

APPENDIX H

Traffic Study

Prepared by

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Traffic Impact Study – Final Report

WALMART* EXPANSION ANTIOCH, CA

24 November 2009

Prepared for:
Environmental Consulting Services
and City of Antioch, CA

Prepared by:
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INTRODUCTION

Kimley-Horn and Associates, Inc. was retained by Environmental Consulting Services to prepare a traffic study for the Walmart Discount Store expansion in Antioch, CA. Results of the traffic study will be used in the preparation of an Environmental Impact Report to assess the impacts of the proposed expansion.

The existing Walmart store is located northwest of the intersection of Lone Tree Way and Hillcrest Avenue in the Williamson Ranch Plaza. **Figure 1** illustrates the location of the project site in relation to the City of Antioch.

This traffic study was prepared based on discussions with, and criteria set forth by, the City of Antioch and Contra Costa Transportation Authority (CCTA). This study addresses the traffic and transportation effects of the proposed development in order to assist the project sponsor and the city in project planning and determining conditions of approval for the project.

Study Methodology

Development Conditions

The Walmart expansion traffic study was based on the following development conditions:

- Existing conditions – Based on current traffic counts and existing roadway geometry and traffic control.
- Near-term traffic conditions – Based on traffic volumes and traffic added by pending and approved (but not yet completed) developments anticipated to occur at the time the project is constructed. Also includes programmed roadway projects which are scheduled to be in place at the same time the project is anticipated to be completed in late 2010.
- Near-term plus project total traffic conditions – Based on existing traffic volumes, traffic added by approved and pending (but not yet completed developments), and traffic generated by the Walmart expansion project, as well as programmed roadway projects anticipated to be in place at the same time the project is to be completed.
- Long-Term conditions without the project – Based on future year traffic forecasts from the City's General Plan model. Future year will correspond with approximate buildout of City's General Plan.
- Long-Term conditions plus project – Based on the City model traffic forecasts and traffic generated by the project.

Operating Conditions and Criteria

Measure C established a sales tax to be used to fund transportation improvements in Contra Costa County. The passage of Contra Costa County Measure J in 2004 extended the previous Measure C program to 2034. The measure includes a growth management program and requires Contra Costa Transportation Authority (CCTA) to develop a comprehensive transportation plan and update it every other year. To receive a share of the sales tax generated by Measure J, local jurisdictions must adhere to the level of service (LOS) standards that Measure J applies to routes of regional significance. Each jurisdiction must take appropriate action to ensure that the LOS standards are met, including routes of regional significance. Designated regional routes include all the freeways and state highways, and the most significant arterials in Contra Costa County.

Contra Costa Transportation Authority (CCTA) classifies several streets in the project study area including Lone Tree Way, Deer Valley Road, and Hillcrest Avenue (north of Lone Tree Way) as routes of regional significance. As such, intersections along the routes require analysis utilizing Growth Management Program procedures outlined in CCTA Technical Procedures, July 19, 2006. The CCTA Technical Procedures require the use of CCTALOS software to determine intersection operation levels based on the Intersection Capacity Utilization (ICU) methodology. The methodology describes the operation of an intersection in terms of Level of Service (LOS) based on corresponding volume to capacity v/c ratio. The CCTA standards apply only to designated routes of regional significance.

Levels of service are represented by a letter scale from LOS A to LOS F, with LOS A representing the best performance and LOS F representing the poorest performance under significantly congested conditions. CCTA set maximum levels of congestion for routes of regional significance such as intersections along Lone Tree Way, Hillcrest Avenue, and Deer Valley Road. According to the CCTA requirements, LOS D (i.e. v/c up to 0.85) is an acceptable level of traffic operation at intersections on the routes of regional significance in the study area regardless of how the intersections are currently operating. Furthermore, intersections to be evaluated under CCTA requirements include signalized intersections that are expected to be affected by 50 or more project trips in a peak period.

In addition, the Contra Costa Transportation Authority (CCTA) and its subsequent Regional Transportation Planning Committees have also set various standards in order to measure effectiveness on specific roadways, called Traffic Service Objectives (TSOs). In the study area, the delay index on routes of regional significance should be less than 2.0. That is to say the ratio of congested travel time vs. uncongested travel time along the corridor should be less than 2.0 during the AM peak as well as during the PM peak period.

For streets not designated as regionally significant, local standards apply. The Antioch General Plan adopted November 2003 states that where feasible, signalized intersections along design arterial roadways will strive to maintain a “High D” level of service ($v/c = 0.85-0.89$) within regional commercial areas and at intersections within 1,000 feet of a freeway interchange regardless of how the intersections are currently operating. (For clarification, it should be noted that the level of service definitions shown in Table 1 are used by both the City of Antioch and CCTA. However, the City of Antioch Level of Service standard for intersections is “High D” (maximum v/c 0.89) while the CCTA Level of Service standard is LOS “D” (maximum v/c 0.85) which is applied to routes of regional significance.)

Unsignalized intersections are not specifically covered in the CCTA or General Plan requirements; however, in harmony with the intent of the General Plan, this report considered a “High D” level of service (LOS) to be an acceptable level of operation at unsignalized intersections. Unsignalized intersections were evaluated using *Highway Capacity Manual* methodology which bases LOS on average delay per vehicle.

Based on Antioch and CCTA requirements, traffic analysis to determine level of service was completed using the CCTALOS module at signalized intersections and the Highway Capacity Manual Operations module at unsignalized intersections within the Traffix software. Traffic service objectives and vehicle queuing at signalized intersections was determined using Synchro software. Traffix and Synchro software platforms are based on the methodology of the *Highway Capacity Manual*. CCTALOS software is based on the Intersection Capacity Utilization (ICU) methodology.

A significant impact would occur if levels of service at the study intersections drop below the established thresholds or if an intersection operating below the acceptable thresholds experiences an increase in v/c or a worse level of service, regardless of how small the increase seconds delay or change in v/c . Mitigation may be required when traffic from the project causes the intersection to operate below acceptable levels of traffic operation.

The effects of vehicle queuing were analyzed and a significant impact was assumed to occur if the queue increases by one or more vehicles (a vehicle being 25 feet long) and the vehicle queue exceeds the turn pocket length.

Table 1 relates the operational characteristics associated with each level of service category for both signalized and unsignalized intersections.

Table 1 – CCTA & City of Antioch Intersection Level of Service Definitions

Level of Service	Description	Signalized (Intersection volume to capacity ratio v/c)	Unsignalized (Avg. control delay per vehicle sec/veh.)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream	≤ 0.6	≤ 10
B	Stable traffic. Traffic flows smoothly with few delays.	0.61 – 0.70	> 10 – 15
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	0.71 – 0.80	> 15 – 25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	0.81 – 0.90	> 25 – 35
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	0.91 – 1.00	> 35 – 50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	> 1.00	> 50

Sources: Contra Costa Transportation Authority Technical Procedures 2006 and Transportation Research Board, *Highway Capacity Manual 2000*, National Research Council, 2000.

Study Intersections Included in Analysis

The proposed project will generate new vehicular trips that will increase traffic volumes on the nearby street network. To assess changes in traffic conditions associated with the project, the following intersections, illustrated in **Figure 1**, were selected by the City of Antioch for evaluation in this traffic study:

1. Country Hills Drive/Deer Valley Road
2. Laurel Road/Hillcrest Avenue
3. Country Hills Drive/Hillcrest Avenue
4. Northeast Walmart Driveway/Hillcrest Avenue
5. Southeast Walmart Driveway/Hillcrest Avenue
6. Lone Tree Way/Country Hills Drive
7. Lone Tree Way/Deer Valley Plaza
8. Lone Tree Way/Deer Valley Road
9. Lone Tree Way/Prewett Park
10. Lone Tree Way/Sagebrush Drive
11. Lone Tree Way/Williamson Ranch Plaza
12. Lone Tree Way/Indian Hill Drive

13. Lone Tree Way/Walmart Driveway
14. Lone Tree Way/Hillcrest Avenue
15. Lone Tree Way/Vista Grande Drive
16. Lone Tree Way/Heidorn Ranch Road
17. Lone Tree Way/Canada Valley Road
18. Lone Tree Way/SR-4 Bypass SB Ramps
19. Lone Tree Way/Jeffrey Way
20. Marita Drive/Deer Valley Road
21. Prewett Ranch Drive/Hillcrest Avenue

Intersections were selected per CCTA traffic impact study guidelines which provide that analysis “should include any signalized intersection to which at least 50 project trips would be added” during the analysis periods (i.e., peak hours). To be conservative, some intersections that have much lower traffic levels were also included in the traffic study.

EXISTING CONDITIONS

Existing Site Uses

The existing Walmart is located in the Williamson Ranch Plaza near the intersection of Lone Tree Way and Hillcrest Avenue. The discount store is currently 141,498 square feet and offers services including sales of general merchandise, an 11,285 square foot garden center, pharmacy, photo center, portrait studio, and tire and lubrication services.

Existing Uses in Vicinity of Site

Williamson Ranch Plaza is a shopping center that includes the Walmart as well as other uses including Orchard Supply Hardware, Staples, Big 5 sporting goods, and various retail, restaurant, and office uses.

Immediately east of the site, across Hillcrest Avenue, is the Lone Tree Landing development and Venture Commerce Center which include retail, office, restaurant and commercial uses.

Land uses north of the Walmart site are primarily residential and directly south of the site is the Williamson Ranch Park which is surrounded by residential uses.

Existing Roadway Network

Below is a description of the principal roadways included in this study.

Canada Valley Road

Canada Valley Road is a two-lane roadway with turn lanes serving residential areas north of Lone Tree Way. The speed limit is 40 mph. South of Lone Tree Way the street changes names and serves the Arcadia development which includes the Home Depot store.

Country Hills Drive

Country Hills Drive is a two-lane roadway with turn lanes at major intersections. East of Hillcrest Avenue the street has a landscaped median. The speed limit on Country Hills Drive is 25 mph. South of Lone Tree Way the street changes name to Mokelumne Drive.

Deer Valley Plaza

Deer Valley Plaza is the access to Deer Valley Plaza.

Deer Valley Road

Deer Valley Road is a four-lane divided roadway with a landscaped median, left turn bays, wide shoulders, and restricted parking. Shoulders are designated as Class II bike lanes. The speed limit on Deer Valley Road is posted at 45 mph in the study area. Deer Valley Road is designated as a Route of Regional Significance.

Heidorn Ranch Road

Heidorn Ranch Road is currently a four-lane divided roadway with a landscaped median, left turn lanes, and restricted parking from Lone Tree Way to the EBMUD aqueduct. North of Lone Tree Way Heidorn Ranch Road is currently a two-lane roadway. The speed limit on Heidorn Ranch Road is 25 mph north of Lone Tree Way and 45 mph south of Lone Tree Way.

Hillcrest Avenue

Hillcrest Avenue is a four-lane divided roadway with a landscaped median, left turn bays, wide shoulders, and restricted parking. Shoulders are designated as Class II bike lanes. The speed limit on Hillcrest Avenue is posted at 45 mph in the study area. Hillcrest Avenue is designated as a Route of Regional Significance north of Lone Tree Way.

Indian Hill Drive

Indian Hill Drive is a two-lane residential street with turn lanes at major intersections. The speed limit on Indian Hill Drive is 25 mph. An access to the Williamson Ranch Plaza is opposite Indian Hill Drive where it intersects Lone Tree Way.

Jeffery Way

Jeffery Way is a two-lane street with a speed limit of 35 mph. Jeffrey Way is connected to the northbound ramps for the SR-4 Bypass.

Laurel Road

Laurel Road is a four-lane divided roadway with a landscaped median and turn lanes at major intersections. Shoulders are designated as Class II bike lanes. The speed limit on Laurel Road is 45 mph in the study area. In the future, Laurel Road will be extended to the east to connect with the completed interchange at Laurel Road and the SR-4 Bypass which provides a connection to Laurel Road in Oakley. On the west side of Hillcrest Avenue the street changes name to Sterling Hill Drive.

Lone Tree Way

Lone Tree Way is an arterial roadway that joins Antioch with the City of Brentwood. Through the project study area, Lone Tree Way is a four- to six-lane divided roadway with a landscaped median, left turn bays, and restricted parking. The speed limit on Lone Tree Way is posted at 45 mph in the study area. Lone Tree Way is designated as a Route of Regional Significance.

Marita Drive

Marita Drive is a two-lane street with turn lanes at major intersections and Class II bike facilities. The speed limit on Marita Drive is 25 mph.

Prewett Park

Prewett Park is the access for Prewett Family Park. Opposite the park entrance is the primary access for the Deer Valley High School.

Sagebrush Drive

Sagebrush Drive is a two-lane street with turn lanes at major intersections. The speed limit on Sagebrush Drive is 25 mph.

State Route 4 (SR-4) Bypass

State Route 4 (SR-4) Bypass is a new roadway between Vasco Road in Brentwood and the existing SR-4 in Antioch. The Bypass is a two-lane expressway between Balfour Road and Lone Tree Way and a four or six-lane freeway between Lone Tree Way and SR-4 to the north. The segment from Lone Tree Way to SR-4 was opened in 2007.

Vista Grande Drive

Vista Grande Drive is a two-lane street with turn lanes at major intersections. The speed limit on Vista Grande is 25 mph.

Williamson Ranch Plaza

Williamson Ranch Plaza has multiple access points into the shopping center and to the existing Walmart.

Existing Site Access

Access to the site is primarily from the Lone Tree Way/Indian Hill Drive on the south side of Williamson Ranch Plaza and three right in/out driveways as shown in **Figure 2**. There is another access to the western portion of the shopping center at the intersection of Lone Tree Way/Williamson Ranch Plaza west of Indian Hill Drive which is expected to be used by few if any Walmart shoppers.

All site driveways provide single lane ingress and egress, with the exception of the exit at Lone Tree Way/Indian Hill Drive which has a single inbound lane and double left turns and a shared through/right lane in the outbound direction.

Existing throat depths at the site driveways are as follows:

- Lone Tree Way/Indian Hill Drive – 220 feet
- Lone Tree Way/Walmart Driveway – 30 feet
- Northeast Walmart Driveway/Hillcrest Avenue – 30 feet
- Southeast Walmart Driveway/Hillcrest Avenue – 80 feet

Existing Lane Configurations and Traffic Control

Existing intersection lane configurations and traffic controls are illustrated in **Figure 3**. Traffic signals in the study area are located at all study intersections with the exception of three right in/out driveways serving Williamson Ranch Plaza. These study locations function as stop-controlled intersections for the Walmart project driveway approaches. In addition, the Prewett Ranch Drive/Hillcrest Avenue intersection has a traffic signal but it is currently set to operate on flash mode until future traffic volumes warrant putting it into full operation such as when Hillcrest Avenue is extended further to the south.

Existing Peak Hour Turning Movement Volumes

Weekday intersection turning movement volumes were collected at project study area intersections in May 2008. Volumes are shown in **Figure 4**. Volumes were collected during the AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak periods of the weekday when local schools were in session and outside of holiday periods. Traffic volume data sheets for new counts are available in the **Appendix**. City practice regarding preparation of traffic impact studies is to limit analysis to weekdays. For this reason, and because no long term weekend traffic forecast data is available, no weekend traffic analysis was prepared.

Existing Transit Facilities

Tri-Delta Transit provides bus service in Antioch. Routes 380, 383, 385 and 392 pass directly adjacent to the project site, connect to the Hillcrest park-and-ride and the Bay Point BART station in Pittsburg, and provide convenient connections to many locations in the city and connections to other local and regional transit routes. There are transit stops at the following locations adjacent to the project site:

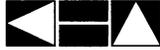
- On eastbound Lone Tree Way, 200 feet west of Indian Hill Drive. Amenities include with a bus turnout and a bench.
- On eastbound Lone Tree Way, 200 feet east of Hillcrest Avenue. Amenities include a bus turnout and a bench.
- On westbound direction Lone Tree Way, 300 feet west of Hillcrest Avenue. Amenities include a bus turnout and a shelter.
- On northbound Hillcrest Avenue, 200 feet north of Lone Tree Way. Other than a bus stop sign, no amenities are provided at this location.

Transit serving the site operates on a frequency of 30 to 60 minutes during the weekday and 60 minutes on the weekend.

Existing Bicycle and Pedestrian Facilities

Sidewalks are present on Lone Tree Way and Hillcrest Avenue adjacent and near the project site. Sidewalks provide walking facilities between the Walmart, nearby transit stops, and the adjacent residential neighborhoods. From the store there are existing paved walkways to both Hillcrest Avenue and Lone Tree Way where the transit stops are located. The walkways permit pedestrians to reach the bus stops without having to walk in the parking lot or drive aisles of the site.

A Class I paved bike trail is present along Lone Tree Way from Hillcrest Avenue west across the site frontage of the Walmart and Williamson Ranch Plaza. Class II bike lanes are present on Hillcrest Avenue adjacent and near the project site on both sides of the street. There is one bicycle rack that will hold up to 25 bicycles at the existing Walmart that is not fastened to the ground. Class II facilities are in place on other study area roadways including Laurel Road, Country Hills Drive, Deer Valley Road, Heidorn Ranch Road, Canada Valley Road, Mokelumne Drive, and Marita Drive. The wide shoulders on Lone Tree Way are currently being used as bicycle facilities. However, when the third traffic lane is striped on Lone Tree Way, there will be no bicycle lanes on the roadway. Bicycle traffic has been planned to use the Class I bike path along the EBMUD Aqueduct, as described above.



Existing Levels of Service at Study Intersections

Traffic operations were evaluated at signalized and unsignalized intersections under existing traffic conditions.

As noted previously, intersections on Lone Tree Way, Deer Valley Road, and Hillcrest Avenue (north of Lone Tree Way) are to operate at a minimum level of service D and v/c up to 0.85. One study intersection is not on a route of regional significance and may operate at LOS D and v/c up to 0.89. This intersection is Prewett Ranch Drive/Hillcrest Avenue.

Results of the analysis are presented in **Table 2**, along with the minimum jurisdictional standard for acceptable levels of service (as previously described in Operating Conditions and Criteria). Additional detail of the analysis is provided in the **Appendix**.

According to CCTALOS software results, all intersections currently satisfy operational standards.

Table 2 – Existing Levels of Service Summary

Int. #	Intersection	Criteria	Existing			
			AM		PM	
			LOS	V/C or Delay	LOS	V/C or Delay
Signalized Intersections						
1	Country Hills Drive/Deer Valley Road	0.85	A	0.44	A	0.38
2	Laurel Road/Hillcrest Avenue	0.85	A	0.31	A	0.22
3	Country Hills Drive/Hillcrest Avenue	0.85	A	0.35	A	0.27
6	Lone Tree Way/Country Hills Drive	0.85	B	0.63	A	0.50
7	Lone Tree Way/Deer Valley Plaza	0.85	A	0.35	A	0.40
8	Lone Tree Way/Deer Valley Road	0.85	B	0.63	A	0.59
9	Lone Tree Way/Prewett Park	0.85	A	0.47	A	0.37
10	Lone Tree Way/Sagebrush Drive	0.85	A	0.37	A	0.38
11	Lone Tree Way/Williamson Ranch Plaza	0.85	A	0.34	A	0.34
12	Lone Tree Way/Indian Hill Drive	0.85	A	0.42	A	0.39
14	Lone Tree Way/Hillcrest Avenue	0.85	A	0.40	A	0.48
15	Lone Tree Way/Vista Grande Drive	0.85	A	0.39	A	0.54
16	Lone Tree Way/Heidorn Ranch Road	0.85	A	0.22	A	0.33
17	Lone Tree Way/Canada Valley Road	0.85	A	0.34	A	0.52
18	Lone Tree Way/SR-4 Bypass	0.85	A	0.42	A	0.58
19	Lone Tree Way/Jeffrey Way	0.85	A	0.27	A	0.44
20	Marita Drive/Deer Valley Road	0.85	A	0.29	A	0.26
21	Prewett Ranch Drive/Hillcrest Avenue	0.89	-	-	-	-
Unsignalized Intersections						
4	Northeast Wal-Mart Driveway/Hillcrest Avenue					
	EB Approach	D	B	13.0	B	11.5
5	Southeast Wal-Mart Driveway/Hillcrest Avenue					
	EB Approach	D	B	10.1	B	10.2
	WB Approach	D	A	9.5	A	9.6
13	Lone Tree Way/Wal-Mart Driveway					
	SB Approach	D	B	10.8	A	9.9
21	Prewett Ranch Drive/Hillcrest Avenue	D	A	8.3	A	8.5

NEARBY ROADWAY AND DEVELOPMENT PROJECTS

Planned Roadway Projects in Vicinity of Site

Several transportation improvements are programmed for the study area intersections and are scheduled for completion prior to or at approximately the same time as the completion of the Walmart expansion (e.g., late 2010). Improvements are planned in Brentwood and Oakley as well, but they are too far away to have an influence on traffic operations within the study area. According to the City of Antioch, these include the following roadway or intersection improvements:

- Intersection #8 – Lone Tree Way/Deer Valley Road – Lengthen the westbound Lone Tree Way left-turn lane to southbound Deer Valley Road to 500', lengthen the westbound Lone Tree Way right-turn lane to northbound Deer Valley Road to 400', lengthen the southbound Deer Valley Road left-turn lane to eastbound Lone Tree Way to 190', construct a second southbound Deer Valley Road left-turn lane to eastbound Lone Tree Way for 800', and lengthen the eastbound Lone Tree Way right-turn lane to southbound Deer Valley Road to 400'. This is part of the Lone Tree Way Corridor project (AD27/31R) and will be completed by 2010.
- Intersection #9 – Lone Tree Way/Prewett Park – Restripe westbound Lone Tree Way through-shared-right to a through and a right-turn lane to northbound Prewett Park. This is part of the Prewett Park project and will be completed by 2010.
- Intersection #10 – Lone Tree Way/Sagebrush Drive – Lengthen the westbound Lone Tree Way left-turn lane to southbound Sagebrush Drive to 600'. This is part of the Lone Tree Way Corridor project (AD27/31R) and will be completed by 2010.
- Intersection #14 – Lone Tree Way/Hillcrest Avenue – Lengthen the eastbound Lone Tree Way left-turn lane to northbound Hillcrest Avenue to 620', restripe Lone Tree Way to three lanes in the eastbound and westbound directions, construct a second southbound Hillcrest Avenue left-turn lane to eastbound Lone Tree Way for 600' as well as change the southbound Hillcrest Avenue left-shared-through lane to a through lane, and modify traffic signal phasing to become eight phases (change northbound and southbound from split phasing to have protected left-turn phasing). This is part of the Lone Tree Way Corridor project (AD27/31R) and will be completed by 2010.
- Intersection #21 – Hillcrest Avenue/Prewett Ranch Drive – Take signal out of flash mode and complete the south leg of the intersection extending Hillcrest Avenue to the south. This is funded by the Aviano Adult Community project and will be completed by 2010.

The above roadway improvements are either programmed City capital improvement projects, or are required as mitigation for other approved projects in the vicinity.

In addition, intersections on Lone Tree Way are currently being retimed and placed under coordinated operation.

Near-Term Lane Configurations and Traffic Control

Figure 5 illustrates the roadway geometry and traffic control planned by the city regardless of the proposed Walmart expansion. The improvements are anticipated to be in place before or at approximately the same time as the proposed opening of the Walmart expansion in late 2010.

Approved/Pending Development Projects in Vicinity of Site

Several development projects in the broad vicinity of the Walmart site are in various stages of planning, approval, or development. These include projects that are reasonably foreseeable in the future and will ultimately be developed roughly the same time or following the Walmart store expansion. Kimley-Horn assessed the approved and pending project trips from Antioch, Brentwood, and Oakley. Therefore, information on nearby approved and pending projects was provided by the Cities of Antioch, Brentwood, and Oakley which is included in the **Appendix**.

The projects are pending for approval or are approved for construction but are not completed or fully occupied. Projects considered for this traffic study were identified by the cities of Antioch, Brentwood, and Oakley as having been approved (but not yet completed or fully occupied), or having a development application submitted, or being otherwise reasonably foreseeable at the time the Notice of Preparation (NOP) of the Walmart Expansion EIR was issued on August 13, 2008. The initial list of projects included all known projects in Antioch, Brentwood, and Oakley. Kimley-Horn and Associates considered each initially listed project in terms of its potential to generate traffic which would affect any of the study intersections. Projects which were determined to contribute no traffic or a negligible volume of traffic to study intersections were not included in the traffic analysis.

Approved and pending projects included in this study are listed in **Table 3**.

Table 3 – Approved and Pending Developments

#	Project Name	Location ¹	Size ²	Status
1	Renaissance at Bluerock	Lone Tree & Golf Course Rd (A)	71 DU	Under construction
2	Bluerock Buisness Center	Bluerock Dr at Lone Tree Wy (A)	48.724 KSF Office	Under construction
3	Lakeview Center	Northwest Corner of Lone Tree Wy and Golf Course Rd (A)	15 KSF Drugstore 14 KSF Grocery 9 KSF Retail/Office	In process
4	Park Ridge	Canada Valley Rd (A)	562 DU	In process
5	Deer Valley Business Park	Deer Valley Rd & Country Hills (A)	84.45 KSF Office	Under construction
6	Hidden Glen	Off Hillcrest, N of Lone Tree Wy (A)	371 DU	Under construction
7	Meadow Creek Village	Off Lone Tree Wy on Vista Grande (A)	97 DU	Under construction
8	Monterra (Nelson Ranch)	Wild Horse Rd off of Hillcrest (A)	360 DU	Under construction
9	Sand Creek Ranch (Rivergate)	Off Canada Valley Rd & Lone Tree Wy (A)	239 DU	Under construction
10	Williamson Ranch Plaza	NS of Lone Tree, W of Indian Hill (A)	39.682 KSF Office	In process
11	Antioch Town Center	E of Lone Tree, W of Golf Course Rd (A)	138.557 KSF Retail	Withdrawn ³
12	Lone Tree Landing	Lone Tree Wy at Hillcrest (A)	33.713 KSF Retail 9.595 KSF Office	In process (Partially Completed - 2009)
13	Venture Commerce Center	Lone Tree Wy & Vista Grande (A)	46.1 KSF Retail	Completed (50% Occupied)
14	Antioch Surgical Center	Hillcrest Ave, S of Deer Valley (A)	5.5 KSF Outpatient Surgery Center	Approved
15	Zeka Ranch Estates	Empire Mine Rd - Northwest corner of FUA-1 (A)	314 DU	Pre-Application
16	Deer Valley Estates	E of Deer Valley Rd, N of Kaiser Hospital (A)	136 DU	Approved
17	Aviano Adult Community	N of Sand Creek Rd, W of Hillcrest Avenue (A)	535 DU	Approved
18	Magnet School	Sand Creek Rd, W of Aviano Development (A)	200 Students	Completed/Occupied (Not occupied in May 2008)
19	Sand Creek Estates	W of Deer Valley Rd, Southern Boundary of the City (A)	190 DU	On hold
20	Roddy Ranch	W of Deer Valley Rd and S of Empire Mine Rd(A)	574 DU 126 Apartments 250 Room Hotel	In process
21	Seventh Day Adventist Church	2200 Country Hills Dr (A)	8-Plex Housing 39.0 KSF Church	Housing approved/ Church under construction
22	Bank of Agriculture	Lone Tree Wy at Country Hills (A)	5.1 KSF Car Wash 3.5 KSF Bank	Approved
23	Smith Parcel	Southeast Antioch off Deer Valley Rd and Balfour (A)	50 DU 111 KSF Retail	In process

¹ (A) = Antioch; (B) = Brentwood; (O) = Oakley.

² DU = dwelling units, KSF = thousand square feet.

³ This project consisted of a proposed Target store until November 2009 when the application was withdrawn. However, for purposes of presenting a worst-case analysis of cumulative conditions, this project is retained as a pending project in this report.

#	Project Name	Location ¹	Size ²	Status
24	Tierra Villas	5020 Heidorn Ranch Rd (A)	122 DU	In process
25	Kaiser Medical Center	6200 Deer Valley Rd (A)	159.6 KSF Hospital 108.45 KSF Medical Office	Completed
26	The Orchard at Slatten Ranch Pad Buildings	Empire Avenue at Wicklow (A)	24 KSF Retail	Approved (JC Penney Built and occupied)
27	Starbucks Commercial Center	3300 Hillcrest Avenue & Wildflower Dr (A)	1.84 KSF Starbucks 4.45 KSF Bank 11 KSF Retail	Approved
28	Hillcrest Village	Hillcrest Ave & Wildflower Dr (A)	96 KSF Office/Retail	On hold
29	Amber Park	S of Lone Tree Wy, E of Empire Ave (B)	99 DU	Under construction
30	Brentwood Station	S of Lone Tree Wy, E of Jeffery Wy (B)	11.2 Restaurant	Completed (Restaurant vacant)
31	Brighton Station	N of Grant St, E of Jeffery Wy (B)	38 DU	Under construction
32	Streets of Brentwood	E of SR-4, S of San Creek (B)	446.1 KSF Retail	Under construction (Partially Completed 2009)
33	Empire Crossings	S of Lone Tree, W of Empire (B)	11.8 KSF Retail	Completed (50% Occupied)
34	Alexandra Homes - Parkside Villas	N side of Sand Creek, W of Fairview (B)	37 DU	Under construction
35	Carmel Estates	E of Minnesota, N of Randy Wy (B)	106 DU	Approved
36	Terreno Homes	N of Sand Creek, E of Railroad Tracks (B)	134 DU	Under construction
37	Bridle Gate	W of SR-4, S of Sand Creek (B)	166 DU	Approved
38	Blackhawk-Nunn-Cox Property	W of SR-4, N of Balfour (B)	58 DU	Under construction
39	Vic Stewarts	S of Balfour, E of John Muir Pkw (B)	10.7 Restaurant 16.1 KSF Retail	Under construction (Completed 2009)
40	Senior Apts - Cox Property	W of SR-4, N of Balfour (B)	120 DU	Under construction
41	Palmilla	W of SR-4, N of Central Blvd (B)	460 DU 108 Apartments 11 Townhomes	Under construction
42	Passport Homes	S of Lone Tree Wy, E of Railroad Tracks (B)	59 DU	Approved
43	Prewett Ranch (Suncrest Homes)	S of Lone Tree Wy, E of O'Hara Ave (B)	240 DU	Approved
44	Casa Bella Apartments	NE Corner of Jeffrey Ln and Amber Ln (B)	120 Apartments	In process
45	Steeplechase	N of Lone Tree Wy, W of O'Hara Ave (B)	116 DU 16 Townhomes	Approved
46	Lone Tree Crossings	N side of Lone Tree Wy and W of the Railroad tracks (B)	117.37 KSF Retail	Under construction
47	Tingdahl	W/O Empire Ave, S/O Lone Tree Way (B)	2 DU	Approved
48	Cornerstone Church	E/O Empire Ave, S/O Lone Tree Way (B)	65.451 KSF Church	Approved
49	The Rock Church	S of Lone Tree Wy, E of O'Hara Ave (B)	21.435 KSF Church	Approved
50	Red Robin	E of SR-4, S of Sand Creek (B)	5.8 KSF Restaurant	Approved (Completed 2009)

¹ (A) = Antioch; (B) = Brentwood; (O) = Oakley.

² DU = dwelling units, KSF = thousand square feet.

#	Project Name	Location ¹	Size ²	Status
51	Capital & Counties - LT	N of Wicklow Wy between Slaten Ranch Rd and Empire Avenue (A)	319.8 KSF Retail	In process (Long Term)
52	Office - LT	On Slaten Ranch Rd, S of Laurel Rd (A)	1429 KSF Office	In process (Long Term)
53	eBART - LT	Neroly Rd (A&O)	1000 Parking Spaces	In process (Long Term)
54	7662 Stonewood	Rose Lane (O)	215 DU	Under construction
55	8541 Ryder, Cortina, Sagewood & Tangelwood	Main Street (O)	495 DU	Under construction
56	8731 Magnolia Park	W of Freedom HS (O)	202 DU	Under construction
57	8736 Pleasant Meadows	1860 O'Hara (O)	44 DU	Approved
58	8787 Rosewood Estates	Laurel Rd (O)	60 DU	In process
59	8803 Brownstone 10	Brownstone Rd (O)	50 DU	Approved
60	8807 Villa Grove	2080 O'Hara (O)	50 DU	Approved
61	8975 Shiloh	Main St. & Simoni Ranch Rd. (O)	75 DU	Approved
62	8980 Brownstone Estates	301 Brownstone (O)	96 DU	In process
63	9027 Duarte Ranch	Southest Corner Laurel & Rose (O)	116 DU	Approved
64	9088 Cedarwood Estates	End of Knox Lane (O)	34 DU	In process
65	7426/7590/7655/7760 Amberwood	4400 Live Oak Ave (O)	87 DU	Approved
66	Spare Time Sports Club	Neroly Rd & Empire (O)	58.3 KSF Fitness Club	Approved (Completed Nov 2008)
67	Rite Aid	NW Corner of Laurel & O'Hara (O)	17.34 KSF Pharmacy	In process
68	Laurel Plaza	NW Corner of Laurel & O'Hara (O)	56.8 KSF Retail	In process
69	Empire Station Mixed Use Project (3 Office Bldgs)	Empire Ave & Neroly Road (O)	9.0 KSF Office	In process
70	Neroly Commercial Center (Phase II of Spare Time)	SE Corner Neroly & Empire (O)	116.9 KSF Retail	In process

¹ (A) = Antioch; (B) = Brentwood; (O) = Oakley.

² DU = dwelling units, KSF = thousand square feet.

Approved/Pending Development Turning Movement Volumes

An estimate of trips generated by approved and pending projects was obtained from information provided by the Cities of Antioch, Brentwood and Oakley. Where available; traffic volumes for these projects were obtained directly from published traffic reports. For development projects that were partially completed and occupied at the time the May 2008 counts were completed for this study, Kimley-Horn staff visited each site to determine the percent occupancy and prorated the estimated number of project generated trips.

Traffic volumes from approved/pending projects, when combined with the Walmart project, represent the cumulative with project analysis condition per requirements of the California Environmental Quality Act.

Figure 6 illustrates the location of the approved projects and **Figure 7** summarizes the vehicle trips associated with the approved and pending development projects.

WALMART EXPANSION

Proposed Site Uses

As noted previously, the existing Walmart discount store is currently 141,498 square feet and offers services including sales of general merchandise, pharmacy, photo center, portrait studio, and tire and lubrication services as well as an 11,285 square foot garden center. It is proposed that the store be expanded to add 39,974 square feet to include a full service grocery area, additional general retail and other ancillary store functions, and 6,339 square feet of the garden center will be removed for an overall net increase of 33,635 square feet. When expanded, the store will become a Walmart Supercenter.

Project Trip Generation

Trip generation for development projects is typically calculated based on rates contained in the Institute of Transportation Engineer's publication, *Trip Generation 8th Edition*. *Trip Generation* is a standard reference used by jurisdictions throughout the country for the estimation of trip generation potential of proposed developments.

A trip is defined in *Trip Generation* as a single or one-directional vehicle movement with either the origin or destination at the project site. In other words, a trip can be either "to" or "from" the site. In addition, a single customer visit to a site is counted as two trips (i.e., one to and one from the site).

For purposes of determining the worst-case impacts of traffic on the surrounding street network, the trips generated by a proposed development are typically estimated between the hours of 7:00-9:00 AM and 4:00-6:00 PM. Recent 24-hour volume counts conducted near the existing Walmart were referenced to determine the AM and PM peak hours. While the project itself may generate more traffic during some other time of the day such as around noon, the peak of "adjacent street traffic" represents the time period when the uses generally contribute to the greatest amount of congestion, with the PM peak commonly being the greatest congestion period. At other times of the day retail land uses rarely cause impacts. For this reason, this evaluation focused on the

weekday AM and PM peaks. This methodology is in harmony with the city's standard for the preparation of traffic impact studies.

The existing Walmart store is most appropriately classified as Free-Standing Discount Store (Land Use 815). This use is characterized by ITE as being a free-standing store that offers "a variety of customer services, centralized cashiering, and a wide range of products. They typically maintain long store hours 7 days a week."

The Walmart when it is expanded, is most appropriately classified as Free-Standing Discount Superstore (ITE Land Use 813). This use is defined by ITE as being "...similar to the free-standing discount stores described in Land Use 815, with the exception that they also contain a full service grocery department under the same roof that shares entrances and exits with the discount store area." The major difference between Land Use 813 and Land Use 815 is that Free-Standing Discount Stores do not have a full service grocery department.

According to ITE, superstores have a higher average trip rate than discount stores in the AM peak, and discount stores have a higher average rate than superstores in the PM peak. The recently released *Trip Generation, 8th Edition* contains data from a combination of 92 additional AM and PM trip generation studies of Free-Standing Discount Superstores as compared to the 7th Edition. This substantial increase in data further validates the accuracy of the trip rates for the Free-Standing Discount Superstore (Land Use 813), which in the previous edition was a newly regarded land use type at the time of its publication.

It is proposed that the store be expanded to add 39,974 square feet inside the building, and 6,339 square feet of the garden center will be removed for an overall net increase of 33,635 square feet. To accurately portray the change in trips once the existing Walmart becomes a Walmart Superstore, the existing discount store trips were estimated (based on 130,213 square feet) and subtracted from the street network and the proposed Superstore trips were estimated (based on 170,187 square feet) and added onto the network.

Trip generation calculations prepared per ITE methodology are based on gross floor area of the building. Gross floor area includes the sum of the floor area in square feet "including cellars, basements, mezzanines, penthouses, corridors, lobbies, stores and offices that are within the principal outside faces of exterior walls." ITE specifies that "unroofed areas and unenclosed roofed-over spaces, except those contained within the principal outside faces of exterior walls, should be excluded from the area calculations." Outdoor or fenced in-areas such as outdoor garden centers are specifically not included in the definition of gross floor area and are excluded.

Excluding the areas outside the principal walls does not suggest that they do not generate trips to or from the project site; rather it is a statement that the ITE methodology already incorporates these trips in the trip generation rates reported by

ITE for the areas within the "principal outside faces of exterior walls." Therefore, consistent with ITE methodology as specifically noted in the 8th Edition, the square footage associated with outdoor and seasonal garden sales areas and other incidental outside areas (i.e., net area of 4,886 square feet for this project) are generally not included in the floor area calculation for this study.

Trip generation was calculated based on the previous discussions and is reported in **Table 5**. Additional trip generation calculations are contained in the **Appendix**.

Table 4 – Walmart Expansion Trip Generation

TIME PERIOD	LAND USE	Trip Rate			Trips		
		In	Out	Total	In	Out	Total
AM Peak	Free Standing Discount Store (130.213 KSF)	0.72	0.34	1.06	(94)	(44)	(138)
	<i>Discount Store Pass-by</i>				0	0	0
	Free Standing Discount Superstore (170.187 KSF)	0.94	0.73	1.67	159	125	284
	<i>Discount Superstore Pass-by</i>				0	0	0
	Net New Vehicle Trips				65	81	146
PM Peak	Free Standing Discount Store (130.213 KSF)	2.50	2.50	5.00	(326)	(325)	(651)
	<i>Discount Store Pass-by (17%)</i>				56	55	111
	Free Standing Discount Superstore (170.187 KSF)	2.26	2.35	4.61	385	400	785
	<i>Discount Superstore Pass-by (28%)</i>				(108)	(112)	(220)
	Net New Vehicle Trips				7	18	25

As noted in **Table 5**, the project will generate approximately 146 new peak AM trips and approximately 25 new peak PM trips. This is a result of the differences in shopping characteristics associated with the existing and the proposed store formats (i.e. discount store vs. superstore).

Project Trip Pass-By

The Walmart expansion will create a specific number of vehicle trips; nevertheless, many of the trips will already be on the road and will likely stop as they pass by the site. Some vehicles are likely to stop as they pass by the Walmart as a matter of convenience on their path to another destination. These are not new vehicle trips but are considered to be pass-by trips. Pass-by trips were calculated based on data published in ITE's *Trip Generation Handbook, 2nd Edition* which includes weekday PM information. To be consistent with the trip generation assumptions noted earlier,

weekday PM pass-by reductions were based on Free-Standing Discount Superstore (Land Use 813) for the proposed Superstore and on Free-Standing Discount Store (Land Use 815) for the existing store. No AM pass-by was assumed because no data was available. The following pass-by rates were used in the analysis:

- AM Pass-by Rate – None
- PM Pass-by Rate – 17% (existing Discount Store)
28% (proposed Discount Superstore)

Project Trip Distribution and Assignment

Because of the nature of the development, most customers to the Walmart are expected to travel from nearby locations in Antioch and Brentwood, with few trips originating in Pittsburg and Oakley.

A project distribution was developed based on distributions prepared in previous traffic reports, existing traffic count information, and the general orientation of population sources to the site. **Figure 9** shows the traffic distribution assumed in this traffic report.

Based on the assumed trip distribution, new vehicle trips generated by the Walmart expansion were assigned to the street network as shown in **Figure 10**. **Figure 11** shows the pass-by trips expected at the project driveways and **Figure 12** shows the total project vehicle trips.

NEAR-TERM LOS TRAFFIC CONDITIONS

Traffic operations were evaluated under the following development conditions:

- Near-Term Traffic Conditions
- Near-Term Plus Walmart Expansion Traffic Conditions

Results of the analysis are presented in **Table 6**. Additional detail is provided in the **Appendix**.

Table 5 – Near-Term Level of Service Summary

Int. #	Intersection	Criteria	Existing				Near Term				Near Term+Project			
			AM		PM		AM		PM		AM		PM	
			LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay
Signalized Intersections														
1	Country Hills Drive/Deer Valley Road	0.85	A	0.44	A	0.38	A	0.47	A	0.47	A	0.47	A	0.47
2	Laurel Road/Hillcrest Avenue	0.85	A	0.31	A	0.22	A	0.33	A	0.27	A	0.34	A	0.27
3	Country Hills Drive/Hillcrest Avenue	0.85	A	0.35	A	0.27	A	0.39	A	0.31	A	0.39	A	0.30
6	Lone Tree Way/Country Hills Drive	0.85	B	0.63	A	0.50	C	0.71	A	0.58	C	0.72	A	0.58
7	Lone Tree Way/Deer Valley Plaza	0.85	A	0.35	A	0.40	A	0.45	A	0.50	A	0.45	A	0.50
8	Lone Tree Way/Deer Valley Road	0.85	B	0.63	A	0.59	C	0.72	D	0.81	C	0.73	D	0.81
9	Lone Tree Way/Prewett Park	0.85	A	0.47	A	0.37	A	0.55	A	0.49	A	0.56	A	0.49
10	Lone Tree Way/Sagebrush Drive	0.85	A	0.37	A	0.38	A	0.46	A	0.51	A	0.47	A	0.51
11	Lone Tree Way/Williamson Ranch Plaza	0.85	A	0.34	A	0.34	A	0.48	A	0.50	A	0.49	A	0.51
12	Lone Tree Way/Indian Hill Drive	0.85	A	0.42	A	0.39	A	0.54	A	0.53	A	0.57	A	0.53
14	Lone Tree Way/Hillcrest Avenue	0.85	A	0.40	A	0.48	A	0.50	A	0.54	A	0.52	A	0.54
15	Lone Tree Way/Vista Grande Drive	0.85	A	0.39	A	0.54	A	0.39	A	0.55	A	0.39	A	0.56
16	Lone Tree Way/Heidorn Ranch Road	0.85	A	0.22	A	0.33	A	0.30	A	0.45	A	0.30	A	0.46
17	Lone Tree Way/Canada Valley Road	0.85	A	0.34	A	0.52	A	0.52	B	0.69	A	0.53	B	0.69
18	Lone Tree Way/SR-4 Bypass	0.85	A	0.42	A	0.58	A	0.53	D	0.84	A	0.53	D	0.84
19	Lone Tree Way/Jeffrey Way	0.85	A	0.27	A	0.44	A	0.36	A	0.57	A	0.36	A	0.57
20	Marita Drive/Deer Valley Road	0.85	A	0.29	A	0.26	A	0.39	A	0.39	A	0.39	A	0.39
21	Prewett Ranch Drive/Hillcrest Avenue	0.89	-	-	-	-	A	0.16	A	0.17	A	0.17	A	0.17
Unsignalized Intersections														
4	Northeast Wal-Mart Driveway/Hillcrest Avenue													
	EB Approach	D	B	13.0	B	11.5	B	14.0	B	12.4	C	15.7	B	12.9
5	Southeast Wal-Mart Driveway/Hillcrest Avenue													
	EB Approach	D	B	10.1	B	10.2	B	10.3	B	10.5	B	10.4	B	10.7
	WB Approach	D	A	9.5	A	9.6	A	9.8	B	10.2	A	9.9	B	10.2
13	Lone Tree Way/Wal-Mart Driveway													
	SB Approach	D	B	10.8	A	9.9	B	12.1	B	11.0	B	12.1	B	11.1
21	Prewett Ranch Drive/Hillcrest Avenue	D	A	8.3	A	8.5	-	-	-	-	-	-	-	-

Near-Term Level of Service Traffic Conditions

Existing traffic volumes, combined with vehicle trips expected to be generated by the approved and pending development projects, were evaluated at the study intersections and can be seen in **Figure 8**. As shown in **Table 6**, all study intersections function within acceptable standards.

Near-Term + Project Level of Service Traffic Conditions

Near-Term + Project traffic conditions were evaluated at the study intersections and are shown in **Figure 13**. As shown in **Table 6**, there are no intersections that do not function within acceptable standards due to the Walmart expansion project.

LONG-TERM YEAR 2025 TRAFFIC

Long-Term Lane Configurations and Traffic Control

Several transportation improvements are anticipated by City staff for the study area intersections for the year 2025. According to the City of Antioch, the following roadway or intersection improvements are planned.

- Intersection #2 – Laurel Road/Hillcrest Avenue – Lengthen the southbound Hillcrest Avenue left-turn lane to eastbound Laurel Road to 600'. This is part of the Lone Tree Way Corridor project (AD27/31R) and will be funded by the City and as mitigation for Davidon's Park Ridge project and will be completed by 2013.
- Intersection #7 – Lone Tree Way/Deer Valley Plaza – the north leg of the intersection will be constructed with a planned shopping center with the following improvements:
 - The southbound Deer Valley Plaza approach will be a left, through, and right turn lanes
 - A westbound Lone Tree Way right-turn lane will be added for 100'
 - The northbound Deer Valley Plaza right-turn lane will be restriped to a through-shared-right
 - An eastbound Lone Tree Way left-turn lane will be added for 100'
- Intersection #19 – Lone Tree Way/Jeffrey Way – A second westbound Lone Tree Way left-turn lane to southbound Jeffrey Way is currently constructed for 60' but blocked off. The lane will be blocked until southbound Jeffrey Way is widened by a developer.

All of these improvements reflect the ultimate lane configurations contained in the Circulation Element of the City of Antioch 1993 General Plan.

Figure 14 illustrates the intersection geometry and traffic control assumed in the long-term analysis.

Year 2025 Forecast

Kimley-Horn obtained the City of Antioch's General Plan Buildout Model travel forecast information which includes anticipated development in the adjacent cities of Brentwood and Oakley. The model was used to plot bi-directional AM and PM traffic volumes on each segment of the roadways in the study area. Model output was used to compare year 2000 with year 2025 model forecasts to determine the incremental difference in traffic volumes at study intersections.

Year 2025 turning movement volumes were calculated by adding the incremental difference in bi-directional roadway segment (i.e., link) volumes to the existing 2008 link volumes, and then performing a Furness adjustment to generate future year turning movement volumes.

The following planned developments were not included in the City's General Plan Buildout forecast model and were therefore manually added to reflect the planned condition in 2025 and listed in **Table 3 - Approved and Pending Developments**:

- Retail between Slaten Ranch Road and Empire Avenue north of Wicklow Way
- Office north of Capital & Counties property
- eBART with parking lots on the east and west sides of Neroly Road in Antioch and Oakley

LONG-TERM LOS TRAFFIC CONDITIONS

Traffic operations were evaluated under the following long-term development conditions:

- Long-Term (2025) Without Project Traffic Conditions
- Long-Term (2025) With Project Traffic Conditions

Results of the analysis are presented in **Table 7**. Additional detail is provided in the **Appendix**.

Table 6 – Long-Term Level of Service Summary

Int. #	Intersection	Criteria	Near Term				Near Term + Project				Long-Term				Long-Term + Project			
			AM		PM		AM		PM		AM		PM		AM		PM	
			LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay
Signalized Intersections																		
1	Country Hills Drive/Deer Valley Road	0.85	A	0.47	A	0.47	A	0.47	A	0.47	A	0.57	A	0.52	A	0.57	A	0.52
2	Laurel Road/Hillcrest Avenue	0.85	A	0.33	A	0.27	A	0.34	A	0.27	B	0.65	B	0.63	B	0.65	B	0.63
3	Country Hills Drive/Hillcrest Avenue	0.85	A	0.39	A	0.31	A	0.39	A	0.30	A	0.48	A	0.47	A	0.48	A	0.47
6	Lone Tree Way/Country Hills Drive	0.85	C	0.71	A	0.58	C	0.72	A	0.58	E	0.96	D	0.88	E	0.97	D	0.88
7	Lone Tree Way/Deer Valley Plaza	0.85	A	0.45	A	0.50	A	0.45	A	0.50	A	0.55	B	0.61	A	0.56	B	0.61
8	Lone Tree Way/Deer Valley Road	0.85	C	0.72	D	0.81	C	0.73	D	0.81	D	0.83	D	0.89	D	0.84	D	0.89
9	Lone Tree Way/Prewett Park	0.85	A	0.55	A	0.49	A	0.56	A	0.49	B	0.63	A	0.57	B	0.63	A	0.57
10	Lone Tree Way/Sagebrush Drive	0.85	A	0.46	A	0.51	A	0.47	A	0.51	A	0.60	A	0.57	B	0.60	A	0.57
11	Lone Tree Way/Williamson Ranch Plaza	0.85	A	0.48	A	0.50	A	0.49	A	0.51	A	0.54	A	0.58	A	0.55	A	0.58
12	Lone Tree Way/Indian Hill Drive	0.85	A	0.54	A	0.53	A	0.57	A	0.53	A	0.58	B	0.63	B	0.61	B	0.63
14	Lone Tree Way/Hillcrest Avenue	0.85	A	0.50	A	0.54	A	0.52	A	0.54	B	0.71	E	0.91	C	0.73	E	0.91
15	Lone Tree Way/Vista Grande Drive	0.85	A	0.39	A	0.55	A	0.39	A	0.56	A	0.46	B	0.64	A	0.46	B	0.64
16	Lone Tree Way/Heidorn Ranch Road	0.85	A	0.30	A	0.45	A	0.30	A	0.46	A	0.57	C	0.74	A	0.57	C	0.74
17	Lone Tree Way/Canada Valley Road	0.85	A	0.52	B	0.69	A	0.53	B	0.69	B	0.67	D	0.84	B	0.68	D	0.84
18	Lone Tree Way/SR-4 Bypass	0.85	A	0.53	D	0.84	A	0.53	D	0.84	C	0.71	E	0.98	C	0.72	E	0.98
19	Lone Tree Way/Jeffrey Way	0.85	A	0.36	A	0.57	A	0.36	A	0.57	B	0.70	C	0.75	C	0.70	C	0.75
20	Marita Drive/Deer Valley Road	0.85	A	0.39	A	0.39	A	0.39	A	0.39	A	0.45	A	0.42	A	0.45	A	0.42
21	Prewett Ranch Drive/Hillcrest Avenue	0.89	A	0.16	A	0.17	A	0.17	A	0.17	A	0.43	A	0.58	A	0.43	A	0.58
Unsignalized Intersections																		
4	Northeast Wal-Mart Driveway/Hillcrest Avenue																	
	EB Approach	D	B	14.0	B	12.4	C	15.7	B	12.9	C	16.9	C	19.2	C	17.2	C	19.2
5	Southeast Wal-Mart Driveway/Hillcrest Avenue																	
	EB Approach	D	B	10.3	B	10.5	B	10.4	B	10.7	B	11.1	B	12.2	B	11.2	B	12.6
	WB Approach	D	A	9.8	B	10.2	A	9.9	B	10.2	B	10.9	B	11.5	B	11.0	B	11.0
13	Lone Tree Way/Wal-Mart Driveway																	
	SB Approach	D	B	12.1	B	11.0	B	12.1	B	11.1	B	12.8	C	15.6	B	12.8	C	12.2

Long-Term Without Project Level of Service Traffic Conditions

Long-term traffic conditions (based on the City's model traffic forecasts) were evaluated at the study intersections and can be seen in Figure 15. As shown in Table 7, the following four intersections do not function within acceptable standards in the long-term condition:

- Lone Tree Way/Country Hills Drive
- Lone Tree Way/Deer Valley Road
- Lone Tree Way/Hillcrest Avenue
- Lone Tree Way/SB SR-4 Bypass

Intersections operating below acceptable thresholds under the long-term condition will occur regardless of the proposed Walmart expansion project.

Long-Term With Project Level of Service Traffic Conditions

Long-term traffic conditions (based on the City's traffic forecasts) plus the Walmart expansion project were evaluated at the study intersections and are shown in Figure 16. As shown in Table 7, there were no additional intersections that do not function within acceptable standards due to the project traffic from the long-term conditions. In addition, the traffic added by the project does not increase the v/c ratios at three of the

four intersections which would be operating with less than acceptable levels of service. The addition of the project only increases the v/c ratio at the intersection of Lone Tree Way/Country Hills Drive during the AM peak hour, therefore, creating a significant impact at this intersection only.

Delay Index

The delay index (DI) is defined as the ratio between the peak congested travel time and the uncongested travel time along a roadway segment of a designated route of regional significance. Kimley-Horn used the Synchro model developed for this traffic study to determine the DI during all scenarios evaluated. Travel times were determined under peak congestion and also under uncongested conditions. Based on CCTA established criteria, the delay index on Lone Tree Way and segments of Hillcrest Avenue and Deer Valley Road designated as routes of regional significance (in the study area) are to have a DI of less than 2.0.

Based on the analysis, all regionally significant routes in the study area currently operate at a DI of less than 2.0. Under long-term conditions, Lone Tree Way in the eastbound and westbound directions is expected to have a DI greater than 2.0 during the PM peak, with or without the project. With the addition of project traffic, the unacceptable DI on Lone Tree Way will worsen slightly in both directions during the AM peak hour. Therefore, the project would result in a significant impact in terms of added delay along this roadway. **Table 8** summarizes the DI results.

Table 7 – Delay Index Summary

Scenario	Time Period	Lone Tree Way		Hillcrest Avenue		Deer Valley Road		
		EB	WB	NB	SB	NB	SB	
Uncongested Travel Time (sec)	AM Peak	346.9	309.2	83.7	127.7	112.3	109.5	
	PM Peak	309.5	343.9	88.4	134.7	138.2	122.3	
Existing	AM Peak	CTT (sec)	398.9	371.8	98.2	139.1	137.6	113.0
		DI	1.1	1.2	1.2	1.1	1.2	1.0
	PM Peak	CTT (sec)	360.5	390.2	97.5	141.6	152.8	117.8
		DI	1.2	1.1	1.1	1.1	1.1	1.0
Near-Term	AM Peak	CTT (sec)	479.6	442.7	102.2	125.9	138.1	114.9
		DI	1.4	1.4	1.2	1.0	1.2	1.0
	PM Peak	CTT (sec)	432.5	444.9	102.6	128.6	191.3	117.9
		DI	1.4	1.3	1.2	1.0	1.4	1.0
Near-Term + Project	AM Peak	CTT (sec)	489.2	472.7	102.7	126.3	138.1	114.3
		DI	1.4	1.5	1.2	1.0	1.2	1.0
	PM Peak	CTT (sec)	434.0	445.5	102.7	128.6	191.3	117.9
		DI	1.4	1.3	1.2	1.0	1.4	1.0
Long-Term	AM Peak	CTT (sec)	739.8	650.3	117.0	140.2	164.1	126.1
		DI	2.1	2.1	1.4	1.1	1.5	1.2
	PM Peak	CTT (sec)	810.0	562.7	117.0	140.2	164.1	126.1
		DI	2.6	1.6	1.3	1.0	1.2	1.0
Long-Term + Project	AM Peak	CTT (sec)	758.6	703.8	121.9	125.8	147.0	115.2
		DI	2.2	2.3	1.5	1.0	1.3	1.1
	PM Peak	CTT (sec)	813.8	566.5	124.2	143.1	164.1	126.0
		DI	2.6	1.6	1.4	1.1	1.2	1.0

CTT = Congested Travel Time

Vehicle Queuing For All Scenarios

As congestion increases it is common for traffic at signals and stop signs to form lines of stopped (or queued) vehicles. Queue lengths were determined for each lane and measure the distance that vehicles will backup in each direction approaching an intersection. The 95th percentile queue is calculated by using 95th percentile traffic to account for fluctuations in traffic and represents a condition where 95 percent of the time during the peak period, traffic volumes and related queuing will be at, or less, than determined by the analysis and is used as the benchmark for impacts as a standard transportation engineering practice. Average queuing is generally less. Ninety-fifth percentile queuing was estimated under the various development conditions and in consideration of the planned intersection and signal timing improvements. A typical vehicle length of 25 feet is used in the queuing analysis. As stated in the Operating Conditions and Criteria, a significant impact was assumed to occur if the queue increases by one or more vehicles and the vehicle queue exceeds the turn pocket length. A summary of the queuing results is included in the **Appendix**. The results indicated instances where queuing in the dedicated turn lanes may exceed the storage limits of the turn pockets.

The analysis showed that the capacities of several turn bays are exceeded under near-term and long-term conditions with the project. In most cases the inadequate queue lengths are not associated with the Walmart expansion but are a result of pre-existing deficiencies. At locations that are at or near capacity and affected by Walmart traffic,

the increase in vehicle queuing resulting from Walmart expansion traffic is less than one vehicle (which is considered less than significant)...

Potential Effects on Transit, Bicycle, and Pedestrian Mobility

The project was evaluated to determine if it would likely conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) or generate pedestrian, bicycle, or transit travel demand that would not be accommodated by transit, bicycle, or pedestrian facilities and plans.

Patrons to Walmart have the option of driving, taking transit, walking or bicycling. For those taking transit they can reach the site via Routes 380 and 392 of the Tri-Delta Transit system.

According to the 2000 U.S. Census, 4.3% of Antioch residents use transit to travel to work. This typically represents the highest level of transit ridership during the day, with other periods being lower such as when shoppers commonly travel to the store. If it is conservatively assumed that 4.3% of the additional customers associated with the Walmart expansion will use transit during the peak hours of the day, it represents approximately 6 passengers in the weekday AM and none in the weekday PM peak periods.

Data was not readily available for peak hour ridership levels on the Tri-Delta Transit system but during the weekday periods, the routes operate every 30 to 60 minutes and observations indicate the sufficient capacity exists on the buses to accommodate the potential additional transit demand. Furthermore, dispersion of the project-generated riders to the bus routes would result in a minimal effect on transit capacity. Thus the project impact on transit service is determined to be less than significant.

Although most pedestrians and cyclists will originate their trips from the neighborhoods in close proximity to the store, 2000 Census data suggests that even fewer customers or workers are anticipated to walk or bicycle to the Walmart than will ride transit.

There are adequate pedestrian walkways from the project site to the existing sidewalks on Lone Tree Way and Hillcrest Avenue. Furthermore, pedestrians will be able to use the continuous sidewalk facilities within the neighborhoods and on streets adjacent to the Walmart site. This will allow Walmart patrons and employees to conveniently walk from nearby destinations or access transit services. Pedestrian crosswalks are present on approaches at signalized intersections near the project site.

Cyclists will be able to use the Class I paved bike trail along Lone Tree Way from Hillcrest Avenue west across the frontage of the Williamson Ranch Plaza. Class II bicycle facilities (i.e., striped bike lanes) are also available on Hillcrest Avenue as well

as several other streets farther from the site. The bicycle rack at the existing Walmart should be fastened to the ground to help prevent theft of bicycles and to make it more secure. With the expansion of the Walmart, an additional bike rack will be installed and fastened so there will be parking for a minimum of 37 bicycles to comply within the city Municipal Code of one bicycle parking space per 25 vehicle parking spaces for a commercial development. Therefore, no capacity deficiencies are anticipated for pedestrian or bicycle facilities.

There are adequate transit facilities adjacent to the project site with continuous sidewalks and ramps to the transit stop locations.

In addition, the project will construct necessary on-site sidewalks, walkways, bicycle parking, and other amenities in compliance with adopted policies, plans and programs; thus, the Walmart expansion's impact on transit, pedestrian or bicycle facilities is determined to be less than significant.

Site Access and Circulation

On site circulation was evaluated at the project's four driveways and within the project site.

As noted previously, all site driveways provide single lane ingress and egress, with the exception of the exit at Lone Tree Way/Indian Hill Drive which has double left turns and a shared through/right lane.

Throat depths at the site driveways are as follows:

- Lone Tree Way/Indian Hill Drive – 220 feet
- Lone Tree Way/Walmart Driveway – 30 feet
- Northeast Walmart Driveway/Hillcrest Avenue – 30 feet
- Southeast Walmart Driveway/Hillcrest Avenue – 80 feet

Blocked parking aisles can generate on-site congestion and inhibit efficient parking lot circulation. However, an analysis of on-site queuing with the store expansion indicates that vehicles are not expected to queue up beyond the depth of the driveway throats and thus would not block parking aisles.

Expansion of the Walmart store will include a new parking field and circulatory drive aisles west of the store. New pedestrian walkways are planned from the store front out into the parking lot.

Heavy vehicles serving the Walmart will continue to use the Indian Hill Drive access from Lone Tree Way. Large semi-trucks entering the site typically must encroach into the exiting traffic lane to avoid having the rear wheels of the trailer off-track into the adjacent landscaping. Once on site, trucks will travel along the west property line to a

new truck dock on the west side of the store expansion or to the existing truck dock on the north side of the building. The parking and circulation layout provides convenient access to the loading docks and adequate truck turnaround area.

Sight distances, emergency access truck access, and on-site circulation planned for the project appear to be generally adequate, and would be subject to refinements as part of the design review process.

SUMMARY OF IMPACTS AND RECOMMENDED MITIGATION

Based on the results of the traffic analysis and evaluation of the proposed site plan the following impacts are noted. Impacts are identified as being significant unless mitigated.

Significant Unless Mitigated

Impact #1 – Long-Term

The Lone Tree Way/Country Hills Drive intersection will operate at LOS E during the AM peak hour and LOS D (greater than 0.85 V/C) during the PM peak hour under the long-term traffic condition and will experience a slight increase in V/C during the AM peak hour due to the Walmart expansion. However, this impact was mitigated in April 2009 by a City-initiated signal optimization project for the Lone Tree Way corridor. The signal operation at this intersection was re-configured from allowing both through and left-turn movements in a given direction to occur simultaneously while traffic in other directions was stopped, to adding protected left-turn phases, allowing the opposing left-turn movements to occur simultaneously while the opposing through movements are stopped. This modification provides for more efficient traffic flow through the intersection and results in substantial reduction of congestion. Kimley-Horn and Associates has determined that the recently completed signal modification will mitigate the increased congestion resulting from the project in the Long-Term because the modifications will result in the Lone Tree Way/Country Hills Drive intersection operating at acceptable LOS D in the AM peak hour in the Long-Term, and decreasing the v/c to 0.83, which is a substantial improvement over pre-project conditions. Therefore, the potentially significant impact to long-term intersection level of service identified in the project traffic analysis no longer exists because of the recent improvements to the signal phasing at this intersection.

Mitigation #1

No mitigation is required. See discussion under Impact #1 – Long-Term above.

Impact #2 – Long-Term

The delay index on Lone Tree Way is greater than 2.0 during the AM and PM peak hours under the long-term traffic condition and will experience a slight increase in V/C during the AM peak hour due to the Walmart expansion.

Mitigation #2

To mitigate the project impacts expected to occur in the long-term in addition to Mitigation #1, the timing of the signal phasing shall be optimized at the intersection of Lone Tree Way/Deer Valley Road, in the Long-Term. Prior to the issuance of occupancy permits for the project, the applicant shall contribute \$11,000 to the City of Antioch Traffic Signal Maintenance Fund to cover the cost of the signal optimization. After mitigation, the Delay Index and volume to capacity ratio (v/c) will be improved to better than pre-project levels in the Long-Term.

Discussion

Since the efficiencies gained by timing optimization are typically minor, signal retiming projects are usually performed in response to traffic congestion that is already occurring. The City of Antioch performs signal retiming at signalized intersections on an as-needed basis; that is, when traffic congestion warrants retiming of signals to optimize traffic flow. This work is funded by the Traffic Signal Maintenance Fund. Therefore, the project contribution to the Traffic Signal Maintenance Fund would ensure that retiming of the Lone Tree Way/Deer Valley Road intersection would take place in the Long-Term when project impact in terms of added congestion at the intersection occurs. If the signal retiming is performed in the Long-Term, as prescribed, Kimley-Horn and Associates expects that the Delay Index and volume to capacity ratio (v/c) will be improved to better than pre-project levels in the Long-Term.

Currently, the cost of signal retiming in Antioch ranges from about \$4,000 to \$7,000, with the cost in any given instance depending on the complexity of the case. To be conservative, the estimated cost for retiming the Lone Tree Way/Deer Valley Road signal was based on the higher \$7,000 figure, which was then increased at a 3 percent annual rate (average annual inflation over the past 20 years was 2.8 percent) to arrive at an estimated cost of \$11,000 to perform the signal timing in the Long Term (assumed for calculation purposes to occur in 2025, the projected year of General Plan buildout)

APPENDIX

APPENDIX

FIGURES

TURNING MOVEMENT VOLUMES

EXISTING CONDITIONS

TRIP GENERATION

APPROVED & PENDING DEVELOPMENT INFORMATION

EXISTING + APPROVED TRAFFIC CONDITIONS

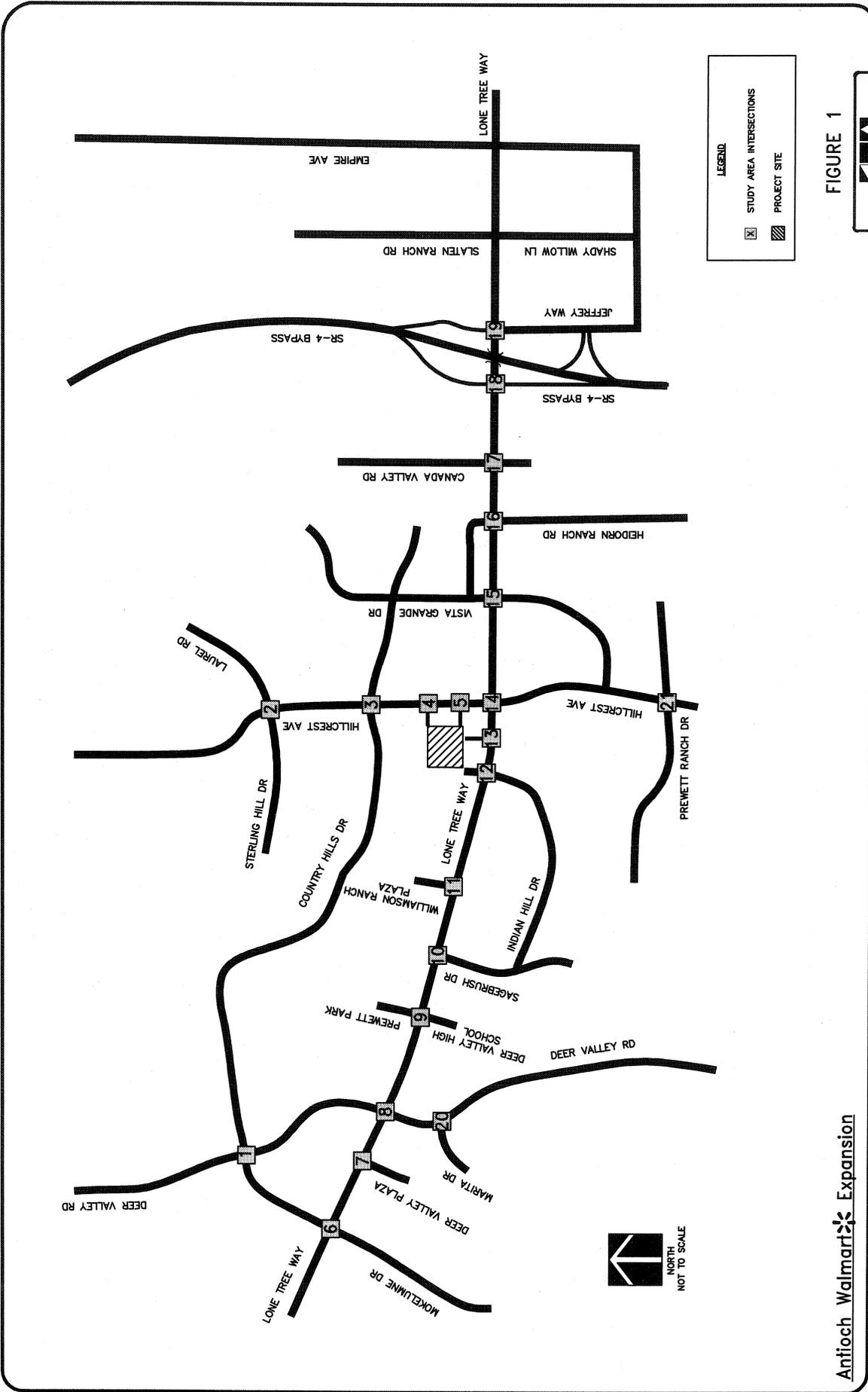
EXISTING + APPROVED + PROJECT TRAFFIC CONDITIONS

LONG-TERM TRAFFIC CONDITIONS

LONG-TERM + PROJECT TRAFFIC CONDITIONS

SIGNAL WARRANT ANALYSIS

QUEUING SUMMARY



Antioch Walmart Expansion

PROJECT LOCATION & STUDY INTERSECTIONS

FIGURE 1

Kimley-Horn and Associates, Inc.



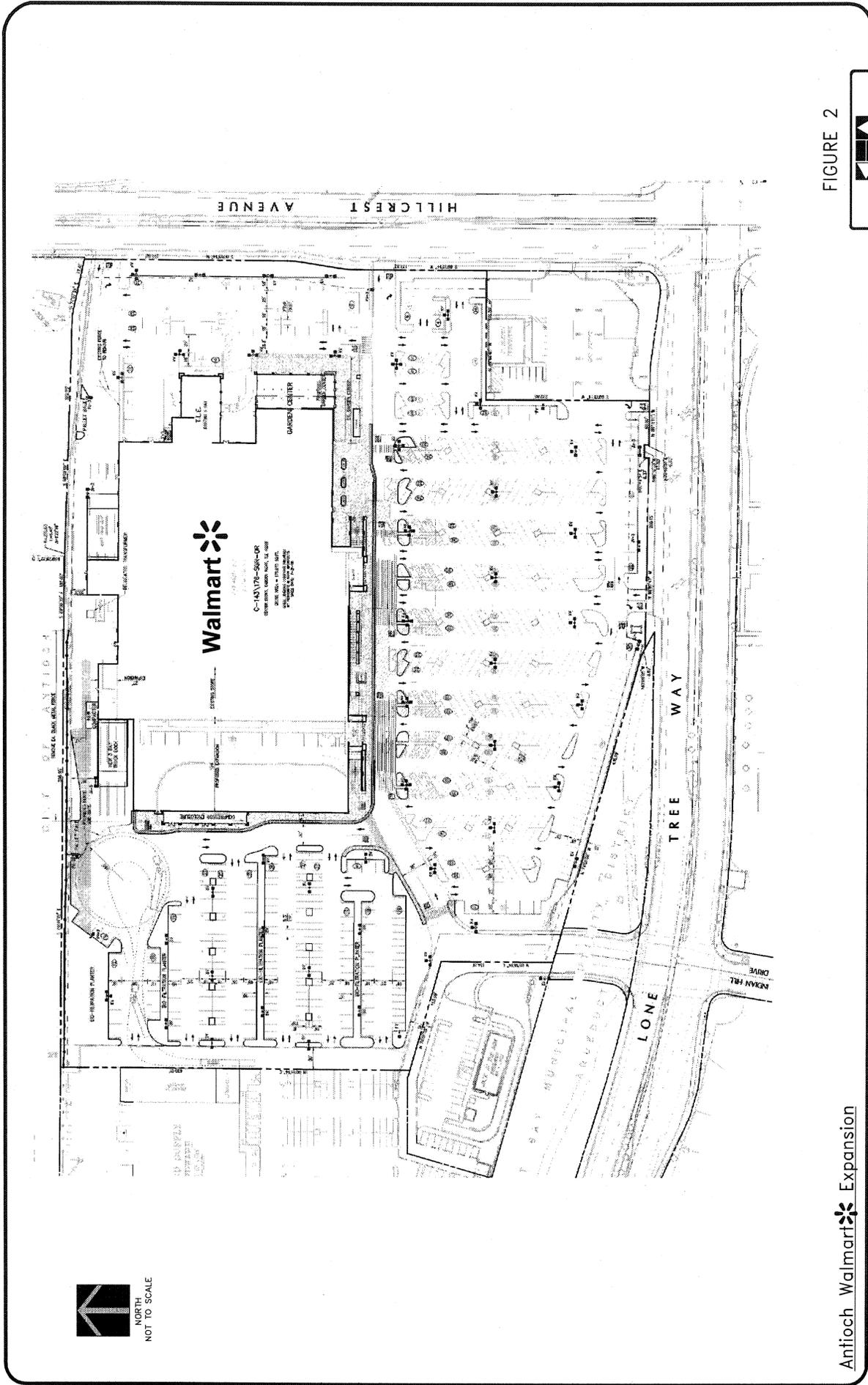


FIGURE 2

Antioch Walmart Expansion

SITE PLAN



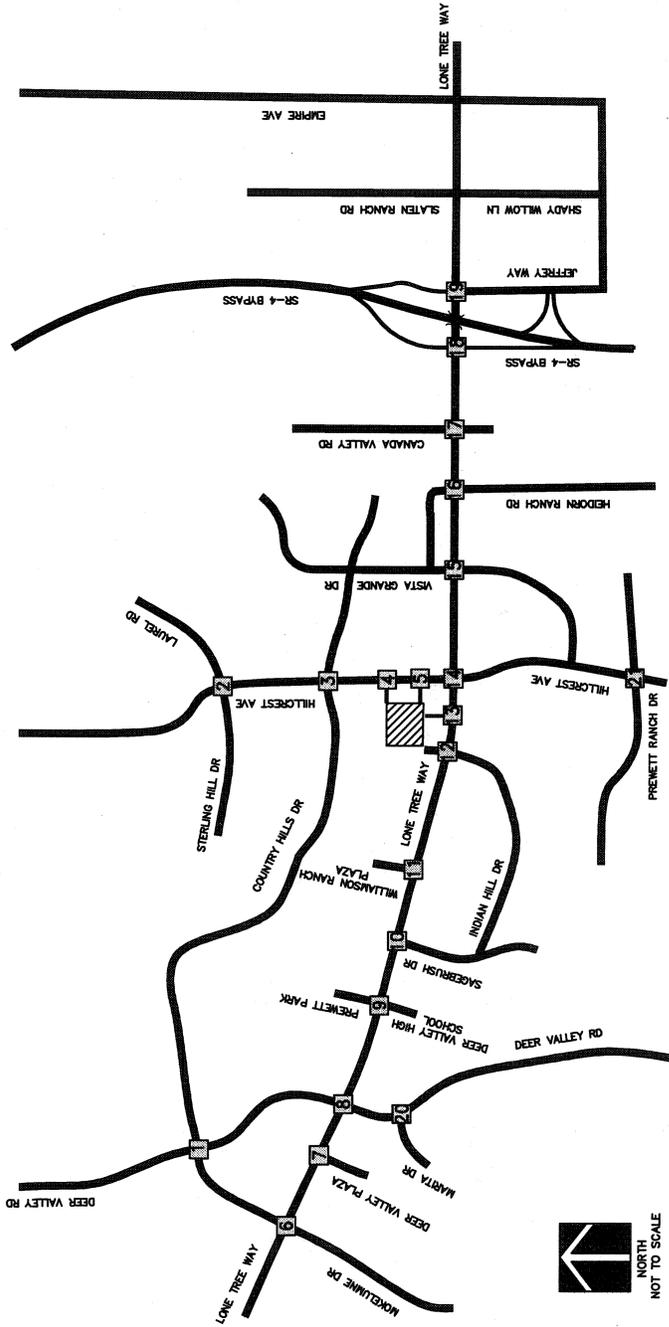
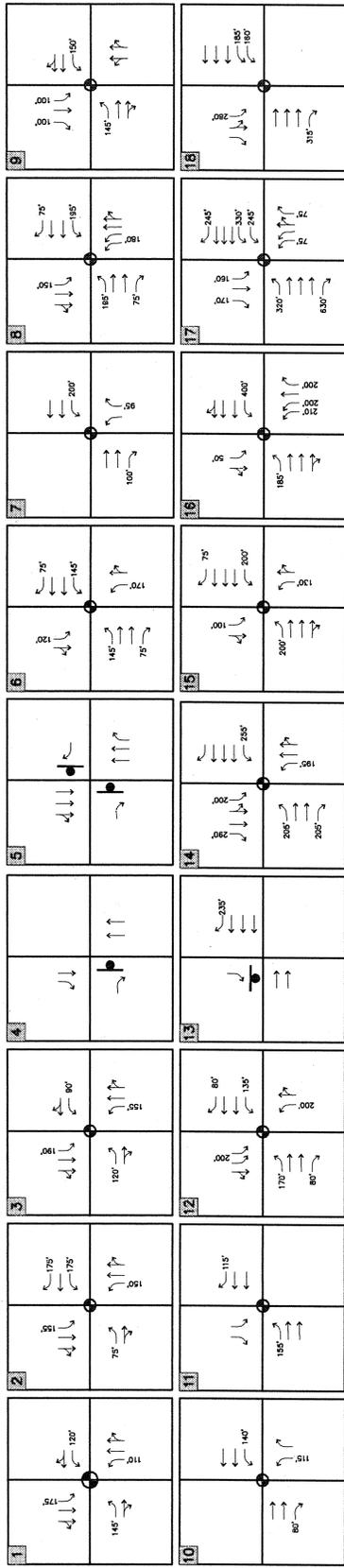


FIGURE 3

Antioch Walmart Expansion

EXISTING LANE GEOMETRY AND TRAFFIC CONTROL



Kimley-Horn and Associates, Inc.

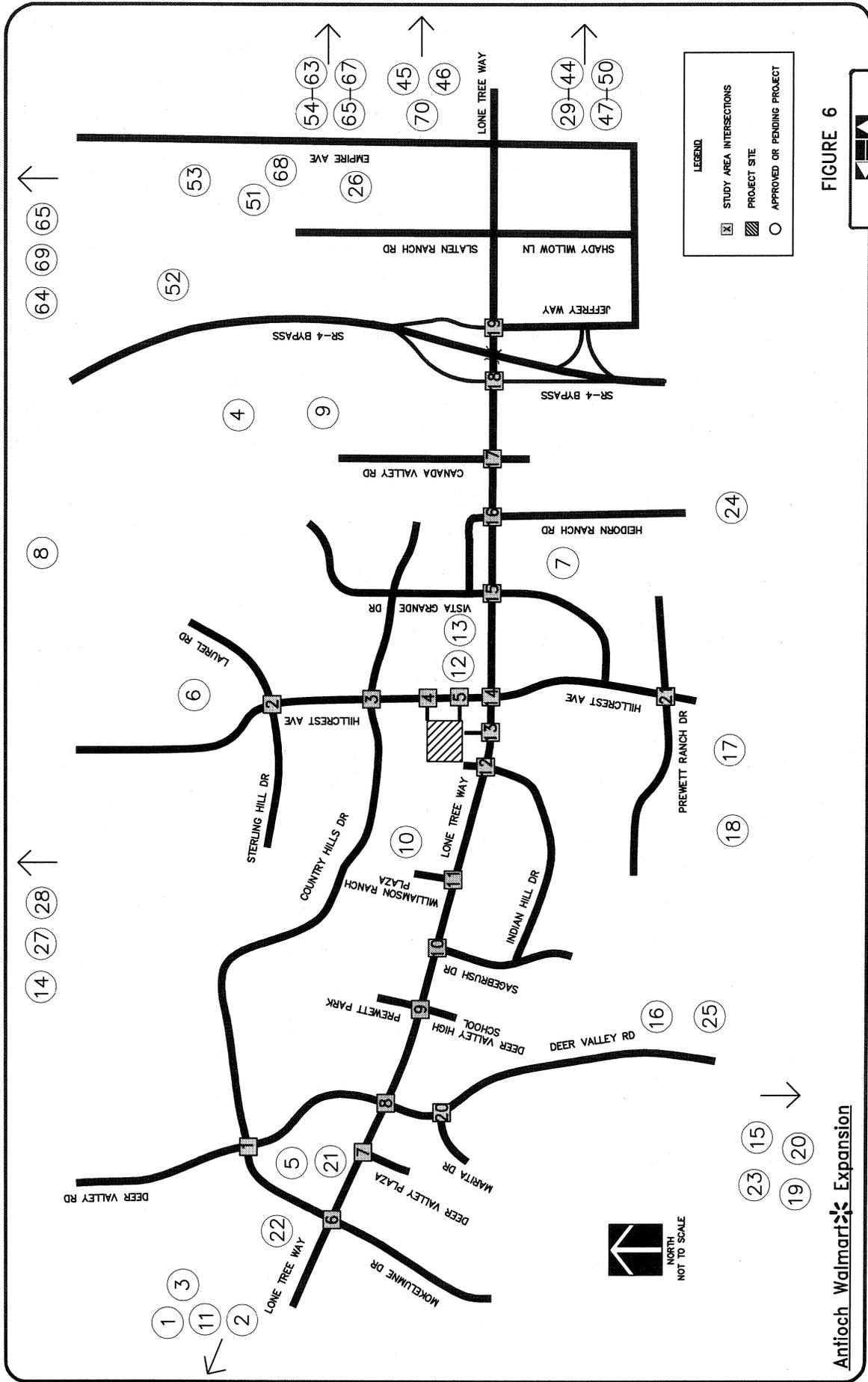


FIGURE 6



Antioch Walmart Expansion

APPROVED & PENDING PROJECT LOCATIONS

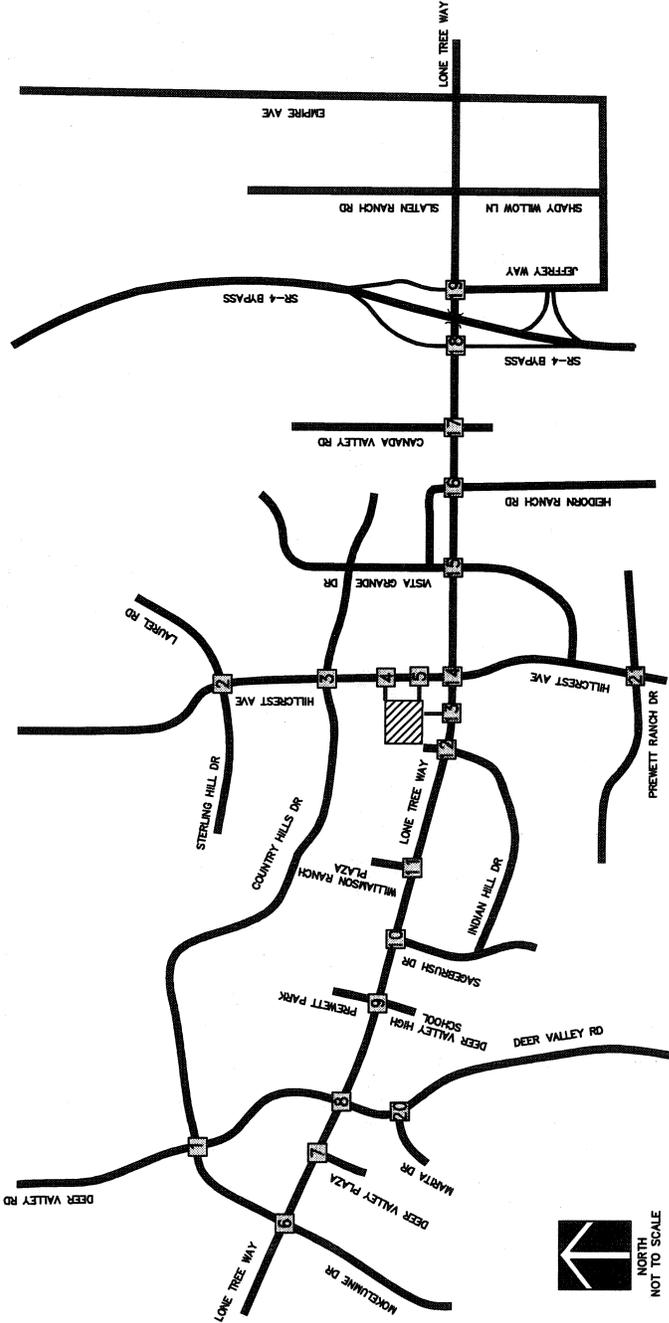
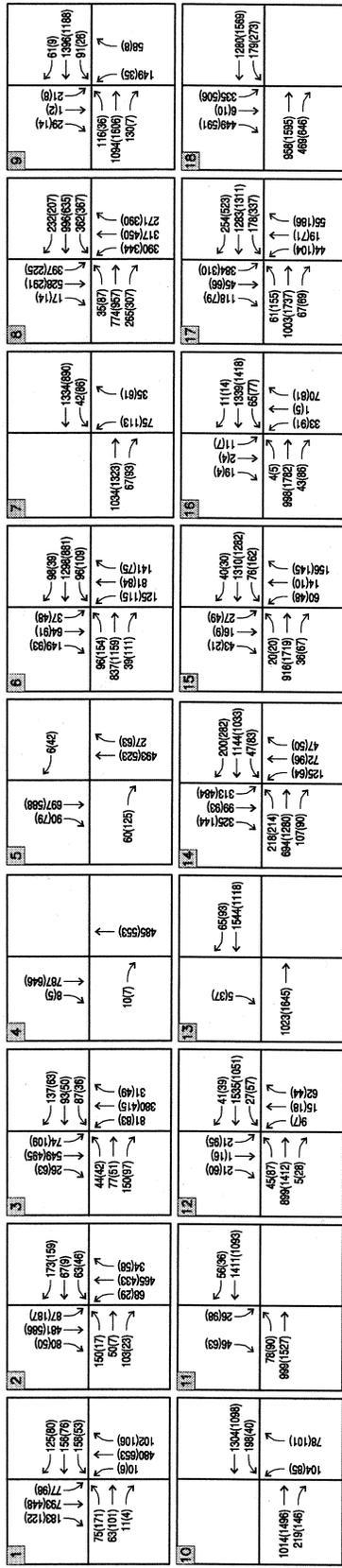
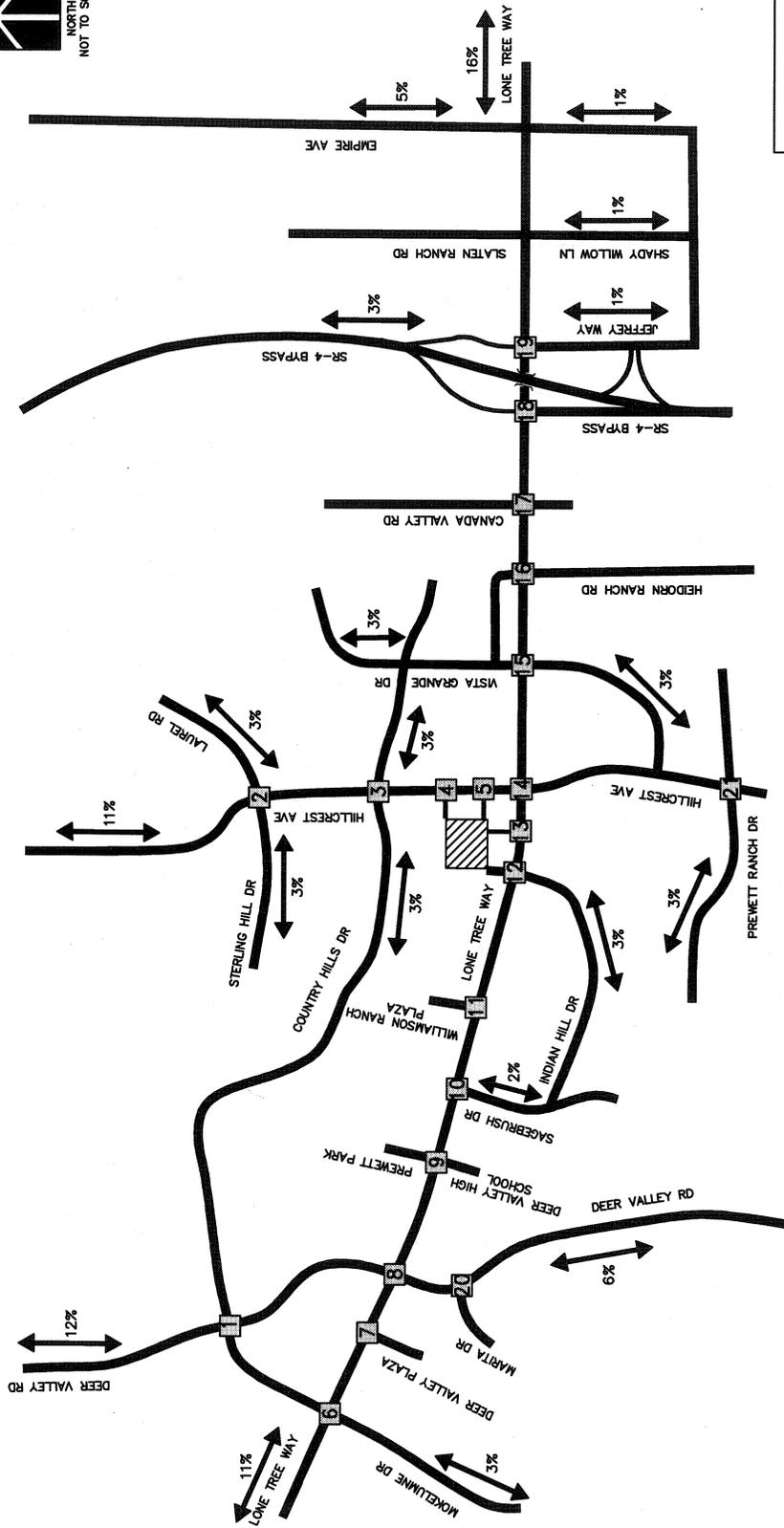


FIGURE 8

Antioch Walmart Expansion

NEAR-TERM TRAFFIC VOLUMES

Kimley-Horn and Associates, Inc.



LEGEND

- STUDY AREA INTERSECTIONS
- PROJECT SITE
- PROJECT TRIP DISTRIBUTION

FIGURE 9



Antioch Walmart Expansion

PROJECT TRIP DISTRIBUTION

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20							

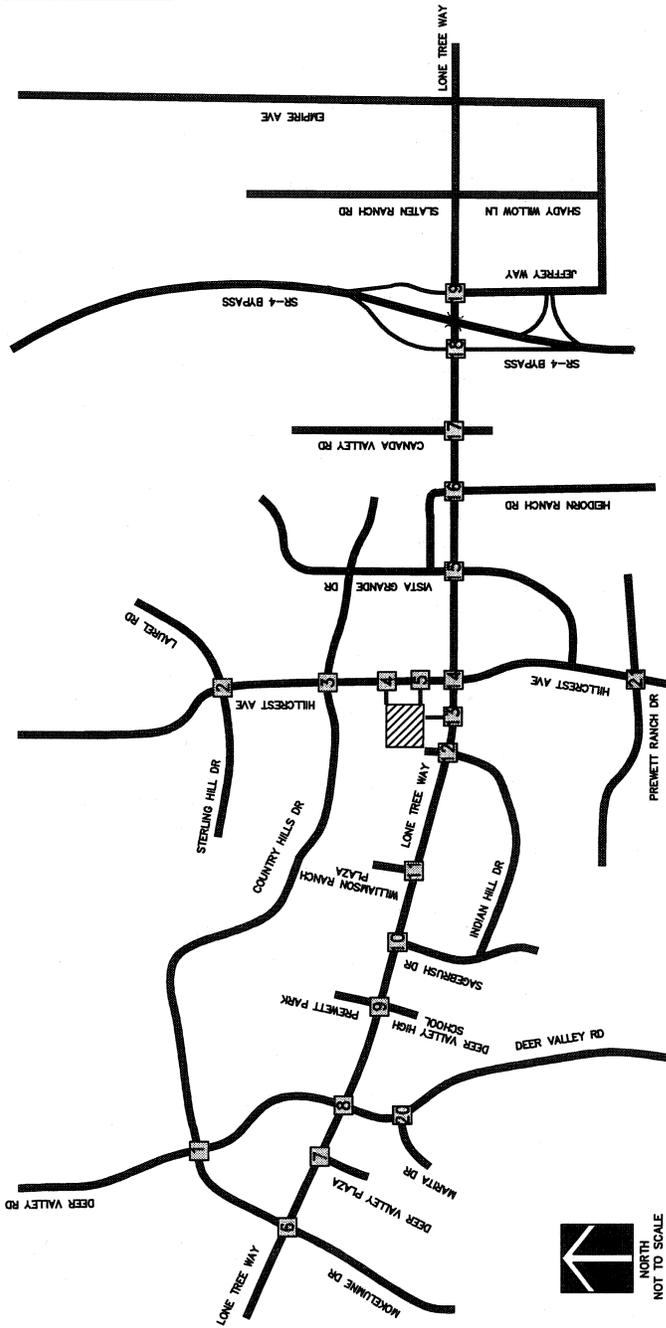


FIGURE 10

Antioch Walmart Expansion

NEW PROJECT GENERATED TRAFFIC VOLUMES



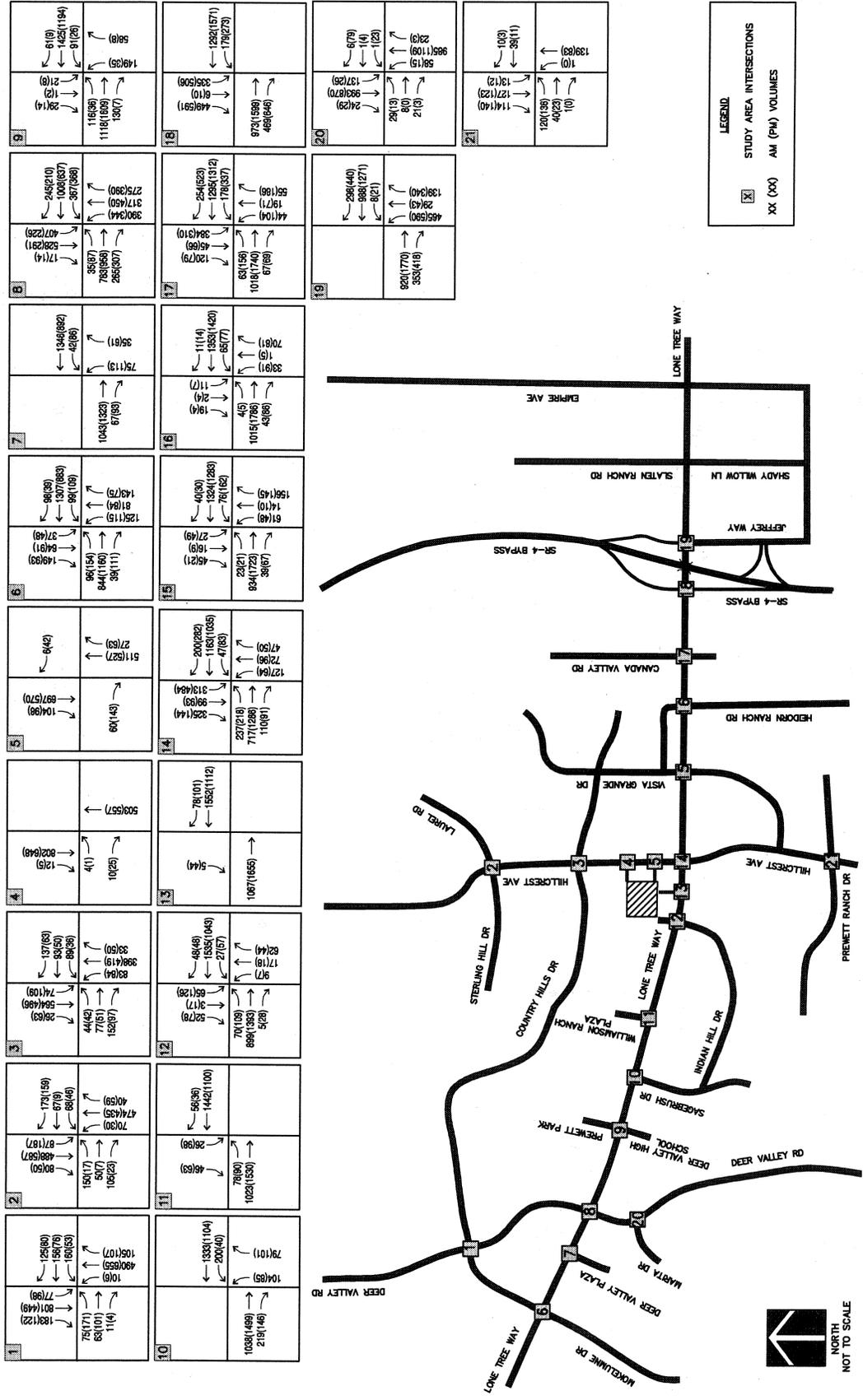


FIGURE 13



Antioch Walmart Expansion

NEAR-TERM + PROJECT TRAFFIC VOLUMES



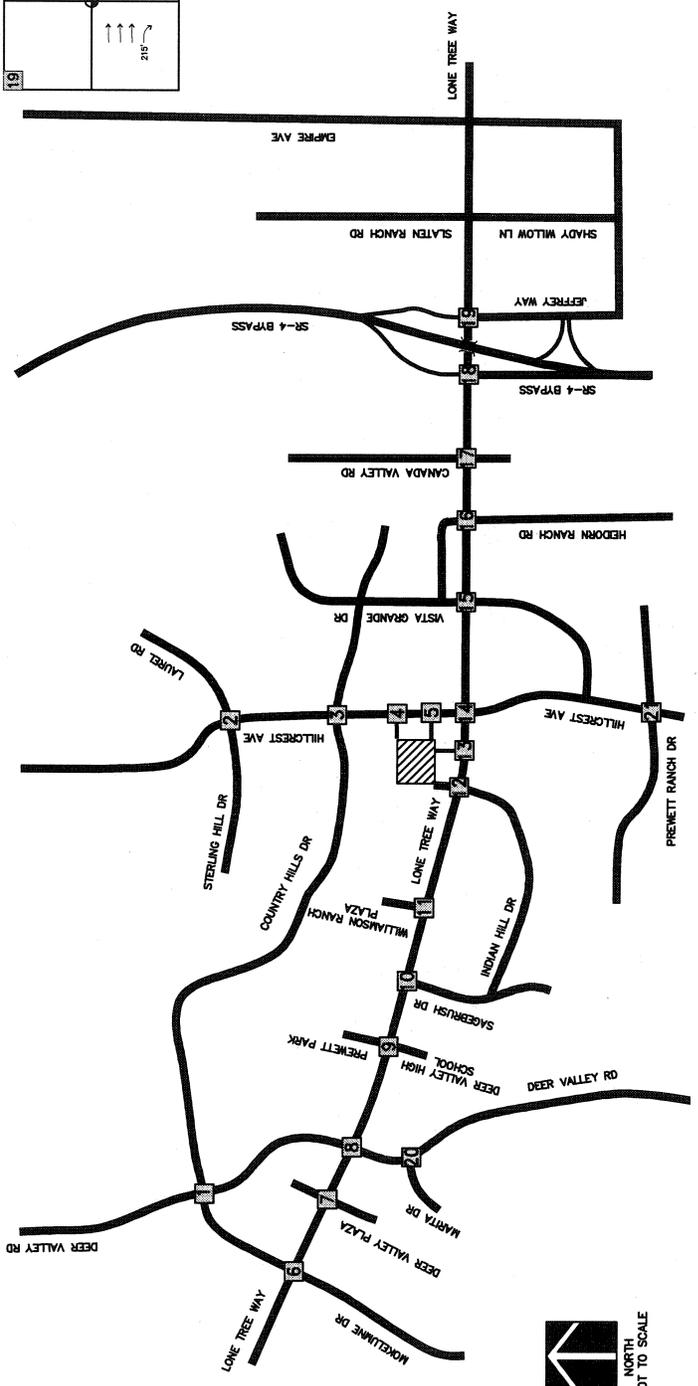
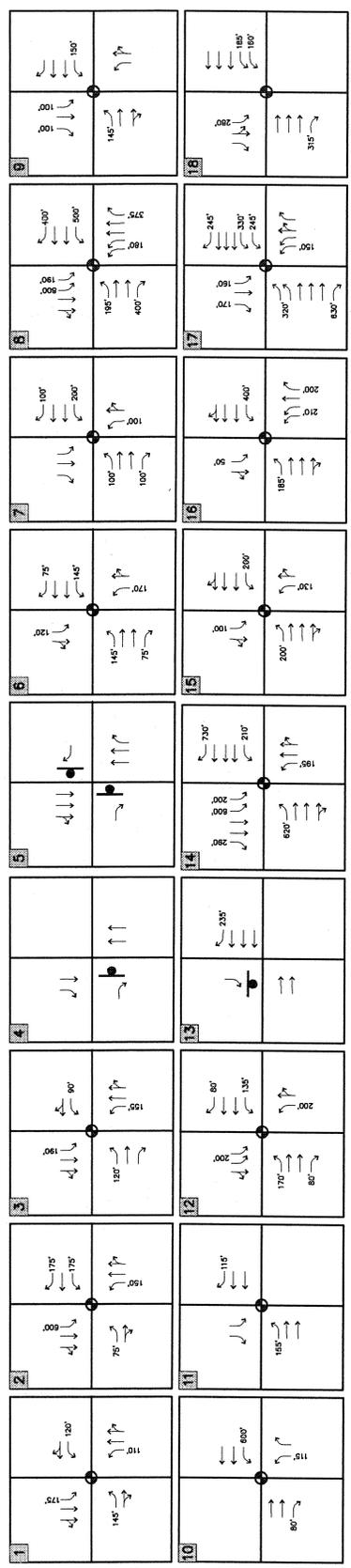


FIGURE 14

Antioch Walmart Expansion

LONG-TERM LANE GEOMETRY AND TRAFFIC CONTROL

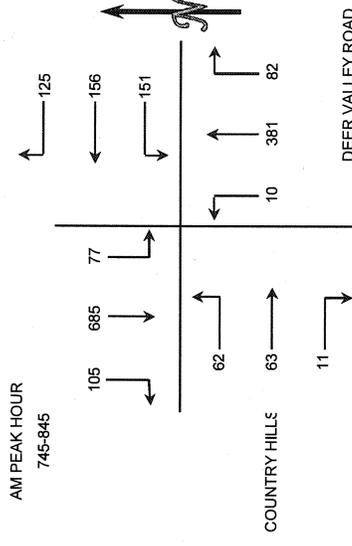


TURNING MOVEMENT VOLUMES

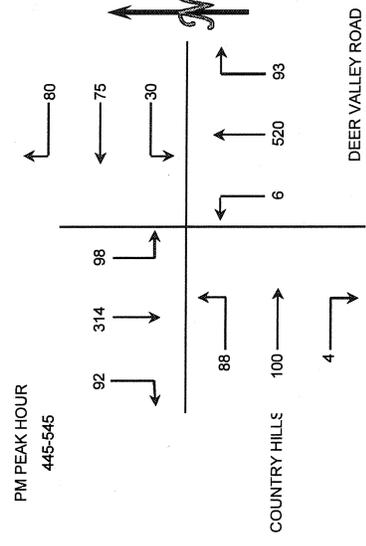
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S DEER VALLEY ROAD AND
 E/W COUNTRY HILLS DRIVE
 CITY: ANTIOCH

15 MIN COUNTS													
7:00 AM TO 9:00 AM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	13	80	7	23	38	19	3	33	0	0	6	4	226
715-730	20	103	9	18	33	21	7	43	1	0	9	6	270
730-745	26	134	22	23	39	43	14	68	0	1	11	14	395
745-800	34	196	32	43	44	52	24	88	3	1	24	16	557
800-815	37	168	20	42	52	30	28	107	2	3	12	15	516
815-830	22	145	15	20	31	26	12	98	2	7	15	16	409
830-845	12	176	10	20	29	43	18	88	3	0	12	15	426
845-900	10	120	11	14	16	30	28	104	0	1	3	7	344
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
790-890	93	513	70	107	154	135	48	232	4	2	50	40	1448
715-815	117	601	83	126	168	146	73	306	6	5	56	51	1738
730-830	119	643	89	128	166	151	78	361	7	12	62	61	1877
745-845	105	685	77	125	156	151	82	381	10	11	63	62	1908
800-900	81	609	56	96	128	129	86	397	7	11	42	53	1695



15 MIN COUNTS													
4:00 PM TO 6:00 PM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	22	80	14	20	19	9	24	128	3	3	16	13	351
415-430	21	73	26	18	17	14	21	127	0	0	22	20	359
430-445	12	76	16	24	19	8	22	125	2	1	23	22	350
445-500	25	80	24	25	18	6	24	110	3	3	25	23	366
500-515	24	81	21	19	19	9	23	131	1	0	19	20	367
515-530	18	73	29	16	17	6	19	147	1	0	23	20	369
530-545	25	80	24	20	21	9	27	132	1	1	33	25	398
545-600	27	91	18	13	18	9	25	94	1	1	22	15	334
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-600	80	309	80	87	73	37	91	490	8	7	86	78	1426
415-615	82	310	87	86	73	37	90	493	6	4	89	85	1442
430-630	79	310	90	84	73	29	88	513	7	4	90	85	1452
445-645	82	314	96	80	75	30	93	520	6	4	100	88	1500
500-600	94	325	92	68	75	33	94	504	4	2	97	80	1488



WILTEC

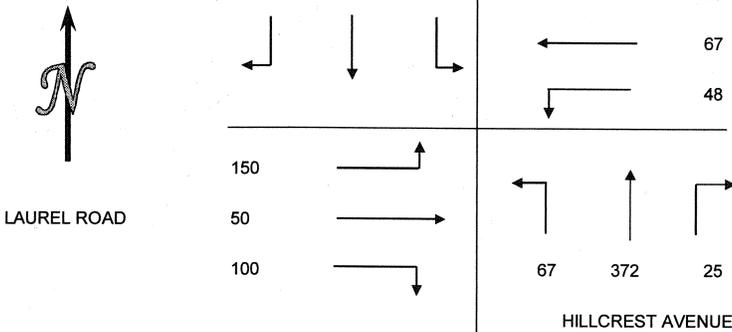
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY - HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S HILLCREST AVENUE
 E/W LAUREL ROAD

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-715	3	50	8	38	1	4	1	58	2	3	4	13	185
715-730	4	47	13	37	1	5	2	74	5	5	1	6	200
730-745	8	91	10	47	3	6	3	96	8	14	3	13	302
745-800	15	110	19	50	3	12	4	92	16	24	6	25	376
800-815	28	92	12	40	26	12	11	112	29	22	17	36	437
815-830	32	92	29	34	31	6	6	92	13	25	19	60	439
830-845	5	83	14	31	7	18	4	76	9	29	8	29	313
845-900	3	110	15	19	2	13	14	24	5	6	3	9	223
HOUR TOTALS													
700-800	30	298	50	172	8	27	10	320	31	46	14	57	1063
715-815	55	340	54	174	33	35	20	374	58	65	27	80	1315
730-830	83	385	70	171	63	36	24	392	66	85	45	134	1554
745-845	80	377	74	155	67	48	25	372	67	100	50	150	1565
800-900	68	377	70	124	66	49	35	304	56	82	47	134	1412

AM PEAK HOUR
745-845



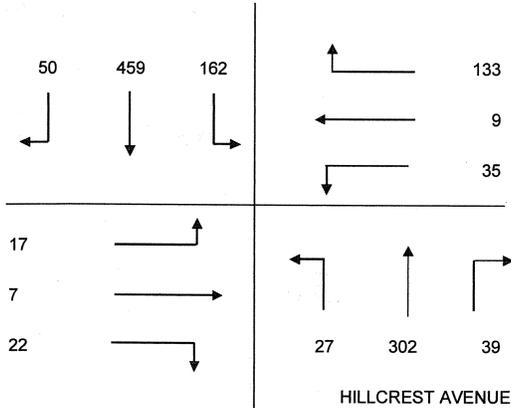
PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
700-715	0	0	1	1
715-730	0	0	3	1
730-745	4	0	1	0
745-800	2	5	10	1
800-815	1	1	6	0
815-830	1	5	3	1
830-845	0	1	0	0
845-900	0	5	0	0
HOUR TOTALS				
700-800	6	5	15	3
715-815	7	6	20	2
730-830	8	11	20	2
745-845	4	12	19	2
800-900	2	12	9	1

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S HILLCREST AVENUE
 E/W LAUREL ROAD

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-415	7	104	27	42	0	5	8	87	7	8	4	6	305
415-430	7	90	35	35	4	4	6	90	3	2	0	5	281
430-445	11	105	28	34	2	7	7	75	5	7	2	6	289
445-500	8	119	30	37	1	3	9	77	7	0	3	2	296
500-515	11	106	42	45	1	10	10	81	5	5	2	4	322
515-530	12	123	37	29	3	15	6	80	8	4	2	3	322
530-545	14	114	43	27	3	3	8	72	11	5	2	4	306
545-600	13	116	40	32	2	7	15	69	3	8	1	6	312
HOUR TOTALS													
400-500	33	418	120	148	7	19	30	329	22	17	9	19	1171
415-515	37	420	135	151	8	24	32	323	20	14	7	17	1188
430-530	42	453	137	145	7	35	32	313	25	16	9	15	1229
445-545	45	462	152	138	8	31	33	310	31	14	9	13	1246
500-600	50	459	162	133	9	35	39	302	27	22	7	17	1262

PM PEAK HOUR
500-600



PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
400-415	0	0	1	0
415-430	0	1	0	0
430-445	0	0	0	0
445-500	0	0	0	0
500-515	0	0	0	0
515-530	0	0	0	0
530-545	0	0	0	0
545-600	1	1	2	0
HOUR TOTALS				
400-500	0	1	1	0
415-515	0	1	0	0
430-530	0	0	0	0
445-545	0	0	0	0
500-600	1	1	2	0

WILTEC

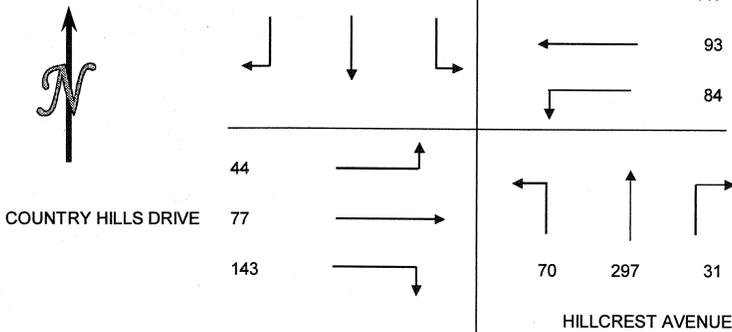
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY - HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S HILLCREST AVENUE
 E/W COUNTRY HILLS DRIVE

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-715	4	46	6	21	2	3	0	41	1	13	6	5	148
715-730	7	60	8	28	9	10	4	50	11	19	7	16	229
730-745	3	70	19	36	18	14	5	69	7	26	7	14	288
745-800	4	105	25	37	32	33	9	62	18	39	33	15	412
800-815	5	118	22	47	41	21	10	95	22	28	28	12	449
815-830	10	113	7	20	14	16	4	69	18	40	12	11	334
830-845	7	103	9	13	6	14	8	71	12	36	4	6	289
845-900	5	125	4	11	2	13	5	62	18	31	7	10	293
HOURLY TOTALS													
700-800	18	281	58	122	61	60	18	222	37	97	53	50	1077
715-815	19	353	74	148	100	78	28	276	58	112	75	57	1378
730-830	22	406	73	140	105	84	28	295	65	133	80	52	1483
745-845	26	439	63	117	93	84	31	297	70	143	77	44	1484
800-900	27	459	42	91	63	64	27	297	70	135	51	39	1365

AM PEAK HOUR
745-845



PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
700-715	0	1	0	0
715-730	3	0	9	0
730-745	2	0	6	2
745-800	8	0	6	1
800-815	3	0	2	6
815-830	2	2	4	2
830-845	1	0	0	0
845-900	0	0	2	0
HOURLY TOTALS				
700-800	13	1	21	3
715-815	16	0	23	9
730-830	15	2	18	11
745-845	14	2	12	9
800-900	6	2	8	8

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

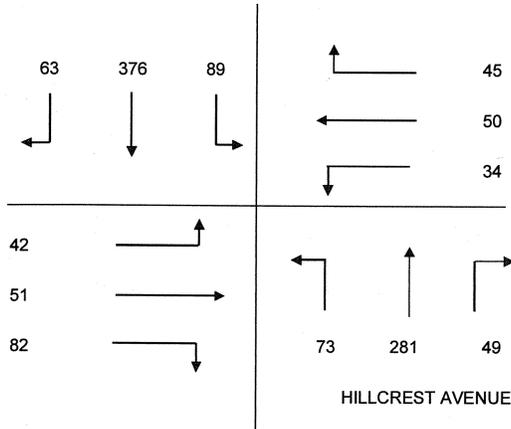
CLIENT: KIMLEY - HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S HILLCREST AVENUE
 E/W COUNTRY HILLS DRIVE

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-415	11	97	17	10	20	2	7	76	23	20	12	11	306
415-430	10	71	12	13	16	5	7	75	19	16	12	3	259
430-445	10	91	12	14	13	3	10	70	21	16	8	6	274
445-500	10	89	24	7	13	10	14	76	20	17	8	10	298
500-515	14	92	20	11	13	6	8	66	20	16	10	18	294
515-530	19	99	19	12	12	39	13	75	15	14	8	10	335
530-545	18	83	21	13	13	-19	17	71	15	22	20	8	282
545-600	12	102	29	9	12	8	11	69	23	30	13	6	324
HOUR TOTALS													
400-500	41	348	65	44	62	20	38	297	83	69	40	30	1137
415-515	44	343	68	45	55	24	39	287	80	65	38	37	1125
430-530	53	371	75	44	51	58	45	287	76	63	34	44	1201
445-545	61	363	84	43	51	36	52	288	70	69	46	46	1209
500-600	63	376	89	45	50	34	49	281	73	82	51	42	1235

PM PEAK HOUR
500-600



COUNTRY HILLS DRIVE

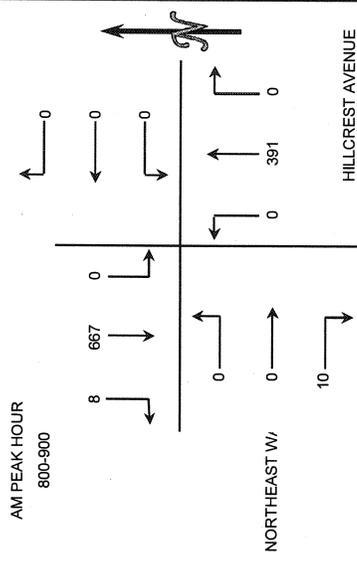


PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
400-415	0	0	5	0
415-430	0	0	0	0
430-445	4	0	1	0
445-500	0	1	0	0
500-515	0	0	1	0
515-530	0	0	2	0
530-545	1	0	2	0
545-600	1	0	0	0
HOUR TOTALS				
400-500	4	1	6	0
415-515	4	1	2	0
430-530	4	1	4	0
445-545	1	1	5	0
500-600	2	0	5	0

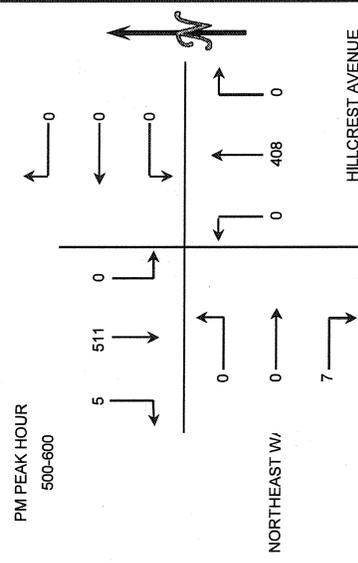
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S HILLCREST AVENUE
 E/W NORTHEAST WALMART DRIVEWAY
 CITY: ANTIOCH

15 MIN COUNTS													
7:00 AM TO 9:00 AM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	0	65	0	0	0	0	0	33	0	0	0	0	98
715-730	2	96	0	0	0	0	0	54	0	1	0	0	153
730-745	3	131	0	0	0	0	0	81	0	0	0	0	215
745-800	1	162	0	0	0	0	0	90	0	0	0	0	253
800-815	1	142	0	0	0	0	0	117	0	2	0	0	262
815-830	2	160	0	0	0	0	0	100	0	2	0	0	264
830-845	3	173	0	0	0	0	0	92	0	2	0	0	270
845-900	2	192	0	0	0	0	0	82	0	4	0	0	280
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-900	6	454	0	0	0	0	0	258	0	1	0	0	719
715-815	7	531	0	0	0	0	0	342	0	3	0	0	883
730-830	7	595	0	0	0	0	0	388	0	4	0	0	984
745-845	7	637	0	0	0	0	0	399	0	6	0	0	1049
800-900	8	667	0	0	0	0	0	391	0	10	0	0	1076



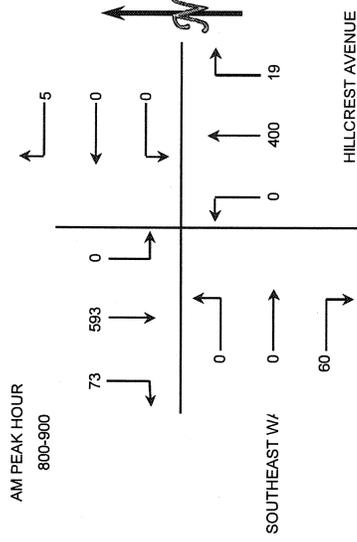
15 MIN COUNTS													
4:00 PM TO 6:00 PM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	1	129	0	0	0	0	0	101	0	2	0	0	233
415-430	3	104	0	0	0	0	0	114	0	0	0	0	221
430-445	1	120	0	0	0	0	0	97	0	1	0	0	219
445-500	0	138	0	0	0	0	0	114	0	2	0	0	254
500-515	2	112	0	0	0	0	0	91	0	1	0	0	206
515-530	0	121	0	0	0	0	0	101	0	2	0	0	224
530-545	0	137	0	0	0	0	0	100	0	1	0	0	238
545-600	3	141	0	0	0	0	0	116	0	3	0	0	263
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	5	491	0	0	0	0	0	426	0	5	0	0	927
415-515	6	474	0	0	0	0	0	416	0	4	0	0	900
430-530	3	491	0	0	0	0	0	403	0	6	0	0	903
445-545	2	508	0	0	0	0	0	406	0	6	0	0	922
500-600	5	511	0	0	0	0	0	408	0	7	0	0	931



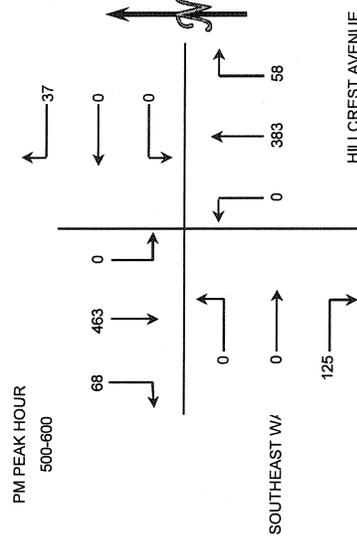
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S HILLCREST AVENUE AND SOUTHEAST WALMART DRIVEWAY
 CITY: ANTIOCH

15 MIN COUNTS		7:00 AM TO 9:00 AM											
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
700-715	2	58	0	0	0	0	1	34	0	1	0	0	96
715-730	2	91	0	0	0	0	0	54	0	4	0	0	151
730-745	15	117	0	2	0	0	2	76	0	9	0	0	221
745-800	10	151	0	0	0	0	0	91	0	5	0	0	257
800-815	20	131	0	1	0	0	2	126	0	13	0	0	293
815-830	22	127	0	1	0	0	5	93	0	15	0	0	263
830-845	15	164	0	2	0	0	5	97	0	15	0	0	298
845-900	16	171	0	1	0	0	7	84	0	17	0	0	296
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
700-800	29	417	0	2	0	0	3	255	0	19	0	0	725
715-815	47	490	0	3	0	0	4	347	0	31	0	0	922
730-830	67	526	0	4	0	0	9	366	0	42	0	0	1034
745-845	67	573	0	4	0	0	12	407	0	48	0	0	1111
800-900	73	593	0	5	0	0	19	400	0	60	0	0	1150



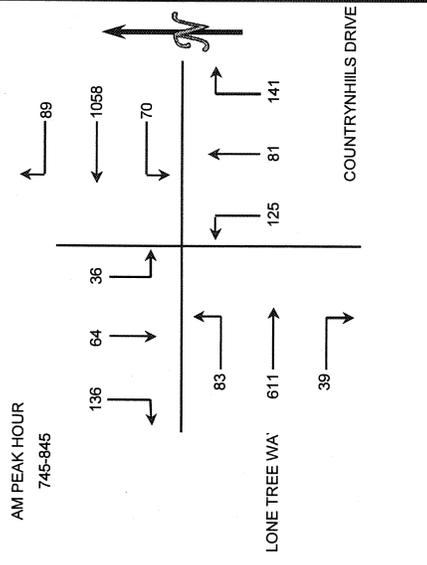
15 MIN COUNTS		4:00 PM TO 6:00 PM											
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
400-415	21	111	0	6	0	0	11	97	0	29	0	0	275
415-430	13	99	0	8	0	0	16	106	0	32	0	0	274
430-445	14	111	0	14	0	0	12	85	0	28	0	0	264
445-500	14	107	0	9	0	0	23	98	0	34	0	0	285
500-515	18	106	0	5	0	0	14	85	0	24	0	0	252
515-530	20	112	0	7	0	0	10	101	0	30	0	0	280
530-545	17	119	0	15	0	0	16	91	0	40	0	0	298
545-600	13	126	0	10	0	0	18	106	0	31	0	0	304
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
400-500	62	428	0	37	0	0	62	366	0	123	0	0	1098
415-515	59	423	0	36	0	0	85	374	0	118	0	0	1075
430-530	66	436	0	35	0	0	59	369	0	116	0	0	1081
445-545	69	444	0	36	0	0	63	375	0	128	0	0	1115
500-600	68	463	0	37	0	0	58	383	0	125	0	0	1134



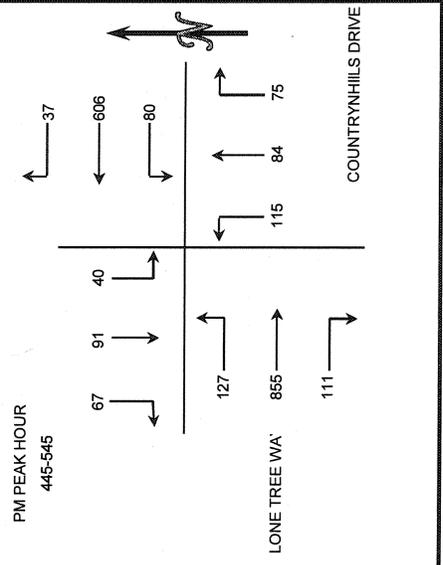
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIUCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S COUNTRYNHILLS DRIVE AND LONE TREE WAY
 CITY: ANTIUCH

7:00 AM TO 9:00 AM												
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
TOTAL												
700-715	32	8	0	1	154	7	5	6	31	8	87	7
715-730	23	8	2	5	189	7	7	8	22	9	114	11
730-745	32	20	0	17	215	16	19	20	35	10	167	30
745-800	31	16	8	28	262	22	44	32	40	13	173	26
800-815	42	20	7	28	279	20	37	20	36	9	159	24
815-830	30	15	13	24	242	16	19	13	25	6	126	15
830-845	33	13	8	9	275	12	41	16	24	11	153	18
845-900	22	8	3	4	217	20	21	6	28	7	131	11
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
700-800	118	52	10	51	820	52	75	66	128	40	541	74
715-815	128	64	17	78	945	65	107	80	133	41	613	91
730-830	135	71	28	97	998	74	119	85	136	38	825	95
745-845	136	64	36	89	1058	70	141	81	125	39	611	83
800-900	127	56	31	65	1013	68	118	55	113	33	569	68



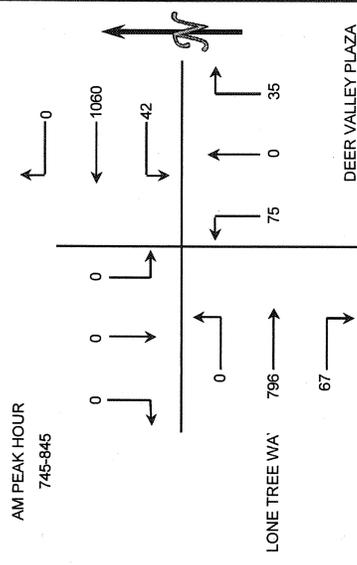
4:00 PM TO 6:00 PM												
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
TOTAL												
400-415	16	14	8	7	178	14	15	16	27	15	236	22
415-430	13	17	11	5	150	17	19	15	23	10	244	30
430-445	15	14	8	10	154	13	32	16	35	27	218	29
445-500	18	17	13	10	138	24	21	32	44	16	224	34
500-515	18	20	10	13	167	19	17	14	20	33	202	33
515-530	18	20	6	8	128	20	14	15	26	31	215	28
530-545	13	34	11	6	173	17	23	23	25	31	214	32
545-600	19	17	6	9	152	16	15	15	22	14	202	31
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
TIME	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
400-500	62	62	40	32	620	68	87	79	129	68	922	115
415-515	64	68	42	38	609	73	89	77	122	86	888	126
430-530	69	71	37	41	587	76	84	77	125	107	859	124
445-545	67	91	40	37	606	80	75	84	115	111	855	127
500-600	68	91	33	36	620	72	69	67	93	109	833	124



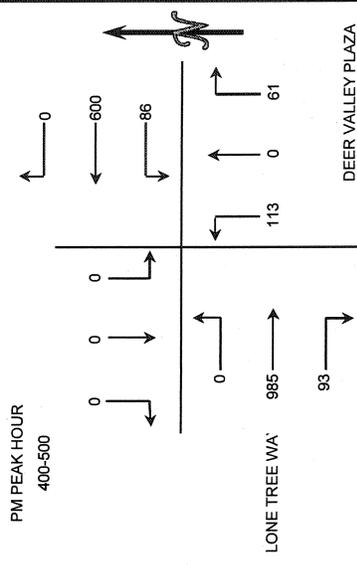
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIPOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S DEER VALLEY PLAZA
 E/W LONE TREE WAY
 CITY: ANTIPOCH

7:00 AM TO 9:00 AM												
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
700-715	0	0	0	0	159	6	2	0	7	5	79	0
715-730	0	0	0	0	199	6	0	0	5	10	103	0
730-745	0	0	0	0	256	12	10	0	18	13	161	0
745-800	0	0	0	0	294	8	9	0	15	12	205	0
800-815	0	0	0	0	302	11	10	0	20	12	193	0
815-830	0	0	0	0	219	9	5	0	24	23	182	0
830-845	0	0	0	0	245	14	11	0	16	20	216	0
845-900	0	0	0	0	208	8	5	0	21	11	202	0
HOUR TOTALS												
TIME	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
700-800	0	0	0	0	908	32	21	0	45	40	548	0
715-815	0	0	0	0	1051	37	29	0	58	47	662	0
730-830	0	0	0	0	1071	40	34	0	77	60	741	0
745-845	0	0	0	0	1060	42	35	0	75	67	796	0
800-900	0	0	0	0	974	42	31	0	81	66	793	0



4:00 PM TO 6:00 PM												
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
400-415	0	0	0	0	163	13	16	0	31	25	261	0
415-430	0	0	0	0	150	21	18	0	24	14	255	0
430-445	0	0	0	0	151	29	12	0	32	30	235	0
445-500	0	0	0	0	136	23	15	0	26	24	234	0
500-515	0	0	0	0	161	15	18	0	38	25	211	0
515-530	0	0	0	0	126	17	20	0	21	23	220	0
530-545	0	0	0	0	171	17	13	0	30	27	204	0
545-600	0	0	0	0	166	19	18	0	21	30	214	0
HOUR TOTALS												
TIME	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL
400-500	0	0	0	0	600	86	61	0	113	93	985	0
415-515	0	0	0	0	598	88	63	0	120	93	935	0
430-530	0	0	0	0	574	84	65	0	117	102	900	0
445-545	0	0	0	0	594	72	66	0	115	99	869	0
500-600	0	0	0	0	624	68	69	0	110	106	849	0

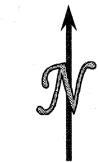


INTERSECTION TURNING MOVEMENT COUNT SUMMARY

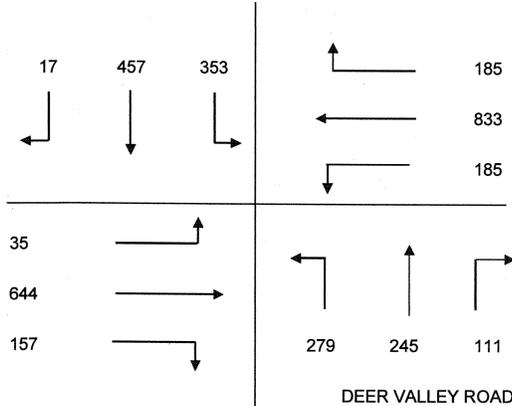
CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S DEER VALLEY ROAD
 E/W LONE TREE WAY

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-715	5	54	26	6	113	17	2	25	48	25	62	1	384
715-730	1	90	42	12	140	30	4	36	52	42	88	4	541
730-745	9	94	70	25	192	27	17	55	55	32	116	5	697
745-800	4	122	107	51	226	42	37	61	79	52	195	12	988
800-815	3	129	83	46	230	46	19	81	73	29	124	9	872
815-830	4	112	75	36	195	49	26	61	57	29	146	9	799
830-845	6	94	88	52	182	48	29	42	70	47	179	5	842
845-900	2	78	104	68	158	54	42	68	64	35	160	17	850
HOUR TOTALS													
700-800	19	360	245	94	671	116	60	177	234	151	461	22	2610
715-815	17	435	302	134	788	145	77	233	259	155	523	30	3098
730-830	20	457	335	158	843	164	99	258	264	142	581	35	3356
745-845	17	457	353	185	833	185	111	245	279	157	644	35	3501
800-900	15	413	350	202	765	197	116	252	264	140	609	40	3363

AM PEAK HOUR
745-845



LONE TREE WAY



DEER VALLEY ROAD

PEDESTRIAN COUNTS

PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
700-715	1	0	3	2
715-730	0	0	4	3
730-745	0	5	13	13
745-800	3	8	4	1
800-815	0	1	16	6
815-830	1	5	10	6
830-845	0	6	21	10
845-900	0	4	9	0
HOUR TOTALS				
700-800	4	13	24	19
715-815	3	14	37	23
730-830	4	19	43	26
745-845	4	20	51	23
800-900	1	16	56	22

WILTEC

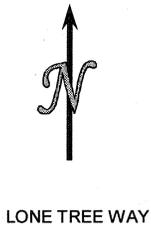
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

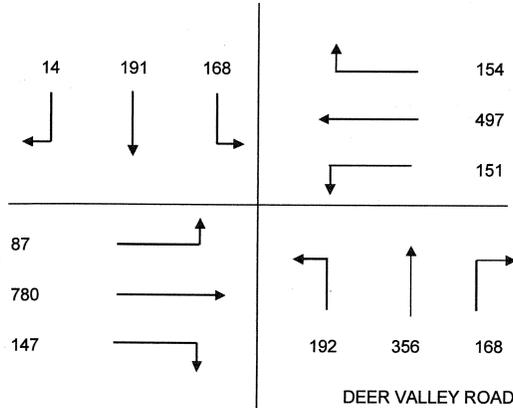
CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S DEER VALLEY ROAD
 E/W LONE TREE WAY

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-415	3	52	35	44	118	33	40	93	76	50	224	18	786
415-430	3	43	31	36	122	25	34	81	34	38	203	24	674
430-445	7	39	47	50	113	35	45	97	58	33	211	10	745
445-500	5	44	42	38	108	24	26	82	45	36	203	14	667
500-515	6	46	27	36	117	43	44	105	48	31	188	16	707
515-530	2	56	38	43	122	39	42	91	46	45	200	28	752
530-545	3	48	60	37	118	35	42	97	57	28	196	28	749
545-600	3	41	43	38	140	34	40	63	41	43	196	15	697
HOUR TOTALS													
400-500	18	178	155	168	461	117	145	353	213	157	841	66	2872
415-515	21	172	147	160	460	127	149	365	185	138	805	64	2793
430-530	20	185	154	167	460	141	157	375	197	145	802	68	2871
445-545	16	194	167	154	465	141	154	375	196	140	787	86	2875
500-600	14	191	168	154	497	151	168	356	192	147	780	87	2905

PM PEAK HOUR
500-600



LONE TREE WAY



DEER VALLEY ROAD

PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
400-415	0	9	2	2
415-430	8	2	2	1
430-445	0	0	2	0
445-500	0	0	0	2
500-515	0	0	8	0
515-530	2	3	3	0
530-545	0	0	1	0
545-600	0	0	1	1
HOUR TOTALS				
400-500	8	11	6	5
415-515	8	2	12	3
430-530	2	3	13	2
445-545	2	3	12	2
500-600	2	3	13	1

WILTEC

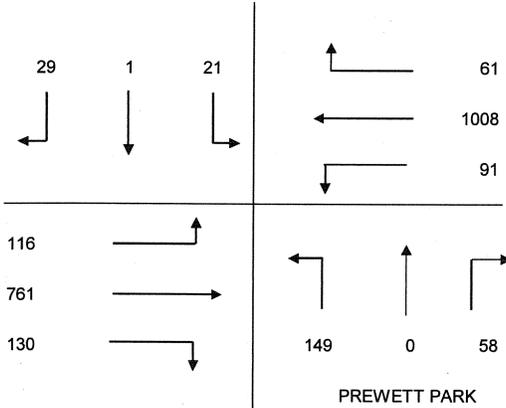
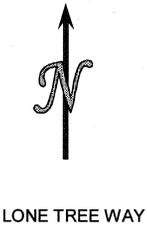
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S PREWETT PARK
 E/W LONE TREE WAY

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-715	1	0	0	0	167	3	0	0	2	11	90	0	274
715-730	0	0	0	1	165	11	4	1	7	20	111	6	326
730-745	6	0	0	4	214	18	7	0	31	26	150	14	470
745-800	9	1	5	9	284	29	20	0	51	61	209	36	714
800-815	2	0	1	13	272	19	13	0	33	36	179	23	591
815-830	4	0	4	16	254	21	12	0	22	14	190	19	556
830-845	14	0	11	23	198	22	13	0	43	19	183	38	564
845-900	13	0	7	16	218	29	27	0	69	29	221	46	675
HOUR TOTALS													
700-800	16	1	5	14	830	61	31	1	91	118	560	56	1784
715-815	17	1	6	27	935	77	44	1	122	143	649	79	2101
730-830	21	1	10	42	1024	87	52	0	137	137	728	92	2331
745-845	29	1	21	61	1008	91	58	0	149	130	761	116	2425
800-900	33	0	23	68	942	91	65	0	167	98	773	126	2386

AM PEAK HOUR
745-845



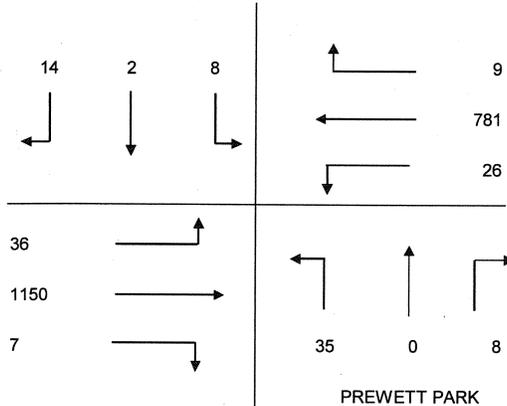
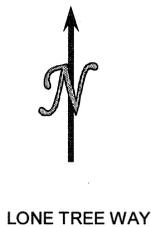
PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
700-715	2	0	2	3
715-730	1	0	3	6
730-745	0	1	0	14
745-800	0	10	0	17
800-815	1	4	1	14
815-830	0	6	1	15
830-845	0	13	0	18
845-900	0	19	0	19
HOUR TOTALS				
700-800	3	11	5	40
715-815	2	15	4	51
730-830	1	21	2	60
745-845	1	33	2	64
800-900	1	42	2	66

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY - HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S PREWETT PARK
 E/W LONE TREE WAY

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-415	7	0	4	1	204	3	5	0	17	5	277	9	532
415-430	1	0	5	5	181	4	8	0	11	4	238	9	466
430-445	3	0	1	2	195	4	1	0	4	0	243	6	459
445-500	5	1	1	2	197	3	1	0	8	2	284	10	514
500-515	3	0	2	3	199	7	3	0	5	1	273	12	508
515-530	5	1	3	1	165	2	3	0	5	3	316	6	510
530-545	1	0	2	3	220	14	1	0	17	1	277	8	544
545-600	2	0	3	2	189	12	3	0	5	0	256	10	482
HOUR TOTALS													
400-500	16	1	11	10	777	14	15	0	40	11	1042	34	1971
415-515	12	1	9	12	772	18	13	0	28	7	1038	37	1947
430-530	16	2	7	8	756	16	8	0	22	6	1116	34	1991
445-545	14	2	8	9	781	26	8	0	35	7	1150	36	2076
500-600	11	1	10	9	773	35	10	0	32	5	1122	36	2044

PM PEAK HOUR
445-545



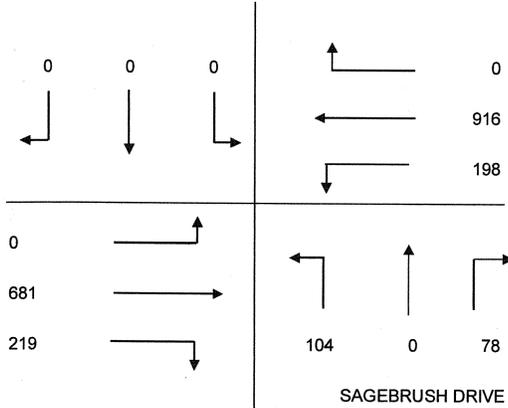
PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
400-415	1	2	0	0
415-430	0	0	0	2
430-445	0	0	1	2
445-500	0	0	3	1
500-515	0	0	1	1
515-530	0	1	2	0
530-545	0	0	3	2
545-600	0	0	1	1
HOUR TOTALS				
400-500	1	2	4	5
415-515	0	0	5	6
430-530	0	1	7	4
445-545	0	1	9	4
500-600	0	1	7	4

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY - HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S SAGEBRUSH DRIVE
 E/W LONE TREE WAY

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
700-715	0	0	0	0	152	3	1	0	17	7	73	0	253
715-730	0	0	0	0	188	8	2	0	11	12	84	0	305
730-745	0	0	0	0	266	43	7	0	23	49	113	0	501
745-800	0	0	0	0	249	75	23	0	48	66	158	0	619
800-815	0	0	0	0	244	22	22	0	38	45	131	0	502
815-830	0	0	0	0	240	43	15	0	25	30	177	0	530
830-845	0	0	0	0	213	45	18	0	14	65	173	0	528
845-900	0	0	0	0	219	88	23	0	27	79	200	0	636
HOUR TOTALS													
700-800	0	0	0	0	855	129	33	0	99	134	428	0	1678
715-815	0	0	0	0	947	148	54	0	120	172	486	0	1927
730-830	0	0	0	0	999	183	67	0	134	190	579	0	2152
745-845	0	0	0	0	946	185	78	0	125	206	639	0	2179
800-900	0	0	0	0	916	198	78	0	104	219	681	0	2196

AM PEAK HOUR
800-900



PEDESTRIAN COUNTS

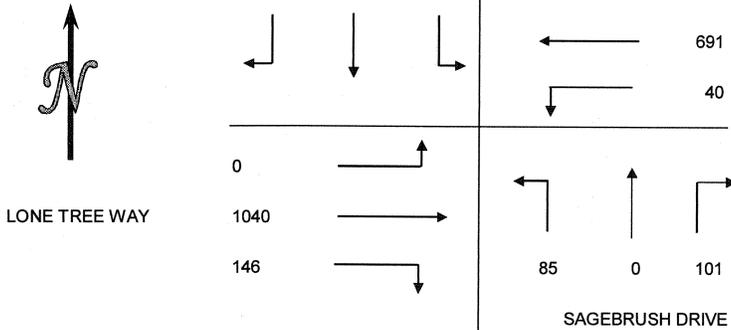
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
700-715	0	0	1	0
715-730	0	2	1	0
730-745	0	0	0	6
745-800	0	0	7	2
800-815	0	0	1	5
815-830	0	0	3	0
830-845	0	0	0	3
845-900	0	2	2	11
HOUR TOTALS				
700-800	0	2	9	8
715-815	0	2	9	13
730-830	0	0	11	13
745-845	0	0	11	10
800-900	0	2	6	19

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY - HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S SAGEBRUSH DRIVE
 E/W LONE TREE WAY

15 MIN COUNTS PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
400-415	0	0	0	0	185	16	12	0	13	41	227	0	494
415-430	0	0	0	0	176	13	16	0	12	28	211	0	456
430-445	0	0	0	0	177	10	11	0	14	39	215	0	466
445-500	0	0	0	0	166	5	6	0	12	36	243	0	468
500-515	0	0	0	0	211	15	24	0	22	43	281	0	596
515-530	0	0	0	0	150	14	45	0	31	26	277	0	543
530-545	0	0	0	0	164	6	26	0	20	41	239	0	496
545-600	0	0	0	0	140	9	46	0	27	22	211	0	455
HOURLY TOTALS													
400-500	0	0	0	0	704	44	45	0	51	144	896	0	1884
415-515	0	0	0	0	730	43	57	0	60	146	950	0	1986
430-530	0	0	0	0	704	44	86	0	79	144	1016	0	2073
445-545	0	0	0	0	691	40	101	0	85	146	1040	0	2103
500-600	0	0	0	0	665	44	141	0	100	132	1008	0	2090

PM PEAK HOUR
445-545

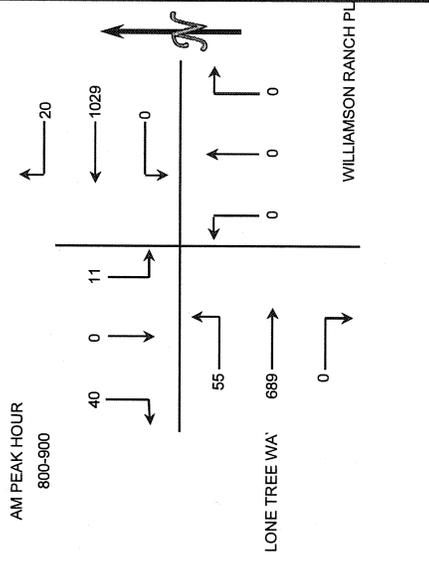


PEDESTRIAN COUNTS				
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
15 MIN COUNTS				
400-415	2	0	2	4
415-430	0	0	3	0
430-445	0	0	0	2
445-500	0	0	1	0
500-515	0	0	0	0
515-530	0	0	1	0
530-545	0	0	4	0
545-600	0	0	0	0
HOURLY TOTALS				
400-500	2	0	6	6
415-515	0	0	4	2
430-530	0	0	2	2
445-545	0	0	6	0
500-600	0	0	5	0

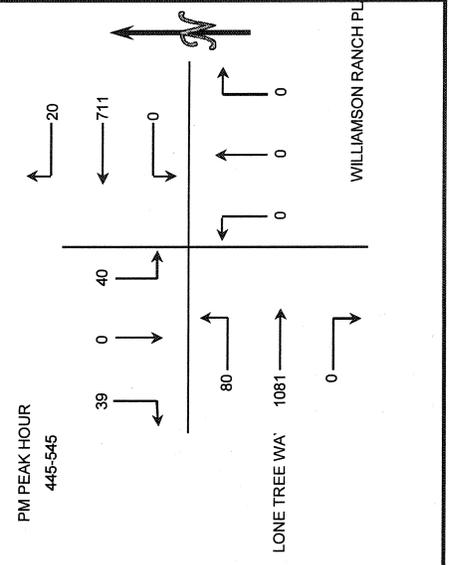
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S WILLIAMSON RANCH PLAZA
 E/W LONE TREE WAY
 CITY: ANTIOCH

7:00 AM TO 9:00 AM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	1	0	0	3	143	0	0	0	0	0	56	5	208
715-730	2	0	0	3	171	0	0	0	0	0	74	3	253
730-745	5	0	1	3	294	0	0	0	0	0	108	7	418
745-800	3	0	2	5	333	0	0	0	0	0	190	9	542
800-815	6	0	2	4	252	0	0	0	0	0	125	10	399
815-830	8	0	0	8	251	0	0	0	0	0	180	11	458
830-845	14	0	3	3	241	0	0	0	0	0	160	16	437
845-900	12	0	6	5	285	0	0	0	0	0	224	18	550
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
700-800	11	0	3	14	941	0	0	0	0	0	428	24	1421
715-815	16	0	5	15	1050	0	0	0	0	0	497	29	1612
730-830	22	0	5	20	1130	0	0	0	0	0	603	37	1817
745-845	31	0	7	20	1077	0	0	0	0	0	655	46	1836
800-900	40	0	11	20	1029	0	0	0	0	0	689	55	1844



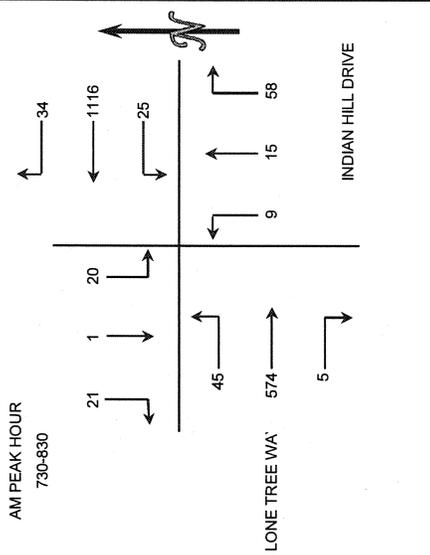
4:00 PM TO 6:00 PM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	20	0	7	2	188	0	0	0	0	0	234	25	476
415-430	8	0	9	3	179	0	0	0	0	0	233	14	446
430-445	6	0	8	5	193	0	0	0	0	0	195	19	426
445-500	5	0	9	5	185	0	0	0	0	0	241	20	465
500-515	16	0	12	9	195	0	0	0	0	0	268	22	522
515-530	8	0	9	1	132	0	0	0	0	0	305	20	475
530-545	10	0	10	5	199	0	0	0	0	0	267	18	509
545-600	8	0	5	7	156	0	0	0	0	0	259	26	461
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
400-500	39	0	33	15	745	0	0	0	0	0	903	76	1813
415-515	35	0	38	22	752	0	0	0	0	0	937	75	1859
430-530	35	0	38	20	705	0	0	0	0	0	1009	81	1888
445-545	39	0	40	20	711	0	0	0	0	0	1081	80	1971
500-600	42	0	36	22	682	0	0	0	0	0	1099	86	1967



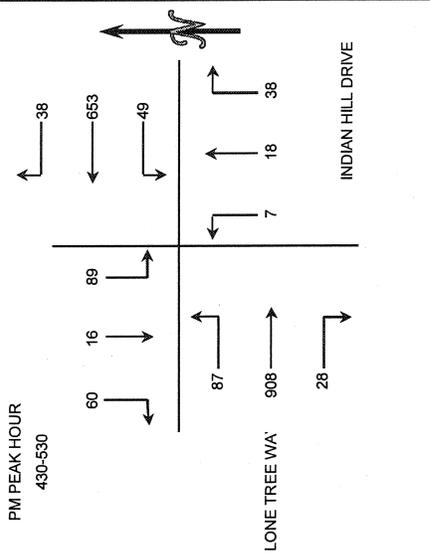
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S INDIAN HILL DRIVE AND E/W LONE TREE WAY
 CITY: ANTIOCH

15 MIN COUNTS		7:00 AM TO 9:00 AM											
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL	TOTAL
700-715	1	0	4	2	171	2	9	2	4	2	49	1	244
715-730	1	0	5	9	203	2	7	1	4	0	78	1	311
730-745	2	0	4	4	284	2	13	3	3	0	123	2	440
745-800	5	0	2	9	360	4	16	2	2	1	177	6	584
800-815	3	0	8	6	264	10	7	2	2	1	132	14	464
815-830	11	1	6	15	208	9	12	3	2	3	142	23	435
830-845	4	5	19	6	220	7	11	4	10	2	140	12	440
845-900	10	1	12	9	244	9	17	5	3	2	168	24	504
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
700-800	9	0	15	24	1018	10	45	8	10	3	427	10	1578
715-815	11	0	19	28	1111	18	53	13	11	2	510	23	1799
730-830	21	1	20	34	1116	25	58	15	9	5	574	45	1923
745-845	23	6	35	36	1052	30	56	16	16	7	591	55	1923
800-900	28	7	45	36	936	35	57	19	17	8	582	73	1843



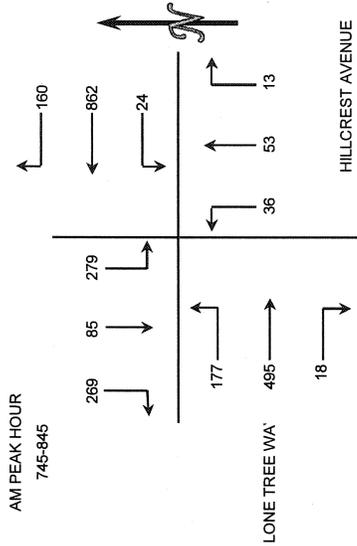
15 MIN COUNTS		4:00 PM TO 6:00 PM											
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBTL	NBRT	NBTH	NBLT	EBRT	EBTH	EBTL	TOTAL
400-415	17	1	31	15	147	12	9	3	0	2	217	27	481
415-430	14	2	21	14	150	10	9	2	0	0	197	23	442
430-445	19	5	29	9	201	10	10	5	2	1	216	31	538
445-500	12	4	14	8	157	9	4	4	1	18	198	20	449
500-515	18	4	29	8	142	11	10	6	2	4	219	10	463
515-530	11	3	17	13	153	19	14	3	2	5	275	26	541
530-545	14	3	13	5	166	8	8	3	0	2	236	25	483
545-600	10	0	23	15	138	10	15	5	2	10	239	16	483
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
400-500	62	12	95	46	655	41	32	14	3	21	828	101	1910
415-515	63	15	93	39	650	40	33	17	5	23	830	84	1892
430-530	60	16	89	38	653	49	38	18	7	28	908	87	1991
445-545	55	14	73	34	618	47	36	16	5	29	928	81	1936
500-600	53	10	82	41	589	48	47	17	6	21	969	77	1970



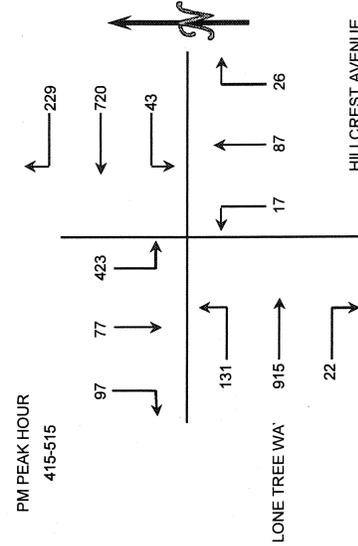
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S HILLCREST AVENUE AND
 E/W LONE TREE WAY
 CITY: ANTOCH

15 MIN COUNTS													
7:00 AM TO 9:00 AM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	18	8	52	38	116	1	2	20	5	2	75	7	344
715-730	34	7	38	17	151	4	4	8	2	2	66	8	341
730-745	47	12	39	23	212	3	1	18	6	4	92	11	468
745-800	80	29	70	41	240	5	5	16	10	4	136	54	690
800-815	57	20	74	41	217	10	5	17	10	3	128	61	643
815-830	46	11	72	46	218	5	2	12	7	7	114	32	572
830-845	86	25	63	32	187	4	1	8	9	4	117	30	566
845-900	90	30	78	41	172	3	9	6	14	3	138	55	639
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	179	56	199	119	719	13	12	62	23	12	369	80	1843
715-815	218	68	221	122	820	22	15	59	28	13	422	134	2142
730-830	230	72	255	151	887	23	13	63	33	18	470	158	2373
745-845	269	85	279	160	862	24	13	53	36	18	495	177	2471
800-900	279	86	287	160	794	22	17	43	40	17	497	178	2420



15 MIN COUNTS													
4:00 PM TO 6:00 PM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	15	16	99	51	172	9	6	13	7	11	238	37	674
415-430	9	21	79	57	179	10	8	31	7	8	203	23	635
430-445	37	21	105	47	179	6	10	17	5	5	247	45	724
445-500	19	12	112	54	161	8	3	17	2	6	211	34	639
500-515	32	23	127	71	201	19	5	22	3	3	254	29	789
515-530	14	15	91	38	138	11	1	19	4	3	209	24	567
530-545	16	28	95	51	144	12	9	25	11	7	231	26	655
545-600	22	27	74	52	193	12	6	21	4	13	193	37	654
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	80	70	395	209	691	33	27	78	21	30	889	139	2672
415-515	97	77	423	229	720	43	26	87	17	22	915	131	2787
430-530	102	71	435	210	679	44	19	75	14	17	921	132	2719
445-545	81	78	425	214	644	50	18	83	20	19	905	113	2650
500-600	84	93	387	212	676	54	21	87	22	26	887	116	2665



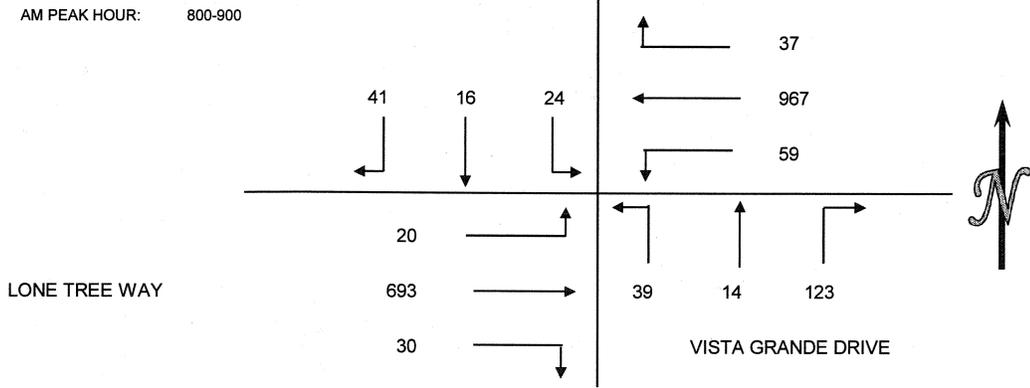
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S VISTA GRANDE DRIVE
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	5	1	3	1	127	3	15	2	11	1	85	2	256
715-730	11	1	0	1	156	11	25	4	10	3	115	3	340
730-745	13	4	5	5	235	11	31	4	11	2	148	9	478
745-800	23	1	8	3	255	11	34	5	17	4	179	1	541
800-815	20	8	15	5	230	11	30	6	14	8	154	5	506
815-830	7	5	2	9	237	14	28	2	11	4	156	2	477
830-845	5	3	2	11	251	11	30	3	11	10	183	6	526
845-900	9	0	5	12	249	23	35	3	3	8	200	7	554
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	52	7	16	10	773	36	105	15	49	10	527	15	1615
715-815	67	14	28	14	876	44	120	19	52	17	596	18	1865
730-830	63	18	30	22	957	47	123	17	53	18	637	17	2002
745-845	55	17	27	28	973	47	122	16	53	26	672	14	2050
800-900	41	16	24	37	967	59	123	14	39	30	693	20	2063



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-715	0	0	0	1	1
715-730	2	0	0	0	2
730-745	1	1	2	1	5
745-800	0	0	0	1	1
800-815	0	0	0	0	0
815-830	0	0	0	0	0
830-845	0	0	0	0	0
845-900	0	0	0	0	0
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-800	3	1	2	3	9
715-815	3	1	2	2	8
730-830	1	1	2	2	6
745-845	0	0	0	1	1
800-900	0	0	0	0	0

BICYCLE COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-715	0	0	1	0	1
715-730	0	0	0	0	0
730-745	0	0	0	0	0
745-800	1	0	0	0	1
800-815	1	0	1	1	3
815-830	0	0	1	0	1
830-845	1	0	1	1	3
845-900	1	0	0	0	1
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-800	1	0	1	0	2
715-815	2	0	1	1	4
730-830	2	0	2	1	5
745-845	3	0	3	2	8
800-900	3	0	3	2	8

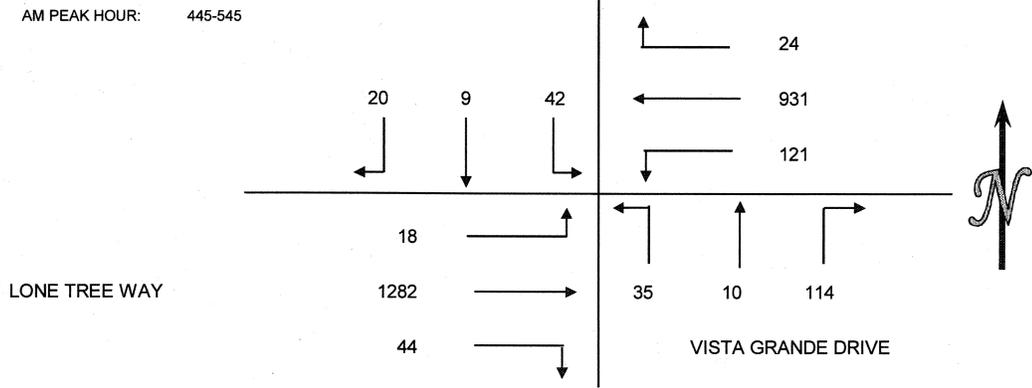
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S VISTA GRANDE DRIVE
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	6	2	4	7	218	33	29	4	8	19	309	10	649
415-430	4	1	8	8	183	29	34	4	10	11	296	5	593
430-445	3	1	7	7	198	21	29	3	10	10	329	9	627
445-500	6	0	11	8	229	28	27	2	12	10	312	5	650
500-515	6	3	15	6	250	29	31	2	10	15	315	3	685
515-530	2	2	8	7	247	31	24	2	7	9	327	5	671
530-545	6	4	8	3	205	33	32	4	6	10	328	5	644
545-600	8	2	6	5	232	29	33	6	11	6	267	9	614
HOURLY TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	19	4	30	30	828	111	119	13	40	50	1246	29	2519
415-515	19	5	41	29	860	107	121	11	42	46	1252	22	2555
430-530	17	6	41	28	924	109	111	9	39	44	1283	22	2633
445-545	20	9	42	24	931	121	114	10	35	44	1282	18	2650
500-600	22	11	37	21	934	122	120	14	34	40	1237	22	2614



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	2	0	0	2
415-430	0	1	0	0	1
430-445	0	1	2	1	4
445-500	0	1	2	0	3
500-515	2	0	0	0	2
515-530	0	0	0	0	0
530-545	1	2	0	0	3
545-600	1	0	0	0	1
HOURLY TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	5	4	1	10
415-515	2	3	4	1	10
430-530	2	2	4	1	9
445-545	3	3	2	0	8
500-600	4	2	0	0	6

BICYCLE COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	1	1	0	0	2
445-500	0	0	3	0	3
500-515	0	0	0	0	0
515-530	1	0	0	2	3
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOURLY TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	1	1	3	0	5
415-515	1	1	3	0	5
430-530	2	1	3	2	8
445-545	1	0	3	2	6
500-600	1	0	0	2	3

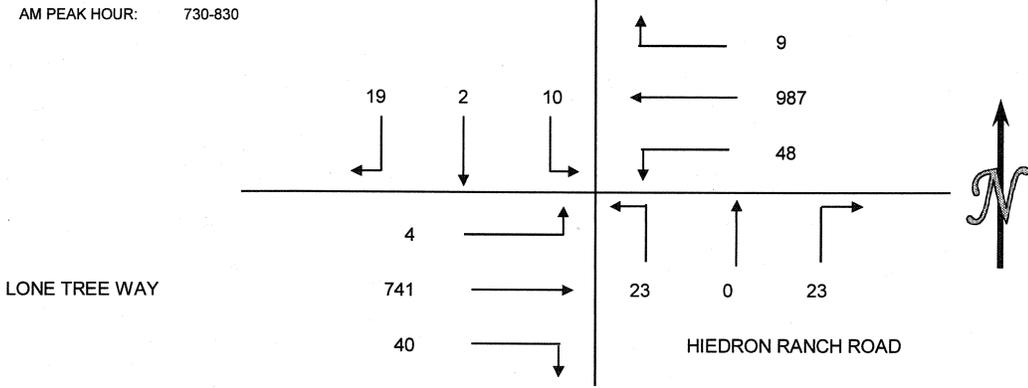
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S HIEDRON RANCH ROAD
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	3	0	0	0	108	0	1	0	3	0	76	0	191
715-730	4	0	5	0	168	2	1	0	1	0	125	0	306
730-745	4	0	1	1	245	3	3	0	2	3	162	0	424
745-800	4	0	3	2	254	3	3	0	7	5	211	0	492
800-815	8	1	1	3	229	10	0	0	4	13	189	2	460
815-830	3	1	5	3	259	32	17	0	10	19	179	2	530
830-845	1	0	1	2	200	6	11	0	11	14	156	0	402
845-900	3	0	0	1	233	5	4	0	12	12	200	1	471
HOURLY TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	15	0	9	3	775	8	8	0	13	8	574	0	1413
715-815	20	1	10	6	896	18	7	0	14	21	687	2	1682
730-830	19	2	10	9	987	48	23	0	23	40	741	4	1906
745-845	16	2	10	10	942	51	31	0	32	51	735	4	1884
800-900	15	2	7	9	921	53	32	0	37	58	724	5	1863



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
700-715	0	0	2	0	2
715-730	0	0	0	0	0
730-745	0	0	0	0	0
745-800	0	2	0	0	2
800-815	0	0	0	0	0
815-830	1	0	1	0	2
830-845	0	0	0	0	0
845-900	1	0	1	0	2
HOURLY TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
700-800	0	2	2	0	4
715-815	0	2	0	0	2
730-830	1	2	1	0	4
745-845	1	2	1	0	4
800-900	2	0	2	0	4

BICYCLE COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
700-715	0	0	1	0	1
715-730	0	0	0	0	0
730-745	0	0	0	0	0
745-800	1	0	0	0	1
800-815	1	0	1	0	2
815-830	0	0	1	0	1
830-845	0	0	0	0	0
845-900	0	0	0	0	0
HOURLY TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
700-800	1	0	1	0	2
715-815	2	0	1	0	3
730-830	2	0	2	0	4
745-845	2	0	2	0	4
800-900	1	0	2	0	3

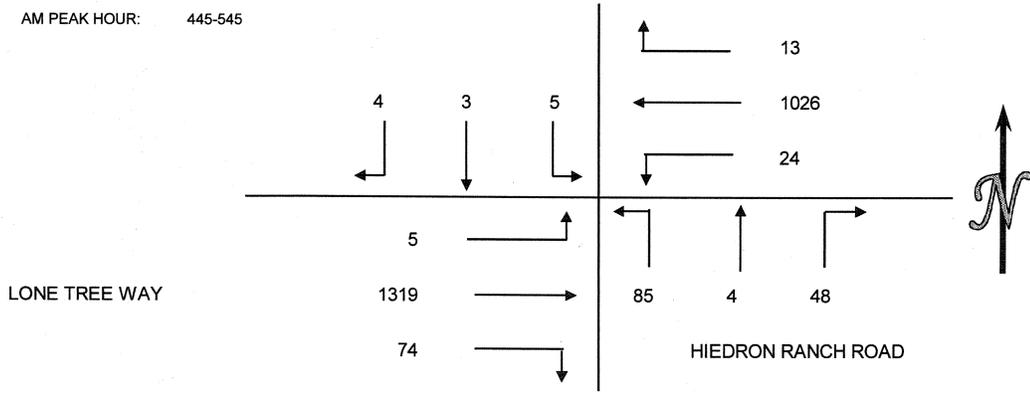
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S HIEDRON RANCH ROAD
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	1	5	233	7	11	0	18	12	332	0	619
415-430	0	0	1	3	239	8	14	0	15	20	332	1	633
430-445	1	1	1	4	228	8	12	1	16	18	342	3	635
445-500	1	2	2	3	247	4	12	0	22	24	338	1	656
500-515	1	0	0	3	254	9	12	1	23	17	325	1	646
515-530	1	1	2	6	280	5	14	2	19	19	320	2	671
530-545	1	0	1	1	245	6	10	1	21	14	336	1	637
545-600	0	1	2	5	267	8	10	2	33	13	249	3	593
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	2	3	5	15	947	27	49	1	71	74	1344	5	2543
415-515	3	3	4	13	968	29	50	2	76	79	1337	6	2570
430-530	4	4	5	16	1009	26	50	4	80	78	1325	7	2608
445-545	4	3	5	13	1026	24	48	4	85	74	1319	5	2610
500-600	3	2	5	15	1046	28	46	6	96	63	1230	7	2547



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-415	2	1	0	0	3
415-430	0	0	0	1	1
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	2	1	1	0	4
515-530	0	0	0	0	0
530-545	1	1	2	0	4
545-600	0	0	1	0	1
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-500	2	1	0	1	4
415-515	2	1	1	1	5
430-530	2	1	1	0	4
445-545	3	2	3	0	8
500-600	3	2	4	0	9

BICYCLE COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-415	0	0	0	0	0
415-430	1	0	0	0	1
430-445	0	0	0	0	0
445-500	0	0	3	0	3
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-500	1	0	3	0	4
415-515	1	0	3	0	4
430-530	0	0	3	0	3
445-545	0	0	3	0	3
500-600	0	0	0	0	0

WILTEC

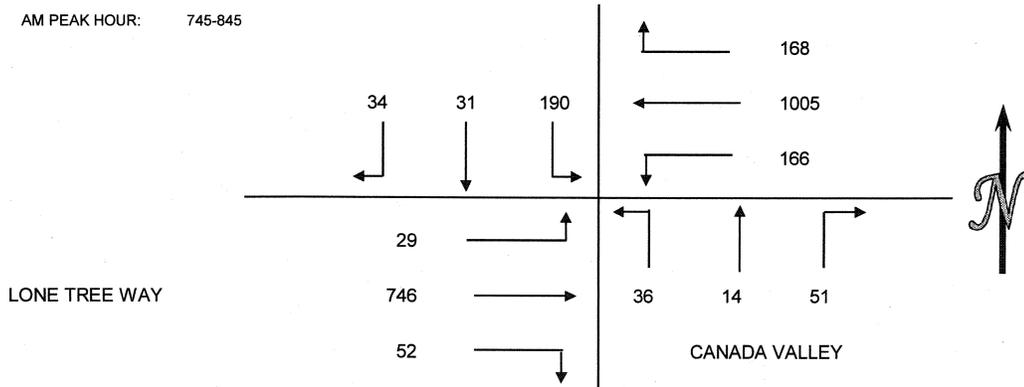
Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S CANADA VALLEY
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	14	8	33	30	126	23	5	5	7	7	111	4	373
715-730	8	6	37	27	166	25	8	3	7	6	120	1	414
730-745	10	5	44	33	237	37	5	0	7	9	134	4	525
745-800	10	10	61	55	289	32	14	3	4	13	205	3	699
800-815	11	7	57	50	211	38	12	1	6	10	162	10	575
815-830	5	10	41	39	267	69	11	6	10	13	193	9	673
830-845	8	4	31	24	238	27	14	4	16	16	186	7	575
845-900	5	2	48	21	205	71	11	4	16	10	197	4	594
HOURLY TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	42	29	175	145	818	117	32	11	25	35	570	12	2011
715-815	39	28	199	165	903	132	39	7	24	38	621	18	2213
730-830	36	32	203	177	1004	176	42	10	27	45	694	26	2472
745-845	34	31	190	168	1005	166	51	14	36	52	746	29	2522
800-900	29	23	177	134	921	205	48	15	48	49	738	30	2417

AM PEAK HOUR: 745-845



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
700-715	0	3	1	0	4
715-730	0	0	0	0	0
730-745	0	1	0	0	1
745-800	0	0	0	0	0
800-815	0	0	0	0	0
815-830	1	1	0	0	2
830-845	0	0	1	0	1
845-900	0	0	0	0	0
HOURLY TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
700-800	0	4	1	0	5
715-815	0	1	0	0	1
730-830	1	2	0	0	3
745-845	1	1	1	0	3
800-900	1	1	1	0	3

BICYCLE COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
700-715	0	0	1	0	1
715-730	0	0	0	0	0
730-745	0	0	0	0	0
745-800	1	0	1	1	3
800-815	1	0	1	0	2
815-830	1	0	1	0	2
830-845	1	1	2	0	4
845-900	1	1	0	0	2
HOURLY TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
700-800	1	0	2	1	4
715-815	2	0	2	1	5
730-830	3	0	3	1	7
745-845	4	1	5	1	11
800-900	4	2	4	0	10

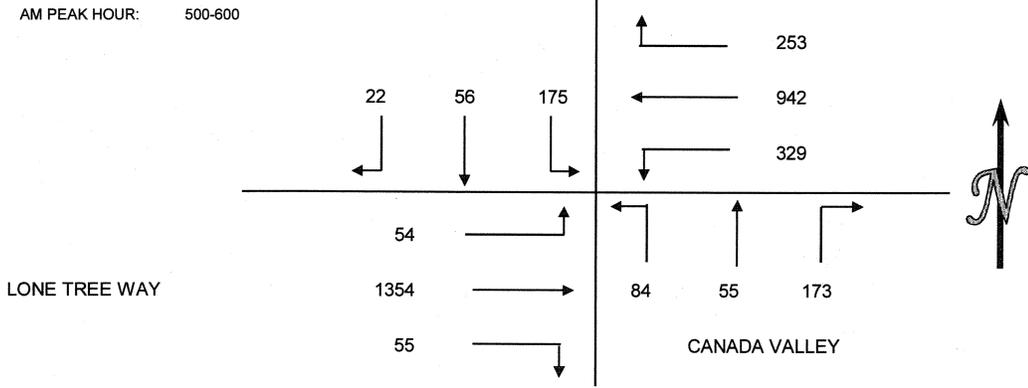
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S CANADA VALLEY
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	9	11	51	58	252	66	41	18	20	14	329	12	881
415-430	9	13	40	41	255	57	29	20	15	10	323	12	824
430-445	11	11	49	42	245	69	34	10	21	10	300	9	811
445-500	9	14	64	55	235	79	50	8	19	20	344	7	904
500-515	7	15	42	52	234	92	22	15	10	14	310	15	828
515-530	6	20	45	76	222	77	55	12	20	16	371	8	928
530-545	4	13	46	49	227	74	36	12	26	15	360	17	879
545-600	5	8	42	76	259	86	60	16	28	10	313	14	917
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	38	49	204	196	987	271	154	56	75	54	1296	40	3420
415-515	36	53	195	190	969	297	135	53	65	54	1277	43	3367
430-530	33	60	200	225	936	317	161	45	70	60	1325	39	3471
445-545	26	62	197	232	918	322	163	47	75	65	1385	47	3539
500-600	22	56	175	253	942	329	173	55	84	55	1354	54	3552



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-415	2	0	0	4	6
415-430	2	0	2	1	5
430-445	0	3	2	0	5
445-500	1	0	0	0	1
500-515	1	2	0	0	3
515-530	0	0	2	1	3
530-545	0	0	2	0	2
545-600	1	0	6	0	7
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-500	5	3	4	5	17
415-515	4	5	4	1	14
430-530	2	5	4	1	12
445-545	2	2	4	1	9
500-600	2	2	10	1	15

BICYCLE COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	1	1
500-515	0	0	2	0	2
515-530	0	0	0	0	0
530-545	0	0	2	0	2
545-600	0	0	0	0	0
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
400-500	0	0	0	1	1
415-515	0	0	2	1	3
430-530	0	0	2	1	3
445-545	0	0	4	1	5
500-600	0	0	4	0	4

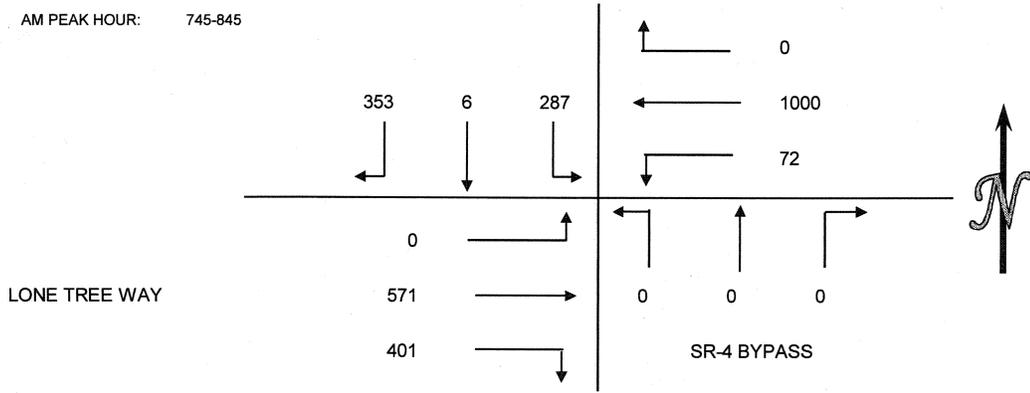
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S SR-4 BYPASS
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
700-715	33	1	35	0	131	13	0	0	0	60	56	0	329
715-730	57	1	41	0	187	21	0	0	0	114	84	0	505
730-745	89	1	54	0	202	13	0	0	0	81	101	0	541
745-800	106	3	81	0	261	23	0	0	0	100	170	0	744
800-815	84	0	78	0	255	18	0	0	0	103	152	0	690
815-830	95	1	65	0	267	11	0	0	0	93	111	0	643
830-845	68	2	63	0	217	20	0	0	0	105	138	0	613
845-900	75	0	56	0	237	9	0	0	0	116	136	0	629
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
700-800	285	6	211	0	781	70	0	0	0	355	411	0	2119
715-815	336	5	254	0	905	75	0	0	0	398	507	0	2480
730-830	374	5	278	0	985	65	0	0	0	377	534	0	2618
745-845	353	6	287	0	1000	72	0	0	0	401	571	0	2690
800-900	322	3	262	0	976	58	0	0	0	417	537	0	2575



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
700-715	0	0	1	0	1
715-730	0	0	0	0	0
730-745	0	0	0	0	0
745-800	0	0	0	0	0
800-815	1	0	0	0	1
815-830	0	0	0	0	0
830-845	1	0	0	0	1
845-900	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
700-800	0	0	1	0	1
715-815	1	0	0	0	1
730-830	1	0	0	0	1
745-845	2	0	0	0	2
800-900	2	0	0	0	2

BICYCLE COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
700-715	0	0	0	0	0
715-730	0	0	0	0	0
730-745	1	0	0	0	1
745-800	1	0	0	0	1
800-815	1	0	1	0	2
815-830	0	0	1	0	1
830-845	1	0	0	0	1
845-900	2	0	0	0	2
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
700-800	2	0	0	0	2
715-815	3	0	1	0	4
730-830	3	0	2	0	5
745-845	3	0	2	0	5
800-900	4	0	2	0	6

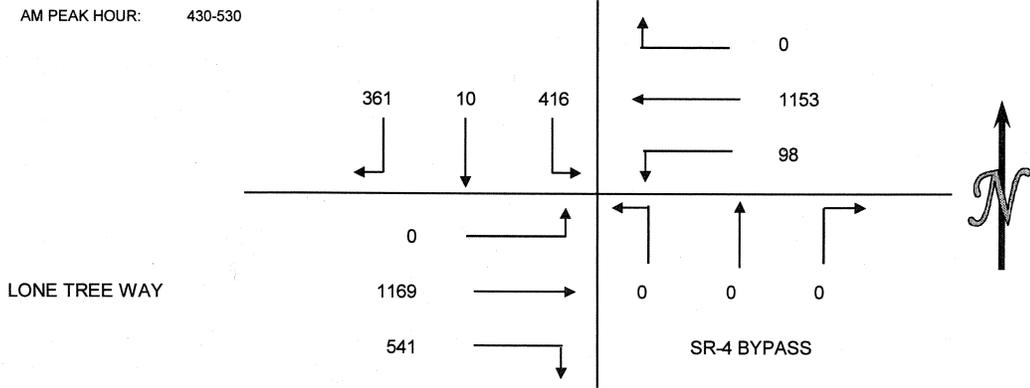
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S SR-4 BYPASS
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	84	2	80	0	322	35	0	0	0	129	285	0	937
415-430	83	3	125	0	280	35	0	0	0	141	266	0	933
430-445	88	0	109	0	300	33	0	0	0	111	245	0	886
445-500	84	4	102	0	260	18	0	0	0	156	306	0	930
500-515	97	3	122	0	289	22	0	0	0	125	287	0	945
515-530	92	3	83	0	304	25	0	0	0	149	331	0	987
530-545	97	3	93	0	261	35	0	0	0	102	293	0	884
545-600	88	1	113	0	330	31	0	0	0	91	270	0	924
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	339	9	416	0	1162	121	0	0	0	537	1102	0	3686
415-515	352	10	458	0	1129	108	0	0	0	533	1104	0	3694
430-530	361	10	416	0	1153	98	0	0	0	541	1169	0	3748
445-545	370	13	400	0	1114	100	0	0	0	532	1217	0	3746
500-600	374	10	411	0	1184	113	0	0	0	467	1181	0	3740



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
400-415	4	1	0	0	5
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	2	0	1	0	3
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	4	0	1	0	5
545-600	1	0	1	0	2
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	6	1	1	0	8
415-515	2	0	1	0	3
430-530	2	0	1	0	3
445-545	6	0	2	0	8
500-600	5	0	2	0	7

BICYCLE COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	1	0	1
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	2	0	2
545-600	0	0	1	0	1
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	1	0	1
415-515	0	0	1	0	1
430-530	0	0	1	0	1
445-545	0	0	3	0	3
500-600	0	0	3	0	3

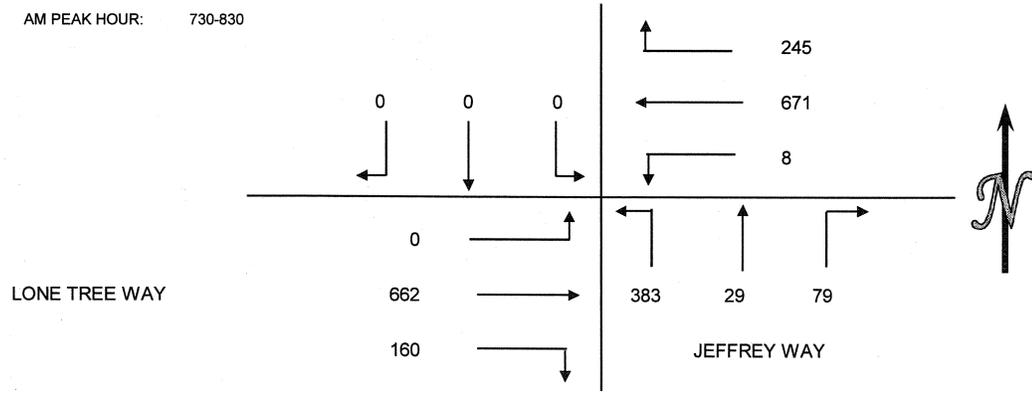
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIOD: 7:00 AM TO 9:00 AM
 INTERSECTION: N/S JEFFREY WAY
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-715	0	0	0	63	134	4	9	5	64	29	92	0	400
715-730	0	0	0	55	146	1	12	7	84	40	118	0	463
730-745	0	0	0	62	184	2	12	9	94	61	141	0	565
745-800	0	0	0	67	159	2	27	6	97	39	183	0	580
800-815	0	0	0	72	183	2	21	10	107	39	191	0	625
815-830	0	0	0	44	145	2	19	4	85	21	147	0	467
830-845	0	0	0	33	132	2	11	1	69	23	138	0	409
845-900	0	0	0	53	128	2	11	7	89	32	141	0	463
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	0	0	0	247	623	9	60	27	339	169	534	0	2008
715-815	0	0	0	256	672	7	72	32	382	179	633	0	2233
730-830	0	0	0	245	671	8	79	29	383	160	662	0	2237
745-845	0	0	0	216	619	8	78	21	358	122	659	0	2081
800-900	0	0	0	202	588	8	62	22	350	115	617	0	1964



PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-715	0	0	0	0	0
715-730	0	0	0	0	0
730-745	0	0	0	0	0
745-800	0	0	0	0	0
800-815	0	0	0	0	0
815-830	1	0	0	0	1
830-845	1	0	0	0	1
845-900	0	1	0	0	1
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-800	0	0	0	0	0
715-815	0	0	0	0	0
730-830	1	0	0	0	1
745-845	2	0	0	0	2
800-900	2	1	0	0	3

BICYCLE COUNTS					
15 MIN COUNTS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-715	0	0	1	0	1
715-730	0	0	0	0	0
730-745	1	0	0	0	1
745-800	1	0	0	0	1
800-815	1	0	1	0	2
815-830	1	0	1	0	2
830-845	0	0	0	0	0
845-900	3	0	1	0	4
HOUR TOTALS	NORTH	EAST	SOUTH	WEST	TOTAL
PERIOD	LEG	LEG	LEG	LEG	
700-800	2	0	1	0	3
715-815	3	0	1	0	4
730-830	4	0	2	0	6
745-845	3	0	2	0	5
800-900	5	0	3	0	8

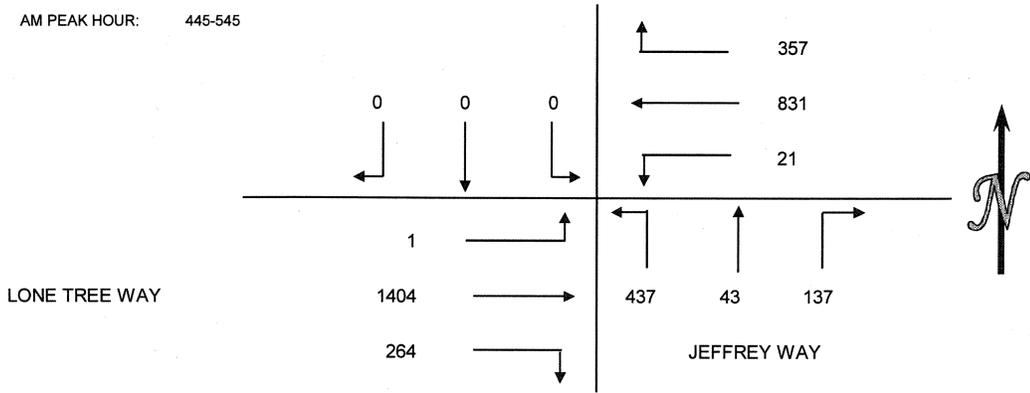
WILTEC

Phone: (626) 564-1944 Fax: (626) 564-0969

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: KIMLEY -HORN AND ASSOCIATES, INC.
 PROJECT: ANTIOCH TRAFFIC COUNTS
 DATE: TUESDAY MAY 13, 2008
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S JEFFREY WAY
 E/W LONE TREE WAY
 CITY: ANTIOCH

VEHICLE COUNTS													
15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	0	66	215	4	24	6	125	63	359	0	862
415-430	0	0	0	85	226	9	21	10	116	63	355	1	886
430-445	0	0	0	70	207	9	20	9	87	71	307	0	780
445-500	0	0	0	78	199	6	36	15	104	72	331	0	841
500-515	0	0	0	100	236	3	45	10	135	61	368	0	958
515-530	0	0	0	79	191	8	25	8	96	58	336	1	802
530-545	0	0	0	100	205	4	31	10	102	73	369	0	894
545-600	0	0	0	95	183	6	35	8	108	51	350	0	836
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	0	0	299	847	28	101	40	432	269	1352	1	3369
415-515	0	0	0	333	868	27	122	44	442	267	1361	1	3465
430-530	0	0	0	327	833	26	126	42	422	262	1342	1	3381
445-545	0	0	0	357	831	21	137	43	437	264	1404	1	3495
500-600	0	0	0	374	815	21	136	36	441	243	1423	1	3490



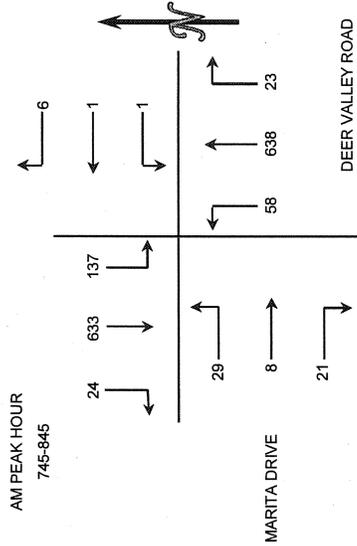
PEDESTRIAN COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
400-415	3	0	0	0	3
415-430	1	0	0	0	1
430-445	0	0	1	0	1
445-500	1	1	0	0	2
500-515	1	0	0	0	1
515-530	0	0	1	0	1
530-545	0	0	1	0	1
545-600	5	0	0	0	5
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
400-500	5	1	1	0	7
415-515	3	1	1	0	5
430-530	2	1	2	0	5
445-545	2	1	2	0	5
500-600	6	0	2	0	8

BICYCLE COUNTS					
15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	1	0	0	0	1
445-500	0	0	3	0	3
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	1	0	1
PERIOD	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
400-500	1	0	3	0	4
415-515	1	0	3	0	4
430-530	1	0	3	0	4
445-545	0	0	3	0	3
500-600	0	0	1	0	1

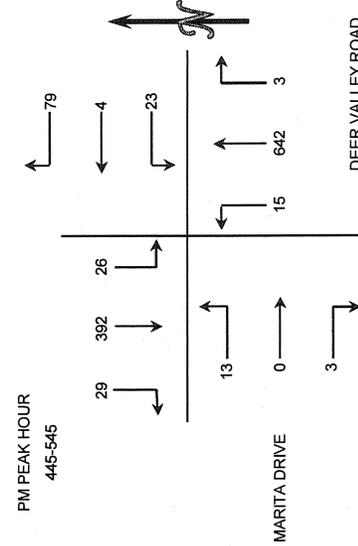
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIPOCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S DEER VALLEY ROAD AND MARITA DRIVE
 CITY: EW ANTIPOCH

15 MIN COUNTS													
7:00 AM TO 9:00 AM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-716	3	72	17	0	0	0	3	67	0	0	0	0	165
715-730	1	111	32	1	0	1	12	94	1	2	2	2	259
730-745	1	131	40	0	0	0	7	139	9	1	1	10	339
745-800	4	157	54	0	1	0	10	193	18	5	4	8	454
800-816	8	169	24	2	0	0	3	188	21	5	1	6	427
815-830	5	151	31	2	0	0	7	125	10	4	3	10	348
830-845	7	156	28	2	0	1	3	132	9	7	0	5	350
845-900	7	129	20	3	0	3	9	174	24	4	1	10	384
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	9	471	143	1	1	1	32	493	28	8	7	23	1217
715-815	14	568	150	3	1	1	32	614	49	13	8	26	1479
730-830	18	608	149	4	1	0	27	645	58	15	9	34	1568
745-845	24	633	137	6	1	1	23	638	58	21	8	29	1579
800-900	27	605	103	9	0	4	22	619	64	20	5	31	1509



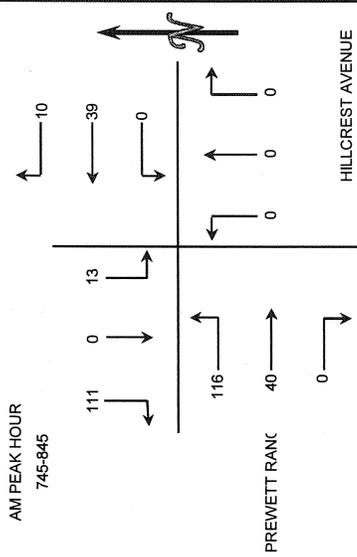
15 MIN COUNTS													
4:00 PM TO 6:00 PM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	8	119	16	17	1	6	6	156	1	1	0	2	333
415-430	5	103	6	10	1	2	3	131	4	1	0	5	271
430-445	6	80	7	19	2	4	1	167	2	0	1	3	292
445-500	5	102	3	15	2	6	1	145	3	0	0	3	285
500-515	8	97	5	26	1	11	0	169	2	1	0	3	323
515-530	6	99	7	19	0	1	2	152	6	0	0	3	295
530-545	10	94	11	19	1	5	0	176	4	2	0	4	326
545-600	11	110	9	19	0	4	0	122	4	0	0	5	284
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	24	404	32	61	6	18	11	599	10	2	1	13	1181
415-515	24	382	21	70	6	23	5	612	11	2	1	14	1171
430-530	25	378	22	79	5	22	4	633	13	1	1	12	1195
445-545	29	392	26	79	4	23	3	642	15	3	0	13	1229
500-600	35	400	32	83	2	21	2	619	16	3	0	15	1228



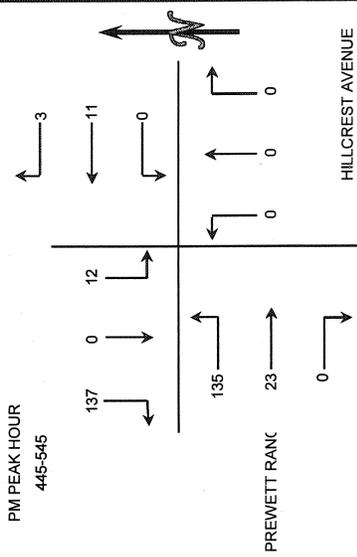
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KIMLEY-HORN AND ASSOCIATES, INC.
 PROJECT: ANTIQCH TRAFFIC COUNTS
 DATE: THURSDAY MAY 15, 2008
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S HILLCREST AVENUE AND PREWETT RANCH DRIVE
 E/W PREWETT RANCH DRIVE
 CITY: ANTIQCH

7:00 AM TO 9:00 AM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-716	7	0	0	2	8	0	0	0	0	0	0	14	31
715-730	10	0	0	4	5	0	0	0	0	0	1	21	41
730-745	19	0	0	2	11	0	0	0	0	0	3	15	50
745-800	33	0	3	5	13	0	0	0	0	0	4	27	85
800-815	33	0	6	1	15	0	0	0	0	0	14	32	101
815-830	25	0	2	2	8	0	0	0	0	0	11	31	79
830-845	20	0	2	2	3	0	0	0	0	0	11	26	64
845-900	14	0	3	0	4	0	0	0	0	0	8	22	51
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
700-800	69	0	3	13	37	0	0	0	0	0	8	77	207
716-815	95	0	9	12	44	0	0	0	0	0	22	95	277
730-830	110	0	11	10	47	0	0	0	0	0	32	105	315
745-845	111	0	13	10	39	0	0	0	0	0	40	116	329
800-900	92	0	13	5	30	0	0	0	0	0	44	111	295



4:00 PM TO 6:00 PM													
PERIOD	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	30	0	0	1	0	0	0	0	0	0	8	36	75
415-430	20	0	4	0	4	0	0	0	0	0	7	26	61
430-445	31	0	4	4	5	0	0	0	0	0	10	31	85
445-500	35	0	4	1	5	0	0	0	0	0	5	30	80
500-515	42	0	2	0	2	0	0	0	0	0	5	38	89
515-530	23	0	4	2	4	0	0	0	0	0	6	27	66
530-545	37	0	2	0	0	0	0	0	0	0	7	40	86
545-600	31	0	6	3	6	0	0	0	0	0	8	24	78
HOUR TOTALS													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
400-500	116	0	12	6	14	0	0	0	0	0	30	123	301
415-515	128	0	14	5	16	0	0	0	0	0	27	125	315
430-530	131	0	14	7	16	0	0	0	0	0	26	126	320
445-545	137	0	12	3	11	0	0	0	0	0	23	135	321
500-600	133	0	14	5	12	0	0	0	0	0	26	129	319



**EXISTING CONDITIONS
(TRAFFIX & SYNCRHO)**

Anioch Wal-Mart Expansion
Scenario Report

Scenario: Existing AM
 Command: None
 Volume: Existing AM
 Geometry: Existing
 Impact Fee: Default Impact Fee
 Trip Generation: None
 Paths: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Anioch Wal-Mart Expansion
Impact Analysis Report
Level Of Service

Intersection	Base Del/V LOS Veh	Future Del/V LOS Veh	Change in
# 1 Deer Valley Rd/ Country Hills	A xxxxx 0.435	A xxxxx 0.435	+ 0.000 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx 0.311	A xxxxx 0.311	+ 0.000 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx 0.353	A xxxxx 0.353	+ 0.000 V/C
# 4 Hillcrest Avenue/Driveway	B 13.0 0.000	B 13.0 0.000	+ 0.000 D/V
# 5 Hillcrest Avenue/South Drivewa	B 10.1 0.000	B 10.1 0.000	+ 0.000 D/V
# 6 Lone Tree Way/Mokelumne Dr	B xxxxx 0.627	B xxxxx 0.627	+ 0.000 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx 0.352	A xxxxx 0.352	+ 0.000 V/C
# 8 Lone Tree Way/Deer Valley Rd	B xxxxx 0.629	B xxxxx 0.629	+ 0.000 V/C
# 9 Lone Tree Way/Deer Valley HS	A xxxxx 0.465	A xxxxx 0.465	+ 0.000 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx 0.374	A xxxxx 0.374	+ 0.000 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx 0.338	A xxxxx 0.338	+ 0.000 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	A xxxxx 0.423	A xxxxx 0.423	+ 0.000 V/C
# 13 Lone Tree Way/Driveway	B 10.8 0.000	B 10.8 0.000	+ 0.000 D/V
# 14 Lone Tree Way/Hillcrest Avenue	A xxxxx 0.396	A xxxxx 0.396	+ 0.000 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx 0.386	A xxxxx 0.386	+ 0.000 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx 0.224	A xxxxx 0.224	+ 0.000 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx 0.344	A xxxxx 0.344	+ 0.000 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	A xxxxx 0.416	A xxxxx 0.416	+ 0.000 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx 0.265	A xxxxx 0.265	+ 0.000 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx 0.293	A xxxxx 0.293	+ 0.000 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A 8.3 0.176	A 8.3 0.176	+ 0.000 V/C

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CATALOS Method (Future Volume Alternative)

 Intersection #1 Deer Valley Rd/ Country Hills Dr

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.435
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 33 Level Of Service: A

 Street Name: Deer Valley Road Country Hills Drive
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 1 0 1 1 0 1 0 0 1 0 1 0 1 0

 Volume Module:
 Base Vol: 10 381 82 77 685 105 62 63 11 151 156 125
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 10 381 82 77 685 105 62 63 11 151 156 125
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 10 381 82 77 685 105 62 63 11 151 156 125
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 10 381 82 77 685 105 62 63 11 151 156 125
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 10 381 82 77 685 105 62 63 11 151 156 125
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 10 381 82 77 685 105 62 63 11 151 156 125
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 10 381 82 77 685 105 62 63 11 151 156 125

 Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.65 0.35 1.00 1.73 0.27 1.00 0.85 0.15 1.00 0.56 0.44
 Final Sat.: 1720 2831 609 1720 2983 457 1720 1464 256 1720 955 765

 Capacity Analysis Module:
 Vol/Sat: 0.01 0.13 0.13 0.04 0.23 0.23 0.04 0.04 0.04 0.09 0.16 0.16
 Crit Volume: 10 395 62
 Crit Moves: ****

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CATALOS Method (Future Volume Alternative)

 Intersection #2 Hillcrest Avenue/Laurel Road

 Cycle (sec): 100 Critical Vol./Cap.(X): 0.311
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 27 Level Of Service: A

 Street Name: Hillcrest Avenue Laurel Road
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Permitted Permitted
 Rights: Ignore Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 1 1 1 0 1 1 0 1 0 1 0 1 0 1

 Volume Module:
 Base Vol: 67 372 25 74 377 80 150 50 100 48 67 164
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 67 372 25 74 377 80 150 50 100 48 67 164
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 67 372 25 74 377 80 150 50 100 48 67 164
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 67 372 25 74 377 80 150 50 100 48 67 164
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 67 372 25 74 377 80 150 50 100 48 67 164
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 67 372 25 74 377 80 150 50 100 48 67 90
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 67 372 25 74 377 80 150 50 100 48 67 90

 Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 2.00 1.00 1.00 1.65 0.35 1.00 0.33 0.67 1.00 1.00 1.00
 Final Sat.: 1720 3440 1563 1720 2838 602 1720 573 1147 1720 1720 1720

 Capacity Analysis Module:
 Vol/Sat: 0.04 0.11 0.02 0.04 0.13 0.13 0.09 0.09 0.09 0.03 0.04 0.05
 Crit Volume: 67 229 150
 Crit Moves: ****

Level of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Hillcrest Avenue/South Driveway
Level of Service: 0.6
Worst Case Level of Service: B [10.1]
Average Delay (sec/veh): 0.6
Street Name: Hillcrest Avenue South Driveway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 1 0 0 2 1 0 0 0 0 1 0 0 0 0 1

Volume Module:
Base Vol: 0 400 19 0 593 73 0 0 60 0 0 5
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 400 19 0 593 73 0 0 60 0 0 5
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 400 19 0 593 73 0 0 60 0 0 5
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 400 19 0 593 73 0 0 60 0 0 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 400 19 0 593 73 0 0 60 0 0 5

Critical Gap Module:
Critical Gp:xxxx xxx xxxxxx xxxxxx xxxxxx xxxxxx 6.9 xxxxxx xxxxxx 6.9
FollowUpTim:xxxx xxx xxxxxx xxxxxx xxxxxx xxxxxx 3.3 xxxxxx xxxxxx 3.3
Capacity Module:
Conflict Vol: xxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 234 xxxxxx xxxxxx 200
Potential Cap.: xxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 768 xxxxxx xxxxxx 808
Move Cap.: xxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 768 xxxxxx xxxxxx 808
Volume/Cap: xxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 0.08 xxxxxx xxxxxx 0.01

Level of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #6 Lone Tree Way/Mokelumme Dr
Level of Service: 130
Critical Vol./Cap.(X): 0.627
Cycle (sec): 120
Y+R=4.0 sec Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61
Level Of Service: B
Street Name: Mokelumme Drive Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 125 81 141 36 64 136 83 611 39 70 1058 89
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 125 81 141 36 64 136 83 611 39 70 1058 89
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 125 81 141 36 64 136 83 611 39 70 1058 89
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 125 81 141 36 64 136 83 611 39 70 1058 89
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 125 81 141 36 64 136 83 611 39 70 1058 89
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 125 81 141 36 64 136 83 611 39 70 1058 53
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 125 81 141 36 64 136 83 611 39 70 1058 53

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.36 0.64 1.00 0.32 0.68 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1650 602 1048 1650 528 1122 1650 3300 1650 1650 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.08 0.13 0.13 0.02 0.12 0.12 0.05 0.19 0.00 0.04 0.32 0.03
Crit Volume: 222 200 83
Crit Moves: ****

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #7 Lone Tree Way/Deer Valley Plaza Lone Tree Way
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.352
 Loss time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 22 Level Of Service: A

 Street Name: Deer Valley Plaza Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

 Volume Module:
 Base Vol: 75 0 35 0 0 0 0 796 67 42 1060 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 75 0 35 0 0 0 0 796 67 42 1060 0
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 75 0 35 0 0 0 0 796 67 42 1060 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 75 0 35 0 0 0 0 796 67 42 1060 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 75 0 35 0 0 0 0 796 67 42 1060 0
 RTOR Reduct: 0 0 35 0 0 0 0 0 0 0 0 0
 RTOR Vol: 75 0 0 0 0 0 0 0 796 0 42 1060 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 75 0 0 0 0 0 0 796 0 42 1060 0

 Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.00 1.00 0.00 0.00 0.00 0.00 2.00 1.00 1.00 2.00 0.00
 Final Sat.: 1720 0 1720 0 0 0 0 3440 1720 1720 3440 0

 Capacity Analysis Module:
 Vol/Sat: 0.04 0.00 0.00 0.00 0.00 0.00 0.00 0.23 0.00 0.02 0.31 0.00
 Crit Volume: 75 0 0 0 0 0 0 0 0 0 0 0
 Crit Moves: ****

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #8 Lone Tree Way/Deer Valley Rd Lone Tree Way
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.629
 Loss time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 61 Level Of Service: B

 Street Name: Deer Valley Road Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 1 1 0 1 0 1 1 0 1 0 2 0 1 1 0 2 0 1

 Volume Module:
 Base Vol: 279 245 111 353 457 17 35 644 157 185 833 185
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 279 245 111 353 457 17 35 644 157 185 833 185
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 279 245 111 353 457 17 35 644 157 185 833 185
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 279 245 111 353 457 17 35 644 157 185 833 185
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 279 245 111 353 457 17 35 644 157 185 833 185
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 153 0
 RTOR Vol: 279 245 111 353 457 17 35 644 4 185 833 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 279 245 111 353 457 17 35 644 4 185 833 0

 Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 2.00 1.38 0.62 1.00 1.93 0.07 1.00 2.00 1.00 1.00 2.00 1.00
 Final Sat.: 3000 2271 1029 1650 3182 118 1650 3300 1650 1650 3300 1650

 Capacity Analysis Module:
 Vol/Sat: 0.09 0.11 0.11 0.21 0.14 0.14 0.02 0.20 0.00 0.11 0.25 0.00
 Crit Volume: 178 353 322 185
 Crit Moves: ****

Anioch Wal-Mart Expansion
 Level of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #9 Lone Tree Way/Deer Valley HS
 Cycle (sec): 130 Critical Vol./Cap. (X): 0.465
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 35 Level Of Service: A

Street Name: Deer Valley HS Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
 Base Vol: 149 0 58 21 1 29 116 761 130 91 1008 61
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 149 0 58 21 1 29 116 761 130 91 1008 61
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 149 0 58 21 1 29 116 761 130 91 1008 61
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 149 0 58 21 1 29 116 761 130 91 1008 61
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 149 0 58 21 1 29 116 761 130 91 1008 61
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 149 0 58 21 1 0 116 761 130 91 1008 61
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 149 0 58 21 1 0 116 761 130 91 1008 61

Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.44 0.56 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.89 0.11
 Final Sat.: 1720 756 964 1720 1720 1720 1720 2938 502 1720 3244 196
 Capacity Analysis Module:
 Vol/Sat: 0.09 0.00 0.06 0.01 0.00 0.00 0.07 0.26 0.26 0.05 0.31 0.31
 Crit Volume: 149 1 116 535
 Crit Moves: ****

Anioch Wal-Mart Expansion
 Level of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #10 Lone Tree Way/Sagebrush Drive
 Cycle (sec): 130 Critical Vol./Cap. (X): 0.374
 Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 23 Level Of Service: A

Street Name: Sagebrush Drive Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Volume Module:
 Base Vol: 104 0 78 0 0 0 0 681 219 198 916 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 104 0 78 0 0 0 0 681 219 198 916 0
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 104 0 78 0 0 0 0 681 219 198 916 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 104 0 78 0 0 0 0 681 219 198 916 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 104 0 78 0 0 0 0 681 219 198 916 0
 RTOR Reduct: 0 0 78 0 0 0 0 0 104 0 0 0
 RTOR Vol: 104 0 0 0 0 0 0 681 115 198 916 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 104 0 0 0 0 0 0 681 115 198 916 0

Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.00 1.00 0.00 0.00 0.00 0.00 2.00 1.00 2.00 0.00 0.00
 Final Sat.: 1720 0 1720 0 0 0 0 3440 1720 1720 3440 0
 Capacity Analysis Module:
 Vol/Sat: 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.20 0.07 0.12 0.27 0.00
 Crit Volume: 104 0 341 198
 Crit Moves: ****

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #11 Lone Tree Way/Williamson Ranch Plaza (OSH)

 Cycle (sec): 130 Critical Vol./Cap.(X): 0.338
 Loss time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 22 Level Of Service: A

 Street Name: Williamson Ranch Plaza (OSH) Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0
 Lanes: 0 0 0 0 1 0 0 0 1 1 0 2 0 0 0 0 2 0 0 1

 Volume Module:
 Base Vol: 0 0 0 11 0 40 55 689 0 0 1029 20
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 11 0 40 55 689 0 0 1029 20
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 0 0 11 0 40 55 689 0 0 1029 20
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 11 0 40 55 689 0 0 1029 20
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 11 0 40 55 689 0 0 1029 20
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 11
 RTOR Vol: 0 0 0 11 0 40 55 689 0 0 1029 9
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 11 0 40 55 689 0 0 1029 9

 Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1720 0 1720 1720 3440 0 0 3440 1720

 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.00 0.03 0.20 0.00 0.00 0.30 0.01
 Crit Volume: 0 11 55 514 514
 Crit Moves: ****

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #12 Lone Tree Way/Indian Hill Dr/Williamson Ranch Plaza (Wal-Mart, OSH)

 Cycle (sec): 130 Critical Vol./Cap.(X): 0.423
 Loss time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level Of Service: A

 Street Name: Indian Hill Dr/Williamson Ranch Pl Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected Protected
 Rights: Include Include Include Include Include Include
 Min. Green: 0
 Lanes: 1 0 0 1 0 2 0 0 1 0 1 0 2 0 1 1 0 2 0 1

 Volume Module:
 Base Vol: 9 15 58 20 1 21 45 574 5 25 1116 34
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 9 15 58 20 1 21 45 574 5 25 1116 34
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 9 15 58 20 1 21 45 574 5 25 1116 34
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 9 15 58 20 1 21 45 574 5 25 1116 34
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 9 15 58 20 1 21 45 574 5 25 1116 34
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 11
 RTOR Vol: 9 15 58 20 1 21 45 574 0 25 1116 23
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 9 15 58 20 1 21 45 574 0 25 1116 23

 Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.21 0.79 2.00 0.05 0.95 1.00 2.00 1.00 1.00 2.00 1.00
 Final Sat.: 1650 339 1311 3000 75 1575 1650 3300 1650 1650 3300 1650

 Capacity Analysis Module:
 Vol/Sat: 0.01 0.04 0.04 0.01 0.01 0.01 0.03 0.17 0.00 0.02 0.34 0.01
 Crit Volume: 73 45 45 45 45 45 45 45 45 45 45 45
 Crit Moves: ****

Anioch Wal-Mart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #15 Lone Tree Way/Vista Grande Drive

Cycle (sec): 130
Loss Time (sec): 9 (Y+R=4.0 sec)
Optimal Cycle: 30
Critical Vol./Cap.(X): 0.386
Average Delay (sec/veh): xxxxxx
Level Of Service: A

Street Name: Vista Grande Drive Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 0 1 0 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 39 14 123 24 16 41 20 693 30 59 967 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 39 14 123 24 16 41 20 693 30 59 967 37
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 39 14 123 24 16 41 20 693 30 59 967 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 39 14 123 24 16 41 20 693 30 59 967 37
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 39 14 123 24 16 41 20 693 30 59 967 37
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 39 14 123 24 16 41 20 693 0 59 967 13
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 39 14 123 24 16 41 20 693 0 59 967 13

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.10 0.90 1.00 0.28 0.72 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1720 176 1544 1720 483 1237 1720 3440 1720 1720 3440 1720
Capacity Analysis Module:
Vol/Sat: 0.02 0.08 0.08 0.01 0.03 0.03 0.01 0.20 0.00 0.03 0.28 0.01
Crit Volume: 137 24 20 484
Crit Moves: ****

Anioch Wal-Mart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #16 Lone Tree Way/Heidorn Ranch Road

Cycle (sec): 120
Loss Time (sec): 12 (Y+R=4.0 sec)
Optimal Cycle: 29
Critical Vol./Cap.(X): 0.224
Average Delay (sec/veh): xxxxxx
Level Of Service: A

Street Name: Heidorn Ranch Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 2 0 1 0 1 1 0 0 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module:
Base Vol: 23 0 23 10 2 19 4 741 40 48 987 9
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 23 0 23 10 2 19 4 741 40 48 987 9
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 23 0 23 10 2 19 4 741 40 48 987 9
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 23 0 23 10 2 19 4 741 40 48 987 9
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 23 0 23 10 2 19 4 741 40 48 987 9
RTOR Reduct: 0 0 23 0 0 0 0 0 0 0 0 0
RTOR Vol: 23 0 0 10 2 19 4 741 40 48 987 9
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 23 0 0 10 2 19 4 741 40 48 987 9

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 1.00 1.00 1.00 0.10 0.90 1.00 2.85 0.15 1.00 2.97 0.03
Final Sat.: 3000 1650 1650 1650 157 1493 1650 4696 254 1650 4905 45
Capacity Analysis Module:
Vol/Sat: 0.01 0.00 0.00 0.01 0.01 0.01 0.01 0.16 0.16 0.03 0.20 0.20
Crit Volume: 12 21 4 332
Crit Moves: ****

Anioch Wal-Mart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #17 Lone Tree Way/Canada Valley Road

Cycle (sec): 100
Loss Time (sec): 12 (Y+R=4.0 sec)
Optimal Cycle: 35

Street Name: Canada Valley Road
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 2 0 0 1 1 1 0 1 0 1 1 0 3 0 1 2 0 3 0 1
Lanes: 2 0 0 1 1 1 0 1 0 1 1 0 3 0 1 2 0 3 0 1

Volume Module:
Base Vol: 36 14 51 190 31 34 29 746 52 166 1005 168
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 36 14 51 190 31 34 29 746 52 166 1005 168

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Capacity Analysis Module:
Vol/Sat: 0.01 0.01 0.00 0.12 0.02 0.00 0.02 0.02 0.15 0.02 0.06 0.20 0.00

Crit Volume: 14
Crit Moves: ****

Anioch Wal-Mart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #18 Lone Tree Way/SB SR-4 Bypass

Cycle (sec): 100
Loss Time (sec): 9 (Y+R=4.0 sec)
Optimal Cycle: 40

Street Name: SB SR-4 Bypass
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 1 1 0 0 1 0 0 3 0 1 2 0 3 0 0
Lanes: 0 0 0 0 0 1 1 0 0 1 0 0 3 0 1 2 0 3 0 0

Volume Module:
Base Vol: 0 0 0 287 6 353 0 571 401 72 1000 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 287 6 353 0 571 401 72 1000 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.10 0.09 0.21 0.00 0.12 0.24 0.02 0.20 0.00

Crit Volume: 353
Crit Moves: ****

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #19 Lone Tree Way/NB SR-4 Bypass (Jeffrey Way)
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.265
 Loss Time (sec): 25 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 25 Level Of Service: A

 Street Name: NB SR-4 Bypass (Jeffrey Way) Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Permitted Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 1 0 0 1 0 0 0 0 0 0 3 0 1 1 0 3 0 1

 Volume Module:
 Base Vol: 383 29 79 0 0 0 0 662 160 8 671 245
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 383 29 79 0 0 0 0 662 160 8 671 245
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 383 29 79 0 0 0 0 662 160 8 671 245
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 383 29 79 0 0 0 0 662 160 8 671 245
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 383 29 79 0 0 0 0 662 160 8 671 245
 RTOR Reduct: 0 0 8 0 0 0 0 0 0 0 160 0 0
 RTOR Vol: 383 29 71 0 0 0 0 662 0 8 671 245
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 383 29 71 0 0 0 0 662 0 8 671 245

 Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.86 0.14 1.00 0.00 0.00 0.00 0.00 3.00 1.00 1.00 3.00 1.00
 Final Sat.: 2907 242 1720 0 0 0 0 5160 1720 1720 5160 1720

 Capacity Analysis Module:
 Vol/Sat: 0.13 0.12 0.04 0.00 0.00 0.00 0.00 0.13 0.00 0.00 0.13 0.14
 Crit Volume: 206 0 221 8
 Crit Moves: ****

 Anioch Wal-Mart Expansion

 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #20 Deer Valley Road/Marita Drive
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.293
 Loss Time (sec): 9 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 26 Level Of Service: A

 Street Name: Deer Valley Road Marita Drive
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0 1 0

 Volume Module:
 Base Vol: 58 638 23 137 633 24 29 8 21 1 1 6
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 58 638 23 137 633 24 29 8 21 1 1 6
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 58 638 23 137 633 24 29 8 21 1 1 6
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 58 638 23 137 633 24 29 8 21 1 1 6
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 58 638 23 137 633 24 29 8 21 1 1 6
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 58 638 23 137 633 24 29 8 21 1 1 6
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 58 638 23 137 633 24 29 8 21 1 1 6

 Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.93 0.07 1.00 1.93 0.07 1.00 0.28 0.72 1.00 0.14 0.86
 Final Sat.: 1720 3320 120 1720 3314 126 1720 474 1246 1720 246 1474

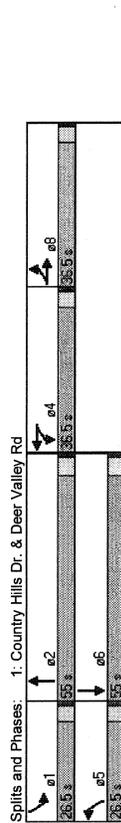
 Capacity Analysis Module:
 Vol/Sat: 0.03 0.19 0.19 0.08 0.19 0.19 0.02 0.02 0.02 0.00 0.00 0.00
 Crit Volume: 331 137 29
 Crit Moves: ****

1: Country Hills Dr. & Deer Valley Rd
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1822	0	1770	1724	0	1770	3396	0	1770	3428	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1765	1822	0	1770	1724	0	1741	3396	0	1729	3428	0
Satd. Flow (perm)	5	24	0	24	18	0	18	361	82	77	685	105
Satd. Flow (RTOR)	62	63	11	151	156	125	10	351	82	77	685	105
Volume (vph)	75	89	0	184	360	0	13	583	0	93	952	0
Lane Group Flow (vph)	Split											
Turn Type	Split											
Permitted Phases	Split											
Protected Phases	Split											
Total Split (s)	36.5	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0	0.0
Act Effct Green (s)	11.6	11.6	0.0	25.8	25.8	0.0	6.7	28.3	0.0	12.1	36.1	0.0
Actuated g/C Ratio	0.14	0.14	0.0	0.31	0.31	0.0	0.10	0.34	0.0	0.14	0.43	0.0
v/c Ratio	0.31	0.35	0.0	0.36	0.66	0.0	0.08	0.51	0.0	0.37	0.64	0.0
Control Delay	45.4	44.0	0.0	30.8	35.2	0.0	50.2	26.8	0.0	45.9	23.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	44.0	0.0	30.8	35.2	0.0	50.2	26.8	0.0	45.9	23.5	0.0
LOS	D C D C D C D C D C D C											
Approach Delay	44.7											
Approach LOS	D C C C C C											
Queue Length 50th (ft)	36	40	0	76	147	0	6	135	0	44	186	0
Queue Length 95th (ft)	95	106	0	169	297	0	27	203	0	113	344	0
Infernal Link Dist (ft)	50	308	0	274	860	0	150	860	0	150	220	0
Turn Bay Length (ft)	586	607	0	687	693	0	431	1727	0	462	1685	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.15	0.0	0.28	0.52	0.0	0.03	0.34	0.0	0.20	0.51	0.0

Intersection Summary
 Cycle Length: 154.5
 Actuated Cycle Length: 83.6
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 39.2
 Intersection Signal Delay: 39.2
 Intersection Signal Delay: 39.2
 Intersection LOS: C
 Intersection Capacity Utilization: 59.6%
 Analysis Period (min): 15

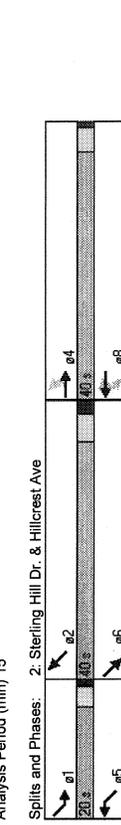


2: Sterling Hill Dr. & Hillcrest Ave
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1640	0	1770	1863	1563	1770	3419	0	1770	3502	0
Satd. Flow (prot)	0.907	0.907	0	0.907	0.907	0.907	0.907	0.907	0	0.907	0.907	0
Flt Permitted	1312	1640	0	990	1863	1563	1766	3419	0	1746	3502	0
Satd. Flow (perm)	115	189	0	189	189	29	29	29	0	8	8	0
Satd. Flow (RTOR)	150	50	100	48	67	164	74	377	80	67	372	25
Volume (vph)	208	208	0	55	77	189	85	525	0	88	522	0
Lane Group Flow (vph)	Perm Prot											
Turn Type	Perm Prot											
Permitted Phases	Perm Prot											
Protected Phases	Perm Prot											
Total Split (s)	40.0	40.0	0.0	40.0	40.0	20.0	40.0	20.0	0.0	20.0	40.0	0.0
Act Effct Green (s)	22.3	22.3	0.0	22.3	22.3	10.9	22.3	10.9	0.0	11.1	22.3	0.0
Actuated g/C Ratio	0.22	0.22	0.0	0.22	0.22	0.11	0.22	0.11	0.0	0.11	0.22	0.0
v/c Ratio	0.71	0.46	0.0	0.25	0.19	0.38	0.44	0.26	0.0	0.45	0.26	0.0
Control Delay	48.3	17.0	0.0	32.0	30.0	6.4	48.0	11.7	0.0	48.1	12.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.3	17.0	0.0	32.0	30.0	6.4	48.0	11.7	0.0	48.1	12.1	0.0
LOS	D B B C C C A D D B D B											
Approach Delay	32.6											
Approach LOS	C B B B B B											
Queue Length 50th (ft)	125	50	0	29	41	0	51	74	0	53	77	0
Queue Length 95th (ft)	137	66	0	55	68	44	92	136	0	82	118	0
Infernal Link Dist (ft)	468	468	0	115	115	140	140	140	0	140	220	0
Turn Bay Length (ft)	75	190	0	190	170	170	170	170	0	170	2095	0
Base Capacity (vph)	485	679	0	366	689	685	301	2050	0	301	2095	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.31	0.0	0.15	0.11	0.27	0.28	0.26	0.0	0.29	0.25	0.0

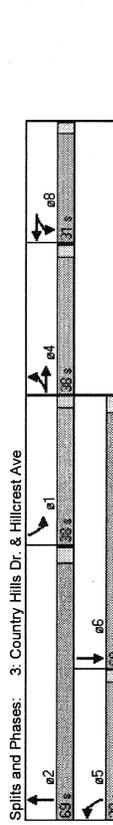
Intersection Summary
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 26 (26%), Referenced to phase 2 NWT and 6 SET, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 20.2
 Intersection Signal Delay: 20.2
 Intersection Signal Delay: 20.2
 Intersection LOS: C
 Intersection Capacity Utilization: 57.5%
 Analysis Period (min): 15



3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBS	SBL	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBS	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1638	0	1770	1673	0	1770	3472	0	1770	3502
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950
Fit Permitted	1770	1638	0	1770	1673	0	1770	3472	0	1770	3502
Satd. Flow (perm)	48	77	143	84	93	117	70	297	31	63	439
Satd. Flow (RTOR)	44	77	143	84	93	117	70	297	31	63	439
Volume (vph)	58	289	0	125	314	0	90	421	0	69	511
Lane Group Flow (vph)	Split	Split	Split	Split	Split	Split	Split	Split	Split	Split	Split
Turn Type	4	4	4	8	8	8	5	2	1	6	6
Protected Phases											
Permitted Phases											
Total Spill (s)	38.0	38.0	0.0	31.0	31.0	0.0	38.0	69.0	0.0	38.0	69.0
Act Effect Green (s)	27.2	27.2	0.0	28.1	28.1	0.0	13.2	68.8	0.0	13.1	66.4
Actuated g/c Ratio	0.19	0.19	0.00	0.19	0.19	0.00	0.09	0.47	0.00	0.09	0.45
v/c Ratio	0.18	0.84	0.37	0.37	0.91	0.57	0.26	0.45	0.32	0.45	0.32
Control Delay	51.7	70.1	57.8	83.0	83.0	79.3	26.0	74.0	27.8	74.0	27.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.7	70.1	57.8	83.0	83.0	79.3	26.0	74.0	27.8	74.0	27.8
LOS	D	E	E	F	F	E	C	E	C	E	C
Approach Delay	67.0	67.0	0.0	75.8	75.8	0.0	35.4	33.3	0.0	33.3	33.3
Approach LOS	E	E	E	E	E	E	D	C	D	C	C
Queue Length 50th (ft)	47	228	106	274	274	85	130	64	164	64	164
Queue Length 95th (ft)	78	279	135	289	289	129	165	122	240	122	240
Internal Link Dist (ft)	120	266	140	263	263	140	1068	165	1583	165	1583
Turn Bay Length (ft)	401	409	339	345	345	368	1628	363	1583	363	1583
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.71	0.37	0.91	0.91	0.24	0.26	0.19	0.32	0.19	0.32
Intersection Summary											
Cycle Length	176										
Actuated Cycle Length	147										
Control Type	Actuated-Uncoordinated										
Maximum v/c Ratio	0.91										
Intersection Signal Delay	50.0										
Intersection LOS	D										
Intersection Capacity Utilization	57.7%										
Analysis Period (min)	15										



3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Movement	EBL	EBR	NBL	NBT	SBL	SBR
Lane Configurations	EBL	EBR	NBL	NBT	SBL	SBR
Sign Control	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	10	0	391	867	8
Peak Hour Factor	0.63	0.63	0.84	0.84	0.87	0.87
Hourly flow rate (vph)	0	16	0	465	767	9
Pedestrians						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
Upstream signal (ft)				592	1148	
pX, platoon unblocked	0.86	0.86	0.86			
vC, conflicting volume	999	767	776			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	999	729	739			
IC, 2 stage (s)	6.8	6.9	4.1			
IF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	100			
dm capacity (veh/h)	208	314	742			
Direction Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	16	233	233	767	9	
Volume Left	0	0	0	0	0	
Volume Right	16	0	0	0	0	
cSH	314	1700	1700	1700	1700	
Volume to Capacity	0.05	0.14	0.14	0.45	0.01	
Queue Length 95th (ft)	4	0	0	0	0	
Control Delay (s)	17.1	0.0	0.0	0.0	0.0	
Lane LOS	C	C	C	C	C	
Approach Delay (s)	17.1	0.0	0.0	0.0	0.0	
Approach LOS	C	C	C	C	C	
Intersection Summary						
Average Delay	0.2					
Intersection Capacity Utilization	45.1%					
Analysis Period (min)	15					
ICU Level of Service	A					

5: Southeast Driveway & Hillcrest Ave
Antioch Wal-Mart Expansion

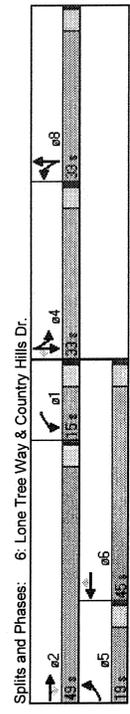
Existing Conditions
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	Stop	0%	0%	Stop	0%	0%	Free	0%	0%	Free	0%
Sign Control	0	0	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0	0	0
Volume (veh/h)	0	60	0	0	5	0	400	19	0	593	73
Peak Hour Factor	0.88	0.88	0.88	0.63	0.63	0.82	0.82	0.82	0.89	0.89	0.89
Heavy Flow Rate (vph)	0	68	0	0	8	0	488	23	0	666	82
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type	None										
Median storage (veh)											
Upstream signal (ft)									298		
pX, platoon unblocked											
VC, conflicting volume	959	1218	263	776	1236	244	748			511	
VC1, stage 1 cont vol											
VC2, stage 2 cont vol											
VCu, unblocked vol	959	1218	263	778	1236	244	748			511	
IC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1	
IC, 2 stage (s)											
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2	
po queue free %	100	100	91	100	100	99	100			100	
EW capacity (veh/h)	209	179	735	260	175	757	866			1050	
Direction Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3			
Volume Total	68	8	244	244	23	267	267	215			
Volume Left	0	0	0	0	0	0	0	0			
Volume Right	68	8	0	0	23	0	0	82			
CSH	735	757	1700	1700	1700	1700	1700	1700			
Volume to Capacity	0.09	0.01	0.14	0.14	0.01	0.16	0.16	0.13			
Queue Length 95th (ft)	8	1	0	0	0	0	0	0			
Control Delay (s)	10.4	9.8	0.0	0.0	0.0	0.0	0.0	0.0			
Lane LOS	B	A	A	A	A	A	A	A			
Approach Delay (s)	10.4	9.8	0.0	0.0	0.0	0.0	0.0	0.0			
Approach LOS	B	A	A	A	A	A	A	A			
Intersection Summary											
Average Delay	0.6										
Intersection Capacity Utilization	23.5%										
Analysis Period (min)	15										
ICU Level of Service	A										

6: Lone Tree Way & Country Hills Dr.
Antioch Wal-Mart Expansion

Existing Conditions
AM Peak

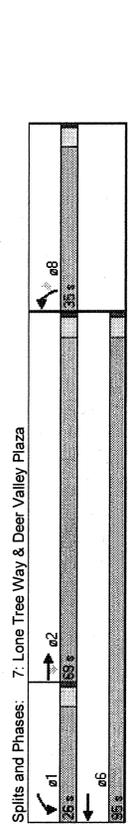
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1686	0	1770	1863
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950
Fit Permitted	1754	3539	1125	1593	3539	1466	1770	1686	0	1770	1863
Satd. Flow (perm)	83	611	39	70	1058	89	125	81	141	36	64
Volume (vph)	97	710	45	75	1138	96	167	296	0	42	74
Lane Group Flow (vph)											
Turn Type	Prot	Perm	Prot	Prot	Perm	Split	Split	Split	Split	Split	Perm
Protected Phases	5	2	1	6	8	8	4	4			
Permitted Phases											
Total Spk (\$)	19.0	49.0	15.0	45.0	45.0	33.0	33.0	33.0	0.0	33.0	33.0
Act Effect Green (s)	14.4	68.2	12.0	65.7	65.7	25.7	25.7	25.7	12.2	12.2	12.2
Actuated g/C Ratio	0.11	0.52	0.52	0.09	0.51	0.61	0.20	0.20	0.09	0.09	0.09
v/c Ratio	0.49	0.38	0.07	0.46	0.64	0.13	0.48	0.77	0.25	0.43	0.55
Control Delay	62.2	20.8	12.8	52.1	18.2	9.1	49.3	51.5	57.3	62.4	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.2	20.8	12.8	52.1	18.2	9.1	49.3	51.5	57.3	62.4	15.3
LOS	E	C	B	D	B	A	D	D	E	E	B
Approach Delay	25.1										
Approach LOS	B										
Queue Length 50th (ft)	78	180	9	58	185	9	126	190	33	60	0
Queue Length 95th (ft)	125	268	35	110	457.5	18	145	203	66	102	57
Internal Link Dist (ft)	1420			740			709				
Turn Bay Length (ft)	144	75	146	73	167		156		156		156
Base Capacity (vph)	229	1856	600	163	1790	764	425	483	408	430	482
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.38	0.07	0.46	0.64	0.13	0.39	0.65	0.10	0.17	0.33
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset: 74 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio	0.77										
Intersection Signal Delay: 27.5											
Intersection Capacity Utilization: 63.4%											
Analysis Period (min): 15											
ICU Level of Service: B											
# 95th percentile volume exceeds capacity, queue may be longer											
Queue shown is maximum after two cycles.											



7: Lone Tree Way & Deer Valley Plaza
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1333	1701	3539	1770	1583
Satd. Flow (RTOR)	45	45	45	45	45	45
Volume (vph)	796	67	42	1060	75	35
Lane Group Flow (vph)	875	74	48	1205	82	38
Turn Type	2	1	1	6	8	8
Permitted Phases	2	1	1	6	8	8
Total Split (s)	69.0	26.0	26.0	95.0	35.0	35.0
Act Effct Green (s)	103.0	103.0	10.5	114.4	12.4	12.4
Actuated g/C Ratio	0.79	0.79	0.08	0.98	0.10	0.10
v/c Ratio	0.31	0.07	0.34	0.39	0.49	0.21
Control Delay	1.3	0.3	66.5	0.5	64.8	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.3	0.3	66.5	0.5	64.8	18.1
LOS	A	A	E	A	E	B
Approach Delay	1.2	1.2	3.0	50.0	0.0	0.0
Approach LOS	A	A	A	D	D	D
Queue Length 50th (ft)	23	1	43	6	67	0
Queue Length 95th (ft)	35	m	m/2	10	117	34
Internal Link Dist (ft)	740	100	197	850	704	95
Turn Bay Length (ft)	2894	1065	313	3115	436	418
Base Capacity (vph)	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.07	0.15	0.39	0.19	0.09

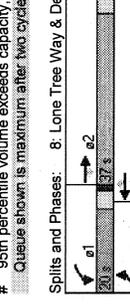


Splits and Phases: 7: Lone Tree Way & Deer Valley Plaza

8: Lone Tree Way & Deer Valley Rd
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBI	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1767	3539	1413	1726	3539	1537
Satd. Flow (RTOR)	68	68	68	68	68	68
Volume (vph)	35	644	157	185	833	185
Lane Group Flow (vph)	43	795	194	199	886	199
Turn Type	5	2	1	1	6	3
Permitted Phases	5	2	1	1	6	3
Total Split (s)	17.0	37.0	20.0	40.0	40.0	30.0
Act Effct Green (s)	10.1	44.8	19.6	56.3	18.1	21.8
Actuated g/C Ratio	0.08	0.34	0.16	0.43	0.14	0.17
v/c Ratio	0.31	0.65	0.37	0.75	0.58	0.66
Control Delay	78.9	35.5	22.8	62.2	24.1	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.9	35.5	22.8	62.2	24.1	10.1
LOS	E	D	C	E	C	E
Approach Delay	34.9	27.6	27.6	53.2	49.2	49.2
Approach LOS	C	C	C	D	D	D
Queue Length 50th (ft)	89	203	37	112	328	42
Queue Length 95th (ft)	72	333	133	#290	#471	121
Internal Link Dist (ft)	850	850	1580	1580	825	420
Turn Bay Length (ft)	195	73	192	75	181	150
Base Capacity (vph)	181	1219	531	269	1532	702
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.65	0.74	0.58	0.28	0.43



Splits and Phases: 8: Lone Tree Way & Deer Valley Rd

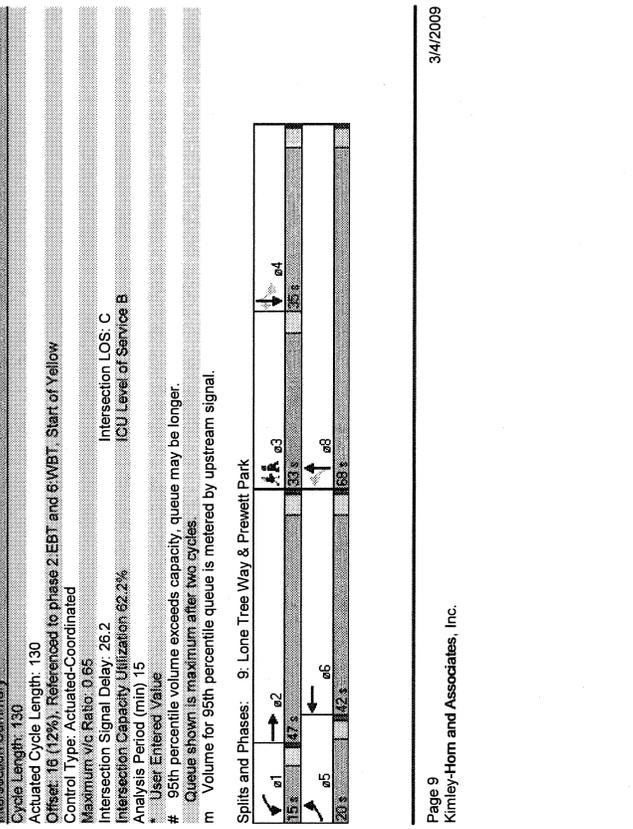
9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3438	0	1770	3502	0	1770	1532	0	1770	1863	1583
Flt Permitted	0.950	0.950	0	0.372	0.372	0	0.688	0.688	0	0.688	0.688	0.688
Satd. Flow (perm)	1769	3438	0	1768	3502	0	1600	1532	0	1237	1863	1432
Satd. Flow (RTOR)	16	16	0	5	5	0	259	259	0	21	29	57
Volume (vph)	116	761	130	91	1008	61	149	0	58	21	1	29
Lane Group Flow (vph)	141	1087	0	104	1188	0	276	107	0	41	2	57
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	5	2	1	6	6	6	8	8	4	4	4	4
Permitted Phases	20.0	47.0	0.0	15.0	42.0	0.0	68.0	68.0	0.0	35.0	35.0	35.0
Total Split (s)	17.3	70.9	0.0	14.6	68.2	0.0	35.5	35.5	0.0	12.3	12.3	12.3
Act Effect Green (s)	0.13	0.55	0.11	0.52	0.27	0.27	0.27	0.27	0.09	0.09	0.09	0.09
Actuated g/C Ratio	0.60	0.58	0.51	0.65	0.63	0.18	0.63	0.18	0.35	0.01	0.30	0.30
v/c Ratio	50.8	27.8	75.2	14.3	46.4	0.6	46.4	0.6	63.1	52.0	17.6	17.6
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	50.8	27.8	75.2	14.3	46.4	0.6	46.4	0.6	63.1	52.0	17.6	17.6
Total Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS	D	C	E	B	B	D	A	A	E	D	D	B
Approach Delay	30.4	30.4	19.0	19.0	19.0	33.6	33.6	33.6	36.9	36.9	36.9	36.9
Approach LOS	C	C	B	B	B	C	C	C	D	D	D	D
Queue Length 50th (ft)	116	463	89	268	186	0	33	33	2	2	0	0
Queue Length 95th (ft)	m146	450	m127	#463	140	0	39	39	5	5	4	4
Internal Link Dist (ft)	1580	1580	605	605	609	609	819	819	103	102	102	102
Turn Bay Length (ft)	145	148	205	1639	800	896	304	459	395	395	395	395
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.58	0.49	0.65	0.65	0.34	0.12	0.13	0.00	0.14	0.00	0.14

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T	4T
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3438	0	1770	3502	0	1770	1532	0	1770	1863	1583
Flt Permitted	0.950	0.950	0	0.372	0.372	0	0.688	0.688	0	0.688	0.688	0.688
Satd. Flow (perm)	1769	3438	0	1768	3502	0	1600	1532	0	1237	1863	1432
Satd. Flow (RTOR)	16	16	0	5	5	0	259	259	0	21	29	57
Volume (vph)	116	761	130	91	1008	61	149	0	58	21	1	29
Lane Group Flow (vph)	141	1087	0	104	1188	0	276	107	0	41	2	57
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	5	2	1	6	6	6	8	8	4	4	4	4
Permitted Phases	20.0	47.0	0.0	15.0	42.0	0.0	68.0	68.0	0.0	35.0	35.0	35.0
Total Split (s)	17.3	70.9	0.0	14.6	68.2	0.0	35.5	35.5	0.0	12.3	12.3	12.3
Act Effect Green (s)	0.13	0.55	0.11	0.52	0.27	0.27	0.27	0.27	0.09	0.09	0.09	0.09
Actuated g/C Ratio	0.60	0.58	0.51	0.65	0.63	0.18	0.63	0.18	0.35	0.01	0.30	0.30
v/c Ratio	50.8	27.8	75.2	14.3	46.4	0.6	46.4	0.6	63.1	52.0	17.6	17.6
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	50.8	27.8	75.2	14.3	46.4	0.6	46.4	0.6	63.1	52.0	17.6	17.6
Total Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS	D	C	E	B	B	D	A	A	E	D	D	B
Approach Delay	30.4	30.4	19.0	19.0	19.0	33.6	33.6	33.6	36.9	36.9	36.9	36.9
Approach LOS	C	C	B	B	B	C	C	C	D	D	D	D
Queue Length 50th (ft)	116	463	89	268	186	0	33	33	2	2	0	0
Queue Length 95th (ft)	m146	450	m127	#463	140	0	39	39	5	5	4	4
Internal Link Dist (ft)	1580	1580	605	605	609	609	819	819	103	102	102	102
Turn Bay Length (ft)	145	148	205	1639	800	896	304	459	395	395	395	395
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.58	0.49	0.65	0.65	0.34	0.12	0.13	0.00	0.14	0.00	0.14

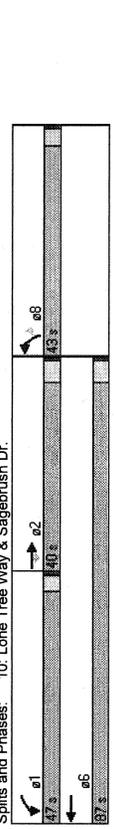
Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 16 (12%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 26.2
 Analysis Period (min): 15
 Intersection Capacity Utilization: 62.2%
 ICU Level of Service: B
 Intersection LOS: C
 * User Entered Value
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	44	44	44	44	44
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770
Fit Permitted	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1482	1760	3539	1715
Satd. Flow (RTOR)	99	219	198	916	104
Volume (vph)	681	219	198	916	104
Lane Group Flow (vph)	841	270	230	1065	162
Turn Type	Perm	Prot	Perm	Perm	Perm
Protected Phases	2	1	6	8	8
Permitted Phases	4.0	47.0	87.0	43.0	43.0
Total Split (s)	80.1	24.2	107.3	16.7	16.7
Act Effct Green (s)	0.62	0.62	0.19	0.83	0.13
Actuated g/C Ratio	0.39	0.28	0.70	0.36	0.71
v/c Ratio	4.8	1.6	70.8	1.7	70.5
Control Delay	0.0	0.0	0.0	0.0	0.0
Queue Delay	4.8	1.6	70.8	1.7	70.5
Total Delay	4.8	1.6	70.8	1.7	70.5
LOS	A	A	E	A	B
Approach Delay	4.0	13.9	45.3		
Approach LOS	A	B	D		
Queue Length 50th (ft)	35	0	145	5	134
Queue Length 95th (ft)	43	2	255	100	133
Internal Link Dist (ft)	605		1855	497	
Turn Bay Length (ft)	80	142		116	
Base Capacity (vph)	2150	951	599	2920	545
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.28	0.36	0.30	0.22
Intersection Summary					
Cycle Length	130				
Actuated Cycle Length	130				
Offset	40 (31%) Referenced to phase 2:EBT and 6:WBT, Start of Yellow				
Control Type	Actuated-Coordinated				
Maximum v/c Ratio	0.71				
Intersection Signal Delay	13.1				
Intersection Capacity Utilization	46.5%				
Analysis Period (min)	15				
Intersection LOS	B				
ICU Level of Service	A				

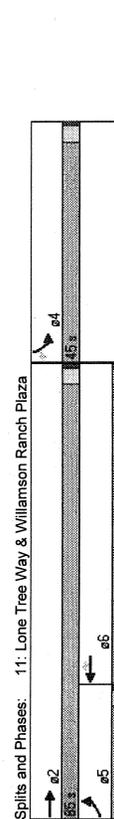


Splits and Phases: 10: Lone Tree Way & Sagebrush Dr.

11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	WBT	WBR	SBL	SBR
Lane Configurations	44	44	44	44	44
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	3539	1770	1583
Fit Permitted	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1762	3539	3539	1504	1770
Satd. Flow (RTOR)	56	689	1029	20	11
Volume (vph)	71	895	1319	26	15
Lane Group Flow (vph)	71	895	1319	26	15
Turn Type	Prot	Perm	Perm	Perm	Perm
Protected Phases	5	2	6	4	4
Permitted Phases	25.0	85.0	60.0	45.0	45.0
Total Split (s)	9.6	115.8	105.0	10.8	10.8
Act Effct Green (s)	0.67	0.89	0.81	0.81	0.08
Actuated g/C Ratio	0.54	0.28	0.46	0.02	0.10
v/c Ratio	71.1	4.1	4.0	0.1	52.5
Control Delay	0.0	0.0	0.0	0.0	0.0
Queue Delay	71.1	4.1	4.0	0.1	52.5
Total Delay	71.1	4.1	4.0	0.1	52.5
LOS	E	A	A	A	D
Approach Delay	9.0	3.9		24.1	
Approach LOS	A	A		C	
Queue Length 50th (ft)	50	65	7	0	12
Queue Length 95th (ft)	76	202	20	m0	24
Internal Link Dist (ft)	1855	820		405	
Turn Bay Length (ft)	155			113	
Base Capacity (vph)	300	3152	2859	1217	539
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.24	0.28	0.46	0.02	0.03
Intersection Summary					
Cycle Length	130				
Actuated Cycle Length	130				
Offset	115 (89%) Referenced to phase 2:EBT and 6:WBT, Start of Yellow				
Control Type	Actuated-Coordinated				
Maximum v/c Ratio	0.54				
Intersection Signal Delay	6.6				
Intersection Capacity Utilization	49.6%				
Analysis Period (min)	15				
Intersection LOS	A				
ICU Level of Service	A				



Splits and Phases: 11: Lone Tree Way & Williamson Ranch Plaza

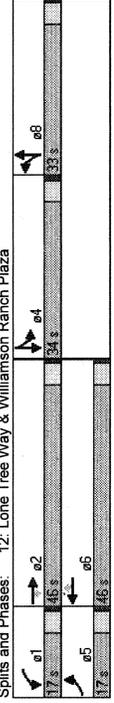
12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

13: Lone Tree Way & Wai-Mart Driveway
Antioch Walmart Expansion

Existing Conditions
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Std. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1641	0	3433	1574	0
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	1574	0
Satd. Flow (perm)	1756	3539	1286	1670	3539	1455	1763	1641	0	3433	1574	0
Satd. Flow (RTOR)	45	574	5	25	1116	34	9	15	58	20	1	21
Volume (vph)	56	716	6	32	1413	43	11	92	0	53	66	0
Lane Group Flow (vph)	Prot	2	Perm	Prot	6	Perm	Split	8	8	Split	4	4
Turn Type	5	2	2	1	6	6	8	8	8	8	4	4
Protected Phases	17.0	46.0	46.0	17.0	46.0	46.0	33.0	33.0	0.0	34.0	34.0	0.0
Total Spill (s)	11.1	77.9	77.9	10.9	75.0	75.0	21.0	21.0	0.0	13.1	13.1	0.0
Act Effect Green (s)	0.09	0.60	0.60	0.58	0.58	0.58	0.16	0.16	0.16	0.10	0.10	0.0
Actuated g/C Ratio	0.37	0.34	0.01	0.22	0.69	0.05	0.04	0.28	0.15	0.28	0.15	0.0
v/c Ratio	63.7	12.1	5.8	77.3	15.6	2.0	39.8	15.0	51.2	16.0	16.0	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	63.7	12.1	5.8	77.3	15.6	2.0	39.8	15.0	51.2	16.0	16.0	0.0
Total Delay	E	B	A	E	B	A	D	B	D	D	B	B
LOS	15.8	15.8	15.8	16.6	16.6	16.6	17.7	17.7	32.8	32.8	32.8	0.0
Approach Delay	B	B	B	B	B	B	B	B	C	C	C	0.0
Queue Length 50th (ft)	29	300	2	28	533	1	7	13	22	2	2	0
Queue Length 95th (ft)	52	337	m8	m54	#735	m1	21	44	14	0	0	0
Internal Link Dist (ft)	158	820	78	150	430	200	356	356	440	440	440	0
Turn Bay Length (ft)	193	2119	771	181	2641	850	408	435	819	417	417	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.34	0.01	0.17	0.69	0.05	0.03	0.21	0.06	0.14	0.06	0.14
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	97 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.69											
Intersection Signal Delay	17.1											
Intersection LOS	B											
Intersection Capacity Utilization	52.8%											
Analysis Period (min)	15											
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
m. Volume for 95th percentile queue is metered by upstream signal.												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Sign Control	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	693	1177	65	0	5	0	0	0	0	0	0
Peak Hour Factor	0.82	0.82	0.85	0.85	0.42	0.42	0	0	0	0	0	0
Hourly flow rate (vph)	0	845	1314	76	0	12	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Walking Speed (ft/s)	0	0	0	0	0	0	0	0	0	0	0	0
Percent Blockage	0	0	0	0	0	0	0	0	0	0	0	0
Right turn flare (veh)	0	0	0	0	0	0	0	0	0	0	0	0
Median type	None	None	None	None	None	None	None	None	None	None	None	None
Median storage (veh)	0	0	0	0	0	0	0	0	0	0	0	0
Upstream signal (ft)	0	510	500	0	0	0	0	0	0	0	0	0
pX, platoon unblocked	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
v/c, conflicting volume	1391	1391	1391	1391	1391	1391	1391	1391	1391	1391	1391	1391
vC1, stage 1 conf vol	0	0	0	0	0	0	0	0	0	0	0	0
vC2, stage 2 conf vol	0	0	0	0	0	0	0	0	0	0	0	0
vCu, unblocked vol	1125	1125	1125	1125	1125	1125	1125	1125	1125	1125	1125	1125
IC, single (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
IC, 2 stage (s)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
IF (s)	100	100	100	100	100	100	100	100	100	100	100	100
p0 queue free %	529	529	529	529	529	529	529	529	529	529	529	529
dir capacity (veh/h)	423	423	423	423	423	423	423	423	423	423	423	423
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	SB 1	SB 2	SB 3	SB 4	SB 5	SB 6
Volume Total	423	423	438	438	438	438	76	12	0	0	0	0
Volume Left	0	0	0	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0	0	0	0	0
cSB	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.25	0.25	0.26	0.26	0.26	0.26	0.04	0.01	0.01	0.01	0.01	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Approach LOS	A	A	A	A	A	A	A	A	A	A	A	A
Intersection Summary												
Average Delay	0.0											
Intersection Capacity Utilization	31.6%											
Analysis Period (min)	15											
ICU Level of Service	A											



14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	5085	1583	1770	3420	0	1900	3288	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	1760	3539	1511	1748	5085	1515	1762	3420	0	1591	3264	1554
Satd. Flow (perm)	177	495	18	24	862	160	36	53	13	279	85	269
Satd. Flow (RTOR)	201	562	20	30	1078	200	40	72	0	175	280	336
Volume (vph)	177	495	18	24	862	160	36	53	13	279	85	269
Lane Group Flow (vph)	201	562	20	30	1078	200	40	72	0	175	280	336
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split	Split	Split	Perm	Perm
Protected Phases	5	2	2	1	6	6	8	8	4	4	4	4
Permitted Phases	29.0	47.0	47.0	18.0	36.0	36.0	23.0	23.0	0.0	42.0	42.0	42.0
Total Split (s)	22.9	75.2	75.2	9.1	57.2	57.2	16.3	16.3	22.1	22.1	22.1	22.1
Act Effct Green (s)	0.18	0.58	0.58	0.07	0.44	0.44	0.14	0.14	0.17	0.17	0.17	0.17
Actuated g/C Ratio	0.65	0.27	0.27	0.02	0.24	0.24	0.16	0.16	0.54	0.50	0.50	0.62
v/c Ratio	79.1	18.0	18.0	16.2	71.8	23.0	4.9	45.5	36.8	54.6	51.2	9.7
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	79.1	18.0	18.0	16.2	71.8	23.0	4.9	45.5	36.8	54.6	51.2	9.7
Total Delay	E	B	B	E	C	A	D	D	D	D	D	A
LOS	33.7	C	C	21.3	C	A	D	D	D	D	D	A
Approach Delay	179	47	1	26	212	16	32	24	151	120	0	0
Queue Length 50th (ft)	255	232	18	m49	314	60	60	42	187	134	40	40
Queue Length 95th (ft)	420	420	205	208	690	230	2575	295	295	218	291	291
Internal Link Dist (ft)	357	2047	882	204	2237	779	324	638	570	886	701	701
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.27	0.02	0.15	0.48	0.26	0.12	0.11	0.31	0.28	0.48	0.48

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 78 (60%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 28.7
 Intersection Capacity Utilization: 61.7%
 Analysis Period (min): 15
 * User Entered Value
 m Volume for 95th percentile queue is metered by upstream signal.



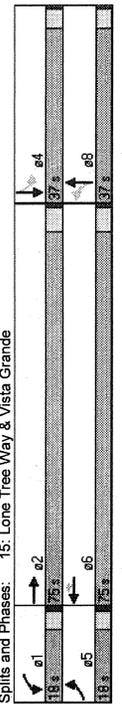
Splits and Phases: 14: Lone Tree Way & Hillcrest Ave

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	5050	0	1770	3539	1583	1770	1583	0	1770	1662	0
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	1770	5050	0	1770	3539	1548	1120	1583	0	948	1662	0
Satd. Flow (perm)	20	693	30	59	967	37	39	14	123	24	16	41
Satd. Flow (RTOR)	23	841	0	63	1029	39	49	174	0	51	121	0
Volume (vph)	20	693	30	59	967	37	39	14	123	24	16	41
Lane Group Flow (vph)	23	841	0	63	1029	39	49	174	0	51	121	0
Turn Type	Prot	Perm	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	5	2	2	1	6	6	8	8	4	4	4	4
Permitted Phases	18.0	75.0	0.0	18.0	75.0	75.0	37.0	37.0	0.0	37.0	37.0	0.0
Total Split (s)	9.7	97.5	0.0	12.5	102.5	102.5	13.3	13.3	0.0	13.3	13.3	0.0
Act Effct Green (s)	0.17	0.75	0.0	0.10	0.79	0.79	0.10	0.10	0.0	0.10	0.10	0.0
Actuated g/C Ratio	0.07	0.22	0.0	0.37	0.37	0.37	0.03	0.03	0.0	0.03	0.03	0.0
v/c Ratio	59.3	10.4	0.0	56.4	3.6	2.8	64.5	18.3	0.0	73.1	24.8	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	59.3	10.4	0.0	56.4	3.6	2.8	64.5	18.3	0.0	73.1	24.8	0.0
Total Delay	E	B	B	E	A	A	E	B	E	C	C	C
LOS	11.7	C	C	6.6	A	A	E	B	E	D	D	D
Approach Delay	18	141	0	54	61	0	38	14	42	27	0	0
Queue Length 50th (ft)	m39	89	0	105	137	12	68	55	41	11	0	0
Queue Length 95th (ft)	665	665	0	1050	1050	75	128	786	100	614	0	0
Internal Link Dist (ft)	197	204	3789	203	2791	1225	293	532	248	498	0	0
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.22	0.0	0.30	0.37	0.03	0.17	0.33	0.21	0.24	0.24	0.24

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.57
 Intersection Signal Delay: 12.8
 Intersection Capacity Utilization: 55.1%
 Analysis Period (min): 15
 * User Entered Value
 m Volume for 95th percentile queue is metered by upstream signal.



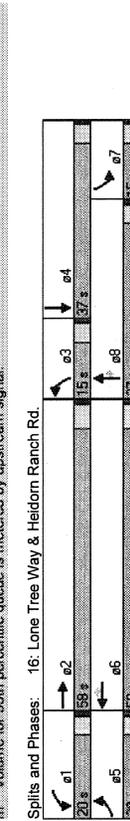
Splits and Phases: 15: Lone Tree Way & Vista Grande

16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5038	0	1770	3539	1583	3433	1863	1583	1770	1615	0
Fit Permitted	0.950			0.950			0.950		0.950		0.950	
Satd. Flow (perm)	1768	5038	0	1768	3539	1544	3433	1863	1561	1765	1615	0
Satd. Flow (RTOR)	8			4					394		24	
Volume (vph)	4	741	40	48	987	9	23	0	23	10	2	19
Lane Group Flow (vph)	4	858	0	54	1109	10	53	0	53	13	27	0
Turn Type	Prot			Prot			Prot		Prot		Prot	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases				6					8			
Total Split (s)	20.0	58.0	0.0	20.0	58.0	15.0	37.0	37.0	15.0	37.0	0.0	0.0
Act Effct Green (s)	8.4	93.0		11.9	103.2	103.2	9.9	15.8	9.1	12.5		
Actuated g/C Ratio	0.06	0.72		0.09	0.79	0.79	0.06	0.12	0.07	0.10		
v/c Ratio	0.04	0.24		0.33	0.39	0.01	0.20	0.10	0.10	0.15		
Control Delay	77.0	11.8		76.6	1.4	0.8	57.7	0.3	57.9	20.0		
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	77.0	11.8		76.6	1.4	0.8	57.7	0.3	57.9	20.0		
LOS	E	B		E	A	A	E	A	E	B		
Approach Delay	12.1			4.9						32.3		
Approach LOS	B			A						C		
Queue Length 50th (ft)	4	31		49	23	0	22	0	11	2		
Queue Length 95th (ft)	m13	318		80	38	m1	20	872	0	27	21	
Internal Link Dist (ft)	1060			900						53	316	
Turn Bay Length (ft)	194	3607		410	100				699	163	440	
Base Capacity (vph)	231	3607		231	2810	1227	317					
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.24		0.23	0.39	0.01	0.17		0.08	0.08	0.06	

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.39
 Intersection Signal Delay: 9.4
 Intersection Capacity Utilization: 48.2%
 Analysis Period (min): 15
 Volume for 95th percentile queue is metered by upstream signal.

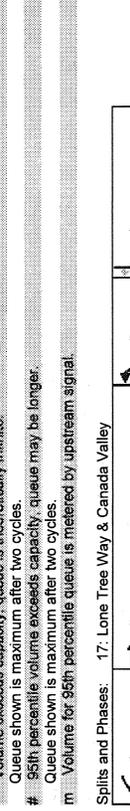


17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

Existing Conditions
AM Peak

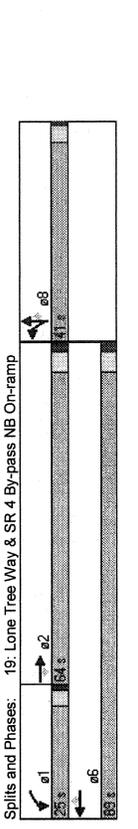
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5085	1583	3433	3539	1583	3433	1583	1504	1770	1863	1583
Fit Permitted	0.950			0.950			0.950		0.950		0.950	
Satd. Flow (perm)	1769	5085	1557	3430	3539	1542	3433	1588	1482	1767	1863	1563
Satd. Flow (RTOR)	49			168				28	41		41	
Volume (vph)	29	746	52	166	1005	168	36	14	51	190	31	34
Lane Group Flow (vph)	31	794	55	187	1129	169	49	47	41	241	39	43
Turn Type	Prot			Prot			Prot		Prot		Prot	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases				6					8			
Total Split (s)	20.0	53.0	25.0	58.0	58.0	20.0	32.0	32.0	20.0	32.0	32.0	32.0
Act Effct Green (s)	12.6	80.9	80.9	12.0	83.9	83.9	7.2	9.8	9.8	17.0	19.6	19.6
Actuated g/C Ratio	0.10	0.62	0.62	0.09	0.65	0.65	0.06	0.08	0.08	0.13	0.15	0.15
v/c Ratio	0.18	0.25	0.06	0.59	0.49	0.18	0.26	0.32	0.27	1.04	0.14	0.16
Control Delay	36.7	2.8	0.2	76.0	8.0	0.4	61.7	32.6	16.9	125.1	48.8	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	2.8	0.2	76.0	8.0	0.4	61.7	32.6	16.9	125.1	48.8	13.2
LOS	D	A	A	E	A	A	E	C	B	F	D	B
Approach Delay	3.8			15.5			38.9			100.7		
Approach LOS	A			B			D			F		
Queue Length 50th (ft)	23	13	0	78	137	1	20	16	0	~219	30	0
Queue Length 95th (ft)	62	16	1	m110	227	m4	34	37	23	#316	49	24
Internal Link Dist (ft)	900			900						1064		
Turn Bay Length (ft)	300	120	300	120	300		150		378	362	231	422
Base Capacity (vph)	231	3165	967	597	2283	1064	449					
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.25	0.06	0.32	0.49	0.18	0.11	0.12	0.11	1.04	0.09	0.11

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.04
 Intersection Signal Delay: 22.7
 Intersection Capacity Utilization: 58.3%
 Analysis Period (min): 15
 Volume for 95th percentile queue is metered by upstream signal.



18: Lone Tree Way & SR 4 Bypass SB Off-ramp
Antioch Walmart Expansion

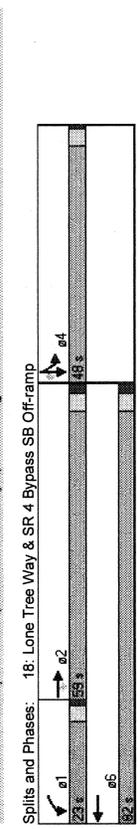
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Flt Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (RTOR)	0	571	401	72	1000	0	0	0	287	6	353	0
Volume (vph)	0	634	446	77	1064	0	0	0	169	178	415	0
Lane Group Flow (vph)	0	634	446	77	1064	0	0	0	169	178	415	0
Turn Type	2	Perm	1	6	Perm	2	1	6	Perm	Split	4	4
Protected Phases	2	2	1	6	2	1	6	2	1	6	2	1
Permitted Phases	0.0	59.0	59.0	23.0	82.0	0.0	0.0	0.0	48.0	48.0	48.0	48.0
Total Split (s)	8.2	81.2	81.2	9.0	91.2	0.25	0.62	0.07	0.70	0.25	0.25	0.25
Act Effct Green (s)	0.20	0.39	0.32	0.30	0.30	0.40	0.41	0.87	0.40	0.41	0.87	0.40
Actuated g/C Ratio	11.8	4.1	56.9	7.2	41.3	41.3	41.7	51.6	41.3	41.7	51.6	41.3
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	11.8	4.1	56.9	7.2	41.3	41.3	41.7	51.6	41.3	41.7	51.6	41.3
Total Delay	8.7	81.2	81.2	9.0	91.2	0.25	0.62	0.07	0.70	0.25	0.25	0.25
LOS	A	A	A	E	A	B	D	D	D	D	D	D
Approach Delay	8.7	81.2	81.2	9.0	91.2	0.25	0.62	0.07	0.70	0.25	0.25	0.25
Approach LOS	A	A	A	E	A	B	D	D	D	D	D	D
Queue Length 50th (ft)	66	31	26	124	66	125	131	259	125	131	259	125
Queue Length 95th (ft)	m64	m50	m51	200	m64	162	167	311	162	167	311	162
Internal Link Dist (ft)	775	400	325	750	775	538	618	1156	538	618	1156	538
Turn Bay Length (ft)	3178	1144	528	3563	3178	562	564	618	562	564	618	562
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.39	0.15	0.30	0.20	0.29	0.30	0.67	0.29	0.30	0.67	0.29
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	72 (56%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.87											
Intersection Signal Delay	19.2											
Intersection Capacity Utilization	48.2%											
Analysis Period (min)	15											
m	Volume for 95th percentile queue is metered by upstream signal.											



Splits and Phases: 18: Lone Tree Way & SR 4 Bypass SB Off-ramp

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4	4+4
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Flt Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (RTOR)	0	662	160	8	671	245	383	29	79	0	0	0
Volume (vph)	0	744	180	9	746	272	226	237	89	0	0	0
Lane Group Flow (vph)	0	744	180	9	746	272	226	237	89	0	0	0
Turn Type	2	Perm	1	6	Perm	2	1	6	Perm	Split	8	8
Protected Phases	2	2	1	6	2	1	6	2	1	6	2	1
Permitted Phases	0.0	64.0	64.0	25.0	89.0	0.0	41.0	41.0	41.0	41.0	41.0	41.0
Total Split (s)	99.4	99.4	99.4	7.0	101.4	101.4	22.6	22.6	22.6	22.6	22.6	22.6
Act Effct Green (s)	0.76	0.76	0.08	0.78	0.78	0.78	0.17	0.17	0.17	0.17	0.17	0.17
Actuated g/C Ratio	8.8	4.4	59.0	4.3	1.0	68.1	70.9	9.9	70.9	9.9	70.9	9.9
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	8.8	4.4	59.0	4.3	1.0	68.1	70.9	9.9	70.9	9.9	70.9	9.9
Total Delay	8.8	4.4	59.0	4.3	1.0	68.1	70.9	9.9	70.9	9.9	70.9	9.9
LOS	A	A	E	A	A	E	E	A	E	A	E	A
Approach Delay	7.9	7.9	3.9	3.9	7.9	3.9	59.9	59.9	59.9	3.9	59.9	3.9
Approach LOS	A	A	E	A	A	E	E	A	E	A	E	A
Queue Length 50th (ft)	77	19	3	49	77	0	194	204	0	0	0	0
Queue Length 95th (ft)	95	35	13	85	95	24	264	276	42	42	42	42
Internal Link Dist (ft)	750	150	315	640	750	150	935	935	150	150	935	150
Turn Bay Length (ft)	3887	1237	581	3965	3887	491	486	526	486	526	526	486
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.15	0.02	0.19	0.22	0.46	0.48	0.48	0.48	0.48	0.48	0.17
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	88 (68%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.80											
Intersection Signal Delay	17.7											
Intersection Capacity Utilization	44.7%											
Analysis Period (min)	15											
m	Volume for 95th percentile queue is metered by upstream signal.											

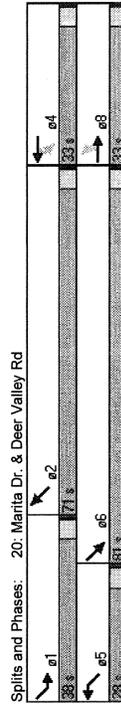


Splits and Phases: 19: Lone Tree Way & SR 4 By-pass NB On-ramp

20: Marita Dr. & Deer Valley Rd
Antioch Walmart Expansion

Existing Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEB	SET	SER	NWB	NWT	NWB	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1619	0	1770	1581	0	1770	3516	0	1770	3516	0	1770
Satd. Flow (prot)	0.744			0.735			0.850			0.850			0.850
Flt Permitted	1367	1619	0	1347	1581	0	1757	3516	0	1753	3516	0	1753
Satd. Flow (perm)	25			18			4			3			3
Satd. Flow (RTOR)	29	8	21	1	6	137	633	24	58	638	23		638
Volume (vph)	34	34	0	3	21	0	149	714	0	72	816	0	72
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	8			4			6			5			2
Protected Phases													
Permitted Phases	33.0	33.0	0.0	33.0	33.0	0.0	38.0	81.0	0.0	28.0	71.0	0.0	28.0
Total Split (s)	16.6	16.6		16.6	16.6		16.6	85.7		11.9	76.0		11.9
Act Effct Green (s)	0.14	0.14		0.14	0.14		0.14	0.73		0.10	0.66		0.10
Actuated g/C Ratio	0.18	0.14		0.02	0.09		0.60	0.28		0.41	0.35		0.41
v/c Ratio	44.8	20.7		41.0	19.4		57.5	9.1		58.1	12.2		58.1
Control Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Queue Delay	44.8	20.7		41.0	19.4		57.5	9.1		58.1	12.2		58.1
Total Delay	D	C		D	B		E	A		E	B		B
LOS	32.8			22.1			17.4			15.9			15.9
Approach Delay	C			C			B			B			B
Approach LOS	23	6		2	2		98	81		48	114		48
Queue Length 50th (ft)	51	32		4	1		188	202		97	237		97
Queue Length 95th (ft)	345			427			825			845			845
Internal Link Dist (ft)													
Turn Bay Length (ft)	309	386		305	372		457	2557		335	2328		335
Base Capacity (vph)	0	0		0	0		0	0		0	0		0
Starvation Cap Reductn	0	0		0	0		0	0		0	0		0
Spillback Cap Reductn	0	0		0	0		0	0		0	0		0
Storage Cap Reductn	0	0		0	0		0	0		0	0		0
Reduced v/c Ratio	0.11	0.09		0.01	0.06		0.33	0.28		0.21	0.35		0.21
Intersection Summary													
Cycle Length: 142													
Actuated Cycle Length: 117.9													
Control Type: Actuated-Uncoordinated													
Maximum v/c Ratio: 0.60													
Intersection Signal Delay: 17.3													
Intersection Capacity Utilization: 48.9%													
Analysis Period (min): 15													



21: Prewett Ranch Dr & Hillcrest Ave
Antioch Walmart Expansion

Existing Conditions
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	116	40	0	0	39	10	0	0	0	0	13	0
Sign Control	0.85	0.85	0.85	0.85	0.85	0.85	1.00	1.00	1.00	0.79	0.79	0.79
Volume (vph)	136	47	0	0	57	15	0	0	0	16	0	141
Peak Hour Factor	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Hourly flow rate (vph)	136	47	0	0	57	15	0	16	141			
Direction Lane #	136	47	0	72	0	0	16	141				
Volume Total (vph)	136	0	0	0	0	0	16	141				
Volume Left (vph)	0	0	0	15	0	0	0	141				
Volume Right (vph)	0	0	0	0	0	0	0	0				
Hadj (s)	0.53	0.03	0.00	-0.11	0.00	0.00	0.53	-0.87				
Departure Headway (s)	5.5	5.0	5.1	5.0	5.3	5.3	5.7	4.5				
Degree Utilization, x	0.21	0.07	0.00	0.10	0.00	0.00	0.03	0.18				
Capacity (veh/h)	630	695	691	695	644	644	599	760				
Control Delay (s)	8.7	7.1	6.9	7.3	7.1	7.1	7.6	7.2				
Approach Delay (s)	8.3			7.3			7.3					
Approach LOS	A			A			A					
Intersection Summary												
Delay	7.7											
HCM Level of Service	A											
Intersection Capacity Utilization	23.1%											
Analysis Period (min)	15											

Anioch Wal-Mart Expansion

Scenario: Existing PM Scenario Report

Command: None
 Volume: Existing PM
 Geometry: Existing
 Impact Fee: Default Impact Fee
 Trip Generation: None
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Anioch Wal-Mart Expansion

Impact Analysis Report
 Level Of Service

Intersection	Base Del/V	Future Del/V	Change in
	LOS Veh C	LOS Veh C	
# 1 Deer Valley Rd/ Country Hills	A xxxxx 0.376	A xxxxx 0.376	+ 0.000 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx 0.219	A xxxxx 0.219	+ 0.000 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx 0.267	A xxxxx 0.267	+ 0.000 V/C
# 4 Hillcrest Avenue/Driveway	B 11.5 0.000	B 11.5 0.000	+ 0.000 D/V
# 5 Hillcrest Avenue/South Drivewa	B 10.2 0.000	B 10.2 0.000	+ 0.000 D/V
# 6 Lone Tree Way/Mokelumme Dr	A xxxxx 0.500	A xxxxx 0.500	+ 0.000 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx 0.402	A xxxxx 0.402	+ 0.000 V/C
# 8 Lone Tree Way/Deer Valley Rd	A xxxxx 0.588	A xxxxx 0.588	+ 0.000 V/C
# 9 Lone Tree Way/Deer Valley HS	A xxxxx 0.373	A xxxxx 0.373	+ 0.000 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx 0.375	A xxxxx 0.375	+ 0.000 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx 0.337	A xxxxx 0.337	+ 0.000 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	A xxxxx 0.385	A xxxxx 0.385	+ 0.000 V/C
# 13 Lone Tree Way/Driveway	A 9.9 0.000	A 9.9 0.000	+ 0.000 D/V
# 14 Lone Tree Way/Hillcrest Avenue	A xxxxx 0.479	A xxxxx 0.479	+ 0.000 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx 0.540	A xxxxx 0.540	+ 0.000 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx 0.329	A xxxxx 0.329	+ 0.000 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx 0.523	A xxxxx 0.523	+ 0.000 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	A xxxxx 0.579	A xxxxx 0.579	+ 0.000 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx 0.438	A xxxxx 0.438	+ 0.000 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx 0.258	A xxxxx 0.258	+ 0.000 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A 8.5 0.206	A 8.5 0.206	+ 0.000 V/C

Anioch Wal-Mart Expansion
 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #7 Lone Tree Way/Deer Valley Plaza
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.402
 Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 24 Level Of Service: A

 Street Name: Deer Valley Plaza Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Volume Module:
 Base Vol: 113 0 61 0 0 0 0 985 93 86 600 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 113 0 61 0 0 0 0 985 93 86 600 0
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 113 0 61 0 0 0 0 985 93 86 600 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 113 0 61 0 0 0 0 985 93 86 600 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 113 0 61 0 0 0 0 985 93 86 600 0
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 113 0 0 0 0 0 0 985 0 86 600 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 113 0 0 0 0 0 0 985 0 86 600 0

Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.00 1.00 0.00 0.00 0.00 0.00 2.00 1.00 1.00 2.00 0.00
 Final Sat.: 1720 0 1720 0 0 0 0 3440 1720 1720 3440 0

 Capacity Analysis Module:
 Vol/Sat: 0.07 0.00 0.00 0.00 0.00 0.00 0.00 0.29 0.00 0.05 0.17 0.00
 Crit Volume: 113 0 493 86
 Crit Moves: ****

Anioch Wal-Mart Expansion
 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #8 Lone Tree Way/Deer Valley Rd
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.588
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 55 Level Of Service: A

 Street Name: Deer Valley Road Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 1 0 1 0 1 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
 Base Vol: 192 356 168 168 191 14 87 780 147 151 497 154
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 192 356 168 168 191 14 87 780 147 151 497 154
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 192 356 168 168 191 14 87 780 147 151 497 154
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 192 356 168 168 191 14 87 780 147 151 497 154
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 192 356 168 168 191 14 87 780 147 151 497 154
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 192 356 168 168 191 14 87 780 41 151 497 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 192 356 168 168 191 14 87 780 41 151 497 0

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 2.00 1.36 0.64 1.00 1.86 0.14 1.00 2.00 1.00 1.00 2.00 1.00
 Final Sat.: 3000 2242 1058 1650 3075 225 1650 3300 1650 1650 3300 1650

 Capacity Analysis Module:
 Vol/Sat: 0.06 0.16 0.16 0.10 0.06 0.06 0.05 0.24 0.03 0.09 0.15 0.00
 Crit Volume: 262 168 390 151
 Crit Moves: ****

 Anloch Wal-Mart Expansion

 Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)
 Intersection #21 Hillcrest Ave/Prewett Ranch Dr
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.206
 Loss Time (sec): 12 (Y+R=4.0 sec) Average Delay (sec/veh): 8.5
 Optimal Cycle: 0 Level Of Service: A

Street Name: Hillcrest Ave Prewett Dr
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 0 1 0 0 0 1 1 0 0 1 0 1 0 0 1 0

Volume Module:

Base Vol:	0	0	0	12	0	137	135	23	0	0	11	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	12	0	137	135	23	0	0	11	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	12	0	137	135	23	0	0	11	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	12	0	137	135	23	0	0	11	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	12	0	137	135	23	0	0	11	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	12	0	137	135	23	0	0	11	3

Saturation Flow Module:
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 0.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 0.79 0.21
 Final Sat.: 622 681 0 640 0 815 656 720 0 636 565 154

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 xxxxx 0.02 xxxxx 0.17 0.21 0.03 xxxxx 0.00 0.02 0.02
 Crit Moves: *****
 Delay/Veh: 0.0 0.0 0.0 8.3 0.0 7.8 9.4 7.7 0.0 0.0 7.7 7.7
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 8.3 0.0 7.8 9.4 7.7 0.0 0.0 7.7 7.7
 LOS By Move: * * * * * A * * * * * A * * * * * A * * * * *
 ApproachDel: xxxxxxx 7.9 9.2 9.2 7.7
 Delay Adj: xxxxx 1.00 1.00 1.00
 ApprAdjDel: xxxxxxx 7.9 9.2 9.2 7.7
 LOS By Appr: * * * * * A * * * * * A * * * * * A * * * * *
 AllWayAvgQ: 0.0 0.0 0.0 0.5 0.0 4.7 6.2 0.8 0.8 0.0 0.5 0.5
 Note: Queue reported is the distance per lane in feet.

1: Country Hills Dr. & Deer Valley Rd.
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1851	0	1770	1702	0	1770	3423	0	1770	3389	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1766	1851	0	1770	1702	0	1756	3423	0	1737	3389	0
Satd. Flow (perm)	1	1	0	32	32	0	14	14	0	27	27	0
Satd. Flow (RTOR)	88	100	4	30	75	80	6	520	93	98	314	92
Volume (vph)	109	128	0	33	170	0	6	659	0	105	437	0
Lane Group Flow (vph)	Split											
Turn Type	Split											
Protected Phases	Split											
Permitted Phases	Split											
Total Split (s)	36.5	38.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0	0.0
Act Effct Green (s)	13.3	13.3	0.0	16.0	16.0	0.0	7.9	41.4	0.0	12.6	53.9	0.0
Actuated g/C Ratio	0.14	0.14	0.0	0.17	0.17	0.0	0.08	0.46	0.0	0.14	0.59	0.0
v/c Ratio	0.43	0.48	0.0	0.11	0.53	0.0	0.04	0.42	0.0	0.44	0.22	0.0
Control Delay	38.0	38.5	0.0	30.3	29.9	0.0	47.3	22.2	0.0	39.3	12.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.0	38.5	0.0	30.3	29.9	0.0	47.3	22.2	0.0	39.3	12.2	0.0
LOS	D C C C C D C											
Approach Delay	D D D C C C											
Approach LOS	D D D C C C											
Queue Length 50th (ft)	42	49	0	12	53	0	2	118	0	41	46	0
Queue Length 95th (ft)	123	140	0	47	156	0	19	294	0	135	158	0
Internal Link Dist (ft)	308											
Turn Bay Length (ft)	50											
Base Capacity (vph)	553	579	0	566	566	0	378	2030	0	428	2209	0
Starvation Cap Reductn	0											
Spillback Cap Reductn	0											
Storage Cap Reductn	0											
Reduced v/c Ratio	0.20	0.22	0.0	0.06	0.30	0.0	0.02	0.32	0.0	0.25	0.20	0.0
Intersection Summary												
Cycle Length	154.5											
Actuated Cycle Length	90.8											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.53											
Intersection Signal Delay	24.0											
Intersection Capacity Utilization	51.6%											
Analysis Period (min)	15											
Splits and Phases: 1: Country Hills Dr. & Deer Valley Rd.												

2: Laurel Rd. & Hillcrest Ave
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1635	0	1770	1863	1583	1770	3466	0	1770	3470	0
Satd. Flow (prot)	0.750	0.750	0	0.728	0.728	0.728	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1396	1635	0	1353	1863	1583	1768	3466	0	1770	3470	0
Satd. Flow (perm)	34	34	0	35	9	133	162	459	50	27	302	39
Satd. Flow (RTOR)	17	7	22	44	11	188	165	519	0	30	379	0
Volume (vph)	27	45	0	44	11	188	165	519	0	30	379	0
Lane Group Flow (vph)	Perm											
Turn Type	Perm											
Protected Phases	Perm											
Permitted Phases	Perm											
Total Split (s)	37.0	37.0	0.0	37.0	37.0	30.0	46.0	0.0	17.0	33.0	0.0	0.0
Act Effct Green (s)	13.3	13.3	0.0	13.3	13.3	13.3	15.1	73.4	0.0	8.1	62.6	0.0
Actuated g/C Ratio	0.13	0.13	0.0	0.13	0.13	0.13	0.15	0.73	0.0	0.08	0.63	0.0
v/c Ratio	0.15	0.18	0.0	0.24	0.04	0.47	0.62	0.20	0.0	0.21	0.17	0.0
Control Delay	36.1	16.2	0.0	38.8	32.9	9.7	49.4	6.2	0.0	45.7	9.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	16.2	0.0	38.8	32.9	9.7	49.4	6.2	0.0	45.7	9.9	0.0
LOS	D B D C A D A											
Approach Delay	23.7											
Approach LOS	C B B											
Queue Length 50th (ft)	16	6	0	26	6	0	100	45	18	42	0	0
Queue Length 95th (ft)	24	17	0	42	16	31	158	123	46	111	0	0
Internal Link Dist (ft)	468											
Turn Bay Length (ft)	75											
Base Capacity (vph)	475	578	0	460	833	642	478	2563	248	2178	0	0
Starvation Cap Reductn	0											
Spillback Cap Reductn	0											
Storage Cap Reductn	0											
Reduced v/c Ratio	0.06	0.08	0.0	0.10	0.02	0.26	0.35	0.20	0.12	0.17	0.0	0.0
Intersection Summary												
Cycle Length	100											
Actuated Cycle Length	100											
Offset	24 (21%) Referenced to phase 2: NWT and 6: SET, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.62											
Intersection Signal Delay	15.8											
Intersection Capacity Utilization	48.8%											
Analysis Period (min)	15											
Splits and Phases: 2: Laurel Rd. & Hillcrest Ave												

5. Southeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Existing Conditions
PM Peak

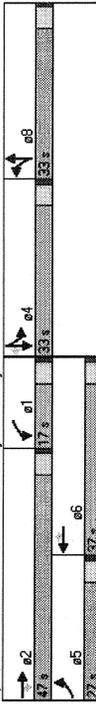
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0	0	125	0	0	37	0	383	58	0	463	68
Volumes (veh/h)	0	0	0.78	0.62	0.62	0.89	0.89	0.89	0.89	0.96	0.96	0.96
Peak Hour Factor	0	0	160	0	0	60	0	430	65	0	462	71
Hourly flow rate (vph)	0	0	160	0	0	60	0	430	65	0	462	71
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median storage (veh)												
Upstream signal (ft)								347				
Px, platoon unblocked												
Vc, conflicting volume	793	1013	196	751	963	215	553					496
Vc1, stage 1 cont vol												
Vc2, stage 2 cont vol												
Vcu, unblocked vol	793	1013	196	751	963	215	553					496
IC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1					4.1
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2					2.2
p0 queue free %	100	100	80	100	100	92	100					100
SM capacity (veh/h)	258	237	812	240	247	790	1013					1064
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	160	60	215	215	215	65	193	167				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	160	60	0	0	0	65	0	0				71
C/S/H	812	790	1700	1700	1700	1700	1700	1700				1700
Volume to Capacity	0.20	0.08	0.13	0.13	0.04	0.11	0.11	0.10				
Queue Length 95th (ft)	18	6	0	0	0	0	0	0				
Control Delay (s)	10.5	9.9	0.0	0.0	0.0	0.0	0.0	0.0				
Lane LOS	B	A	A	A	A	A	A	A				
Approach Delay (s)	10.5	9.9	0.0	0.0	0.0	0.0	0.0	0.0				
Approach LOS	B	A	A	A	A	A	A	A				
Intersection Summary												
Average Delay	1.8											
Intersection Capacity Utilization	24.9%											
ICU Level of Service	A											
Analysis Period (min)	15											

6. Lone Tree Way & Country Hills Dr.
Antioch Walmart Expansion

Existing Conditions
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Sign Control	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Grade	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1720	0	1770	1863
Flt Permitted	0.966			0.966			0.966			0	0.966	
Satd. Flow (perm)	1762	3539	1386	1721	3539	1529	1755	1720	0	1768	1863	1549
Satd. Flow (RTOR)			41				32					79
Volume (vph)	127	855	111	80	606	37	115	84	75	40	91	67
Lane Group Flow (vph)	132	891	116	88	666	41	162	224	0	47	107	79
Turn Type	Prot	Perm	Prot	Prot	Perm	Prot	Split	Split	Split	Split	Perm	Perm
Protected Phases	5	2	1	6	8	8	8	8	8	4	4	4
Permitted Phases	2	2	2	6	6	6	6	6	6	6	6	6
Total Split (s)	27.0	47.0	47.0	17.0	37.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
Act Effct Green (s)	16.7	65.8	65.8	14.0	63.1	63.1	21.7	21.7	21.7	16.5	16.5	16.5
Actuated g/C Ratio	0.13	0.51	0.51	0.11	0.49	0.49	0.17	0.17	0.17	0.13	0.13	0.13
v/c Ratio	0.58	0.50	0.16	0.46	0.39	0.05	0.55	0.72	0.21	0.45	0.30	0.30
Control Delay	65.0	24.9	15.0	58.8	24.5	16.9	55.7	55.9	49.9	56.7	12.1	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.0	24.9	15.0	58.8	24.5	16.9	55.7	55.9	49.9	56.7	12.1	12.1
LOS	E	C	B	E	C	B	E	E	E	D	E	B
Approach Delay	28.3											
Approach LOS	C											
Queue Length 50th (ft)	106	242	31	66	148	3	127	156	37	87	0	0
Queue Length 95th (ft)	166	427	93	m136	364	m14	141	166	62	120	37	0
Internal Link Dist (ft)	144	1420	75	146	740	73	167	675	156	577	156	156
Turn Bay Length (ft)	327	1791	722	191	1718	761	408	422	408	438	418	418
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.50	0.16	0.46	0.39	0.05	0.40	0.53	0.12	0.25	0.19	0.19
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	80 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.72											
Intersection Signal Delay	33.4											
Intersection LOS	C											
Intersection Capacity Utilization	58.4%											
Analysis Period (min)	15											
ICU Level of Service	B											
Volume for 95th percentile queue is metered by upstream signal.												

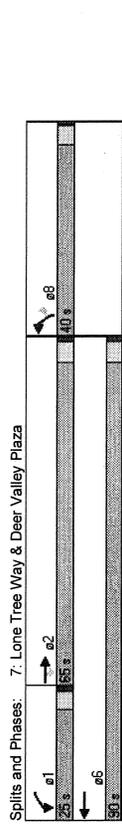
Splits and Phases: 6. Lone Tree Way & Country Hills Dr.



7: Lone Tree Way & Deer Valley Plaza
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	3539	1583	1770	3539	1770
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950
Fit Permitted	3539	1436	1741	3539	1770
Satd. Flow (perm)	47	86	600	113	61
Satd. Flow (RTOR)	1048	99	95	659	145
Volume (vph)	995	93	86	600	113
Lane Group Flow (vph)	1048	99	95	659	145
Turn Type	Prot	Prot	Prot	Prot	Prot
Protected Phases	2	1	6	8	8
Permitted Phases	2	2	25.0	90.0	40.0
Total Split (s)	65.0	65.0	25.0	90.0	40.0
Act Effect Green (s)	80.4	80.4	13.9	107.4	16.6
Actuated g/C Ratio	0.70	0.70	0.11	0.63	0.13
v/c Ratio	0.43	0.10	0.50	0.23	0.64
Control Delay	2.1	0.5	58.0	5.9	66.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	2.1	0.5	58.0	5.9	66.2
LOS	A	A	E	A	B
Approach Delay	2.0	A	E	12.5	47.5
Approach LOS	A	B	D	B	D
Queue Length 50th (ft)	36	1	85	93	118
Queue Length 95th (ft)	43	m0	145	0	154
Internal Link Dist (ft)	740	100	197	850	704
Turn Bay Length (ft)	2462	1013	300	2923	504
Base Capacity (vph)	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.43	0.10	0.32	0.23	0.29
Intersection Summary					
Cycle Length	130				
Actuated Cycle Length	130				
Offset	94 (72%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow				
Control Type	Actuated-Coordinated				
Maximum v/c Ratio	0.64				
Intersection Signal Delay	10.5				
Intersection Capacity Utilization	48.3%				
Analysis Period (min)	15				
m	Volume for 85th percentile queue is metered by upstream signal.				

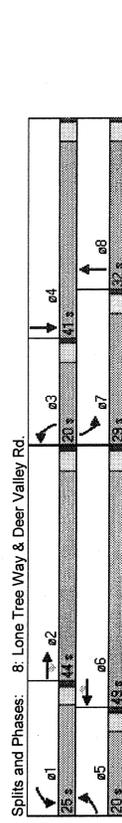


Splits and Phases: 7: Lone Tree Way & Deer Valley Plaza

8: Lone Tree Way & Deer Valley Rd.
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	3433	3352	0	2000	3501	0
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1767	3539	1523	1760	3539	1551	3427	3352	0	1766	3501	0
Satd. Flow (perm)	87	780	147	151	497	154	192	356	168	168	191	14
Satd. Flow (RTOR)	100	897	169	159	523	162	223	609	0	200	244	0
Volume (vph)	100	897	169	159	523	162	223	609	0	200	244	0
Lane Group Flow (vph)	100	897	169	159	523	162	223	609	0	200	244	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	3	8	7	4			
Permitted Phases	20.0	44.0	44.0	25.0	49.0	49.0	20.0	32.0	0.0	29.0	41.0	0.0
Total Split (s)	13.5	53.0	53.0	17.8	57.3	57.3	14.7	27.0	0.0	20.2	32.5	0.0
Act Effect Green (s)	0.10	0.41	0.41	0.14	0.44	0.44	0.11	0.21	0.0	0.16	0.25	0.0
Actuated g/C Ratio	0.55	0.62	0.26	0.65	0.34	0.22	0.57	0.62	0.0	0.64	0.28	0.0
v/c Ratio	80.8	25.4	14.8	73.0	29.6	17.2	60.4	54.4	0.0	60.7	38.2	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	80.8	25.4	14.8	73.0	29.6	17.2	60.4	54.4	0.0	60.7	38.2	0.0
Total Delay	80.8	25.4	14.8	73.0	29.6	17.2	60.4	54.4	0.0	60.7	38.2	0.0
LOS	F	C	B	E	C	B	E	D	E	D	D	D
Approach Delay	28.6	C	35.4	D	E	56.0	48.3					
Approach LOS	C	D	D	D	D	D	D					
Queue Length 50th (ft)	81	160	22	134	100	8	92	235	160	64	107	0
Queue Length 95th (ft)	139	318	100	218	0	165	127	285	213	107	420	0
Internal Link Dist (ft)	195	850	73	192	1580	75	181	802	400	1028	0	0
Turn Bay Length (ft)	231	1442	854	300	1560	740	449	802	400	1028	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.62	0.26	0.53	0.34	0.22	0.50	0.76	0.50	0.24	0.24	0.0
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	80 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.82											
Intersection Signal Delay	40.0											
Intersection Capacity Utilization	59.5%											
Analysis Period (min)	15											
n	User Entered Value											



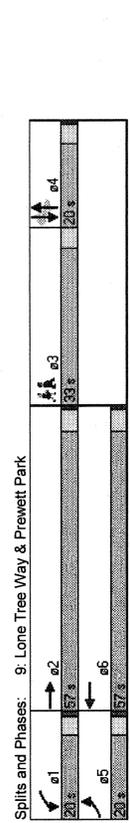
Splits and Phases: 8: Lone Tree Way & Deer Valley Rd.

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4P	4P	4P	4P	4P	4P	4P	4P	4P	4P	4P	4P
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3535	0	1770	3531	0	1770	1561	0	1770	1863	1583
Flt Permitted	0.950	0.950	0	0.755	0.755	0	0.755	0.747	0	0.747	0.747	0.747
Satd. Flow (perm)	1770	3535	0	1766	3531	0	1394	1561	0	1388	1863	1550
Satd. Flow (RTOR)	1	1	1	1	1	1	1	1	1	1	1	1
Volume (vph)	36	1150	7	26	781	9	35	0	8	8	2	14
Lane Group Flow (vph)	36	1258	0	30	918	0	71	16	0	15	4	25
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	5	2	1	6	1	4	4	4	4	4	4	4
Permitted Phases	20.0	57.0	0.0	20.0	57.0	0.0	20.0	20.0	0.0	20.0	20.0	20.0
Total Split (s)	9.8	89.8	0.0	9.0	86.8	0.0	13.0	13.0	0.0	13.0	13.0	13.0
Act Effct Green (s)	0.07	0.67	0.00	0.10	0.10	0.00	0.10	0.10	0.00	0.10	0.10	0.10
Actuated g/C Ratio	0.29	0.52	0.00	0.24	0.39	0.00	0.51	0.03	0.00	0.11	0.02	0.14
v/c Ratio	66.1	7.8	70.8	5.6	67.4	0.1	53.0	50.5	19.7	53.0	50.5	19.7
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	7.8	70.8	5.6	67.4	0.1	53.0	50.5	19.7	53.0	50.5	19.7
LOS	E	A	E	A	E	A	E	A	D	D	D	B
Approach Delay	9.6	7.6	7.6	7.6	7.6	7.6	55.1	55.1	33.9	33.9	33.9	33.9
Approach LOS	A	A	A	A	A	A	E	E	C	C	C	C
Queue Length 50th (ft)	32	141	24	67	58	0	12	12	3	3	3	3
Queue Length 95th (ft)	m53	175	m56	123	56	0	20	20	9	9	9	9
Internal Link Dist (ft)	145	1580	148	605	609	609	819	819	102	102	102	102
Turn Bay Length (ft)	231	2442	231	2359	182	649	182	244	224	224	224	224
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.52	0.13	0.39	0.39	0.02	0.08	0.02	0.08	0.02	0.11	0.11

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 113.07%. Referenced to phase 2, EBT and 6, WBT, Start of Yellow
 Control Type: Actuated/Coordinated
 Maximum v/c Ratio: 0.52
 Intersection LOS: B
 Intersection Capacity Utilization: 47.4%
 Analysis Period (min): 15
 m: Volume for 95th percentile queue is metered by upstream signal.



9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

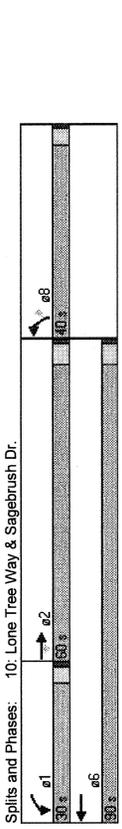
Existing Conditions
PM Peak

Lane Group	EB3
Lane Configurations	
Total Lost Time (s)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Volume (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Total Split (s)	33.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	3539	1583	1770	3539	1770	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	3539	1511	1763	3539	1770	1583
Satd. Flow (perm)	55	55	55	55	55	55
Satd. Flow (RTOR)	1040	146	40	691	85	101
Volume (vph)	1130	159	49	853	139	168
Lane Group Flow (vph)	Perm	Prot	Prot	Perm	Perm	Perm
Turn Type	2	2	1	6	8	8
Protected Phases						
Permitted Phases	60.0	60.0	30.0	90.0	40.0	40.0
Total Split (s)	101.3	101.3	9.1	105.3	14.7	14.7
Act Effct Green (s)	0.78	0.78	0.07	0.84	0.11	0.11
Actuated g/C Ratio	0.41	0.13	0.40	0.29	0.69	0.51
v/c Ratio	1.1	0.3	0.3	0.74	1.0	0.72
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.1	0.3	0.3	0.74	1.0	0.72
LOS	A	A	E	A	E	B
Approach Delay	1.0			4.9	40.1	
Approach LOS	A			A	D	
Queue Length 50th (ft)	17	0	37	16	115	0
Queue Length 95th (ft)	10	1	76	7	116	3
Internal Link Dist (ft)	605			1855	497	
Turn Bay Length (ft)	80	142		116		
Base Capacity (vph)	2757	1190	368	2974	504	569
Starvation Cap Reductn	149	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.13	0.13	0.29	0.28	0.28
Intersection Summary						
Cycle Length: 130						
Actuated Cycle Length: 130						
Offset: 122 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.69						
Intersection Signal Delay: 7.2						
Intersection Capacity Utilization: 44.6%						
Analysis Period (min): 15						
Intersection LOS: A						
ICU Level of Service: A						

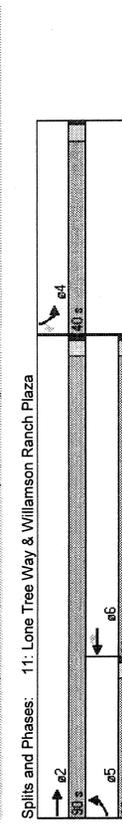


Splits and Phases: 10: Lone Tree Way & Sagebrush Dr.

11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	WBL	WBT	SBL	SBT
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	3539	1583	1770	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	1731	3539	3539	1451	1770	1562
Satd. Flow (perm)	55	55	55	55	55	55
Satd. Flow (RTOR)	80	1081	711	20	40	39
Volume (vph)	90	1215	790	22	56	55
Lane Group Flow (vph)	Prot	Perm	Perm	Perm	Perm	Perm
Turn Type	5	2	6	6	4	4
Protected Phases						
Permitted Phases	30.0	90.0	60.0	60.0	40.0	40.0
Total Split (s)	11.5	114.5	99.5	99.5	12.1	12.1
Act Effct Green (s)	0.09	0.86	0.77	0.77	0.09	0.09
Actuated g/C Ratio	0.58	0.39	0.29	0.02	0.34	0.28
v/c Ratio	75.2	3.0	0.9	0.1	58.3	15.5
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.2	3.0	0.9	0.1	58.3	15.5
LOS	E	A	A	A	E	B
Approach Delay	6.0	0.9			37.1	
Approach LOS	A	A			D	
Queue Length 50th (ft)	70	6	9	0	46	0
Queue Length 95th (ft)	106	427	20	m0	62	20
Internal Link Dist (ft)	1655	820			457	
Turn Bay Length (ft)	155				113	
Base Capacity (vph)	368	3118	2707	1113	604	464
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.39	0.29	0.02	0.11	0.11
Intersection Summary						
Cycle Length: 130						
Actuated Cycle Length: 130						
Offset: 75 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.58						
Intersection Signal Delay: 6.9						
Intersection Capacity Utilization: 42.1%						
Analysis Period (min): 15						
Intersection LOS: A						
ICU Level of Service: A						

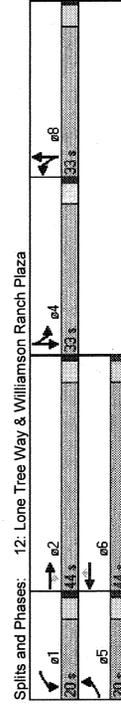


Splits and Phases: 11: Lone Tree Way & Williamson Ranch Plaza

12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Existing Conditions
PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1655	0	3433	1626	0
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1724	3539	1422	1742	3539	1419	1767	1655	0	3419	1626	0
Satd. Flow (RTOR)	87	908	28	49	653	38	7	18	38	89	16	60
Volume (vph)	104	1081	33	58	777	45	10	78	0	114	98	0
Lane Group Flow (vph)	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split	Split	Split	Split	Split
Turn Type	5	2	1	6	8	8	8	8	8	4	4	4
Protected Phases												
Permitted Phases	20.0	44.0	44.0	20.0	44.0	44.0	33.0	33.0	0.0	33.0	33.0	0.0
Act Erct Green (s)	14.3	82.2	82.2	12.6	78.1	78.1	13.1	13.1	0.0	14.6	14.6	0.0
Actuated g/C Ratio	0.11	0.63	0.63	0.10	0.60	0.60	0.10	0.10	0.0	0.11	0.11	0.0
v/c Ratio	0.54	0.48	0.04	0.34	0.37	0.05	0.06	0.36	0.0	0.30	0.39	0.0
Control Delay	74.6	12.3	4.9	66.7	9.0	3.4	47.7	24.4	52.9	19.6	19.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.6	12.3	4.9	66.7	9.0	3.4	47.7	24.4	52.9	19.6	19.6	0.0
LOS	E	B	A	E	A	A	D	C	D	D	D	B
Approach Delay	17.4			12.7			27.1			37.5		
Approach LOS	B			B			C			D		
Queue Length 50th (ft)	83	164	3	51	35	0	8	20	0	47	17	
Queue Length 95th (ft)	108	4549	21	93	151	6	18	39		56	46	
Internal Link Dist. (ft)	520			420			731			440		
Turn Bay Length (ft)	158	2237	902	231	2127	871	408	423	200	792	434	
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.46	0.04	0.25	0.37	0.05	0.02	0.18		0.14	0.23	
Intersection Summary												
Cycle Length	130			130			130			130		
Actuated Cycle Length	130			130			130			130		
Offset: 63 (41%): Referenced to phase 2:EBT and 6:WBT, Start of Yellow												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.54												
Intersection Signal Delay: 17.8												
Intersection LOS: B												
Intersection Capacity Utilization: 48.1%												
Analysis Period (min): 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												



Splits and Phases: 12: Lone Tree Way & Williamson Ranch Plaza

13: Lone Tree Way & Wal-Mart Driveway
Antioch Walmart Expansion

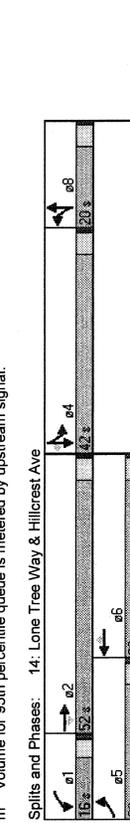
Existing Conditions
PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1655	0	3433	1626	0
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1724	3539	1422	1742	3539	1419	1767	1655	0	3419	1626	0
Satd. Flow (RTOR)	87	908	28	49	653	38	7	18	38	89	16	60
Volume (vph)	104	1081	33	58	777	45	10	78	0	114	98	0
Lane Group Flow (vph)	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split	Split	Split	Split	Split
Turn Type	5	2	1	6	8	8	8	8	8	4	4	4
Protected Phases												
Permitted Phases	20.0	44.0	44.0	20.0	44.0	44.0	33.0	33.0	0.0	33.0	33.0	0.0
Act Erct Green (s)	14.3	82.2	82.2	12.6	78.1	78.1	13.1	13.1	0.0	14.6	14.6	0.0
Actuated g/C Ratio	0.11	0.63	0.63	0.10	0.60	0.60	0.10	0.10	0.0	0.11	0.11	0.0
v/c Ratio	0.54	0.48	0.04	0.34	0.37	0.05	0.06	0.36	0.0	0.30	0.39	0.0
Control Delay	74.6	12.3	4.9	66.7	9.0	3.4	47.7	24.4	52.9	19.6	19.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.6	12.3	4.9	66.7	9.0	3.4	47.7	24.4	52.9	19.6	19.6	0.0
LOS	E	B	A	E	A	A	D	C	D	D	D	B
Approach Delay	17.4			12.7			27.1			37.5		
Approach LOS	B			B			C			D		
Queue Length 50th (ft)	83	164	3	51	35	0	8	20	0	47	17	
Queue Length 95th (ft)	108	4549	21	93	151	6	18	39		56	46	
Internal Link Dist. (ft)	520			420			731			440		
Turn Bay Length (ft)	158	2237	902	231	2127	871	408	423	200	792	434	
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.46	0.04	0.25	0.37	0.05	0.02	0.18		0.14	0.23	
Intersection Summary												
Cycle Length	130			130			130			130		
Actuated Cycle Length	130			130			130			130		
Offset: 63 (41%): Referenced to phase 2:EBT and 6:WBT, Start of Yellow												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.54												
Intersection Signal Delay: 17.8												
Intersection LOS: B												
Intersection Capacity Utilization: 48.1%												
Analysis Period (min): 15												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

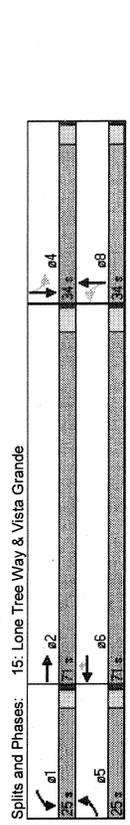
15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
1770	3539	1583	1770	5055	1583	1770	3388	0	2000	3272	1583
0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
1765	3539	1520	1765	5055	1517	1749	3388	0	1583	3230	1534
18	269	18	269	18	269	18	269	25	18	269	118
131	915	22	43	720	229	17	87	26	423	77	97
146	1017	24	51	847	269	24	160	0	258	352	118
Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
5	2	1	6	6	6	8	8	8	4	4	4
Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases
30.0	52.0	52.0	38.0	38.0	20.0	20.0	20.0	0.0	42.0	42.0	42.0
16.7	66.3	66.3	10.4	56.0	56.0	17.3	17.3	0.0	26.1	26.1	26.1
0.74	0.51	0.51	0.068	0.43	0.43	0.13	0.13	0.0	0.20	0.20	0.20
0.57	0.56	0.03	0.36	0.39	0.33	0.10	0.34	0.0	0.64	0.54	0.29
76.4	18.4	12.2	52.8	31.9	13.1	47.7	43.7	0.0	54.6	48.8	8.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76.4	18.4	12.2	52.8	31.9	13.1	47.7	43.7	0.0	54.6	48.8	8.5
LOS	E	B	B	C	B	D	D	D	D	D	A
Approach	25.4	C	28.5	C	44.3	D	44.3	D	44.3	D	A
Queue Length 50th (ft)	120	73	0	41	195	66	19	56	221	147	0
Queue Length 95th (ft)	202	289	m11	84	194	110	34	64	269	167	37
Internal Link Dist (ft)	203	430	205	208	590	230	2575	295	1680	291	543
Base Capacity (vph)	368	1855	784	177	2188	806	268	535	600	982	543
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.56	0.03	0.29	0.39	0.33	0.09	0.30	0.43	0.36	0.22
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset	50 (38%)	Referenced to phase 2:EBT and 6:WBT, Start of Yellow									
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.64										
Intersection Signal Delay	31.8										
Intersection Capacity Utilization	62.0%										
Analysis Period (min)	15										
m	User Entered Value										



Splits and Phases: 14: Lone Tree Way & Hillcrest Ave

EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
1770	5055	0	1770	3539	1583	1770	1582	0	1770	1653	0
0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
1765	5055	0	1768	3539	1535	1364	1582	0	977	1653	0
18	1282	44	121	931	24	35	10	114	42	9	20
19	1367	0	129	990	26	44	154	0	57	39	0
Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
5	2	1	6	6	6	8	8	8	4	4	4
Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases
25.0	71.0	0.0	25.0	71.0	71.0	34.0	34.0	0.0	34.0	34.0	0.0
9.3	88.1	0.0	102.6	102.6	15.9	15.9	15.9	0.0	15.9	15.9	0.0
0.87	0.68	0.0	0.13	0.79	0.79	0.12	0.12	0.0	0.12	0.12	0.0
0.15	0.40	0.0	0.56	0.35	0.02	0.26	0.48	0.0	0.47	0.17	0.0
78.3	5.4	0.0	59.4	6.5	6.3	51.9	14.1	0.0	63.3	22.9	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78.3	5.4	0.0	59.4	6.5	6.3	51.9	14.1	0.0	63.3	22.9	0.0
LOS	E	A	E	A	A	D	B	E	E	C	C
Approach	6.4	A	12.5	A	A	D	B	A	A	C	D
Queue Length 50th (ft)	16	175	114	73	1	35	9	46	9	9	9
Queue Length 95th (ft)	m29	193	183	222	6	56	45	64	28	28	28
Internal Link Dist (ft)	197	650	203	1655	75	128	786	100	614	614	614
Base Capacity (vph)	300	3427	301	2794	1215	525	485	233	415	415	415
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.40	0.43	0.35	0.02	0.14	0.32	0.24	0.09	0.09	0.09
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset	98 (75%)	Referenced to phase 2:EBT and 6:WBT, Start of Yellow									
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.56										
Intersection Signal Delay	11.4										
Intersection Capacity Utilization	58.5%										
Analysis Period (min)	15										
m	User Entered Value										

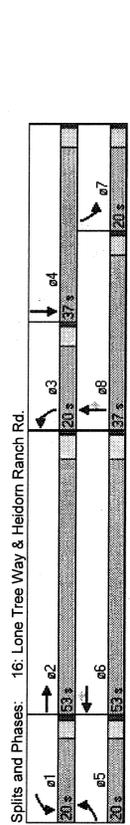


Splits and Phases: 15: Lone Tree Way & Vista Grande

16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	5037	0	1770	3539	1583	3433	1863	1583	1770	1699	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0
Fit Permitted	1768	5037	0	1768	3539	1538	3433	1863	1561	1765	1699	0
Satd. Flow (perm)	8	74	24	1026	13	85	4	48	5	3	4	7
Satd. Flow (RTOR)	5	1319	0	26	1127	14	112	5	63	8	12	0
Volume (vph)	5	1451	0	26	1127	14	112	5	63	8	12	0
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	1	6	3	3	8	8	7	4		
Protected Phases	5	2	1	6	3	3	8	8	7	4		
Permitted Phases	20.0	53.0	0.0	20.0	53.0	20.0	37.0	37.0	20.0	37.0	0.0	0.0
Total Split (s)	8.5	97.4	0.0	9.9	103.2	103.2	12.0	15.8	15.8	8.6	11.8	
Act Effct Green (s)	0.07	0.75	0.08	0.79	0.79	0.09	0.12	0.12	0.07	0.09	0.09	
Actuated g/C Ratio	0.04	0.38	0.19	0.40	0.01	0.35	0.02	0.26	0.07	0.07	0.07	
v/c Ratio	81.4	3.5	70.6	4.2	2.7	58.1	44.0	12.6	57.8	33.0		
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Queue Length	81.4	3.5	70.6	4.2	2.7	58.1	44.0	12.6	57.8	33.0		
Total Delay	F	A	E	A	A	E	D	B	E	C		
LOS	F	A	E	A	A	E	D	B	E	C		
Approach Delay	3.7	5.7		5.7	41.8		41.8	42.9				
Approach LOS	A	A		A	D		D	D				
Queue Length 50th (ft)	4	30	23	52	1	46	4	0	6	4		
Queue Length 95th (ft)	m11	262	m32	390	m2	63	11	24	15	12		
Internal Link Dist (ft)	194	1055		905		972		316				
Turn Bay Length (ft)	231	3774	231	2810	1222	449	487	455	231	450		
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.38	0.11	0.40	0.01	0.25	0.01	0.14	0.03	0.03		
Intersection Summary												
Cycle Length	130			130								
Actuated Cycle Length	130			130								
Offset	114 (86%)			Referenced to phase 2:EBT and 6:WBT, Start of Yellow								
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.46											
Intersection Signal Delay	7.2			Intersection LOS: A								
Intersection Capacity Utilization	45.3%			ICU Level of Service A								
Analysis Period (min)	15											
m	Volume for 95th percentile queue is metered by upstream signal.											



Splits and Phases: 16: Lone Tree Way & Heidorn Ranch Rd.

17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	5085	1583	3433	3407	0	3433	1638	1504	1770	1863	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Fit Permitted	1768	5085	1534	3420	3407	0	3424	1638	1481	1764	1863	1562
Satd. Flow (perm)	54	1354	55	329	942	253	84	55	173	175	56	22
Satd. Flow (RTOR)	58	1458	59	366	1328	0	112	133	171	240	77	30
Volume (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	5	2	2	6	3	3	8	8	8	7	4	4
Turn Type	5	2	2	6	3	3	8	8	8	7	4	4
Protected Phases	5	2	2	6	3	3	8	8	8	7	4	4
Permitted Phases	20.0	58.0	58.0	30.0	68.0	0.0	20.0	22.0	22.0	20.0	22.0	22.0
Total Split (s)	14.8	69.2	69.2	18.2	74.5		13.7	13.5	13.5	17.0	18.8	18.8
Act Effct Green (s)	0.11	0.53	0.53	0.14	0.57		0.11	0.10	0.10	0.13	0.14	0.14
Actuated g/C Ratio	0.29	0.54	0.07	0.76	0.68		0.31	0.68	0.56	1.04	0.29	0.12
v/c Ratio	37.9	9.8	2.8	66.3	15.0		58.2	61.5	14.5	124.0	50.4	15.7
Control Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Queue Length	37.9	9.8	2.8	66.3	15.0		58.2	61.5	14.5	124.0	50.4	15.7
Total Delay	D	A	A	E	B		E	E	B	F	D	B
LOS	D	A	A	E	B		E	E	B	F	D	B
Approach Delay	10.5			26.1			41.3			98.3		
Approach LOS	B			C			D			F		
Queue Length 50th (ft)	40	152	1	136	316		47	81	0	~218	57	0
Queue Length 95th (ft)	72	106	9	m177	528		63	126	33	#275	83	18
Internal Link Dist (ft)	300	905		760			150			1064		
Turn Bay Length (ft)	300	120	300				150			305	281	
Base Capacity (vph)	231	2708	831	713	1967		505	262	362	231	305	281
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.54	0.07	0.51	0.68		0.22	0.61	0.47	1.04	0.25	0.11
Intersection Summary												
Cycle Length	130			130								
Actuated Cycle Length	130			130								
Offset	87 (67%)			Referenced to phase 2:EBT and 6:WBT, Start of Yellow								
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.04			Intersection LOS: C								
Intersection Signal Delay	27.8			ICU Level of Service B								
Intersection Capacity Utilization	63.9%											
Analysis Period (min)	15											
n	Volume for 95th percentile queue is metered by upstream signal.											

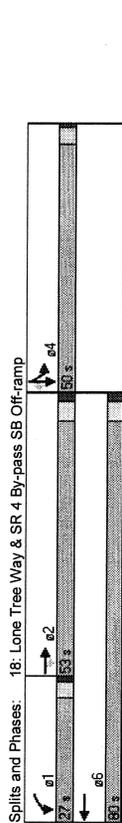


Splits and Phases: 17: Lone Tree Way & Canada Valley

18: Lone Tree Way & SR 4 By-pass SB Off-ramp
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Fit Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (RTOR)	0	1169	541	98	1153	0	0	0	416	10	361	54
Volume (vph)	0	1313	608	113	1325	0	0	0	234	244	406	0
Lane Group Flow (vph)	0	1313	608	113	1325	0	0	0	234	244	406	0
Turn Type	2	1	6	1	6	1	6	1	6	1	6	1
Protected Phases	2	1	6	1	6	1	6	1	6	1	6	1
Permitted Phases	0.0	53.0	53.0	27.0	80.0	0.0	0.0	0.0	50.0	50.0	50.0	0.0
Total Split (s)	0.0	75.3	75.3	10.1	88.4	0.0	0.0	0.0	35.6	35.6	35.6	0.0
Act Effct Green (s)	0.0	86	86	0.08	0.68	0.0	0.0	0.0	0.27	0.27	0.27	0.0
Actuated g/C Ratio	0.45	0.52	0.42	0.38	0.51	0.0	0.0	0.0	0.53	0.86	0.86	0.0
v/c Ratio	17.2	5.5	73.9	5.9	5.9	0.0	0.0	0.0	42.4	42.9	55.7	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.2	5.5	73.9	5.9	5.9	0.0	0.0	0.0	42.4	42.9	55.7	0.0
LOS	B	A	E	A	A	D	D	D	D	D	D	E
Approach Delay	13.5	0	0	11.3	0	0	0	0	48.7	0	0	0
Approach LOS	B	B	B	B	B	D	D	D	D	D	D	D
Queue Length 50th (ft)	165	32	49	92	125	174	183	286	227	236	363	0
Queue Length 95th (ft)	m227	m93	m68	125	760	871	528	528	227	236	363	0
Internal Link Dist (ft)	760	400	325	760	760	871	528	528	227	236	363	0
Turn Bay Length (ft)	2946	1160	634	3459	3459	608	610	607	608	610	607	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.52	0.18	0.38	0.38	0.38	0.40	0.67	0.38	0.40	0.67	0.0
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	100 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.86											
Intersection Signal Delay	20.1											
Intersection LOS	C											
Intersection Capacity Utilization	66.4%											
Analysis Period (min)	15											
Volume for 95th percentile queue is metered by upstream signal.												

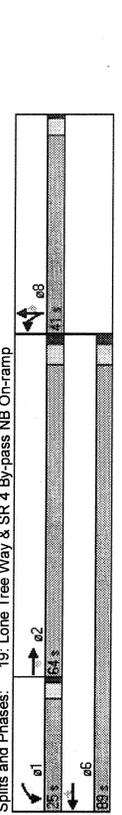


Splits and Phases: 18: Lone Tree Way & SR 4 By-pass SB Off-ramp

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Existing Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	1583	1681	1699	1583	0	0	0
Satd. Flow (prot)	0	5085	1583	3433	5085	1583	1681	1699	1583	0	0	0
Fit Permitted	0	5085	1583	3433	5085	1583	1681	1699	1583	0	0	0
Satd. Flow (perm)	0	5085	1583	3433	5085	1545	1681	1699	1553	0	0	0
Satd. Flow (RTOR)	0	1404	264	21	831	357	437	43	137	0	0	0
Volume (vph)	0	1494	281	24	934	401	289	304	169	0	0	0
Lane Group Flow (vph)	0	1494	281	24	934	401	289	304	169	0	0	0
Turn Type	2	1	6	1	6	1	6	1	6	1	6	1
Protected Phases	2	1	6	1	6	1	6	1	6	1	6	1
Permitted Phases	0.0	64.0	64.0	25.0	89.0	89.0	41.0	41.0	41.0	0.0	0.0	0.0
Total Split (s)	0.0	89.9	89.9	7.1	96.0	96.0	28.0	28.0	28.0	0.0	0.0	0.0
Act Effct Green (s)	0.0	0.89	0.89	0.05	0.74	0.74	0.22	0.22	0.22	0.0	0.0	0.0
Actuated g/C Ratio	0.42	0.25	0.13	0.25	0.32	0.32	0.80	0.83	0.36	0.0	0.0	0.0
v/c Ratio	5.1	2.4	60.0	6.3	6.3	6.3	63.9	67.0	7.4	0.0	0.0	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.1	2.4	60.0	6.3	6.3	6.3	63.9	67.0	7.4	0.0	0.0	0.0
LOS	A	A	E	A	A	A	E	E	A	E	A	A
Approach Delay	4.7	0	0	5.8	0	0	52.6	0	0	0	0	0
Approach LOS	A	A	A	A	A	D	D	D	D	D	D	D
Queue Length 50th (ft)	126	31	10	80	0	246	281	0	0	0	0	0
Queue Length 95th (ft)	254	82	25	130	31	281	296	37	0	0	0	0
Internal Link Dist (ft)	760	150	315	920	150	936	1156	1156	315	0	0	0
Turn Bay Length (ft)	3516	1135	561	3754	1246	481	497	575	575	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.25	0.04	0.25	0.32	0.32	0.59	0.61	0.29	0.0	0.0	0.0
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.83											
Intersection Signal Delay	14.4											
Intersection LOS	B											
Intersection Capacity Utilization	47.6%											
Analysis Period (min)	15											



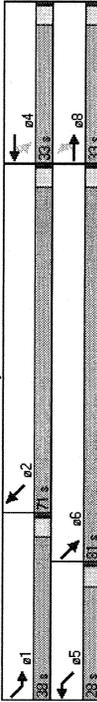
Splits and Phases: 19: Lone Tree Way & SR 4 By-pass NB On-ramp

20: Marita Dr. & Deer Valley Rd.
Antioch Walmart Expansion

Existing Conditions
PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Split (s)	17.0	15.83	0	17.0	15.98	0	17.0	34.89	0	17.0	35.35	0
Act Ert Green (s)	0.569	0.755	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Actuated g/C Ratio	10.60	15.83	0	14.06	15.98	0	17.61	34.89	0	17.34	35.35	0
v/c Ratio	0.19	0.01	0	0.25	0.47	0	0.21	0.19	0	0.12	0.26	0
Control Delay	47.5	0.0	0	47.7	15.9	0	47.6	3.4	0	48.0	4.7	0
Queue Delay	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Total Delay	47.5	0.0	0	47.7	15.9	0	47.6	3.4	0	48.0	4.7	0
LOS	D	A	A	D	B	B	D	A	A	D	D	A
Approach Delay	39.2	0	0	22.8	0	0	6.0	0	0	5.6	0	0
Approach LOS	D	D	D	C	C	C	A	A	A	A	A	A
Queue Length 50th (ft)	11	0	0	19	3	0	18	22	0	9	69	0
Queue Length 95th (ft)	25	0	0	40	27	0	46	68	0	32	117	0
Internal Link Dist (ft)	345			427			825			845		
Turn Bay Length (ft)												
Base Capacity (vph)	252	758	0	334	466	0	456	2800	0	342	2725	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillover Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.01	0	0.10	0.26	0	0.07	0.19	0	0.05	0.26	0
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	106.9											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.47											
Intersection Signal Delay	8.1											
Intersection Capacity Utilization	36.2%											
Analysis Period (min)	15											

Splits and Phases: 20: Marita Dr. & Deer Valley Rd.



21: Prewett Ranch Dr & Hillcrest Ave
Antioch Walmart Expansion

Existing Conditions
PM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SNR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SNR
Lane Configurations	135	23	0	0	11	3	0	0	0	12	0	137
Sign Control	Stop	Stop	0	0	Stop	0	0	0	0	0	0	Stop
Volume (vph)	0.84	0.84	0.84	0.39	0.39	0.39	1.00	1.00	1.00	0.85	0.85	0.85
Peak Hour Factor	161	27	0	0	28	8	0	0	0	14	0	161
Hourly flow rate (vph)												
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1	SB 2				
Volume Total (vph)	161	27	0	36	0	0	14	161				
Volume Left (vph)	161	0	0	0	0	0	0	14				
Volume Right (vph)	0	0	0	0	0	0	0	0				
Hadj (s)	0.53	0.08	0.00	-0.12	0.00	0.00	0.53	-0.57				
Departure Headway (s)	5.5	5.0	5.1	5.0	5.3	5.3	5.6	4.4				
Degree Utilization, x	0.24	0.04	0.00	0.05	0.00	0.00	0.02	0.20				
Capacity (veh/h)	630	693	682	685	654	654	608	775				
Control Delay (s)	9.1	7.0	6.9	7.1	7.1	7.1	7.6	7.3				
Approach Delay (s)	8.8	7.1	7.1	0.0	0.0	0.0	7.3	7.3				
Approach LOS	A	A	A	A	A	A	A	A				
Intersection Summary												
Delay	8.0											
HCM Level of Service	A											
Intersection Capacity Utilization	24.1%											
Analysis Period (min)	15											

TRIP GENERATION

**APPROVED & PENDING DEVELOPMENT
INFORMATION**

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Renaissance at Bluerock
097311002.1

Project Name
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction								
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	
210	Single-Family Detached Housing	Dwelling Unit(s)	71	Avg	9.57	0.75	1.01	680	53	72	13	40	45	27	680	53	72	13	40	45	27	
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.82															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62															
								Totals	680	53	72	13	40	45	27	680	53	72	13	40	45	27
								Reduction	95	7	10	2	6	6	4							
								Grand Total	585	46	62	11	34	39	23							

14%

Notes:
(1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Park Ridge
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates			Total Trips						Net Trips after Pass-By Reduction								
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips						
210	Single-Family Detached Housing	Dwelling Unit(s)	562	Avg	9.57	0.75	1.01	5380	422	568	106	316	358	210	5380	422	568	106	316	358	210	
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.96	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62															
Totals					5380	422	568	106	316	358	210	5380	422	568	106	316	358	210	5380	422	568	210
Reduction					753	59	80	15	44	50	29	4627	363	488	91	272	308	181				
Grand Total					4627	363	488	91	272	308	181											

Notes: (1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Deer Valley Business Park
097311002.1

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Avg	Daily Trips	AM Trips	PM Trips	Avg	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips				
					Rate	Rate	Rate	Rate or Eq	In	Out	In	Out	In	Out	In	Out	In	Out				
710	General Office Building (1)	1,000 Sq Ft	84.45	11.01	1.55	1.49	1.40	930	131	126	115	16	21	105	930	131	126	115	16	21	105	
714	Corporate Headquarters Building(1)	1,000 Sq Ft		7.98	1.49	1.40																
715	Single Tenant Office Building (1)	1,000 Sq Ft		11.57	1.80	1.73																
720	Medical-Dental Office Building	1,000 Sq Ft		36.13	2.30	3.46																
730	Government Office Building (1)	1,000 Sq Ft		68.93	5.88	1.21																
731	State Motor Vehicles Department	1,000 Sq Ft		166.02	9.84	17.09																
732	United States Post Office	1,000 Sq Ft		108.19	8.21	11.12																
733	Government Office Complex	1,000 Sq Ft		27.92	2.21	2.85																
750	Office Park (1)	1,000 Sq Ft		11.42	1.71	1.48																
760	Research and Development Center (1)	1,000 Sq Ft		8.11	1.22	1.07																
770	Business Park (1)	1,000 Sq Ft		12.76	1.43	1.29																
				Totals				930	131	126	115	16	21	105	930	131	126	115	16	21	105	
				Reduction				214	30	29	26	4	5	24								
				Grand Total				716	101	97	89	12	16	81								

Notes: (1) AM and/or PM rates correspond to peak hour of generator 23%

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Hidden Glen
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out		
210	Single-Family Detached Housing	Dwelling Unit(s)	371	Avg	9.57	0.75	1.01	3552	278	375	70	208	236	139	3552	278	375	70	208	236	139
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
Totals								3552	278	375	70	208	236	139	3552	278	375	70	208	236	139
Reduction								487	39	53	10	29	33	19	487	39	53	10	29	33	19
Grand Total								3065	239	323	60	179	203	120	3065	239	323	60	179	203	120

Notes:
 (1) AM and/or PM rates correspond to peak hour of generator

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- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
 Meadow Creek Village

Project Number
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Avg	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips						
210	Single-Family Detached Housing	Dwelling Unit(s)	97	Avg	9.57	0.75	1.01		930	73	98	18	55	62	36	930	73	98	18	55	62	36			
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					930	73	98	18	55	62	36	930	73	98	18	55	62	36	930	73	98	18	55	62	36
Reduction					130	10	14	3	8	9	5	130	10	14	3	8	9	5	130	10	14	3	8	9	5
Grand Total					800	63	84	15	47	53	31	800	63	84	15	47	53	800	63	84	15	47	53	31	

Notes:

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
 Monterra (Nelson Ranch)

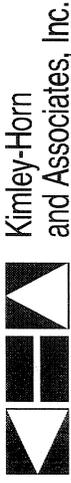
Project Number
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out
210	Single-Family Detached Housing	Dwelling Unit(s)	360	Avg	9.57	0.75	1.01	3446	270	364	68	202	229	135	3446	270	364	68	202	229	135
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
Totals					3446	270	364	68	202	229	135	3446	270	364	68	202	229	135			
Reduction					482	38	51	10	28	32	19	482	38	51	10	28	32	19			
Grand Total					2964	232	313	58	174	197	116	2964	232	313	58	174	197	116			

Notes:

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Sand Creek Ranch - Rivergate
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips				Net Trips after Pass-By Reduction								
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips					
					or Eq	Rate	Rate	In	Out	In	Out	In	Out	In	Out						
210	Single-Family Detached Housing	Dwelling Unit(s)	239	Avg	9.57	0.75	1.01	2288	179	241	45	134	152	89	2288	179	241	45	134	152	89
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
				Totals	2288	179	241	241	45	134	152	89	2288	179	241	45	134	152	89		
				Reduction	320	25	34	6	19	21	12										
				Grand Total	1968	154	207	39	115	131	77										

Notes:
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 C Includes weekday rates only
 D Total trips include pass-by trips w/ no internal capture
 E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Lone Tree Business Ctr (Williamson
Ranch Plaza)
097311002.1

Project Name
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Trip Rates			Total Trips						Net Trips after Pass-By Reduction						
				Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	
710	General Office Building (1)	1,000 Sq Ft	39,685	11.01	1.55	1.49	438	62	59	7	10	49	438	62	59	7	10	49	
714	Corporate Headquarters Building (1)	1,000 Sq Ft		7.98	1.49	1.40													
715	Single Tenant Office Building (1)	1,000 Sq Ft		11.57	1.80	1.73													
720	Medical-Dental Office Building	1,000 Sq Ft		36.13	2.30	3.46													
730	Government Office Building (1)	1,000 Sq Ft		68.93	5.88	1.21													
731	State Motor Vehicles Department	1,000 Sq Ft		166.02	9.84	17.09													
732	United States Post Office	1,000 Sq Ft		108.19	8.21	11.12													
733	Government Office Complex	1,000 Sq Ft		27.92	2.21	2.85													
760	Research and Development Center (1)	1,000 Sq Ft		8.11	1.22	1.07													
770	Business Park (1)	1,000 Sq Ft		12.76	1.43	1.29													
Totals							438	62	59	7	10	49	438	62	59	7	10	49	
Reduction							101	14	13	2	2	11							
Grand Total							337	48	45	5	8	38							

Notes:

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Antioch Town Center
097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips				Net Trips after Pass-By Reduction									
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips						
812	Building Materials and Lumber Store	1,000 Sq Ft		Avg	45.16	2.60	4.49															
813	Free Standing Discount Superstore	1,000 Sq Ft		Avg	53.13	1.67	4.61															
814	Specialty Retail Center	1,000 Sq Ft		Avg	44.32	*	2.71															
815	Free Standing Discount Store	1,000 Sq Ft	138.56	Avg	57.24	1.06	5.00		7932	147	683	100	47	347	346	7932	147	575	100	47	288	287
816	Hardware/Paint Store	1,000 Sq Ft		Avg	51.29	1.08	4.84															
817	Nursery (Garden Center)	1,000 Sq Ft		Avg	36.08	1.31	3.80															
818	Nursery (Wholesale)	1,000 Sq Ft		Avg	39.00	2.40	5.17															
820	Shopping Center	1,000 Sq Ft		Avg	42.94	1.00	3.73															
823	Factory Outlet Center	1,000 Sq Ft		Avg	26.59	0.67	2.29															
841	New Car Sales	1,000 Sq Ft		Avg	33.34	2.03	2.59															
843	Automobile Parts Sales	1,000 Sq Ft		Avg	61.91	2.21	5.98															
848	Tire Store	1,000 Sq Ft		Avg	24.87	2.89	4.15															
849	Tire Superstore	1,000 Sq Ft		Avg	20.36	1.34	2.11															
850	Supermarket	1,000 Sq Ft		Avg	102.24	3.59	10.50															
851	Convenience Market (Open 24 Hours)	1,000 Sq Ft		Avg	737.99	67.03	52.41															
852	Convenience Market (Open 15-16 Hours)	1,000 Sq Ft		Avg	*	31.02	34.57															
853	Convenience Market w/ Gasoline Pumps	Fueling Position(s)		Avg	542.60	16.57	19.07															
854	Discount Supermarket	1,000 Sq Ft		Avg	96.82	2.74	8.90															
857	Discount Club	1,000 Sq Ft		Avg	41.80	0.56	4.24															
860	Wholesale Market	1,000 Sq Ft		Avg	6.73	0.51	0.88															
861	Sporting Goods Superstore	1,000 Sq Ft		Avg	*	*	3.10															
862	Home Improvement Superstore	1,000 Sq Ft		Avg	29.80	1.26	2.37															
863	Electronics Superstore	1,000 Sq Ft		Avg	45.04	0.28	4.50															
864	Toy/Children's Superstore	1,000 Sq Ft		Avg	*	*	4.99															
865	Baby Superstore	1,000 Sq Ft		Avg	*	*	1.82															
866	Pet Supply Superstore	1,000 Sq Ft		Avg	*	*	3.38															
867	Office Supply Superstore	1,000 Sq Ft		Avg	*	*	3.40															
868	Book Superstore	1,000 Sq Ft		Avg	*	*	19.53															
869	Discount Home Furnishing Superstore	1,000 Sq Ft		Avg	20.00	0.57	1.57															
872	Bed and Linen Superstore	1,000 Sq Ft		Avg	*	*	2.22															
875	Department Store	1,000 Sq Ft		Avg	22.88	0.53	1.78															
876	Apparel Store	1,000 Sq Ft		Avg	66.40	1.00	3.83															
879	Arts and Crafts Store (1)	1,000 Sq Ft		Avg	56.55	4.65	6.21															
880	Pharmacy/Drugstore w/o Drive-Through Window	1,000 Sq Ft		Avg	90.06	3.20	8.42															
881	Pharmacy/Drugstore w/ Drive-Through Window	1,000 Sq Ft		Avg	88.16	2.66	10.35															
890	Furniture Store	1,000 Sq Ft		Avg	5.06	0.17	0.45															
896	Video Rental Store	1,000 Sq Ft		Avg	*	*	13.60															
					Totals				7932	147	693	100	47	347	346	7932	147	575	100	47	288	287
					55%				4363	81	381	55	26	191	190							
					Grand Total				3568	66	312	45	21	156	156							

Notes:

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
 Venture Commerce Center

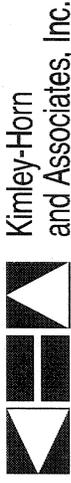
Project Number
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction									
					Daily Rate	AM Rate	PM Rate		Daily Trips	AM Trips	PM Trips		AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips						
					Rate	Rate	Rate		In	Out	In	Out	In	Out	In	Out	In	Out						
710	General Office Building (1)	1,000 Sq Ft	46.1	Avg	11.01	1.55	1.49	1.40	508	71	69	12	57	508	71	69	12	57	508	71	69	12	57	
714	Corporate Headquarters Building(1)	1,000 Sq Ft		Avg	7.98	1.49	1.40																	
715	Single Tenant Office Building (1)	1,000 Sq Ft		Avg	11.57	1.80	1.73																	
720	Medical-Dental Office Building	1,000 Sq Ft		Avg	36.13	2.30	3.46																	
730	Government Office Building (1)	1,000 Sq Ft		Avg	68.93	5.88	1.21																	
731	State Motor Vehicles Department	1,000 Sq Ft		Avg	166.02	9.84	17.09																	
732	United States Post Office	1,000 Sq Ft		Avg	108.19	8.21	11.12																	
733	Government Office Complex	1,000 Sq Ft		Avg	27.92	2.21	2.85																	
750	Office Park (1)	1,000 Sq Ft		Avg	11.42	1.71	1.48																	
760	Research and Development Center (1)	1,000 Sq Ft		Avg	8.11	1.22	1.07																	
770	Business Park (1)	1,000 Sq Ft		Avg	12.76	1.43	1.29																	
Totals					508	71	69	12	57	508	71	69	12	57	508	71	69	12	57	508	71	69	12	57
Reduction					117	16	14	3	13	117	16	14	3	13	117	16	14	3	13	117	16	14	3	13
Grand Total					391	55	53	9	44	391	55	53	9	44	391	55	53	9	44	391	55	53	9	44

Notes: (1) AM and/or PM rates correspond to peak hour of generator

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Zeka Ranch Estates
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction					
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips			
210	Single-Family Detached Housing	Dwelling Unit(s)	314	Avg	9.57	0.75	1.01	3006	236	317	200	117	3006	236	317	59	177	200	117
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.82												
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58												
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35												
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39												
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72												
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52												
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78												
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38												
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55												
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59												
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27												
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23												
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16												
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17												
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22												
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29												
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26												
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75												
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62												
Totals					3006	236	317	200	117	3006	236	317	59	177	200	117	200	117	
Reduction					421	33	44	8	25	16	28	16	152	172	101				
Grand Total					2585	203	273	51	152	172	101								

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Office LT
097311002.1

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips In	PM Trips In	AM Trips Out	PM Trips Out	Daily Trips	AM Trips In	PM Trips In	AM Trips Out	PM Trips Out				
710	General Office Building (1)	1,000 Sq Ft	1429	Avg	11.01	1.55	1.49	15734	2215	2129	1949	266	362	1767	15734	2215	2129	1949	266	362	1767
714	Corporate Headquarters Building (1)	1,000 Sq Ft		Avg	7.98	1.49	1.40														
715	Single Tenant Office Building (1)	1,000 Sq Ft		Avg	11.57	1.80	1.73														
720	Medical-Dental Office Building	1,000 Sq Ft		Avg	36.13	2.30	3.46														
730	Government Office Building (1)	1,000 Sq Ft		Avg	68.93	5.88	1.21														
731	State Motor Vehicles Department	1,000 Sq Ft		Avg	166.02	9.84	17.09														
732	United States Post Office	1,000 Sq Ft		Avg	108.19	8.21	11.12														
733	Government Office Complex	1,000 Sq Ft		Avg	27.92	2.21	2.85														
750	Office Park (1)	1,000 Sq Ft		Avg	11.42	1.71	1.48														
760	Research and Development Center (1)	1,000 Sq Ft		Avg	8.11	1.22	1.07														
770	Business Park (1)	1,000 Sq Ft		Avg	12.76	1.43	1.29														
Totals								15734	2215	2129	1949	266	362	1767	15734	2215	2129	1949	266	362	1767
eBART Red.								1888	266	255	234	32	43	212							
Subtotal								13846	1949	1874	1715	234	319	1555							
Reduction								2492	351	337	309	42	57	280							
Grand Total								11354	1598	1536	1406	192	261	1275							

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Deer Valley Estates
 097311002.1

Project Name
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction											
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out				
210	Single-Family Detached Housing	Dwelling Unit(s)	136	Avg	9.57	0.75	1.01	1302	102	137	26	76	86	51	1302	102	137	26	76	86	51				
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					1302	102	137	26	76	86	51	1302	102	137	26	76	86	51	1302	102	137	26	76	86	51
Reduction					182	14	19	4	11	12	7	182	14	19	4	11	12	7	182	14	19	4	11	12	7
Grand Total					1120	88	118	22	65	74	44	1120	88	118	22	65	74	44	1120	88	118	22	65	74	44

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14%

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Magnet School
097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips				Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips				
501	Military Base	Employee(s)		Avg	1.78	0.39	0.39													
520	Elementary School (1)	Student(s)		Avg	1.29	0.45	0.15													
522	Middle School/Junior High School (1)	Student(s)		Avg	1.62	0.54	0.16													
530	High School (1)	Student(s)		Avg	1.71	0.42	0.13													
534	Private School (K-8) (1)	Student(s)		Avg	*	0.90	0.60													
536	Private School (K-12)	Student(s)	200	Avg	2.48	0.81	0.17	496	162	34	99	63	15	19	496	162	34	99	63	
540	Junior/Community College	Student(s)		Avg	1.20	0.12	0.12													
550	University/College	Student(s)		Avg	2.38	0.21	0.21													
560	Church	1,000 Sq Ft		Avg	9.11	0.56	0.55													
561	Synagogue	1,000 Sq Ft		Avg	10.64	0.14	1.69													
565	Day Care Center	Student(s)		Avg	4.48	0.80	0.82													
566	Cemetery	Acre(s)		Avg	4.73	0.17	0.84													
571	Prison	Bed(s)		Avg	*	0.10	0.05													
590	Library	1,000 Sq Ft		Avg	56.24	1.04	7.30													
591	Lodge/Fraternal Organization	Member(s)		Avg	0.29	0.01	0.03													
					25%															
Totals					486	162	34	99	63	15	19	496	162	34	99	63	15	19		
Reduction					124	41	9	25	16	4	5									
Grand Total					372	122	26	74	47	11	14									

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Roddy Ranch
097311002.1

Project Name
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out		
210	Single-Family Detached Housing	Dwelling Unit(s)	574	Avg	9.57	0.75	1.01	5494	431	580	108	323	365	215	5494	431	580	108	323	365	215
220	Apartment	Dwelling Unit(s)	126	Avg	6.65	0.51	0.62	838	64	78	13	51	51	27	838	64	78	13	51	51	27
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
310	Hotel	Room(s)	250	Avg	8.17	0.56	0.59	2044	140	148	85	55	78	70	2044	140	148	85	55	78	70
311	All Suites Hotel	Room(s)		Avg	4.90	0.38	0.40														
312	Business Hotel	Occupied Room(s)		Avg	7.27	0.58	0.62														
320	Motel	Room(s)		Avg	5.63	0.45	0.47														
330	Resort Hotel	Room(s)		Avg	*	0.37	0.49														
Totals								5494	431	580	108	323	365	215	5494	431	580	108	323	365	215
Reduction					14%			769	60	81	15	45	51	30							
Sub Total 1								4725	371	499	93	278	314	185							
Totals								838	64	78	13	51	51	27							
Reduction					14%			117	9	11	2	7	7	4							
Sub Total 2								721	55	67	11	44	44	23							
Totals								2044	140	148	85	55	78	70							
Reduction					42%			858	59	62	36	23	33	29							
Sub Total 3								1186	81	86	49	32	45	41							
Grand Total								6631	136	153	60	76	89	64							

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Amber Park
097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips						
									In	Out	In	Out	In	Out	In	Out	In	Out	In	Out					
210	Single-Family Detached Housing	Dwelling Unit(s)	99	Avg	9.57	0.75	1.01		948	74	100	19	55	63	37	948	74	100	19	55	63	37			
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					948	74	100	19	55	63	37	948	74	100	19	55	63	37	948	74	100	19	55	63	37
Reduction					133	10	14	3	8	9	5	133	10	14	3	8	9	5	133	10	14	3	8	9	5
Grand Total					815	64	86	16	47	54	32	815	64	86	16	47	54	32	815	64	86	16	47	54	32

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation **Project Name** Brighton Station
Trips Based on Average Rates/Equations **Project Number** 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips	Avg					
					Rate	Rate	Rate		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In				
210	Single-Family Detached Housing	Dwelling Unit(s)	38	Avg	9.57	0.75	1.01	0.82	364	29	38	7	22	24	14	364	29	38	7	22	24	14			
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
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254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					364	29	38	7	22	24	14	364	29	38	7	22	24	14	364	29	38	7	22	24	14
Reduction					51	4	5	1	3	3	2	51	4	5	1	3	3	2	51	4	5	1	3	2	
Grand Total					313	25	33	6	19	21	12	313	25	33	6	19	21	12	313	25	33	6	19	12	

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- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Alexandra Homes-Parkside Villas
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction								
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips		PM Trips		Daily Trips	AM Trips		PM Trips						
									In	Out	In	Out		In	Out	In	Out					
210	Single-Family Detached Housing	Dwelling Unit(s)	37	Avg	9.57	0.75	1.01	356	28	37	7	21	23	14	356	28	37	7	21	23	14	
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a)	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62															
								Totals	356	28	37	7	21	23	14	356	28	37	7	21	23	14
								Reduction	50	4	5	1	3	3	2	50	4	5	1	3	3	2
								Grand Total	306	24	32	6	18	20	306	24	32	6	18	20	12	

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Carmel Estates
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Avg	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips					
									In	Out	In	Out	In	Out	In	Out						
210	Single-Family Detached Housing	Dwelling Unit(s)	106	Avg	9.57	0.75	1.01		1016	80	107	20	60	67	40	1016	80	107	20	60	67	40
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.82															
Totals					1016	80	107	20	60	67	40	1016	80	107	20	60	67	40				
Reduction					142	11	15	3	8	9	6	142	11	15	3	8	9	6				
Grand Total					874	69	92	17	52	58	34	874	69	92	17	52	58	34				

Notes:

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- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Terreno Homes
097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	AM Trips	PM Trips	Trips	Trips	AM Trips	PM Trips	Trips						
									In	Out	In	Out	In	Out	In	Out	In	Out	In	Out					
210	Single-Family Detached Housing	Dwelling Unit(s)	134	Avg	9.57	0.75	1.01	0.62	1284	101	135	25	76	85	50	1284	101	135	25	76	85	50			
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					1284	101	135	25	76	85	50	1284	101	135	25	76	85	50	1284	101	135	25	76	85	50
Reduction					180	14	19	4	11	12	7	180	14	19	4	11	12	7	180	14	19	4	11	12	7
Grand Total					1104	87	116	22	65	73	43	1104	87	116	22	65	73	43	1104	87	116	22	65	73	43

Notes:

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Bridle Gate
097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips					
210	Single-Family Detached Housing	Dwelling Unit(s)	166	Avg	9.57	0.75	1.01	1590	125	168	31	94	106	62	1590	125	168	31	94	106	62
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
Totals					1590	125	168	31	94	106	62	1590	125	168	31	94	106	62			
Reduction					223	18	24	4	13	15	9	223	18	24	4	13	15	9			
Grand Total					1367	108	144	27	81	91	53	1367	108	144	27	81	91	53			

Notes:

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- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
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Trip Generation Planner (ITE 8th Edition)



Blackhawk-Nunn-Cox Property
097311002.1

Project Name
Project Number

Weekday Trip Generation
Trips Based on Average Rates/Equations

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Avg Rate	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips								
									In	Out	In	Out	In	Out	In	Out									
210	Single-Family Detached Housing	Dwelling Unit(s)	58	Avg	9.57	0.75	1.01	0.82	556	44	59	11	33	37	22	556	44	59	11	33	37	22			
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.82																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					556	44	59	11	33	37	22	556	44	59	11	33	37	22	556	44	59	11	33	37	22
Reduction					78	6	8	2	5	5	3	78	6	8	2	5	3	78	6	8	2	5	3		
Grand Total					478	38	51	9	28	32	19	478	38	51	9	28	32	19	478	38	51	9	28	32	19

Notes:

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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Vic Stewarts
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips				Net Trips after Pass-By Reduction									
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips						
812	Building Materials and Lumber Store	1,000 Sq Ft		Avg	45.16	2.60	4.49															
813	Free Standing Discount Superstore	1,000 Sq Ft		Avg	53.13	1.67	4.61															
814	Specialty Retail Center	1,000 Sq Ft		Avg	44.32	*	2.71															
815	Free Standing Discount Store	1,000 Sq Ft		Avg	57.24	1.06	5.00															
816	Hardware/Paint Store	1,000 Sq Ft		Avg	51.29	1.08	4.84															
817	Nursery (Garden Center)	1,000 Sq Ft		Avg	36.08	1.31	3.80															
818	Nursery (Wholesale)	1,000 Sq Ft		Avg	39.00	2.40	5.17															
820	Shopping Center	1,000 Sq Ft	16.1	Avg	42.94	1.00	3.73	682	16	60	10	6	29	31	692	16	40	10	6	19	21	
823	Factory Outlet Center	1,000 Sq Ft		Avg	26.59	0.67	2.29															
841	New Car Sales	1,000 Sq Ft		Avg	33.34	2.03	2.59															
843	Automobile Parts Sales	1,000 Sq Ft		Avg	61.91	2.21	5.98															
848	Tire Store	1,000 Sq Ft		Avg	24.87	2.89	4.15															
849	Tire Superstore	1,000 Sq Ft		Avg	20.36	1.34	2.11															
850	Supermarket	1,000 Sq Ft		Avg	102.24	3.59	10.50															
851	Convenience Market (Open 24 Hours)	1,000 Sq Ft		Avg	737.99	67.03	52.41															
852	Convenience Market (Open 15-16 Hours)	1,000 Sq Ft		Avg	*	31.02	34.57															
853	Convenience Market w/ Gasoline Pumps	Fueling Position(s)		Avg	542.60	16.57	19.07															
854	Discount Supermarket	1,000 Sq Ft		Avg	96.82	2.74	8.90															
857	Discount Club	1,000 Sq Ft		Avg	41.80	0.56	4.24															
860	Wholesale Market	1,000 Sq Ft		Avg	6.73	0.51	0.88															
861	Sporting Goods Superstore	1,000 Sq Ft		Avg	*	*	3.10															
862	Home Improvement Superstore	1,000 Sq Ft		Avg	29.80	1.26	2.37															
863	Electronics Superstore	1,000 Sq Ft		Avg	45.04	0.28	4.50															
864	Toy/Children's Superstore	1,000 Sq Ft		Avg	*	*	4.99															
865	Baby Superstore	1,000 Sq Ft		Avg	*	*	1.82															
866	Pet Supply Superstore	1,000 Sq Ft		Avg	*	*	3.38															
867	Office Supply Superstore	1,000 Sq Ft		Avg	*	*	3.40															
868	Book Superstore	1,000 Sq Ft		Avg	*	*	19.53															
869	Discount Home Furnishing Superstore	1,000 Sq Ft		Avg	20.00	0.57	1.57															
872	Bed and Linen Superstore	1,000 Sq Ft		Avg	*	*	2.22															
875	Department Store	1,000 Sq Ft		Avg	22.88	0.53	1.78															
876	Apparel Store	1,000 Sq Ft		Avg	66.40	1.00	3.83															
879	Arts and Crafts Store (1)	1,000 Sq Ft		Avg	56.55	4.65	6.21															
880	Pharmacy/Drugstore w/o Drive-Through Window	1,000 Sq Ft		Avg	90.06	3.20	8.42															
881	Pharmacy/Drugstore w/ Drive-Through Window	1,000 Sq Ft		Avg	88.16	2.66	10.35															
890	Furniture Store	1,000 Sq Ft		Avg	5.06	0.17	0.45															
896	Video Rental Store	1,000 Sq Ft		Avg	*	*	13.60															
911	Walk-In Bank	1,000 Sq Ft		Avg	*	*	12.13															
912	Drive-In Bank	1,000 Sq Ft		Avg	148.15	12.35	25.82															
918	Hair Salon	1,000 Sq Ft		Avg	*	1.21	1.45															
920	Copy, Print and Express Ship Store	1,000 Sq Ft		Avg	*	2.78	7.41															
925	Drinking Place	1,000 Sq Ft		Avg	*	*	11.34															
931	Quality Restaurant	1,000 Sq Ft		Avg	89.95	0.81	7.49															

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Vic Stewarts
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates			Total Trips						Net Trips after Pass-By Reduction						
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	
932	High-Turnover (Sit-Down) Restaurant	1,000 Sq Ft	10.7	Avg	127.15	11.52	11.15	1362	123	119	64	59	70	49	1362	123	68	59	40	28
933	Fast-Food Restaurant w/o D.T.	1,000 Sq Ft		Avg	716.00	43.87	26.15													
933-1	Fast-Food Restaurant w/o D.T. - Yogurt	1,000 Sq Ft		Avg	*	*	15.12													
934	Fast-Food Restaurant w/ D.T.	1,000 Sq Ft		Avg	496.12	49.35	33.84													
935	Fast-Food Restaurant w/ D.T. No Indoor Seats	1,000 Sq Ft		Avg	*	*	153.85													
936	Coffee/Donut Shop w/o D.T.	1,000 Sq Ft		Avg	*	*	40.57													
936-1	Donut/Ice Cream Shop w/o D.T.	1,000 Sq Ft		Avg	*	*	20.00													
936-2	Donut/Sandwich Shop w/o D.T.	1,000 Sq Ft		Avg	*	*	13.00													
937	Coffee/Donut Shop w/ D.T.	1,000 Sq Ft		Avg	818.58	110.75	42.93													
938	Coffee/Donut Shop w/ D.T. No Indoor Seats	1,000 Sq Ft		Avg	1800.00	303.33	75.00													
939	Bread/Donut/Bagel Shop w/o D.T.	1,000 Sq Ft		Avg	*	*	28.00													
940	Bread/Donut/Bagel Shop w/ D.T.	1,000 Sq Ft		Avg	*	*	19.56													
941	Quick Lubrication Vehicle Shop	Service Position(s)		Avg	40.00	3.00	5.19													
942	Automobile Care Center	1,000 Sq Ft		Avg	*	*	3.38													
943	Automobile Parts and Service Center	1,000 Sq Ft		Avg	*	*	4.46													
944	Gasoline/Service Station	Fueling Position(s)		Avg	168.56	12.16	13.86													
945	Gasoline Station w/ Convenience Market	Fueling Position(s)		Avg	162.78	10.16	13.38													
946	Gasoline Station w/ Conv. Mkt. & Car Wash	Fueling Position(s)		Avg	152.84	11.93	13.94													
947	Self-Service Car Wash (1)	Wash Stall(s)		Avg	108.00	8.00	5.54													
948	Automated Car Wash	1,000 Sq Ft		Avg	*	*	14.12													
Totals					692	16	60	10	6	29	31									
Reduction					367	8	32	5	3	15	16									
Sub Total 1					325	8	28	5	3	14	15									
Totals					1362	123	119	64	59	70	49									
Reduction					667	60	58	31	29	34	24									
Sub Total 2					695	63	61	33	30	36	25									
Grand Total					1020	70	89	37	33	49	40									

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
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- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Palmilla
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips				Net Trips after Pass-By Reduction												
					Daily Rate	AM Rate	PM Rate	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips						
210	Single-Family Detached Housing	Dwelling Unit(s)	460	Avg	9.57	0.75	1.01		4404	345	465	86	259	293	172	4404	345	465	86	259	293	172			
220	Apartment	Dwelling Unit(s)	108	Avg	6.65	0.51	0.62		720	55	67	11	44	44	23	720	55	67	11	44	44	23			
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)	11	Avg	5.81	0.44	0.52		64	5	6	1	4	4	2	64	5	6	1	4	4	2			
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					5188	405	538	98	307	341	197	5188	405	538	98	307	341	197	5188	405	538	98	307	341	197
Reduction					726	57	75	14	43	48	28	726	57	75	14	43	48	28	726	57	75	14	43	48	28
Grand Total					4462	348	463	84	264	293	169	4462	348	463	84	264	293	169	4462	348	463	84	264	169	

Notes:
 (1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Passport Homes
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates						Total Trips						Net Trips after Pass-By Reduction								
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips						
																				Rate	Rate	Rate	In	Out	In
210	Single-Family Detached Housing	Dwelling Unit(s)	59	Avg	9.57	0.75	1.01	566	44	60	11	33	38	22	566	44	60	11	33	38	22				
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.82																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.82																		
Totals					566	44	60	11	33	38	22	566	44	60	11	33	38	22	566	44	60	11	33	38	22
Reduction					79	6	8	2	5	5	3	79	6	8	2	5	5	3	79	6	8	2	5	3	
Grand Total					487	38	52	9	28	33	19	487	38	52	9	28	33	19	487	38	52	9	28	33	19

Notes:
 (1) AM and/or PM rates correspond to peak hour of generator

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- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation **Project Name** Prewett Ranch (Suncrest Homes)
Trips Based on Average Rates/Equations **Project Number** 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips			
									In	Out	In	Out	In	Out	In	Out	In	Out				
210	Single-Family Detached Housing	Dwelling Unit(s)	240	Avg	9.57	0.75	1.01	2298	180	242	45	135	152	90	2298	180	242	45	135	152	90	
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a	Senior Adult Housing (CA Pulite Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62															
					Totals				2298	180	242	45	135	152	90	2298	180	242	45	135	152	90
					Reduction				322	25	34	6	19	21	13							
					Grand Total				1976	155	208	39	116	131	77							

Notes: (1) AM and/or PM rates correspond to peak hour of generator

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- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

Casa Bella Apartments
097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips					
210	Single-Family Detached Housing	Dwelling Unit(s)		Avg	9.57	0.75	1.01		798	61	74	12	49	48	26	798	61	74	12	49	48	26			
220	Apartment	Dwelling Unit(s)	120	Avg	6.65	0.51	0.62		798	61	74	12	49	48	26	798	61	74	12	49	48	26			
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					798	61	74	12	49	48	26	798	61	74	12	49	48	26	798	61	74	12	49	48	26
Reduction					112	9	10	2	7	7	4	112	9	10	2	7	7	4	112	9	10	2	7	7	4
Grand Total					686	52	64	10	42	41	22	686	52	64	10	42	41	22	686	52	64	10	42	41	22

Notes: (1) AM and/or PM rates correspond to peak hour of generator

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- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Steeplechase
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips	Avg					
210	Single-Family Detached Housing	Dwelling Unit(s)	116	Avg	9.57	0.75	1.01		1112	87	117	22	65	74	43				1112	87	117	22	65	74	43
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)	16	Avg	5.81	0.44	0.52		94	7	8	1	6	5	3				94	7	8	1	6	5	3
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					1206	94	125	23	71	79	46	1206	94	125	23	71	79	46	1206	94	125	23	71	79	46
Reduction					169	13	18	3	10	11	6	169	13	18	3	10	11	6	169	13	18	3	10	11	6
Grand Total					1037	81	108	20	61	68	40	1037	81	108	20	61	68	40	1037	81	108	20	61	68	40

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
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Trip Generation Planner (ITE 8th Edition)

Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Smith Parcel
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction							
				Daily Rate	AM Rate	PM Rate	Avg	Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips			
								In	Out	In	Out	In	Out	In	Out	In	Out				
210	Single-Family Detached Housing	Dwelling Unit(s)	50	9.57	0.75	1.01	Avg	480	38	51	10	28	32	19	480	38	51	10	28	32	19
220	Apartment	Dwelling Unit(s)		6.65	0.51	0.62	Avg														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		6.59	0.46	0.58	Avg														
222	High-Rise Apartment	Dwelling Unit(s)		4.20	0.30	0.35	Avg														
223	Mid-Rise Apartment	Dwelling Unit(s)		*	0.30	0.39	Avg														
224	Rental Townhouse	Dwelling Unit(s)		*	0.70	0.72	Avg														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		5.81	0.44	0.52	Avg														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		*	0.67	0.78	Avg														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		4.18	0.34	0.38	Avg														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		*	0.56	0.55	Avg														
240	Mobile Home Park	Occ. Dwelling Unit(s)		4.99	0.44	0.59	Avg														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		3.71	0.22	0.27	Avg														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		3.96	0.17	0.23	Avg														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		3.48	0.13	0.16	Avg														
253	Congregate Care Facility	Dwelling Unit(s)		2.02	0.06	0.17	Avg														
254	Assisted Living	Bed(s)		2.66	0.14	0.22	Avg														
255	Continuing Care Retirement Community	Occupied Unit(s)		2.81	0.18	0.29	Avg														
260	Recreational Homes	Dwelling Unit(s)		3.16	0.16	0.26	Avg														
265	Timeshare	Dwelling Unit(s)		10.03	0.48	0.75	Avg														
270	Residential Planned Unit Development	Dwelling Unit(s)		7.50	0.51	0.62	Avg														
812	Building Materials and Lumber Store	1,000 Sq Ft		45.16	2.60	4.49	Avg														
813	Free Standing Discount Superstore	1,000 Sq Ft		53.13	1.67	4.61	Avg														
814	Specialty Retail Center	1,000 Sq Ft		44.32	*	2.71	Avg														
815	Free Standing Discount Store	1,000 Sq Ft		57.24	1.06	5.00	Avg														
816	Hardware/Paint Store	1,000 Sq Ft		51.29	1.08	4.84	Avg														
817	Nursery (Garden Center)	1,000 Sq Ft		36.08	1.31	3.80	Avg														
818	Nursery (Wholesale)	1,000 Sq Ft		39.00	2.40	5.17	Avg														
820	Shopping Center	1,000 Sq Ft	111	42.94	1.00	3.73	Avg	4768	111	414	68	43	203	211	4768	111	273	68	43	134	139
823	Factory Outlet Center	1,000 Sq Ft		26.59	0.67	2.29	Avg														
841	New Car Sales	1,000 Sq Ft		33.34	2.03	2.59	Avg														
843	Automobile Parts Sales	1,000 Sq Ft		61.91	2.21	5.98	Avg														
848	Tire Store	1,000 Sq Ft		24.87	2.89	4.15	Avg														
849	Tire Superstore	1,000 Sq Ft		20.36	1.34	2.11	Avg														
850	Supermarket	1,000 Sq Ft		102.24	3.59	10.50	Avg														
851	Convenience Market (Open 24 Hours)	1,000 Sq Ft		737.99	67.03	52.41	Avg														
852	Convenience Market (Open 15-16 Hours)	1,000 Sq Ft		*	31.02	34.57	Avg														
853	Convenience Market w/ Gasoline Pumps	Fueling Position(s)		542.60	16.57	19.07	Avg														
854	Discount Supermarket	1,000 Sq Ft		96.82	2.74	8.90	Avg														
857	Discount Club	1,000 Sq Ft		41.80	0.56	4.24	Avg														
860	Wholesale Market	1,000 Sq Ft		6.73	0.51	0.88	Avg														
861	Sporting Goods Superstore	1,000 Sq Ft		*	*	3.10	Avg														
862	Home Improvement Superstore	1,000 Sq Ft		29.80	1.26	2.37	Avg														
863	Electronics Superstore	1,000 Sq Ft		45.04	0.28	4.50	Avg														

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation **Project Name** **Tierra Villas**
Trips Based on Average Rates/Equations **Project Number** **097311002.1**

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction						
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips				
210	Single-Family Detached Housing	Dwelling Unit(s)	122	Avg	9.57	0.75	1.01	1168	92	123	46	1168	92	123	46	1168	92	123	46	
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62													
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58													
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35													
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39													
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72													
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52													
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78													
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38													
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55													
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59													
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27													
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23													
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16													
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17													
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22													
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29													
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26													
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75													
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62													
Totals					1168	92	123	46	1168	92	123	46	1168	92	123	46	1168	92	123	46
Reduction					164	13	17	6	164	13	17	6	164	13	17	6	164	13	17	6
Grand Total					1004	79	106	40	1004	79	106	40	1004	79	106	40	1004	79	106	40

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Bluerock Buisness Center
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction													
					Daily Rate	AM Rate	PM Rate	Rate	AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips					
									In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out				
710	General Office Building (1)	1,000 Sq Ft	48,724	Avg	11.01	1.55	1.49	1.49	76	73	67	9	12	61	538	76	73	67	9	12	61	538	76	73	67	9	12	61
714	Corporate Headquarters Building (1)	1,000 Sq Ft		Avg	7.98	1.49	1.40																					
715	Single Tenant Office Building (1)	1,000 Sq Ft		Avg	11.57	1.80	1.73																					
720	Medical-Dental Office Building	1,000 Sq Ft		Avg	36.13	2.30	3.46																					
730	Government Office Building (1)	1,000 Sq Ft		Avg	68.93	5.88	1.21																					
731	State Motor Vehicles Department	1,000 Sq Ft		Avg	166.02	9.84	17.09																					
732	United States Post Office	1,000 Sq Ft		Avg	108.19	8.21	11.12																					
733	Government Office Complex	1,000 Sq Ft		Avg	27.92	2.21	2.85																					
750	Office Park (1)	1,000 Sq Ft		Avg	11.42	1.71	1.48																					
760	Research and Development Center (1)	1,000 Sq Ft		Avg	8.11	1.22	1.07																					
770	Business Park (1)	1,000 Sq Ft		Avg	12.76	1.43	1.29																					
Totals									76	73	67	9	12	61	538	76	73	67	9	12	61	538	76	73	67	9	12	61
Reduction									17	17	15	2	3	14	124	17	17	15	2	3	14	124	17	17	15	2	3	14
Grand Total									59	56	52	7	9	47	414	59	56	52	7	9	47	414	59	56	52	7	9	47

23%
 AM and/or PM rates correspond to peak hour of generator

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

Kaiser Medical Center
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips				Net Trips after Pass-By Reduction									
					Daily Rate	AM Rate	PM Rate	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips	Avg	Daily Trips	AM Trips	PM Trips			
610	Hospital	1,000 Sq Ft	159.8	Avg	16.50	1.12	1.14		2634	179	182	106	73	76	106	2634	179	182	106	73	76	106
620	Nursing Home	Bed(s)		Avg	2.37	0.17	0.22															
630	Clinic	1,000 Sq Ft		Avg	31.45	*	5.18															
640	Animal Hospital/Veterinary Clinic	1,000 Sq Ft		Avg	*	4.08	4.72															
710	General Office Building (1)	1,000 Sq Ft		Avg	11.01	1.55	1.49															
714	Corporate Headquarters Building (1)	1,000 Sq Ft		Avg	7.98	1.49	1.40															
715	Single Tenant Office Building (1)	1,000 Sq Ft		Avg	11.57	1.80	1.73															
720	Medical-Dental Office Building	1,000 Sq Ft	108.45	Avg	36.13	2.30	3.46		3920	249	375	197	52	101	274	3920	249	375	197	52	101	274
730	Government Office Building (1)	1,000 Sq Ft		Avg	68.93	5.88	1.21															
731	State Motor Vehicles Department	1,000 Sq Ft		Avg	166.02	9.84	17.09															
732	United States Post Office	1,000 Sq Ft		Avg	108.19	8.21	11.12															
733	Government Office Complex	1,000 Sq Ft		Avg	27.92	2.21	2.85															
750	Office Park (1)	1,000 Sq Ft		Avg	11.42	1.71	1.48															
760	Research and Development Center (1)	1,000 Sq Ft		Avg	8.11	1.22	1.07															
770	Business Park (1)	1,000 Sq Ft		Avg	12.76	1.43	1.29															
Totals					2634	179	182	106	73	76	106	6554	428	557	303	125	177	380				
Reduction					711	48	49	29	20	21	29											
Sub Total 1					1923	131	133	77	53	55	77											
Totals					3920	249	375	197	52	101	274											
Reduction					1568	100	150	79	21	40	110											
Sub Total 2					2352	149	225	118	31	61	164											
Grand Total					4276	280	358	196	84	116	242											

- Notes:
- (1) AM and/or PM rates correspond to peak hour of generator
 - A Trip generation data from ITE Trip Generation, 8th Edition
 - B AM/PM rates correspond to peak of adjacent street traffic (if data available)
 - C Includes weekday rates only
 - D Total trips include pass-by trips w/ no internal capture
 - E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
 - F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
 - G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
 - H Enter data only in green shaded cells



Trip Generation Planner (ITE 8th Edition)

Weekday Trip Generation
Trips Based on Average Rates/Equations
Project Name Lone Tree Landing
Project Number 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction								
				Daily Rate	AM Rate	PM Rate	Avg	AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips		Daily Trips				
								In	Out	In	Out	In	Out	In	Out	In	Out	In	Out			
710	General Office Building (1)	1,000 Sq Ft	9.595	11.01	1.55	1.49	Avg	106	15	14	2	12	106	15	14	2	12	106	15	14	2	12
714	Corporate Headquarters Building(1)	1,000 Sq Ft	Avg	7.98	1.49	1.40	Avg															
715	Single Tenant Office Building (1)	1,000 Sq Ft	Avg	11.57	1.80	1.73	Avg															
720	Medical-Dental Office Building	1,000 Sq Ft	Avg	36.13	2.30	3.46	Avg															
730	Government Office Building (1)	1,000 Sq Ft	Avg	68.93	5.88	1.21	Avg															
731	State Motor Vehicles Department	1,000 Sq Ft	Avg	166.02	9.84	17.09	Avg															
732	United States Post Office	1,000 Sq Ft	Avg	108.19	8.21	11.12	Avg															
733	Government Office Complex	1,000 Sq Ft	Avg	27.92	2.21	2.85	Avg															
750	Office Park (1)	1,000 Sq Ft	Avg	11.42	1.71	1.48	Avg															
760	Research and Development Center (1)	1,000 Sq Ft	Avg	8.11	1.22	1.07	Avg															
770	Business Park (1)	1,000 Sq Ft	Avg	12.76	1.43	1.29	Avg															
812	Building Materials and Lumber Store	1,000 Sq Ft	Avg	45.16	2.60	4.49	Avg															
813	Free Standing Discount Superstore	1,000 Sq Ft	Avg	53.13	1.67	4.61	Avg															
814	Specialty Retail Center	1,000 Sq Ft	Avg	44.32	*	2.71	Avg															
815	Free Standing Discount Store	1,000 Sq Ft	Avg	57.24	1.06	5.00	Avg															
816	Hardware/Paint Store	1,000 Sq Ft	Avg	51.29	1.08	4.84	Avg															
817	Nursery (Wholesale)	1,000 Sq Ft	Avg	36.08	1.31	3.80	Avg															
818	Nursery (Garden Center)	1,000 Sq Ft	Avg	39.00	2.40	5.17	Avg															
820	Shopping Center	1,000 Sq Ft	33.713	42.94	1.00	3.73	Avg	1448	34	126	21	13	62	64	1448	34	83	21	13	41	42	
823	Factory Outlet Center	1,000 Sq Ft	Avg	26.59	0.67	2.29	Avg															
841	New Car Sales	1,000 Sq Ft	Avg	33.34	2.03	2.59	Avg															
843	Automobile Parts Sales	1,000 Sq Ft	Avg	61.91	2.21	5.98	Avg															
848	Tire Store	1,000 Sq Ft	Avg	24.87	2.89	4.15	Avg															
849	Tire Superstore	1,000 Sq Ft	Avg	20.36	1.34	2.11	Avg															
850	Supermarket	1,000 Sq Ft	Avg	102.24	3.59	10.50	Avg															
851	Convenience Market (Open 24 Hours)	1,000 Sq Ft	Avg	737.99	67.03	52.41	Avg															
852	Convenience Market (Open 15-16 Hours)	1,000 Sq Ft	Avg	*	31.02	34.57	Avg															
853	Convenience Market w/ Gasoline Pumps	Fueling Position(s)	Avg	542.60	16.57	19.07	Avg															
854	Discount Supermarket	1,000 Sq Ft	Avg	96.82	2.74	8.90	Avg															
857	Discount Club	1,000 Sq Ft	Avg	41.80	0.56	4.24	Avg															
860	Wholesale Market	1,000 Sq Ft	Avg	6.73	0.51	0.88	Avg															
861	Sporting Goods Superstore	1,000 Sq Ft	Avg	*	*	3.10	Avg															
862	Home Improvement Superstore	1,000 Sq Ft	Avg	29.80	1.26	2.37	Avg															
863	Electronics Superstore	1,000 Sq Ft	Avg	45.04	0.28	4.50	Avg															
864	Toy/Children's Superstore	1,000 Sq Ft	Avg	*	*	4.99	Avg															
865	Baby Superstore	1,000 Sq Ft	Avg	*	*	1.82	Avg															
866	Pet Supply Superstore	1,000 Sq Ft	Avg	*	*	3.38	Avg															
867	Office Supply Superstore	1,000 Sq Ft	Avg	*	*	3.40	Avg															
868	Book Superstore	1,000 Sq Ft	Avg	*	*	19.53	Avg															
869	Discount Home Furnishing Superstore	1,000 Sq Ft	Avg	20.00	0.57	1.57	Avg															
872	Bed and Linen Superstore	1,000 Sq Ft	Avg	*	*	2.22	Avg															
875	Department Store	1,000 Sq Ft	Avg	22.88	0.53	1.78	Avg															
876	Apparel Store	1,000 Sq Ft	Avg	66.40	1.00	3.83	Avg															

Trip Generation Planner (ITE 8th Edition)

Weekday Trip Generation
 Trips Based on Average Rates/Equations

The Orchard at Slatten Ranch Pad Buildings
 097311002.1

Project Name
 Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Trip Rates			Total Trips												Net Trips after Pass-By Reduction					
				Avg Rate or Eq	Daily Rate	AM Rate	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips					
								In	Out	In	Out		In	Out	In	Out		In	Out					
812	Building Materials and Lumber Store	1,000 Sq Ft	Avg 45.16	2.60	4.49	1032	24	90	15	9	44	46	1032	24	59	15	9	29	30					
813	Free Standing Discount Superstore	1,000 Sq Ft	Avg 53.13	1.67	4.61																			
814	Specialty Retail Center	1,000 Sq Ft	Avg 44.32	*	2.71																			
815	Free Standing Discount Store	1,000 Sq Ft	Avg 57.24	1.06	5.00																			
816	Hardware/Paint Store	1,000 Sq Ft	Avg 51.29	1.08	4.84																			
817	Nursery (Garden Center)	1,000 Sq Ft	Avg 36.08	1.31	3.80																			
818	Nursery (Wholesale)	1,000 Sq Ft	Avg 39.00	2.40	5.17																			
820	Shopping Center	1,000 Sq Ft	Avg 42.94	1.00	3.73	24																		
823	Factory Outlet Center	1,000 Sq Ft	Avg 26.59	0.67	2.29																			
841	New Car Sales	1,000 Sq Ft	Avg 33.34	2.03	2.59																			
843	Automobile Parts Sales	1,000 Sq Ft	Avg 61.91	2.21	5.98																			
848	Tire Store	1,000 Sq Ft	Avg 24.87	2.89	4.15																			
849	Tire Superstore	1,000 Sq Ft	Avg 20.36	1.34	2.11																			
850	Supermarket	1,000 Sq Ft	Avg 102.24	3.59	10.50																			
851	Convenience Market (Open 24 Hours)	1,000 Sq Ft	Avg 737.99	67.03	52.41																			
852	Convenience Market (Open 15-16 Hours)	1,000 Sq Ft	Avg *	31.02	34.57																			
853	Convenience Market w/ Gasoline Pumps	Fueling Position(s)	Avg 542.60	16.57	19.07																			
854	Discount Supermarket	1,000 Sq Ft	Avg 96.82	2.74	8.90																			
857	Discount Club	1,000 Sq Ft	Avg 41.80	0.56	4.24																			
860	Wholesale Market	1,000 Sq Ft	Avg 6.73	0.51	0.88																			
861	Sporting Goods Superstore	1,000 Sq Ft	Avg *	*	3.10																			
862	Home Improvement Superstore	1,000 Sq Ft	Avg 29.80	1.26	2.37																			
863	Electronics Superstore	1,000 Sq Ft	Avg 45.04	0.28	4.50																			
864	Toy/Children's Superstore	1,000 Sq Ft	Avg *	*	4.99																			
865	Baby Superstore	1,000 Sq Ft	Avg *	*	1.82																			
866	Pet Supply Superstore	1,000 Sq Ft	Avg *	*	3.38																			
867	Office Supply Superstore	1,000 Sq Ft	Avg *	*	3.40																			
868	Book Superstore	1,000 Sq Ft	Avg *	*	19.53																			
869	Discount Home Furnishing Superstore	1,000 Sq Ft	Avg 20.00	0.57	1.57																			
872	Bed and Linen Superstore	1,000 Sq Ft	Avg *	*	2.22																			
875	Department Store	1,000 Sq Ft	Avg 22.88	0.53	1.78																			
876	Apparel Store	1,000 Sq Ft	Avg 66.40	1.00	3.83																			
879	Arts and Crafts Store (1)	1,000 Sq Ft	Avg 56.55	4.65	6.21																			
880	Pharmacy/Drugstore w/ Drive-Through Window	1,000 Sq Ft	Avg 90.06	3.20	8.42																			
881	Pharmacy/Drugstore w/ Drive-Through Window	1,000 Sq Ft	Avg 88.16	2.66	10.35																			
890	Furniture Store	1,000 Sq Ft	Avg 5.06	0.17	0.45																			
896	Video Rental Store	1,000 Sq Ft	Avg *	*	13.60																			
				Totals	1032	24	90	15	9	44	46	1032	24	59	15	9	29	30	30					
				Reduction	547	13	48	8	5	23	24													
				Sub Total 1	485	11	42	7	4	21	22													

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Starbucks at Hillcrest and
 Wildflower
 097311002.1

Project Name
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips				Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips				
									In	Out	In	Out	In	Out	In	Out				
812	Building Materials and Lumber Store	1,000 Sq Ft	Avg	45.16	2.60	4.49														
813	Free Standing Discount Superstore	1,000 Sq Ft	Avg	53.13	1.67	4.61														
814	Specialty Retail Center	1,000 Sq Ft	Avg	44.32	*	2.71														
815	Free Standing Discount Store	1,000 Sq Ft	Avg	57.24	1.06	5.00														
816	Hardware/Paint Store	1,000 Sq Ft	Avg	51.29	1.08	4.84														
817	Nursery (Garden Center)	1,000 Sq Ft	Avg	36.08	1.31	3.80														
818	Nursery (Wholesale)	1,000 Sq Ft	Avg	39.00	2.40	5.17														
820	Shopping Center	1,000 Sq Ft	11	Avg	42.94	1.00	3.73	474	11	41	7	4	20	21	474	11	27	4	13	14
823	Factory Outlet Center	1,000 Sq Ft	Avg	26.59	0.67	2.29														
841	New Car Sales	1,000 Sq Ft	Avg	33.34	2.03	2.59														
843	Automobile Parts Sales	1,000 Sq Ft	Avg	61.91	2.21	5.98														
848	Tire Store	1,000 Sq Ft	Avg	24.87	2.89	4.15														
849	Tire Superstore	1,000 Sq Ft	Avg	20.36	1.34	2.11														
850	Supermarket	1,000 Sq Ft	Avg	102.24	3.59	10.50														
851	Convenience Market (Open 24 Hours)	1,000 Sq Ft	Avg	737.99	67.03	52.41														
852	Convenience Market (Open 15-16 Hours)	1,000 Sq Ft	Avg	*	31.02	34.57														
853	Convenience Market w/ Gasoline Pumps	Fueling Position(s)	Avg	542.60	16.57	19.07														
854	Discount Supermarket	1,000 Sq Ft	Avg	96.82	2.74	8.90														
857	Discount Club	1,000 Sq Ft	Avg	41.80	0.56	4.24														
860	Wholesale Market	1,000 Sq Ft	Avg	6.73	0.51	0.88														
861	Sporting Goods Superstore	1,000 Sq Ft	Avg	*	*	3.10														
862	Home Improvement Superstore	1,000 Sq Ft	Avg	29.80	1.26	2.37														
863	Electronics Superstore	1,000 Sq Ft	Avg	45.04	0.28	4.50														
864	Toy/Children's Superstore	1,000 Sq Ft	Avg	*	*	4.99														
865	Baby Superstore	1,000 Sq Ft	Avg	*	*	1.82														
866	Pet Supply Superstore	1,000 Sq Ft	Avg	*	*	3.38														
867	Office Supply Superstore	1,000 Sq Ft	Avg	*	*	3.40														
868	Book Superstore	1,000 Sq Ft	Avg	*	*	19.53														
869	Discount Home Furnishing Superstore	1,000 Sq Ft	Avg	20.00	0.57	1.57														
872	Bed and Linen Superstore	1,000 Sq Ft	Avg	*	*	2.22														
875	Department Store	1,000 Sq Ft	Avg	22.88	0.53	1.78														
876	Apparel Store	1,000 Sq Ft	Avg	66.40	1.00	3.83														
879	Arts and Crafts Store (1)	1,000 Sq Ft	Avg	56.55	4.65	6.21														
880	Pharmacy/Drugstore w/o Drive-Through Window	1,000 Sq Ft	Avg	90.06	3.20	8.42														
881	Pharmacy/Drugstore w/ Drive-Through Window	1,000 Sq Ft	Avg	88.16	2.66	10.35														
890	Furniture Store	1,000 Sq Ft	Avg	5.06	0.17	0.45														
896	Video Rental Store	1,000 Sq Ft	Avg	*	*	13.60														
911	Walk-In Bank	1,000 Sq Ft	Avg	*	*	12.13														
912	Drive-In Bank	1,000 Sq Ft	Avg	148.15	12.35	25.82														
918	Hair Salon	1,000 Sq Ft	Avg	*	1.21	1.45														
920	Copy, Print and Express Ship Store	1,000 Sq Ft	Avg	*	2.78	7.41														
925	Drinking Place	1,000 Sq Ft	Avg	*	*	11.34														

Trip Generation Planner (ITE 8th Edition)



Sand Creek Estates
097311002.1

Project Name
Project Number

Weekday Trip Generation
Trips Based on Average Rates/Equations

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction						
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips		
									In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
210	Single-Family Detached Housing	Dwelling Unit(s)	190	Avg	9.57	0.75	1.01	1820	143	192	36	107	121	71	1820	143	192	36	107	121	71
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.82														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.56	0.55														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.48	0.13	0.16														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	2.02	0.06	0.17														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.66	0.14	0.22														
254	Assisted Living	Bed(s)		Avg	2.81	0.18	0.29														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	3.16	0.16	0.26														
260	Recreational Homes	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
265	Timeshare	Dwelling Unit(s)		Avg	7.50	0.51	0.82														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg																	
Totals					1820	143	192	36	107	121	71	1820	143	192	36	107	121	71			
Reduction					255	20	27	5	15	17	10										
Grand Total					1565	123	165	31	92	104	61										

Notes:

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- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation **Project Name** Hillcrest Village
Trips Based on Average Rates/Equations **Project Number** 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips				Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips				
									In	Out	In	Out	In	Out	In	Out				
710	General Office Building (1)	1,000 Sq Ft	96	Avg	11.01	1.55	1.49	1.49	1058	149	143	18	24	119	1058	149	143	18	24	119
714	Corporate Headquarters Building(1)	1,000 Sq Ft		Avg	7.98	1.49	1.40													
715	Single Tenant Office Building (1)	1,000 Sq Ft		Avg	11.57	1.80	1.73													
720	Medical-Dental Office Building	1,000 Sq Ft		Avg	36.13	2.30	3.46													
730	Government Office Building (1)	1,000 Sq Ft		Avg	68.93	5.88	1.21													
731	State Motor Vehicles Department	1,000 Sq Ft		Avg	166.02	9.84	17.09													
732	United States Post Office	1,000 Sq Ft		Avg	108.19	8.21	11.12													
733	Government Office Complex	1,000 Sq Ft		Avg	27.92	2.21	2.85													
750	Office Park (1)	1,000 Sq Ft		Avg	11.42	1.71	1.48													
760	Research and Development Center (1)	1,000 Sq Ft		Avg	8.11	1.22	1.07													
770	Business Park (1)	1,000 Sq Ft		Avg	12.76	1.43	1.29													
Totals					1058	149	143	18	24	119	1058	149	143	18	24	119				
Reduction					243	34	33	4	6	27										
Grand Total					815	115	110	14	18	92										

Notes: (1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
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- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation **Project Name** 7662 Stonewood
Trips Based on Average Rates/Equations **Project Number** 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips				Net Trips after Pass-By Reduction									
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips						
210	Single-Family Detached Housing	Dwelling Unit(s)	215	Avg	9.57	0.75	1.01		2058	161	217	40	121	137	80	2058	161	217	40	121	137	80
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.28															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62															
Totals					2058	161	217	40	121	137	80	2058	161	217	40	121	137	80				
Reduction					288	23	30	6	17	19	11											
Grand Total					1770	138	187	34	104	118	69											

Notes:

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- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)



8541 Ryder, Cortina, Sagewood &
Tanglewood
097311002.1

Weekday Trip Generation **Project Name**
Trips Based on Average Rates/Equations **Project Number**

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction					
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips	Daily Trips	AM Trips	PM Trips	Trips
					9.57	0.75	1.01	1.01	4738	371	500	185	4738	371	500	185	4738	371	500	185
210	Single-Family Detached Housing	Dwelling Unit(s)	495	Avg	6.65	0.51	0.82		4738	371	500	185	4738	371	500	185				
220	Apartment	Dwelling Unit(s)		Avg	6.59	0.46	0.58													
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	4.20	0.30	0.35													
222	High-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39													
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.70	0.72													
224	Rental Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52													
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78													
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38													
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.56	0.55													
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59													
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	3.71	0.22	0.27													
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.96	0.17	0.23													
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.48	0.13	0.16													
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	2.02	0.06	0.17													
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.66	0.14	0.22													
254	Assisted Living	Bed(s)		Avg	2.81	0.18	0.29													
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	3.16	0.16	0.26													
260	Recreational Homes	Dwelling Unit(s)		Avg	10.03	0.48	0.75													
265	Timeshare	Dwelling Unit(s)		Avg	7.50	0.51	0.62													
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg																
Totals					4738	371	500	185	4738	371	500	185	4738	371	500	185	4738	371	500	185
Reduction					663	52	70	44	663	52	70	44	663	52	70	44	663	52	70	44
Grand Total					4075	319	430	271	4075	319	430	271	4075	319	430	271	4075	319	430	271

- Notes:
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 - D Total trips include pass-by trips w/ no internal capture
 - E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
 - F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

8731 Magnolia Park
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips	AM Trips	PM Trips					
								In	Out	In	Out	In	Out	In	Out	In	Out				
210	Single-Family Detached Housing	Dwelling Unit(s)	202	Avg	9.57	0.75	1.01	1934	152	204	38	114	129	75	1934	152	204	38	114	129	75
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
Totals					1934	152	204	38	114	129	75	1934	152	204	38	114	129	75			
Reduction					271	21	29	5	16	18	11	1663	131	175	33	98	111	65			
Grand Total					1663	131	175	33	98	111	65	1663	131	175	33	98	111	65			

Notes:
 (1) AM and/or PM rates correspond to peak hour of generator

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- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)

Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

8736 Pleasant Meadows
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips				Net Trips after Pass-By Reduction								
					Daily Rate	AM Rate	PM Rate	Daily Rate	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips	Daily Trips	AM Trips	PM Trips					
									In	Out	In	Out	In	Out	In	Out					
210	Single-Family Detached Housing	Dwelling Unit(s)	44	Avg	9.57	0.75	1.01	422	33	44	8	25	28	16	422	33	44	8	25	28	16
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.82														
Totals					422	33	44	8	25	28	16	422	33	44	8	25	28	16			
Reduction					59	5	6	1	4	4	2										
Grand Total					363	28	38	7	22	24	14										

Notes:
 (1) AM and/or PM rates correspond to peak hour of generator

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- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
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Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name
Project Number

8787 Rosewood Estates
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips		PM Trips		Daily Trips	AM Trips		PM Trips						
									In	Out	In	Out		In	Out	In	Out					
210	Single-Family Detached Housing	Dwelling Unit(s)	60	Avg	9.57	0.75	1.01	576	45	61	11	34	38	23	576	45	61	11	34	38	23	
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.82															
Totals					576	45	61	11	34	38	23	576	45	61	11	34	38	23	576	45	61	23
Reduction					81	6	9	2	5	5	3	81	6	9	2	5	5	3	81	6	9	3
Grand Total					495	39	52	9	29	33	595	495	39	52	9	29	33	595	495	39	52	20

- Notes:
- (1) AM and/or PM rates correspond to peak hour of generator
 - A Trip generation data from ITE Trip Generation, 8th Edition
 - B AM/PM rates correspond to peak of adjacent street traffic (if data available)
 - C Includes weekday rates only
 - D Total trips include pass-by trips w/ no internal capture
 - E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
 - F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
 - G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
 - H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Kimley-Horn
and Associates, Inc.

Weekday Trip Generation **Project Name** 8803 Brownstone 10
Trips Based on Average Rates/Equations **Project Number** 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips		PM Trips		Daily Trips	AM Trips		PM Trips		Daily Trips	AM Trips		PM Trips				
									In	Out	In	Out		In	Out	In	Out		In	Out					
210	Single-Family Detached Housing	Dwelling Unit(s)	50	Avg	9.57	0.75	1.01	480	38	51	10	28	32	19	480	38	51	10	28	32	19				
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					480	38	51	10	28	32	19	480	38	51	10	28	32	19	480	38	51	10	28	32	19
Reduction					67	5	7	1	4	4	3	67	5	7	1	4	4	3	67	5	7	1	4	3	
Grand Total					413	33	44	9	24	28	16	413	33	44	9	24	28	16	413	33	44	9	24	16	

Notes: (1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

8807 Villa Grove
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips		PM Trips		Daily Trips	AM Trips		PM Trips									
									In	Out	In	Out		In	Out	In	Out								
210	Single-Family Detached Housing	Dwelling Unit(s)	50	Avg	9.57	0.75	1.01	480	38	51	10	28	32	19	480	38	51	10	28	32	19				
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.36																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					480	38	51	10	28	32	19	480	38	51	10	28	32	19	480	38	51	10	28	32	19
Reduction					67	5	7	1	4	4	3	67	5	7	1	4	4	3	67	5	7	1	4	3	
Grand Total					413	33	44	9	24	28	16	413	33	44	9	24	28	16	413	33	44	9	24	28	16

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Weekday Trip Generation
 Trips Based on Average Rates/Equations

Project Name
 Project Number

8975 Shiloh
 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out		
210	Single-Family Detached Housing	Dwelling Unit(s)	75	Avg	9.57	0.75	1.01	718	56	76	14	42	48	28	718	56	76	14	42	48	28
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
Totals								718	56	76	14	42	48	28	718	56	76	14	42	48	28
Reduction								101	8	11	2	6	7	4							
Grand Total								617	48	65	12	36	41	24							

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



8980 Brownstone Estates
097311002.1

Project Name
Project Number

Weekday Trip Generation
Trips Based on Average Rates/Equations

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction										
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips						
									In	Out	In	Out	In	Out	In	Out	In	Out							
210	Single-Family Detached Housing	Dwelling Unit(s)	96	Avg	9.57	0.75	1.01	920	72	97	18	54	61	36	920	72	97	18	54	61	36				
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																		
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																		
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																		
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																		
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																		
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																		
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																		
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																		
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																		
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																		
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																		
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																		
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																		
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																		
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																		
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																		
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.28																		
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																		
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																		
Totals					920	72	97	18	54	61	36	920	72	97	18	54	61	36	920	72	97	18	54	61	36
Reduction					129	10	14	3	8	9	5														
Grand Total					791	62	83	15	46	52	31														

Notes:

- (1) AM and/or PM rates correspond to peak hour of generator
- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells



Trip Generation Planner (ITE 8th Edition)

Weekday Trip Generation **Project Name** 9027 Duarte Ranch
Trips Based on Average Rates/Equations **Project Number** 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates				Total Trips						Net Trips after Pass-By Reduction												
					Daily Rate	AM Rate	PM Rate	Rate	AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips										
									In	Out	In	Out	In	Out	In	Out	In	Out									
210	Single-Family Detached Housing	Dwelling Unit(s)	116	Avg	9.57	0.75	1.01		1112	87	117	22	65	74	43					1112	87	117	22	65	74	43	
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62																				
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58																				
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35																				
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39																				
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72																				
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52																				
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78																				
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38																				
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55																				
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59																				
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27																				
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23																				
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16																				
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17																				
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22																				
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29																				
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26																				
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75																				
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62																				
Totals					1112	87	117	22	65	74	43										1112	87	117	22	65	74	43
Reduction					156	12	16	3	9	10	6																
Grand Total					956	75	101	19	56	64	37																

- Notes:
- (1) AM and/or PM rates correspond to peak hour of generator
 - A Trip generation data from ITE Trip Generation, 8th Edition
 - B AM/PM rates correspond to peak of adjacent street traffic (if data available)
 - C Includes weekday rates only
 - D Total trips include pass-by trips w/ no internal capture
 - E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
 - F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
 - G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
 - H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



9088 Cedarwood Estates
097311002.1

Project Name
Project Number

Weekday Trip Generation
Trips Based on Average Rates/Equations

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips	AM Trips	PM Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out	Daily Trips	AM Trips In	AM Trips Out	PM Trips In	PM Trips Out		
210	Single-Family Detached Housing	Dwelling Unit(s)	34	Avg	9.57	0.75	1.01	326	26	34	7	19	21	13	326	26	34	7	19	21	13
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62														
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58														
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35														
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39														
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72														
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52														
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78														
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38														
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55														
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59														
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27														
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23														
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16														
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17														
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22														
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29														
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26														
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75														
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.62														
Totals								326	26	34	7	19	21	13	326	26	34	7	19	21	13
Reduction								46	4	5	1	3	3	2							
Grand Total								280	22	29	6	16	18	11							

Notes: 14%

(1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells



Trip Generation Planner (ITE 8th Edition)

Weekday Trip Generation **Project Name** 7426759076557760 Amberwood
Trips Based on Average Rates/Equations **Project Number** 097311002.1

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates				Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Rate	Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips			
									In	Out	In	Out	In	Out	In	Out	In	Out				
210	Single-Family Detached Housing	Dwelling Unit(s)	87	Avg	9.57	0.75	1.01		834	65	88	16	49	55	33	834	65	88	16	49	55	33
220	Apartment	Dwelling Unit(s)		Avg	6.65	0.51	0.62															
221	Low-Rise Apartment	Occ. Dwelling Unit(s)		Avg	6.59	0.46	0.58															
222	High-Rise Apartment	Dwelling Unit(s)		Avg	4.20	0.30	0.35															
223	Mid-Rise Apartment	Dwelling Unit(s)		Avg	*	0.30	0.39															
224	Rental Townhouse	Dwelling Unit(s)		Avg	*	0.70	0.72															
230	Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	5.81	0.44	0.52															
231	Low-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	*	0.67	0.78															
232	High-Rise Residential Condominium/Townhouse	Dwelling Unit(s)		Avg	4.18	0.34	0.38															
233	Luxury Condominium/Townhouse	Occ. Dwelling Unit(s)		Avg	*	0.56	0.55															
240	Mobile Home Park	Occ. Dwelling Unit(s)		Avg	4.99	0.44	0.59															
251	Senior Adult Housing-Detached	Dwelling Unit(s)		Avg	3.71	0.22	0.27															
251X-a	Senior Adult Housing (CA Pulte Dell Webb)	Dwelling Unit(s)		Avg	3.96	0.17	0.23															
252	Senior Adult Housing-Attached	Occ. Dwelling Unit(s)		Avg	3.48	0.13	0.16															
253	Congregate Care Facility	Dwelling Unit(s)		Avg	2.02	0.06	0.17															
254	Assisted Living	Bed(s)		Avg	2.66	0.14	0.22															
255	Continuing Care Retirement Community	Occupied Unit(s)		Avg	2.81	0.18	0.29															
260	Recreational Homes	Dwelling Unit(s)		Avg	3.16	0.16	0.26															
265	Timeshare	Dwelling Unit(s)		Avg	10.03	0.48	0.75															
270	Residential Planned Unit Development	Dwelling Unit(s)		Avg	7.50	0.51	0.82															
Totals					834	65	88	16	49	55	33	834	65	88	16	49	55	33				
Reduction					117	9	12	2	7	8	5											
Grand Total					717	56	76	14	42	47	28											

Notes: (1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

Trip Generation Planner (ITE 8th Edition)



Empire Station Mixed Use Project (3 Office Bldgs)
097311002.1

Weekday Trip Generation **Project Name**
Trips Based on Average Rates/Equations **Project Number**

ITE Code	Land Use Description	Independent Variable	No. of Units or Eq	Avg Rate	Trip Rates			Total Trips						Net Trips after Pass-By Reduction							
					Daily Rate	AM Rate	PM Rate	Daily Trips		AM Trips		PM Trips		Daily Trips		AM Trips		PM Trips			
								In	Out	In	Out	In	Out	In	Out	In	Out				
710	General Office Building (1)	1,000 Sq Ft	9	Avg 11.01	1.55	1.49	100	14	13	12	2	2	11	100	14	13	12	2	2	11	
714	Corporate Headquarters Building (1)	1,000 Sq Ft		Avg 7.98	1.49	1.40															
715	Single Tenant Office Building (1)	1,000 Sq Ft		Avg 11.57	1.80	1.73															
720	Medical-Dental Office Building	1,000 Sq Ft		Avg 36.13	2.30	3.46															
730	Government Office Building (1)	1,000 Sq Ft		Avg 68.93	5.88	1.21															
731	State Motor Vehicles Department	1,000 Sq Ft		Avg 166.02	9.84	17.09															
732	United States Post Office	1,000 Sq Ft		Avg 108.19	8.21	11.12															
733	Government Office Complex	1,000 Sq Ft		Avg 27.92	2.21	2.85															
750	Office Park (1)	1,000 Sq Ft		Avg 11.42	1.71	1.48															
760	Research and Development Center (1)	1,000 Sq Ft		Avg 8.11	1.22	1.07															
770	Business Park (1)	1,000 Sq Ft		Avg 12.76	1.43	1.29															
Totals							100	14	13	12	2	2	11	100	14	13	12	2	2	11	
Reduction							23	3	3	3	0	0	3								
Grand Total							77	11	10	9	2	2	8								

Notes:
(1) AM and/or PM rates correspond to peak hour of generator

- A Trip generation data from ITE Trip Generation, 8th Edition
- B AM/PM rates correspond to peak of adjacent street traffic (if data available)
- C Includes weekday rates only
- D Total trips include pass-by trips w/ no internal capture
- E Pass-by rates from ITE Trip Generation Handbook, 2nd Edition
- F Internal capture rates from ITE Trip Generation Handbook, 2nd Edition
- G Worksheet is intended as a planning tool. Verify results w/ ITE Trip Generation, 8th Edition
- H Enter data only in green shaded cells

**EXISTING + APPROVED TRAFFIC CONDITIONS
(TRAFFIX & SYNCRHO)**

Antioch Walmart Expansion
Near Term AM

Scenario: Near Term AM
 Command: Near Term AM
 Volume: Near-Term AM
 Geometry: Near-Term
 Impact Fee: Default Impact Fee
 Trip Generation: Approved AM
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Antioch Walmart Expansion
Near Term AM

Impact Analysis Report
Level Of Service

Intersection	Base Del/V LOS Veh	Future Del/V LOS Veh	Change in
# 1 Deer Valley Rd/ Country Hills	A xxxxx 0.435	A xxxxx 0.469	+ 0.034 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx 0.311	A xxxxx 0.332	+ 0.020 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx 0.353	A xxxxx 0.386	+ 0.033 V/C
# 4 Hillcrest Avenue/Driveway	B 13.0 0.022	B 14.0 0.024	+ 0.949 D/V
# 5 Hillcrest Avenue/South Drivewa	B 10.1 0.078	B 10.3 0.082	+ 0.257 D/V
# 6 Lone Tree Way/Mokelumne Dr	B xxxxx 0.627	C xxxxx 0.714	+ 0.087 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx 0.367	A xxxxx 0.450	+ 0.083 V/C
# 8 Lone Tree Way/Deer Valley Rd	A xxxxx 0.544	C xxxxx 0.719	+ 0.175 V/C
# 9 Lone Tree Way/Deer Valley HS	A xxxxx 0.448	A xxxxx 0.552	+ 0.105 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx 0.389	A xxxxx 0.462	+ 0.073 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx 0.352	A xxxxx 0.482	+ 0.131 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	A xxxxx 0.423	A xxxxx 0.544	+ 0.121 V/C
# 13 Lone Tree Way/Driveway	B 10.8 0.008	B 12.1 0.010	+ 1.296 D/V
# 14 Lone Tree Way/Hillcrest Avenue	A xxxxx 0.394	A xxxxx 0.501	+ 0.107 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx 0.300	A xxxxx 0.388	+ 0.088 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx 0.224	A xxxxx 0.299	+ 0.075 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx 0.336	A xxxxx 0.523	+ 0.187 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	A xxxxx 0.416	A xxxxx 0.531	+ 0.115 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx 0.273	A xxxxx 0.362	+ 0.089 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx 0.293	A xxxxx 0.392	+ 0.100 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A xxxxx 0.153	A xxxxx 0.162	+ 0.009 V/C

Antioch Walmart Expansion Near Term AM

Level Of Service Computation Report CCTALOS Method (Future Volume Alternative)

Intersection #9 Lone Tree Way/Deer Valley HS Cycle (sec): 130 Critical Vol./Cap.(X): 0.552 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx Optimal Cycle: 42 Level Of Service: A

Street Name: Deer Valley HS Lone Tree Way Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Include Protected Permitted Include Protected Rights: Include Include Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 Lanes: 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 2 0 1

Volume Module: Base Vol: 149 0 58 21 1 29 116 761 130 91 1008 61 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Initial Bse: 149 0 58 21 1 29 116 761 130 91 1008 61 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 149 0 58 21 1 29 116 1002 130 91 1368 61 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 149 0 58 21 1 29 116 1002 130 91 1368 61 Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 149 0 58 21 1 29 116 1002 130 91 1368 61 RTOR Reduce: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 RTOR Vol: 149 0 58 21 1 0 116 1002 130 91 1368 40 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 FinalVolume: 149 0 58 21 1 0 116 1002 130 91 1368 40

Saturation Flow Module: Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Lanes: 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.77 0.23 1.00 2.00 1.00 Final Sat.: 1720 0 1720 1720 1720 1720 3045 395 1720 3440 1720

Capacity Analysis Module: Vol/Sat: 0.09 0.00 0.03 0.01 0.00 0.00 0.07 0.33 0.33 0.05 0.40 0.02 Crit Volume: 149 116 684 Crit Moves: ****

Antioch Walmart Expansion Near Term AM

Level Of Service Computation Report CCTALOS Method (Future Volume Alternative)

Intersection #10 Lone Tree Way/Sagebrush Drive Cycle (sec): 130 Critical Vol./Cap.(X): 0.462 Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx Optimal Cycle: 27 Level Of Service: A

Street Name: Sagebrush Drive Lone Tree Way Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Protected Permitted Include Protected Permitted Include Protected Rights: Include Include Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 Lanes: 1 0 0 1 0 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Volume Module: Base Vol: 104 0 78 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Initial Bse: 104 0 78 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 104 0 78 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 104 0 78 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 104 0 78 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 RTOR Reduce: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 RTOR Vol: 104 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 FinalVolume: 104 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module: Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Lanes: 1.00 0.00 1.00 0.00 0.00 0.00 0.00 2.00 1.00 1.00 2.00 0.00 Final Sat.: 1650 0 1650 0 0 0 0 0 0 0 0 3300 1650 1650 3300 0

Capacity Analysis Module: Vol/Sat: 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.28 0.07 0.12 0.39 0.00 Crit Volume: 104 461 198 Crit Moves: ****

Antioch Walmart Expansion
Near Term AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #11 Lone Tree Way/Williamson Ranch Plaza (OSH)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.482
Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Street Name: Williamson Ranch Plaza (OSH) Lone Tree Way
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 1 0 0 0 1 0 2 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 11 0 40 55 689 0 0 1029 20
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 11 0 40 55 689 0 0 1029 20
Added Vol: 0 0 0 15 0 6 23 218 0 0 355 36
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 26 0 46 78 907 0 0 1384 56
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 26 0 46 78 907 0 0 1384 56
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 26 0 46 78 907 0 0 1384 56
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 0 0 0 26 0 46 78 907 0 0 1384 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 26 0 46 78 907 0 0 1384 30

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1650 0 1650 1650 3300 0 0 3300 1650

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.00 0.05 0.27 0.00 0.00 0.42 0.02
Crit Volume: 0 26 78 692
Crit Moves: *****

Antioch Walmart Expansion
Near Term AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #12 Lone Tree Way/Indian Hill Dr/Williamson Ranch Plaza (Wal-Mart, OSH)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.544
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: A

Street Name: Indian Hill Dr/Williamson Ranch Pl Lone Tree Way
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 2 0 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 9 15 58 20 1 21 45 574 5 25 1116 34
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 9 15 58 20 1 21 45 574 5 25 1116 34
Added Vol: 0 0 4 1 0 0 0 0 233 0 2 391 7
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 9 15 62 21 1 21 45 807 5 27 1507 41
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 9 15 62 21 1 21 45 807 5 27 1507 41
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 9 15 62 21 1 21 45 807 5 27 1507 41
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 9 15 62 21 1 21 45 807 5 27 1507 29
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 9 15 62 21 1 21 45 807 5 27 1507 29

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.19 0.81 2.00 0.05 0.95 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1650 321 1329 3000 75 1575 1650 3300 1650 1650 3300 1650

Capacity Analysis Module:
Vol/Sat: 0.01 0.05 0.05 0.01 0.01 0.01 0.03 0.24 0.00 0.02 0.46 0.02
Crit Volume: 77 22 45 754
Crit Moves: *****

Antioch Walmart Expansion
Near Term AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #15 Lone Tree Way/Vista Grande Drive

Cycle (sec): 130 Critical Vol./Cap.(X): 0.388
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx A
Optimal Cycle: 30 Level Of Service: A

Street Name: Vista Grande Drive Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 1 0 2 1 0 1 0 2 1 0

Volume Module:
Base Vol: 39 14 123 24 16 41 20 693 30 59 967 37
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 39 14 123 24 16 41 20 693 30 59 967 37
Added Vol: 21 0 33 3 0 2 0 210 6 17 343 3
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 60 14 156 27 16 43 20 903 36 76 1310 40
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 60 14 156 27 16 43 20 903 36 76 1310 40
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 60 14 156 27 16 43 20 903 36 76 1310 40
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 60 14 156 27 16 43 20 903 36 76 1310 40
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 60 14 156 27 16 43 20 903 36 76 1310 40

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.08 0.92 1.00 0.27 0.73 1.00 2.88 0.12 1.00 2.91 0.09
Final Sat.: 1720 142 1578 1720 466 1254 1720 4962 198 1720 5007 153

Capacity Analysis Module:
Vol/Sat: 0.03 0.10 0.10 0.02 0.03 0.03 0.01 0.18 0.18 0.04 0.26 0.26
Crit Volume: 170 27 20 450
Crit Moves: ****

Antioch Walmart Expansion
Near Term AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #16 Lone Tree Way/Heidorn Ranch Road

Cycle (sec): 120 Critical Vol./Cap.(X): 0.299
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx A
Optimal Cycle: 33 Level Of Service: A

Street Name: Heidorn Ranch Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 1 0 1 1 0 0 1 0 2 1 0 1 0 2 1 0

Volume Module:
Base Vol: 23 0 23 10 2 19 4 741 40 48 987 9
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 23 0 23 10 2 19 4 741 40 48 987 9
Added Vol: 10 1 47 1 0 0 0 244 2 17 352 2
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 33 1 70 11 2 19 4 985 42 65 1339 11
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 1 70 11 2 19 4 985 42 65 1339 11
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 1 70 11 2 19 4 985 42 65 1339 11
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 33 1 5 11 2 19 4 985 42 65 1339 11
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 33 1 5 11 2 19 4 985 42 65 1339 11

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 1.00 1.00 1.00 1.00 1.00 1.00 2.88 0.12 1.00 2.98 0.02
Final Sat.: 3000 1650 1650 1650 157 1493 1650 4748 202 1650 4910 40

Capacity Analysis Module:
Vol/Sat: 0.01 0.00 0.00 0.01 0.01 0.01 0.00 0.21 0.21 0.04 0.27 0.27
Crit Volume: 17 21 4 450
Crit Moves: ****

Antioch Walmart Expansion Near Term AM

Level Of Service Computation Report CCTLALOS Method (Future Volume Alternative)

Intersection #17 Lone Tree Way/Canada Valley Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.523
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: A

Street Name: Canada Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 2 0 0 1 1 0 1 0 1 2 0 3 0 1 2 0 3 0 1
Volume Module: 36 14 51 190 31 34 29 746 52 166 1005 168

Base Vol: 36 14 51 190 31 34 29 746 52 166 1005 168
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 36 14 51 190 31 34 29 746 52 166 1005 168
Added Vol: 8 5 4 193 14 84 32 248 12 12 278 86

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 44 19 55 383 45 118 61 994 64 178 1283 254

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 44 19 55 383 45 118 61 994 64 178 1283 254
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 44 19 55 383 45 118 61 994 64 178 1283 254
RTOR Reduct: 0 0 55 0 0 34 0 0 24 0 0 254

RTOR Vol: 44 19 0 383 45 84 61 994 40 178 1283 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 44 19 0 383 45 84 61 994 40 178 1283 0

Saturation Flow Module: Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Capacity Analysis Module: Vol/Sat: 0.01 0.01 0.00 0.23 0.03 0.05 0.02 0.20 0.02 0.06 0.26 0.00

Crit Volume: 19 383 31 428
Crit Moves: ****

Antioch Walmart Expansion Near Term AM

Level Of Service Computation Report CCTLALOS Method (Future Volume Alternative)

Intersection #18 Lone Tree Way/SB SR-4 Bypass

Cycle (sec): 100 Critical Vol./Cap.(X): 0.531
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level Of Service: A

Street Name: SB SR-4 Bypass Lone Tree Way
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Permitted Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 0 0 0 1 1 0 0 1 0 0 3 0 1 2 0 3 0 0
Volume Module: 0 0 0 287 6 353 0 571 401 72 1000 0

Base Vol: 0 0 0 287 6 353 0 571 401 72 1000 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 287 6 353 0 571 401 72 1000 0
Added Vol: 0 0 0 48 0 96 0 376 68 107 280 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 335 6 449 0 947 469 179 1280 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 335 6 449 0 947 469 179 1280 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 335 6 449 0 947 469 179 1280 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0

RTOR Vol: 0 0 0 335 6 449 0 947 469 179 1280 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 335 6 449 0 947 469 179 1280 0

Saturation Flow Module: Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.11 0.10 0.27 0.00 0.19 0.28 0.06 0.26 0.00

Crit Volume: 0 449 316 427
Crit Moves: ****

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #19 Lone Tree Way/NB SR-4 Bypass (Jeffrey Way)
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.362
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: A

 Street Name: NB SR-4 Bypass (Jeffrey Way) Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Permitted Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 1 0 0 1 0 0 0 0 0 3 0 1 2 0 3 0 1

Volume Module:
 Base Vol: 383 29 79 0 0 0 0 662 160 8 671 245
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 383 29 79 0 0 0 0 662 160 8 671 245
 Added Vol: 81 0 60 0 0 0 0 232 192 0 306 53
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 464 29 139 0 0 0 0 894 352 8 977 298
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 464 29 139 0 0 0 0 894 352 8 977 298
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 464 29 139 0 0 0 0 894 352 8 977 298
 RTOR Reduct: 0 0 4 0 0 0 0 0 255 0 0 0
 RTOR Vol: 464 29 135 0 0 0 0 894 97 8 977 298
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 464 29 135 0 0 0 0 894 97 8 977 298

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00
 Lanes: 1.88 0.12 1.00 0.00 0.00 0.00 0.00 3.00 1.00 2.00 3.00 1.00
 Final Sat.: 2823 194 1650 0 0 0 0 4950 1650 3000 4950 1650

 Capacity Analysis Module:
 Vol/Sat: 0.16 0.15 0.08 0.00 0.00 0.00 0.00 0.18 0.06 0.00 0.20 0.18
 Crit Volume: 246 0 298 326
 Crit Moves: ****

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #20 Deer Valley Road/Marita Drive
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.392
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level Of Service: A

 Street Name: Deer Valley Road Marita Drive
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0 1 0

Volume Module:
 Base Vol: 58 638 23 137 633 24 29 8 21 1 1 6
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 58 638 23 137 633 24 29 8 21 1 1 6
 Added Vol: 0 343 0 0 198 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 58 981 23 137 831 24 29 8 21 1 1 6
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 58 981 23 137 831 24 29 8 21 1 1 6
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 58 981 23 137 831 24 29 8 21 1 1 6
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 58 981 23 137 831 24 29 8 21 1 1 6
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 58 981 23 137 831 24 29 8 21 1 1 6

Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.95 0.05 1.00 1.94 0.06 1.00 0.28 0.72 1.00 0.14 0.86
 Final Sat.: 1720 3361 79 1720 3343 97 1720 474 1246 1720 246 1474

 Capacity Analysis Module:
 Vol/Sat: 0.03 0.29 0.29 0.08 0.25 0.25 0.02 0.02 0.02 0.00 0.00 0.00
 Crit Volume: 502 137 29
 Crit Moves: ****

Antioch Walmart Expansion
Near Term AM

Level Of Service Computation Report
CCTALIOS Method (Future Volume Alternative)

Intersection #21 Hillcrest Ave/Prewett Ranch Dr
Cycle (sec): 100 Critical Vol./Cap.(X): 0.162
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Street Name: Hillcrest Ave Prewett Dr
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Permitted Permitted Permitted Permitted
Rights: Include Include Include Include Include Include Include Include
Min. Green: 0
Y+R: 4.0
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 0 0 0 13 0 111 116 40 0 0 39 10
Growth Adj: 1.00
Initial Bse: 0 0 0 13 0 111 116 40 0 0 39 10
Added Vol: 1 139 0 0 62 0 2 0 1 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 1 139 0 13 62 111 118 40 1 0 39 10
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 1 139 0 13 62 111 118 40 1 0 39 10
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 139 0 13 62 111 118 40 1 0 39 10
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 1 139 0 13 62 111 118 40 1 0 39 10
PCE Adj: 1.00
MLF Adj: 1.00
FinalVolume: 1 139 0 13 62 111 118 40 1 0 39 10

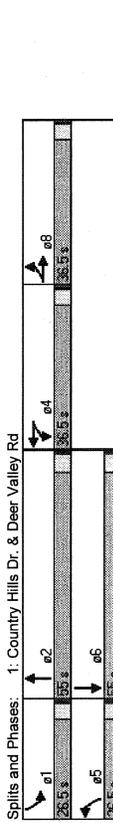
Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 1.00 1.00 1.00 1.00 1.00 0.98 0.02 1.00 0.80 0.20
Final Sat.: 1720 3440 0 1720 1720 1720 1720 1678 42 1720 1369 351

Capacity Analysis Module:
Vol/Sat: 0.00 0.04 0.00 0.01 0.04 0.06 0.07 0.02 0.02 0.00 0.03 0.03
Crit Volume: 1 111 118 49
Crit Moves: ****

1: Country Hills Dr. & Deer Valley Rd
Antitoch Walmart Expansion

Near-Term Condition
AM Peak

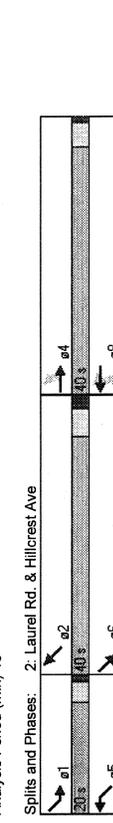
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1822	0	1770	1724	0	1770	3400	0	1770	3384
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950
Fit Permitted	1765	1822	0	1770	1724	0	1749	3400	0	1733	3384
Satd. Flow (perm)	5	5	0	24	24	0	18	18	0	19	19
Satd. Flow (RTOR)	75	63	11	158	156	125	10	480	102	77	793
Volume (vph)	90	88	0	203	360	0	12	677	0	93	1175
Lane Group Flow (vph)	Split										
Turn Type	Split										
Protected Phases	Split										
Permitted Phases	Split										
Total Split (s)	36.5	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0
Act Effct Green (s)	11.9	11.9	0.0	26.7	26.7	0.0	8.1	40.6	0.0	12.1	48.9
Actuated g/C Ratio	0.12	0.12	0.00	0.27	0.27	0.00	0.08	0.42	0.00	0.12	0.50
v/c Ratio	0.42	0.40	0.00	0.42	0.74	0.00	0.09	0.48	0.00	0.43	0.69
Control Delay	52.0	48.8	0.0	35.4	42.9	0.0	53.8	26.2	0.0	52.0	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.0	48.8	0.0	35.4	42.9	0.0	53.8	26.2	0.0	52.0	25.1
LOS	D										
Approach Delay	D										
Approach LOS	D										
Queue Length 50th (ft)	53	50	0	102	188	0	7	176	0	55	284
Queue Length 95th (ft)	110	105	0	178	300	0	29	270	0	113	460
Internal Link Dist (ft)	308										
Turn Bay Length (ft)	145	120	0	585	586	0	110	880	0	175	220
Base Capacity (vph)	500	519	0	585	586	0	359	1671	0	385	1785
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.17	0.00	0.35	0.61	0.00	0.03	0.41	0.00	0.24	0.66
Intersection Summary											
Cycle Length	154.5										
Actuated Cycle Length	97.8										
Control Type	Actuated-Uncoordinated										
Maximum v/c Ratio	0.74										
Intersection Signal Delay	31.2										
Intersection LOS	C										
Intersection Capacity Utilization	65.9%										
Analysis Period (min)	15										



2: Laurel Rd. & Hillcrest Ave
Antitoch Walmart Expansion

Near-Term Condition
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1638	0	1770	1863	1583	1770	3442	0	1770	3488
Satd. Flow (prot)	0.767	0.767	0	0.534	0.534	0.534	0.534	0.534	0	0.534	0.534
Fit Permitted	1312	1638	0	981	1663	1557	1767	3442	0	1750	3488
Satd. Flow (perm)	118	118	0	199	199	199	21	21	0	19	19
Satd. Flow (RTOR)	150	50	103	63	67	173	87	481	80	68	465
Volume (vph)	208	212	0	72	77	199	100	645	0	89	657
Lane Group Flow (vph)	Perm										
Turn Type	Perm										
Protected Phases	Perm										
Permitted Phases	Perm										
Total Split (s)	40.0	40.0	0.0	40.0	40.0	20.0	40.0	40.0	0.0	20.0	40.0
Act Effct Green (s)	22.3	22.3	0.0	22.3	22.3	11.7	22.3	22.3	0.0	11.7	22.3
Actuated g/C Ratio	0.22	0.22	0.00	0.22	0.22	0.12	0.22	0.12	0.00	0.11	0.59
v/c Ratio	0.71	0.46	0.00	0.33	0.19	0.40	0.48	0.31	0.00	0.45	0.52
Control Delay	48.3	17.0	0.0	34.3	30.0	6.4	48.3	12.5	0.0	48.0	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.3	17.0	0.0	34.3	30.0	6.4	48.3	12.5	0.0	48.0	13.2
LOS	D										
Approach Delay	D										
Approach LOS	D										
Queue Length 50th (ft)	125	50	0	39	41	0	60	98	0	54	104
Queue Length 95th (ft)	137	66	0	69	68	45	104	174	0	82	154
Internal Link Dist (ft)	468										
Turn Bay Length (ft)	75	175	0	175	155	155	155	155	0	150	2088
Base Capacity (vph)	485	660	0	363	689	701	301	2057	0	301	2088
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.31	0.00	0.20	0.11	0.28	0.33	0.31	0.00	0.30	0.32
Intersection Summary											
Cycle Length	100										
Actuated Cycle Length	100										
Offset	26 (26%), Referenced to phase 2 NMT and 6 SET, Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.71										
Intersection Signal Delay	20.1										
Intersection LOS	C										
Intersection Capacity Utilization	58.4%										
Analysis Period (min)	15										



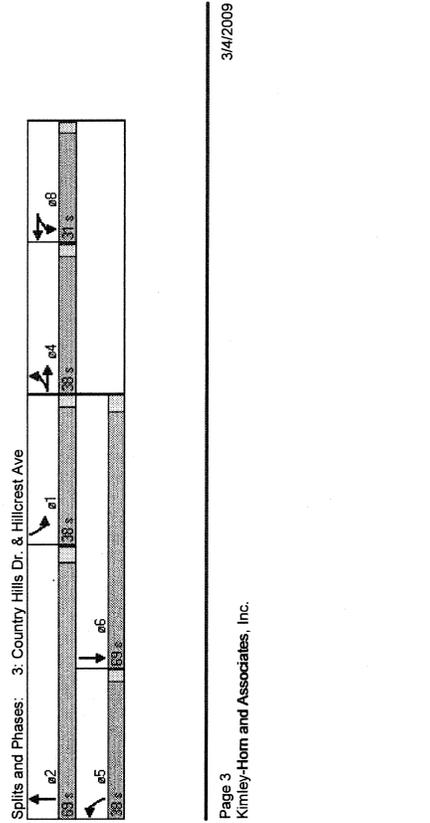
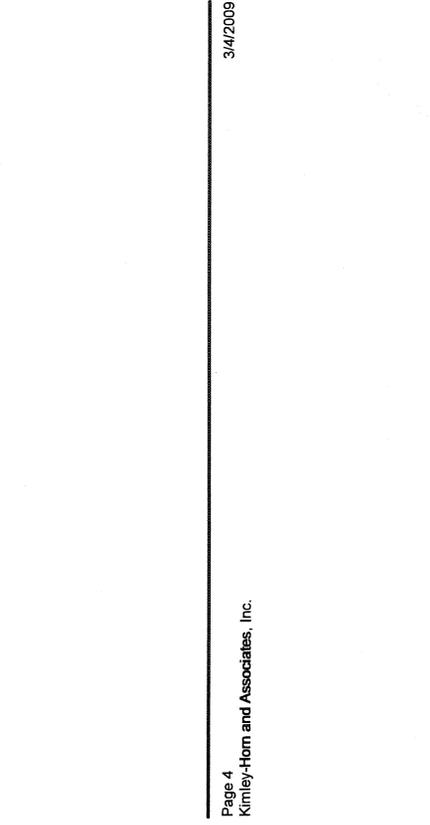
3: Country Hills Dr. & Hillcrest Ave
Antitoch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antitoch Walmart Expansion

Near-Term Condition
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1635	0	1770	1662	0	1770	3486	0	1770	3510	0
Satd. Flow (prot)	0.953	0	0.950	0	0.950	0	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1770	1635	0	1770	1662	0	1770	3486	0	1770	3510	0
Satd. Flow (perm)	50	0	0	36	0	0	6	0	0	0	3	0
Satd. Flow (RTOR)	44	77	150	87	93	137	81	380	31	74	549	26
Volume (vph)	58	288	0	130	343	0	104	527	0	81	632	0
Lane Group Flow (vph)	Split		Split		Prot		Prot		Prot		Prot	
Turn Type	4	4	4	8	8	8	5	2	1	1	6	6
Protected Phases	Protected Phases											
Permitted Phases	Permitted Phases											
Total Split (s)	38.0	38.0	0.0	31.0	31.0	0.0	38.0	69.0	0.0	38.0	69.0	0.0
Act Effct Green (s)	28.2	28.2	0.0	28.1	28.1	0.0	14.5	66.4	0.0	14.5	66.4	0.0
Actuated %C Ratio	0.19	0.19	0.0	0.19	0.19	0.0	0.19	0.45	0.0	0.19	0.45	0.0
v/c Ratio	0.17	0.65	0.0	0.39	1.00	0.0	0.60	0.34	0.0	0.47	0.40	0.0
Control Delay	52.2	71.3	0.0	59.4	102.5	0.0	80.7	28.9	0.0	74.0	30.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.2	71.3	0.0	59.4	102.5	0.0	80.7	28.9	0.0	74.0	30.3	0.0
LOS	D	E	E	E	F	F	F	C	F	E	C	C
Approach Delay	Approach Delay											
Approach LOS	Approach LOS											
Queue Length 50th (ft)	48	239	0	114	324	0	100	175	0	77	220	0
Queue Length 95th (ft)	79	289	0	141	434	0	146	212	0	138	308	0
Internal Link Dist (ft)	120	286	0	90	283	0	155	1068	0	190	1140	0
Turn Bay Length (ft)	398	407	0	334	343	0	366	1554	0	366	1553	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.73	0.0	0.39	1.00	0.0	0.28	0.34	0.0	0.22	0.40	0.0
Intersection Summary	Intersection Summary											
Cycle Length	Cycle Length: 176											
Actuated Cycle Length	Actuated Cycle Length: 149.2											
Control Type	Control Type: Actuated-Uncoordinated											
Maximum v/c Ratio	Maximum v/c Ratio: 1.00											
Intersection Signal Delay	Intersection Signal Delay: 53.3											
Intersection Capacity Utilization	Intersection Capacity Utilization: 56.7%											
Analysis Period (min)	Analysis Period (min): 15											
Volume exceeds capacity, queue is theoretically infinite.	Volume exceeds capacity, queue is theoretically infinite.											
# 95th percentile volume exceeds capacity, queue may be longer.	# 95th percentile volume exceeds capacity, queue may be longer.											
Queue shown is maximum after two cycles.	Queue shown is maximum after two cycles.											

Movement	EBL	EBT	EBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Free	Free	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0	10	0	0	0	0	0	0	0
Volume (veh/h)	0.63	0.63	0.84	0.84	0.87	0.87	0.87	0.87	0.87
Peak Hour Factor	0	16	0	0	0	0	0	0	0
Hourly Flow Rate (vph)	0	16	0	0	0	0	0	0	0
Pedestrians	Pedestrians								
Walking Speed (ft/s)	Walking Speed (ft/s)								
Percent Blockage	Percent Blockage								
Right turn flare (veh)	Right turn flare (veh)								
Median type	Median type								
Median storage (veh)	Median storage (veh)								
Upstream signal (ft)	Upstream signal (ft)								
p.k. platoon unblocked	p.k. platoon unblocked								
v/c, conflicting volume	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
VC1, stage 1 conf vol	VC1, stage 1 conf vol								
VC2, stage 2 conf vol	VC2, stage 2 conf vol								
VCU, unblocked vol	VCU, unblocked vol								
IC, single (s)	IC, single (s)								
IC, 2 stage (s)	IC, 2 stage (s)								
IF (s)	IF (s)								
p0 queue free %	p0 queue free %								
CM capacity (veh/h)	CM capacity (veh/h)								
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 1	SB 2	SB 1	SB 2
Volume Total	16	289	289	905	905	9	9	9	9
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0	0
CSH	236	1700	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.07	0.17	0.17	0.63	0.63	0.01	0.01	0.01	0.01
Queue Length 95th (ft)	5	0	0	0	0	0	0	0	0
Control Delay (s)	21.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	C	C	C	C	C	C	C	C
Approach Delay (s)	Approach Delay (s)								
Approach LOS	Approach LOS								
Intersection Summary	Intersection Summary								
Average Delay	Average Delay								
Intersection Capacity Utilization	Intersection Capacity Utilization								
Analysis Period (min)	Analysis Period (min)								
ICU Level of Service	ICU Level of Service								



Splits and Phases: 3: Country Hills Dr. & Hillcrest Ave

5: Southeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

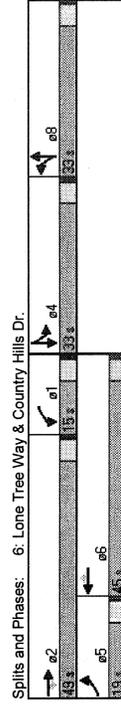
Near-Term Condition
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0	0	60	0	0	6	0	493	27	0	697	90
Volume (veh/h)	0.88	0.88	0.88	0.63	0.63	0.63	0.82	0.82	0.82	0.89	0.89	0.89
Peak Hour Factor	0	0	68	0	0	10	0	601	33	0	783	101
Hourly flow rate (vph)	0	0	68	0	0	10	0	601	33	0	783	101
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None											
Median storage (veh)												
Upstream signal (ft)									298			
px, platoon unblocked												
yc, conflicting volume	1144	1468	312	930	1485	301	884					634
vc1, stage 1 cont vol												
vc2, stage 2 cont vol												
vcu, unblocked vol	1144	1468	312	930	1485	301	884					634
tc, stage (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1					4.1
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2					2.2
p0 queue free %	100	100	90	100	100	99	100					100
SM capacity (veh/h)	153	127	684	200	123	695	781					945
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	68	10	301	301	33	313	313	258				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	68	10	0	0	33	0	0	101				
GSH	684	695	1700	1700	1700	1700	1700	1700				
Volume to Capacity	0.10	0.01	0.18	0.18	0.02	0.18	0.18	0.15				
Queue Length 95th (ft)	8	1	0	0	0	0	0	0				
Control Delay (s)	10.8	10.2	0.0	0.0	0.0	0.0	0.0	0.0				
Lane LOS	B	B	A	A	A	A	A	A				
Approach Delay (s)	10.8	10.2	0.0	0.0	0.0	0.0	0.0	0.0				
Approach LOS	B	B	A	A	A	A	A	A				
Intersection Summary												
Average Delay	0.5											
Intersection Capacity Utilization	25.9%											
Analysis Period (min)	15											
ICU Level of Service	A											

6: Lone Tree Way & Country Hills Dr.
Antioch Walmart Expansion

Near-Term Condition
AM Peak

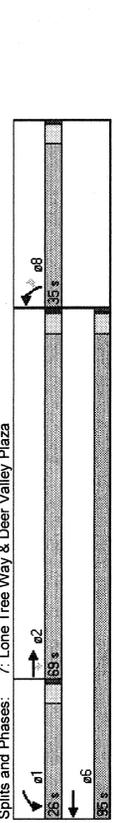
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1593	1770	3539	1583	1770	1686	0	1770	1651	0
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1759	3539	1125	1647	3539	1486	1770	1686	0	1770	1651	0
Satd. Flow (perm)	96	837	39	96	1298	98	125	81	141	37	64	149
Volume (vph)	112	973	45	103	1396	105	167	296	0	43	247	0
Lane Group Flow (vph)	112	973	45	103	1396	105	167	296	0	43	247	0
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split		Split	Split	
Protected Phases	5	2	1	6	8	8	8	8		4	4	
Permitted Phases	2	6		6								
Total Split (s)	19.0	49.0	15.0	45.0	33.0	33.0	33.0	33.0	0.0	33.0	33.0	0.0
Act Effct Green (s)	14.6	61.1	61.1	12.0	58.5	58.5	24.6	24.6	20.3	20.3	20.3	0.0
Actuated g/C Ratio	0.11	0.47	0.47	0.08	0.48	0.48	0.19	0.19	0.16	0.16	0.16	0.0
v/c Ratio	0.57	0.59	0.08	0.63	0.88	0.15	0.50	0.80	0.16	0.16	0.16	0.0
Control Delay	65.7	29.3	18.5	61.2	32.1	32.1	14.1	51.3	45.7	45.7	47.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	29.3	18.5	61.2	32.1	32.1	14.1	51.3	45.7	45.7	47.9	0.0
LOS	E	C	B	E	C	B	D	D	D	D	D	D
Approach Delay	32.5			32.8			53.6					47.6
Approach LOS	C			C			D					D
Queue Length 50th (ft)	90	311	14	83	433	12	126	190	32	134		
Queue Length 95th (ft)	146	436	43	156	484	21	153	215	60	197		
Internal Link Dist (ft)	1420			740			709					
Turn Bay Length (ft)	145			145			170					
Base Capacity (vph)	223	1662	537	163	1592	661	411	440	408	448		
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.59	0.08	0.63	0.88	0.15	0.41	0.67	0.11	0.55		
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	74 (67%), Referenced to phase 2.EBT and 6.WBT. Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.88											
Intersection Signal Delay	36.7											
Intersection LOS	D											
Intersection Capacity Utilization	74.0%											
Analysis Period (min)	15											
ICU Level of Service	D											
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												



7: Lone Tree Way & Deer Valley Plaza
Antioch Walmart Expansion

Near-Term Condition
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583	3539
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1333	1722	3539	1770	1583	3539
Satd. Flow (RTOR)	35	67	42	1334	75	35	38
Volume (vph)	1034	67	42	1334	75	35	38
Lane Group Flow (vph)	1136	74	48	1516	82	38	38
Turn Type	Prot						
Protected Phases	2	2	1	6	8	8	8
Permitted Phases	69.0	69.0	26.0	95.0	35.0	35.0	35.0
Total Split (s)	103.0	103.0	10.5	114.4	12.4	12.4	12.4
Act Effct Green (s)	0.79	0.79	0.08	0.88	0.10	0.10	0.10
Actuated g/C Ratio	0.41	0.07	0.34	0.49	0.49	0.21	0.21
v/c Ratio	1.0	0.2	60.7	1.8	64.8	18.1	18.1
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	1.0	0.2	60.7	1.8	64.8	18.1	18.1
Total Delay	A	A	E	A	E	B	B
LOS	A	A	E	A	E	B	B
Approach Delay	1.0	0.0	3.6	50.0	0.0	0.0	0.0
Approach LOS	A	A	A	D	D	D	D
Queue Length 50th (ft)	22	0	43	10	67	0	0
Queue Length 95th (ft)	25	m0	m0	46	117	34	34
Internal Link Dist (ft)	740	100	200	850	704	95	95
Turn Bay Length (ft)	2803	1063	313	3115	436	418	418
Base Capacity (vph)	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.07	0.15	0.48	0.19	0.09	0.09
Intersection Summary							
Cycle Length: 130							
Actuated Cycle Length: 130							
Offset: 90 (69%); Referenced to phase 2:EBT and 6:WBT, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 0.49							
Intersection Signal Delay: 4.4							
Intersection LOS: A							
Intersection Capacity Utilization: 47.7%							
Analysis Period (min): 15							
m. Volume for 95th percentile queue is metered by upstream signal.							

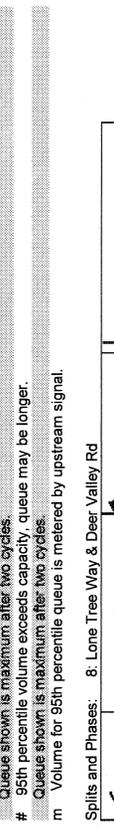


Splits and Phases: 7: Lone Tree Way & Deer Valley Plaza

8: Lone Tree Way & Deer Valley Rd
Antioch Walmart Expansion

Near-Term Condition
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3539
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1767	3539	1413	1735	3539	1537	3539
Satd. Flow (RTOR)	249	327	285	362	996	232	390
Volume (vph)	35	774	285	362	996	232	390
Lane Group Flow (vph)	43	956	327	389	1071	249	433
Turn Type	Prot						
Protected Phases	5	2	1	6	3	8	7
Permitted Phases	17.0	37.0	20.0	40.0	40.0	30.0	32.0
Total Split (s)	10.1	34.0	24.0	49.9	22.5	26.0	34.0
Act Effct Green (s)	0.08	0.26	0.26	0.18	0.38	0.17	0.20
Actuated g/C Ratio	0.31	1.03	0.54	1.19	0.79	0.34	0.85
v/c Ratio	71.7	87.2	16.8	146.0	29.9	5.1	58.2
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	71.7	87.2	16.8	146.0	29.9	5.1	58.2
Total Delay	E	F	B	F	C	A	E
LOS	E	F	B	F	C	A	E
Approach Delay	69.8	52.7	52.7	53.0	50.1	50.1	50.1
Approach LOS	E	D	D	D	D	D	D
Queue Length 50th (ft)	38	-341	40	-425	461	41	179
Queue Length 95th (ft)	71	#499	167	#619	#658	m79	228
Internal Link Dist (ft)	850	850	1680	1680	825	825	420
Turn Bay Length (ft)	195	400	500	400	180	180	495
Base Capacity (vph)	194	926	611	327	1358	743	836
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	1.03	0.54	1.19	0.79	0.34	0.61
Intersection Summary							
Cycle Length: 130							
Actuated Cycle Length: 130							
Offset: 64 (42%); Referenced to phase 2:EBT and 6:WBT, Start of Yellow							
Control Type: Actuated-Coordinated							
Maximum v/c Ratio: 1.19							
Intersection Signal Delay: 56.6							
Intersection LOS: E							
Intersection Capacity Utilization: 87.6%							
Analysis Period (min): 15							
m. User Entered Value							
~ Volume exceeds capacity, queue is theoretically infinite.							
# Queue shown is maximum after two cycles.							
# 95th percentile volume exceeds capacity, queue may be longer.							
m Queue shown is maximum after five cycles.							
m Volume for 95th percentile queue is metered by upstream signal.							



Splits and Phases: 8: Lone Tree Way & Deer Valley Rd

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

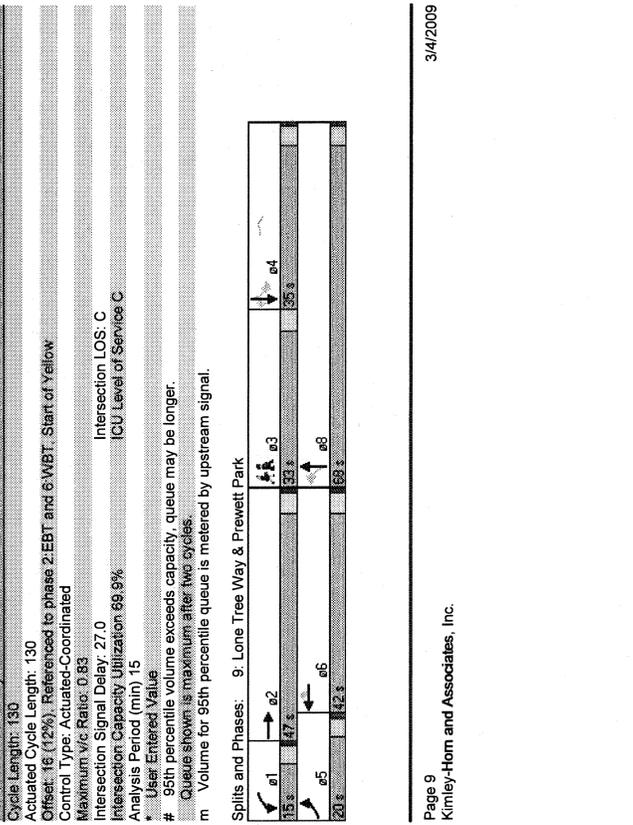
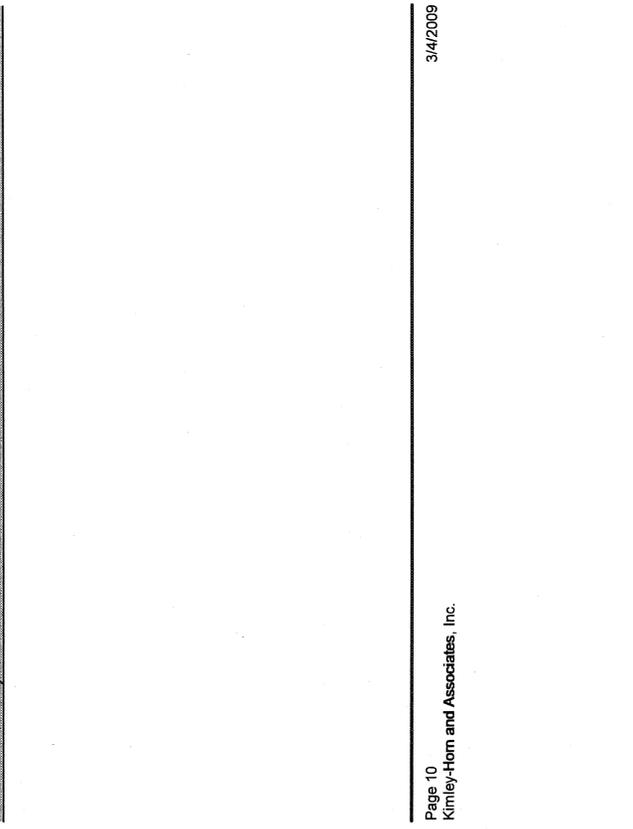
9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

Near-Term Condition
AM Peak

Near-Term Condition
AM Peak

Lane Group	e3		
Lane Configurations			
Total Lost Time (s)			
Satd. Flow (prot)			
Fit Permitted			
Satd. Flow (perm)			
Satd. Flow (RTOR)			
Volume (vph)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	3		
Permitted Phases			
Total Split (s)	33.0		
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Internal Link Dist (ft)			
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			
Intersection Summary			

Lane Group	e3			e4			e5			e6		
Lane Configurations												
Total Lost Time (s)												
Satd. Flow (prot)												
Fit Permitted												
Satd. Flow (perm)												
Satd. Flow (RTOR)												
Volume (vph)												
Lane Group Flow (vph)												
Turn Type												
Protected Phases	5			2			1			6		
Permitted Phases												
Total Split (s)	20.0			47.0			0.0			15.0		
Act Effect Green (s)	17.0			71.0			14.5			68.5		
Actuated g/C Ratio	0.13			0.55			0.11			0.53		
v/c Ratio	0.61			0.79			0.51			0.83		
Control Delay	51.8			27.0			77.2			20.3		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	51.8			27.0			77.2			20.3		
LOS	D			C			E			C		
Approach Delay	28.1			22.9			33.6			38.9		
Approach LOS	C			C			C			D		
Queue Length 50th (ft)	103			638			89			406		
Queue Length 95th (ft)	m109			m4697			m132			#942		
Internal Link Dist (ft)	1580			605			809			819		
Turn Bay Length (ft)	145			1898			205			1866		
Base Capacity (vph)	0			0			0			0		
Starvation Cap Reductn	0			0			0			0		
Spillback Cap Reductn	0			0			0			0		
Storage Cap Reductn	0			0			0			0		
Reduced v/c Ratio	0.55			0.79			0.49			0.83		
Intersection Summary												
Cycle Length	130			130			130			130		
Actuated Cycle Length	130			130			130			130		
Offset	16 (12%)			Referenced to phase 2:EBT and 6:WBT. Start of Yellow								
Control Type	Actuated-Coordinated			Actuated-Coordinated			Actuated-Coordinated			Actuated-Coordinated		
Maximum v/c Ratio	0.83			0.83			0.83			0.83		
Intersection Signal Delay	27.0			27.0			27.0			27.0		
Intersection Capacity Utilization	99.9%			99.9%			99.9%			99.9%		
Analysis Period (min)	15			15			15			15		
#	User Entered Value											
m	95th percentile volume exceeds capacity, queue may be longer.			95th percentile volume exceeds capacity, queue may be longer.			95th percentile volume exceeds capacity, queue may be longer.			95th percentile volume exceeds capacity, queue may be longer.		
	Queue shown is maximum after two cycles.			Queue shown is maximum after two cycles.			Queue shown is maximum after two cycles.			Queue shown is maximum after two cycles.		
	Volume for 95th percentile queue is metered by upstream signal.			Volume for 95th percentile queue is metered by upstream signal.			Volume for 95th percentile queue is metered by upstream signal.			Volume for 95th percentile queue is metered by upstream signal.		



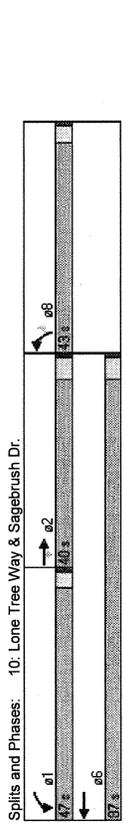
10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

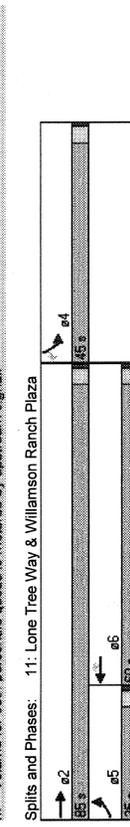
Near-Term Condition
AM Peak

Near-Term Condition
AM Peak

Lane Group	EBT	EBL	WBL	WBT	NBL	NBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	3539	1583	1770	3539	1770	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	3539	1482	1764	3539	1715	1559
Satd. Flow (perm)	1014	219	198	1304	104	78
Satd. Flow (RTOR)	1252	270	230	1516	162	122
Volume (vph)	Prot	1	6	8	Prot	8
Lane Group Flow (vph)	2	2	2	2	2	2
Turn Type	Prot	1	6	8	Prot	8
Protected Phases	2	2	2	2	2	2
Permitted Phases	40.0	40.0	47.0	87.0	43.0	43.0
Total Split (s)	80.3	80.3	23.9	107.3	16.7	16.7
Act Effct Green (s)	0.62	0.62	0.18	0.63	0.13	0.13
Actuated g/C Ratio	0.57	0.29	0.71	0.52	0.71	0.40
v/c Ratio	5.6	1.4	68.7	1.7	70.5	11.8
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	5.6	1.4	68.7	1.7	70.5	11.8
Total Delay	A	A	E	A	E	B
LOS	A	A	E	A	E	B
Approach Delay	5.0	10.1	9.0	30.2	10.1	9.0
Approach LOS	A	B	A	C	B	A
Queue Length 50th (ft)	37	0	164	13	134	0
Queue Length 95th (ft)	97	2	212	33	133	13
Internal Link Dist (ft)	605	605	1855	820	1855	492
Turn Bay Length (ft)	60	600	2920	545	115	564
Base Capacity (vph)	2186	941	599	2920	545	564
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.29	0.38	0.52	0.30	0.22
Intersection Summary						
Cycle Length: 130						
Actuated Cycle Length: 130						
Offset: 40 (31%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.71						
Intersection Signal Delay: 10.9						
Intersection LOS: B						
Intersection Capacity Utilization 56.7%						
ICU Level of Service B						
Analysis Period (min) 15						



Lane Group	EBL	EBT	WBL	WBT	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	3539	1583	1770	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	1766	3539	3539	1504	1770	1550
Satd. Flow (perm)	78	999	1411	56	26	46
Satd. Flow (RTOR)	101	1297	1809	72	37	85
Volume (vph)	Prot	5	2	6	4	4
Lane Group Flow (vph)	5	5	5	5	5	5
Turn Type	Prot	5	2	6	4	4
Protected Phases	5	5	5	5	5	5
Permitted Phases	25.0	85.0	60.0	60.0	45.0	45.0
Total Split (s)	11.7	115.3	99.9	99.9	11.3	11.3
Act Effct Green (s)	0.09	0.89	0.77	0.77	0.09	0.09
Actuated g/C Ratio	0.63	0.41	0.66	0.66	0.24	0.33
v/c Ratio	74.8	5.0	9.4	0.1	55.9	15.6
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	74.8	5.0	9.4	0.1	55.9	15.6
Total Delay	E	A	A	A	E	B
LOS	E	A	A	A	E	B
Approach Delay	10.1	9.0	30.2	10.1	9.0	9.0
Approach LOS	B	A	C	B	A	C
Queue Length 50th (ft)	75	122	7	0	31	0
Queue Length 95th (ft)	100	219	237	m0	45	22
Internal Link Dist (ft)	155	1855	820	115	406	406
Turn Bay Length (ft)	360	3136	2721	1161	572	545
Base Capacity (vph)	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.41	0.66	0.06	0.06	0.12
Intersection Summary						
Cycle Length: 130						
Actuated Cycle Length: 130						
Offset: 115 (88%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.66						
Intersection Signal Delay: 10.1						
Intersection LOS: B						
Intersection Capacity Utilization 61.2%						
ICU Level of Service B						
Analysis Period (min) 15						
m Volume for 95th percentile queue is metered by upstream signal.						



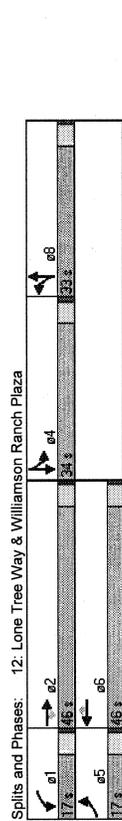
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12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Near-Term Condition
AM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1637	0	3433	1574	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1763	3539	1286	1713	3539	1455	1763	1637	0	3433	1574	0
Satd. Flow (RTOR)	45	899	5	27	1535	41	9	15	62	21	1	21
Volume (vph)	56	1124	6	34	1943	52	11	97	0	55	58	0
Lane Group Flow (vph)	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split	Split	Split	Split	Split
Turn Type	5	2	2	1	6	8	8	8	8	4	4	4
Permitted Phases												
Prohibited Phases												
Total Split (s)	17.0	46.0	46.0	17.0	46.0	46.0	33.0	33.0	0.0	34.0	34.0	0.0
Act Effr Green (s)	11.3	77.8	77.8	11.0	74.8	74.8	21.0	21.0	0.0	13.1	13.1	0.0
Actuated g/C Ratio	0.09	0.60	0.60	0.08	0.58	0.58	0.16	0.16	0.0	0.16	0.16	0.0
v/c Ratio	0.37	0.53	0.01	0.23	0.95	0.06	0.04	0.29	0.0	0.16	0.28	0.0
Control Delay	72.5	13.6	4.4	69.2	32.6	7.4	39.8	14.7	51.3	16.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.5	13.6	4.4	69.2	32.6	7.4	39.8	14.7	51.3	16.0	0.0	0.0
LOS	E	B	A	E	C	A	D	B	D	D	B	B
Approach Delay	16.3			32.5			17.2			33.2		
Approach LOS	B			C			B			C		
Queue Length 50th (ft)	36	504	1	29	478	7	7	13	28	28	2	2
Queue Length 95th (ft)	64	522	m4	m44	#1176	m15	21	45	15	15	0	0
Internal Link Dist (ft)				430			355			440		
Turn Bay Length (ft)	170	80	135	80	200	80	200	200	200	200	417	417
Base Capacity (vph)	194	2117	770	191	2635	840	438	438	819	819	417	417
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.53	0.01	0.18	0.95	0.06	0.03	0.22	0.07	0.14	0.07	0.14
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	97 (75%)	Referenced to phase 2 EBT and 6 WBT	Start of Yellow									
Control Type	Actuated-Coordinated											
Intersection LOS	C											
Maximum v/c Ratio	0.95											
Intersection Signal Delay	26.5											
Intersection Capacity Utilization	57.9%											
Analysis Period (min)	15											
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
m Volume for 95th percentile queue is metered by upstream signal.												



Splits and Phases: 12: Lone Tree Way & Williamson Ranch Plaza

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13: Lone Tree Way & Wal-Mart Driveway
Antioch Walmart Expansion

Near-Term Condition
AM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	1023	1544	85	0	5	0	0	5
Peak Hour Factor	0.82	0.82	0.85	0.85	0.42	0.42	0	0	0
Hourly flow rate (vph)	0	1248	1816	76	0	12	0	0	12
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type							None		
Median storage (veh)									
Upstream signal (ft)				510	500				
pX, platoon unblocked				0.78					0.88
vC, conflicting volume				1893					2440
vC1, stage 1 conf vol									605
vC2, stage 2 conf vol									0
vCU, unblocked vol				1582					1577
IC, single (s)				4.1					6.8
IC, 2 stage (s)				2.2					3.5
IF (s)				100					100
p0 queue free %				321					88
dm capacity (veh/h)									846
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	SB 1	SB 1	SB 1
Volume Total	624	624	605	605	605	605	76	12	0
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	76	12	0
cSH	1700	1700	1700	1700	1700	1700	1700	846	846
Volume to Capacity	0.37	0.37	0.36	0.36	0.36	0.36	0.04	0.04	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS	A	A	A	A	A	A	A	A	A
Approach LOS	A	A	A	A	A	A	A	A	A
Intersection Summary									
Average Delay							0.0		
Intersection Capacity Utilization							39.8%		
Analysis Period (min)							15		
ICU Level of Service							A		



Splits and Phases: 12: Lone Tree Way & Williamson Ranch Plaza

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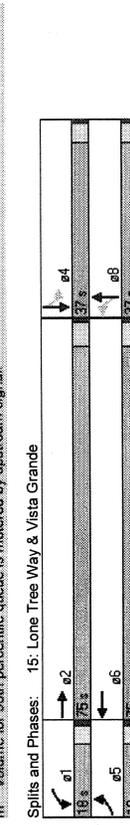
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14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	4953	0	1770	5085	1583	1770	3297	0	1900	3539	1583
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Fit Permitted	1762	4953	0	1756	5085	1515	1760	3297	0	3396	3539	1554
Satd. Flow (perm)	218	694	107	47	1144	220	125	72	47	313	99	325
Satd. Flow (RTOR)	248	911	0	52	1257	220	158	149	0	391	124	408
Volume (vph)	20	916	36	76	1310	40	60	14	156	27	16	43
Lane Group Flow (vph)	23	1107	0	81	1437	0	76	215	0	57	125	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	6	8	8	8	4	4	4
Permitted Phases	18.0	75.0	0.0	18.0	75.0	0.0	37.0	37.0	0.0	37.0	37.0	0.0
Total Split (s)	9.7	94.1	0.0	13.9	102.8	0.0	15.5	15.5	0.0	15.5	15.5	0.0
Act Effct Green (s)	0.07	0.72	0.0	0.11	0.79	0.0	0.12	0.12	0.0	0.12	0.12	0.0
Actuated g/C Ratio	0.17	0.30	0.0	0.43	0.36	0.0	0.58	0.59	0.0	0.58	0.45	0.0
v/c Ratio	0.16	0.28	0.0	0.43	0.36	0.0	0.58	0.58	0.0	0.58	0.45	0.0
Control Delay	51.6	12.8	0.0	57.9	5.3	0.0	69.8	15.8	0.0	69.8	21.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	12.8	0.0	57.9	5.3	0.0	69.8	15.8	0.0	69.8	21.7	0.0
LOS	D	B	B	E	A	A	E	B	E	B	E	C
Approach Delay	13.4	8.1	0.0	13.4	8.1	0.0	29.9	29.9	0.0	29.9	39.6	0.0
Approach LOS	D	B	B	E	A	A	E	B	E	B	E	C
Queue Length 50th (ft)	16	234	0	70	101	0	62	14	46	26	26	0
Queue Length 95th (ft)	m37	247	0	128	126	0	94	54	43	43	9	0
Internal Link Dist (ft)	200	668	0	200	1050	0	130	786	100	614	614	0
Turn Bay Length (ft)	200	3657	0	200	4005	0	288	561	100	501	501	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.30	0.0	0.38	0.36	0.0	0.26	0.38	0.27	0.26	0.25	0.0

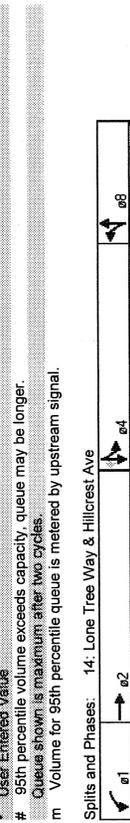
Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 55 (42%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 13.8
 Intersection Capacity Utilization: 58.6%
 Analysis Period (min): 15
 ICU Level of Service: B
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 14: Lone Tree Way & Hillcrest Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	4953	0	1770	5085	1583	1770	3297	0	1900	3539	1583
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Fit Permitted	1762	4953	0	1756	5085	1515	1760	3297	0	3396	3539	1554
Satd. Flow (perm)	218	694	107	47	1144	220	125	72	47	313	99	325
Satd. Flow (RTOR)	248	911	0	52	1257	220	158	149	0	391	124	408
Volume (vph)	20	916	36	76	1310	40	60	14	156	27	16	43
Lane Group Flow (vph)	23	1107	0	81	1437	0	76	215	0	57	125	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	6	8	8	8	4	4	4
Permitted Phases	29.0	47.0	0.0	18.0	36.0	36.0	23.0	23.0	0.0	42.0	42.0	42.0
Total Split (s)	24.1	56.6	0.0	10.5	41.0	41.0	18.6	18.6	0.0	34.3	34.3	34.3
Act Effct Green (s)	0.19	0.44	0.0	0.08	0.32	0.32	0.14	0.14	0.0	0.26	0.26	0.26
Actuated g/C Ratio	0.76	0.42	0.0	0.36	0.78	0.35	0.62	0.29	0.0	0.78	0.78	0.58
v/c Ratio	0.62	0.25	0.0	0.64	0.37	0.33	0.63	0.30	0.0	0.63	0.63	0.45
Control Delay	86.2	25.3	0.0	86.2	25.3	25.3	86.2	30.7	0.0	86.2	35.5	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.2	25.3	0.0	86.2	25.3	25.3	86.2	30.7	0.0	86.2	35.5	7.9
LOS	F	C	C	E	D	A	E	C	E	D	A	A
Approach Delay	38.4	33.9	0.0	33.9	33.9	47.4	47.4	31.7	0.0	31.7	31.7	0.0
Approach LOS	D	C	C	E	D	A	E	C	E	D	A	A
Queue Length 50th (ft)	222	71	0	37	380	29	123	35	154	41	11	11
Queue Length 95th (ft)	304	284	0	m75	491	101	173	57	179	57	47	47
Internal Link Dist (ft)	420	420	0	420	690	730	195	2575	400	216	216	0
Turn Bay Length (ft)	620	2171	0	210	1605	629	273	560	570	1082	738	290
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.42	0.0	0.25	0.78	0.35	0.57	0.27	0.69	0.42	0.55	0.0

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 76 (60%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 35.8
 Intersection Capacity Utilization: 63.2%
 Analysis Period (min): 15
 ICU Level of Service: B
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 15: Lone Tree Way & Vista Grande

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	4953	0	1770	5085	1583	1770	3297	0	1900	3539	1583
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Fit Permitted	1762	4953	0	1756	5085	1515	1760	3297	0	3396	3539	1554
Satd. Flow (perm)	218	694	107	47	1144	220	125	72	47	313	99	325
Satd. Flow (RTOR)	248	911	0	52	1257	220	158	149	0	391	124	408
Volume (vph)	20	916	36	76	1310	40	60	14	156	27	16	43
Lane Group Flow (vph)	23	1107	0	81	1437	0	76	215	0	57	125	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	6	8	8	8	4	4	4
Permitted Phases	29.0	47.0	0.0	18.0	36.0	36.0	23.0	23.0	0.0	42.0	42.0	42.0
Total Split (s)	24.1	56.6	0.0	10.5	41.0	41.0	18.6	18.6	0.0	34.3	34.3	34.3
Act Effct Green (s)	0.19	0.44	0.0	0.08	0.32	0.32	0.14	0.14	0.0	0.26	0.26	0.26
Actuated g/C Ratio	0.76	0.42	0.0	0.36	0.78	0.35	0.62	0.29	0.0	0.78	0.78	0.58
v/c Ratio	0.62	0.25	0.0	0.64	0.37	0.33	0.63	0.30	0.0	0.63	0.63	0.45
Control Delay	86.2	25.3	0.0	86.2	25.3	25.3	86.2	30.7	0.0	86.2	35.5	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.2	25.3	0.0	86.2	25.3	25.3	86.2	30.7	0.0	86.2	35.5	7.9
LOS	F	C	C	E	D	A	E	C	E	D	A	A
Approach Delay	38.4	33.9	0.0	33.9	33.9	47.4	47.4	31.7	0.0	31.7	31.7	0.0
Approach LOS	D	C	C	E	D	A	E	C	E	D	A	A
Queue Length 50th (ft)	222	71	0	37	380	29	123	35	154	41	11	11
Queue Length 95th (ft)	304	284	0	m75	491	101	173	57	179	57	47	47
Internal Link Dist (ft)	420	420	0	420	690	730	195	2575	400	216	216	0
Turn Bay Length (ft)	620	2171	0	210	1605	629	273	560	570	1082	738	290
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.42	0.0	0.25	0.78	0.35	0.57	0.27	0.69	0.42	0.55	0.0

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 76 (60%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 35.8
 Intersection Capacity Utilization: 63.2%
 Analysis Period (min): 15
 ICU Level of Service: B
 m Volume for 95th percentile queue is metered by upstream signal.

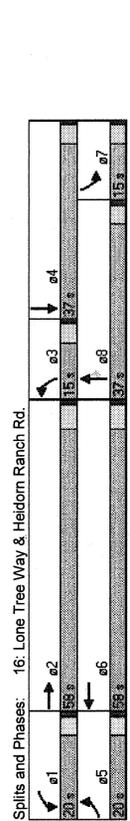


16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Near-Term Condition
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5050	0	1770	5079	0	3433	1863	1583	1770	1615	0
Flt Permitted	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0
Satd. Flow (perm)	1769	5050	0	1769	5079	0	3433	1863	1561	1765	1615	0
Satd. Flow (RTOR)	6	1	1	1	1	1	1	1	1	1	1	1
Volume (vph)	4	998	43	65	1339	11	33	1	70	11	2	19
Lane Group Flow (vph)	4	1144	0	73	1516	0	77	2	163	14	27	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Permitted Phases	5	2	1	6	3	6	8	7	4	4	4	4
Prohibited Phases												
Total Spill (s)	20.0	58.0	0.0	20.0	58.0	0.0	15.0	37.0	37.0	15.0	37.0	0.0
Act Effic Green (s)	8.4	86.2	13.2	99.6	10.5	16.7	16.7	9.0	12.8	9.0	12.8	0.0
Actuated g/C Ratio	0.06	0.68	0.10	0.77	0.08	0.13	0.13	0.07	0.10	0.07	0.10	0.0
v/c Ratio	0.03	0.33	0.41	0.39	0.28	0.01	0.48	0.11	0.15	0.11	0.15	0.0
Control Delay	75.0	13.3	75.0	1.7	58.3	43.0	11.1	58.2	19.8	11.1	58.2	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.0	13.3	75.0	1.7	58.3	43.0	11.1	58.2	19.8	11.1	58.2	19.8
LOS	E	B	E	A	E	A	E	D	B	E	B	B
Approach	B	B	A	A	A	A	A	A	A	A	A	A
Queue Length 50th (ft)	4	88	66	25	31	1	0	11	0	11	2	0
Queue Length 95th (ft)	m11	409	107	52	26	4	0	29	21	29	21	0
Internal Link Dist (ft)	1050	900	900	900	972	200	50	316	200	50	316	200
Turn Bay Length (ft)	185	400	400	400	200	200	50	316	200	50	316	200
Base Capacity (vph)	231	3429	232	3892	317	487	529	163	440	163	440	440
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.33	0.31	0.39	0.24	0.00	0.31	0.09	0.06	0.31	0.09	0.06

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 65 (42%) Referenced to phase 2 EBT and 6 WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.48
 Intersection Signal Delay: 10.4
 Intersection Capacity Utilization: 46.3%
 Analysis Period (min): 15
 ICU Level of Service: A
 m. Volume for 95th percentile queue is metered by upstream signal.



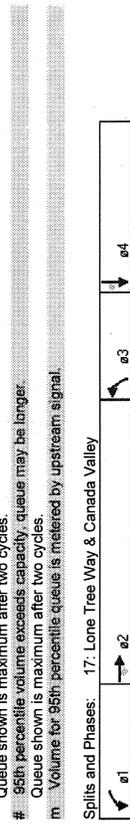
Splits and Phases: 16: Lone Tree Way & Heidorn Ranch Rd.

17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

Near-Term Condition
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	1623	1504	1770	1863	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3432	5085	1557	3431	5085	1558	3433	1623	1482	1767	1863	1563
Satd. Flow (RTOR)	71	285	27	47	285	27	47	285	27	47	285	27
Volume (vph)	61	1003	67	178	1283	254	44	19	55	384	45	118
Lane Group Flow (vph)	65	1067	71	200	1442	285	59	53	47	486	57	149
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Permitted Phases	5	2	1	6	3	6	8	7	4	4	4	4
Prohibited Phases												
Total Spill (s)	20.0	53.0	58.0	25.0	58.0	58.0	20.0	32.0	32.0	20.0	32.0	32.0
Act Effic Green (s)	14.8	80.0	80.0	12.5	79.6	79.6	7.6	10.1	10.1	17.0	19.6	19.6
Actuated g/C Ratio	0.17	0.62	0.62	0.10	0.61	0.61	0.06	0.06	0.06	0.13	0.16	0.15
v/c Ratio	0.11	0.34	0.07	0.60	0.46	0.27	0.29	0.35	0.30	0.20	0.20	0.41
Control Delay	36.8	5.0	0.3	73.0	8.2	0.6	62.0	36.5	18.2	538.9	48.4	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	5.0	0.3	73.0	8.2	0.6	62.0	36.5	18.2	538.9	48.4	10.1
LOS	D	A	A	E	A	A	E	D	B	F	D	B
Approach	D	A	A	E	A	A	E	D	B	F	D	B
Queue Length 50th (ft)	28	24	0	86	108	0	25	22	0	~648	44	0
Queue Length 95th (ft)	41	43	0	m114	m199	m0	39	45	23	#734	66	35
Internal Link Dist (ft)	900	900	900	630	400	350	150	542	383	367	231	420
Turn Bay Length (ft)	320	449	3131	985	581	3112	1064	449	383	367	231	420
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.34	0.07	0.34	0.46	0.27	0.13	0.14	0.13	2.10	0.14	0.32

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 37 (28%) Referenced to phase 2 EBT and 6 WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 3.10
 Intersection Signal Delay: 77.1
 Intersection Capacity Utilization: 66.1%
 Analysis Period (min): 15
 ICU Level of Service: C
 n. Volume exceeds capacity, queue is theoretically infinite
 o. Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 p. Queue shown is maximum after two cycles.
 m. Volume for 95th percentile queue is metered by upstream signal.



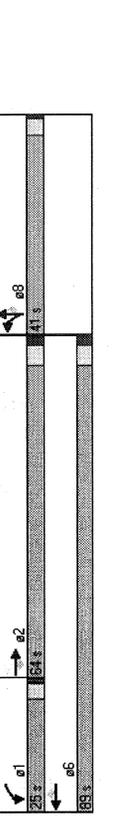
Splits and Phases: 17: Lone Tree Way & Canada Valley

18: Lone Tree Way & SR 4 Bypass SB Off-ramp
Antioch Walmart Expansion

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Flt Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (RTOR)	0	958	469	179	1280	0	0	0	335	6	449	0
Volume (vph)	0	1064	521	190	1362	0	0	0	197	204	528	0
Lane Group Flow (vph)	0	1064	521	190	1362	0	0	0	197	204	528	0
Turn Type	2	1	6	2	1	6	2	1	6	2	1	6
Permitted Phases	2	1	6	2	1	6	2	1	6	2	1	6
Permitted Phases	2	1	6	2	1	6	2	1	6	2	1	6
Total Split (s)	0.0	59.0	59.0	23.0	82.0	0.0	0.0	0.0	48.0	48.0	48.0	0.0
Act Effct Green (s)	0.0	65.2	65.2	12.9	81.1	0.0	0.0	0.0	42.9	42.9	42.9	0.0
Actuated g/C Ratio	0.00	0.50	0.50	0.10	0.62	0.00	0.00	0.00	0.33	0.33	0.33	0.00
v/c Ratio	0.00	0.42	0.42	0.50	0.56	0.00	0.00	0.00	0.35	0.37	0.35	0.00
Control Delay	0.00	26.8	26.8	7.1	12.3	0.00	0.00	0.00	34.5	34.5	34.5	0.00
Queue Delay	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.00
Queue Delay	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.00
Total Delay	0.00	26.8	26.8	7.1	12.3	0.00	0.00	0.00	34.5	34.5	34.5	0.00
LOS	C	A	A	E	B	C	A	A	C	C	C	E
Approach Delay	20.3					18.4						51.8
Approach LOS	C					B						D
Queue Length 50th (ft)	308	127	80	252		128			128	133	387	
Queue Length 95th (ft)	m136	m83	m112	231		186			186	192	4540	
Internal Link Dist (ft)	775			750		536					616	
Turn Bay Length (ft)	315	310				280						
Base Capacity (vph)	2550	1044	528	3173		582			584	584	583	
Starvation Cap Reductn	0	0	0	0		0			0	0	0	
Spillback Cap Reductn	0	0	0	0		0			0	0	0	
Storage Cap Reductn	0	0	0	0		0			0	0	0	
Reduced v/c Ratio	0.42	0.50	0.36	0.43		0.34			0.35	0.35	0.91	

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 72 (55%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.95
 Intersection Signal Delay: 26.8
 Intersection Capacity Utilization: 59.2%
 Analysis Period (min): 15
 Intersection LOS: C
 ICU Level of Service: B

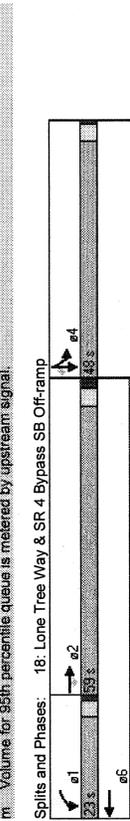


Splits and Phases: 18: Lone Tree Way & SR 4 Bypass SB Off-ramp

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Flt Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (RTOR)	0	905	352	8	977	298	464	29	139	0	0	0
Volume (vph)	0	1017	396	9	1066	331	270	284	156	0	0	0
Lane Group Flow (vph)	0	1017	396	9	1066	331	270	284	156	0	0	0
Turn Type	2	1	6	2	1	6	2	1	6	2	1	6
Permitted Phases	2	1	6	2	1	6	2	1	6	2	1	6
Permitted Phases	2	1	6	2	1	6	2	1	6	2	1	6
Total Split (s)	0.0	64.0	64.0	25.0	89.0	89.0	41.0	41.0	41.0	0.0	0.0	0.0
Act Effct Green (s)	0.0	95.6	95.6	7.0	97.6	97.6	26.4	26.4	26.4	0.0	0.0	0.0
Actuated g/C Ratio	0.00	0.74	0.74	0.05	0.75	0.75	0.20	0.20	0.20	0.00	0.00	0.00
v/c Ratio	0.00	0.27	0.32	0.05	0.28	0.27	0.79	0.82	0.35	0.00	0.00	0.00
Control Delay	0.00	7.3	2.3	59.0	5.9	1.2	65.0	68.2	7.8	0.00	0.00	0.00
Queue Delay	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00
Queue Delay	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00
Total Delay	0.00	7.3	2.3	59.0	5.9	1.2	65.0	68.2	7.8	0.00	0.00	0.00
LOS	A	A	A	E	A	A	E	E	A	E	E	A
Approach Delay	6.9					5.2						53.7
Approach LOS	A					A						D
Queue Length 50th (ft)	76	25	3	91	0	230	244	0	0	0	0	0
Queue Length 95th (ft)	98	40	13	148	29	303	318	51	51	0	0	0
Internal Link Dist (ft)	750			640		935			1156			
Turn Bay Length (ft)	240	280				250	1000					
Base Capacity (vph)	3739	1264	581	3817	1242	491	485	573	573	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.32	0.02	0.28	0.27	0.55	0.57	0.27	0.27	0.00	0.00	0.00

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 88 (68%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 15.2
 Intersection Capacity Utilization: 45.9%
 Analysis Period (min): 15
 Intersection LOS: B
 ICU Level of Service: A



Splits and Phases: 19: Lone Tree Way & SR 4 By-pass NB On-ramp

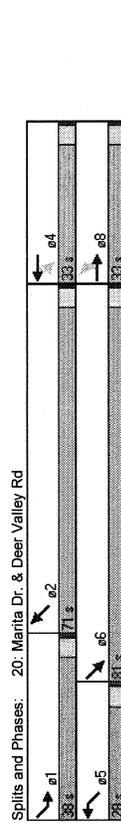
20: Marita Dr. & Deer Valley Rd
Antioch Wal-Mart Expansion

21: Prewett Ranch Dr. & Hillcrest Ave
Antioch Wal-Mart Expansion

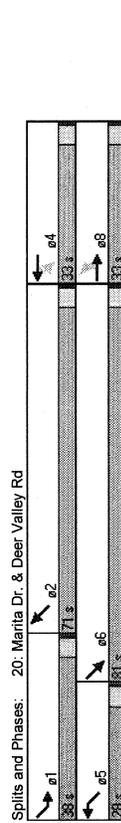
Near-Term Condition
AM Peak

Near-Term Condition
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (\$)	1770	1619	0	1770	1581	0	1770	3521	0	1770	3525	0
Satd. Flow (prot)	0.744	0.735	0	0.960	0.960	0	0.960	0.960	0	0.960	0.960	0
Flt Permitted	1367	1619	0	1347	1581	0	1762	3521	0	1760	3525	0
Satd. Flow (perm)	25	18	0	18	18	0	3	3	0	2	2	0
Satd. Flow (RTOR)	29	8	21	1	6	137	988	24	58	981	23	0
Volume (vph)	34	34	0	3	21	0	149	1100	0	72	1239	0
Lane Group Flow (vph)	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	8	4	4	4	4	4	6	6	6	6	6	6
Protected Phases	4	4	4	4	4	4	6	6	6	6	6	6
Permitted Phases	33.0	33.0	0.0	33.0	33.0	0.0	38.0	81.0	0.0	28.0	71.0	0.0
Total Split (\$)	16.6	16.6	0.0	16.6	16.6	0.0	16.6	85.7	0.0	11.9	78.0	0.0
Act Effct Green (s)	0.14	0.14	0.0	0.14	0.14	0.0	0.14	0.73	0.0	0.10	0.66	0.0
Actuated g/C Ratio	0.18	0.14	0.0	0.02	0.09	0.0	0.60	0.43	0.0	0.41	0.53	0.0
v/c Ratio	44.8	20.7	0.0	41.0	19.4	0.0	57.5	10.7	0.0	58.1	14.8	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	44.8	20.7	0.0	41.0	19.4	0.0	57.5	10.7	0.0	58.1	14.8	0.0
Total Delay	D	C	C	D	B	B	E	B	B	E	B	B
LOS	8	4	4	4	4	4	6	6	6	6	6	6
Approach Delay	32.8	22.1	0.0	22.1	22.1	0.0	16.3	16.3	0.0	17.2	17.2	0.0
Approach LOS	C	C	C	C	C	C	B	B	B	B	B	B
Queue Length 50th (ft)	23	6	2	2	2	2	98	145	48	205	48	205
Queue Length 95th (ft)	51	32	4	4	4	4	188	351	97	405	97	405
Internal Link Dist (ft)	345	345	0	427	427	0	825	825	0	845	845	0
Turn Bay Length (ft)	40	100	100	100	100	100	125	457	2560	335	2334	0
Base Capacity (vph)	309	386	305	372	372	305	457	2560	335	2334	335	2334
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.09	0.01	0.01	0.06	0.01	0.33	0.43	0.21	0.53	0.21	0.53
Intersection LOS: B												
ICU Level of Service B												
Intersection Capacity Utilization 56.4%												
Analysis Period (min) 15												



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (\$)	1770	1857	0	1863	1805	0	1770	3539	0	1770	3291	0
Satd. Flow (prot)	0.698	0.698	0	0.960	0.960	0	0.960	0.960	0	0.960	0.960	0
Flt Permitted	1300	1857	0	1863	1805	0	1770	3539	0	1770	3291	0
Satd. Flow (perm)	118	40	1	0	39	10	1	139	0	13	127	111
Satd. Flow (RTOR)	139	48	0	0	72	0	1	154	0	16	302	0
Volume (vph)	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	4	4	4	8	8	8	5	2	1	6	6	6
Turn Type	4	4	4	8	8	8	5	2	1	6	6	6
Protected Phases	33.0	33.0	0.0	33.0	33.0	0.0	26.0	55.0	0.0	26.0	55.0	0.0
Total Split (\$)	14.4	14.4	0.0	14.0	14.0	0.0	8.7	27.1	0.0	9.1	27.3	0.0
Act Effct Green (s)	0.29	0.29	0.0	0.28	0.28	0.0	0.16	0.68	0.0	0.17	0.69	0.0
Actuated g/C Ratio	0.38	0.29	0.0	0.14	0.14	0.0	0.06	0.07	0.0	0.05	0.15	0.0
v/c Ratio	9.8	6.9	0.0	6.3	7.2	0.0	13.0	7.2	0.0	12.9	4.5	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	9.8	6.9	0.0	6.3	7.2	0.0	13.0	7.2	0.0	12.9	4.5	0.0
Total Delay	A	A	A	A	A	A	B	A	A	B	A	A
LOS	9.1	9.1	9.1	6.3	6.3	6.3	7.3	7.3	7.3	4.9	4.9	4.9
Approach Delay	A	A	A	A	A	A	A	A	A	A	A	A
Approach LOS	8	3	3	3	3	3	5	5	5	1	5	5
Queue Length 50th (ft)	49	20	20	19	19	19	32	32	32	12	30	30
Queue Length 95th (ft)	955	955	955	816	816	816	404	404	404	115	2375	2375
Internal Link Dist (ft)	100	955	955	816	816	816	85	85	85	115	2375	2375
Turn Bay Length (ft)	680	972	972	950	950	950	691	2953	691	593	2775	2775
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.05	0.00	0.08	0.08	0.00	0.05	0.05	0.02	0.11	0.11	0.11
Intersection LOS: A												
ICU Level of Service A												
Intersection Capacity Utilization 30.7%												
Analysis Period (min) 15												



Antioch Walmart Expansion
Near Term PM

Scenario Report

Scenario: Near Term PM
 Command: Near Term PM
 Volume: Near Term PM
 Geometry: Near Term
 Impact Fee: Default Impact Fee
 Trip Generation: Approved PM
 Trip Distribution: Near Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Antioch Walmart Expansion
Near Term PM

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh	V/ C	Future Del/ LOS Veh	Change in
# 1 Deer Valley Rd/ Country Hills	A xxxxx	0.376	A xxxxx 0.468	+ 0.091 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx	0.219	A xxxxx 0.267	+ 0.048 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx	0.267	A xxxxx 0.306	+ 0.039 V/C
# 4 Hillcrest Avenue/Driveway	B 11.5	0.012	B 12.4 0.014	+ 0.888 D/V
# 5 Hillcrest Avenue/South Drivewa	B 10.2	0.152	B 10.5 0.160	+ 0.319 D/V
# 6 Lone Tree Way/Mokelumne Dr	A xxxxx	0.500	A xxxxx 0.582	+ 0.083 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx	0.419	A xxxxx 0.495	+ 0.075 V/C
# 8 Lone Tree Way/Deer Valley Rd	A xxxxx	0.543	D xxxxx 0.806	+ 0.264 V/C
# 9 Lone Tree Way/Deer Valley HS	A xxxxx	0.373	A xxxxx 0.488	+ 0.115 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx	0.391	A xxxxx 0.511	+ 0.120 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx	0.352	A xxxxx 0.504	+ 0.152 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	A xxxxx	0.385	A xxxxx 0.528	+ 0.143 V/C
# 13 Lone Tree Way/Driveway	A 9.9	0.048	B 11.0 0.058	+ 1.077 D/V
# 14 Lone Tree Way/Hillcrest Avenue	A xxxxx	0.400	A xxxxx 0.540	+ 0.139 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx	0.424	A xxxxx 0.554	+ 0.130 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx	0.329	A xxxxx 0.454	+ 0.125 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx	0.523	B xxxxx 0.688	+ 0.166 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	A xxxxx	0.579	D xxxxx 0.841	+ 0.261 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx	0.451	A xxxxx 0.570	+ 0.119 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx	0.258	A xxxxx 0.394	+ 0.136 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A xxxxx	0.159	A xxxxx 0.167	+ 0.009 V/C

Antioch Walmart Expansion
Near Term PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #17 Lone Tree Way/Canada Valley Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.688
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: B

Street Name: Canada Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 1 1 1 0 1 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:

Base Vol: 84 55 173 175 56 22 54 1354 55 329 942 253
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 84 55 173 175 56 22 54 1354 55 329 942 253
Added Vol: 20 16 13 133 10 57 101 360 12 8 369 270
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 104 71 186 308 66 79 155 1714 67 337 1311 523
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 104 71 186 308 66 79 155 1714 67 337 1311 523
Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 104 71 186 308 66 79 155 1714 67 337 1311 523
RTOR Reduce: 0 0 185 0 0 79 0 0 0 57 0 0 308
RTOR Vol: 104 71 308 66 0 155 1714 10 337 1311 215
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 104 71 308 66 0 155 1714 10 337 1311 215

Saturation Flow Module:

Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 0.91 1.00 1.00 1.00 1.00 0.91 1.00 1.00 0.91 1.00 1.00
Lanes: 2.00 1.00 1.00 1.00 1.00 1.00 1.00 2.00 3.00 1.00 2.00 3.00 1.00
Final Sat.: 3000 1650 1500 1650 1650 1650 1650 3000 4950 1650 3000 4950 1650

Capacity Analysis Module:

Vol/Sat: 0.03 0.04 0.00 0.19 0.04 0.00 0.05 0.35 0.01 0.11 0.26 0.13
Crit Volume: 71 308 66 571 169
Crit Moves: ****

Antioch Walmart Expansion
Near Term PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #18 Lone Tree Way/SB SR-4 Bypass

Cycle (sec): 100 Critical Vol./Cap.(X): 0.841
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 117 Level Of Service: D

Street Name: SB SR-4 Bypass Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 0 1 1 0 0 1 0 0 3 0 1 2 0 3 0 0

Volume Module:

Base Vol: 0 0 416 10 361 0 1169 541 98 1153 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 416 10 361 0 1169 541 98 1153 0
Added Vol: 0 0 90 0 230 0 402 105 175 416 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 506 10 591 0 1571 646 273 1569 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 506 10 591 0 1571 646 273 1569 0
Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 506 10 591 0 1571 646 273 1569 0
RTOR Reduce: 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 0 0 506 10 591 0 1571 646 273 1569 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 506 10 591 0 1571 646 273 1569 0

Saturation Flow Module:

Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.96 0.04 1.00 0.00 3.00 1.00 2.00 3.00 0.00
Final Sat.: 0 0 2942 64 1650 0 4950 1650 3000 4950 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.17 0.16 0.36 0.00 0.32 0.39 0.09 0.32 0.00
Crit Volume: 0 591 646 137
Crit Moves: ****

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

Intersection #21 Hillcrest Ave/Prewett Ranch Dr
 Hillcrest Ave East Bound West Bound
 Prewett Dr

Cycle (sec): 100 Critical Vol./Cap. (X): 0.167
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 22 Level Of Service: A

Control:	Protected	Include	Protected	Include	Permitted	Include	Permitted	Include
Min. Green:	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0

Volume Module:	Base Vol:	Growth Adj:	Initial Bse:	Added Vol:	PasserByVol:	Initial Fut:	User Adj:	PHF Adj:	PHF Volume:	Reduced Vol:	Reduced Vol:	RTOR Vol:	PCE Adj:	MLF Adj:	FinalVolume:
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	0	137	135	23	0	0	11	3	0	0	0	11	3	3
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Saturation Flow Module:	Sat/Lane:	Adjustment:	Lanes:	Final Sat:
	1720	1720	1720	1720
	1.00	1.00	1.00	1.00
	1.00	2.00	0.00	1.00
	1720	3440	0	1720
	1720	1720	1720	1720

Capacity Analysis Module:
 Vol/Sat: 0.00 0.02 0.00 0.01 0.06 0.08 0.08 0.01 0.00 0.00 0.01 0.01
 Crit Volume: 0 139 135
 Crit Moves: ****

2: Laurel Rd. & Hillcrest Ave
Antioch Walmart Expansion

1: Country Hills Dr. & Deer Valley Rd.
Antioch Walmart Expansion

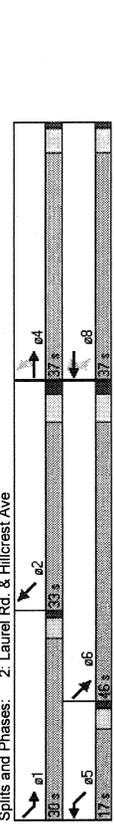
Near-Term Condition
PM Peak

Near-Term Condition
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1631	0	1770	1863	1583	1770	3497	0	1770	3467	0
Satd. Flow (prot)	0.950	0.950	0	0.726	0.950	0.950	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1396	1631	0	1350	1863	1563	1768	3497	0	1770	3467	0
Satd. Flow (perm)	36	36	0	201	201	201	11	11	0	15	15	0
Satd. Flow (RTOR)	17	7	23	46	9	159	187	586	50	29	433	58
Volume (vph)	217	47	0	58	11	201	191	649	0	32	545	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	4	4	8	8	1	6	5	2				
Protected Phases												
Permitted Phases	4	37.0	0.0	37.0	37.0	30.0	46.0	0.0	17.0	33.0	0.0	0.0
Total Split (s)	13.9	13.9	0.0	13.9	13.9	16.5	72.8	0.0	8.2	60.7	0.0	0.0
Act Effect Green (s)	0.14	0.14	0.0	0.14	0.14	0.16	0.73	0.0	0.08	0.61	0.0	0.0
Actuated g/C Ratio	0.14	0.18	0.0	0.31	0.04	0.52	0.25	0.0	0.22	0.26	0.0	0.0
v/c Ratio	35.5	15.8	0.0	40.0	32.4	38.8	48.4	6.8	45.8	11.5	0.0	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	35.5	15.8	0.0	40.0	32.4	38.8	48.4	6.8	45.8	11.5	0.0	0.0
Total Delay	D	B	D	D	C	A	D	A	D	D	B	B
LOS	D	B	D	D	C	A	D	A	D	D	B	B
Approach Delay	23.0			17.0			16.5				13.4	
Approach LOS	C			B			B				B	
Queue Length 50th (ft)	16	6	0	35	6	0	115	63	19	70	0	0
Queue Length 95th (ft)	24	18	0	52	16	0	175	159	48	167	0	0
Internal Link Dist (ft)	75	468	0	115	175	155	140	205	150	205	0	0
Turn Bay Length (ft)	475	578	0	469	633	684	478	2547	248	2109	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reducn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reducn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reducn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.08	0.0	0.13	0.02	0.30	0.40	0.25	0.13	0.26	0.0	0.0

Intersection Summary
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 21 (21%), Referenced to phase 2:NWT and 6:SET, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 15.8
 Intersection Capacity Utilization: 50.8%
 Analysis Period (min): 15
 Intersection LOS: B
 ICU Level of Service A

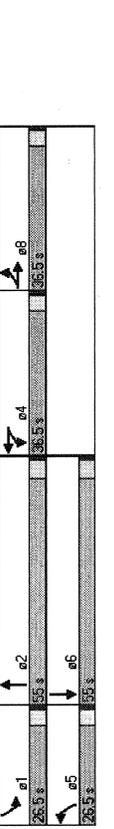
Splits and Phases: 2: Laurel Rd. & Hillcrest Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1851	0	1770	1704	0	1770	3433	0	1770	3398	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1766	1851	0	1770	1704	0	1759	3433	0	1744	3398	0
Satd. Flow (perm)	1	1	0	31	13	0	24	24	0	24	24	0
Satd. Flow (RTOR)	171	101	4	53	76	80	6	653	106	98	448	122
Volume (vph)	211	130	0	58	172	0	6	816	0	105	613	0
Lane Group Flow (vph)	Split	Split	Split	Split	Split	Split	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	8	8	4	4	4	4	5	2	1	6	6	6
Protected Phases												
Permitted Phases	36.5	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0	0.0
Total Split (s)	17.4	17.4	0.0	15.5	15.5	0.0	8.0	44.1	0.0	12.5	55.4	0.0
Act Effect Green (s)	0.18	0.18	0.0	0.16	0.16	0.0	0.08	0.48	0.0	0.13	0.80	0.0
Actuated g/C Ratio	0.65	0.38	0.0	0.20	0.56	0.0	0.04	0.50	0.0	0.44	0.30	0.0
v/c Ratio	46.7	39.5	0.0	40.0	39.1	0.0	56.2	26.8	0.0	48.6	15.4	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	46.7	39.5	0.0	40.0	39.1	0.0	56.2	26.8	0.0	48.6	15.4	0.0
Total Delay	D	D	D	D	D	D	E	C	D	D	B	B
LOS	D	D	D	D	D	D	E	C	D	D	B	B
Approach Delay	44.0			39.3			27.0	20.4		20.4		
Approach LOS	D			D			C	C		C		
Queue Length 50th (ft)	100	58	0	26	67	0	3	184	0	50	97	0
Queue Length 95th (ft)	245	155	0	88	196	0	22	433	0	160	264	0
Internal Link Dist (ft)	145	308	0	120	274	0	110	880	0	175	220	0
Turn Bay Length (ft)	560	587	0	561	552	0	378	1837	0	418	2145	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reducn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reducn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reducn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.22	0.0	0.11	0.31	0.0	0.02	0.42	0.0	0.25	0.29	0.0

Intersection Summary
 Cycle Length: 154.5
 Actuated Cycle Length: 92.3
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 28.8
 Intersection Capacity Utilization: 60.0%
 Analysis Period (min): 15
 Intersection LOS: C
 ICU Level of Service B

Splits and Phases: 1: Country Hills Dr. & Deer Valley Rd.



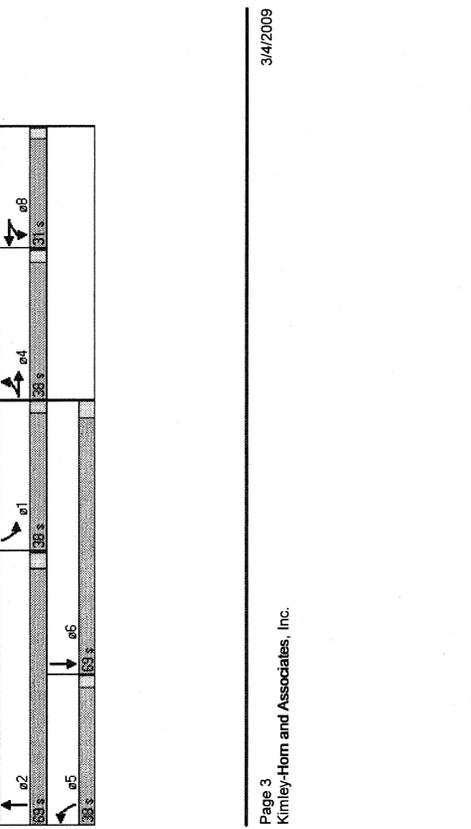
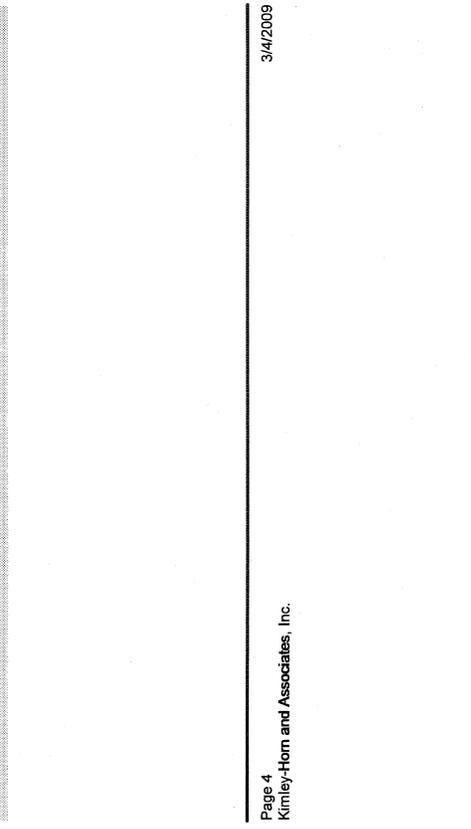
3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Near-Term Condition
PM Peak

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1656	0	1770	1691	0	1770	3483	0	1770
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950
Fit Permitted	1765	1656	0	1756	1691	0	1770	3483	0	1770
Satd. Flow (perm)	48	51	97	36	50	63	83	415	49	109
Satd. Flow (RTOR)	48	51	97	36	50	63	83	415	49	109
Volume (vph)	48	51	97	36	50	63	83	415	49	109
Lane Group Flow (vph)	48	168	0	71	222	0	90	504	0	118
Turn Type	Split	Split	Split	Split	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	4	4	8	8	5	2	1	6		
Permitted Phases										
Total Split (s)	38.0	38.0	0.0	31.0	31.0	0.0	38.0	69.0	0.0	38.0
Act. Effect Green (s)	15.6	15.6	19.9	19.9	12.3	67.2	14.3	71.7		
Actuated g/C Ratio	0.12	0.12	0.15	0.15	0.09	0.52	0.11	0.55		
v/c Ratio	0.22	0.69	0.26	0.77	0.54	0.28	0.61	0.31		
Control Delay	55.8	54.9	52.8	64.9	71.2	20.4	70.5	19.3		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	55.8	54.9	52.8	64.9	71.2	20.4	70.5	19.3		
LOS	E	D	E	D	E	C	E	B		
Approach Delay	55.1	55.1	62.0	62.0	28.1	28.1	27.6			
Approach LOS	E	E	E	E	C	C	C			
Queue Length 50th (ft)	37	97	52	154	72	118	95	143		
Queue Length 95th (ft)	81	186	61	132	148	223	182	263		
Internal Link Dist (ft)	286	286	283	283	1660	1660	190	1140		
Turn Bay Length (ft)	120	430	90	365	155	1816	417	1934		
Base Capacity (vph)	421	430	365	373	405	1816	417	1934		
Starvation Cap Reductn	0	0	0	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0	0	0		
Reduced v/c Ratio	0.11	0.39	0.19	0.60	0.22	0.28	0.28	0.31		
Intersection Summary										
Cycle Length	176									
Actuated Cycle Length	129.2									
Control Type	Actuated-Uncoordinated									
Maximum v/c Ratio	0.77									
Intersection Signal Delay	36.5									
Intersection Capacity Utilization	48.0%									
Analysis Period (min)	15									

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	7	0	563	648	5		
Peak Hour Factor	0.58	0.58	0.88	0.88	0.90	0.90		
Hourly flow rate (vph)	0	12	0	628	718	6		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	None							
Median storage (veh)								
Upstream signal (ft)				727	1032			
pX, platoon unblocked	0.86	0.86	0.86	0.86	0.86			
vC, conflicting volume	1037	718	723					
vC1, stage 1 conf vol	1037	670	677					
vC2, stage 2 conf vol	6.8	6.9	4.1					
IC, 2 stage (s)								
IF (s)	3.5	3.3	2.2					
po queue free %	100	95	100					
GM capacity (veh/h)	194	342	779					
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2			
Volume Total	12	314	314	718	6			
Volume Left	0	0	0	0	0			
Volume Right	12	0	0	0	0			
CSH	342	1700	1700	1700	1700			
Volume to Capacity	0.04	0.18	0.18	0.42	0.00			
Queue Length 95th (ft)	3	0	0	0	0			
Control Delay (s)	15.9	0.0	0.0	0.0	0.0			
Lane LOS	C							
Approach Delay (s)	15.9	0.0	0.0	0.0	0.0			
Approach LOS	C							
Intersection Summary								
Average Delay	0.1							
Intersection Capacity Utilization	44.0%							
Analysis Period (min)	15							
ICU Level of Service	A							



5: Southeast Driveway & Hillcrest Ave
Antitoch Walmart Expansion

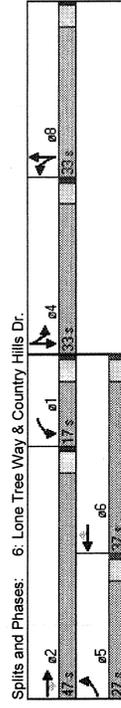
6: Lone Tree Way & Country Hills Dr.
Antitoch Walmart Expansion

Near-Term Condition
PM Peak

Near-Term Condition
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0	0	0	0	0	0	0	0	0	0	0
Volume (veh/h)	0	125	0	0	42	0	523	63	0	568	79
Peak Hour Factor	0.78	0.78	0.78	0.62	0.62	0.89	0.89	0.89	0.96	0.96	0.96
Hourly flow rate (vph)	0	160	0	0	68	0	588	71	0	612	82
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type	None			None							
Median storage (veh)											
Upstream signal (ft)							347				
px platform unblocked											
vc, conflicting volume	1015	1312	245	952	1282	284	695			658	
vc1, stage 1 cont vol											
vc2, stage 2 cont vol											
vcu, unblocked vol	1015	1312	245	952	1282	284	695			658	
tc, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1	
tc, 2 stage (s)											
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2	
o queue free %	100	100	79	100	100	90	100			100	
CM capacity (veh/h)	174	157	755	169	164	703	897			925	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3			
Volume Total	160	68	294	284	71	245	205				
Volume Left	0	0	0	0	0	0	0				
Volume Right	160	68	294	284	71	245	205				
CSH	755	703	1700	1700	1700	1700	1700			1700	
Volume to Capacity	0.21	0.10	0.17	0.17	0.04	0.14	0.14			0.12	
Queue Length 95th (ft)	20	8	0	0	0	0	0			0	
Control Delay (s)	11.0	10.7	0.0	0.0	0.0	0.0	0.0			0.0	
Lane LOS	B	B	A	A	A	A	A			A	
Approach Delay (s)	11.0	10.7	0.0	0.0	0.0	0.0	0.0			0.0	
Approach LOS	B	B	A	A	A	A	A			A	
Intersection Summary											
Average Delay	1.6										
Intersection Capacity Utilization	27.5%										
Analysis Period (min)	15										
ICU Level of Service	A										

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1563	1770	3539	1563	1770	1720	1720	0	1770
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Permitted Phases	5	2	1	6	8	8	8	8	8	4	4
Volume (vph)	154	1159	111	109	881	39	115	84	75	48	91
Lane Group Flow (vph)	160	1207	116	120	968	43	162	224	0	56	216
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split	Split	Split	Split
Protected Phases	6			6							
Total Split (s)	27.0	47.0	17.0	37.0	37.0	33.0	33.0	33.0	33.0	33.0	33.0
Act Effect Green (s)	18.5	61.3	14.0	56.8	56.8	21.7	21.7	21.7	21.7	21.0	21.0
Actuated g/C Ratio	0.14	0.47	0.47	0.11	0.44	0.44	0.17	0.17	0.17	0.16	0.16
v/c Ratio	0.63	0.72	0.17	0.63	0.63	0.06	0.55	0.72	0.72	0.20	0.71
Control Delay	63.4	32.8	18.4	68.4	32.2	20.8	55.7	55.9	46.3	54.2	54.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.4	32.8	18.4	68.4	32.2	20.8	55.7	55.9	46.3	54.2	54.2
LOS	E	C	B	E	C	C	E	E	D	D	D
Approach Delay	34.9			35.4			55.8				52.6
Approach LOS	C			D			E				D
Queue Length 50th (ft)	129	415	99	65	251	11	127	156	42	145	145
Queue Length 95th (ft)	195	698	99	m#176	617	m26	141	166	71	189	189
Internal Link Dist (ft)	145	1420	75	145	740	75	170	408	120	577	577
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	327	1669	670	191	1546	675	408	422	408	421	421
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.72	0.17	0.63	0.63	0.06	0.40	0.53	0.14	0.51	0.51
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset: 80 (62%), Referenced to phases 2,EBT and 6,WBT, Start of Yellow											
Control Type: Actuated-Coordinated											
Maximum v/c Ratio: 0.72											
Intersection Signal Delay: 39.0											
Intersection Capacity Utilization: 7.12%											
ICU Level of Service: C											
Analysis Period (min): 15											
# 95th percentile volume exceeds capacity, queue may be longer.											
Queue shown is maximum after two cycles.											
m Volume for 95th percentile queue is metered by upstream signal.											



Splits and Phases: 6: Lone Tree Way & Country Hills Dr.

7: Lone Tree Way & Deer Valley Plaza
Antioch Walmart Expansion

8: Lone Tree Way & Deer Valley Rd.
Antioch Walmart Expansion

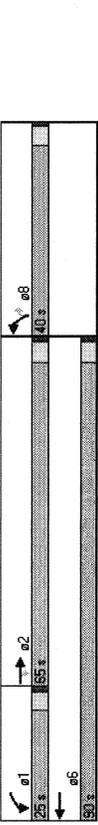
Near-Term Condition
PM Peak

Near-Term Condition
PM Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	4A	4A	4A	4A	4A	4A
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1436	1752	3539	1770	1583
Satd. Flow (RTOR)	35	35	35	35	35	35
Volume (vph)	1323	93	86	890	113	61
Lane Group Flow (vph)	1407	99	95	978	145	78
Turn Type	Perm	Prot	1	6	8	8
Protected Phases	2					
Permitted Phases	65.0	65.0	25.0	90.0	40.0	40.0
Total Spill (s)	90.5	90.5	13.9	107.4	16.6	16.6
Act Effect Green (s)	0.70	0.70	0.11	0.83	0.13	0.13
Actuated g/C Ratio	0.57	0.10	0.50	0.33	0.64	0.29
v/c Ratio	4.1	0.5	50.0	7.5	66.2	12.8
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.1	0.5	50.0	7.5	66.2	12.8
LOS	A	A	D	A	E	B
Approach Delay	3.9			11.3	47.5	
Approach LOS	A			B	D	
Queue Length 50th (ft)	43	0	85	175	118	0
Queue Length 95th (ft)	85	m0	m127	m0	154	31
Internal Link Dist (ft)	740			850	704	
Turn Bay Length (ft)	2483	1010	300	2993	504	506
Base Capacity (vph)	61	0	0	0	0	0
Starvation Cap Reducn	0	0	0	0	0	0
Spillback Cap Reducn	0	0	0	0	0	0
Storage Cap Reducn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.10	0.32	0.33	0.29	0.15

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 94 (72%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 10.2
Intersection Capacity Utilization 57.6%
Analysis Period (min) 15
m: Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Lone Tree Way & Deer Valley Plaza



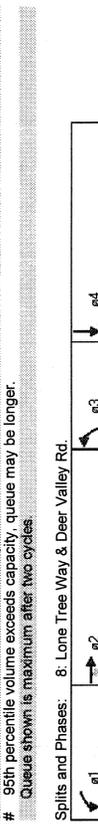
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3/4/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4A	4A	4A	4A							
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3267	0	2000	3512
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950
Satd. Flow (perm)	1768	3539	1523	1762	3539	1551	3428	3267	0	3427	3512
Satd. Flow (RTOR)	218					185					4
Volume (vph)	87	957	307	367	635	207	344	450	390	225	291
Lane Group Flow (vph)	100	1100	353	386	668	218	400	976	0	268	363
Turn Type	Prot	Perm	Prot	Prot	Perm	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	1	6	3	8					
Permitted Phases	20.0	44.0	44.0	25.0	49.0	49.0	20.0	32.0	0.0	29.0	41.0
Total Spill (s)	13.6	41.0	41.0	22.0	49.4	49.4	17.0	31.8	0.0	23.2	36.0
Act Effect Green (s)	0.10	0.32	0.32	0.17	0.38	0.38	0.13	0.24	0.18	0.32	0.32
Actuated g/C Ratio	0.54	0.39	0.49	1.29	0.50	0.50	0.89	1.07	0.75	0.55	0.55
v/c Ratio	78.8	55.8	7.2	197.9	35.8	12.9	78.2	88.3	64.0	37.1	37.1
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.8	55.8	7.2	197.9	35.8	12.9	78.2	88.3	64.0	37.1	37.1
LOS	E	E	A	F	D	B	E	F	E	D	D
Approach Delay	46.2			81.1		85.3					48.5
Approach LOS	D			F		F					D
Queue Length 50th (ft)	60	308	0	~427	131	0	173	~438	109	125	125
Queue Length 95th (ft)	140	~583	111	~633	0	176	~242	~542	145	158	158
Internal Link Dist (ft)	850			1580			825		495		420
Turn Bay Length (ft)	195	400	500	500	400	180	400	495	400	1028	1028
Base Capacity (vph)	231	1116	722	300	1344	724	448	916	400	0	0
Starvation Cap Reducn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reducn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reducn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.99	0.49	1.29	0.50	0.30	0.89	1.07	0.67	0.35	0.35

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 60 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.29
Intersection Signal Delay: 66.8
Intersection Capacity Utilization 91.8%
Analysis Period (min) 15
User Entered Value
Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 8: Lone Tree Way & Deer Valley Rd.



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3/4/2009

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

Near-Term Condition
PM Peak

Near-Term Condition
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3535	0	1770	3539	1583	1770	1561	0	1770	1863	1583
Satd. Flow (prot)	0.950	0	0.950	0.950	0.755	0.747	0.747	0.747	0	0.747	0.747	0.747
Flt Permitted	1770	3535	0	1768	3539	1545	1394	1561	0	1388	1863	1550
Satd. Flow (perm)	36	1606	7	26	1188	9	35	505	8	8	2	14
Satd. Flow (RTOR)	39	1754	0	30	1381	10	71	16	0	15	4	25
Volume (vph)	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Lane Group Flow (vph)	5	2	1	6	4	4	4	4	4	4	4	4
Turn Type	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases
Permitted Phases	20.0	57.0	0.0	20.0	57.0	20.0	20.0	20.0	0.0	20.0	20.0	20.0
Total Split (s)	9.7	89.7	9.1	86.9	86.9	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Act Effect Green (s)	0.07	0.69	0.07	0.67	0.67	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Activated g/C Ratio	0.29	0.72	0.24	0.58	0.01	0.51	0.03	0.11	0.02	0.14	0.02	0.14
v/c Ratio	60.6	13.3	74.6	6.7	2.7	67.4	0.1	53.0	50.5	19.7	0.0	0.0
Control Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	60.6	12.3	71.6	6.8	2.7	67.4	0.1	53.0	50.5	19.7	0.0	0.0
Total Delay	E	B	E	A	A	A	E	A	D	D	D	B
LOS	8.1	13.4	8.1	55.1	55.1	33.9	33.9	33.9	33.9	33.9	33.9	33.9
Approach Delay	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS
Queue Length 50th (ft)	32	275	0	73	0	58	0	12	3	3	0	0
Queue Length 95th (ft)	m37	m#893	m54	181	m1	56	0	20	9	9	0	0
Internal Link Dist (ft)	1580	1580	605	609	609	819	819	819	819	819	819	819
Turn Bay Length (ft)	145	2439	231	2365	1034	182	643	182	244	224	100	100
Base Capacity (vph)	0	0	0	126	0	0	0	0	0	0	0	0
Starvation Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.72	0.13	0.62	0.01	0.39	0.02	0.08	0.02	0.02	0.02	0.11

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3535	0	1770	3539	1583	1770	1561	0	1770	1863	1583
Satd. Flow (prot)	0.950	0	0.950	0.950	0.755	0.747	0.747	0.747	0	0.747	0.747	0.747
Flt Permitted	1770	3535	0	1768	3539	1545	1394	1561	0	1388	1863	1550
Satd. Flow (perm)	36	1606	7	26	1188	9	35	505	8	8	2	14
Satd. Flow (RTOR)	39	1754	0	30	1381	10	71	16	0	15	4	25
Volume (vph)	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Lane Group Flow (vph)	5	2	1	6	4	4	4	4	4	4	4	4
Turn Type	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases
Permitted Phases	20.0	57.0	0.0	20.0	57.0	20.0	20.0	20.0	0.0	20.0	20.0	20.0
Total Split (s)	9.7	89.7	9.1	86.9	86.9	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Act Effect Green (s)	0.07	0.69	0.07	0.67	0.67	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Activated g/C Ratio	0.29	0.72	0.24	0.58	0.01	0.51	0.03	0.11	0.02	0.14	0.02	0.14
v/c Ratio	60.6	13.3	74.6	6.7	2.7	67.4	0.1	53.0	50.5	19.7	0.0	0.0
Control Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	60.6	12.3	71.6	6.8	2.7	67.4	0.1	53.0	50.5	19.7	0.0	0.0
Total Delay	E	B	E	A	A	A	E	A	D	D	D	B
LOS	8.1	13.4	8.1	55.1	55.1	33.9	33.9	33.9	33.9	33.9	33.9	33.9
Approach Delay	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS
Queue Length 50th (ft)	32	275	0	73	0	58	0	12	3	3	0	0
Queue Length 95th (ft)	m37	m#893	m54	181	m1	56	0	20	9	9	0	0
Internal Link Dist (ft)	1580	1580	605	609	609	819	819	819	819	819	819	819
Turn Bay Length (ft)	145	2439	231	2365	1034	182	643	182	244	224	100	100
Base Capacity (vph)	0	0	0	126	0	0	0	0	0	0	0	0
Starvation Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.72	0.13	0.62	0.01	0.39	0.02	0.08	0.02	0.02	0.02	0.11

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 113 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 12.5

Intersection Capacity Utilization: 60.0%

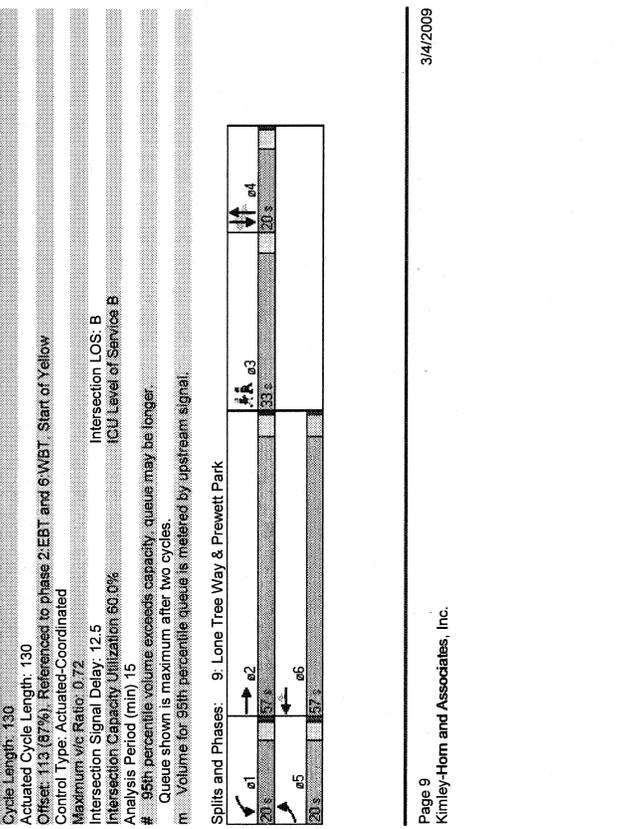
Analysis Period (min): 15

95th percentile volume exceeds capacity, queue may be longer.

m Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Lone Tree Way & Prewett Park

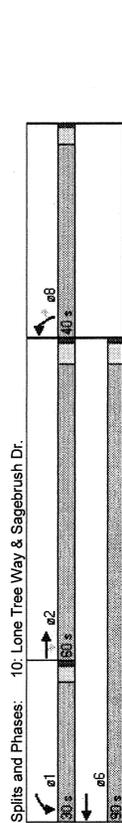


10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

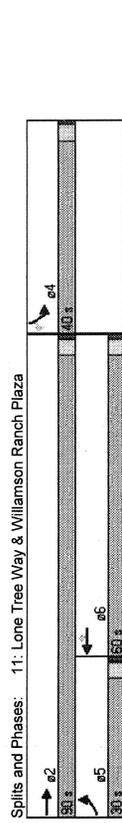
11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Near-Term Condition
PM Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	EB	EB	WB	WB	NB	NB
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Fit Permitted	0.950		0.950		0.950	
Satd. Flow (perm)	3539	1511	1766	3539	1770	1583
Satd. Flow (RTOR)	38		40	1098	85	101
Volume (vph)	1486	146	40	1098	85	101
Lane Group Flow (vph)	1626	169	49	1356	139	168
Turn Type	Perm	Prot	Perm	Prot	Perm	Perm
Protected Phases	2		1	6	8	
Permitted Phases	2		1	6	8	
Total Split (s)	60.0	60.0	60.0	60.0	40.0	40.0
Act. Effect Green (s)	101.2	101.2	9.1	109.3	14.7	14.7
Actuated g/C Ratio	0.78	0.78	0.07	0.84	0.11	0.11
v/c Ratio	0.59	0.13	0.40	0.46	0.69	0.51
Control Delay	3.6	0.3	73.6	1.1	72.6	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.6	0.3	73.6	1.1	72.6	12.9
LOS	A	A	E	A	E	B
Approach Delay	3.3		3.6	40.1		
Approach LOS	A		A	D		
Queue Length 50th (ft)	18	1	38	10	115	0
Queue Length 95th (ft)	86	m1	73	13	116	3
Internal Link Dist (ft)	605		1855	497		
Turn Bay Length (ft)	80	600		115		
Base Capacity (vph)	2755	1185	368	2874	504	569
Starvation Cap Reductn	106	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.13	0.13	0.46	0.28	0.29
Intersection Summary						
Cycle Length	130					
Actuated Cycle Length	130					
Offset: 122 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.69						
Intersection Signal Delay: 6.6						
Intersection Capacity Utilization: 54.3%						
Analysis Period (min): 15						
m: Volume for 95th percentile queue is metered by upstream signal.						



Lane Group	EBL	EBT	WBL	WBT	SBL	SBR
Lane Configurations	EB	EB	WB	WB	SB	SB
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Fit Permitted	0.950		0.950		0.950	
Satd. Flow (perm)	1748	3539	3539	1451	1770	1582
Satd. Flow (RTOR)	89		17		89	
Volume (vph)	90	1527	1093	36	98	63
Lane Group Flow (vph)	101	1716	1214	40	138	89
Turn Type	Prot	Perm	Prot	Perm	Perm	Perm
Protected Phases	5	2	6	6	4	
Permitted Phases	5	2	6	6	4	
Total Split (s)	30.0	90.0	60.0	60.0	40.0	40.0
Act. Effect Green (s)	12.1	108.2	93.1	93.1	15.8	15.8
Actuated g/C Ratio	0.69	0.83	0.72	0.72	0.12	0.12
v/c Ratio	0.61	0.58	0.48	0.04	0.64	0.33
Control Delay	76.5	6.0	2.9	0.1	66.8	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.5	6.0	2.9	0.1	66.8	12.5
LOS	E	A	A	A	E	B
Approach Delay	9.9	2.8			45.5	
Approach LOS	A		A		D	
Queue Length 50th (ft)	86	131	10	0	114	0
Queue Length 95th (ft)	121	709	82	m0	128	22
Internal Link Dist (ft)	155	1655	820		457	
Turn Bay Length (ft)	155	2945	2533	1044	504	508
Base Capacity (vph)	368	2945	2533	1044	504	508
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.56	0.48	0.04	0.27	0.18
Intersection Summary						
Cycle Length: 130						
Actuated Cycle Length: 130						
Offset: 75 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.64						
Intersection Signal Delay: 9.6						
Intersection Capacity Utilization: 54.8%						
Analysis Period (min): 15						
m: Volume for 95th percentile queue is metered by upstream signal.						

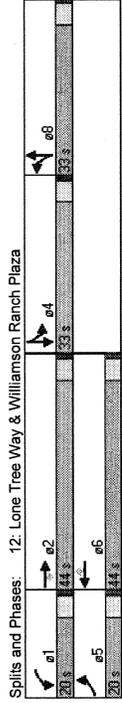


12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

13: Lone Tree Way & Wal-Mart Driveway
Antioch Walmart Expansion

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	4	4	4	4	4	4	4	4	4	4	4
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	1770	3539	1583	1770	3539	1583	1770	1647	0	3433	1626
Peak Hour Factor	0.86	0.86	0.86	0.94	0.94	0.94	0.94	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	0	1913	1189	99	0	44					
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type											None
Median storage (veh)											
Upstream signal (ft)											
pX, platoon unblocked											0.72
vC, conflicting volume											2145
vC1, stage 1 conf vol											396
vC2, stage 2 conf vol											
vCn, unblocked vol											1121
IC, single (s)											6.8
IC, 2 stage (s)											6.9
IF (s)											3.5
pl queue free %											100
pl capacity (veh/h)											95
dm capacity (veh/h)											145
EBL	872	4.1									
EBT	2.2										
EBR	100										
WBL	510										
WBT	0.80										
WBR	1288										
NBL											
NBT											
NBR											
SBL											
SBR											
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	SB 1			
Volume Total	956	956	396	396	396	396	396	99	44		
Volume Left	0	0	0	0	0	0	0	0	0		
Volume Right	0	0	0	0	0	0	0	0	0		
csh	1700	1700	1700	1700	1700	1700	1700	872	872		
Volume to Capacity	0.56	0.56	0.23	0.23	0.23	0.23	0.23	0.06	0.06		
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Lane LOS	A	A	A	A	A	A	A	A	A		
Approach Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	9.3		
Approach LOS	A	A	A	A	A	A	A	A	A		
Intersection Summary											
Average Delay	0.1										
Intersection Capacity Utilization	48.8%										
Analysis Period (min)	15										
ICU Level of Service	A										

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	4	4	4	4	4	4	4	4	4	4	4
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1647	0	3433	1626
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1746	3539	1422	1758	3539	1419	1767	1647	0	3419	1626
Satd. Flow (RTOR)	6	1412	28	57	1051	39	7	18	44	95	16
Volume (vph)	104	1681	33	68	1251	46	10	86	0	122	98
Lane Group Flow (vph)	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split	Split	Split	Split
Turn Type	5	2	2	1	6	8	8	8	4	4	4
Permitted Phases											
Total Split (s)	20.0	44.0	44.0	20.0	44.0	44.0	33.0	33.0	0.0	33.0	33.0
Act Effct Green (s)	14.3	81.4	81.4	13.3	78.0	78.0	13.1	13.1	14.8	14.8	14.8
Actuated g/C Ratio	0.11	0.63	0.63	0.10	0.60	0.60	0.10	0.10	0.11	0.11	0.11
w/C Ratio	0.54	0.76	0.76	0.38	0.59	0.59	0.06	0.06	0.31	0.39	0.39
Control Delay	70.2	18.0	18.0	7.7	60.9	60.9	15.4	15.4	53.1	19.4	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.2	18.0	18.0	7.7	60.9	60.9	15.4	15.4	53.1	19.4	19.4
LOS	E	B	A	E	B	B	D	C	D	D	B
Approach Delay	20.8			21.8			25.9		38.1		
Approach LOS	C			C			C		D		
Queue Length 50th (ft)	84	420	2	60	177	5	8	20	51	17	17
Queue Length 95th (ft)	122	#1071	m18	m84	#639	m22	18	40	60	46	46
Internal Link Dist (ft)	820			430			731		200		440
Turn Bay Length (ft)	170	80	135	80	200	80	200	200	200	200	494
Base Capacity (vph)	231	2216	893	231	2122	856	408	427	792	792	494
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced w/C Ratio	0.45	0.76	0.04	0.29	0.59	0.05	0.02	0.20	0.15	0.23	0.23
Intersection Summary											
Cycle Length, 130											
Actuated Cycle Length, 130											
Offset, 53 (41%) Referenced to phase 2 EBT and 6 WBT, Start of Yellow											
Control Type, Actuated-Coordinated											
Intersection LOS: C											
Maximum w/C Ratio, 0.76											
Intersection Signal Delay, 22.4											
ICU Level of Service B											
Analysis Period (min) 15											
# 95th percentile volume exceeds capacity, queue may be longer.											
Queue shown is maximum after two cycles.											
m. Volume for 95th percentile queue is metered by upstream signal.											

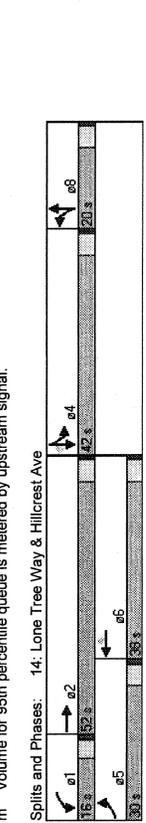


14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

Near-Term Condition
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	5021	0	1770	5085	1583	1770	3319	0	2000	3539
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950
Fit Permitted	1762	5021	0	1764	5085	1517	1741	3319	0	3377	3539
Satd. Flow (perm)	10	332	0	83	1033	282	64	96	50	484	93
Satd. Flow (RTOR)	214	1280	90	83	1033	282	64	96	50	484	93
Volume (vph)	238	1522	0	98	1215	332	90	205	0	590	113
Lane Group Flow (vph)	238	1522	0	98	1215	332	90	205	0	590	113
Turn Type	Prot	Prot	Prot	Prot	Prot	Split	Split	Split	Split	Split	Perm
Protected Phases	5	2	1	6	6	8	8	8	4	4	4
Permitted Phases	30.0	52.0	0.0	16.0	38.0	38.0	20.0	20.0	0.0	42.0	42.0
Total Split (s)	23.6	51.8	0.0	12.3	40.4	40.4	15.0	15.0	0.0	39.0	39.0
Act Effct Green (s)	0.16	0.40	0.09	0.31	0.31	0.12	0.12	0.12	0.36	0.36	0.36
Actuated g/C Ratio	0.74	0.76	0.59	0.77	0.47	0.44	0.47	0.47	0.98	0.11	0.30
Control Delay	70.9	23.5	0.0	51.5	16.6	60.2	41.3	79.2	33.3	6.2	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.9	23.5	0.0	51.5	16.6	60.2	41.3	79.2	33.3	6.2	6.2
LOS	E	C	E	D	B	E	D	D	E	C	A
Approach Delay	29.9	45.1	0.0	45.1	47.1	47.1	47.1	47.1	58.0	58.0	58.0
Approach LOS	C	D	D	D	D	D	D	D	E	E	E
Queue Length 50th (ft)	157	301	84	394	86	71	60	60	254	36	0
Queue Length 95th (ft)	m285	275	138	290	144	97	72	72	#321	54	39
Internal Link Dist (ft)	620	420	210	690	730	195	2575	2575	400	1680	290
Turn Bay Length (ft)	368	2005	180	1851	700	231	485	485	600	1062	583
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.76	0.54	0.77	0.47	0.39	0.42	0.39	0.42	0.96	0.11

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 60 (38%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 41.9
 Intersection LOS: D
 Intersection Capacity Utilization: 76.0%
 ICU Level of Service: D
 Analysis Period (min): 15
 # User Entered Value
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



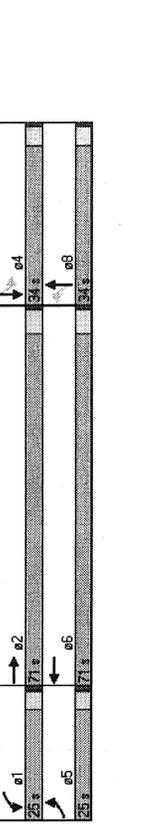
Splits and Phases: 14: Lone Tree Way & Hillcrest Ave

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Near-Term Condition
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	5049	0	1770	5067	0	1770	1576	0	1770	1651
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950
Fit Permitted	1767	5049	0	1769	5067	0	1362	1576	0	843	1651
Satd. Flow (perm)	7	181	0	4	181	0	181	181	0	181	181
Satd. Flow (RTOR)	20	1719	67	162	1282	30	48	10	145	49	9
Volume (vph)	21	1841	0	172	1398	0	60	193	0	66	40
Lane Group Flow (vph)	21	1841	0	172	1398	0	60	193	0	66	40
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Perm	Perm
Protected Phases	5	2	1	6	6	8	8	8	4	4	4
Permitted Phases	25.0	71.0	0.0	25.0	71.0	0.0	34.0	34.0	0.0	34.0	34.0
Total Split (s)	9.5	84.0	0.0	19.4	98.4	0.0	17.6	17.6	0.0	17.6	17.6
Act Effct Green (s)	0.07	0.85	0.15	0.76	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Actuated g/C Ratio	0.16	0.56	0.65	0.36	0.33	0.52	0.33	0.52	0.58	0.16	0.16
Control Delay	76.8	6.5	63.3	6.0	52.5	12.9	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.8	6.7	63.3	6.0	52.5	12.9	0.0	0.0	0.0	0.0	0.0
LOS	E	A	E	A	A	D	B	B	E	C	C
Approach Delay	7.5	12.3	0.0	12.3	22.3	22.3	22.3	22.3	51.8	51.8	51.8
Approach LOS	A	B	D	B	C	C	C	C	D	D	D
Queue Length 50th (ft)	19	34	144	53	47	9	9	9	54	9	9
Queue Length 95th (ft)	m22	m482	231	193	72	47	47	47	75	28	28
Internal Link Dist (ft)	200	650	200	1055	786	786	786	786	100	614	614
Turn Bay Length (ft)	200	3264	304	3837	325	514	514	514	201	415	415
Base Capacity (vph)	0	597	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.69	0.57	0.36	0.16	0.38	0.33	0.33	0.33	0.10	0.10

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 96 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 11.7
 Intersection LOS: B
 Intersection Capacity Utilization: 71.5%
 ICU Level of Service: C
 Analysis Period (min): 15
 m Volume for 95th percentile queue is metered by upstream signal.



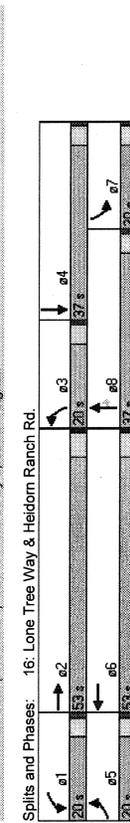
Splits and Phases: 15: Lone Tree Way & Vista Grande

16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Near-Term Condition
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5043	0	1770	5079	0	3433	1863	1583	1770	1723	0
Flt Permitted	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0
Satd. Flow (perm)	1768	5043	0	1769	5079	0	3433	1863	1561	1765	1723	0
Satd. Flow (RTOR)	5	1782	86	77	1418	14	91	5	81	7	4	4
Volume (vph)	5	1946	0	85	1573	0	120	7	107	12	14	4
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	2	1	6	3	8	8	8	8	8	4
Protected Phases	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Permitted Phases	20.0	53.0	0.0	20.0	53.0	0.0	20.0	37.0	37.0	20.0	37.0	0.0
Total Split (s)	8.5	86.4	14.1	101.0	14.2	15.4	15.4	8.9	8.9	11.8	11.8	0.0
Act Effect Green (s)	0.07	0.66	0.11	0.78	0.11	0.12	0.12	0.07	0.09	0.09	0.09	0.00
Actuated g/C Ratio	0.04	0.58	0.44	0.40	0.32	0.03	0.38	0.10	0.09	0.10	0.09	0.00
v/c Ratio	80.0	6.6	73.1	5.1	55.0	45.0	11.9	58.0	34.1	58.0	34.1	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.0	6.6	73.1	5.1	55.0	45.0	11.9	58.0	34.1	58.0	34.1	0.0
LOS	E	A	E	A	D	D	D	B	E	E	C	C
Approach Delay	6.8	8.6	8.6	35.0	35.0	35.0	35.0	45.1	45.1	45.1	45.1	0.0
Approach LOS	A	A	A	C	C	C	C	D	D	D	D	D
Queue Length 50th (ft)	4	42	76	30	60	5	0	10	6	10	6	0
Queue Length 95th (ft)	m0	631	89	488	67	15	28	20	14	20	14	0
Internal Link Dist (ft)	185	1055	400	905	200	972	200	50	316	200	50	0
Turn Bay Length (ft)	231	3353	234	3945	479	487	487	231	455	487	231	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reducin	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reducin	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reducin	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.58	0.36	0.40	0.25	0.01	0.22	0.05	0.03	0.05	0.03	0.00

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 114 (88%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 9.5
 Intersection Capacity Utilization: 61.0%
 Analysis Period (min): 15
 Volume for 95th percentile queue is metered by upstream signal.



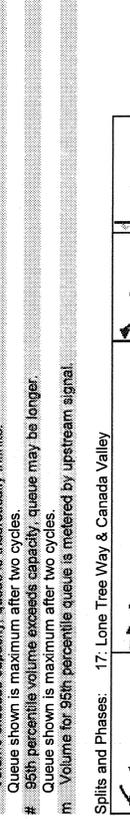
Splits and Phases: 16: Lone Tree Way & Heidorn Ranch Rd.

17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

Near-Term Condition
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	1674	1504	1770	1863	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3430	5085	1584	3425	5085	1559	3428	1674	1481	1764	1863	1562
Satd. Flow (RTOR)	5	1737	69	337	1311	523	104	71	186	310	66	79
Volume (vph)	167	1868	74	374	1457	581	139	141	202	425	90	108
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	2	1	6	3	8	8	8	8	8	4
Protected Phases	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Permitted Phases	20.0	58.0	30.0	68.0	68.0	20.0	22.0	22.0	20.0	20.0	22.0	22.0
Total Split (s)	17.0	67.5	18.9	69.5	69.5	10.5	14.5	14.5	14.5	17.0	21.0	21.0
Act Effect Green (s)	0.13	0.52	0.15	0.53	0.53	0.08	0.11	0.11	0.11	0.13	0.16	0.16
Actuated g/C Ratio	0.37	0.71	0.09	0.75	0.54	0.53	0.50	0.70	0.59	1.84	0.30	0.31
v/c Ratio	45.4	17.6	4.7	69.2	15.3	2.1	63.2	67.0	13.9	425.8	56.4	10.8
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	17.6	4.7	69.2	15.3	2.1	63.2	67.0	13.9	425.8	56.4	10.8
LOS	D	B	A	E	B	A	E	E	B	F	D	B
Approach Delay	19.6	20.5	20.5	43.6	43.6	43.6	43.6	299.7	299.7	299.7	299.7	0.0
Approach LOS	B	B	B	C	C	C	C	D	D	D	D	D
Queue Length 50th (ft)	69	259	0	164	205	14	58	108	0	~541	87	0
Queue Length 95th (ft)	86	284	m25	m173	m234	m29	75	143	33	~568	95	27
Internal Link Dist (ft)	320	905	449	2841	832	713	2717	1104	449	288	388	231
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reducin	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reducin	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reducin	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.71	0.09	0.52	0.54	0.53	0.31	0.55	0.52	1.84	0.30	0.31

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 87 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.84
 Intersection Signal Delay: 53.0
 Intersection Capacity Utilization: 82.0%
 Analysis Period (min): 15
 Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 17: Lone Tree Way & Canada Valley

18: Lone Tree Way & SR 4 By-pass SB Off-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	4	4	4	4	4	4	0	0	0	0	0	0		
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0		
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	0	1681	1688	1583		
Flt Permitted	0	0	0	0	0	0	0	0	0	0	0	0		
Satd. Flow (perm)	0	5085	1581	3432	5085	0	0	0	0	1681	1688	1583		
Satd. Flow (RTOR)	0	1595	646	273	1569	0	0	0	0	506	10	591		
Volume (vph)	0	1792	726	314	1803	0	0	0	0	285	295	664		
Lane Group Flow (vph)	0	1792	726	314	1803	0	0	0	0	285	295	664		
Turn Type		Perm	Prot		Perm	Split				Split		Perm		
Protected Phases	2	1	6									4		
Permitted Phases	0.0	53.0	53.0	27.0	80.0	0.0	0.0	0.0	0.0	50.0	50.0	50.0		
Total Split (s)	0.0	57.0	57.0	17.0	77.0	0.0	0.0	0.0	0.0	47.0	47.0	47.0		
Act Effct Green (s)	0.44	0.44	0.13	0.59	0.60	0.36	0.36	0.36	0.36	0.47	0.48	1.14		
v/c Ratio	0.80	0.68	0.70	0.60	0.60	0.47	0.48	0.48	0.48	0.47	0.48	1.14		
Control Delay	24.8	4.7	67.3	10.7	119.3	35.1	35.4	35.4	35.4	35.4	35.4	119.3		
Queue Delay	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	24.8	5.7	67.3	10.7	119.3	35.1	35.4	35.4	35.4	35.4	35.4	119.3		
LOS	C	A	E	B	B	D	D	D	D	D	D	F		
Approach Delay	19.3			19.1								80.1		
Approach LOS	B			B								F		
Queue Length 50th (ft)	191	30	125	206						193	201	644		
Queue Length 95th (ft)	m336	m119	m156	207						280	290	#967		
Internal Link Dist (ft)	760			760			671					528		
Turn Bay Length (ft)		315	175							280				
Base Capacity (vph)	2229	1064	634	3012						608	610	583		
Starvation Cap Reductn	0	134	0	0						0	0	0		
Spillback Cap Reductn	0	0	0	0						0	0	0		
Storage Cap Reductn	0	0	0	0						0	0	0		
Reduced v/c Ratio	0.80	0.78	0.60	0.60						0.47	0.48	1.14		
Intersection Summary														
Cycle Length	130													
Actuated Cycle Length	130													
Offset	100 (77%), Referenced to phase 2, EBT and 6, WBT, Start of Yellow													
Control Type	Actuated-Coordinated													
Maximum v/c Ratio	1.14													
Intersection Signal Delay	32.1													
Intersection Capacity Utilization	73.6%													
Analysis Period (min)	15													
ICU Level of Service	D													
Volume exceeds capacity, queue is theoretically infinite.														
Queue shown is maximum after two cycles.														
# 95th percentile volume exceeds capacity, queue may be longer.														
Queue shown is maximum after two cycles.														
m Volume for 95th percentile queue is metered by upstream signal.														
Splits and Phases:	18: Lone Tree Way & SR 4 By-pass SB Off-ramp													
	e1	e2	e3	e4									e5	e6
	27 s	59 s		50 s										

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4	4	4	4	4	0	0	0	0	0	0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Satd. Flow (prot)	0	5085	1583	3433	5085	1583	1681	1695	1583	0	0	0
Flt Permitted	0	0	0	0	0	0	0	0	0	0	0	0
Satd. Flow (perm)	0	5085	1581	3432	5085	1545	1681	1695	1563	0	0	0
Satd. Flow (RTOR)	0	1766	418	21	1270	440	590	43	340	0	0	0
Volume (vph)	0	1879	445	24	1427	484	380	401	420	0	0	0
Lane Group Flow (vph)	0	1879	445	24	1427	484	380	401	420	0	0	0
Turn Type		Perm	Prot		Perm	Split			Perm			Perm
Protected Phases	2	1	6									6
Permitted Phases	0.0	64.0	64.0	25.0	89.0	86.0	41.0	41.0	41.0	0.0	0.0	0.0
Total Split (s)	0.0	63.5	63.5	7.1	89.6	89.6	34.4	34.4	34.4	0.0	0.0	0.0
Act Effct Green (s)	0.58	0.40	0.13	0.41	0.41	0.85	0.90	0.90	0.67	0.00	0.00	0.00
v/c Ratio	4.0	1.1	60.0	9.6	1.7	63.7	66.7	17.5	17.5	0.0	0.0	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	4.0	1.1	60.0	9.6	1.7	63.7	66.7	17.5	17.5	0.0	0.0	0.0
Total Delay	4.0	1.1	60.0	9.6	1.7	63.7	66.7	17.5	17.5	0.0	0.0	0.0
LOS	A	A	E	A	A	E	E	B	B			
Approach Delay	3.5			8.2						49.2		
Approach LOS	A			A						D		
Queue Length 50th (ft)	269	21	10	191	0	308	330	87	87			
Queue Length 95th (ft)	63	m0	25	217	33	381	403	148	148			
Internal Link Dist (ft)	760			820				935				1168
Turn Bay Length (ft)		215	280			170	210					
Base Capacity (vph)	3265	1116	581	3504	1218	491	495	664	664	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.40	0.04	0.41	0.41	0.77	0.81	0.63	0.63			
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	Referenced to phase 2, EBT and 6, WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.90											
Intersection Signal Delay	15.2											
Intersection Capacity Utilization	62.3%											
Analysis Period (min)	15											
ICU Level of Service	B											
Volume for 95th percentile queue is metered by upstream signal.												
Splits and Phases:	19: Lone Tree Way & SR 4 By-pass NB On-ramp											
	e1	e2	e3	e4	e5	e6						
	26 s	64 s		41 s								

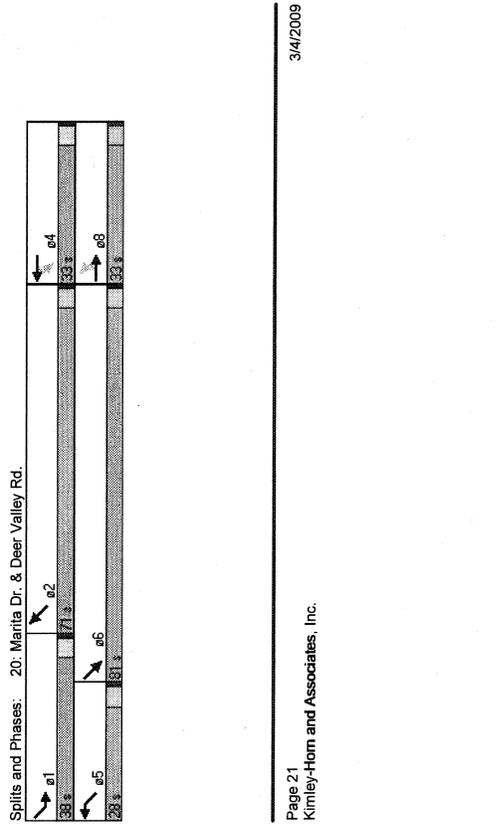
20: Marita Dr. & Deer Valley Rd.
Antioch Walmart Expansion

21: Prewett Ranch Dr. & Hillcrest Ave
Antioch Walmart Expansion

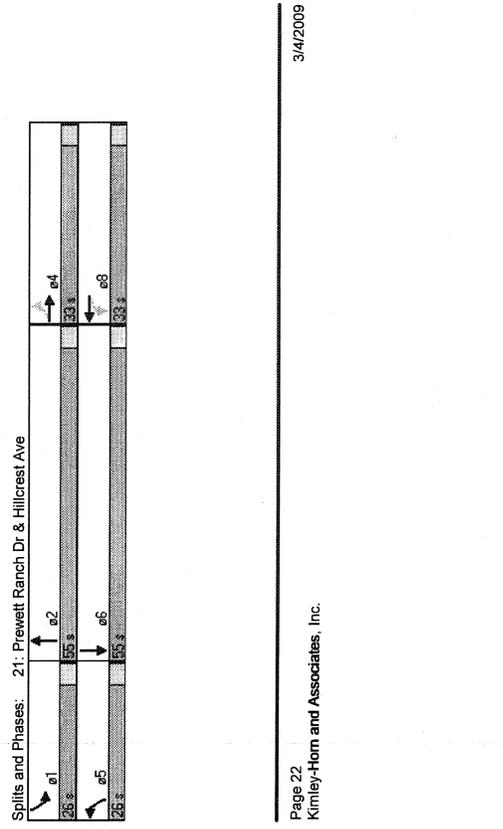
Near-Term Condition
PM Peak

Near-Term Condition
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1583	0	1770	1598	0	1770	3514	0	1770	3539	0
Satd. Flow (prot)	0.569	0.765	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1060	1583	0	1405	1598	0	1765	3514	0	1754	3539	0
Satd. Flow (perm)	318	477	0	333	477	0	477	869	0	477	869	0
Satd. Flow (RTOR)	13	4	0	33	119	0	33	1151	0	16	1208	0
Volume (vph)	19	4	0	33	119	0	33	1151	0	16	1208	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	8	4	4	4	4	1	6	5	2	2	2	2
Protected Phases	8	4	4	4	4	1	6	5	2	2	2	2
Permitted Phases	8	4	4	4	4	1	6	5	2	2	2	2
Total Split (s)	33.0	33.0	0.0	33.0	33.0	0.0	38.0	81.0	0.0	28.0	71.0	0.0
Act Effect Green (s)	10.2	10.2	0.0	10.2	10.2	0.0	9.6	85.7	0.0	8.6	82.4	0.0
Actuated g/C Ratio	0.10	0.10	0.00	0.10	0.10	0.00	0.09	0.80	0.00	0.08	0.77	0.00
v/c Ratio	0.19	0.01	0.00	0.25	0.47	0.00	0.22	0.41	0.00	0.12	0.44	0.00
Control Delay	47.5	6.0	0.0	47.7	15.9	0.0	47.6	4.6	0.0	48.0	5.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	6.0	0.0	47.7	15.9	0.0	47.6	4.6	0.0	48.0	5.9	0.0
LOS	D	A	D	D	B	D	D	A	D	D	A	A
Approach Delay	36.2	22.8	0.0	22.8	5.8	0.0	5.8	6.5	0.0	6.5	6.5	0.0
Approach LOS	D	C	D	C	A	D	A	A	D	A	A	A
Queue Length 50th (ft)	11	0	0	19	3	0	19	60	0	9	146	0
Queue Length 95th (ft)	26	0	0	40	27	0	46	166	0	32	237	0
Internal Link Dist. (ft)	345	0	0	427	0	0	825	0	0	845	0	
Turn Bay Length (ft)	40	100	0	100	175	0	175	125	0	125	0	
Base Capacity (vph)	252	619	0	334	466	0	466	2820	0	342	2793	0
Starvation Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.08	0.01	0.00	0.10	0.26	0.00	0.07	0.41	0.00	0.05	0.44	0.00
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	106.9											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.47											
Intersection Signal Delay	7.4											
Intersection LOS	A											
Intersection Capacity Utilization	45.4%											
ICU Level of Service	A											
Analysis Period (min)	15											



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1863	0	1863	1801	0	1863	3539	0	1770	3256	0
Satd. Flow (prot)	0.734	0.960	0	0.960	0.960	0	0.960	0.960	0	0.960	0.960	0
Flt Permitted	1367	1863	0	1863	1801	0	1863	3539	0	1770	3256	0
Satd. Flow (perm)	395	527	0	527	500	0	527	960	0	527	960	0
Satd. Flow (RTOR)	13	4	0	33	119	0	33	1151	0	16	1208	0
Volume (vph)	19	4	0	33	119	0	33	1151	0	16	1208	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	4	4	4	4	4	1	6	5	2	2	2	2
Protected Phases	4	4	4	4	4	1	6	5	2	2	2	2
Permitted Phases	4	4	4	4	4	1	6	5	2	2	2	2
Total Split (s)	33.0	33.0	0.0	33.0	33.0	0.0	26.0	55.0	0.0	26.0	55.0	0.0
Act Effect Green (s)	14.1	14.1	0.0	13.6	13.6	0.0	12.6	26.2	0.0	8.6	28.6	0.0
Actuated g/C Ratio	0.29	0.29	0.00	0.28	0.28	0.00	0.28	0.58	0.00	0.16	0.64	0.00
v/c Ratio	0.41	0.05	0.00	0.07	0.07	0.00	0.04	0.04	0.00	0.05	0.14	0.00
Control Delay	9.7	6.5	0.0	5.8	5.8	0.0	7.9	7.9	0.0	12.7	3.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.7	6.5	0.0	5.8	5.8	0.0	7.9	7.9	0.0	12.7	3.8	0.0
LOS	A	A	A	A	A	A	A	A	A	B	A	A
Approach Delay	9.3	5.8	0.0	5.8	5.8	0.0	5.8	3.2	0.0	3.2	3.2	0.0
Approach LOS	A	A	A	A	A	A	A	A	A	B	A	A
Queue Length 50th (ft)	11	2	0	2	2	0	3	3	0	1	5	0
Queue Length 95th (ft)	52	13	0	6	6	0	22	22	0	12	20	0
Internal Link Dist. (ft)	624	0	0	636	0	0	221	0	0	2575	0	
Turn Bay Length (ft)	100	968	0	968	0	0	968	0	0	115	0	
Base Capacity (vph)	710	968	0	968	939	0	968	2946	0	684	2764	0
Starvation Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.23	0.03	0.00	0.04	0.04	0.00	0.03	0.03	0.00	0.02	0.11	0.00
Intersection Summary												
Cycle Length	114											
Actuated Cycle Length	44.9											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.41											
Intersection Signal Delay	5.8											
Intersection LOS	A											
Intersection Capacity Utilization	28.7%											
ICU Level of Service	A											
Analysis Period (min)	15											



**EXISTING + APPROVED + PROJECT
TRAFFIC CONDITIONS
(TRAFFIX & SYNCRHO)**

Antioch Walmart Expansion
Near Term + Project AM

Scenario Report
Near Term + Project AM

Command: Near Term + Project AM
 Volume: Near-Term+Proj AM
 Geometry: Near-Term
 Impact Fee: Default Impact Fee
 Trip Generation: App+Proj AM
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Antioch Walmart Expansion
Near Term + Project AM

Impact Analysis Report
Level Of Service

Intersection	Base Del/V/	Future Del/V/	Change in
	LOS Veh C	LOS Veh C	
# 1 Deer Valley Rd/ Country Hills	A xxxxx 0.435	A xxxxx 0.469	+ 0.034 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx 0.311	A xxxxx 0.335	+ 0.024 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx 0.353	A xxxxx 0.394	+ 0.041 V/C
# 4 Hillcrest Avenue/Driveway	B 13.0 0.022	C 15.7 0.025	+ 2.667 D/V
# 5 Hillcrest Avenue/South Drive	B 10.1 0.078	B 10.4 0.083	+ 0.317 D/V
# 6 Lone Tree Way/Mokelumne Dr	B xxxxx 0.627	C xxxxx 0.718	+ 0.091 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx 0.367	A xxxxx 0.453	+ 0.086 V/C
# 8 Lone Tree Way/Deer Valley Rd	A xxxxx 0.544	C xxxxx 0.725	+ 0.181 V/C
# 9 Lone Tree Way/Deer Valley HS	A xxxxx 0.448	A xxxxx 0.561	+ 0.113 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx 0.389	A xxxxx 0.466	+ 0.077 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx 0.352	A xxxxx 0.492	+ 0.140 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	A xxxxx 0.423	A xxxxx 0.571	+ 0.148 V/C
# 13 Lone Tree Way/Driveway	B 10.8 0.008	B 12.1 0.010	+ 1.321 D/V
# 14 Lone Tree Way/Hillcrest Avenue	A xxxxx 0.394	A xxxxx 0.517	+ 0.122 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx 0.300	A xxxxx 0.392	+ 0.092 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx 0.224	A xxxxx 0.302	+ 0.078 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx 0.336	A xxxxx 0.526	+ 0.190 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	A xxxxx 0.416	A xxxxx 0.533	+ 0.117 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx 0.273	A xxxxx 0.364	+ 0.091 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx 0.293	A xxxxx 0.394	+ 0.101 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A xxxxx 0.153	A xxxxx 0.165	+ 0.012 V/C

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #1 Deer Valley Rd/ Country Hills Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.469
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Street Name: Deer Valley Road Country Hills Drive
Approach: North Bound South Bound East Bound West Bound

Table with columns: L, T, R, L, T, R, L, T, R. Rows for Control, Rights, Min. Green, Y+R, Lanes.

Volume Module:
Base Vol: 10 381 82 77 685 105 62 63 11 151 156 125
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 10 381 82 77 685 105 62 63 11 151 156 125
Added Vol: 0 109 23 0 15 76 13 0 0 9 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 10 490 105 77 700 181 75 63 11 160 156 125
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 10 490 105 77 700 181 75 63 11 160 156 125
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 10 490 105 77 700 181 75 63 11 160 156 125
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 10 490 105 77 700 181 75 63 11 160 156 125
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 10 490 105 77 700 181 75 63 11 160 156 125

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.65 0.35 1.00 1.59 0.41 1.00 0.85 0.15 1.00 0.56 0.44
Final Sat.: 1720 2833 607 1720 2733 707 1720 1464 256 1720 955 765

Capacity Analysis Module:
Vol/Sat: 0.01 0.17 0.17 0.04 0.26 0.26 0.04 0.04 0.04 0.09 0.16 0.16
Crit Volume: 10 441 75 281
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #2 Hillcrest Avenue/Laurel Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.335
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Street Name: Hillcrest Avenue Laurel Road
Approach: North Bound South Bound East Bound West Bound

Table with columns: L, T, R, L, T, R, L, T, R. Rows for Control, Rights, Min. Green, Y+R, Lanes.

Volume Module:
Base Vol: 67 372 25 74 377 80 150 50 100 48 67 164
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 67 372 25 74 377 80 150 50 100 48 67 164
Added Vol: 3 100 14 6 69 0 0 0 0 5 20 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 70 472 39 80 446 80 150 50 105 68 67 173
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 70 472 39 80 446 80 150 50 105 68 67 173
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 70 472 39 80 446 80 150 50 105 68 67 173
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 70 472 39 80 446 80 150 50 105 68 67 93
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 70 472 39 80 446 80 150 50 105 68 67 93

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 1.70 0.30 1.00 0.32 0.68 1.00 1.00 1.00
Final Sat.: 1720 3440 1563 1720 2917 523 1720 555 1165 1720 1720 1720

Capacity Analysis Module:
Vol/Sat: 0.04 0.14 0.02 0.05 0.15 0.15 0.09 0.09 0.09 0.04 0.04 0.05
Crit Volume: 70 263 150
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #7 Lone Tree Way/Deer Valley Plaza

Cycle (sec): 130 Critical Vol./Cap.(X): 0.453
Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Street Name: Deer Valley Plaza Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 0 1 0 0 0 0 0 2 0 1 1 0 2 0 0

Volume Module:
Base Vol: 75 0 35 0 0 0 796 67 42 1060 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 75 0 35 0 0 0 796 67 42 1060 0
Added Vol: 0 0 0 0 0 0 111 0 0 285 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 75 0 35 0 0 0 907 67 42 1345 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 75 0 35 0 0 0 907 67 42 1345 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 75 0 35 0 0 0 907 67 42 1345 0
RTOR Reduct: 0 0 35 0 0 0 0 0 0 0 0
RTOR Vol: 75 0 0 0 0 0 0 907 0 42 1345 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 75 0 0 0 0 0 907 0 42 1345 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.00 1.00 0.00 0.00 0.00 0.00 2.00 1.00 1.00 2.00 0.00
Final Sat.: 1650 0 1650 0 0 0 0 3300 1650 1650 3300 0
Capacity Analysis Module:
Vol/Sat: 0.05 0.00 0.00 0.00 0.00 0.00 0.00 0.27 0.00 0.03 0.41 0.00
Crit Volume: 75 0 0 0 0 0 0 673
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #8 Lone Tree Way/Deer Valley Rd

Cycle (sec): 130 Critical Vol./Cap.(X): 0.725
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 83 Level Of Service: C

Street Name: Deer Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 1 0 2 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 279 245 111 353 457 17 35 644 157 185 833 185
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 279 245 111 353 457 17 35 644 157 185 833 185
Added Vol: 111 72 164 17 7 0 0 69 42 155 174 60
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 390 317 275 370 464 17 35 713 199 340 1007 245
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 390 317 275 370 464 17 35 713 199 340 1007 245
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 390 317 275 370 464 17 35 713 199 340 1007 245
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 390 317 275 370 464 17 35 713 0 340 1007 42
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 390 317 275 370 464 17 35 713 0 340 1007 42

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 1.07 0.93 2.00 1.93 0.07 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 3000 1767 1533 3000 3183 117 1650 3300 1650 1650 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.13 0.18 0.18 0.12 0.15 0.15 0.02 0.22 0.00 0.21 0.31 0.03
Crit Volume: 296 185 357 340
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #9 Lone Tree Way/Deer Valley HS

Cycle (sec): 130 Critical Vol./Cap.(X): 0.561
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: A

Street Name: Deer Valley HS Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 1 0 1 1 0 1 0 1 0 2 0 1

Volume Module:
Base Vol: 149 0 58 21 1 29 116 761 130 91 1008 61
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 149 0 58 21 1 29 116 761 130 91 1008 61
Added Vol: 0 0 0 0 0 0 0 250 0 0 390 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 149 0 58 21 1 29 116 1011 130 91 1398 61
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 149 0 58 21 1 29 116 1011 130 91 1398 61
Reduced Vol: 0 0 0 0 0 0 0 0
Reduced Vol: 149 0 58 21 1 29 116 1011 130 91 1398 61
RTOR Reduct: 0 0 0 0 0 0 0 0
RTOR Vol: 149 0 58 21 1 0 116 1011 130 91 1398 40
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 149 0 58 21 1 0 116 1011 130 91 1398 40

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.00 1.00 1.00 1.00 1.00 1.77 0.23
Final Sat.: 1720 0 1720 1720 1720 1720 3048 392 1720 3440 1720

Capacity Analysis Module:
Vol/Sat: 0.09 0.00 0.03 0.01 0.00 0.00 0.07 0.33 0.33 0.05 0.41 0.02
Crit Volume: 149 1 116 699
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #10 Lone Tree Way/Sagebrush Drive

Cycle (sec): 130 Critical Vol./Cap.(X): 0.466
Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Street Name: Sagebrush Drive Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Volume Module:
Base Vol: 104 0 78 0 0 0 0 681 219 198 916 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 104 0 78 0 0 0 0 681 219 198 916 0
Added Vol: 0 0 1 0 0 0 0 250 0 0 390 0
PasserByVol: 0 0 0 0 0 0 0 0
Initial Fut: 104 0 79 0 0 0 0 931 219 200 1306 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 104 0 79 0 0 0 0 931 219 200 1306 0
Reduced Vol: 0 0 0 0 0 0 0 0
Reduced Vol: 104 0 79 0 0 0 0 931 219 200 1306 0
RTOR Reduct: 0 0 0 0 0 0 0 0
RTOR Vol: 104 0 0 0 0 0 0 931 115 200 1306 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 104 0 0 0 0 0 0 931 115 200 1306 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.00 1.00 0.00 0.00 0.00 2.00 1.00
Final Sat.: 1650 0 1650 0 0 0 3300 1650 1650 3300 0

Capacity Analysis Module:
Vol/Sat: 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.28 0.07 0.12 0.40 0.00
Crit Volume: 104 0 466 200
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #11 Lone Tree Way/Williamson Ranch Plaza (OSH)

Cycle (sec): 130 Critical Vol./Cap. (X): 0.492
Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Street Name: Williamson Ranch Plaza (OSH) Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 1 0 0 0 1 0 2 0 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 11 0 40 55 689 0 0 1029 20
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 11 0 40 55 689 0 0 1029 20
Added Vol: 0 0 0 15 0 6 23 228 0 0 386 36
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 26 0 46 78 917 0 0 1415 56
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 26 0 46 78 917 0 0 1415 56
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 26 0 46 78 917 0 0 1415 56
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 0 0 0 26 0 46 78 917 0 0 1415 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 26 0 46 78 917 0 0 1415 30

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1650 0 1650 1650 3300 0 0 3300 1650

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.00 0.05 0.28 0.00 0.00 0.43 0.02
Crit Volume: 26
Crit Moves: *****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #12 Lone Tree Way/Indian Hill Dr/Williamson Ranch Plaza (Wal-Mart, OSH)

Cycle (sec): 130 Critical Vol./Cap. (X): 0.571
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: A

Street Name: Indian Hill Dr/Williamson Ranch Pl Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 2 0 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 9 15 58 20 1 21 45 574 5 25 1116 34
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 9 15 58 20 1 21 45 574 5 25 1116 34
Added Vol: 0 2 4 45 2 31 10 233 0 2 391 14
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 9 17 62 65 3 52 55 807 5 27 1507 48
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 9 17 62 65 3 52 55 807 5 27 1507 48
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 9 17 62 65 3 52 55 807 5 27 1507 48
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 9 17 62 65 3 52 55 807 5 27 1507 12
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 9 17 62 65 3 52 55 807 5 27 1507 12

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.22 0.78 2.00 0.05 0.95 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1650 355 1295 3000 90 1560 1650 3300 1650 1650 3300 1650

Capacity Analysis Module:
Vol/Sat: 0.01 0.05 0.05 0.02 0.03 0.03 0.03 0.24 0.00 0.02 0.46 0.01
Crit Volume: 79
Crit Moves: *****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #17 Lone Tree Way/Canada Valley Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.526
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: A

Street Name: Canada Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 1 1 0 1 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:
Base Vol: 36 14 51 190 31 34 29 746 52 166 1005 168
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 36 14 51 190 31 34 29 746 52 166 1005 168
Added Vol: 8 5 4 193 14 86 34 263 12 12 290 86
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 44 19 55 383 45 120 63 1009 64 178 1295 254
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 44 19 55 383 45 120 63 1009 64 178 1295 254
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 44 19 55 383 45 120 63 1009 64 178 1295 254
RTOR Reduct: 0 0 55 0 0 35 0 0 24 0 0 254
RTOR Vol: 44 19 0 383 45 85 63 1009 40 178 1295 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 44 19 0 383 45 85 63 1009 40 178 1295 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00
Lanes: 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 2.00 3.00 1.00
Final Sat.: 3000 1650 1500 1650 1650 1650 3000 4950 1650 3000 4950 1650

Capacity Analysis Module:
Vol/Sat: 0.01 0.01 0.00 0.23 0.03 0.05 0.02 0.20 0.02 0.06 0.26 0.00
Crit Volume: 19 383 32 432
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #18 Lone Tree Way/SB SR-4 Bypass

Cycle (sec): 100 Critical Vol./Cap.(X): 0.533
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 68 Level Of Service: A

Street Name: SB SR-4 Bypass Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Protected Permitted Protected Protected
Rights: Include Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 1 1 0 0 1 0 0 3 0 1 2 0 3 0 0

Volume Module:
Base Vol: 0 0 0 287 6 353 0 571 401 72 1000 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 287 6 353 0 571 401 72 1000 0
Added Vol: 0 0 0 48 0 96 0 391 68 107 292 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 335 6 449 0 962 469 179 1292 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 335 6 449 0 962 469 179 1292 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 335 6 449 0 962 469 179 1292 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 0 0 0 335 6 449 0 962 469 179 1292 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 335 6 449 0 962 469 179 1292 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00
Lanes: 0.00 0.00 0.00 1.96 0.04 1.00 0.00 3.00 1.00 2.00 3.00 0.00
Final Sat.: 0 0 0 2947 58 1650 0 4950 1650 3000 4950 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.11 0.10 0.27 0.00 0.19 0.28 0.06 0.26 0.00
Crit Volume: 0 449 321 431
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #19 Lone Tree Way/NB SR-4 Bypass (Jeffrey Way)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.364
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx A
Optimal Cycle: 41 Level Of Service: *****

Street Name: NB SR-4 Bypass (Jeffrey Way) Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Permitted Include Protected Permitted Include
Rights: Include Include Include Include Include Include
Min. Green: 0
Y+R: 4.0
Lanes: 1 1 0 0 1 0 0 0 0 0 0 3 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:
Base Vol: 383 29 79 0 0 0 0 662 160 8 671 245
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 383 29 79 0 0 0 0 662 160 8 671 245
Added Vol: 82 0 60 0 0 0 0 247 193 0 317 53
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 465 29 139 0 0 0 0 909 353 8 988 298
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 465 29 139 0 0 0 0 909 353 8 988 298
Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 465 29 139 0 0 0 0 909 353 8 988 298
RTOR: 0 0 4
RTOR Reduct: 0 0 0 0 0 0 256 0 0 0
RTOR Vol: 465 29 135 0 0 0 0 909 97 8 988 298
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 465 29 135 0 0 0 0 909 97 8 988 298

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00
Lanes: 1.88 0.12 1.00 0.00 0.00 0.00 0.00 3.00 1.00 2.00 3.00 1.00
Final Sat.: 2824 194 1650 0 0 0 0 4950 1650 3000 4950 1650
Capacity Analysis Module:
Vol/Sat: 0.16 0.15 0.08 0.00 0.00 0.00 0.00 0.18 0.06 0.00 0.20 0.18
Crit Volume: 247 0 303 329
Crit Moves: *****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #20 Deer Valley Road/Marita Drive

Cycle (sec): 100 Critical Vol./Cap.(X): 0.394
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx A
Optimal Cycle: 31 Level Of Service: *****

Street Name: Deer Valley Road Marita Drive
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Permitted Include Protected Permitted Include
Rights: Include Include Include Include Include Include
Min. Green: 0
Y+R: 4.0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 58 638 23 137 633 24 29 8 21 1 1 6
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 58 638 23 137 633 24 29 8 21 1 1 6
Added Vol: 0 347 0 0 203 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 58 985 23 137 836 24 29 8 21 1 1 6
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 58 985 23 137 836 24 29 8 21 1 1 6
Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 58 985 23 137 836 24 29 8 21 1 1 6
RTOR: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 58 985 23 137 836 24 29 8 21 1 1 6
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 58 985 23 137 836 24 29 8 21 1 1 6

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.95 0.05 1.00 1.94 0.06 1.00 0.28 0.72 1.00 0.14 0.86
Final Sat.: 1720 3362 78 1720 3344 96 1720 474 1246 1720 246 1474
Capacity Analysis Module:
Vol/Sat: 0.03 0.29 0.29 0.08 0.25 0.25 0.02 0.02 0.02 0.00 0.00 0.00
Crit Volume: 504 137 29
Crit Moves: *****

Antioch Walmart Expansion
Near Term + Project AM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #21 Hillcrest Ave/Prewett Ranch Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.165
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

Street Name: Hillcrest Ave Prewett Dr
Approach: North Bound South Bound East Bound West Bound

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected											
Rights:	Include											
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0

Volume Module:	0	0	13	0	111	116	40	0	0	39	10
Base Vol:	0	0	13	0	111	116	40	0	0	39	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	13	0	111	116	40	0	0	39	10
Added Vol:	1	139	0	0	62	3	4	0	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	139	0	13	62	114	120	40	1	0	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	139	0	13	62	114	120	40	1	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	139	0	13	62	114	120	40	1	0	39
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	1	139	0	13	62	114	120	40	1	0	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	1	139	0	13	62	114	120	40	1	0	39

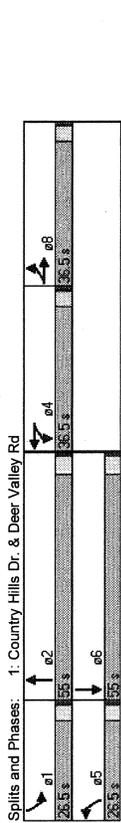
Saturation Flow Module:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.00	1.00	1.00	0.98	0.02	1.00	0.80
Final Sat:	1720	3440	0	1720	1720	1720	1678	42	1720	1369	351

Capacity Analysis Module:
Vol/Sat: 0.00 0.04 0.00 0.01 0.04 0.07 0.07 0.02 0.02 0.00 0.03 0.03
Crit Volume: 1 114 120 49
Crit Moves: ****

1: Country Hills Dr. & Deer Valley Rd
Antioch Walmart Expansion

Near-Term + Project
AM Peak

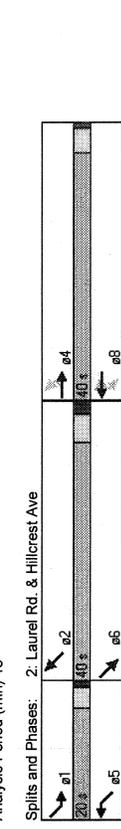
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1822	0	1770	1724	0	1770	3400	0	1770	3384
Satd. Flow (prot)	0.980	0.980	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950
Flt Permitted	1765	1822	0	1770	1724	0	1749	3400	0	1734	3384
Satd. Flow (perm)	5	5	0	24	24	0	18	18	0	19	19
Satd. Flow (RTOR)	75	63	11	160	156	125	10	490	105	77	801
Volume (vph)	90	83	0	205	380	0	12	892	0	93	1185
Lane Group Flow (vph)	Split		Split		Split		Split		Prot		Prot
Turn Type	8		4		4		5		2		1
Protected Phases	8		4		4		5		2		1
Permitted Phases	36.5		36.5		36.5		0.0		26.5		55.0
Total Split (s)	12.0		26.9		26.9		8.0		41.8		12.1
Act Effct Green (s)	0.12		0.27		0.27		0.06		0.42		0.12
Actuated g/C Ratio	0.43		0.40		0.43		0.09		0.48		0.44
v/c Ratio	52.4		48.0		36.8		43.5		26.3		52.4
Control Delay	0.0		0.0		0.0		0.0		0.0		0.0
Queue Delay	0.0		0.0		0.0		0.0		0.0		0.0
Total Delay	52.4		49.0		36.8		43.5		26.3		52.4
LOS	D		D		D		D		C		D
Approach Delay	50.7		40.7		40.7		26.7		27.1		27.1
Approach LOS	D		D		D		C		C		C
Queue Length 50th (ft)	54		50		105		190		7		163
Queue Length 95th (ft)	110		105		179		300		29		278
Internal Link Dist (ft)	308		274		274		880		113		466
Turn Bay Length (ft)	145		511		575		576		110		175
Base Capacity (vph)	492		511		575		576		353		1665
Starvation Cap Reductn	0		0		0		0		0		0
Spillback Cap Reductn	0		0		0		0		0		0
Storage Cap Reductn	0		0		0		0		0		0
Reduced v/c Ratio	0.18		0.17		0.36		0.63		0.03		0.42
Intersection Summary											
Cycle Length	154.5										
Actuated Cycle Length	99.3										
Control Type	Actuated-Uncoordinated										
Maximum v/c Ratio	0.74										
Intersection Signal Delay	31.4										
Intersection Capacity Utilization	66.1%										
Analysis Period (min)	15										
Intersection LOS	C										
ICU Level of Service	C										



2: Laurel Rd. & Hillcrest Ave
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1636	0	1770	1863	1583	1770	3442	0	1770	3490
Satd. Flow (prot)	0.767	0.767	0	0.530	0.530	0.530	0.530	0.530	0	0.530	0.530
Flt Permitted	1312	1636	0	973	1863	1557	1767	3442	0	1750	3490
Satd. Flow (perm)	121	121	0	199	199	199	21	21	0	10	10
Satd. Flow (RTOR)	150	50	105	68	67	173	87	488	80	70	474
Volume (vph)	208	215	0	78	77	193	100	653	0	92	677
Lane Group Flow (vph)	Split		Split		Split		Split		Prot		Prot
Turn Type	4		8		8		6		1		5
Protected Phases	4		8		8		6		1		5
Permitted Phases	40.0		40.0		40.0		40.0		20.0		40.0
Total Split (s)	22.3		22.3		22.3		11.7		59.4		11.3
Act Effct Green (s)	0.22		0.22		0.22		0.12		0.55		0.11
Actuated g/C Ratio	0.71		0.47		0.36		0.19		0.46		0.32
v/c Ratio	48.3		16.9		35.2		30.0		6.4		48.3
Control Delay	0.0		0.0		0.0		0.0		0.0		0.0
Queue Delay	0.0		0.0		0.0		0.0		0.0		0.0
Total Delay	48.3		16.9		35.2		30.0		6.4		48.3
LOS	D		B		D		C		A		D
Approach Delay	32.3		17.9		17.9		17.4		17.4		17.4
Approach LOS	C		B		B		B		B		B
Queue Length 50th (ft)	125		50		43		41		0		60
Queue Length 95th (ft)	137		66		74		68		45		104
Internal Link Dist (ft)	468		468		115		115		155		150
Turn Bay Length (ft)	75		682		682		701		301		2052
Base Capacity (vph)	0		0		0		0		0		0
Starvation Cap Reductn	0		0		0		0		0		0
Spillback Cap Reductn	0		0		0		0		0		0
Storage Cap Reductn	0		0		0		0		0		0
Reduced v/c Ratio	0.43		0.32		0.22		0.11		0.28		0.33
Intersection Summary											
Cycle Length	100										
Actuated Cycle Length	100										
Offset	26 (26%), Referenced to Phase 2.NM/T and 6.SET. Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.71										
Intersection Signal Delay	20.2										
Intersection Capacity Utilization	58.8%										
Analysis Period (min)	15										
Intersection LOS	C										
ICU Level of Service	B										



3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Satd. Flow (prot)	0.950	0	0.950	0	0.950	0	0.950	0	0.950	0	0.950
Fit Permitted	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Hourly flow rate (vph)	6	16	6	16	6	16	6	16	6	16	6
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type											
Median storage (veh)											
Upstream signal (ft)											
pX, platoon unblocked	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
vC, conflicting volume	1221	922	936								
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	1272	904	921								
IC, single (s)	6.8	6.9	4.1								
IC, 2 stage (s)											
IF (s)	3.5	3.3	2.2								
P0 queue free %	95	93	100								
ck capacity (veh/h)	129	227	599								
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	16	299	299	922	14						
Volume Left	0	0	0	0	0						
Volume Right	16	0	0	0	0						
CSH	227	1700	1700	1700	1700						
Volume to Capacity	0.07	0.18	0.18	0.54	0.01						
Queue Length 95th (ft)	6	0	0	0	0						
Control Delay (s)	22.0	0.0	0.0	0.0	0.0						
Lane LOS	C										
Approach Delay (s)	Err	0.0	0.0	0.0	0.0						
Approach LOS	F										
Intersection Summary											
Average Delay	Err										
Intersection Capacity Utilization	Err%										
Analysis Period (min)	15										
	ICU Level of Service H										

Near-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Satd. Flow (prot)	0.950	0	0.950	0	0.950	0	0.950	0	0.950	0	0.950
Fit Permitted	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Hourly flow rate (vph)	6	16	6	16	6	16	6	16	6	16	6
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type											
Median storage (veh)											
Upstream signal (ft)											
pX, platoon unblocked	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
vC, conflicting volume	1221	922	936								
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	1272	904	921								
IC, single (s)	6.8	6.9	4.1								
IC, 2 stage (s)											
IF (s)	3.5	3.3	2.2								
P0 queue free %	95	93	100								
ck capacity (veh/h)	129	227	599								
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	16	299	299	922	14						
Volume Left	0	0	0	0	0						
Volume Right	16	0	0	0	0						
CSH	227	1700	1700	1700	1700						
Volume to Capacity	0.07	0.18	0.18	0.54	0.01						
Queue Length 95th (ft)	6	0	0	0	0						
Control Delay (s)	22.0	0.0	0.0	0.0	0.0						
Lane LOS	C										
Approach Delay (s)	Err	0.0	0.0	0.0	0.0						
Approach LOS	F										
Intersection Summary											
Average Delay	Err										
Intersection Capacity Utilization	Err%										
Analysis Period (min)	15										
	ICU Level of Service H										

Near-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Satd. Flow (prot)	0.950	0	0.950	0	0.950	0	0.950	0	0.950	0	0.950
Fit Permitted	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Hourly flow rate (vph)	6	16	6	16	6	16	6	16	6	16	6
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type											
Median storage (veh)											
Upstream signal (ft)											
pX, platoon unblocked	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
vC, conflicting volume	1221	922	936								
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	1272	904	921								
IC, single (s)	6.8	6.9	4.1								
IC, 2 stage (s)											
IF (s)	3.5	3.3	2.2								
P0 queue free %	95	93	100								
ck capacity (veh/h)	129	227	599								
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	16	299	299	922	14						
Volume Left	0	0	0	0	0						
Volume Right	16	0	0	0	0						
CSH	227	1700	1700	1700	1700						
Volume to Capacity	0.07	0.18	0.18	0.54	0.01						
Queue Length 95th (ft)	6	0	0	0	0						
Control Delay (s)	22.0	0.0	0.0	0.0	0.0						
Lane LOS	C										
Approach Delay (s)	Err	0.0	0.0	0.0	0.0						
Approach LOS	F										
Intersection Summary											
Average Delay	Err										
Intersection Capacity Utilization	Err%										
Analysis Period (min)	15										
	ICU Level of Service H										

Near-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Satd. Flow (prot)	0.950	0	0.950	0	0.950	0	0.950	0	0.950	0	0.950
Fit Permitted	1770	1633	0	1770	1662	0	1770	3486	0	1770	3510
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Hourly flow rate (vph)	6	16	6	16	6	16	6	16	6	16	6
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type											
Median storage (veh)											
Upstream signal (ft)											
pX, platoon unblocked	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
vC, conflicting volume	1221	922	936								
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vCu, unblocked vol	1272	904	921								
IC, single (s)	6.8	6.9	4.1								
IC, 2 stage (s)											

5: Southeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

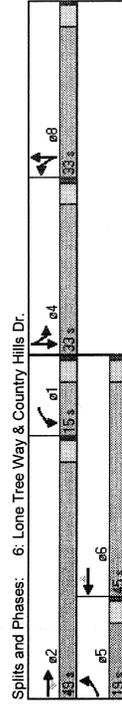
Near-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations											
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	60	0	0	0	6	0	511	27	0	897
Peak Hour Factor	0.88	0.88	0.88	0.63	0.63	0.82	0.82	0.82	0.82	0.89	0.89
Hourly flow rate (vph)	0	68	0	0	0	10	0	623	33	0	783
Pedestrians											
Lane Width (ft)											
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type	None			None							
Median storage (veh)											
Upstream signal (ft)									298		
pX platoon unblocked											
vC1, conflicting volume	1163	1498	319	952	1523	312	900				656
vC2, stage 1 cont vol											
vCu, unblocked vol	1163	1498	319	952	1523	312	900				656
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1
tC, 2 stage (s)											
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2
p0 queue free %	100	100	90	100	100	99	100				100
GM capacity (veh/h)	148	121	678	192	117	684	751				927
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3			
Volume Total	68	10	312	312	33	313	313	273			
Volume Left	0	0	0	0	0	0	0	0			
Volume Right	68	10	0	0	33	0	6	117			
CSH	676	684	1700	1700	1700	1700	1700	1700			
Volume to Capacity	0.10	0.01	0.18	0.18	0.02	0.18	0.18	0.16			
Queue Length 95th (ft)	8	1	0	0	0	0	0	0			
Control Delay (s)	10.9	10.3	0.0	0.0	0.0	0.0	0.0	0.0			
Lane LOS	B	B	A	A	A	A	A	A			
Approach Delay (s)	10.9	10.3	0.0	0.0	0.0	0.0	0.0	0.0			
Approach LOS	B	B	A	A	A	A	A	A			
Intersection Summary											
Average Delay	0.5										
Intersection Capacity Utilization	26.2%										
Analysis Period (min)	15										
ICU Level of Service	A										

6: Lone Tree Way & Country Hills Dr.
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1684	0	1770	1651
Flt. Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0
Satd. Flow (perm)	1759	3539	1125	1648	3539	1486	1770	1684	0	1770	1651
Volume (vph)	96	844	39	99	1307	98	125	81	143	37	64
Lane Group Flow (vph)	112	981	45	106	1405	105	167	299	0	43	247
Turn Type	Prot	Perm	Prot	Prot	Perm	Prot	Split	Split	Split	Split	Split
Protected Phases	5	2	1	6	6	6	6	6	6	4	4
Permitted Phases											
Total Split (s)	19.0	49.0	15.0	45.0	45.0	33.0	33.0	33.0	0.0	33.0	33.0
Act Effect Green (s)	14.6	60.9	12.0	58.3	58.3	24.8	24.8	24.8	0.0	20.3	20.3
Actuated v/c Ratio	0.11	0.47	0.07	0.69	0.48	0.45	0.18	0.19	0.16	0.16	0.16
v/c Ratio	0.57	0.59	0.08	0.65	0.88	0.15	0.49	0.50	0.16	0.16	0.16
Control Delay	65.7	29.6	18.5	61.9	32.3	14.1	51.0	55.0	45.7	47.9	47.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	29.6	18.5	61.9	32.3	14.1	51.0	55.0	45.7	47.9	47.9
LOS	E	C	B	E	C	B	D	D	D	D	D
Approach Delay	32.7										
Approach LOS	C										
Queue Length 50th (ft)	90	316	14	86	356	12	126	192	32	134	134
Queue Length 95th (ft)	146	441	43	#161	#693	20	153	217	60	197	197
Internal Link Dist. (ft)	145	1420	75	145	1588	680	411	440	120	408	446
Turn Bay Length (ft)	223	1858	535	163	1588	680	411	440	120	408	446
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.59	0.08	0.65	0.88	0.15	0.41	0.68	0.11	0.55	0.55
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset	74 (57%), Referenced to phase 2 EBT and 6 WBT, Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.88										
Intersection Signal Delay	36.9										
Intersection LOS	D										
Intersection Capacity Utilization	74.2%										
ICU Level of Service	D										
Analysis Period (min)	15										
# 95th percentile volume exceeds capacity, queue may be longer.											
Queue shown is maximum after two cycles.											



7: Lone Tree Way & Deer Valley Plaza
Antioch Walmart Expansion

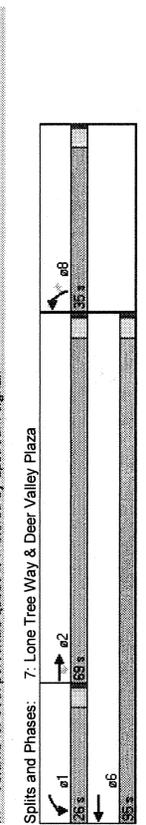
8: Lone Tree Way & Deer Valley Rd
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Near-Term + Project
AM Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1333	1723	3539	1770	1583
Volume (vph)	1043	67	42	1346	75	35
Lane Group Flow (vph)	1146	74	48	1530	82	38
Turn Type	Perm	Prot	Perm	Prot	Perm	Prot
Protected Phases	2	1	6	8	8	8
Permitted Phases	2	2	2	2	2	2
Total Split (s)	69.0	26.0	95.0	35.0	35.0	35.0
Act Effct Green (s)	103.0	103.0	105.0	114.4	12.4	12.4
Actuated g/C Ratio	0.79	0.79	0.08	0.88	0.10	0.10
v/c Ratio	0.41	0.07	0.34	0.49	0.49	0.21
Control Delay	1.0	0.2	66.5	2.0	64.8	16.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1.0	0.2	66.5	2.0	64.8	16.1
LOS	A	A	E	A	E	B
Approach Delay	0.9	0.9	3.8	50.0	50.0	50.0
Approach LOS	A	A	A	D	D	D
Queue Length 50th (ft)	22	0	43	10	67	0
Queue Length 95th (ft)	24	m0	m0	53	117	34
Internal Link Dist (ft)	740	100	200	850	704	95
Turn Bay Length (ft)	2803	1063	313	3115	436	418
Base Capacity (vph)	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.07	0.15	0.49	0.19	0.09

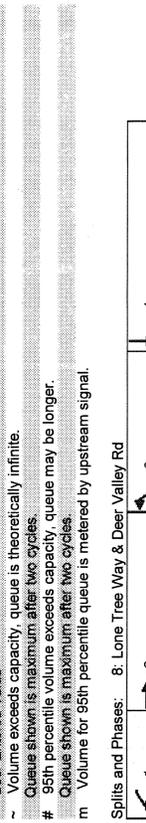
Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 90 (69%); Referenced to phase 2:EBT and 6:WBT. Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 4.5
Intersection Capacity Utilization: 48.0%
Analysis Period (min): 15
m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 7: Lone Tree Way & Deer Valley Plaza

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3211	0	2000	3516	0
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0
Satd. Flow (perm)	1767	3539	1413	1736	3539	1537	3352	3211	0	3367	3516	0
Volume (vph)	35	783	265	367	1008	245	390	317	275	407	528	17
Lane Group Flow (vph)	43	967	327	395	1054	293	433	659	0	457	612	0
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Prot
Protected Phases	5	2	1	6	3	8	3	8	7	4	4	4
Permitted Phases	2	2	2	2	2	2	2	2	2	2	2	2
Total Split (s)	17.0	37.0	20.0	40.0	40.0	30.0	32.0	0.0	41.0	43.0	0.0	0.0
Act Effct Green (s)	10.1	34.0	23.4	49.3	49.3	22.5	26.1	0.0	34.6	39.2	0.0	0.0
Actuated g/C Ratio	0.08	0.26	0.18	0.38	0.38	0.17	0.20	0.00	0.27	0.29	0.00	0.00
v/c Ratio	0.31	1.04	0.54	1.24	0.81	0.35	0.73	0.66	0.86	0.69	0.00	0.00
Control Delay	71.2	90.4	165.9	165.3	36.4	52	58.2	49.5	61.7	41.3	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.2	90.4	165.9	165.3	30.4	52	58.2	49.5	61.7	41.3	0.0	0.0
LOS	E	F	B	F	C	A	E	D	E	D	E	D
Approach Delay	72.3	72.3	57.2	57.2	53.0	53.0	53.0	53.0	50.0	50.0	50.0	50.0
Approach LOS	E	E	E	E	D	D	D	D	D	D	D	D
Queue Length 50th (ft)	37	~442	43	~451	481	45	179	218	185	222	0	0
Queue Length 95th (ft)	71	#509	167	#614	#672	m83	228	288	245	283	0	0
Internal Link Dist (ft)	850	850	1680	1680	825	825	420	420	420	420	0	0
Turn Bay Length (ft)	195	400	500	500	400	180	858	585	1104	1104	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	1.04	0.54	1.24	0.81	0.35	0.61	0.79	0.78	0.65	0.00	0.00

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 54 (42%); Referenced to phase 2:EBT and 6:WBT. Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 58.7
Intersection Capacity Utilization: 88.2%
Analysis Period (min): 15
User Entered Value
m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 8: Lone Tree Way & Deer Valley Rd

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

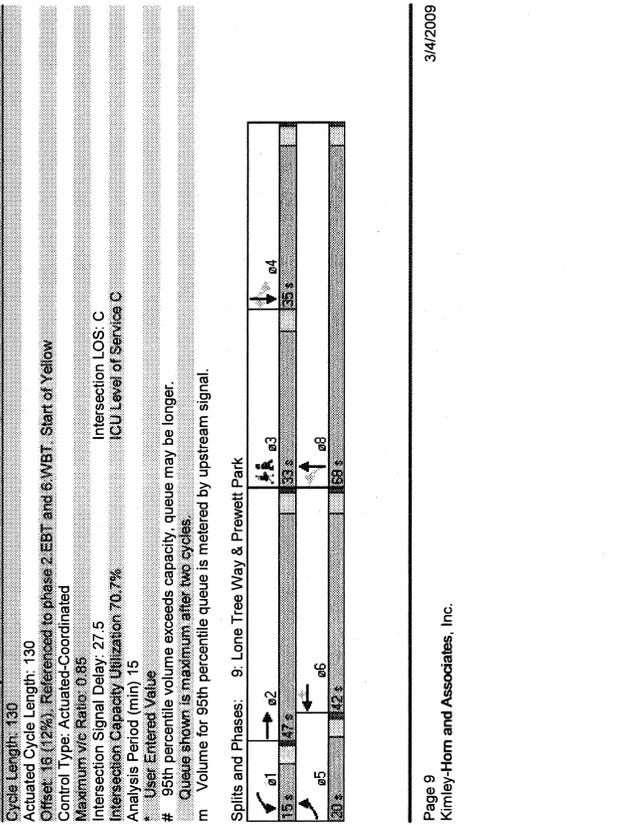
Near-Term + Project
AM Peak

Near-Term + Project
AM Peak

EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
1770	3466	0	1770	3539	1583	1770	1532	0	1770	1863
0.950		0	0.960		0.972				0.868	
1769	3466	0	1769	3539	1539	1600	1532	0	1237	1863
141	1522	0	101	1583	68	276	107	0	41	2
116	1118	130	91	1425	61	149	0	58	21	1
141	1522	0	101	1583	68	276	107	0	41	2
Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
5	2	2	1	6	8	8	8	8	4	4
20.0	47.0	0.0	15.0	42.0	68.0	68.0	68.0	0.0	35.0	35.0
17.0	71.0	0.0	14.5	68.5	68.5	35.5	35.5	0.0	12.3	12.3
0.13	0.65	0.0	0.11	0.53	0.53	0.27	0.27	0.02	0.09	0.09
0.61	0.80	0.0	0.51	0.85	0.08	0.63	0.18	0.35	0.01	0.30
51.6	27.3	0.0	73.5	21.7	3.7	48.4	0.7	63.1	52.0	17.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51.6	27.3	0.0	73.5	21.7	3.7	48.4	0.7	63.1	52.0	17.6
D	C	C	E	C	A	D	A	A	E	D
29.3	24.0	24.0	24.0	33.6	33.6	36.9	36.9	36.9	36.9	36.9
103	653	86	421	1	186	0	33	2	0	0
m108	m4716	m134	#973	m18	140	0	39	5	4	4
145	1580	150	605	609	609	609	609	609	609	609
257	1898	205	1865	828	887	887	887	887	887	887
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0.55	0.90	0.49	0.85	0.08	0.34	0.12	0.13	0.13	0.00	0.14

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3466	0	1770	3539	1583	1770	1532	0	1770	1863
Flt Permitted	0.950		0	0.960		0.972				0.868	
Satd. Flow (perm)	1769	3466	0	1769	3539	1539	1600	1532	0	1237	1863
Satd. Flow (RTOR)	141	1522	0	101	1583	68	276	107	0	41	2
Volume (vph)	116	1118	130	91	1425	61	149	0	58	21	1
Lane Group Flow (vph)	141	1522	0	101	1583	68	276	107	0	41	2
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	8	8	8	8	4	4
Permitted Phases	20.0	47.0	0.0	15.0	42.0	68.0	68.0	68.0	0.0	35.0	35.0
Total Split (s)	17.0	71.0	0.0	14.5	68.5	68.5	35.5	35.5	0.0	12.3	12.3
Act Effect Green (s)	0.13	0.65	0.0	0.11	0.53	0.53	0.27	0.27	0.02	0.09	0.09
Actuated g/C Ratio	0.61	0.80	0.0	0.51	0.85	0.08	0.63	0.18	0.35	0.01	0.30
v/c Ratio	51.6	27.3	0.0	73.5	21.7	3.7	48.4	0.7	63.1	52.0	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	51.6	27.3	0.0	73.5	21.7	3.7	48.4	0.7	63.1	52.0	17.6
Total Delay	D	C	C	E	C	A	D	A	A	E	D
LOS	D	C	C	E	C	A	D	A	A	E	D
Approach Delay	29.3	24.0	24.0	24.0	33.6	33.6	36.9	36.9	36.9	36.9	36.9
Approach LOS	C	C	C	C	C	C	D	D	D	D	D
Queue Length 50th (ft)	103	653	86	421	1	186	0	33	2	0	0
Queue Length 95th (ft)	m108	m4716	m134	#973	m18	140	0	39	5	4	4
Internal Link Dist (ft)	145	1580	150	605	609	609	609	609	609	609	609
Turn Bay Length (ft)	257	1898	205	1865	828	887	887	887	887	887	887
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.90	0.49	0.85	0.08	0.34	0.12	0.13	0.13	0.00	0.14

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 16 (12%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 27.5
 Intersection Capacity Utilization: 70.7%
 Analysis Period (min): 15
 * User Entered Value
 # 95th percentile volume exceeds capacity, queue may be longer.
 m Queue shown is maximum after two cycles.
 n Volume for 95th percentile queue is metered by upstream signal.



11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

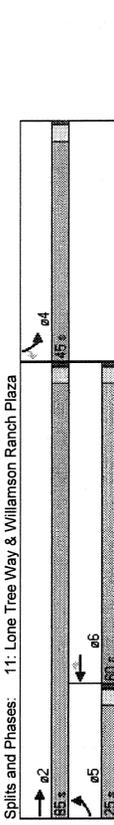
10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Lane Group	EBL	WBL	WBR	SBL	EBL	WBL	WBR	SBL
Lane Configurations	EB	WB	WB	SB	EB	WB	WB	SB
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	3539	1583	1770	3539	3539	1583
Flt Permitted	0.950				0.950			
Satd. Flow (perm)	1766	3539	3539	1504	1770	3539	3539	1550
Satd. Flow (RTOR)	65				65			
Volume (vph)	78	1023	1442	56	26	46		
Lane Group Flow (vph)	101	1329	1849	72	37	65		
Turn Type	Prot				Perm			
Protected Phases		2	6		4			
Permitted Phases				6				4
Total Split (s)	25.0	85.0	60.0	60.0	45.0	45.0	45.0	45.0
Act Erct Green (s)	11.7	115.3	100.0	100.0	11.3	11.3	11.3	11.3
Actuated g/C Ratio	0.09	0.89	0.77	0.77	0.09	0.09	0.09	0.09
v/c Ratio	0.64	0.42	0.68	0.06	0.24	0.33		
Control Delay	76.0	5.0	11.0	0.1	55.9	15.6		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	76.0	5.0	11.0	0.1	55.9	15.6		
LOS	E	A	B	A	E	B		
Approach Delay	10.0	10.6		30.2				
Approach LOS	B	B		C				
Queue Length 50th (ft)	76	127	50	0	31	0		
Queue Length 95th (ft)	101	196	239	m1	45	22		
Internal Link Dist (ft)		1855	620		406			
Turn Bay Length (ft)	155			115				
Base Capacity (vph)	300	3138	2721	1161	572	645		
Starvation Cap Reductn	0	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.34	0.42	0.68	0.06	0.06	0.12		

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 115 (88%), Referenced to phase 2, EBT and 6, WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 11.0
 Intersection Capacity Utilization: 62.1%
 Analysis Period (min): 15
 ICU Level of Service: B

Volume for 95th percentile queue is metered by upstream signal

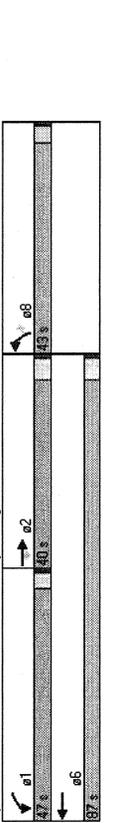


Splits and Phases: 11: Lone Tree Way & Williamson Ranch Plaza

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	EB	EB	WB	WB	NB	NB
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3539	1482	1764	3539	1715	1559
Satd. Flow (RTOR)	65				123	
Volume (vph)	1038	219	200	1333	104	79
Lane Group Flow (vph)	1281	270	233	1550	162	123
Turn Type	Perm	Prot			Perm	
Protected Phases	2		1	6	8	
Permitted Phases			2			8
Total Split (s)	40.0	40.0	47.0	87.0	43.0	43.0
Act Erct Green (s)	79.9	79.9	24.3	107.3	16.7	16.7
Actuated g/C Ratio	0.61	0.61	0.19	0.83	0.13	0.13
v/c Ratio	0.59	0.29	0.70	0.53	0.71	0.40
Control Delay	6.3	1.5	68.6	2.2	70.5	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.3	1.5	68.6	2.2	70.5	11.7
LOS	A	A	E	A	E	B
Approach Delay	5.5		10.8	45.1		
Approach LOS	A		B	D		
Queue Length 50th (ft)	37	0	188	32	134	0
Queue Length 95th (ft)	135	2	206	28	133	12
Internal Link Dist (ft)	605		1855	497		
Turn Bay Length (ft)	80	600		115		
Base Capacity (vph)	2176	936	599	2920	545	565
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.29	0.39	0.53	0.30	0.22

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 40 (31%), Referenced to phase 2, EBT and 6, WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 11.2
 Intersection Capacity Utilization: 56.5%
 Analysis Period (min): 15
 ICU Level of Service: B

Volume for 95th percentile queue is metered by upstream signal



Splits and Phases: 10: Lone Tree Way & Sagebrush Dr.

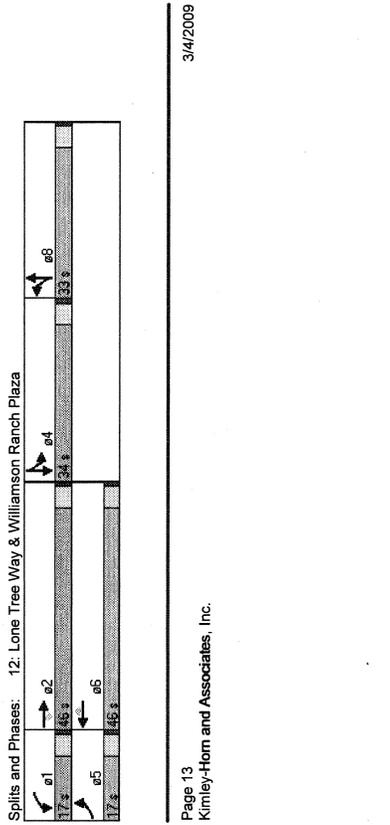
12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

13: Lone Tree Way & Wal-Mart Driveway
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Volume (veh/h)	1763	3539	1286	1713	3539	1455	1764	1645	0	3433	1574
Hourly Flow Rate (vph)	70	899	5	27	1535	48	9	17	62	65	3
Peak Hour Factor	0.82	0.82	0.85	0.85	0.85	0.42	0.42	0.42	0.42	0.42	0.42
Pedestrians	0	1301	1826	92	0	12					
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type											
Median storage (veh)											
Upstream signal (ft)											
pX, platoon unblocked											
vC, conflicting volume											
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vC3, unblocked vol											
IC, single (s)											
IC, 2 stage (s)											
IF (s)											
P0 queue free %											
ch capacity (veh/h)											
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	SB 1	SB 2	SB 3	SB 4	SB 5
Volume Total	651	651	609	609	609	609	92	12			
Volume Left	0	0	0	0	0	0	0	0			
Volume Right	0	0	0	0	0	0	0	0			
CSH	1700	1700	1700	1700	1700	1700	1700	839			
Volume to Capacity	0.38	0.38	0.36	0.36	0.36	0.36	0.05	0.01			
Queue Length 95th (ft)	0	0	0	0	0	0	0	0			
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Lane LOS	A	A	A	A	A	A	A	A			
Approach LOS											
Intersection Summary											
Average Delay	0.0										
Intersection Capacity Utilization	40.0%										
Analysis Period (min)	15										
ICU Level of Service	A										

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Volume (veh/h)	1770	3539	1583	1770	3539	1583	1770	1645	0	3433	1574
Hourly Flow Rate (vph)	70	899	5	27	1535	48	9	17	62	65	3
Peak Hour Factor	0.82	0.82	0.85	0.85	0.85	0.42	0.42	0.42	0.42	0.42	0.42
Pedestrians	0	1301	1826	92	0	12					
Walking Speed (ft/s)											
Percent Blockage											
Right turn flare (veh)											
Median type											
Median storage (veh)											
Upstream signal (ft)											
pX, platoon unblocked											
vC, conflicting volume											
vC1, stage 1 conf vol											
vC2, stage 2 conf vol											
vC3, unblocked vol											
IC, single (s)											
IC, 2 stage (s)											
IF (s)											
P0 queue free %											
ch capacity (veh/h)											
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	SB 1	SB 2	SB 3	SB 4	SB 5
Volume Total	651	651	609	609	609	609	92	12			
Volume Left	0	0	0	0	0	0	0	0			
Volume Right	0	0	0	0	0	0	0	0			
CSH	1700	1700	1700	1700	1700	1700	1700	839			
Volume to Capacity	0.38	0.38	0.36	0.36	0.36	0.36	0.05	0.01			
Queue Length 95th (ft)	0	0	0	0	0	0	0	0			
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Lane LOS	A	A	A	A	A	A	A	A			
Approach LOS											
Intersection Summary											
Average Delay	0.0										
Intersection Capacity Utilization	40.0%										
Analysis Period (min)	15										
ICU Level of Service	A										

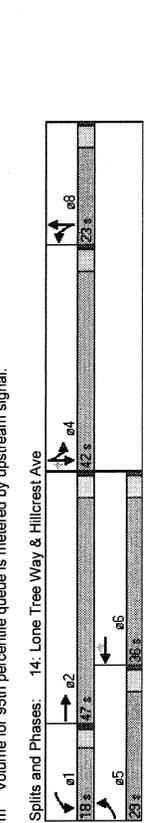


14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	4953	0	1770	5085	1583	1770	3297	0	1800	3539	1583
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0.950
Fit Permitted	1762	4953	0	1757	5085	1515	1760	3297	0	3396	3539	1554
Satd. Flow (perm)	24	24	0	220	220	59	59	59	0	313	313	386
Satd. Flow (RTOR)	237	717	110	47	1163	200	127	72	47	313	99	325
Volume (vph)	269	940	0	52	1278	220	159	149	0	391	124	406
Lane Group Flow (vph)	Prot	Prot	Prot	Perm	Split	Split	Split	Split	Split	Split	Split	Perm
Turn Type	5	2	2	1	6	8	8	8	8	4	4	4
Protected Phases												
Permitted Phases												
Total Split (s)	29.0	47.0	0.0	18.0	36.0	23.0	23.0	23.0	0.0	42.0	42.0	42.0
Act Effct Green (s)	24.9	56.4	0.0	10.6	40.1	40.1	18.7	18.7	0.0	34.3	34.3	34.3
Actuated g/C Ratio	0.18	0.43	0.08	0.36	0.31	0.31	0.14	0.14	0.14	0.28	0.28	0.28
v/c Ratio	0.79	0.43	0.36	0.81	0.35	0.63	0.28	0.28	0.28	0.78	0.13	0.59
Control Delay	83.0	28.5	83.8	38.6	8.5	63.5	30.7	30.7	30.7	55.3	35.5	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	83.0	28.5	83.8	38.6	8.5	63.5	30.7	30.7	30.7	55.3	35.5	8.0
Total Delay	F	C	E	D	A	E	C	C	E	D	D	A
LOS	41.4	35.1	47.6	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
Approach LOS												
Queue Length 50th (ft)	242	119	37	397	29	125	34	154	41	12	12	12
Queue Length 95th (ft)	#334	278	m75	#505	101	176	57	179	57	49	49	49
Internal Link Dist (ft)	620	420	210	890	730	195	274	561	400	1082	290	290
Turn Bay Length (ft)	359	2164	204	1669	620	274	561	570	1082	736	290	290
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.43	0.26	0.81	0.35	0.68	0.27	0.69	0.12	0.55	0.12	0.55

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 78 (60%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 37.2
 Intersection LOS: D
 Intersection Capacity Utilization 64.2%
 ICU Level of Service C
 Analysis Period (min): 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



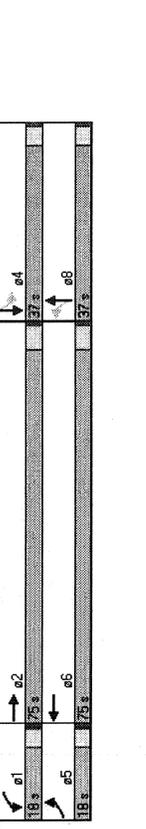
Splits and Phases: 14: Lone Tree Way & Hillcrest Ave

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	5050	0	1770	5062	0	1770	1587	0	1770	1656	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1770	5050	0	1770	5062	0	1090	1587	0	820	1656	0
Satd. Flow (perm)	8	8	0	5	5	0	197	197	0	98	98	0
Satd. Flow (RTOR)	23	934	39	76	1324	40	61	14	156	27	16	45
Volume (vph)	27	1131	0	81	1452	0	77	215	0	57	130	0
Lane Group Flow (vph)	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Turn Type	5	2	2	1	6	8	8	8	8	4	4	4
Protected Phases												
Permitted Phases												
Total Split (s)	18.0	75.0	0.0	18.0	75.0	0.0	37.0	37.0	0.0	37.0	37.0	0.0
Act Effct Green (s)	9.9	94.0	0.0	13.9	100.0	0.0	15.6	15.6	0.0	15.6	15.6	0.0
Actuated g/C Ratio	0.08	0.72	0.11	0.37	0.37	0.12	0.12	0.12	0.12	0.12	0.12	0.12
v/c Ratio	0.20	0.31	0.43	0.37	0.37	0.59	0.59	0.59	0.59	0.58	0.46	0.58
Control Delay	52.0	11.0	57.9	6.0	70.8	45.7	75.3	21.3	75.3	21.3	21.3	75.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	52.0	11.0	57.9	6.0	70.8	45.7	75.3	21.3	75.3	21.3	21.3	75.3
Total Delay	D	B	E	A	E	A	E	B	E	A	E	C
LOS	11.9	8.7	30.3	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Approach LOS												
Queue Length 50th (ft)	20	190	71	105	63	14	46	26	46	26	26	46
Queue Length 95th (ft)	m43	257	128	127	96	54	43	43	43	43	43	9
Internal Link Dist (ft)	200	665	200	1050	786	200	100	614	100	614	200	614
Turn Bay Length (ft)	204	3653	204	215	3696	285	561	214	504	214	504	504
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.31	0.38	0.37	0.27	0.38	0.27	0.26	0.27	0.26	0.26	0.26

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.59
 Intersection Signal Delay: 13.6
 Intersection LOS: B
 Intersection Capacity Utilization 58.8%
 ICU Level of Service B
 Analysis Period (min): 15
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 15: Lone Tree Way & Vista Grande

17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

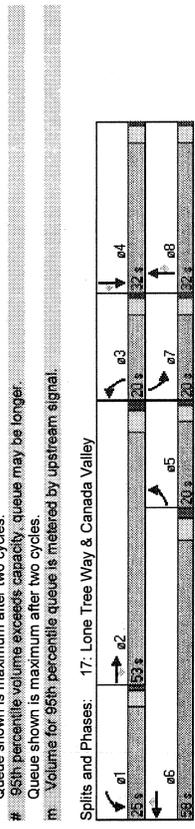
16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Near-Term + Project
AM Peak

Near-Term + Project
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	1623	1504	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3432	5085	1557	3431	5085	1558	3433	1623	1482	1767	1863	1563
Satd. Flow (RTOR)	71			71			277			47		
Volume (vph)	63	1018	67	178	1295	254	44	19	55	384	45	120
Lane Group Flow (vph)	67	1063	71	200	1455	285	59	53	47	486	57	152
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm
Protected Phases	5	2	1	6	3	8	7	4				
Permitted Phases		2		6		8						
Total Split (s)	20.0	53.0	53.0	25.0	58.0	20.0	32.0	20.0	32.0	20.0	32.0	32.0
Act Effct Green (s)	14.8	80.1	12.5	79.6	79.6	7.6	10.1	10.1	17.0	19.6	19.6	19.6
Actuated g/C Ratio	0.11	0.62	0.62	0.10	0.61	0.08	0.08	0.08	0.13	0.15	0.15	0.15
v/c Ratio	0.17	0.35	0.07	0.61	0.47	0.27	0.29	0.35	0.30	2.10	0.20	0.42
Control Delay	37.3	5.1	6.3	73.0	6.3	6.6	62.0	36.5	18.2	538.9	48.4	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.3	5.1	6.3	73.0	6.3	6.6	62.0	36.5	18.2	538.9	48.4	10.1
LOS	D	A	A	E	A	A	E	D	B	F	D	B
Approach Delay	6.5			13.9			40.6					
Approach LOS	A			B			D					F
Queue Length 50th (ft)	29	24	0	86	110	0	25	22	0	~648	44	0
Queue Length 95th (ft)	41	43	0	m114	m204	m0	39	45	23	#734	66	36
Internal Link Dist (ft)		900		775			542			1084		
Turn Bay Length (ft)	320	630	275	245	150	245	160	231	420	470	170	470
Base Capacity (veh)	449	3132	985	581	3112	1061	449	383	367	231	420	470
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.35	0.07	0.34	0.47	0.27	0.13	0.14	0.13	2.10	0.14	0.32

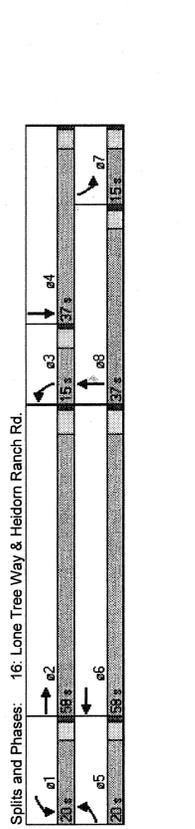
Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 37 (28%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.10
Intersection Signal Delay: 76.6
Intersection Capacity Utilization: 66.3%
Analysis Period (min): 15
Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 17: Lone Tree Way & Canada Valley

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5050	0	1770	5079	0	3433	1863	1583	1770	1615	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1769	5050	0	1769	5079	0	3433	1863	1561	1765	1615	0
Satd. Flow (RTOR)	6			1			163			24		
Volume (vph)	4	1015	43	65	1353	11	33	1	70	11	2	19
Lane Group Flow (vph)	4	1162	0	73	1532	0	77	2	163	14	27	0
Turn Type	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm
Protected Phases	5	2	1	6	3	8	7	4				
Permitted Phases		2		6		8						
Total Split (s)	20.0	58.0	0.0	20.0	58.0	0.0	15.0	37.0	37.0	15.0	37.0	0.0
Act Effct Green (s)	8.4	88.2	0.0	13.3	99.6	0.0	10.5	16.7	16.7	9.0	12.8	0.0
Actuated g/C Ratio	0.06	0.68	0.00	0.10	0.77	0.00	0.08	0.13	0.13	0.07	0.10	0.00
v/c Ratio	0.03	0.34	0.00	0.40	0.39	0.00	0.28	0.01	0.48	0.11	0.15	0.00
Control Delay	72.5	14.5	0.0	74.9	1.7	0.0	58.3	43.0	11.1	58.2	19.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.5	14.5	0.0	74.9	1.7	0.0	58.3	43.0	11.1	58.2	19.8	0.0
LOS	E	B	E	E	A	E	E	D	B	E	E	B
Approach Delay	14.7			5.0			26.4			32.9		
Approach LOS	B			A			C			C		
Queue Length 50th (ft)	4	117	0	66	25	0	31	1	0	11	2	0
Queue Length 95th (ft)	m10	416	0	107	53	0	26	4	0	29	21	0
Internal Link Dist (ft)		1080		900			972			50		
Turn Bay Length (ft)	185	3428	400	233	3892	0	317	487	529	163	440	0
Base Capacity (veh)	231	3428	400	233	3892	0	317	487	529	163	440	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.34	0.00	0.31	0.39	0.00	0.24	0.00	0.31	0.09	0.06	0.00

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 55 (42%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 10.8
Intersection Capacity Utilization: 48.6%
Analysis Period (min): 15
Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 16: Lone Tree Way & Heidorn Ranch Rd.

18: Lone Tree Way & SR 4 Bypass SB Off-ramp
Antioch Walmart Expansion

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBS	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Flt Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (RTOR)	0	973	469	179	1292	0	0	0	335	6	449
Volume (vph)	0	1081	521	190	1374	0	0	0	197	204	528
Lane Group Flow (vph)	0	1081	521	190	1374	0	0	0	197	204	528
Turn Type	2	1	6	2	1	6	2	1	6	2	1
Protected Phases	2	1	6	2	1	6	2	1	6	2	1
Permitted Phases	0.0	59.0	59.0	23.0	82.0	0.0	0.0	0.0	48.0	48.0	48.0
Total Split (s)	65.1	65.1	13.0	81.0	81.0	0.0	0.0	0.0	43.0	43.0	43.0
Act Erct Green (s)	0.90	0.90	0.10	0.62	0.43	0.33	0.33	0.33	0.33	0.37	0.95
Actuated g/C Ratio	0.42	0.50	0.56	0.43	0.43	0.35	0.37	0.35	0.35	0.37	0.95
v/c Ratio	26.8	7.0	62.2	12.4	12.4	34.5	34.8	65.0	0.0	0.0	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	26.8	7.0	62.2	12.4	12.4	34.5	34.8	65.0	0.0	0.0	0.0
Total Delay	26.8	7.0	62.2	12.4	12.4	34.5	34.8	65.0	0.0	0.0	0.0
LOS	C	A	A	E	B	C	C	C	C	C	E
Approach Delay	20.3	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
Approach LOS	C	B	B	B	B	B	B	B	B	B	B
Queue Length 50th (ft)	315	113	80	251	232	128	133	389	128	133	389
Queue Length 95th (ft)	m136	m82	m112	232	760	186	192	#543	186	192	#543
Internal Link Dist (ft)	776	776	776	776	776	536	536	536	536	536	536
Turn Bay Length (ft)	315	315	175	315	315	280	280	582	280	280	582
Base Capacity (veh)	2546	1043	528	3170	3170	582	582	582	582	582	582
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.50	0.36	0.43	0.43	0.34	0.35	0.91	0.34	0.35	0.91
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset	72 (55%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.95										
Intersection Signal Delay	26.8										
Intersection Capacity Utilization	59.4%										
Analysis Period (min)	15										
# 95th percentile volume exceeds capacity, queue may be longer.											
Queue shown is maximum after two cycles.											
m Volume for 95th percentile queue is metered by upstream signal.											
Splits and Phases:	18: Lone Tree Way & SR 4 Bypass SB Off-ramp										

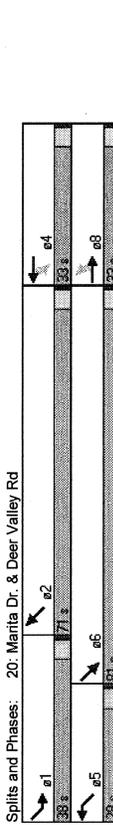
Lane Group	EBL	EBS	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Flt Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (RTOR)	0	973	469	179	1292	0	0	0	335	6	449
Volume (vph)	0	1081	521	190	1374	0	0	0	197	204	528
Lane Group Flow (vph)	0	1081	521	190	1374	0	0	0	197	204	528
Turn Type	2	1	6	2	1	6	2	1	6	2	1
Protected Phases	2	1	6	2	1	6	2	1	6	2	1
Permitted Phases	0.0	64.0	64.0	25.0	89.0	0.0	0.0	0.0	41.0	41.0	41.0
Total Split (s)	95.5	95.5	7.0	97.5	97.5	26.5	26.5	26.5	26.5	26.5	26.5
Act Erct Green (s)	0.73	0.73	0.05	0.75	0.75	0.20	0.20	0.20	0.20	0.20	0.20
Actuated g/C Ratio	0.28	0.32	0.05	0.29	0.27	0.79	0.83	0.35	0.35	0.35	0.35
v/c Ratio	7.3	2.3	59.0	6.0	1.2	64.7	68.3	7.8	0.0	0.0	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	7.3	2.3	59.0	6.0	1.2	64.7	68.3	7.8	0.0	0.0	0.0
Total Delay	7.3	2.3	59.0	6.0	1.2	64.7	68.3	7.8	0.0	0.0	0.0
LOS	A	A	E	A	A	E	E	A	E	E	A
Approach Delay	6.9	5.2	5.2	5.2	5.2	5.36	5.36	5.36	5.36	5.36	5.36
Approach LOS	A	A	A	A	A	D	D	D	D	D	D
Queue Length 50th (ft)	77	24	3	93	0	230	245	0	230	245	0
Queue Length 95th (ft)	99	39	13	151	29	302	320	51	302	320	51
Internal Link Dist (ft)	750	750	750	750	750	840	840	840	840	840	840
Turn Bay Length (ft)	215	215	280	215	280	170	210	573	210	210	573
Base Capacity (veh)	3735	1283	581	3814	1241	491	485	573	485	573	573
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.32	0.02	0.29	0.27	0.55	0.58	0.27	0.55	0.58	0.27
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset	88 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.83										
Intersection Signal Delay	15.1										
Intersection Capacity Utilization	47.0%										
Analysis Period (min)	15										
Intersection LOS: B											
ICU Level of Service A											
Splits and Phases:	19: Lone Tree Way & SR 4 By-pass NB On-ramp										

20: Marita Dr. & Deer Valley Rd
Antioch Walmart Expansion

21: Prewett Ranch Dr. & Hillcrest Ave
Antioch Walmart Expansion

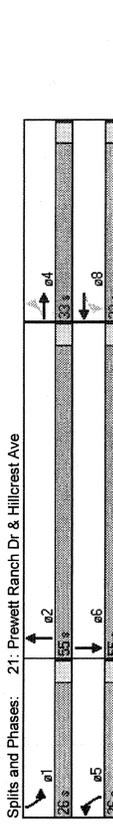
Near-Term + Project
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1619	0	1770	1581	0	1770	3521	0	1770	3525	0
Satd. Flow (prot)	0.744			0.785			0.950			0.950		
Flt Permitted	1567	1519	0	1347	1581	0	1763	3521	0	1760	3525	0
Satd. Flow (perm)	29	8	21	1	1	6	137	993	24	58	985	23
Satd. Flow (RTOR)	34	34	0	3	21	0	149	1105	0	72	1244	0
Volume (vph)	Perm	8	8	4	4	4	1	6	5	2	2	2
Lane Group Flow (vph)	Perm	33.0	33.0	33.0	33.0	33.0	38.0	81.0	0.0	28.0	71.0	0.0
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Split (s)	14.5	14.5	14.5	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
Act Effect Green (s)	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Actuated g/C Ratio	0.38	0.38	0.38	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
v/c Ratio	0.18	0.14	0.14	0.02	0.09	0.09	0.60	0.43	0.41	0.53	0.53	0.53
Control Delay	44.8	20.7	41.6	19.4	19.4	19.4	57.5	10.7	58.1	14.9	14.9	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	20.7	41.6	19.4	19.4	19.4	57.5	10.7	58.1	14.9	14.9	14.9
LOS	D	C	D	B	B	B	E	B	E	B	B	B
Approach Delay	32.8	32.8	32.8	22.1	22.1	22.1	16.3	16.3	17.2	17.2	17.2	17.2
Approach LOS	C	C	C	C	C	C	B	B	B	B	B	B
Queue Length 50th (ft)	23	6	2	2	2	2	98	146	48	207	207	207
Queue Length 95th (ft)	51	32	4	4	4	4	188	352	97	407	407	407
Internal Link Dist (ft)	345			427			825		845			
Turn Bay Length (ft)	40			100			125		175			
Base Capacity (vph)	309	386	305	372	372	372	457	2560	335	2334	2334	2334
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.09	0.01	0.06	0.06	0.06	0.33	0.43	0.21	0.53	0.53	0.53
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	117.9											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.60											
Intersection Signal Delay	17.2											
Intersection LOS	B											
ICU Level of Service	B											
Intersection Capacity Utilization	56.5%											
Analysis Period (min)	15											



Splits and Phases: 20: Marita Dr. & Deer Valley Rd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1857	0	1863	1805	0	1770	3539	0	1770	3288	0
Satd. Flow (prot)	0.686			0.950			0.950			0.950		
Flt Permitted	1300	1857	0	1863	1805	0	1770	3539	0	1770	3288	0
Satd. Flow (perm)	1	1	1	11			1	139	0	13	127	114
Satd. Flow (RTOR)	120	40	1	0	39	10	1	154	0	16	305	0
Volume (vph)	Perm	4	4	8	8	8	5	2	1	6	6	6
Lane Group Flow (vph)	Perm	33.0	33.0	33.0	33.0	33.0	26.0	55.0	0.0	26.0	55.0	0.0
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Split (s)	14.5	14.5	14.5	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
Act Effect Green (s)	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Actuated g/C Ratio	0.38	0.38	0.38	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
v/c Ratio	0.18	0.14	0.14	0.02	0.09	0.09	0.60	0.43	0.41	0.53	0.53	0.53
Control Delay	44.8	20.7	41.6	19.4	19.4	19.4	57.5	10.7	58.1	14.9	14.9	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	20.7	41.6	19.4	19.4	19.4	57.5	10.7	58.1	14.9	14.9	14.9
LOS	D	C	D	B	B	B	E	B	E	B	B	B
Approach Delay	32.8	32.8	32.8	22.1	22.1	22.1	16.3	16.3	17.2	17.2	17.2	17.2
Approach LOS	C	C	C	C	C	C	B	B	B	B	B	B
Queue Length 50th (ft)	23	6	2	2	2	2	98	146	48	207	207	207
Queue Length 95th (ft)	51	32	4	4	4	4	188	352	97	407	407	407
Internal Link Dist (ft)	345			427			825		845			
Turn Bay Length (ft)	40			100			125		175			
Base Capacity (vph)	309	386	305	372	372	372	457	2560	335	2334	2334	2334
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.09	0.01	0.06	0.06	0.06	0.33	0.43	0.21	0.53	0.53	0.53
Intersection Summary												
Cycle Length	114											
Actuated Cycle Length	46.4											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.38											
Intersection Signal Delay	6.6											
Intersection LOS	A											
ICU Level of Service	A											
Intersection Capacity Utilization	30.6%											
Analysis Period (min)	15											



Splits and Phases: 21: Prewett Ranch Dr. & Hillcrest Ave

Scenario Report
 Command: Near Term + Project PM
 Volume: Near-Term+Proj PM
 Geometry: Near-Term
 Impact Fee: Default Impact Fee
 Trip Generation: App+Proj PM
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Impact Analysis Report
 Level Of Service

Intersection	Base Del/V/ LOS Veh	Future Del/V/ LOS Veh	Change in
# 1 Deer Valley Rd/ Country Hills	A xxxxx 0.376	A xxxxx 0.469	+ 0.092 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx 0.219	A xxxxx 0.268	+ 0.049 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx 0.267	A xxxxx 0.299	+ 0.032 V/C
# 4 Hillcrest Avenue/Driveway	B 11.5 0.012	B 12.9 0.051	+ 1.385 D/V
# 5 Hillcrest Avenue/South Drivewa	B 10.2 0.152	B 10.7 0.184	+ 0.509 D/V
# 6 Lone Tree Way/Mokelumne Dr	A xxxxx 0.500	A xxxxx 0.583	+ 0.083 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx 0.419	A xxxxx 0.495	+ 0.075 V/C
# 8 Lone Tree Way/Deer Valley Rd	A xxxxx 0.543	D xxxxx 0.808	+ 0.265 V/C
# 9 Lone Tree Way/Deer Valley HS	A xxxxx 0.373	A xxxxx 0.489	+ 0.116 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx 0.391	A xxxxx 0.512	+ 0.121 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx 0.352	A xxxxx 0.505	+ 0.153 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	A xxxxx 0.385	A xxxxx 0.534	+ 0.149 V/C
# 13 Lone Tree Way/Driveway	A 9.9 0.048	B 11.1 0.069	+ 1.129 D/V
# 14 Lone Tree Way/Hillcrest Avenue	A xxxxx 0.400	A xxxxx 0.542	+ 0.142 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx 0.424	A xxxxx 0.555	+ 0.131 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx 0.329	A xxxxx 0.455	+ 0.126 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx 0.523	B xxxxx 0.689	+ 0.167 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	A xxxxx 0.579	D xxxxx 0.841	+ 0.261 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx 0.451	A xxxxx 0.571	+ 0.120 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx 0.258	A xxxxx 0.394	+ 0.136 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A xxxxx 0.159	A xxxxx 0.169	+ 0.010 V/C

Antioch Walmart Expansion
Near Term + Project PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #1 Deer Valley Rd/ Country Hills Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.469
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 Level Of Service: A

Street Name: Deer Valley Road Country Hills Drive
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 6 520 93 98 314 92 88 100 4 30 75 80
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 6 520 93 98 314 92 88 100 4 30 75 80
Added Vol: 0 135 14 0 37 24 83 1 0 23 1 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 6 655 107 98 351 116 171 101 4 53 76 80
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 6 655 107 98 351 116 171 101 4 53 76 80
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 6 655 107 98 351 116 171 101 4 53 76 80
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 6 655 107 98 351 116 171 101 4 53 76 80
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 6 655 107 98 351 116 171 101 4 53 76 80

Saturation Flow Module:

Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.72 0.28 1.00 1.50 0.50 1.00 0.96 0.04 1.00 0.49 0.51
Final Sat.: 1720 2957 483 1720 2386 854 1720 1654 66 1720 838 882

Capacity Analysis Module:

Vol/Sat: 0.00 0.22 0.22 0.06 0.14 0.14 0.10 0.06 0.06 0.03 0.09 0.09
Crit Volume: 381 98 171
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #2 Hillcrest Avenue/Laurel Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.268
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Street Name: Hillcrest Avenue Laurel Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Permitted Permitted
Rights: Ignore Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:

Base Vol: 27 302 39 162 459 50 17 7 22 35 9 133
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 27 302 39 162 459 50 17 7 22 35 9 133
Added Vol: 3 132 18 6 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0
Initial Fut: 30 434 57 168 538 50 17 7 23 46 9 159
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 30 434 57 168 538 50 17 7 23 46 9 159
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 30 434 57 168 538 50 17 7 23 46 9 159
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 30 434 57 168 538 50 17 7 23 46 9 159
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 30 434 57 168 538 50 17 7 23 46 9 159

Saturation Flow Module:

Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 1.00 1.00 1.83 0.17 1.00 0.23 0.77 1.00 1.00 1.00
Final Sat.: 1720 3440 1563 1720 3147 293 1720 401 1319 1720 1720 1720

Capacity Analysis Module:

Vol/Sat: 0.02 0.13 0.04 0.10 0.17 0.17 0.01 0.02 0.02 0.03 0.01 0.00
Crit Volume: 217 168 30
Crit Moves: ****

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #15 Lone Tree Way/Vista Grande Drive
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.555
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: A

 Street Name: Vista Grande Drive Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 0 1 0 0 1 0 2 1 0 1 0 2 1 0

Volume Module: 35 10 114 42 9 20 18 1282 44 121 931 24
 Base Vol: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 35 10 114 42 9 20 18 1282 44 121 931 24
 Added Vol: 13 0 31 7 0 0 1 3 415 23 41 352 6
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 48 10 145 49 9 21 21 1697 67 162 1283 30
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 48 10 145 49 9 21 21 1697 67 162 1283 30
 Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 48 10 145 49 9 21 21 1697 67 162 1283 30
 RTOR Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 48 10 145 49 9 21 21 1697 67 162 1283 30

Saturation Flow Module:
 Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.06 0.94 1.00 0.30 0.70 1.00 2.89 0.11 1.00 2.93 0.07
 Final Sat.: 1720 111 1609 1720 516 1204 1720 4964 196 1720 5042 118

 Capacity Analysis Module:
 Vol/Sat: 0.03 0.09 0.09 0.03 0.02 0.02 0.01 0.34 0.34 0.09 0.25 0.25
 Crit Volume: 155 49 588 162
 Crit Moves: ****

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #16 Lone Tree Way/Heidorn Ranch Road
 Cycle (sec): 120 Critical Vol./Cap.(X): 0.455
 Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 42 Level Of Service: A

 Street Name: Heidorn Ranch Road Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 2 0 1 0 1 1 0 0 1 0 2 1 0 1 0 2 1 0

Volume Module: 85 4 48 5 3 4 5 1319 74 24 1026 13
 Base Vol: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 85 4 48 5 3 4 5 1319 74 24 1026 13
 Added Vol: 6 1 33 2 1 0 0 442 10 53 394 1
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 91 5 81 7 4 4 5 1761 84 77 1420 14
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 91 5 81 7 4 4 5 1761 84 77 1420 14
 Reduce Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 91 5 81 7 4 4 5 1761 84 77 1420 14
 RTOR Vol: 0 0 77 0 0 0 0 0 0 0 0 0
 RTOR Reduct: 0 0 77 0 0 0 0 0 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 91 5 4 7 4 4 5 1761 84 77 1420 14

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 2.00 1.00 1.00 1.00 0.50 0.50 1.00 2.86 0.14 1.00 2.97 0.03
 Final Sat.: 3000 1650 1650 1650 825 1650 4725 225 1650 4902 48

 Capacity Analysis Module:
 Vol/Sat: 0.03 0.00 0.00 0.00 0.00 0.00 0.00 0.37 0.37 0.05 0.29 0.29
 Crit Volume: 46 8 615 77
 Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #17 Lone Tree Way/Canada Valley Road

Cycle (sec): 100 Critical Vol./Cap.(X): 0.689
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: B

Street Name: Canada Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 0 1 1 0 1 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:
Base Vol: 84 55 173 175 56 22 54 1354 55 329 942 253
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 84 55 173 175 56 22 54 1354 55 329 942 253
Added Vol: 20 16 13 133 10 57 102 364 12 8 370 270
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 104 71 186 308 66 79 156 1718 67 337 1312 523
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 104 71 186 308 66 79 156 1718 67 337 1312 523
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 104 71 186 308 66 79 156 1718 67 337 1312 523
RTOR Vol: 104 71 1 308 66 0 156 1718 10 337 1312 215
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 104 71 1 308 66 0 156 1718 10 337 1312 215

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 3000 1650 1500 1650 1650 1650 3000 4950 1650 3000 4950 1650
Capacity Analysis Module:
Vol/Sat: 0.03 0.04 0.00 0.19 0.04 0.00 0.05 0.35 0.01 0.11 0.27 0.13
Crit Volume: 71 308 169
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #18 Lone Tree Way/SB SR-4 Bypass

Cycle (sec): 100 Critical Vol./Cap.(X): 0.841
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 117 Level Of Service: D

Street Name: SB SR-4 Bypass Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Permitted Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 1 1 0 0 1 0 0 3 0 1 2 0 3 0 0

Volume Module:
Base Vol: 0 0 0 416 10 361 0 1169 541 98 1153 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 416 10 361 0 1169 541 98 1153 0
Added Vol: 0 0 0 90 0 230 0 405 105 175 418 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 506 10 591 0 1574 646 273 1571 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 506 10 591 0 1574 646 273 1571 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 506 10 591 0 1574 646 273 1571 0
RTOR Vol: 0 0 0 506 10 591 0 1574 646 273 1571 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 506 10 591 0 1574 646 273 1571 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.96 0.04 1.00 0.00 3.00 1.00 2.00 3.00 0.00
Final Sat.: 0 0 0 2942 64 1650 0 4950 1650 3000 4950 0
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.17 0.16 0.36 0.00 0.32 0.39 0.09 0.32 0.00
Crit Volume: 0 591 646 137
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #19 Lone Tree Way/NB SR-4 Bypass (Jeffrey Way)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.571
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 43 Level Of Service: A

Street Name: NB SR-4 Bypass (Jeffrey Way) Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Permitted Include Protected Permitted Include
Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Min. Green: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 1 0 0 1 0 0 0 0 0 0 0 0 3 0 1 2 0 3 0 1
Lanes: 1 0 0 1 0 0 0 0 0 0 0 0 3 0 1 2 0 3 0 1

Volume Module:
Base Vol: 437 43 137 0 0 0 1404 264 21 831 357
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 437 43 137 0 0 0 1404 264 21 831 357
Added Vol: 153 0 203 0 0 0 341 154 0 440 83
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 590 43 340 0 0 0 1745 418 21 1271 440
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 590 43 340 0 0 0 1745 418 21 1271 440
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 590 43 340 0 0 0 1745 418 21 1271 440
RTOR Reduct: 0 0 12 0 0 0 0 0 0 325 0
RTOR Vol: 590 43 328 0 0 0 1745 94 21 1271 440
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 590 43 328 0 0 0 1745 94 21 1271 440

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.86 0.14 1.00 0.00 0.00 0.00 0.00 3.00 1.00 2.00
Final Sat.: 2796 224 1650 0 0 0 4950 1650 3000 4950 1650

Capacity Analysis Module:
Vol/Sat: 0.21 0.19 0.20 0.00 0.00 0.00 0.35 0.06 0.01 0.26 0.27
Crit Volume: 316 0 582 11
Crit Moves: ****

Antioch Walmart Expansion
Near Term + Project PM

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #20 Deer Valley Road/Marita Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.394
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Street Name: Deer Valley Road Marita Drive
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Permitted Include Protected Permitted Include
Rights: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Min. Green: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 15 642 3 26 392 29 13 0 3 23 4 79
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 15 642 3 26 392 29 13 0 3 23 4 79
Added Vol: 0 467 0 0 323 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 15 1109 3 26 715 29 13 0 3 23 4 79
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 15 1109 3 26 715 29 13 0 3 23 4 79
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 15 1109 3 26 715 29 13 0 3 23 4 79
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 15 1109 3 26 715 29 13 0 3 23 4 79
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 15 1109 3 26 715 29 13 0 3 23 4 79

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.99 0.01 1.00 1.92 0.08 1.00 0.00 1.00 1.00 0.05 0.95
Final Sat.: 1720 3431 9 1720 3306 134 1720 0 1720 1720 83 1637

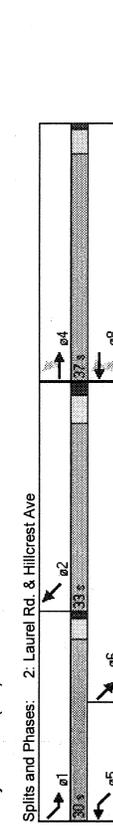
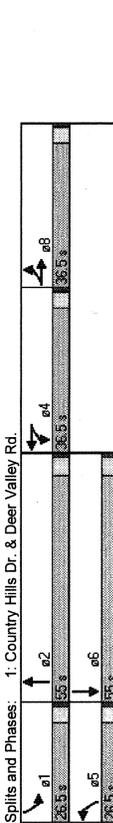
Capacity Analysis Module:
Vol/Sat: 0.01 0.32 0.32 0.02 0.22 0.22 0.01 0.00 0.00 0.01 0.05 0.05
Crit Volume: 556 26 13
Crit Moves: ****

1: Country Hills Dr. & Deer Valley Rd.
Antioch Walmart Expansion

2: Laurel Rd. & Hillcrest Ave
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1851	0	1770	1704	0	1770	3432	0	1770	3398	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1766	1851	0	1770	1704	0	1759	3432	0	1744	3398	0
Satd. Flow (perm)	171	101	4	53	76	80	6	655	107	98	449	122
Volume (vph)	211	130	0	58	172	0	6	819	0	105	614	0
Lane Group Flow (vph)	Split	Split	Split	Split	Split	Split	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	8	8	8	4	4	4	5	2	1	6	6	6
Permitted Phases	36.5	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0	0.0
Total Split (s)	17.4	17.4	0.0	15.5	15.5	0.0	8.0	44.2	0.0	12.6	55.5	0.0
Act Effect Green (s)	0.18	0.18	0.0	0.16	0.16	0.0	0.08	0.48	0.0	0.13	0.60	0.0
Actuated g/C Ratio	0.65	0.38	0.0	0.20	0.56	0.0	0.04	0.50	0.0	0.44	0.30	0.0
v/c Ratio	46.7	39.6	0.0	40.1	39.1	0.0	58.2	26.8	0.0	48.6	15.3	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	46.7	39.6	0.0	40.1	39.1	0.0	58.2	26.8	0.0	48.6	15.3	0.0
Total Delay	D	D	D	D	D	D	E	C	D	D	B	B
LOS	D	D	D	D	D	D	E	C	D	D	B	B
Approach Delay	44.0	39.3	0.0	39.3	39.3	0.0	27.0	20.3	0.0	20.3	20.3	0.0
Approach LOS	D	D	D	D	D	D	C	C	C	C	C	C
Queue Length 50th (ft)	100	58	0	26	67	0	3	185	0	50	67	0
Queue Length 95th (ft)	245	155	0	88	196	0	22	435	0	160	264	0
Internal Link Dist (ft)	145	308	0	120	274	0	110	880	0	175	220	0
Turn Bay Length (ft)	560	586	0	551	552	0	378	1937	0	418	2145	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.22	0.0	0.11	0.31	0.0	0.02	0.42	0.0	0.25	0.29	0.0
Intersection Summary												
Cycle Length	154.5											
Actuated Cycle Length	92.4											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.65											
Intersection Signal Delay	28.8											
Intersection Capacity Utilization	60.1%											
Analysis Period (min)	15											
Intersection LOS	C											
ICU Level of Service	B											



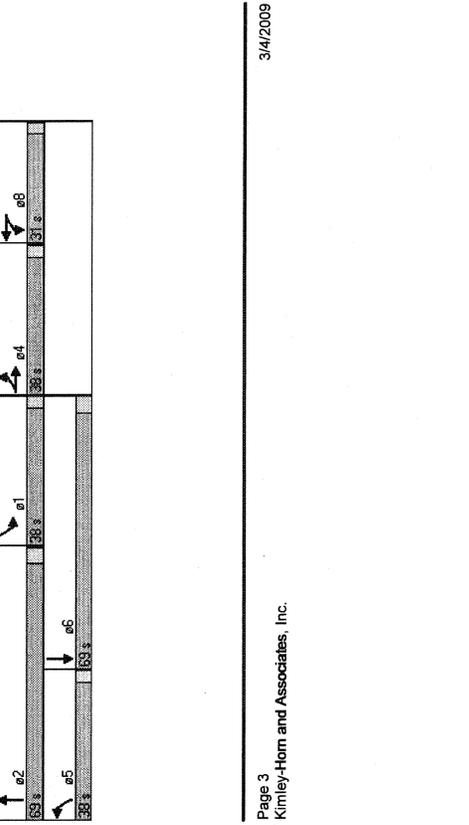
3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Movement	EBL	EBR	NBL	NBT	SBL	SBR
Lane Configurations	Stop	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%
Grade	0%	0%	0%	0%	0%	0%
Volume (veh/ft)	1	25	0	557	648	5
Peak Hour Factor	0.58	0.58	0.88	0.88	0.90	0.90
Hourly flow rates (vph)	2	43	0	533	720	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)				727	1032	
pX: platoon unblocked	0.85	0.85	0.85			
vC: conflicting volume	1036	720	726			
vC1: stage 1 contr vol						
vC2: stage 2 contr vol						
IC: single (s)	1043	673	679			
IC: 2 stage (s)	6.8	6.9	4.1			
IF (s)	3.5	3.3	2.2			
pl queue free %	99	87	100			
ch capacity (veh/h)	182	340	777			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	43	316	316	720	6	
Volume Left	0	0	0	0	0	
Volume Right	43	0	0	0	6	
csh	340	1700	1700	1700	1700	
Volume to Capacity	0.13	0.19	0.19	0.42	0.00	
Queue Length 95th (ft)	11	0	0	0	0	
Control Delay (s)	17.1	0.0	0.0	0.0	0.0	
Lane LOS	C					
Approach Delay (s)	E	0.0	0.0	0.0		
Approach LOS	F					
Intersection Summary						
Average Delay						Err
Intersection Capacity Utilization						Err%
Analysis Period (min)						15
						ICU Level of Service
						H

Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1656	0	1770	1691	0	1770	3483	0
Satd. Flow (prot)	0.960	0.960	0	0.960	0.960	0	0.960	1770	3479
Flt Permitted	1765	1656	0	1756	1691	0	1770	3483	0
Satd. Flow (perm)	46	51	97	36	50	63	84	419	50
Satd. Flow (RTOR)	48	188	0	71	222	0	91	509	0
Volume (vph)	Split	Split	Split	Split	Split	Split	Split	Split	Split
Volume Group Flow (vph)	4	4	8	8	5	2	1	6	
Turn Type	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases	Protected Phases
Permitted Phases	38.0	38.0	0.0	31.0	0.0	38.0	69.0	0.0	38.0
Total Split (s)	15.6	15.6	19.9	19.9	12.4	67.2	14.3	71.6	
Act Effct Green (s)	0.12	0.12	0.15	0.15	0.09	0.52	0.11	0.65	
Activated g/C Ratio	0.22	0.69	0.26	0.77	0.54	0.28	0.61	0.31	
v/c Ratio	55.8	54.9	52.8	64.9	71.2	20.5	70.5	19.3	
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Queue Length	55.8	54.9	52.8	64.9	71.2	20.5	70.5	19.3	
Total Delay	E	D	D	E	E	C	E	B	
LOS	E	D	D	E	E	C	E	B	
Approach Delay	55.1	55.1	62.0	62.0	28.1	28.1	27.6	27.6	
Approach LOS	E	E	E	E	C	C	C	C	
Queue Length 50th (ft)	37	97	52	154	73	120	95	143	
Queue Length 95th (ft)	81	186	61	132	149	226	182	264	
Internal Link Dist (ft)	266	266	283	283	1660	1660	190	1140	
Turn Bay Length (ft)	120	430	90	365	373	406	1816	417	
Base Capacity (vph)	0	0	0	0	0	0	0	0	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.11	0.39	0.19	0.60	0.22	0.28	0.28	0.28	0.31
Intersection Summary									
Cycle Length: 176									
Actuated Cycle Length: 125.2									
Control Type: Actuated-Uncoordinated									
Maximum v/c Ratio: 0.77									
Intersection Signal Delay: 36.5									
Intersection LOS: D									
Intersection Capacity Utilization 48.1%									
Analysis Period (min): 15									
Splits and Phases: 3: Country Hills Dr. & Hillcrest Ave									
EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBR	
69 s	63 s	133 s	133 s	38 s	38 s	38 s	131 s	131 s	
65 s	65 s	163 s	163 s	66 s	66 s	66 s	163 s	163 s	



5. Southeast Driveway & Hillcrest Ave
Antioch Wal-Mart Expansion

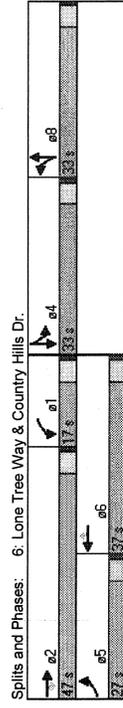
Near-Term + Project
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0	0	143	0	0	42	0	527	63	0	570	98
Volume (veh/h)	0	0	0.78	0.78	0.62	0.62	0.89	0.89	0.69	0.96	0.96	0.96
Peak Hour Factor	0	0	163	0	0	68	0	552	71	0	594	102
Hourly flow rate (vph)	0	0	163	0	0	68	0	552	71	0	594	102
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)								347				
PX platoon unblocked												
VC1, stage 1 cont vol	1009	1308	249	973	1288	296	696					663
VC2, stage 2 cont vol												
VCU, unblocked vol	1009	1308	249	973	1288	296	696					663
IC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1					4.1
IC, 2 stage (s)												
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2					2.2
no queue free %	100	100	76	100	100	90	100					100
SM capacity (veh/h)	176	168	751	166	163	700	886					922
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	183	68	296	296	71	238	236	221				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	183	68	296	296	71	238	236	221				
CSH	751	700	1700	1700	1700	1700	1700	1700				
Volume to Capacity	0.24	0.10	0.17	0.17	0.04	0.14	0.14	0.13				
Queue Length 95th (ft)	24	8	0	0	0	0	0	0				
Control Delay (s)	11.3	10.7	0.0	0.0	0.0	0.0	0.0	0.0				
Lane LOS	B	B	A	A	A	A	A	A				
Approach Delay (s)	11.3	10.7	0.0	0.0	0.0	0.0	0.0	0.0				
Approach LOS	B	B	A	A	A	A	A	A				
Intersection Summary												
Average Delay	1.7											
Intersection Capacity Utilization	28.7%											
Analysis Period (min)	15											
ICU Level of Service	A											

6. Lone Tree Way & Country Hills Dr.
Antioch Wal-Mart Expansion

Near-Term + Project
PM Peak

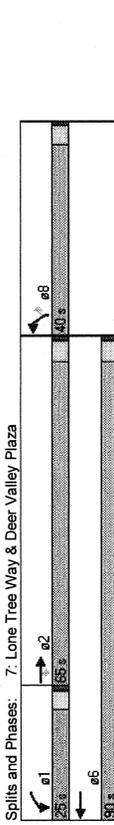
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Sign Control	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Grade	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1702
Volume (veh/h)	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969
Peak Hour Factor	1764	3539	1386	1738	3539	1529	1757	3539	1529	1757	3539	1702
Hourly flow rate (vph)	1764	3539	1386	1738	3539	1529	1757	3539	1529	1757	3539	1702
Pedestrians												
Lane Width (ft)	154	1160	111	109	883	39	115	84	75	48	91	93
Walking Speed (ft/s)	160	1208	116	120	970	43	162	224	0	58	216	0
Percent Blockage												
Right turn flare (veh)												
Median type	5	2	1	6	6	6	8	8	8	4	4	4
Median storage (veh)												
Upstream signal (ft)												
PX platoon unblocked												
VC1, stage 1 cont vol	27.0	47.0	17.0	37.0	37.0	33.0	33.0	33.0	0.0	33.0	33.0	0.0
VC2, stage 2 cont vol												
VCU, unblocked vol	27.0	47.0	17.0	37.0	37.0	33.0	33.0	33.0	0.0	33.0	33.0	0.0
IC, single (s)	18.5	61.3	61.3	14.0	56.8	56.8	21.7	21.7		21.0	21.0	
IC, 2 stage (s)	0.14	0.47	0.47	0.11	0.44	0.44	0.17	0.17		0.16	0.16	
IF (s)	0.63	0.72	0.17	0.63	0.63	0.06	0.55	0.72		0.20	0.71	
no queue free %	63.4	32.8	18.4	66.3	32.2	20.7	55.7	55.9		46.3	54.2	
SM capacity (veh/h)	63.4	32.8	18.4	66.3	32.2	20.7	55.7	55.9		46.3	54.2	
Direction, Lane #	E	C	B	E	C	C	E	E		D	D	
Volume Total	35.0	35.0	35.4	35.4	35.4	35.4	35.4	35.4		35.4	35.4	
Volume Left	0	0	0	0	0	0	0	0		0	0	
Volume Right	35.0	35.0	35.4	35.4	35.4	35.4	35.4	35.4		35.4	35.4	
CSH	129	416	99	95	251	11	127	156		42	145	
Volume to Capacity	195	#699	99	m#176	#621	m26	141	166		71	199	
Queue Length 95th (ft)	145	1420	75	145	740	75	170	170		120	577	
Control Delay (s)	32.7	1669	670	191	1546	675	408	422		408	421	
Lane LOS	E	C	B	E	C	C	E	E		D	D	
Approach Delay (s)	35.0	35.0	35.4	35.4	35.4	35.4	35.4	35.4		35.4	35.4	
Approach LOS	E	C	B	E	C	C	E	E		D	D	
Intersection Summary												
Average Delay	130											
Intersection Capacity Utilization	60 (62%)											
Analysis Period (min)	15											
ICU Level of Service	C											
Maximum v/c Ratio	0.72											
Intersection Signal Delay	39.0											
Intersection Capacity Utilization	71.3%											
Analysis Period (min)	15											
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
m Volume for 95th percentile queue is metered by upstream signal.												



7: Lone Tree Way & Deer Valley Plaza
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBR	WBL	WBR	NBL	NBR
Lane Configurations	←	←	←	←	←	←
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1436	1752	3539	1770	1583
Satd. Flow (RTOR)	35	35	35	35	35	35
Volume (vph)	1323	93	86	892	113	61
Lane Group Flow (vph)	1407	99	95	980	145	78
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	2	2	1	6	8	8
Permitted Phases	6	6	1	6	8	8
Total Split (s)	65.0	65.0	25.0	90.0	40.0	40.0
Act Effct Green (s)	90.5	90.5	13.9	107.4	16.6	16.6
Actuated g/C Ratio	0.70	0.70	0.11	0.83	0.13	0.13
v/c Ratio	0.57	0.10	0.50	0.34	0.64	0.29
Control Delay	4.1	0.5	50.0	7.5	66.2	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.1	0.5	50.0	7.5	66.2	12.8
LOS	A	A	D	A	E	B
Approach Delay	3.9	0	11.3	47.5	0	0
Approach LOS	A	B	D	B	D	D
Queue Length 50th (ft)	43	0	85	175	118	0
Queue Length 95th (ft)	85	m0	m126	m0	154	31
Internal Link Dist (ft)	740	0	850	704	0	0
Turn Bay Length (ft)	100	200	0	0	0	0
Base Capacity (vph)	2463	1070	300	2923	504	95
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.10	0.32	0.34	0.29	0.15
Intersection Summary						
Cycle Length: 130						
Actuated Cycle Length: 130						
Offset: 94 (72%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.64						
Intersection Signal Delay: 10.2						
Intersection LOS: B						
Intersection Capacity Utilization: 57.6%						
Analysis Period (min): 15						
m - Volume for 95th percentile queue is metered by upstream signal.						

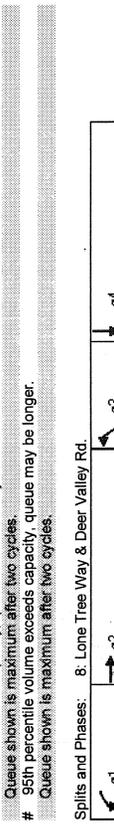


Splits and Phases: 7: Lone Tree Way & Deer Valley Plaza

8: Lone Tree Way & Deer Valley Rd.
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBR	WBL	WBR	NBL	NBR
Lane Configurations	←	←	←	←	←	←
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1768	3539	1523	1762	3539	1551
Satd. Flow (RTOR)	221	221	221	221	221	221
Volume (vph)	87	958	307	368	637	210
Lane Group Flow (vph)	100	1101	353	387	671	221
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	1	6	3	8
Permitted Phases	6	6	1	6	3	8
Total Split (s)	20.0	44.0	25.0	49.0	20.0	32.0
Act Effct Green (s)	13.6	41.0	22.0	49.4	17.0	31.8
Actuated g/C Ratio	0.10	0.32	0.32	0.17	0.38	0.13
v/c Ratio	0.54	0.99	0.49	1.29	0.50	0.89
Control Delay	78.8	56.0	7.2	199.1	35.9	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.8	56.0	7.2	199.1	35.9	12.8
LOS	E	E	A	F	D	E
Approach Delay	46.4	81.3	81.3	85.3	48.6	48.6
Approach LOS	D	F	F	F	D	D
Queue Length 50th (ft)	80	308	0	429	132	0
Queue Length 95th (ft)	140	584	0	178	242	0
Internal Link Dist (ft)	350	0	1560	0	825	0
Turn Bay Length (ft)	195	400	500	400	180	495
Base Capacity (vph)	231	1116	722	300	1344	726
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.99	0.49	1.29	0.50	0.89
Intersection Summary						
Cycle Length: 130						
Actuated Cycle Length: 130						
Offset: 80 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 1.29						
Intersection Signal Delay: 67.0						
Intersection LOS: E						
Intersection Capacity Utilization: 91.8%						
Analysis Period (min): 15						
* - User Entered Value						
- Volume exceeds capacity, queue is theoretically infinite.						
# Queue shown is maximum after two cycles.						
# 95th percentile volume exceeds capacity, queue may be longer.						
Queue shown is maximum after two cycles.						



Splits and Phases: 8: Lone Tree Way & Deer Valley Rd.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3535	0	1770	3539	1583	1770	1561	0	1770	1863
Satd. Flow (prot)	0.950			0.150		0.155				0.147	
Fit Permitted	1770	3535	0	1768	3539	1545	1394	1561	0	1388	1863
Satd. Flow (perm)	39	1757	0	30	1368	10	71	16	0	15	4
Satd. Flow (RTOR)	36	1609	7	26	1194	9	35	505	8	8	2
Volume (vph)	39	1757	0	30	1368	10	71	16	0	15	4
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Turn Type	5	2		1	6		4		4		4
Protected Phases											
Permitted Phases											
Total Split (s)	20.0	57.0	0.0	20.0	57.0	20.0	20.0	20.0	0.0	20.0	20.0
Act Effct Green (s)	9.7	89.7	9.1	86.9	86.9	13.0	13.0	13.0	13.0	13.0	13.0
Actuated g/C Ratio	0.07	0.68	0.07	0.67	0.67	0.10	0.10	0.10	0.10	0.10	0.10
v/c Ratio	0.29	0.72	0.24	0.59	0.01	0.51	0.03	0.11	0.11	0.02	0.14
Control Delay	60.6	12.3	71.0	6.4	2.7	67.4	0.1	53.0	50.5	19.7	0.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.6	12.3	71.0	6.4	2.7	67.4	0.1	53.0	50.5	19.7	0.0
LOS	E	B	E	A	A	E	A	A	D	D	B
Approach Delay	13.4			7.8			55.1			33.9	
Approach LOS	B			A			E			C	
Queue Length 50th (ft)	32	275	0	73	0	58	0	12	3	3	0
Queue Length 95th (ft)	m37	m485		m53	184	m1	56	0	20	9	9
Internal Link Dist (ft)	145	1590		605		609			100	819	
Turn Bay Length (ft)	231	2439		150	2365	1054	182	643	182	244	224
Base Capacity (vph)	0	0	0	122	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.72	0.13	0.62	0.01	0.39	0.02	0.05	0.02	0.02	0.11

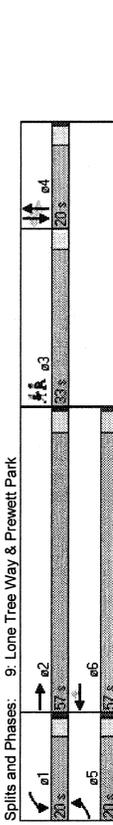
Lane Group	e3											
Lane Configurations												
Total Lost Time (s)												
Satd. Flow (prot)												
Fit Permitted												
Satd. Flow (perm)												
Satd. Flow (RTOR)												
Volume (vph)												
Lane Group Flow (vph)												
Turn Type												
Protected Phases												
Permitted Phases												
Total Split (s)												
Act Effct Green (s)												
Actuated g/C Ratio												
v/c Ratio												
Control Delay												
Queue Delay												
Total Delay												
LOS												
Approach Delay												
Approach LOS												
Queue Length 50th (ft)												
Queue Length 95th (ft)												
Internal Link Dist (ft)												
Turn Bay Length (ft)												
Base Capacity (vph)												
Starvation Cap Reductn												
Spillback Cap Reductn												
Storage Cap Reductn												
Reduced v/c Ratio												

Intersection Summary

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 113 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection LOS: B
 ICU Level of Service: B

Intersection Signal Delay: 12.3
 Intersection Capacity Utilization: 60.1%
 Analysis Period (min): 15
 # 35th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 9: Lone Tree Way & Prewett Park

11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Near-Term + Project
PM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR
Lane Configurations	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1511	1766	3539	1770	1583
Satd. Flow (RTOR)	36	149	46	1104	85	101
Volume (vph)	1629	159	49	1383	139	166
Lane Group Flow (vph)	1629	159	49	1383	139	166
Turn Type	Perm	Prot	Perm	Prot	Perm	Prot
Protected Phases	2	1	6	8	8	8
Permitted Phases	2	1	6	8	8	8
Total Spilt (s)	60.0	60.0	30.0	90.0	40.0	40.0
Act Effect Green (s)	101.1	101.1	9.2	109.3	14.7	14.7
Actuated g/C Ratio	0.78	0.78	0.07	0.84	0.11	0.11
v/c Ratio	0.59	0.13	0.39	0.46	0.69	0.51
Control Delay	3.6	0.3	76.0	1.0	72.6	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Length	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.6	0.3	76.0	1.0	72.6	12.9
LOS	A	A	E	A	E	B
Approach Delay	3.3	0.0	3.6	40.1	0.0	0.0
Approach LOS	A	A	A	D	A	D
Queue Length 50th (ft)	17	1	41	10	115	0
Queue Length 95th (ft)	87	m1	73	12	116	3
Internal Link Dist (ft)	605	605	600	1855	497	115
Turn Bay Length (ft)	2753	1184	368	2974	504	569
Base Capacity (vph)	105	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.13	0.13	0.46	0.28	0.29

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 122 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 6.6
 Intersection Capacity Utilization: 54.4%
 Analysis Period (min): 15
 Volume for 95th percentile queue is metered by upstream signal.

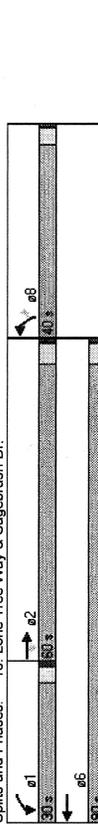
Splits and Phases: 10: Lone Tree Way & Sagebrush Dr.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBR
Lane Configurations	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1511	1766	3539	1770	1583
Satd. Flow (RTOR)	36	149	46	1104	85	101
Volume (vph)	1629	159	49	1383	139	166
Lane Group Flow (vph)	1629	159	49	1383	139	166
Turn Type	Perm	Prot	Perm	Prot	Perm	Prot
Protected Phases	2	1	6	8	8	8
Permitted Phases	2	1	6	8	8	8
Total Spilt (s)	60.0	60.0	30.0	90.0	40.0	40.0
Act Effect Green (s)	101.1	101.1	9.2	109.3	14.7	14.7
Actuated g/C Ratio	0.78	0.78	0.07	0.84	0.11	0.11
v/c Ratio	0.59	0.13	0.39	0.46	0.69	0.51
Control Delay	3.6	0.3	76.0	1.0	72.6	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Length	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.6	0.3	76.0	1.0	72.6	12.9
LOS	A	A	E	A	E	B
Approach Delay	3.3	0.0	3.6	40.1	0.0	0.0
Approach LOS	A	A	A	D	A	D
Queue Length 50th (ft)	17	1	41	10	115	0
Queue Length 95th (ft)	87	m1	73	12	116	3
Internal Link Dist (ft)	605	605	600	1855	497	115
Turn Bay Length (ft)	2753	1184	368	2974	504	569
Base Capacity (vph)	105	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.13	0.13	0.46	0.28	0.29

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 122 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 6.6
 Intersection Capacity Utilization: 54.4%
 Analysis Period (min): 15
 Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 11: Lone Tree Way & Williamson Ranch Plaza

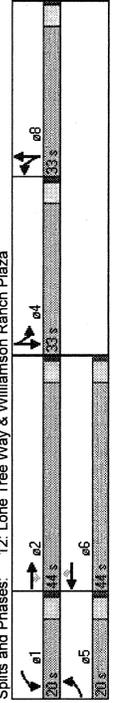


12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

13: Lone Tree Way & Wal-Mart Driveway
Antioch Walmart Expansion

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	EBL	EBT	WBT	WBR	SBL	SBR
Signal Control	Free	Free	Free	Free	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	1655	1112	161	0	44
Peak Hour Factor	0.86	0.86	0.94	0.84	0.84	0.84
Hourly flow rate (vph)	0	1924	1183	107	0	52
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		510	500			
pX, platoon unblocked		0.80			0.73	0.80
vC, conflicting volume		1280			2145	384
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vC, unblocked vol		873			1122	0
IC, single (s)		4.1			6.8	6.9
IC, 2 stage (s)						
IF (s)		2.2			3.5	3.3
PO queue free %		100			100	94
EBL capacity (veh/h)		618			145	872
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4
Volume Total	962	962	394	394	107	52
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
CSH	1700	1700	1700	1700	1700	872
Volume to Capacity	0.57	0.57	0.23	0.23	0.23	0.06
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS						A
Approach LOS						A
Intersection Summary						
Average Delay				0.2		
Intersection Capacity Utilization				49.1%		
Analysis Period (min)				15		
ICU Level of Service				A		

Lane Group	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBT	SBR
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	1647	0	3433	1616	0
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0
Satd. Flow (perm)	1745	3539	1422	1757	1568	0	3419	1616	0
Satd. Flow (RTOR)	109	1393	28	57	1043	48	7	18	78
Volume (vph)	130	1658	33	68	1242	57	10	86	0
Lane Group Flow (vph)	Prot	Perm	Prot	Perm	Split	Split	Split	Split	0
Turn Type	5	2	1	6	8	8	4	4	
Protected Phases									
Permitted Phases	20.0	44.0	20.0	44.0	33.0	33.0	33.0	33.0	0.0
Total Split (s)	15.7	80.3	13.3	75.4	13.1	13.1	15.8	15.8	0.0
Act Effct Green (s)	0.12	0.82	0.10	0.58	0.10	0.10	0.12	0.12	0.0
Actuated g/C Ratio	0.61	0.76	0.04	0.38	0.60	0.07	0.39	0.39	0.43
v/c Ratio	72.4	18.5	7.9	61.3	20.6	15.1	47.7	23.4	53.7
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	72.4	18.5	7.9	61.3	20.6	15.1	47.7	23.4	53.7
Total Delay	E	B	A	E	C	B	D	C	D
LOS	22.1	22.4	25.9	38.3					
Approach LOS									
Queue Length 50th (ft)	108	489	3	60	195	6	8	20	67
Queue Length 95th (ft)	150	#1047	m18	m85	#651	m26	18	40	75
Internal Link Dist (ft)	170	820	80	135	430	80	200	200	440
Turn Bay Length (ft)	237	2187	881	231	2054	800	408	427	792
Base Capacity (vph)	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.76	0.04	0.28	0.60	0.07	0.02	0.20	0.20
Intersection Summary									
Cycle Length	130								
Actuated Cycle Length	130								
Offset	\$3 (41%)	Referenced to phase 2:EBT and 6:WBT, Start of Yellow							
Control Type	Actuated-Coordinated								
Maximum v/c Ratio	0.76								
Intersection Signal Delay	23.6								
Intersection LOS	C								
Intersection Capacity Utilization	62.5%								
Analysis Period (min)	15								
# 95th percentile volume exceeds capacity, queue may be longer.									
Queue shown is maximum after two cycles.									
m Volume for 95th percentile queue is metered by upstream signal.									



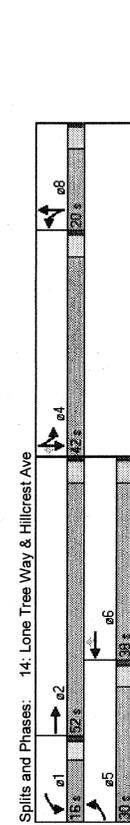
Splits and Phases: 12: Lone Tree Way & Williamson Ranch Plaza

14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5021	0	1770	5085	1583	1770	3319	0	*2000	3539	1583
Flt Permitted	0.960	0.960	0	0.960	0.960	0.960	0.960	0.960	0	0.960	0.960	0.960
Satd. Flow (perm)	1767	5021	0	1764	5085	1517	1741	3319	0	3377	3539	1534
Satd. Flow (RTDR)	10	332	0	332	282	282	64	96	50	484	93	144
Volume (vph)	218	1286	91	83	1035	282	64	96	50	484	93	144
Lane Group Flow (vph)	242	1530	0	98	1218	332	90	205	0	590	113	178
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Split	Split	Split	Split	Split	Perm
Protected Phases	5	2	1	6	1	6	8	8	8	4	4	4
Permitted Phases												
Total Split (s)	30.0	52.0	0.0	16.0	38.0	38.0	20.0	20.0	0.0	42.0	42.0	42.0
Act Effct Green (s)	23.8	51.7	12.3	40.3	40.3	15.0	15.0	15.0	0.0	39.0	39.0	39.0
Actuated g/C Ratio	0.18	0.40	0.05	0.31	0.31	0.12	0.12	0.12	0.00	0.30	0.30	0.30
v/c Ratio	0.75	0.78	0.59	0.77	0.47	0.44	0.47	0.47	0.98	0.98	0.11	0.30
Control Delay	71.5	24.3	62.6	51.7	16.6	60.2	41.3	78.2	33.3	6.2	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	24.3	62.6	51.7	16.6	60.2	41.3	78.2	33.3	6.2	0.0	0.0
LOS	E	C	E	D	B	E	D	D	E	C	C	A
Approach Delay	30.8	45.3	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1	47.1
Approach LOS	C	D	D	D	D	D	D	D	D	D	D	E
Queue Length 50th (ft)	159	288	85	395	85	71	60	254	36	0	0	0
Queue Length 95th (ft)	m291	284	138	287	143	97	72	#321	54	39	0	0
Internal Link Dist (ft)	620	420	210	690	730	195	2575	400	1660	290	0	0
Turn Bay Length (ft)	368	2004	180	1575	699	231	465	600	1062	583	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.76	0.54	0.77	0.47	0.39	0.42	0.98	0.11	0.30	0.00	0.00

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 50 (38%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 42.2
 Intersection LOS: D
 Intersection Capacity Utilization: 76.2%
 Analysis Period (min): 15
 ICU Level of Service D
 * User Entered Value
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



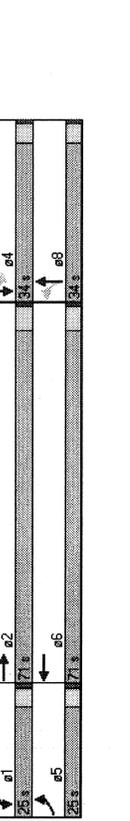
Splits and Phases: 14: Lone Tree Way & Hillcrest Ave

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5049	0	1770	5067	0	1770	1576	0	1770	1651	0
Flt Permitted	0.960	0.960	0	0.960	0.960	0	0.960	0.960	0	0.960	0.960	0
Satd. Flow (perm)	1767	5049	0	1769	5067	0	1362	1576	0	843	1651	0
Satd. Flow (RTDR)	7	181	0	4	181	0	181	181	0	28	28	0
Volume (vph)	21	1723	67	162	1283	30	48	10	145	49	9	21
Lane Group Flow (vph)	22	1845	0	172	1397	0	60	193	0	66	40	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm
Protected Phases	5	2	1	6	1	6	8	8	8	4	4	4
Permitted Phases												
Total Split (s)	25.0	71.0	0.0	25.0	71.0	0.0	34.0	34.0	0.0	34.0	34.0	0.0
Act Effct Green (s)	9.6	84.0	19.4	98.4	98.4	17.6	17.6	17.6	0.0	17.6	17.6	0.0
Actuated g/C Ratio	0.07	0.65	0.15	0.76	0.76	0.14	0.14	0.14	0.00	0.14	0.14	0.00
v/c Ratio	0.17	0.57	0.65	0.36	0.36	0.33	0.32	0.32	0.58	0.58	0.16	0.00
Control Delay	76.2	6.5	63.2	6.0	6.0	52.5	12.9	70.0	21.8	0.0	0.0	0.0
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.2	6.7	63.2	6.0	6.0	52.5	12.9	70.0	21.8	0.0	0.0	0.0
LOS	E	A	E	A	A	D	B	B	E	E	C	C
Approach Delay	7.5	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
Approach LOS	A	B	B	B	B	B	B	B	B	B	B	B
Queue Length 50th (ft)	19	34	144	53	47	9	9	54	9	0	0	0
Queue Length 95th (ft)	m23	m484	231	194	72	47	75	75	28	0	0	0
Internal Link Dist (ft)	650	650	200	1655	130	786	100	100	614	0	0	0
Turn Bay Length (ft)	200	3264	304	3835	325	514	201	415	0	0	0	0
Base Capacity (vph)	0	598	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.69	0.57	0.36	0.18	0.38	0.33	0.10	0.00	0.00	0.00	0.00

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 98 (75%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 11.7
 Intersection LOS: B
 Intersection Capacity Utilization: 71.6%
 Analysis Period (min): 15
 ICU Level of Service C
 m Volume for 95th percentile queue is metered by upstream signal.



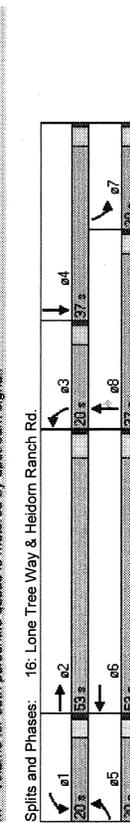
Splits and Phases: 15: Lone Tree Way & Vista Grande

16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5043	0	1770	5079	0	3433	1863	1583	1770	1723	0
Flt Permitted	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0
Satd. Flow (perm)	1768	5043	0	1769	5079	0	3433	1863	1561	1765	1723	0
Satd. Flow (RTOR)	6	1786	86	77	1420	14	91	5	81	7	4	7
Volume (vph)	5	1950	0	85	1575	0	120	7	107	12	14	4
Lane Group Flow (vph)	Prot	1	6	3	8	7	8	7	8	7	4	4
Turn Type	Prot	1	6	3	8	7	8	7	8	7	4	4
Protected Phases	5	2	1	6	3	8	7	8	7	4	4	4
Permitted Phases	20.0	53.0	0.0	20.0	53.0	0.0	20.0	37.0	37.0	20.0	37.0	0.0
Total Split (s)	8.5	86.4	14.1	101.0	14.1	101.0	14.2	15.4	15.4	8.9	11.8	0.0
Act Effect Green (s)	0.07	0.68	0.11	0.78	0.11	0.78	0.11	0.12	0.12	0.07	0.09	0.09
Actuated g/C Ratio	0.04	0.58	0.44	0.40	0.44	0.40	0.32	0.03	0.38	0.10	0.09	0.09
v/c Ratio	80.2	6.6	73.1	5.1	55.0	45.0	11.9	58.0	34.1	0.0	0.0	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	90.2	6.6	73.1	5.1	55.0	45.0	11.9	58.0	34.1	0.0	0.0	0.0
Total Delay	F	A	E	A	D	D	B	E	C			
LOS	6.8	8.6	8.6	35.0	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
Approach Delay	A	A	A	C	D	D	C	D	D	D	D	D
Approach LOS	4	43	76	30	50	5	0	10	6	6	6	6
Queue Length 50th (ft)	m0	633	89	489	67	15	28	20	14	14	14	14
Queue Length 95th (ft)	1065	1065	1065	905	200	972	200	50	316	316	316	316
Internal Link Dist (ft)	185	400	234	3945	479	487	487	231	456	456	456	456
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.58	0.36	0.40	0.25	0.01	0.22	0.05	0.03	0.03	0.03	0.03

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 114 (88%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 9.5
 Intersection LOS: A
 Intersection Capacity Utilization: 61.1%
 Analysis Period (min): 15
 m Volume for 95th percentile queue is metered by upstream signal.



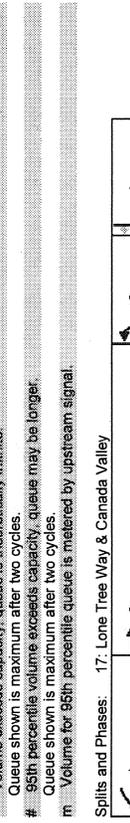
Splits and Phases: 16: Lone Tree Way & Heidorn Ranch Rd.

17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	1674	1504	1770	1863	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3430	5085	1584	3425	5085	1589	3428	1674	1481	1764	1863	1562
Satd. Flow (RTOR)	74	1740	69	337	1312	523	104	71	186	310	66	79
Volume (vph)	168	1871	74	374	1458	581	139	141	202	425	90	108
Lane Group Flow (vph)	Prot	1	6	3	8	7	8	7	8	7	4	4
Turn Type	Prot	1	6	3	8	7	8	7	8	7	4	4
Protected Phases	5	2	1	6	3	8	7	8	7	4	4	4
Permitted Phases	20.0	58.0	30.0	68.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0
Total Split (s)	17.0	67.5	18.9	69.5	10.5	14.5	14.5	14.5	14.5	17.0	21.0	21.0
Act Effect Green (s)	0.13	0.52	0.15	0.53	0.13	0.11	0.11	0.11	0.11	0.13	0.16	0.16
Actuated g/C Ratio	0.37	0.71	0.09	0.75	0.54	0.53	0.50	0.70	0.59	1.84	0.30	0.31
v/c Ratio	45.3	17.8	4.7	68.1	15.3	2.1	63.2	67.0	13.9	425.8	58.4	63.8
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	46.3	17.8	4.7	69.1	15.3	2.1	63.2	67.0	13.9	425.8	58.4	63.8
Total Delay	D	B	A	E	B	A	E	E	B	F	D	B
LOS	19.6	20.5	20.5	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6	43.6
Approach Delay	B	B	B	C	D	D	D	D	D	D	D	D
Approach LOS	70	257	0	164	205	14	58	108	0	~541	87	0
Queue Length 50th (ft)	m0	285	m25	m173	m234	m29	75	143	33	~568	95	27
Queue Length 95th (ft)	905	905	905	760	760	760	542	542	160	1064	1064	1064
Internal Link Dist (ft)	320	285	630	285	245	150	448	288	388	231	304	346
Turn Bay Length (ft)	448	284	832	713	2717	1104	448	288	388	231	304	346
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.71	0.09	0.52	0.54	0.53	0.31	0.55	0.52	1.84	0.30	0.31

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 87 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.84
 Intersection Signal Delay: 53.0
 Intersection LOS: D
 Intersection Capacity Utilization: 82.1%
 Analysis Period (min): 15
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 17: Lone Tree Way & Canada Valley

18: Lone Tree Way & SR 4 By-pass SB Off-ramp
Antioch Walmart Expansion

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Flt Permitted	0	0	0	0.950	0.950	0	0	0	0.950	0.954	0
Satd. Flow (perm)	0	5085	1583	3432	5085	0	0	0	1681	1688	1583
Satd. Flow (RTOR)	0	1599	646	273	1571	0	0	0	506	10	591
Volume (vph)	0	1797	726	314	1806	0	0	0	285	295	864
Lane Group Flow (vph)	0	1797	726	314	1806	0	0	0	285	295	864
Turn Type		2	1	6					4		
Protected Phases		2	1	6					4		
Permitted Phases		0.0	53.0	27.0	80.0	0.0	0.0	0.0	50.0	50.0	50.0
Total Split (s)		57.0	57.0	17.0	77.0				47.0	47.0	47.0
Act Effct Green (s)		0.44	0.44	0.13	0.99				0.36	0.36	0.36
Actuated g/C Ratio		0.81	0.68	0.70	0.60				0.47	0.48	1.14
v/c Ratio		24.9	4.8	67.4	10.7				35.1	35.4	119.3
Control Delay		0.0	1.0	0.0	0.0				0.0	0.0	0.0
Queue Delay		24.9	5.7	67.4	10.7				35.1	35.4	119.3
Total Delay		24.9	5.7	67.4	10.7				35.1	35.4	119.3
LOS		C	A	E	B				D	D	F
Approach Delay		19.4			19.1				80.1		
Approach LOS		B			B				F		
Queue Length 50th (ft)		182	31	125	208				193	201	644
Queue Length 95th (ft)		m337	m119	m156	207				280	290	#667
Internal Link Dist (ft)		760			760			871			
Turn Bay Length (ft)		315	175						280		528
Base Capacity (vph)		2229	1063	634	3012				608	610	583
Starvation Cap Reductn		0	134	0	0				0	0	0
Spillback Cap Reductn		0	0	0	0				0	0	0
Storage Cap Reductn		0	0	0	0				0	0	0
Reduced v/c Ratio		0.81	0.78	0.50	0.60				0.47	0.48	1.14
Intersection Summary											
Cycle Length		130									
Actuated Cycle Length		130									
Offset		100 (77%)									
Control Type		Actuated-Coordinated									
Maximum v/c Ratio		1.14									
Intersection Signal Delay		32.1									
Intersection LOS		C									
Intersection Capacity Utilization		73.6%									
Analysis Period (min)		15									
* Volume exceeds capacity, queue is theoretically infinite.											
# 95th percentile volume exceeds capacity, queue may be longer.											
m. Volume for 95th percentile queue is metered by upstream signal.											
Spits and Phases: 18: Lone Tree Way & SR 4 By-pass SB Off-ramp											

18: Lone Tree Way & SR 4 By-pass SB Off-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Flt Permitted	0	0	0	0.950	0.950	0	0	0	0.950	0.954	0
Satd. Flow (perm)	0	5085	1583	3432	5085	0	0	0	1681	1688	1583
Satd. Flow (RTOR)	0	1599	646	273	1571	0	0	0	506	10	591
Volume (vph)	0	1797	726	314	1806	0	0	0	285	295	864
Lane Group Flow (vph)	0	1797	726	314	1806	0	0	0	285	295	864
Turn Type		2	1	6					4		
Protected Phases		2	1	6					4		
Permitted Phases		0.0	53.0	27.0	80.0	0.0	0.0	0.0	50.0	50.0	50.0
Total Split (s)		57.0	57.0	17.0	77.0				47.0	47.0	47.0
Act Effct Green (s)		0.44	0.44	0.13	0.99				0.36	0.36	0.36
Actuated g/C Ratio		0.81	0.68	0.70	0.60				0.47	0.48	1.14
v/c Ratio		24.9	4.8	67.4	10.7				35.1	35.4	119.3
Control Delay		0.0	1.0	0.0	0.0				0.0	0.0	0.0
Queue Delay		24.9	5.7	67.4	10.7				35.1	35.4	119.3
Total Delay		24.9	5.7	67.4	10.7				35.1	35.4	119.3
LOS		C	A	E	B				D	D	F
Approach Delay		19.4			19.1				80.1		
Approach LOS		B			B				F		
Queue Length 50th (ft)		182	31	125	208				193	201	644
Queue Length 95th (ft)		m337	m119	m156	207				280	290	#667
Internal Link Dist (ft)		760			760			871			
Turn Bay Length (ft)		315	175						280		528
Base Capacity (vph)		2229	1063	634	3012				608	610	583
Starvation Cap Reductn		0	134	0	0				0	0	0
Spillback Cap Reductn		0	0	0	0				0	0	0
Storage Cap Reductn		0	0	0	0				0	0	0
Reduced v/c Ratio		0.81	0.78	0.50	0.60				0.47	0.48	1.14
Intersection Summary											
Cycle Length		130									
Actuated Cycle Length		130									
Offset		100 (77%)									
Control Type		Actuated-Coordinated									
Maximum v/c Ratio		1.14									
Intersection Signal Delay		32.1									
Intersection LOS		C									
Intersection Capacity Utilization		73.6%									
Analysis Period (min)		15									
* Volume exceeds capacity, queue is theoretically infinite.											
# 95th percentile volume exceeds capacity, queue may be longer.											
m. Volume for 95th percentile queue is metered by upstream signal.											
Spits and Phases: 18: Lone Tree Way & SR 4 By-pass SB Off-ramp											

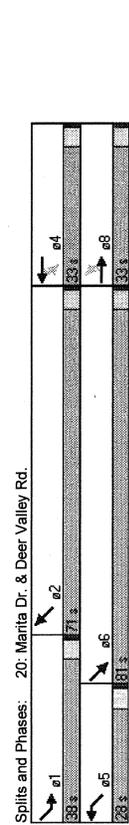
19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	1583	1681	1685	1583	0	0
Flt Permitted	0	0	0	0.950	0.950	0.950	0.950	0.958	0.958	0	0
Satd. Flow (perm)	0	5085	1583	3432	5085	1545	1681	1685	1583	0	0
Satd. Flow (RTOR)	0	1770	418	21	1271	440	590	43	340	0	0
Volume (vph)	0	1883	445	24	1428	494	380	401	420	0	0
Lane Group Flow (vph)	0	1883	445	24	1428	494	380	401	420	0	0
Turn Type		2	1	6		6	8				
Protected Phases		2	1	6		6	8				
Permitted Phases		0.0	64.0	25.0	89.0	41.0	41.0	41.0	41.0	0.0	0.0
Total Split (s)		83.5	83.5	7.1	89.6	89.6	34.4	34.4	34.4	0.0	0.0
Act Effct Green (s)		0.64	0.64	0.05	0.69	0.69	0.26	0.26	0.26	0.0	0.0
Actuated g/C Ratio		0.58	0.40	0.13	0.41	0.41	0.85	0.85	0.85	0.0	0.0
v/c Ratio		4.0	1.1	60.0	9.8	1.7	63.7	68.7	17.5	0.0	0.0
Control Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay		4.0	1.1	60.0	9.8	1.7	63.7	68.7	17.5	0.0	0.0
Total Delay		4.0	1.1	60.0	9.8	1.7	63.7	68.7	17.5	0.0	0.0
LOS		A	A	E	A	A	E	E	E	B	B
Approach Delay		3.5			8.2		49.2				
Approach LOS		A			A		D				
Queue Length 50th (ft)		269	21	10	191	0	308	330	87	0	0
Queue Length 95th (ft)		63	m0	25	218	33	381	403	148	0	0
Internal Link Dist (ft)		760			820				895		1166
Turn Bay Length (ft)		3265	1118	581	3504	1218	491	485	684	0	0
Base Capacity (vph)		0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.58	0.40	0.04	0.41	0.77	0.81	0.81	0.63	0.0	0.0
Intersection Summary											
Cycle Length		130									
Actuated Cycle Length		130									
Offset		10 (6%)									
Control Type		Actuated-Coordinated									
Maximum v/c Ratio		0.90									
Intersection Signal Delay		15.2									
Intersection LOS		B									

20: Marita Dr. & Deer Valley Rd.
Antioch Walmart Expansion

Near-Term + Project
PM Peak

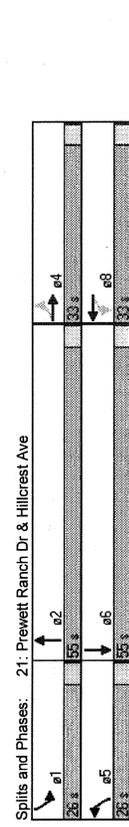
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1583	0	1770	1598	0	1770	3514	0	1770	3539	0
Satd. Flow (prot)	0.569			0.766			0.950			0.950		
Flt Permitted	1060	1583	0	1406	1598	0	1765	3514	0	1754	3539	0
Satd. Flow (perm)	318			113			4			4		
Satd. Flow (RTOR)	13	0	3	23	4	79	26	870	29	15	1109	3
Volume (vph)	19	4	0	33	119	0	33	1152	0	16	1208	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	8			4			1			6		5
Permitted Phases	8			4			1			6		5
Total Split (s)	33.0	33.0	0.0	33.0	33.0	0.0	38.0	81.0	0.0	28.0	71.0	0.0
Act Effect Green (s)	10.2	10.2	0.0	10.2	10.2	0.0	9.6	85.7	0.0	8.6	82.4	0.0
Actuated g/C Ratio	0.10	0.10	0.00	0.10	0.10	0.00	0.09	0.80	0.00	0.08	0.77	0.00
v/c Ratio	0.19	0.01	0.00	0.25	0.47	0.00	0.22	0.41	0.00	0.12	0.44	0.00
Control Delay	47.5	9.0	0.0	47.7	15.9	0.0	47.6	4.6	0.0	48.0	5.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	9.0	0.0	47.7	15.9	0.0	47.6	4.6	0.0	48.0	5.9	0.0
LOS	D	A	D	D	B	D	D	A	D	D	A	A
Approach Delay	39.2			22.8			5.8			6.5		
Approach LOS	D			C			A			A		
Queue Length 50th (ft)	11	0	0	19	3	0	19	60	0	9	146	0
Queue Length 95th (ft)	26	0	0	40	27	0	46	166	0	32	237	0
Internal Link Dist (ft)	345			427			825			845		
Turn Bay Length (ft)	40			100			175			125		
Base Capacity (vph)	252	619	0	334	466	0	466	2820	0	342	2729	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.01	0.00	0.10	0.26	0.00	0.07	0.41	0.00	0.05	0.44	0.00
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	106.9											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.47											
Intersection Signal Delay	7.4											
Intersection LOS	A											
ICU Level of Service A												
Intersection Capacity Utilization	45.4%											
Analysis Period (min)	15											



21: Prewett Ranch Dr. & Hillcrest Ave
Antioch Walmart Expansion

Near-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1863	0	1863	1801	0	1863	3539	0	1770	3256	0
Satd. Flow (prot)	0.784			0.960			0.950			0.950		
Flt Permitted	1367	1863	0	1863	1801	0	1863	3539	0	1770	3256	0
Satd. Flow (perm)	318			113			4			4		
Satd. Flow (RTOR)	13	0	3	23	4	79	26	870	29	15	1109	3
Volume (vph)	19	4	0	33	119	0	33	1152	0	16	1208	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	4			8			5			2		1
Permitted Phases	4			8			5			2		1
Total Split (s)	33.0	33.0	0.0	33.0	33.0	0.0	26.0	55.0	0.0	26.0	55.0	0.0
Act Effect Green (s)	14.1	14.1	0.0	13.6	13.6	0.0	26.2	26.2	0.0	26.2	26.2	0.0
Actuated g/C Ratio	0.29	0.29	0.00	0.28	0.28	0.00	0.58	0.16	0.00	0.16	0.16	0.00
v/c Ratio	0.41	0.05	0.00	0.07	0.07	0.00	0.04	0.05	0.00	0.05	0.15	0.00
Control Delay	9.8	6.5	0.0	5.8	5.8	0.0	7.9	12.8	0.0	7.9	12.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.8	6.5	0.0	5.8	5.8	0.0	7.9	12.8	0.0	7.9	12.8	0.0
LOS	A	A	A	A	A	A	A	B	A	A	B	A
Approach Delay	9.3			5.8			7.9			3.2		
Approach LOS	A			A			A			A		
Queue Length 50th (ft)	11	2	0	2	2	0	3	12	0	1	5	0
Queue Length 95th (ft)	52	13	0	6	6	0	22	22	0	12	20	0
Internal Link Dist (ft)	624			536			221			2576		
Turn Bay Length (ft)	100			940			2945			115		
Base Capacity (vph)	710	968	0	940	940	0	940	664	0	664	2793	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.03	0.00	0.04	0.04	0.00	0.03	0.02	0.00	0.02	0.11	0.00
Intersection Summary												
Cycle Length	114											
Actuated Cycle Length	44.8											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.41											
Intersection Signal Delay	5.8											
Intersection LOS	A											
ICU Level of Service A												
Intersection Capacity Utilization	28.6%											
Analysis Period (min)	15											



**LONG-TERM TRAFFIC CONDITIONS
(TRAFFIX & SYNCRHO)**

Antioch Walmart Expansion

Scenario Report

Command: Cumulative AM
 Volume: None
 Geometry: Cumulative AM
 Impact Fee: Default Impact Fee
 Trip Generation: Cumulative AM
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Antioch Walmart Expansion

Impact Analysis Report

Level Of Service

Intersection	Base Del/V/LOS Veh C	Future Del/V/LOS Veh C	Change in
# 1 Deer Valley Rd/ Country Hills	A xxxxx 0.572	A xxxxx 0.572	+ 0.001 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx 0.599	B xxxxx 0.645	+ 0.046 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx 0.471	A xxxxx 0.479	+ 0.008 V/C
# 4 Hillcrest Avenue/Driveway	C 16.5 0.031	C 16.9 0.032	+ 0.420 D/V
# 5 Hillcrest Avenue/South Drivewa	B 11.1 0.099	B 11.1 0.100	-0.066 D/V
# 6 Lone Tree Way/Mokelumne Dr	E xxxxx 0.959	E xxxxx 0.962	+ 0.004 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx 0.551	A xxxxx 0.554	+ 0.004 V/C
# 8 Lone Tree Way/Deer Valley Rd	D xxxxx 0.815	D xxxxx 0.834	+ 0.019 V/C
# 9 Lone Tree Way/Deer Valley HS	B xxxxx 0.609	B xxxxx 0.625	+ 0.016 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx 0.579	A xxxxx 0.595	+ 0.016 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx 0.540	A xxxxx 0.542	+ 0.002 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	B xxxxx 0.627	A xxxxx 0.577	-0.050 V/C
# 13 Lone Tree Way/Driveway	B 12.7 0.011	B 12.8 0.011	+ 0.031 D/V
# 14 Lone Tree Way/Hillcrest Avenue	B xxxxx 0.642	C xxxxx 0.713	+ 0.071 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx 0.410	A xxxxx 0.460	+ 0.050 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx 0.421	A xxxxx 0.567	+ 0.146 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx 0.542	B xxxxx 0.672	+ 0.129 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	B xxxxx 0.668	C xxxxx 0.712	+ 0.044 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx 0.427	B xxxxx 0.699	+ 0.272 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx 0.457	A xxxxx 0.450	-0.006 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A xxxxx 0.422	A xxxxx 0.428	+ 0.006 V/C

Antioch Walmart Expansion

Level Of Service Computation Report
CTALOS Method (Future Volume Alternative)

Intersection #1 Deer Valley Rd/ Country Hills Dr

Cycle (sec): 100
Loss Time (sec): 9
Optimal Cycle: 43

Street Name: Deer Valley Road
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 13 551 97 77 816 214 172 130 31 160 156 127
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.01 0.19 0.19 0.04 0.30 0.30 0.10 0.09 0.09 0.09 0.16 0.16
Crit Volume: 13 517 172 283

Antioch Walmart Expansion

Level Of Service Computation Report
CTALOS Method (Future Volume Alternative)

Intersection #2 Hillcrest Avenue/Laurel Road

Cycle (sec): 100
Loss Time (sec): 9
Optimal Cycle: 52

Street Name: Hillcrest Avenue
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Ignore Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 1 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 67 512 463 191 493 80 150 89 100 325 118 188
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.04 0.16 0.18 0.21 0.19 0.19 0.09 0.11 0.11 0.17 0.07 0.00
Crit Volume: 280 353 353 189 287

Antioch Walmart Expansion

Level Of Service Computation Report
 CATALOS Method (Future Volume Alternative)

 Intersection #11 Lone Tree Way/Williamson Ranch Plaza (OSH)

 Cycle (sec): 130 Critical Vol./Cap.(X): 0.542
 Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 31 Level Of Service: A

 Street Name: Williamson Ranch Plaza (OSH) Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Include Permitted
 Rights: Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 0 0 0 0 1 0 0 0 1 0 2 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 25 0 46 82 1376 0 0 1567 50
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 25 0 46 82 1376 0 0 1567 50
 Added Vol: 0 0 0 0 0 0 0 55 0 0 8 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 0 0 25 0 46 82 1431 0 0 1575 50
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 25 0 46 82 1431 0 0 1575 50
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 25 0 46 82 1431 0 0 1575 50
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 25
 RTOR Vol: 0 0 0 25 0 46 82 1431 0 0 1575 25
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 25 0 82 1431 0 0 1575 25

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1650 0 1650 1650 3300 0 0 3300 1650
 Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.00 0.05 0.43 0.00 0.00 0.48 0.02
 Crit Volume: 0 25 82 788
 Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
 CATALOS Method (Future Volume Alternative)

 Intersection #12 Lone Tree Way/Indian Hill Dr/Williamson Ranch Plaza (Wal-Mart, OSH)

 Cycle (sec): 130 Critical Vol./Cap.(X): 0.577
 Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 54 Level Of Service: A

 Street Name: Indian Hill Dr/Williamson Ranch Pl Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 0 1 0 2 0 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
 Base Vol: 12 15 69 43 1 21 86 1275 6 26 1681 45
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 12 15 69 43 1 21 86 1275 6 26 1681 45
 Added Vol: 0 0 0 0 0 0 0 -86 141 0 0 8 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 12 15 69 43 1 21 0 1416 6 26 1689 45
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 12 15 69 43 1 21 0 1416 6 26 1689 45
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 12 15 69 43 1 21 0 1416 6 26 1689 45
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 24
 RTOR Vol: 12 15 69 43 1 21 0 1416 0 26 1689 21
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 12 15 69 43 1 21 0 1416 0 26 1689 21

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.18 0.82 2.00 0.05 0.95 1.00 2.00 1.00 1.00 2.00 1.00
 Final Sat.: 1650 295 1355 3000 75 1575 1650 3300 1650 1650 3300 1650
 Capacity Analysis Module:
 Vol/Sat: 0.01 0.05 0.05 0.01 0.01 0.01 0.00 0.43 0.00 0.02 0.51 0.01
 Crit Volume: 84 22 0 845
 Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)
Intersection #13 Lone Tree Way/Driveway

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B [12.8]
Street Name: Driveway Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 0 0 0 0 0 0 0 0 1 0 0 2 0 0 0 0 3 0 1

Volume Module:
Base Vol: 0 0 0 0 0 0 5 0 1395 0 0 1686 65
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Critical Gap Module:
Critical Gap: xxxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
FollowUpTIm: xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:
Conflict Vol: xxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: xxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Note: Queue reported is the distance per lane in feet.

Antioch Walmart Expansion

Level Of Service Computation Report
CTCALOS Method (Future Volume Alternative)
Intersection #14 Lone Tree Way/Hillcrest Avenue

Cycle (sec): 130 Critical Vol./Cap.(X): 0.713
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 80 Level Of Service: C
Street Name: Hillcrest Avenue Lone Tree Way
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Volume Module:
Base Vol: 351 421 134 351 248 324 233 771 413 72 1069 199
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Module:
Conflict Vol: xxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Potential Cap.: xxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Control Del: xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Note: Queue reported is the distance per lane in feet.

Antioch Walmart Expansion

Level Of Service Computation Report
CTALOS Method (Future Volume Alternative)

Intersection #17 Lone Tree Way/Canada Valley Road

Cycle (sec): 100
Loss Time (sec): 12
Optimal Cycle: 69

Street Name: Canada Valley Road
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 2.0 0.1 1.0 1.0 1.0 1.0 2.0 3.0 1.0 2.0 3.0 1.0
Lanes: 2 0 0 1 1 0 1 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:

Base Vol: 66 36 93 336 81 97 56 1069 107 302 1244 287
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 66 36 93 336 81 97 56 1069 107 302 1244 287

Reduced Vol: 66 36 93 338 81 97 56 1704 107 302 1363 288
RTOR Reduct: 0 0 93 0 0 31 0 0 36 0 0 288
RTOR Vol: 66 36 0 338 81 66 56 1704 71 302 1363 0

Saturation Flow Module:

Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00

Antioch Walmart Expansion

Level Of Service Computation Report
CTALOS Method (Future Volume Alternative)

Intersection #18 Lone Tree Way/SB SR-4 Bypass

Cycle (sec): 100
Loss Time (sec): 9
Optimal Cycle: 65

Street Name: SB SR-4 Bypass
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 0.0 0.0 0.0 1.0 1.0 0.0 1.0 0.0 3.0 1.0 2.0 3.0 0.0
Lanes: 0 0 0 0 1 1 0 0 1 0 0 3 0 1 2 0 3 0 0

Volume Module:

Base Vol: 0 0 0 545 7 531 0 993 474 176 1304 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 545 7 531 0 993 474 176 1304 0

Reduced Vol: 0 0 0 523 7 515 0 1629 474 212 1440 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 0 0 0 523 7 515 0 1629 474 212 1440 0

Saturation Flow Module:

Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00

Antioch Walmart Expansion

Level Of Service Computation Report
 CATALOS Method (Future Volume Alternative)

 Intersection #21 Hillcrest Ave/Prewett Ranch Dr

 Cycle (sec): 100
 Loss Time (sec): 9
 Optimal Cycle: 33

 Critical Vol./Cap.(X): 0.428
 Average Delay (sec/veh): xxxxxx
 Level Of Service: A

Street Name: Hillcrest Ave Prewett Dr
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Protected	Protected	Protected	Permitted	Permitted
Rights:	Include	Include	Include	Include	Include
Min. Green:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R:	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes:	1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0	1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0	1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0	1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0	1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol:	138 776	0	13 613	112	118 133	93	0	48 10
Growth Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00 1.00
Initial Bse:	138 776	0	13 613	112	118 133	93	0	48 10
Added Vol:	0 144	0	0 21	0	0 0	0	0	0 0 0
PasserByVol:	0 0	0	0 0	0	0 0	0	0	0 0 0
Initial Fut:	138 920	0	13 634	112	118 133	93	0	48 10
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00 1.00
PHF Volume:	138 920	0	13 634	112	118 133	93	0	48 10
Reduct Vol:	0 0	0	0 0	0	0 0	0	0	0 0 0
Reduced Vol:	138 920	0	13 634	112	118 133	93	0	48 10
RTOR Reduct:	0 0	0	0 0	0	0 0	0	0	0 0 0
RTOR Vol:	138 920	0	13 634	112	118 133	93	0	48 10
PCE Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00 1.00
FinalVolume:	138 920	0	13 634	112	118 133	93	0	48 10

Saturation Flow Module:

Sat/Lane:	1720 1720	1720	1720 1720	1720	1720 1720	1720	1720	1720 1720
Adjustment:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00 1.00
Lanes:	1.00 2.00	0.00	1.00 1.70	0.30	1.00 0.59	0.41	1.00	0.83 0.17
Final Sat.:	1720 3440	0	1720 2924	516	1720 1012	708	1720	1423 297

Capacity Analysis Module:

Vol/Sat:	0.08 0.27	0.00	0.01 0.22	0.22	0.07 0.13	0.13	0.00	0.03 0.03
Crit Volume:	138	373	226	0	0	0	0	0
Crit Moves:	****	****	****	****	****	****	****	****

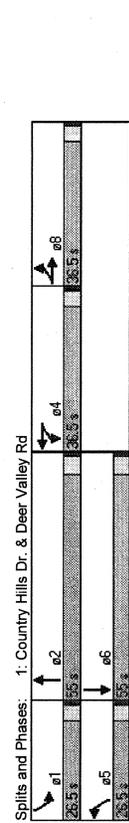
1: Country Hills Dr. & Deer Valley Rd
Antioch Walmart Expansion

2: Laurel Rd. & Hillcrest Ave
Antioch Walmart Expansion

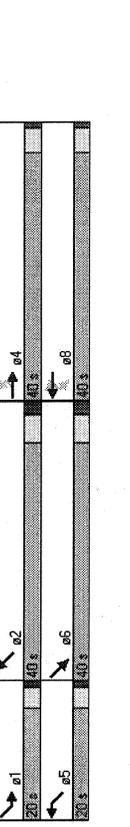
Long-Term Conditions
AM Peak

Long-Term Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1809	0	1770	1724	0	1770	3421	0	1770	3387	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1785	1809	0	1770	1724	0	1751	3421	0	1737	3387	0
Satd. Flow (perm)	7	7	0	24	24	0	14	14	0	23	23	0
Satd. Flow (RTOR)	172	130	31	160	156	127	13	553	97	77	819	214
Volume (vph)	207	194	0	205	363	0	15	756	0	93	1245	0
Lane Group Flow (vph)	Split											
Turn Type	Split											
Protected Phases	8 6 4 4											
Permitted Phases	8 6 4 4											
Total Split (s)	36.5	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0	0.0
Act Effect Green (s)	20.2	20.2	29.3	29.3	29.3	8.2	45.2	45.2	12.9	54.3	54.3	0.0
Actuated g/C Ratio	0.17	0.17	0.25	0.25	0.25	0.07	0.39	0.39	0.11	0.48	0.48	0.0
v/c Ratio	0.68	0.61	0.46	0.81	0.81	0.13	0.57	0.57	0.48	0.79	0.79	0.0
Control Delay	58.8	53.3	43.5	55.1	55.1	62.0	33.3	33.3	61.2	33.7	33.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	53.3	43.5	55.1	55.1	62.0	33.3	33.3	61.2	33.7	33.7	0.0
LOS	E D E E C E C E C											
Approach Delay	56.1											
Approach LOS	E D E C											
Queue Length 50th (ft)	142	126	120	222	222	10	245	245	64	388	388	0
Queue Length 95th (ft)	238	216	214	362	362	36	362	362	129	592	592	0
Internal Link Dist (ft)	308											
Turn Bay Length (ft)	145	120	120	274	274	110	860	860	175	220	220	0
Base Capacity (vph)	460	475	495	498	498	303	1488	1488	324	1571	1571	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.41	0.41	0.73	0.73	0.05	0.51	0.51	0.29	0.79	0.79	0.0
Intersection Summary												
Cycle Length	154.5											
Actuated Cycle Length	117.2											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.81											
Intersection Signal Delay	40.7											
Intersection Capacity Utilization	73.1%											
Analysis Period (min)	15											



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1686	0	1770	1863	1583	1770	3452	0	1770	3311	0
Satd. Flow (prot)	0.831	0.831	0	0.831	0.831	0.831	0.831	0.831	0	0.831	0.831	0
Fit Permitted	1171	1686	0	866	1663	1557	1768	3452	0	1752	3311	0
Satd. Flow (perm)	64	64	0	241	241	18	18	18	0	138	138	0
Satd. Flow (RTOR)	150	89	100	287	118	210	353	557	80	67	528	313
Volume (vph)	208	263	0	330	136	241	406	732	0	88	1107	0
Lane Group Flow (vph)	Perm											
Turn Type	Perm											
Protected Phases	4 8 8											
Permitted Phases	4 8 8											
Total Split (s)	40.0	40.0	0.0	40.0	40.0	20.0	40.0	40.0	0.0	20.0	40.0	0.0
Act Effect Green (s)	37.0	37.0	37.0	37.0	37.0	17.0	44.9	44.9	11.1	37.0	37.0	0.0
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.17	0.48	0.48	0.11	0.37	0.37	0.0
v/c Ratio	0.48	0.40	1.03	0.20	0.33	1.35	0.47	0.47	0.45	0.84	0.84	0.0
Control Delay	28.7	19.4	91.9	22.4	4.2	212.0	21.1	21.1	48.1	32.3	32.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	19.4	91.9	22.4	4.2	212.0	21.1	21.1	48.1	32.3	32.3	0.0
LOS	C B B F C A F C											
Approach Delay	23.5											
Approach LOS	C D D											
Queue Length 50th (ft)	100	90	-227	58	0	-341	168	168	53	288	288	0
Queue Length 95th (ft)	127	113	#377	98	43	#501	227	227	82	291	291	0
Internal Link Dist (ft)	468											
Turn Bay Length (ft)	75	175	175	600	600	150	1560	1560	301	1312	1312	0
Base Capacity (vph)	433	664	320	669	728	301	1560	1560	301	1312	1312	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.40	1.03	0.20	0.33	1.35	0.47	0.47	0.29	0.84	0.84	0.0
Intersection Summary												
Cycle Length	100											
Actuated Cycle Length	100											
Offset: 26 (26%)	Referenced to phase 2: NMT and 6: SET. Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.35											
Intersection Signal Delay	53.3											
Intersection Capacity Utilization	90.3%											
Analysis Period (min)	15											



3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1863	1583	1770	1644	0	1770	3491	0	1770	3506	0
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Flt. Permitted	1770	1863	1522	1770	1644	0	1770	3491	0	1770	3506	0
Satd. Flow (perm)	64	77	204	45	87	93	173	104	538	38	86	740
Satd. Flow (RTOR)	84	101	204	130	397	0	133	739	0	95	866	0
Volume (vph)	Split	Perm	Split	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	4	4	8	8	8	8	5	2	1	6	6	6
Turn Type	Permitted Phases											
Permitted Phases	4											
Total Split (s)	38.0	38.0	31.0	31.0	0.0	0.0	38.0	69.0	0.0	38.0	69.0	0.0
Act Effct Green (s)	16.8	16.8	16.8	28.2	28.2	0.0	16.1	66.6	0.0	16.1	66.6	0.0
Actuated g/C Ratio	0.12	0.12	0.12	0.20	0.20	0.0	0.12	0.48	0.0	0.12	0.48	0.0
v/c Ratio	0.39	0.45	0.56	0.36	1.08	0.0	0.65	0.44	0.0	0.47	0.51	0.0
Control Delay	62.2	63.6	13.1	54.5	115.5	0.0	75.5	27.0	0.0	66.7	28.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	E	E	B	D	F	F	E	C	E	C	E	C
LOS	E	E	B	D	F	F	E	C	E	C	E	C
Approach Delay	36.8											
Approach LOS	D											
Queue Length 50th (ft)	71	86	0	98	347	0	113	214	0	79	260	0
Queue Length 95th (ft)	110	127	32	137	4399	0	172	291	0	150	420	0
Internal Link Dist (ft)	266											
Turn Bay Length (ft)	120											
Base Capacity (vph)	394	415	497	357	368	0	392	1665	0	392	1671	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spitback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.24	0.41	0.36	1.08	0.0	0.34	0.44	0.0	0.24	0.51	0.0
Intersection Summary												
Cycle Length	176											
Actuated Cycle Length	139.8											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	1.08											
Intersection Signal Delay	46.7											
Intersection Capacity Utilization	62.7%											
Analysis Period (min)	15											
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												

Movement	EBL	EBT	EBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Free	Free	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volumes (veh/h)	0	10	0	678	593	8	0	0	0
Peak Hour Factor	0.63	0.63	0.84	0.84	0.84	0.87	0.87	0.87	0.87
Floury flow rate (vph)	0	16	0	807	1103	9	0	0	0
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None								
Median storage (veh)									
Upstream signal (ft)	482								
pX, platoon unblocked	0.79	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
v/c, conflicting volume	1507	1103	1113	1113	1113	1113	1113	1113	1113
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCU, unblocked vol	1270	1142	1154	1154	1154	1154	1154	1154	1154
IC, 2 stage (s)	6.8	6.9	4.1	4.1	4.1	4.1	4.1	4.1	4.1
IF (s)	3.5	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2
p0 queue free %	100	89	100	100	100	100	100	100	100
gM capacity (veh/h)	126	142	438	438	438	438	438	438	438
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 1	SB 2	SB 1	SB 2
Volumes Total	16	404	404	1103	9	9	9	9	9
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	16	0	0	0	0	0	0	0	0
vSH	142	1700	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.11	0.24	0.24	0.24	0.68	0.61	0.61	0.61	0.61
Queue Length 95th (ft)	9	0	0	0	0	0	0	0	0
Control Delay (s)	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D	D	D	D	D	D	D	D	D
Approach Delay (s)	33.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Approach LOS	D	D	D	D	D	D	D	D	D
Intersection Summary									
Average Delay	0.3								
Intersection Capacity Utilization	60.5%								
Analysis Period (min)	15								
ICU Level of Service	B								



5: Southeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Long-Term Conditions
AM Peak

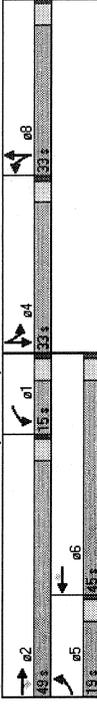
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SBT	SBR
Lane Configurations	Step	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sign Control	Step	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0	0	66	0	0	11	0	769	26	0	879	90	0
Volume (veh/h)	0.88	0.88	0.88	0.63	0.63	0.82	0.82	0.82	0.82	0.89	0.89	0.89	0.89
Peak Hour Factor	0	0	75	0	0	17	0	926	32	0	988	101	0
Hourly flow rate (vph)	0	0	75	0	0	17	0	926	32	0	988	101	0
Pedestrians													
Lane Width (ft)													
Percent Blockage													
Right turn flare (veh)	None			None									
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
vC, conflicting volume	1518	1996	380	1330	2014	463	1088			957			
vC1, stage 1 cont vol													
vC2, stage 2 cont vol													
vCu, unblocked vol	1437	1995	380	1217	2017	203	1089			781			
IC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1			
IC, 2 stage (s)													
IF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2			
p0 queue free %	100	100	88	100	100	97	100			100			
SM capacity (veh/h)	78	51	618	103	49	688	837			712			
Direction_Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3					
Volume Total	75	17	463	463	32	395	385	299					
Volume Left	0	0	0	0	0	0	0	0					
Volume Right	75	17	0	0	32	0	0	101					
cSH	618	688	1700	1700	1700	1700	1700	1700					
Volume to Capacity	0.12	0.03	0.27	0.27	0.02	0.23	0.23	0.18					
Queue Length 95th (ft)	10	2	0	0	0	0	0	0					
Control Delay (s)	11.5	10.4	0.0	0.0	0.0	0.0	0.0	0.0					
Lane LOS	B	B	B	B	B	B	B	B					
Approach LOS	B	B	B	B	B	B	B	B					
Intersection Summary													
Average Delay	0.5												
Intersection Capacity Utilization	31.0%												
Analysis Period (min)	15												
ICU Level of Service	A												

6: Lone Tree Way & Country Hills Dr.
Antioch Walmart Expansion

Long-Term Conditions
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SBT	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1751	0	1770	1699	0	0
Flt Permitted	0.950			0.950			0.950			0.950			
Satd. Flow (perm)	1762	3539	1125	1690	3539	1486	1770	1751	0	1770	1699	0	0
Satd. Flow (RTOR)	92	1103	44	80	1542	101	196	275	182	39	123	145	0
Volume (vph)	107	1283	51	88	1658	109	261	610	0	45	312	0	0
Lane Group Flow (vph)	Prot	5	2	1	6	8	8	8	8	8	8	4	4
Turn Type	Prot	5	2	1	6	8	8	8	8	8	8	4	4
Protected Phases													
Permitted Phases													
Total Split (s)	19.0	48.0	48.0	15.0	45.0	45.0	33.0	33.0	0.0	33.0	33.0	0.0	0.0
Act Erct Green (s)	14.0	46.0	46.0	12.0	44.0	44.0	33.9	33.9		26.1	26.1		
Actuated g/C Ratio	0.11	0.35	0.35	0.09	0.34	0.34	0.26	0.26		0.20	0.20		
v/c Ratio	0.56	1.02	1.03	0.53	1.38	1.38	0.21	0.57		0.13	0.83		
Control Delay	66.2	73.3	23.2	53.8	206.3	17.5	48.6	182.0		41.6	61.3		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay	66.2	73.3	23.2	53.8	206.3	17.5	48.6	182.0		41.6	61.3		
LOS	E	E	C	D	F	B	D	F		D	E		
Approach Delay	71.0			188.1			142.0			56.8			
Approach LOS	E			F			F			E			
Queue Length 50th (ft)	85	-605	21	63	-97.4	11	195	-662		31	218		
Queue Length 95th (ft)	140	#685	49	m110	#133	m53	237	#701		61	302		
Internal Link Dist (ft)	1420			740			709			577			
Turn Bay Length (ft)	145		75	145		75	170			408			
Base Capacity (vph)	218	1252	406	163	1198	516	461	474		408			
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0			
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0			
Storage Cap Reductn	0	0	0	0	0	0	0	0		0			
Reduced v/c Ratio	0.49	1.02	0.13	0.53	1.38	0.21	0.57	1.29		0.11	0.73		
Intersection Summary													
Cycle Length	130												
Actuated Cycle Length	130												
Offset: 74 (57%)	Referenced to phase 2.EBT and 6.WBT, Start of Yellow												
Control Type	Actuated-Coordinated												
Maximum v/c Ratio	1.38												
Intersection Signal Delay	131.7												
Intersection Capacity Utilization	90.0%												
Analysis Period (min)	15												
ICU Level of Service	F												
Volume exceeds capacity, queue is theoretically infinite													
Queue shown is maximum after two cycles													
# 95th percentile volume exceeds capacity, queue may be longer.													
Queue shown is maximum after two cycles.													
m Volume for 95th percentile queue is metered by upstream signal.													

Splits and Phases: 6: Lone Tree Way & Country Hills Dr.



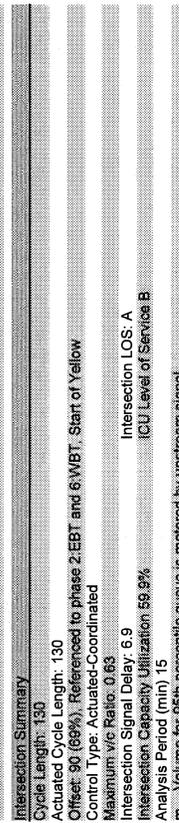
7: Lone Tree Way & Deer Valley Rd
Antioch Walmart Expansion

8: Lone Tree Way & Deer Valley Rd
Antioch Walmart Expansion

Long-Term Conditions AM Peak

Long-Term Conditions AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1587	0	1770	1863	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Fit Permitted	1770	3539	1333	1738	3539	1583	1410	1587	0	1289	1863	1583
Satd. Flow (perm)	46	1293	85	42	1565	28	46	1	63	22	2	7
Satd. Flow (RTOR)	51	1421	93	48	1778	32	50	69	0	24	2	8
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	2	1	6	6	8	8	8	4	4	4
Protected Phases	26.0	69.0	69.0	26.0	69.0	69.0	35.0	35.0	0.0	35.0	35.0	35.0
Total Split (s)	10.2	104.0	104.0	10.5	104.2	104.2	11.1	11.1	0.0	11.0	11.0	11.0
Act. Eff. Green (s)	0.08	0.80	0.80	0.08	0.80	0.80	0.09	0.09	0.08	0.08	0.08	0.08
Actuated G/C Ratio	0.37	0.50	0.09	0.34	0.63	0.03	0.41	0.35	0.22	0.01	0.06	0.06
v/c Ratio	54.0	1.0	0.1	57.3	6.5	0.9	65.7	17.3	58.7	52.0	28.1	28.1
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	54.0	1.1	0.1	57.3	6.5	0.9	65.7	17.3	58.7	52.0	28.1	28.1
Total Delay	D	A	A	E	A	A	E	B	E	D	C	C
LOS	2.7	A	A	E	A	A	E	B	E	D	C	C
Approach Delay	45	17	0	43	41	0	41	1	19	2	0	0
Approach LOS	m#45	m#18	m#1	m#50	m#234	m#1	m#1	m#46	m#47	m#10	m#16	m#16
Queue Length 50th (ft)	100	740	100	200	850	100	95	704	346	317	459	396
Queue Length 95th (ft)	313	2832	1074	313	2838	1271	347	442	317	459	396	396
Internal Link Dist. (ft)	0	186	0	0	0	0	0	0	0	0	0	0
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.54	0.09	0.15	0.63	0.03	0.14	0.16	0.08	0.00	0.00	0.02
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	90 (69%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.63											
Intersection Signal Delay	6.9											
Intersection Capacity Utilization	59.9%											
Analysis Period (min)	15											
m	Volume for 95th percentile queue is metered by upstream signal.											

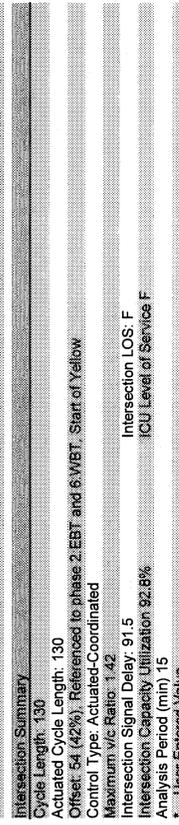


Splits and Phases: 7: Lone Tree Way & Deer Valley Rd

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Kimley-Horn and Associates, Inc.

3/4/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1583	1583	1770	1863	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Fit Permitted	1770	3539	1583	1770	3539	1583	1770	1583	1583	1770	1863	1583
Satd. Flow (perm)	1768	3539	1413	1749	3539	1537	1749	1537	1537	1749	1863	1537
Satd. Flow (RTOR)	38	1068	233	328	1183	259	448	364	377	429	516	19
Lane Group Flow (vph)	47	1319	288	353	1272	278	498	404	419	482	601	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	6	8	8	8	4	4	4
Total Split (s)	17.0	37.0	37.0	20.0	40.0	40.0	30.0	30.0	32.0	32.0	41.0	43.0
Act. Eff. Green (s)	10.3	34.0	34.0	24.0	49.6	49.6	24.3	24.3	24.5	24.5	35.5	35.8
Actuated G/C Ratio	0.08	0.26	0.26	0.18	0.38	0.38	0.19	0.19	0.19	0.19	0.27	0.28
v/c Ratio	0.33	1.42	0.51	1.08	0.94	0.37	0.78	0.61	0.89	0.88	0.88	0.82
Control Delay	63.1	244.6	28.8	104.9	37.2	5.1	59.1	51.7	44.5	63.4	43.4	43.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.1	244.6	28.8	104.9	37.2	5.1	59.1	51.7	44.5	63.4	43.4	43.4
LOS	E	F	C	F	D	A	E	D	D	E	D	D
Approach Delay	17.0	37.0	37.0	20.0	40.0	40.0	30.0	30.0	32.0	32.0	41.0	43.0
Approach LOS	41	#807	112	#383	#650	49	206	160	163	195	220	220
Queue Length 50th (ft)	75	#811	154	m#469	m#798	m#76	263	211	#328	#275	278	278
Queue Length 95th (ft)	195	850	400	500	1550	400	180	825	375	495	420	420
Internal Link Dist. (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.42	0.51	1.08	0.94	0.37	0.70	0.51	0.82	0.82	0.82	0.85
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	54 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.42											
Intersection Signal Delay	91.5											
Intersection Capacity Utilization	92.8%											
Analysis Period (min)	15											
n	User Entered Value											
m	Volume exceeds capacity, queue is theoretically infinite.											
	Queue shown is maximum after two cycles.											
#	95th percentile volume exceeds capacity, queue may be longer.											
	Queue shown is maximum after two cycles.											
m	Volume for 95th percentile queue is metered by upstream signal.											



Splits and Phases: 8: Lone Tree Way & Deer Valley Rd

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3/4/2009

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

Long-Term Conditions
AM Peak

Long-Term Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3479	0	1770	3539	1583	1770	1532	0	1770	1863
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950
Fit Permitted	1769	3479	0	1769	3539	1539	1769	1532	0	1769	1863
Satd. Flow (perm)	120	1523	145	91	1560	61	149	0	64	26	1
Satd. Flow (RTOR)	146	2034	0	101	1733	88	278	119	0	51	2
Volume (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	5	2	2	1	6	8	8	8	8	4	4
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases											
Permitted Phases	20.0	47.0	0.0	15.0	42.0	42.0	68.0	68.0	0.0	35.0	35.0
Total Split (s)	17.4	70.2	0.0	14.6	67.4	67.4	36.3	36.3	0.0	13.1	13.1
Act Effct Green (s)	0.13	0.54	0.0	0.11	0.52	0.52	0.28	0.28	0.0	0.10	0.10
Actuated g/C Ratio	0.62	1.08	0.0	0.51	0.94	0.94	0.62	0.62	0.0	0.41	0.41
v/c Ratio	46.5	69.8	0.0	74.0	29.8	4.0	45.1	0.7	0.0	64.5	51.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	46.5	69.8	0.0	74.0	29.8	4.0	45.1	0.7	0.0	64.5	51.0
Queue Delay	D	E	E	E	C	A	D	A	A	E	D
Total Delay	68.3	31.2	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
LOS	E	E	E	E	C	A	D	A	A	E	D
Approach Delay	E	E	E	E	C	A	D	A	A	E	D
Approach LOS	E	E	E	E	C	A	D	A	A	E	D
Queue Length 50th (ft)	106	-1137	80	-848	7	184	0	0	0	42	2
Queue Length 95th (ft)	m93	m1899	m132	#1136	m18	137	0	0	0	45	5
Internal Link Dist (ft)	145	1580	260	1580	606	609	609	609	609	819	3
Turn Bay Length (ft)	145	1580	260	1580	606	609	609	609	609	819	3
Base Capacity (vph)	260	1881	206	1834	813	800	886	886	886	302	459
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	1.06	0.49	0.94	0.08	0.34	0.13	0.13	0.13	0.17	0.00

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3479	0	1770	3539	1583	1770	1532	0	1770	1863
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950
Fit Permitted	1769	3479	0	1769	3539	1539	1769	1532	0	1769	1863
Satd. Flow (perm)	120	1523	145	91	1560	61	149	0	64	26	1
Satd. Flow (RTOR)	146	2034	0	101	1733	88	278	119	0	51	2
Volume (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	5	2	2	1	6	8	8	8	8	4	4
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases											
Permitted Phases	20.0	47.0	0.0	15.0	42.0	42.0	68.0	68.0	0.0	35.0	35.0
Total Split (s)	17.4	70.2	0.0	14.6	67.4	67.4	36.3	36.3	0.0	13.1	13.1
Act Effct Green (s)	0.13	0.54	0.0	0.11	0.52	0.52	0.28	0.28	0.0	0.10	0.10
Actuated g/C Ratio	0.62	1.08	0.0	0.51	0.94	0.94	0.62	0.62	0.0	0.41	0.41
v/c Ratio	46.5	69.8	0.0	74.0	29.8	4.0	45.1	0.7	0.0	64.5	51.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay	46.5	69.8	0.0	74.0	29.8	4.0	45.1	0.7	0.0	64.5	51.0
Queue Delay	D	E	E	E	C	A	D	A	A	E	D
Total Delay	68.3	31.2	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
LOS	E	E	E	E	C	A	D	A	A	E	D
Approach Delay	E	E	E	E	C	A	D	A	A	E	D
Approach LOS	E	E	E	E	C	A	D	A	A	E	D
Queue Length 50th (ft)	106	-1137	80	-848	7	184	0	0	0	42	2
Queue Length 95th (ft)	m93	m1899	m132	#1136	m18	137	0	0	0	45	5
Internal Link Dist (ft)	145	1580	260	1580	606	609	609	609	609	819	3
Turn Bay Length (ft)	145	1580	260	1580	606	609	609	609	609	819	3
Base Capacity (vph)	260	1881	206	1834	813	800	886	886	886	302	459
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	1.06	0.49	0.94	0.08	0.34	0.13	0.13	0.13	0.17	0.00

Intersection Summary

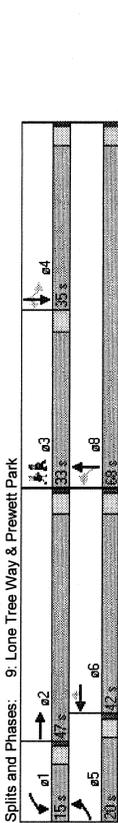
Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 49.0
Intersection Capacity Utilization: 76.7%
Analysis Period (min): 15
User Entered Value

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 49.0
Intersection Capacity Utilization: 76.7%
Analysis Period (min): 15
User Entered Value

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

~ Volume exceeds capacity, queue is theoretically infinite.
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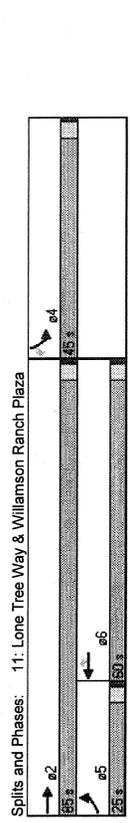
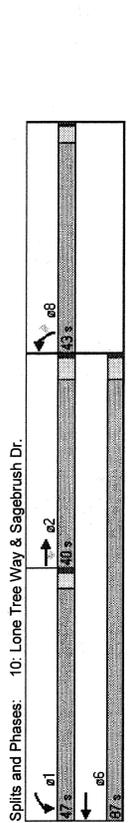


10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Long-Term Conditions
AM Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	EBT	EBR	WBL	WBT	NBL	NBR
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1462	1767	3539	1715	1559
Satd. Flow (RTOR)	50	138	50	138	50	138
Volume (vph)	1443	234	198	1471	104	87
Lane Group Flow (vph)	1781	288	230	1710	182	136
Turn Type	Prot	Perm	Prot	Perm	Perm	Perm
Protected Phases	2	1	6	8		
Permitted Phases	2	1	6	8		
Total Split (s)	40.0	47.0	87.0	43.0	43.0	8
Act Effct Green (s)	80.6	80.6	23.7	107.3	16.7	16.7
Actuated g/C Ratio	0.82	0.82	0.16	0.83	0.13	0.13
v/c Ratio	0.81	0.31	0.71	0.59	0.71	0.43
Control Delay	9.2	9.9	59.7	3.1	70.5	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Length	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.2	9.9	59.7	3.1	70.5	11.6
LOS	A	A	E	A	E	B
Approach Delay	8.1	A	9.8	43.6		
Approach LOS	A	A	A	D		
Queue Length 50th (ft)	45	0	164	14	134	0
Queue Length 95th (ft)	m782	m2	m201	3	133	11
Internal Link Dist (ft)	605		1855	487		
Turn Bay Length (ft)	80	600	598	2920	545	574
Base Capacity (vph)	2193	937	598	2920	545	574
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.31	0.38	0.59	0.30	0.24
Intersection Summary						
Cycle Length	130					
Actuated Cycle Length	130					
Offset	40 (31%), Referenced to phase 2:EBT and 6:WBT. Start of Yellow					
Control Type	Actuated-Coordinated					
Maximum v/c Ratio	0.81					
Intersection Signal Delay	11.3					
Intersection Capacity Utilization	67.5%					
Analysis Period (min)	15					
m	Volume for 95th percentile queue is metered by upstream signal.					



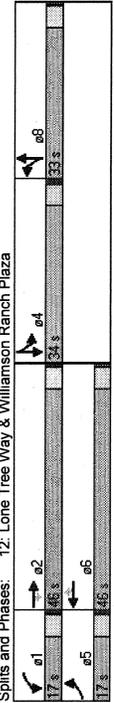
12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

13: Lone Tree Way & Wai-Mart Driveway
Antioch Walmart Expansion

Long-Term Conditions
AM Peak

Movement	EBL	EBT	WBL	WBT	WBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Sign Control	Free	Free	Free	Free	Free	Free	Stop
Grade	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	1536	1894	85	0	0	5
Peak Hour Factor	0.82	0.82	0.85	0.85	0.42	0.42	0.42
Hourly flow rate (vph)	0	1873	1993	76	0	0	12
Pedestrians							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median storage (veh)							
Upstream signal (ft)		510	500				
pX, platoon unblocked	0.78						0.67
vC, conflicting volume	2089						2930
vC1, stage 1 conf vol							654
vC2, stage 2 conf vol							
vCU, unblocked vol	1801						2053
IC, single (s)	4.1						6.8
IC, 2 stage (s)							6.9
IF (s)	2.2						3.5
p0 queue free %	100						100
EB capacity (veh/h)	263						32
EB capacity (veh/h)							842
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	SB 1
Volume Total	937	937	664	664	664	664	76
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0
gSH	1700	1700	1700	1700	1700	1700	842
Volume to Capacity	0.55	0.55	0.39	0.39	0.39	0.39	0.04
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS	A	A	A	A	A	A	A
Approach Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3
Approach LOS	A	A	A	A	A	A	A
Intersection Summary							
Average Delay	0.0						
Intersection Capacity Utilization	45.8%						
ICU Level of Service	A						
Analysis Period (min)	15						

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1863	3539	1583	1770	3539	1583	1770	1634	0	3433
RT Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1863	3539	1286	1746	3539	1455	1763	1634	0	3433
Satd. Flow (RTOR)	0	1416	6	26	1689	45	12	15	69	43
Volume (vph)	0	1770	8	33	2136	57	16	106	0	113
Lane Group Flow (vph)	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split	Split	Split
Turn Type	5	2	1	6	8	8	4	4	4	4
Protected Phases										
Permitted Phases	17.0	46.0	46.0	17.0	46.0	33.0	33.0	0.0	34.0	34.0
Total Split (s)	76.4	76.4	10.9	85.4	21.0	21.0	21.0	14.5	14.5	14.5
Act Effl Green (s)	0.89	0.89	0.08	0.86	0.16	0.16	0.16	0.11	0.11	0.11
Actuated v/c Ratio	0.85	0.01	0.22	0.92	0.06	0.05	0.31	0.29	0.26	0.26
v/c Ratio	22.9	9.3	62.7	23.4	5.3	40.3	14.1	53.0	15.2	15.2
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	22.9	9.3	62.7	23.4	5.3	40.3	14.1	53.0	15.2	15.2
Total Delay	C	A	E	C	A	D	B	D	B	B
LOS	C	A	E	C	A	D	B	D	B	B
Approach Delay	22.8		23.5		17.4		40.2			
Approach LOS	C		C		B		D			
Queue Length 50th (ft)	836	1	25	523	5	10	13	46	2	2
Queue Length 95th (ft)	#1009	m4	m36	m#988	m18	26	46	26	0	0
Internal Link Dist (ft)	820		430		356		440			
Turn Bay Length (ft)	2079	756	191	2325	959	408	444	200	619	417
Base Capacity (veh/h)	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.01	0.17	0.92	0.06	0.04	0.24	0.14	0.14	0.14
Intersection Summary										
Cycle Length	130									
Actuated Cycle Length	130									
Offset	97 (75%), Referenced to phase 2 EBT and 6 WBT, Start of Yellow									
Control Type	Actuated-Coordinated									
Maximum v/c Ratio	0.92									
Intersection Signal Delay	23.7									
Intersection LOS	C									
Analysis Period (min)	15									
ICU Level of Service	B									
# 95th percentile volume exceeds capacity, queue may be longer.										
Queue shown is maximum after two cycles.										
m Volume for 95th percentile queue is metered by upstream signal.										



Splits and Phases: 12: Lone Tree Way & Williamson Ranch Plaza

14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4777	0	1770	5085	1583	1770	3240	0	1900	3539
Flt Permitted	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950
Satd. Flow (perm)	1762	4777	0	1764	5085	1515	1762	3240	0	3419	3539
Satd. Flow (RTOR)	95	236	0	95	236	157	95	236	0	317	317
Volume (vph)	233	912	413	109	1099	215	351	357	342	415	232
Lane Group Flow (vph)	265	1505	0	120	1208	236	439	874	0	519	290
Turn Type	5	2	1	6	8	8	8	8	8	4	4
Permitted Phases	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Total Split (s)	29.0	47.0	0.0	18.0	36.0	36.0	23.0	23.0	0.0	42.0	42.0
Act Effct Green (s)	24.6	45.3	0.0	13.7	34.4	34.4	20.5	20.5	0.0	38.5	38.5
Actuated g/C Ratio	0.19	0.35	0.0	0.11	0.26	0.26	0.16	0.16	0.0	0.30	0.30
v/c Ratio	0.79	0.87	0.0	0.64	0.90	0.41	1.57	1.36	0.0	0.92	0.28
Control Delay	75.8	42.0	0.0	71.6	47.6	10.8	310.2	205.3	0.0	67.6	35.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.8	42.0	0.0	71.6	47.6	10.8	310.2	205.3	0.0	67.6	35.8
LOS	E	D	D	E	D	B	F	F	F	E	D
Approach Delay	47.0	43.9	0.0	43.9	240.4	240.4	41.6	41.6	0.0	41.6	41.6
Approach LOS	D	D	D	D	F	F	D	D	D	D	D
Queue Length 50th (ft)	239	256	0	90	371	44	~580	~454	0	217	98
Queue Length 95th (ft)	m284	406	0	157	#460	127	#630	#483	0	#251	120
Internal Link Dist (ft)	420	420	0	690	690	287.5	287.5	287.5	0	172	172
Turn Bay Length (ft)	620	210	0	210	730	195	195	195	0	400	290
Base Capacity (vph)	354	1726	204	1347	575	279	643	570	1062	698	698
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.87	0.0	0.69	0.90	0.41	1.57	1.36	0.0	0.91	0.27
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset	78 (60%), Referenced to phase 2 EBT and 6 WBT, Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	1.57										
Intersection Signal Delay	88.6										
Intersection Capacity Utilization	84.4%										
Analysis Period (min)	15										
User Entered Value											
Volume exceeds capacity, queue is theoretically infinite.											
Queue shown is maximum after two cycles.											
95th percentile volume exceeds capacity, queue may be longer.											
Queue shown is maximum after two cycles.											
Volume for 95th percentile queue is metered by upstream signal.											
Splits and Phases	14: Lone Tree Way & Hillcrest Ave										

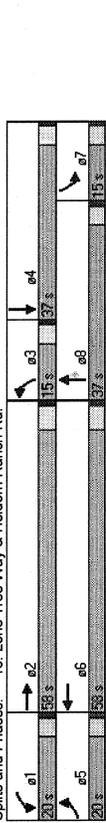
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5062	0	1770	5039	0	1770	1605	0	1770	1654
Flt Permitted	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950
Satd. Flow (perm)	1770	5062	0	1770	5039	0	907	1605	0	764	1654
Satd. Flow (RTOR)	5	10	0	5	10	0	192	112	0	112	112
Volume (vph)	48	1443	41	76	1328	72	60	27	157	37	22
Lane Group Flow (vph)	56	1726	0	81	1490	0	76	233	0	79	187
Turn Type	5	2	1	6	8	8	8	8	8	4	4
Permitted Phases	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Total Split (s)	18.0	75.0	0.0	18.0	75.0	0.0	37.0	37.0	0.0	37.0	37.0
Act Effct Green (s)	11.9	90.1	0.0	13.7	91.8	0.0	19.6	19.6	0.0	19.6	19.6
Actuated g/C Ratio	0.09	0.69	0.0	0.11	0.71	0.0	0.15	0.15	0.0	0.15	0.15
v/c Ratio	0.35	0.49	0.0	0.43	0.42	0.0	0.56	0.58	0.0	0.69	0.54
Control Delay	50.9	17.7	0.0	52.7	9.0	0.0	64.6	16.2	0.0	79.0	25.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.9	17.7	0.0	52.7	9.0	0.0	64.6	16.2	0.0	79.0	25.5
LOS	D	B	B	D	A	A	E	B	E	C	C
Approach Delay	18.8	11.2	0.0	11.2	28.1	28.1	41.4	41.4	0.0	41.4	41.4
Approach LOS	B	B	B	B	C	C	D	D	D	D	D
Queue Length 50th (ft)	46	337	0	64	153	60	31	64	0	64	57
Queue Length 95th (ft)	m47	m399	0	m120	184	90	67	53	0	53	21
Internal Link Dist (ft)	685	685	0	1050	1050	786	786	786	0	614	614
Turn Bay Length (ft)	200	200	0	200	130	130	100	100	0	100	100
Base Capacity (vph)	285	3511	215	215	3561	237	562	200	515	200	515
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.49	0.0	0.35	0.42	0.0	0.32	0.41	0.0	0.40	0.36
Intersection Summary											
Cycle Length	130										
Actuated Cycle Length	130										
Offset	65 (42%), Referenced to phase 2 EBT and 6 WBT, Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	0.69										
Intersection Signal Delay	18.0										
Intersection Capacity Utilization	60.8%										
Analysis Period (min)	15										
User Entered Value											
Volume exceeds capacity, queue is theoretically infinite.											
Queue shown is maximum after two cycles.											
95th percentile volume exceeds capacity, queue may be longer.											
Queue shown is maximum after two cycles.											
Volume for 95th percentile queue is metered by upstream signal.											
Splits and Phases	15: Lone Tree Way & Vista Grande										

16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Long-Term Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4979	0	1770	5088	0	3433	1863	1563	1770	1628
Fit Permitted	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1769	4979	0	1769	5088	0	3433	1863	1561	1765	1628
Satd. Flow (RTOR)	24	24	0	24	24	0	24	24	24	24	24
Volume (vph)	26	1528	211	141	1366	25	162	0	288	12	9
Lane Group Flow (vph)	29	1911	0	158	1563	0	377	0	683	15	75
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	3	3	8	7	4	4
Permitted Phases											
Total Split (s)	20.0	58.0	0.0	20.0	58.0	0.0	15.0	37.0	37.0	15.0	37.0
Act Effct Green (s)	10.1	64.3	0.0	17.4	76.1	0.0	16.4	34.0	34.0	9.1	22.0
Actuated g/C Ratio	0.08	0.49	0.00	0.13	0.59	0.00	0.13	0.28	0.28	0.07	0.17
v/c Ratio	0.21	0.77	0.00	0.67	0.53	0.00	0.87	1.05	1.05	0.12	0.23
Control Delay	82.0	28.7	0.0	77.8	6.1	0.0	77.1	74.5	58.3	13.9	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.0	28.7	0.0	77.8	6.1	0.0	77.1	74.5	58.3	13.9	13.9
LOS	F	C	C	E	A	A	E	E	E	E	B
Approach Delay	26.5	12.7	0.0	26.5	12.7	0.0	12.7	12.7	12.7	12.7	21.3
Approach LOS	C	C	C	B	B	B	C	C	C	C	C
Queue Length 50th (ft)	26	527	0	120	40	0	197	~414	~414	12	9
Queue Length 95th (ft)	m52	671	0	191	172	0	100	972	38	31	35
Internal Link Dist (ft)	185	1050	0	400	900	0	200	200	50	50	315
Base Capacity (vph)	231	2475	0	248	2868	0	433	657	163	472	472
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.77	0.00	0.64	0.53	0.00	0.87	1.05	1.05	0.09	0.16

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 55 (42%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 32.3
 Intersection LOS: C
 Intersection Capacity Utilization: 66.8%
 Analysis Period (min): 15
 # Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

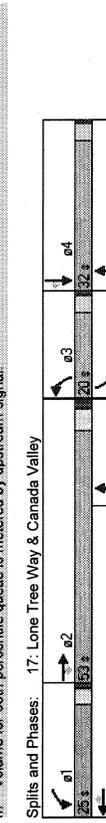


17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

Long-Term Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1563	3433	5085	1563	3433	1563	1504	1770	1863
Fit Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3432	5085	1557	3432	5085	1558	3433	1563	1482	1767	1863
Satd. Flow (RTOR)	114	114	0	114	114	0	114	114	114	114	114
Volume (vph)	56	1704	107	302	1363	288	66	36	93	338	81
Lane Group Flow (vph)	60	1813	114	339	1531	324	89	90	85	428	103
Turn Type	Prot										
Protected Phases	5	2	2	1	6	3	3	8	7	4	4
Permitted Phases											
Total Split (s)	20.0	53.0	0.0	25.0	58.0	0.0	20.0	32.0	32.0	20.0	32.0
Act Effct Green (s)	14.7	71.5	0.0	17.9	76.4	0.0	8.7	11.6	11.6	17.0	20.0
Actuated g/C Ratio	0.11	0.55	0.00	0.14	0.59	0.00	0.07	0.09	0.09	0.13	0.15
v/c Ratio	0.15	0.65	0.00	0.72	0.51	0.00	0.31	0.39	0.52	0.40	0.36
Control Delay	38.4	13.9	0.0	69.6	13.3	0.0	62.7	46.7	15.6	431.4	51.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	13.9	0.0	69.6	13.3	0.0	62.7	46.7	15.6	431.4	51.8
LOS	D	B	A	E	B	A	E	D	B	F	D
Approach Delay	14.1	20.2	0.0	20.2	20.2	0.0	20.2	20.2	20.2	292.4	292.4
Approach LOS	B	C	C	C	C	C	D	D	D	F	F
Queue Length 50th (ft)	21	138	0	146	175	0	37	51	0	~547	80
Queue Length 95th (ft)	m24	m293	0	m172	m258	0	m13	53	75	28	#638
Internal Link Dist (ft)	320	900	0	630	400	0	350	150	150	170	1064
Base Capacity (vph)	448	2797	908	588	2887	1048	449	389	397	231	416
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.65	0.00	0.13	0.59	0.00	0.31	0.20	0.23	0.21	0.25

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 37 (28%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.85
 Intersection Signal Delay: 53.9
 Intersection LOS: D
 Intersection Capacity Utilization: 76.8%
 Analysis Period (min): 15
 # Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



18: Lone Tree Way & SR 4 Bypass SB Off-ramp
Antioch Walmart Expansion

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	1583	1681	1688	1583	0	0	0
Satd. Flow (prot)	0	5085	1583	3433	5085	1583	1681	1688	1583	0	0	0
Flt Permitted	0	5085	1583	3433	5085	1583	1681	1688	1583	0	0	0
Satd. Flow (perm)	0	5085	1583	3433	5085	1545	1681	1695	1583	0	0	0
Satd. Flow (RTOR)	0	1750	408	137	1195	642	461	34	570	0	0	0
Volume (vph)	0	1966	458	152	1328	713	271	285	640	0	0	0
Lane Group Flow (vph)	0	1966	458	152	1328	713	271	285	640	0	0	0
Turn Type	2	1	6	2	1	6	6	8	8			
Permitted Phases	2	1	6	2	1	6	6	8	8			
Protected Phases	2	1	6	2	1	6	6	8	8			
Total Split (s)	0.0	64.0	25.0	89.0	89.0	41.0	41.0	41.0	41.0	0.0	0.0	0.0
Act Effct Green (s)	73.6	73.6	10.9	87.5	87.5	36.5	36.5	36.5	36.5	0.0	0.0	0.0
Actuated g/C Ratio	0.57	0.57	0.08	0.67	0.67	0.28	0.28	0.28	0.28	0.0	0.0	0.0
v/c Ratio	0.68	0.44	0.53	0.39	0.56	0.58	0.60	0.98	0.98	0.0	0.0	0.0
Control Delay	13.9	2.8	63.4	10.0	2.4	45.3	46.1	55.6	55.6	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.9	2.8	63.4	10.0	2.4	45.3	46.1	55.6	55.6	0.0	0.0	0.0
LOS	B	A	E	A	A	D	D	D	D	E	E	E
Approach Delay	11.8	11.8	11.2	11.2	11.2	51.0	51.0	51.0	51.0	0.0	0.0	0.0
Approach LOS	B	B	B	B	B	D	D	D	D	E	E	E
Queue Length 50th (ft)	156	30	64	173	0	203	215	328	328	0	0	0
Queue Length 95th (ft)	170	39	98	201	40	295	312	4569	4569	0	0	0
Internal Link Dist (ft)	750			640		935				1156		
Turn Bay Length (ft)	240	280	280	250	1000							
Base Capacity (vph)	2890	1038	581	3424	1273	491	495	689	689	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.44	0.28	0.39	0.56	0.55	0.58	0.98	0.98	0.0	0.0	0.0

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 88 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 19.6
 Intersection Capacity Utilization: 75.8%
 Analysis Period (min): 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 19: Lone Tree Way & SR 4 By-pass NB On-ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	0	5085	1583	3433	5085	1583	1681	1688	1583	0	0	0
Satd. Flow (prot)	0	5085	1583	3433	5085	1583	1681	1688	1583	0	0	0
Flt Permitted	0	5085	1583	3433	5085	1583	1681	1688	1583	0	0	0
Satd. Flow (perm)	0	5085	1583	3433	5085	1545	1681	1695	1583	0	0	0
Satd. Flow (RTOR)	0	1629	474	212	1440	0	0	523	7	515	36	36
Volume (vph)	0	1810	527	226	1532	0	0	308	315	606	606	606
Lane Group Flow (vph)	0	1810	527	226	1532	0	0	308	315	606	606	606
Turn Type	2	1	6	2	1	6	6	8	8			
Permitted Phases	2	1	6	2	1	6	6	8	8			
Protected Phases	2	1	6	2	1	6	6	8	8			
Total Split (s)	0.0	59.0	23.0	82.0	82.0	0.0	0.0	48.0	48.0	48.0	48.0	48.0
Act Effct Green (s)	61.1	61.1	14.9	79.0	79.0	0.0	0.0	45.0	45.0	45.0	45.0	45.0
Actuated g/C Ratio	0.47	0.47	0.11	0.61	0.61	0.35	0.35	0.35	0.35	1.06	1.06	1.06
v/c Ratio	0.76	0.52	0.58	0.50	0.50	0.53	0.54	1.06	1.06	0.0	0.0	0.0
Control Delay	20.7	2.5	68.1	12.2	12.2	38.1	38.4	93.1	93.1	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.7	2.5	68.1	12.2	12.2	38.1	38.4	93.1	93.1	0.0	0.0	0.0
LOS	C	A	E	B	B	D	D	D	D	F	F	F
Approach Delay	16.6	16.6	19.4	19.4	19.4	65.3	65.3	65.3	65.3	0.0	0.0	0.0
Approach LOS	B	B	B	B	B	E	E	E	E	F	F	F
Queue Length 50th (ft)	373	37	102	214	214	217	224	540	540	0	0	0
Queue Length 95th (ft)	m219	m28	141	238	238	294	302	4700	4700	0	0	0
Internal Link Dist (ft)	775			750		536				618		
Turn Bay Length (ft)	315	310	310	280	280							
Base Capacity (vph)	2391	1914	528	3090	3090	582	584	572	572	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.52	0.43	0.50	0.50	0.53	0.54	1.06	1.06	0.0	0.0	0.0

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 72 (55%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 28.8
 Intersection Capacity Utilization: 66.4%
 Analysis Period (min): 15
 Intersection LOS: C
 ICU Level of Service: C
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: Lone Tree Way & SR 4 Bypass SB Off-ramp



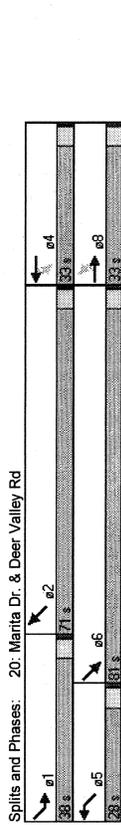
20: Marita Dr. & Deer Valley Rd
Antioch Walmart Expansion

21: Prewett Ranch Dr & Hillcrest Ave
Antioch Walmart Expansion

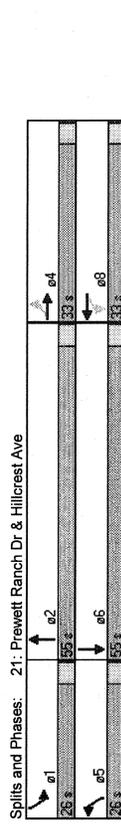
Long-Term Conditions
AM Peak

Long-Term Conditions
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1619	0	1770	1577	0	1770	3521	0	1770	3525	0
Satd. Flow (prot)	0.742	0.735	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1364	1619	0	1347	1577	0	1765	3521	0	1758	3525	0
Satd. Flow (perm)	21	8	21	1	1	7	137	900	24	61	1188	27
Satd. Flow (RTOR)	25	34	0	3	24	0	149	1004	0	75	1500	0
Volume (vph)	Perm	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	8	4	4	1	6	5	2	2	2	2	2	2
Turn Type	4	4	4	1	6	5	2	2	2	2	2	2
Protected Phases	4	4	4	1	6	5	2	2	2	2	2	2
Permitted Phases	33.0	33.0	33.0	33.0	33.0	33.0	81.0	81.0	0.0	28.0	71.0	0.0
Total Split (s)	14.8	14.8	14.8	14.6	14.6	14.6	12.1	12.1	78.2	12.1	78.2	0.0
Act Effct Green (s)	0.23	0.23	0.23	0.23	0.23	0.23	0.14	0.14	0.73	0.10	0.66	0.0
Actuated g/C Ratio	0.48	0.62	0.21	0.21	0.21	0.21	0.60	0.39	0.42	0.42	0.64	0.0
v/c Ratio	28.7	26.9	21.1	21.1	21.1	21.1	57.6	10.2	58.2	17.1	17.1	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	28.7	26.9	21.1	21.1	21.1	21.1	57.6	10.2	58.2	17.1	17.1	0.0
Total Delay	28.7	26.9	21.1	21.1	21.1	21.1	57.6	10.2	58.2	17.1	17.1	0.0
LOS	C	C	C	C	C	C	E	B	E	B	B	B
Approach Delay	30.7	27.5	21.1	21.1	21.1	21.1	16.3	16.3	19.0	16.3	16.3	0.0
Approach LOS	C	C	C	C	C	C	B	B	B	B	B	B
Queue Length 50th (ft)	16	6	2	2	2	2	97	124	49	273	273	0.0
Queue Length 95th (ft)	41	32	4	4	4	4	188	312	100	537	537	0.0
Internal Link Dist (ft)	345	345	345	345	345	345	825	825	175	845	845	0.0
Turn Bay Length (ft)	40	100	100	100	100	100	125	457	2563	335	2342	0.0
Base Capacity (vph)	308	386	305	373	373	373	457	2563	335	2342	2342	0.0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.09	0.10	0.06	0.06	0.06	0.33	0.39	0.22	0.22	0.64	0.0
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	117.7											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.64											
Intersection Signal Delay	18.2											
Intersection Capacity Utilization	63.9%											
Analysis Period (min)	15											
ICU Level of Service	B											



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1747	0	1863	1814	0	1770	3539	0	1770	3468	0
Satd. Flow (prot)	0.673	0.673	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Flt Permitted	1254	1747	0	1863	1814	0	1770	3539	0	1770	3468	0
Satd. Flow (perm)	30	30	30	9	9	9	9	23	9	23	23	0
Satd. Flow (RTOR)	118	133	93	0	48	10	138	920	0	13	634	112
Volume (vph)	139	265	0	0	86	0	153	1022	0	16	945	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	4	4	4	8	8	8	5	2	1	1	6	6
Protected Phases	4	4	4	8	8	8	5	2	1	1	6	6
Permitted Phases	33.0	33.0	33.0	33.0	33.0	33.0	26.0	55.0	0.0	26.0	55.0	0.0
Total Split (s)	14.8	14.8	14.8	14.6	14.6	14.6	11.8	43.4	7.5	7.5	32.6	0.0
Act Effct Green (s)	0.23	0.23	0.23	0.23	0.23	0.23	0.16	0.69	0.11	0.11	0.52	0.0
Actuated g/C Ratio	0.48	0.62	0.21	0.21	0.21	0.21	0.47	0.42	0.09	0.09	0.52	0.0
v/c Ratio	28.7	26.9	21.1	21.1	21.1	21.1	30.6	7.8	37.0	37.0	15.9	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	28.7	26.9	21.1	21.1	21.1	21.1	30.6	7.8	37.0	37.0	15.9	0.0
Total Delay	28.7	26.9	21.1	21.1	21.1	21.1	30.6	7.8	37.0	37.0	15.9	0.0
LOS	C	C	C	C	C	C	C	A	D	D	B	B
Approach Delay	27.5	27.5	21.1	21.1	21.1	21.1	10.8	16.3	16.3	16.3	16.3	0.0
Approach LOS	C	C	C	C	C	C	B	B	B	B	B	B
Queue Length 50th (ft)	40	89	20	20	20	20	45	72	5	128	128	0.0
Queue Length 95th (ft)	117	185	53	53	53	53	143	262	26	245	245	0.0
Internal Link Dist (ft)	956	956	956	956	956	956	816	404	115	2576	2576	0.0
Turn Bay Length (ft)	100	100	100	100	100	100	85	2621	487	2287	2287	0.0
Base Capacity (vph)	485	694	485	707	707	707	557	2621	487	2287	2287	0.0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.38	0.12	0.12	0.12	0.12	0.27	0.39	0.03	0.03	0.41	0.0
Intersection Summary												
Cycle Length	114											
Actuated Cycle Length	62.5											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.63											
Intersection Signal Delay	15.7											
Intersection Capacity Utilization	52.0%											
Analysis Period (min)	15											
ICU Level of Service	A											



Antioch Walmart Expansion

Scenario Report
Cumulative PM

Command: None
 Volume: Cumulative PM
 Geometry: Cumulative
 Impact Fee: Default Impact Fee
 Trip Generation: Cumulative PM
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Antioch Walmart Expansion

Impact Analysis Report
Level Of Service

Intersection	Base Del/V LOS	Veh C	Future Del/V LOS	Veh C	Change in
# 1 Deer Valley Rd/ Country Hills	A	xxxxx 0.520	A	xxxxx 0.523	+ 0.002 V/C
# 2 Hillcrest Avenue/Laurel Road	B	xxxxx 0.672	B	xxxxx 0.625	-0.048 V/C
# 3 Hillcrest Avenue/Country Hills	A	xxxxx 0.476	A	xxxxx 0.465	-0.011 V/C
# 4 Hillcrest Avenue/Driveway	C	19.9 0.028	C	19.2 0.027	-0.765 D/V
# 5 Hillcrest Avenue/South Drivewa	B	13.4 0.206	B	12.2 0.202	-1.151 D/V
# 6 Lone Tree Way/Mokelumne Dr	D	xxxxx 0.874	D	xxxxx 0.882	+ 0.008 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A	xxxxx 0.598	B	xxxxx 0.606	+ 0.008 V/C
# 8 Lone Tree Way/Deer Valley Rd	D	xxxxx 0.889	D	xxxxx 0.889	-0.001 V/C
# 9 Lone Tree Way/Deer Valley HS	A	xxxxx 0.565	A	xxxxx 0.570	+ 0.005 V/C
# 10 Lone Tree Way/Sagebrush Drive	A	xxxxx 0.561	A	xxxxx 0.566	+ 0.005 V/C
# 11 Lone Tree Way/Williamson Ranch	A	xxxxx 0.571	A	xxxxx 0.576	+ 0.005 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	B	xxxxx 0.601	B	xxxxx 0.628	+ 0.027 V/C
# 13 Lone Tree Way/Driveway	B	11.9 0.068	B	12.1 0.070	+ 0.271 D/V
# 14 Lone Tree Way/Hillcrest Avenue	C	xxxxx 0.734	E	xxxxx 0.911	+ 0.177 V/C
# 15 Lone Tree Way/Vista Grande Dri	A	xxxxx 0.590	B	xxxxx 0.640	+ 0.050 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A	xxxxx 0.572	C	xxxxx 0.738	+ 0.165 V/C
# 17 Lone Tree Way/Canada Valley Ro	C	xxxxx 0.775	D	xxxxx 0.838	+ 0.064 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	D	xxxxx 0.872	E	xxxxx 0.982	+ 0.110 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	B	xxxxx 0.655	C	xxxxx 0.752	+ 0.097 V/C
# 20 Deer Valley Road/Marita Drive	A	xxxxx 0.425	A	xxxxx 0.420	-0.005 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A	xxxxx 0.535	A	xxxxx 0.576	+ 0.040 V/C

Antioch Walmart Expansion

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Hillcrest Avenue/South Driveway

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B [12.2]

Street Name: Hillcrest Avenue South Driveway

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Rights: Include Include Include Include

Lanes: 0 0 2 0 1 0 1 1 1 0 0 0 0 0 1 0 0 1 0 0

Volume Module: Base Vol: 0 717 68 9 1044 79 2 0 126 1 0 40

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 717 68 9 1044 79 2 0 126 1 0 40

Added Vol: 0 -15 0 0 -38 0 0 -71 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 702 68 9 1006 79 -69 0 126 1 0 40

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 702 68 9 1006 79 0 0 126 1 0 40

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 0 702 68 9 1006 79 0 0 126 1 0 40

Critical Gap Module: Critical Gp:xxxx xxx xxxxxx 4.1 xxx xxxxxx xxxxxx xxxxxx 6.9 7.5 6.5 6.9

FollowUpTim:xxxx xxx xxxxxx 2.2 xxx xxxxxx xxxxxx xxxxxx 3.3 3.5 4.0 3.3

Capacity Module: Conflict Vol: xxx xxxxxx xxxxxx 770 xxx xxxxxx xxxxxx xxxxxx 375 1055 1805 351

Potent Cap.: xxx xxxxxx xxxxxx 840 xxx xxxxxx xxxxxx xxxxxx 623 180 78 645

Move Cap.: xxx xxxxxx xxxxxx 840 xxx xxxxxx xxxxxx xxxxxx 623 142 78 645

Volume/Cap: xxx xxxxxx xxxxxx 0.01 xxx xxxxxx xxxxxx xxxxxx 0.20 0.01 0.00 0.06

Level Of Service Module: 2Way95thQ: xxx xxxxxx xxxxxx 0.8 xxx xxxxxx xxxxxx xxxxxx 18.8 xxx xxxxxx xxxxxx

Control Del:xxxx xxx xxxxxx 9.3 xxx xxxxxx xxxxxx xxxxxx 12.2 xxx xxxxxx xxxxxx

IOS by Move: * * * * * A * * * * * B * * * * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxx xxxxxx xxxxxx xxx xxx xxxxxx xxx xxx xxxxxx xxx 594 xxxxxx

SharedQueue:xxxx xxx xxxxxx 0.0 xxx xxxxxx xxxxxx xxxxxx xxxxxx 0.2 xxxxxx

Shrd ConDel:xxxx xxx xxxxxx 9.3 xxx xxxxxx xxxxxx xxxxxx 11.5 xxxxxx

Antioch Walmart Expansion

Level Of Service Computation Report
CTALOS Method (Future Volume Alternative)

Intersection #6 Lone Tree Way/Mokelumme Dr

Cycle (sec): 130 Critical Vol./Cap.(X): 0.882

Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Street Name: Mokelumme Drive Lone Tree Way

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Split Phase Split Phase

Rights: Include Include Include Include

Min. Green: 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module: Base Vol: 152 171 97 56 261 88 146 1376 182 137 1003 46

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 152 171 97 56 261 88 146 1376 182 137 1003 46

Added Vol: 0 0 0 0 0 0 0 0 26 0 0 77 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 152 171 97 56 261 88 146 1402 182 137 1080 46

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 152 171 97 56 261 88 146 1402 182 137 1080 46

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 152 171 97 56 261 88 146 1402 182 137 1080 46

RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0 0

RTOR Vol: 152 171 97 56 261 88 146 1402 30 137 1080 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 152 171 97 56 261 88 146 1402 30 137 1080 0

Saturation Flow Module: Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 0.64 0.36 1.00 0.75 0.25 1.00 2.00 1.00 1.00 2.00 1.00

Final Sat.: 1650 1053 597 1650 1234 416 1650 3300 1650 1650 3300 1650

Antioch Walmart Expansion

Level Of Service Computation Report
CTALOS Method (Future Volume Alternative)

Intersection #6 Lone Tree Way/Mokelumme Dr

Cycle (sec): 130 Critical Vol./Cap.(X): 0.882

Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Street Name: Mokelumme Drive Lone Tree Way

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Split Phase Split Phase

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module: Base Vol: 152 171 97 56 261 88 146 1376 182 137 1003 46

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 152 171 97 56 261 88 146 1376 182 137 1003 46

Added Vol: 0 0 0 0 0 0 0 0 26 0 0 77 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 152 171 97 56 261 88 146 1402 182 137 1080 46

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 152 171 97 56 261 88 146 1402 182 137 1080 46

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 152 171 97 56 261 88 146 1402 182 137 1080 46

RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0 0

RTOR Vol: 152 171 97 56 261 88 146 1402 30 137 1080 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 152 171 97 56 261 88 146 1402 30 137 1080 0

Saturation Flow Module: Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 0.64 0.36 1.00 0.75 0.25 1.00 2.00 1.00 1.00 2.00 1.00

Final Sat.: 1650 1053 597 1650 1234 416 1650 3300 1650 1650 3300 1650

Antioch Walmart Expansion

Level Of Service Computation Report
CTALOS Method (Future Volume Alternative)

Intersection #6 Lone Tree Way/Mokelumme Dr

Cycle (sec): 130 Critical Vol./Cap.(X): 0.882

Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Street Name: Mokelumme Drive Lone Tree Way

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Split Phase Split Phase

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 0 1 0 1 0 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module: Base Vol: 152 171 97 56 261 88 146 1376 182 137 1003 46

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 152 171 97 56 261 88 146 1376 182 137 1003 46

Added Vol: 0 0 0 0 0 0 0 0 26 0 0 77 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 152 171 97 56 261 88 146 1402 182 137 1080 46

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 152 171 97 56 261 88 146 1402 182 137 1080 46

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 152 171 97 56 261 88 146 1402 182 137 1080 46

RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0 0

RTOR Vol: 152 171 97 56 261 88 146 1402 30 137 1080 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 152 171 97 56 261 88 146 1402 30 137 1080 0

Saturation Flow Module: Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 0.64 0.36 1.00 0.75 0.25 1.00 2.00 1.00 1.00 2.00 1.00

Final Sat.: 1650 1053 597 1650 1234 416 1650 3300 1650 1650 3300 1650

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #7 Lone Tree Way/Deer Valley Plaza

Cycle (sec): 130 Critical Vol./Cap.(X): 0.606
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Street Name: Deer Valley Plaza Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 1 0 1 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 121 0 62 40 3 40 29 1531 101 90 1007 25
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 121 0 62 40 3 40 29 1531 101 90 1007 25
Added Vol: 0 0 0 0 0 0 0 26 0 0 77 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 121 0 62 40 3 40 29 1557 101 90 1084 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 121 0 62 40 3 40 29 1557 101 90 1084 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 121 0 62 40 3 40 29 1557 101 90 1084 25
RTOR Reduct: 0 0 0 0 0 29 0 0 101 0 0 25
RTOR Vol: 121 0 62 40 3 11 29 1557 0 90 1084 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 121 0 62 40 3 11 29 1557 0 90 1084 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.00 1.00 1.00 1.00 2.00 1.00 1.00
Final Sat.: 1650 0 1650 1650 1650 1650 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.04 0.02 0.00 0.01 0.02 0.47 0.00 0.05 0.33 0.00
Crit Volume: 121 11 779 90
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #8 Lone Tree Way/Deer Valley Rd

Cycle (sec): 130 Critical Vol./Cap.(X): 0.889
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Street Name: Deer Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 2 0 1 2 0 1 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 377 466 436 235 390 22 98 1110 389 499 730 208
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 377 466 436 235 390 22 98 1110 389 499 730 208
Added Vol: 0 0 -17 8 0 0 0 26 0 -14 77 8
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 377 466 419 243 390 22 98 1136 389 485 807 216
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 377 466 419 243 390 22 98 1136 389 485 807 216
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 377 466 419 243 390 22 98 1136 389 485 807 216
RTOR Reduct: 0 0 419 0 0 0 0 0 207 0 0 134
RTOR Vol: 377 466 0 243 390 22 98 1136 182 485 807 82
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 377 466 0 243 390 22 98 1136 182 485 807 82

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 0.91 1.00 1.00 1.00 1.00
Lanes: 2.00 2.00 1.00 2.00 1.89 0.11 1.00 2.00
Final Sat.: 3000 3300 1650 3000 3124 176 1650 3300 1650 1650 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.13 0.14 0.00 0.08 0.12 0.12 0.06 0.34 0.11 0.29 0.24 0.05
Crit Volume: 189 206 568 485
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #11 Lone Tree Way/Williamson Ranch Plaza (OSH)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.576
Loss Time (sec): 16 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: A

Street Name: Williamson Ranch Plaza (OSH) Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 0 1 0 0 0 1 0 2 0 0 2 0 1

Volume Module:
Base Vol: 0 0 0 90 0 67 94 1703 0 0 1309 36
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 90 0 67 94 1703 0 0 1309 36
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 90 0 67 94 1720 0 0 1381 36
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 90 0 67 94 1720 0 0 1381 36
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 90 0 67 94 1720 0 0 1381 36
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 0 0 0 90 0 67 94 1720 0 0 1381 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 0 0 90 0 67 94 1720 0 0 1381 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 1650 0 1650 1650 3300 0 0 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.05 0.00 0.00 0.06 0.52 0.00 0.00 0.42 0.00
Crit Volume: 0 90 90 860 860 691
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #12 Lone Tree Way/Indian Hill Dr/Williamson Ranch Plaza (Wal-Mart, OSH)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.628
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: B

Street Name: Indian Hill Dr/Williamson Ranch Pl Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 2 0 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 8 18 47 157 18 60 119 1571 32 55 1265 52
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 8 18 47 157 18 60 119 1571 32 55 1265 52
Added Vol: 0 0 0 0 0 0 0 0 -71 88 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 8 18 47 157 18 60 48 1659 32 55 1337 52
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 8 18 47 157 18 60 48 1659 32 55 1337 52
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 8 18 47 157 18 60 48 1659 32 55 1337 52
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 8 18 47 157 18 60 48 1659 24 55 1337 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 8 18 47 157 18 60 48 1659 24 55 1337 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.28 0.72 2.00 0.23 0.77 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1650 457 1193 3000 381 1269 1650 3300 1650 1650 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.00 0.04 0.04 0.05 0.05 0.05 0.03 0.50 0.01 0.03 0.41 0.00
Crit Volume: 65 79 829 55
Crit Moves: ****

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)
Intersection #13 Lone Tree Way/Driveaway

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B [12.1]
Level Of Service: E
Street Name: Driveaway Lone Tree Way

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include

Lanes: 0 0 0 0 0 0 0 0 1 0 0 2 0 0 0 0 3 0 1
Volume Module:
Base Vol: 0 0 0 0 0 0 0 0 1801 0 0 1330 93

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 0 0 38 0 1801 0 0 1330 93

Added Vol: 0 0 0 0 0 0 0 0 88 0 0 72 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 0 0 0 38 0 1889 0 0 1402 93

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 0 0 0 38 0 1889 0 0 1402 93
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 0 0 0 0 0 38 0 1889 0 0 1402 93

Critical Gap Module:
Critical Gap:xxxxx xxxx xxxx xxxx 6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxx xxxx 3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx

Capacity Module:
Conflict Vol: xxx xxxx xxxxx xxxx xxxx 467 xxxx xxxx xxxxx xxxx xxxx xxxxx
Potential Cap.: xxx xxxx xxxxx xxxx xxxx 542 xxxx xxxx xxxxx xxxx xxxx xxxxx

Move Cap.: xxx xxxx xxxxx xxxx xxxx 542 xxxx xxxx xxxxx xxxx xxxx xxxxx
Volume/Cap: xxx xxxx xxxx xxxx xxxx 0.07 xxxx xxxx xxxxx xxxx xxxx xxxxx

Level Of Service Module:
2Way95thQ: xxx xxxx xxxxx xxxx xxxx 5.6 xxxx xxxx xxxxx xxxx xxxx xxxxx
Control Del:xxxxx xxx xxxxx xxxxx 12.1 xxxxx xxxx xxxxx xxxxx xxxx xxxxx

LOS by Move: * * * * * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx

SharedQueue:xxxxx xxx xxxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Shrd ConDel:xxxxx xxx xxxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx

Shared LOS: * * * * *
ApproachDel: xxxxxx 12.1 xxxxxx
ApproachLOS: *
Note: Queue reported is the distance per lane in feet.

Level Of Service Computation Report

CATALOS Method (Future Volume Alternative)
Intersection #14 Lone Tree Way/Hillcrest Avenue

Average Delay (sec/veh): 130 Critical Vol./Cap.(X): 0.911
Level Of Service: E
Street Name: Hillcrest Avenue Lone Tree Way

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Lanes: 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0
Volume Module:
Base Vol: 238 276 205 489 482 198 229 1290 249 189 1099 279

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 238 276 205 489 482 198 229 1290 249 189 1099 279

Added Vol: 0 -54 91 54 -39 -53 0 88 0 177 125 39
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 238 222 296 543 443 145 229 1378 249 366 1224 318

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 238 222 296 543 443 145 229 1378 249 366 1224 318
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 238 222 296 543 443 145 229 1378 249 366 1224 318

RTOR Reduct: 0 0 0 0 0 0 145 0 0 0 0 0 299
RTOR Vol: 238 222 296 543 443 0 229 1378 249 366 1224 19

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 238 222 296 543 443 0 229 1378 249 366 1224 19
Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 2.00 2.00 1.00 1.00 2.54 0.46 1.00 3.00 1.00

Final Sat.: 1650 1650 1650 3000 3300 1650 1650 4192 758 1650 4950 1650
Capacity Analysis Module:
Vol/Sat: 0.14 0.13 0.18 0.18 0.13 0.00 0.14 0.33 0.33 0.22 0.25 0.01

Crit Volume: 296 272 542 366
Crit Moves: * * * * *
Note: Queue reported is the distance per lane in feet.

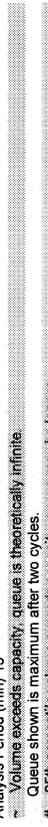
2: Laurel Rd. & Hillcrest Ave
Antioch Wal-Mart Expansion

1: Country Hills Dr. & Deer Valley Rd.
Antioch Wal-Mart Expansion

Long-Term Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1635	0	1770	1663	1583	1770	3500	0	1770	3350	0
Satd. Flow (prot)	0.741	0.702	0	0.702	0.650	0.950	0.950	0	0	0.950	0	0
Fit Permitted	1379	1635	0	1305	1663	1583	1768	3500	0	1770	3350	0
Satd. Flow (perm)	61	583	0	583	10	75	10	75	0	75	0	0
Satd. Flow (RTOR)	17	13	39	549	20	461	241	647	50	27	456	206
Volume (vph)	27	81	0	696	25	584	246	711	0	30	736	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	4	4	4	4	4	4	4	4	4	4	4	4
Protected Phases	8	8	8	8	8	8	8	8	8	8	8	8
Permitted Phases	37.0	37.0	0.0	37.0	37.0	37.0	30.0	46.0	0.0	17.0	33.0	0.0
Total Split (s)	34.0	34.0	0.0	34.0	34.0	34.0	19.6	52.8	0.0	8.1	37.4	0.0
Act Effct Green (s)	0.34	0.34	0.0	0.34	0.34	0.34	0.20	0.33	0.0	0.08	0.37	0.0
Actuated g/C Ratio	0.06	0.14	0.0	0.06	0.06	0.06	0.04	0.08	0.0	0.02	0.07	0.0
v/c Ratio	22.8	9.3	0.0	22.8	22.4	6.9	48.5	15.5	0.0	45.7	25.1	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	22.8	9.3	0.0	22.8	22.4	6.9	48.5	15.5	0.0	45.7	25.1	0.0
Total Delay	22.8	9.3	0.0	22.8	22.4	6.9	48.5	15.5	0.0	45.7	25.1	0.0
LOS	C	A	C	F	C	A	D	B	D	D	C	C
Approach Delay	12.7	159.4	0.0	12.7	159.4	24.0	24.0	24.0	0.0	26.0	0.0	0.0
Approach LOS	B	F	C	F	F	C	C	C	C	C	C	C
Queue Length 50th (ft)	12	11	0	12	11	13	148	144	0	18	173	0
Queue Length 95th (ft)	22	21	0	22	21	25	213	198	0	46	261	0
Internal Link Dist (ft)	75	468	0	75	468	115	140	140	0	150	285	0
Turn Bay Length (ft)	469	596	0	469	596	444	833	896	478	1851	248	1301
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.14	0.0	0.06	0.14	0.04	0.65	0.51	0.38	0.12	0.57	0.0
Intersection Summary												
Cycle Length	100											
Actuated Cycle Length	100											
Offset: 21 (21%)	Referenced to phase 2: NMT and 6: SET. Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.57											
Intersection Signal Delay	80.4											
Intersection Capacity Utilization	81.3%											
Analysis Period (min)	15											

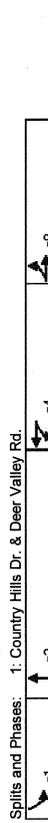
Volume exceeds capacity, queue is theoretically infinite
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Splits and Phases: 2: Laurel Rd. & Hillcrest Ave

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1846	0	1770	1704	0	1770	3433	0	1770	3311	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0	0
Fit Permitted	1766	1846	0	1770	1704	0	1762	3433	0	1745	3311	0
Satd. Flow (perm)	31	31	0	31	13	0	13	67	0	67	0	0
Satd. Flow (RTOR)	246	100	6	54	76	80	8	682	110	101	530	280
Volume (vph)	304	130	0	59	172	0	9	851	0	109	871	0
Lane Group Flow (vph)	Split	Split	Split	Split	Split	Split	Split	Split	Split	Split	Split	Split
Turn Type	8	8	8	8	8	8	8	8	8	8	8	8
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	36.5	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0	0.0
Total Split (s)	23.4	23.4	0.0	16.5	16.5	0.0	8.9	38.0	0.0	13.7	49.1	0.0
Act Effct Green (s)	0.24	0.24	0.0	0.17	0.17	0.0	0.08	0.39	0.0	0.14	0.51	0.0
Actuated g/C Ratio	0.71	0.29	0.0	0.20	0.56	0.0	0.06	0.63	0.0	0.45	0.51	0.0
v/c Ratio	50.1	39.8	0.0	44.6	43.7	0.0	62.8	32.2	0.0	54.9	19.6	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	50.1	39.8	0.0	44.6	43.7	0.0	62.8	32.2	0.0	54.9	19.6	0.0
Total Delay	50.1	39.8	0.0	44.6	43.7	0.0	62.8	32.2	0.0	54.9	19.6	0.0
LOS	D	D	D	D	D	D	E	C	D	D	B	B
Approach Delay	47.0	43.9	0.0	47.0	43.9	0.0	32.5	32.5	0.0	23.5	0.0	0.0
Approach LOS	D	D	D	D	D	D	C	C	C	C	C	C
Queue Length 50th (ft)	173	65	0	33	82	0	5	236	0	64	166	0
Queue Length 95th (ft)	354	154	0	90	199	0	29	465	0	166	397	0
Internal Link Dist (ft)	145	308	0	120	274	0	110	880	0	175	220	0
Turn Bay Length (ft)	807	635	0	549	550	0	386	1698	0	419	1884	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.20	0.0	0.11	0.31	0.0	0.02	0.50	0.0	0.26	0.46	0.0
Intersection Summary												
Cycle Length	154.5											
Actuated Cycle Length	97.2											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.71											
Intersection Signal Delay	32.6											
Intersection Capacity Utilization	65.2%											
Analysis Period (min)	15											

Volume exceeds capacity, queue is theoretically infinite
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Splits and Phases: 1: Country Hills Dr. & Deer Valley Rd.

3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Long-Term Conditions
PM Peak

Long-Term Conditions
PM Peak

Movement	EBL	EBR	NBL	NBR	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	0%	0%	0%	0%	0%	0%
Grade	0	7	0	672	1092	5
Volume (veh/h)	0.58	0.58	0.88	0.88	0.90	0.90
Peak Hour Factor	0	12	0	754	1213	6
Hourly flow rate (vph)						
Pedestrians						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)				727	1032	
Upstream signal (ft)						
p.k. platoon unblocked	0.64	0.64	0.64			
v/c, conflicting volume	1595	1213	1219			
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCU, unblocked vol	1932	1334	1343			
IC, single (s)	6.8	6.9	4.1			
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
P0 queue free %	100	87	100			
CM capacity (veh/h)	37	92	325			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	12	382	382	1213	6	
Volume Left	0	0	0	0	0	
Volume Right	12	0	0	0	6	
CSH	92	1700	1700	1700	1700	
Volume to Capacity	0.13	0.22	0.22	0.71	0.60	
Queue Length 95th (ft)	11	0	0	0	0	
Control Delay (s)	F	50.0	0.0	0.0	0.0	
Lane LOS	F					
Approach Delay (s)	F	50.0	0.0	0.0	0.0	
Approach LOS	F					
Intersection Summary						
Average Delay	0.3					
Intersection Capacity Utilization	67.5%					
ICU Level of Service	C					
Analysis Period (min)	15					

Movement	EBL	EBR	NBL	NBR	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	0%	0%	0%	0%	0%	0%
Grade	0	7	0	672	1092	5
Volume (veh/h)	0.58	0.58	0.88	0.88	0.90	0.90
Peak Hour Factor	0	12	0	754	1213	6
Hourly flow rate (vph)						
Pedestrians						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)				727	1032	
Upstream signal (ft)						
p.k. platoon unblocked	0.64	0.64	0.64			
v/c, conflicting volume	1595	1213	1219			
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCU, unblocked vol	1932	1334	1343			
IC, single (s)	6.8	6.9	4.1			
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
P0 queue free %	100	87	100			
CM capacity (veh/h)	37	92	325			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	12	382	382	1213	6	
Volume Left	0	0	0	0	0	
Volume Right	12	0	0	0	6	
CSH	92	1700	1700	1700	1700	
Volume to Capacity	0.13	0.22	0.22	0.71	0.60	
Queue Length 95th (ft)	11	0	0	0	0	
Control Delay (s)	F	50.0	0.0	0.0	0.0	
Lane LOS	F					
Approach Delay (s)	F	50.0	0.0	0.0	0.0	
Approach LOS	F					
Intersection Summary						
Average Delay	0.3					
Intersection Capacity Utilization	67.5%					
ICU Level of Service	C					
Analysis Period (min)	15					

Movement	EBL	EBR	NBL	NBR	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	0%	0%	0%	0%	0%	0%
Grade	0	7	0	672	1092	5
Volume (veh/h)	0.58	0.58	0.88	0.88	0.90	0.90
Peak Hour Factor	0	12	0	754	1213	6
Hourly flow rate (vph)						
Pedestrians						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)				727	1032	
Upstream signal (ft)						
p.k. platoon unblocked	0.64	0.64	0.64			
v/c, conflicting volume	1595	1213	1219			
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCU, unblocked vol	1932	1334	1343			
IC, single (s)	6.8	6.9	4.1			
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
P0 queue free %	100	87	100			
CM capacity (veh/h)	37	92	325			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	12	382	382	1213	6	
Volume Left	0	0	0	0	0	
Volume Right	12	0	0	0	6	
CSH	92	1700	1700	1700	1700	
Volume to Capacity	0.13	0.22	0.22	0.71	0.60	
Queue Length 95th (ft)	11	0	0	0	0	
Control Delay (s)	F	50.0	0.0	0.0	0.0	
Lane LOS	F					
Approach Delay (s)	F	50.0	0.0	0.0	0.0	
Approach LOS	F					
Intersection Summary						
Average Delay	0.3					
Intersection Capacity Utilization	67.5%					
ICU Level of Service	C					
Analysis Period (min)	15					

Movement	EBL	EBR	NBL	NBR	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop
Sign Control	0%	0%	0%	0%	0%	0%
Grade	0	7	0	672	1092	5
Volume (veh/h)	0.58	0.58	0.88	0.88	0.90	0.90
Peak Hour Factor	0	12	0	754	1213	6
Hourly flow rate (vph)						
Pedestrians						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)				727	1032	
Upstream signal (ft)						
p.k. platoon unblocked	0.64	0.64	0.64			
v/c, conflicting volume	1595	1213	1219			
VC1, stage 1 conf vol						
VC2, stage 2 conf vol						
VCU, unblocked vol	1932	1334	1343			
IC, single (s)	6.8	6.9	4.1			
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
P0 queue free %	100	87	100			
CM capacity (veh/h)	37	92	325			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	12	382	382	1213	6	
Volume Left	0	0	0	0	0	
Volume Right	12	0	0	0	6	
CSH	92	1700	1700	1700	1700	
Volume to Capacity	0.13	0.22	0.22	0.71	0.60	
Queue Length 95th (ft)	11	0	0	0	0	
Control Delay (s)	F	50.0	0.0	0.0	0.0	
Lane LOS	F					
Approach Delay (s)	F	50.0	0.0	0.0	0.0	
Approach LOS	F					
Intersection Summary						
Average Delay	0.3					
Intersection Capacity Utilization	67.5%					
ICU Level of Service	C					
Analysis Period (min)	15					



5: Southeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

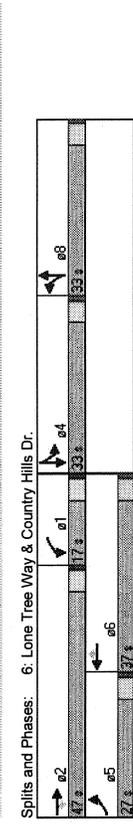
6: Lone Tree Way & Country Hills Dr.
Antioch Walmart Expansion

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	0%	0%	Step	0%	0%	Free	0%	Free	0%	Free	0%
Sign Control	0	0	0	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0	0	0	0
Volume (veh/h)	0.78	0.78	0.78	0.62	0.62	0.62	0.89	0.89	0.89	0.96	0.96	0.96
Peak Hour Factor	0	0	0	0	0	0	0.89	0.89	0.89	0.96	0.96	0.96
Hourly flow rate (vph)	0	0	0	0	0	0	789	789	789	918	918	918
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Walking Speed (ft/s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Percent Blackage	None	None	None	None	None	None	None	None	None	None	None	None
Right turn flare (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Median type	None	None	None	None	None	None	None	None	None	None	None	None
Median storage (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Upstream signal (ft)	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
pX, platoon unblocked	1567	1973	390	1316	1938	394	1130	1130	1130	865	865	865
vC, conflicting volume	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
vC1, stage 1 cont vol	1552	1972	390	1295	1936	339	1130	1130	1130	826	826	826
vC2, stage 2 cont vol	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1	4.1	4.1	4.1	4.1
vC, single (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2	2.2	2.2	2.2	2.2
fC, 2 stage (s)	100	100	73	98	100	90	100	100	100	99	99	99
p0 queue free %	86	59	608	84	62	635	614	614	614	774	774	774
GM capacity (veh/h)	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	162	66	394	394	76	271	524	344				
Volume Left	0	2	0	0	0	0	0	0				
Volume Right	162	64	394	394	76	271	524	344				
cSH	608	547	1700	1700	774	1700	1700	1700				
Volume to Capacity	0.27	0.12	0.23	0.23	0.04	0.01	0.31	0.20				
Queue Length 95th (ft)	27	10	0	0	0	1	0	0				
Control Delay (s)	13.0	12.5	0.0	0.0	0.0	0.5	0.0	0.0				
Lane LOS	B	B	A	A	A	A	A	A				
Approach Delay (s)	13.0	12.5	0.0	0.1	0.1	0.1	0.1	0.1				
Approach LOS	B	B	A	A	A	A	A	A				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1754	1754	1770	1754	1770
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Fit Permitted	1766	3539	1386	1747	3539	1529	1760	1754	1754	1768	1782	1768
Satd. Flow (perm)	146	1402	182	137	1080	46	152	171	97	56	261	88
Satd. Flow (RTOR)	152	1460	190	151	1187	51	214	378	0	66	411	0
Volume (vph)	146	1402	182	137	1080	46	152	171	97	56	261	88
Lane Group Flow (vph)	152	1460	190	151	1187	51	214	378	0	66	411	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Split	Split	Split	Split	Split	Split
Protected Phases	5	2	1	6	8	8	8	8	8	8	4	4
Permitted Phases	27.0	47.0	47.0	37.0	37.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
Total Split (s)	18.1	44.8	44.8	14.0	40.7	29.2	29.2	29.2	29.2	30.0	30.0	30.0
Act Effect Green (s)	0.14	0.34	0.34	0.11	0.31	0.22	0.22	0.22	0.22	0.23	0.23	0.23
Actuated g/C Ratio	0.62	1.20	0.38	0.79	1.07	0.54	0.92	0.92	0.92	0.16	0.98	0.16
v/c Ratio	63.0	135.0	27.7	74.1	84.6	19.3	49.9	75.5	41.3	87.2	41.3	87.2
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	63.0	135.0	27.7	74.1	84.6	19.3	49.9	75.5	41.3	87.2	41.3	87.2
Total Delay	E	F	C	E	F	B	D	E	D	F	D	F
LOS	E	F	C	E	F	B	D	E	D	F	D	F
Approach Delay	117.6	117.6	81.0	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
Approach LOS	F	F	F	E	E	E	E	E	E	F	F	F
Queue Length 50th (ft)	122	793	94	125	593	13	159	297	45	338	45	338
Queue Length 95th (ft)	186	4933	162	m#230	#794	m29	183	307	81	#498	81	#498
Internal Link Dist (ft)	145	1420	75	145	145	170	170	170	170	170	170	170
Turn Bay Length (ft)	327	1219	504	191	1108	487	408	420	408	420	408	420
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	1.20	0.38	0.79	1.07	0.10	0.52	0.90	0.16	0.98	0.16	0.98

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 80 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.20
 Intersection Signal Delay: 94.4
 Intersection Capacity Utilization: 88.2%
 Analysis Period (min): 15
 ICU Level of Service: E

95th percentile volume exceeds capacity; queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



5: Southeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

6: Lone Tree Way & Country Hills Dr.
Antioch Walmart Expansion

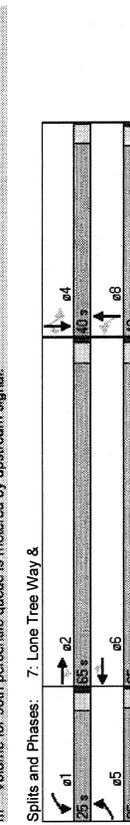
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	0%	0%	Step	0%	0%	Free	0%	Free	0%	Free	0%
Sign Control	0	0	0	0	0	0	0	0	0	0	0	0
Grade	0	0	0	0	0	0	0	0	0	0	0	0
Volume (veh/h)	0.78	0.78	0.78	0.62	0.62	0.62	0.89	0.89	0.89	0.96	0.96	0.96
Peak Hour Factor	0	0	0	0	0	0	0.89	0.89	0.89	0.96	0.96	0.96
Hourly flow rate (vph)	0	0	0	0	0	0	789	789	789	918	918	918
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Walking Speed (ft/s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Percent Blackage	None	None	None	None	None	None	None	None	None	None	None	None
Right turn flare (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Median type	None	None	None	None	None	None	None	None	None	None	None	None
Median storage (veh)	None	None	None	None	None	None	None	None	None	None	None	None
Upstream signal (ft)	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
pX, platoon unblocked	1567	1973	390	1316	1938	394	1130	1130	1130	865	865	865
vC, conflicting volume	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
vC1, stage 1 cont vol	1552	1972	390	1295	1936	339	1130	1130	1130	826	826	826
vC2, stage 2 cont vol	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1	4.1	4.1	4.1	4.1
vC, single (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2	2.2	2.2	2.2	2.2
fC, 2 stage (s)	100	100	73	98	100	90	100	100	100	99	99	99
p0 queue free %	86	59	608	84	62	635	614	614	614	774	774	774
GM capacity (veh/h)	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	162	66	394	394	76	271	524	344				
Volume Left	0	2	0	0	0	0	0	0				
Volume Right	162	64	394	394	76	271	524	344				
cSH	608	547	1700	1700	774	1700	1700	1700				
Volume to Capacity	0.27	0.12	0.23	0.23	0.04	0.01	0.31	0.20				
Queue Length 95th (ft)	27	10	0	0	0	1	0	0				
Control Delay (s)	13.0	12.5	0.0	0.0	0.0	0.5	0.0	0.0				
Lane LOS	B	B	A	A	A	A	A	A				
Approach Delay (s)	13.0	12.5	0.0	0.1	0.1	0.1	0.1	0.1				
Approach LOS	B	B	A	A	A	A	A	A				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1754	1754	1770	1754	

7: Lone Tree Way & Antioch Walmart Expansion
Long-Term Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1583	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.766			0.681		
Satd. Flow (perm)	1770	3539	1436	1757	3539	1583	1408	1583	0	1289	1863	1583
Satd. Flow (RTOR)	29	1656	107	90	1084	25	121	0	62	40	3	40
Volume (vph)	31	1656	107	90	1191	27	155	79	0	44	3	44
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	2	1	6	1	6	8				4
Protected Phases												
Permitted Phases	25.0	65.0	65.0	25.0	65.0	65.0	40.0	40.0	0.0	40.0	40.0	40.0
Total Split (s)	8.8	86.6	86.6	14.2	96.0	96.0	20.2	20.2	0.0	20.2	20.2	20.2
Act Effect Green (s)	0.07	0.87	0.87	0.11	0.74	0.74	0.16	0.16	0.16	0.16	0.16	0.16
Activated g/C Ratio	0.26	0.70	0.11	0.51	0.46	0.02	0.71	0.16	0.22	0.01	0.16	0.16
v/c Ratio	57.2	10.8	0.4	54.3	11.4	9.0	68.8	0.7	48.4	42.3	13.2	13.2
Control Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	57.2	10.9	0.4	54.3	11.4	9.0	68.8	0.7	48.4	42.3	13.2	13.2
Total Delay	E	B	A	D	B	A	E	A		D	D	B
LOS	E	B	A	D	B	A	E	A		D	D	B
Approach Delay	11.0			14.6			45.8			31.2		
Approach LOS	B			B			D			C		
Queue Length 50th (ft)	28	122	0	88	199	5	126	0	33	2	0	0
Queue Length 95th (ft)	m28	m52	m0	m131	m0	m7	160	0	65	11	32	0
Internal Link Dist (ft)	100	740		860		100	704			467		
Turn Bay Length (ft)	100	200		200		100						
Base Capacity (vph)	300	2356	957	300	2614	1172	401	654	361	530	482	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.72	0.11	0.33	0.46	0.02	0.39	0.12	0.12	0.01	0.09	0.09

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 94 (72%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 15.3
 Intersection LOS: B
 Intersection Capacity Utilization 71.4%
 Analysis Period (min) 15
 m - Volume for 95th percentile queue is metered by upstream signal.



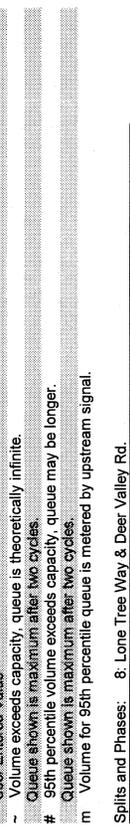
Splits and Phases: 7: Lone Tree Way &

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8: Lone Tree Way & Deer Valley Rd.
Antioch Walmart Expansion
Long-Term Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	2000	3508	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1768	3539	1523	1764	3539	1551	3429	3539	1558	3421	3508	0
Satd. Flow (RTOR)	98	1136	389	485	807	216	377	466	419	243	390	22
Volume (vph)	113	1306	447	511	849	227	436	542	487	289	490	0
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	2	1	6	1	6	3	8	7	4	4
Protected Phases												
Permitted Phases	20.0	44.0	44.0	25.0	49.0	20.0	32.0	32.0	29.0	41.0	41.0	0.0
Total Split (s)	14.3	41.0	41.0	26.7	53.4	17.0	26.4	26.4	23.9	33.3	33.3	0.0
Act Effect Green (s)	0.11	0.92	0.92	0.32	0.21	0.41	0.41	0.41	0.20	0.18	0.18	0.0
Activated g/C Ratio	0.58	1.17	0.63	1.41	0.58	0.29	0.98	0.75	0.91	0.79	0.94	0.0
v/c Ratio	75.8	125.0	15.9	236.4	41.3	15.5	92.9	55.7	42.6	66.0	43.1	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	75.8	125.0	15.9	236.4	41.3	15.5	92.9	55.7	42.6	66.0	43.1	0.0
Total Delay	E	F	B	F	D	B	F	E	D	E	D	D
LOS	E	F	B	F	D	B	F	E	D	E	D	D
Approach Delay	96.9			100.4			62.5			51.6		
Approach LOS	F			F			E			D		
Queue Length 50th (ft)	90	-67.3	112	-651	223	19	192	222	184	118	177	0
Queue Length 95th (ft)	m146	#74	123	#878	471	m171	#277	271	#333	157	213	0
Internal Link Dist (ft)	195	850		1580		400	180	400	180	375	495	0
Turn Bay Length (ft)	231	1116	712	363	1454	771	448	789	564	400	1028	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	1.17	0.63	1.41	0.58	0.29	0.95	0.69	0.86	0.72	0.48	0.0

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 80 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.41
 Intersection Signal Delay: 82.5
 Intersection LOS: F
 Intersection Capacity Utilization 94.2%
 Analysis Period (min) 15
 n - User Entered Value
 - Volume exceeds capacity, queue is theoretically infinite.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 8: Lone Tree Way & Deer Valley Rd.

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9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

Long-Term Conditions
PM Peak

Long-Term Conditions
PM Peak

Lane Group	EBL	EBT	EBL	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3535	0	1770	3539	1583	1770	1561	0	1770	1863
Satd. Flow (prot)	0.950			0.950		0.755			0.744		
Fit Permitted	1770	3535	0	1768	3539	1545	1394	1561	0	1383	1863
Satd. Flow (perm)	36	1798	7	32	1475	10	44	0	10	8	2
Satd. Flow (RTOR)	39	1982	0	37	1715	12	90	20	0	15	4
Volume (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	5	2	1	6	4	4	4	4	4	4	4
Turn Type	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases
Protected Phases	20.0	57.0	0.0	20.0	57.0	20.0	20.0	20.0	0.0	20.0	20.0
Permitted Phases	9.8	88.0	9.6	85.5	14.3	14.3	14.3	14.3	14.3	14.3	14.3
Total Split (s)	0.08	0.88	0.07	0.66	0.66	0.11	0.11	0.11	0.11	0.11	0.11
Act Effct Green (s)	0.28	0.74	0.01	0.59	0.03	0.10	0.02	0.13	0.10	0.02	0.13
Actuated g/C Ratio	60.1	15.5	71.9	13.3	3.3	70.0	0.1	51.8	49.5	19.2	19.2
v/c Ratio	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	60.1	15.5	71.9	11.4	3.3	70.0	0.1	51.8	49.5	19.2	19.2
Control Delay	E	B	E	B	A	E	A	D	D	D	B
Queue Delay	16.3	12.6	12.6	57.3	57.3	33.1	33.1	33.1	33.1	33.1	33.1
Total Delay	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS
LOS	B	B	B	E	E	C	C	C	C	C	C
Approach Delay	33	278	32	395	0	73	0	11	3	3	0
Approach LOS	m34	m4964	m47	#899	m2	66	0	20	9	9	9
Queue Length 50th (ft)	145	1590	150	605	609	609	609	609	100	819	100
Queue Length 95th (ft)	231	2393	231	2325	1019	183	643	643	182	246	229
Internal Link Dist (ft)	0	0	0	57	0	0	0	0	0	0	0
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.82	0.16	0.75	0.01	0.49	0.03	0.08	0.02	0.11	0.11

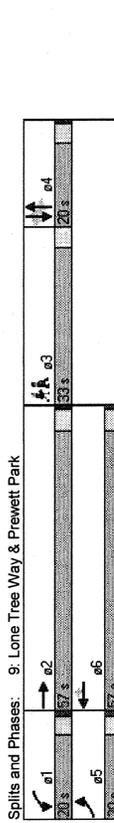
Lane Group	EBL	EBT	EBL	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3535	0	1770	3539	1583	1770	1561	0	1770	1863
Satd. Flow (prot)	0.950			0.950		0.755			0.744		
Fit Permitted	1770	3535	0	1768	3539	1545	1394	1561	0	1383	1863
Satd. Flow (perm)	36	1798	7	32	1475	10	44	0	10	8	2
Satd. Flow (RTOR)	39	1982	0	37	1715	12	90	20	0	15	4
Volume (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	5	2	1	6	4	4	4	4	4	4	4
Turn Type	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases	Permitted Phases
Protected Phases	20.0	57.0	0.0	20.0	57.0	20.0	20.0	20.0	0.0	20.0	20.0
Permitted Phases	9.8	88.0	9.6	85.5	14.3	14.3	14.3	14.3	14.3	14.3	14.3
Total Split (s)	0.08	0.88	0.07	0.66	0.66	0.11	0.11	0.11	0.11	0.11	0.11
Act Effct Green (s)	0.28	0.74	0.01	0.59	0.03	0.10	0.02	0.13	0.10	0.02	0.13
Actuated g/C Ratio	60.1	15.5	71.9	13.3	3.3	70.0	0.1	51.8	49.5	19.2	19.2
v/c Ratio	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	60.1	15.5	71.9	11.4	3.3	70.0	0.1	51.8	49.5	19.2	19.2
Control Delay	E	B	E	B	A	E	A	D	D	D	B
Queue Delay	16.3	12.6	12.6	57.3	57.3	33.1	33.1	33.1	33.1	33.1	33.1
Total Delay	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS	Approach LOS
LOS	B	B	B	E	E	C	C	C	C	C	C
Approach Delay	33	278	32	395	0	73	0	11	3	3	0
Approach LOS	m34	m4964	m47	#899	m2	66	0	20	9	9	9
Queue Length 50th (ft)	145	1590	150	605	609	609	609	609	100	819	100
Queue Length 95th (ft)	231	2393	231	2325	1019	183	643	643	182	246	229
Internal Link Dist (ft)	0	0	0	57	0	0	0	0	0	0	0
Turn Bay Length (ft)	0	0	0	0	0	0	0	0	0	0	0
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.82	0.16	0.75	0.01	0.49	0.03	0.08	0.02	0.11	0.11

Intersection Summary

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 113 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 16.0
 Intersection Capacity Utilization: 65.8%
 Analysis Period (min): 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 113 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 16.0
 Intersection Capacity Utilization: 65.8%
 Analysis Period (min): 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 9: Lone Tree Way & Prewett Park

Splits and Phases: 9: Lone Tree Way & Prewett Park

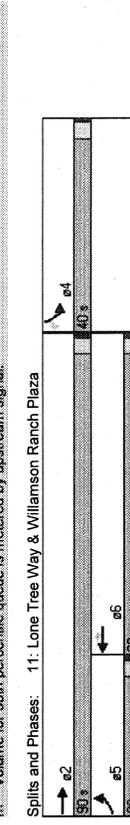
11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

Long-Term Conditions
PM Peak

Lane Group	EBL	EBT	WBL	WBT	WBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	3539	1583	1770	1583	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	1756	3539	3539	1451	1770	1582	1582
Satd. Flow (perm)	94	1720	1381	36	90	67	67
Volume (vph)	106	1933	1534	40	127	94	94
Lane Group Flow (vph)	Prot	5	2	6	4	4	4
Turn Type	Prot	5	2	6	4	4	4
Permitted Phases	30.0	90.0	60.0	60.0	40.0	40.0	40.0
Total Split (s)	11.8	108.8	93.9	93.9	15.2	15.2	15.2
Act Effect Green (s)	0.09	0.84	0.72	0.72	0.12	0.12	0.12
Actuated g/C Ratio	0.66	0.65	0.60	0.61	0.61	0.61	0.61
v/c Ratio	77.8	92.2	8.1	0.1	65.9	12.6	12.6
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	77.8	92.2	6.1	0.1	65.9	12.6	12.6
Total Delay	E	A	A	A	E	E	B
LOS	E	A	A	A	E	E	B
Approach Delay	12.6	6.0	43.2				
Approach LOS	B	A	D				
Queue Length 50th (ft)	93	176	11	0	105	0	0
Queue Length 95th (ft)	m120	831	226	m0	120	22	22
Internal Link Dist (ft)	155	1855	820	115	457		
Turn Bay Length (ft)	368	2961	2557	1052	504	512	512
Base Capacity (vph)	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.65	0.60	0.04	0.25	0.18	0.18

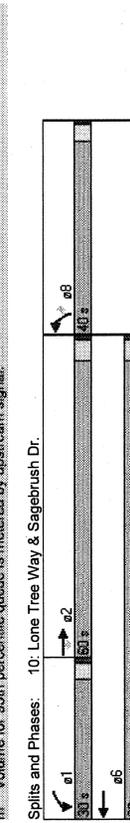
Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 75 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 11.7
Intersection LOS: B
Intersection Capacity Utilization: 58.7%
ICU Level of Service B
Analysis Period (min): 15
m - Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 11: Lone Tree Way & Williamson Ranch Plaza

Lane Group	EBL	EBT	WBL	WBT	NBL	NBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	3539	1583	1770	3539	1770	1583
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0.950	0.950
Flt Permitted	3539	1511	1767	3539	1770	1583
Satd. Flow (perm)	1888	146	45	1385	85	101
Volume (vph)	1835	159	56	1710	139	165
Lane Group Flow (vph)	Prot	2	1	6	8	8
Turn Type	Prot	2	1	6	8	8
Permitted Phases	60.0	60.0	30.0	90.0	40.0	40.0
Total Split (s)	98.8	98.8	9.4	109.3	14.7	14.7
Act Effect Green (s)	0.76	0.76	0.07	0.84	0.11	0.11
Actuated g/C Ratio	0.66	0.66	0.44	0.57	0.69	0.51
v/c Ratio	60	0.3	79.0	1.7	72.6	12.9
Control Delay	0.1	0.0	0.0	0.0	0.0	0.0
Queue Delay	61	0.3	79.0	1.7	72.6	12.9
Total Delay	A	A	E	A	E	B
LOS	A	A	E	A	E	B
Approach Delay	5.6	4.1	40.1			
Approach LOS	A	A	D			
Queue Length 50th (ft)	25	1	43	25	115	0
Queue Length 95th (ft)	197	m0	m77	15	116	3
Internal Link Dist (ft)	805	80	600	1855	497	115
Turn Bay Length (ft)	2889	1156	368	2974	504	599
Base Capacity (vph)	93	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	39	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.14	0.15	0.58	0.28	0.29

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 122 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 7.6
Intersection LOS: A
Intersection Capacity Utilization: 59.6%
ICU Level of Service B
Analysis Period (min): 15
m - Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 10: Lone Tree Way & Sagebrush Dr.

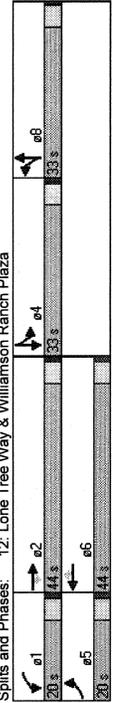
12: Lone Tree Way & Williamson Ranch Plaza
Antioch Wal-Mart Expansion

13: Lone Tree Way & Wal-Mart Driveway
Antioch Wal-Mart Expansion

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	1770	3539	1583	1770	3539	1583	1770	1643	0	3433	1630	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly Flow Rate (vph)	0	2197	1491	99	0	45						
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (ft)												
PA, platoon unblocked	0.74	510	500									
VC, conflicting volume	1590											
VC1, stage 1 cont vol												
VC2, stage 2 cont vol												
VCU, unblocked vol	1108											
IC, single (s)	4.1											
IC, 2 stage (s)												
IF (s)	2.2											
p0 queue free %	100											
GM capacity (veh/h)	486											
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	SB 1					
Volume Total	1098	1098	497	497	497	99	45					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	0	0	0	0	0					
CSH	1700	1700	1700	1700	1700	1700	808					
Volume to Capacity	0.65	0.65	0.29	0.29	0.29	0.06	0.06					
Queue Length 95th (ft)	0	0	0	0	0	0	0					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Lane LOS	A	A	A	A	A	A	A					
Approach LOS												
Intersection Summary												
Average Delay	0.1											
Intersection Capacity Utilization	65.6%											
Analysis Period (min)	15											
ICU Level of Service	B											

12: Lone Tree Way & Williamson Ranch Plaza
Antioch Wal-Mart Expansion

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	1770	3539	1583	1770	3539	1583	1770	1643	0	3433	1630	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly Flow Rate (vph)	0	2197	1491	99	0	45						
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage (veh)												
Upstream signal (ft)												
PA, platoon unblocked	0.74	510	500									
VC, conflicting volume	1590											
VC1, stage 1 cont vol												
VC2, stage 2 cont vol												
VCU, unblocked vol	1108											
IC, single (s)	4.1											
IC, 2 stage (s)												
IF (s)	2.2											
p0 queue free %	100											
GM capacity (veh/h)	486											
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	SB 1					
Volume Total	1098	1098	497	497	497	99	45					
Volume Left	0	0	0	0	0	0	0					
Volume Right	0	0	0	0	0	0	0					
CSH	1700	1700	1700	1700	1700	1700	808					
Volume to Capacity	0.65	0.65	0.29	0.29	0.29	0.06	0.06					
Queue Length 95th (ft)	0	0	0	0	0	0	0					
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Lane LOS	A	A	A	A	A	A	A					
Approach LOS												
Intersection Summary												
Average Delay	0.1											
Intersection Capacity Utilization	65.6%											
Analysis Period (min)	15											
ICU Level of Service	B											



Splits and Phases: 12: Lone Tree Way & Williamson Ranch Plaza

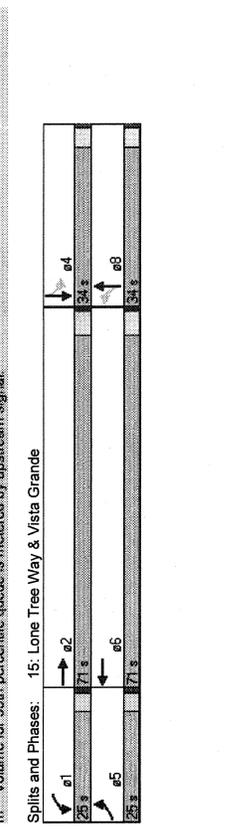
15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4938	0	1770	5085	1583	1770	3171	0	2000	3539	1583
Flt Permitted	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Satd. Flow (perm)	1768	4938	0	1766	5085	1517	1754	3171	0	3406	3539	1534
Satd. Flow (RTOR)	32	374	0	374	374	374	374	374	0	374	374	374
Volume (vph)	229	1378	249	366	1224	318	238	222	286	543	443	145
Lane Group Flow (vph)	254	1808	0	431	1440	374	336	730	0	662	540	177
Turn Type	Prot											
Protected Phases	5	2	1	6	8	6	8	8	8	4	4	4
Permitted Phases	6											
Total Split (s)	30.0	52.0	0.0	16.0	38.0	38.0	20.0	20.0	0.0	42.0	42.0	42.0
Act Effct Green (s)	24.6	49.0	0.0	13.0	37.4	37.4	17.0	17.0	0.0	39.0	39.0	39.0
Actuated g/c Ratio	0.19	0.38	0.00	0.10	0.29	0.29	0.13	0.13	0.00	0.30	0.30	0.30
v/c Ratio	0.76	0.96	0.00	2.44	0.96	0.53	1.45	1.31	0.00	1.10	0.51	0.30
Control Delay	68.3	36.9	684.7	68.6	12.8	264.8	187.3	110.8	396.6	6.2	6.2	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	26.9	0.0	0.0	0.0
Total Delay	68.3	36.9	684.7	68.6	12.8	264.8	188.4	117.9	396.6	6.2	6.2	6.2
LOS	E	D	F	E	B	F	F	F	F	D	D	A
Approach Delay	40.8											
Approach LOS	D											
Queue Length 50th (ft)	177	450	0	130	374	374	170	170	0	326	197	0
Queue Length 95th (ft)	m252	m4333	0	#773	#511	117	#410	#308	0	#384	227	38
Internal Link Dist (ft)	620	420	0	210	690	730	195	556	0	400	1660	280
Turn Bay Length (ft)	368	1881	0	177	1465	703	231	556	0	600	1062	564
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.96	2.44	0.98	0.53	1.45	1.32	1.17	0.51	0.30	0.30	0.30

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 98 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.44
 Intersection Signal Delay: 122.0
 Intersection Capacity Utilization: 101.3%
 Analysis Period (min): 15
 User Entered Value



Splits and Phases: 14: Lone Tree Way & Hillcrest Ave

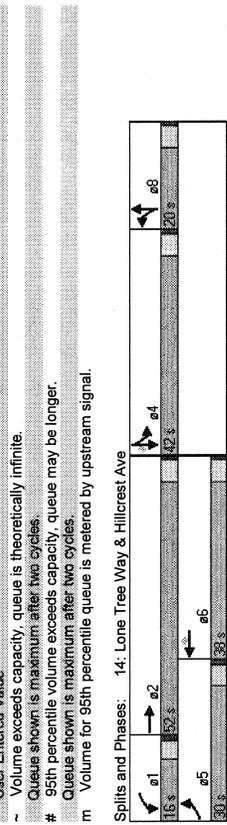
~ Volume exceeds capacity, queue is theoretically infinite.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5049	0	1770	5055	0	1770	1610	0	1770	1649	0
Flt Permitted	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Satd. Flow (perm)	1768	5049	0	1769	5055	0	1760	1610	0	1760	1649	0
Satd. Flow (RTOR)	6	6	0	6	6	0	6	6	0	6	6	6
Volume (vph)	39	2031	78	167	1753	62	54	26	124	81	22	54
Lane Group Flow (vph)	40	2174	0	178	1931	0	68	187	0	109	103	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	1	6	8	6	8	8	8	4	4	4
Permitted Phases	8											
Total Split (s)	25.0	71.0	0.0	25.0	71.0	0.0	34.0	34.0	0.0	34.0	34.0	0.0
Act Effct Green (s)	10.7	79.2	0.0	19.6	90.3	0.0	22.2	22.2	0.0	22.2	22.2	0.0
Actuated g/c Ratio	0.08	0.61	0.00	0.15	0.69	0.00	0.17	0.17	0.00	0.17	0.17	0.00
v/c Ratio	0.27	0.71	0.00	0.67	0.55	0.00	0.34	0.46	0.00	0.34	0.46	0.00
Control Delay	69.7	14.4	69.7	68.1	12.1	69.7	48.9	14.0	69.7	17.7	17.5	69.7
Queue Delay	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	15.0	69.7	68.1	12.1	69.7	48.9	14.0	69.7	17.7	17.5	69.7
LOS	E	B	F	E	B	F	D	D	F	E	E	B
Approach Delay	16.0											
Approach LOS	B											
Queue Length 50th (ft)	36	470	0	143	110	0	51	23	88	22	22	0
Queue Length 95th (ft)	m31	m535	0	237	409	0	79	61	114	46	46	0
Internal Link Dist (ft)	200	660	0	200	1055	0	130	786	0	100	614	0
Turn Bay Length (ft)	300	3080	0	365	3514	0	277	502	0	206	449	0
Base Capacity (vph)	0	489	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.84	0.58	0.55	0.25	0.37	0.53	0.23	0.53	0.23	0.23	0.53

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 98 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 17.8
 Intersection Capacity Utilization: 76.8%
 Analysis Period (min): 15
 Volume for 95th percentile queue is metered by upstream signal



Splits and Phases: 15: Lone Tree Way & Vista Grande

17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

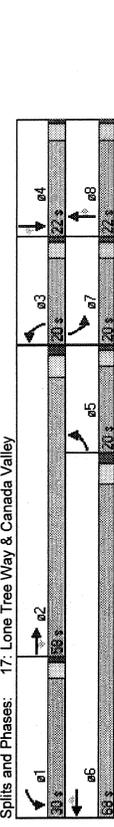
16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Long-Term Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	1603	1504	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3432	5085	1534	3428	5085	1559	3428	1603	1481	1765	1863	1562
Satd. Flow (RTOR)			86			524		43		324		
Volume (vph)	128	2039	80	450	1956	472	213	71	371	349	126	63
Lane Group Flow (vph)	138	2192	86	500	2173	524	284	221	369	478	173	86
Turn Type	Prot	Prot	Prot									
Protected Phases	5	2	1	6	3	6	3	6	7	4	4	4
Permitted Phases	2	6	8	6	8	6	8	6	8	6	8	6
Total Split (s)	20.0	58.0	30.0	68.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0
Act Effct Green (s)	17.0	60.7	22.8	66.5	15.2	17.5	17.0	17.5	17.0	19.3	19.3	19.3
Actuated g/C Ratio	0.13	0.47	0.18	0.51	0.81	0.12	0.13	0.13	0.13	0.13	0.13	0.13
v/c Ratio	0.31	0.92	0.11	0.63	0.84	0.50	0.71	0.87	0.77	2.07	0.62	0.28
Control Delay	48.6	32.7	9.6	68.7	23.5	1.9	65.3	75.8	20.5	524.0	62.8	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	32.7	9.6	68.7	23.5	1.9	65.3	75.8	20.5	524.0	62.8	12.4
LOS	D	C	A	E	C	A	E	E	C	F	E	B
Approach Delay	32.8			27.1			49.1					350.0
Approach LOS	C			C			D					F
Queue Length 50th (ft)	41	350	13	204	513	21	119	156	35	-634	138	0
Queue Length 95th (ft)	m38	m309	m10	m230	m442	m24	136	200	62	#650	173	26
Internal Link Dist (ft)		905		760			542				1064	
Turn Bay Length (ft)	320	630	400	350	150	150	449	271	493	231	280	308
Base Capacity (vph)	449	2375	762	713	2801	1054	449	271	493	231	280	308
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.92	0.11	0.70	0.84	0.50	0.63	0.82	0.75	2.07	0.62	0.28

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 87 (67%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.07
 Intersection Signal Delay: 65.2
 Intersection LOS: E
 Intersection Capacity Utilization: 96.8%
 ICU Level of Service: F
 Analysis Period (min): 15
 * Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

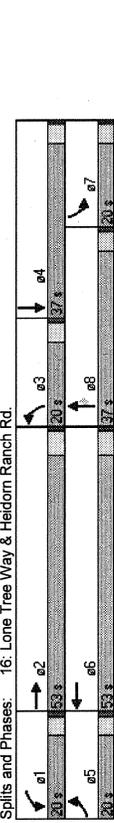
Splits and Phases: 17: Lone Tree Way & Canada Valley



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4994	0	1770	5068	0	3433	1863	1583	1770	1799	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1769	4994	0	1769	5068	0	3433	1863	1561	1766	1799	0
Satd. Flow (RTOR)				2						389		11
Volume (vph)	9	2037	223	309	1899	33	201	28	289	25	34	10
Lane Group Flow (vph)	9	2354	0	340	2123	0	264	37	380	42	74	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	1	6	3	6	3	6	7	4	4	4
Permitted Phases	2	6	8	6	8	6	8	6	8	6	8	6
Total Split (s)	20.0	53.0	0.0	20.0	53.0	0.0	20.0	37.0	37.0	20.0	37.0	0.0
Act Effct Green (s)	8.7	50.0	0.0	40.4	90.8	0.0	16.1	16.3	16.3	13.5	13.6	0.0
Actuated g/C Ratio	0.07	0.38	0.00	0.31	0.70	0.00	0.12	0.13	0.13	0.10	0.10	0.00
v/c Ratio	0.06	1.22	0.00	0.62	0.60	0.00	0.62	0.16	0.16	0.23	0.37	0.00
Control Delay	78.7	128.8	0.0	48.5	7.7	0.0	80.9	48.8	15.6	56.1	48.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.7	128.8	0.0	48.5	7.7	0.0	80.9	48.8	15.6	56.1	48.6	0.0
LOS	E	F	F	D	A	A	E	D	B	E	D	D
Approach Delay	128.6			13.3			34.9			51.3		
Approach LOS	F			C			C			D		D
Queue Length 50th (ft)	8	-884	0	193	84	0	109	30	17	32	52	0
Queue Length 95th (ft)	m11	#987	0	m#472	749	0	129	44	38	47	53	0
Internal Link Dist (ft)		1055		905			872				316	
Turn Bay Length (ft)	185	231	1931	400	550	3542	449	487	673	231	479	0
Base Capacity (vph)	231	1931	1931	400	550	3542	449	487	673	231	479	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	1.22	0.00	0.62	0.60	0.00	0.59	0.08	0.06	0.16	0.15	0.00

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 114 (88%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.22
 Intersection Signal Delay: 65.2
 Intersection LOS: E
 Intersection Capacity Utilization: 84.8%
 ICU Level of Service: E
 Analysis Period (min): 15
 * Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 16: Lone Tree Way & Heidorn Ranch Rd.



18: Lone Tree Way & SR 4 By-pass SB Off-ramp
Antioch Walmart Expansion

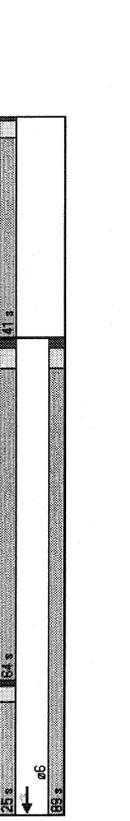
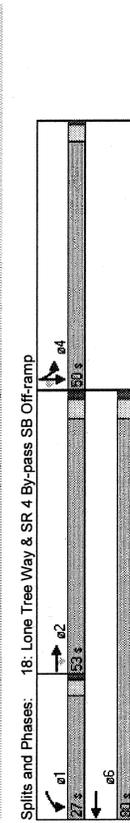
19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Long-Term Conditions PM Peak

Long-Term Conditions PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA						
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Flt Permitted	0	5085	1583	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (perm)	0	5085	1561	3433	5085	0	0	0	1681	1688	1583	0
Satd. Flow (RTOR)	0	2165	605	623	2134	0	0	0	765	13	556	0
Volume (vph)	0	2453	880	716	2453	0	0	0	430	445	625	0
Lane Group Flow (vph)	0	2453	880	716	2453	0	0	0	430	445	625	0
Turn Type	2	1	6	1	6	1	6	1	6	1	6	1
Protected Phases	2	1	6	1	6	1	6	1	6	1	6	1
Permitted Phases	2	1	6	1	6	1	6	1	6	1	6	1
Total Split (s)	0.0	53.0	53.0	27.0	80.0	0.0	0.0	0.0	50.0	50.0	50.0	4.0
Act Effct Green (s)	0.0	50.0	50.0	24.0	77.0	0.0	0.0	0.0	47.0	47.0	47.0	4.0
Actuated g/C Ratio	0.38	0.38	0.38	0.18	0.59	0.38	0.38	0.38	0.36	0.36	0.36	0.36
v/c Ratio	1.24	0.77	1.13	0.81	0.81	1.24	0.77	1.13	0.73	0.73	1.09	1.09
Control Delay	145.7	13.2	121.4	18.3	18.3	145.7	13.2	121.4	43.2	44.3	103.3	103.3
Queue Delay	0.0	1.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	145.7	14.5	121.4	19.4	19.4	145.7	14.5	121.4	43.2	44.3	103.3	103.3
LOS	F	B	F	F	B	F	B	F	D	D	D	F
Approach Delay	117.1	42.4	42.4	42.4	42.4	117.1	42.4	42.4	88.6	88.6	88.6	88.6
Approach LOS	F	D	D	D	D	F	D	D	E	E	E	E
Queue Length 50th (ft)	-921	154	~361	456	456	-921	154	~361	325	340	~591	~591
Queue Length 95th (ft)	m#860	m#152	m#461	486	486	m#860	m#152	m#461	451	470	#810	#810
Internal Link Dist (ft)	760	760	760	760	760	760	760	760	671	671	671	671
Turn Bay Length (ft)	315	310	310	310	310	315	310	310	280	280	610	574
Base Capacity (vph)	1956	888	888	3012	3012	1956	888	888	608	608	610	574
Starvation Cap Reductn	0	74	0	118	118	0	74	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.84	1.13	0.85	0.85	1.24	0.84	1.13	0.71	0.73	1.09	1.09

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 100 (77%), Referenced to phase 2.EBT and 6.WBT. Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 77.3
Intersection Capacity Utilization 91.1%
Analysis Period (min) 15
Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 18: Lone Tree Way & SR 4 By-pass SB Off-ramp

Splits and Phases: 19: Lone Tree Way & SR 4 By-pass NB On-ramp

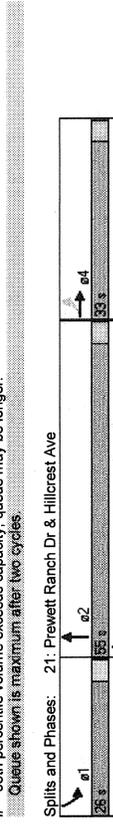
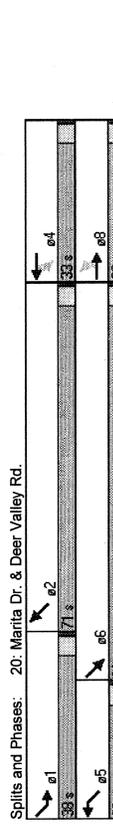
20: Marita Dr. & Deer Valley Rd.
Antioch Walmart Expansion

21: Prewett Ranch Dr & Hillcrest Ave
Antioch Walmart Expansion

Long-Term Conditions
PM Peak

Long-Term Conditions
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1583	0	1770	1602	0	1770	3519	0	1770	3539	0
Satd. Flow (prot)	0.639	0.763	0	0.960	0.960	0	0.960	0.960	0	0.960	0.960	0
Fit Permitted	1004	1583	0	1403	1602	0	1766	3519	0	1760	3539	0
Satd. Flow (perm)	288	124	0	288	124	0	288	124	0	288	124	0
Satd. Flow (RTOR)	13	0	5	23	6	87	26	1136	29	25	1178	3
Volume (vph)	19	7	0	33	133	0	33	1493	0	27	1283	0
Lane Group Flow (vph)	Perm	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	8	4	1	6	5	2						
Permitted Phases	4	4	4	4	4	4	4	4	4	4	4	4
Total Satd. (s)	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
Act Effort Green (s)	10.3	10.3	10.3	10.3	10.3	10.3	9.6	84.7	9.3	84.4	9.3	84.4
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.78	0.08	0.78	0.08	0.78
v/c Ratio	0.20	0.02	0.25	0.51	0.22	0.55	0.22	0.55	0.19	0.47	0.19	0.47
Control Delay	49.4	0.0	49.0	16.7	49.2	6.8	48.9	6.1	48.9	6.1	48.9	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	0.0	49.0	16.7	49.2	6.9	48.9	6.1	48.9	6.1	48.9	6.1
LOS	D	A	D	B	D	A	D	A	D	A	D	A
Approach Delay	38.1	23.1	7.8	7.8	7.0	7.0						
Approach LOS	D	C	A	A	A	A						
Queue Length 50th (ft)	12	0	21	6	21	207	17	164	47	265	47	265
Queue Length 95th (ft)	27	0	40	29	46	257	46	257	47	265	47	265
Internal Link Dist (ft)	345	427	427	427	427	825	825	825	825	825	825	825
Turn Bay Length (ft)	40	100	100	125	125	2738	175	2744	175	2744	175	2744
Base Capacity (vph)	235	591	328	470	448	2738	345	2744	345	2744	345	2744
Starvation Cap Reductn	0	0	0	0	0	188	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.01	0.10	0.28	0.07	0.59	0.08	0.47	0.08	0.47	0.08	0.47
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	108.9											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.55											
Intersection Signal Delay	8.5											
Intersection LOS	A											
ICU Level of Service	A											
Intersection Capacity Utilization	47.3%											
Analysis Period (min)	15											



Splits and Phases: 20: Marita Dr. & Deer Valley Rd.

Splits and Phases: 21: Prewett Ranch Dr & Hillcrest Ave

Queue shown is maximum after two cycles.

Queue shown is maximum after two cycles.

**LONG-TERM + PROJECT TRAFFIC CONDITIONS
(TRAFFIX & SYNCRHO)**

Antioch Walmart Expansion

Scenario: Cumulative + Project AM Scenario Report

Command: None
 Volume: Cumulative+Project AM
 Geometry: Cumulative
 Impact Fee: Default Impact Fee
 Trip Generation: Cum+Proj_AM
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Antioch Walmart Expansion

Impact Analysis Report
 Level Of Service

Intersection	Base Del/V LOS Veh	Future Del/V LOS Veh	Change in
# 1 Deer Valley Rd/ Country Hills	A xxxxx 0.572	A xxxxx 0.574	+ 0.003 V/C
# 2 Hillcrest Avenue/Laurel Road	A xxxxx 0.599	B xxxxx 0.652	+ 0.053 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx 0.471	A xxxxx 0.484	+ 0.013 V/C
# 4 Hillcrest Avenue/Driveway	C 16.5 0.031	C 17.2 0.033	+ 0.653 D/V
# 5 Hillcrest Avenue/South Drivewa	B 11.1 0.099	B 11.2 0.101	+ 0.005 D/V
# 6 Lone Tree Way/Mokelumne Dr	E xxxxx 0.959	E xxxxx 0.966	+ 0.008 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx 0.551	A xxxxx 0.558	+ 0.007 V/C
# 8 Lone Tree Way/Deer Valley Rd	D xxxxx 0.815	D xxxxx 0.840	+ 0.025 V/C
# 9 Lone Tree Way/Deer Valley HS	B xxxxx 0.609	B xxxxx 0.632	+ 0.023 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx 0.579	B xxxxx 0.603	+ 0.024 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx 0.540	A xxxxx 0.552	+ 0.012 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	B xxxxx 0.627	B xxxxx 0.612	-0.014 V/C
# 13 Lone Tree Way/Driveway	B 12.7 0.011	B 12.8 0.011	+ 0.059 D/V
# 14 Lone Tree Way/Hillcrest Avenue	B xxxxx 0.642	C xxxxx 0.731	+ 0.089 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx 0.410	A xxxxx 0.464	+ 0.054 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx 0.421	A xxxxx 0.571	+ 0.149 V/C
# 17 Lone Tree Way/Canada Valley Ro	A xxxxx 0.542	B xxxxx 0.675	+ 0.133 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	B xxxxx 0.668	C xxxxx 0.715	+ 0.047 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	A xxxxx 0.427	C xxxxx 0.702	+ 0.275 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx 0.457	A xxxxx 0.451	-0.005 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A xxxxx 0.422	A xxxxx 0.429	+ 0.007 V/C

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #3 Hillcrest Avenue/Country Hills Drive

Cycle (sec): 100
Loss Time (sec): 9
Optimal Cycle: 36
Critical Vol./Cap.(X): 0.484
Average Delay (sec/veh): xxxxxx
Level Of Service: A

Street Name: Hillcrest Avenue
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Permitted Permitted Permitted
Rights: Include Include Include Include Include Include
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 104 672 38 86 714 39 64 77 155 87 93 173
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Fut: 104 672 38 86 714 39 64 77 155 87 93 173
Added Vol: 2 -116 2 0 41 0 0 0 0 2 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 106 556 40 86 755 39 64 77 157 89 93 173
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 106 556 40 86 755 39 64 77 157 89 93 173
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 106 556 40 86 755 39 64 77 157 89 93 173
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 106 556 40 86 755 39 64 77 157 89 93 173

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.87 0.13 1.00 1.90 0.10 1.00 1.00 1.00 1.00 0.35 0.65
Final Sat: 1720 3209 231 1720 3271 169 1720 1720 1720 1720 601 1119

Capacity Analysis Module:
Vol/Sat: 0.06 0.17 0.17 0.05 0.23 0.23 0.04 0.04 0.03 0.05 0.15 0.15
Crit Volume: 106 397 64 266
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Hillcrest Avenue/Driveaway

Average Delay (sec/veh): 0.1
Worst Case Level Of Service: C [17.2]

Street Name: Hillcrest Avenue
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Uncontrolled Uncontrolled Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 0 0 2 0 0 0 1 0 1 0 0 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 812 0 0 934 8 0 0 0 10 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 812 0 0 934 8 0 0 0 10 0 0 0
Added Vol: 0 -111 0 0 40 4 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 701 0 0 974 12 0 0 0 10 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 701 0 0 974 12 0 0 0 10 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 701 0 0 974 12 0 0 0 10 0 0 0

Critical Gap Module:
Critical Gap: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 6.2 xxxxxx xxxxxx
FollowUpTime: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 3.3 xxxxxx xxxxxx

Capacity Module:
Conflict Vol: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 974 xxxxxx xxxxxx
Potential Cap: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 306 xxxxxx xxxxxx
Move Cap: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 306 xxxxxx xxxxxx
Volume/Cap: xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx 0.03 xxxxxx xxxxxx

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #7 Lone Tree Way/Deer Valley Plaza
Cycle (sec): 130 Critical Vol./Cap.(X): 0.558
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: A

Street Name: Deer Valley Plaza Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 1 0 1 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 46 1 63 22 2 7 46 1219 85 42 1553 28
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 46 1 63 22 2 7 46 1219 85 42 1553 28
Added Vol: 0 0 0 0 0 0 0 84 0 0 23 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 46 1 63 22 2 7 46 1303 85 42 1576 28
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 46 1 63 22 2 7 46 1303 85 42 1576 28
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 46 1 63 22 2 0 46 1303 39 42 1576 6
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 46 1 63 22 2 0 46 1303 39 42 1576 6

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.02 0.98 1.00 1.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1650 26 1624 1650 1650 1650 1650 3300 1650 1650 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.03 0.04 0.04 0.01 0.00 0.00 0.03 0.39 0.02 0.03 0.48 0.00
Crit Volume: 64 22 46 788
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #8 Lone Tree Way/Deer Valley Rd
Cycle (sec): 130 Critical Vol./Cap.(X): 0.840
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 142 Level Of Service: D

Street Name: Deer Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 2 0 1 2 0 1 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 448 364 399 426 516 19 38 994 233 334 1171 257
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 448 364 399 426 516 19 38 994 233 334 1171 257
Added Vol: 0 0 -18 13 0 0 0 84 0 -1 23 15
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 448 364 381 439 516 19 38 1078 233 333 1194 272
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 448 364 381 439 516 19 38 1078 233 333 1194 272
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Reduct: 0 0 333 0 0 0 0 0 233 0 0 241
RTOR Vol: 448 364 48 439 516 19 38 1078 0 333 1194 31
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 448 364 48 439 516 19 38 1078 0 333 1194 31

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 2.00 1.00 2.00 1.93 0.07 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 3000 3300 1650 3000 3183 117 1650 3300 1650 1650 3300 1650
Capacity Analysis Module:
Vol/Sat: 0.15 0.11 0.03 0.15 0.16 0.16 0.02 0.33 0.00 0.20 0.36 0.02
Crit Volume: 224 268 539 333
Crit Moves: ****

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)
 Intersection #11 Lone Tree Way/Williamson Ranch Plaza (OSH)
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.552
 Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 32 Level Of Service: A
 Street Name: Williamson Ranch Plaza (OSH) Lone Tree Way
 Approach: North Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted	Protected	Include	Permitted	Protected	Include
Rights:	Include	Include	Include	Include	Include	Include
Min. Green:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Y+R:	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0
Lanes:	0 0 0 0	1 0 0 0	1 0 2 0	0 0 2 0	0 0 2 0	1 0 2 0

Volume Module:

Base Vol:	0 0 0 0	25 0 46	82 1376	0 0 1567	50
Growth Adj:	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00
Initial Bse:	0 0 0 0	25 0 46	82 1376	0 0 1567	50
Added Vol:	0 0 0 0	0 0 0 0	0 80 0 0	0 0 39 0	0
PasserByVol:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0
Initial Fut:	0 0 0 0	25 0 46	82 1456	0 0 1606	50
User Adj:	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00
PHF Adj:	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00
PHF Volume:	0 0 0 0	25 0 46	82 1456	0 0 1606	50
Reduced Vol:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0
RTOR Reduct:	0 0 0 0	25 0 46	82 1456	0 0 1606	50
RTOR Vol:	0 0 0 0	25 0 46	82 1456	0 0 1606	25
PCE Adj:	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00
MLF Adj:	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00 1.00 1.00 1.00	1.00
FinalVolume:	0 0 0 0	25 0 46	82 1456	0 0 1606	25

Saturation Flow Module:

Sat/Lane:	1650 1650	1650 1650	1650 1650	1650 1650	1650
Adjustment:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00
Lanes:	0.00 0.00	0.00 0.00	1.00 1.00	0.00 0.00	2.00 1.00
Final Sat.:	0 0	0 1650	0 1650	0 3300	1650

Capacity Analysis Module:

Vol/Sat:	0.00 0.00	0.00 0.02	0.00 0.05	0.44 0.00	0.00 0.49	0.02
Crit Volume:	0	25	82	803	803	25
Crit Moves:	0	***	***	***	***	***

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)
 Intersection #12 Lone Tree Way/Indian Hill Dr/Williamson Ranch Plaza(Wal-Wart, OSH)
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.612
 Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 59 Level Of Service: B
 Street Name: Indian Hill Dr/Williamson Ranch Pl Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase	Protected	Include	Protected	Include
Rights:	Include	Include	Include	Include	Include
Min. Green:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Y+R:	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0
Lanes:	1 0 0 1	2 0 0 1	1 0 2 0	1 0 2 0	1 0 2 0

Volume Module:

Base Vol:	12 15 69	43 1 21	86 1275	6 26 1681	45
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
Initial Bse:	12 15 69	43 1 21	86 1275	6 26 1681	45
Added Vol:	0 2 0	0 48 2	31 -61 141	0 0 8 7	0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0 0	0
Initial Fut:	12 17 69	91 3 52	25 1416	6 26 1689	52
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
PHF Volume:	12 17 69	91 3 52	25 1416	6 26 1689	52
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0 0	0
RTOR Reduct:	12 17 69	91 3 52	25 1416	6 26 1689	52
RTOR Vol:	12 17 69	91 3 52	25 1416	0 26 1689	2
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
FinalVolume:	12 17 69	91 3 52	25 1416	0 26 1689	2

Saturation Flow Module:

Sat/Lane:	1650 1650	1650 1650	1650 1650	1650 1650	1650
Adjustment:	1.00 1.00	1.00 0.91	1.00 1.00	1.00 1.00	1.00
Lanes:	1.00 0.20	0.80 2.00	0.05 0.95	1.00 2.00	1.00 2.00
Final Sat.:	1650 326	1324 3000	90 1560	1650 3300	1650 3300

Capacity Analysis Module:

Vol/Sat:	0.01 0.05	0.05 0.03	0.03 0.03	0.02 0.43	0.00 0.02	0.51 0.00
Crit Volume:	86	55	25	845	845	845
Crit Moves:	***	***	***	***	***	***

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #15 Lone Tree Way/Vista Grande Drive

Cycle (sec): 130
Loss Time (sec): 9
Optimal Cycle: 35

Street Name: Vista Grande Drive
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Protected
Rights: Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module:

Base Vol: 60 27 156 36 22 66 48 1029 41 75 1244 71
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 60 27 156 36 22 66 48 1029 41 75 1244 71

Added Vol: 2 0 1 1 0 2 2 432 2 1 98 1
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 62 27 157 37 22 68 50 1461 43 76 1342 72

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 62 27 157 37 22 68 50 1461 43 76 1342 72

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 62 27 157 37 22 68 50 1461 43 76 1342 72
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0

RTOR Vol: 62 27 157 37 22 68 50 1461 43 76 1342 72
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 62 27 157 37 22 68 50 1461 43 76 1342 72

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #16 Lone Tree Way/Heidorn Ranch Road

Cycle (sec): 120
Loss Time (sec): 12
Optimal Cycle: 53

Street Name: Heidorn Ranch Road
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected
Rights: Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 1 0 1 1 0 0 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module:

Base Vol: 162 0 79 12 9 49 26 1112 211 107 1281 25
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 162 0 79 12 9 49 26 1112 211 107 1281 25

Added Vol: 0 0 219 0 0 0 0 433 0 34 99 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 162 0 298 12 9 49 26 1545 211 141 1380 25

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 162 0 298 12 9 49 26 1545 211 141 1380 25

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 162 0 298 12 9 49 26 1545 211 141 1380 25
RTOR Reduct: 0 0 141 0 0 0 0 0 0 0 0 0

RTOR Vol: 162 0 157 12 9 49 26 1545 211 141 1380 25
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 162 0 157 12 9 49 26 1545 211 141 1380 25

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

Intersection #17 Lone Tree Way/Canada Valley Road
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.675
 Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 70 Level Of Service: B

Street Name: Canada Valley Road Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Protected	Include	Protected	Include	Protected	Include
Rights:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Min. Green:	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0
Y+R:	2 0 0 1	1 0 1 0	1 2 0 3	0 1 2 0	3 0 1 2	0 3 0 1

Volume Module:

Base Vol:	66	36	93	336	81	97	56	1069	107	302	1244	287
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	36	93	336	81	97	56	1069	107	302	1244	287
Added Vol:	0	0	0	2	0	2	2	650	0	0	131	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	36	93	338	81	99	58	1719	107	302	1375	288
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	36	93	338	81	99	58	1719	107	302	1375	288
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	36	93	338	81	99	58	1719	107	302	1375	288
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	66	36	0	338	81	67	58	1719	71	302	1375	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	36	0	338	81	67	58	1719	71	302	1375	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00
Lanes:	2.00	1.00	1.00	1.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	1.00
Final Sat.:	3000	1650	1500	1650	1650	3000	4950	1650	3000	4950	1650	1650

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.00	0.20	0.05	0.04	0.02	0.35	0.04	0.10	0.28	0.00
Crit Volume:	36	338	338	573	573	151	573	151	573	151	573	151
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***

Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

Intersection #18 Lone Tree Way/SB SR-4 Bypass
 Cycle (sec): 100 Critical Vol./Cap.(X): 0.715
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 65 Level Of Service: C

Street Name: SB SR-4 Bypass Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted	Protected	Permitted	Protected	Permitted	Protected
Rights:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Min. Green:	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0
Y+R:	0 0 0 0	1 1 0 0	1 0 0 1	0 0 3 0	1 2 0 3	0 0 3 0

Volume Module:

Base Vol:	0	0	0	545	7	531	0	993	474	176	1304	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	545	7	531	0	993	474	176	1304	0
Added Vol:	0	0	0	-22	0	-16	0	652	0	36	148	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	523	7	515	0	1645	474	212	1452	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	523	7	515	0	1645	474	212	1452	0
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	523	7	515	0	1645	474	212	1452	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	0	0	523	7	515	0	1645	474	212	1452	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	523	7	515	0	1645	474	212	1452	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	0.00	0.00	0.00	1.97	0.03	1.00	0.00	3.00	1.00	2.00	3.00	0.00
Final Sat.:	0	0	0	2960	44	1650	0	4950	1650	3000	4950	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.18	0.16	0.31	0.00	0.33	0.29	0.07	0.29	0.00
Crit Volume:	0	515	548	515	548	106	515	548	106	515	548	106
Crit Moves:	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #19 Lone Tree Way/NB SR-4 Bypass (Jeffrey Way)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.702
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level Of Service: C

Street Name: NB SR-4 Bypass (Jeffrey Way) Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 1 0 0 1 0 0 0 0 0 0 3 0 1 2 0 3 0 1

Volume Module:

Base Vol: 461 34 334 0 0 0 0 1072 472 137 1023 642
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 461 34 334 0 0 0 0 1072 472 137 1023 642
Added Vol: 1 0 236 0 0 0 0 693 -63 0 184 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 462 34 570 0 0 0 0 1765 409 137 1207 642
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 462 34 570 0 0 0 0 1765 409 137 1207 642
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Reduct: 0 0 75 0 0 0 0 254 0 0 0 0
RTOR Vol: 462 34 495 0 0 0 0 1765 155 137 1207 642
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 462 34 495 0 0 0 0 1765 155 137 1207 642

Saturation Flow Module:

Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 0.00 0.00 0.00 0.00 0.91 1.00 1.00
Lanes: 1.86 0.14 1.00 0.00 0.00 0.00 0.00 3.00 1.00 2.00 3.00 1.00
Final Sat.: 2794 226 1650 0 0 0 0 4950 1650 3000 4950 1650

Capacity Analysis Module:

Vol/Sat: 0.17 0.15 0.30 0.00 0.00 0.00 0.00 0.36 0.09 0.05 0.24 0.39
Crit Volume: 495 588 69
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #20 Deer Valley Road/Marita Drive

Cycle (sec): 100 Critical Vol./Cap.(X): 0.451
Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

Street Name: Deer Valley Road Marita Drive
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 61 1210 27 137 906 24 21 8 21 1 1 7
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 61 1210 27 137 906 24 21 8 21 1 1 7
Added Vol: 0 -18 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 61 1192 27 137 905 24 21 8 21 1 1 7
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 61 1192 27 137 905 24 21 8 21 1 1 7
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 61 1192 27 137 905 24 21 8 21 1 1 7
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 61 1192 27 137 905 24 21 8 21 1 1 7

Saturation Flow Module:

Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.96 0.04 1.00 1.95 0.05 1.00 0.28 0.72 1.00 0.12 0.88
Final Sat.: 1720 3364 76 1720 3351 89 1720 474 1246 1720 215 1505

Capacity Analysis Module:

Vol/Sat: 0.04 0.35 0.35 0.08 0.27 0.27 0.01 0.02 0.02 0.00 0.00 0.00
Crit Volume: 610 137
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
 CCRALOS Method (Future Volume Alternative)

Intersection #21 Hillcrest Ave/Prewett Ranch Dr

Cycle (sec): 100 Critical Vol./Cap. (X): 0.429
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 33 Level Of Service: A

Street Name: Hillcrest Ave Prewett Dr
 Approach: North Bound South Bound East Bound West Bound

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected	Protected	Protected	Protected	Protected	Protected	Permitted	Permitted	Permitted	Permitted	Permitted	Permitted
Rights:	Include											
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0

Volume Module:

Base Vol:	138	776	0	13	613	112	118	133	93	0	48	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	138	776	0	13	613	112	118	133	93	0	48	10
Added Vol:	0	144	0	0	21	2	2	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	920	0	13	634	114	120	133	93	0	48	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	138	920	0	13	634	114	120	133	93	0	48	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	920	0	13	634	114	120	133	93	0	48	10
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	138	920	0	13	634	114	120	133	93	0	48	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	138	920	0	13	634	114	120	133	93	0	48	10

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.70	0.30	1.00	0.59	0.41	1.00	0.83	0.17
Final Sat.:	1720	3440	0	1720	2916	524	1720	1012	708	1720	1423	297

Capacity Analysis Module:

Vol/Sat:	0.08	0.27	0.00	0.01	0.22	0.22	0.07	0.13	0.13	0.00	0.03	0.03
Crit Volume:	138	374	0	374	226	0	226	0	0	0	0	0
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***

1: Country Hills Dr. & Deer Valley Rd
Antioch Walmart Expansion

2: Laurel Dr. & Hillcrest Ave
Antioch Walmart Expansion

Long-Term + Project
AM Peak

Long-Term + Project
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1809	0	1770	1724	0	1770	3417	0	1770	3357
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0
Fit Permitted	1765	1809	0	1770	1724	0	1751	3417	0	1738	3357
Satd. Flow (perm)	7	24	0	24	14	0	14	14	0	77	23
Satd. Flow (RTOR)	172	130	31	163	156	127	13	562	100	77	826
Volume (vph)	207	194	0	209	363	0	15	769	0	93	1253
Lane Group Flow (vph)	Split										
Turn Type	Split										
Protected Phases	Split										
Permitted Phases	Split										
Total Split (s)	36.5	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0
Act Effct Green (s)	20.2	20.2	0.0	29.3	29.3	0.0	8.2	45.4	0.0	12.9	54.4
Actuated g/c Ratio	0.17	0.17	0.00	0.25	0.25	0.00	0.07	0.39	0.00	0.11	0.46
v/c Ratio	0.68	0.61	0.00	0.47	0.81	0.00	0.13	0.58	0.00	0.48	0.80
Control Delay	58.9	53.5	0.0	43.9	55.3	0.0	62.2	33.5	0.0	61.4	33.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.9	53.5	0.0	43.9	55.3	0.0	62.2	33.5	0.0	61.4	33.9
LOS	E										
Approach Delay	E										
Approach LOS	E										
Queue Length 50th (ft)	142	126	0	123	222	0	10	251	0	64	392
Queue Length 95th (ft)	240	218	0	219	365	0	37	370	0	130	599
Internal Link Dist (ft)	308										
Turn Bay Length (ft)	145	120	0	495	499	0	110	1466	0	175	220
Base Capacity (vph)	460	475	0	495	499	0	302	1466	0	323	1573
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.41	0.00	0.42	0.73	0.00	0.05	0.52	0.00	0.29	0.80
Intersection Summary											
Cycle Length	154.5										
Actuated Cycle Length	117.4										
Control Type	Actuated-Uncoordinated										
Maximum v/c Ratio	0.81										
Intersection Signal Delay	40.8										
Intersection Capacity Utilization	73.3%										
Analysis Period (min)	15										
Splits and Phases: 1: Country Hills Dr. & Deer Valley Rd											

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1684	0	1770	1863	1583	1770	3452	0	1770	3311
Satd. Flow (prot)	0.931	0.931	0	0.468	0.950	0.950	0.950	0.950	0	0.950	0
Fit Permitted	1171	1684	0	861	1663	1557	1768	3452	0	1752	3311
Satd. Flow (perm)	65	241	0	241	18	0	18	18	0	65	139
Satd. Flow (RTOR)	150	89	102	292	118	210	353	564	80	69	537
Volume (vph)	208	265	0	336	136	241	406	740	0	91	1127
Lane Group Flow (vph)	Perm										
Turn Type	Perm										
Protected Phases	Perm										
Permitted Phases	Perm										
Total Split (s)	40.0	40.0	0.0	40.0	40.0	20.0	40.0	40.0	0.0	20.0	40.0
Act Effct Green (s)	37.0	37.0	0.0	37.0	37.0	17.0	44.7	44.7	0.0	11.3	37.0
Actuated g/c Ratio	0.37	0.37	0.00	0.37	0.37	0.17	0.45	0.45	0.00	0.11	0.37
v/c Ratio	0.48	0.40	0.00	1.05	0.20	0.33	1.35	0.48	0.00	0.46	0.86
Control Delay	28.7	19.4	0.0	98.0	22.4	4.2	212.0	21.3	0.0	48.0	33.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	19.4	0.0	98.0	22.4	4.2	212.0	21.3	0.0	48.0	33.3
LOS	C										
Approach Delay	C										
Approach LOS	C										
Queue Length 50th (ft)	100	81	0	236	58	0	341	172	0	55	307
Queue Length 95th (ft)	127	114	0	438	98	43	501	232	0	84	298
Internal Link Dist (ft)	468										
Turn Bay Length (ft)	75	664	0	175	689	728	301	1554	0	150	1313
Base Capacity (vph)	433	664	0	319	689	728	301	1554	0	301	1313
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.40	0.00	1.05	0.20	0.33	1.35	0.48	0.00	0.30	0.86
Intersection Summary											
Cycle Length	100										
Actuated Cycle Length	100										
Offset (26%)	Referenced to phase 2: NWT and 6: SET, Start of Yellow										
Control Type	Actuated-Coordinated										
Maximum v/c Ratio	1.35										
Intersection Signal Delay	54.0										
Intersection Capacity Utilization	91.1%										
Analysis Period (min)	15										
Splits and Phases: 2: Laurel Dr. & Hillcrest Ave											

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

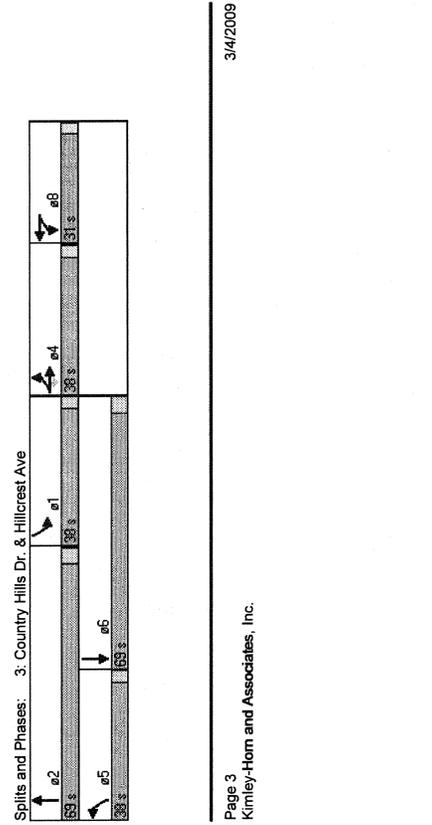
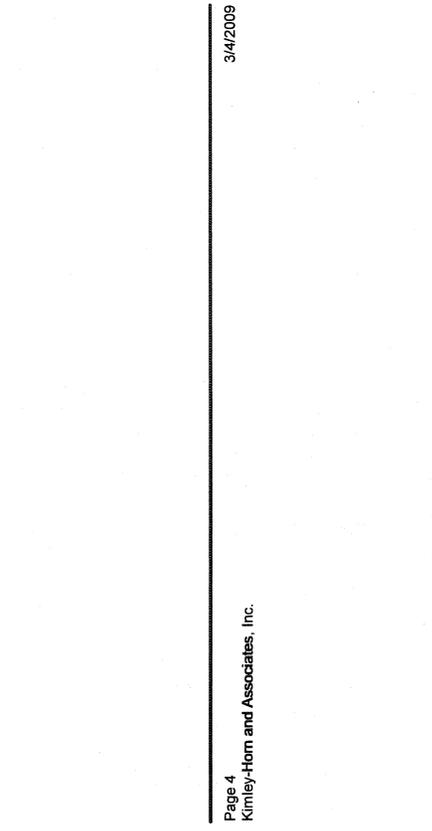
4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Long-Term + Project
AM Peak

Long-Term + Project
AM Peak

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Act Effort (s)	1770	1863	1583	1770	1644	0	1770	3491	0	1770
Accumulated v/c Ratio	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0	0.950
Control Delay (s)	62.4	63.8	62.4	63.8	62.4	0	63.8	62.4	0	63.8
Queue Delay (s)	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0	0.0
Total Delay (s)	62.4	63.8	62.4	63.8	62.4	0	63.8	62.4	0	63.8
LOS	E	E	E	E	E	C	E	E	C	E
Approach Delay (s)	36.8	36.8	36.8	36.8	36.8	0	36.8	36.8	0	36.8
Queue Length 50th (ft)	71	86	71	86	71	0	86	71	0	86
Queue Length 95th (ft)	110	127	110	127	110	0	127	110	0	127
Internal Link Dist (ft)	286	286	286	286	286	0	286	286	0	286
Turn Bay Length (ft)	120	393	414	499	357	367	155	392	1662	392
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.24	0.41	0.37	1.08	0.35	0.46	0.24	0.24	0.52
Intersection Summary										
Cycle Length	176									
Actuated Cycle Length	140.1									
Control Type	Actuated-Uncoordinated									
Maximum v/c Ratio	1.08									
Intersection Signal Delay	46.8									
Intersection LOS	D									
Intersection Capacity Utilization	63.2%									
Analysis Period (min)	15									
ICU Level of Service	B									
Volume exceeds capacity, queue is theoretically infinite.										
# Queue shown is maximum after two cycles										
Queue shown is maximum after two cycles.										

Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Free	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%
Grade	4	10	0	687	574	12		
Volume (veh/h)	0.63	0.63	0.84	0.84	0.87	0.87		
Hourly Flow Rate (vph)	6	16	0	830	1120	14		
Pedestrians								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median storage (veh)								
Upstream signal (ft)	0.78	0.72	0.72	482	1305			
pX, platoon unblocked	1534	1120	1133					
v/c, conflicting volume								
VC1, stage 1 conf vol	1305	1165	1184					
VC2, stage 2 conf vol	6.8	6.9	4.1					
IC, 2 stage (s)	3.5	3.3	2.2					
IF (s)	95	88	100					
p0 queue free %	119	135	423					
dir capacity (veh/h)	EB 1	NB 1	NB 2	SB 1	SB 2			
Volume Total	16	415	415	1120	14			
Volume Left	0	0	0	0	0			
Volume Right	16	0	0	0	14			
CSH	135	1700	1700	1700	1700			
Volume to Capacity	0.12	0.24	0.24	0.86	0.01			
Queue Length 95th (ft)	10	0	0	0	0			
Control Delay (s)	36.1	0.0	0.0	0.0	0.0			
Lane LOS	E	F	F	F	F			
Approach LOS	E	F	F	F	F			
Intersection Summary								
Average Delay	Err							
Intersection Capacity Utilization	Err%							
Analysis Period (min)	15							
ICU Level of Service	H							



5: Southeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

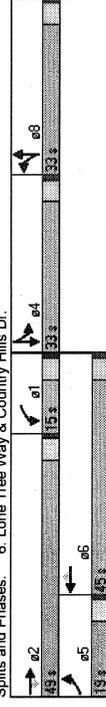
Long-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Sign Control	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grade	0	0	0	0	0	0	0	0	0	0	0	0
Volume (veh/h)	0.88	0.88	0.88	0.63	0.63	0.63	0.82	0.82	0.82	0.89	0.89	104
Peak Hour Factor	0	0	0	0	0	0	0	0	0	0	0	0.89
Hourly flow rate (vph)	0	0	0	0	0	0	0	0	0	0	0	988
Pedestrians												117
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median storage (veh)												
Upstream signal (ft)												
pX platoon unblocked	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
VC1, conflicting volume	1538	2027	368	1353	2053	474	1104					980
VC2, stage 2 cont vol												
VC, single (s)	1460	2031	388	1244	2062	217	1104					808
TC, 2 stage (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1					4.1
PF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2					2.2
p0 queue free %	100	100	88	100	100	97	100					100
dM capacity (veh/h)	75	48	611	98	46	674	628					695
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3				
Volume Total	75	17	474	474	32	395	395	314				
Volume Left	0	0	0	0	0	0	0	0				
Volume Right	75	17	0	0	32	0	0	117				
cSH	611	674	1700	1700	1700	1700	1700	1700				
Volume to Capacity	0.12	0.03	0.28	0.28	0.02	0.23	0.23	0.18				
Queue Length 95th (ft)	10	2	0	0	0	0	0	0				
Control Delay (s)	11.7	10.5	0.0	0.0	0.0	0.0	0.0	0.0				
Lane LOS	B	B	B	B	B	B	B	B				
Approach Delay (s)	11.7	10.5	0.0	0.0	0.0	0.0	0.0	0.0				
Approach LOS	B	B	B	B	B	B	B	B				
Intersection Summary												
Average Delay	0.5											
Intersection Capacity Utilization	31.5%											
Analysis Period (min)	15											
ICU Level of Service	A											

6: Lone Tree Way & Country Hills Dr.
Antioch Walmart Expansion

Long-Term + Project
AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	3539	1583	1770	3539	1583	1770	1751	0	1770	1699	0
Satd. Flow (prot)	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0.960	0	0.960	0.960	0
Flt Permitted	1762	3539	1125	1691	3539	1486	1770	1751	0	1770	1699	0
Satd. Flow (perm)	92	1111	44	82	1551	101	196	275	184	39	123	145
Volume (vph)	107	1292	51	88	1668	109	261	612	0	45	312	0
Lane Group Flow (vph)	Prot	Perm	Prot	Perm	Prot	Perm	Split	Split		Split	Split	
Turn Type	5	2	2	1	6	8	8	4		4	4	
Protected Phases												
Permitted Phases	6											
Total Split (s)	19.0	49.0	49.0	15.0	45.0	33.0	33.0	33.0	0.0	33.0	33.0	0.0
Act Effect Green (s)	14.0	46.0	46.0	12.0	44.0	33.0	33.0	33.0	0.0	26.1	26.1	0.0
Actuated g/C Ratio	0.11	0.35	0.35	0.09	0.34	0.34	0.26	0.26	0.20	0.20	0.20	0.20
v/c Ratio	0.56	1.03	0.13	0.54	1.39	0.21	0.57	1.29	0.13	0.13	0.63	0.13
Control Delay	66.2	75.2	23.2	54.5	209.8	17.6	46.6	183.6	41.6	61.3	61.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.2	75.2	23.2	54.5	209.8	17.6	46.6	183.6	41.6	61.3	61.3	0.0
LOS	E	E	C	D	F	B	D	F	D	D	D	E
Approach Delay	72.7											
Approach LOS	E											
Queue Length 50th (ft)	86	-613	21	64	-963	11	195	-665	31	248	31	248
Queue Length 95th (ft)	140	4693	49	m112	#1143	m53	237	#704	61	302	61	302
Internal Link Dist (ft)	1420											
Turn Bay Length (ft)	145	145	75	145	145	75	170	170	120	120	120	425
Base Capacity (vph)	216	1252	406	163	1196	516	461	474	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	1.03	0.13	0.54	1.39	0.21	0.57	1.29	0.11	0.11	0.73	0.11
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	74 (57%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.39											
Intersection Signal Delay	133.8											
Intersection LOS	F											
Intersection Capacity Utilization	96.3%											
Analysis Period (min)	15											
ICU Level of Service	E											
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
m. Volume for 96th percentile queue is metered by upstream signal.												
Splits and Phases:	6: Lone Tree Way & Country Hills Dr.											



7: Lone Tree Way & Deer Valley Rd
Antioch Walmart Expansion

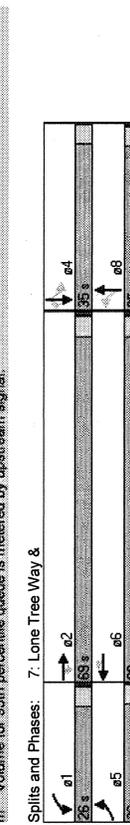
8: Lone Tree Way & Deer Valley Rd
Antioch Walmart Expansion

Long-Term + Project AM Peak

Long-Term + Project AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1587	0	1770	1863	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1770	3539	1333	1738	3539	1583	1410	1587	0	1289	1863	1583
Satd. Flow (RTOR)	35	85	42	1576	28	46	1	63	22	2	2	7
Volume (vph)	51	1432	93	48	1791	32	50	69	0	24	2	8
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	2	1	6	1	6	8	8	8	4	4
Protected Phases												
Permitted Phases	26.0	69.0	69.0	26.0	69.0	69.0	35.0	35.0	0.0	35.0	35.0	35.0
Total Split (s)	10.2	104.1	104.1	10.4	104.2	104.2	11.1	11.1	11.1	11.0	11.0	11.0
Act Effct Green (s)	0.06	0.80	0.80	0.06	0.80	0.80	0.09	0.09	0.09	0.08	0.08	0.08
Actuated g/C Ratio	0.37	0.51	0.09	0.34	0.63	0.03	0.41	0.35	0.22	0.01	0.06	0.06
v/c Ratio	54.1	1.1	0.1	57.2	6.8	0.9	66.7	17.3	58.7	52.0	28.1	28.1
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	54.1	1.2	0.1	57.2	6.8	0.9	66.7	17.3	58.7	52.0	28.1	28.1
Total Delay	D	A	A	E	A	A	E	B	E	D	C	C
LOS	D	A	A	E	A	A	E	B	E	D	C	C
Approach Delay	2.8	8.0	8.0	2.8	8.0	8.0	37.7	37.7	37.7	51.1	51.1	51.1
Approach LOS	A	A	A	A	A	A	D	D	D	D	D	D
Queue Length 50th (ft)	45	17	0	43	59	0	41	1	19	2	2	0
Queue Length 95th (ft)	m43	m18	m1	m48	m214	m1	81	46	47	10	16	16
Internal Link Dist (ft)	100	740	100	200	860	100	95	704	346	346	346	346
Turn Bay Length (ft)	100	200	100	200	100	100	100	100	100	100	100	100
Base Capacity (vph)	313	2833	1074	313	2838	1271	347	442	317	459	398	398
Starvation Cap Reductn	0	186	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.54	0.09	0.15	0.63	0.03	0.14	0.15	0.06	0.00	0.02	0.02

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 90 (69%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 7.1
 Intersection Capacity Utilization: 60.2%
 Analysis Period (min): 15
 m: Volume for 95th percentile queue is metered by upstream signal.

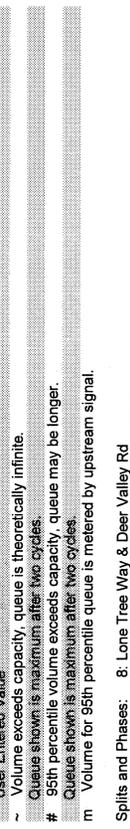


Splits and Phases: 7: Lone Tree Way & Deer Valley Rd

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 Kimley-Horn and Associates, Inc.
 3/4/2009

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1587	0	1770	1863	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	1770	3539	1333	1738	3539	1583	1410	1587	0	1289	1863	1583
Satd. Flow (RTOR)	35	85	42	1576	28	46	1	63	22	2	2	7
Volume (vph)	51	1432	93	48	1791	32	50	69	0	24	2	8
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	5	2	2	1	6	1	6	8	8	8	4	4
Protected Phases												
Permitted Phases	17.0	37.0	37.0	20.0	40.0	40.0	30.0	32.0	32.0	41.0	43.0	0.0
Total Split (s)	10.4	34.0	34.0	23.3	48.9	48.9	24.3	24.8	24.8	35.9	36.5	0.0
Act Effct Green (s)	0.08	0.26	0.26	0.16	0.36	0.36	0.19	0.19	0.19	0.28	0.28	0.0
Actuated g/C Ratio	0.33	1.44	0.51	1.13	0.96	0.39	0.78	0.60	0.90	0.89	0.61	0.0
v/c Ratio	63.2	249.7	29.0	120.4	39.9	5.4	59.1	51.2	45.5	64.5	42.7	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	63.2	249.7	29.0	120.4	39.9	5.4	59.1	51.2	45.5	64.5	42.7	0.0
Total Delay	E	F	C	F	D	A	E	D	D	E	D	D
LOS	E	F	C	F	D	A	E	D	D	E	D	D
Approach Delay	208.3	49.6	49.6	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
Approach LOS	F	D	D	D	D	D	D	D	D	D	D	D
Queue Length 50th (ft)	41	-819	113	-412	-673	55	206	158	167	201	217	217
Queue Length 95th (ft)	75	#922	154	m#467	m#790	m80	263	211	#340	#286	278	278
Internal Link Dist (ft)	195	860	400	500	1680	400	180	825	375	495	420	420
Turn Bay Length (ft)	191	926	563	316	1331	755	713	789	512	585	1092	1092
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.44	0.51	1.13	0.96	0.39	0.70	0.51	0.83	0.84	0.55	0.55

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 54 (42%), Referenced to phase 2.EBT and 6.WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.44
 Intersection Signal Delay: 94.1
 Intersection Capacity Utilization: 93.4%
 Analysis Period (min): 15
 n: User Entered Value
 ~ Volume exceeds capacity, queue is theoretically infinite.
 # Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 8: Lone Tree Way & Deer Valley Rd

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 Kimley-Horn and Associates, Inc.
 3/4/2009

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

9: Lone Tree Way & Prewett Park
Antioch Walmart Expansion

Long-Term + Project
AM Peak

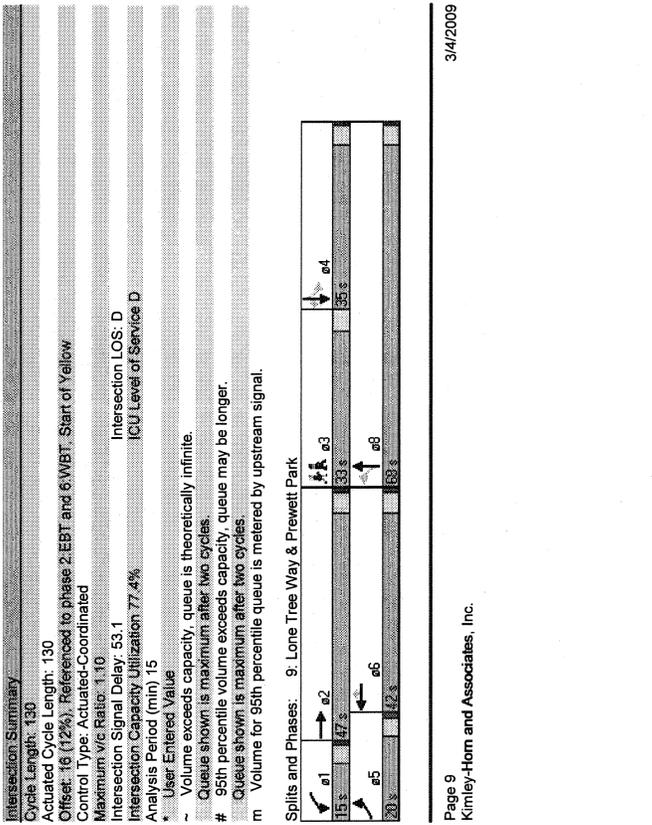
Long-Term + Project
AM Peak

EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
1770	3480	0	1770	3539	1583	1770	1532	0	1770	1863
0.950	0.950	0	0.950	0.950	0.372	0.372	0.372	0	0.681	0.681
1769	3460	0	1769	3539	1539	1600	1532	0	1225	1863
8	8	0	32	32	239	239	239	0	65	65
120	1547	145	91	1589	61	149	0	64	26	1
146	2084	0	101	1766	58	276	119	0	51	2
5	2	1	6	6	8	8	8	4	4	4
20.0	47.0	0.0	15.0	42.0	42.0	68.0	68.0	0.0	35.0	35.0
17.4	70.2	14.6	67.4	67.4	36.3	36.3	36.3	13.1	13.1	13.1
0.13	0.54	0.11	0.52	0.52	0.28	0.28	0.28	0.10	0.10	0.10
0.62	1.10	0.51	0.96	0.96	0.62	0.62	0.62	0.41	0.41	0.41
46.6	76.5	73.2	33.0	4.6	46.1	0.7	64.5	51.0	16.3	16.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46.6	76.5	73.2	33.0	4.6	45.1	0.7	64.5	51.0	16.3	16.3
D	E	E	C	A	D	A	A	E	D	B
74.5	34.1	34.1	31.8	31.8	37.7	37.7	37.7	37.7	37.7	37.7
107	-1166	82	-875	1	184	0	42	2	0	0
m92	m4914	m132	#1166	m19	137	0	45	5	3	3
145	1580	150	606	606	609	609	609	819	819	819
260	1882	206	1834	813	866	866	866	302	469	401
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0.56	1.10	0.49	0.96	0.08	0.34	0.13	0.17	0.00	0.16	0.16

EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
1770	3480	0	1770	3539	1583	1770	1532	0	1770	1863
0.950	0.950	0	0.950	0.950	0.372	0.372	0.372	0	0.681	0.681
1769	3460	0	1769	3539	1539	1600	1532	0	1225	1863
8	8	0	32	32	239	239	239	0	65	65
120	1547	145	91	1589	61	149	0	64	26	1
146	2084	0	101	1766	58	276	119	0	51	2
5	2	1	6	6	8	8	8	4	4	4
20.0	47.0	0.0	15.0	42.0	42.0	68.0	68.0	0.0	35.0	35.0
17.4	70.2	14.6	67.4	67.4	36.3	36.3	36.3	13.1	13.1	13.1
0.13	0.54	0.11	0.52	0.52	0.28	0.28	0.28	0.10	0.10	0.10
0.62	1.10	0.51	0.96	0.96	0.62	0.62	0.62	0.41	0.41	0.41
46.6	76.5	73.2	33.0	4.6	46.1	0.7	64.5	51.0	16.3	16.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46.6	76.5	73.2	33.0	4.6	45.1	0.7	64.5	51.0	16.3	16.3
D	E	E	C	A	D	A	A	E	D	B
74.5	34.1	34.1	31.8	31.8	37.7	37.7	37.7	37.7	37.7	37.7
107	-1166	82	-875	1	184	0	42	2	0	0
m92	m4914	m132	#1166	m19	137	0	45	5	3	3
145	1580	150	606	606	609	609	609	819	819	819
260	1882	206	1834	813	866	866	866	302	469	401
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0.56	1.10	0.49	0.96	0.08	0.34	0.13	0.17	0.00	0.16	0.16

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.10
 Intersection Signal Delay: 53.1
 Intersection Capacity Utilization 77.4%
 Analysis Period (min) 15
 User Entered Value

- Volume exceeds capacity, queue is theoretically infinite.
 # Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.



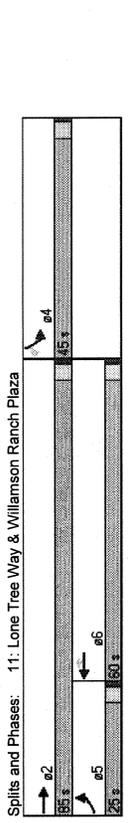
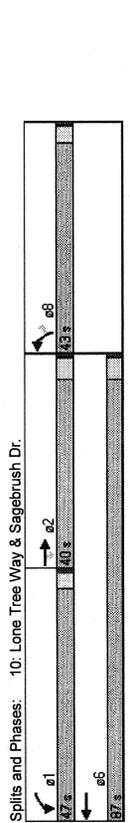
10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Long-Term + Project
AM Peak

Long-Term + Project
AM Peak

Lane Group	EBL	EBR	WBL	WBT	NBL	NBR
Lane Configurations	AA	AA	AA	AA	AA	AA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3539	1482	1767	3539	1715	1559
Satd. Flow (RTOR)	1467	234	200	1500	104	88
Volume (vph)	1811	289	233	1744	162	138
Lane Group Flow (vph)	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	2	1	6	8	8	8
Protected Phases						
Permitted Phases	40.0	40.0	47.0	87.0	43.0	43.0
Total Split (s)	80.5	80.5	23.8	107.3	16.7	16.7
Act Effct Green (s)	0.82	0.82	0.18	0.83	0.13	0.13
Actuated g/C Ratio	0.83	0.31	0.72	0.60	0.71	0.43
v/c Ratio	9.1	0.8	62.4	4.3	70.5	11.6
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	9.1	0.8	62.4	4.3	70.5	11.6
Total Delay	A	A	E	A	E	B
LOS	A	A	E	A	E	B
Approach Delay	8.0	0	11.2	43.4	43.4	43.4
Approach LOS	A	B	B	D	D	D
Queue Length 50th (ft)	46	0	183	96	134	0
Queue Length 95th (ft)	m785	m2	m198	3	133	11
Internal Link Dist (ft)	605	80	600	1865	497	115
Turn Bay Length (ft)	2192	936	599	2920	545	575
Base Capacity (vph)	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.31	0.39	0.60	0.30	0.24
Intersection Summary						
Cycle Length	130					
Actuated Cycle Length	130					
Offset	40 (31%), Referenced to phase 2:EBT and 6:WBT. Start of Yellow					
Control Type	Actuated-Coordinated					
Maximum v/c Ratio	0.83					
Intersection Signal Delay	11.9					
Intersection LOS	B					
Intersection Capacity Utilization	68.3%					
ICU Level of Service C						
Analysis Period (min)	15					
m	Volume for 95th percentile queue is metered by upstream signal.					



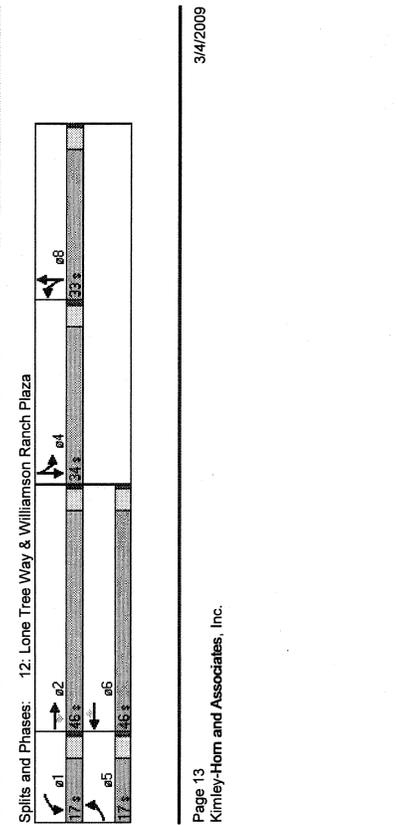
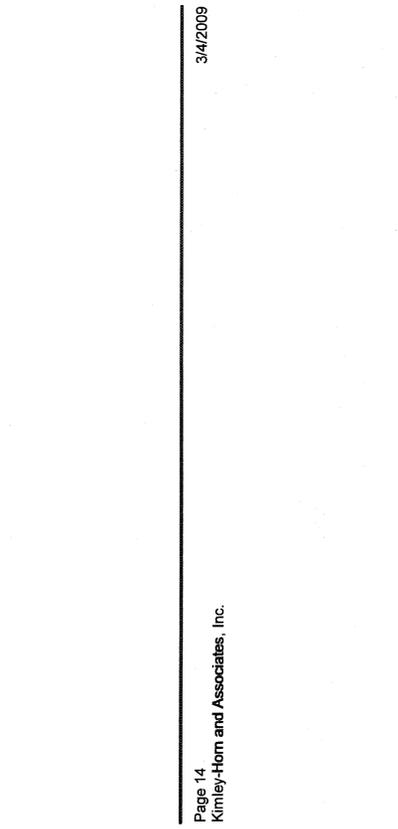
13: Lone Tree Way & Wai-Mart Driveway
Antioch Walmart Expansion

12: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

Long-Term + Project
AM Peak

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	Free	Free	Free	Free	Stop	Stop
Sign Control	Free	Free	Free	Free	Stop	Stop
Grade	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	1880	1701	78	0	5
Peak Hour Factor	0.82	0.82	0.85	0.85	0.42	0.42
Hourly flow rate (vph)	0	1927	2001	92	0	12
Pedestrians						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)		510	500			
pX, platoon unblocked	0.77				0.65	0.77
vC, conflicting volume	2083				2965	687
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vC, unblocked vol	1823				2072	0
IC, single (s)	4.1				6.6	6.9
IC, 2 stage (s)						
IF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cm capacity (veh/h)	285				30	836
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4
Volume Total	963	963	667	667	667	92
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
gSH	1700	1700	1700	1700	1700	836
Volume to Capacity	0.57	0.57	0.39	0.39	0.39	0.05
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS	A	A	A	A	A	A
Approach Delay						
Approach LOS						
Intersection Summary						
Average Delay	0.0					
Intersection Capacity Utilization	47.0%					
Analysis Period (min)	15					
ICU Level of Service	A					

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	Free	Free	Free	Free	Free	Free	Free	Free	Free
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	1770	3539	1583	1770	1639	1639	0	3433	1574
Peak Hour Factor	0.960	0.960	0.960	0.960	0.960	0.960	0	0.960	0.960
Hourly flow rate (vph)	1785	3539	1286	1746	1639	1639	0	3433	1574
Pedestrians									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type									
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume									
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vC, unblocked vol									
IC, single (s)									
IC, 2 stage (s)									
IF (s)									
p0 queue free %									
cm capacity (veh/h)									
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	1770	3539	1583	1770	1639	1639	0	3433	1574
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0	0
gSH	1770	3539	1583	1770	1639	1639	0	3433	1574
Volume to Capacity	0.16	0.89	0.01	0.17	1.06	0.08	0.04	0.24	0.28
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	B	B	E	A	D	B	D	B
Approach Delay									
Approach LOS									
Intersection Summary									
Average Delay	41.0								
Intersection Capacity Utilization	63.9%								
Analysis Period (min)	15								
ICU Level of Service	B								
Volume exceeds capacity, queue is theoretically infinite.									
Queue shown is maximum after two cycles.									
# 95th percentile volume exceeds capacity, queue may be longer.									
Queue shown is maximum after two cycles.									
m Volume for 95th percentile queue is metered by upstream signal.									



14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4763	0	1770	5085	1583	1770	3240	0	1900	3539	1583
Flt Permitted	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Satd. Flow (perm)	1762	4783	0	1764	5085	1515	1762	3240	0	3419	3539	1554
Satd. Flow (RTOR)	93	236	0	93	236	157	157	157	0	317	317	116
Volume (vph)	252	935	415	109	1117	215	353	357	342	415	232	302
Lane Group Flow (vph)	286	1534	0	120	1227	236	441	874	0	519	280	378
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	2	1	6	8	8	8	8	4	4	4
Permitted Phases	29.0	47.0	0.0	18.0	36.0	36.0	23.0	23.0	0.0	42.0	42.0	42.0
Total Split (s)	25.2	45.3	0.0	13.7	33.8	33.8	20.5	20.5	0.0	36.5	36.5	36.5
Act Effct Green (s)	0.19	0.35	0.0	0.11	0.26	0.26	0.16	0.16	0.0	0.30	0.30	0.30
Actuated g/C Ratio	0.83	0.89	0.0	0.64	0.93	0.41	1.58	1.36	0.0	0.92	0.28	0.55
v/c Ratio	75.1	44.6	0.0	71.5	51.1	10.8	313.1	205.3	0.0	67.6	36.8	10.4
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.1	44.6	0.0	71.5	51.1	10.8	313.1	205.3	0.0	67.6	36.8	10.4
LOS	E	D	D	E	D	B	F	F	F	E	D	B
Approach Delay	49.4	46.6	0.0	46.6	46.6	0.0	241.5	241.5	0.0	41.6	41.6	41.6
Approach LOS	D	D	D	D	D	D	F	F	F	D	D	D
Queue Length 50th (ft)	258	292	0	90	378	45	-534	-454	0	217	98	88
Queue Length 95th (ft)	m298	420	0	157	4472	124	#634	#483	0	#251	120	60
Internal Link Dist (ft)	620	420	0	210	690	730	195	2575	0	400	172	290
Turn Bay Length (ft)	620	420	0	210	690	730	195	2575	0	400	172	290
Base Capacity (vph)	354	1726	204	1324	569	279	643	570	1062	688	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.89	0.0	0.59	0.83	0.41	1.58	1.36	0.0	0.91	0.27	0.65
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	78 (60%), Referenced to phase 2, EBT and 6,WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.56											
Intersection Signal Delay	89.9											
Intersection Capacity Utilization	65.5%											
Analysis Period (min)	15											
User Entered Value												
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
Volume for 95th percentile queue is metered by upstream signal.												
Splits and Phases	14: Lone Tree Way & Hillcrest Ave											

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

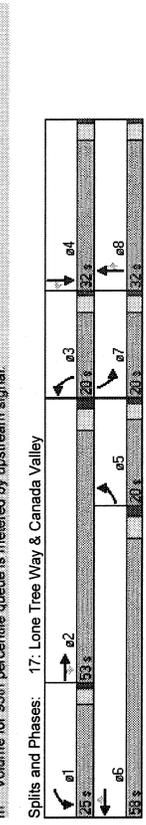
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5062	0	1770	5039	0	1770	1605	0	1770	1652	0
Flt Permitted	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Satd. Flow (perm)	1770	5062	0	1770	5039	0	1770	1605	0	1770	1652	0
Satd. Flow (RTOR)	5	10	0	5	10	0	10	191	0	764	1652	0
Volume (vph)	50	1461	43	76	1342	72	62	27	157	37	22	68
Lane Group Flow (vph)	58	1749	0	81	1505	0	78	233	0	79	192	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	2	1	1	5	8	8	8	8	8	4	4	4
Permitted Phases	18.0	75.0	0.0	18.0	75.0	0.0	37.0	37.0	0.0	37.0	37.0	37.0
Total Split (s)	12.1	90.1	0.0	13.7	91.6	0.0	19.6	19.6	0.0	19.6	19.6	19.6
Act Effct Green (s)	0.09	0.69	0.0	0.11	0.70	0.0	0.15	0.15	0.0	0.15	0.15	0.15
Actuated g/C Ratio	0.35	0.50	0.0	0.43	0.42	0.0	0.58	0.58	0.0	0.69	0.55	0.55
v/c Ratio	50.4	18.1	0.0	52.7	9.0	0.0	66.6	16.3	0.0	79.0	25.4	25.4
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	18.1	0.0	52.7	9.0	0.0	66.6	16.3	0.0	79.0	25.4	25.4
LOS	D	B	B	D	A	A	E	B	E	C	C	C
Approach Delay	19.1	11.3	0.0	11.3	28.9	0.0	28.9	28.9	0.0	41.0	41.0	41.0
Approach LOS	B	B	B	B	C	C	D	D	D	D	D	D
Queue Length 50th (ft)	48	348	0	64	154	0	62	31	0	64	58	58
Queue Length 95th (ft)	m48	m408	0	m121	185	0	93	68	0	53	21	21
Internal Link Dist (ft)	200	685	0	200	1050	0	786	786	0	100	814	814
Turn Bay Length (ft)	200	685	0	200	1050	0	786	786	0	100	814	814
Base Capacity (vph)	206	3511	215	215	3554	233	561	200	518	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.50	0.0	0.38	0.42	0.0	0.33	0.42	0.0	0.40	0.37	0.37
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	55 (42%), Referenced to phase 2, EBT and 6,WBT, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.89											
Intersection Signal Delay	18.2											
Intersection Capacity Utilization	61.2%											
Analysis Period (min)	15											
User Entered Value												
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
Volume for 95th percentile queue is metered by upstream signal.												
Splits and Phases	15: Lone Tree Way & Vista Grande											

17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	W	W	W	W	W	W	W	W	W	W	W	W
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	1638	1504	1770	1863	1583
Fit Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3432	5085	1557	3432	5085	1558	3433	1638	1482	1767	1863	1563
Satd. Flow (RTOR)	114			297			30	85		93	338	81
Volume (vph)	58	1719	107	302	1375	288	66	36	90	85	428	103
Lane Group Flow (vph)	62	1829	114	339	1545	324	89	90	85	428	103	125
Turn Type	Prot	Perm	Prot	Prot	Perm	Prot	Prot	Perm	Prot	Perm	Prot	Perm
Protected Phases	2	2	2	1	6	3	3	6	8	7	4	4
Permitted Phases	2	2	2	1	6	3	3	6	8	7	4	4
Total Split (s)	20.0	53.0	25.0	58.0	58.0	20.0	32.0	32.0	20.0	20.0	32.0	32.0
Act Effct Green (s)	14.8	71.5	71.5	17.9	76.4	76.4	8.7	11.6	11.6	17.0	20.0	20.0
Actuated g/C Ratio	0.11	0.55	0.55	0.14	0.59	0.59	0.07	0.09	0.09	0.13	0.15	0.15
v/c Ratio	0.16	0.65	0.13	0.72	0.52	0.31	0.39	0.52	0.40	0.40	0.36	0.36
Control Delay	38.3	14.0	3.0	69.6	13.4	2.1	62.7	46.7	15.6	43.4	51.8	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.3	14.0	3.0	69.6	13.4	2.1	62.7	46.7	15.6	43.4	51.8	10.3
LOS	D	B	A	E	B	A	E	D	B	F	D	B
Approach Delay	14.1			20.4			42.1			291.5		
Approach LOS	B			C			D			F		
Queue Length 50th (ft)	21	138	0	146	178	1	37	51	0	~547	80	0
Queue Length 95th (ft)	m24	m296	m6	m173	m261	m15	53	75	28	#638	108	34
Internal Link Dist (ft)	900			775			542			1084		
Turn Bay Length (ft)	320	630	285	245	150		160			170		
Base Capacity (vph)	449	2797	908	586	2987	1038	449	389	397	231	416	446
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.65	0.13	0.58	0.52	0.21	0.20	0.23	0.21	1.85	0.25	0.28

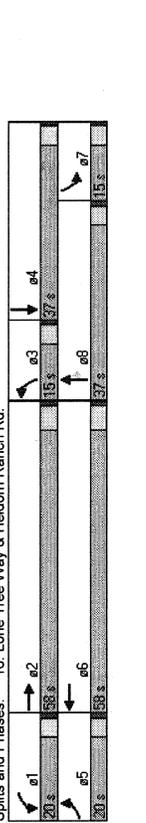
Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.85
 Intersection Signal Delay: 53.7
 Intersection Capacity Utilization: 77.2%
 Analysis Period (min): 15
 Intersection LOS: D
 ICU Level of Service: D



Splits and Phases: 17: Lone Tree Way & Canada Valley

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	W	W	W	W	W	W	W	W	W	W	W	W
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4979	0	1770	5068	0	3433	1863	1583	1770	1628	0
Fit Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1769	4979	0	1769	5068	0	3433	1863	1581	1765	1628	0
Satd. Flow (RTOR)	23			337			63			9	49	
Volume (vph)	26	1545	211	141	1380	25	162	0	288	12	9	49
Lane Group Flow (vph)	29	1930	0	158	1579	0	377	0	693	15	75	0
Turn Type	Prot	Perm	Prot	Prot	Perm	Prot	Prot	Perm	Prot	Perm	Prot	Perm
Protected Phases	5	2	2	1	6	3	3	8	7	4	4	4
Permitted Phases	5	2	2	1	6	3	3	8	7	4	4	4
Total Split (s)	20.0	58.0	0.0	20.0	58.0	0.0	45.0	37.0	37.0	15.0	37.0	0.0
Act Effct Green (s)	10.1	64.3		17.4	76.1		16.4	34.0	34.0	9.1	22.0	
Actuated g/C Ratio	0.09	0.49		0.13	0.59		0.13	0.26	0.07	0.17		
v/c Ratio	0.21	0.78		0.67	0.53		0.87	1.05	0.12	0.23		
Control Delay	81.8	25.9		78.0	5.2		77.1	74.5	58.3	13.9		
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0		
Total Delay	81.8	25.9		78.0	5.2		77.1	74.5	58.3	13.9		
LOS	F	C		E	A		E	E	B	E		
Approach Delay	26.7			12.7			21.3			21.3		
Approach LOS	C			B			C			C		
Queue Length 50th (ft)	25	537		121	40		~187	~414	12	9		
Queue Length 95th (ft)	m51	678		191	173		100	972	38	31	35	
Internal Link Dist (ft)	185	1050		900			200	50	316			
Turn Bay Length (ft)	231	2475		248	2968		433	657	163	472		
Base Capacity (vph)	0	0		0	0		0	0	0	0		
Starvation Cap Reductn	0	0		0	0		0	0	0	0		
Spillback Cap Reductn	0	0		0	0		0	0	0	0		
Storage Cap Reductn	0	0		0	0		0	0	0	0		
Reduced v/c Ratio	0.13	0.78		0.64	0.53		0.87	1.05	0.09	0.16		

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 32.3
 Intersection Capacity Utilization: 67.1%
 Analysis Period (min): 15
 Intersection LOS: C
 ICU Level of Service: C



Splits and Phases: 16: Lone Tree Way & Heidorn Ranch Rd.

18: Lone Tree Way & SR 4 Bypass SB Off-ramp
Antioch Walmart Expansion

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

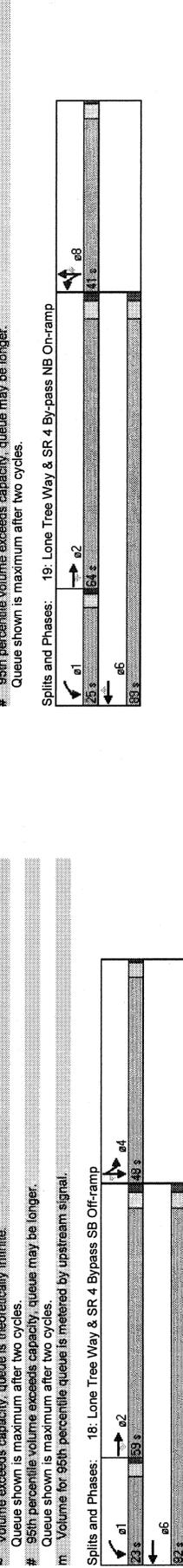
Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Flt. Permitted		0.950		0.950					0.950	0.954	
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (RTOR)	0	1645	474	212	1452	0	0	0	523	7	515
Volume (vph)	0	1828	527	226	1545	0	0	0	306	315	606
Lane Group Flow (vph)	0	1828	527	226	1545	0	0	0	306	315	606
Turn Type		2	1	6					Split	Split	Perm
Protected Phases		2	1	6					4	4	
Permitted Phases		0.0	59.0	23.0	82.0	0.0	0.0	0.0	48.0	48.0	48.0
Total Split (s)		61.2	61.2	14.8	79.0				45.0	45.0	45.0
Act Effct Green (s)		0.47	0.47	0.11	0.61				0.35	0.35	0.35
Actuated g/C Ratio		0.76	0.52	0.58	0.50				0.53	0.54	1.06
v/c Ratio		20.7	2.5	68.2	12.2				38.1	38.4	93.7
Control Delay		0.0	0.0	0.0	0.0				0.0	0.0	0.0
Queue Delay		20.7	2.5	68.2	12.2				38.1	38.4	93.7
Total Delay		20.7	2.5	68.2	12.2				38.1	38.4	93.7
LOS		C	A	E	B				D	D	F
Approach Delay		16.6		19.3					65.6		
Approach LOS		B		B					E		
Queue Length 50th (ft)		379	37	102	216				217	224	542
Queue Length 95th (ft)		m221	m29	141	239				294	302	#702
Internal Link Dist (ft)		775		750					536		616
Turn Bay Length (ft)		2392	315	175	3090				280	280	584
Base Capacity (vph)		0	0	0	0				0	0	0
Starvation Cap Reductn		0	0	0	0				0	0	0
Spillback Cap Reductn		0	0	0	0				0	0	0
Storage Cap Reductn		0	0	0	0				0	0	0
Reduced v/c Ratio		0.76	0.52	0.43	0.50				0.53	0.54	1.06

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	0	5085	1583	3433	5085	1583	1681	1681	1681	1681	1583
Flt. Permitted		0.950		0.950					0.950	0.958	
Satd. Flow (perm)	0	5085	1583	3433	5085	1583	1681	1681	1681	1681	1583
Satd. Flow (RTOR)	0	1765	409	137	1207	642	462	34	570	0	0
Volume (vph)	0	1983	460	152	1341	713	271	286	640	0	0
Lane Group Flow (vph)	0	1983	460	152	1341	713	271	286	640	0	0
Turn Type		2	1	6					Split	Split	Perm
Protected Phases		2	1	6					8	8	
Permitted Phases		0.0	64.0	25.0	89.0	89.0	41.0	41.0	41.0	41.0	41.0
Total Split (s)		73.6	73.6	10.9	87.5	87.5	36.5	36.5	36.5	36.5	36.5
Act Effct Green (s)		0.57	0.57	0.08	0.67	0.67	0.28	0.28	0.28	0.28	0.28
Actuated g/C Ratio		0.69	0.45	0.53	0.39	0.56	0.58	0.60	0.98	0.98	0.98
v/c Ratio		13.8	3.4	63.4	10.0	2.4	45.3	46.2	55.6	55.6	55.6
Control Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay		13.8	3.4	63.4	10.0	2.4	45.3	46.2	55.6	55.6	55.6
Total Delay		13.8	3.4	63.4	10.0	2.4	45.3	46.2	55.6	55.6	55.6
LOS		B	A	E	B	A	D	D	D	D	E
Approach Delay		11.9		11.3					51.0		
Approach LOS		B		B					D		
Queue Length 50th (ft)		158	34	64	176	0	203	215	398		
Queue Length 95th (ft)		170	47	98	204	40	295	312	#569		
Internal Link Dist (ft)		750		640					935		1156
Turn Bay Length (ft)		215	170	170	210				210		
Base Capacity (vph)		2880	1023	581	3424	1273	491	495	669		
Starvation Cap Reductn		0	0	0	0	0	0	0	0		
Spillback Cap Reductn		0	0	0	0	0	0	0	0		
Storage Cap Reductn		0	0	0	0	0	0	0	0		
Reduced v/c Ratio		0.69	0.45	0.26	0.39	0.56	0.55	0.58	0.98		

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 88 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 19.6
 Intersection Capacity Utilization: 78.1%
 Analysis Period (min): 15
 ICU Level of Service: D

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

m. Volume for 95th percentile queue is metered by upstream signal.

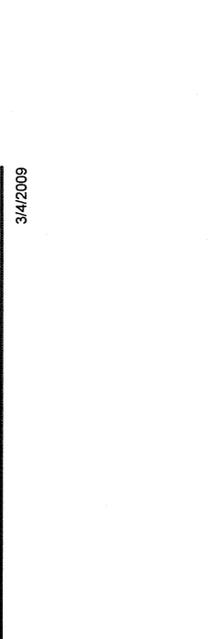


Splits and Phases: 18: Lone Tree Way & SR 4 Bypass SB Off-ramp

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 88 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 19.6
 Intersection Capacity Utilization: 78.1%
 Analysis Period (min): 15
 ICU Level of Service: D

95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

m. Volume for 95th percentile queue is metered by upstream signal.



20: Marita Dr. & Deer Valley Rd
Antioch Walmart Expansion

21: Prewett Ranch Dr & Hillcrest Ave
Antioch Walmart Expansion

Long-Term + Project
AM Peak

Long-Term + Project
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1619	0	1770	1577	0	1770	3521	0	1770	3525	0
Satd. Flow (prot)	0.742	0.735	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1364	1619	0	1347	1577	0	1765	3521	0	1758	3525	0
Satd. Flow (perm)	25	8	21	1	7	137	905	24	61	1192	27	2
Satd. Flow (RTOR)	21	34	0	3	24	0	149	1010	0	75	1505	0
Volume (vph)	Perm	Perm	Perm	Perm	Perm	Perm	Prot	Prot	Prot	Prot	Prot	Prot
Lane Group Flow (vph)	8	8	4	4	4	4	1	6	5	2	2	2
Turn Type	4	4	4	4	4	4	1	6	5	2	2	2
Protected Phases	4	4	4	4	4	4	1	6	5	2	2	2
Permitted Phases	33.0	33.0	0.0	33.0	33.0	0.0	38.0	81.0	0.0	28.0	71.0	0.0
Total Split (s)	16.3	16.3	0.0	16.3	16.3	0.0	16.5	85.6	0.0	12.1	78.2	0.0
Act Effct Green (s)	0.14	0.14	0.0	0.14	0.14	0.0	0.16	0.73	0.0	0.10	0.66	0.0
Actuated g/C Ratio	0.02	0.02	0.0	0.02	0.02	0.0	0.02	0.39	0.0	0.02	0.64	0.0
v/c Ratio	44.0	20.9	0.0	41.0	18.8	0.0	57.6	10.2	0.0	58.2	17.1	0.0
Control Delay	44.0	20.9	0.0	41.0	18.8	0.0	57.6	10.2	0.0	58.2	17.1	0.0
Queue Delay	44.0	20.9	0.0	41.0	18.8	0.0	57.6	10.2	0.0	58.2	17.1	0.0
Total Delay	44.0	20.9	0.0	41.0	18.8	0.0	57.6	10.2	0.0	58.2	17.1	0.0
LOS	D	C	D	D	B	D	E	B	E	B	E	B
Approach Delay	30.7	21.2	0.0	30.7	21.2	0.0	16.3	16.3	0.0	19.1	19.1	0.0
Approach LOS	C	C	C	C	C	C	B	B	C	B	B	C
Queue Length 50th (ft)	16	6	2	2	2	2	97	125	49	275	5	128
Queue Length 95th (ft)	41	32	4	4	4	4	188	314	100	540	26	245
Internal Link Dist (ft)	40	345	0	427	0	0	825	0	0	845	0	2575
Turn Bay Length (ft)	40	100	0	100	0	0	125	0	0	175	0	115
Base Capacity (vph)	306	386	0	305	373	0	457	2563	0	335	2342	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.08	0.0	0.01	0.06	0.0	0.33	0.39	0.0	0.22	0.64	0.0
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	117.7											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.64											
Intersection Signal Delay	13.2											
Intersection LOS	B											
Intersection Capacity Utilization	64.0%											
ICU Level of Service	C											
Analysis Period (min)	15											



Antioch Walmart Expansion

Scenario: Cumulative + Project PM

Command: None
 Volume: Cumulative+Project PM
 Geometry: Cumulative
 Impact Fee: Default Impact Fee
 Trip Generation: Cum+Proj PM
 Trip Distribution: Near-Term
 Paths: Default Path
 Routes: Default Route
 Configuration: Default Configuration

Antioch Walmart Expansion

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS Veh C	V/ C	Future Del/ LOS Veh C	Change in
# 1 Deer Valley Rd/ Country Hills	A xxxxx	0.520	A xxxxx 0.524	+ 0.003 V/C
# 2 Hillcrest Avenue/Laurel Road	B xxxxx	0.672	B xxxxx 0.626	-0.046 V/C
# 3 Hillcrest Avenue/Country Hills	A xxxxx	0.476	A xxxxx 0.466	-0.010 V/C
# 4 Hillcrest Avenue/Driveway	C	19.9 0.028	C 19.2 0.027	-0.726 D/V
# 5 Hillcrest Avenue/South Driveva	B	13.4 0.206	B 12.6 0.233	-0.823 D/V
# 6 Lone Tree Way/Mokelumne Dr	D xxxxx	0.874	D xxxxx 0.883	+ 0.009 V/C
# 7 Lone Tree Way/Deer Valley Plaz	A xxxxx	0.598	B xxxxx 0.607	+ 0.008 V/C
# 8 Lone Tree Way/Deer Valley Rd	D xxxxx	0.889	D xxxxx 0.890	+ 0.000 V/C
# 9 Lone Tree Way/Deer Valley HS	A xxxxx	0.565	A xxxxx 0.571	+ 0.006 V/C
# 10 Lone Tree Way/Sagebrush Drive	A xxxxx	0.561	A xxxxx 0.567	+ 0.006 V/C
# 11 Lone Tree Way/Williamson Ranch	A xxxxx	0.571	A xxxxx 0.577	+ 0.006 V/C
# 12 Lone Tree Way/Indian Hill Dr/W	B xxxxx	0.601	B xxxxx 0.633	+ 0.032 V/C
# 13 Lone Tree Way/Driveway	B	11.9 0.068	B 12.2 0.083	+ 0.343 D/V
# 14 Lone Tree Way/Hillcrest Avenue	C xxxxx	0.734	E xxxxx 0.912	+ 0.178 V/C
# 15 Lone Tree Way/Vista Grande Dri	A xxxxx	0.590	B xxxxx 0.641	+ 0.051 V/C
# 16 Lone Tree Way/Heidorn Ranch Ro	A xxxxx	0.572	C xxxxx 0.738	+ 0.166 V/C
# 17 Lone Tree Way/Canada Valley Ro	C xxxxx	0.775	D xxxxx 0.839	+ 0.064 V/C
# 18 Lone Tree Way/SB SR-4 Bypass	D xxxxx	0.872	E xxxxx 0.983	+ 0.110 V/C
# 19 Lone Tree Way/NB SR-4 Bypass (	B xxxxx	0.655	C xxxxx 0.752	+ 0.097 V/C
# 20 Deer Valley Road/Marita Drive	A xxxxx	0.425	A xxxxx 0.420	-0.005 V/C
# 21 Hillcrest Ave/Prewett Ranch Dr	A xxxxx	0.535	A xxxxx 0.576	+ 0.040 V/C

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #1 Deer Valley Rd/ Country Hills Dr
Cycle (sec): 100
Loss Time (sec): 9
Optimal Cycle: 39

Street Name: Deer Valley Road
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 8 674 110 101 522 280 246 100 6 54 76 80
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.00 0.23 0.23 0.06 0.24 0.24 0.14 0.06 0.06 0.03 0.09 0.09
Crit Volume: 398 101 246 156
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #2 Hillcrest Avenue/Laurel Road
Cycle (sec): 100
Loss Time (sec): 9
Optimal Cycle: 50

Street Name: Hillcrest Avenue
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 27 426 331 211 593 50 17 13 39 641 20 263
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:
Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:
Vol/Sat: 0.02 0.14 0.13 0.14 0.20 0.20 0.01 0.03 0.03 0.32 0.01 0.13
Crit Volume: 234 241 550 550
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #7 Lone Tree Way/Deer Valley Plaza

Cycle (sec): 130 Critical Vol./Cap.(X): 0.607
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Street Name: Deer Valley Plaza Lone Tree Way
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 1 0 1 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 121 0 62 40 3 40 29 1531 101 90 1007 25
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 121 0 62 40 3 40 29 1531 101 90 1007 25
Added Vol: 0 0 0 0 0 0 0 27 0 0 80 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 121 0 62 40 3 40 29 1558 101 90 1087 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 121 0 62 40 3 40 29 1558 101 90 1087 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 121 0 62 40 3 40 29 1558 101 90 1087 25
RTOR Reduct: 0 0 0 0 0 29 0 0 101 0 0 25
RTOR Vol: 121 0 62 40 3 11 29 1558 0 90 1087 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 121 0 62 40 3 11 29 1558 0 90 1087 0

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.00 1.00 1.00 1.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1650 0 1650 1650 1650 1650 1650 3300 1650 1650 3300 1650

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.04 0.02 0.00 0.01 0.02 0.47 0.00 0.05 0.33 0.00
Crit Volume: 121 779 90
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #8 Lone Tree Way/Deer Valley Rd

Cycle (sec): 130 Critical Vol./Cap.(X): 0.890
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Street Name: Deer Valley Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 2 0 1 2 0 1 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 377 466 436 235 390 22 98 1110 389 499 730 208
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 377 466 436 235 390 22 98 1110 389 499 730 208
Added Vol: 0 0 -17 9 0 0 0 27 0 -13 80 11
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 377 466 419 244 390 22 98 1137 389 486 810 219
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 377 466 419 244 390 22 98 1137 389 486 810 219
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 377 466 419 244 390 22 98 1137 389 486 810 219
RTOR Reduct: 0 0 419 0 0 0 0 0 207 0 0 134
RTOR Vol: 377 466 0 244 390 22 98 1137 182 486 810 85
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 377 466 0 244 390 22 98 1137 182 486 810 85

Saturation Flow Module:
Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 2.00 1.00 2.00 1.89 0.11 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 3000 3300 1650 3000 3124 176 1650 3300 1650 1650 3300 1650

Capacity Analysis Module:
Vol/Sat: 0.13 0.14 0.00 0.08 0.12 0.12 0.06 0.34 0.11 0.29 0.25 0.05
Crit Volume: 189 206 568 486
Crit Moves: ****

Antioch Walmart Expansion
 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #9 Lone Tree Way/Deer Valley HS
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.571
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 43 Level Of Service: A
 Street Name: Deer Valley HS Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted	Include	Protected	Include	Protected
Rights:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Min. Green:	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0
Y+R:	1 0 0 1	1 0 1 0	1 0 1 0	1 0 2 0	1 0 2 0
Lanes:	1 0 0 1	1 0 1 0	1 0 1 0	1 0 2 0	1 0 2 0

Volume Module:

Base Vol:	44	0	10	8	2	14	36	1781	7	32	1403	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	0	10	8	2	14	36	1781	7	32	1403	10
Added Vol:	0	0	0	0	0	0	0	19	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	0	10	8	2	14	36	1800	7	32	1481	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	0	10	8	2	14	36	1800	7	32	1481	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	0	10	8	2	14	36	1800	7	32	1481	10
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	44	0	10	8	2	0	36	1800	7	32	1481	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	0	10	8	2	0	36	1800	7	32	1481	2

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	1.99	0.01	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1720	0	1720	1720	1720	3427	13	1720	3440	1720		

Capacity Analysis Module:

Vol/Sat:	0.03	0.00	0.01	0.00	0.00	0.00	0.02	0.53	0.53	0.02	0.43	0.00
Crit Volume:	44		2				904	32				
Crit Moves:	****		****				****	****				

Antioch Walmart Expansion
 Level Of Service Computation Report
 CCTALOS Method (Future Volume Alternative)

 Intersection #10 Lone Tree Way/Sagebrush Drive
 Cycle (sec): 130 Critical Vol./Cap.(X): 0.567
 Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 33 Level Of Service: A
 Street Name: Sagebrush Drive Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Permitted	Include	Protected	Include	Protected
Rights:	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Min. Green:	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0	4.0 4.0 4.0 4.0
Y+R:	1 0 0 1	0 0 0 0	0 0 0 0	0 0 2 0	1 1 0 2
Lanes:	1 0 0 1	0 0 0 0	0 0 0 0	0 0 2 0	1 1 0 2

Volume Module:

Base Vol:	85	0	101	0	0	0	1671	146	45	1313	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	0	101	0	0	0	1671	146	45	1313	0
Added Vol:	0	0	0	0	0	0	19	0	0	78	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	0	101	0	0	0	1690	146	45	1391	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	0	101	0	0	0	1690	146	45	1391	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	0	101	0	0	0	1690	146	45	1391	0
RTOR Reduct:	0	0	45	0	0	0	0	85	0	0	0
RTOR Vol:	85	0	56	0	0	0	1690	61	45	1391	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	0	56	0	0	0	1690	61	45	1391	0

Saturation Flow Module:

Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1720	0	1720	0	0	0	3440	1720	1720	3440	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.00	0.03	0.00	0.00	0.00	0.00	0.49	0.04	0.03	0.40	0.00
Crit Volume:	85		0				845	45				
Crit Moves:	****		****				****	****				

Antioch Walmart Expansion

Level Of Service Computation Report
 CCTLALOS Method (Future Volume Alternative)

 Intersection #11 Lone Tree Way/Williamson Ranch Plaza (OSH)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.577
 Loss Time (sec): 6 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: A

 Street Name: Williamson Ranch Plaza (OSH) Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Include Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 0 0 0 0 1 0 0 0 1 0 2 0 0 0 0 2 0 1

Volume Module:
 Base Vol: 0 0 0 90 0 67 94 1703 0 0 1309 36
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 90 0 67 94 1703 0 0 1309 36
 Added Vol: 0 0 0 0 0 0 0 20 0 0 78 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 0 0 90 0 67 94 1723 0 0 1387 36
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 90 0 67 94 1723 0 0 1387 36
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 90 0 67 94 1723 0 0 1387 36
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 0 0 0 90 0 0 94 1723 0 0 1387 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 0 0 90 0 0 94 1723 0 0 1387 0

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 0.00 1.00 1.00 2.00 0.00 0.00 2.00 1.00
 Final Sat.: 0 0 0 1650 0 1650 1650 3300 0 0 3300 1650

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.05 0.00 0.00 0.06 0.52 0.00 0.00 0.42 0.00
 Crit Volume: 0 90 862 694
 Crit Moves: *****

Antioch Walmart Expansion

Level Of Service Computation Report
 CCTLALOS Method (Future Volume Alternative)

 Intersection #12 Lone Tree Way/Indian Hill Dr/Williamson Ranch Plaza (Wal-Mart, OSH)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.633
 Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 62 Level Of Service: B

 Street Name: Indian Hill Dr/Williamson Ranch Pl Lone Tree Way
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 0 1 0 2 0 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
 Base Vol: 8 18 47 157 18 60 119 1571 32 55 1265 52
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 8 18 47 157 18 60 119 1571 32 55 1265 52
 Added Vol: 0 0 0 11 1 7 -68 88 0 0 72 1
 PasserByVol: 0 0 0 21 0 11 19 -19 0 0 -8 8
 Initial Fut: 8 18 47 189 19 78 70 1640 32 55 1329 61
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 8 18 47 189 19 78 70 1640 32 55 1329 61
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 8 18 47 189 19 78 70 1640 32 55 1329 61
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 8 18 47 189 19 78 70 1640 24 55 1329 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 8 18 47 189 19 78 70 1640 24 55 1329 0

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 0.28 0.72 2.00 0.20 0.80 1.00 2.00 1.00 1.00 2.00 1.00
 Final Sat.: 1650 457 1193 3000 323 1327 1650 3300 1650 1650 3300 1650

Capacity Analysis Module:
 Vol/Sat: 0.00 0.04 0.04 0.06 0.06 0.06 0.04 0.50 0.01 0.03 0.40 0.00
 Crit Volume: 65 95 820 55
 Crit Moves: *****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #15 Lone Tree Way/Vista Grande Drive

Cycle (sec): 130 Critical Vol./Cap.(X): 0.641
Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: B

Street Name: Vista Grande Drive Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Include Protected Include Protected
Rights: Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module:

Base Vol: 54 26 121 78 22 54 39 1799 78 164 1412 59
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 54 26 121 78 22 54 39 1799 78 164 1412 59
Added Vol: 0 0 3 3 0 0 1 236 1 3 343 3
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 54 26 124 81 22 54 40 2035 79 167 1755 62
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 54 26 124 81 22 54 40 2035 79 167 1755 62
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Revised Vol: 54 26 124 81 22 54 40 2035 79 167 1755 62
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 54 26 124 81 22 54 40 2035 79 167 1755 62
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 54 26 124 81 22 54 40 2035 79 167 1755 62

Saturation Flow Module:

Sat/Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 0.17 0.83 1.00 0.29 0.71 1.00 2.89 0.11 1.00 2.90 0.10
Final Sat.: 1720 298 1422 1720 498 1222 1720 4967 193 1720 4984 176

Capacity Analysis Module:

Vol/Sat: 0.03 0.09 0.09 0.05 0.04 0.04 0.02 0.41 0.41 0.10 0.35 0.35
Crit Volume: 150 81 705 167
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
CCTALOS Method (Future Volume Alternative)

Intersection #16 Lone Tree Way/Heidorn Ranch Road

Cycle (sec): 120 Critical Vol./Cap.(X): 0.738
Loss Time (sec): 12 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 87 Level Of Service: C

Street Name: Heidorn Ranch Road Lone Tree Way
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Split Phase Protected
Rights: Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 2 0 1 0 1 1 0 0 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module:

Base Vol: 201 28 226 25 34 10 9 1799 223 93 1552 33
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 201 28 226 25 34 10 9 1799 223 93 1552 33
Added Vol: 0 0 63 0 0 0 0 242 0 216 348 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 201 28 289 25 34 10 9 2041 223 309 1900 33
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 201 28 289 25 34 10 9 2041 223 309 1900 33
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Revised Vol: 201 28 289 25 34 10 9 2041 223 309 1900 33
RTOR Reduct: 0 0 289 0 0 0 0 0 0 0 0 0
RTOR Vol: 201 28 0 25 34 10 9 2041 223 309 1900 33
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 201 28 0 25 34 10 9 2041 223 309 1900 33

Saturation Flow Module:

Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
Adjustment: 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 2.00 1.00 1.00 1.00 0.77 0.23 1.00 2.70 0.30 1.00 2.95 0.05
Final Sat.: 3000 1650 1650 1650 1275 375 1650 4462 488 1650 4865 85

Capacity Analysis Module:

Vol/Sat: 0.07 0.02 0.00 0.02 0.03 0.03 0.01 0.46 0.46 0.19 0.39 0.39
Crit Volume: 101 44 755 309
Crit Moves: ****

Antioch Walmart Expansion

Level Of Service Computation Report
 CCTLALOS Method (Future Volume Alternative)

Intersection #21 Hillcrest Ave/Prewett Ranch Dr

Cycle (sec): 100 Critical Vol./Cap.(X): 0.576
 Loss Time (sec): 9 Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 44 Level Of Service: A

Street Name: Hillcrest Ave Prewett Dr
 Approach: North Bound South Bound East Bound West Bound

Movement	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected	Protected	Include									
Rights:	Include	Include	Include									
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0

Volume Module:

Base Vol:	120	739	0	12	976	140	136	150	77	0	104	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	739	0	12	976	140	136	150	77	0	104	3
Added Vol:	0	37	0	0	138	1	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	120	776	0	12	1114	141	136	150	77	0	104	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	776	0	12	1114	141	136	150	77	0	104	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	776	0	12	1114	141	136	150	77	0	104	3
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	120	776	0	12	1114	141	136	150	77	0	104	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	776	0	12	1114	141	136	150	77	0	104	3

Saturation Flow Module:

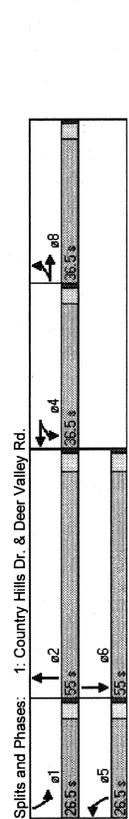
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.78	0.22	1.00	0.66	0.34	1.00	0.97	0.03
Final Sat:	1720	3440	0	1720	3054	386	1720	1137	583	1720	1672	48

Capacity Analysis Module:
 Vol/Sat: 0.07 0.23 0.00 0.01 0.36 0.36 0.08 0.13 0.13 0.00 0.06 0.06
 Crit Volume: 628 136 107
 Crit Moves: ****

1: Country Hills Dr. & Deer Valley Rd.
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1846	0	1770	1704	0	1770	3433	0	1770	3311	0
Satd. Flow (prot)	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0
Fit Permitted	1765	1846	2	1770	1704	0	1762	3433	0	1745	3311	0
Satd. Flow (perm)	246	100	6	54	76	80	8	684	111	101	531	280
Satd. Flow (RTOR)	304	130	0	59	172	0	9	854	0	109	872	0
Volume (vph)	Split	8	8	4	4	4	5	2	1	6		
Lane Group Flow (vph)	Perm	4	4	4	4	4	5	2	1	6	Prot	
Turn Type	Protected Phases	8	8	4	4	4	5	2	1	6	Prot	
Permitted Phases	Total Split (s)	36.5	0.0	36.5	36.5	0.0	26.5	55.0	0.0	26.5	55.0	0.0
Act Effect Green (s)	23.4	23.4	16.5	16.5	16.5	8.9	38.1	13.7	49.2	13.7	49.2	0.0
Actuated g/C Ratio	0.24	0.24	0.17	0.17	0.17	0.08	0.39	0.14	0.51	0.14	0.51	0.0
v/c Ratio	0.71	0.29	0.20	0.56	0.20	0.06	0.63	0.45	0.51	0.45	0.51	0.0
Control Delay	50.3	39.8	44.6	43.8	44.6	62.9	32.2	54.9	19.6	54.9	19.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.3	39.8	44.6	43.8	44.6	62.9	32.2	54.9	19.6	54.9	19.6	0.0
LOS	D	D	D	D	D	E	C	D	B	D	B	C
Approach Delay	47.1	44.0	44.0	44.0	44.0	32.5	32.5	23.5	23.5	23.5	23.5	0.0
Approach LOS	D	D	D	D	D	C	C	C	C	C	C	C
Queue Length 50th (ft)	174	65	33	83	33	5	237	64	166	64	166	0.0
Queue Length 95th (ft)	354	154	90	199	90	29	466	166	398	166	398	0.0
Internal Link Dist (ft)	308	274	274	274	274	880	880	220	220	220	220	0.0
Turn Bay Length (ft)	145	120	120	120	120	110	175	175	220	175	220	0.0
Base Capacity (vph)	607	634	549	550	549	386	1699	419	1886	419	1886	0.0
Starvation Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0.0
Spillback Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0.0
Storage Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0.0
Reduced v/c Ratio	0.50	0.21	0.11	0.31	0.11	0.02	0.50	0.26	0.46	0.26	0.46	0.0
Intersection Summary												
Cycle Length	154.5											
Actuated Cycle Length	97.3											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.71											
Intersection Signal Delay	32.6											
Intersection Capacity Utilization	65.3%											
Analysis Period (min)	15											

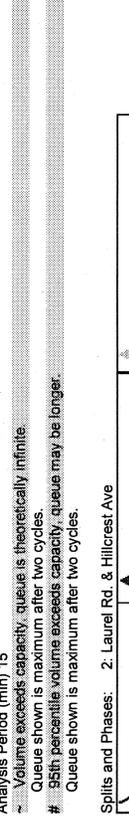


Splits and Phases: 1: Country Hills Dr. & Deer Valley Rd.

2: Laurel Rd. & Hillcrest Ave.
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	NWL	NWR	NWR2
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1635	0	1770	1663	1583	1770	3417	0	1770	2787	0
Satd. Flow (prot)	0.741	0.741	0	0.702	0.702	0.950	0.950	0.956	0	0.950	0.950	0
Fit Permitted	1379	1635	0	1305	1663	1563	1768	3417	0	1770	2787	0
Satd. Flow (perm)	17	13	39	550	20	220	241	648	50	28	467	207
Satd. Flow (RTOR)	27	81	0	686	25	278	246	712	0	31	749	0
Volume (vph)	Perm	4	4	8	8	8	1	6	5	2		
Lane Group Flow (vph)	Protected Phases	4	4	8	8	8	1	6	5	2	Prot	
Turn Type	Permitted Phases	4	4	8	8	8	1	6	5	2	Prot	
Permitted Phases	Total Split (s)	37.0	37.0	37.0	37.0	30.0	46.0	0.0	17.0	33.0	0.0	0.0
Act Effect Green (s)	34.0	34.0	34.0	34.0	34.0	19.6	52.7	8.2	37.4	8.2	37.4	0.0
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.20	0.53	0.08	0.37	0.08	0.37	0.0
v/c Ratio	0.06	0.14	1.57	0.04	0.39	0.71	0.39	0.21	0.69	0.21	0.69	0.0
Control Delay	22.8	8.3	283.4	22.4	4.7	48.5	15.7	45.8	28.5	45.8	28.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.8	8.3	283.4	22.4	4.7	48.5	15.7	45.8	28.5	45.8	28.5	0.0
LOS	C	A	F	C	A	D	B	D	D	D	C	C
Approach Delay	12.7	206.3	206.3	12.7	206.3	24.1	30.2	30.2	30.2	30.2	30.2	0.0
Approach LOS	B	F	F	B	F	C	C	C	C	C	C	C
Queue Length 50th (ft)	12	8	-633	11	0	148	142	19	207	19	207	0.0
Queue Length 95th (ft)	22	21	#711	25	32	213	197	47	#340	47	#340	0.0
Internal Link Dist (ft)	778	778	196	196	196	140	354	354	140	354	354	0.0
Turn Bay Length (ft)	75	175	175	175	175	600	600	150	150	150	150	0.0
Base Capacity (vph)	469	566	444	633	715	478	1805	248	1081	248	1081	0.0
Starvation Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0.0
Spillback Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0.0
Storage Cap. Reductn	0	0	0	0	0	0	0	0	0	0	0	0.0
Reduced v/c Ratio	0.06	0.14	1.87	0.04	0.39	0.51	0.39	0.13	0.69	0.13	0.69	0.0
Intersection Summary												
Cycle Length	100											
Actuated Cycle Length	100											
Offset: 21 (21%)	Referenced to phase 2: NWR and 6: SBL, Start of Yellow											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.57											
Intersection Signal Delay	89.3											
Intersection Capacity Utilization	80.5%											
Analysis Period (min)	15											
Intersection LOS	F											
ICU Level of Service	D											
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												



Splits and Phases: 2: Laurel Rd. & Hillcrest Ave

3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1863	1770	1689	0	1770	3493	0	1770	3476
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0	0.950	0.950	0	0.950	0.950
Fit Permitted	1765	1863	1549	1754	1689	0	1770	3493	0	1770
Satd. Flow (perm)	86	51	122	36	50	66	99	546	50	116
Volume (vph)	98	58	139	71	227	0	108	647	0	126
Lane Group Flow (vph)	Split	Perm	Split	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	4	4	8	8	5	2	2	1	1	6
Protected Phases										
Permitted Phases	38.0	38.0	31.0	31.0	0.0	38.0	69.0	0.0	38.0	69.0
Total Split (s)	14.1	14.1	20.2	20.2	13.5	67.2	14.8	68.4	14.8	68.4
Act. Effct Green (s)	0.11	0.11	0.16	0.16	0.11	0.52	0.12	0.53	0.12	0.53
Actuated G/C Ratio	0.51	0.28	0.47	0.26	0.78	0.58	0.35	0.62	0.62	0.59
vc Ratio	64.8	58.1	14.0	52.1	64.3	69.9	21.2	69.8	24.7	64.3
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	64.8	58.1	14.0	52.1	64.3	69.9	21.2	69.8	24.7	64.3
Total Delay	E	E	B	D	E	E	C	E	C	C
LOS	E	E	B	D	E	E	C	E	C	C
Approach LOS	39.5	61.4	28.2	28.2	29.4	29.4	29.4	29.4	29.4	29.4
Approach Delay	D	E	E	E	C	C	C	C	C	C
Queue Length 50th (ft)	78	45	0	51	154	86	156	100	305	100
Queue Length 95th (ft)	145	94	58	62	135	170	298	183	555	183
Internal Link Dist (ft)	286	286	283	283	283	1680	1680	1140	1140	1140
Turn Bay Length (ft)	120	120	90	90	378	155	1831	190	1857	190
Base Capacity (vph)	419	441	473	367	378	417	1831	421	1857	421
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced vc Ratio	0.23	0.13	0.29	0.19	0.60	0.26	0.35	0.30	0.59	0.30
Intersection Summary										
Cycle Length: 176										
Actuated Cycle Length: 128.4										
Control Type: Actuated-Uncoordinated										
Maximum vc Ratio: 0.78										
Intersection Signal Delay: 33.9										
Intersection Capacity Utilization: 56.8%										
Analysis Period (min): 15										

4: Northeast Driveway & Hillcrest Ave
Antioch Walmart Expansion

Long-Term + Project
PM Peak

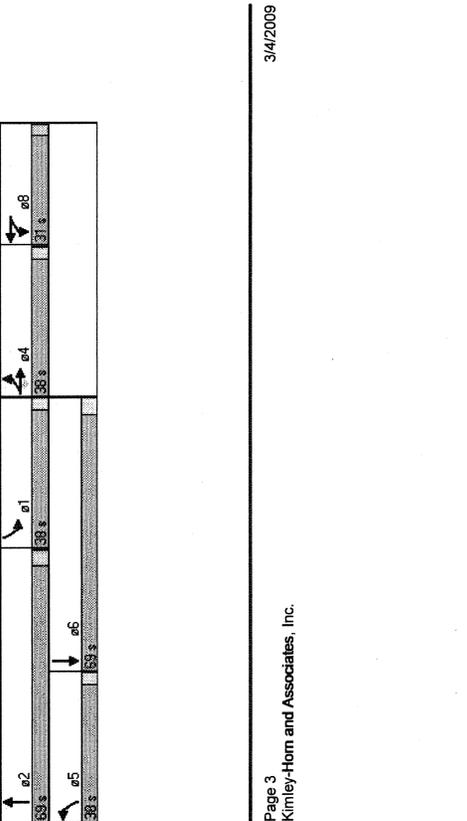
Movement	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
Grade	0%	0%	0%	0%	0%	0%	0%	0%
Volume (veh/h)	0	7	0	877	1094	5	5	5
Peak Hour Factor	0.58	0.58	0.88	0.88	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	12	0	769	1216	6	6	6
Pedestrians								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	None	None	None	None	None	None	None	None
Median storage (veh)								
Upstream signal (ft)					727	1032	1032	1032
px, platoon unblocked	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
vc, conflicting volume	1800	1216	1221	1221	1221	1221	1221	1221
vc1, stage 1 cont vol								
vc2, stage 2 cont vol								
vcU, unblocked vol	1945	1339	1348	1348	1348	1348	1348	1348
IC, single (s)	6.8	6.9	4.1	4.1	4.1	4.1	4.1	4.1
IC, 2 stage (s)								
IF (s)	3.5	3.3	2.2	2.2	2.2	2.2	2.2	2.2
p0 queue free %	100	87	100	100	100	100	100	100
qM capacity (veh/h)	36	81	322	322	322	322	322	322
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 1	SB 2	SB 1
Volume Total	12	385	385	1216	1216	6	6	6
Volume Left	0	0	0	0	0	0	0	0
Volume Right	12	0	0	0	0	0	0	0
CSH	91	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.13	0.23	0.23	0.72	0.72	0.00	0.00	0.00
Queue Length 95th (ft)	11	0	0	0	0	0	0	0
Control Delay (s)	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	F	F	F	F	F	F	F
Approach Delay (s)	50.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Approach LOS	F	F	F	F	F	F	F	F
Intersection Summary								
Average Delay								
Intersection Capacity Utilization								
Analysis Period (min)								

3: Country Hills Dr. & Hillcrest Ave
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1863	1770	1689	0	1770	3493	0	1770	3476
Satd. Flow (prot)	0.950	0.950	0.950	0.950	0	0.950	0.950	0	0.950	0.950
Fit Permitted	1765	1863	1549	1754	1689	0	1770	3493	0	1770
Satd. Flow (perm)	86	51	122	36	50	66	99	546	50	116
Volume (vph)	98	58	139	71	227	0	108	647	0	126
Lane Group Flow (vph)	Split	Perm	Split	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Turn Type	4	4	8	8	5	2	2	1	1	6
Protected Phases										
Permitted Phases	38.0	38.0	31.0	31.0	0.0	38.0	69.0	0.0	38.0	69.0
Total Split (s)	14.1	14.1	20.2	20.2	13.5	67.2	14.8	68.4	14.8	68.4
Act. Effct Green (s)	0.11	0.11	0.16	0.16	0.11	0.52	0.12	0.53	0.12	0.53
Actuated G/C Ratio	0.51	0.28	0.47	0.26	0.78	0.58	0.35	0.62	0.62	0.59
vc Ratio	64.8	58.1	14.0	52.1	64.3	69.9	21.2	69.8	24.7	64.3
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	64.8	58.1	14.0	52.1	64.3	69.9	21.2	69.8	24.7	64.3
Total Delay	E	E	B	D	E	E	C	E	C	C
LOS	E	E	B	D	E	E	C	E	C	C
Approach LOS	39.5	61.4	28.2	28.2	29.4	29.4	29.4	29.4	29.4	29.4
Approach Delay	D	E	E	E	C	C	C	C	C	C
Queue Length 50th (ft)	78	45	0	51	154	86	156	100	305	100
Queue Length 95th (ft)	145	94	58	62	135	170	298	183	555	183
Internal Link Dist (ft)	286	286	283	283	283	1680	1680	1140	1140	1140
Turn Bay Length (ft)	120	120	90	90	378	155	1831	190	1857	190
Base Capacity (vph)	419	441	473	367	378	417	1831	421	1857	421
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced vc Ratio	0.23	0.13	0.29	0.19	0.60	0.26	0.35	0.30	0.59	0.30
Intersection Summary										
Cycle Length: 176										
Actuated Cycle Length: 128.4										
Control Type: Actuated-Uncoordinated										
Maximum vc Ratio: 0.78										
Intersection Signal Delay: 33.9										
Intersection Capacity Utilization: 56.8%										
Analysis Period (min): 15										

3: Country Hills Dr. & Hillcrest Ave



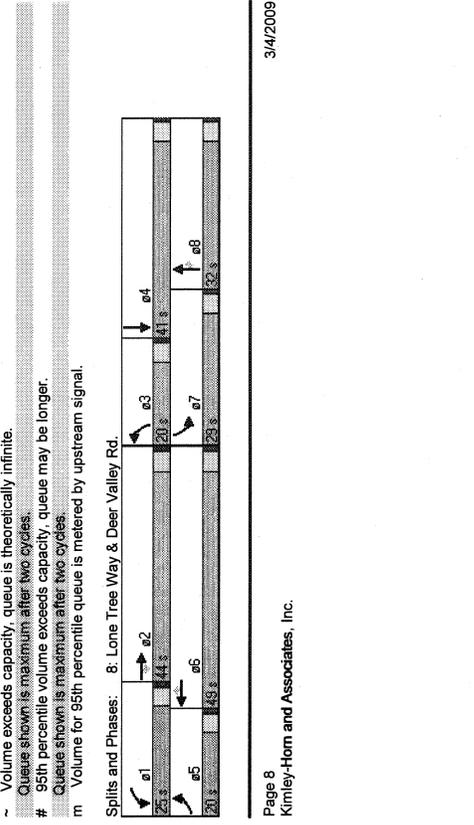
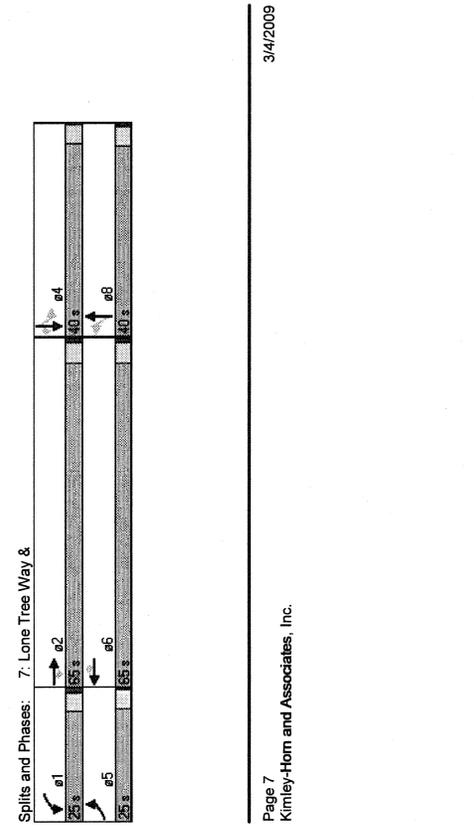
7: Lone Tree Way & Antioch Walmart Expansion

8: Lone Tree Way & Deer Valley Rd. Antioch Walmart Expansion

Long-Term + Project PM Peak

Long-Term + Project PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (norm)	1770	3539	1436	1757	3539	1583	1408	1583	0	1269	1863	1583
Satd. Flow (RTOR)	32	1558	101	90	1087	25	121	284	0	62	40	3
Volume (Vph)	31	1857	107	99	1195	27	155	79	0	44	3	44
Lane Group Flow (Vph)	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm	Prot	Perm
Turn Type	5	2	2	1	6	1	6	8	8	4	4	4
Protected Phases												
Permitted Phases	25.0	65.0	65.0	25.0	65.0	65.0	40.0	40.0	0.0	40.0	40.0	40.0
Total Split (s)	8.8	86.6	86.6	14.2	96.0	96.0	20.2	20.2	0.0	20.2	20.2	20.2
Act Effct Green (s)	0.07	0.67	0.67	0.11	0.74	0.74	0.16	0.16	0.16	0.16	0.16	0.16
Actuated g/C Ratio	0.26	0.70	0.11	0.51	0.46	0.02	0.71	0.16	0.22	0.01	0.16	0.16
v/c Ratio	57.2	10.8	0.4	94.1	11.4	9.0	86.8	6.7	48.4	42.3	19.2	19.2
Control Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	57.2	10.8	0.4	94.1	11.4	9.0	86.8	6.7	48.4	42.3	19.2	19.2
Total Delay	E	B	A	D	B	A	E	A	D	D	D	B
LOS	11.1	B	A	D	B	A	E	A	D	D	D	B
Approach Delay												
Approach LOS	B	B	B	B	B	B	B	B	B	B	B	B
Queue Length 50th (ft)	28	122	0	88	198	4	126	0	33	2	0	0
Queue Length 95th (ft)	m28	m52	m0	m131	m0	m7	160	0	65	11	32	32
Internal Link Dist (ft)	100	740	100	200	860	100	704	100	704	361	530	482
Turn Bay Length (ft)	300	2387	967	300	2514	1172	401	654	361	530	482	482
Base Capacity (Vph)	0	66	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.72	0.11	0.33	0.46	0.02	0.39	0.12	0.12	0.01	0.09	0.09
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	94 (72%)											
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	0.71											
Intersection Signal Delay	15.3											
Intersection Capacity Utilization	71.4%											
Analysis Period (min)	15											
m - Volume for 95th percentile queue is metered by upstream signal.												

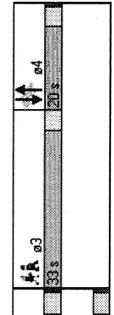


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3535	0	1770	3539	1563	1770	1561	0	1770
Flt Permitted	0.950	0	0.980	0	0.755	0	0.744	0	0.144	0
Satd. Flow (perm)	1770	3535	0	1768	3539	1545	1394	1561	0	1383
Satd. Flow (RTOR)	36	1800	7	32	1481	10	44	0	10	8
Volume (vph)	39	1985	0	37	1722	12	90	20	0	15
Lane Group Flow (vph)	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Turn Type	5	2	1	6	4	4	4	4	4	4
Protected Phases										
Permitted Phases	20.0	57.0	0.0	20.0	57.0	20.0	20.0	0.0	20.0	20.0
Total Spilt (s)	9.8	88.0	0	9.6	85.5	14.3	14.3	0	14.3	14.3
Act Effct Green (s)	0.08	0.68	0	0.07	0.66	0.11	0.11	0	0.11	0.11
Actuated g/C Ratio	0.29	0.82	0	0.28	0.74	0.01	0.59	0.03	0.10	0.02
v/c Ratio	60.1	15.5	0	71.5	11.0	3.2	70.0	0.1	51.8	49.5
Control Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	E	B	E	B	A	E	A	A	D	D
LOS	E	B	E	B	A	E	A	A	D	D
Approach Delay	16.4	12.3				57.3			33.1	
Approach LOS	B	B				E			C	
Queue Length 50th (ft)	32	204	0	32	204	0	73	0	11	3
Queue Length 95th (ft)	m34	m#965	0	m47	#905	m3	66	0	20	9
Internal Link Dist (ft)	145	1580	0	150	605	0	609	0	819	0
Turn Bay Length (ft)	231	2393	0	231	2329	1019	163	643	100	246
Base Capacity (vph)	0	0	0	57	0	0	0	0	182	228
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.82	0	0.16	0.76	0.01	0.49	0.03	0.08	0.02

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR
Lane Configurations	1	1	1	1	1	1	1	1	1	1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3535	0	1770	3539	1563	1770	1561	0	1770
Flt Permitted	0.950	0	0.980	0	0.755	0	0.744	0	0.144	0
Satd. Flow (perm)	1770	3535	0	1768	3539	1545	1394	1561	0	1383
Satd. Flow (RTOR)	36	1800	7	32	1481	10	44	0	10	8
Volume (vph)	39	1985	0	37	1722	12	90	20	0	15
Lane Group Flow (vph)	Prot	Prot	Prot	Perm	Perm	Perm	Perm	Perm	Perm	Perm
Turn Type	5	2	1	6	4	4	4	4	4	4
Protected Phases										
Permitted Phases	20.0	57.0	0.0	20.0	57.0	20.0	20.0	0.0	20.0	20.0
Total Spilt (s)	9.8	88.0	0	9.6	85.5	14.3	14.3	0	14.3	14.3
Act Effct Green (s)	0.08	0.68	0	0.07	0.66	0.11	0.11	0	0.11	0.11
Actuated g/C Ratio	0.29	0.82	0	0.28	0.74	0.01	0.59	0.03	0.10	0.02
v/c Ratio	60.1	15.5	0	71.5	11.0	3.2	70.0	0.1	51.8	49.5
Control Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	E	B	E	B	A	E	A	A	D	D
LOS	E	B	E	B	A	E	A	A	D	D
Approach Delay	16.4	12.3				57.3			33.1	
Approach LOS	B	B				E			C	
Queue Length 50th (ft)	32	204	0	32	204	0	73	0	11	3
Queue Length 95th (ft)	m34	m#965	0	m47	#905	m3	66	0	20	9
Internal Link Dist (ft)	145	1580	0	150	605	0	609	0	819	0
Turn Bay Length (ft)	231	2393	0	231	2329	1019	163	643	100	246
Base Capacity (vph)	0	0	0	57	0	0	0	0	182	228
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.82	0	0.16	0.76	0.01	0.49	0.03	0.08	0.02

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 113 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 15.9
 Intersection Capacity Utilization: 85.9%
 Analysis Period (min): 15
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 m Volume for 95th percentile queue is metered by upstream signal.

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 113 (87%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 15.9
 Intersection Capacity Utilization: 85.9%
 Analysis Period (min): 15
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 m Volume for 95th percentile queue is metered by upstream signal.



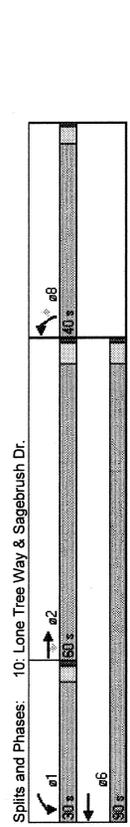
Splits and Phases: 9: Lone Tree Way & Prewett Park

10: Lone Tree Way & Sagebrush Dr.
Antioch Walmart Expansion

11: Lone Tree Way & Williamson Ranch Plaza
Antioch Walmart Expansion

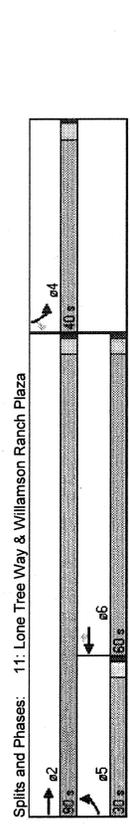
Long-Term + Project
PM Peak

Lane Group	EBR	EBT	WBL	WBT	NBL	NBR
Lane Configurations	EB	EB	WB	WB	NB	NB
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3539	1583	1770	3539	1770	1583
Fit Permitted	0.960	0.960	0.960	0.960	0.960	0.960
Satd. Flow (perm)	3539	1511	1767	3539	1770	1583
Satd. Flow (RTOR)	34					
Volume (vph)	1690	146	45	1391	85	101
Lane Group Flow (vph)	1837	159	56	1717	139	166
Turn Type	Perm	Prot	Perm	Perm	Perm	Perm
Protected Phases	2	1	6	6	6	8
Permitted Phases	6.0	6.0	30.0	90.0	40.0	40.0
Total Split (s)	98.7	98.7	9.4	109.3	14.7	14.7
Act Effct Green (s)	0.76	0.76	0.07	0.84	0.11	0.11
Actuated g/C Ratio	0.66	0.14	0.43	0.58	0.69	0.51
v/c Ratio	6.0	0.3	81.3	1.2	72.6	12.9
Control Delay	0.1	0.0	0.0	0.0	0.0	0.0
Queue Delay	6.1	0.3	81.3	1.3	72.6	12.9
Total Delay	6.2	0.3	81.3	1.3	72.6	12.9
LOS	A	A	F	A	E	B
Approach Delay	5.6		3.8	40.1		
Approach LOS	A		A	D		
Queue Length 50th (ft)	25	1	45	27	115	0
Queue Length 95th (ft)	198	m0	m77	15	116	3
Internal Link Dist (ft)	606		1855	497		
Turn Bay Length (ft)	2668	186	368	2974	504	569
Base Capacity (vph)	92	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	41	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.14	0.15	0.59	0.28	0.29
Intersection Summary						
Cycle Length	130					
Actuated Cycle Length	130					
Offset	122 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow					
Control Type	Actuated-Coordinated					
Maximum v/c Ratio	0.69					
Intersection Signal Delay	7.4					
Intersection Capacity Utilization	59.6%					
Analysis Period (min)	15					
m	Volume for 98th percentile queue is metered by upstream signal.					



Splits and Phases: 10: Lone Tree Way & Sagebrush Dr.

Lane Group	EBL	EBT	WBL	WBT	SBL	SBR
Lane Configurations	EB	EB	WB	WB	SB	SB
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	3539	3539	1583	1770	1583
Fit Permitted	0.960	0.960	0.960	0.960	0.960	0.960
Satd. Flow (perm)	1756	3539	3539	1451	1770	1562
Satd. Flow (RTOR)	14					
Volume (vph)	94	1723	1387	36	90	67
Lane Group Flow (vph)	106	1936	1541	40	127	94
Turn Type	Prot	Perm	Perm	Perm	Perm	Perm
Protected Phases	5	2	6	6	4	4
Permitted Phases	30.0	90.0	60.0	60.0	40.0	40.0
Total Split (s)	11.9	108.8	93.9	93.9	15.2	15.2
Act Effct Green (s)	0.08	0.84	0.72	0.72	0.12	0.12
Actuated g/C Ratio	0.65	0.65	0.60	0.04	0.61	0.35
v/c Ratio	77.6	9.2	6.6	0.1	65.9	12.6
Control Delay	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	77.6	9.2	6.6	0.1	65.9	12.6
Total Delay	77.6	9.2	6.6	0.1	65.9	12.6
LOS	E	A	A	A	E	B
Approach Delay	12.8	6.4			43.2	
Approach LOS	B	A			D	
Queue Length 50th (ft)	93	178	13	0	105	0
Queue Length 95th (ft)	m120	832	251	m0	120	22
Internal Link Dist (ft)	155	1855	820	457		
Turn Bay Length (ft)	368	2961	2556	1052	504	512
Base Capacity (vph)	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.65	0.60	0.04	0.25	0.18
Intersection Summary						
Cycle Length	130					
Actuated Cycle Length	130					
Offset	75 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow					
Control Type	Actuated-Coordinated					
Maximum v/c Ratio	0.65					
Intersection Signal Delay	11.9					
Intersection Capacity Utilization	59.8%					
Analysis Period (min)	15					
m	Volume for 98th percentile queue is metered by upstream signal.					



Splits and Phases: 11: Lone Tree Way & Williamson Ranch Plaza

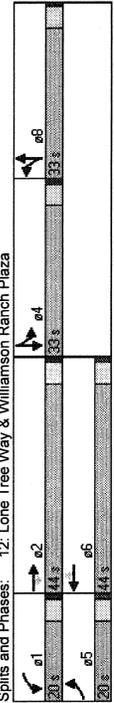
12: Lone Tree Way & Williamson Ranch Plaza
 Antioch Walmart Expansion

13: Lone Tree Way & Wai-Mart Driveway
 Antioch Walmart Expansion

Long-Term + Project
 PM Peak

Movement	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBR
Volume (veh/h)	0	1900	1395	101	0	0	0	45	
Hourly flow rate (vph)	0	0.86	0.86	0.94	0.94	0.84	0.84	0.84	
Pedestrians	0	2209	1484	107	0	0	0	54	
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type									None
Median storage (veh)									
Upstream signal (ft)		510	500						
pX, platoon unblocked	0.75							0.57	0.75
vC, conflicting volume	1581							2589	495
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCU, unblocked vol	1110							1243	0
IC, single (s)	4.1							6.8	6.9
IC, 2 stage (s)									
IF (s)	2.2							3.5	3.3
q0 queue free %	100							100	93
qM capacity (veh/h)	488							95	808
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	WB 4	SB 1	SB 1
Volume Total	1105	1105	495	485	485	107	54	0	0
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0	0
CSH	1700	1700	1700	1700	1700	1700	1700	808	808
Volume to Capacity	0.65	0.65	0.29	0.29	0.29	0.06	0.07	0	0
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	5
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	9.8
Lane LOS	A	A	A	A	A	A	A	A	A
Approach LOS									
Intersection Summary									
Average Delay	0.1								
Intersection Capacity Utilization	55.9%								
Analysis Period (min)	15								
ICU Level of Service	B								

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBR
Volume (veh/h)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Hourly flow rate (vph)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Pedestrians	0	0	0	0	0	0	0	0	0
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type									
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume									
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCU, unblocked vol									
IC, single (s)									
IC, 2 stage (s)									
IF (s)									
q0 queue free %									
qM capacity (veh/h)									
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	WB 4	WB 4	SB 1	SB 1
Volume Total	200	200	200	200	200	200	200	200	200
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0	0
CSH	200	200	200	200	200	200	200	200	200
Volume to Capacity	0.36	0.36	0.05	0.28	0.79	0.09	0.03	0.21	0.31
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	0
Control Delay (s)	28.8	28.8	26.7	25.6	25.6	25.6	25.6	41.8	41.8
Lane LOS	E	C	A	E	C	B	D	C	D
Approach LOS									
Intersection Summary									
Average Delay	29.0								
Intersection Capacity Utilization	71.1%								
Analysis Period (min)	15								
ICU Level of Service	C								



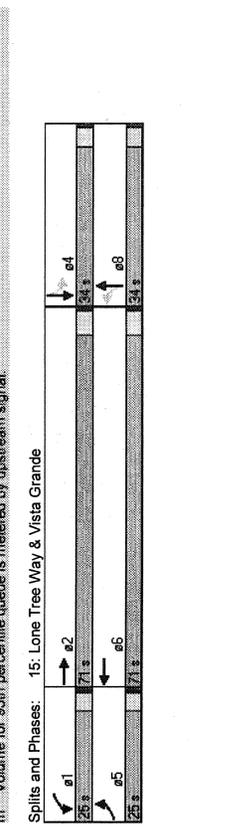
Splits and Phases: 12: Lone Tree Way & Williamson Ranch Plaza

14: Lone Tree Way & Hillcrest Ave
Antioch Walmart Expansion

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4938	0	1770	5085	1583	1770	3171	0	2000	3539	1583
Flt Permitted	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Satd. Flow (perm)	1764	4938	0	1766	5085	1517	1754	3171	0	3406	3539	1534
Satd. Flow (RTOR)	32	32	0	374	374	163	163	163	0	163	163	177
Volume (vph)	234	1363	250	386	1226	318	238	222	296	543	443	145
Lane Group Flow (vph)	260	1815	0	431	1442	374	336	730	0	662	540	177
Turn Type	Prot											
Protected Phases	5	2	1	6	1	6	8	8	4	4	4	4
Permitted Phases												
Total Split (s)	30.0	52.0	0.0	16.0	38.0	38.0	20.0	20.0	0.0	42.0	42.0	42.0
Act Effct Green (s)	24.7	49.0	0.0	13.0	37.3	37.3	17.0	17.0	0.0	39.0	39.0	39.0
Actuated g/C Ratio	0.19	0.38	0.0	0.10	0.29	0.29	0.13	0.13	0.0	0.30	0.30	0.30
v/c Ratio	0.77	0.96	0.0	2.44	0.99	0.53	1.45	1.31	0.0	1.10	0.51	0.30
Control Delay	69.0	37.8	684.6	71.1	12.8	264.6	187.3	110.6	395.6	6.2	6.2	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	28.6	0.0	0.0	0.0
Total Delay	69.0	37.8	684.6	71.1	12.8	264.6	188.4	139.4	395.6	6.2	6.2	6.2
LOS	E	D	F	E	B	F	F	F	F	D	D	A
Approach Delay	41.7	179.1	0.0	0.0	0.0	212.4	0.0	0.0	0.0	83.2	0.0	0.0
Approach LOS	D	F	F	F	F	F	F	F	F	F	F	F
Queue Length 50th (ft)	182	457	0.0	617	495	63	384	351	0.0	326	197	0
Queue Length 95th (ft)	m260	m#342	0.0	#773	#512	118	#410	#308	0.0	#384	227	38
Internal Link Dist (ft)	620	420	0.0	210	690	730	195	556	0.0	400	1660	280
Turn Bay Length (ft)	368	1881	0.0	177	1457	702	231	556	0.0	600	1662	584
Base Capacity (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.96	2.44	0.99	0.53	1.45	1.32	1.17	0.51	0.30	0.30	0.30

Intersection Summary
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 50 (38%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.44
 Intersection Signal Delay: 122.7
 Intersection Capacity Utilization: 101.4%
 Analysis Period (min): 15
 User Entered Value

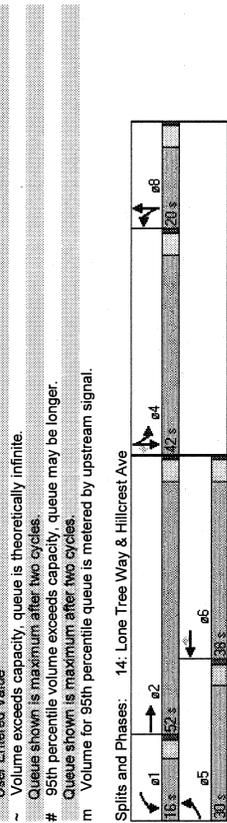


Splits and Phases: 14: Lone Tree Way & Hillcrest Ave
 ~ Volume exceeds capacity, queue is theoretically infinite.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

15: Lone Tree Way & Vista Grande
Antioch Walmart Expansion

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	5049	0	1770	5055	0	1770	1610	0	1770	1649	0
Flt Permitted	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0	0.950	0.950	0.950
Satd. Flow (perm)	1768	5049	0	1769	5055	0	1760	1610	0	1764	1649	0
Satd. Flow (RTOR)	7	7	0	6	6	0	155	155	0	73	73	0
Volume (vph)	40	2035	79	167	1755	62	54	26	124	81	22	54
Lane Group Flow (vph)	41	2179	0	178	1833	0	68	187	0	109	103	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	1	6	1	6	8	8	4	4	4	4
Permitted Phases												
Total Split (s)	25.0	71.0	0.0	25.0	71.0	0.0	34.0	34.0	0.0	34.0	34.0	34.0
Act Effct Green (s)	10.7	79.2	0.0	19.6	90.3	0.0	22.2	22.2	0.0	22.2	22.2	22.2
Actuated g/C Ratio	0.08	0.61	0.0	0.16	0.69	0.0	0.17	0.17	0.0	0.17	0.17	0.17
v/c Ratio	0.28	0.71	0.0	0.67	0.55	0.0	0.34	0.46	0.0	0.34	0.46	0.30
Control Delay	69.8	14.4	581.4	58.1	12.1	49.9	14.0	14.0	0.0	14.0	14.0	14.0
Queue Delay	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.8	15.0	581.4	58.1	12.1	49.9	14.0	14.0	0.0	14.0	14.0	14.0
LOS	E	B	F	E	B	F	D	D	B	E	E	B
Approach Delay	16.1	16.1	0.0	16.0	16.0	0.0	23.6	23.6	0.0	48.4	0.0	0.0
Approach LOS	B	B	F	B	B	F	C	C	D	D	D	D
Queue Length 50th (ft)	37	469	0.0	143	110	0.0	51	23	89	22	0	0
Queue Length 95th (ft)	m32	m535	0.0	237	409	0.0	79	61	114	46	0	0
Internal Link Dist (ft)	200	660	0.0	200	1055	0.0	130	766	100	614	0	0
Turn Bay Length (ft)	300	3080	0.0	305	3512	0.0	277	502	206	449	0	0
Base Capacity (vph)	0	490	0.0	0	0	0.0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0.0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0.0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0.0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.84	0.58	0.55	0.25	0.37	0.53	0.23	0.53	0.23	0.23	0.23

Intersection Summary
 Cycle Length: 730
 Actuated Cycle Length: 130
 Offset: 98 (75%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 17.9
 Intersection Capacity Utilization: 78.9%
 Analysis Period (min): 15
 User Entered Value

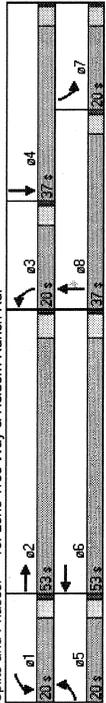


Splits and Phases: 15: Lone Tree Way & Vista Grande
 ~ Volume exceeds capacity, queue is theoretically infinite.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

16: Lone Tree Way & Heidorn Ranch Rd.
Antioch Walmart Expansion

Long-Term + Project
PM Peak

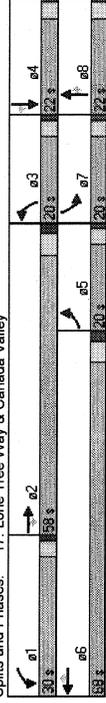
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	1770	4994	0	1770	5068	0	3433	1863	1583	1770	1799	0
Flt Permitted	0.950	0.950	0	0.950	0.950	0	0.950	0.950	0.950	0.950	0.950	0
Satd. Flow (perm)	1769	4994	0	1769	5068	0	3433	1863	1561	1766	1799	0
Satd. Flow (RTOR)	17	17	0	17	17	0	17	17	17	17	17	11
Volume (vph)	9	2041	223	309	1900	33	201	28	289	25	34	10
Lane Group Flow (vph)	9	2368	0	340	2124	0	264	37	380	42	74	0
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	1	6	3	8	7	4				
Permitted Phases	20.0	53.0	0.0	20.0	53.0	0.0	20.0	37.0	20.0	37.0	20.0	0.0
Total Split (s)	8.7	50.0	40.4	90.8	16.1	16.3	16.3	13.5	13.5	13.6		
Act Effect Green (s)	0.07	0.38	0.31	0.70	0.12	0.13	0.13	0.10	0.10	0.10		
Activated g/C Ratio	0.08	1.22	0.62	0.60	0.62	0.16	0.75	0.23	0.37			
Control Delay	79.6	139.6	48.6	7.7	60.9	48.8	15.6	56.1	48.6			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	79.6	139.6	48.6	7.7	60.9	48.8	15.6	56.1	48.6			
LOS	E	F	F	A	D	A	E	D	B	E	D	D
Approach Delay	129.5		13.3		34.9			51.3				
Approach LOS	F		B		C			D				
Queue Length 50th (ft)	8	-897	193	84	109	30	17	32	52			
Queue Length 95th (ft)	m11	#990	m#471	749	129	44	38	47	53			
Internal Link Dist (ft)	1055		905		200	972	200	50	316			
Turn Bay Length (ft)	185	400	400	560	3542	448	487	673	231	479		
Base Capacity (vph)	231	1931	0	0	0	0	0	0	0	0	0	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.04	1.22	0.62	0.60	0.59	0.06	0.56	0.18	0.15			
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	114 (88%)	Referenced to phase 2:EBT and 6:WBT. Start of Yellow										
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	1.22											
Intersection Signal Delay	65.6											
Intersection Capacity Utilization	84.9%											
Analysis Period (min)	15											
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
m Volume for 95th percentile queue is metered by upstream signal.												



17: Lone Tree Way & Canada Valley
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	1603	1504	1770	1863	1583
Flt Permitted	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Satd. Flow (perm)	3432	5085	1584	3428	5085	1589	3428	1603	1481	1765	1863	1562
Satd. Flow (RTOR)	86	86	86	86	86	86	86	86	86	86	86	86
Volume (vph)	129	2043	80	450	1958	472	213	71	371	349	126	63
Lane Group Flow (vph)	139	2197	86	500	2175	524	284	221	369	478	173	86
Turn Type	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot	Prot
Protected Phases	5	2	1	6	3	8	7	4				
Permitted Phases	20.0	58.0	58.0	30.0	68.0	20.0	22.0	22.0	20.0	20.0	22.0	22.0
Total Split (s)	17.0	60.7	60.7	22.8	66.5	15.2	17.5	17.5	17.0	19.3		
Act Effect Green (s)	0.13	0.47	0.47	0.18	0.51	0.51	0.12	0.13	0.13	0.15		
Activated g/C Ratio	0.31	0.93	0.11	0.63	0.84	0.50	0.71	0.87	0.77	2.07		
Control Delay	48.6	32.8	9.6	66.7	23.6	1.9	66.3	75.8	20.5	524.0	62.8	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	32.8	9.6	66.7	23.6	1.9	65.3	75.8	20.5	524.0	62.8	12.4
LOS	D	C	A	E	C	A	E	E	C	F	E	B
Approach Delay	32.8		27.1		49.1							
Approach LOS	C		D		F							
Queue Length 50th (ft)	42	351	13	204	511	21	119	156	35	-634	138	0
Queue Length 95th (ft)	m38	m308	m10	m230	m445	m24	136	200	62	#650	173	26
Internal Link Dist (ft)	320	905	630	400	760	350	150	542	170	1064		
Turn Bay Length (ft)	449	2375	762	713	2601	1056	449	271	493	231	280	308
Base Capacity (vph)	0	0	0	0	15	0	0	0	0	0	0	0
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.93	0.11	0.70	0.84	0.50	0.63	0.82	0.75	2.07	0.62	0.28
Intersection Summary												
Cycle Length	130											
Actuated Cycle Length	130											
Offset	87 (67%)	Referenced to phase 2:EBT and 6:WBT. Start of Yellow										
Control Type	Actuated-Coordinated											
Maximum v/c Ratio	2.07											
Intersection Signal Delay	65.2											
Intersection Capacity Utilization	96.9%											
Analysis Period (min)	15											
Volume exceeds capacity, queue is theoretically infinite.												
Queue shown is maximum after two cycles.												
# 95th percentile volume exceeds capacity, queue may be longer.												
Queue shown is maximum after two cycles.												
m Volume for 95th percentile queue is metered by upstream signal.												

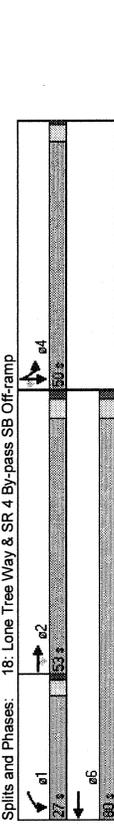


18: Lone Tree Way & SR 4 By-pass SB Off-ramp
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA						
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Flt Permitted		0.9860		0.9860					0.9860	0.9864	
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1688	1583
Satd. Flow (RTOR)	0	2168	605	623	2135	0	0	0	765	13	556
Volume (vph)	0	2436	680	716	2454	0	0	0	430	445	625
Lane Group Flow (vph)		2	1	6	1				4	4	
Turn Type		Perm	Prot						Split	Split	
Protected Phases		2		1	6				4	4	
Permitted Phases		0.0	53.0	27.0	80.0	0.0	0.0	0.0	50.0	50.0	50.0
Total Split (s)		50.0	50.0	24.0	77.0				47.0	47.0	47.0
Act Effct Green (s)		0.38	0.38	0.18	0.69				0.36	0.36	0.36
Actuated g/C Ratio		1.25	0.77	1.13	0.81				0.71	0.73	1.09
v/c Ratio		146.4	13.2	12.15	19.1				43.2	44.3	103.3
Control Delay		0.0	1.3	0.0	0.2				0.0	0.0	0.0
Queue Delay		146.4	14.4	12.15	19.4				43.2	44.3	103.3
Total Delay		F	F	F	B				D	D	F
LOS		F	F	F	B				D	D	F
Approach Delay		117.6		42.4					68.6		
Approach LOS		F		D					E		
Queue Length 50th (ft)		-923	155	-361	457				325	340	-591
Queue Length 95th (ft)		m#662	m152	m#461	486				451	470	#810
Internal Link Dist (ft)		760		760				671			528
Turn Bay Length (ft)		1956	315	310	3012			280	608	610	574
Base Capacity (vph)		0	74	0	118			0	0	0	0
Starvation Cap Reductn		0	0	0	0			0	0	0	0
Spillback Cap Reductn		0	0	0	0			0	0	0	0
Storage Cap Reductn		0	0	0	0			0	0	0	0
Reduced v/c Ratio		1.25	0.84	1.13	0.85				0.71	0.73	1.09

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 105 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.25
Intersection LOS: E
Intersection Capacity Utilization 91.2%
Analysis Period (min): 15
Volume exceeds capacity, queue is theoretically infinite.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



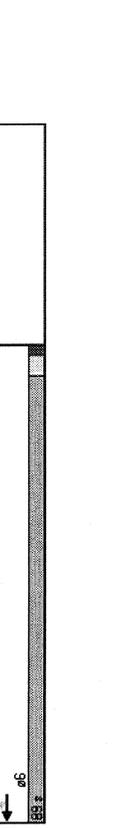
Splits and Phases: 18: Lone Tree Way & SR 4 By-pass SB Off-ramp

19: Lone Tree Way & SR 4 By-pass NB On-ramp
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	AAA	AAA	AAA	AAA	AAA						
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Satd. Flow (prot)	0	5085	1583	3433	5085	0	0	0	1681	1695	1583
Flt Permitted		0.9860		0.9860					0.9860	0.9868	
Satd. Flow (perm)	0	5085	1583	3433	5085	0	0	0	1681	1695	1583
Satd. Flow (RTOR)	0	2397	545	58	2170	751	599	43	442	0	0
Volume (vph)	0	2550	590	65	2438	844	386	407	546	0	0
Lane Group Flow (vph)		2	1	6	1				8		
Turn Type		Perm	Prot						Split	Split	
Protected Phases		2		1	6				8	8	
Permitted Phases		0.0	64.0	25.0	89.0	41.0	41.0	41.0	41.0	41.0	0.0
Total Split (s)		80.0	80.0	8.0	89.0	89.0	35.0	35.0	35.0	35.0	0.0
Act Effct Green (s)		0.62	0.62	0.06	0.68	0.68	0.27	0.27	0.27	0.27	0.0
Actuated g/C Ratio		0.81	0.53	0.31	0.70	0.64	0.85	0.89	0.89	0.86	
v/c Ratio		9.1	0.8	62.0	14.3	3.0	63.1	67.9	38.1		
Control Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay		9.1	0.8	62.0	14.3	3.0	63.1	67.9	38.1		
Total Delay		A	A	E	B	A	E	E	D		
LOS		A	A	E	B	A	E	E	D		
Approach Delay		7.6		12.4					53.1		
Approach LOS		A		B					D		
Queue Length 50th (ft)		428	0	27	453	0	314	336	216		
Queue Length 95th (ft)		m425	m5	51	494	38	386	410	289		
Internal Link Dist (ft)		760		620					835		1166
Turn Bay Length (ft)		3130	1091	581	3461	1324	491	495	662		
Base Capacity (vph)		0	0	0	0	0	0	0	0	0	0
Starvation Cap Reductn		0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn		0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn		0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio		0.81	0.53	0.11	0.70	0.64	0.79	0.82	0.82		

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 10 (6%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection LOS: B
Intersection Capacity Utilization 80.6%
Analysis Period (min): 15
m Volume for 95th percentile queue is metered by upstream signal.



Splits and Phases: 19: Lone Tree Way & SR 4 By-pass NB On-ramp

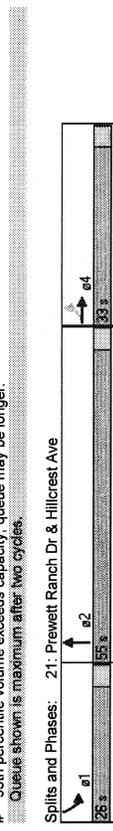
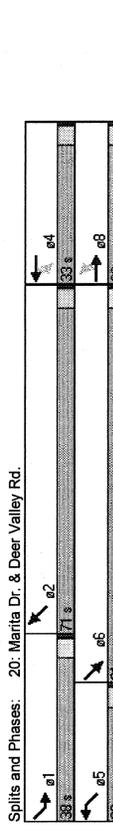
20: Marita Dr. & Deer Valley Rd.
Antioch Walmart Expansion

21: Prewett Ranch Dr & Hillcrest Ave
Antioch Walmart Expansion

Long-Term + Project
PM Peak

Long-Term + Project
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Total Lost Time (s)	1770	1583	0	1770	1602	0	1770	3520	0	1770	3539	0
Satd. Flow (prot)	0.539	0	0.753	0	0.960	0	0.960	0	0.960	0	0.960	0
Fit Permitted	1004	1583	0	1403	1602	0	1766	3520	0	1760	3539	0
Satd. Flow (perm)	13	0	5	23	6	87	26	1137	29	25	1178	3
Satd. Flow (RTOR)	19	7	0	33	133	0	33	1495	0	27	1283	0
Volume (vph)	Perm	8	4	1	6	2						
Lane Group Flow (vph)	33.0	33.0	0.0	33.0	33.0	0.0	38.0	81.0	0.0	28.0	71.0	0.0
Turn Type	Permitted Phases	4										
Protected Phases	8											
Permitted Phases	33.0	33.0	0.0	33.0	33.0	0.0	38.0	81.0	0.0	28.0	71.0	0.0
Total Split (s)	10.3	10.3	0.0	10.3	10.3	0.0	9.6	84.7	0.0	9.3	84.4	0.0
Act Effct Green (s)	0.09	0.09	0.00	0.09	0.09	0.00	0.08	0.76	0.00	0.08	0.76	0.00
Actuated g/C Ratio	0.25	0.25	0.00	0.25	0.25	0.00	0.22	0.55	0.00	0.19	0.47	0.00
v/c Ratio	49.4	0.0	49.0	16.7	49.2	6.8	48.9	6.1	0.0	48.9	6.1	0.0
Control Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Queue Delay	49.4	0.0	49.0	16.7	49.2	6.8	48.9	6.1	0.0	48.9	6.1	0.0
Total Delay	D	A	D	B	D	A	D	A	D	D	A	A
LOS	D	A	D	B	D	A	D	A	D	D	A	A
Approach Delay	36.1	23.1	7.8	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Approach LOS	D	C	C	A	A	A	A	A	A	A	A	A
Queue Length 50th (ft)	12	0	21	6	21	207	46	258	17	164	47	265
Queue Length 95th (ft)	27	0	40	29	46	525	46	525	17	164	47	265
Internal Link Dist (ft)	345	0	427	0	427	0	427	0	427	0	427	0
Turn Bay Length (ft)	40	100	125	100	125	175	100	125	175	100	125	175
Base Capacity (vph)	235	581	328	470	448	2738	345	2744	345	2744	345	2744
Starvation Cap Reductn	0	0	0	0	0	188	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.01	0.10	0.28	0.07	0.59	0.07	0.59	0.08	0.47	0.08	0.47
Intersection Summary												
Cycle Length	142											
Actuated Cycle Length	108.9											
Control Type	Actuated-Uncoordinated											
Maximum v/c Ratio	0.55											
Intersection Signal Delay	8.5											
Intersection LOS	A											
Intersection Capacity Utilization	47.3%											
ICU Level of Service	A											
Analysis Period (min)	15											



SIGNAL WARRANT ANALYSIS

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Northeast Driveway & Hillcrest Avenue, Antioch, CA

COUNT DATE: Existing

MAJOR STREET: Hillcrest Avenue

OF APPROACH LANES: 2

MINOR STREET: Northeast Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	1,066	10	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	924	7	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	1,990	17			0		0	0	0	
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Southeast Driveway & Hillcrest Avenue, Antioch, CA

COUNT DATE: Existing

MAJOR STREET: Hillcrest Avenue

OF APPROACH LANES: 2

MINOR STREET: Southeast Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	1,085	60	Y			Y	Y	Y		
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	972	125	Y	Y	Y	Y	Y	Y	Y	
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	2,057	185	1			2			2	1
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Lone Tree Way & Walmart Driveway, Antioch, CA

COUNT DATE: Existing

MAJOR STREET: Lone Tree Way

OF APPROACH LANES: 3

MINOR STREET: Walmart Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
08:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	1,875	5	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	1,933	37	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	3,808	42	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Prewett Ranch Drive & Hillcrest Avenue, Antioch, CA

COUNT DATE: Existing

MAJOR STREET: Hillcrest Avenue

OF APPROACH LANES: 2

MINOR STREET: Prewett Ranch Drive

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	124	156		Y			Y			
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	149	158		Y			Y			
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	273	314	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Northeast Driveway & Hillcrest Avenue, Antioch, CA

COUNT DATE: Near Term

MAJOR STREET: Hillcrest Avenue

OF APPROACH LANES: 2

MINOR STREET: Northeast Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	1,280	10	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	1,204	7	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	2,484	17	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Lone Tree Way & Walmart Driveway, Antioch, CA

COUNT DATE: Near Term

MAJOR STREET: Lone Tree Way

OF APPROACH LANES: 3

MINOR STREET: Walmart Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	2,632	5	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	2,856	37	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	5,488	42	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Northeast Driveway & Hillcrest Avenue, Antioch, CA

COUNT DATE: Near + Project Term

MAJOR STREET: Hillcrest Avenue

OF APPROACH LANES: 2

MINOR STREET: Northeast Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	1,317	14	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	1,210	26	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	2,527	40	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Lone Tree Way & Walmart Driveway, Antioch, CA

COUNT DATE: Near + Proj Term

MAJOR STREET: Lone Tree Way

OF APPROACH LANES: 3

MINOR STREET: Walmart Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROAC HES	MINOR ST HIGHEST APPROAC H	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	2,697	5	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	2,868	44	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	5,565	49	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Northeast Driveway & Hillcrest Avenue, Antioch, CA

COUNT DATE: Cumulative Term

MAJOR STREET: Hillcrest Avenue

OF APPROACH LANES: 2

MINOR STREET: Northeast Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	1,646	10	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	1,769	7	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	3,415	17	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Lone Tree Way & Walmart Driveway, Antioch, CA

COUNT DATE: Cumulative Term

MAJOR STREET: Lone Tree Way

OF APPROACH LANES: 3

MINOR STREET: Walmart Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	3,295	5	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	3,384	38	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	6,679	43	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Northeast Driveway & Hillcrest Avenue, Antioch, CA

COUNT DATE: Cumulative + Project Term

MAJOR STREET: Hillcrest Avenue

OF APPROACH LANES: 2

MINOR STREET: Northeast Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	1,687	10	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	1,776	7	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	3,463	17	0			0			0	0
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Lone Tree Way & Walmart Driveway, Antioch, CA

COUNT DATE: Cumulative + Project Term

MAJOR STREET: Lone Tree Way

OF APPROACH LANES: 3

MINOR STREET: Walmart Driveway

OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): N

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y

	MAJOR ST BOTH APPROACHES	MINOR ST HIGHEST APPROACH	Warrant 1 - Condition A			Warrant 1 - Condition B			WARRANT 2	WARRANT 3
			MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53			
06:00 AM TO 07:00 AM										
07:00 AM TO 08:00 AM	3,363	5	Y			Y				
08:00 AM TO 09:00 AM										
09:00 AM TO 10:00 AM										
10:00 AM TO 11:00 AM										
11:00 AM TO 12:00 PM										
12:00 PM TO 01:00 PM										
01:00 PM TO 02:00 PM										
02:00 PM TO 03:00 PM										
03:00 PM TO 04:00 PM										
04:00 PM TO 05:00 PM										
05:00 PM TO 06:00 PM	3,396	45	Y			Y				
06:00 PM TO 07:00 PM										
07:00 PM TO 08:00 PM										
08:00 PM TO 09:00 PM										
09:00 PM TO 10:00 PM										
	6,759	50			0		0	0	0	
			8 HOURS NEEDED NOT SATISFIED			8 HOURS NEEDED NOT SATISFIED			4 HRS NEEDED NOT SATISFIED	1 HR NEEDED NOT SATISFIED

WARRANT 1 - Condition A -- Minimum Vehicular Volume Warrant (8 hours)

WARRANT 1 - Condition B -- Interruption of Continuous Traffic Warrant (8 hours)

WARRANT 2 -- Four Hour Volume Warrant - Figure 4C-2

WARRANT 3 -- Peak Hour Volume Warrant - Figure 4C-4

Conditions: Based on 2000 MUTCD

QUEUING SUMMARY

Antioch Wal-Mart Expansion Queuing Summary

Scenarios Analyzed	Country Hills #6		Deer Valley Plaza #7		Deer Valley Road #8		Pinnacle #9		Sagebrush Drive #10		Williamson Ranch Plaza #11		Indian Hill Drive #12		Loma Tree Way #13		Diversity #13		Hilcrest Avenue #14		Vista Grande Drive #15		Hudson Ranch Road #16		Canada Valley Road #17		SR4 Business Ramps #18		Jeffrey Way #19		Country Hills Dr #20		Dear Valley Rd #20		Laval Road #21		Hilcrest Avenue Country Hills Drive #21											
	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM	Lnk	AM	PM									
Existing Traffic	EBL	145	25	166	195	72	139	145	146	53	155	76	105	170	52	103	205	205	202	200	39	29	185	<25	<25	300	82	72	145	95	123	40	51	26	75	137	24	120	78	80								
	EBR	75	35	93	100	<25	75	133	100	80	<25	80	<25	80	<25	25	205	<25	<25	75	<25	<25	630	<25	<25	315	50	93	215	35	82	100	<25	40	175	55	42	90	135	57								
	WBL	145	110	136	200	72	145	195	208	218	150	127	56	140	35	76	255	49	84	200	105	163	400	92	285	110	177	175	51	69	280	<25	25	170	<25	44	31	155	129	131								
	WBR	75	<25	<25	75	121	165	115	<25	<25	115	<25	<25	80	<25	235	<25	195	80	34	130	66	56	205	<25	63	75	34	63	210	264	281	175	27	<25	175	97	32	150	82	46	155	129	131				
Near-Term Traffic	NBL	170	145	141	180	172	127	115	133	116	200	<25	200	<25	200	<25	200	187	269	100	41	64	50	37	<25	160	310	275	200	162	227	125	113	135	125	188	46	155	92	158	102	154						
	NBR	120	85	82	150	108	100	39	<25	200	<25	200	<25	200	<25	200	<25	200	40	37	170	<25	<25	170	<25	<25	300	41	86	145	110	265	40	51	26	75	137	<25	120	79	81	100	49					
	SBL	145	146	165	195	71	140	145	109	37	155	100	121	170	64	122	620	304	285	200	37	<25	165	<25	<25	300	41	86	630	<25	25	315	83	119	215	40	<25	170	<25	120	79	81	100	49				
	SBR	75	43	89	100	<25	400	167	111	80	<25	80	<25	80	<25	200	210	75	138	200	126	231	400	107	89	285	114	173	175	112	165	280	<25	25	120	178	88	100	<25	40	175	69	52	90	141	81	120	<25
Near-Term + Project Traffic	EBL	145	146	165	195	71	140	145	109	37	155	100	121	170	64	122	620	304	281	200	43	<25	165	<25	<25	300	41	86	630	<25	25	315	82	119	215	39	<25	170	<25	120	79	81	100	50				
	EBR	75	43	89	100	<25	400	167	111	80	<25	80	<25	80	<25	200	210	75	138	200	126	231	400	107	89	285	114	173	175	112	165	280	<25	25	120	178	88	100	<25	40	175	69	52	90	141	81	120	<25
	WBL	145	161	178	200	<25	127	500	318	533	150	132	54	600	212	73	210	75	138	200	126	231	400	107	89	285	114	173	175	112	165	280	<25	25	120	178	88	100	<25	40	175	69	52	90	141	81	120	<25
	WBR	75	<25	26	400	79	176	115	<25	<25	115	<25	<25	80	<25	235	<25	195	173	97	130	94	72	200	26	67	150	39	75	210	302	381	175	29	<25	175	97	32	150	82	48	155	148	149	85	<25		
Long-Term Traffic	NBL	170	153	141	180	228	242	115	133	116	200	<25	200	<25	200	<25	200	187	269	100	41	64	50	37	<25	160	310	275	200	162	227	125	113	135	125	188	46	155	92	158	102	154						
	NBR	120	85	82	150	108	100	39	<25	200	<25	200	<25	200	<25	200	<25	200	40	37	170	<25	<25	170	<25	<25	300	41	86	145	110	265	40	51	26	75	137	<25	120	79	81	100	50					
	SBL	145	146	165	195	71	140	145	109	37	155	100	121	170	64	122	620	304	281	200	43	<25	165	<25	<25	300	41	86	630	<25	25	315	82	119	215	39	<25	170	<25	120	79	81	100	50				
	SBR	75	43	89	100	<25	400	167	111	80	<25	80	<25	80	<25	200	210	75	138	200	126	231	400	107	89	285	114	173	175	112	165	280	<25	25	120	178	88	100	<25	40	175	69	52	90	141	81	120	<25
Long-Term Project Traffic	EBL	145	146	165	195	71	140	145	109	37	155	100	121	170	64	122	620	304	281	200	43	<25	165	<25	<25	300	41	86	630	<25	25	315	82	119	215	39	<25	170	<25	120	79	81	100	50				
	EBR	75	43	89	100	<25	400	167	111	80	<25	80	<25	80	<25	200	210	75	138	200	126	231	400	107	89	285	114	173	175	112	165	280	<25	25	120	178	88	100	<25	40	175	69	52	90	141	81	120	<25
	WBL	145	161	178	200	<25	127	500	318	533	150	132	54	600	212	73	210	75	138	200	126	231	400	107	89	285	114	173	175	112	165	280	<25	25	120	178	88	100	<25	40	175	69	52	90	141	81	120	<25
	WBR	75	<25	26	400	79	176	115	<25	<25	115	<25	<25	80	<25	235	<25	195	173	97	130	94	72	200	26	67	150	39	75	210	302	381	175	29	<25	175	97	32	150	84	49	155	148	149	85	<25		

