



MEMORANDUM

Date: September 20, 2010

To: Mr. Ray Pyle, Contra Costa Community College District

From: Ellen Robinson, P.E.

Subject: *Brentwood Center Environmental Analysis Update*

WC10-2704

Fehr & Peers prepared the following supplemental traffic analysis for the proposed Brentwood Center (Project), a Community College with an expected maximum enrollment of 5,000 students, proposed within Pioneer Square of the Vineyards at Marsh Creek, located in Brentwood. The Project was previously approved for development on a site south of Marsh Creek Road (southern site), west of the State Route 4 bypass and a full transportation analysis of that site was previously included in the *Vineyards at Marsh Creek Environmental Impact Report (EIR)*. The current proposal would relocate the Project to a site north of Marsh Creek Road within the Vineyards development, which was previously approved for a mixed use development. Because the entitlements for the previously approved college site would not be changed as part of the project, college uses were assumed for the southern site under cumulative conditions. This memorandum addresses four specific areas and is intended to supplement the previous environmental work:

1. Project Description
2. Setting
3. Trip Generation, Distribution and Assignment
4. Project Impacts and Mitigations

Six study scenarios were evaluated:

1. ***Existing*** – Existing (2010) conditions from recent traffic counts
2. ***Near-Term No Project*** – Near-Term future conditions with existing traffic plus additional traffic from proposed, pending and approved developments in the City of Brentwood, including the Vineyards development as analyzed in the *Vineyards at Marsh Creek EIR*
3. ***Near-Term Plus Project Phase 1*** – Near-Term future conditions with existing traffic, additional traffic from proposed, pending and approved developments, and the Vineyards development as modified by the Project, including the Phase 1 of the community college
4. ***Near-Term Plus Project Build-out*** – Near-Term future conditions with existing traffic, additional traffic from proposed, pending and approved developments, and the Vineyards development as modified by the Project, including full build out of the community college
5. ***Cumulative No Project*** – Future (2035) forecast conditions that consider build out of the City of Brentwood General Plan and planned roadway improvements, including the Vineyards development as analyzed in the *Vineyards at Marsh Creek EIR*

6. **Cumulative Plus Project** – Future (2035) forecast conditions with traffic from full build out of the Project

1. PROJECT DESCRIPTION

The proposed Brentwood Center Community College comprises two two-story buildings (each with 22,000 square feet) north of Marsh Creek Road within the Vineyards at Marsh Creek Site at Pioneer Square. **Figure 1** shows the conceptual project site plan. The project would be constructed in two phases, with one building completed in Phase 1, and the second in Phase 2. Planned enrollment for Phase 1 is 2,500 full-time equivalent (FTE) students and 5,000 FTE students at buildout. The project site is currently approved for 16.5 acres of mixed-use development.

2. SETTING

This section describes the existing and projected future transportation setting of the Brentwood Center Community College project.

Study Area

The proposed Project site location is shown on **Figure 2**. The site is at the southern end of the City of Brentwood, northwest of the intersection of the State Route 4 (SR 4) Bypass and Marsh Creek Road.

Existing Roadway Network

The following describes the major roadways in the vicinity of the Project:

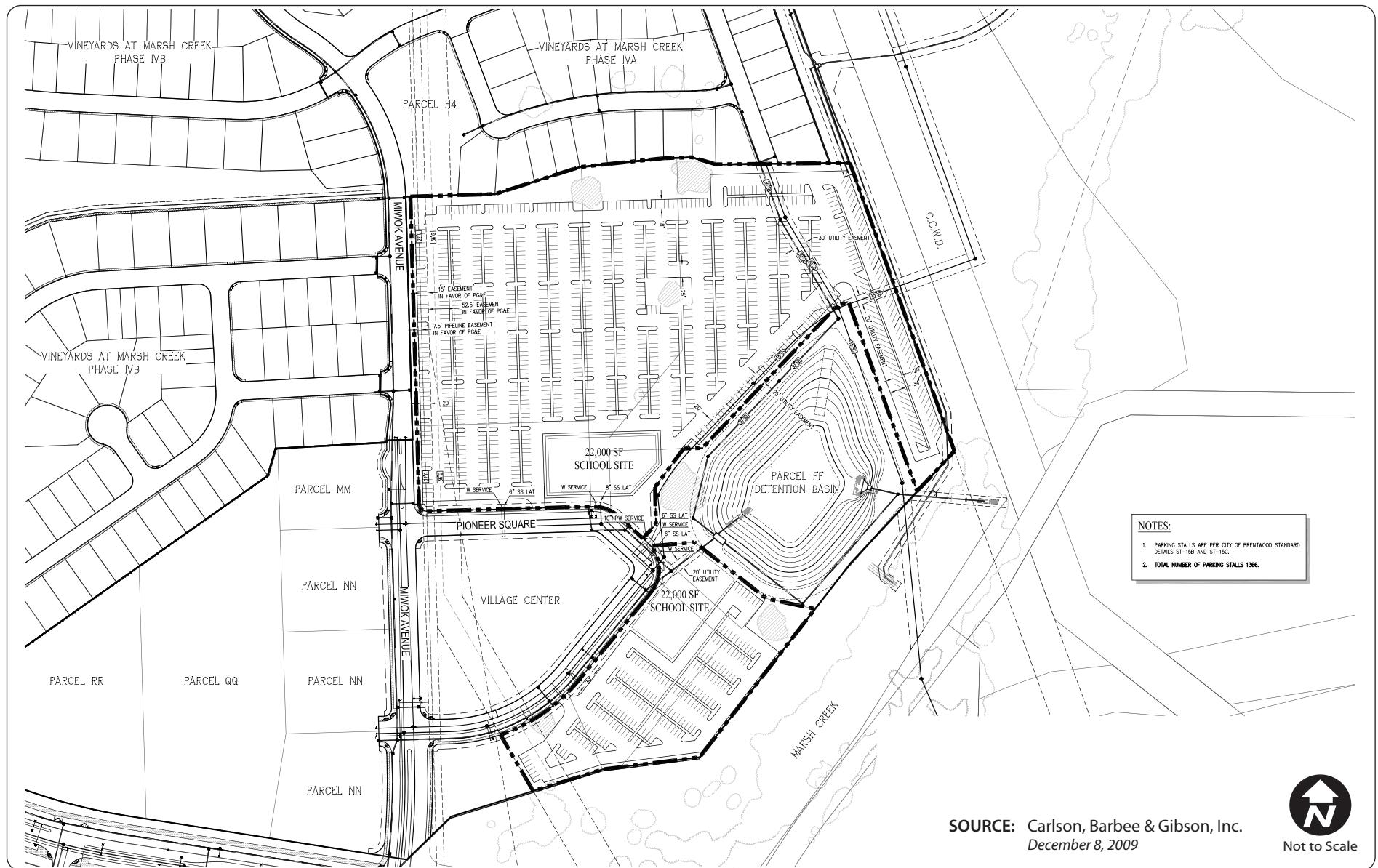
SR 4 Bypass is a north-south roadway that connects SR 4 in Antioch to Vasco Road south of Brentwood. In the project vicinity, SR 4 Bypass is a two-lane expressway with a 55-mile per hour speed limit and grade separation at Fairview Avenue. Additional lanes are provided at the intersection with Marsh Creek Road, where the SR 4 bypass becomes Vasco Road, to provide additional capacity. The SR 4 Bypass is a designated Route of Regional Significance, as defined by the Contra Costa County Transportation Authority (CCTA).

Concord Avenue is a curving north-south/east-west oriented rural roadway that connects Fairview Avenue to Walnut Avenue. This roadway provides one lane per direction with a speed limit of 45 MPH. The portion of Concord Avenue north of Fairview Avenue has been replaced by John Muir Parkway.

John Muir Parkway is a developing north-south arterial connection between Fairview Avenue and Balfour Road, generally paralleling SR 4 Bypass and replacing the northern portion of Concord Avenue. John Muir Parkway provides one travel lane in each direction, and has a speed limit of 35 miles per hour.

Marsh Creek Road is an east-west oriented rural roadway connecting far East Contra Costa County (i.e. Discovery Bay) with Central County (i.e. Clayton and Concord). It parallels Balfour Road for much of its length through Brentwood. The roadway currently provides one lane per direction. Marsh Creek Road is a designated Route of Regional Significance.

Vasco Road is a two-lane rural roadway connecting the East County area to Livermore and other elements of the regional freeway system. The posted speed limit on Vasco Road is 45 to 55 MPH.



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March 2010
WC10-2704_1_SitePlan

PROJECT SITE PLAN

FIGURE 1

Vineyards Parkway is a developing continuation of Fairview Avenue which will extend to a signalized intersection with Marsh Creek Road. Vineyards Parkway provides one traffic lane in each direction, and will act as the main collector roadway through the Vineyards at Marsh Creek development.

Study Intersections

The EIR assessed the near-term and long-term operations of 18 intersections. In the near-term condition, impacts were identified at 4 intersections. The improvements identified in the EIR have been constructed at those locations. In the long-term scenario, the 18 study intersections were projected to operate at acceptable service levels with planned roadway improvements. Therefore, this assessment focuses on intersections in the immediate vicinity of the project site that could potentially be impacted with the proposed changes in traffic patterns in the area due to the relocation of the Community College to Pioneer Square. The following intersections have been identified for inclusion in this assessment:

1. John Muir Parkway/Fairview Avenue
2. Fairview Avenue/Concord Avenue
3. SR 4 Bypass/Marsh Creek Road
4. Marsh Creek Road/Vineyards Parkway (future intersection)

The location of the intersections in relation to the Campus is shown on **Figure 2**. The three existing intersections are signalized. The study intersections were analyzed using the methodology presented in the Contra Costa Transportation Authority's (CCTA) Technical Procedures Update (July 2006). This methodology is described below.

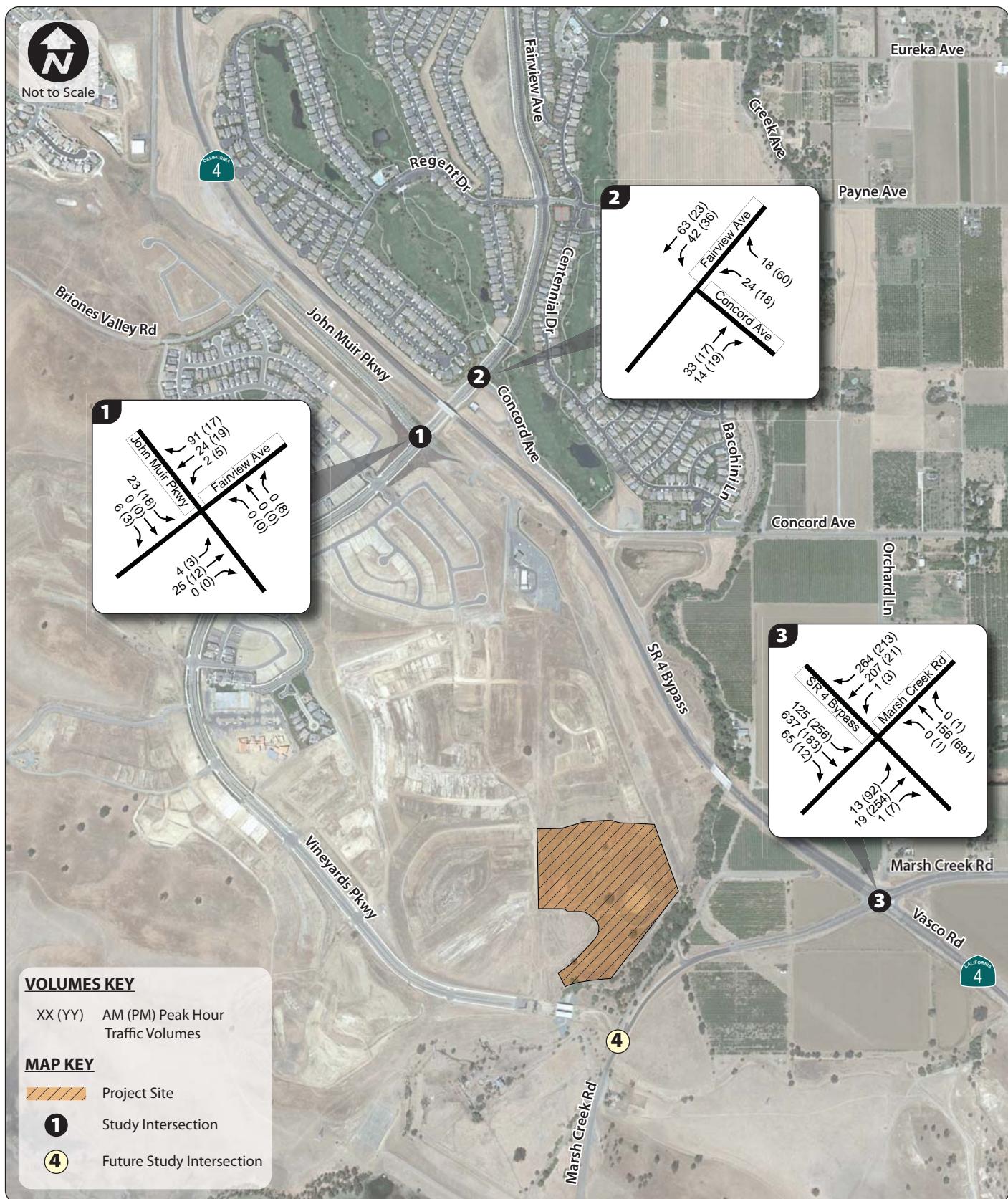
Transportation engineers and planners use the term level of service (LOS) to qualitatively describe the operations of transportation facilities. Level of service ranges from LOS A, indicating free-flow conditions with little or no delay) to LOS F (representing oversaturated conditions with excessive delays). LOS E describes conditions at capacity. The CCTA method uses various intersection characteristics (such as traffic volumes, lane geometry, and signal phasing) to estimate an intersection's volume-to-capacity (V/C) ratio. Table A1 in Attachment A summarizes the relationship between the V/C ratio and LOS for signalized intersections.

For unsignalized (all-way stop-controlled and side-street stop-controlled) intersections, the *Highway Capacity Manual* (Transportation Research Board, 2000) methodology for unsignalized intersections was utilized. With this methodology, operations are defined by the average control delay per vehicle (measured in seconds) for each stop-controlled movement. This incorporates delay associated with deceleration, acceleration, stopping and moving up in the queue. For side-street stop-controlled intersections, the delay is presented for the worst stop-controlled movement. The relationship between average vehicle delay and LOS at unsignalized intersections is summarized in Table A2 in Attachment A.

The CCTA's *Technical Procedures Update* (July 2006) and the *East County Action Plan Final 2000 Update* provide LOS standards for signalized intersections on Non-regional Routes. The study area is categorized as a Special Planning Area in the City of Brentwood General Plan (updated March 2009), with a planned mix of land uses consistent with suburban development. Acceptable LOS for suburban, Non-regional Routes is a mid-LOS D, or a V/C ratio of 0.85 or lower. The John Muir Parkway/Fairview Avenue and Fairview Avenue/Concord Avenue intersections are located on Non-regional Routes, and are therefore subject to this standard.



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The 2009 *East County Action Plan Update* identifies Marsh Creek Road as a Route of Regional Significance. Marsh Creek Road is currently classified as a Non-Signalized Rural Road, and with the completion of the signalized intersection with Vineyards Parkway, would likely be reclassified as a Signalized Suburban Arterial Route in the Project vicinity. The minimum acceptable peak hour level of service for both classifications is mid-LOS D, or a V/C ratio of 0.85 or lower. This standard applies to the SR-4 Bypass/Marsh Creek Road intersection.

Existing Conditions

Traffic counts were conducted at the three existing study intersections during the morning (7:00 AM to 9:00 AM) and evening (4:00 PM to 6:00 PM) periods in February 2010 on a typical weekday with schools in normal session. Based on the observed traffic volumes, a morning (AM) and evening (PM) peak hour was identified for each of the study intersections. The AM and PM peak hour traffic volumes for the study intersections are shown on **Figure 2**. The existing intersection lane geometries and type of traffic control are shown on **Figure 3**.

The peak hour traffic volumes and existing lane geometry and signal timings were used to analyze the existing Level of Service at the study intersections. The peak hour LOS results are shown in **Table 3**. All of the study intersections currently operate at acceptable Level of Service A during both the AM and PM peak hours.

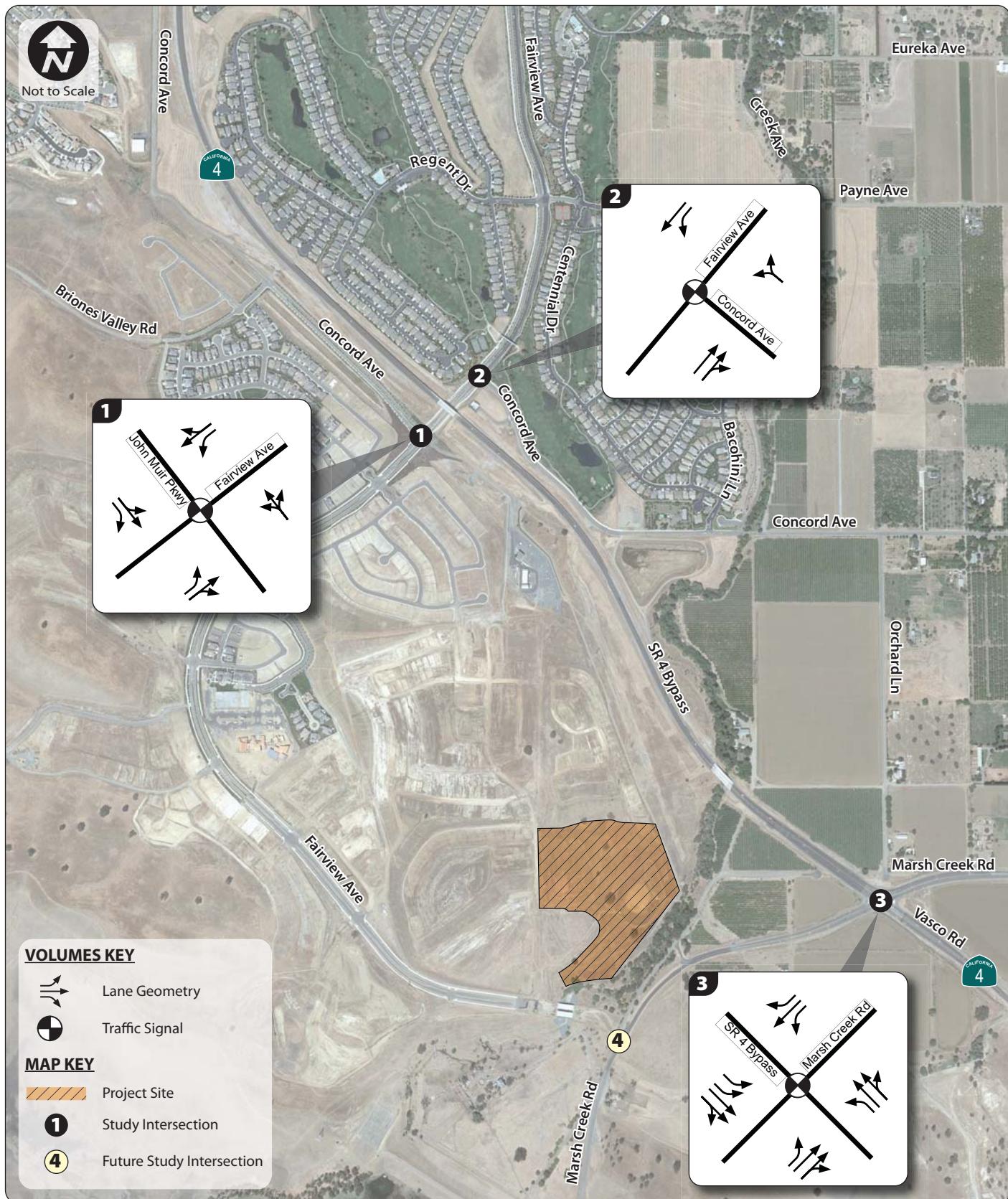
TABLE 3 EXISTING (2010) PEAK HOUR LEVEL OF SERVICE				
Location	Control	Peak Hour	V/C Ratio ¹	LOS
1. John Muir Parkway/Fairview Avenue	Signal	AM	0.11	A
		PM	0.04	A
2. Fairview Avenue/Concord Avenue	Signal	AM	0.09	A
		PM	0.11	A
3. SR 4 Bypass/Marsh Creek Road	Signal	AM	0.39	A
		PM	0.43	A

1. Volume-to-Capacity ratio determined for all signalized intersections using the CCTA LOS methodology.
Source: Fehr & Peers, 2010

3. VINEYARDS DEVELOPMENT TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Trip generation for the community college was based on the planned enrollment for each Phase. Fehr & Peers has conducted trip generation studies of five community colleges across California since 2002. These rates were averaged to produce estimated AM and PM peak hour rates per FTE student, as presented in **Table 4**. These rates are compared to the junior college trip generation rates from ITE's *Trip Generation*, 6th and 8th Editions. The 6th Edition ITE rate was assumed in the program-level analysis in the Vineyards at Marsh Creek EIR.

The rate observed at California community colleges is higher than either of the ITE *Trip Generation* rates. Conservatively, this rate was used to estimate the daily and peak hour trips generated by the Project. **Table 5** shows the application of these rates to determine daily and peak hour trips associated with each phase of the Project.



Brentwood Community College

**TABLE 4
 COMMUNITY COLLEGE TRIP GENERATION RATES COMPARISON**

Source	Daily Rate per FTE	AM Peak Hour Rate per FTE	PM Peak Hour Rate per FTE
ITE <i>Trip Generation</i> , 6 th Edition ¹	1.54	0.14	0.17
ITE <i>Trip Generation</i> , 8 th Edition ¹	1.20	0.12	0.12
California Community Colleges	2.23	0.18	0.15
1. Average rates for Land Use 540, Junior College, per student.			
Source: Fehr & Peers, 2010			

**TABLE 5
 COMMUNITY COLLEGE TRIP GENERATION RATES COMPARISON**

	FTE Students	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			Total	In	Out	Total	In	Out
California Community Colleges Trip Generation Rate per FTE		2.23	0.18	76%	24%	0.15	63%	37%
Phase 1	2,500	5,575	450	342	108	375	236	139
Phase 2	2,500	5,575	450	342	108	375	236	139
Total College Build Out	5,000	11,150	900	684	216	750	473	277

Source: Fehr & Peers, 2010

ITE Trip Generation 8th Edition trip rates were applied to the market rate housing and commercial uses. Trip generation rates for Active Adult housing of 0.33 trips per dwelling unit in the AM peak hour and 0.44 in the PM peak hour were assumed, consistent with the EIR analysis. At the time the existing traffic counts were conducted, 111 residences had been constructed at the site, and trips associated with these units were not included in the Vineyards trip generation. **Table 6** shows the trip generation for the approved Vineyards development.

**TABLE 6
 VINEYARDS TRIP GENERATION**

Land Use	Size	AM Peak Hour Trips			PM Peak Hour Trips		
		Total	In	Out	Total	In	Out
Pioneer Square Area							
Retail ¹	60,150 sf	114	70	44	453	222	231
Civic ²	10,000 sf	10	7	3	73	35	38
Office ³	30,000 sf	72	63	9	112	19	93
Hotel ⁴	150 rooms	68	41	27	89	47	42
Winery ⁵	112,000 sf	9	4	5	28	4	24
Assisted Living ⁶	200,000 sf	22	14	8	44	19	25

TABLE 6
VINEYARDS TRIP GENERATION

Land Use	Size	AM Peak Hour Trips			PM Peak Hour Trips		
		Total	In	Out	Total	In	Out
Senior Apartments ⁷	350 du	116	42	74	154	55	99
<i>Pioneer Square Subtotal</i>		411	241	170	953	401	552
Single-Family Active Adult Housing ⁷	1,100 du	363	131	232	484	174	310
Market Rate Single-Family Housing ⁸	39 du	37	9	28	45	28	17
Community College ⁹	5,000 FTE students	900	684	216	750	473	277
Total Vineyards Development		1,711	1,065	646	2,232	1,076	1,156

Notes:

sf = square feet

du = dwelling units

FTE = full time equivalent

1. Trip generation based on the rates for Shopping Center (Land Use 820) in the Institute of Transportation Engineers' (ITE) Trip Generation (8th Edition), as presented below.
 AM Rate: $\ln(T) = 0.59 \ln(X) + 2.32$ (inbound = 61%, outbound = 39%)
 PM Rate: $\ln(T) = 0.67 \ln(X) + 3.37$ (inbound = 49%, outbound = 51%)
 Where: T = trip ends and X = thousands of square feet gross leasable area.
2. Trip generation based on the average rates for Library (Land Use 590) in the Institute of Transportation Engineers' (ITE) Trip Generation (8th Edition), as presented below.
 AM Rate: $T = 1.04(X)$ (inbound = 71%, outbound = 29%)
 PM Rate: $T = 7.3(X)$ (inbound = 48%, outbound = 52%)
 Where: T = trip ends and X = thousands of square feet gross floor area.
3. Trip generation based on the rates for General Office Building (Land Use 710) in the Institute of Transportation Engineers' (ITE) Trip Generation (8th Edition), as presented below.
 AM Rate: $\ln(T) = 0.80 \ln(X) + 1.55$ (inbound = 88%, outbound = 12%)
 PM Rate: $T = 1.12(X) + 78.81$ (inbound = 17%, outbound = 83%)
 Where: T = trip ends and X = thousands of square feet gross floor area.
4. Trip generation based on the rates for Hotel (Land Use 310) in the Institute of Transportation Engineers' (ITE) Trip Generation (8th Edition), as presented below.
 AM Rate: $\ln(T) = 1.24 \ln(X) + 2.00$ (inbound = 61%, outbound = 39%)
 PM Rate: $T = 0.59(X)$ (inbound = 53%, outbound = 47%)
 Where: T = trip ends and X = rooms.
5. Based on trip generation study for Wente Winery in Livermore, California.
6. Taken from Sunrise Assisted Living Trip Generation Study
7. Taken from Brentwood Active Adult Housing Traffic Fee Review (Fehr & Peers, December 1998). Rate per dwelling unit.
8. Trip generation based on the average rates for Single Family Detached Housing (Land Use 210) in the Institute of Transportation Engineers' (ITE) Trip Generation (8th Edition), as presented below.
 AM Rate: $T = 0.75(X)$ (inbound = 25%, outbound = 75%)
 PM Rate: $T = 1.01(X)$ (inbound = 63%, outbound = 37%)
 Where: T = trip ends and X = dwelling units.
9. See Table 5 for Community College trip generation rates.

Source: ITE, 2009; Fehr & Peers, 2010

As shown in **Table 6**, the approved Vineyards development would generate 1,711 AM peak hour trips and 2,232 PM peak hour trips. The trip distribution for residential and commercial development is consistent with that used in the *Vineyards at Marsh Creek EIR*, and is based on a weighted distribution of existing and future traffic volumes.

Distribution of community college trips for both the proposed Project and the previously approved college site was determined based on the expected enrollment area from which students would be drawn. This area includes the City of Brentwood and Discovery Bay, as well as portions of Oakley and Antioch. The majority of community college trips are expected to travel to and from the north of the Project site. Trip distribution percentages are shown on **Figure 4**.

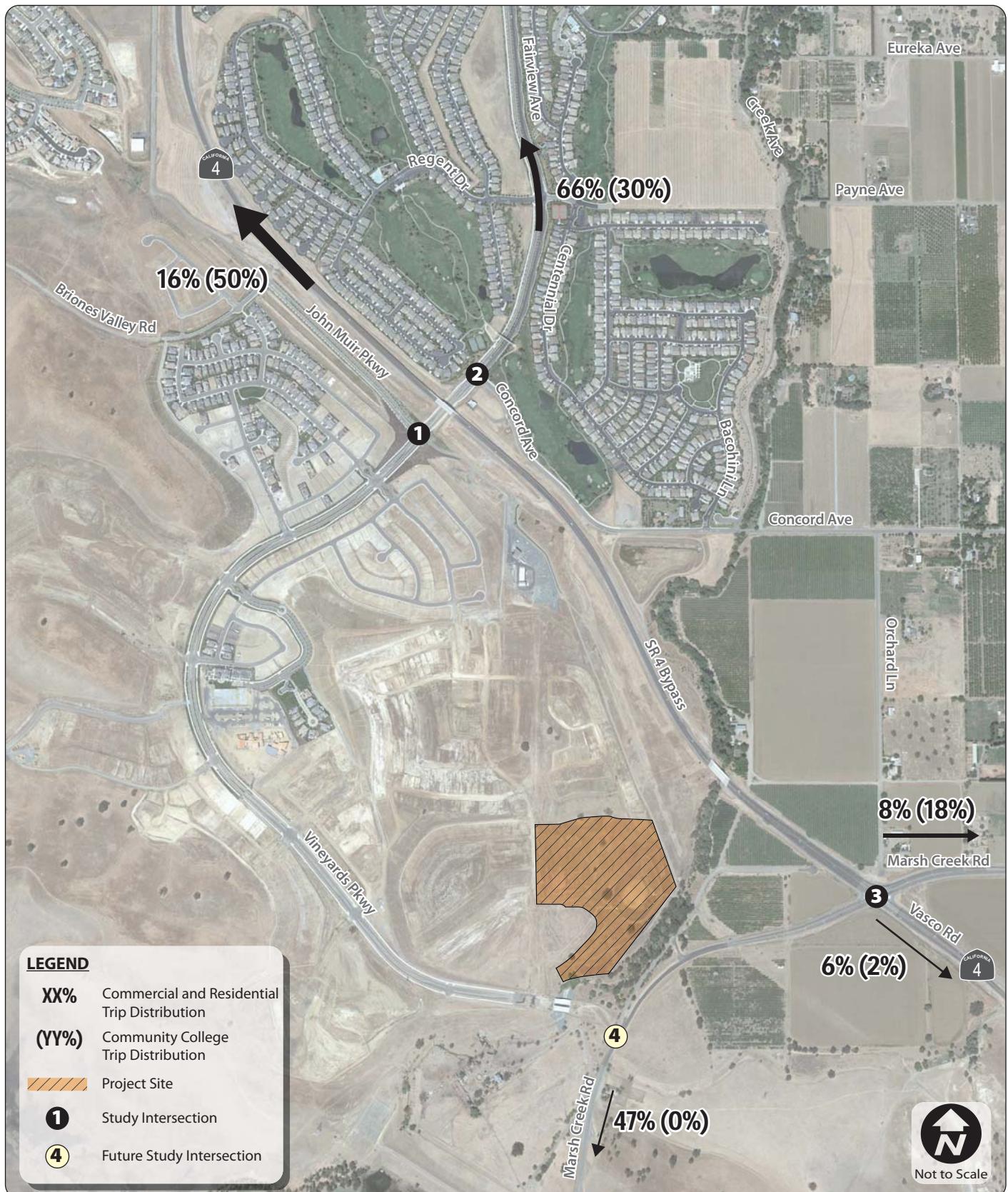
The proposed Project would replace approximately 16.5 acres, or 57 percent, of the Pioneer Square land uses with community college use. The displaced uses would have generated 57 percent of the Pioneer Square area trips shown in **Table 6**, or 234 AM and 543 PM peak hour trips. These removed trips were subtracted from the trips generated by the Project to determine the Project trip assignment, shown on **Figure 5**.

Near-Term Conditions

Near-Term traffic volumes were forecast by adding traffic due to the proposed, pending and approved projects in Brentwood, as of February 2010, to the existing traffic counts. These projects include all of the Vineyards land uses listed in Table 6, except for the previously approved community college use on the southern site. This use was not assumed under near-term conditions because the use is not expected to be developed in the foreseeable future. The commercial and residential projects included in the background traffic are shown in **Tables 7 and 8**, respectively. Trips generated by these projects were estimated using rates from the Institute of Transportation Engineers' (ITE) *Trip Generation, 8th Edition*, and were assigned to the roadway network. Trips from the Vineyards development as presented in **Table 6** were added to these base volumes. The resulting Near-Term No Project traffic volumes are shown on **Figure 6**.

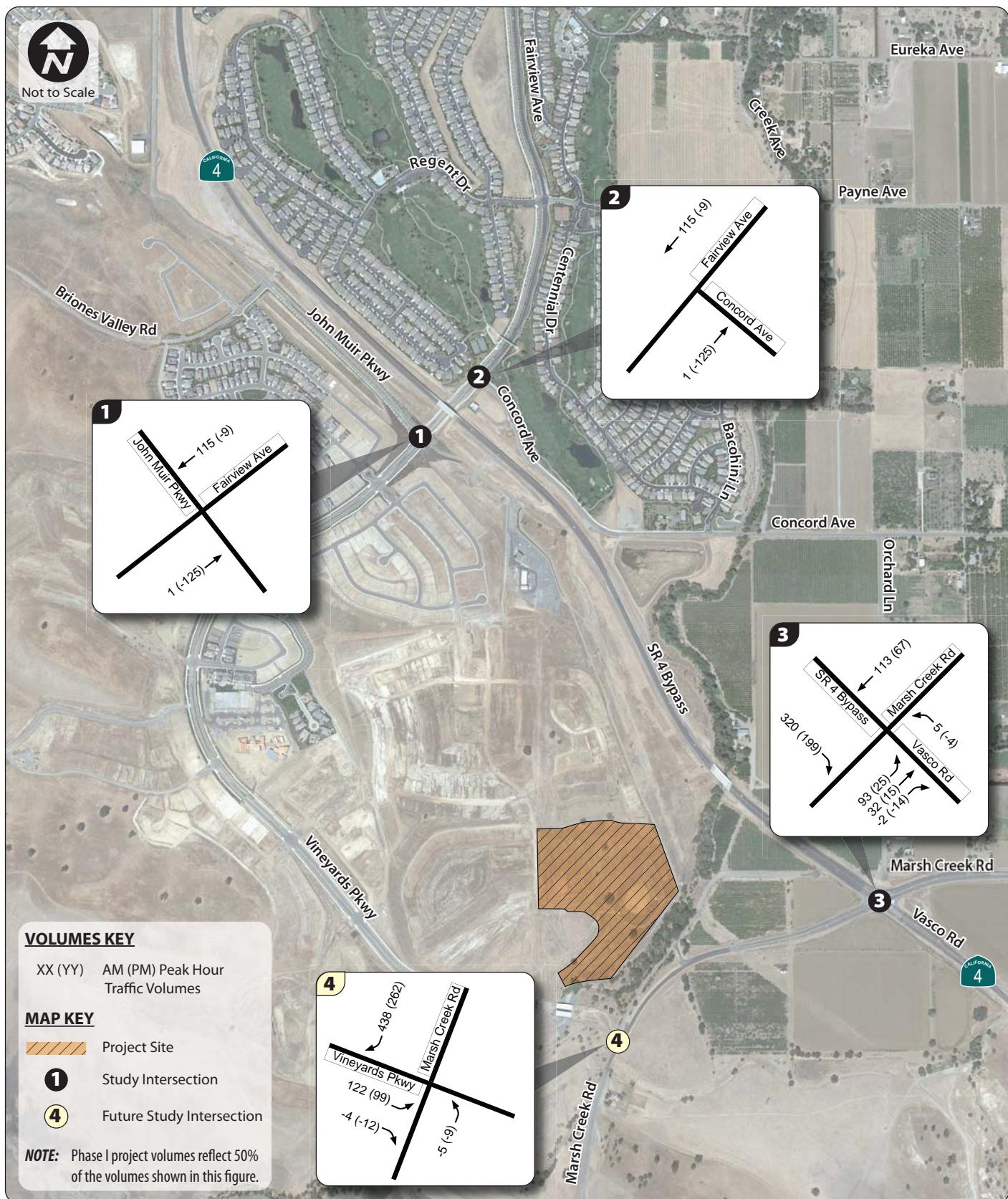
The Near-Term scenario includes the extension of Fairview Avenue (as Vineyards Parkway) from its current terminus at Concord Avenue to a new signalized intersection with Marsh Creek Road.. No other roadway improvements in the study area were assumed. The Near-Term No Project intersection lane geometries and traffic control are shown on **Figure 3**. The intersection lane geometries and traffic control under Near-Term Plus Project Phase 1 and Near-Term Plus Project Build Out are shown on **Figure 7**.

The Level of Service results for the study intersections under near-term conditions with and without the Project are presented in **Table 9**.





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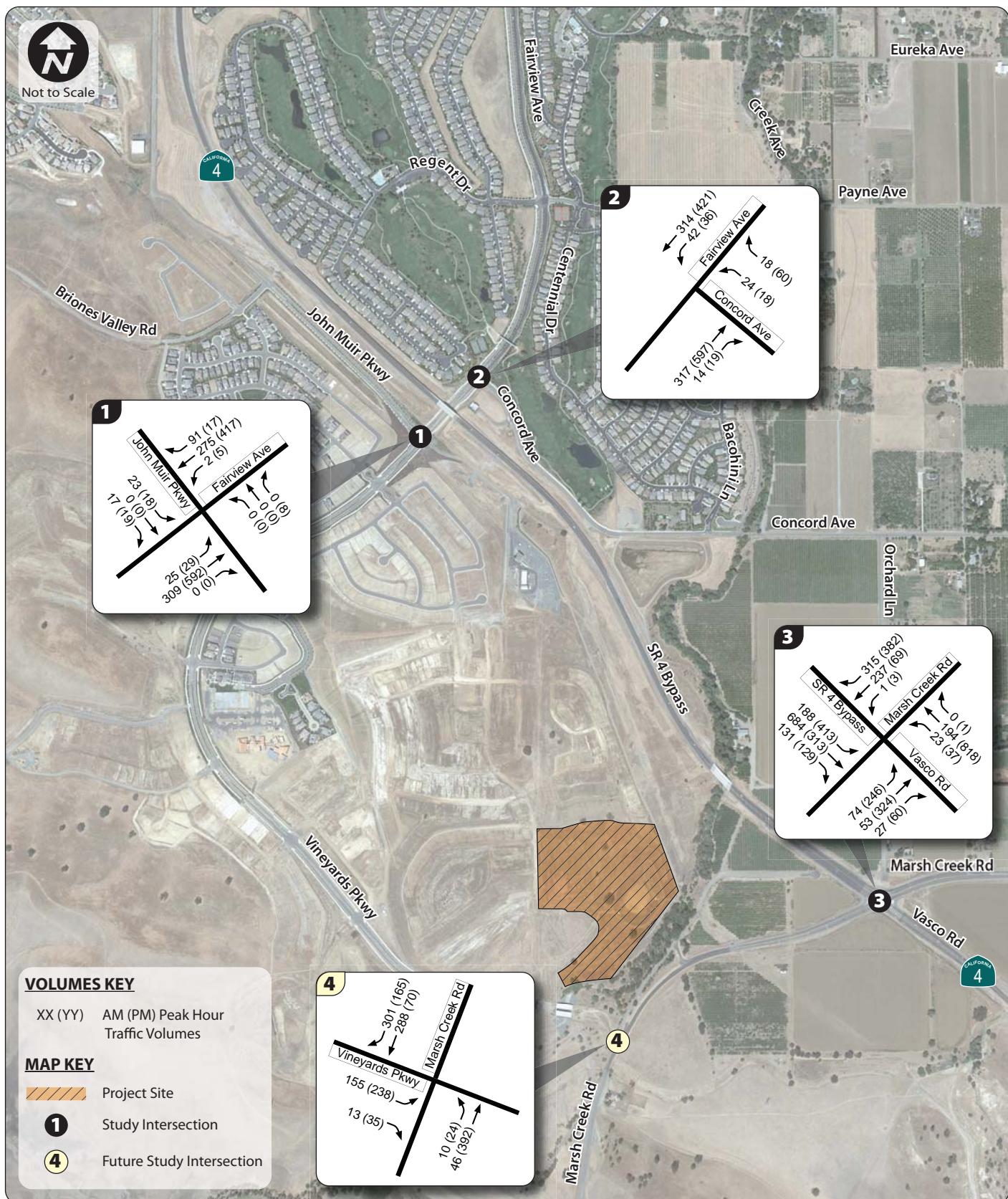
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PROJECT BUILDOUT PEAK HOUR TRAFFIC VOLUMES

FIGURE 5



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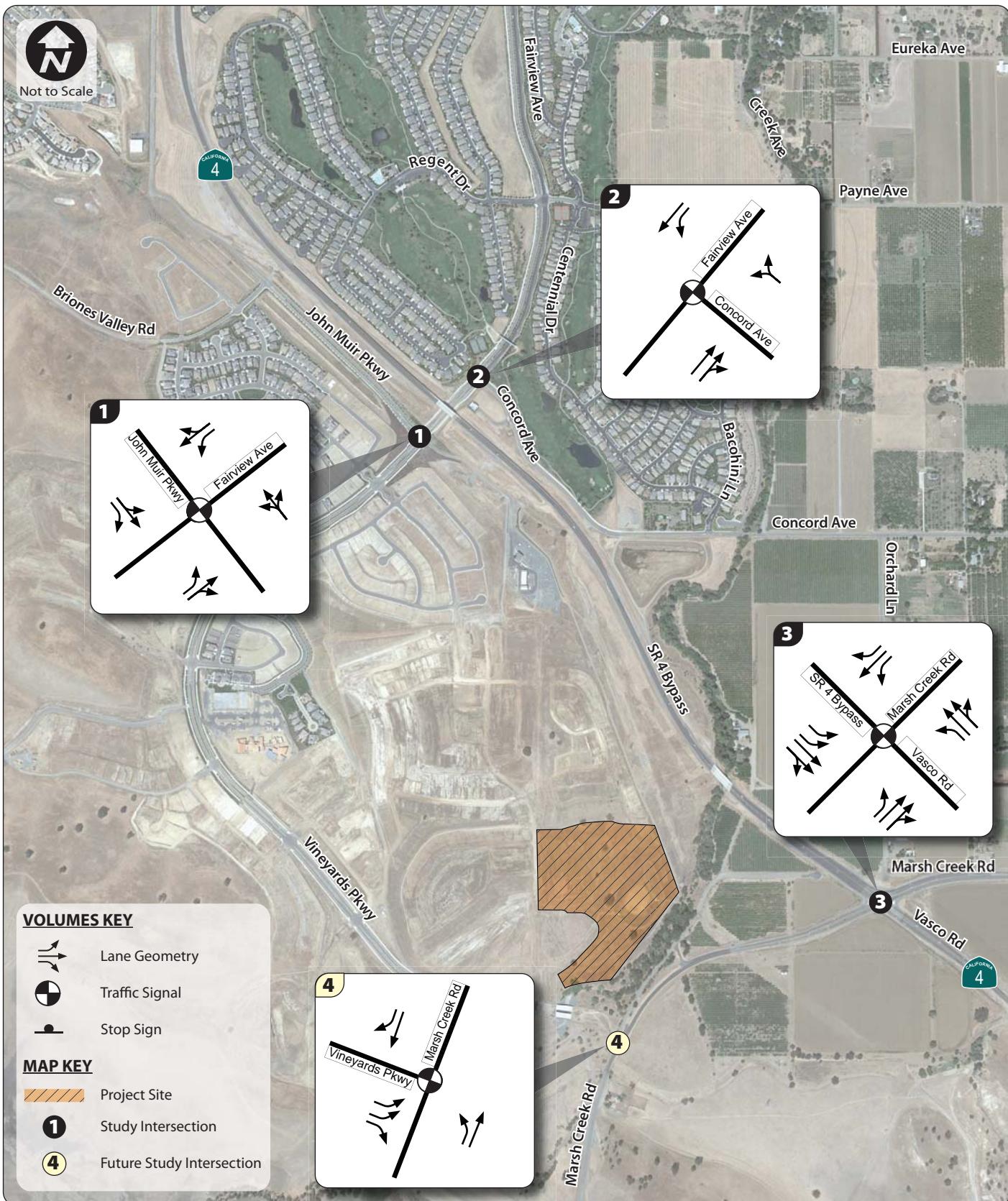


TABLE 9
NEAR-TERM PLUS PROJECT PEAK HOUR LEVEL OF SERVICE

Location	Control	Peak Hour	Near-Term No Project		Near-Term Plus Project Phase 1		Near-Term Plus Project Build Out	
			V/C Ratio or Delay ¹	LOS	V/C Ratio or Delay ¹	LOS	V/C Ratio or Delay ¹	LOS
1. John Muir Parkway/ Fairview Avenue	Signal	AM	0.32	A	0.33	A	0.41	A
		PM	0.42	A	0.31	A	0.34	A
2. Fairview Avenue/ Concord Avenue	Signal	AM	0.28	A	0.29	A	0.37	A
		PM	0.38	A	0.32	A	0.38	A
3. SR 4 Bypass/Marsh Creek Road	Signal	AM	0.50	A	0.61	B	0.75	C
		PM	0.68	B	0.66	B	0.73	C
4. Marsh Creed Road/ Vineyards Parkway	Signal	AM	0.25	A	0.26	A	0.38	A
		PM	0.36	A	0.36	A	0.40	A

Notes:

1. Volume-to-Capacity ratio determined for all signalized intersections using the CCTA LOS methodology. Intersection average and (worst movement) delay in seconds presented for side-street stop-controlled intersections.
2. SSSC = side-street stop-controlled intersection

Source: Fehr & Peers, 2010

Under near-term conditions, all of the study intersections would operate at an acceptable level of service with or without the Project. No significant project traffic impacts are identified for near-term conditions.

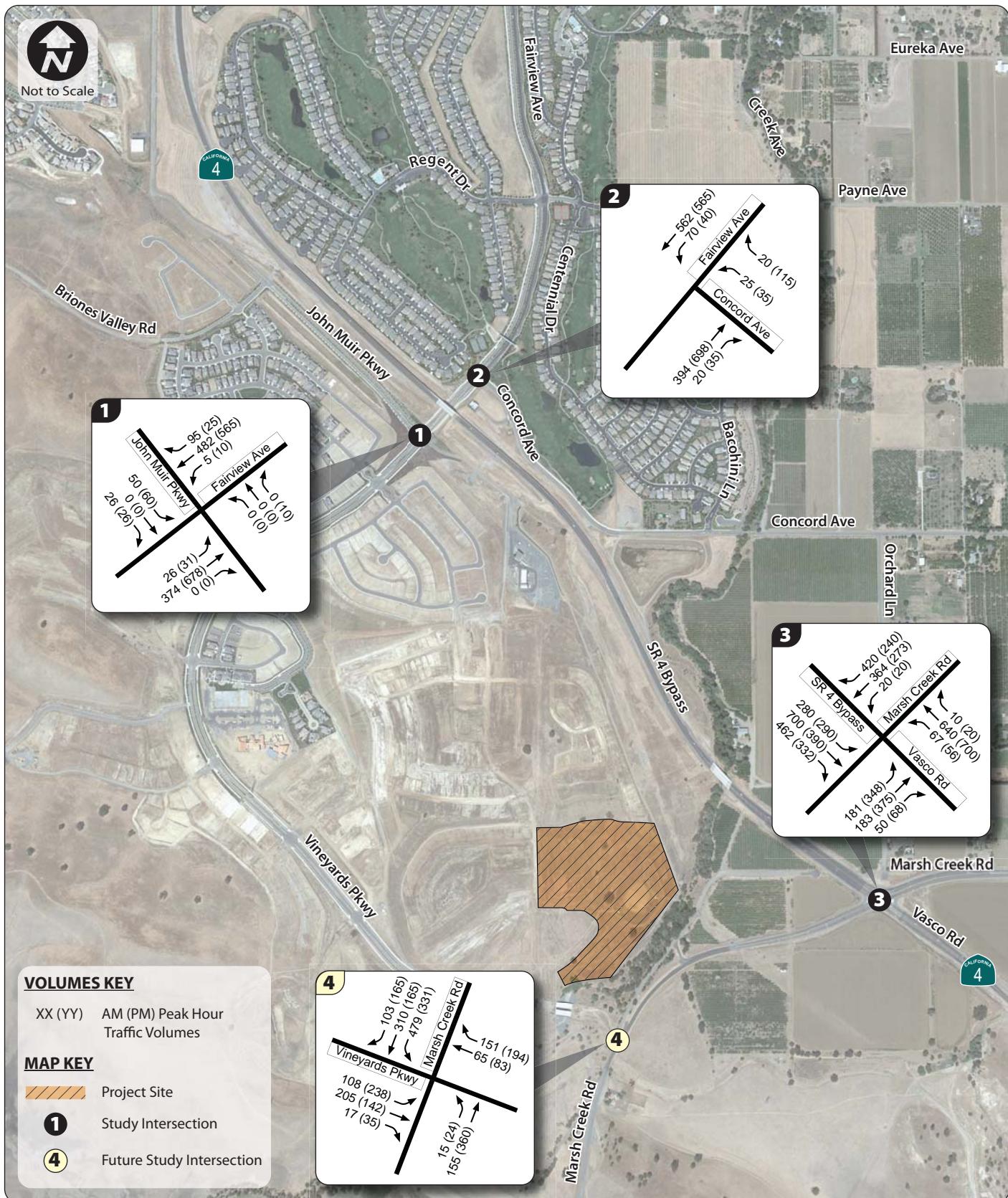
Cumulative Conditions

Traffic conditions for the year 2035 were forecast using the CCTA Travel Demand Model. The land use assumptions in the model were reviewed and adjusted to account for the planned projects in Brentwood that were included in the near-term scenario, and trips from development of a community college campus on the southern site were added to the cumulative forecast, to develop the Cumulative peak hour volumes at the study intersections under No Project conditions shown on **Figure 8**. Major roadway improvements included in the model are

- Widening of SR 4 freeway to provide three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction west of Hillcrest Avenue
- Widening of Segment 2 of the SR 4 Bypass (Lone Tree Way to Balfour Road) to operate as a four-lane freeway with interchanges at Sand Creek Road and Balfour Road.
- Completion of John Muir Parkway from Balfour Road to Fairview Avenue.
- Extension of Foothill Boulevard to intersect with John Muir Parkway with traffic signal installation.



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Under Cumulative conditions, access to the previously approved college site was assumed as a fourth leg of the future Marsh Creek Road/Vineyards Parkway intersection. No other roadway changes from the Near-Term conditions were assumed. The lane geometry and traffic control at the study intersections under Cumulative conditions are shown in **Figure 9**. The Level of Service results for Cumulative conditions are shown in **Table 6**.

TABLE 10: CUMULATIVE (2035) PLUS PROJECT BUILD OUT PEAK HOUR LEVEL OF SERVICE							
Location	Control	Peak Hour	Cumulative No Project		Cumulative Plus Project Build Out		
			V/C Ratio or Delay ¹	LOS	V/C Ratio or Delay ¹	LOS	
1. John Muir Parkway/Fairview Avenue	Signal	AM	0.51	A	0.60	A	
		PM	0.49	A	0.44	A	
2. Fairview Avenue/Concord Avenue	Signal	AM	0.47	A	0.56	A	
		PM	0.55	A	0.54	A	
3. SR 4 Bypass/Marsh Creek Road	Signal	AM	0.83	D	1.10	F	
		PM	0.88	D	0.98	E	
4. Marsh Creek Road/Vineyards Parkway	Signal	AM	0.67	B	0.67	B	
		PM	0.71	C	0.71	C	

Notes:

1. Volume-to-Capacity ratio determined for all signalized intersections using the CCTA LOS methodology. Intersection average and (worst movement) delay in seconds presented for side-street stop-controlled intersections.
2. SSSC = side-street stop-controlled intersection

Source: Fehr & Peers, 2010

Under cumulative conditions, three of the four study intersections are projected to operate at an acceptable level of service with or without the Project, assuming development of a community college campus on both the Pioneer Square site and the southern site.

The intersection of the SR 4 Bypass with Marsh Creek Road, however, is expected to degrade from an acceptable LOS D to an unacceptable LOS F during the AM peak hour and from an unacceptable LOS D (v/c ratio greater than 0.85) to LOS E during the PM peak hour with the addition of the project. This impact is considered **significant** based on significance criteria used in the *Vineyards at Marsh Creek Environmental Impact Report (EIR)*.

Construction of an overpass at this location is included in the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) Plan. The project will pay the ECCRFFA fee for regional improvements, thus contributing to the implementation of the overpass. Construction of the SR 4 Bypass/Marsh Creek Road overpass would provide acceptable operations at this location. However, the fee program does not identify funding sources to fully fund all of the projects in the Plan, including the SR 4 Bypass/Marsh Creek Road overpass. Thus, this impact is considered **significant and unavoidable**.

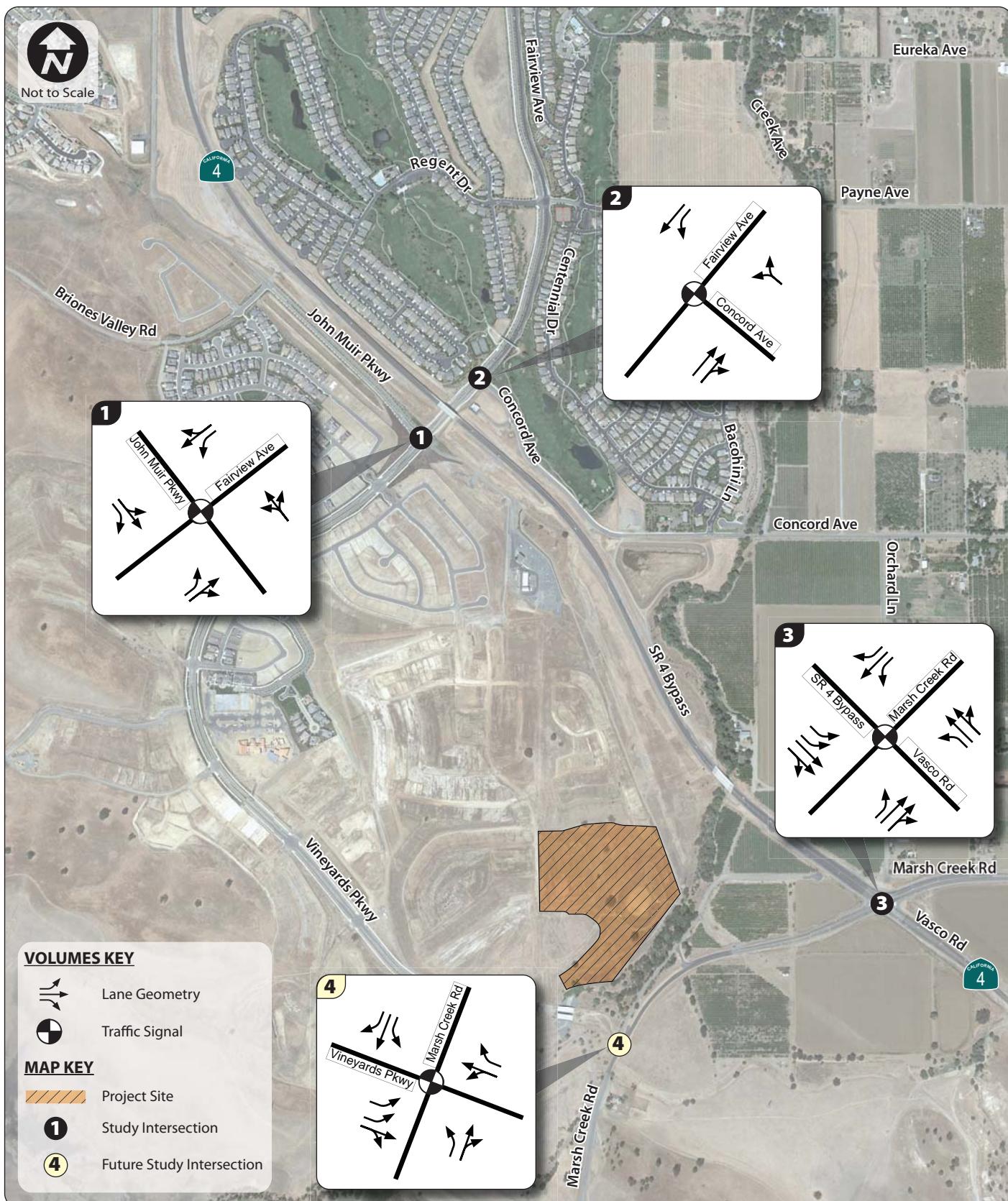
This completes our off-site transportation assessment of the Brentwood Center. Please call Ellen if you have questions.

Attachments:

- A. Intersection LOS Criteria

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- B. Near-Term Development Descriptions
- C. Traffic Counts
- D. Level of Service Worksheets



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ATTACHMENT A: INTERSECTION LOS CRITERIA

SIGNALIZED INTERSECTION LOS CRITERIA		
Level Service	Description	Sum of Critical V/C Ratio
A	Progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	< 0.60
B	Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	0.61 - 0.70
C	Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many vehicles still pass through the intersection without stopping.	0.71 - 0.80
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and/or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	0.81 - 0.90
E	This level is considered by many agencies to be the limit of acceptable delay. High delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent.	0.91 - 1.00
F	This level is considered unacceptable with oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may occur at high V/C ratios below 1.0 with many cycle failures. Poor progression and long cycle lengths may be contributing factors to delay.	> 1.00

Source: *Technical Procedures Update* (Contra Costa Transportation Authority, 2006)

UNSIGNALIZED INTERSECTION LOS CRITERIA		
Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delays	< 10.0
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded	> 50.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.



ATTACHMENT B: NEAR-TERM DEVELOPMENT DESCRIPTIONS

**TABLE 7
NEAR-TERM COMMERCIAL DEVELOPMENT DESCRIPTIONS**

Map No.	Project Description	Status
1	65 ksf Church (DR 08-08 / CUP 08-09)	Proposed
2	26 ksf Industrial (DR 06-14)	Approved and Permitted
3	27 ksf Church (DR 088-11)	Approved
4	2.5 ksf Fast Food Restaurant (DR09-04 / CUP 09-02)	Approved and Permitted
5	12 ksf Community Center (DR 09-04 / CUP 09-02)	Approved and Permitted
6	20 ksf Office (DR 07-08)	Approved
7	100 ksf Mixed-Use Commercial (TSM 8633 / DR 03-10)	Approved and Permitted
8	9 ksf Mixed-Use Commercial (DR 05-30)	Approved
9	21 ksf Church (DR 08-20 / CUP 08-31)	Approved
10	11 ksf Office (DR 08-17 / MS 353-08)	Proposed
11	61 AC Ranch (TSM 9152 / GPA 09-01)	Approved
12	94 ksf Retail (DR 04-34)	Approved and Permitted
13	49 ksf Retail (DR 05-27)	Approved and Permitted
14	38 ksf Office (DR 05-15 / MS 351-06)	Approved
15	94 ksf City of Brentwood Civic Center (DR 07-16)	Approved and Permitted
16	29 ksf Mixed-Use Commercial (DR 08-01)	Approved and Permitted
17	117 ksf Shopping Center (DR 05-29)	Approved and Permitted
18	460 ksf Shopping Center (DR 06-08)	Approved and Permitted
19	45 Room Motel (DR 03-09)	Approved and Permitted

Source: *City of Brentwood Project Status Report*, February 12, 2010.

TABLE 8
NEAR-TERM RESIDENTIAL DEVELOPMENT DESCRIPTIONS

Map No.	Project Description	Status
1	471 Single Family Homes 108 Apartments (TSM 8729 / DR 0-12)	Under Construction
2	2 Single Family Homes (MS 357-06)	Approved – No Construction
3	8 Single Family Homes (TSM 8808)	Under Construction
4	64 Single Family Homes 104 Townhomes (TSM 8627 / DR 06-06)	Under Construction
5	5 Single Family Homes (MS 353-07)	Approved – No Construction
6	8 Single Family Homes (TSM 8446)	Approved – No Construction
7	132 Single Family Homes (TSM 9154 / DR 06-27)	Proposed
8	6 Single Family Homes (TSM 9148 / DR 06-23)	Proposed
9	33 Single Family Homes (TSM 9115 / DR 06-28)	Approved – No Construction
10	37 Single Family Homes (TSM 8982 / DR 05-25)	Approved – No Construction
11	9 Single Family Homes (TSM 8701)	Approval Expired
12	240 Single Family Homes (TSM 8954 / DR 05-07)	Under Construction
13	166 Single Family Homes (TSM 8506 / DR 01-12)	Approved – No Construction
14	494 Single Family Homes (TSM 8548 / DR 04-33)	Approval Expired
15	106 Single Family Homes (TSM 8311 / DR 05-20)	Approval Expired
16	177 Single Family Homes (TSM 8534 / DR 02-33)	Under Construction
17	160 Single Family Homes (TSM 9173 / DR 07-14)	Approved – No Construction
18	Vineyards at Marsh Creek ¹	Under Construction
19	3 Single Family Homes (MS 354-04)	Approved – No Construction
20	311 Single Family Homes (TSM 8788 / 03-33)	Under Construction
21	199 Single Family Homes (TSM 8601 / DR 02-26)	Under Construction
22	120 Apartments (DR 07-12)	Proposed
23	90 Single Family Homes (TSM 8781 / DR 03-27)	Under Construction
24	3 Single Family Homes (MS 358-06)	Proposed
25	180 Single Family Homes (TSM 8674 / DR 05-23)	Under Construction
26	481 Single Family Homes 30 Duplex units (TSM 8561A / DR 04-29)	Under Construction
27	84 Single Family Homes (TSM 8875 / DR 04-29)	Under Construction
28	162 Single Family Homes (TSM 8470 / DR 01-44)	Under Construction
29	4 Single Family Homes (MS 361-06)	Approved – No Construction
30	5 Single Family Homes (MS 353-06)	Approved – No Construction
31	6 Single Family Homes (MS 356-05)	Approved – No Construction

Notes:

1. The development in Vineyards at Marsh Creek assumed for the analysis is presented in Table 6

Source: *City of Brentwood Project Status Report*, February 12, 2010.

All Traffic Data

(916) 771-8700

Lafayette

File Name : 10-7025-001 FAIRVIEW-JOHN MUIR
 Site Code : 00000000
 Start Date : 1/27/2010
 Page No : 1

Groups Printed- Unshifted

	JOHN MUIR PKWY. Southbound					FAIRVIEW AVE. Westbound					DRIVEWAY Northbound					FAIRVIEW AVE. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	2	0	0	0	2	0	5	8	0	13	0	0	0	0	0	1	4	0	0	5	20
07:15	1	0	0	0	1	1	6	9	0	16	0	0	0	0	0	2	4	0	0	6	23
07:30	1	1	0	0	2	3	5	7	0	15	0	0	0	0	0	0	2	0	0	0	19
07:45	7	0	1	0	8	1	7	34	0	42	0	0	0	0	0	1	3	0	0	4	54
Total	11	1	1	0	13	5	23	58	0	86	0	0	0	0	0	4	13	0	0	17	116
08:00	10	0	1	0	11	0	5	16	0	21	0	0	0	0	0	1	5	0	0	6	38
08:15	7	0	1	0	8	0	5	7	0	12	0	0	0	0	0	2	4	0	0	6	26
08:30	2	0	2	0	4	1	6	5	0	12	0	0	0	0	0	1	8	0	0	9	25
08:45	4	0	2	0	6	1	8	7	0	16	0	0	0	0	0	0	8	0	0	8	30
Total	23	0	6	0	29	2	24	35	0	61	0	0	0	0	0	4	25	0	0	29	119

*** BREAK ***

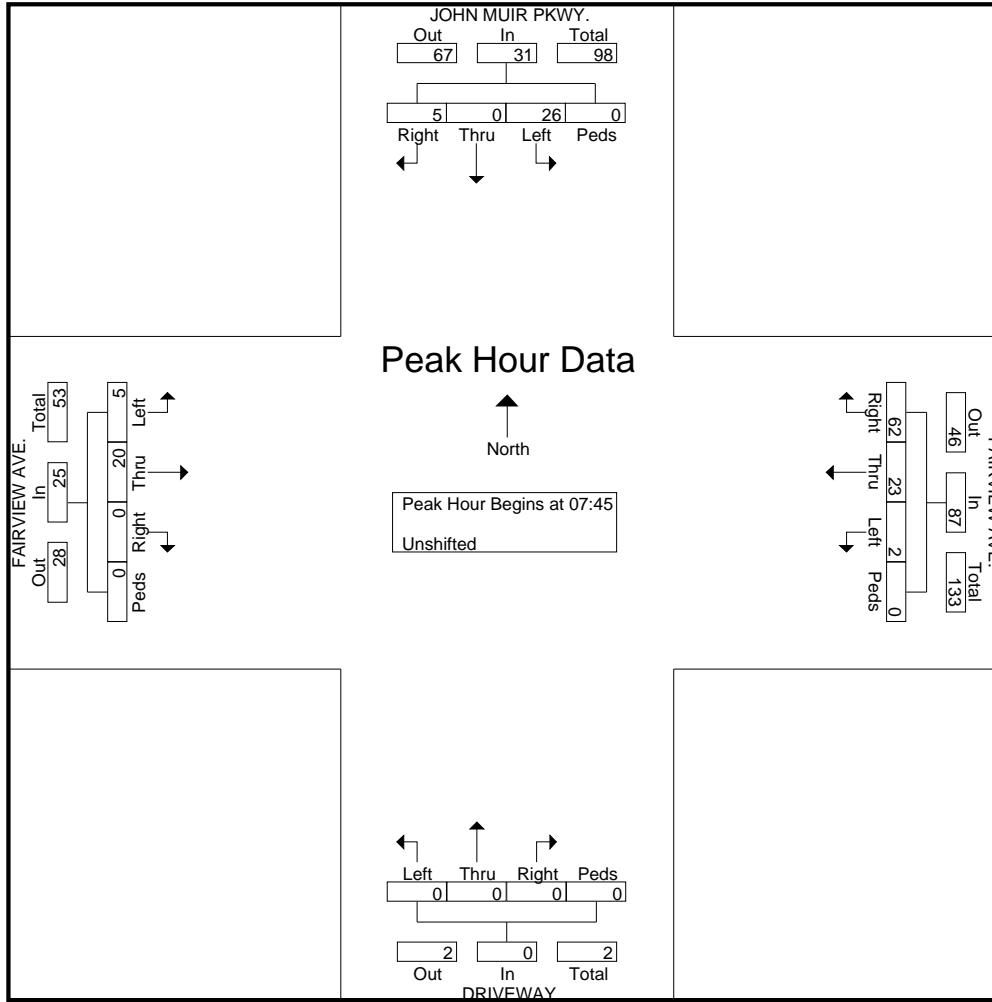
16:00	3	1	0	0	4	0	3	4	0	7	0	0	0	0	0	0	11	0	0	11	22
16:15	4	0	1	0	5	0	5	3	0	8	0	0	1	0	1	1	5	0	0	6	20
16:30	5	0	0	0	5	0	6	2	0	8	0	0	0	0	0	1	2	0	0	3	16
16:45	3	0	1	0	4	1	6	8	0	15	0	0	1	0	1	0	2	0	0	2	22
Total	15	1	2	0	18	1	20	17	0	38	0	0	2	0	2	2	20	0	0	22	80
17:00	6	0	1	0	7	1	5	3	0	9	0	0	4	0	4	0	4	0	0	4	24
17:15	4	0	1	0	5	3	2	4	0	9	0	0	3	0	3	2	4	0	0	6	23
17:30	0	0	0	0	0	0	5	3	0	8	0	0	2	0	2	0	3	0	0	3	13
17:45	6	0	0	0	6	0	4	6	0	10	0	0	1	0	1	3	3	0	0	6	23
Total	16	0	2	0	18	4	16	16	0	36	0	0	10	0	10	5	14	0	0	19	83
Grand Total	65	2	11	0	78	12	83	126	0	221	0	0	12	0	12	15	72	0	0	87	398
Apprch %	83.3	2.6	14.1	0		5.4	37.6	57	0		0	0	100	0	0	17.2	82.8	0	0		
Total %	16.3	0.5	2.8	0	19.6	3	20.9	31.7	0	55.5	0	0	3	0	3	3.8	18.1	0	0	21.9	

	JOHN MUIR PKWY. Southbound					FAIRVIEW AVE. Westbound					DRIVEWAY Northbound					FAIRVIEW AVE. Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total

Peak Hour Analysis From 07:00 to 17:15 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45

07:45	7	0	1	0	8	1	7	34	0	42	0	0	0	0	0	1	3	0	0	4	54
08:00	10	0	1	0	11	0	5	16	0	21	0	0	0	0	0	1	5	0	0	6	38
08:15	7	0	1	0	8	0	5	7	0	12	0	0	0	0	0	2	4	0	0	6	26
08:30	2	0	2	0	4	1	6	5	0	12	0	0	0	0	0	1	8	0	0	9	25
Total Volume	26	0	5	0	31	2	23	62	0	87	0	0	0	0	0	5	20	0	0	25	143
% App. Total	83.9	0	16.1	0		2.3	26.4	71.3	0		0	0	0	0	0	20	80	0	0		



All Traffic Data

(916) 771-8700

Lafayette

File Name : 10-7025-002 CONCORD-FAIRVIEW
 Site Code : 00000000
 Start Date : 1/27/2010
 Page No : 1

Groups Printed- Unshifted

Start Time	Southbound					FAIRVIEW AVE. Westbound					CONCORD AVE. Northbound					FAIRVIEW AVE. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00	0	0	0	0	0	6	9	0	0	15	4	0	3	0	7	0	2	3	0	5	27
07:15	0	0	0	0	0	8	11	0	0	19	3	0	2	0	5	0	2	4	0	6	30
07:30	0	0	0	0	0	9	12	0	0	21	5	0	4	0	9	0	0	4	0	4	34
07:45	0	0	0	0	0	11	28	0	0	39	14	0	9	0	23	0	6	3	0	9	71
Total	0	0	0	0	0	34	60	0	0	94	26	0	18	0	44	0	10	14	0	24	162
08:00	0	0	0	0	0	6	19	0	0	25	2	0	3	0	5	0	11	5	0	16	46
08:15	0	0	0	0	0	10	9	0	0	19	2	0	3	0	5	0	8	2	0	10	34
08:30	0	0	0	0	0	15	7	0	0	22	6	0	3	0	9	0	8	4	0	12	43
08:45	0	0	0	0	0	5	10	0	0	15	6	0	4	0	10	0	8	2	0	10	35
Total	0	0	0	0	0	36	45	0	0	81	16	0	13	0	29	0	35	13	0	48	158

*** BREAK ***

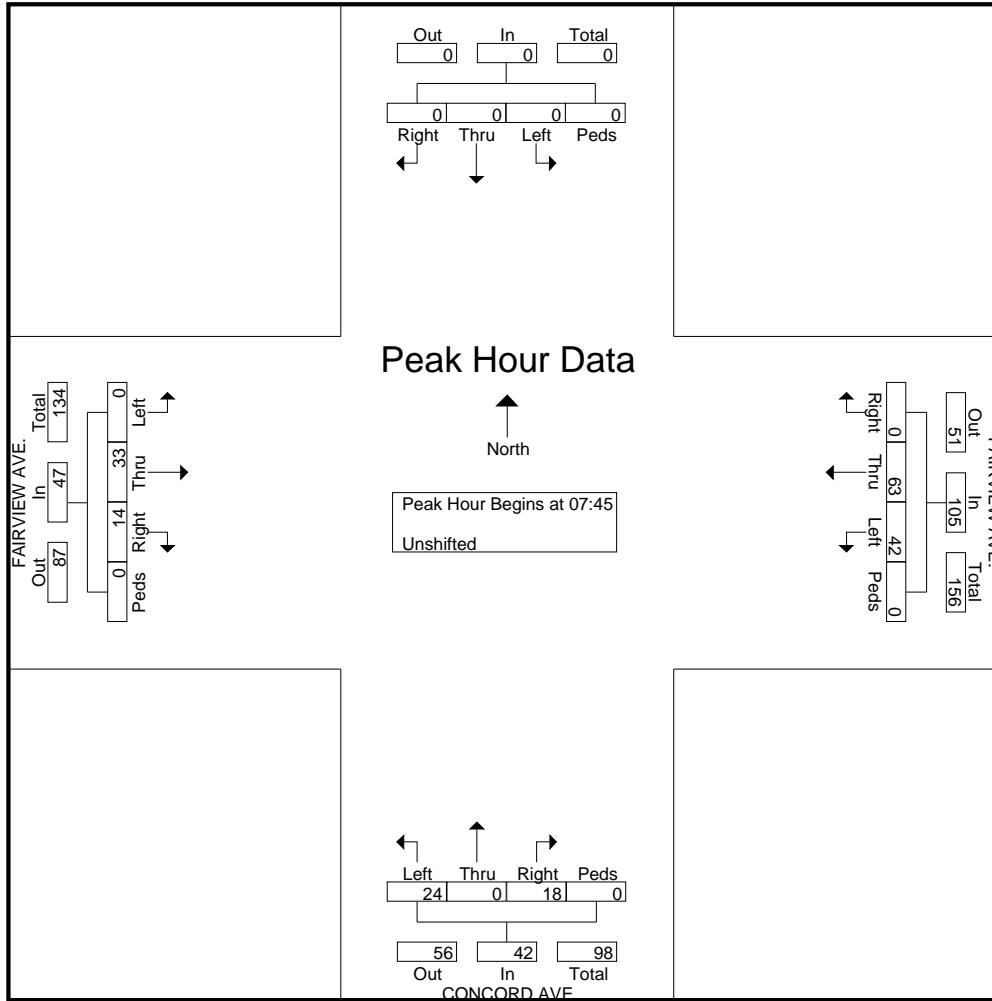
16:00	0	0	0	0	0	5	6	0	0	11	3	0	10	0	13	0	5	10	0	15	39
16:15	0	0	0	0	0	6	3	0	0	9	4	0	10	0	14	0	8	3	0	11	34
16:30	0	0	0	0	0	7	5	0	0	12	3	0	15	0	18	0	1	5	0	6	36
16:45	0	0	0	0	0	8	10	0	0	18	5	0	9	0	14	0	2	4	0	6	38
Total	0	0	0	0	0	26	24	0	0	50	15	0	44	0	59	0	16	22	0	38	147
17:00	0	0	0	0	0	11	5	0	0	16	5	0	18	0	23	0	9	9	0	18	57
17:15	0	0	0	0	0	6	3	0	0	9	5	0	19	0	24	0	4	3	0	7	40
17:30	0	0	0	0	0	11	5	0	0	16	3	0	14	0	17	0	2	3	0	5	38
17:45	0	0	0	0	0	5	3	0	0	8	5	0	10	0	15	0	7	3	0	10	33
Total	0	0	0	0	0	33	16	0	0	49	18	0	61	0	79	0	22	18	0	40	168
Grand Total	0	0	0	0	0	129	145	0	0	274	75	0	136	0	211	0	83	67	0	150	635
Apprch %	0	0	0	0	0	47.1	52.9	0	0	35.5	35.5	0	64.5	0	55.3	44.7	0				
Total %	0	0	0	0	0	20.3	22.8	0	0	43.1	11.8	0	21.4	0	33.2	0	13.1	10.6	0	23.6	

Start Time	Southbound					FAIRVIEW AVE. Westbound					CONCORD AVE. Northbound					FAIRVIEW AVE. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	

Peak Hour Analysis From 07:00 to 17:15 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:45

07:45	0	0	0	0	0	11	28	0	0	39	14	0	9	0	23	0	6	3	0	9	71
08:00	0	0	0	0	0	6	19	0	0	25	2	0	3	0	5	0	11	5	0	16	46
08:15	0	0	0	0	0	10	9	0	0	19	2	0	3	0	5	0	8	2	0	10	34
08:30	0	0	0	0	0	15	7	0	0	22	6	0	3	0	9	0	8	4	0	12	43
Total Volume	0	0	0	0	0	42	63	0	0	105	24	0	18	0	42	0	33	14	0	47	194
% App. Total	0	0	0	0	0	40	60	0	0	57.1	0	42.9	0	0	0	70.2	29.8	0			



All Traffic Data

(916) 771-8700

Lafayette

File Name : 10-7025-003 SR4-MARSH CREEK
 Site Code : 00000000
 Start Date : 1/27/2010
 Page No : 1

Groups Printed- Unshifted

Start Time	SR 4 BYPASS Southbound					MARSH CREEK RD. Westbound					SR 4 BYPASS Northbound					MARSH CREEK RD. Eastbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00	25	143	22	0	190	1	60	57	0	118	0	33	0	0	33	1	1	1	0	3	344
07:15	31	186	13	0	230	0	66	69	0	135	0	43	0	0	43	1	5	0	0	6	414
07:30	32	174	16	0	222	0	37	59	0	96	0	35	0	0	35	5	5	0	0	10	363
07:45	37	134	14	0	185	0	44	79	0	123	0	45	0	0	45	6	8	0	0	14	367
Total	125	637	65	0	827	1	207	264	0	472	0	156	0	0	156	13	19	1	0	33	1488
08:00	36	137	12	0	185	0	42	63	0	105	0	36	0	0	36	0	5	0	0	5	331
08:15	22	144	14	0	180	0	28	52	0	80	1	30	1	0	32	3	4	1	0	8	300
08:30	35	110	3	0	148	0	33	65	0	98	3	33	0	0	36	1	5	0	0	6	288
08:45	45	104	15	0	164	0	17	46	0	63	0	47	0	0	47	1	6	0	0	7	281
Total	138	495	44	0	677	0	120	226	0	346	4	146	1	0	151	5	20	1	0	26	1200

*** BREAK ***

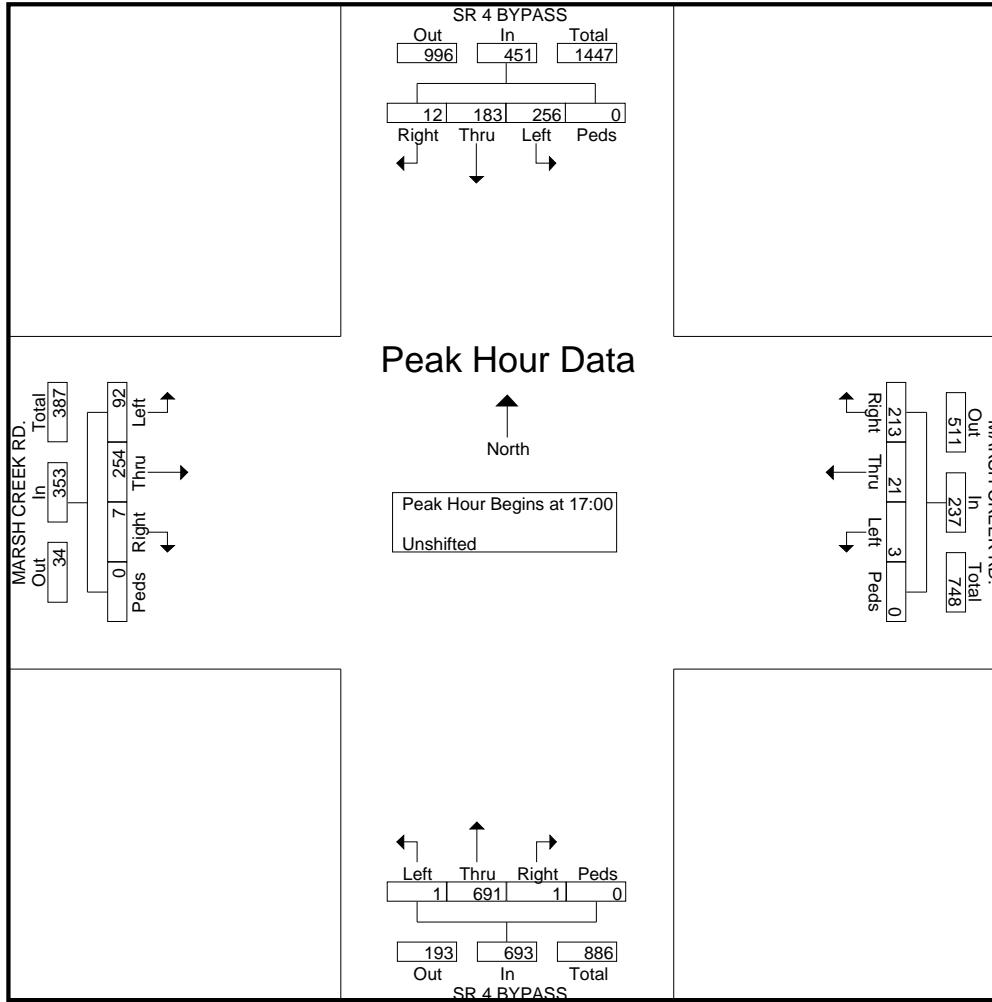
16:00	74	67	1	0	142	0	8	37	0	45	0	179	3	0	182	14	45	0	0	59	428
16:15	63	65	6	0	134	0	13	50	0	63	0	141	0	0	141	11	33	0	0	44	382
16:30	78	44	3	0	125	0	6	82	0	88	0	145	1	0	146	20	31	1	0	52	411
16:45	60	49	2	0	111	0	12	49	0	61	0	163	0	0	163	21	64	1	0	86	421
Total	275	225	12	0	512	0	39	218	0	257	0	628	4	0	632	66	173	2	0	241	1642
17:00	61	43	2	0	106	2	6	54	0	62	0	150	1	0	151	18	60	2	0	80	399
17:15	75	52	5	0	132	0	10	54	0	64	0	189	0	0	189	30	49	5	0	84	469
17:30	52	51	3	0	106	0	1	72	0	73	0	165	0	0	165	24	73	0	0	97	441
17:45	68	37	2	0	107	1	4	33	0	38	1	187	0	0	188	20	72	0	0	92	425
Total	256	183	12	0	451	3	21	213	0	237	1	691	1	0	693	92	254	7	0	353	1734
Grand Total	794	1540	133	0	2467	4	387	921	0	1312	5	1621	6	0	1632	176	466	11	0	653	6064
Apprch %	32.2	62.4	5.4	0		0.3	29.5	70.2	0		0.3	99.3	0.4	0		27	71.4	1.7	0		
Total %	13.1	25.4	2.2	0	40.7	0.1	6.4	15.2	0	21.6	0.1	26.7	0.1	0	26.9	2.9	7.7	0.2	0	10.8	

Start Time	SR 4 BYPASS Southbound					MARSH CREEK RD. Westbound					SR 4 BYPASS Northbound					MARSH CREEK RD. Eastbound				
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total

Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1

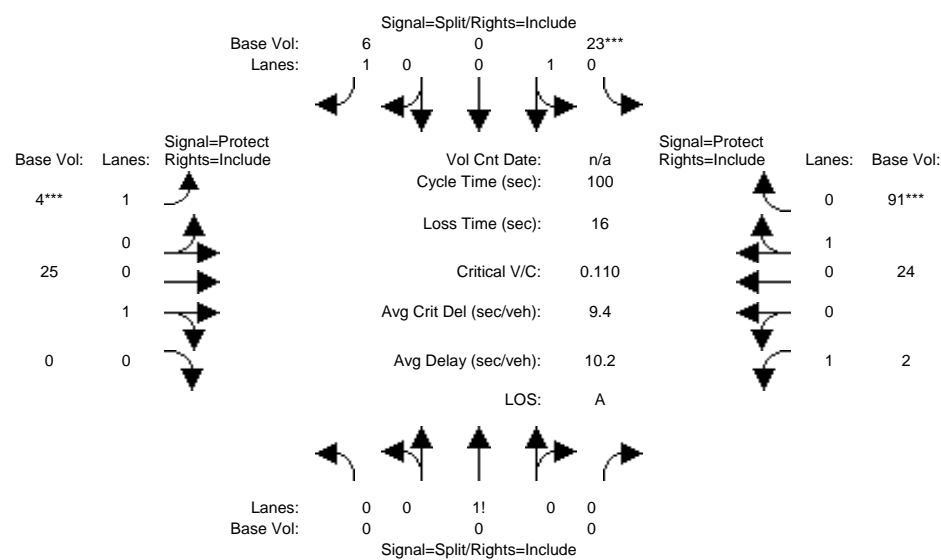
Peak Hour for Entire Intersection Begins at 17:00

17:00	61	43	2	0	106	2	6	54	0	62	0	150	1	0	151	18	60	2	0	80	399
17:15	75	52	5	0	132	0	10	54	0	64	0	189	0	0	189	30	49	5	0	84	469
17:30	52	51	3	0	106	0	1	72	0	73	0	165	0	0	165	24	73	0	0	97	441
17:45	68	37	2	0	107	1	4	33	0	38	1	187	0	0	188	20	72	0	0	92	425
Total Volume	256	183	12	0	451	3	21	213	0	237	1	691	1	0	693	92	254	7	0	353	1734
% App. Total	56.8	40.6	2.7	0		1.3	8.9	89.9	0		0.1	99.7	0.1	0		26.1	72	2	0		



Level Of Service Computation Report
CCTALOS (Base Volume Alternative)
Existing AM

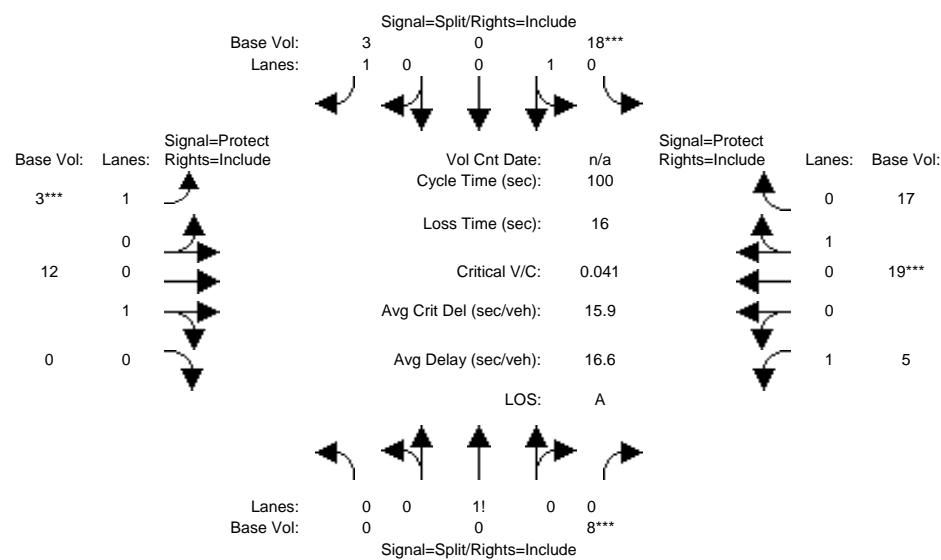
Intersection #1: John Muir Parkway / Fairview Avenue



Street Name:		John Muir Parkway			Fairview Avenue		
Approach:		North Bound	South Bound	East Bound		West Bound	
Movement:		L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	
Min. Green:		3 3 3	3 3 3	3 5 5	3 5 5	3 5 5	
Volume Module:							
Base Vol:		0 0 0	23 0 6	4 25 0	2 24 91		
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	
Initial Bse:		0 0 0	23 0 6	4 25 0	2 24 91		
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	
PHF Adj:		0.75 0.75 0.75	0.75 0.75 0.75	0.75 0.75 0.75	0.75 0.75 0.75	0.75 0.75 0.75	
PHF Volume:		0 0 0	31 0 8	5 33 0	3 32 121		
Reducut Vol:		0 0 0	0 0 0	0 0 0	0 0 0		
Reduced Vol:		0 0 0	31 0 8	5 33 0	3 32 121		
RTOR Reduct:		0 0 0	0 0 5	0 0 0	0 0 0		
RTOR Vol:		0 0 0	31 0 3	5 33 0	3 32 121		
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	
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	
Final Volume:		0 0 0	31 0 3	5 33 0	3 32 121		
Saturation Flow Module:							
Sat/Lane:		1720 1720 1720	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 1.00 1.00	
Lanes:		0.00 1.00 0.00	1.00 0.00 1.00	1.00 1.00 1.00	0.00 1.00 0.21	0.79	
Final Sat.:		0 1720 0	1720 0 1720	1720 1720 0	1720 359 1361		
Capacity Analysis Module:							
Vol/Sat:		0.00 0.00 0.00	0.02 0.00 0.00	0.00 0.02 0.00	0.00 0.09 0.09	0.09	
Crit Volume:		0 31	5		153		
Crit Moves:		****	****		****		

Level Of Service Computation Report
CCTALOS (Base Volume Alternative)
Existing PM

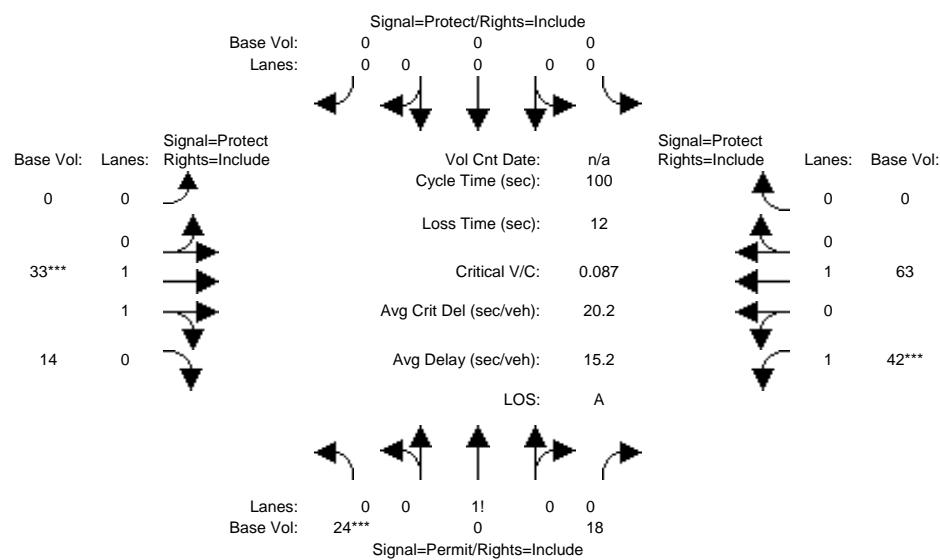
Intersection #1: John Muir Parkway / Fairview Avenue



Street Name: John Muir Parkway Fairview Avenue
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 3 3 3 3 3 3 3 5 5 3 5 5 5
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 0 0 8 18 0 3 3 12 0 5 19 17
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 8 18 0 3 3 12 0 5 19 17
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: 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89
PHF Volume: 0 0 9 20 0 3 3 13 0 6 21 19
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 9 20 0 3 3 13 0 6 21 19
RTOR Reduct: 0 0 6 0 0 3 0 0 0 0 0 0
RTOR Vol: 0 0 3 20 0 0 3 13 0 6 21 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
Final Volume: 0 0 3 20 0 0 3 13 0 6 21 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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00 0.00 1.00 0.53 0.47
Final Sat.: 0 0 1650 1650 0 1650 1650 1650 0 1650 871 779
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.00 0.00 0.01 0.00 0.00 0.02 0.02
Crit Volume: 3 20 3 40
Crit Moves: **** * * * *

Level Of Service Computation Report
CCTALOS (Base Volume Alternative)
Existing AM

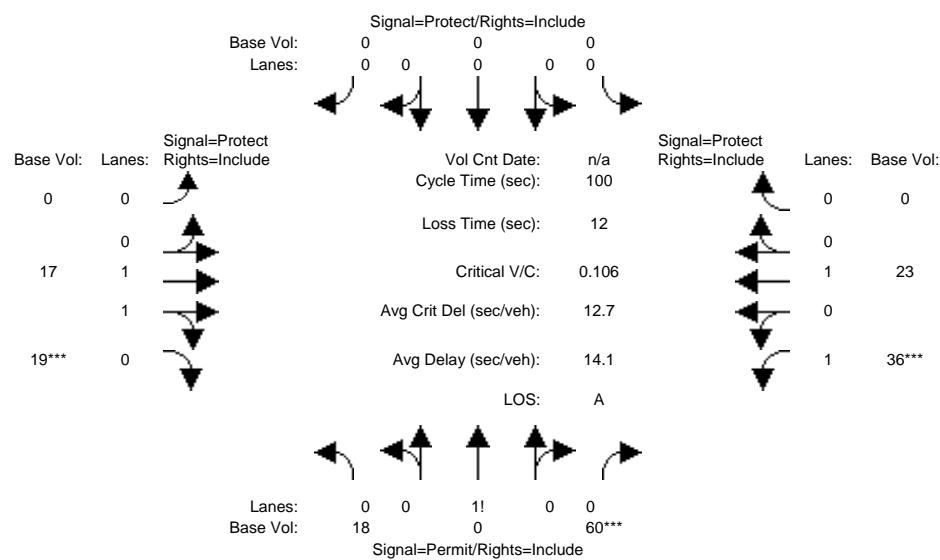
Intersection #2: Fairview Parkway / Concord Avenue



Street Name:		Concord Avenue	Fairview Parkway		
Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Min. Green:	5 5 5	0 0 0	0 5 5	3 5 0	
Volume Module:					
Base Vol:	24 0 18	0 0 0	0 33 14	42 63 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:	24 0 18	0 0 0	0 33 14	42 63 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:	0.75 0.75 0.75	0.75 0.75 0.75	0.75 0.75 0.75	0.75 0.75 0.75	
PHF Volume:	32 0 24	0 0 0	0 44 19	56 84 0	
Reduc Vol:	0 0 0	0 0 0	0 0 0	0 0 0	
Reduced Vol:	32 0 24	0 0 0	0 44 19	56 84 0	
RTOR Reduct:	0 0 0	0 0 0	0 0 0	0 0 0	
RTOR Vol:	32 0 24	0 0 0	0 44 19	56 84 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	
Final Volume:	32 0 24	0 0 0	0 44 19	56 84 0	
Saturation Flow Module:					
Sat./Lane:	1650 1650 1650 1650 1650	1650 1650 1650 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:	0.57 0.00 0.43	0.00 0.00 0.00	0.00 1.40 0.60	1.00 1.00 0.00	
Final Sat.:	943 0 707	0 0 0	0 2317 983	1650 1650 0	
Capacity Analysis Module:					
Vol/Sat:	0.03 0.00 0.03	0.00 0.00 0.00	0.00 0.02 0.02	0.03 0.05 0.00	
Crit Volume:	32 0	31	56	****	
Crit Moves:	****				

Level Of Service Computation Report
CCTALOS (Base Volume Alternative)
Existing PM

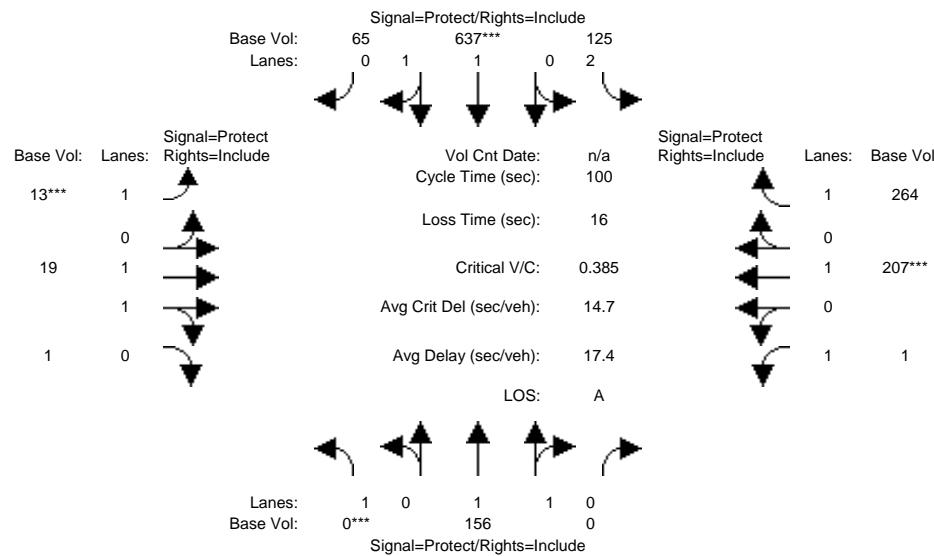
Intersection #2: Fairview Parkway / Concord Avenue



Street Name: Concord Avenue Fairview Parkway
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Min. Green: 5 5 5 0 0 0 0 5 5 3 5 0
 Volume Module:
 Base Vol: 18 0 60 0 0 0 0 17 19 36 23 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: 18 0 60 0 0 0 0 17 19 36 23 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: 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76
 PHF Volume: 24 0 79 0 0 0 0 22 25 47 30 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 24 0 79 0 0 0 0 22 25 47 30 0
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 24 0 79 0 0 0 0 22 25 47 30 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
 Final Volume: 24 0 79 0 0 0 0 22 25 47 30 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: 0.23 0.00 0.77 0.00 0.00 0.00 0.00 1.00 1.00 1.00 1.00 1.00
 Final Sat.: 381 0 1269 0 0 0 0 1650 1650 1650 1650 0
 Capacity Analysis Module:
 Vol/Sat: 0.06 0.00 0.06 0.00 0.00 0.00 0.00 0.01 0.02 0.03 0.02 0.00
 Crit Volume: 103 0 25 47 **** ****
 Crit Moves: **** ****

Level Of Service Computation Report
CCTALOS (Base Volume Alternative)
Existing AM

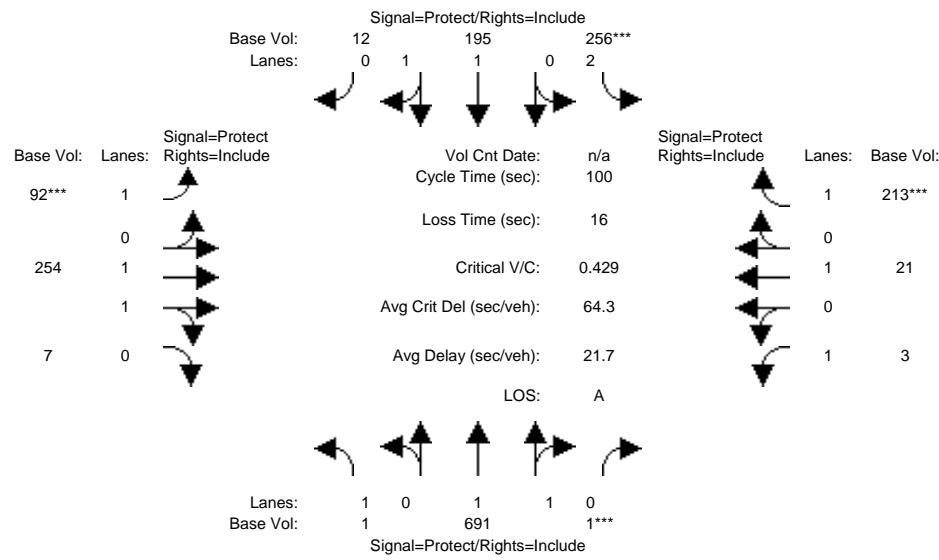
Intersection #3: SR 4 Bypass / Marsh Creek Road



Street Name:	SR 4 Bypass / Vasco Road						Marsh Creek Road								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	2	4	4	2	4	4	2	2	2	2	2	2	2	2	2
Volume Module:															
Base Vol:	0	156	0	125	637	65	13	19	1	1	207	264			
Height Adj:	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	156	0	125	637	65	13	19	1	1	207	264			
User Input:	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
PHR Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHR Volume:	0	173	0	139	708	72	14	21	1	1	230	293			
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	173	0	139	708	72	14	21	1	1	230	293			
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
RTOR Vol:	0	173	0	139	708	72	14	21	1	1	230	217			
PCB Adj:	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
FinalVolume:	0	173	0	139	708	72	14	21	1	1	230	217			
Saturation Flow Module:															
Sat/Lane:	1650	1650	1650	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	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	2.00	1.81	0.19	1.00	1.90	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1650	3300	0	3000	2994	306	1650	3135	165	1650	1650	1650	1650	1650	1650
Capacity Analysis Module:															
Vol/Sat:	0.00	0.05	0.00	0.05	0.24	0.24	0.01	0.01	0.01	0.01	0.00	0.14	0.13		
Crit Volume:	0			390			14				230				
Crit Maxmt:	***			***			***				***				

Level Of Service Computation Report
CCTALOS (Base Volume Alternative)
Existing PM

Intersection #3: SR 4 Bypass / Marsh Creek Road

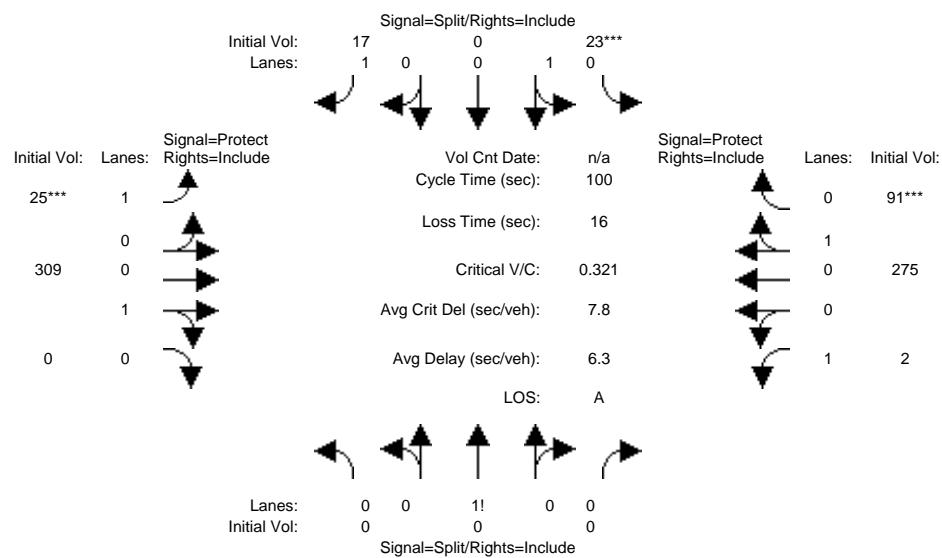


Street Name:	SR 4 Bypass / Vasco Road						Marsh Creek Road						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	2	4	4	4	2	4	4	2	2	2	2	2	
Volume Module:													
Base Vol:	1	691		1	256	195	12	92	254	7	3	21	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Base:	1	691		1	256	195	12	92	254	7	3	21	213
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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	1	751		1	278	212	13	100	276	8	3	23	232
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	751		1	278	212	13	100	276	8	3	23	232
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0	153
RTOR Vol:	1	751		1	278	212	13	100	276	8	3	23	78
PCF Adj:	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
Final Volume:	1	751		1	278	212	13	100	276	8	3	23	78
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	
Lanes:	1.00	1.99	0.01	2.00	1.88		0.12	1.00	1.95	0.05	1.00	1.00	
Final Sat.:	1650	3295		5	3000	3109	191	1650	3211	89	1650	1650	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.23	0.23	0.09	0.07	0.07	0.06	0.09	0.09	0.00	0.01	0.05	
Crit Volume:		376	139					100				78	
Crit Moves:	****	****						****				****	

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term AM

Intersection #1: John Muir Parkway / Fairview Avenue

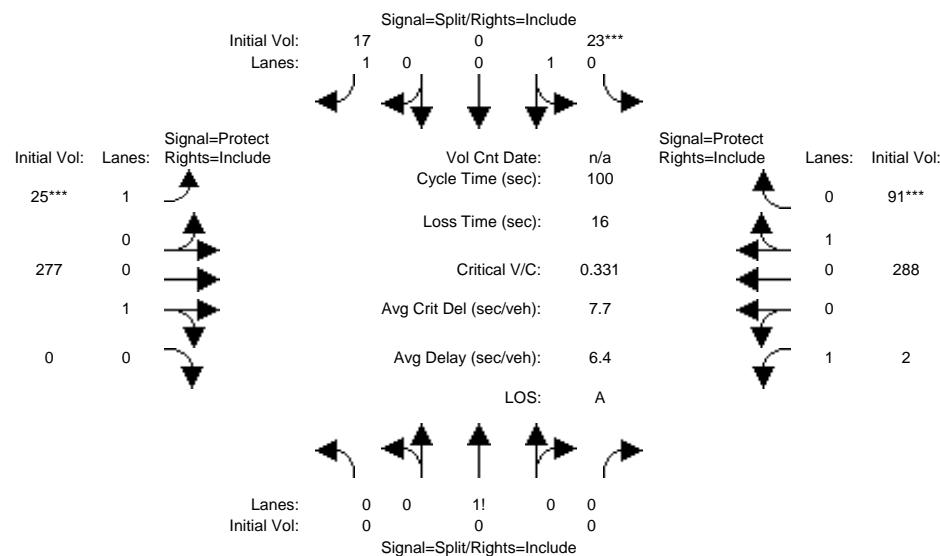


Street Name:	John Muir Parkway				Fairview Avenue			
	Approach:	North Bound	South Bound	East Bound	West Bound			
Movement:	L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:	3 3 3	3 3 3	3 5 5	3 5 5				
Volume Module:								
Base Vol:	0 0 0 23 0 6 4 25 0 2 24 91							
Growth Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00							
Initial Bse:	0 0 0 23 0 6 4 25 0 2 24 91							
Added Vol:	0 0 0 0 0 11 21 284 0 0 251 0							
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0							
Initial Fut:	0 0 0 23 0 17 25 309 0 2 275 91							
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:	0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75							
PHF Volume:	0 0 0 31 0 23 33 412 0 3 367 121							
Reducut Vol:	0 0 0 0 0 0 0 0 0 0 0 0							
Reduced Vol:	0 0 0 31 0 23 33 412 0 3 367 121							
RTOR Reduct:	0 0 0 0 0 0 0 0 0 0 0 0							
RTOR Vol:	0 0 0 31 0 0 33 412 0 3 367 121							
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:	0 0 0 31 0 0 33 412 0 3 367 121							
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:	0.00 1.00 0.00 1.00 0.00 1.00 1.00 1.00 0.00 1.00 0.75 0.25							
Final Sat.:	0 1720 0 1720 0 1720 1720 1720 0 1720 1292 428							
Capacity Analysis Module:								
Vol/Sat:	0.00 0.00 0.00 0.02 0.00 0.00 0.02 0.24 0.00 0.00 0.28 0.28							
Crit Volume:	0 31 33 488							
Crit Moves:	****							

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 AM

Intersection #1: John Muir Parkway / Fairview Avenue

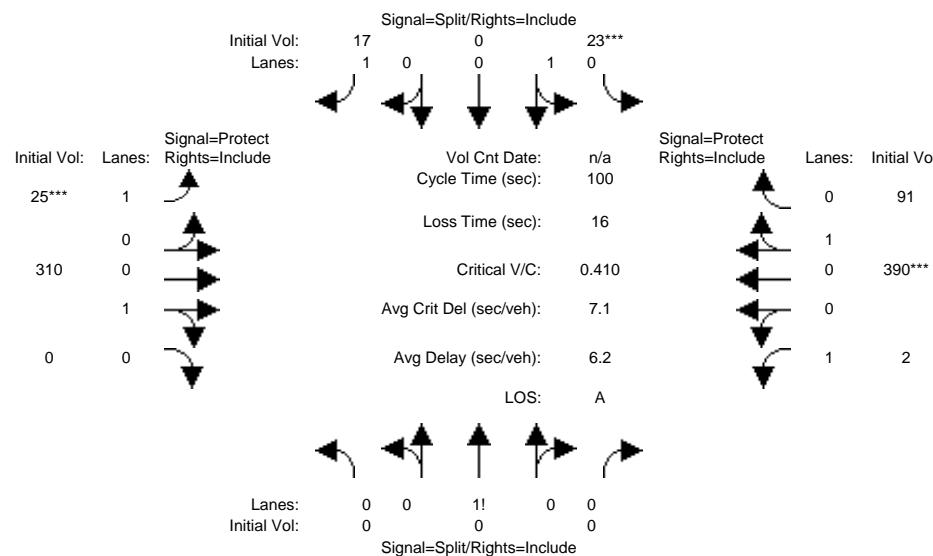


	John Muir Parkway				Fairview Avenue			
Approach:	North Bound	South Bound	East Bound	West Bound				
Movement:	L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:	3	3	3	3	3	3	5	5
Volume Module:								
Base Vol:	0	0	0	23	0	6	4	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	23	0	6	4	25
Added Vol:	0	0	0	0	11	21	252	0
PasserByVol:	0	0	0	0	0	0	0	264
Initial Fut:	0	0	0	23	0	17	25	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	0	0	0	31	0	23	33	369
Reducet Vol:	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	31	0	23	33	369
RTOR Reduct:	0	0	0	0	23	0	0	0
RTOR Vol:	0	0	0	31	0	0	33	369
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
Final Volume:	0	0	0	31	0	0	33	369
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:	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Final Sat.:	0	1720	0	1720	1720	1720	0	1720
Capacity Analysis Module:								
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.29
Crit Volume:	0	31	0	33	0	33	0	505
Crit Moves:	****	****	****	****	****	****	****	****

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out AM

Intersection #1: John Muir Parkway / Fairview Avenue

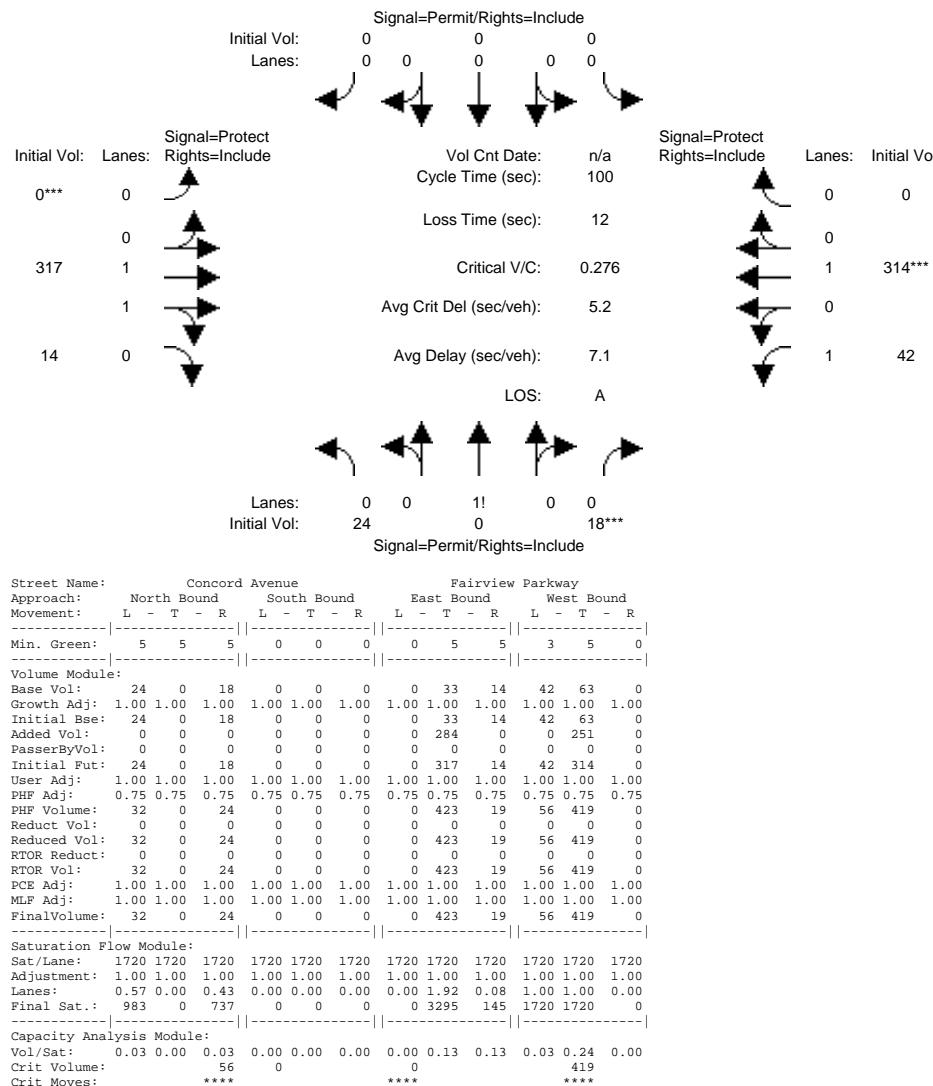


Street Name:		John Muir Parkway	Fairview Avenue		
Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Min. Green:	3 3 3	3 3 3	3 5 5	3 5 5	
Volume Module:					
Base Vol:	0 0 0	23 0 6	4 25 0	2 24 91	
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
Initial Bse:	0 0 0	23 0 6	4 25 0	2 24 91	
Added Vol:	0 0 0	0 0 11	21 285 0	0 0 366	0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0
Initial Fut:	0 0 0	23 0 17	25 310 0	2 390 91	
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:	0.75 0.75 0.75	0.75 0.75 0.75	0.75 0.75 0.75	0.75 0.75 0.75	0.75
PHF Volume:	0 0 0	31 0 23	33 413 0	3 520	121
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0
Reduced Vol:	0 0 0	31 0 23	33 413 0	3 520	121
RTOR Reduct:	0 0 0	0 0 23	0 0 0	0 0 0	0
RTOR Vol:	0 0 0	31 0 0	33 413 0	3 520	121
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
Final Volume:	0 0 0	31 0 0	33 413 0	3 520	121
Saturation Flow Module:					
Sat./Lane:	1720 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:	0.00 1.00 0.00	1.00 0.00 1.00	1.00 1.00 0.00	1.00 0.81 0.19	
Final Sat.:	0 1720 0	1720 0 1720	1720 1720 0	1720 1395 325	
Capacity Analysis Module:					
Vol/Sat:	0.00 0.00 0.00	0.02 0.00 0.00	0.02 0.24 0.00	0.00 0.00 0.37	0.37
Crit Volume:	0 31	33	641		
Crit Moves:	****	****	****		

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term AM

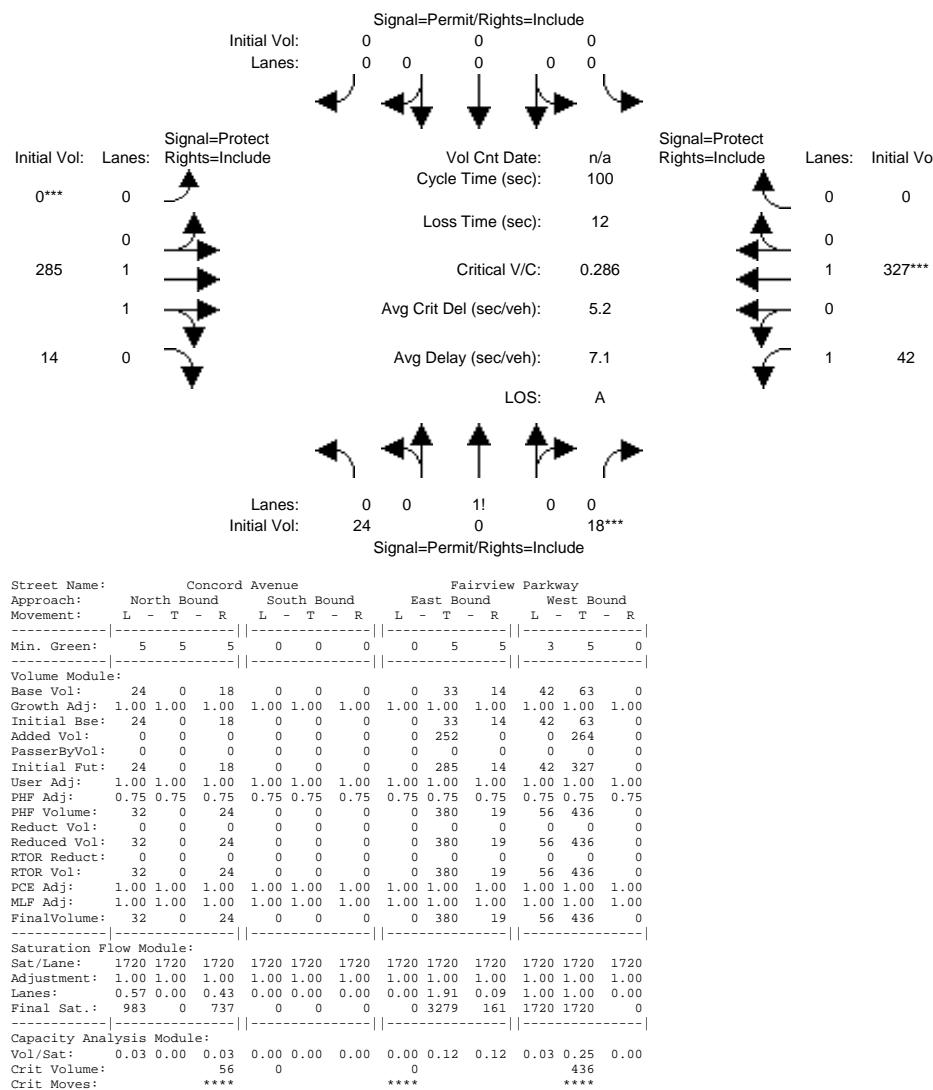
Intersection #2: Fairview Parkway / Concord Avenue



Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 AM

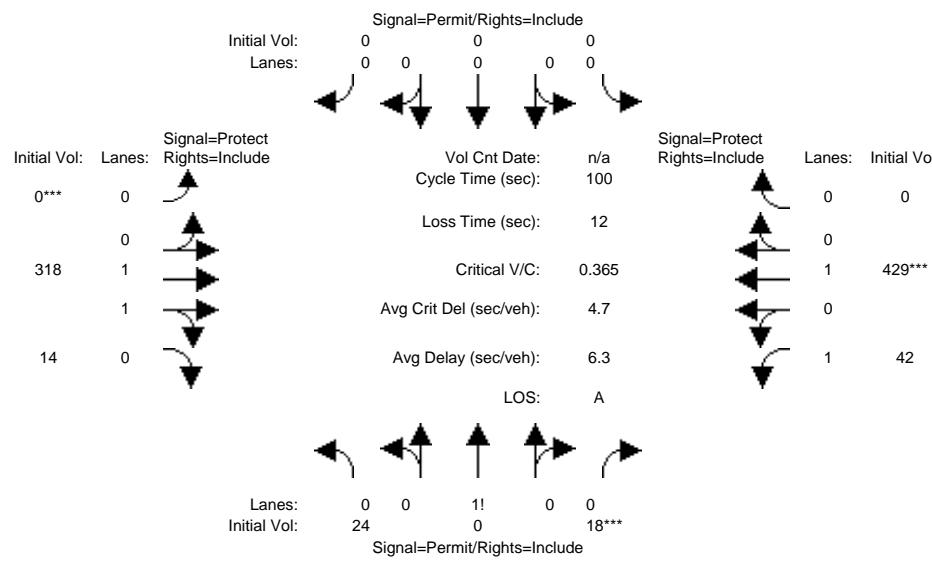
Intersection #2: Fairview Parkway / Concord Avenue



Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out AM

Intersection #2: Fairview Parkway / Concord Avenue

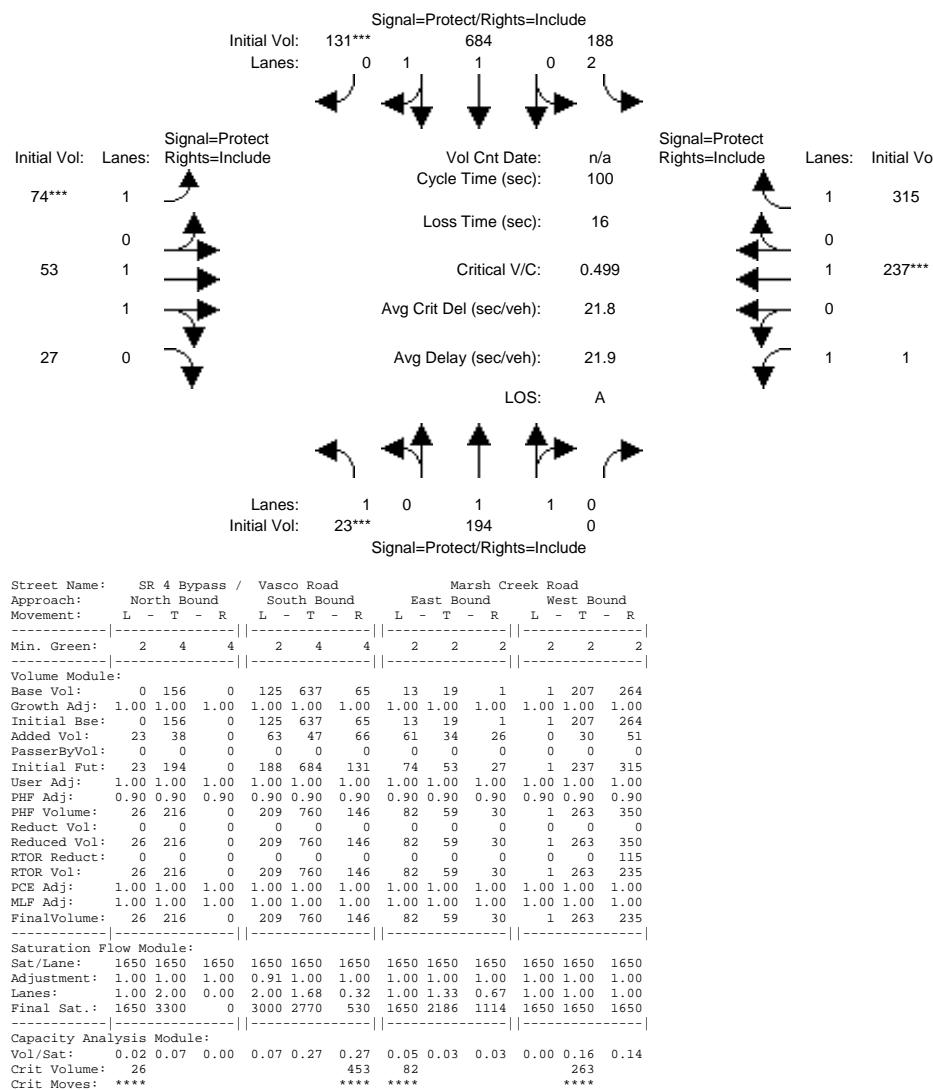


Street Name: Concord Avenue Fairview Parkway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 5 5 5 0 0 0 0 5 5 3 5 0
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 24 0 18 0 0 0 0 33 14 42 63 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: 24 0 18 0 0 0 0 33 14 42 63 0
Added Vol: 0 0 0 0 0 0 0 285 0 0 366 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 24 0 18 0 0 0 0 318 14 42 429 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: 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75
PHF Volume: 32 0 24 0 0 0 0 424 19 56 572 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 32 0 24 0 0 0 0 424 19 56 572 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 32 0 24 0 0 0 0 424 19 56 572 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: 32 0 24 0 0 0 0 424 19 56 572 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: 0.57 0.00 0.43 0.00 0.00 0.00 0.00 1.92 0.08 1.00 1.00 1.00
Final Sat.: 983 0 737 0 0 0 0 3295 145 1720 1720 0
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.03 0.00 0.03 0.00 0.00 0.00 0.00 0.13 0.13 0.03 0.33 0.00
Crit Volume: 56 0 0 0 0 0 0 572
Crit Moves: ****

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term AM

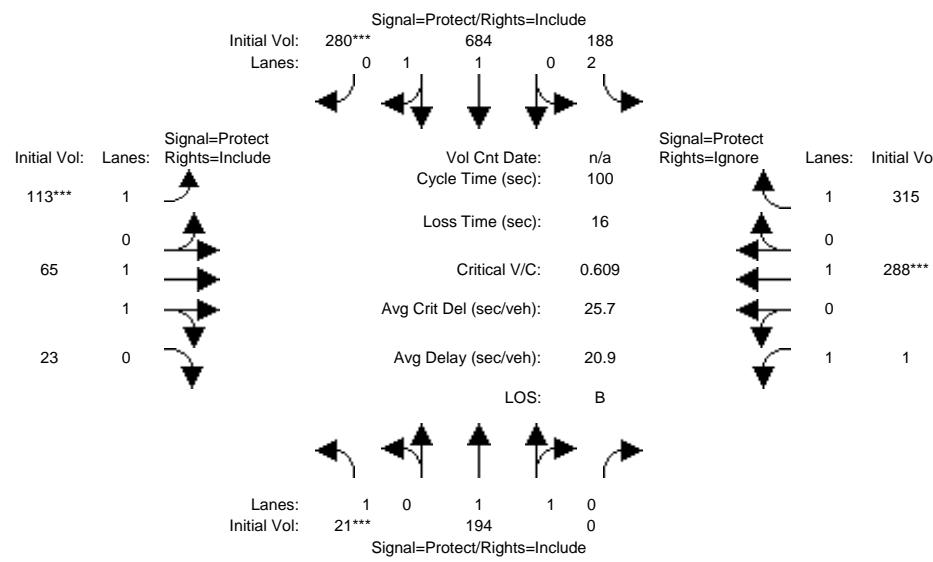
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 AM

Intersection #3: SR 4 Bypass / Marsh Creek Road

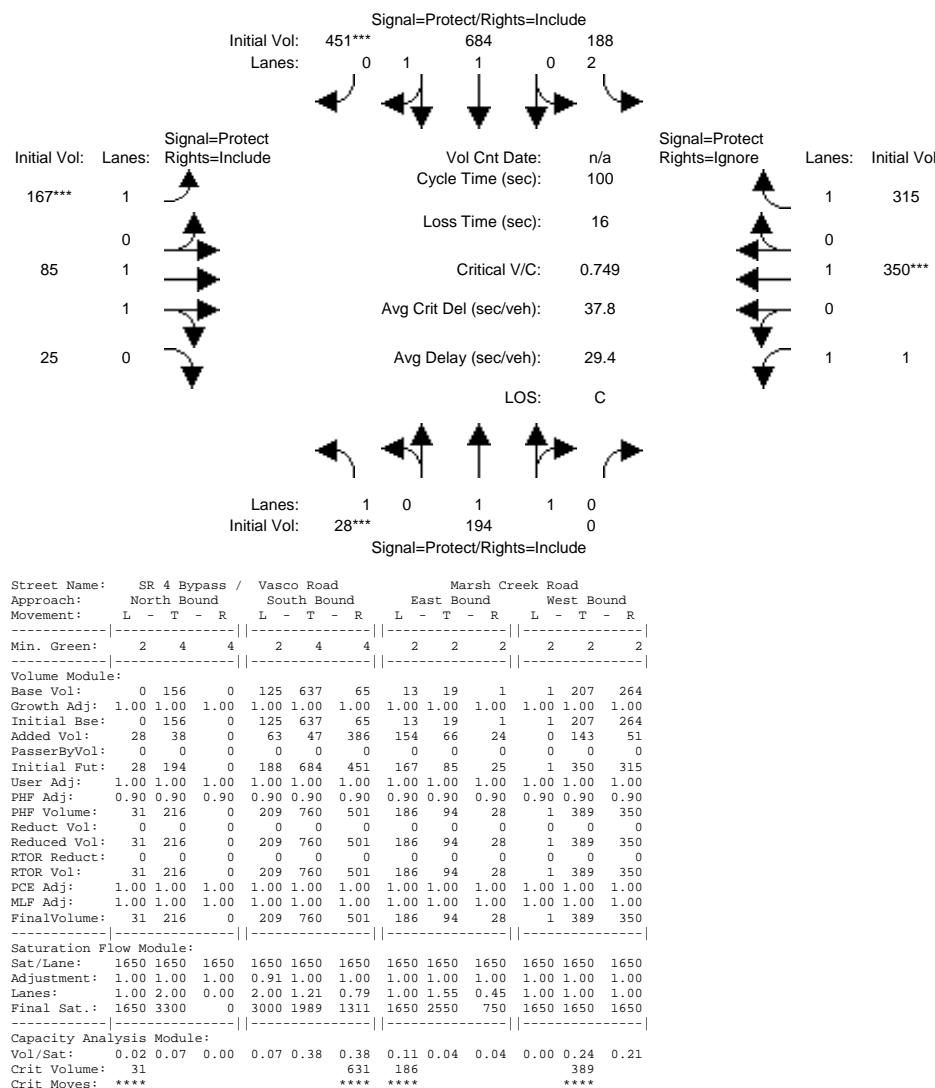


Street Name: SR 4 Bypass / Vasco Road Marsh Creek Road
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 2 4 4 2 4 4 2 2 2 2 2 2
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 0 156 0 125 637 65 13 19 1 1 207 264
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: 0 156 0 125 637 65 13 19 1 1 207 264
Added Vol: 21 38 0 63 47 215 100 46 22 0 81 51
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 21 194 0 188 684 280 113 65 23 1 288 315
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: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume: 23 216 0 209 760 311 126 72 26 1 320 350
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 23 216 0 209 760 311 126 72 26 1 320 350
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 23 216 0 209 760 311 126 72 26 1 320 350
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: 23 216 0 209 760 311 126 72 26 1 320 350
-----|-----|-----|-----|-----|-----|-----|-----|
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 2.00 0.00 2.00 1.42 0.58 1.00 1.48 0.52 1.00 1.00 1.00
Final Sat.: 1650 3300 0 3000 2341 959 1650 2437 863 1650 1650 1650
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.01 0.07 0.00 0.07 0.32 0.32 0.08 0.03 0.03 0.00 0.19 0.21
Crit Volume: 23 536 126 320
Crit Moves: ****

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out AM

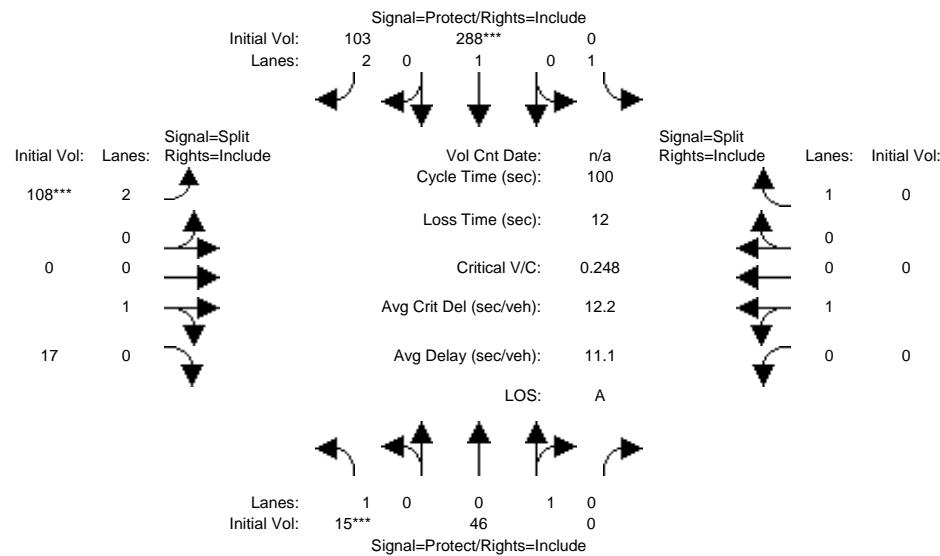
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term AM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]

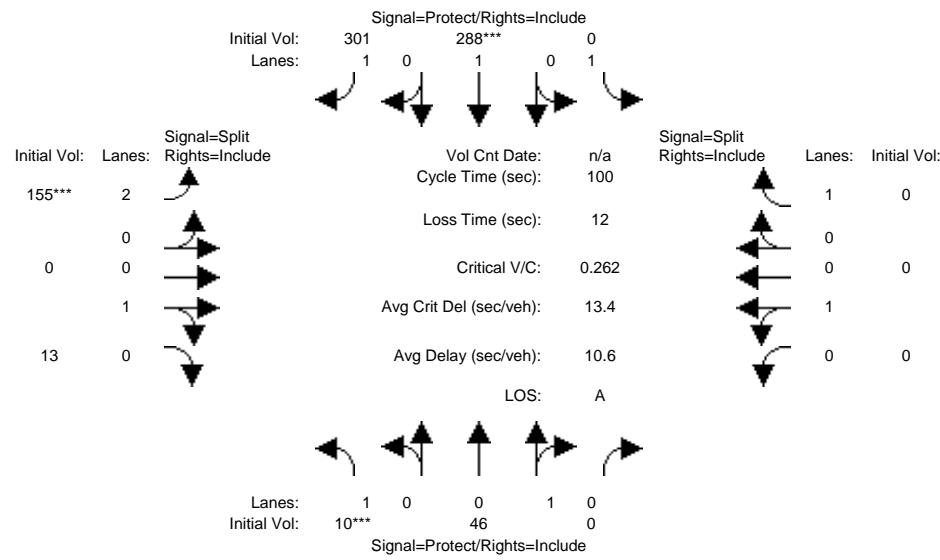


Street Name:		Marsh Creek Road	Vineyards Parkway					
Approach:	North Bound	South Bound	East Bound	West Bound				
Movement:	L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:	2 2 2	2 2 2	2 2 2	0 0 0				
Volume Module:								
Base Vol:	0 33 0	0 0 272	0 0 0	0 0 0				
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00				
Initial Bse:	0 33 0	0 0 272	0 0 0	0 0 0				
Added Vol:	15 13 0	0 16 103	108 0 17	0 0 0				
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0				
Initial Fut:	15 46 0	0 288 103	108 0 17	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:	0.85 0.85 0.85	0.85 0.85 0.85	0.85 0.85 0.85	0.85 0.85 0.85				
PHF Volume:	18 54 0	0 339 121	127 0 20	0 0 0				
Reducet Vol:	0 0 0	0 0 0	0 0 0	0 0 0				
Reduced Vol:	18 54 0	0 339 121	127 0 20	0 0 0				
RTOR Reduct:	0 0 0	0 0 70	0 0 0	0 0 0				
RTOR Vol:	18 54 0	0 339 51	127 0 20	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				
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:	18 54 0	0 339 51	127 0 20	0 0 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	0.91 0.91 1.00	1.00 1.00 1.00				
Lanes:	1.00 1.00 0.00	1.00 1.00 2.00	2.00 0.00 1.00	0.00 1.00 1.00				
Final Sat.:	1720 1720 0	1720 1720 3127	3127 0 1720	0 1720 1720				
Capacity Analysis Module:								
Vol/Sat:	0.01 0.03 0.00	0.00 0.20 0.02	0.04 0.00 0.01	0.00 0.00 0.00				
Crit Volume:	18	339	64	0				
Crit Moves:	****	****	****					

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 AM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]

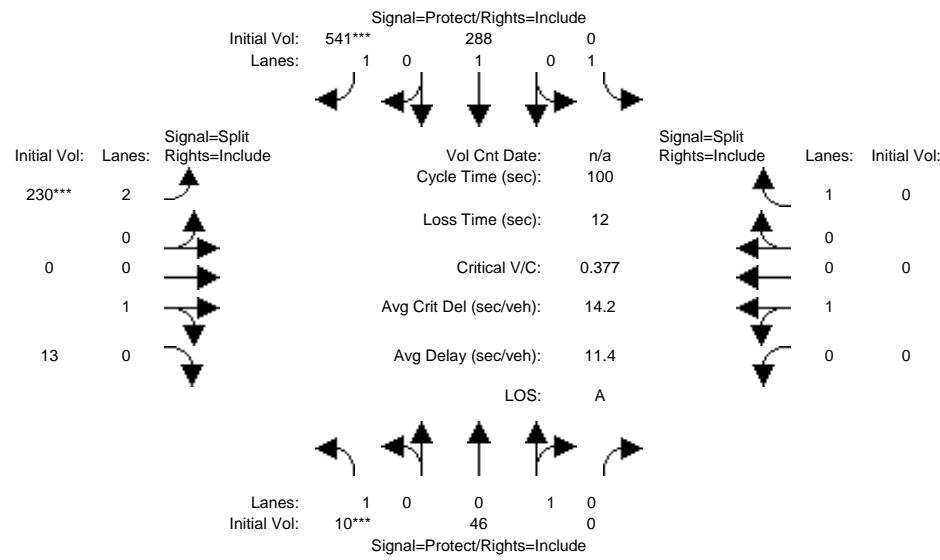


	Marsh Creek Road				Vineyards Parkway			
Approach:	North Bound	South Bound	East Bound	West Bound				
Movement:	L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:	2	2	2	2	2	2	2	0
Volume Module:								
Base Vol:	0	33	0	0	272	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	33	0	0	272	0	0	0
Added Vol:	10	13	0	0	16	301	155	0
PasserByVol:	0	0	0	0	0	0	0	0
Initial Fut:	10	46	0	0	288	301	155	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	12	54	0	0	339	354	182	0
Reducet Vol:	0	0	0	0	0	0	0	0
Reduced Vol:	12	54	0	0	339	354	182	0
RTOR Reduct:	0	0	0	0	100	0	0	0
RTOR Vol:	12	54	0	0	339	254	182	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:	12	54	0	0	339	254	182	0
Saturation Flow Module:								
Sat./Lane:	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00
Final Sat.:	1720	1720	0	1720	1720	3127	0	1720
Capacity Analysis Module:								
Vol/Sat:	0.01	0.03	0.00	0.00	0.20	0.15	0.06	0.00
Crit Volume:	12		339		91			0
Crit Moves:	****		****		****			

Brentwood Center Community College
Near-Term AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out AM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]

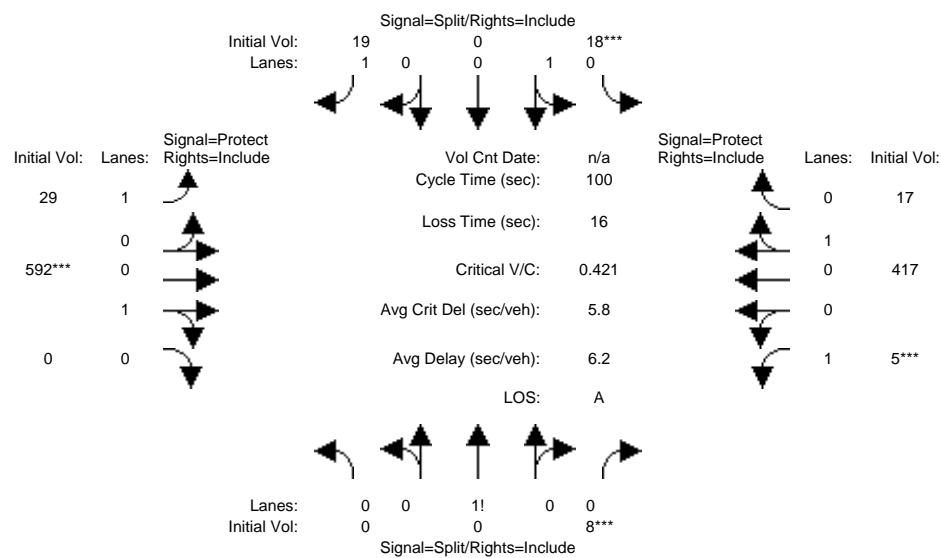


Street Name: Marsh Creek Road Vineyards Parkway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|
Min. Green: 2 2 2 2 2 2 2 0 0 0
-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 0 33 0 0 272 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
Initial Bse: 0 33 0 0 272 0 0 0 0 0 0 0 0 0
Added Vol: 10 13 0 0 16 541 230 0 13 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 10 46 0 0 288 541 230 0 13 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
PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
PHF Volume: 12 54 0 0 339 636 271 0 15 0 0 0 0 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 12 54 0 0 339 636 271 0 15 0 0 0 0 0
RTOR Reduct: 0 0 0 0 0 149 0 0 0 0 0 0 0 0
RTOR Vol: 12 54 0 0 339 488 271 0 15 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
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
FinalVolume: 12 54 0 0 339 488 271 0 15 0 0 0 0 0
-----|-----|-----|-----|-----|-----|-----|
Saturation Flow Module:
Sat./Lane: 1720 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 0.91 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 0.00 1.00 1.00 1.00 2.00 0.00 1.00 0.00 1.00 1.00 1.00
Final Sat.: 1720 1720 0 1720 1720 1720 3127 0 1720 0 1720 1720
-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.01 0.03 0.00 0.00 0.20 0.28 0.09 0.00 0.01 0.00 0.00 0.00
Crit Volume: 12 488 135 0
Crit Moves: **** *

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term PM

Intersection #1: John Muir Parkway / Fairview Avenue

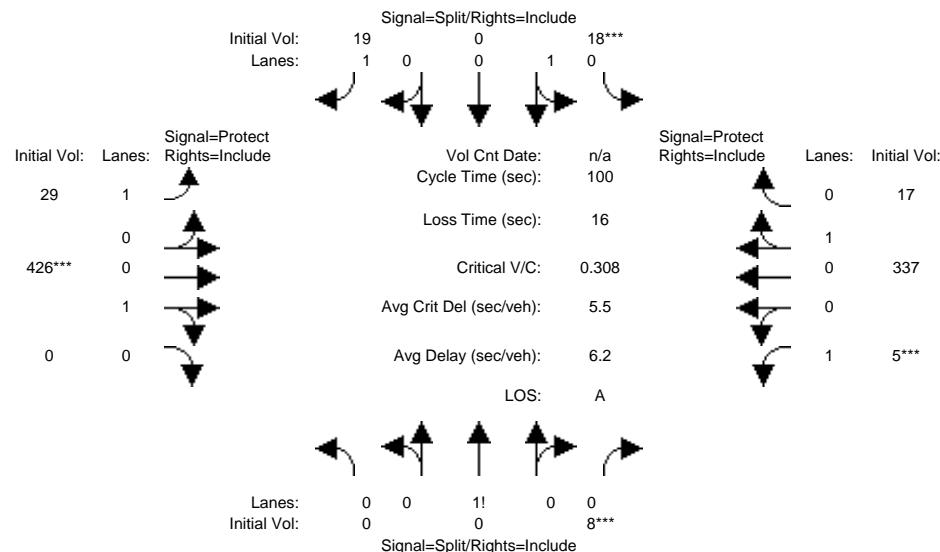


Street Name:		John Muir Parkway			Fairview Avenue							
Approach:	North Bound	South Bound	East Bound	West Bound	L - T - R	L - T - R	L - T - R					
Movement:	L	T	R	L	T	R	L	T	R			
Min. Green:	3	3	3	3	3	3	3	5	5			
Volume Module:												
Base Vol:	0	0	8	18	0	3	3	12	0	5	19	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	8	18	0	3	3	12	0	5	19	17
Added Vol:	0	0	0	0	0	16	26	580	0	0	398	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	8	18	0	19	29	592	0	5	417	17
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:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	0	0	9	20	0	21	33	665	0	6	469	19
Reducut Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	9	20	0	21	33	665	0	6	469	19
RTOR Reduct:	0	0	6	0	0	21	0	0	0	0	0	0
RTOR Vol:	0	0	3	20	0	0	33	665	0	6	469	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
Final Volume:	0	0	3	20	0	0	33	665	0	6	469	19
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	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.96	0.04
Final Sat.:	0	0	1650	1650	0	1650	1650	1650	0	1650	1585	65
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.40	0.00	0.00	0.30	0.30
Crit Volume:				3	20			665		6		
Crit Moves:	****	****				****		****				

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 PM

Intersection #1: John Muir Parkway / Fairview Avenue

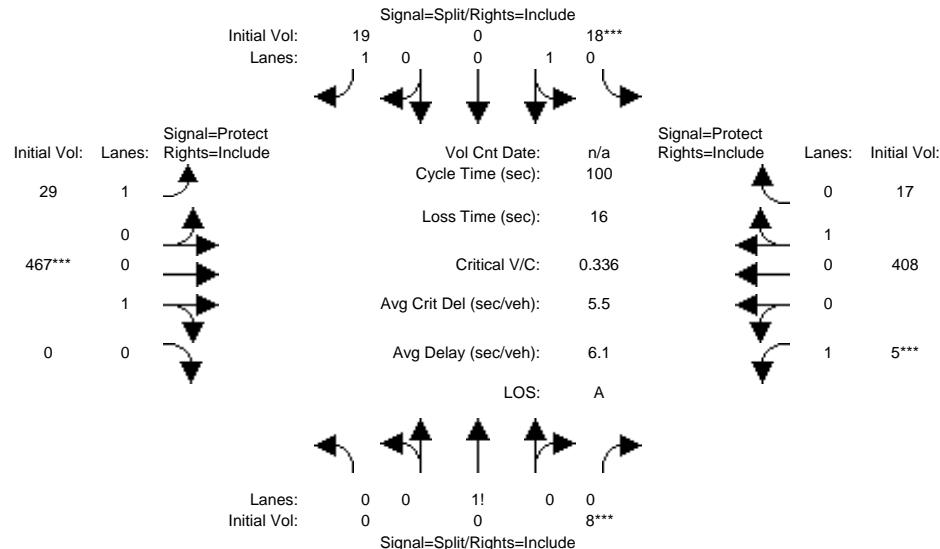


Street Name: John Muir Parkway Fairview Avenue
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 3 3 3 3 3 3 5 5 3 5 5 5
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 0 0 8 18 0 3 3 12 0 5 19 17
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 8 18 0 3 3 12 0 5 19 17
Added Vol: 0 0 0 0 0 16 26 414 0 0 0 318 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 8 18 0 19 29 426 0 5 337 17
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: 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89
PHF Volume: 0 0 9 20 0 21 33 479 0 6 379 19
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 9 20 0 21 33 479 0 6 379 19
RTOR Reduct: 0 0 6 0 0 21 0 0 0 0 0 0
RTOR Vol: 0 0 3 20 0 0 33 479 0 6 379 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
Final Volume: 0 0 3 20 0 0 33 479 0 6 379 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 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00 0.00 1.00 0.95 0.05
Final Sat.: 0 0 1650 1650 0 1650 1650 0 1650 1571 79
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.00 0.02 0.29 0.00 0.00 0.24 0.24
Crit Volume: 3 20 479 6
Crit Moves: **** **** *** ***

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out PM

Intersection #1: John Muir Parkway / Fairview Avenue

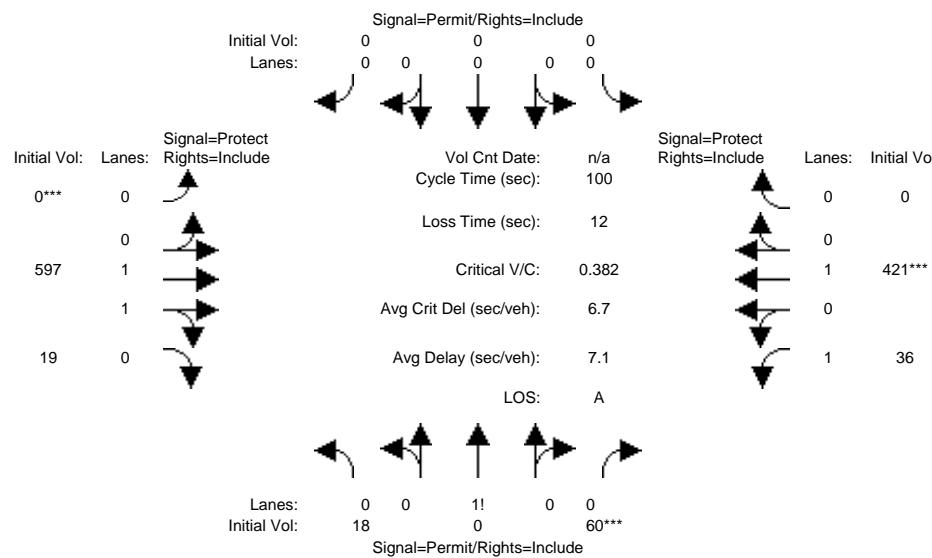


Street Name:	John Muir Parkway								Fairview Avenue				
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	R
Min. Green:	3	3	3	3	3	3	3	5	5	5	3	5	5
Volume Module:													
Base Vol:	0	0	8	18	0	3	3	12	0	5	19	17	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Base:	0	0	8	18	0	3	3	12	0	5	19	17	
Added Vol:	0	0	0	0	0	16	26	455	0	0	389	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	0	8	18	0	19	29	467	0	5	408	17	
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	
PHR Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	
PHR Volume:	0	0	9	20	0	21	33	525	0	6	458	19	
Reducut Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	0	9	20	0	21	33	525	0	6	458	19	
RTOR Reduct:	0	0	6	0	0	21	0	0	0	0	0	0	
RTOR Vol:	0	0	3	20	0	0	33	525	0	6	458	19	
PCB Adj:	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	
FinalIVolume:	0	0	3	20	0	0	0	33	525	0	6	458	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.04
Final Sat.:	0	0	1650	1650	0	1650	1650	1650	0	1650	1584	66	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.32	0.00	0.00	0.29	0.29
Crit Volume:			3	20				525			6		
Crit Moves:	****	****					****			****			

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term PM

Intersection #2: Fairview Parkway / Concord Avenue

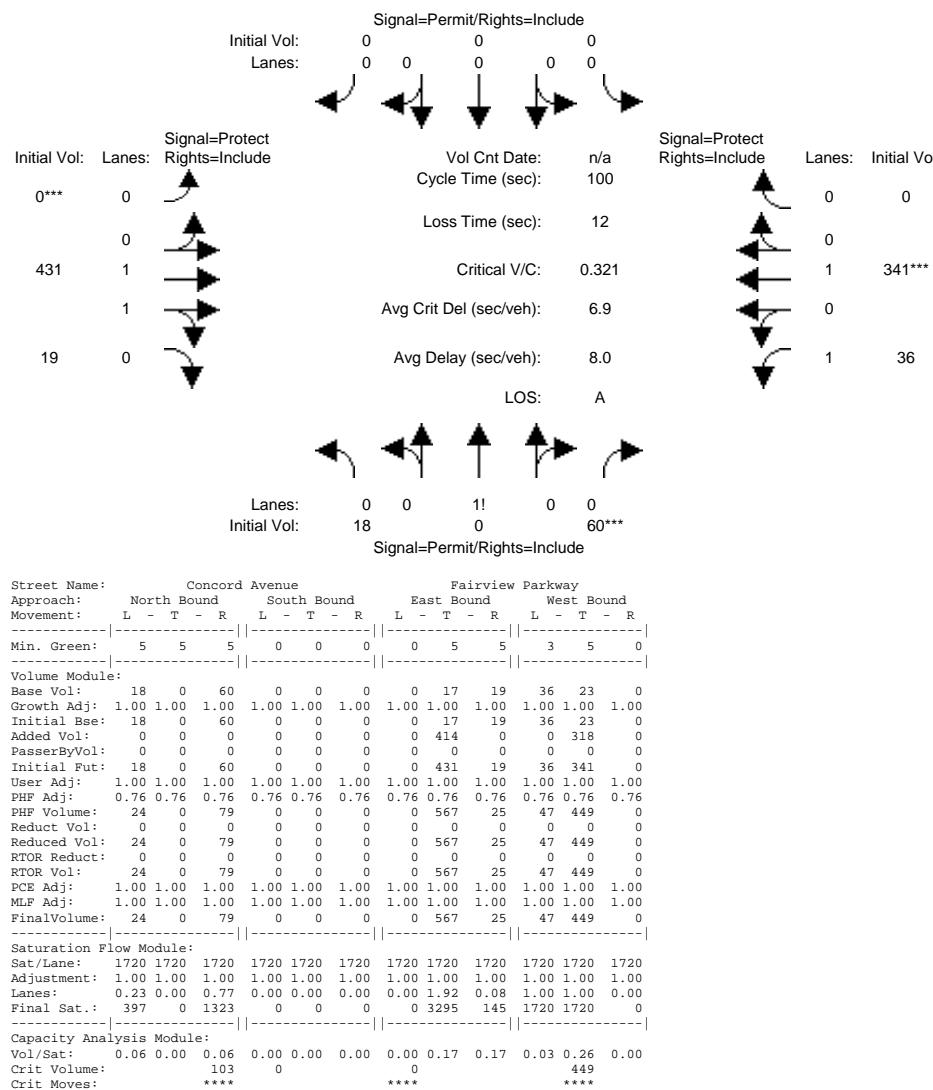


Street Name: Concord Avenue Fairview Parkway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 5 5 5 0 0 0 0 5 5 3 5 0
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 18 0 60 0 0 0 0 17 19 36 23 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: 18 0 60 0 0 0 0 0 17 19 36 23 0
Added Vol: 0 0 0 0 0 0 0 0 580 0 0 398 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 18 0 60 0 0 0 0 597 19 36 421 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: 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76
PHF Volume: 24 0 79 0 0 0 0 0 786 25 47 554 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 24 0 79 0 0 0 0 0 786 25 47 554 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 24 0 79 0 0 0 0 786 25 47 554 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
Final Volume: 24 0 79 0 0 0 0 786 25 47 554 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: 0.23 0.00 0.77 0.00 0.00 0.00 0.00 1.94 0.06 1.00 1.00 0.00
Final Sat.: 397 0 1323 0 0 0 0 3334 106 1720 1720 0
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.06 0.00 0.06 0.00 0.00 0.00 0.00 0.24 0.24 0.03 0.32 0.00
Crit Volume: 103 0 0 0 0 0 0 554
Crit Moves: ****

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 PM

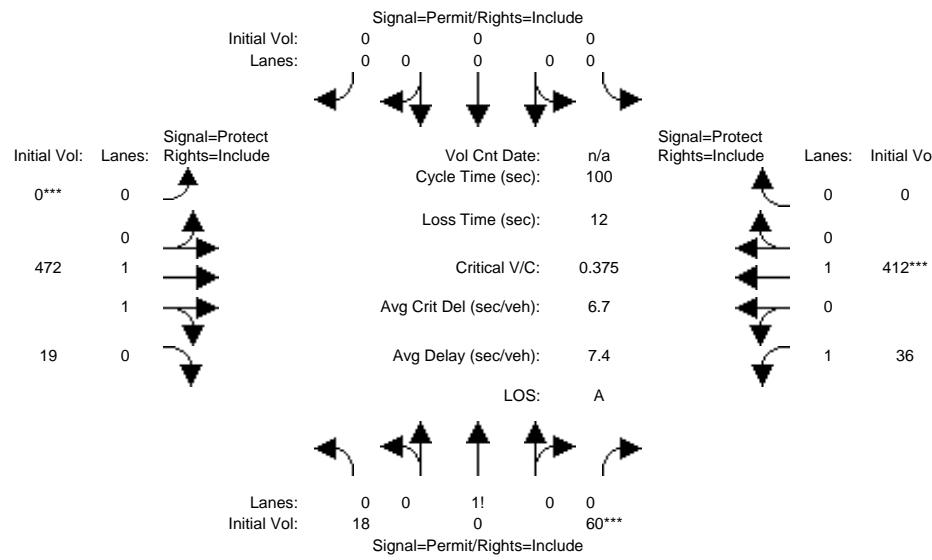
Intersection #2: Fairview Parkway / Concord Avenue



Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out PM

Intersection #2: Fairview Parkway / Concord Avenue

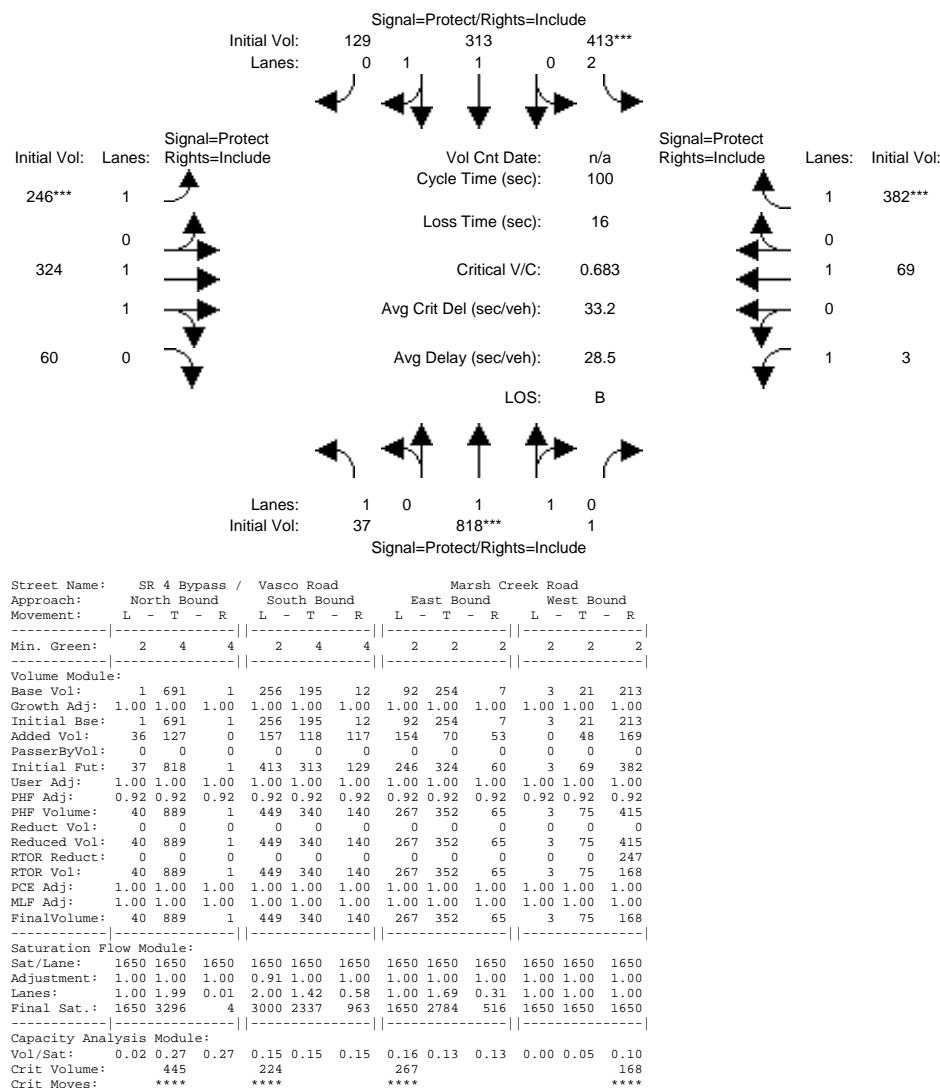


Street Name: Concord Avenue Fairview Parkway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 5 5 5 0 0 0 0 5 5 3 5 0
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 18 0 60 0 0 0 0 17 19 36 23 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: 18 0 60 0 0 0 0 17 19 36 23 0
Added Vol: 0 0 0 0 0 0 0 455 0 0 389 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 18 0 60 0 0 0 0 472 19 36 412 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: 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76
PHF Volume: 24 0 79 0 0 0 0 621 25 47 542 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 24 0 79 0 0 0 0 621 25 47 542 0
RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 24 0 79 0 0 0 0 621 25 47 542 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
Final Volume: 24 0 79 0 0 0 0 621 25 47 542 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: 0.23 0.00 0.77 0.00 0.00 0.00 0.00 1.92 0.08 1.00 1.00 0.00
Final Sat.: 397 0 1323 0 0 0 0 3307 133 1720 1720 0
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.06 0.00 0.06 0.00 0.00 0.00 0.00 0.19 0.19 0.03 0.32 0.00
Crit Volume: 103 0 0 0 0 0 0 542
Crit Moves: ****

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term PM

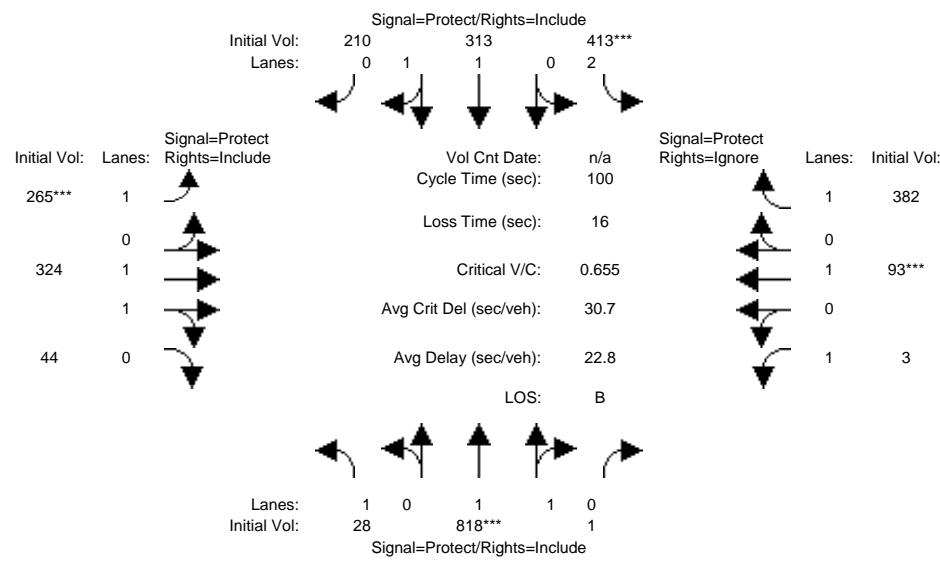
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 PM

Intersection #3: SR 4 Bypass / Marsh Creek Road

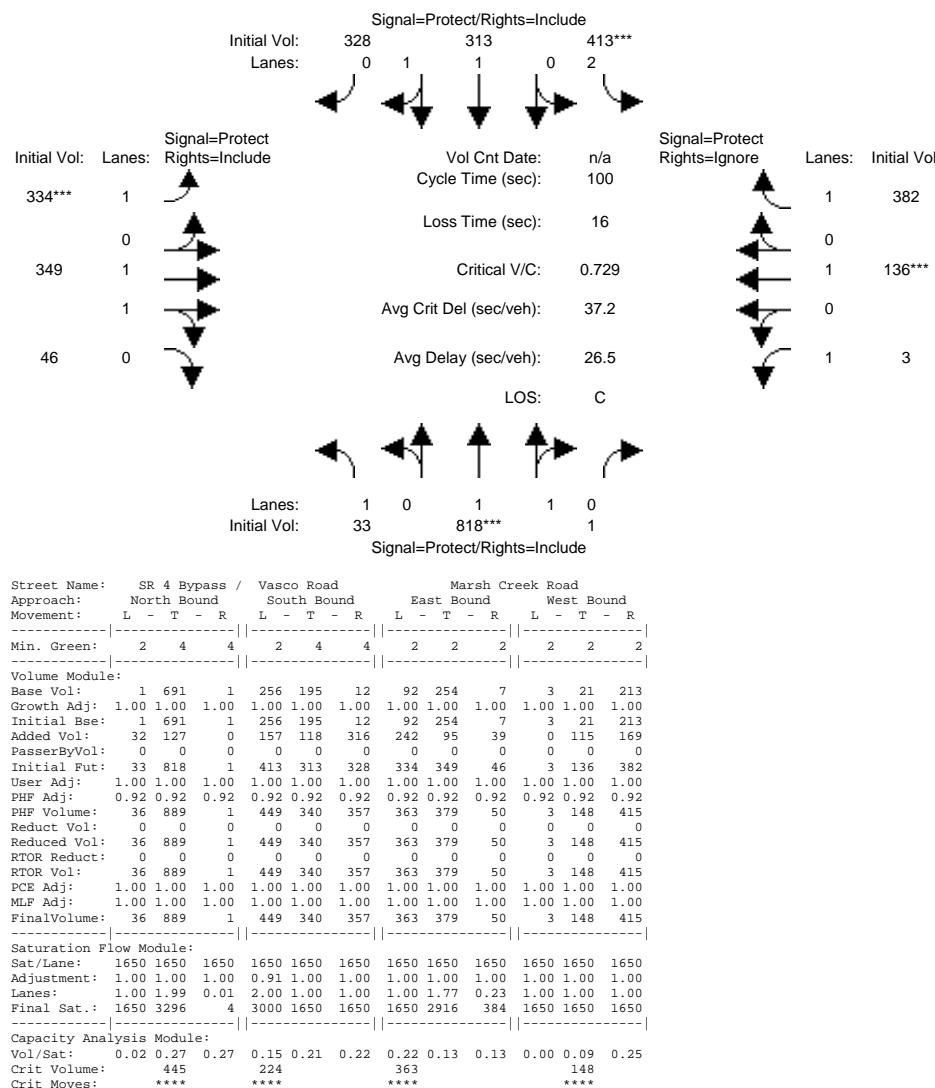


Street Name: SR 4 Bypass / Vasco Road Marsh Creek Road
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Min. Green: 2 4 4 2 4 4 2 2 2 2 2 2
 Volume Module:
 Base Vol: 1 691 1 256 195 12 92 254 7 3 21 213
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 1 691 1 256 195 12 92 254 7 3 21 213
 Added Vol: 27 127 0 157 118 198 173 70 37 0 72 169
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 28 818 1 413 313 210 265 324 44 3 93 382
 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: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
 PHF Volume: 30 889 1 449 340 228 288 352 48 3 101 415
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 30 889 1 449 340 228 288 352 48 3 101 415
 RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 30 889 1 449 340 228 288 352 48 3 101 415
 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: 30 889 1 449 340 228 288 352 48 3 101 415
 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 1.99 0.01 2.00 1.20 0.80 1.00 1.76 0.24 1.00 1.00 1.00
 Final Sat.: 1650 3296 4 3000 1975 1325 1650 2905 395 1650 1650 1650
 Capacity Analysis Module:
 Vol/Sat: 0.02 0.27 0.27 0.15 0.17 0.17 0.17 0.12 0.12 0.00 0.06 0.25
 Crit Volume: 445 224 288 101
 Crit Moves: ****

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out PM

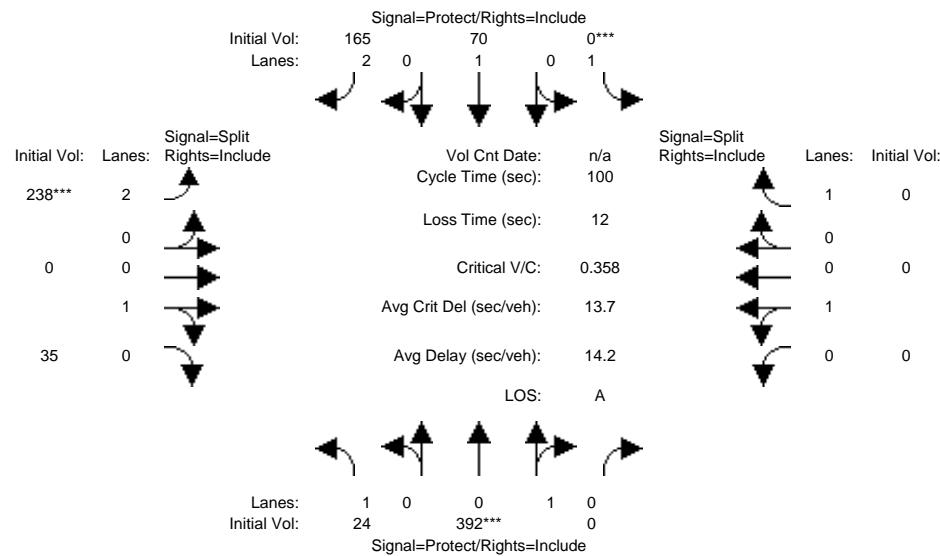
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term PM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]

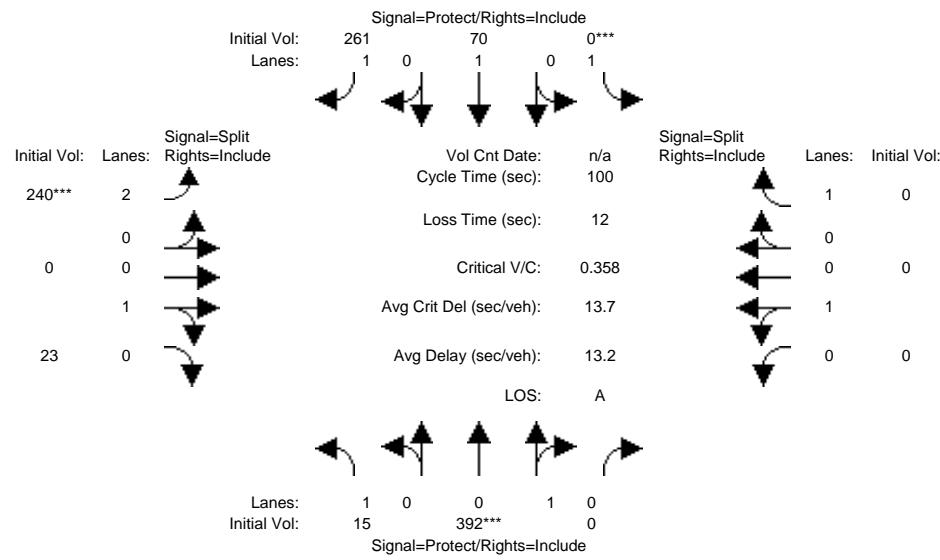


Street Name:		Marsh Creek Road				Vineyards Parkway			
Approach:		North Bound	South Bound	East Bound	West Bound				
Movement:		L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:		2	2	2	2	2	2	2	0
Volume Module:									
Base Vol:	0	353	0	0	34	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	353	0	0	34	0	0	0	0
Added Vol:	24	39	0	0	36	165	238	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0
Initial Fut:	24	392	0	0	70	165	238	0	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	28	461	0	0	82	194	280	0	41
Reduc Vol:	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	461	0	0	82	194	280	0	41
RTOR Reduct:	0	0	0	0	154	0	0	0	0
RTOR Vol:	28	461	0	0	82	40	280	0	41
PCE Adj:	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
Final Volume:	28	461	0	0	82	40	280	0	41
Saturation Flow Module:									
Sat./Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	2.00	2.00	0.00	1.00
Final Sat.:	1720	1720	0	1720	1720	3127	3127	0	1720
Capacity Analysis Module:									
Vol/Sat:	0.02	0.27	0.00	0.00	0.05	0.01	0.09	0.00	0.02
Crit Volume:	461	0	0	140	0	0	0	0	0
Crit Moves:	****	****	****	****	****	****	****	****	****

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Phase 1 PM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]

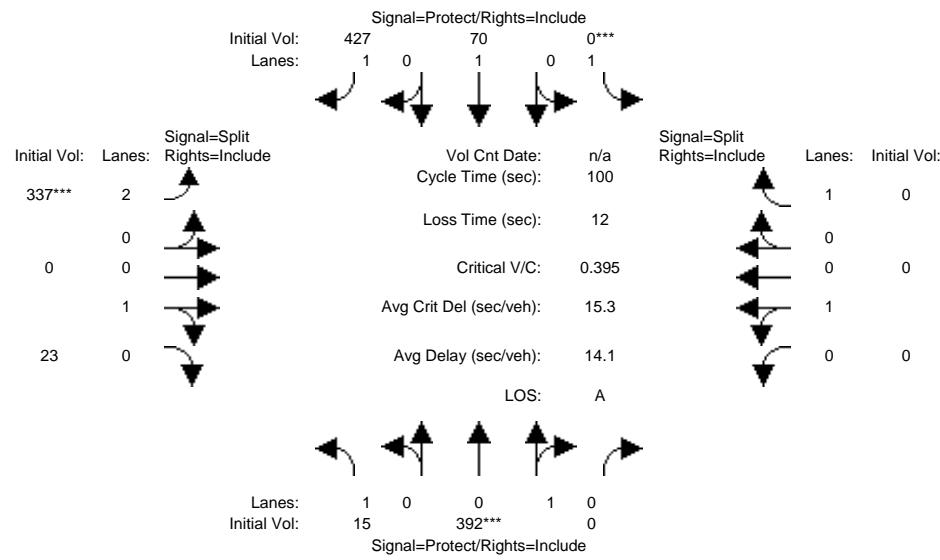


Street Name: Marsh Creek Road Vineyards Parkway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 2 2 2 2 2 2 2 2 0 0 0 0
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 0 353 0 0 34 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
Initial Bse: 0 353 0 0 34 0 0 0 0 0 0 0 0 0
Added Vol: 15 39 0 0 36 261 240 0 23 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 15 392 0 0 70 261 240 0 23 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
PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
PHF Volume: 18 461 0 0 82 307 282 0 27 0 0 0 0 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 461 0 0 82 307 282 0 27 0 0 0 0 0
RTOR Reduct: 0 0 0 0 0 155 0 0 0 0 0 0 0 0
RTOR Vol: 18 461 0 0 82 152 282 0 27 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
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
Final Volume: 18 461 0 0 82 152 282 0 27 0 0 0 0 0
-----|-----|-----|-----|-----|-----|-----|-----|
Saturation Flow Module:
Sat./Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
Adjustment: 1.00 1.00 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 0.00 1.00 1.00 1.00 2.00 0.00 1.00 0.00 1.00 1.00 1.00 1.00
Final Sat.: 1720 1720 0 1720 1720 1720 3127 0 1720 0 1720 1720
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.01 0.27 0.00 0.00 0.05 0.09 0.09 0.00 0.02 0.00 0.00 0.00
Crit Volume: 461 0 0 141 0
Crit Moves: **** * **** *

Brentwood Center Community College
Near-Term PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Near-Term Plus Build Out PM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]



Street Name: Marsh Creek Road Vineyards Parkway
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Min. Green: 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0

Volume Module:
 Base Vol: 0 353 0 0 34 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
 Initial Bse: 0 353 0 0 34 0 0 0 0 0 0 0 0 0 0 0 0
 Added Vol: 15 39 0 0 36 427 337 0 23 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
 Initial Fut: 15 392 0 0 70 427 337 0 23 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
 PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
 PHF Volume: 18 461 0 0 82 502 396 0 27 0 0 0 0 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 18 461 0 0 82 502 396 0 27 0 0 0 0 0 0 0 0
 RTOR Reduct: 0 0 0 0 0 218 0 0 0 0 0 0 0 0 0 0 0
 RTOR Vol: 18 461 0 0 82 284 396 0 27 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
 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
 Final Volume: 18 461 0 0 82 284 396 0 27 0 0 0 0 0 0 0 0

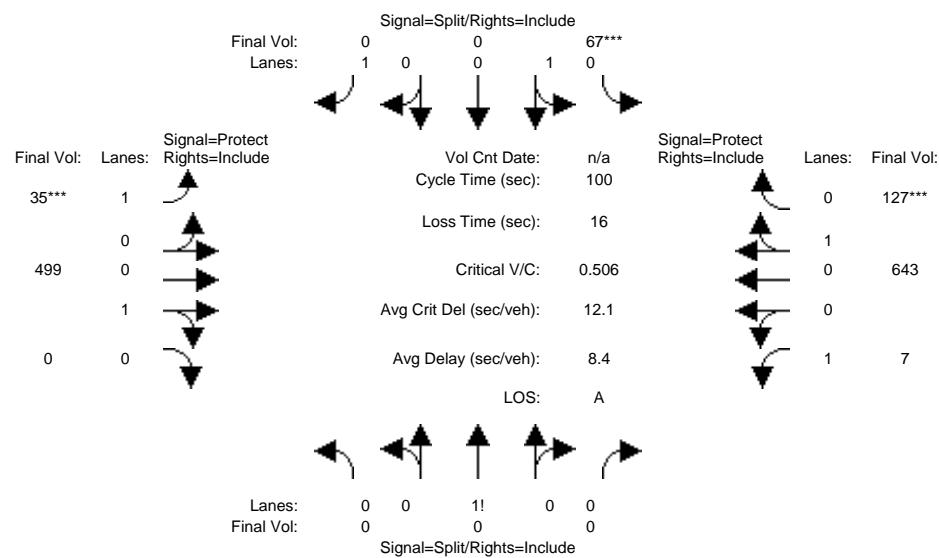
Saturation Flow Module:
 Sat./Lane: 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720 1720
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 1.00 1.00 0.00 1.00 1.00 1.00 2.00 0.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Sat.: 1720 1720 0 1720 1720 1720 3127 0 1720 0 1720 1720 1720 1720 1720 1720

Capacity Analysis Module:
 Vol/Sat: 0.01 0.27 0.00 0.00 0.05 0.17 0.13 0.00 0.02 0.00 0.00 0.00
 Crit Volume: 461 0 198 0
 Crit Moves: **** * ***

Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative AM

Intersection #1: John Muir Parkway / Fairview Avenue



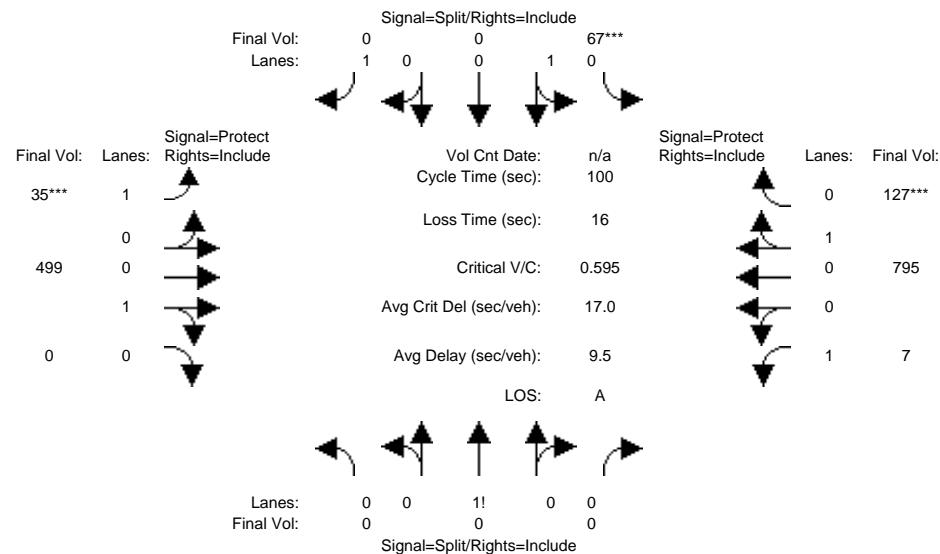
Street Name: John Muir Parkway Fairview Avenue

Approach:	North Bound	South Bound	East Bound	West Bound				
Movement:	L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:	3 3 3	3 3 3	3 5 5	3 5 5				
Volume Module:								
Base Vol:	0 0 0 50 0 15 5 25 0 5 25 95							
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 50 0 15 5 25 0 5 25 95							
Added Vol:	0 0 0 0 0 11 21 349 0 0 457 0							
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0							
Initial Fut:	0 0 0 50 0 26 26 374 0 5 482 95							
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:	0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75							
PHF Volume:	0 0 0 67 0 35 35 499 0 7 643 127							
Reducut Vol:	0 0 0 0 0 0 0 0 0 0 0 0							
Reduced Vol:	0 0 0 67 0 35 35 499 0 7 643 127							
RTOR Reduct:	0 0 0 0 0 0 35 0 0 0 0 0							
RTOR Vol:	0 0 0 67 0 0 35 499 0 7 643 127							
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 67 0 0 35 499 0 7 643 127							
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:	0.00 1.00 0.00 1.00 0.00 1.00 1.00 1.00 0.00 1.00 0.84 0.16							
Final Sat.:	0 1720 0 1720 0 1720 1720 1720 0 1720 1437 283							
Capacity Analysis Module:								
Vol/Sat:	0.00 0.00 0.00 0.04 0.00 0.00 0.02 0.29 0.00 0.00 0.45 0.45							
Crit Volume:	0 67 35 769							
Crit Moves:	****	****	****	****	****	****	****	****

Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out AM

Intersection #1: John Muir Parkway / Fairview Avenue



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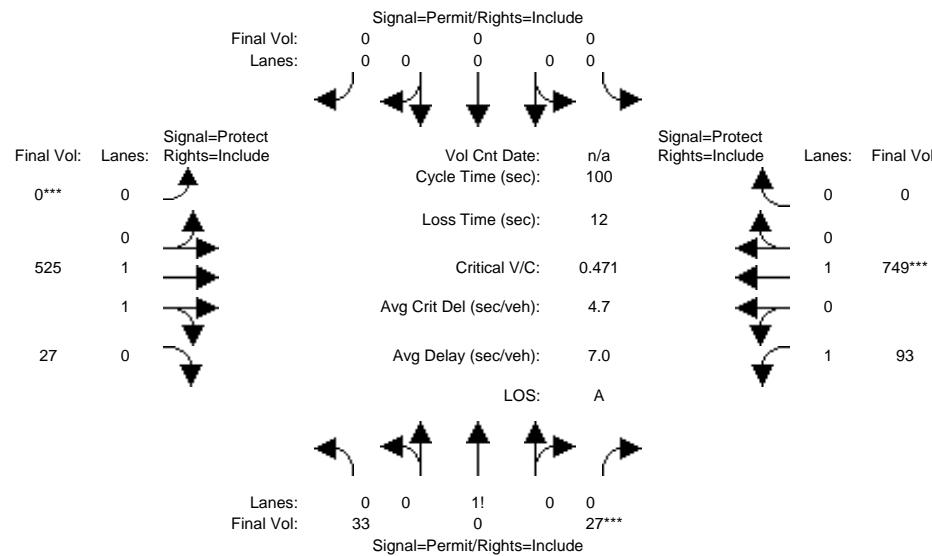
Street Name: John Muir Parkway Fairview Avenue
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 3 3 3 3 3 3 3 5 5 5 3 5 5
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 0 0 0 50 0 15 5 25 0 5 25 95
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 50 0 15 5 25 0 5 25 95
Added Vol: 0 0 0 0 11 21 349 0 0 0 571 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 50 0 26 26 374 0 5 596 95
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: 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75
PHF Volume: 0 0 0 67 0 35 35 499 0 7 795 127
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 67 0 35 35 499 0 7 795 127
RTOR Reduct: 0 0 0 0 0 35 0 0 0 0 0 0
RTOR Vol: 0 0 0 67 0 0 35 499 0 7 795 127
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 67 0 0 35 499 0 7 795 127
-----|-----|-----|-----|-----|-----|-----|-----|
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: 0.00 1.00 0.00 1.00 0.00 1.00 1.00 1.00 0.00 1.00 0.86 0.14
Final Sat.: 0 1720 0 1720 0 1720 1720 1720 0 1720 1484 236
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.04 0.00 0.00 0.02 0.29 0.00 0.00 0.54 0.54
Crit Volume: 0 67 35 921
Crit Moves: **** 499 ****
-----|-----|-----|-----|-----|-----|-----|-----|

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Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative AM

Intersection #2: Fairview Parkway / Concord Avenue

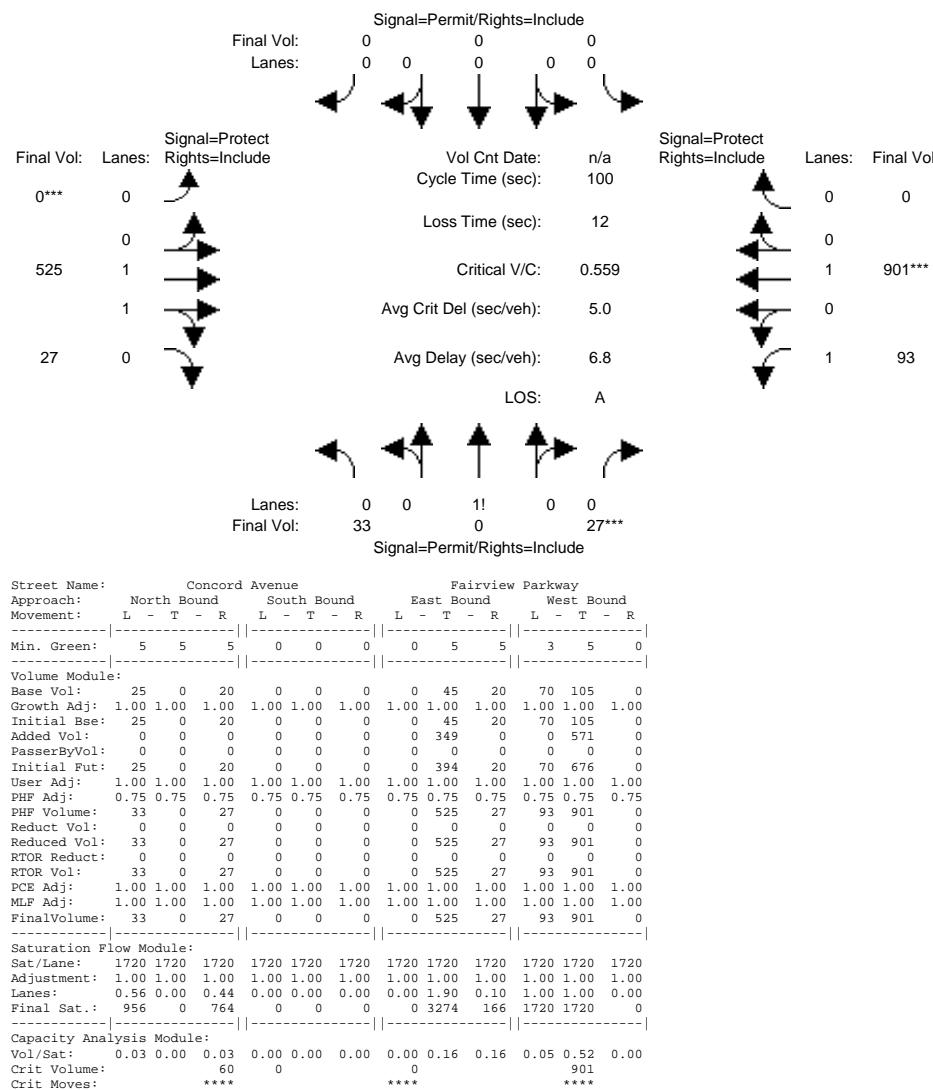


	Concord Avenue				Fairview Parkway			
Approach:	North Bound	South Bound	East Bound	West Bound				
Movement:	L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:	5	5	5	0	0	0	5	3
Volume Module:								
Base Vol:	25	0	20	0	0	0	45	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	0	20	0	0	0	45	20
Added Vol:	0	0	0	0	0	0	349	0
PasserByVol:	0	0	0	0	0	0	0	457
Initial Fut:	25	0	20	0	0	0	394	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	33	0	27	0	0	0	525	27
Reducet Vol:	0	0	0	0	0	0	0	0
Reduced Vol:	33	0	27	0	0	0	525	27
RTOR Reduct:	0	0	0	0	0	0	0	0
RTOR Vol:	33	0	27	0	0	0	525	27
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:	33	0	27	0	0	0	525	27
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:	0.56	0.00	0.44	0.00	0.00	0.00	1.90	0.10
Final Sat.:	956	0	764	0	0	0	3274	166
Capacity Analysis Module:								
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.16	0.16
Crit Volume:	60	0	0	0	0	0	749	0.00
Crit Moves:	****	****	****	****	****	****	****	****

Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out AM

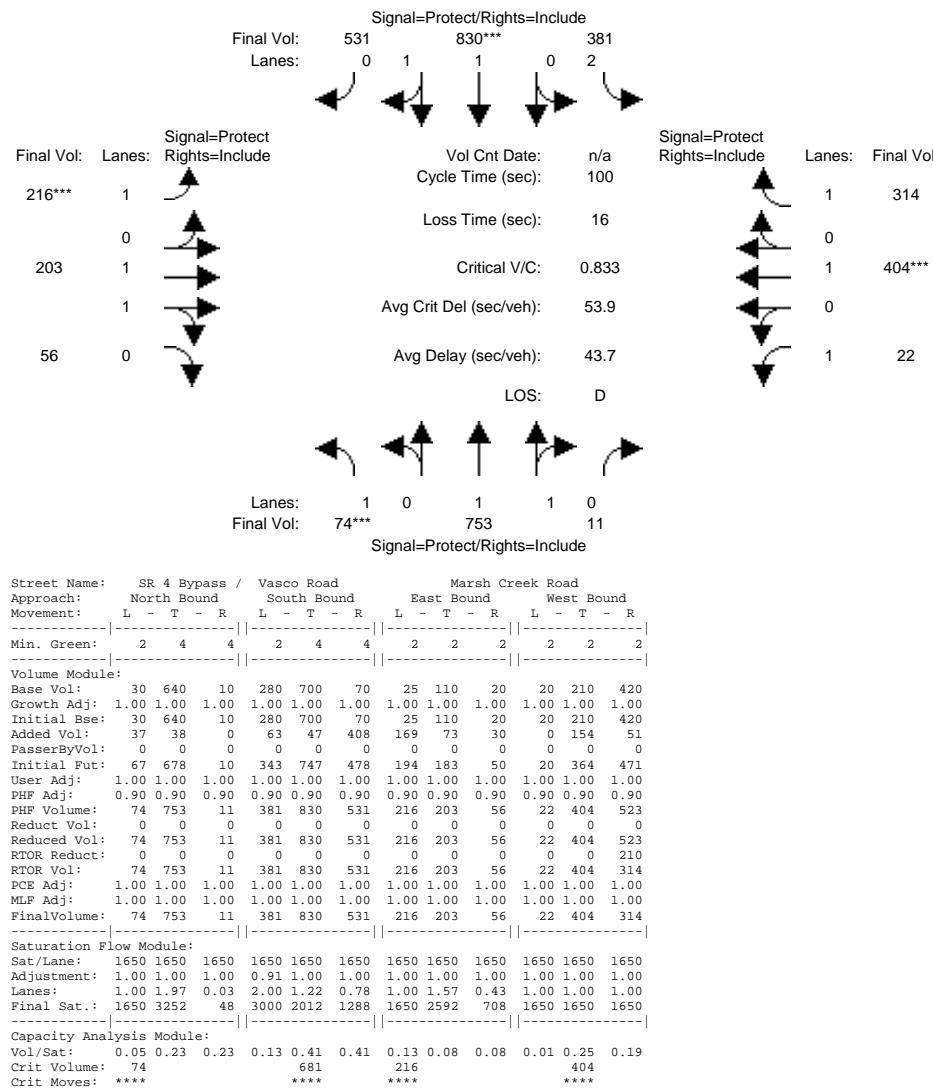
Intersection #2: Fairview Parkway / Concord Avenue



Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative AM

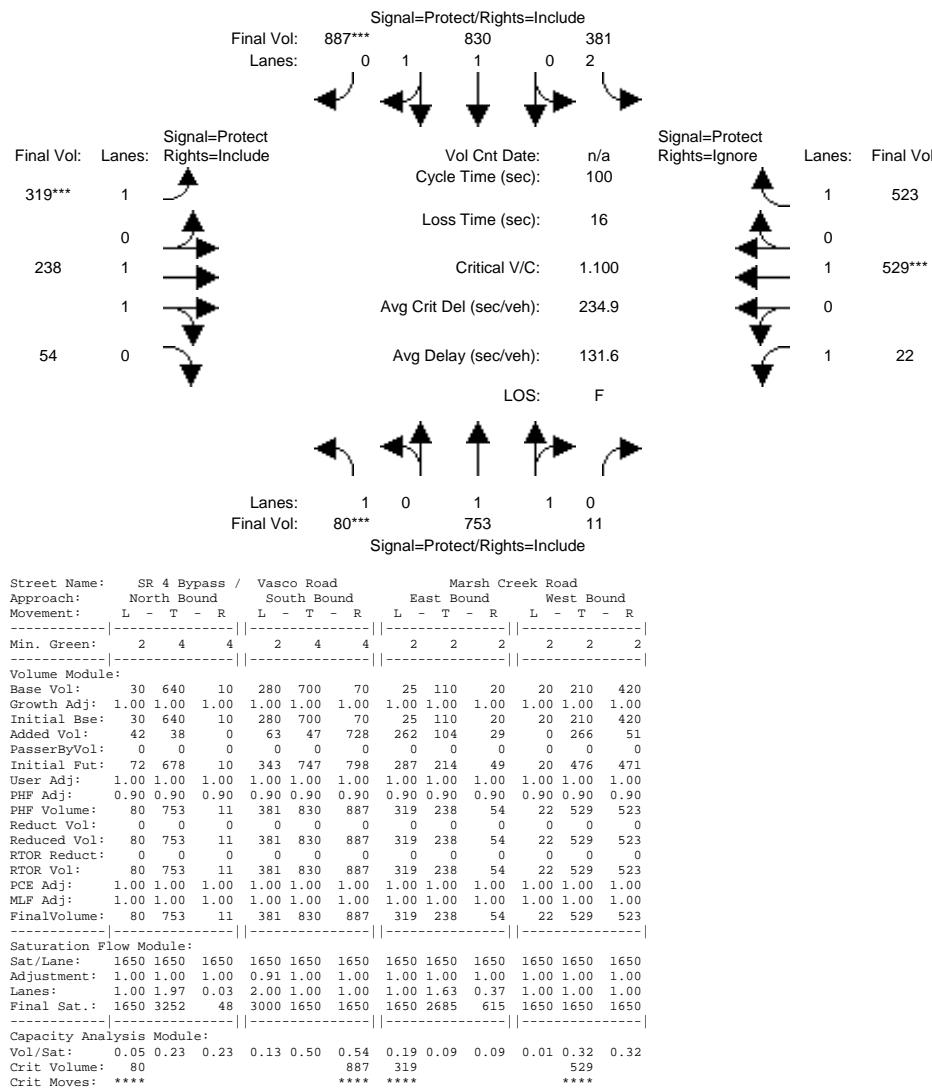
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out AM

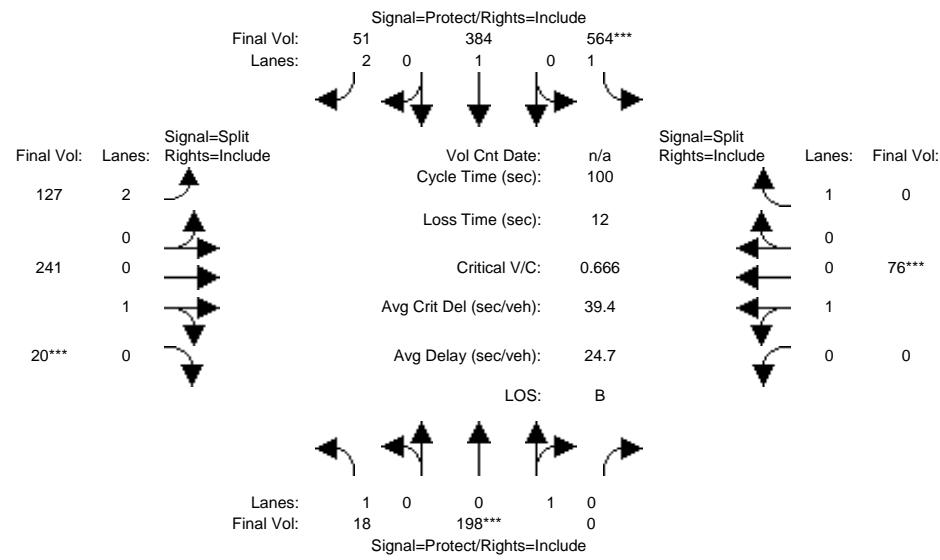
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative AM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]

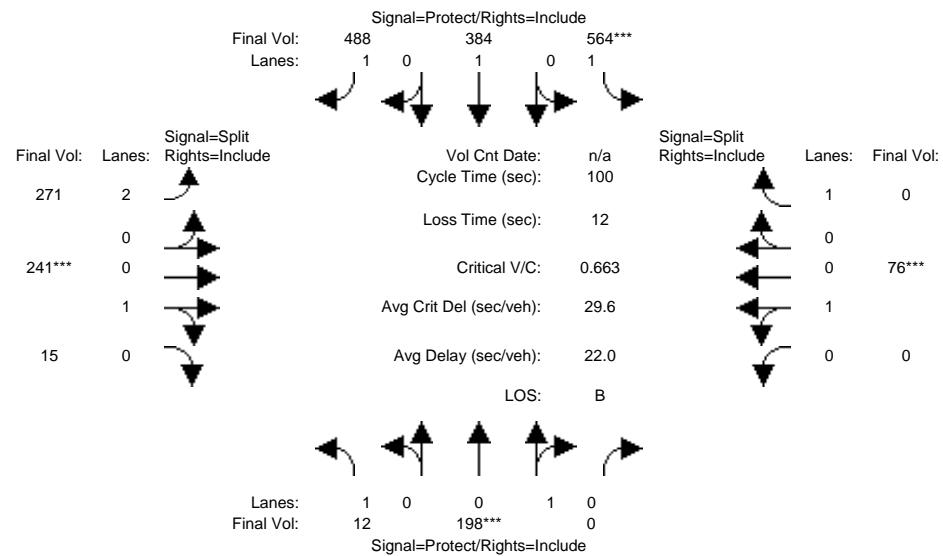


Street Name:		Marsh Creek Road	Vineyards Parkway		
Approach:	North Bound	South Bound	East Bound	West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	
Min. Green:	2 2 2	2 2 2	2 2 2	0 0 0	
Volume Module:					
Base Vol:	0 155	0 0 310	0 0 0	0 0 0	0 0 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	0 155	0 0 310	0 0 0	0 0 0	0 0 0
Added Vol:	15 13	0 479 16	103 108 205	17 0 65	151
PasserByVol:	0 0	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	15 168	0 479 326	103 108 205	17 0 65	151
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
PHF Adj:	0.85 0.85 0.85	0.85 0.85 0.85	0.85 0.85 0.85	0.85 0.85 0.85	0.85 0.85 0.85
PHF Volume:	18 198	0 564 384	121 127 241	20 0 76	178
Reducet Vol:	0 0	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	18 198	0 564 384	121 127 241	20 0 76	178
RTOR Reduct:	0 0	0 0 70	0 0 0	0 0 0	0 0 0
RTOR Vol:	18 198	0 564 384	51 127 241	20 0 76	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
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
Final Volume:	18 198	0 564 384	51 127 241	20 0 76	0
Saturation Flow Module:					
Sat./Lane:	1650 1650	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	0.91 0.91 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	1.00 1.00 0.00	1.00 1.00 2.00	2.00 0.92 0.08	0.00 1.00 1.00	1.00
Final Sat.:	1650 1650	0 1650 1650	3000 3000 1524	126 0 1650	1650
Capacity Analysis Module:					
Vol/Sat:	0.01 0.12 0.00	0.34 0.23 0.02	0.04 0.16 0.16	0.16 0.00 0.05	0.00
Crit Volume:	198	564	261	76	
Crit Moves:	****	****	****	****	

Brentwood Center Community College
Cumulative AM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out AM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]



Street Name: Marsh Creek Road Vineyards Parkway

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|-----|-----|-----|

Min. Green: 2 2 2 2 2 2 2 2 0 0 0

-----|-----|-----|-----|-----|-----|-----|-----|

Volume Module:

Base Vol:	0	155	0	0	310	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
Initial Bse:	0	155	0	0	310	0	0	0	0	0	0	0
Added Vol:	10	13	0	479	16	541	230	205	13	0	65	151
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	168	0	479	326	541	230	205	13	0	65	151
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:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	12	198	0	564	384	636	271	241	15	0	76	178
Reducet Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	198	0	564	384	636	271	241	15	0	76	178
RTOR Reduct:	0	0	0	0	149	0	0	0	0	0	0	0
RTOR Vol:	12	198	0	564	384	488	271	241	15	0	76	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:	12	198	0	564	384	488	271	241	15	0	76	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	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	2.00	0.94	0.06	0.00	1.00	1.00
Final Sat.:	1650	1650	0	1650	1650	1650	3000	1552	98	0	1650	1650

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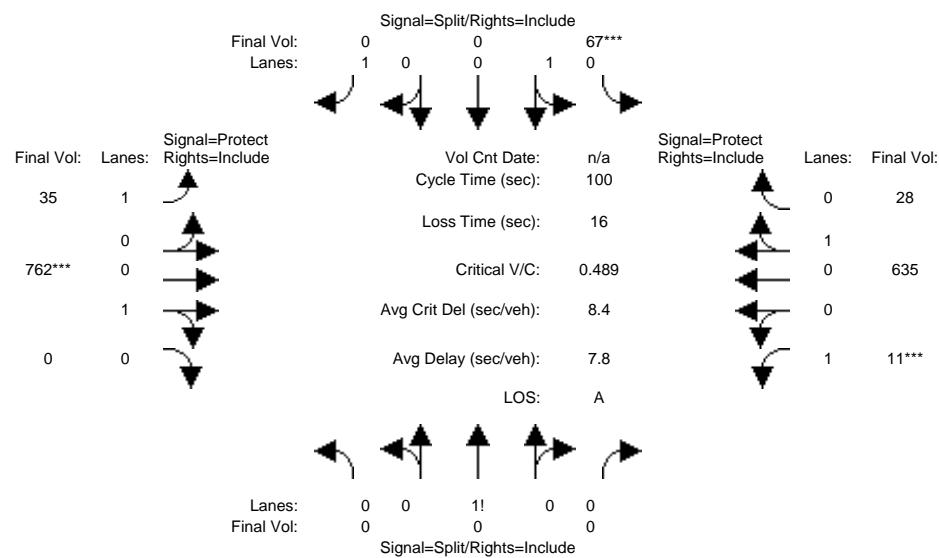
Capacity Analysis Module:

Vol/Sat:	0.01	0.12	0.00	0.34	0.23	0.30	0.09	0.16	0.16	0.00	0.05	0.00
Crit Volume:	198			564			256			76		
Crit Moves:	****	****		****			****			****		

Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative PM

Intersection #1: John Muir Parkway / Fairview Avenue

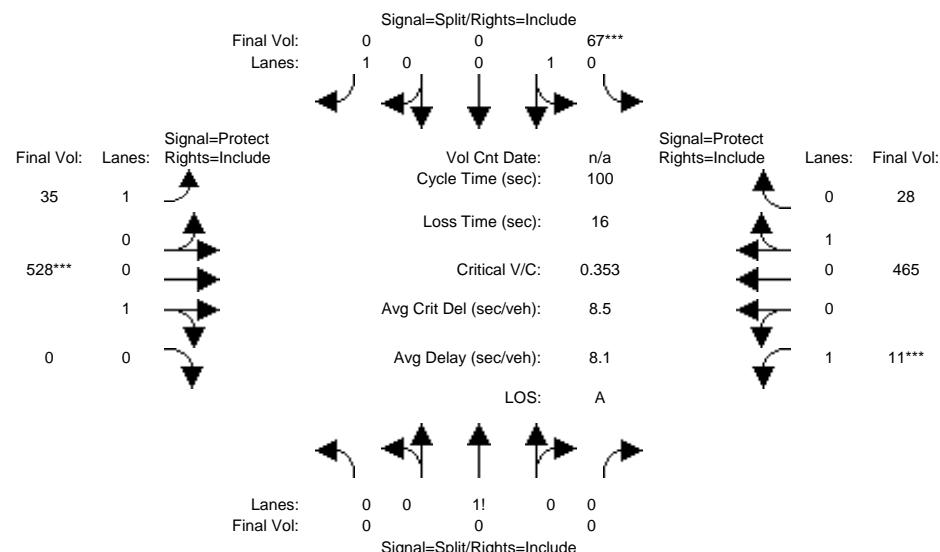


Street Name:	John Muir Parkway				Fairview Avenue							
	Approach:	North Bound	South Bound	East Bound	West Bound							
Movement:	L - T - R	L - T - R	L - T - R	L - T - R								
Min. Green:	3 3 3	3 3 3	3 5 5	3 5 5								
Volume Module:												
Base Vol:	0 0 10 60 0 10 5 15 0 10 25 25											
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:	0 0 10 60 0 10 5 15 0 10 25 25											
Added Vol:	0 0 0 0 0 16 26 663 0 0 540 0											
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0											
Initial Fut:	0 0 10 60 0 26 31 678 0 10 565 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:	0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89											
PHF Volume:	0 0 11 67 0 29 35 762 0 11 635 28											
Reducut Vol:	0 0 0 0 0 0 0 0 0 0 0 0											
Reduced Vol:	0 0 11 67 0 29 35 762 0 11 635 28											
RTOR Reduct:	0 0 11 0 0 29 0 0 0 0 0 0											
RTOR Vol:	0 0 0 67 0 0 35 762 0 11 635 28											
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 67 0 0 35 762 0 11 635 28											
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:	0.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00 0.00 1.00 0.96 0.04											
Final Sat.:	0 0 1720 1720 0 1720 1720 1720 0 1720 1647 73											
Capacity Analysis Module:												
Vol/Sat:	0.00 0.00 0.00 0.04 0.00 0.00 0.02 0.44 0.00 0.01 0.39 0.39											
Crit Volume:	0 67 762 11											
Crit Moves:	****	****	****									

Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out PM

Intersection #1: John Muir Parkway / Fairview Avenue

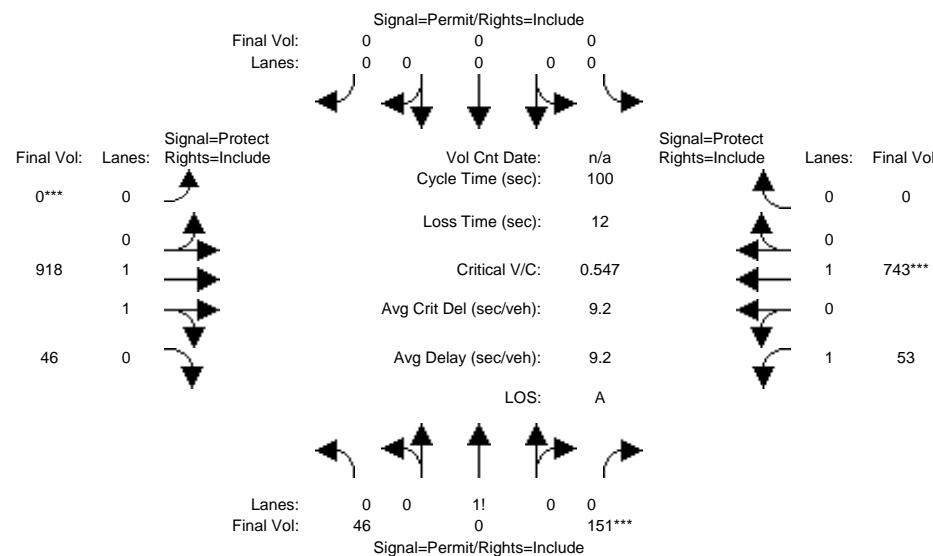


	John Muir Parkway				Fairview Avenue			
Approach:	North Bound	South Bound	East Bound	West Bound				
Movement:	L - T - R	L - T - R	L - T - R	L - T - R				
Min. Green:	3	3	3	3	3	3	5	5
Volume Module:								
Base Vol:	0	0	10	60	0	10	5	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	10	60	0	10	5	15
Added Vol:	0	0	0	0	16	26	455	0
PasserByVol:	0	0	0	0	0	0	0	389
Initial Fut:	0	0	10	60	0	26	31	470
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	0	0	11	67	0	29	35	528
Reducet Vol:	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	11	67	0	29	35	528
RTOR Reduct:	0	0	11	0	0	29	0	0
RTOR Vol:	0	0	0	67	0	0	35	528
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
Final Volume:	0	0	0	67	0	0	35	528
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:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	0	1720	1720	0	1720	1720	0
Capacity Analysis Module:								
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.00	0.02	0.31
Crit Volume:	0	67				528		11
Crit Moves:	****			****			****	

Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative PM

Intersection #2: Fairview Parkway / Concord Avenue

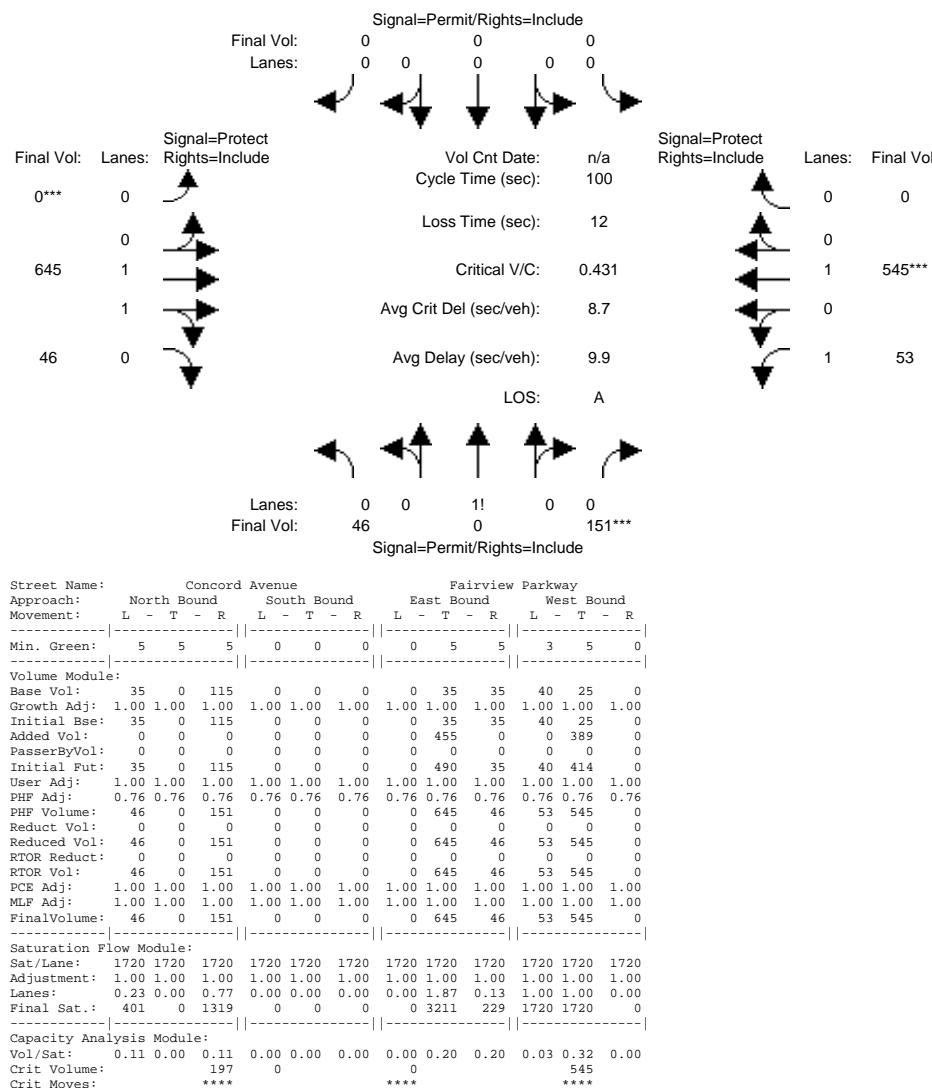


	Street Name:	Concord Avenue	Fairview Parkway	
	Approach:	North Bound South Bound	East Bound West Bound	
	Movement:	L - T - R L - T - R L - T - R L - T - R		
	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----			
	Min. Green: 5 5 5 0 0 0 0 5 5 3 5 0			
	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----			
Volume Module:	Base Vol: 35 0 115 0 0 0 0 35 35 40 25 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: 35 0 115 0 0 0 0 35 35 40 25 0			
	Added Vol: 0 0 0 0 0 0 0 663 0 0 540 0			
	PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0			
	Initial Fut: 35 0 115 0 0 0 0 698 35 40 565 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: 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76			
	PHF Volume: 46 0 151 0 0 0 0 918 46 53 743 0			
	Reducet Vol: 0 0 0 0 0 0 0 0 0 0 0 0			
	Reduced Vol: 46 0 151 0 0 0 0 918 46 53 743 0			
	RTOR Reduct: 0 0 0 0 0 0 0 0 0 0 0 0			
	RTOR Vol: 46 0 151 0 0 0 0 918 46 53 743 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: 46 0 151 0 0 0 0 918 46 53 743 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: 0.23 0.00 0.77 0.00 0.00 0.00 0.00 1.90 0.10 1.00 1.00 1.00			
	Final Sat.: 401 0 1319 0 0 0 0 3276 164 1720 1720 0			
	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----			
Capacity Analysis Module:	Vol/Sat: 0.11 0.00 0.11 0.00 0.00 0.00 0.00 0.28 0.28 0.03 0.43 0.00			
	Crit Volume: 197 0 0 0 0 0 0 0 0 743 0 0			
	Crit Moves: **** **** **** ****			

Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out PM

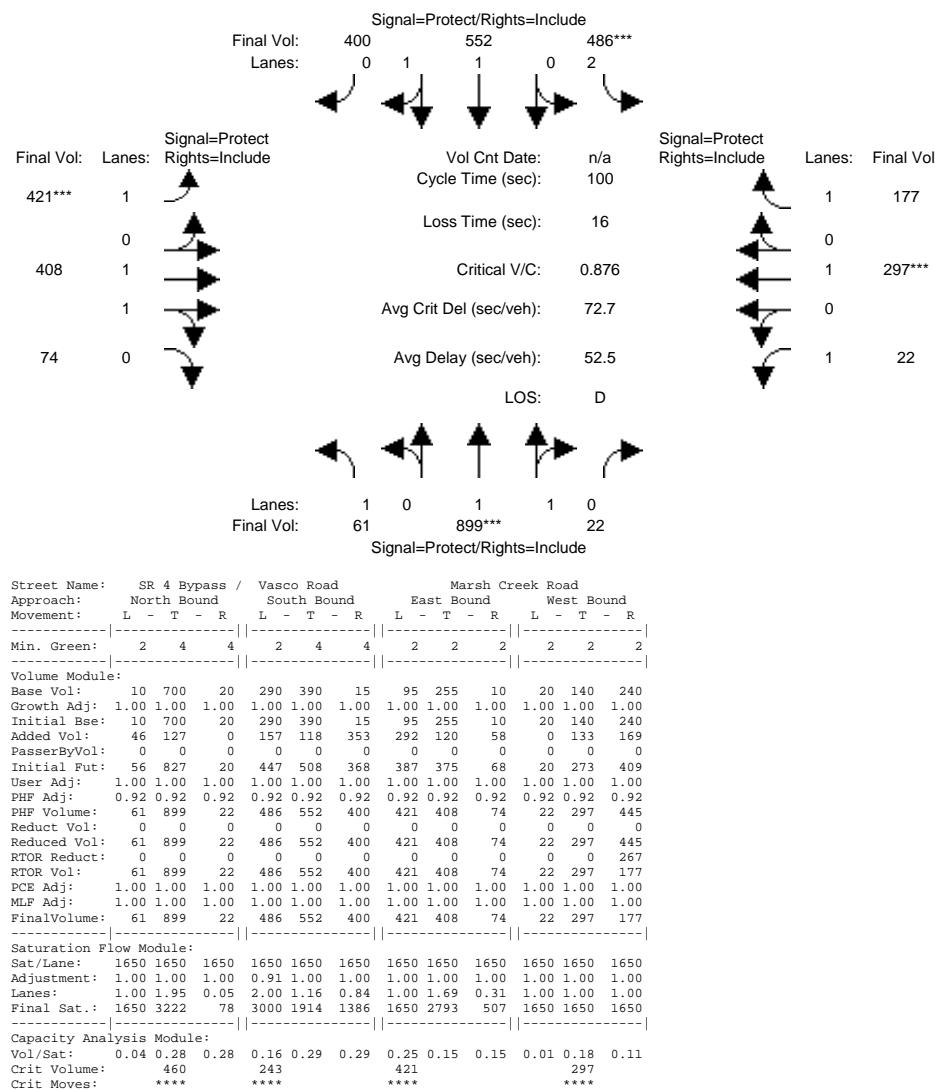
Intersection #2: Fairview Parkway / Concord Avenue



Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative PM

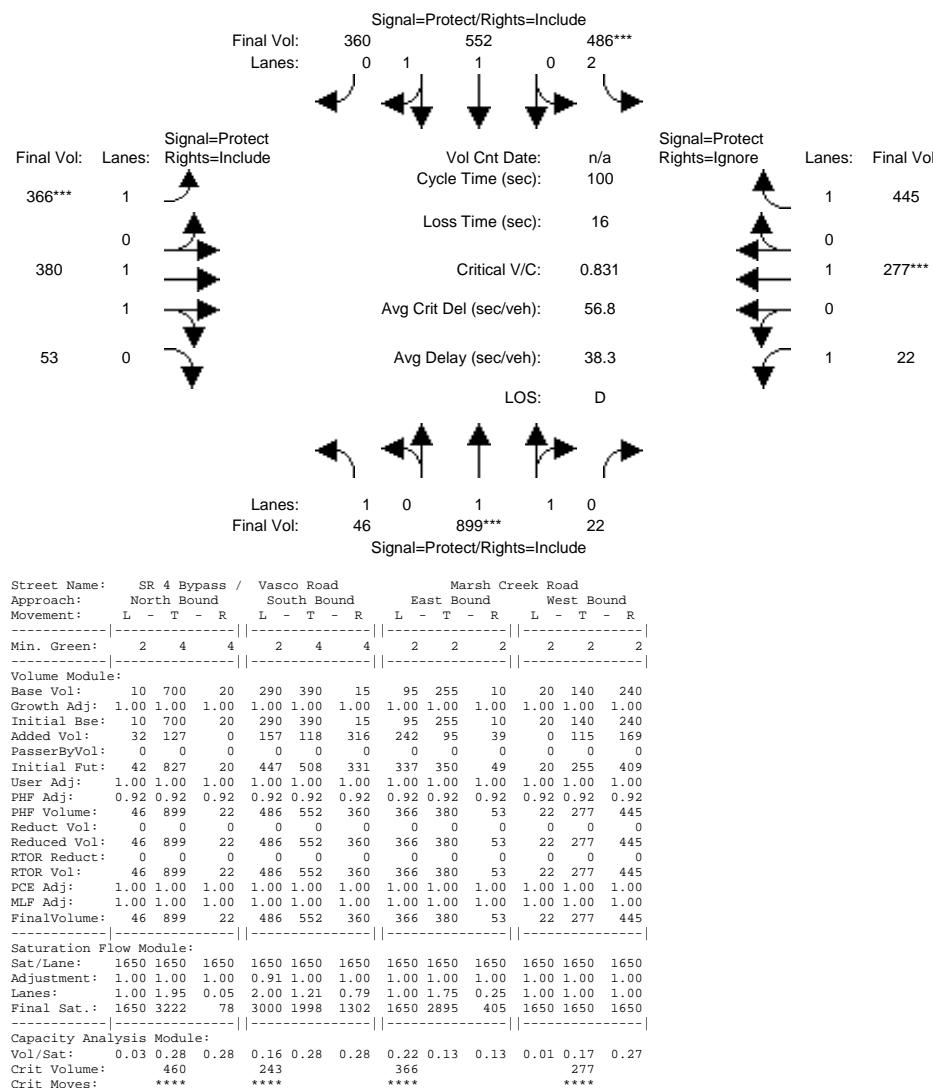
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out PM

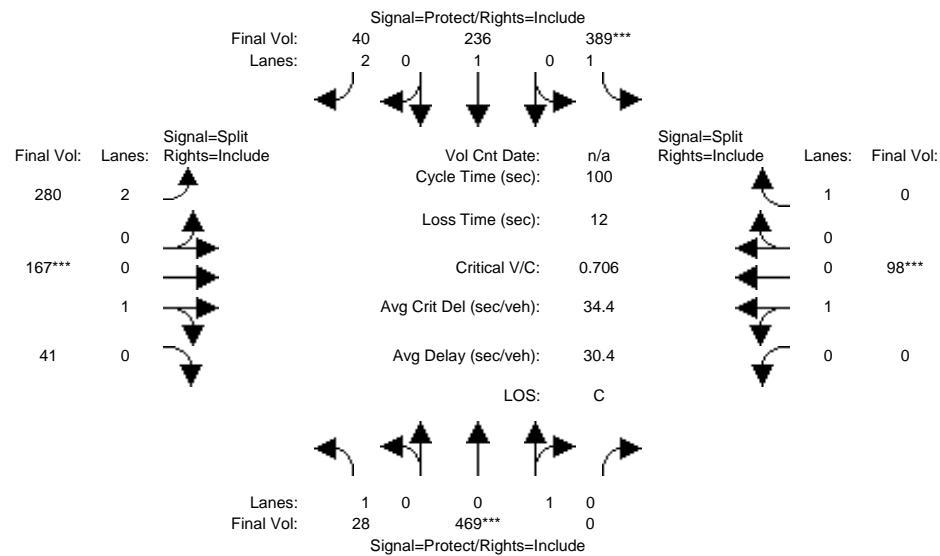
Intersection #3: SR 4 Bypass / Marsh Creek Road



Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative PM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]

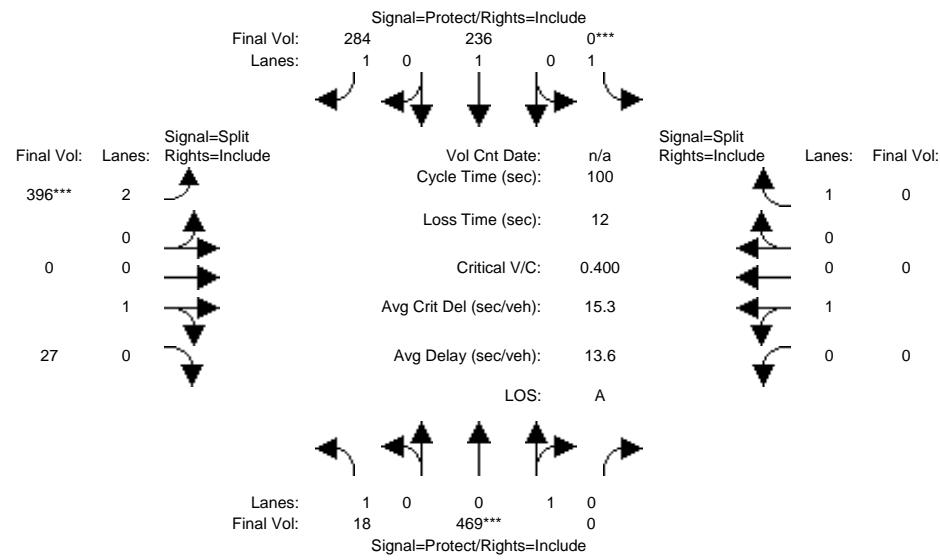


Street Name:	Marsh Creek Road			Vineyards			Parkway								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0
Volume Module:															
Base Vol:	0	360	0	0	165	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	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
Initial Base:	0	360	0	0	165	0	0	0	0	0	0	0	0	0	0
Added Vol:	24	39	0	331	36	165	238	142	35	0	83	194			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	399	0	331	201	165	238	142	35	0	83	194			
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
PHR Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHR Volume:	28	469	0	389	236	194	280	167	41	0	98	228			
Reducut Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	469	0	389	236	194	280	167	41	0	98	228			
RTOR Reduct:	0	0	0	0	0	154	0	0	0	0	0	0	0	0	0
RTOR Vol:	28	469	0	389	236	40	280	167	41	0	98	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
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
FinalVolume:	28	469	0	389	236	40	280	167	41	0	98	0			
Saturation Flow Module:															
Sat/Lane:	1650	1650	1650	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	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	0.00	1.00	1.00	2.00	2.00	0.80	0.20	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1650	1650	0	1650	1650	3000	3000	1324	326	0	1650	1650			
Capacity Analysis Module:															
Vol/Sat:	0.02	0.28	0.00	0.24	0.14	0.01	0.09	0.13	0.13	0.00	0.06	0.00			
Crit Volume:	469	389	0	208	208	0	98	98							
Crit Moves:	****	****	0	****	****	0	****	****	0	****	****	0			

Brentwood Center Community College
Cumulative PM Peak Hour

Level Of Service Computation Report
CCTALOS (Future Volume Alternative)
Cumulative Plus Build Out PM

Intersection #4: Marsh Creek Road / Vineyards Parkway [Future only]



Street Name: Marsh Creek Road Vineyards Parkway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|
Min. Green: 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0
-----|-----|-----|-----|-----|-----|-----|-----|
Volume Module:
Base Vol: 0 360 0 0 165 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
Initial Bse: 0 360 0 0 165 0 0 0 0 0 0 0 0 0 0 0 0
Added Vol: 15 39 0 0 36 427 337 0 23 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: 15 399 0 0 201 427 337 0 23 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
PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
PHF Volume: 18 469 0 0 236 502 396 0 27 0 0 0 0 0 0 0 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 18 469 0 0 236 502 396 0 27 0 0 0 0 0 0 0 0
RTOR Reduct: 0 0 0 0 0 218 0 0 0 0 0 0 0 0 0 0 0
RTOR Vol: 18 469 0 0 236 284 396 0 27 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
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
Final Volume: 18 469 0 0 236 284 396 0 27 0 0 0 0 0 0 0 0
-----|-----|-----|-----|-----|-----|-----|-----|
Saturation Flow Module:
Sat./Lane: 1720 1720 1720 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 0.91 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 1.00 1.00 2.00 0.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1720 1720 0 1720 1720 1720 3127 0 1720 0 1720 1720 1720 1720 1720
-----|-----|-----|-----|-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.01 0.27 0.00 0.00 0.14 0.17 0.13 0.00 0.02 0.00 0.00 0.00
Crit Volume: 469 0 198 0 0 0 0 0 0 0 0 0 0 0 0 0
Crit Moves: **** * **** ***