

South Academy Highlands

Traffic Technical Memorandum

Prepared for:
Classic Consulting Engineers & Surveyors, LLC
619 N Cascade Avenue, Suite 200
Colorado Springs, CO 80903

Contact: Mr. Matt Larson

FEBRUARY 1, 2022

LSC Transportation Consultants
Prepared by: Jeffrey C. Hodsdon, P.E.

LSC #S215070



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Traffic Count Reports

Queue Reports

Synchro LOS Reports

Site Plan



LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

February 1, 2022

Jeffrey P. Otto Dentons US LLP
<via email>

RE: South Academy Highlands
Traffic Technical Memorandum
Fountain, CO
LSC # S214990

Dear Mr. Otto,

LSC Transportation Consultants, Inc. has prepared this traffic technical memorandum for the next phase of the South Academy Highlands development to be located southwest of the intersection of Venetucci Boulevard/Walmart Heights in Fountain, Colorado. Figure 1 shows the location of the site. Site access will be to Venetucci Boulevard.

This memo has been prepared primarily to address the proposed intersection laneage, recommended signal phasing, and projected intersection traffic operations at the Venetucci Boulevard/Walmart Heights. Analysis of the south site access is also included.

REPORT CONTENTS

The preparation of this report included the following:

- Inventory of existing adjacent and nearby area street system. This included surface conditions, functional classifications, roadway widths, lane configurations, traffic control, posted speed limits, pavement markings, intersection and access spacing, roadway and intersection alignments, auxiliary left- and right-turn lanes, intersection sight distances, etc.;
- Summary of morning and late afternoon peak-hour turning-movement traffic counts at the following “study-area” intersections:
 - Venetucci Boulevard/Walmart Heights
 - Venetucci Boulevard/south site access
 - Walmart Heights/north site access
- Estimates of average weekday and peak-hour trip generation for the proposed South Academy Highlands site;

- Estimation of directional distribution of site-generated vehicle trips on the area street system and at the existing site-access points on Venetucci Boulevard and Walmart Heights;
- Projections of site-generated turning-movement traffic volumes at the study-area intersections and proposed access points;
- Estimates of short- and long-term background traffic volumes at the study-area intersections and access points;
- Total traffic (site traffic plus background traffic) projections at these intersections for the short and long term;
- Level of service (LOS) analysis at the following intersections:
 - Venetucci Boulevard/Walmart Heights
 - Venetucci Boulevard/south site access
 - Walmart Heights/proposed north site access
- Vehicle queuing analysis on the side-street approaches and the northbound left turn at the Walmart Heights/Venetucci Boulevard intersection;
- Findings regarding the proposed laneage at the Walmart Heights/Venetucci Boulevard intersection;
- Summary of compiled data, traffic-volume estimates, analysis, findings, and recommendations.

PRIOR AREA TRAFFIC REPORTS

The traffic impact study for the entire development was dated September 18, 2013.

LAND USE AND ACCESS

Current Land Uses

Figure 1 shows the site location relative to the adjacent and nearby streets. The current phase is for four commercial lots proposed to contain two fast-food restaurants (with drive through), an auto parts store, and a coffee shop. The proposed site plan showing the proposed land-use plan, on-site circulation, and the development entry points is shown in Figure 2.

Site Access

Site access will be to Venetucci Boulevard, as shown in Figure 2. The north site access will be via a new west leg at the signalized intersection of Venetucci Boulevard/Walmart Heights. A second stop-sign-controlled, three-quarter-movement access will be at the existing east-side access intersection located approximately 300 feet south of the signal. The median is already configured for this access.

PROPOSED INTERSECTION LANEAGE, RESTRIPIING AND SIGNAL PHASING

The applicant is proposing that the west leg of the Walmart Heights and Venetucci Boulevard intersection provide access **only** to the subject commercial development and not provide a vehicular connection to the north for access to the future development to the north. As such, this access to this development forming the west leg of the Walmart Heights and Venetucci Boulevard intersection would need to be constructed entirely on the applicant's property and not encroach on the adjacent property to the north.

This necessitates a shift of the north edge of the access drive to the south, which results in a shift of the intersection departure lane (inbound lane into the development) to the south when compared to the original design plans and the existing northwest curb radius location. This results in a shift south of the westbound through movement across the intersection from the east side. The proposed solution is to shift the originally proposed eastbound approach laneage to the south. The eastbound lane "assignments" would not change from the original plan - an exclusive left and shared through/right lane. Note: the typical striped-out area of pavement or "spacer" between the eastbound left and the eastbound through/right (to align with the southernmost westbound left-turn lane would not be needed given the change in the westbound lane configuration described in the next paragraph).

The proposed lane shift on the west side (eastbound approach) will necessitate a change in the westbound lane assignments. The westbound approach was originally planned for dual exclusive left-turn lanes and a shared through/right lane. The current plan proposes a change to one exclusive left, one shared left/through, and one exclusive right-turn lane. This revised lane configuration will allow for the proposed shift of the lanes on the eastbound approach (west side) to maintain proper alignment with the receiving/departure lane on the west side of the intersection. This modified westbound lane configuration with the left, left/through, and right lane **will require "split phase" signal phasing/timing eastbound and westbound.**

This shift will cause the need to reconstruct the existing pedestrian ramp, curb return, and concrete cross pan. Signal-plan modifications will be needed.

Adjacent Parcel

The parcel to the north of the site has been planned for residential land use (also on the west side of Venetucci Boulevard), under different ownership from the applicant, and is currently in unincorporated El Paso County. The estimated trips to/from this parcel are included in the north/south through traffic on Venetucci Boulevard.

ROAD AND TRAFFIC CONDITIONS

Adjacent streets serving the site are identified below followed by a brief description of each:

Venetucci Boulevard locally extends north from South Academy Boulevard to B Street, where it intersects at a right-in/right-out intersection. Highway 85/87 passes over I-25 just south of B Street. North of B Street, Highway 85/87 becomes Venetucci Boulevard and is under the City of Colorado Springs' jurisdiction.

Walmart Heights is a private commercial street extending east from Venetucci Boulevard into the South Academy Highlands commercial development area east of Venetucci. The intersection of Walmart Heights/Venetucci Boulevard is signalized.

Existing Traffic Volumes

Vehicular turning movements were counted at the following intersections, dates, and times:

- Venetucci Boulevard/Walmart Heights
 - Tuesday, November 2, 2021 from 6:30 – 8:30 a.m.
 - Tuesday, November 2, 2021 from 4:00 – 6:00 p.m.
- Venetucci Boulevard/proposed south access
 - Tuesday, November 2, 2021 from 6:30 – 8:30 a.m.
 - Tuesday, November 2, 2021 from 4:00 – 6:00 p.m.

Figure 3 shows these turning-movement volumes, as well as the average weekday traffic volumes (estimated based on factored peak-hour count data) on the study-area streets. Raw count data are attached.

TRIP GENERATION

Estimates of the vehicle trips projected to be generated by the South Academy Highlands development have been made using the nationally-published trip-generation rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE). The following ITE land use categories, along with corresponding trip-generation rates, have been used to develop the trip-generation estimates for the development:

- 843 – Automobile Parts Store
- 934 – Fast Food with Drive-Through Window
- 938 – Coffee Shop Drive-Through Window and No Indoor Seating

Table 1 below presents a summary of the estimated site trip generation. A detailed trip-generation estimate for the development, including ITE rates for the proposed land use, is presented in Table 3 (attached).

Table 1: Estimated Site Vehicle-Trip Generation

Analysis Period	Weekday		
	In	Out	Total
Morning Peak Hour	209	202	411
Evening Peak Hour	147	139	286
Daily/24-hour	1,930	1,930	3,859

The proposed South Academy Highlands site is projected to generate about 1,930 vehicle trips on the average weekday during a 24-hour period, with approximately half entering and half exiting the site. During the morning peak hour, approximately 209 entering vehicles and 202 exiting vehicles would be generated. Approximately 147 entering and 139 exiting vehicles would be generated by the site during the afternoon peak hour.

Pass-by Trips

The total number of trips to be generated by the site has also been analyzed to account for pass-by trips. A pass-by trip is one made by a motorist who would already be on an adjacent road regardless of the proposed development, but who stops in at the site while passing by. That pass-by motorist would then continue on his or her way to a final destination in the original direction. Non-primary trip percentage has been based on data from the *Trip Generation Handbook - An ITE Proposed Recommended Practice, 3rd Edition, 2014* by ITE and adjustments by LSC for site-specific conditions. Table 1 has a detailed trip-generation estimate, including internal, diverted, and pass-by trips.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip Directional Distribution

Estimating the directional distribution of site-generated vehicle trips to the study-area roads and intersections is a necessary component in determining the site's traffic impacts. The following percentages of the site-generated vehicle trips are projected to be oriented to and from the site's major approaches:

- To/from the north (via B Street) – 15 percent
- To/from the east (via Walmart shopping plaza) – 5 percent
- To/from the south (via South Academy Boulevard) – 80 percent

Directional-distribution estimates were based on the following factors: prior traffic reports for this development, the existing traffic counts, the site's location with respect to the residential areas, employment centers, Fort Carson, and balance of the City of Colorado Springs metropolitan area; the site's proposed land uses; and the roadway network. Pass-by trip

distribution is different from the “primary trip” distribution and is based on the magnitude and direction of traffic on Venetucci Boulevard.

Site-Generated Traffic

Figure 5 shows the projected site-generated traffic volumes for the weekday morning and evening peak hours. Site-generated traffic volumes at the following intersections have been calculated by applying the directional-distribution percentages estimated by LSC (from Figure 4) to the trip-generation estimates (from Table 3):

- Venetucci Boulevard/Walmart Heights
- Venetucci Boulevard/south access (three-quarter)
- Walmart Heights/internal site access

Existing-Plus-Site-Generated Traffic Volumes

Figure 6 shows the sum of the adjusted existing traffic volumes (from Figure 3) and site-generated peak-hour traffic volumes (shown in Figure 5). These volumes represent the projected short-term total traffic, following development of the four subject commercial lots.

Estimated Future 2041 Background Traffic Volumes

Figure 7 shows the projected 20-year background traffic volumes for the year 2041. Background volumes include increases in through traffic and trips generated by the future residential development north of the site and the future Phase 2 commercial development north of Sam’s Club, but do **not** include projected traffic to be generated by the currently-proposed Lots 1-4 development.

Future 2041 Total Traffic Volumes

Figure 8 shows the projected 2041 total traffic volumes, which are the sum of 2041 background traffic volumes (from Figure 7) plus the site-generated traffic volumes (from Figure 5).

LEVEL OF SERVICE ANALYSIS

The following intersections have been analyzed to determine the projected intersection levels of service for short- and long-term traffic scenarios for the morning and evening peak-hour time periods:

- Venetucci Boulevard/Walmart Heights
- Venetucci Boulevard/south access (three-quarter)
- Walmart Heights/internal site access

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection and is indicated on a scale from “A” to “F.” LOS A is indicative of little congestion or delay. LOS F indicates a high level of congestion or delay. Table 2 shows the level of service delay ranges for signalized and unsignalized intersections.

Table 2: Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) ⁽¹⁾
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more

(1) For unsignalized intersections, if V/C ratio is greater than 1.0 the level of service is LOS F, regardless of the projected average control delay per vehicle.

Detailed Synchro reports are attached. A summary of LOS during the weekday morning and evening peak hours for the following unsignalized intersections is described below.

Venetucci Boulevard/Walmart Heights

This intersection is projected to operate at an overall intersection LOS B overall during both peak hours through the 20-year horizon. All individual turning movements are projected to operate at LOS D or better during both peak hours through the 20-year horizon.

Walmart Heights/Proposed North Site Access (Internal Driveway)

All individual turning movements are projected to operate at LOS A during both peak hours through the 20-year horizon.

Venetucci Boulevard/Proposed South Site Access (Three-Quarter)

All individual turning movements are projected to operate at LOS B or better during both peak hours through the 20-year horizon.

VEHICLE QUEUEING ANALYSIS

A Synchro queueing analysis was performed to estimate short-term and long-term queues at the intersection of Venetucci Boulevard/Walmart Heights during the morning and afternoon peak hours. Please see the attached SimTraffic queue reports for more detail.

Analysis has been run to estimate the queue length that the eastbound approach at Venetucci Boulevard/Walmart Heights will extend back to the proposed site access on the west side of the intersection. There are about 88 feet between the stop line on the eastbound approach on

Walmart Heights and the end of the eastbound left-turn lane. Queues less than 88 feet would not block the proposed access.

LSC has assumed that the signalized intersection of Venetucci Boulevard/Walmart Heights would have a 70-second cycle and separate 15-second split phases each for the eastbound and westbound approaches.

Morning Peak Hour

Venetucci Boulevard/Walmart Heights

SimTraffic reports indicate the following 95th-percentile queue lengths during the long-term morning peak hour at the intersection of Venetucci Boulevard/Walmart Heights:

- Eastbound-left – 47 feet (0 percent storage block time)
- Eastbound- through/right (shared) – 48 feet (0 percent storage block time)
- Northbound-left – 63 feet (0 percent storage block time)
- Westbound-left – 134 feet (0 percent block time)
- Westbound-through/left – 92 feet (0 percent block time)
- Westbound-right – 18 feet (0 percent block time)

As shown in the attached SimTraffic reports, the projected eastbound queues during the morning peak hour would be less than 88 feet and, thus, would not block the proposed access.

Venetucci Boulevard/South Access (3/4-Movement)

SimTraffic reports indicate the following 95th-percentile queue lengths during the long-term morning peak hour:

- Northbound-left – 76 feet (0 percent storage block time)

As shown in the attached SimTraffic reports, the projected northbound-left queues during the AM peak would not exceed the proposed stacking distance at the south three-quarter access.

Afternoon Peak Hour

Venetucci Boulevard/Walmart Heights

SimTraffic reports indicate the following 95th-percentile queue lengths during the long-term afternoon peak hour at the intersection of Venetucci Boulevard/Walmart Heights:

- Eastbound-left – 46 feet (0 percent storage block time)
- Eastbound- through/right (shared) – 58 feet (0 percent storage block time)
- Northbound-left – 61 feet (0 percent storage block time)
- Westbound-left – 161 feet (0 percent block time)
- Westbound-through/left – 182 feet (0 percent block time)
- Westbound-right – 34 feet (0 percent block time)

As shown in the attached SimTraffic reports, the projected 95th percentile eastbound queues during the afternoon peak hour would be less than the 88 feet of distance between the access and the stop line at the signalized intersection. Given the close spacing, there is potential for infrequent blockage. LSC recommends posting a “Do Not Block Intersection” sign, if this becomes necessary, on the exiting lane of the internal drive aisle just west of the first internal lot access. Furthermore, should operational problems arise due to the short access spacing back from Venetucci, the north access may need to be converted to a right-in/right-out (or potentially a right-out-only access).

Venetucci Boulevard/South Access

SimTraffic reports indicate the following 95th-percentile queue lengths during the long-term afternoon peak hour:

- Northbound-left – 105 feet (0 percent storage block time)

As shown in the attached SimTraffic reports, the projected northbound-left queues during the PM peak hour would not exceed the proposed stacking distance at the south three-quarter access.

AUXILIARY TURN LANE ANALYSIS

Please refer to for the attached exhibit with proposed laneage modifications at the intersection of Venetucci Boulevard/Walmart Heights (as presented on page 4).

CONCLUSIONS

- The site is projected to generate about 3,859 new driveway vehicle trips on the average weekday.
- During the weekday morning peak hour of adjacent street traffic, 209 vehicles would enter the site while 202 vehicles would exit.
- During the weekday afternoon peak hour of adjacent street traffic, 147 vehicles would enter the site while 139 vehicles would exit.
- All individual turning movements at the study-area intersections are projected to operate at LOS D or better through the 20-year horizon. Please refer to the “Level of Service” section above for detailed LOS analysis results.
- As shown in the attached SimTraffic reports, the projected eastbound 95th-percentile queues during the afternoon peak hour would be less than 88 feet and, thus, would not regularly block the proposed access on Walmart Heights west of Venetucci Boulevard. Please refer to the “Vehicle Queueing Analysis” section for Synchro queueing-analysis queue-length

estimates at the study-area intersections during both long-term peak hours. Given the close spacing, there is potential for infrequent blockage. LSC recommends posting a “Do Not Block Intersection” sign, if this becomes necessary, on the exiting lane of the internal drive aisle just west of the first internal lot access. Furthermore, should operational problems arise due to the short access spacing back from Venetucci, the north access may need to be converted to a right-in/right-out (or potentially a right-out-only access).

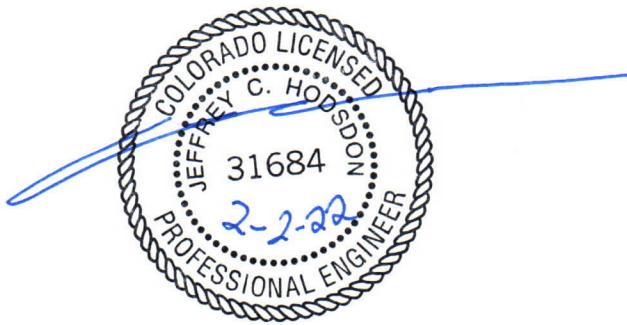
- Please refer to the attached exhibit with the proposed intersection laneage at the intersection of Walmart Heights west of Venetucci Boulevard. The shift in the eastbound laneage and modified westbound lane configuration with the left, left/through, and right lane **will require “split phase” signal phasing/timing eastbound and westbound.**

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.



By: Jeffrey C. Hodsdon, P.E.
Principal

JCH/JAB:jas

Enclosures: Table 3 – Table 5
Figures 1-9
Traffic Count Reports
Queue Reports
Synchro LOS Reports
Site Plan

Tables



Table 3: Detailed Trip Generation Estimate

ITE Code	Description	Value	Units ¹	Trip Generation Rates ²				Internal Capture	Driveway Trips Generated				Primary Trips	Diverted Trips	Pass-By Trips	External Trips Generated							
				Average Weekday		A.M. In	P.M. Out		Average Weekday		A.M. In	P.M. Out				External Trips Generated							
				Weekday	In	Out	Weekday		Weekday	In	Out	In				Average Weekday	A.M. In	P.M. Out	Average Weekday				
843	Automobile Parts Sales	7.000	KSF	54.57	1.38	1.13	2.35	2.55	5%	363	9	8	16	17	50%	45%	5%	181	5	4	8	8	
934	Fast-Food w/ Drive-Through Window	3.000	KSF	467.48	22.75	21.86	17.18	15.85	5%	1332	65	62	49	45	50%	45%	5%	666	32	31	24	23	
934	Fast-Food w/ Drive-Through Window	3.800	KSF	467.48	22.75	21.86	17.18	15.85	5%	1688	82	79	62	57	50%	45%	5%	844	41	39	31	29	
938	Coffee/Donut Shop w/ Drive-Through Window and No Indoor Seating	2.800	KSF	179.00	19.91	19.91	7.54	7.54	5%	476	53	53	20	20	15%	80%	5%	71	8	8	3	3	
									Total	3859	209	202	147	139				Total	1763	86	82	66	63

¹ KSF = 1,000 square feet

² Source: *Trip Generation, 11th Edition (2021)* by the Institute of Transportation Engineers (ITE)

Table 4: Vehicular Turning Movement Counts – Venetucci Boulevard/Walmart Heights

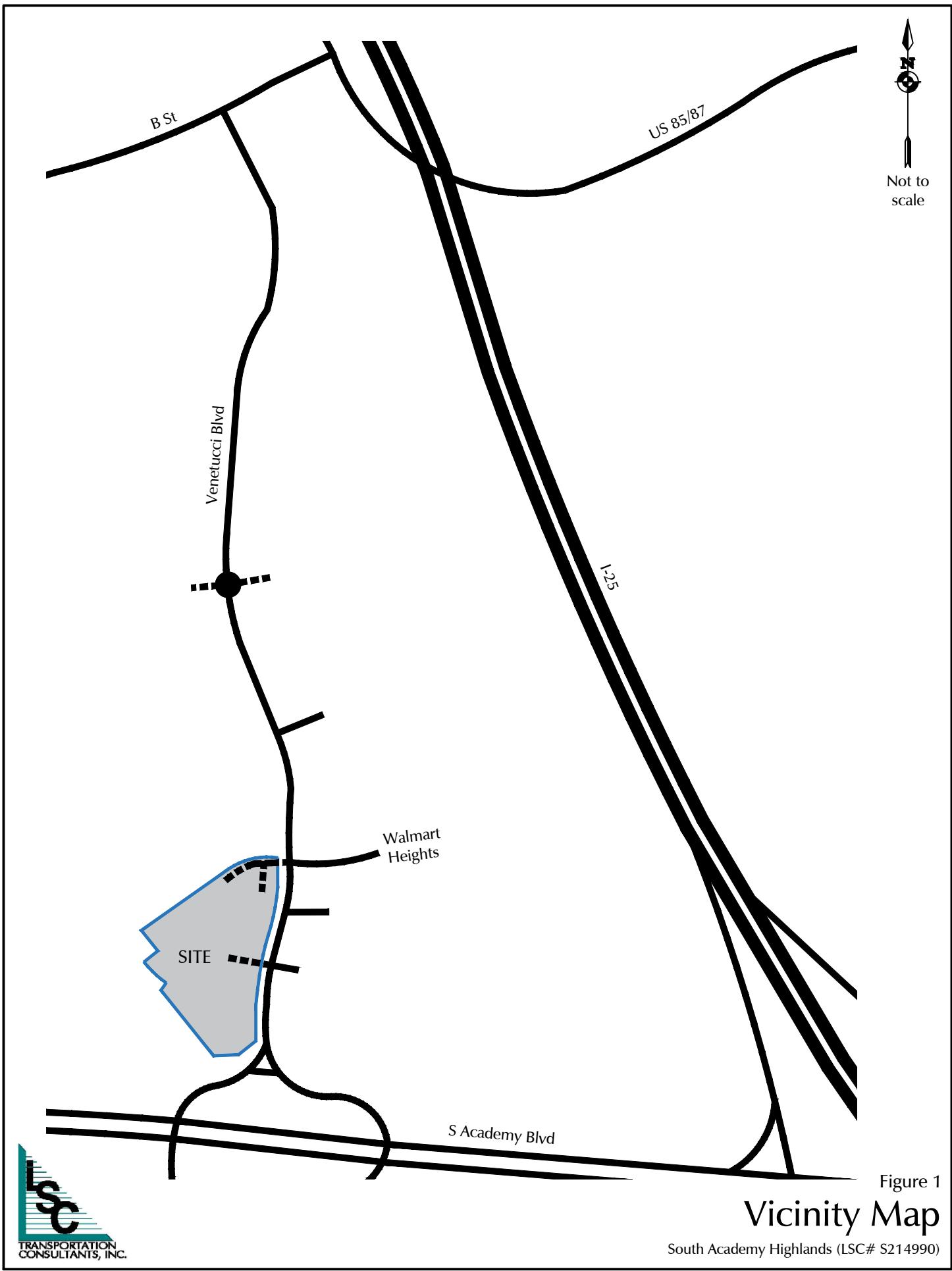
Turn	2021 Existing		Short-Term Baseline		Site-Generated		Short-Term Baseline + Site		Future Background		2041 Background		2041 Background + Site	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
SBR	0	0	0	0	10	10	10	10	0	0	0	0	10	10
SBT	8	31	10	35	19	19	29	54	215	293	230	330	249	349
SBL	5	20	5	20	-1	-1	4	19	0	0	5	20	4	19
WBR	12	52	15	55	0	0	15	55	0	0	15	55	15	55
WBT	0	0	0	0	10	10	10	10	0	0	0	0	10	10
WBL	140	662	150	670	0	0	150	670	0	0	150	670	150	670
NBR	152	544	160	550	-4	-3	156	547	0	0	160	550	156	547
NBT	18	48	20	50	-1	-1	19	49	120	305	140	360	139	359
NBL	0	0	0	0	52	50	52	50	0	0	0	0	52	50
EBR	0	0	0	0	37	35	37	35	0	0	0	0	37	35
EBT	0	0	0	0	7	7	7	7	0	0	0	0	7	7
EBL	0	0	0	0	7	7	7	7	0	0	0	0	7	7

Table 5: Vehicular Turning Movement Counts – Venetucci Boulevard/South Site Access

Turn	2021 Existing		Short-Term Baseline		Site-Generated		Short-Term Baseline + Site		Future Background		2041 Background		2041 Background + Site	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
SBR	0	0	0	0	21	20	21	20	0	0	0	0	21	20
SBT	148	693	160	705	55	52	215	757	0	0	380	1000	435	1052
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	2	8	5	10	0	0	5	10	0	0	5	10	5	10
NBR	26	89	30	90	0	0	30	90	0	0	30	90	30	90
NBT	168	584	175	590	44	42	219	632	0	0	295	900	339	942
NBL	0	0	0	0	115	111	115	111	0	0	0	0	115	111
EBR	0	0	0	0	94	90	94	90	0	0	0	0	94	90

Figures





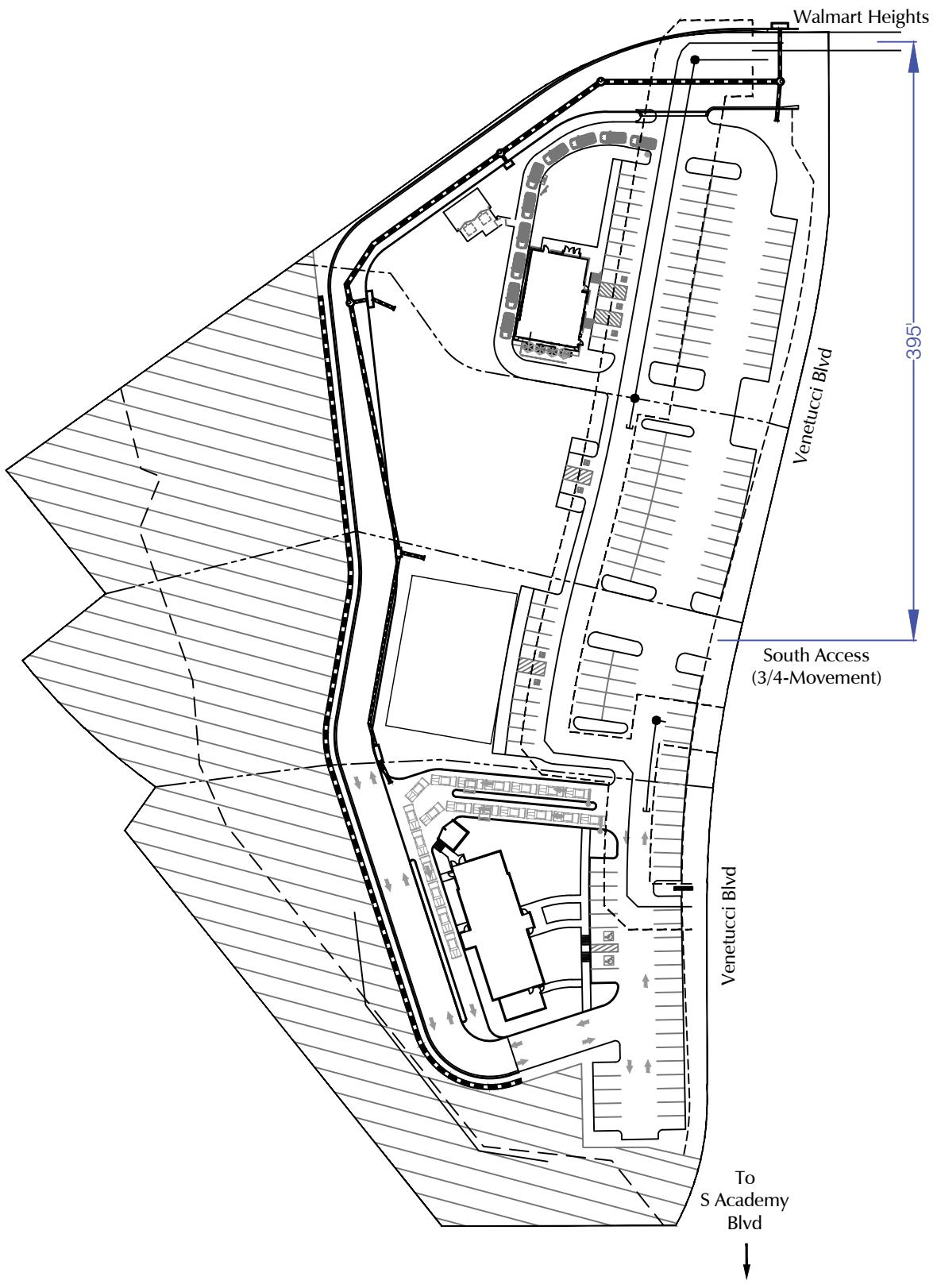
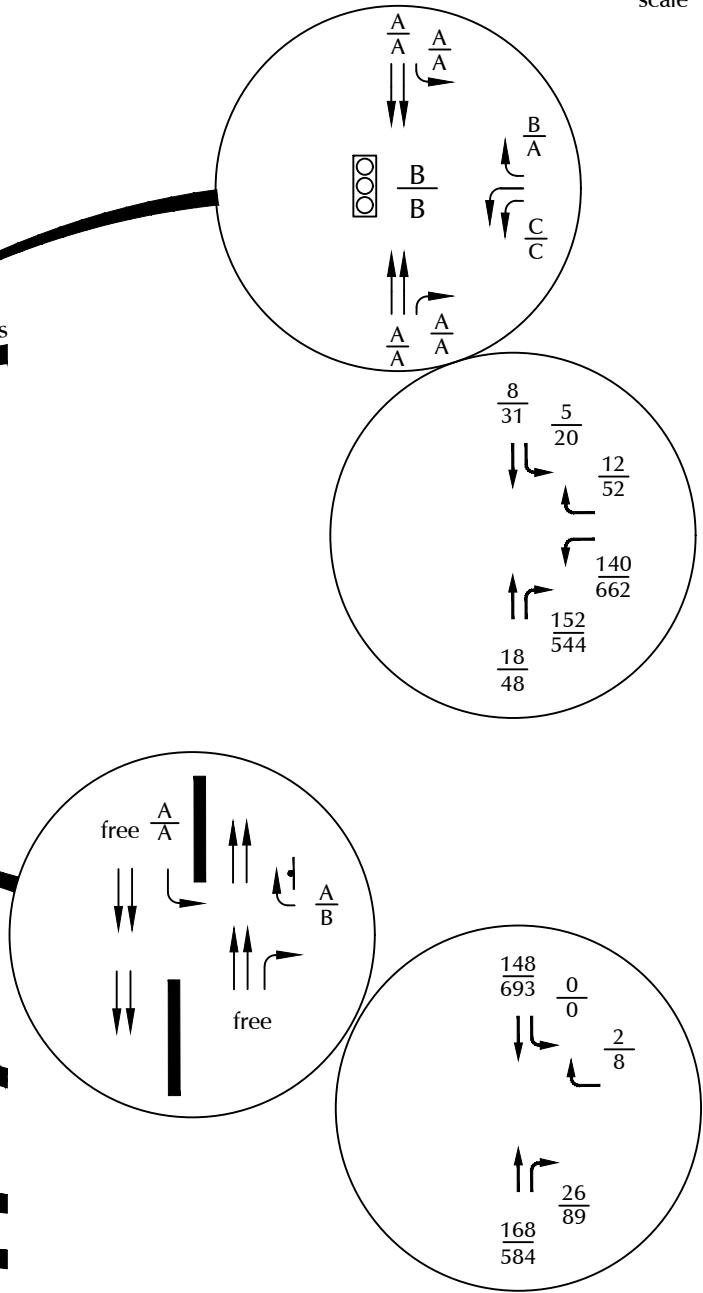
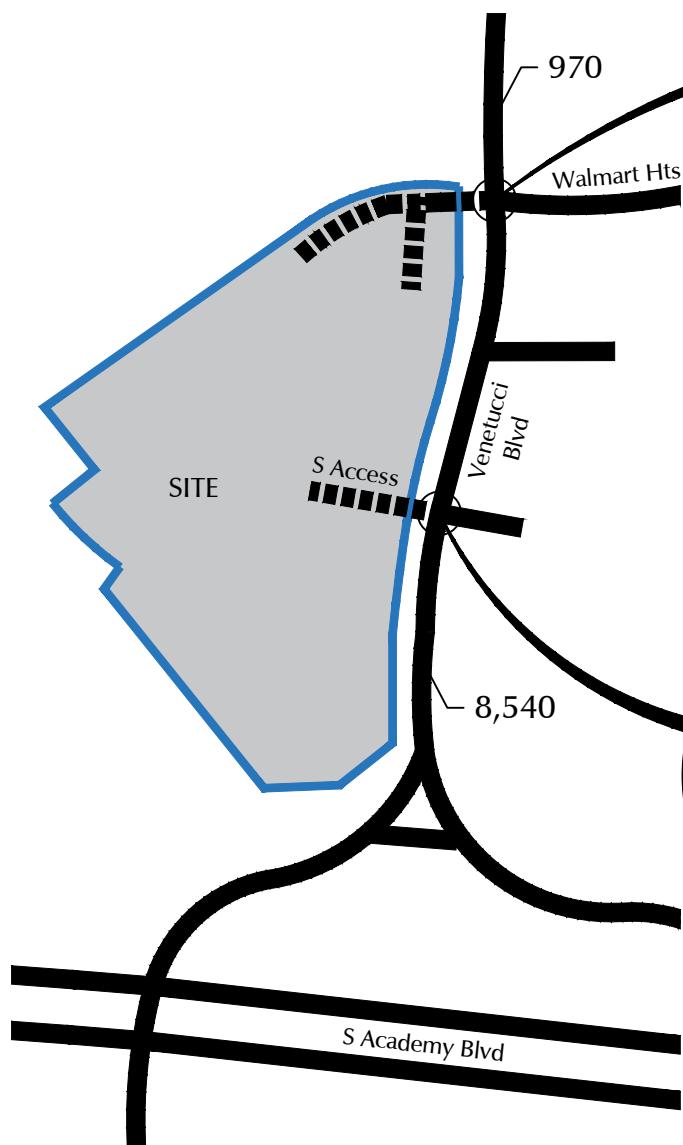


Figure 2
Site Plan

South Academy Highlands (LSC# S214990)

1" = 250'
scale

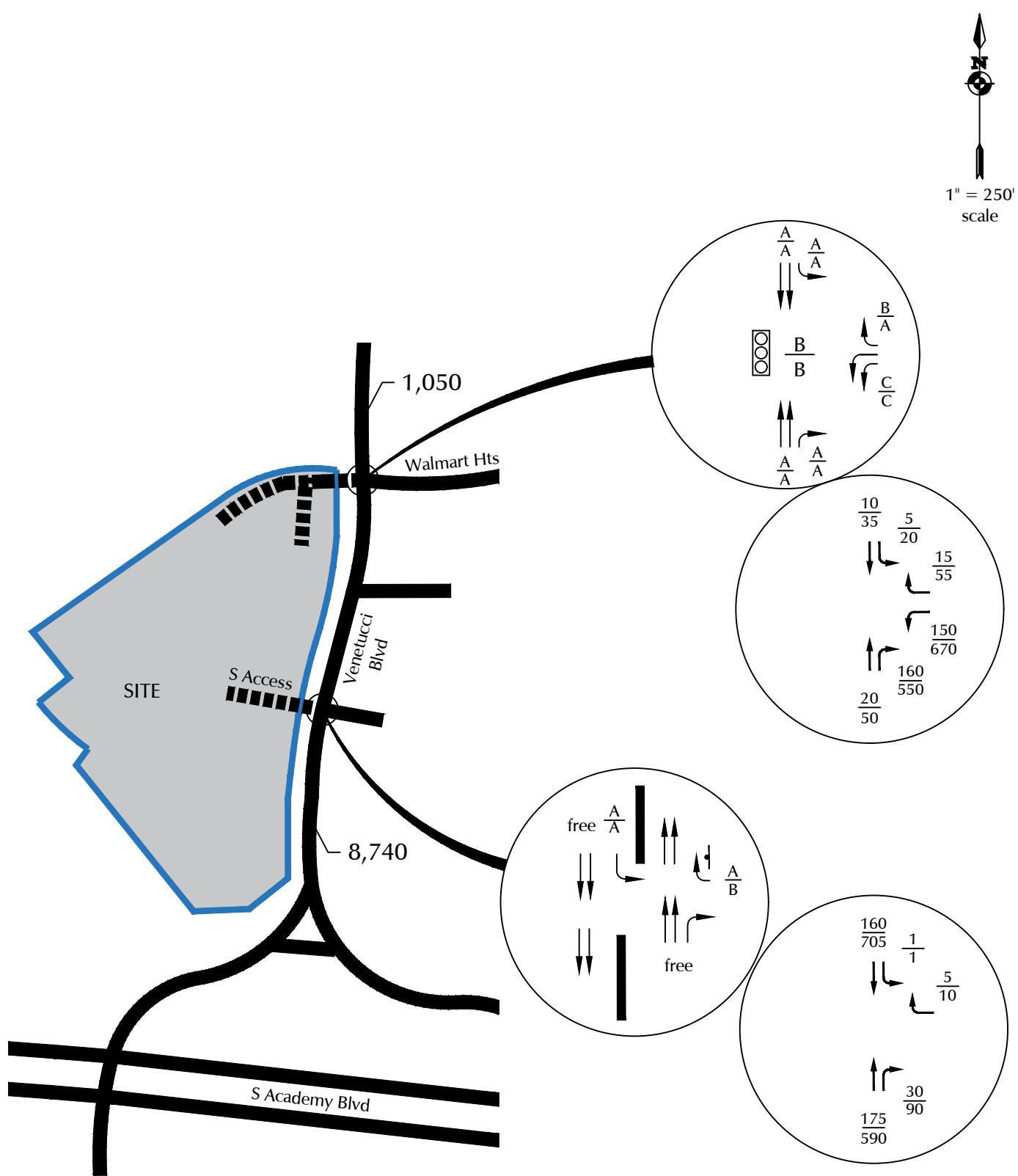


- Counts by LSC (November 2021)
- = Traffic Signal ┤ = Stop Sign
 - $\frac{X}{X}$ = AM Individual Movement Peak-Hour LOS
PM Individual Movement Peak-Hour LOS
 - $\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (Veh/Hour)
PM Weekday Peak-Hour Traffic (Veh/Hour)
 - X,XXX = Average Daily Traffic (Vehicles/Day)

Figure 3
Existing Traffic, Lane Geometry, Traffic Control, and LOS

South Academy Highlands (LSC# S214990)

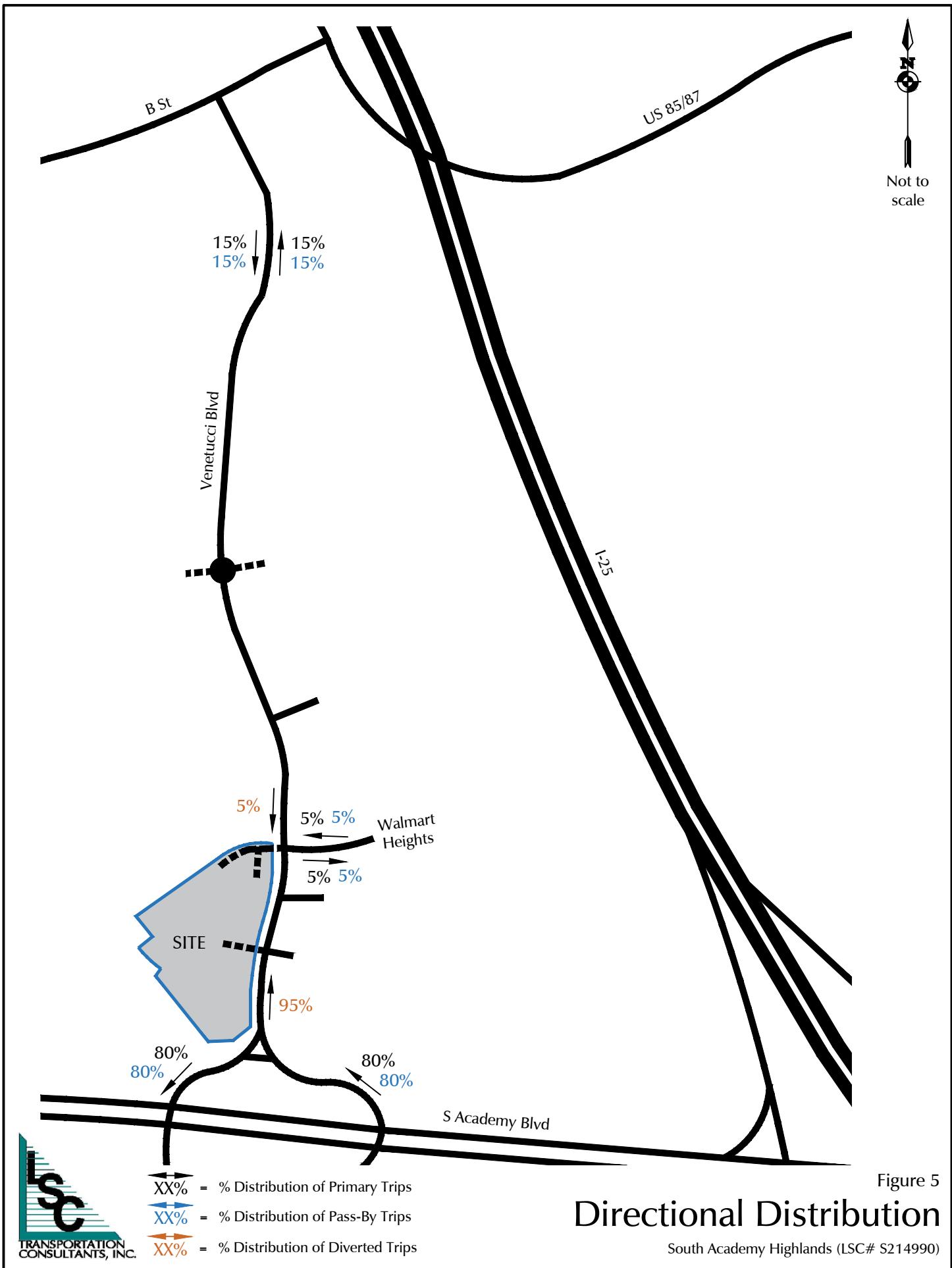
N
1" = 250'
scale



- = Traffic Signal = Stop Sign
 $\frac{X}{X}$ = AM Individual Movement Peak-Hour LOS
 PM Individual Movement Peak-Hour LOS
 $\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (Veh/Hour)
 PM Weekday Peak-Hour Traffic (Veh/Hour)
 X,XXX = Average Daily Traffic (Vehicles/Day)

Figure 4
**Short-Term Baseline
 Traffic, Lane Geometry,
 Traffic Control, and LOS**

South Academy Highlands (LSC# S214990)



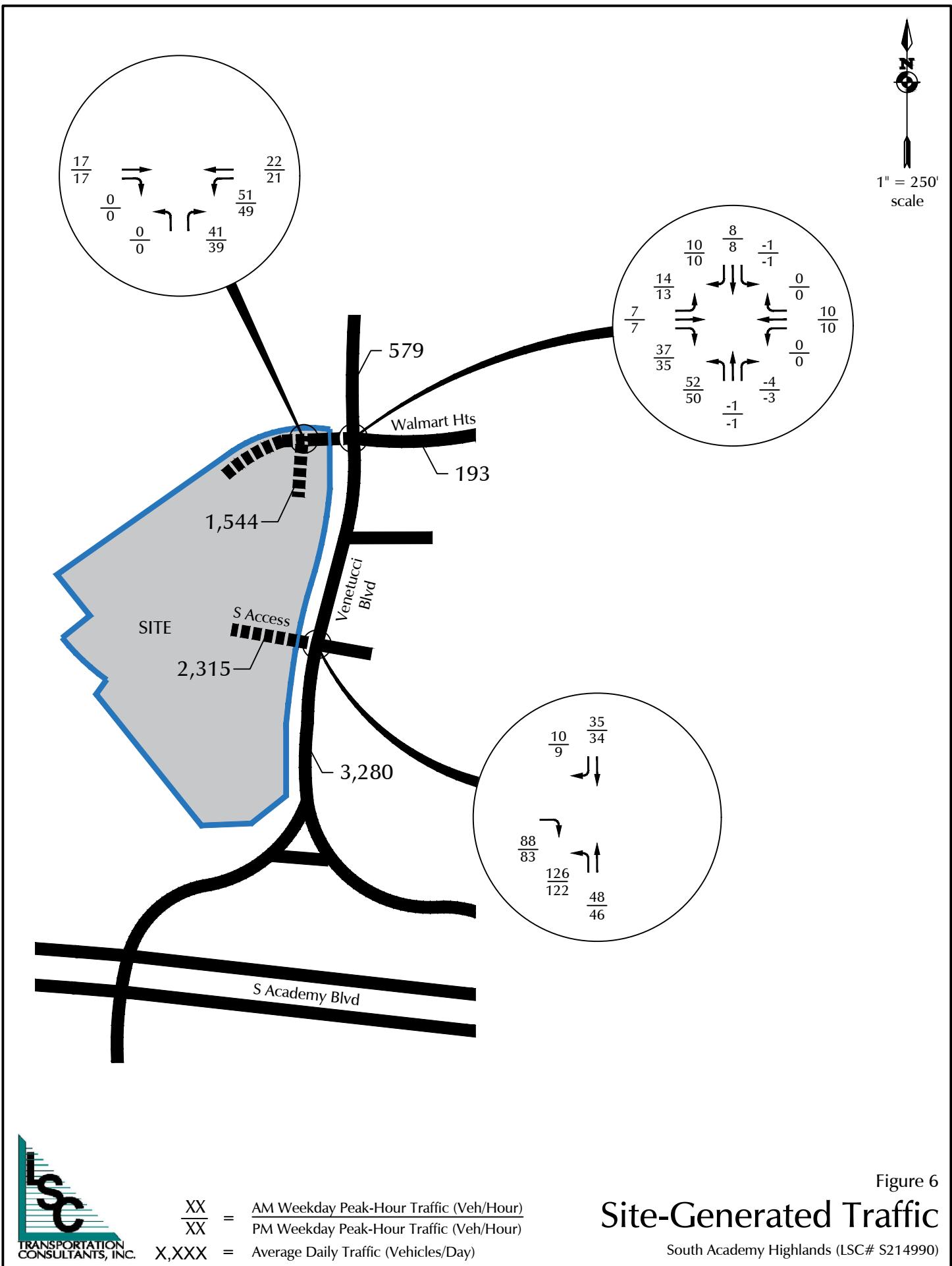


Figure 6
Site-Generated Traffic
South Academy Highlands (LSC# S214990)

1" = 250'
scale

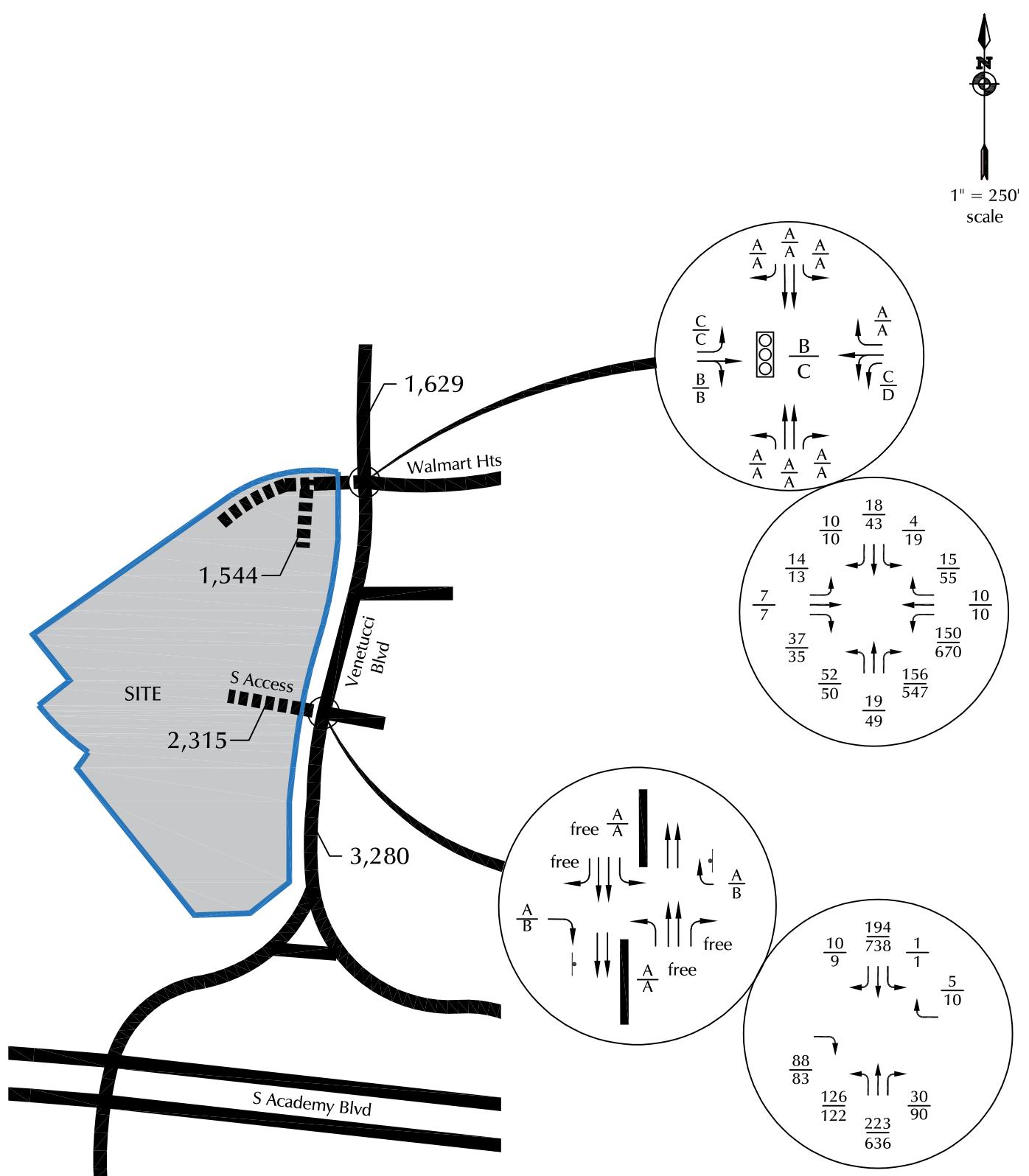
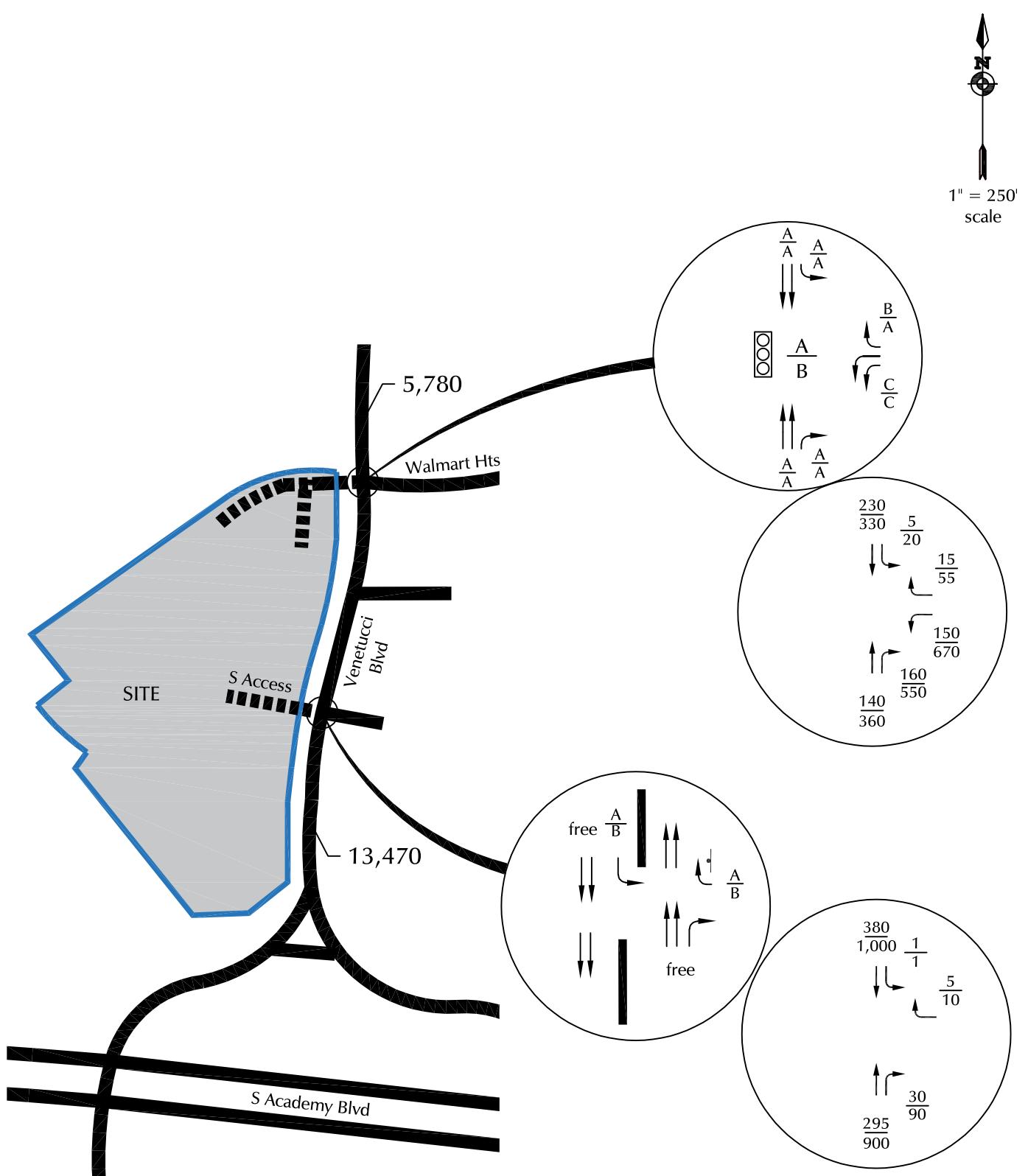


Figure 7
Short-Term Baseline + Site
Traffic, Lane Geometry,
Traffic Control, and LOS

1" = 250'
scale



- = Traffic Signal = Stop Sign
- $\frac{X}{X}$ = AM Individual Movement Peak-Hour LOS
PM Individual Movement Peak-Hour LOS
- $\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (Veh/Hour)
PM Weekday Peak-Hour Traffic (Veh/Hour)
- X,XXX = Average Daily Traffic (Vehicles/Day)

Figure 8
2041 Background
Traffic, Lane Geometry,
Traffic Control, and LOS

South Academy Highlands (LSC# S214990)

N
1" = 250'
scale

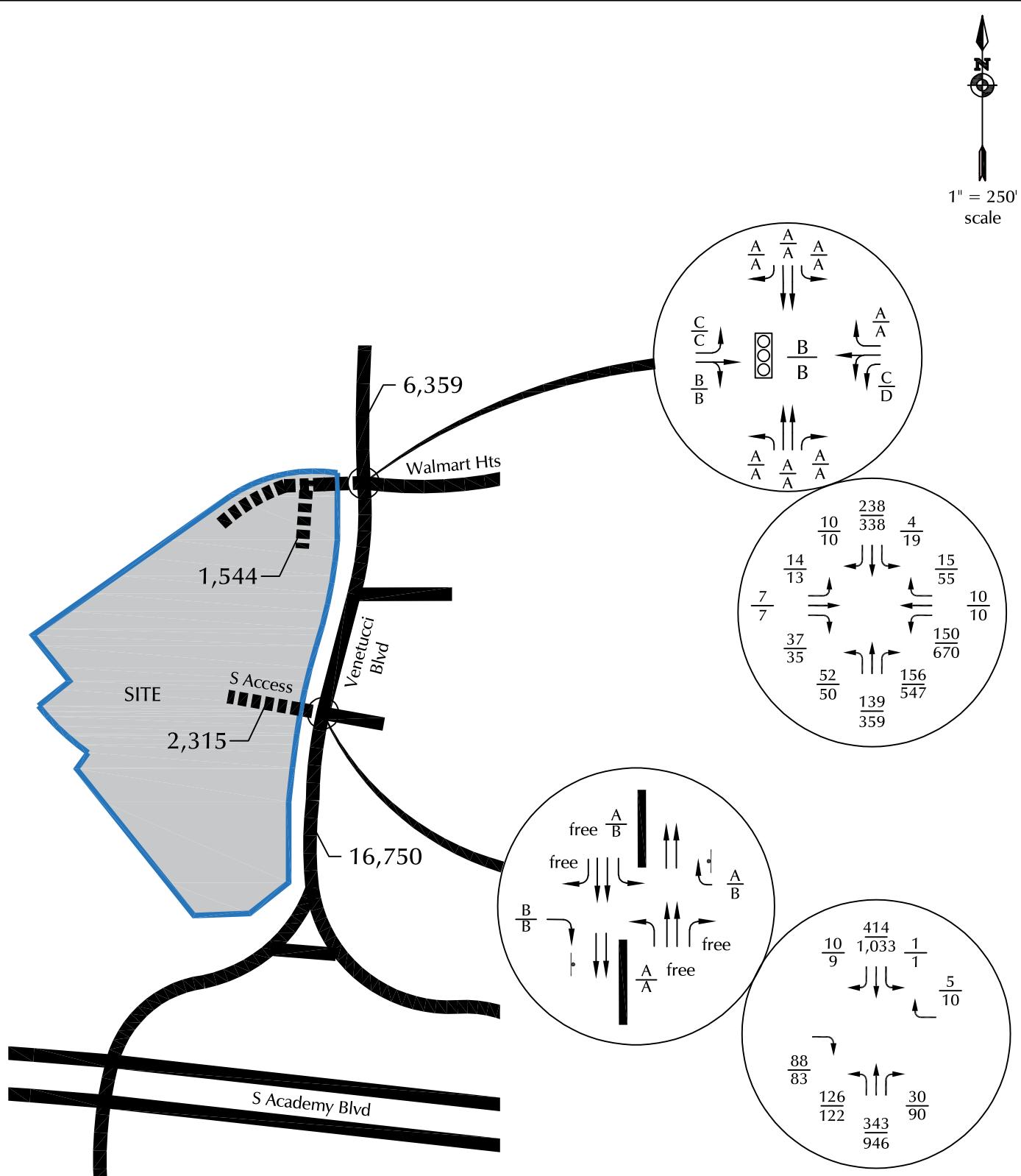


Figure 9

2041 Background + Site Traffic, Lane Geometry, Traffic Control, and LOS

South Academy Highlands (LSC# S214990)

Traffic Counts



LSC Transportation Consultants, Inc.

2504 E Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Venetucci Blvd - R in S of Walmart Hts AM

Site Code : S214990

Start Date : 11/2/2021

Page No : 1

Groups Printed- Bank 1

Start Time	Venetucci Blvd Southbound					R in S of Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	9
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	7
Total	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16	0	0	0	0	0	16
07:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	5	0	5	0	0	0	0	0	6
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	6
07:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	13	0	13	0	0	0	0	0	14
Total	0	0	0	0	0	0	0	2	0	2	0	0	26	0	26	0	0	0	0	0	28
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	0	0	0	0	0	13
08:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	9	0	9	0	0	0	0	0	10
Grand Total	0	0	0	0	0	0	0	0	3	0	3	0	0	64	0	64	0	0	0	0	67
Apprch %	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	0	0	0	0	0
Total %	0	0	0	0	0	0	0	4.5	0	4.5	0	0	95.5	0	95.5	0	0	0	0	0	0

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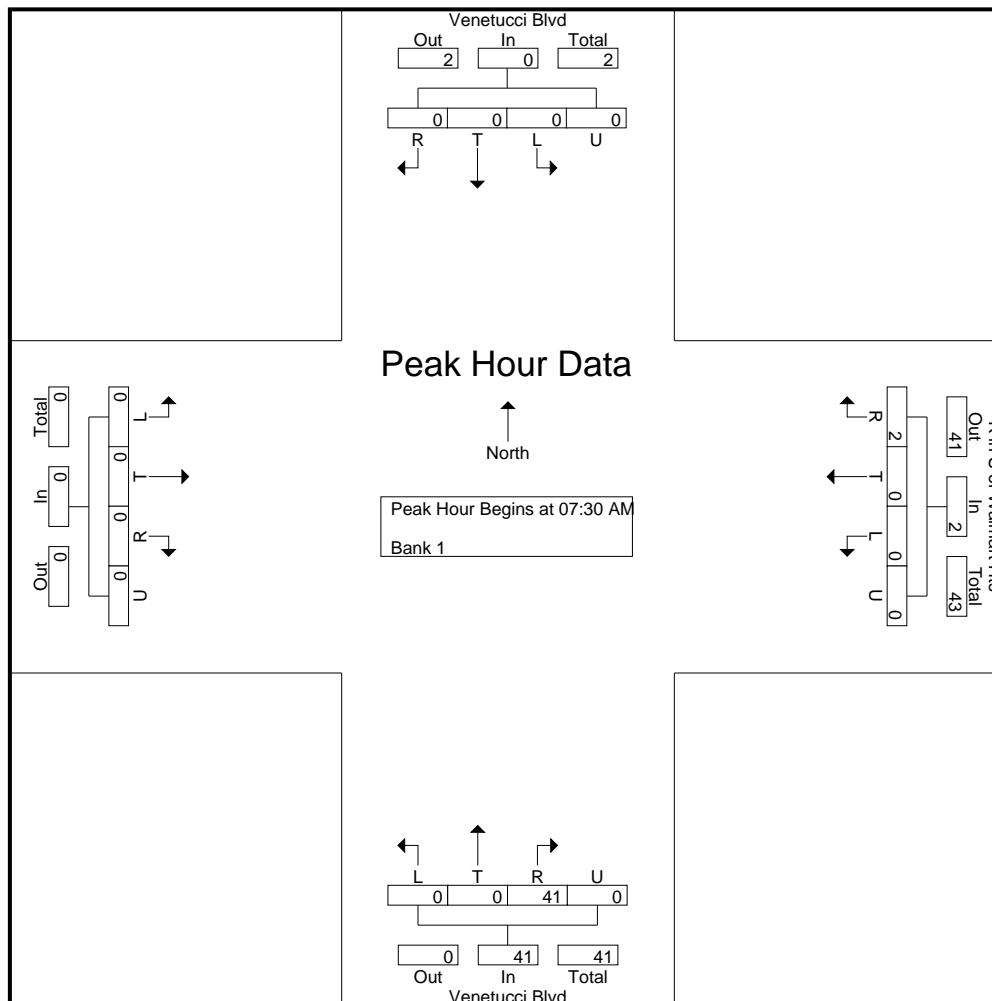
File Name : Venetucci Blvd - R in S of Walmart Hts AM
 Site Code : S214990
 Start Date : 11/2/2021
 Page No : 2

Start Time	Venetucci Blvd Southbound					R in S of Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 7:30:00 AM																						
7:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	6	
7:45:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	13	0	13	0	0	0	0	0	0	14
8:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	0	0	0	0	0	0	13
8:15:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	9	0	9	0	0	0	0	0	0	10
Total Volume	0	0	0	0	0	0	0	2	0	2	0	0	41	0	41	0	0	0	0	0	0	43
% App. Total	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.788	.000	.788	.000	.000	.000	.000	.000	.768	

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File Name : Venetucci Blvd - R in S of Walmart Hts AM
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File Name : Venetucci Blvd - R in S of Walmart Hts AM
 Site Code : S214990
 Start Date : 11/2/2021
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	Venetucci Blvd Southbound					R in S of Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					
	Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total

Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1

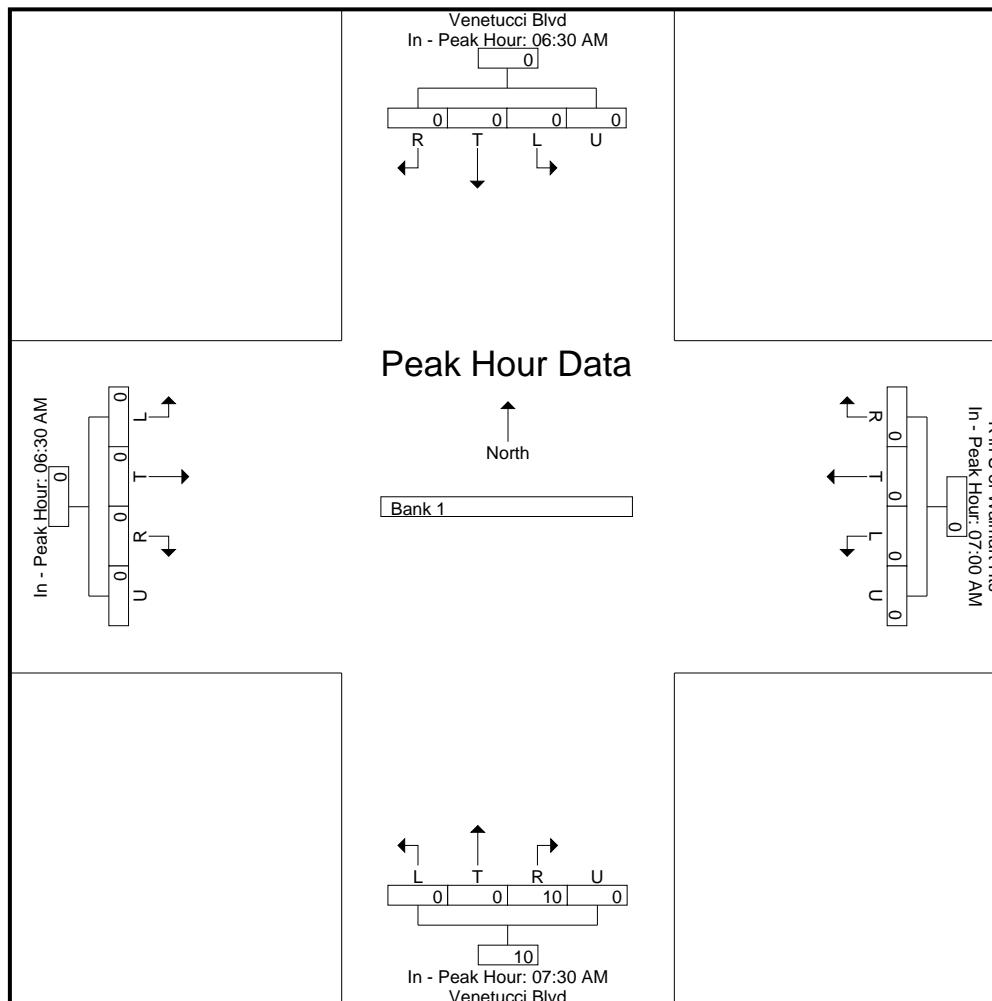
Peak Hour for Each Approach Begins at:

	6:30:00 AM	7:00:00 AM					7:30:00 AM					6:30:00 AM									
+0 mins.	0	0	0	0	0	0	0	0	1	0	1	0	0	6	0	6	0	0	0	0	0
+5 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	0	0	0	0	0
+10 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	1	0	1	0	0	9	0	9	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	2	0	2	0	0	41	0	41	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.788	.000	.788	.000	.000	.000	.000	.000

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File Name : Venetucci Blvd - R in S of Walmart Hts AM
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File Name : Venetucci Blvd - R in S of Walmart Hts PM

Site Code : S214990

Start Date : 11/2/2021

Page No : 1

Groups Printed- Bank 1

Start Time	Venetucci Blvd Southbound					R in S of Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	0	0	0	0	0	0	0	2	0	2	0	0	22	0	22	0	0	0	0	0	24
04:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	21	0	21	0	0	0	0	0	22
04:30 PM	0	0	0	0	0	0	0	5	0	5	0	0	25	0	25	0	0	0	0	0	30
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	21	0	21	0	0	0	0	0	21
Total	0	0	0	0	0	0	0	8	0	8	0	0	89	0	89	0	0	0	0	0	97
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	21	0	21	0	0	0	0	0	22
05:15 PM	0	0	0	0	0	0	0	3	0	3	0	0	24	0	24	0	0	0	0	0	27
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	27	0	27	0	0	0	0	0	27
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	0	0	0	25
Total	0	0	0	0	0	0	0	4	0	4	0	0	97	0	97	0	0	0	0	0	101
Grand Total	0	0	0	0	0	0	0	12	0	12	0	0	186	0	186	0	0	0	0	0	198
Apprch %	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	0	0	0	0	
Total %	0	0	0	0	0	0	0	6.1	0	6.1	0	0	93.9	0	93.9	0	0	0	0	0	

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File Name : Venetucci Blvd - R in S of Walmart Hts PM

Site Code : S214990

Start Date : 11/2/2021

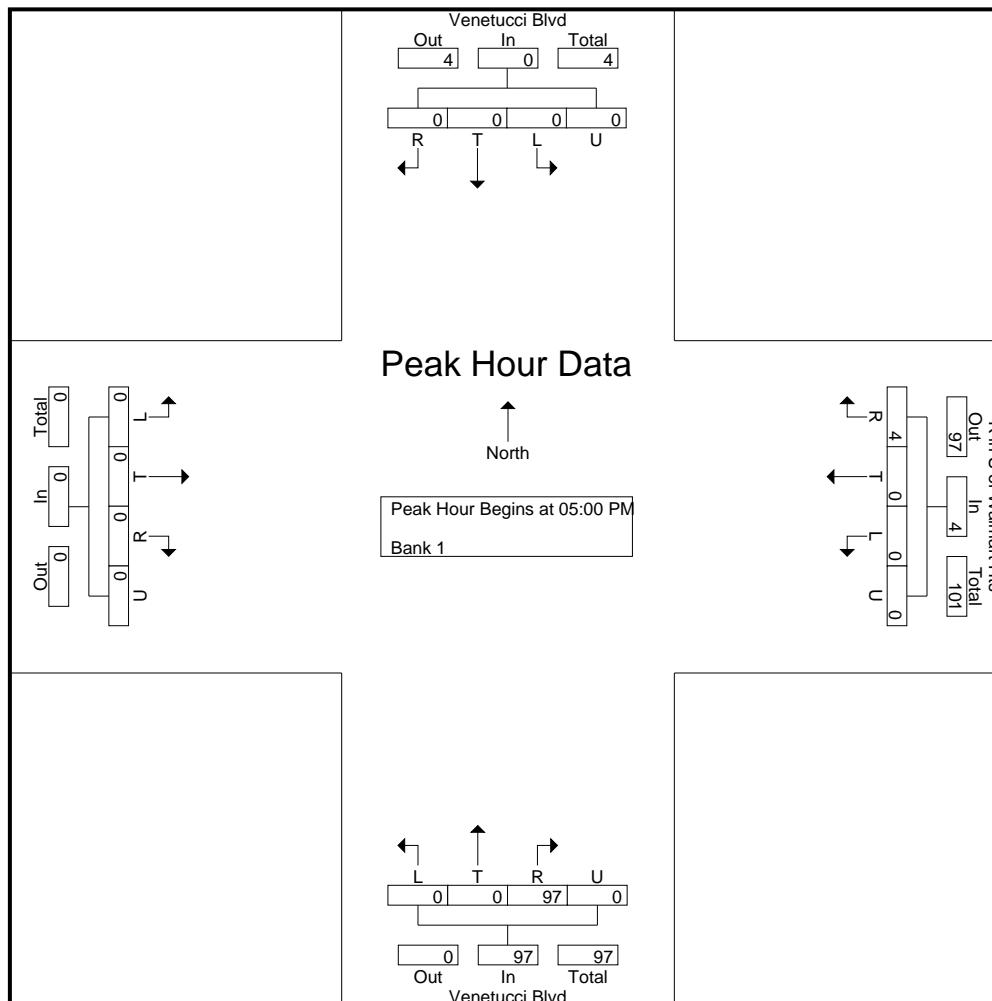
Page No : 2

Start Time	Venetucci Blvd Southbound					R in S of Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 5:00:00 PM																						
5:00:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	21	0	21	0	0	0	0	0	0	22
5:15:00 PM	0	0	0	0	0	0	0	3	0	3	0	0	24	0	24	0	0	0	0	0	0	27
5:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	27	0	27	0	0	0	0	0	0	27
5:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	0	0	0	0	25
Total Volume	0	0	0	0	0	0	0	4	0	4	0	0	97	0	97	0	0	0	0	0	0	101
% App. Total	0	0	0	0	0	0	0	100	0	0	0	0	100	0	100	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.898	.000	.898	.000	.000	.000	.000	.000	.935	

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File Name : Venetucci Blvd - R in S of Walmart Hts PM
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File Name : Venetucci Blvd - R in S of Walmart Hts PM
 Site Code : S214990
 Start Date : 11/2/2021
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	Venetucci Blvd Southbound					R in S of Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					
	Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total

Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1

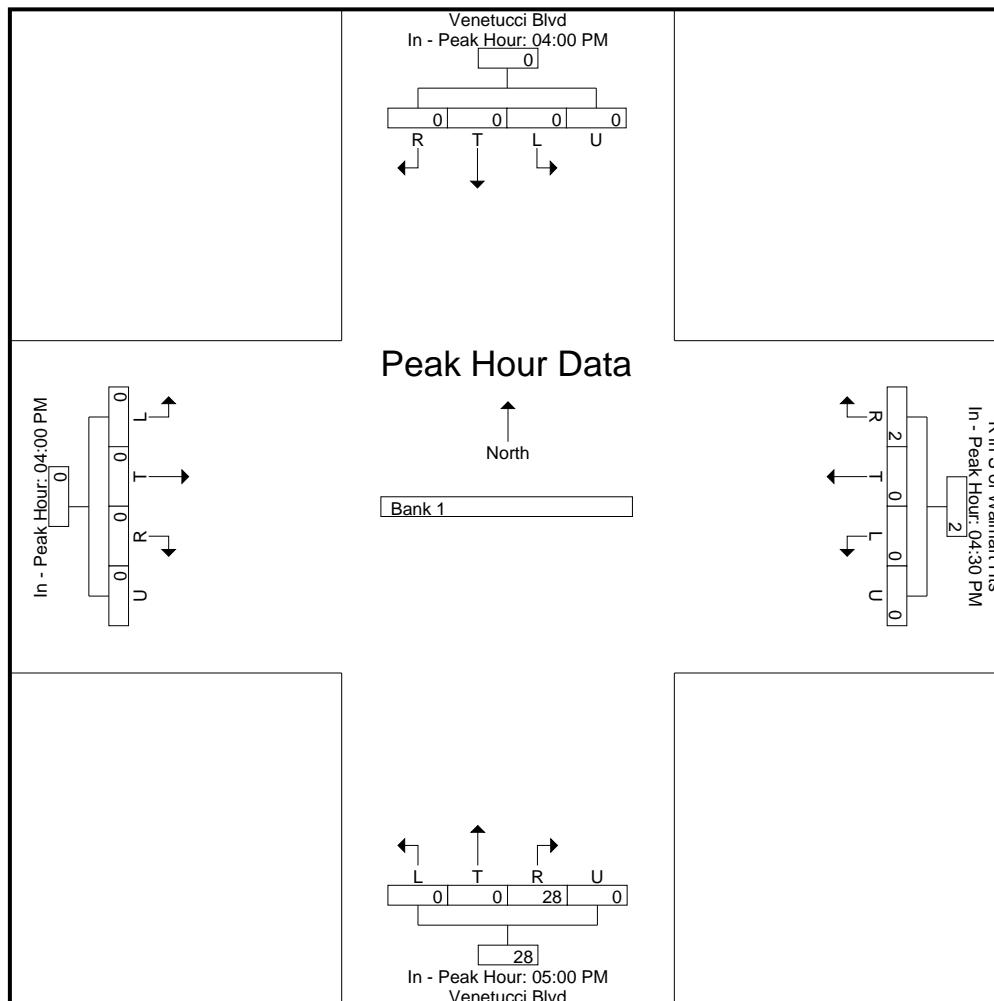
Peak Hour for Each Approach Begins at:

	4:00:00 PM	4:30:00 PM					5:00:00 PM					4:00:00 PM								
+0 mins.	0	0	0	0	0	0	0	0	5	0	5	0	0	21	0	21	0	0	0	0
+5 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	24	0	0	0	0
+10 mins.	0	0	0	0	0	0	0	0	1	0	1	0	0	27	0	27	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	3	0	3	0	0	25	0	25	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	9	0	9	0	0	97	0	97	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	100	0	100	0	0	100	0	100	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.450	.000	.450	.000	.000	.898	.000	.898	.000	.000	.000	.000

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File Name : Venetucci Blvd - R in S of Walmart Hts PM
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File Name : Venetucci Blvd - Walmart Hts AM
 Site Code : S214990
 Start Date : 11/2/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Venetucci Blvd Southbound					Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	1	0	0	0	1	14	0	2	0	16	0	3	27	9	39	0	0	0	0	0	56
06:45 AM	0	1	0	0	1	25	0	0	0	25	0	2	24	10	36	0	0	0	0	0	62
Total	1	1	0	0	2	39	0	2	0	41	0	5	51	19	75	0	0	0	0	0	118
07:00 AM	0	1	0	0	1	37	0	2	0	39	0	1	33	18	52	0	0	0	0	0	92
07:15 AM	1	0	0	0	1	33	0	6	0	39	0	5	21	10	36	0	0	0	0	0	76
07:30 AM	2	4	0	0	6	35	0	2	0	37	0	5	42	10	57	0	0	0	0	0	100
07:45 AM	2	3	0	0	5	35	0	2	0	37	0	7	56	8	71	0	0	0	0	0	113
Total	5	8	0	0	13	140	0	12	0	152	0	18	152	46	216	0	0	0	0	0	381
08:00 AM	5	4	0	0	9	60	0	0	0	60	0	7	58	9	74	0	0	0	0	0	143
08:15 AM	2	5	0	0	7	69	0	5	0	74	0	5	46	15	66	0	0	0	0	0	147
Grand Total	13	18	0	0	31	308	0	19	0	327	0	35	307	89	431	0	0	0	0	0	789
Apprch %	41.9	58.1	0	0		94.2	0	5.8	0		0	8.1	71.2	20.6		0	0	0	0	0	
Total %	1.6	2.3	0	0	3.9	39	0	2.4	0	41.4	0	4.4	38.9	11.3	54.6	0	0	0	0	0	

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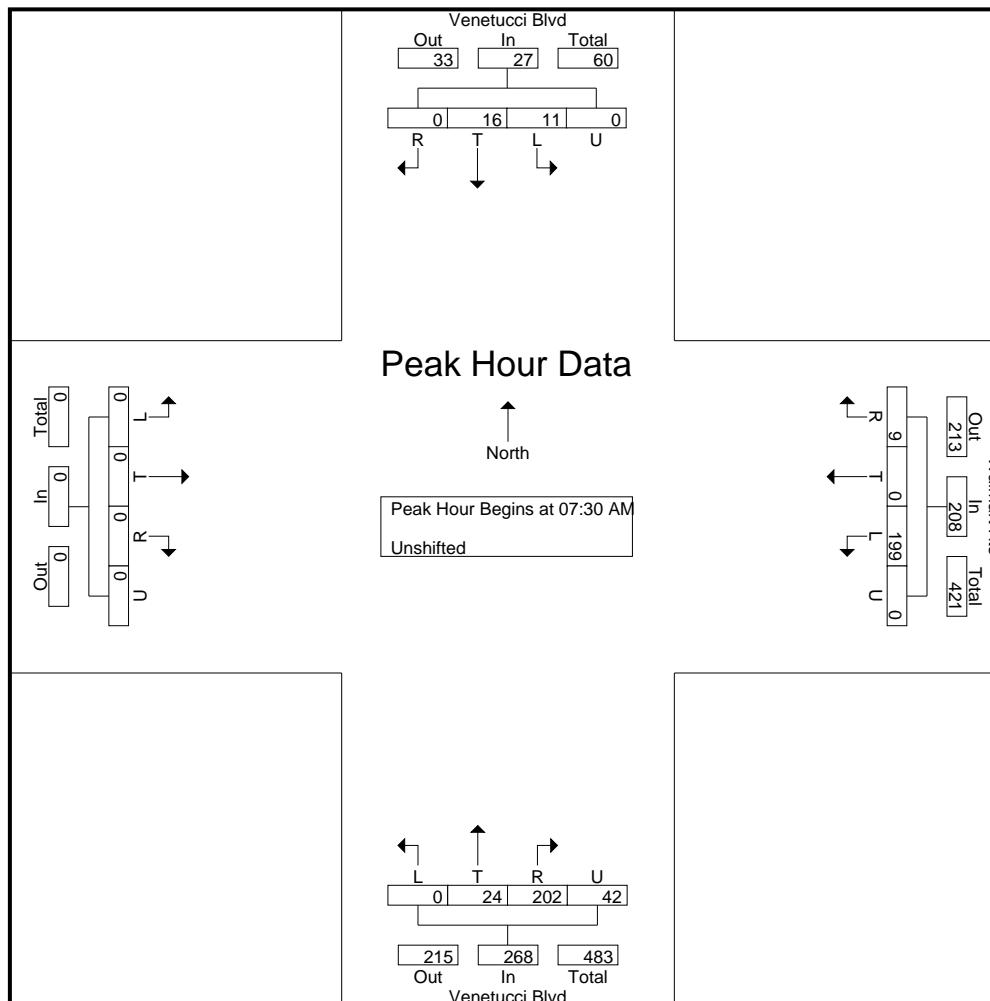
File Name : Venetucci Blvd - Walmart Hts AM
 Site Code : S214990
 Start Date : 11/2/2021
 Page No : 2

Start Time	Venetucci Blvd Southbound					Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 7:30:00 AM																						
7:30:00 AM	2	4	0	0	6	35	0	2	0	37	0	5	42	10	57	0	0	0	0	0	100	
7:45:00 AM	2	3	0	0	5	35	0	2	0	37	0	7	56	8	71	0	0	0	0	0	113	
8:00:00 AM	5	4	0	0	9	60	0	0	0	60	0	7	58	9	74	0	0	0	0	0	143	
8:15:00 AM	2	5	0	0	7	69	0	5	0	74	0	5	46	15	66	0	0	0	0	0	147	
Total Volume	11	16	0	0	27	199	0	9	0	208	0	24	202	42	268	0	0	0	0	0	503	
% App. Total	40.7	59.3	0	0		95.7	0	4.3	0		0	9	75.4	15.7		0	0	0	0	0		
PHF	.550	.800	.000	.000	.750	.721	.000	.450	.000	.703	.000	.857	.871	.700	.905	.000	.000	.000	.000	.000	.855	

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File Name : Venetucci Blvd - Walmart Hts AM
Site Code : S214990
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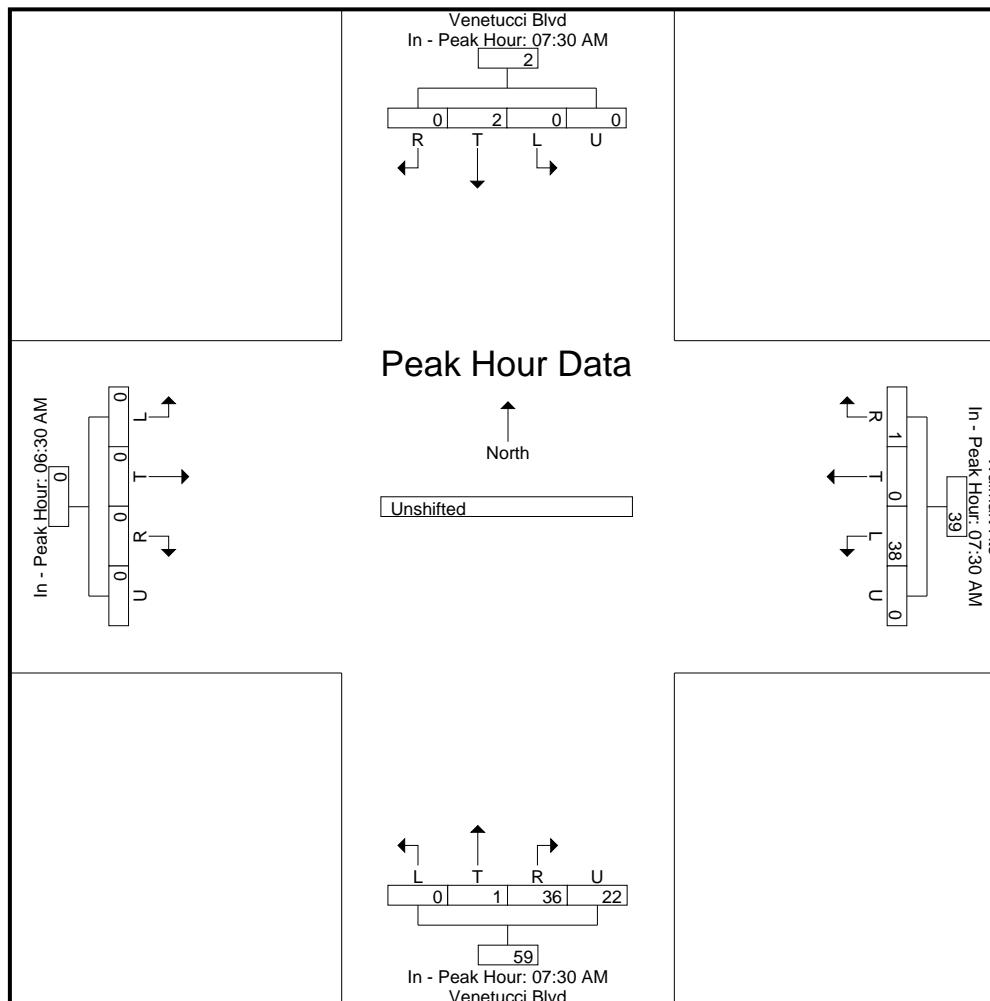
File Name : Venetucci Blvd - Walmart Hts AM
 Site Code : S214990
 Start Date : 11/2/2021
 Page No : 4

Start Time	Venetucci Blvd Southbound					Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
+0 mins.	2	4	0	0	6	7:30:00 AM	35	0	2	0	37	7:30:00 AM	0	5	42	10	57	0	0	0	0
+5 mins.	2	3	0	0	5	35	0	2	0	37	0	7	56	8	71	0	0	0	0	0	
+10 mins.	5	4	0	0	9	60	0	0	0	60	0	7	58	9	74	0	0	0	0	0	
+15 mins.	2	5	0	0	7	69	0	5	0	74	0	5	46	15	66	0	0	0	0	0	
Total Volume	11	16	0	0	27	199	0	9	0	208	0	24	202	42	268	0	0	0	0	0	
% App. Total	40.7	59.3	0	0		95.7	0	4.3	0		0	9	75.4	15.7		0	0	0	0		
PHF	.550	.800	.000	.000	.750	.721	.000	.450	.000	.703	.000	.857	.871	.700	.905	.000	.000	.000	.000	.000	

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File Name : Venetucci Blvd - Walmart Hts AM
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LSC Transportation Consultants, Inc.

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File Name : Venetucci Blvd - Walmart Hts PM
 Site Code : S214990
 Start Date : 11/2/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Venetucci Blvd Southbound					Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
04:00 PM	6	8	0	1	15	158	0	11	0	169	0	11	139	11	161	0	0	0	0	0	345
04:15 PM	5	14	0	0	19	151	0	12	0	163	0	13	154	12	179	0	0	0	0	0	361
04:30 PM	7	7	0	0	14	193	0	15	0	208	0	12	117	17	146	0	0	0	0	0	368
04:45 PM	2	2	0	0	4	160	0	14	0	174	0	12	134	6	152	0	0	0	0	0	330
Total	20	31	0	1	52	662	0	52	0	714	0	48	544	46	638	0	0	0	0	0	1404
05:00 PM	5	4	0	0	9	184	0	6	0	190	0	7	120	11	138	0	0	0	0	0	337
05:15 PM	4	6	0	0	10	180	0	7	0	187	0	14	126	16	156	0	0	0	0	0	353
05:30 PM	5	2	0	0	7	127	1	7	0	135	0	10	108	9	127	0	0	0	0	0	269
05:45 PM	4	7	0	0	11	156	0	10	0	166	0	10	98	4	112	0	0	0	0	0	289
Total	18	19	0	0	37	647	1	30	0	678	0	41	452	40	533	0	0	0	0	0	1248
Grand Total	38	50	0	1	89	1309	1	82	0	1392	0	89	996	86	1171	0	0	0	0	0	2652
Apprch %	42.7	56.2	0	1.1		94	0.1	5.9	0		0	7.6	85.1	7.3		0	0	0	0	0	
Total %	1.4	1.9	0	0	3.4	49.4	0	3.1	0	52.5	0	3.4	37.6	3.2	44.2	0	0	0	0	0	

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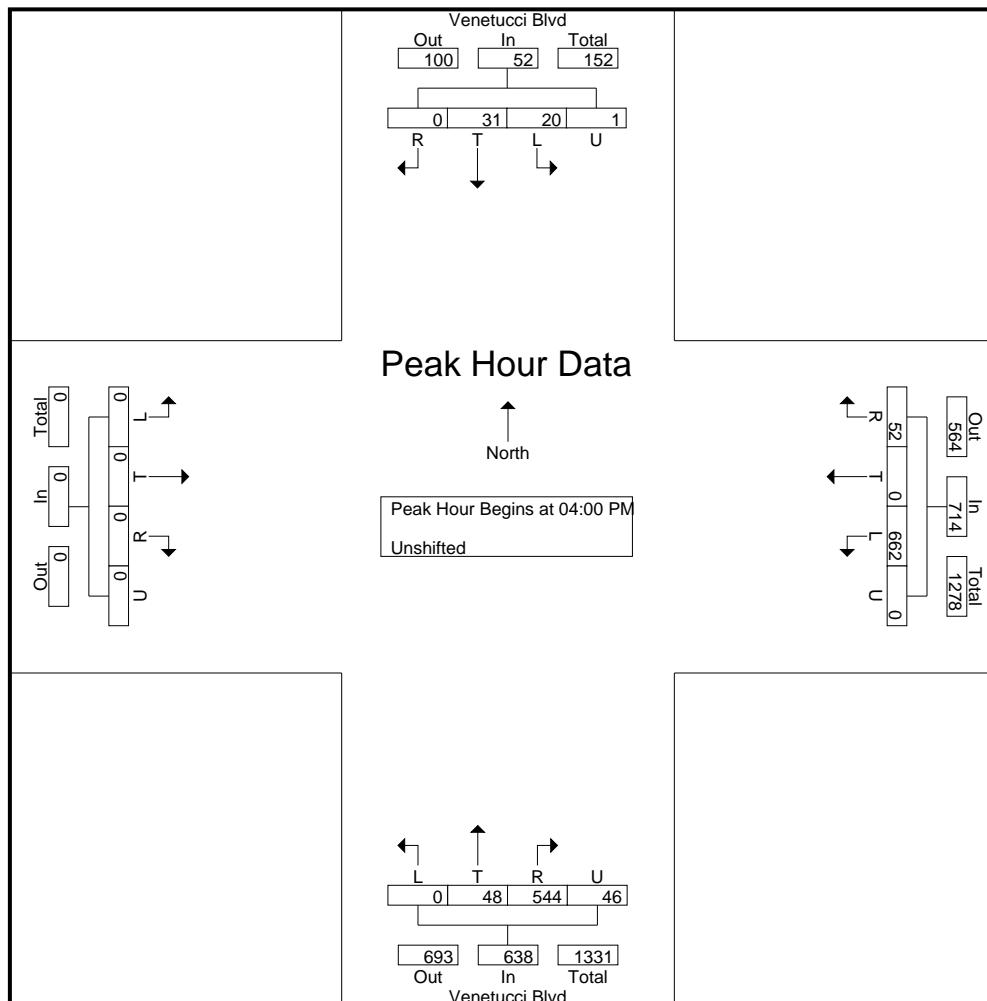
File Name : Venetucci Blvd - Walmart Hts PM
 Site Code : S214990
 Start Date : 11/2/2021
 Page No : 2

Start Time	Venetucci Blvd Southbound					Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 4:00:00 PM																						
4:00:00 PM	6	8	0	1	15	158	0	11	0	169	0	11	139	11	161	0	0	0	0	0	345	
4:15:00 PM	5	14	0	0	19	151	0	12	0	163	0	13	154	12	179	0	0	0	0	0	361	
4:30:00 PM	7	7	0	0	14	193	0	15	0	208	0	12	117	17	146	0	0	0	0	0	368	
4:45:00 PM	2	2	0	0	4	160	0	14	0	174	0	12	134	6	152	0	0	0	0	0	330	
Total Volume	20	31	0	1	52	662	0	52	0	714	0	48	544	46	638	0	0	0	0	0	1404	
% App. Total	38.5	59.6	0	1.9		92.7	0	7.3	0		0	7.5	85.3	7.2		0	0	0	0	0		
PHF	.714	.554	.000	.250	.684	.858	.000	.867	.000	.858	.000	.923	.883	.676	.891	.000	.000	.000	.000	.000	.954	

LSC Transportation Consultants, Inc.

2504 E Pikes Peak Ave, Suite 304
Colorado Springs, CO 80909
719-633-2868

File Name : Venetucci Blvd - Walmart Hts PM
Site Code : S214990
Start Date : 11/2/2021
Page No : 3



LSC Transportation Consultants, Inc.

2504 E Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Venetucci Blvd - Walmart Hts PM
 Site Code : S214990
 Start Date : 11/2/2021
 Page No : 4

Start Time	Venetucci Blvd Southbound					Walmart Hts Westbound					Venetucci Blvd Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	

Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1

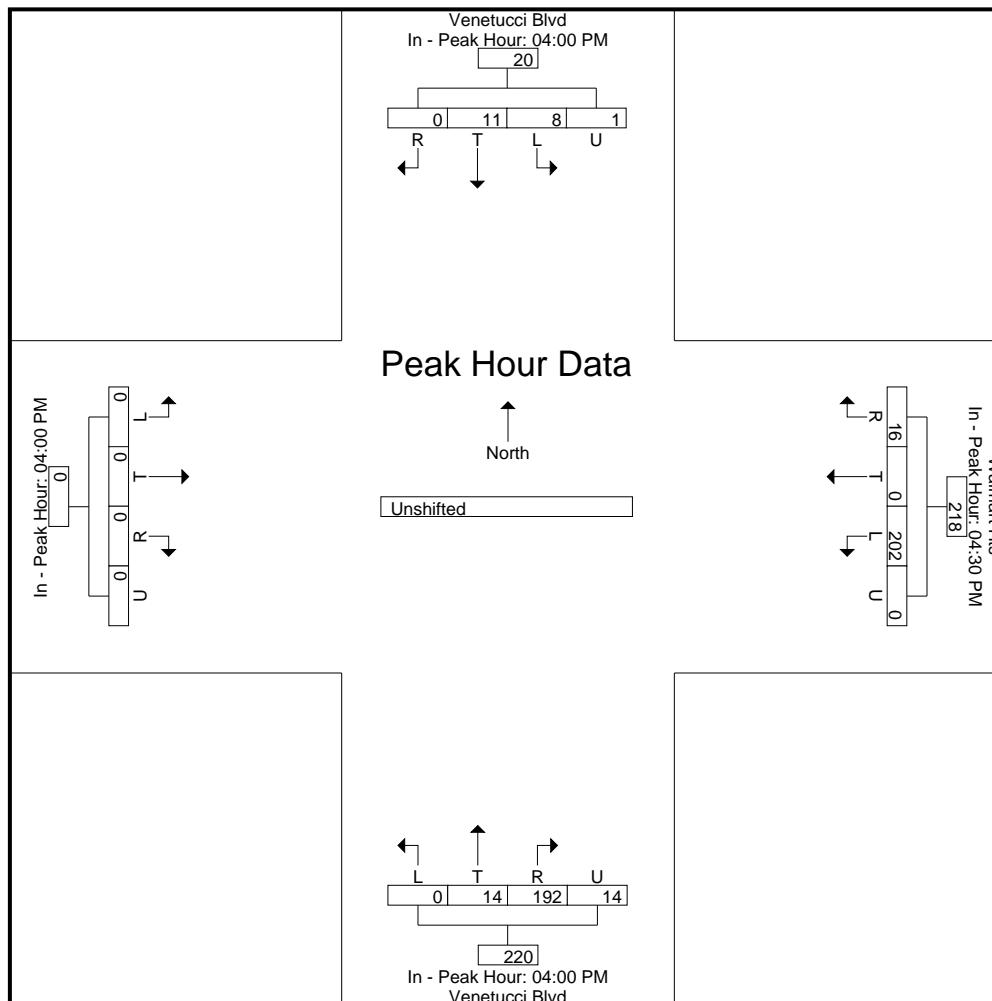
Peak Hour for Each Approach Begins at:

	4:00:00 PM					4:30:00 PM					4:00:00 PM					4:00:00 PM					
+0 mins.	6	8	0	1	15	193	0	15	0	208	0	11	139	11	161	0	0	0	0	0	0
+5 mins.	5	14	0	0	19	160	0	14	0	174	0	13	154	12	179	0	0	0	0	0	0
+10 mins.	7	7	0	0	14	184	0	6	0	190	0	12	117	17	146	0	0	0	0	0	0
+15 mins.	2	2	0	0	4	180	0	7	0	187	0	12	134	6	152	0	0	0	0	0	0
Total Volume	20	31	0	1	52	717	0	42	0	759	0	48	544	46	638	0	0	0	0	0	0
% App. Total	38.5	59.6	0	1.9		94.5	0	5.5	0		0	7.5	85.3	7.2		0	0	0	0	0	0
PHF	.714	.554	.000	.250	.684	.929	.000	.700	.000	.912	.000	.923	.883	.676	.891	.000	.000	.000	.000	.000	

LSC Transportation Consultants, Inc.

2504 E Pikes Peak Ave, Suite 304
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719-633-2868

File Name : Venetucci Blvd - Walmart Hts PM
Site Code : S214990
Start Date : 11/2/2021
Page No : 5



Queuing Reports



Queuing and Blocking Report
AM

2021 Existing
AM

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #1

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	R	T	T	R	L	T
Maximum Queue (ft)	108	43	13	16	5	50	5	10
Average Queue (ft)	64	11	5	3	0	26	1	2
95th Queue (ft)	115	49	16	19	0	54	9	15
Link Distance (ft)				314		314		
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				160			105	125
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #2

Movement	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	L	R	T	R	L	T	
Maximum Queue (ft)	108	41	12	15	60	10	15	
Average Queue (ft)	65	9	4	3	29	1	2	
95th Queue (ft)	116	42	14	17	65	12	15	
Link Distance (ft)				314				
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				160			105	125
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #3

Movement	WB	WB	WB	NB	NB	NB	
Directions Served	L	L	R	T	T	R	
Maximum Queue (ft)	77	19	13	21	10	55	
Average Queue (ft)	42	4	5	4	1	23	
95th Queue (ft)	76	18	16	21	12	56	
Link Distance (ft)				314		314	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				160			105
Storage Blk Time (%)							
Queuing Penalty (veh)							

Queuing and Blocking Report

AM

2021 Existing

AM

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #4

Movement	WB	WB	WB	NB	NB	SB
Directions Served	L	L	R	T	R	T
Maximum Queue (ft)	94	46	13	20	51	19
Average Queue (ft)	60	11	5	3	28	3
95th Queue (ft)	94	45	15	18	56	21
Link Distance (ft)			314			
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		160		105		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 1: Venetucci Blvd & Walmart Hts, All Intervals

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	R	T	T	R	L	T
Maximum Queue (ft)	123	75	13	31	16	63	15	24
Average Queue (ft)	58	9	5	3	0	27	1	2
95th Queue (ft)	104	40	15	19	6	58	7	15
Link Distance (ft)			314	314				
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		160		105	125			
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report

AM

2021 Existing

AM

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #1

Movement	WB
Directions Served	R
Maximum Queue (ft)	20
Average Queue (ft)	5
95th Queue (ft)	23
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #2

Movement	WB
Directions Served	R
Maximum Queue (ft)	20
Average Queue (ft)	5
95th Queue (ft)	23
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #3

Movement	WB
Directions Served	R
Maximum Queue (ft)	5
Average Queue (ft)	1
95th Queue (ft)	8
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

AM

2021 Existing

AM

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #4

Movement	WB
Directions Served	R
Maximum Queue (ft)	25
Average Queue (ft)	6
95th Queue (ft)	26
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S 3/4 Access, All Intervals

Movement	WB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report
PM

2021 Existing
PM

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #1

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	R	T	T	R	L	T
Maximum Queue (ft)	151	146	44	38	5	115	38	25
Average Queue (ft)	142	117	16	17	1	69	9	8
95th Queue (ft)	157	172	44	46	9	112	33	30
Link Distance (ft)				314	314			
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				160		105	125	
Storage Blk Time (%)				1		1		
Queuing Penalty (veh)				0		0		

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #2

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	R	L	T	T
Maximum Queue (ft)	157	145	32	44	130	32	25	10
Average Queue (ft)	144	120	13	15	77	14	4	1
95th Queue (ft)	165	174	30	47	133	39	19	12
Link Distance (ft)				314				
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				160		105	125	
Storage Blk Time (%)				1		2		
Queuing Penalty (veh)				0		0		

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #3

Movement	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	R	L	T	T
Maximum Queue (ft)	160	148	28	50	119	30	23	5
Average Queue (ft)	140	100	9	16	72	7	6	1
95th Queue (ft)	165	169	26	48	119	30	28	8
Link Distance (ft)				314				
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				160		105	125	
Storage Blk Time (%)				0		1		
Queuing Penalty (veh)				0		0		

Queuing and Blocking Report

PM

2021 Existing

PM

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #4

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	R	T	T	R	L	T
Maximum Queue (ft)	154	151	21	38	10	134	26	33
Average Queue (ft)	144	119	9	10	1	81	4	11
95th Queue (ft)	155	168	23	37	12	138	20	36
Link Distance (ft)				314	314			
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				160		105	125	
Storage Blk Time (%)				1		2		
Queuing Penalty (veh)				0		1		

Intersection: 1: Venetucci Blvd & Walmart Hts, All Intervals

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	170	155	49	57	15	155	41	33	10
Average Queue (ft)	143	114	12	14	1	75	8	7	1
95th Queue (ft)	162	173	32	45	7	126	32	29	7
Link Distance (ft)				314	314				
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)				160		105	125		
Storage Blk Time (%)				0		1			
Queuing Penalty (veh)				0		0			

Queuing and Blocking Report PM

2021 Existing
PM

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #1

Movement	WB
Directions Served	R
Maximum Queue (ft)	25
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #2

Movement	WB
Directions Served	R
Maximum Queue (ft)	24
Average Queue (ft)	8
95th Queue (ft)	29
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #3

Movement	WB
Directions Served	R
Maximum Queue (ft)	20
Average Queue (ft)	7
95th Queue (ft)	28
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

PM

01/11/2022

Intersection: 2: Venetucci Blvd & S 3/4 Access, Interval #4

Movement	WB
Directions Served	R
Maximum Queue (ft)	25
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S 3/4 Access, All Intervals

Movement	WB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	9
95th Queue (ft)	31
Link Distance (ft)	91
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #1

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	42	43	111	70	12	44	56	32	55	5	93	31
Average Queue (ft)	16	21	70	20	4	19	32	8	28	1	45	10
95th Queue (ft)	47	48	118	66	15	49	66	31	61	12	92	34
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			195		240	105			105	125		
Storage Blk Time (%)										0	0	
Queuing Penalty (veh)										0	0	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #1

Movement	SB
Directions Served	R
Maximum Queue (ft)	13
Average Queue (ft)	2
95th Queue (ft)	13
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #2

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	38	39	121	89	11	63	50	34	49	9	116	36
Average Queue (ft)	20	24	79	31	4	23	22	5	29	2	56	11
95th Queue (ft)	43	44	131	92	13	60	60	25	55	14	117	38
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			195		240	105			105	125		
Storage Blk Time (%)								0			0	
Queuing Penalty (veh)								0			0	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #2

Movement	SB
Directions Served	R
Maximum Queue (ft)	18
Average Queue (ft)	3
95th Queue (ft)	16
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #3

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	34	29	108	56	15	55	64	5	38	14	74	9
Average Queue (ft)	13	18	65	18	5	26	20	1	24	2	34	2
95th Queue (ft)	41	37	117	51	18	63	64	12	50	14	69	11
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			195		240	105			105	125		
Storage Blk Time (%)						0	0				0	
Queuing Penalty (veh)						0	0				0	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #3

Movement	SB
Directions Served	R
Maximum Queue (ft)	9
Average Queue (ft)	1
95th Queue (ft)	11
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #4

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	31	44	128	54	14	50	64	36	52	10	100	26
Average Queue (ft)	12	24	80	19	5	20	25	7	28	3	44	7
95th Queue (ft)	37	47	134	53	16	56	60	31	61	17	88	27
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)			195		240	105			105	125		
Storage Blk Time (%)								0			0	
Queuing Penalty (veh)								0			0	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #4

Movement	SB
Directions Served	R
Maximum Queue (ft)	18
Average Queue (ft)	3
95th Queue (ft)	16
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, All Intervals

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	46	54	136	104	18	74	79	45	63	24	124	44
Average Queue (ft)	15	22	74	22	4	22	25	5	27	2	45	7
95th Queue (ft)	43	45	126	68	15	57	63	26	57	14	94	30
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)	0											
Queuing Penalty (veh)	0											
Storage Bay Dist (ft)		195		240	105			105	125			
Storage Blk Time (%)						0	0		0		0	
Queuing Penalty (veh)						0	0		0		0	

Intersection: 1: Venetucci Blvd & Walmart Hts, All Intervals

Movement	SB
Directions Served	R
Maximum Queue (ft)	27
Average Queue (ft)	2
95th Queue (ft)	14
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S Site Access, Interval #1

Movement	EB	WB	NB	SB	SB
Directions Served	R	R	L	T	TR
Maximum Queue (ft)	63	15	70	2	9
Average Queue (ft)	33	3	33	0	0
95th Queue (ft)	59	19	70	3	4
Link Distance (ft)	168	91		326	326
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				140	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Venetucci Blvd & S Site Access, Interval #2

Movement	EB	WB	NB
Directions Served	R	R	L
Maximum Queue (ft)	74	19	65
Average Queue (ft)	40	3	35
95th Queue (ft)	71	19	70
Link Distance (ft)	168	91	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			140
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Venetucci Blvd & S Site Access, Interval #3

Movement	EB	WB	NB	SB
Directions Served	R	R	L	L
Maximum Queue (ft)	49	10	53	4
Average Queue (ft)	32	1	27	1
95th Queue (ft)	50	12	53	6
Link Distance (ft)	168	91		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		140	120	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Venetucci Blvd & S Site Access, Interval #4

Movement	EB	WB	NB
Directions Served	R	R	L
Maximum Queue (ft)	57	25	75
Average Queue (ft)	37	8	37
95th Queue (ft)	57	29	76
Link Distance (ft)	168	91	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		140	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Venetucci Blvd & S Site Access, All Intervals

Movement	EB	WB	NB	SB	SB	SB
Directions Served	R	R	L	L	T	TR
Maximum Queue (ft)	80	30	88	4	2	9
Average Queue (ft)	35	4	33	0	0	0
95th Queue (ft)	60	21	68	3	2	2
Link Distance (ft)	168	91		326	326	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		140	120			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 33: N Site Access & Walmart Hts, Interval #1

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	5	36
Average Queue (ft)	1	24
95th Queue (ft)	8	44
Link Distance (ft)	89	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: N Site Access & Walmart Hts, Interval #2

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	19	40
Average Queue (ft)	4	24
95th Queue (ft)	23	46
Link Distance (ft)	89	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: N Site Access & Walmart Hts, Interval #3

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	5	36
Average Queue (ft)	1	21
95th Queue (ft)	9	45
Link Distance (ft)	89	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: N Site Access & Walmart Hts, Interval #4

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	5	45
Average Queue (ft)	1	25
95th Queue (ft)	12	50
Link Distance (ft)	89	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: N Site Access & Walmart Hts, All Intervals

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	30	52
Average Queue (ft)	2	24
95th Queue (ft)	14	47
Link Distance (ft)	89	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty, Interval #1: 0

Zone wide Queuing Penalty, Interval #2: 0

Zone wide Queuing Penalty, Interval #3: 0

Zone wide Queuing Penalty, Interval #4: 0

Zone wide Queuing Penalty, All Intervals: 0

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #1

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	41	42	159	148	31	53	128	106	162	48	134	63
Average Queue (ft)	20	24	145	120	13	28	79	37	96	19	79	28
95th Queue (ft)	46	46	161	180	32	61	127	121	162	49	129	69
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			195		240	105		105	125			
Storage Blk Time (%)				0			2	0	5		1	
Queuing Penalty (veh)				0			1	0	9		0	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #1

Movement	SB
Directions Served	R
Maximum Queue (ft)	22
Average Queue (ft)	6
95th Queue (ft)	24
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #2

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	31	46	146	152	37	56	114	116	148	33	122	74
Average Queue (ft)	16	28	141	127	13	23	81	42	84	12	73	21
95th Queue (ft)	38	57	157	182	34	58	121	115	148	37	125	63
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)		1										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)			195		240	105			105	125		
Storage Blk Time (%)						0	2	0	2			1
Queuing Penalty (veh)						0	1	1	4			0

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #2

Movement	SB
Directions Served	R
Maximum Queue (ft)	22
Average Queue (ft)	3
95th Queue (ft)	16
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #3

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	31	50	153	146	18	56	105	67	148	33	108	55
Average Queue (ft)	9	22	143	109	9	27	69	25	83	11	68	17
95th Queue (ft)	30	50	159	171	22	60	115	77	145	36	105	51
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)	0											
Queuing Penalty (veh)	0											
Storage Bay Dist (ft)		195		240	105			105	125			
Storage Blk Time (%)						1	0	3			0	
Queuing Penalty (veh)						0	2	6			0	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #3

Movement	SB
Directions Served	R
Maximum Queue (ft)	18
Average Queue (ft)	3
95th Queue (ft)	16
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #4

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	31	54	159	155	17	49	132	106	159	36	132	81
Average Queue (ft)	9	29	147	128	10	25	81	41	88	14	80	33
95th Queue (ft)	31	58	160	179	22	56	125	113	139	40	138	82
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)			195		240	105		105	125			
Storage Blk Time (%)				0			2	0	3		1	0
Queuing Penalty (veh)				0			1	1	6		0	0

Intersection: 1: Venetucci Blvd & Walmart Hts, Interval #4

Movement	SB
Directions Served	R
Maximum Queue (ft)	22
Average Queue (ft)	4
95th Queue (ft)	19
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Venetucci Blvd & Walmart Hts, All Intervals

Movement	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	42	62	171	162	43	71	146	186	203	52	144	90
Average Queue (ft)	13	26	144	121	11	25	78	36	87	14	75	25
95th Queue (ft)	38	53	160	180	28	59	123	108	150	41	126	68
Link Distance (ft)	89	89				326	326					
Upstream Blk Time (%)	0											
Queuing Penalty (veh)	0											
Storage Bay Dist (ft)		195		240	105			105	125			
Storage Blk Time (%)		0	0		0	2	0	3		1		0
Queuing Penalty (veh)		0	0		0	1	1	6		0		0

Intersection: 1: Venetucci Blvd & Walmart Hts, All Intervals

Movement	SB
Directions Served	R
Maximum Queue (ft)	27
Average Queue (ft)	4
95th Queue (ft)	19
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	125
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Venetucci Blvd & S Site Access, Interval #1

Movement	EB	WB	NB	NB	SB
Directions Served	R	R	L	T	L
Maximum Queue (ft)	61	24	101	45	4
Average Queue (ft)	36	7	54	6	1
95th Queue (ft)	60	27	101	55	6
Link Distance (ft)	168	91			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		140		120	
Storage Blk Time (%)		0		0	
Queuing Penalty (veh)		0		0	

Intersection: 2: Venetucci Blvd & S Site Access, Interval #2

Movement	EB	WB	NB	SB	
Directions Served	R	R	L	L	
Maximum Queue (ft)	63	33	104	4	
Average Queue (ft)	41	10	54	1	
95th Queue (ft)	65	34	105	6	
Link Distance (ft)	168	91			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		140	120		
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 2: Venetucci Blvd & S Site Access, Interval #3

Movement	EB	WB	NB	SB	
Directions Served	R	R	L	L	
Maximum Queue (ft)	58	30	82	4	
Average Queue (ft)	35	7	37	1	
95th Queue (ft)	65	28	77	7	
Link Distance (ft)	168	91			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		140	120		
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 2: Venetucci Blvd & S Site Access, Interval #4

Movement	EB	WB	NB	SB
Directions Served	R	R	L	T
Maximum Queue (ft)	63	33	97	2
Average Queue (ft)	39	12	46	0
95th Queue (ft)	63	37	92	3
Link Distance (ft)	168	91		326
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		140		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Venetucci Blvd & S Site Access, All Intervals

Movement	EB	WB	NB	NB	SB	SB
Directions Served	R	R	L	T	L	T
Maximum Queue (ft)	75	37	120	45	8	2
Average Queue (ft)	38	9	48	2	0	0
95th Queue (ft)	64	32	95	26	6	1
Link Distance (ft)	168	91			326	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		140		120		
Storage Blk Time (%)			0	0		
Queuing Penalty (veh)			0	0		

Intersection: 3: N Site Access & Walmart Hts, Interval #1

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	5	36
Average Queue (ft)	1	25
95th Queue (ft)	8	44
Link Distance (ft)	89	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: N Site Access & Walmart Hts, Interval #2

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	5	23	36
Average Queue (ft)	1	2	23
95th Queue (ft)	8	15	44
Link Distance (ft)	160	89	223
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: N Site Access & Walmart Hts, Interval #3

Movement	NB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	21
95th Queue (ft)	43
Link Distance (ft)	223
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: N Site Access & Walmart Hts, Interval #4

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	15	36
Average Queue (ft)	2	22
95th Queue (ft)	15	45
Link Distance (ft)	89	223
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: N Site Access & Walmart Hts, All Intervals

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	5	28	48
Average Queue (ft)	0	1	23
95th Queue (ft)	4	11	44
Link Distance (ft)	160	89	223
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty, Interval #1: 1

Zone wide Queuing Penalty, Interval #2: 0

Zone wide Queuing Penalty, Interval #3: 0

Zone wide Queuing Penalty, Interval #4: 0

Zone wide Queuing Penalty, All Intervals: 0

Levels of Service



Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2021 Existing
AM

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	140	12	18	152	5	8
Future Volume (vph)	140	12	18	152	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	160		105	125	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				160	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950			0.950		
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950			0.743		
Satd. Flow (perm)	3433	1583	3539	1583	1384	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		14		175		
Link Speed (mph)	25		30		30	
Link Distance (ft)	373		410		365	
Travel Time (s)	10.2		9.3		8.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.78	0.78
Adj. Flow (vph)	161	14	21	175	6	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	161	14	21	175	6	10
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	36		20		20	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2		6	
Permitted Phases	8	8		2	6	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2021 Existing
AM

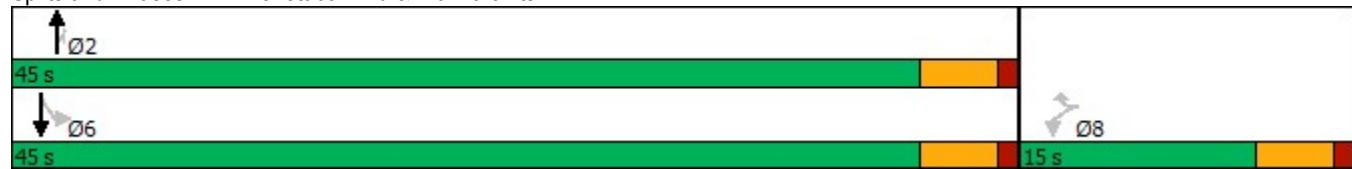


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	15.0	15.0	45.0	45.0	45.0	45.0
Total Split (%)	25.0%	25.0%	75.0%	75.0%	75.0%	75.0%
Maximum Green (s)	10.5	10.5	40.5	40.5	40.5	40.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	8.2	8.2	46.9	46.9	46.9	46.9
Actuated g/C Ratio	0.13	0.13	0.77	0.77	0.77	0.77
v/c Ratio	0.35	0.06	0.01	0.14	0.01	0.00
Control Delay	25.5	12.2	2.9	0.9	3.0	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	12.2	2.9	0.9	3.0	2.9
LOS	C	B	A	A	A	A
Approach Delay	24.4		1.1		2.9	
Approach LOS	C		A		A	
Queue Length 50th (ft)	27	0	1	0	1	0
Queue Length 95th (ft)	47	12	3	12	3	2
Internal Link Dist (ft)	293		330		285	
Turn Bay Length (ft)		160		105	125	
Base Capacity (vph)	591	284	2719	1256	1063	2719
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.05	0.01	0.14	0.01	0.00
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 61.1						
Natural Cycle: 45						
Control Type: Actuated-Uncoordinated						
Maximum v/c Ratio: 0.35						
Intersection Signal Delay: 11.7				Intersection LOS: B		
Intersection Capacity Utilization 21.1%				ICU Level of Service A		
Analysis Period (min) 15						

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2021 Existing
AM

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	168	26	0	148
Future Vol, veh/h	0	2	168	26	0	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	193	30	0	178
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	112	0	0	223	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	920	-	-	1343	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	920	-	-	1343	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.9	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	920	1343	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	-	-	8.9	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2021 Existing
PM

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	662	52	48	544	20	31
Future Volume (vph)	662	52	48	544	20	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	160		105	125	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				160	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950			0.950		
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.721	
Satd. Flow (perm)	3433	1583	3539	1583	1343	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		56		585		
Link Speed (mph)	25		30		30	
Link Distance (ft)	373		410		365	
Travel Time (s)	10.2		9.3		8.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.83	0.83
Adj. Flow (vph)	712	56	52	585	24	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	712	56	52	585	24	37
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	36		20		20	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2		6	
Permitted Phases	8	8		2	6	

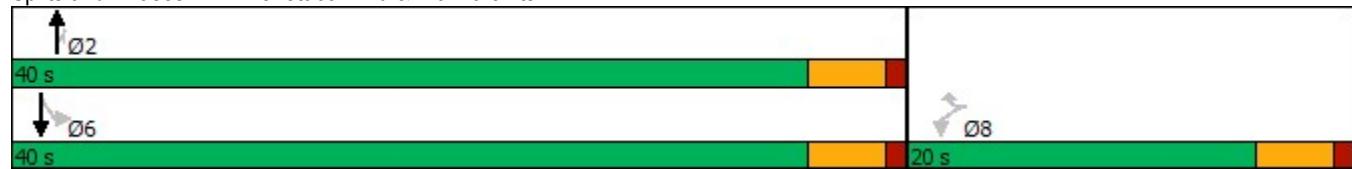
Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2021 Existing
PM



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	20.0	20.0	40.0	40.0	40.0	40.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%
Maximum Green (s)	15.5	15.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	15.0	15.0	35.5	35.5	35.5	35.5
Actuated g/C Ratio	0.25	0.25	0.60	0.60	0.60	0.60
v/c Ratio	0.83	0.13	0.02	0.50	0.03	0.02
Control Delay	30.9	6.6	5.1	2.2	5.3	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.9	6.6	5.1	2.2	5.3	5.1
LOS	C	A	A	A	A	A
Approach Delay	29.2		2.5		5.2	
Approach LOS	C		A		A	
Queue Length 50th (ft)	123	0	3	0	3	2
Queue Length 95th (ft)	#202	23	8	33	10	6
Internal Link Dist (ft)	293		330		285	
Turn Bay Length (ft)		160		105	125	
Base Capacity (vph)	894	454	2112	1180	801	2112
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.12	0.02	0.50	0.03	0.02
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 59.5						
Natural Cycle: 45						
Control Type: Actuated-Uncoordinated						
Maximum v/c Ratio: 0.83						
Intersection Signal Delay: 16.6				Intersection LOS: B		
Intersection Capacity Utilization 45.4%				ICU Level of Service A		
Analysis Period (min) 15						
# 95th percentile volume exceeds capacity, queue may be longer.						
Queue shown is maximum after two cycles.						

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑		↑↑	
Traffic Vol, veh/h	0	8	584	89	0	693
Future Vol, veh/h	0	8	584	89	0	693
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	628	96	0	745
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	362	0	0	724	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	635	-	-	874	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	635	-	-	874	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.8	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	635	874	-	
HCM Lane V/C Ratio	-	-	0.016	-	-	
HCM Control Delay (s)	-	-	10.8	0	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline
AM

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	150	15	20	160	5	10
Future Volume (vph)	150	15	20	160	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	160		105	125	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				160	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950				0.742	
Satd. Flow (perm)	3433	1583	3539	1583	1382	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		17		184		
Link Speed (mph)	25		30		30	
Link Distance (ft)	373		410		365	
Travel Time (s)	10.2		9.3		8.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.78	0.78
Adj. Flow (vph)	172	17	23	184	6	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	172	17	23	184	6	13
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	36		20		20	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2		6	
Permitted Phases	8	8		2	6	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline
AM



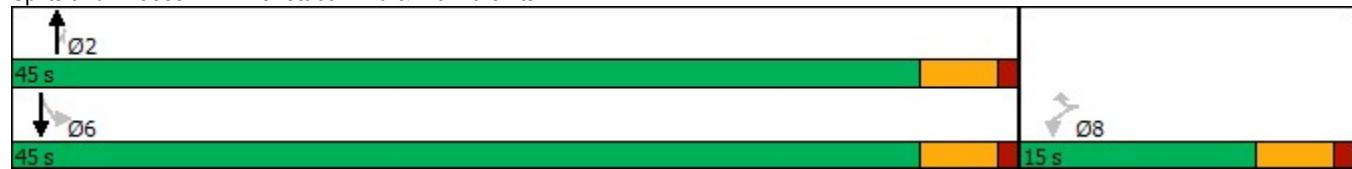
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	15.0	15.0	45.0	45.0	45.0	45.0
Total Split (%)	25.0%	25.0%	75.0%	75.0%	75.0%	75.0%
Maximum Green (s)	10.5	10.5	40.5	40.5	40.5	40.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	8.4	8.4	46.4	46.4	46.4	46.4
Actuated g/C Ratio	0.14	0.14	0.76	0.76	0.76	0.76
v/c Ratio	0.36	0.07	0.01	0.15	0.01	0.00
Control Delay	25.3	11.7	3.0	0.9	3.0	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	11.7	3.0	0.9	3.0	3.0
LOS	C	B	A	A	A	A
Approach Delay	24.1		1.2		3.0	
Approach LOS	C		A		A	
Queue Length 50th (ft)	28	0	1	0	1	1
Queue Length 95th (ft)	50	14	3	13	3	2
Internal Link Dist (ft)	293		330		285	
Turn Bay Length (ft)		160		105	125	
Base Capacity (vph)	594	288	2704	1253	1056	2704
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.06	0.01	0.15	0.01	0.00
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 60.7						
Natural Cycle: 45						
Control Type: Actuated-Uncoordinated						
Maximum v/c Ratio: 0.36						
Intersection Signal Delay: 11.7				Intersection LOS: B		
Intersection Capacity Utilization 21.6%				ICU Level of Service A		
Analysis Period (min) 15						

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline

AM

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	175	30	1	159
Future Vol, veh/h	0	5	175	30	1	159
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	6	201	34	1	192
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	118	0	0	235	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	912	-	-	1329	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	912	-	-	1329	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	912	1329	-	
HCM Lane V/C Ratio	-	-	0.007	0.001	-	
HCM Control Delay (s)	-	-	9	7.7	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline
PM

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	670	55	50	550	20	35
Future Volume (vph)	670	55	50	550	20	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	160		105	125	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				160	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950			0.950		
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950			0.720		
Satd. Flow (perm)	3433	1583	3539	1583	1341	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		59		591		
Link Speed (mph)	25		30		30	
Link Distance (ft)	373		410		365	
Travel Time (s)	10.2		9.3		8.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.83	0.83
Adj. Flow (vph)	720	59	54	591	24	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	720	59	54	591	24	42
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	36		20		20	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2		6	
Permitted Phases	8	8		2	6	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline
PM



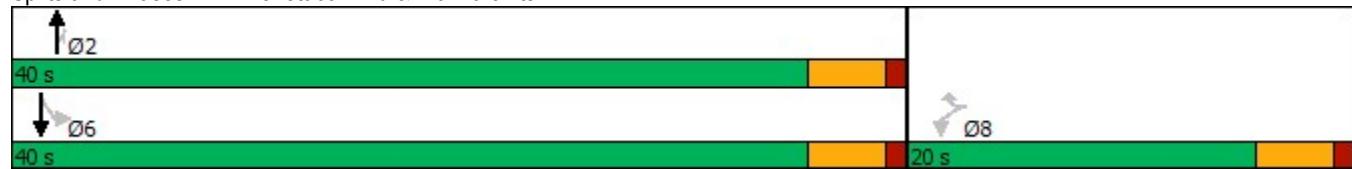
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	20.0	20.0	40.0	40.0	40.0	40.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%
Maximum Green (s)	15.5	15.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	15.0	15.0	35.5	35.5	35.5	35.5
Actuated g/C Ratio	0.25	0.25	0.60	0.60	0.60	0.60
v/c Ratio	0.83	0.13	0.03	0.50	0.03	0.02
Control Delay	31.4	6.5	5.2	2.2	5.3	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	6.5	5.2	2.2	5.3	5.1
LOS	C	A	A	A	A	A
Approach Delay	29.5		2.5		5.2	
Approach LOS	C		A		A	
Queue Length 50th (ft)	125	0	3	0	3	3
Queue Length 95th (ft)	#205	23	9	33	10	7
Internal Link Dist (ft)	293		330		285	
Turn Bay Length (ft)		160		105	125	
Base Capacity (vph)	893	455	2111	1182	800	2111
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.13	0.03	0.50	0.03	0.02
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 59.5						
Natural Cycle: 45						
Control Type: Actuated-Uncoordinated						
Maximum v/c Ratio: 0.83						
Intersection Signal Delay: 16.8				Intersection LOS: B		
Intersection Capacity Utilization 45.7%				ICU Level of Service A		
Analysis Period (min) 15						
# 95th percentile volume exceeds capacity, queue may be longer.						
Queue shown is maximum after two cycles.						

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline

PM

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑		↑↑	
Traffic Vol, veh/h	0	10	590	90	1	704
Future Vol, veh/h	0	10	590	90	1	704
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	13	634	97	1	757
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	366	0	0	731	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	631	-	-	869	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	631	-	-	869	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.8	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	631	869	-	
HCM Lane V/C Ratio	-	-	0.02	0.001	-	
HCM Control Delay (s)	-	-	10.8	9.1	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline + Site

AM

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	13	7	35	150	10	15	52	19	156	4	18	10
Future Volume (vph)	13	7	35	150	10	15	52	19	156	4	18	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	195		240	105		105	125		125
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			65			100			160		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.874				0.850			0.850			0.850
Flt Protected	0.950			0.950	0.958		0.950			0.950		
Satd. Flow (prot)	1770	1628	0	1681	1695	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950	0.958		0.742			0.742		
Satd. Flow (perm)	1770	1628	0	1681	1695	1583	1382	3539	1583	1382	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42				94			179			94
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		173			373			410			365	
Travel Time (s)		4.7			10.2			9.3			8.3	
Peak Hour Factor	0.83	0.83	0.83	0.87	0.87	0.87	0.87	0.87	0.87	0.78	0.78	0.78
Adj. Flow (vph)	16	8	42	172	11	17	60	22	179	5	23	13
Shared Lane Traffic (%)				47%								
Lane Group Flow (vph)	16	50	0	91	92	17	60	22	179	5	23	13
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right	Right	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4		8	8			2		6		6
Permitted Phases					8	2			2	6		6

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline + Site

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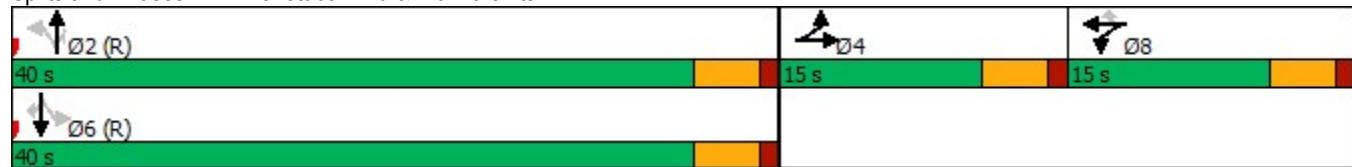
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	15.0	15.0		15.0	15.0	15.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	21.4%	21.4%		21.4%	21.4%	21.4%	57.1%	57.1%	57.1%	57.1%	57.1%	57.1%
Maximum Green (s)	10.5	10.5		10.5	10.5	10.5	35.5	35.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	6.5	6.5		9.1	9.1	9.1	47.8	47.8	47.8	47.8	47.8	47.8
Actuated g/C Ratio	0.09	0.09		0.13	0.13	0.13	0.68	0.68	0.68	0.68	0.68	0.68
v/c Ratio	0.10	0.26		0.42	0.42	0.06	0.06	0.01	0.16	0.01	0.01	0.01
Control Delay	29.6	15.9		33.1	33.1	0.4	7.6	7.5	2.0	7.8	7.4	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.6	15.9		33.1	33.1	0.4	7.6	7.5	2.0	7.8	7.4	0.0
LOS	C	B		C	C	A	A	A	A	A	A	A
Approach Delay									3.7			5.1
Approach LOS									A			A
Queue Length 50th (ft)	7	3		38	38	0	10	1	0	1	2	0
Queue Length 95th (ft)	21	27		74	74	0	29	7	24	5	6	0
Internal Link Dist (ft)						293			330			285
Turn Bay Length (ft)					195		240	105		105	125	125
Base Capacity (vph)	265	279		262	264	325	944	2418	1138	944	2418	1111
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.18		0.35	0.35	0.05	0.06	0.01	0.16	0.01	0.01	0.01
Intersection Summary												
Area Type:	Other											
Cycle Length: 70												
Actuated Cycle Length: 70												
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green												
Natural Cycle: 70												
Control Type: Actuated-Coordinated												
Maximum v/c Ratio: 0.42												
Intersection Signal Delay: 15.0												
Intersection Capacity Utilization 29.2%												
Analysis Period (min) 15												

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

Short-Term Baseline + Site

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Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection												
Int Delay, s/veh 2.7												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	88	0	0	5	126	223	30	1	194	10
Future Vol, veh/h	0	0	88	0	0	5	126	223	30	1	194	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	140	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	92	92	92	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	106	0	0	6	137	242	33	1	223	11
Major/Minor												
Minor2		Minor1		Major1		Major2						
Conflicting Flow All	-	-	117	-	-	138	234	0	0	275	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	*1025	0	0	885	1436	-	-	1285	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1				1	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	*1025	-	-	885	1436	-	-	1285	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach												
EB			WB			NB		SB				
HCM Control Delay, s	8.9			9.1			2.6			0		
HCM LOS	A			A			A			A		
Minor Lane/Major Mvmt												
Capacity (veh/h)	1436	-	-	1025	885	1285	-	-				
HCM Lane V/C Ratio	0.095	-	-	0.103	0.007	0.001	-	-				
HCM Control Delay (s)	7.8	-	-	8.9	9.1	7.8	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0	0	-	-				
Notes												
~: Volume exceeds capacity			\$: Delay exceeds 300s			+: Computation Not Defined		*: All major volume in platoon				

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

01/25/2022

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	7	35	670	10	55	50	49	547	19	43	10
Future Volume (vph)	13	7	35	670	10	55	50	49	547	19	43	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	195		240	105		105	125		125
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			65			100			160		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.874				0.850			0.850			0.850
Flt Protected	0.950			0.950	0.954		0.950			0.950		
Satd. Flow (prot)	1770	1628	0	1681	1688	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950	0.954		0.721			0.721		
Satd. Flow (perm)	1770	1628	0	1681	1688	1583	1343	3539	1583	1343	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42				94			588			94
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		173			373			410			365	
Travel Time (s)		4.7			10.2			9.3			8.3	
Peak Hour Factor	0.83	0.83	0.83	0.93	0.93	0.93	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	16	8	42	720	11	59	54	53	588	23	52	12
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	16	50	0	367	364	59	54	53	588	23	52	12
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right	Right	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4		8	8			2		6		6
Permitted Phases					8	2			2	6		6

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

01/25/2022

PM



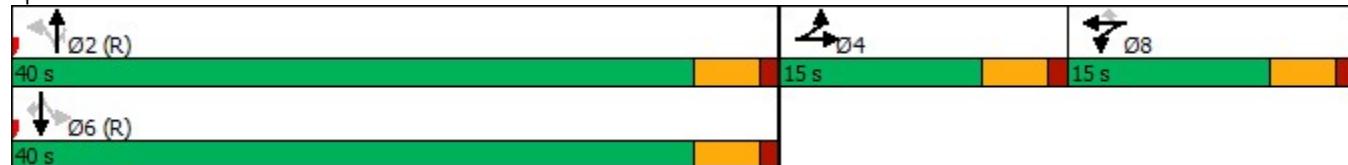
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	15.0	15.0		15.0	15.0	15.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	21.4%	21.4%		21.4%	21.4%	21.4%	57.1%	57.1%	57.1%	57.1%	57.1%	57.1%
Maximum Green (s)	10.5	10.5		10.5	10.5	10.5	35.5	35.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	6.5	6.5		18.5	18.5	18.5	35.5	35.5	35.5	35.5	35.5	35.5
Actuated g/C Ratio	0.09	0.09		0.26	0.26	0.26	0.51	0.51	0.51	0.51	0.51	0.51
v/c Ratio	0.10	0.26		0.83	0.82	0.12	0.08	0.03	0.54	0.03	0.03	0.01
Control Delay	29.6	15.9		47.2	46.2	3.3	9.3	8.7	3.0	8.9	8.7	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.6	15.9		47.2	46.2	3.3	9.3	8.7	3.0	8.9	8.7	0.0
LOS	C	B		D	D	A	A	A	A	A	A	A
Approach Delay									3.9			7.6
Approach LOS									A			A
Queue Length 50th (ft)	7	3		~174	~169	0	11	5	0	5	5	0
Queue Length 95th (ft)	21	27		#370	#366	15	28	13	45	14	12	0
Internal Link Dist (ft)						293			330			285
Turn Bay Length (ft)					195		240	105		105	125	125
Base Capacity (vph)	265	279		444	446	487	681	1794	1092	681	1794	849
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.18		0.83	0.82	0.12	0.08	0.03	0.54	0.03	0.03	0.01

Intersection Summary

Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	70
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.83
Intersection Signal Delay:	23.8
Intersection LOS:	C
Intersection Capacity Utilization:	53.5%
ICU Level of Service:	A
Analysis Period (min):	15
~ Volume exceeds capacity, queue is theoretically infinite.	

- Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	88	0	0	5	122	636	90	1	738	9
Future Vol, veh/h	0	0	88	0	0	5	122	636	90	1	738	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	0	-	-	0	140	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	106	0	0	6	131	684	97	1	794	10

Major/Minor	Minor2	Minor1		Major1		Major2	
Conflicting Flow All	-	-	402	-	-	391	804
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22
Pot Cap-1 Maneuver	0	0	*802	0	0	608	1166
Stage 1	0	0	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-
Platoon blocked, %			1			1	-
Mov Cap-1 Maneuver	-	-	*802	-	-	608	1166
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB		NB		SB		
HCM Control Delay, s	10.2	11		1.2		0		
HCM LOS	B	B						
<hr/>								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1166	-	-	802	608	832	-	-
HCM Lane V/C Ratio	0.113	-	-	0.132	0.011	0.001	-	-
HCM Control Delay (s)	8.5	-	-	10.2	11	9.3	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.5	0	0	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2041 Background

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑↑	↑	↑↑	↑	↑	↑↑
Traffic Volume (vph)	150	15	140	160	2	230
Future Volume (vph)	150	15	140	160	2	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	160		105	125	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				160	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950			0.950		
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950			0.656		
Satd. Flow (perm)	3433	1583	3539	1583	1222	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		17		174		
Link Speed (mph)	25		30		30	
Link Distance (ft)	373		410		365	
Travel Time (s)	10.2		9.3		8.3	
Peak Hour Factor	0.87	0.87	0.92	0.92	0.87	0.87
Adj. Flow (vph)	172	17	152	174	2	264
Shared Lane Traffic (%)						
Lane Group Flow (vph)	172	17	152	174	2	264
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	36		20		20	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2		6	
Permitted Phases	8	8		2	6	

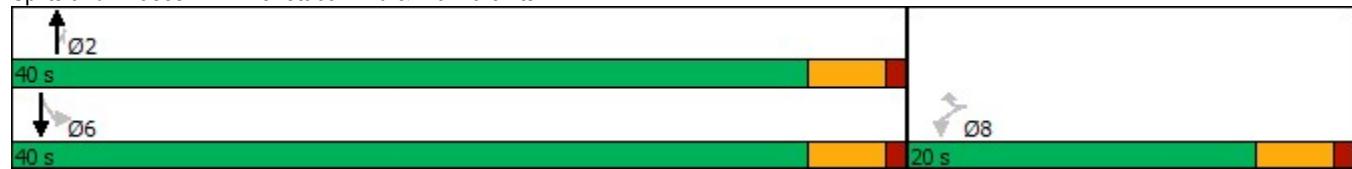
Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2041 Background
AM



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	20.0	20.0	40.0	40.0	40.0	40.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%
Maximum Green (s)	15.5	15.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	8.1	8.1	41.3	41.3	41.3	41.3
Actuated g/C Ratio	0.15	0.15	0.75	0.75	0.75	0.75
v/c Ratio	0.34	0.07	0.06	0.14	0.00	0.10
Control Delay	22.6	10.7	3.1	1.0	3.0	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	10.7	3.1	1.0	3.0	3.1
LOS	C	B	A	A	A	A
Approach Delay	21.5		2.0		3.1	
Approach LOS	C		A		A	
Queue Length 50th (ft)	25	0	6	0	0	11
Queue Length 95th (ft)	45	13	14	14	2	22
Internal Link Dist (ft)	293		330		285	
Turn Bay Length (ft)		160		105	125	
Base Capacity (vph)	962	456	2640	1225	911	2640
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.04	0.06	0.14	0.00	0.10
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 55.4						
Natural Cycle: 45						
Control Type: Actuated-Uncoordinated						
Maximum v/c Ratio: 0.34						
Intersection Signal Delay: 7.1				Intersection LOS: A		
Intersection Capacity Utilization 21.6%				ICU Level of Service A		
Analysis Period (min) 15						

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	295	30	1	379
Future Vol, veh/h	0	5	295	30	1	379
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	6	321	33	1	412
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	177	0	0	354	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	835	-	-	1201	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	835	-	-	1201	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.3	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	835	1201	-	
HCM Lane V/C Ratio	-	-	0.008	0.001	-	
HCM Control Delay (s)	-	-	9.3	8	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

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PM



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑ ↙	↗	↑ ↗	↗	↖	↑ ↗
Traffic Volume (vph)	670	55	360	550	20	330
Future Volume (vph)	670	55	360	550	20	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	160		105	125	
Storage Lanes	2	1		1	1	
Taper Length (ft)	60				160	
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950			0.950		
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.950			0.523		
Satd. Flow (perm)	3433	1583	3539	1583	974	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		59		591		
Link Speed (mph)	25		30		30	
Link Distance (ft)	373		410		365	
Travel Time (s)	10.2		9.3		8.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.92	0.92
Adj. Flow (vph)	720	59	387	591	22	359
Shared Lane Traffic (%)						
Lane Group Flow (vph)	720	59	387	591	22	359
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	36		20		20	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (ft)	20	20	100	20	20	100
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	6	20	20	6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94		94	
Detector 2 Size(ft)			6		6	
Detector 2 Type			Cl+Ex		Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)			0.0		0.0	
Turn Type	Perm	Perm	NA	Perm	Perm	NA
Protected Phases			2		6	
Permitted Phases	8	8		2	6	

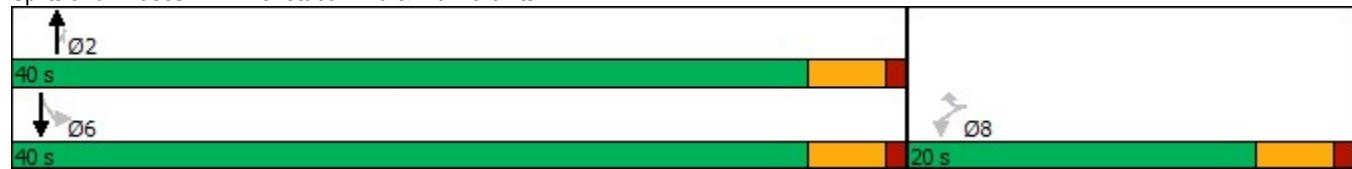
Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2041 Background
PM



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	20.0	20.0	40.0	40.0	40.0	40.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%
Maximum Green (s)	15.5	15.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effect Green (s)	15.0	15.0	35.5	35.5	35.5	35.5
Actuated g/C Ratio	0.25	0.25	0.60	0.60	0.60	0.60
v/c Ratio	0.83	0.13	0.18	0.50	0.04	0.17
Control Delay	31.4	6.5	5.8	2.2	5.4	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	6.5	5.8	2.2	5.4	5.7
LOS	C	A	A	A	A	A
Approach Delay	29.5		3.7		5.7	
Approach LOS	C		A		A	
Queue Length 50th (ft)	125	0	29	0	3	26
Queue Length 95th (ft)	#205	23	46	33	10	43
Internal Link Dist (ft)	293		330		285	
Turn Bay Length (ft)		160		105	125	
Base Capacity (vph)	893	455	2111	1182	581	2111
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.13	0.18	0.50	0.04	0.17
Intersection Summary						
Area Type:	Other					
Cycle Length: 60						
Actuated Cycle Length: 59.5						
Natural Cycle: 45						
Control Type: Actuated-Uncoordinated						
Maximum v/c Ratio: 0.83						
Intersection Signal Delay: 13.5				Intersection LOS: B		
Intersection Capacity Utilization 45.7%				ICU Level of Service A		
Analysis Period (min) 15						
# 95th percentile volume exceeds capacity, queue may be longer.						
Queue shown is maximum after two cycles.						

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑		↑↑	
Traffic Vol, veh/h	0	10	900	90	1	999
Future Vol, veh/h	0	10	900	90	1	999
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	13	968	97	1	1074
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	533	0	0	1065	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	491	-	-	650	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	491	-	-	650	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	12.5	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	491	650	-	
HCM Lane V/C Ratio	-	-	0.026	0.002	-	
HCM Control Delay (s)	-	-	12.5	10.5	-	
HCM Lane LOS	-	-	B	B	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2041 Background + Site

AM

	↑	→	↓	↗	↖	↙	↖	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	14	3	37	150	10	15	52	139	156	4	238	10
Future Volume (vph)	14	3	37	150	10	15	52	139	156	4	238	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	195		240	105		105	125		125
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			65			100			160		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.862				0.850			0.850			0.850
Flt Protected	0.950			0.950	0.958		0.950			0.950		
Satd. Flow (prot)	1770	1606	0	1681	1695	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950	0.958		0.592			0.656		
Satd. Flow (perm)	1770	1606	0	1681	1695	1583	1103	3539	1583	1222	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45				94			170			94
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		173			373			410			365	
Travel Time (s)		4.7			10.2			9.3			8.3	
Peak Hour Factor	0.83	0.83	0.83	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	4	45	172	11	17	57	151	170	4	259	11
Shared Lane Traffic (%)				47%								
Lane Group Flow (vph)	17	49	0	91	92	17	57	151	170	4	259	11
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4		8	8			2		6		6
Permitted Phases					8	2			2	6		6

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2041 Background + Site

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	15.0	15.0		15.0	15.0	15.0	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	15.0	15.0		15.0	15.0	15.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	21.4%	21.4%		21.4%	21.4%	21.4%	57.1%	57.1%	57.1%	57.1%	57.1%	57.1%
Maximum Green (s)	10.5	10.5		10.5	10.5	10.5	35.5	35.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	C-Max						
Act Effect Green (s)	6.4	6.4		9.1	9.1	9.1	47.9	47.9	47.9	47.9	47.9	47.9
Actuated g/C Ratio	0.09	0.09		0.13	0.13	0.13	0.68	0.68	0.68	0.68	0.68	0.68
v/c Ratio	0.10	0.26		0.42	0.42	0.06	0.08	0.06	0.15	0.00	0.11	0.01
Control Delay	29.9	14.6		33.0	33.0	0.4	7.7	6.6	2.0	7.8	6.5	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	14.6		33.0	33.0	0.4	7.7	6.6	2.0	7.8	6.5	0.0
LOS	C	B		C	C	A	A	A	A	A	A	A
Approach Delay		18.5			30.2			4.7			6.3	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)	7	2		38	38	0	10	13	0	1	23	0
Queue Length 95th (ft)	22	26		74	74	0	29	30	26	5	47	0
Internal Link Dist (ft)		93			293			330			285	
Turn Bay Length (ft)				195		240	105		105	125		125
Base Capacity (vph)	265	279		262	264	326	754	2420	1136	835	2420	1112
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.18		0.35	0.35	0.05	0.08	0.06	0.15	0.00	0.11	0.01

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 11.7

Intersection LOS: B

Intersection Capacity Utilization 33.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↑			↑	↑	↑↓		↑	↑↓	
Traffic Vol, veh/h	0	0	88	0	0	5	126	343	30	1	414	10
Future Vol, veh/h	0	0	88	0	0	5	126	343	30	1	414	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	140	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	106	0	0	6	137	373	33	1	450	11
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	-	-	231	-	-	203	461	0	0	406	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	771	0	0	804	1096	-	-	1149	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	771	-	-	804	1096	-	-	1149	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	10.4		9.5			2.2			0			
HCM LOS	B		A									
Minor Lane/Major Mvmt			NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR		
Capacity (veh/h)	1096		-	-	771	804	1149	-	-	-		
HCM Lane V/C Ratio	0.125		-	-	0.138	0.008	0.001	-	-	-		
HCM Control Delay (s)	8.8		-	-	10.4	9.5	8.1	-	-	-		
HCM Lane LOS	A		-	-	B	A	A	-	-	-		
HCM 95th %tile Q(veh)	0.4		-	-	0.5	0	0	-	-	-		

Intersection						
Int Delay, s/veh	5.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	51	22	0	41
Future Vol, veh/h	17	0	51	22	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	0	61	27	0	53
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	22	0	171	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	149	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1593	-	819	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1593	-	787	1055
Mov Cap-2 Maneuver	-	-	-	-	787	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	845	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	5.1	8.6			
HCM LOS			A			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1055	-	-	1593	-	
HCM Lane V/C Ratio	0.05	-	-	0.039	-	
HCM Control Delay (s)	8.6	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-	

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2041 Background + Site

PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	13	7	35	670	10	55	50	359	547	19	338	10
Future Volume (vph)	13	7	35	670	10	55	50	359	547	19	338	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	195		240	105		105	125		125
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			65			100			160		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.874			0.850			0.850			0.850
Flt Protected	0.950			0.950	0.954		0.950			0.950		
Satd. Flow (prot)	1770	1628	0	1681	1688	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950	0.954		0.533			0.522		
Satd. Flow (perm)	1770	1628	0	1681	1688	1583	993	3539	1583	972	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42				94			588			94
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		173			373			410			365	
Travel Time (s)		4.7			10.2			9.3			8.3	
Peak Hour Factor	0.83	0.83	0.83	0.93	0.93	0.93	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	16	8	42	720	11	59	54	386	588	21	367	11
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	16	50	0	367	364	59	54	386	588	21	367	11
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right	Right	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex								
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split	NA		Split	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4	4		8	8			2		2	6	
Permitted Phases					8	2			2	6		6

Lanes, Volumes, Timings
1: Venetucci Blvd & Walmart Hts

2041 Background + Site

PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4		8	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5		22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	12.0	12.0		18.0	18.0	18.0	40.0	40.0	40.0	40.0	40.0	40.0
Total Split (%)	17.1%	17.1%		25.7%	25.7%	25.7%	57.1%	57.1%	57.1%	57.1%	57.1%	57.1%
Maximum Green (s)	7.5	7.5		13.5	13.5	13.5	35.5	35.5	35.5	35.5	35.5	35.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0	0	0	0	0
Act Effect Green (s)	6.3	6.3		18.7	18.7	18.7	35.5	35.5	35.5	35.5	35.5	35.5
Actuated g/C Ratio	0.09	0.09		0.27	0.27	0.27	0.51	0.51	0.51	0.51	0.51	0.51
v/c Ratio	0.10	0.27		0.82	0.81	0.12	0.11	0.22	0.54	0.04	0.20	0.01
Control Delay	30.2	16.4		45.9	44.9	3.2	9.8	9.9	3.0	9.1	9.9	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	16.4		45.9	44.9	3.2	9.8	9.9	3.0	9.1	9.9	0.0
LOS	C	B		D	D	A	A	A	A	A	A	A
Approach Delay									6.0			9.5
Approach LOS									A			A
Queue Length 50th (ft)	7	3		~174	~169	0	11	45	0	4	42	0
Queue Length 95th (ft)	21	28		#358	#354	15	29	68	45	14	65	0
Internal Link Dist (ft)						293		330				285
Turn Bay Length (ft)					195		240	105		105	125	125
Base Capacity (vph)	189	211		449	450	491	503	1794	1092	492	1794	849
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.24		0.82	0.81	0.12	0.11	0.22	0.54	0.04	0.20	0.01

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 19.5

Intersection LOS: B

Intersection Capacity Utilization 53.5%

ICU Level of Service A

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

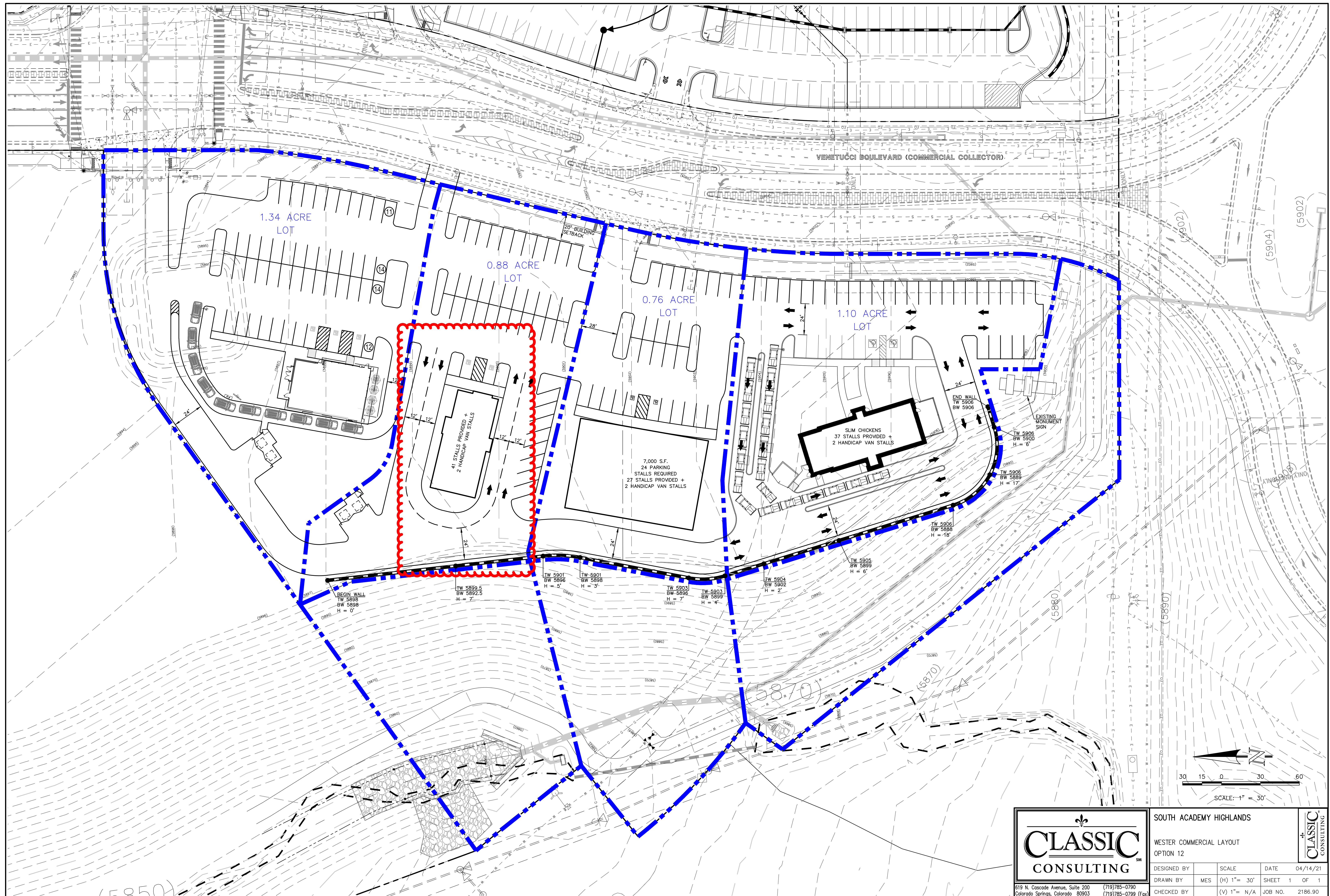
Splits and Phases: 1: Venetucci Blvd & Walmart Hts



Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	83	0	0	10	122	946	90	1	1033	9
Future Vol, veh/h	0	0	83	0	0	10	122	946	90	1	1033	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	140	-	-	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	95	95	95	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	100	0	0	13	128	996	95	1	1111	10
Major/Minor												
Minor2		Minor1			Major1			Major2				
Conflicting Flow All	-	-	561	-	-	546	1121	0	0	1091	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	*668	0	0	482	*999	-	-	635	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1				1					
Mov Cap-1 Maneuver	-	-	*668	-	-	482	*999	-	-	635	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach												
EB			WB			NB			SB			
HCM Control Delay, s	11.3			12.7			1			0		
HCM LOS	B			B								
Minor Lane/Major Mvmt												
Capacity (veh/h)	* 999	-	-	668	482	635	-	-				
HCM Lane V/C Ratio	0.129	-	-	0.15	0.027	0.002	-	-				
HCM Control Delay (s)	9.1	-	-	11.3	12.7	10.7	-	-				
HCM Lane LOS	A	-	-	B	B	B	-	-				
HCM 95th %tile Q(veh)	0.4	-	-	0.5	0.1	0	-	-				
Notes												
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon									

Site Plan





Venetucci Blvd.

Inbound (westbound) Lane
4' LANE SHIFT to the south
(AS NEEDED)

Wal Mart Hts.

Site

Proposed
Laneage

