

Sherry Garrison, Council Position 1
Thane Harrison, Council Position 2
Tommy Ginn, Council Position 3



Bill Patterson, Council Position 4
Ron Martin, Council Position 5
Rae A. Sinor, Council Position 6

James Stokes, City Manager
Gary Jackson, Assistant City Manager

Jerry Mouton Jr., Mayor

Shannon Bennett, TRMC, City Secretary
Jim Fox, City Attorney

CALL TO ORDER

1. Executive Session - By authority of Article 6252-17 (Section 3-e,f, and g) [EXS 19-006](#)
V.A.T.S., and the Open Meetings Act, the Council may adjourn to an Executive Session related to the following item:

a. Consultation with City Attorney - (551.071) Potential Litigation.

Recommended Action: No action will occur. Discussion only in Executive Session.

2. Presentation of the Traffic Signal Coordination on East Boulevard. [PRE 19-015](#)

Department: Public Works

Attachments: [20190125 East Blvd Traffic Study Tech Memo - 02-25-2019](#)

3. Discussion of issues relating to the status of Type B projects for January - [DIS 19-051](#)
March 2019.

Recommended Action: Discussion only

Attachments: [DPCDC Quarterly Project Update - 042219](#)

[HAI DeerPark Softball Final Punch List-5-22-19](#)

[DP Substantial Completion Letter](#)

ADJOURN

Shannon Bennett, TRMC
City Secretary

Posted on Bulletin Board
May 3, 2019

City Hall is wheelchair accessible and accessible parking spaces are available. Hearing assistance devices are available. Requests for accommodation services must be made 72 hours prior to any meeting. Please contact the City Secretary office at 281-478-7248 for further information.

The Mission of the City of Deer Park is to deliver exemplary municipal services that provide the community a high quality of life consistent with our history, culture and unique character.



Legislation Details (With Text)

File #: EXS 19-006 **Version:** 1 **Name:**
Type: Executive Session **Status:** Agenda Ready
File created: 5/1/2019 **In control:** City Council Workshop
On agenda: 5/7/2019 **Final action:**
Title: Executive Session - By authority of Article 6252-17 (Section 3-e,f, and g) V.A.T.S., and the Open Meetings Act, the Council may adjourn to an Executive Session related to the following item:

a. Consultation with City Attorney - (551.071) Potential Litigation.

Sponsors:

Indexes:

Code sections:

Attachments:

Date	Ver.	Action By	Action	Result
5/7/2019	1	City Council Workshop		

Executive Session - By authority of Article 6252-17 (Section 3-e,f, and g) V.A.T.S., and the Open Meetings Act, the Council may adjourn to an Executive Session related to the following item:

a. Consultation with City Attorney - (551.071) Potential Litigation.

Summary:

The City Council will adjourn into Executive Session to discuss with the City Attorney potential litigation.

Fiscal/Budgetary Impact:

n/a

No action will occur. Discussion only in Executive Session.



Legislation Details (With Text)

File #: PRE 19-015 **Version:** 1 **Name:**
Type: Presentation **Status:** Agenda Ready
File created: 5/2/2019 **In control:** City Council Workshop
On agenda: 5/7/2019 **Final action:**
Title: Presentation of the Traffic Signal Coordination on East Boulevard.
Sponsors: Public Works
Indexes:
Code sections:
Attachments: [20190125_East Blvd_Traffic Study_Tech Memo - 02-25-2019](#)

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

Presentation of the Traffic Signal Coordination on East Boulevard.

Summary: Midtown Engineers was hired to perform the engineering services for the traffic signal coordination of East Blvd. This involves a traffic study to improve the north/south vehicular traffic flow. This project will consist of traffic counts, signal coordination, modeling using SHYNCHRO software and implementing the revised timing plans. Midtown has completed their traffic study and will be presenting Council with its recommendations for moving forward with implementation.

Fiscal/Budgetary Impact:

No impact



5225 Katy Freeway, Suite 400 Houston, Texas 77007
Tele: 713-862-8848 Fax: 713-862-8840

TECHNICAL MEMORANDUM

Traffic Signal Coordination and Summary of Findings for East Boulevard – Between E. Thirteenth Street and Spencer Highway

Date: February 25, 2019

To: Adam Ballesteros, P.E. – City of Deer Park

From: Suzanna Set, P.E., PTOE – Midtown Engineers LLC

CC: Bill Pedersen, P.E. – City of Deer Park



February 25, 2019

This technical memorandum documents the findings of a traffic study and the coordinated signal timing plans for East Boulevard, between E. Thirteenth Street and Spencer Highway, in the City of Deer Park.

Background

Midtown Engineers LLC was contracted by the City of Deer Park to perform a traffic study for East Boulevard and to provide coordination to eight signalized intersections along the corridor. The goal of the coordinated signal timing is to synchronize traffic movements and to manage the progression speed. In addition, the coordination of traffic signals can reduce the number of stops along East Boulevard, provide for a continuous flow of traffic at the target speed and reduce fuel consumption and vehicle emission.

East Boulevard is a 2.5-mile long, four-lane, concrete boulevard with raised medians and median openings. The study limit includes eight (8) signalized intersections, listed below, along East Boulevard (from north to south). See **Exhibit 1** for Site Location Map.

1. E Thirteenth Street
2. E X Street
3. E San Augustine Street
4. E P Street
5. E Pasadena Boulevard
6. Aaron Street
7. HEB and Walmart driveways
8. Spencer Highway

The posted speed limit along East Boulevard ranges between 40 MPH and 50 MPH. The side street posted speed limits vary between 25, 30, 40 and 45 MPH. The left turn storage lengths

were measured in the field and summarized in **Table 1** below. See **Exhibit 2** for Existing Posted Speed Limits and Lane Configurations.

Table 1: Existing Left Turn Storage Lengths

Intersection	Storage Length, in feet			
	Northbound	Southbound	Eastbound	Westbound
1. East Boulevard at E Thirteenth Street	120	185	275	300
2. East Boulevard at E X Street	125	125	N/A	N/A
3. East Boulevard at E San Augustine Street	180	180	N/A	N/A
4. East Boulevard at E P Street	175	175	N/A	N/A
5. East Boulevard at E Pasadena Boulevard	150	145	N/A	N/A
6. East Boulevard at Aaron Street	180	175	N/A	N/A
7. East Boulevard at HEB and Walmart driveways	125	110	N/A	N/A
8. East Boulevard at Spencer Highway	140	155	115	100

According the Houston-Galveston Area Council (H-GAC), the land use along East Boulevard is primarily residential. There are commercial developments on the north and south end of the study limit. In addition, Heritage Elementary School and Deer Park Fire Station #3 are located along East Boulevard within the study limit.

Methodology and Assumptions

SYNCHRO 9TM, a macroscopic analysis and optimization software, was used to develop the AM, PM and off peak hour signal timing plans. The phasing are based on the typical NEMA phasing.

The AM and PM timing plans was based on the peak hour from the collected traffic data. For the off-peak timing plan, it was assumed the off-peak hour would be from 10:00 to 11:00 AM, with the assumption that school would be in session and lunchtime traffic starts after 11:00 AM.

One of the most important elements of a successful coordination of a signalized corridor is making sure that all intersections are running at the same cycle lengths. According to the Federal Highway Administration (FHWA), distances no greater than $\frac{3}{4}$ miles are the most responsive to coordination. The distances between intersections along East Boulevard do not exceed $\frac{3}{4}$ miles. A corridor can be operated in one of two way; a shorter cycle length which minimizes delay time or a longer cycle length which provides additional green time to the main street but increases intersection delay. The cycle length of 90 and 120 seconds were analyzed as two options for coordination of East Boulevard.

Data Collection

CJ Hensch & Associates collected thirteen-hour (13) vehicle turning movement counts (TMCs) at seven intersections on Tuesday, December 18, 2018 and one intersection on Tuesday, January 8th, 2019, from 6:00 A.M. to 7:00 P.M. **Table 2** below lists the AM and PM peak hour for each intersection.

Table 2: AM and PM Peak Hours

Intersections	AM	PM
1. East Boulevard at E Thirteenth Street	7:00 – 8:00	4:30 – 5:30
2. *East Boulevard at E X Street	7:00 – 8:00	4:30 – 5:30
3. East Boulevard at E San Augustine Street	7:00 – 8:00	4:30 – 5:30
4. East Boulevard at E P Street	7:00 – 8:00	4:15 – 5:15
5. East Boulevard at E Pasadena Boulevard	7:00 – 8:00	4:30 – 5:30
6. East Boulevard at Aaron Street	7:15 – 8:15	4:30 – 5:30
7. East Boulevard at HEB and Walmart driveways	7:15 – 8:15	4:15 – 5:15
8. East Boulevard at Spencer Highway	7:15 – 8:15	5:00 – 6:00

* Tuesday, January 8th, 2019 from 6:00 A.M. to 7:00 P.M.

See **Exhibit 3** for Existing AM and PM Peak Hour Volumes. The 13-hour turning movement counts can be found in **Appendix B**.

It was observed, during a field visit on Monday, January 7th, 2019, that all intersections, with the exceptions of East Boulevard at HEB/Walmart driveways and Spencer Highway, had detection (in the form of loops) only for the left turn bays along East Boulevard. The side streets all had full sets of detection loops, with the exception of E Thirteenth Street, HEB/Walmart driveways and Spencer Highway. HEB/Walmart driveways had camera detection present. It was also observed that only three of the eight intersections (E P St, Spencer Highway and Aaron St (except for eastbound)) had working pedestrian signals.

The posted speed along East Boulevard is 40 MPH at the north and south terminus of the study limit, elsewhere in between is 50 MPH. In addition, there is a school zone speed limit of 30 MPH within the study limit. The following observations were made during another morning visit (7:00 - 10:00 AM):

- 1) Drivers were driving below the 50 MPH posted speed limit
- 2) Stop and go condition between intersections
- 3) Drivers could not accelerate to the posted speed, having to stop at intersections

Analysis

All approaches for the eight intersections, starting with northbound left (NBL), northbound through (NBT) etc., were analyzed using SYNCHRO 9™. The two cycle lengths used in the analysis were 90 and 120-second. The outputs from Synchro can be found in **Appendix C**. For individual intersections, the two performance measurements used are queue length and delay/LOS, which are discussed in details below. In addition, the traffic flow along the corridor was evaluated using the “time-space” diagram, which is part of SYNCHRO. The “time-space” diagram is discussed in details below.

Queue Length

Queue lengths were analyzed to determine if future roadway improvements, especially, left turn lanes, are needed. The 50th percentile queue length was used in the study, because it represents the maximum queue of a typical cycle. The 95th percentile queue length in many cases will not be experienced due to upstream metering. As defined by the Highway Capacity Manual (HCM) – “The 95th-percentile queue is defined to be the queue length (in vehicles) that has only a 5-percent probability of being exceeded during the analysis time period. It is a useful parameter for determining the appropriate length of turn pockets, but it is not typical of what an average driver would experience.”

The outputs show 90-second cycle length provided a shorter queue length for AM, PM and off-peak hours. See **Table 3**, **Table 4** and **Table 5**, below for the 50th percentile queue length comparison, in the AM, PM peak hour and off-peak hours, respectively. The existing left turn lanes have sufficient storage length to accommodate the demand.

Table 3: AM Peak 90 vs. 120 Second Cycles Queue Length Comparison

Queue Length at 50 th percentile (ft)									
Intersection*	NBL	NBT	SBL	SBT	SBR	EBL	EBT	WBL	WBT
1	47/107	43/122	90/114	71/97	N/A	57/79	16/21	1/2	13/16
2	28/49	217/97	26/36	33/34	N/A	N/A	37/46	N/A	33/48
3	33/47	64/274	16/21	45/68	N/A	N/A	41/50	N/A	25/35
4	30/39	13/61	8/18	112/61	N/A	N/A	27/32	N/A	46/71
5	55/86	156/184	55/74	81/142	N/A	N/A	140/191	N/A	100/143
6	N/A	11/238	58/53	16/206	N/A	N/A	N/A	95/132	N/A
7	8/7	54/147	31/42	48/205	1/25	29/36	3/3	12/17	1/2
8	41/46	96/156	43/15	77/175	N/A	90/124	83/110	56/77	126/169

XX/YY : 90 second/120 seconds

* See **Table 2** for Intersection Description

Table 4: PM Peak 90 vs. 120 Second Cycles Queue Length Comparison

Queue Length at 50 th percentile (ft)									
Intersection*	NBL	NBT	SBL	SBT	SBR	EBL	EBT	WBL	WBT
1	52/82	64/15	34/47	249/303	N/A	14/20	22/31	38/52	18/32
2	70/57	21/52	14/20	147/114	N/A	N/A	27/43	N/A	98/137
3	50/119	17/14	35/60	381/376	N/A	N/A	22/32	N/A	14/20
4	89/84	183/158	31/50	122/56	N/A	N/A	15/23	N/A	31/45
5	137/173	177/176	80/83	359/446	N/A	N/A	131/203	N/A	208/280
6	N/A	79/86	27/38	56/2	N/A	N/A	N/A	29/39	N/A
7	32/54	53/86	57/140	21/70	1/5	63/96	22/49	23/32	10/13
8	76/116	154/212	66/63	218/204	N/A	131/169	185/233	137/180	335/389

XX/YY : 90 second/120 seconds

* See **Table 2** for Intersection Description

Table 5: Off-Peak 90 vs. 120 Second Cycles Queue Length Comparison

Queue Length at 50 th percentile (ft)									
Intersection*	NBL	NBT	SBL	SBT	SBR	EBL	EBT	WBL	WBT
1	28/40	40/13	18/26	42/26	N/A	15/22	10/15	8/11	5/8
2	22/27	7/12	4/9	17/84	N/A	N/A	20/27	N/A	18/26
3	26/63	23/16	4/6	34/26	N/A	N/A	14/20	N/A	8/15
4	25/32	12/2	2/7	49/32	N/A	N/A	6/11	N/A	14/20
5	52/59	71/32	17/34	31/26	N/A	N/A	40/62	N/A	53/76
6	N/A	4/29	6/8	45/35	N/A	N/A	N/A	15/24	N/A
7	6/9	69/3	47/57	20/33	N/A	28/45	10/16	13/17	6/8
8	49/61	67/87	26/27	57/59	N/A	54/89	64/113	32/44	106/152

XX/YY : 90 second/120 seconds

* See **Table 2** for Intersection Description

Delay/LOS

For signalized intersection, the Level of Service (LOS) is calculated by taking the intersection delay and converting it to a level (A – F). With A being the best, traffic is free flowing and no delays are occurring and F being the worst, forced flow, very congested and queues failing to clear. The LOS outputs for AM, PM and Off-peak hour are listed below in **Table 6**, **Table 7** and **Table 8**, respectively. During the AM and off-peak hours, a cycle length of 90-second results in a better LOS and lower delay for all eight intersections. During the PM peak hour, a cycle length of 120-second results in a better LOS and lower delay for most of the intersections.

Table 6: AM Peak 90 vs. 120 Second Cycles LOS and Intersection Delay Comparison

Intersection*	LOS	Delay, sec/veh
1	B/C	19.8/28.1
2	B/C	17.1/20.9
3	B/C	13.8/23.3
4	B/B	12.8/16.3
5	C/C	26.3/32.0
6	B/C	10.7/20.5
7	A/C	8.6/23.7
8	C/D	28.0/35.5

XX/YY : 90 seconds/120 seconds

* See **Table 2** for Intersection Description

Table 7: PM Peak 90 vs. 120 Second Cycles LOS and Intersection Delay Comparison

Intersection*	LOS	Delay, sec/veh
1	C/C	22.1/24.3
2	C/C	30.5/21.5
3	C/B	21.7/19.0
4	C/B	21.7/14.5
5	D/D	51.1/45.0
6	A/A	8.7/4.6
7	B/B	13.5/19.3
8	E/D	62.2/45.7

XX/YY : 90 seconds/120 seconds

* See **Table 2** for Intersection Description

Table 8: Off-Peak 90 vs. 120 Second Cycles LOS and Intersection Delay Comparison

Intersection*	LOS	Delay, sec/veh
1	B/C	19.6/21.4
2	B/C	11.4/21.3
3	B/B	12.3/14.7
4	A/B	9.1/10.1
5	B/C	17.1/23.4
6	A/A	4.9/3.9
7	B/B	13.8/13.3
8	C/D	26.8/39.0

XX/YY : 90 seconds/120 seconds

* See **Table 2** for Intersection Description

Time-Space Diagram

Time-space diagram is a graphic presentation that describes the relationship between the location of vehicles in the traffic stream and the time as they progress along the roadway. The time-space diagrams for East Boulevard (AM and PM peak hours) are included in **Appendix D**. For

the off-peak hours, the AM peak hour timing plan will be utilized in the field. The diagram includes intersection locations, cycle length, splits, offset, and left-turn phasing. The cycle length, splits and offset will be the values to be implemented in the controllers in the field.

CONCLUSION AND RECOMMENDATIONS

Based on the analysis, it is recommended to synchronize the eight controller units along East Boulevard using the following cycle lengths.

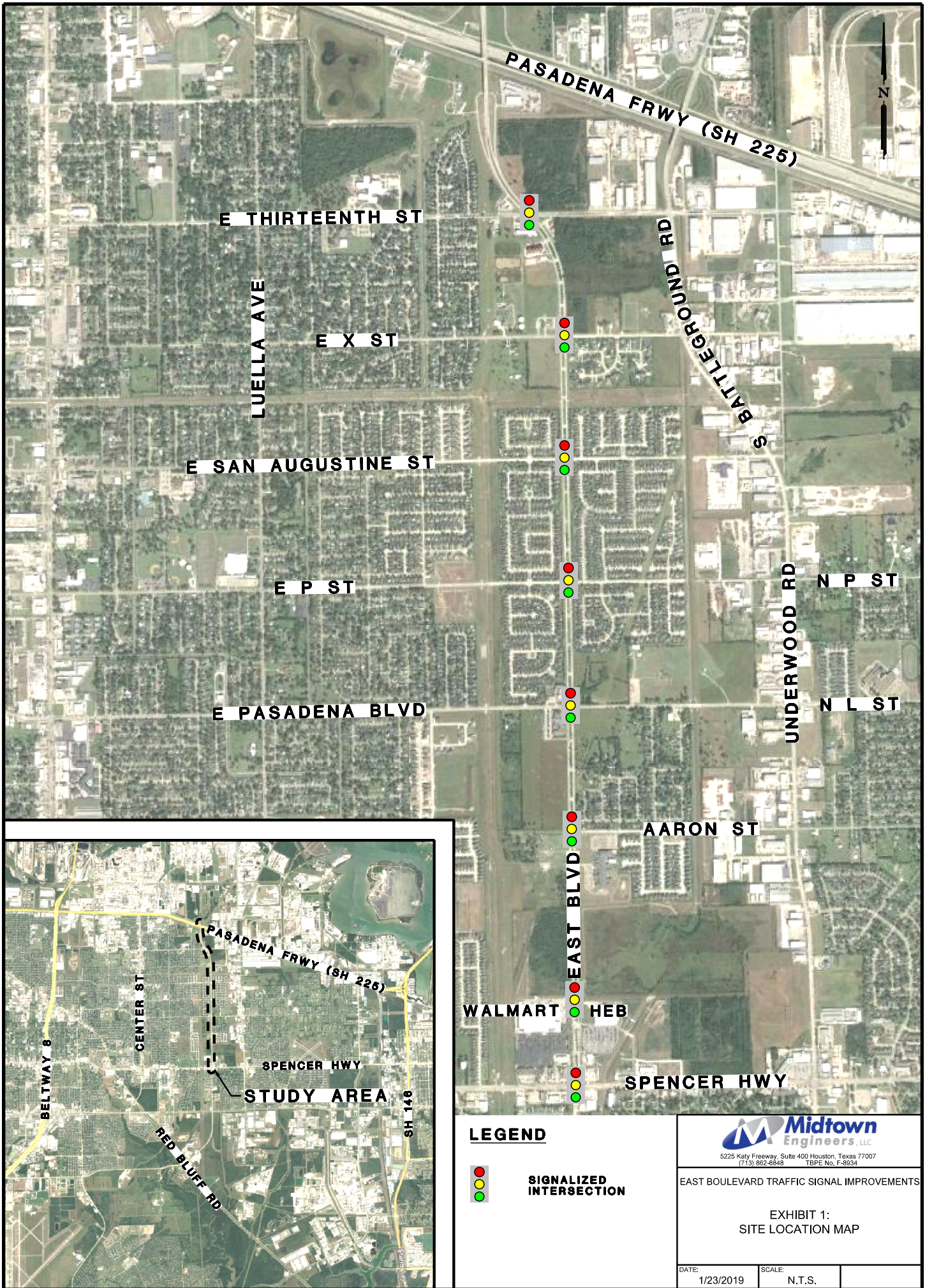
- AM Peak – 90-second
- Off-Peak – 90-second
- PM Peak – 120-second

For AM and off-peak hours, the 90-second cycle length provides better LOS, intersection delay and queue lengths. For the PM peak, a 120-second cycle length result in longer queue lengths, but the queue lengths did not exceed existing storage lengths. In addition, the intersection delays and LOS are better for most of the intersections.

Based on field observations, two additional recommendations, listed below, could be considered to further improve the operations of East Boulevard:

1. Perform a speed study to determine the appropriate speed limit for the corridor, to ensure progression through the corridor, a uniform posted speed would be beneficial.
2. Evaluate the existing condition of the pedestrian signals along East Boulevard, so necessary repair and/or replace can be made to have the pedestrian signals operate properly.

Appendix A:
Exhibit 1 through Exhibit 4



S:\Projects\DEER-3730\DCN\PPV\02_SPEED AND LANE CONFIG.dgn
1/23/2019 1:51:59 PM kkozak

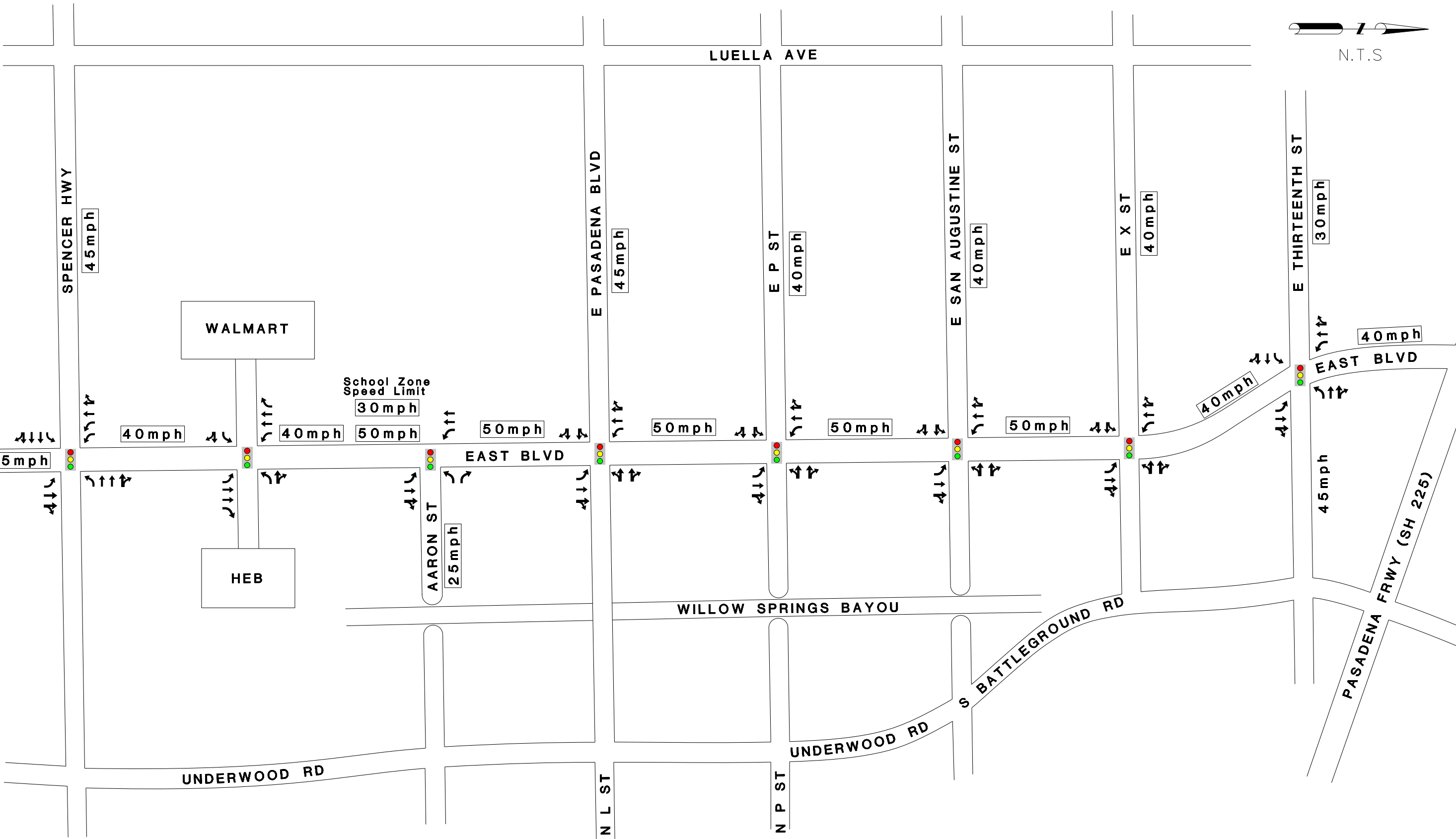


EXHIBIT 2:
EXISTING POSTED SPEED LIMITS AND LANE CONFIGURATIONS

LEGEND :

N/A

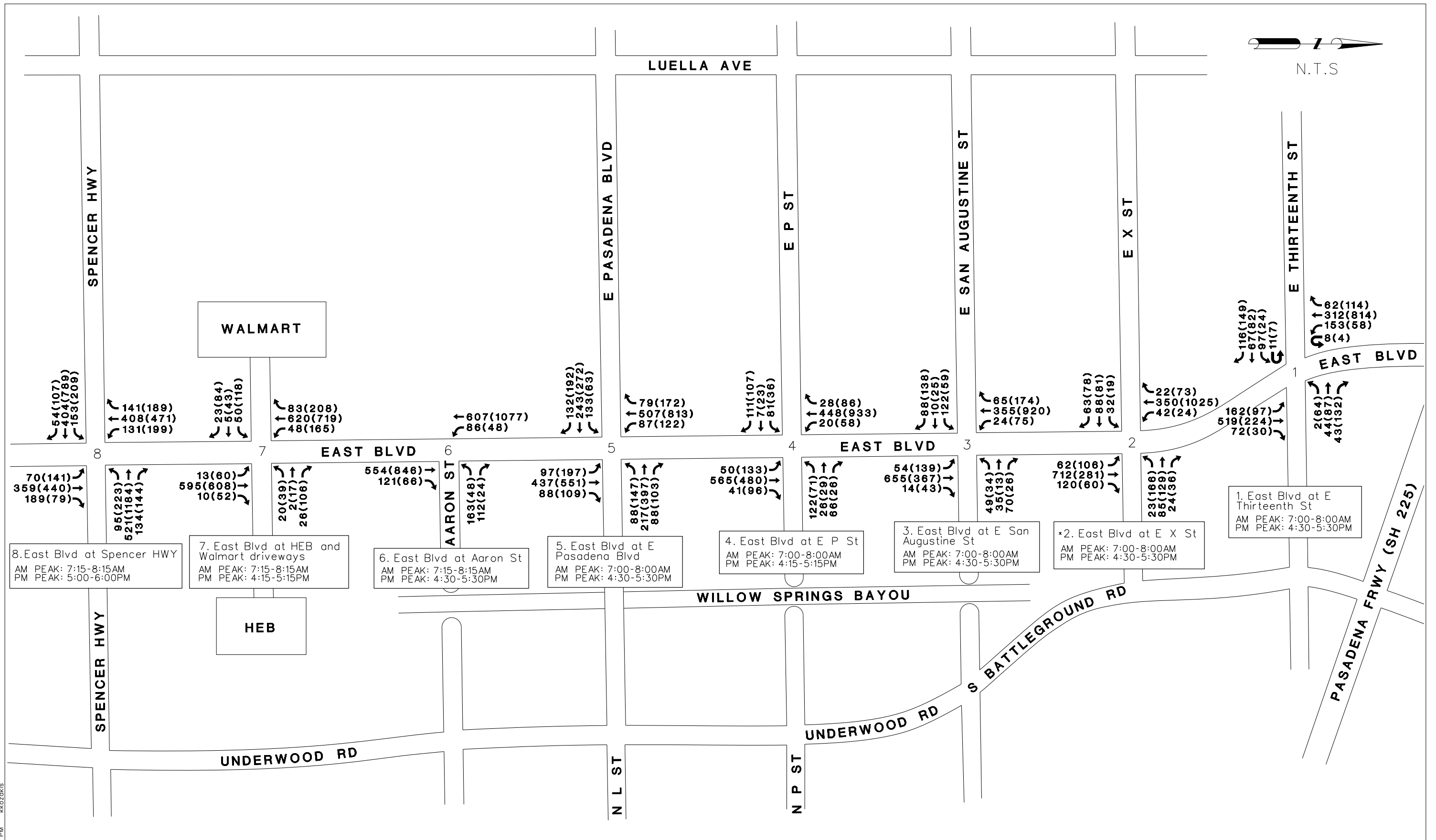
S:\Projects\DEER-3730\DCN\PPV\03_Peak Hour VOL.dgn
1/23/2019 1:54:28 PM kkozakis



EXHIBIT 3 :
EXISTING AM AND PM PEAK HOUR VOLUMES

LEGEND :

XXX (YYY): AM (PM) PEAK HOUR TRAFFIC VOLUMES
TAKEN ON TUESDAY, DEC 18, 2018
* : TAKEN ON TUESDAY, JAN 8, 2019



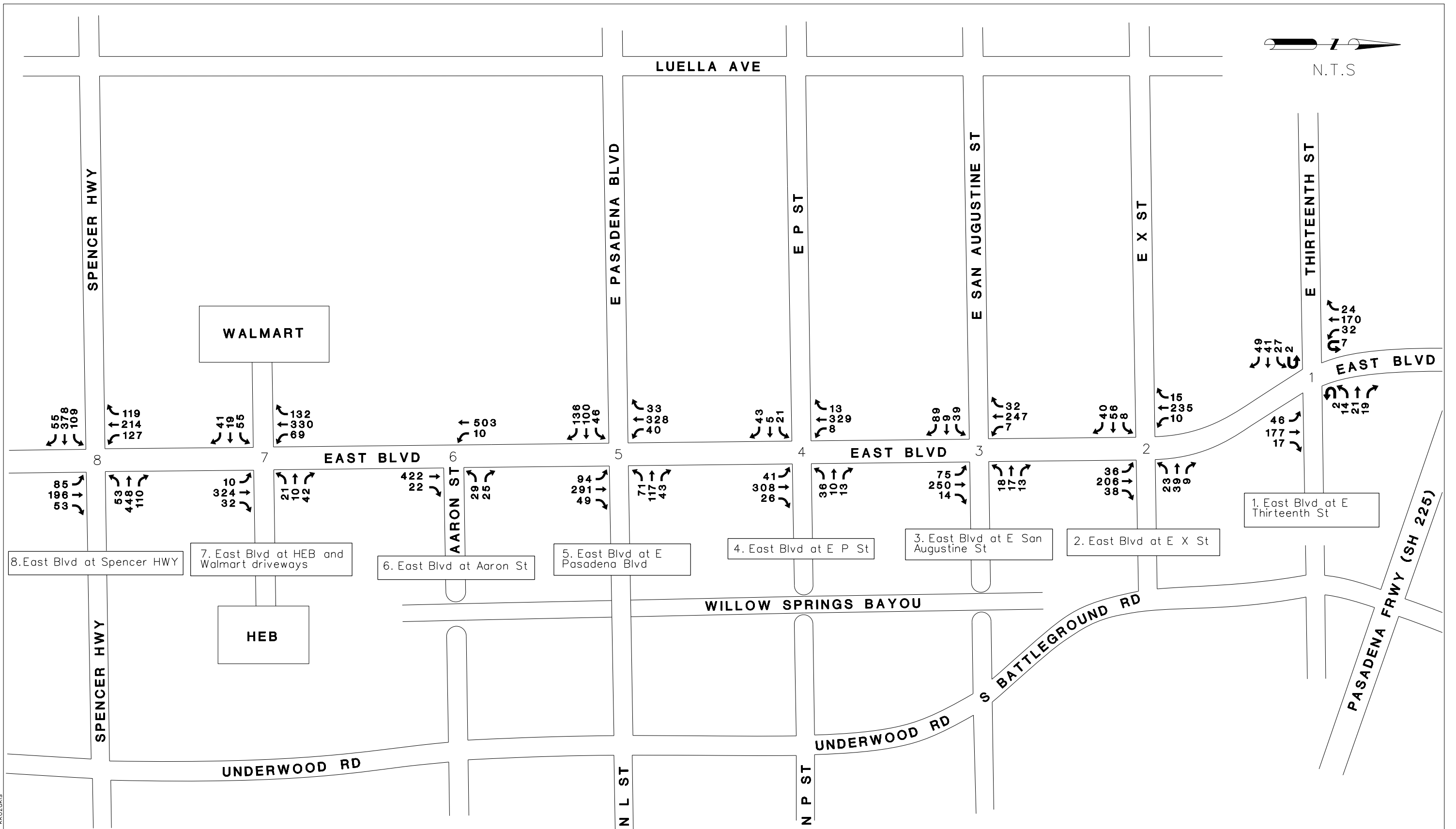
S:\Projects\DEER-3730\DCN\PPV\04_OFF-PEAK HOUR VOL.dgn
1/23/2019 1:55:03 PM kkozak



EXHIBIT 4:
EXISTING OFF PEAK HOUR VOLUMES

LEGEND :

XXX : HOUR TRAFFIC VOLUMES
OFF PEAK HOURS: 10:00-11:00 AM



Appendix B: Turning Movement Counts

East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM(+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464


 Provided by: C. J. Hensch & Associates Inc.
 5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E 13th St Westbound						East Blvd Northbound						E 13th St Eastbound							
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int	
2018-12-18 12:00AM	0	7	0	0	7	0	1	1	0	0	2	0	0	2	2	0	0	4	0	0	0	0	0	0	0	13
12:15AM	2	8	0	0	10	0	1	0	0	0	1	0	1	1	1	0	0	3	0	1	1	1	0	3	0	17
12:30AM	0	2	0	0	2	0	0	0	2	0	2	0	1	3	1	0	0	5	0	0	0	0	0	0	0	9
12:45AM	0	3	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	2	0	1	0	1	0	2	0	7
Hourly Total	2	20	0	0	22	0	2	1	2	0	5	0	2	8	4	0	0	14	0	2	1	2	0	5	0	46
1:00AM	2	7	0	0	9	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	12
1:15AM	0	6	0	0	6	0	0	1	0	0	1	0	0	8	0	0	0	8	0	0	0	0	0	0	0	15
1:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	0	0	0	0	4
1:45AM	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	4
Hourly Total	2	14	0	0	16	0	1	2	0	0	3	0	0	13	2	0	0	15	0	0	0	1	0	1	0	35
2:00AM	0	4	0	0	4	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	1	0	1	0	7
2:15AM	1	3	1	0	5	0	0	0	0	0	0	0	1	4	0	0	0	5	0	0	0	0	0	0	0	10
2:30AM	0	2	1	0	3	0	0	1	0	0	1	0	0	1	1	0	0	2	0	0	0	1	0	1	0	7
2:45AM	0	1	0	0	1	0	0	0	1	0	1	0	0	3	0	0	0	3	0	0	0	0	0	0	0	5
Hourly Total	1	10	2	0	13	0	0	1	1	0	2	0	2	9	1	0	0	12	0	0	0	2	0	2	0	29
3:00AM	0	6	0	0	6	0	1	0	0	0	1	0	0	9	0	0	0	9	0	0	0	0	0	0	0	16
3:15AM	0	0	0	0	0	0	1	1	0	0	2	0	2	12	0	0	0	14	0	0	2	0	0	2	0	18
3:30AM	0	5	0	0	5	0	0	0	0	0	0	0	2	11	0	0	0	13	0	1	1	1	0	3	0	21
3:45AM	1	8	0	0	9	0	0	0	0	0	0	0	2	15	0	0	0	17	0	1	1	0	0	2	0	28
Hourly Total	1	19	0	0	20	0	2	1	0	0	3	0	6	47	0	0	0	53	0	2	4	1	0	7	0	83
4:00AM	0	12	0	0	12	0	1	0	0	0	1	0	3	18	1	0	0	22	0	3	2	0	0	5	0	40
4:15AM	0	9	4	0	13	0	0	1	0	0	1	0	9	28	1	0	0	38	0	3	2	2	0	7	0	59
4:30AM	2	13	2	0	17	0	0	2	0	0	2	0	4	46	2	0	0	52	0	1	7	1	0	9	0	80
4:45AM	2	19	5	0	26	0	0	1	1	0	2	0	13	49	3	0	0	65	0	1	8	2	0	11	0	104
Hourly Total	4	53	11	0	68	0	1	4	1	0	6	0	29	141	7	0	0	177	0	8	19	5	0	32	0	283
5:00AM	3	22	2	0	27	0	2	1	0	0	3	0	5	64	2	0	0	71	0	1	3	7	0	11	0	112
5:15AM	1	20	3	0	24	0	3	1	1	0	5	0	12	97	0	0	0	109	0	1	8	7	0	16	0	154
5:30AM	0	29	9	0	38	0	4	2	0	0	6	0	17	117	3	0	0	137	0	4	13	14	1	32	0	213
5:45AM	1	49	13	0	63	0	11	3	1	0	15	0	17	151	6	0	0	174	0	2	10	7	0	19	0	271
Hourly Total	5	120	27	0	152	0	20	7	2	0	29	0	51	429	11	0	0	491	0	8	34	35	1	78	0	750
6:00AM	2	39	18	1	60	0	10	3	1	0	14	0	13	186	6	0	0	205	0	6	12	15	0	33	0	312
6:15AM	5	44	15	2	66	0	15	5	0	0	20	0	10	150	7	1	0	168	0	4	23	18	0	45	0	299
6:30AM	3	49	12	4	68	0	12	6	1	0	19	0	16	132	12	0	0	160	0	9	23	22	2	56	0	303
6:45AM	8	50	21	1	80	0	8	6	0	0	14	0	19	147	17	0	0	183	0	9	10	16	0	35	0	312
Hourly Total	18	182	66	8	274	0	45	20	2	0	67	0	58	615	42	1	0	716	0	28	68	71	2	169	0	1226
7:00AM	14	71	36	1	122	0	23	13	1	0	37	0	15	144	46	0	0	205	0	24	11	30	1	66	0	430
7:15AM	21	92	40	5	158	0	7	12	0	0	19	0	12	149	45	0	0	206	0	33	23	19	2	77	0	460
7:30AM	16	75	41	1	133	0	4	13	0	0	17	0	21	127	53	0	0	201	0	34	16	27	5	82	0	433
7:45AM	11	74	36	1	122	0	9	6	1	0	16	0	24	99	18	0	0	141	0	25	17	21	3	66	0	345
Hourly Total	62	312	153	8	535	0	43	44	2	0	89	0	72	519	162	0	0	753	0	116	67	97	11	291	0	1668
8:00AM	18	87	37	4	146	0	14	10	0	0	24	0	15	103	16	1	0	135	0	24	10	10	2	46	0	351
8:15AM	6	46	20	3	75	0	10	10	1	0	21	0	16	64	17	0	0	97	0	15	7	12	0	34	0	227
8:30AM	3	58	17	3	81	0	6	6	2	0	14	0	14	62	9	0	0	85	0	8	9	6	1	24	0	204
8:45AM	4	46	11	0	61	0	10	9	0	0	19	0	9	49	23	0	0	81	0	21	13	5	0	39	0	200
Hourly Total	31	237	85	10	363	0	40	35	3	0	78	0	54	278	65	1	0	398	0	68	39	33	3	143	0	982
9:00AM	2	34	11	1	48	0	3	3	3	0	9	0	6	50	9	0	0	65	0	16	11	6	0	33	0	155
9:15AM	3	40	4	1	48	0	7	6	3	1	17	0	9	51	6	0	0	66	0	7	5	5	0	17	0	148
9:30AM	3	39	10	1	53	0	6	2	3	1	12	0	2	54	9	1	0	66	0	7	7	5	0	19	0	150
9:45AM	3	47	7	0	57	0	8	8	3	0	19	0	4	36	14	0	0	54	0	9	11	2	0	22	0	152
Hourly Total	11	160	32	3	206	0	24	19	12	2	57	0	21	191	38	1	0	251	0	39	34	18	0	91	0	605
10:00AM	8	41	8	1	58	0	7	8	3	1	19	0	6	40	6	0	0	52	0	8	10	5	2	25	0	154
10:15AM	4	43	5	2	54	0	7	2	1	1	11	0	2	54	13	0	0	69	0	15	9	8	0	32	0	166
10:30AM	7	47	9	1	64	0	2	5	3	0	10	0	5	40	14	1	0	60	0	16	13	6	0	35	0	169
10:45AM	5	39	10	3	57	0	3	6	7	0	16	0	4	43	13	0	0	60	0	10	9	8	0	27	0	160
Hourly Total	24	170	32	7	233	0	19	21	14	2	56	0	17	177	46	1	0	241	0	49	41	27	2	119	0	649
11:00AM	9	82	9	5	105	0	11	12	12	0	35	0	6	5												

Leg Direction	East Blvd Southbound						E 13th St Westbound						East Blvd Northbound						E 13th St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
1:45PM	13	48	12	1	74	0	7	11	3	0	21	0	7	56	21	0	84	0	16	11	5	0	32	0	211
Hourly Total	33	228	34	3	298	0	22	40	16	0	78	0	26	206	70	3	305	0	67	56	22	0	145	0	826
2:00PM	6	53	9	1	69	0	7	9	2	0	18	0	12	47	14	0	73	0	25	10	7	1	43	0	203
2:15PM	3	50	4	2	59	0	7	10	4	0	21	0	8	48	11	0	67	0	17	11	5	1	34	0	181
2:30PM	13	74	8	2	97	0	16	9	7	0	32	0	4	50	21	2	77	0	12	7	5	1	25	0	231
2:45PM	8	70	9	0	87	0	5	5	4	0	14	0	6	57	34	0	97	0	18	12	8	2	40	0	238
Hourly Total	30	247	30	5	312	0	35	33	17	0	85	0	30	202	80	2	314	0	72	40	25	5	142	0	853
3:00PM	15	110	10	1	136	0	12	8	5	2	27	0	1	45	22	1	69	0	37	18	4	0	59	0	291
3:15PM	13	102	8	4	127	0	14	8	6	0	28	0	9	51	17	0	77	0	19	10	5	3	37	0	269
3:30PM	13	107	7	2	129	0	54	12	7	0	73	0	5	72	10	0	87	0	25	7	12	0	44	0	333
3:45PM	14	128	10	0	152	0	30	7	11	0	48	0	8	72	13	0	93	0	21	8	5	0	34	0	327
Hourly Total	55	447	35	7	544	0	110	35	29	2	176	0	23	240	62	1	326	0	102	43	26	3	174	0	1220
4:00PM	21	176	11	4	212	0	43	13	14	3	73	0	7	68	36	1	112	0	30	9	3	1	43	0	440
4:15PM	33	162	12	8	215	0	28	23	15	0	66	0	3	55	38	0	96	0	29	17	5	3	54	0	431
4:30PM	29	177	13	2	221	0	53	19	16	1	89	0	9	82	26	0	117	0	47	22	9	1	79	0	506
4:45PM	23	198	10	1	232	0	33	15	17	0	65	0	4	48	26	0	78	0	40	20	7	1	68	0	443
Hourly Total	106	713	46	15	880	0	157	70	62	4	293	0	23	253	126	1	403	0	146	68	24	6	244	0	1820
5:00PM	36	217	18	0	271	0	29	24	20	0	73	0	11	48	24	2	85	0	31	21	3	3	58	0	487
5:15PM	26	222	17	1	266	0	17	29	11	0	57	0	6	46	21	0	73	0	31	19	5	2	57	0	453
5:30PM	22	199	16	1	238	0	21	16	9	0	46	0	4	26	31	1	62	0	31	22	9	3	65	0	411
5:45PM	20	183	8	1	212	0	8	14	9	0	31	0	5	39	18	1	63	0	34	14	1	2	51	0	357
Hourly Total	104	821	59	3	987	0	75	83	49	0	207	0	26	159	94	4	283	0	127	76	18	10	231	0	1708
6:00PM	20	128	5	1	154	0	16	16	2	0	34	0	6	47	16	0	69	0	19	13	6	2	40	0	297
6:15PM	20	128	3	0	151	0	5	11	0	0	16	0	3	42	19	1	65	0	27	3	4	0	34	0	266
6:30PM	15	93	3	1	112	0	9	13	7	0	29	0	0	47	23	1	71	0	17	10	4	0	31	0	243
6:45PM	20	95	1	2	118	0	3	10	3	0	16	0	4	34	27	2	67	0	13	4	1	0	18	0	219
Hourly Total	75	444	12	4	535	0	33	50	12	0	95	0	13	170	85	4	272	0	76	30	15	2	123	0	1025
7:00PM	7	81	2	0	90	0	4	5	2	0	11	0	1	23	14	0	38	0	6	7	5	0	18	0	157
7:15PM	9	80	1	1	91	0	3	7	1	0	11	0	4	28	18	0	50	0	5	6	4	1	16	3	168
7:30PM	7	61	1	1	70	0	2	4	2	0	8	0	2	28	5	0	35	0	8	3	3	0	14	0	127
7:45PM	7	41	0	0	48	0	1	3	0	0	4	0	2	28	15	0	45	0	6	2	1	0	9	0	106
Hourly Total	30	263	4	2	299	0	10	19	5	0	34	0	9	107	52	0	168	0	25	18	13	1	57	3	558
8:00PM	4	39	1	3	47	0	1	1	2	0	4	0	2	27	15	1	45	0	8	4	4	1	17	0	113
8:15PM	8	41	1	2	52	0	1	2	0	0	3	0	2	17	7	0	26	0	4	5	2	0	11	0	92
8:30PM	5	39	1	0	45	0	1	3	1	0	5	0	0	22	7	0	29	0	9	5	6	0	20	0	99
8:45PM	2	35	0	0	37	0	1	5	1	0	7	0	1	16	8	1	26	0	16	5	1	0	22	0	92
Hourly Total	19	154	3	5	181	0	4	11	4	0	19	0	5	82	37	2	126	0	37	19	13	1	70	0	396
9:00PM	3	33	3	0	39	0	0	1	1	0	2	0	5	21	7	0	33	0	5	5	4	0	14	0	88
9:15PM	1	27	0	0	28	0	0	2	1	0	3	0	1	25	9	2	37	0	13	2	1	0	16	0	84
9:30PM	2	37	1	1	41	0	0	2	0	0	2	0	3	14	6	0	23	0	5	2	0	0	7	0	73
9:45PM	2	22	1	1	26	0	2	7	0	0	9	0	3	10	7	1	21	0	4	2	4	0	10	0	66
Hourly Total	8	119	5	2	134	0	2	12	2	0	16	0	12	70	29	3	114	0	27	11	9	0	47	0	311
10:00PM	4	18	1	2	25	0	0	1	0	0	1	0	1	11	8	0	20	0	6	3	1	0	10	0	56
10:15PM	6	27	0	0	33	0	0	1	0	0	1	0	1	17	6	0	24	0	8	0	0	0	8	0	66
10:30PM	3	15	0	0	18	0	3	2	0	0	5	0	0	10	8	0	18	0	3	2	2	0	7	0	48
10:45PM	2	21	0	1	24	0	0	1	1	0	2	0	1	12	4	0	17	0	1	2	0	0	3	0	46
Hourly Total	15	81	1	3	100	0	3	5	1	0	9	0	3	50	26	0	79	0	18	7	3	0	28	0	216
11:00PM	0	19	0	0	19	0	2	0	0	0	2	0	1	12	3	0	16	0	3	3	3	0	9	0	46
11:15PM	1	13	0	0	14	0	0	2	1	0	3	0	1	8	4	0	13	0	1	1	0	0	2	0	32
11:30PM	0	5	0	0	5	0	3	3	4	0	10	0	1	6	2	0	9	0	1	0	3	0	4	0	28
11:45PM	3	10	0	0	13	0	0	0	0	0	0	0	0	4	4	0	8	0	0	1	1	0	2	0	23
Hourly Total	4	47	0	0	51	0	5	5	5	0	15	0	3	30	13	0	46	0	5	5	7	0	17	0	129
Total	706	5408	714	103	6931	0	720	612	307	10	1649	0	581	4494	1184	31	6290	0	1156	801	524	50	2531	3	17401
% Approach	10.2%	78.0%	10.3%	1.5%	-	-	43.7%	37.1%	18.6%	0.6%	-	-	9.2%	71.4%	18.8%	0.5%	-	-	45.7%	31.6%	20.7%	2.0%	-	-	-
% Total	4.1%	31.1%	4.1%	0.6%	39.8%	-	4.1%	3.5%	1.8%	0.1%	9.5%	-	3.3%	25.8%	6.8%	0.2%	36.1%	-	6.6%	4.6%	3.0%	0.3%	14.5%	-	-
Lights	689	5273	671	100	6733	-	663	593	300	10	1566	-	569	4392	1173	30	6164	-	1143	782	513	50	2488	-	16951
% Lights	97.6%	97.5%	94.0%	97.1%	97.1%	-	92.1%	96.9%	97.7%	100%	95.0%	-	97.9%	97.7%	99.1%	96.8%	98.0%	-	98.9%	97.6%	97.9%	100%	98.3%	-	97.4%
Articulate d Trucks	0	37	26	1	64	-	34	0	0	0	34	-	4	32	1	0	37	-	1	6	0	0	7	-	142
% Articulated Trucks	0%	0.7%	3.6%	1.0%	0.9%	-	4.7%	0%	0%	0%	2.1%	-	0.7%	0.7%	0.1%	0%	0.6%	-	0.1%	0.7%	0%	0%	0.3%	-	0.8%
Buses and Single-Unit Trucks	17	98	17	2	134	-	23	19	7	0	49	-	8	70	10	1	89	-	12	13	11	0	36	-	308
% Buses and Single-Unit Trucks	2.4%	1.8%	2.4%	1.9%	1.9%	-	3.2%	3.1%	2.3%	0%	3.0%	-	1.4%	1.6%	0.8%	3.2%	1.4%	-	1.0%	1.6%	2.1%	0%	1.4%	-	1.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

[N] East Blvd

Total: 12772

In: 6931

Out: 5841

706

5408

714

103

[W] E 13th St

Total: 5083

Out: 2552

In: 2531

3
50
524
801
1156

720
612
307
10

Out: 2106 In: 1649

Total: 3755

[E] E 13th St

Out: 6902

In: 6290

Total: 13192

[S] East Blvd

31

1184

4494

581

East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound							E 13th St Westbound							East Blvd Northbound							E 13th St Eastbound							
Time	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		Int
2018-12-18 7:00AM	14	71	36	1	122	0		23	13	1	0	37	0		15	144	46	0	205	0		24	11	30	1	66	0		430
7:15AM	21	92	40	5	158	0		7	12	0	0	19	0		12	149	45	0	206	0		33	23	19	2	77	0		460
7:30AM	16	75	41	1	133	0		4	13	0	0	17	0		21	127	53	0	201	0		34	16	27	5	82	0		433
7:45AM	11	74	36	1	122	0		9	6	1	0	16	0		24	99	18	0	141	0		25	17	21	3	66	0		345
Total	62	312	153	8	535	0		43	44	2	0	89	0		72	519	162	0	753	0		116	67	97	11	291	0		1668
% Approach	11.6%	58.3%	28.6%	1.5%	-	-		48.3%	49.4%	2.2%	0%	-	-		9.6%	68.9%	21.5%	0%	-	-		39.9%	23.0%	33.3%	3.8%	-	-		-
% Total	3.7%	18.7%	9.2%	0.5%	32.1%	-		2.6%	2.6%	0.1%	0%	5.3%	-		4.3%	31.1%	9.7%	0%	45.1%	-		7.0%	4.0%	5.8%	0.7%	17.4%	-		-
PHF	0.738	0.848	0.933	0.400	0.847	-		0.467	0.846	0.500	-	0.601	-		0.750	0.871	0.764	-	0.914	-		0.853	0.728	0.808	0.550	0.887	-		0.907
Lights	60	298	152	8	518	-		42	42	2	0	86	-		72	511	161	0	744	-		116	64	97	11	288	-		1636
% Lights	96.8%	95.5%	99.3%	100%	96.8%	-		97.7%	95.5%	100%	0%	96.6%	-		100%	98.5%	99.4%	0%	98.8%	-		100%	95.5%	100%	100%	99.0%	-		98.1%
Articulated Trucks	0	3	0	0	3	-		1	0	0	0	1	-		0	1	0	0	1	-		0	1	0	0	1	-		6
% Articulated Trucks	0%	1.0%	0%	0%	0.6%	-		2.3%	0%	0%	0%	1.1%	-		0%	0.2%	0%	0%	0.1%	-		0%	1.5%	0%	0%	0.3%	-		0.4%
Buses and Single-Unit Trucks	2	11	1	0	14	-		0	2	0	0	2	-		0	7	1	0	8	-		0	2	0	0	2	-		26
% Buses and Single-Unit Trucks	3.2%	3.5%	0.7%	0%	2.6%	-		0%	4.5%	0%	0%	2.2%	-		0%	1.3%	0.6%	0%	1.1%	-		0%	3.0%	0%	0%	0.7%	-		1.6%
Pedestrians	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		
% Pedestrians	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

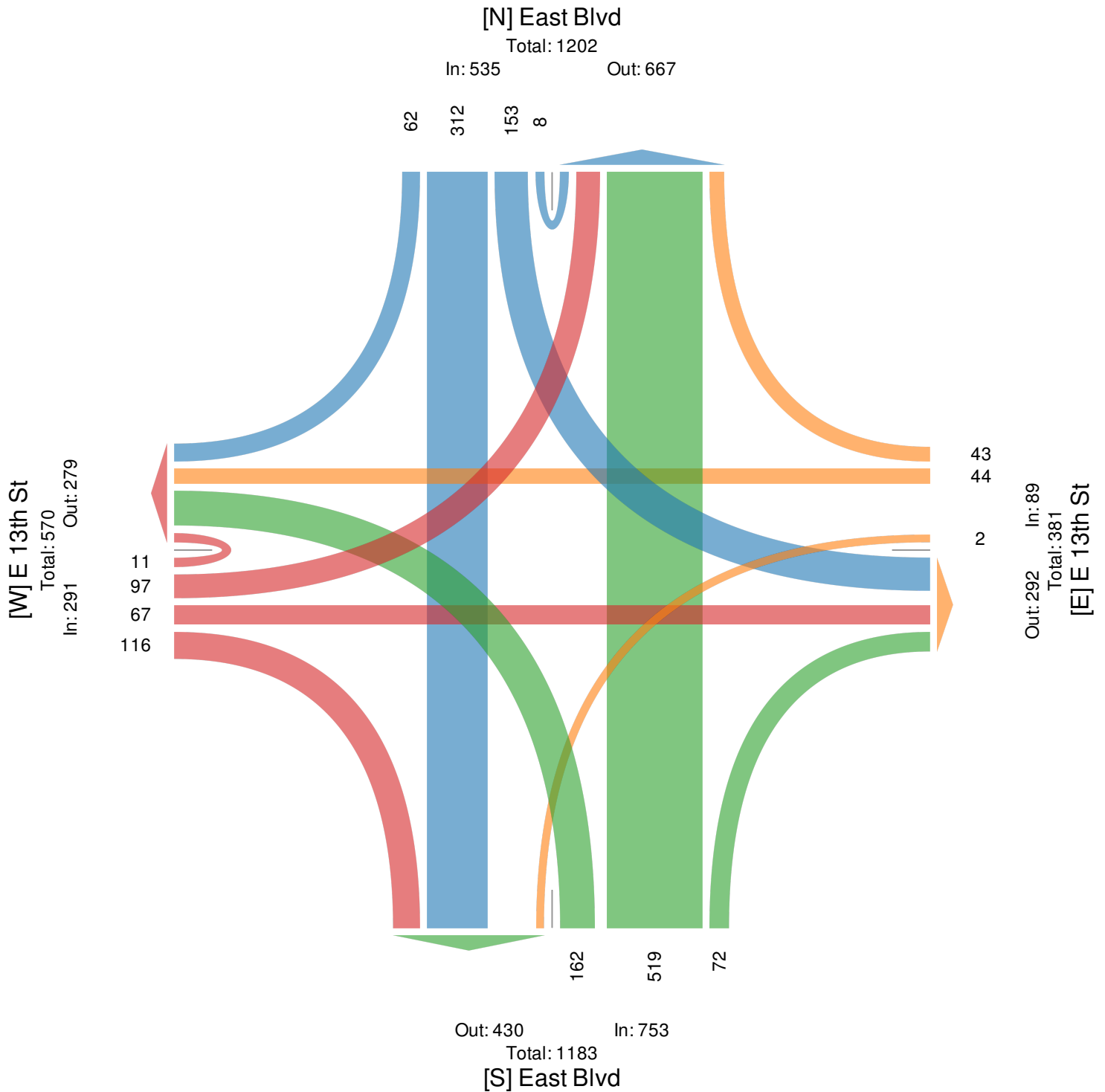
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 11:45AM - 12:45PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound							E 13th St Westbound							East Blvd Northbound							E 13th St Eastbound							
Time	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		Int
2018-12-18 11:45AM	3	87	7	1	98	0		10	10	10	0	30	0		16	66	14	1	97	0		17	16	5	0	38	0		263
12:00PM	14	75	14	3	106	0		9	17	4	0	30	0		15	61	14	1	91	0		30	18	7	0	55	0		282
12:15PM	6	60	8	2	76	0		10	10	7	0	27	0		13	85	14	1	113	0		21	16	16	1	54	0		270
12:30PM	6	57	13	2	78	0		7	13	10	0	30	0		10	65	15	2	92	0		12	19	8	1	40	0		240
Total	29	279	42	8	358	0		36	50	31	0	117	0		54	277	57	5	393	0		80	69	36	2	187	0		1055
% Approach	8.1%	77.9%	11.7%	2.2%	-	-		30.8%	42.7%	26.5%	0%	-	-		13.7%	70.5%	14.5%	1.3%	-	-		42.8%	36.9%	19.3%	1.1%	-	-		-
% Total	2.7%	26.4%	4.0%	0.8%	33.9%	-		3.4%	4.7%	2.9%	0%	11.1%	-		5.1%	26.3%	5.4%	0.5%	37.3%	-		7.6%	6.5%	3.4%	0.2%	17.7%	-		-
PHF	0.518	0.802	0.750	0.667	0.844	-		0.900	0.735	0.775	-	0.975	-		0.844	0.815	0.950	0.625	0.869	-		0.667	0.908	0.563	0.500	0.850	-		0.935
Lights	28	269	35	8	340	-		32	48	31	0	111	-		53	268	57	5	383	-		79	67	36	2	184	-		1018
% Lights	96.6%	96.4%	83.3%	100%	95.0%	-		88.9%	96.0%	100%	0%	94.9%	-		98.1%	96.8%	100%	100%	97.5%	-		98.8%	97.1%	100%	100%	98.4%	-		96.5%
Articulated Trucks	0	3	4	0	7	-		1	0	0	0	1	-		1	1	0	0	2	-		0	0	0	0	0	-		10
% Articulated Trucks	0%	1.1%	9.5%	0%	2.0%	-		2.8%	0%	0%	0%	0.9%	-		1.9%	0.4%	0%	0%	0.5%	-		0%	0%	0%	0%	0%	-		0.9%
Buses and Single-Unit Trucks	1	7	3	0	11	-		3	2	0	0	5	-		0	8	0	0	8	-		1	2	0	0	3	-		27
% Buses and Single-Unit Trucks	3.4%	2.5%	7.1%	0%	3.1%	-		8.3%	4.0%	0%	0%	4.3%	-		0%	2.9%	0%	0%	2.0%	-		1.3%	2.9%	0%	0%	1.6%	-		2.6%
Pedestrians	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-
% Pedestrians	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 11:45AM - 12:45PM)

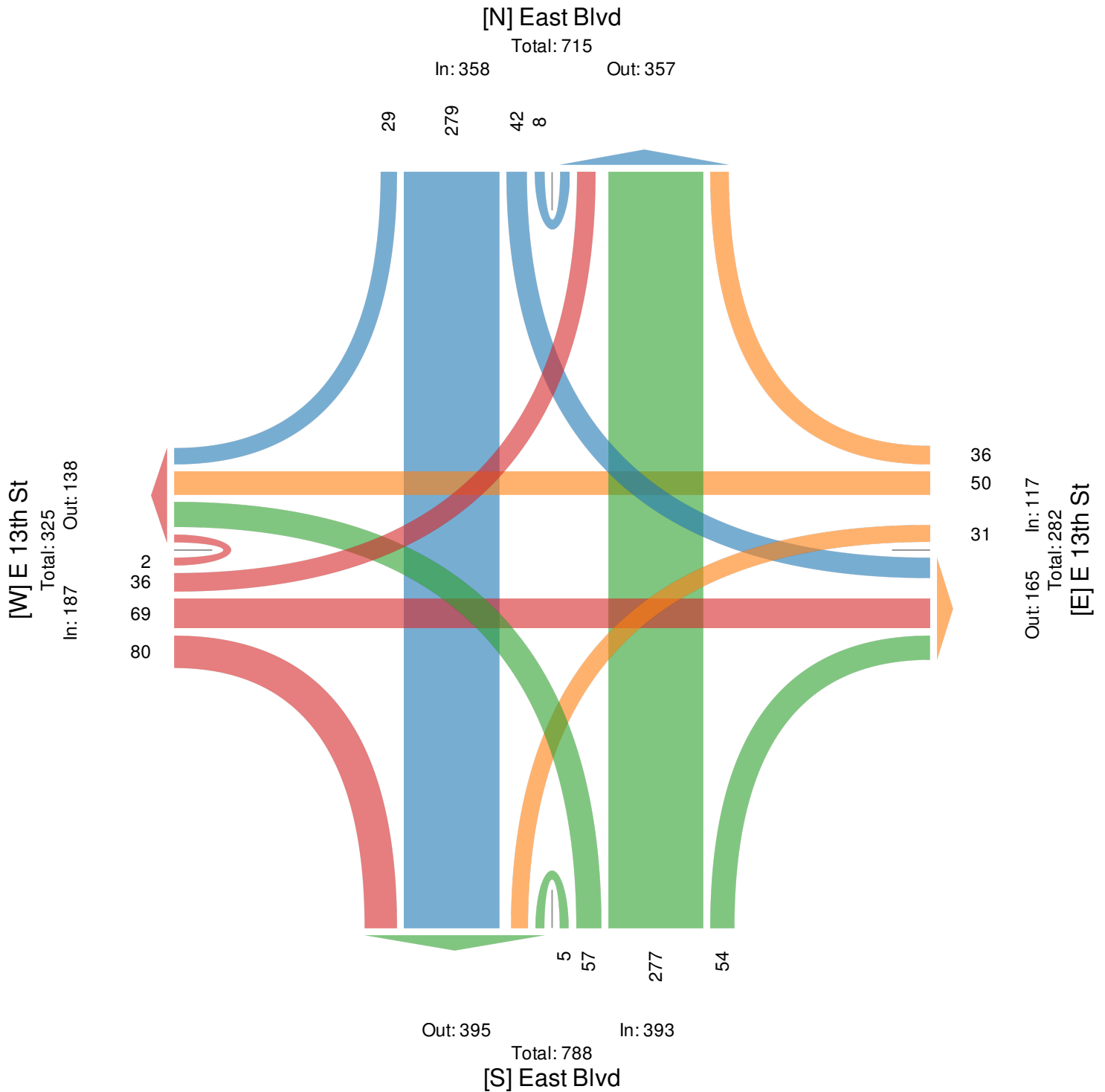
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound							E 13th St Westbound							East Blvd Northbound							E 13th St Eastbound							
Time	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		Int
2018-12-18																													
4:30PM	29	177	13	2	221	0		53	19	16	1	89	0		9	82	26	0	117	0		47	22	9	1	79	0		506
4:45PM	23	198	10	1	232	0		33	15	17	0	65	0		4	48	26	0	78	0		40	20	7	1	68	0		443
5:00PM	36	217	18	0	271	0		29	24	20	0	73	0		11	48	24	2	85	0		31	21	3	3	58	0		487
5:15PM	26	222	17	1	266	0		17	29	11	0	57	0		6	46	21	0	73	0		31	19	5	2	57	0		453
Total	114	814	58	4	990	0		132	87	64	1	284	0		30	224	97	2	353	0		149	82	24	7	262	0		1889
% Approach	11.5%	82.2%	5.9%	0.4%	-	-		46.5%	30.6%	22.5%	0.4%	-	-		8.5%	63.5%	27.5%	0.6%	-	-		56.9%	31.3%	9.2%	2.7%	-	-	-	
% Total	6.0%	43.1%	3.1%	0.2%	52.4%	-		7.0%	4.6%	3.4%	0.1%	15.0%	-		1.6%	11.9%	5.1%	0.1%	18.7%	-		7.9%	4.3%	1.3%	0.4%	13.9%	-		-
PHF	0.792	0.917	0.806	0.500	0.913	-		0.623	0.750	0.800	0.250	0.798	-		0.682	0.683	0.933	0.250	0.754	-		0.793	0.932	0.667	0.583	0.829	-		0.933
Lights	107	809	54	4	974	-		128	86	64	1	279	-		27	221	97	2	347	-		149	81	22	7	259	-		1859
% Lights	93.9%	99.4%	93.1%	100%	98.4%	-		97.0%	98.9%	100%	100%	98.2%	-		90.0%	98.7%	100%	100%	98.3%	-		100%	98.8%	91.7%	100%	98.9%	-		98.4%
Articulated Trucks	0	0	4	0	4	-		0	0	0	0	0	-		1	2	0	0	3	-		0	1	0	0	1	-		8
% Articulated Trucks	0%	0%	6.9%	0%	0.4%	-		0%	0%	0%	0%	0%	-		3.3%	0.9%	0%	0%	0.8%	-		0%	1.2%	0%	0%	0.4%	-		0.4%
Buses and Single-Unit Trucks	7	5	0	0	12	-		4	1	0	0	5	-		2	1	0	0	3	-		0	0	2	0	2	-		22
% Buses and Single-Unit Trucks	6.1%	0.6%	0%	0%	1.2%	-		3.0%	1.1%	0%	0%	1.8%	-		6.7%	0.4%	0%	0%	0.8%	-		0%	0%	8.3%	0%	0.8%	-		1.2%
Pedestrians	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-
% Pedestrians	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E Thirteenth St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

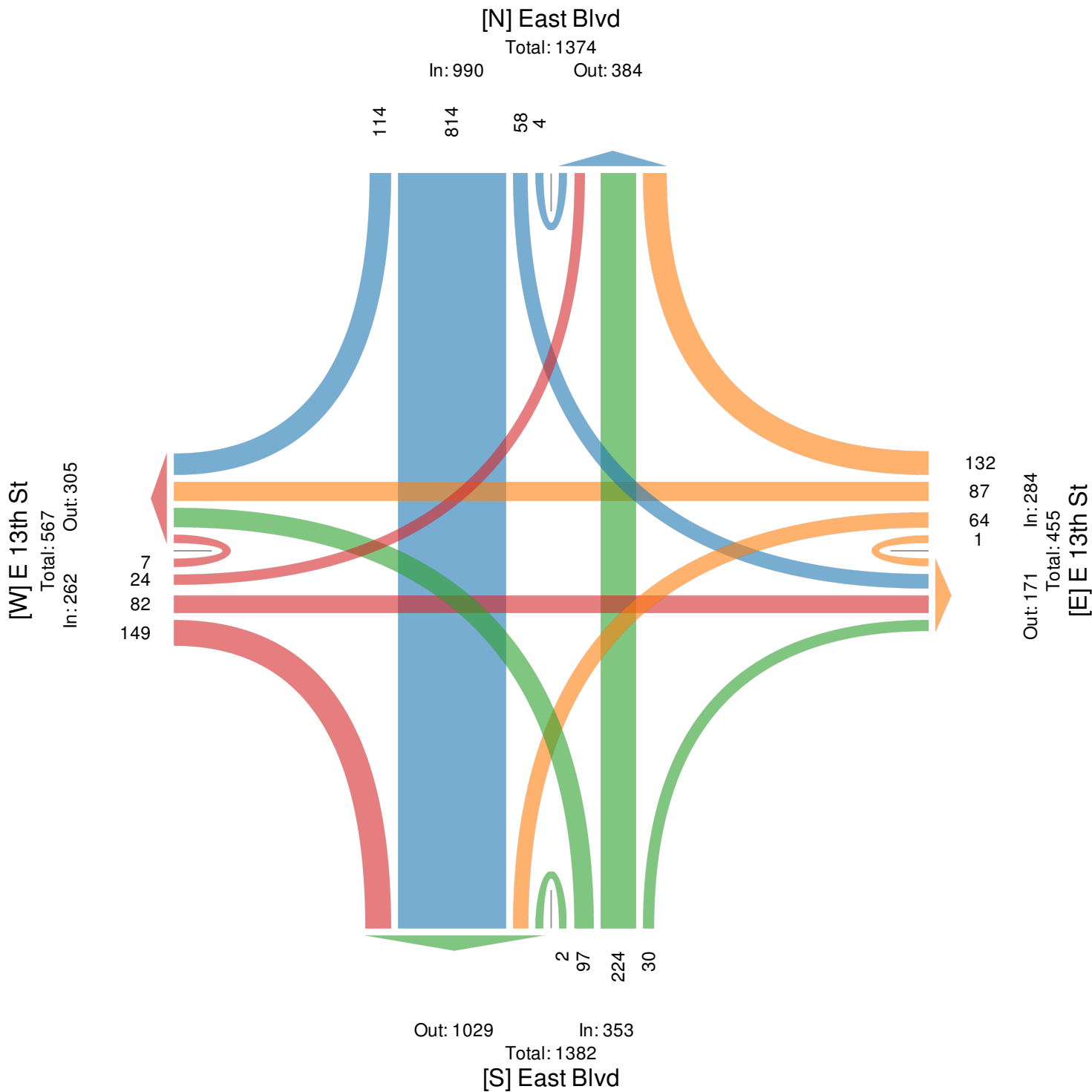
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599581, Location: 29.70032, -95.100464



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. X St - TMC

Tue Jan 8, 2019

Full Length (12AM-12AM(+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E. X St Westbound						East Blvd Northbound						E. X St Eastbound							
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int	
2019-01-08 12:00AM	0	7	0	0	7	0	0	1	3	0	4	0	0	8	0	0	0	8	1	0	4	0	0	4	1	23
12:15AM	0	11	0	0	11	0	0	2	0	0	2	0	1	4	0	0	0	5	0	2	1	0	0	3	0	21
12:30AM	0	9	0	0	9	0	0	1	1	0	2	0	1	10	1	0	0	12	0	0	0	0	0	0	0	23
12:45AM	1	6	0	0	7	0	0	0	0	0	0	0	1	0	4	0	0	5	0	1	1	0	0	2	0	14
Hourly Total	1	33	0	0	34	0	0	4	4	0	8	0	3	22	5	0	0	30	1	3	6	0	0	9	1	81
1:00AM	0	3	0	0	3	0	0	1	2	0	3	0	0	3	0	0	0	3	0	1	0	0	0	1	0	10
1:15AM	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1:30AM	0	5	0	0	5	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2	0	0	2	0	9
1:45AM	0	3	0	0	3	0	0	1	1	0	2	0	0	2	0	0	0	2	0	0	0	0	0	0	0	7
Hourly Total	0	16	0	0	16	0	0	2	3	0	5	0	2	5	0	0	0	7	0	1	2	0	0	3	0	31
2:00AM	0	3	0	0	3	0	0	2	0	0	2	0	0	3	1	0	0	4	0	0	0	0	0	0	0	9
2:15AM	0	4	0	0	4	0	0	0	1	0	1	0	0	3	0	0	0	3	0	2	0	0	0	2	0	10
2:30AM	0	1	0	0	1	0	0	0	0	0	0	0	1	3	1	0	0	5	0	0	0	1	0	1	0	7
2:45AM	0	3	0	0	3	0	0	0	1	0	1	0	0	4	0	0	0	4	0	0	1	0	0	1	0	9
Hourly Total	0	11	0	0	11	0	0	2	2	0	4	0	1	13	2	0	0	16	0	2	1	1	0	4	0	35
3:00AM	0	3	0	0	3	0	0	0	0	0	0	0	0	7	0	0	0	7	0	0	1	0	0	1	0	11
3:15AM	0	2	0	0	2	0	0	1	0	0	1	0	4	12	0	0	0	16	0	1	1	0	0	2	0	21
3:30AM	0	5	0	0	5	0	0	0	0	0	0	0	3	15	1	0	0	19	0	0	1	0	0	1	0	25
3:45AM	0	8	0	0	8	0	0	0	0	0	0	0	7	19	0	0	0	26	0	2	1	0	0	3	0	37
Hourly Total	0	18	0	0	18	0	0	1	0	0	1	0	14	53	1	0	0	68	0	3	4	0	0	7	0	94
4:00AM	0	15	0	0	15	0	1	1	1	0	3	0	7	17	2	0	0	26	0	0	2	1	0	3	0	47
4:15AM	1	12	1	0	14	0	1	0	4	0	5	0	4	24	0	0	0	28	0	2	6	2	0	10	0	57
4:30AM	1	12	0	0	13	0	3	0	3	0	6	0	12	42	1	0	0	55	0	0	3	2	0	5	0	79
4:45AM	0	12	2	0	14	3	2	2	2	0	6	1	7	55	0	0	0	62	0	1	10	2	0	13	0	95
Hourly Total	2	51	3	0	56	3	7	3	10	0	20	1	30	138	3	0	0	171	0	3	21	7	0	31	0	278
5:00AM	0	17	3	0	20	0	2	3	4	0	9	0	16	69	0	0	0	85	0	1	9	4	0	14	0	128
5:15AM	1	23	2	0	26	0	5	4	3	0	12	0	21	100	4	0	0	125	0	5	7	4	0	16	0	179
5:30AM	4	35	5	0	44	0	3	5	2	0	10	0	27	116	4	0	0	147	0	3	9	4	0	16	0	217
5:45AM	2	39	15	0	56	0	6	6	5	0	17	0	28	167	2	0	0	197	0	5	24	9	0	38	0	308
Hourly Total	7	114	25	0	146	0	16	18	14	0	48	0	92	452	10	0	0	554	0	14	49	21	0	84	0	832
6:00AM	1	29	9	0	39	0	6	9	7	0	22	0	22	165	4	0	0	191	0	7	15	13	0	35	0	287
6:15AM	3	40	9	0	52	0	3	9	5	0	17	0	27	162	5	0	0	194	0	13	10	9	0	32	0	295
6:30AM	4	53	12	0	69	0	3	15	5	0	23	0	28	167	6	0	0	201	0	9	25	11	0	45	0	338
6:45AM	4	48	12	0	64	0	7	12	7	0	26	0	38	184	14	0	0	236	0	7	9	6	0	22	0	348
Hourly Total	12	170	42	0	224	0	19	45	24	0	88	0	115	678	29	0	0	822	0	36	59	39	0	134	0	1268
7:00AM	1	75	9	0	85	0	7	12	5	0	24	0	26	199	7	0	0	232	0	7	17	10	0	34	0	375
7:15AM	8	78	5	0	91	0	7	21	3	0	31	0	31	209	16	0	0	256	0	15	19	5	0	39	0	417
7:30AM	5	106	16	0	127	0	4	23	6	0	33	0	29	191	19	0	0	239	0	20	22	7	0	49	0	448
7:45AM	8	91	12	0	111	0	6	29	9	0	44	0	34	113	20	0	0	167	0	21	30	10	0	61	0	383
Hourly Total	22	350	42	0	414	0	24	85	23	0	132	0	120	712	62	0	0	894	0	63	88	32	0	183	0	1623
8:00AM	2	59	11	0	72	0	8	13	13	0	34	0	25	100	18	0	0	143	0	16	24	4	0	44	0	293
8:15AM	5	63	5	0	73	0	4	21	4	0	29	0	16	94	8	0	0	118	0	10	22	8	0	40	0	260
8:30AM	3	53	7	0	63	0	3	13	10	0	26	0	19	73	7	0	0	99	0	14	16	1	0	31	0	219
8:45AM	0	56	3	0	59	0	2	9	5	0	16	0	10	87	8	0	0	105	0	9	6	3	0	18	0	198
Hourly Total	10	231	26	0	267	0	17	56	32	0	105	0	70	354	41	0	0	465	0	49	68	16	0	133	0	970
9:00AM	3	62	6	0	71	1	3	12	5	0	20	1	9	57	10	0	0	76	0	10	12	1	0	23	0	190
9:15AM	11	49	2	0	62	0	1	11	7	0	19	0	8	61	4	0	0	73	0	9	13	3	0	25	0	179
9:30AM	4	40	8	0	52	0	1	5	4	0	10	0	12	45	5	0	0	62	0	9	18	2	0	29	0	153
9:45AM	2	42	0	2	46	0	2	18	4	0	24	0	14	54	10	0	0	78	0	9	11	7	0	27	0	175
Hourly Total	20	193	16	2	231	1	7	46	20	0	73	1	43	217	29	0	0	289	0	37	54	13	0	104	0	697
10:00AM	4	63	3	0	70	0	4	8	8	0	20	0	7	49	6	0	0	62	0	11	13	1	0	25	0	177
10:15AM	6	51	1	0	58	1	1	13	4	0	18	0	7	51	7	0	0	65	0	11	13	4	0	28	0	169
10:30AM	2	60	1	0	63	0	1	5	2	0	8	0	10	50	9	0	0	69	0	11	13	2	0	26	0	166
10:45AM	3	61	5	0	69	0	3	13	9	0	25	0	14	56	14	0	0	84	0	7	17	1	0	25	0	203
Hourly Total	15	235	10	0	260	1	9	39	23	0	71	0	38	206	36	0	0	280	0	40	56	8	0	104	0	715
11:00AM	6	107	5	0	118	0	7	23	20	0	50	0	8	65	9	0	0	82	0	15</						

Leg Direction	East Blvd Southbound						E. X St Westbound						East Blvd Northbound						E. X St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
1:30PM	3	66	3	0	72	0	2	15	5	0	22	0	10	67	13	1	91	0	11	17	2	0	30	0	215
1:45PM	3	53	1	0	57	0	2	10	13	0	25	0	11	86	13	0	110	0	10	10	4	0	24	0	216
Hourly Total	11	238	10	0	259	0	9	56	44	0	109	0	56	288	61	1	406	0	50	57	11	0	118	0	892
2:00PM	3	89	1	0	93	0	1	12	11	0	24	0	11	56	14	0	81	0	9	18	4	0	31	0	229
2:15PM	5	88	0	0	93	0	1	12	8	0	21	0	15	62	16	0	93	0	8	11	1	0	20	0	227
2:30PM	3	71	4	0	78	0	6	15	13	0	34	0	6	71	12	0	89	0	9	16	1	0	26	0	227
2:45PM	4	73	2	0	79	0	3	16	10	0	29	0	10	76	13	0	99	0	9	8	5	0	22	0	229
Hourly Total	15	321	7	0	343	0	11	55	42	0	108	0	42	265	55	0	362	0	35	53	11	0	99	0	912
3:00PM	9	152	5	0	166	0	1	15	14	0	30	0	14	78	16	0	108	0	14	10	6	0	30	0	334
3:15PM	14	121	3	0	138	0	4	18	10	0	32	0	13	60	20	0	93	0	21	14	2	0	37	0	300
3:30PM	5	160	4	0	169	0	8	16	13	0	37	0	14	83	19	0	116	0	30	15	5	0	50	0	372
3:45PM	12	169	6	0	187	0	4	20	13	0	37	0	9	75	26	0	110	0	24	16	2	0	42	0	376
Hourly Total	40	602	18	0	660	0	17	69	50	0	136	0	50	296	81	0	427	0	89	55	15	0	159	0	1382
4:00PM	3	166	8	0	177	0	7	26	25	0	58	0	20	67	24	0	111	0	21	11	1	0	33	0	379
4:15PM	12	185	7	0	204	0	8	26	23	0	57	0	19	84	18	0	121	0	17	23	2	0	42	0	424
4:30PM	19	206	11	0	236	0	20	32	32	0	84	0	15	79	24	0	118	0	28	19	2	0	49	0	487
4:45PM	15	257	3	0	275	0	7	33	47	0	87	0	16	69	21	0	106	0	18	19	5	0	42	0	510
Hourly Total	49	814	29	0	892	0	42	117	127	0	286	0	70	299	87	0	456	0	84	72	10	0	166	0	1800
5:00PM	15	266	6	0	287	0	5	38	45	0	88	0	19	60	29	0	108	0	14	25	8	0	47	0	530
5:15PM	24	296	4	0	324	0	4	26	42	0	72	0	10	73	32	0	115	0	18	18	4	0	40	0	551
5:30PM	14	250	5	0	269	0	2	38	29	0	69	0	11	54	19	0	84	0	19	19	1	0	39	0	461
5:45PM	10	224	5	0	239	0	2	18	20	0	40	0	11	59	28	0	98	0	18	11	7	0	36	0	413
Hourly Total	63	1036	20	0	1119	0	13	120	136	0	269	0	51	246	108	0	405	0	69	73	20	0	162	0	1955
6:00PM	7	149	3	1	160	0	1	15	23	0	39	0	12	68	23	0	103	0	21	16	1	0	38	0	340
6:15PM	6	145	2	0	153	0	5	15	14	0	34	0	10	78	24	0	112	0	20	13	1	0	34	0	333
6:30PM	6	105	2	0	113	0	3	16	7	0	26	0	6	55	12	0	73	0	19	7	3	0	29	0	241
6:45PM	6	74	1	0	81	0	2	13	9	0	24	0	7	44	18	0	69	0	14	3	0	0	17	0	191
Hourly Total	25	473	8	1	507	0	11	59	53	0	123	0	35	245	77	0	357	0	74	39	5	0	118	0	1105
7:00PM	5	97	5	0	107	0	4	12	8	0	24	0	7	42	27	0	76	0	13	2	3	0	18	0	225
7:15PM	5	65	0	1	71	0	1	7	2	0	10	0	10	45	22	0	77	0	9	5	2	0	16	0	174
7:30PM	4	74	0	0	78	0	1	15	3	0	19	0	2	25	13	1	41	0	19	3	1	0	23	0	161
7:45PM	6	47	2	0	55	0	0	6	6	0	12	0	6	32	15	0	53	0	5	6	3	0	14	0	134
Hourly Total	20	283	7	1	311	0	6	40	19	0	65	0	25	144	77	1	247	0	46	16	9	0	71	0	694
8:00PM	2	46	0	0	48	0	1	7	3	0	11	0	6	33	24	0	63	0	9	1	0	0	10	0	132
8:15PM	2	46	0	0	48	0	0	3	4	0	7	0	8	25	18	0	51	0	6	7	0	0	13	0	119
8:30PM	1	54	1	0	56	0	1	8	5	0	14	0	6	31	9	0	46	0	6	7	1	0	14	0	130
8:45PM	1	31	0	0	32	0	1	5	5	0	11	0	3	22	10	0	35	0	5	5	0	0	10	0	88
Hourly Total	6	177	1	0	184	0	3	23	17	0	43	0	23	111	61	0	195	0	26	20	1	0	47	0	469
9:00PM	2	33	1	0	36	0	0	0	5	0	5	0	3	24	6	0	33	0	6	3	2	0	11	0	85
9:15PM	3	31	0	0	34	0	1	6	0	0	7	0	5	25	15	0	45	0	6	1	5	0	12	2	98
9:30PM	4	34	0	0	38	0	0	2	4	0	6	0	1	24	5	0	30	0	4	1	2	0	7	0	81
9:45PM	3	25	0	0	28	0	1	3	2	0	6	0	1	17	5	0	23	0	1	1	0	0	2	0	59
Hourly Total	12	123	1	0	136	0	2	11	11	0	24	0	10	90	31	0	131	0	17	6	9	0	32	2	323
10:00PM	1	25	0	0	26	0	0	3	5	0	8	0	0	12	5	0	17	0	3	2	0	0	5	0	56
10:15PM	0	15	0	0	15	0	0	1	5	0	6	0	3	13	6	0	22	0	0	0	2	0	2	0	45
10:30PM	1	17	0	0	18	0	0	1	0	0	1	0	1	10	3	0	14	0	2	0	1	0	3	0	36
10:45PM	0	13	0	0	13	0	1	1	1	0	3	0	1	7	2	0	10	0	0	1	0	0	1	0	27
Hourly Total	2	70	0	0	72	0	1	6	11	0	18	0	5	42	16	0	63	0	5	3	3	0	11	0	164
11:00PM	0	13	0	0	13	0	0	2	3	0	5	0	2	15	2	0	19	0	3	1	0	0	4	0	41
11:15PM	0	12	0	0	12	0	0	3	3	0	6	0	2	8	1	0	11	0	4	1	1	0	6	0	35
11:30PM	1	12	0	0	13	0	0	1	0	0	1	0	0	6	3	0	9	0	0	2	0	0	2	0	25
11:45PM	0	14	0	0	14	0	0	1	1	0	2	0	1	9	2	0	12	0	1	3	0	0	4	0	32
Hourly Total	1	51	0	0	52	0	0	7	7	0	14	0	5	38	8	0	51	0	8	7	1	0	16	0	133
Total	369	6297	296	4	6966	5	258	1011	813	0	2082	2	1021	5549	987	2	7559	1	857	936	260	0	2053	3	18660
% Approach	5.3%	90.4%	4.2%	0.1%	-	-	12.4%	48.6%	39.0%	0%	-	-	13.5%	73.4%	13.1%	0%	-	-	41.7%	45.6%	12.7%	0%	-	-	-
% Total	2.0%	33.7%	1.6%	0%	37.3%	-	1.4%	5.4%	4.4%	0%	11.2%	-	5.5%	29.7%	5.3%	0%	40.5%	-	4.6%	5.0%	1.4%	0%	11.0%	-	-
Lights	363	6193	294	4	6854	-	254	999																	

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. X St - TMC

Tue Jan 8, 2019

Full Length (12AM-12AM (+1))

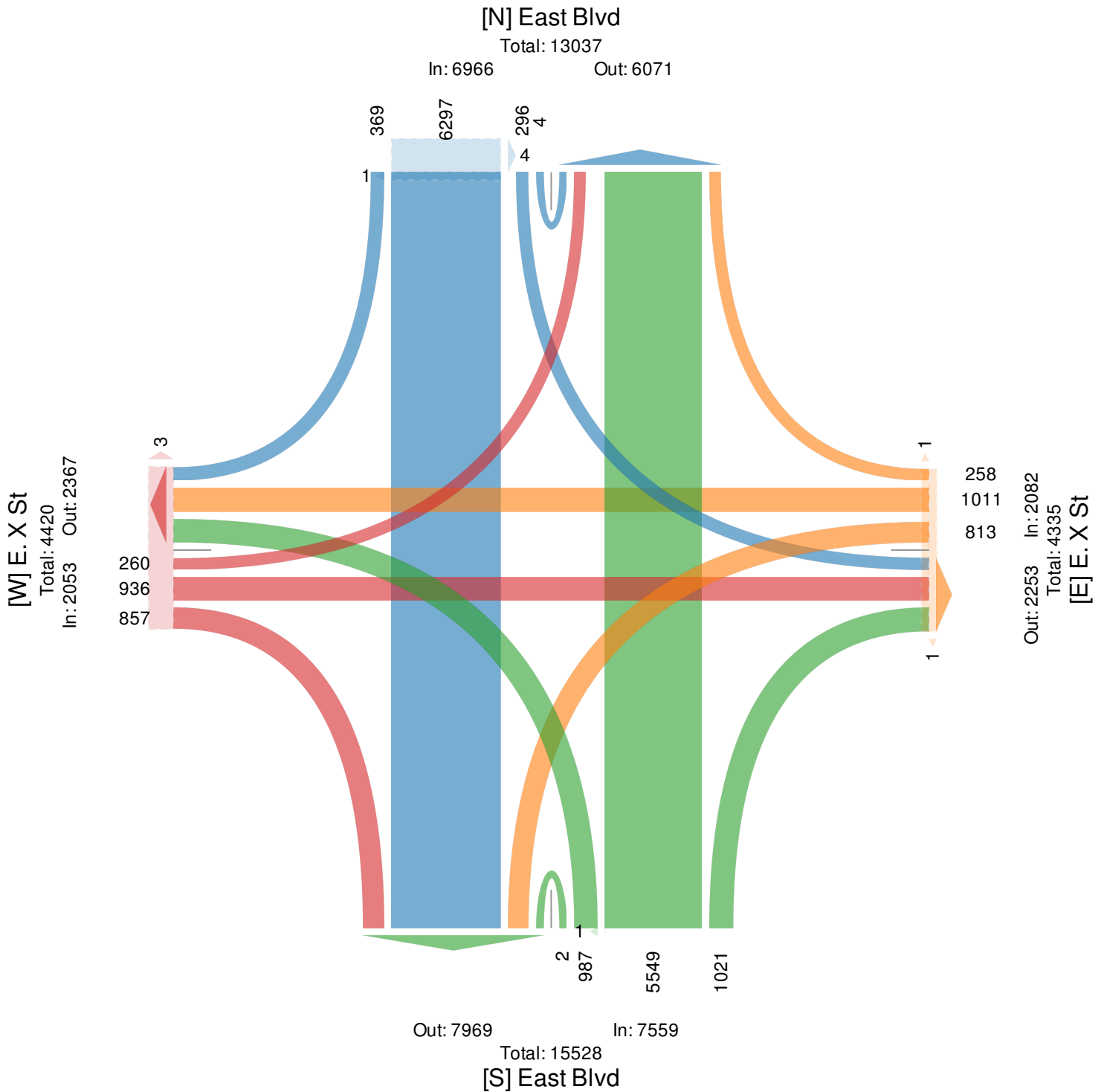
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. X St - TMC

Tue Jan 8, 2019

AM Peak (Jan 08 2019 7AM - 8AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E. X St Westbound						East Blvd Northbound						E. X St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2019-01-08 7:00AM	1	75	9	0	85	0	7	12	5	0	24	0	26	199	7	0	232	0	7	17	10	0	34	0	375
7:15AM	8	78	5	0	91	0	7	21	3	0	31	0	31	209	16	0	256	0	15	19	5	0	39	0	417
7:30AM	5	106	16	0	127	0	4	23	6	0	33	0	29	191	19	0	239	0	20	22	7	0	49	0	448
7:45AM	8	91	12	0	111	0	6	29	9	0	44	0	34	113	20	0	167	0	21	30	10	0	61	0	383
Total	22	350	42	0	414	0	24	85	23	0	132	0	120	712	62	0	894	0	63	88	32	0	183	0	1623
% Approach	5.3%	84.5%	10.1%	0%	-	-	18.2%	64.4%	17.4%	0%	-	-	13.4%	79.6%	6.9%	0%	-	-	34.4%	48.1%	17.5%	0%	-	-	-
% Total	1.4%	21.6%	2.6%	0%	25.5%	-	1.5%	5.2%	1.4%	0%	8.1%	-	7.4%	43.9%	3.8%	0%	55.1%	-	3.9%	5.4%	2.0%	0%	11.3%	-	-
PHF	0.688	0.825	0.656	-	0.815	-	0.857	0.733	0.639	-	0.750	-	0.882	0.852	0.775	-	0.873	-	0.750	0.733	0.800	-	0.750	-	0.906
Lights	22	341	41	0	404	-	23	84	21	0	128	-	119	701	62	0	882	-	63	88	32	0	183	-	1597
% Lights	100%	97.4%	97.6%	0%	97.6%	-	95.8%	98.8%	91.3%	0%	97.0%	-	99.2%	98.5%	100%	0%	98.7%	-	100%	100%	100%	0%	100%	-	98.4%
Articulated Trucks	0	4	0	0	4	-	0	0	0	0	0	-	0	2	0	0	2	-	0	0	0	0	0	-	6
% Articulated Trucks	0%	1.1%	0%	0%	1.0%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.4%
Buses and Single-Unit Trucks	0	5	1	0	6	-	1	1	2	0	4	-	1	9	0	0	10	-	0	0	0	0	0	-	20
% Buses and Single-Unit Trucks	0%	1.4%	2.4%	0%	1.4%	-	4.2%	1.2%	8.7%	0%	3.0%	-	0.8%	1.3%	0%	0%	1.1%	-	0%	0%	0%	0%	0%	-	1.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. X St - TMC

Tue Jan 8, 2019

AM Peak (Jan 08 2019 7AM - 8AM)

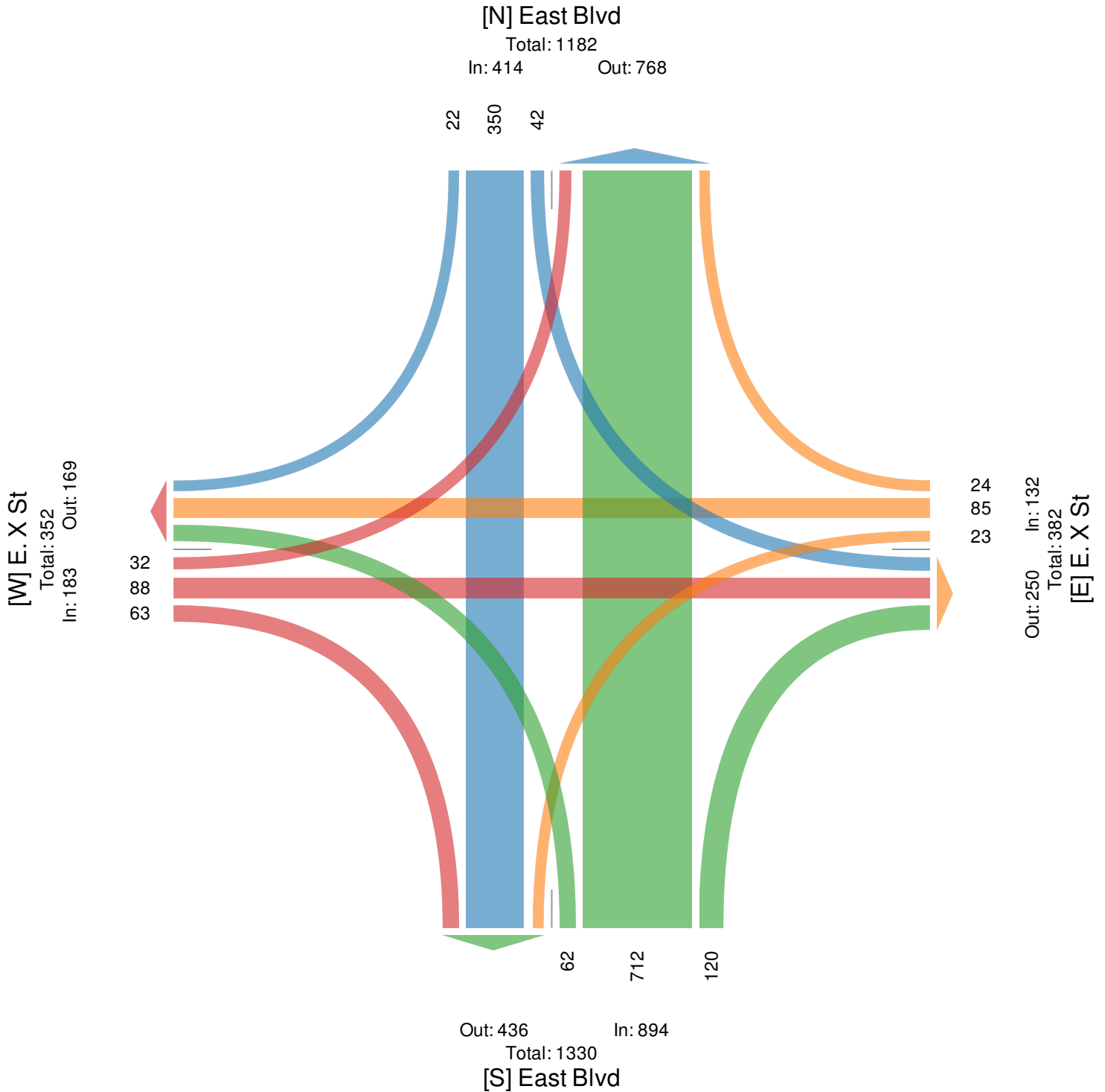
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. X St - TMC

Tue Jan 8, 2019

Midday Peak (Jan 08 2019 11:45AM - 12:45PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound					E. X St Westbound					East Blvd Northbound					E. X St Eastbound					
Time	R	T	L	U	App Ped*	R	T	L	U	App Ped*	R	T	L	U	App Ped*	R	T	L	U	App Ped*	Int
2019-01-08 11:45AM	5	93	3	0	101 0	8	23	19	0	50 0	18	92	9	0	119 0	10	10	3	0	23 0	293
12:00PM	2	103	4	0	109 0	4	15	14	0	33 0	17	82	16	0	115 0	16	17	3	0	36 0	293
12:15PM	2	64	6	0	72 0	8	18	18	0	44 0	16	75	18	0	109 0	10	22	1	0	33 0	258
12:30PM	6	66	2	0	74 0	5	20	14	0	39 0	17	100	14	0	131 0	13	17	7	0	37 0	281
Total	15	326	15	0	356 0	25	76	65	0	166 0	68	349	57	0	474 0	49	66	14	0	129 0	1125
% Approach	4.2%	91.6%	4.2%	0%	-	15.1%	45.8%	39.2%	0%	-	14.3%	73.6%	12.0%	0%	-	38.0%	51.2%	10.9%	0%	-	-
% Total	1.3%	29.0%	1.3%	0%	31.6%	2.2%	6.8%	5.8%	0%	14.8%	6.0%	31.0%	5.1%	0%	42.1%	4.4%	5.9%	1.2%	0%	11.5%	-
PHF	0.625	0.791	0.625	-	0.817	0.781	0.826	0.855	-	0.830	0.944	0.873	0.792	-	0.905	0.766	0.750	0.500	-	0.872	0.960
Lights	15	317	15	0	347	25	75	65	0	165	66	345	56	0	467	49	65	14	0	128	1107
% Lights	100%	97.2%	100%	0%	97.5%	100%	98.7%	100%	0%	99.4%	97.1%	98.9%	98.2%	0%	98.5%	100%	98.5%	100%	0%	99.2%	98.4%
Articulated Trucks	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
% Articulated Trucks	0%	2.1%	0%	0%	2.0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.6%
Buses and Single-Unit Trucks	0	2	0	0	2	0	1	0	0	1	2	4	1	0	7	0	1	0	0	1	11
% Buses and Single-Unit Trucks	0%	0.6%	0%	0%	0.6%	0%	1.3%	0%	0%	0.6%	2.9%	1.1%	1.8%	0%	1.5%	0%	1.5%	0%	0%	0.8%	1.0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. X St - TMC

Tue Jan 8, 2019

Midday Peak (Jan 08 2019 11:45AM - 12:45PM)

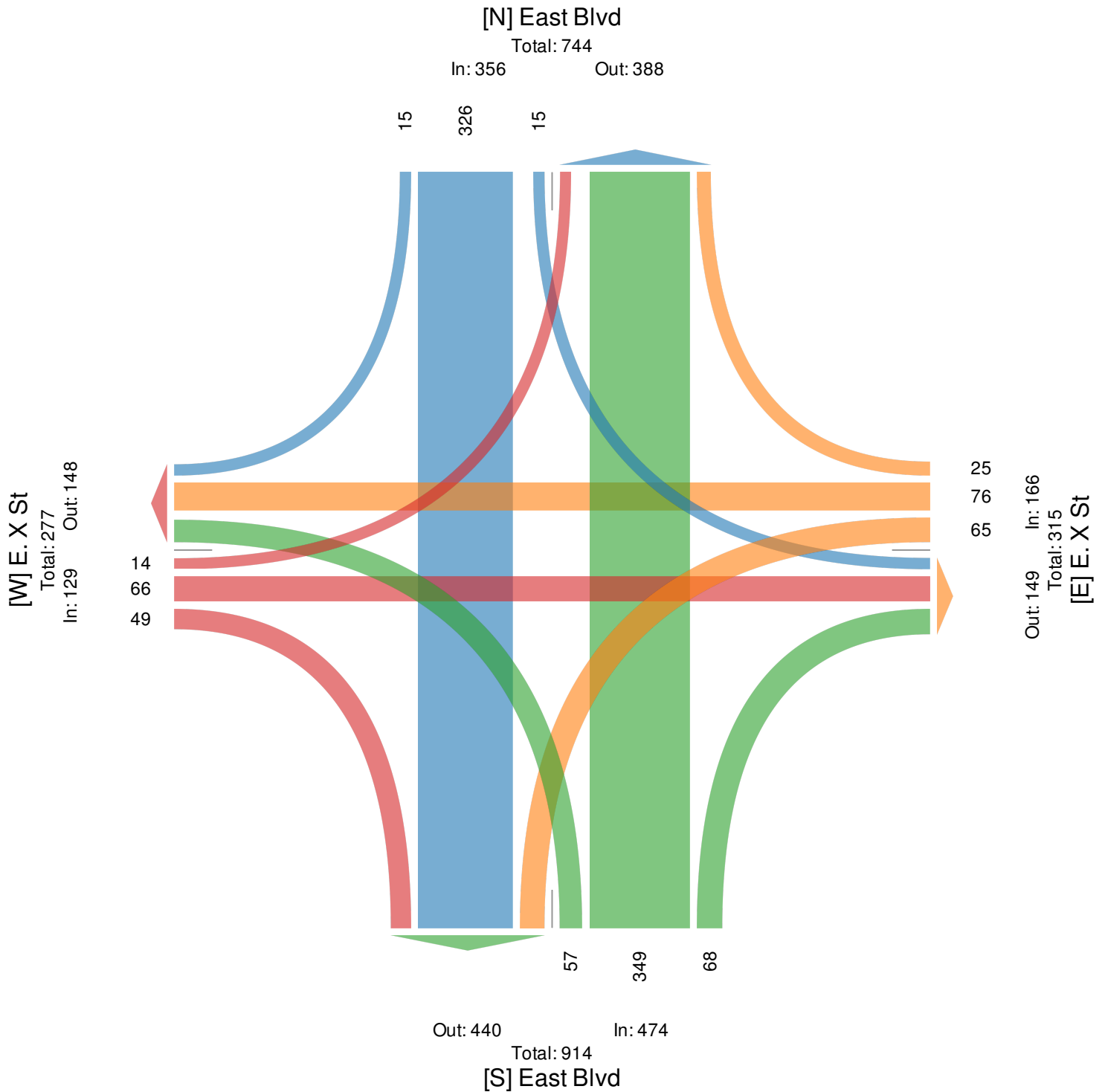
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. X St - TMC

Tue Jan 8, 2019

PM Peak (Jan 08 2019 4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E. X St Westbound						East Blvd Northbound						E. X St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2019-01-08 4:30PM	19	206	11	0	236	0	20	32	32	0	84	0	15	79	24	0	118	0	28	19	2	0	49	0	487
4:45PM	15	257	3	0	275	0	7	33	47	0	87	0	16	69	21	0	106	0	18	19	5	0	42	0	510
5:00PM	15	266	6	0	287	0	5	38	45	0	88	0	19	60	29	0	108	0	14	25	8	0	47	0	530
5:15PM	24	296	4	0	324	0	4	26	42	0	72	0	10	73	32	0	115	0	18	18	4	0	40	0	551
Total	73	1025	24	0	1122	0	36	129	166	0	331	0	60	281	106	0	447	0	78	81	19	0	178	0	2078
% Approach	6.5%	91.4%	2.1%	0%	-	-	10.9%	39.0%	50.2%	0%	-	-	13.4%	62.9%	23.7%	0%	-	-	43.8%	45.5%	10.7%	0%	-	-	-
% Total	3.5%	49.3%	1.2%	0%	54.0%	-	1.7%	6.2%	8.0%	0%	15.9%	-	2.9%	13.5%	5.1%	0%	21.5%	-	3.8%	3.9%	0.9%	0%	8.6%	-	-
PHF	0.760	0.866	0.545	-	0.866	-	0.450	0.849	0.883	-	0.940	-	0.789	0.889	0.828	-	0.947	-	0.696	0.810	0.594	-	0.908	-	0.943
Lights	73	1023	23	0	1119	-	36	129	166	0	331	-	58	275	106	0	439	-	78	81	19	0	178	-	2067
% Lights	100%	99.8%	95.8%	0%	99.7%	-	100%	100%	100%	0%	100%	-	96.7%	97.9%	100%	0%	98.2%	-	100%	100%	100%	0%	100%	-	99.5%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	2	0	0	2	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.7%	0%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0.1%
Buses and Single-Unit Trucks	0	2	1	0	3	-	0	0	0	0	0	-	2	4	0	0	6	-	0	0	0	0	0	-	9
% Buses and Single-Unit Trucks	0%	0.2%	4.2%	0%	0.3%	-	0%	0%	0%	0%	0%	-	3.3%	1.4%	0%	0%	1.3%	-	0%	0%	0%	0%	0%	-	0.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. X St - TMC

Tue Jan 8, 2019

PM Peak (Jan 08 2019 4:30PM - 5:30PM) - Overall Peak Hour

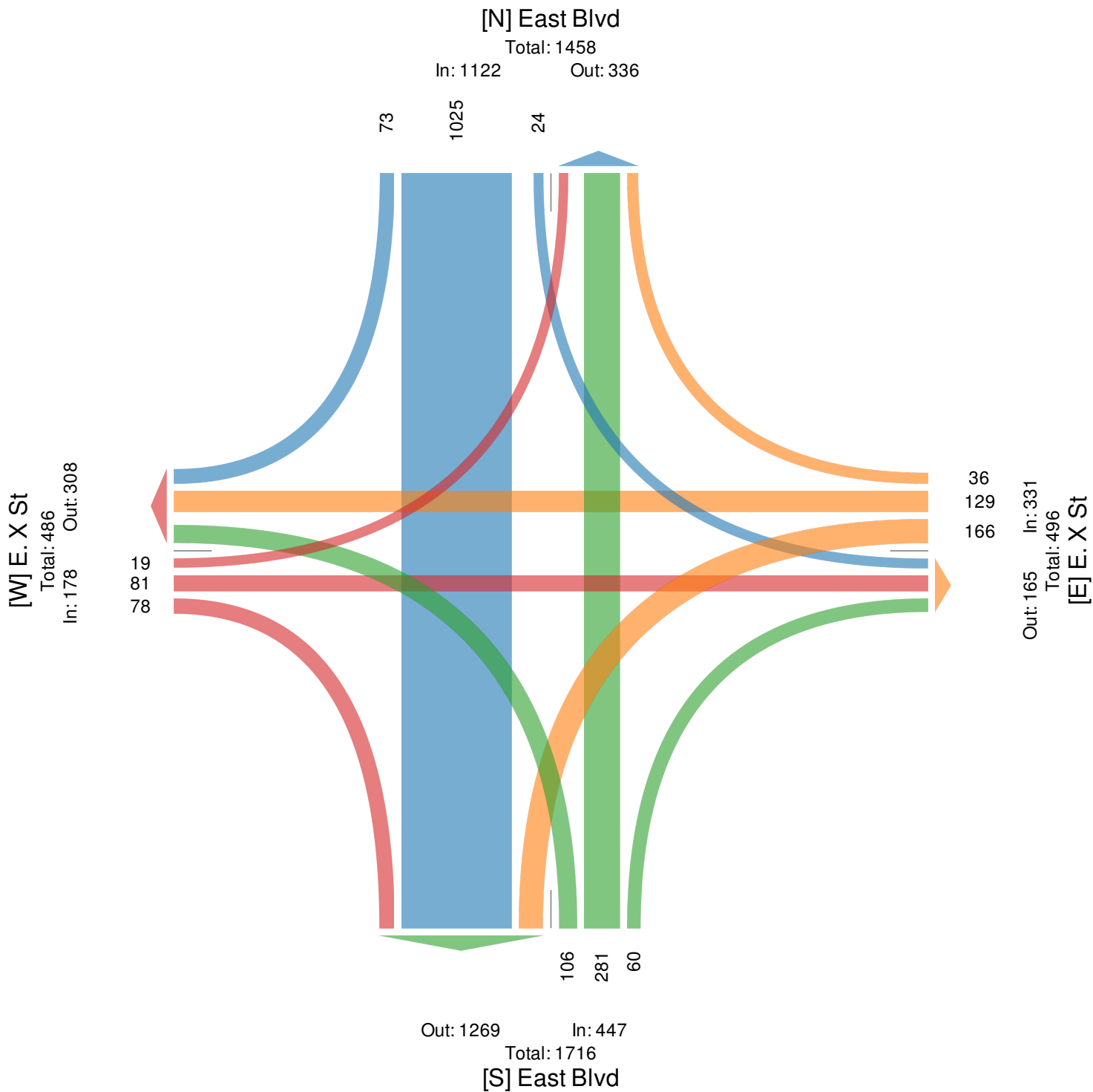
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians)

All Movements

ID: 599582, Location: 29.695216, -95.098733



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E San Augustine St Westbound						East Blvd Northbound						E San Augustine St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18																									
12:00AM	4	3	2	0	9	0	0	0	1	0	1	0	0	5	1	0	6	0	0	0	0	0	0	0	16
12:15AM	2	5	1	0	8	0	0	0	0	0	0	0	1	6	1	0	8	0	0	0	0	0	0	0	16
12:30AM	0	6	0	0	6	0	1	0	0	0	1	0	0	7	1	0	8	0	0	1	0	0	0	1	16
12:45AM	1	4	1	0	6	0	0	0	0	0	0	0	1	3	3	0	7	0	1	0	0	0	0	1	14
Hourly Total	7	18	4	0	29	0	1	0	1	0	2	0	2	21	6	0	29	0	1	1	0	0	2	0	62
1:00AM	0	8	2	0	10	0	0	0	0	0	0	0	0	2	1	0	3	0	0	1	0	0	1	0	14
1:15AM	0	4	1	0	5	0	1	0	1	0	2	0	2	7	0	0	9	0	0	0	1	0	1	0	17
1:30AM	0	4	0	0	4	0	0	0	1	0	1	0	0	3	0	0	3	0	0	0	1	0	1	0	9
1:45AM	0	1	0	0	1	0	0	0	2	0	2	0	1	4	1	0	6	0	0	0	0	0	0	0	9
Hourly Total	0	17	3	0	20	0	1	0	4	0	5	0	3	16	2	0	21	0	0	1	2	0	3	0	49
2:00AM	0	3	0	0	3	0	0	0	1	0	1	0	0	1	1	0	2	0	0	0	1	0	1	0	7
2:15AM	0	3	0	0	3	0	0	0	0	0	0	0	0	6	1	0	7	0	1	0	1	0	2	0	12
2:30AM	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	5
2:45AM	1	1	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	1	0	0	1	0	6
Hourly Total	1	9	0	0	10	0	0	0	1	0	1	0	0	13	2	0	15	0	1	1	2	0	4	0	30
3:00AM	1	5	0	0	6	0	2	0	0	0	2	0	0	6	0	0	6	0	0	1	2	0	3	0	17
3:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	15	0	0	0	2	0	2	0	17
3:30AM	0	6	1	0	7	0	1	0	0	0	1	0	2	15	0	0	17	0	1	0	2	0	3	0	28
3:45AM	3	7	1	0	11	0	1	0	3	0	4	0	0	14	1	0	15	0	4	0	2	0	6	0	36
Hourly Total	4	18	2	0	24	0	4	0	3	0	7	0	2	49	2	0	53	0	5	1	8	0	14	0	98
4:00AM	1	13	1	0	15	0	6	1	2	0	9	0	0	20	2	0	22	0	1	0	4	0	5	0	51
4:15AM	3	17	0	0	20	0	3	0	1	0	4	0	0	30	1	0	31	0	2	0	5	0	7	0	62
4:30AM	2	9	1	0	12	0	4	1	2	0	7	0	1	55	0	0	56	0	2	0	2	0	4	0	79
4:45AM	3	19	2	0	24	0	4	2	1	0	7	0	1	58	0	0	59	0	3	0	4	0	7	0	97
Hourly Total	9	58	4	0	71	0	17	4	6	0	27	0	2	163	3	0	168	0	8	0	15	0	23	0	289
5:00AM	3	14	3	0	20	0	2	2	1	0	5	0	0	62	6	0	68	0	4	0	11	0	15	0	108
5:15AM	1	18	0	0	19	0	4	1	0	0	5	0	0	98	0	0	98	0	5	0	8	0	13	0	135
5:30AM	2	32	1	0	35	0	18	1	0	0	19	0	0	119	1	0	120	0	9	0	19	0	28	0	202
5:45AM	1	38	1	0	40	0	7	1	3	0	11	0	0	136	2	0	138	0	2	0	28	0	30	0	219
Hourly Total	7	102	5	0	114	0	31	5	4	0	40	0	0	415	9	0	424	0	20	0	66	0	86	0	664
6:00AM	3	40	2	0	45	1	9	1	8	0	18	0	0	183	3	0	186	0	7	1	20	0	28	0	277
6:15AM	4	46	1	0	51	0	14	1	9	0	24	0	1	131	3	0	135	0	14	2	23	0	39	0	249
6:30AM	6	47	0	0	53	0	16	3	9	0	28	0	7	139	8	0	154	0	9	2	18	0	29	0	264
6:45AM	5	56	1	0	62	0	31	8	10	0	49	0	6	150	9	0	165	0	13	3	43	0	59	0	335
Hourly Total	18	189	4	0	211	1	70	13	36	0	119	0	14	603	23	0	640	0	43	8	104	0	155	0	1125
7:00AM	11	70	4	0	85	0	22	4	8	0	34	0	2	165	8	0	175	0	17	1	38	0	56	0	350
7:15AM	16	95	9	0	120	0	17	17	17	0	51	0	6	172	16	0	194	0	18	1	30	0	49	0	414
7:30AM	19	98	7	0	124	0	21	8	16	0	45	0	2	152	13	0	167	0	30	6	29	0	65	0	401
7:45AM	19	92	4	0	115	0	10	6	8	0	24	0	4	166	17	0	187	0	23	2	25	0	50	0	376
Hourly Total	65	355	24	0	444	0	70	35	49	0	154	0	14	655	54	0	723	0	88	10	122	0	220	0	1541
8:00AM	20	80	2	0	102	0	12	5	5	0	22	0	6	109	24	0	139	0	21	3	29	0	53	0	316
8:15AM	7	59	5	0	71	0	10	10	10	0	30	0	3	98	19	0	120	0	20	4	14	0	38	0	259
8:30AM	11	61	3	0	75	0	5	3	6	0	14	0	4	72	16	0	92	0	21	2	16	0	39	0	220
8:45AM	9	66	3	0	78	0	8	1	6	0	15	1	5	85	6	0	96	0	20	4	20	0	44	0	233
Hourly Total	47	266	13	0	326	0	35	19	27	0	81	1	18	364	65	0	447	0	82	13	79	0	174	0	1028
9:00AM	3	52	3	0	58	1	0	1	4	0	5	0	3	60	9	0	72	0	12	0	7	0	19	1	154
9:15AM	5	48	5	0	58	0	9	1	3	0	13	1	5	64	18	0	87	2	13	1	6	0	20	0	178
9:30AM	8	49	0	0	57	0	1	1	3	0	5	0	0	67	11	0	78	0	23	4	10	0	37	0	177
9:45AM	7	59	2	0	68	0	7	5	4	0	16	0	5	55	12	0	72	0	16	4	7	0	27	2	183
Hourly Total	23	208	10	0	241	1	17	8	14	0	39	1	13	246	50	0	309	2	64	9	30	0	103	3	692
10:00AM	7	55	0	0	62	0	2	2	3	0	7	0	2	55	16	0	73	0	20	1	7	0	28	0	170
10:15AM	7	60	4	0	71	0	8	8	6	0	22	0	5	59	18	0	82	0	22	6	9	0	37	0	212
10:30AM	10	65	2	0	77	0	1	2	5	0	8	0	4	62	22	0	88	0	24	1	9	0	34	0	207
10:45AM	8	67	1	0	76	0	2	5	4	0	11	0	3	74	19	0	96	0	23	1	14	0	38	0	221
Hourly Total	32	247	7	0	286	0	13	17	18	0	48	0	14	250	75	0	339	0	89	9	39	0	137	0	810
11:00AM	10	110	6	0	126	0	6	5	4	0	15	0	9	79	15	0	103	0	10	1	11	0	22	0	266
11:15AM	17	122	2	0	141	0	3	2	1	0	6	0	3	91	11	0	105	0	26	4	15	0	45	0	297
11:30AM	16	98	5	0																					

Leg Direction	East Blvd Southbound						E San Augustine St Westbound						East Blvd Northbound						E San Augustine St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
1:30PM	6	69	1	0	76	0	9	1	5	0	15	0	6	90	19	0	115	0	18	2	17	0	37	0	243
1:45PM	5	88	2	0	95	0	4	2	8	0	14	0	6	104	22	0	132	0	22	6	12	0	40	0	281
Hourly Total	36	335	9	0	380	0	18	8	28	0	54	0	24	368	87	0	479	0	95	14	42	0	151	0	1064
2:00PM	6	76	3	0	85	0	6	2	6	0	14	0	7	86	17	0	110	0	19	0	6	0	25	0	234
2:15PM	12	81	4	0	97	0	1	8	7	0	16	0	6	73	17	0	96	0	14	5	9	0	28	0	237
2:30PM	12	84	6	0	102	0	1	4	7	0	12	1	9	85	20	0	114	0	27	2	12	0	41	0	269
2:45PM	17	81	7	0	105	0	7	3	4	0	14	0	5	96	17	0	118	0	29	2	13	0	44	0	281
Hourly Total	47	322	20	0	389	0	15	17	24	0	56	1	27	340	71	0	438	0	89	9	40	0	138	0	1021
3:00PM	27	125	6	0	158	0	6	6	3	0	15	0	10	76	28	0	114	0	26	5	6	0	37	0	324
3:15PM	14	120	11	0	145	0	2	11	7	0	20	0	7	98	28	0	133	0	20	7	7	0	34	1	332
3:30PM	17	136	6	0	159	0	7	2	6	0	15	0	7	82	21	0	110	0	29	4	10	0	43	0	327
3:45PM	21	162	6	1	190	0	6	4	5	0	15	0	12	95	23	0	130	2	31	7	12	0	50	1	385
Hourly Total	79	543	29	1	652	0	21	23	21	0	65	0	36	351	100	0	487	2	106	23	35	0	164	2	1368
4:00PM	38	179	14	0	231	0	5	6	10	0	21	0	7	90	34	0	131	0	34	11	18	0	63	0	446
4:15PM	28	210	14	0	252	0	9	5	10	0	24	1	18	93	31	0	142	0	40	10	9	0	59	0	477
4:30PM	39	211	11	0	261	0	4	6	16	0	26	0	6	114	24	0	144	0	37	4	16	0	57	0	488
4:45PM	35	261	19	0	315	0	8	0	8	0	16	0	14	79	36	0	129	0	34	6	17	0	57	0	517
Hourly Total	140	861	58	0	1059	0	26	17	44	0	87	1	45	376	125	0	546	0	145	31	60	0	236	0	1928
5:00PM	42	227	18	0	287	0	7	6	4	0	17	0	9	93	41	0	143	0	34	4	15	0	53	0	500
5:15PM	58	221	27	0	306	0	7	1	6	0	14	0	14	81	38	0	133	0	33	11	11	0	55	0	508
5:30PM	40	191	15	0	246	0	9	5	10	0	24	0	8	84	36	0	128	0	29	4	6	0	39	0	437
5:45PM	30	226	12	0	268	0	2	6	6	0	14	0	10	70	29	0	109	0	34	5	15	0	54	0	445
Hourly Total	170	865	72	0	1107	0	25	18	26	0	69	0	41	328	144	0	513	0	130	24	47	0	201	0	1890
6:00PM	21	129	8	0	158	0	4	3	8	0	15	0	15	83	33	0	131	0	15	7	7	0	29	0	333
6:15PM	15	138	18	0	171	0	8	4	6	0	18	0	16	80	20	0	116	0	20	5	6	0	31	0	336
6:30PM	18	106	16	0	140	0	4	9	8	0	21	0	10	76	27	0	113	0	16	4	9	0	29	0	303
6:45PM	16	95	12	1	124	0	7	4	9	0	20	0	8	73	31	0	112	0	20	6	4	0	30	0	286
Hourly Total	70	468	54	1	593	0	23	20	31	0	74	0	49	312	111	0	472	0	71	22	26	0	119	0	1258
7:00PM	13	90	5	0	108	0	5	2	10	0	17	0	16	59	37	0	112	0	23	3	6	0	32	0	269
7:15PM	11	90	7	0	108	0	4	3	4	0	11	0	10	67	28	0	105	0	16	4	5	0	25	0	249
7:30PM	12	77	3	0	92	0	3	0	2	0	5	0	11	48	22	0	81	0	11	3	3	0	17	0	195
7:45PM	7	53	5	0	65	0	4	3	5	0	12	0	11	59	25	0	95	0	25	2	3	0	30	0	202
Hourly Total	43	310	20	0	373	0	16	8	21	0	45	0	48	233	112	0	393	0	75	12	17	0	104	0	915
8:00PM	10	46	3	0	59	0	0	2	2	0	4	0	9	59	33	0	101	1	16	5	4	0	25	0	189
8:15PM	5	53	3	0	61	0	4	2	7	0	13	0	8	51	24	0	83	0	5	3	5	0	13	0	170
8:30PM	6	52	6	0	64	1	3	2	3	0	8	0	4	41	11	0	56	0	14	2	5	0	21	1	149
8:45PM	6	55	6	0	67	0	0	4	4	0	8	0	9	42	20	0	71	0	13	8	2	0	23	0	169
Hourly Total	27	206	18	0	251	1	7	10	16	0	33	0	30	193	88	0	311	1	48	18	16	0	82	1	677
9:00PM	9	40	3	0	52	0	2	1	2	0	5	0	6	36	12	0	54	0	14	7	2	0	23	0	134
9:15PM	5	37	4	0	46	0	1	0	2	0	3	0	9	53	20	0	82	0	7	3	3	0	13	0	144
9:30PM	3	32	5	0	40	0	1	0	2	0	3	0	4	30	8	0	42	0	3	1	0	0	4	0	89
9:45PM	6	29	2	0	37	2	2	1	2	0	5	0	6	35	17	0	58	0	4	3	2	0	9	0	109
Hourly Total	23	138	14	0	175	2	6	2	8	0	16	0	25	154	57	0	236	0	28	14	7	0	49	0	476
10:00PM	5	20	3	0	28	1	1	2	3	0	6	0	3	27	13	0	43	0	6	0	3	0	9	0	86
10:15PM	5	25	4	0	34	0	0	2	3	0	5	0	0	31	2	0	33	0	3	6	1	0	10	0	82
10:30PM	3	16	3	0	22	0	3	1	4	0	8	0	4	19	6	1	30	0	6	4	5	0	15	0	75
10:45PM	3	19	1	0	23	0	1	1	1	0	3	0	4	16	6	0	26	0	4	1	5	0	10	0	62
Hourly Total	16	80	11	0	107	1	5	6	11	0	22	0	11	93	27	1	132	0	19	11	14	0	44	0	305
11:00PM	2	21	0	0	23	0	0	0	0	0	0	0	0	15	4	0	19	0	6	0	1	0	7	0	49
11:15PM	2	15	0	0	17	0	0	1	1	0	2	0	3	13	2	0	18	0	1	1	0	0	2	0	39
11:30PM	1	14	1	0	16	0	1	0	0	0	1	0	1	8	2	0	11	0	1	1	3	0	5	0	33
11:45PM	2	7	3	0	12	0	1	0	0	0	1	0	2	10	2	0	14	0	1	0	0	0	1	0	28
Hourly Total	7	57	4	0	68	0	2	1	1	0	4	0	6	46	10	0	62	0	9	2	4	0	15	0	149
Total	970	6474	414	2	7860	6	454	260	422	0	1136	4	468	6356	1372	2	8198	5	1402	262	871	0	2535	6	19729
% Approach	12.3%	82.4%	5.3%	0%	-	-	40.0%	22.9%	37.1%	0%	-	-	5.7%	77.5%	16.7%	0%	-	-	55.3%	10.3%	34.4%	0%	-	-	-
% Total	4.9%	32.8%	2.1%	0%	39.8%	-	2.3%	1.3%	2.1%	0%	5.8%	-	2.4%	32.2%	7.0%	0%	41.6%	-	7.1%	1.3%	4.4%	0%	12.8%	-	-
Lights	952	6347	408	2	7709	-	449	259	411	0	1119	-	462	6250	1360	2	8074	-	1394	256	860	0	2510	-	19412
% Lights	98.1%	98.0%	98.6%	100%	98.1%	-	98.9%	99.6%	97.4%	0%	98.5%	-	98.7%	98.3%	99.1%	100%	98.5%	-	99.4%	97.7%	98.7%	0%	99.0%	-	98.4%
Articulated Trucks	2	25	0	0	27	-	0	0	0	0	0	-	0	22	0	0	22	-	2	0	2	0	4	-	53
% Articulated Trucks	0.2%	0.4%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.3%	-	0.1%	0%	0.2%	0%	0.2%	-	0.3%
Buses and Single-Unit Trucks	16	102	6	0	124	-	5	1	11	0	17	-	6	84	12	0	102	-	6	6	9	0	21	-	264
% Buses and Single-Unit Trucks	1.6%	1.6%	1.4%	0%	1.6%	-	1.1%	0.4%	2.6%	0%	1.5%	-	1.3%	1.3%	0.9%	0%	1.2%	-	0.4%	2.3%	1.0%	0%	0.8%	-	1.3%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	4	-	-	-	-	-	5	-	-	-	-	-	6	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	100%

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

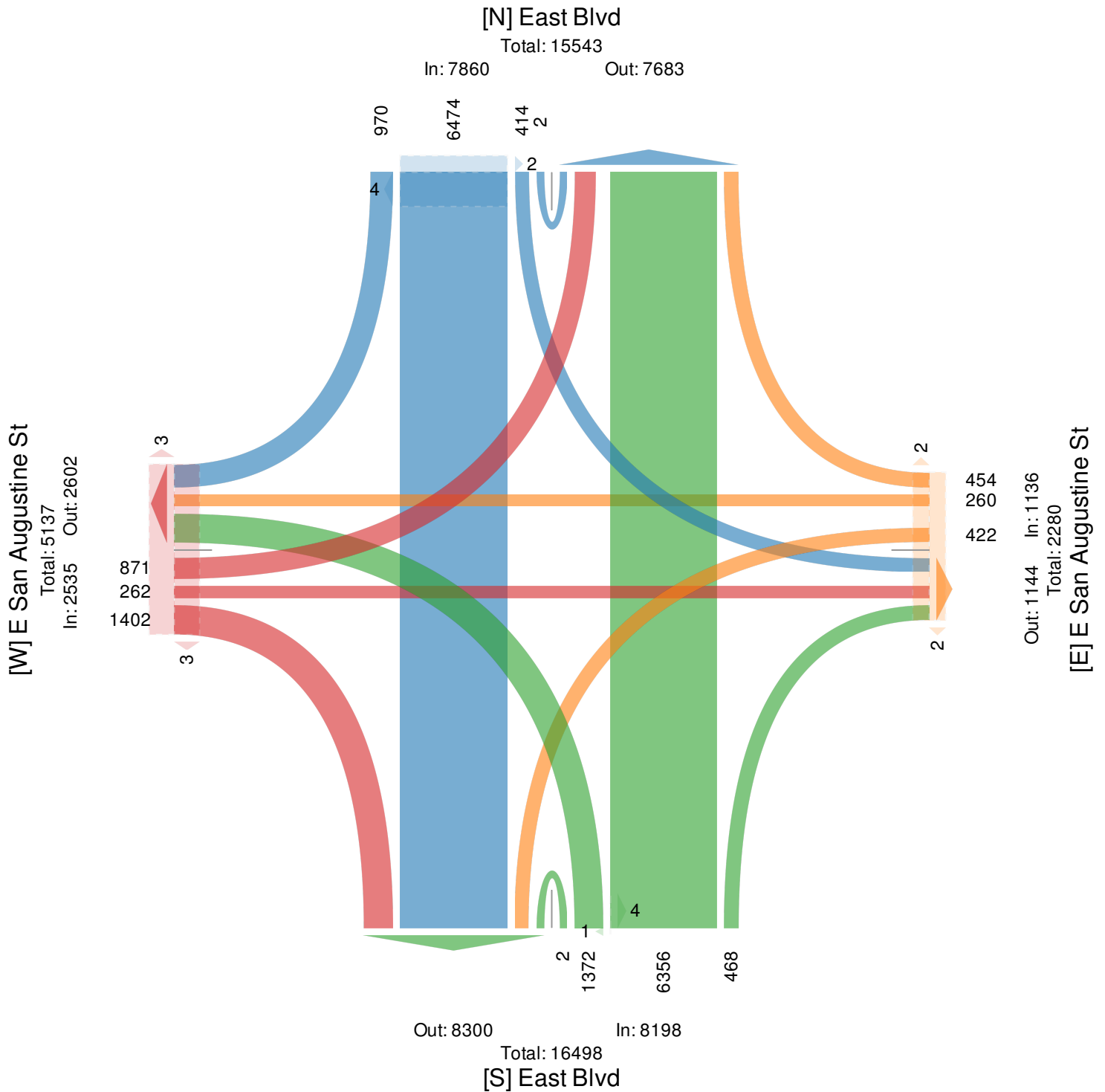
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E San Augustine St Westbound						East Blvd Northbound						E San Augustine St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 7:00AM	11	70	4	0	85	0	22	4	8	0	34	0	2	165	8	0	175	0	17	1	38	0	56	0	350
7:15AM	16	95	9	0	120	0	17	17	17	0	51	0	6	172	16	0	194	0	18	1	30	0	49	0	414
7:30AM	19	98	7	0	124	0	21	8	16	0	45	0	2	152	13	0	167	0	30	6	29	0	65	0	401
7:45AM	19	92	4	0	115	0	10	6	8	0	24	0	4	166	17	0	187	0	23	2	25	0	50	0	376
Total	65	355	24	0	444	0	70	35	49	0	154	0	14	655	54	0	723	0	88	10	122	0	220	0	1541
% Approach	14.6%	80.0%	5.4%	0%	-	-	45.5%	22.7%	31.8%	0%	-	-	1.9%	90.6%	7.5%	0%	-	-	40.0%	4.5%	55.5%	0%	-	-	-
% Total	4.2%	23.0%	1.6%	0%	28.8%	-	4.5%	2.3%	3.2%	0%	10.0%	-	0.9%	42.5%	3.5%	0%	46.9%	-	5.7%	0.6%	7.9%	0%	14.3%	-	-
PHF	0.855	0.906	0.667	-	0.895	-	0.795	0.515	0.721	-	0.755	-	0.583	0.952	0.794	-	0.932	-	0.733	0.417	0.803	-	0.846	-	0.931
Lights	63	345	23	0	431	-	70	34	47	0	151	-	13	648	53	0	714	-	86	10	122	0	218	-	1514
% Lights	96.9%	97.2%	95.8%	0%	97.1%	-	100%	97.1%	95.9%	0%	98.1%	-	92.9%	98.9%	98.1%	0%	98.8%	-	97.7%	100%	100%	0%	99.1%	-	98.2%
Articulated Trucks	1	2	0	0	3	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	4
% Articulated Trucks	1.5%	0.6%	0%	0%	0.7%	-	0%	0%	0%	0%	0%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0.3%
Buses and Single-Unit Trucks	1	8	1	0	10	-	0	1	2	0	3	-	1	6	1	0	8	-	2	0	0	0	2	-	23
% Buses and Single-Unit Trucks	1.5%	2.3%	4.2%	0%	2.3%	-	0%	2.9%	4.1%	0%	1.9%	-	7.1%	0.9%	1.9%	0%	1.1%	-	2.3%	0%	0%	0%	0.9%	-	1.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

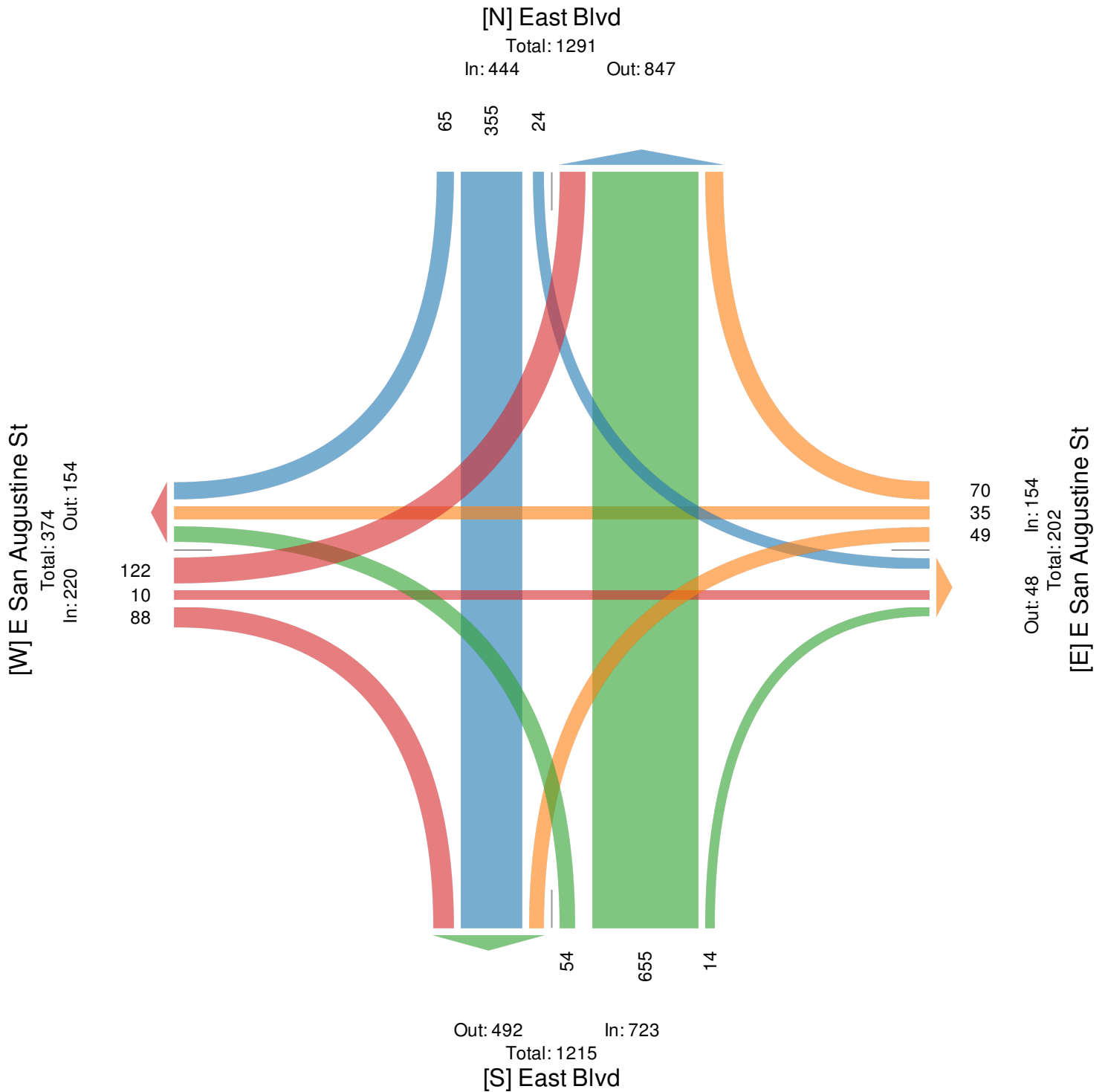
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 11:45AM - 12:45PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E San Augustine St Westbound						East Blvd Northbound						E San Augustine St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 11:45AM	19	104	6	0	129	0	3	3	1	0	7	0	5	103	14	0	122	0	23	4	11	0	38	0	296
12:00PM	7	123	0	0	130	0	4	4	4	0	12	0	5	97	17	0	119	0	29	5	17	0	51	0	312
12:15PM	10	93	4	0	107	0	5	4	5	0	14	0	6	100	23	0	129	0	20	5	10	0	35	0	285
12:30PM	12	86	3	0	101	0	3	1	4	0	8	0	6	117	25	1	149	0	33	2	13	0	48	0	306
Total	48	406	13	0	467	0	15	12	14	0	41	0	22	417	79	1	519	0	105	16	51	0	172	0	1199
% Approach	10.3%	86.9%	2.8%	0%	-	-	36.6%	29.3%	34.1%	0%	-	-	4.2%	80.3%	15.2%	0.2%	-	-	61.0%	9.3%	29.7%	0%	-	-	-
% Total	4.0%	33.9%	1.1%	0%	38.9%	-	1.3%	1.0%	1.2%	0%	3.4%	-	1.8%	34.8%	6.6%	0.1%	43.3%	-	8.8%	1.3%	4.3%	0%	14.3%	-	-
PHF	0.632	0.825	0.542	-	0.898	-	0.750	0.750	0.700	-	0.732	-	0.917	0.891	0.790	0.250	0.871	-	0.795	0.800	0.750	-	0.843	-	0.961
Lights	46	401	12	0	459	-	14	12	14	0	40	-	21	410	79	1	511	-	105	16	50	0	171	-	1181
% Lights	95.8%	98.8%	92.3%	0%	98.3%	-	93.3%	100%	100%	0%	97.6%	-	95.5%	98.3%	100%	100%	98.5%	-	100%	100%	98.0%	0%	99.4%	-	98.5%
Articulated Trucks	1	1	0	0	2	-	0	0	0	0	0	-	0	2	0	0	2	-	0	0	0	0	0	-	4
% Articulated Trucks	2.1%	0.2%	0%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0%	0.5%	0%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0.3%
Buses and Single-Unit Trucks	1	4	1	0	6	-	1	0	0	0	1	-	1	5	0	0	6	-	0	0	1	0	1	-	14
% Buses and Single-Unit Trucks	2.1%	1.0%	7.7%	0%	1.3%	-	6.7%	0%	0%	0%	2.4%	-	4.5%	1.2%	0%	0%	1.2%	-	0%	0%	2.0%	0%	0.6%	-	1.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 11:45AM - 12:45PM)

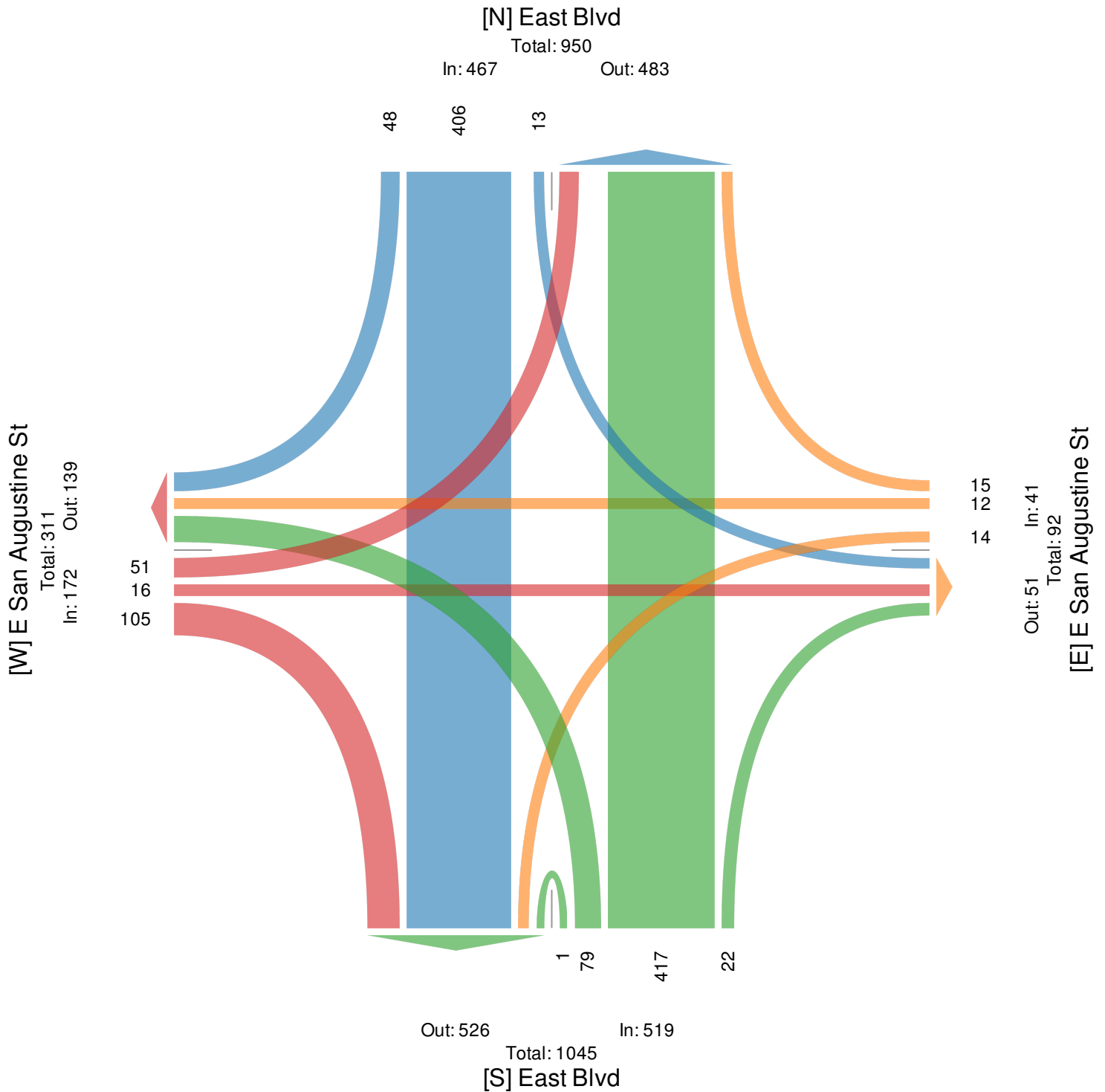
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681

CJ Hensch & Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E San Augustine St Westbound						East Blvd Northbound						E San Augustine St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 4:30PM	39	211	11	0	261	0	4	6	16	0	26	0	6	114	24	0	144	0	37	4	16	0	57	0	488
4:45PM	35	261	19	0	315	0	8	0	8	0	16	0	14	79	36	0	129	0	34	6	17	0	57	0	517
5:00PM	42	227	18	0	287	0	7	6	4	0	17	0	9	93	41	0	143	0	34	4	15	0	53	0	500
5:15PM	58	221	27	0	306	0	7	1	6	0	14	0	14	81	38	0	133	0	33	11	11	0	55	0	508
Total	174	920	75	0	1169	0	26	13	34	0	73	0	43	367	139	0	549	0	138	25	59	0	222	0	2013
% Approach	14.9%	78.7%	6.4%	0%	-	-	35.6%	17.8%	46.6%	0%	-	-	7.8%	66.8%	25.3%	0%	-	-	62.2%	11.3%	26.6%	0%	-	-	-
% Total	8.6%	45.7%	3.7%	0%	58.1%	-	1.3%	0.6%	1.7%	0%	3.6%	-	2.1%	18.2%	6.9%	0%	27.3%	-	6.9%	1.2%	2.9%	0%	11.0%	-	-
PHF	0.750	0.881	0.694	-	0.928	-	0.813	0.542	0.531	-	0.702	-	0.768	0.805	0.848	-	0.953	-	0.932	0.568	0.868	-	0.974	-	0.973
Lights	174	915	75	0	1164	-	25	13	32	0	70	-	42	362	137	0	541	-	136	25	58	0	219	-	1994
% Lights	100%	99.5%	100%	0%	99.6%	-	96.2%	100%	94.1%	0%	95.9%	-	97.7%	98.6%	98.6%	0%	98.5%	-	98.6%	100%	98.3%	0%	98.6%	-	99.1%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	1
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	0	5	0	0	5	-	1	0	2	0	3	-	1	4	2	0	7	-	2	0	1	0	3	-	18
% Buses and Single-Unit Trucks	0%	0.5%	0%	0%	0.4%	-	3.8%	0%	5.9%	0%	4.1%	-	2.3%	1.1%	1.4%	0%	1.3%	-	1.4%	0%	1.7%	0%	1.4%	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E San Augustine St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

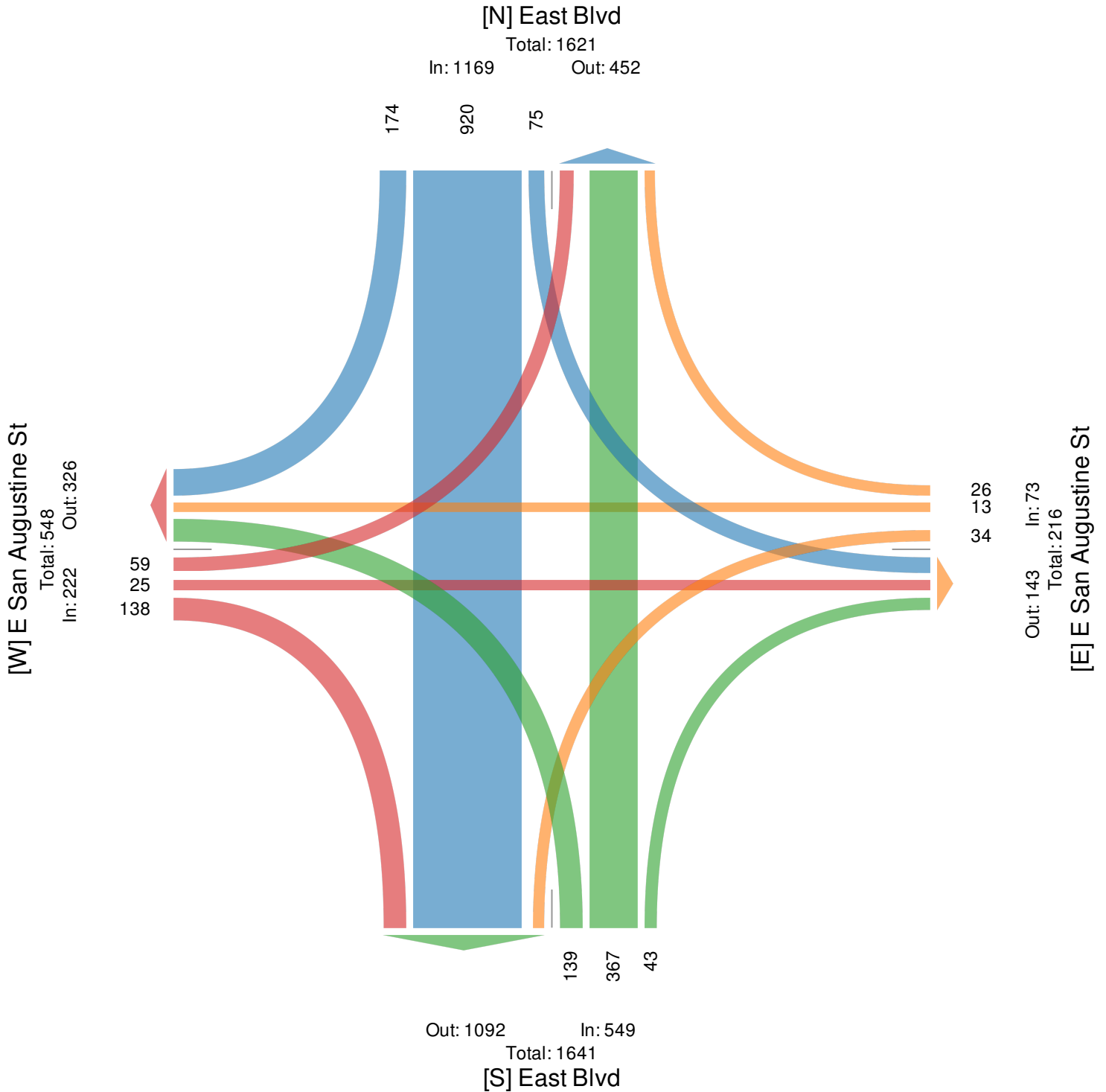
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599583, Location: 29.69006, -95.098681



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. P St - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM(+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E.P St Westbound						East Blvd Northbound						E. P St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18																									
12:00AM	0	3	0	0	3	0	0	0	1	0	1	0	5	6	3	0	14	0	0	0	0	0	0	0	18
12:15AM	0	5	1	0	6	0	0	0	1	0	1	0	4	6	3	0	13	0	1	0	0	0	1	0	21
12:30AM	0	5	1	0	6	0	0	0	0	0	0	0	2	8	1	0	11	0	0	0	0	0	0	0	17
12:45AM	0	7	0	0	7	0	0	0	0	0	0	0	2	7	1	0	10	0	0	0	2	0	2	0	19
Hourly Total	0	20	2	0	22	0	0	0	2	0	2	0	13	27	8	0	48	0	1	0	2	0	3	0	75
1:00AM	2	4	0	0	6	0	0	1	3	0	4	0	2	2	0	0	4	0	0	0	1	0	1	0	15
1:15AM	2	4	1	0	7	0	0	0	3	0	3	0	0	6	2	0	8	0	0	0	3	0	3	0	21
1:30AM	0	5	0	0	5	0	0	0	1	0	1	0	2	3	1	0	6	0	2	1	0	0	3	0	15
1:45AM	1	2	0	0	3	0	0	0	0	0	0	0	1	6	0	0	7	0	1	0	0	0	1	0	11
Hourly Total	5	15	1	0	21	0	0	1	7	0	8	0	5	17	3	0	25	0	3	1	4	0	8	0	62
2:00AM	0	4	0	0	4	0	0	0	2	0	2	0	0	3	1	0	4	0	1	0	0	0	1	0	11
2:15AM	1	3	0	0	4	0	0	0	1	0	1	0	1	6	2	0	9	0	0	0	0	0	0	0	14
2:30AM	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	5
2:45AM	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	2	0	3	0	6
Hourly Total	2	9	0	0	11	0	0	0	3	0	3	0	1	13	4	0	18	0	2	0	2	0	4	0	36
3:00AM	0	5	0	0	5	0	0	1	1	0	2	0	0	6	0	0	6	0	1	0	0	0	1	0	14
3:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	13	0	1	0	2	0	3	0	16
3:30AM	0	6	0	0	6	0	2	0	0	0	2	0	1	13	0	0	14	0	1	0	3	0	4	0	26
3:45AM	2	11	0	0	13	0	2	1	0	0	3	0	0	10	0	0	10	0	2	0	1	0	3	0	29
Hourly Total	2	22	0	0	24	0	4	2	1	0	7	0	1	42	0	0	43	0	5	0	6	0	11	0	85
4:00AM	1	15	0	0	16	0	1	0	2	0	3	0	0	21	0	0	21	0	0	0	0	0	0	0	40
4:15AM	0	20	1	0	21	0	1	1	5	0	7	0	0	30	0	0	30	0	1	0	2	0	3	0	61
4:30AM	0	15	0	0	15	0	3	0	0	0	3	0	0	45	1	0	46	0	4	0	8	0	12	0	76
4:45AM	2	19	3	0	24	0	4	1	5	0	10	0	0	49	1	0	50	0	0	0	5	0	5	0	89
Hourly Total	3	69	4	0	76	0	9	2	12	0	23	0	0	145	2	0	147	0	5	0	15	0	20	0	266
5:00AM	2	18	2	0	22	0	7	1	6	0	14	0	1	54	1	0	56	0	6	0	8	0	14	0	106
5:15AM	1	21	0	0	22	0	7	0	3	0	10	0	2	81	1	0	84	0	10	0	15	0	25	0	141
5:30AM	1	39	0	0	40	0	8	0	4	0	12	0	2	103	1	1	107	0	7	0	12	0	19	0	178
5:45AM	2	42	1	0	45	0	6	0	3	0	9	0	0	131	2	0	133	1	9	0	8	0	17	0	204
Hourly Total	6	120	3	0	129	0	28	1	16	0	45	0	5	369	5	1	380	1	32	0	43	0	75	0	629
6:00AM	2	49	3	1	55	0	15	0	11	1	27	0	7	151	3	0	161	1	5	0	22	0	27	0	270
6:15AM	2	66	2	0	70	0	5	2	9	0	16	0	1	113	3	0	117	0	11	0	21	0	32	0	235
6:30AM	4	50	1	0	55	0	15	4	29	0	48	0	4	110	2	0	116	0	18	0	23	0	41	0	260
6:45AM	6	77	3	0	86	0	16	0	21	0	37	0	5	118	9	0	132	0	23	1	30	0	54	0	309
Hourly Total	14	242	9	1	266	0	51	6	70	1	128	0	17	492	17	0	526	1	57	1	96	0	154	0	1074
7:00AM	2	82	3	0	87	0	17	6	25	0	48	0	5	126	11	0	142	0	20	0	28	0	48	0	325
7:15AM	12	127	3	0	142	0	19	9	38	0	66	0	11	164	12	0	187	0	32	1	23	0	56	0	451
7:30AM	8	119	8	1	136	0	13	6	34	0	53	0	8	130	21	0	159	0	24	5	22	0	51	0	399
7:45AM	6	120	6	0	132	0	17	5	25	0	47	0	17	145	6	0	168	0	35	1	8	0	44	0	391
Hourly Total	28	448	20	1	497	0	66	26	122	0	214	0	41	565	50	0	656	0	111	7	81	0	199	0	1566
8:00AM	5	94	7	0	106	0	14	2	16	0	32	0	11	125	14	0	150	0	13	2	10	0	25	0	313
8:15AM	5	79	8	0	92	0	12	8	11	0	31	0	10	94	13	1	118	0	15	2	6	0	23	0	264
8:30AM	4	78	3	0	85	0	7	5	10	0	22	0	6	81	3	0	90	0	9	3	4	0	16	0	213
8:45AM	3	80	5	0	88	0	11	4	13	0	28	1	3	76	6	0	85	0	6	4	5	0	15	2	216
Hourly Total	17	331	23	0	371	0	44	19	50	0	113	1	30	376	36	1	443	0	43	11	25	0	79	2	1006
9:00AM	2	74	1	0	77	0	3	1	8	0	12	0	5	67	8	0	80	0	11	1	4	0	16	0	185
9:15AM	3	57	3	0	63	0	5	1	18	0	24	0	6	76	4	0	86	0	14	2	7	0	23	1	196
9:30AM	5	68	1	0	74	0	3	0	10	0	13	1	10	65	14	0	89	0	10	2	4	0	16	0	192
9:45AM	5	73	5	0	83	0	7	2	12	0	21	0	5	63	3	0	71	0	13	1	2	0	16	0	191
Hourly Total	15	272	10	0	297	0	18	4	48	0	70	1	26	271	29	0	326	0	48	6	17	0	71	1	764
10:00AM	2	69	5	0	76	0	4	2	8	0	14	0	4	64	10	0	78	0	14	0	4	0	18	0	186
10:15AM	5	77	0	0	82	0	1	5	9	0	15	0	8	72	11	0	91	0	9	1	7	0	17	0	205
10:30AM	1	98	1	0	100	0	2	0	6	0	8	0	7	80	8	0	95	0	12	4	7	0	23	0	226
10:45AM	5	85	2	0	92	0	6	3	13	0	22	0	7	92	12	0	111	0	8	0	3	0	11	0	236
Hourly Total	13	329	8	0	350	0	13	10	36	0	59	0	26	308	41	0	375	0	43	5	21	0	69	0	853
11:00AM	6	117	0	0	123	0	5	2	6	0	13	0	7	91	15	0	113	0	7	1	7	0	15	0	264
11:15AM	8	141	5	0	154	0	3	4	10	0	17	0	8	88	14	0	110	0	9	1	4	0	14	0	295

Leg Direction	East Blvd Southbound						E.P St Westbound						East Blvd Northbound						E. P St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
1:45PM	6	106	2	0	114	0	4	2	14	0	20	0	7	122	11	0	140	0	9	2	6	0	17	0	291
Hourly Total	17	413	15	0	445	0	19	5	42	0	66	0	34	445	48	0	527	0	59	5	15	0	79	0	1117
2:00PM	5	94	5	0	104	0	4	1	9	0	14	0	14	103	10	0	127	0	14	0	3	0	17	0	262
2:15PM	6	89	2	0	97	0	3	2	7	0	12	0	13	84	20	0	117	0	20	2	3	0	25	0	251
2:30PM	11	101	5	0	117	0	5	3	14	0	22	0	11	112	13	0	136	0	12	1	3	0	16	0	291
2:45PM	7	107	3	0	117	0	4	3	9	0	16	0	11	107	21	0	139	0	18	2	4	0	24	0	296
Hourly Total	29	391	15	0	435	0	16	9	39	0	64	0	49	406	64	0	519	0	64	5	13	0	82	0	1100
3:00PM	10	136	8	0	154	0	2	3	13	0	18	0	11	112	13	0	136	0	23	7	8	0	38	0	346
3:15PM	9	138	4	0	151	0	3	4	14	0	21	0	23	110	19	0	152	0	10	3	9	0	22	0	346
3:30PM	9	148	14	0	171	0	6	3	15	0	24	0	20	112	13	0	145	0	21	4	3	0	28	0	368
3:45PM	18	169	5	0	192	0	7	2	17	0	26	0	35	116	40	0	191	0	13	4	8	0	25	0	434
Hourly Total	46	591	31	0	668	0	18	12	59	0	89	0	89	450	85	0	624	0	67	18	28	0	113	0	1494
4:00PM	14	203	10	0	227	0	8	3	14	0	25	0	29	117	23	0	169	0	25	6	6	0	37	0	458
4:15PM	16	222	12	0	250	0	8	5	20	0	33	0	27	126	35	0	188	0	37	9	8	0	54	0	525
4:30PM	17	221	11	0	249	0	4	7	17	0	28	0	23	117	35	0	175	0	30	4	14	0	48	0	500
4:45PM	29	260	20	0	309	0	7	13	14	0	34	0	26	124	19	1	170	0	18	1	4	0	23	0	536
Hourly Total	76	906	53	0	1035	0	27	28	65	0	120	0	105	484	112	1	702	0	110	20	32	0	162	0	2019
5:00PM	24	230	15	0	269	0	7	4	20	0	31	0	20	113	44	0	177	0	22	9	10	0	41	1	518
5:15PM	29	226	8	0	263	0	5	4	8	0	17	0	26	132	35	0	193	0	25	3	5	0	33	0	506
5:30PM	20	200	9	1	230	0	5	9	24	0	38	0	25	98	23	0	146	0	23	2	5	0	30	0	444
5:45PM	26	221	18	0	265	0	4	4	20	0	28	0	34	112	33	0	179	0	28	13	5	0	46	0	518
Hourly Total	99	877	50	1	1027	0	21	21	72	0	114	0	105	455	135	0	695	0	98	27	25	0	150	1	1986
6:00PM	13	133	7	0	153	0	5	0	19	0	24	0	37	105	36	0	178	0	12	5	6	0	23	0	378
6:15PM	9	152	7	0	168	0	7	3	18	0	28	0	41	101	25	0	167	0	27	2	6	0	35	0	398
6:30PM	11	115	6	0	132	0	6	6	14	0	26	0	28	107	23	0	158	0	20	4	3	0	27	0	343
6:45PM	8	113	9	0	130	0	9	5	17	0	31	0	21	96	20	0	137	0	14	2	3	0	19	0	317
Hourly Total	41	513	29	0	583	0	27	14	68	0	109	0	127	409	104	0	640	0	73	13	18	0	104	0	1436
7:00PM	8	107	6	0	121	0	5	5	14	0	24	0	21	101	24	0	146	0	16	3	1	0	20	0	311
7:15PM	5	97	8	0	110	0	5	1	12	0	18	0	21	97	20	0	138	0	14	4	1	0	19	0	285
7:30PM	10	68	7	0	85	0	4	3	15	0	22	0	20	70	9	0	99	0	11	2	3	0	16	0	222
7:45PM	5	68	8	0	81	0	5	0	12	0	17	0	27	94	20	0	141	0	12	5	3	0	20	0	259
Hourly Total	28	340	29	0	397	0	19	9	53	0	81	0	89	362	73	0	524	0	53	14	8	0	75	0	1077
8:00PM	6	58	5	0	69	1	3	4	6	0	13	0	25	84	19	0	128	0	13	3	5	0	21	0	231
8:15PM	5	58	3	1	67	0	6	1	11	0	18	0	20	70	20	0	110	0	17	4	4	0	25	0	220
8:30PM	5	53	7	0	65	0	2	5	7	0	14	0	16	47	12	0	75	0	4	2	6	0	12	0	166
8:45PM	5	67	4	0	76	0	1	1	3	0	5	0	13	68	18	0	99	0	16	4	2	0	22	0	202
Hourly Total	21	236	19	1	277	1	12	11	27	0	50	0	74	269	69	0	412	0	50	13	17	0	80	0	819
9:00PM	4	52	1	0	57	0	1	2	7	0	10	0	16	49	14	0	79	0	12	4	2	0	18	0	164
9:15PM	2	40	3	0	45	0	2	5	8	0	15	0	19	79	12	0	110	0	9	1	1	0	11	0	181
9:30PM	3	31	4	0	38	0	0	0	6	0	6	0	9	44	17	0	70	0	5	4	2	0	11	0	125
9:45PM	3	29	3	0	35	0	1	1	6	0	8	0	7	52	4	0	63	0	3	0	2	0	5	0	111
Hourly Total	12	152	11	0	175	0	4	8	27	0	39	0	51	224	47	0	322	0	29	9	7	0	45	0	581
10:00PM	0	28	2	0	30	0	1	0	7	0	8	0	9	39	7	0	55	0	7	3	1	0	11	0	104
10:15PM	1	25	3	0	29	0	3	0	6	0	9	0	10	29	4	0	43	0	3	0	4	0	7	0	88
10:30PM	5	18	4	0	27	0	3	0	2	0	5	0	8	26	5	0	39	0	1	1	0	0	2	0	73
10:45PM	1	19	5	0	25	0	1	0	3	0	4	0	6	23	6	0	35	0	1	0	3	0	4	0	68
Hourly Total	7	90	14	0	111	0	8	0	18	0	26	0	33	117	22	0	172	0	12	4	8	0	24	0	333
11:00PM	2	23	1	0	26	0	0	0	2	0	2	0	4	16	4	0	24	0	1	0	0	0	1	0	53
11:15PM	2	15	1	0	18	0	0	0	1	0	1	0	1	18	5	0	24	0	1	0	0	0	1	0	44
11:30PM	2	12	2	0	16	0	0	0	0	0	0	0	5	11	3	0	19	0	1	0	1	0	2	0	37
11:45PM	0	8	1	0	9	0	1	1	1	0	3	0	1	13	8	0	22	0	2	1	1	0	4	0	38
Hourly Total	6	58	5	0	69	0	1	1	4	0	6	0	11	58	20	0	89	0	5	1	2	0	8	0	172
Total	537	7396	377	4	8314	1	436	206	921	1	1564	2	1007	7172	1071	3	9253	2	1079	180	534	0	1793	4	20924
% Approach	6.5%	89.0%	4.5%	0%	-	-	27.9%	13.2%	58.9%	0.1%	-	-	10.9%	77.5%	11.6%	0%	-	-	60.2%	10.0%	29.8%	0%	-	-	-
% Total Lights	2.6%	35.3%	1.8%	0%	39.7%	-	2.1%	1.0%	4.4%	0%	7.5%	-	4.8%	34.3%	5.1%	0%	44.2%	-	5.2%	0.9%	2.6%	0%	8.6%	-	-
	531	7262	375	4	8172	-	432	204	917	1	1554	-	1000	7060	1066	3	9129	-	1070	179	527	0	1776	-	20631
% Lights	98.9%	98.2%	99.5%	100%	98.3%	-	99.1%	99.0%	99.6%	100%	99.4%	-	99.3%	98.4%	99.5%	100%	98.7%	-	99.2%	99.4%	98.7%	0%	99.1%	-	98.6%
Articulated Trucks	0	29	0	0	29	-	0	0	0	0	0	-	0	18	0	0	18	-	1	0	1	0	2	-	49
% Articulated Trucks	0%	0.4%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.2%	-	0.1%	0%	0.2%	0%	0.1%	-	0.2%
Buses and Single-Unit Trucks	6	105	2	0	113	-	4	2	4	0	10	-	7	94	5	0	106	-	8	1	6	0	15	-	244
% Buses and Single-Unit Trucks	1.1%	1.4%	0.5%	0%	1.4%	-	0.9%	1.0%	0.4%	0%	0.6%	-	0.7%	1.3%	0.5%	0%	1.1%	-	0.7%	0.6%	1.1%	0%	0.8%	-	1.2%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. P St - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

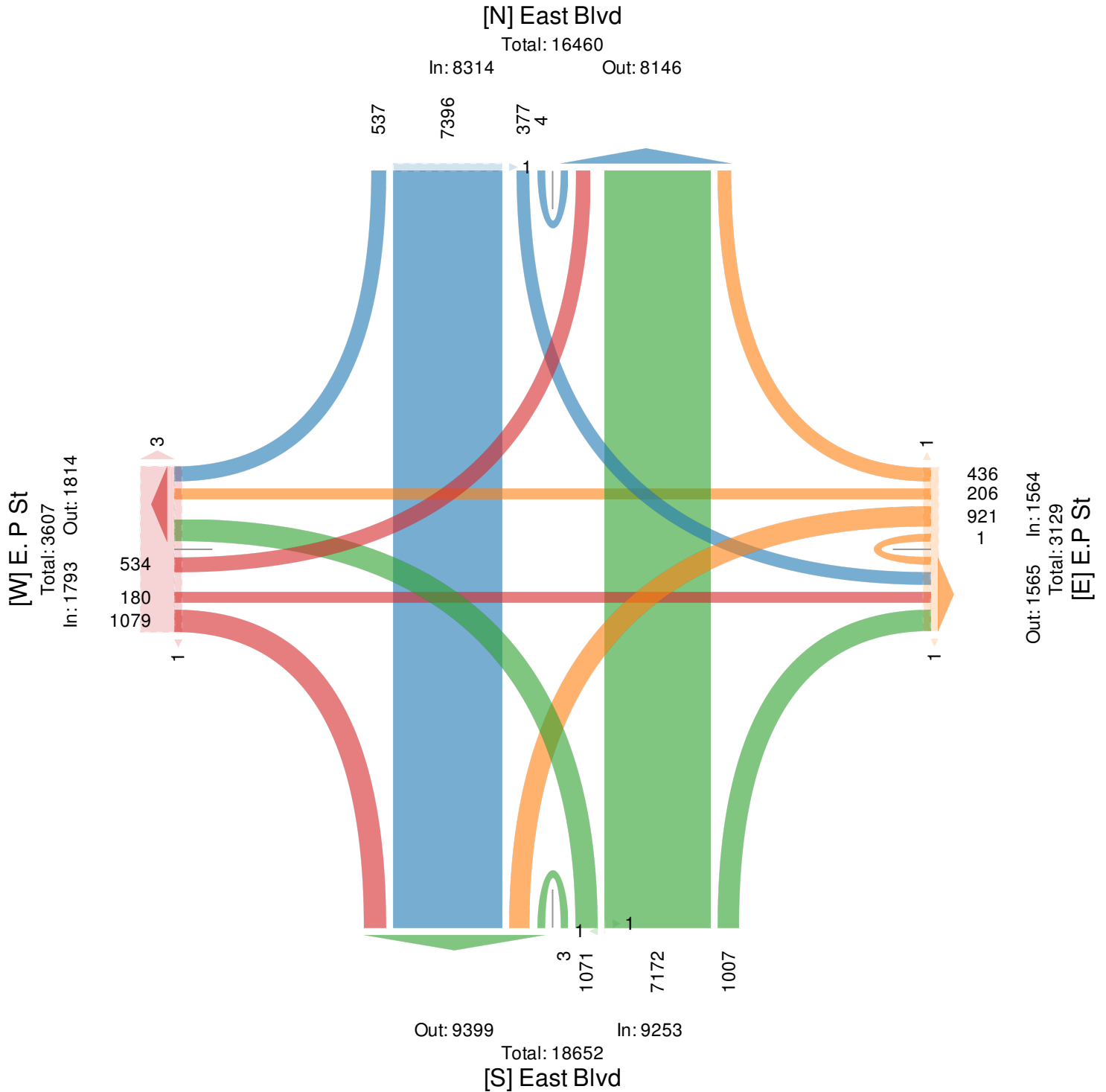
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. P St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E.P St Westbound						East Blvd Northbound						E. P St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 7:00AM	2	82	3	0	87	0	17	6	25	0	48	0	5	126	11	0	142	0	20	0	28	0	48	0	325
	12	127	3	0	142	0	19	9	38	0	66	0	11	164	12	0	187	0	32	1	23	0	56	0	451
	8	119	8	1	136	0	13	6	34	0	53	0	8	130	21	0	159	0	24	5	22	0	51	0	399
	6	120	6	0	132	0	17	5	25	0	47	0	17	145	6	0	168	0	35	1	8	0	44	0	391
Total	28	448	20	1	497	0	66	26	122	0	214	0	41	565	50	0	656	0	111	7	81	0	199	0	1566
% Approach	5.6%	90.1%	4.0%	0.2%	-	-	30.8%	12.1%	57.0%	0%	-	-	6.3%	86.1%	7.6%	0%	-	-	55.8%	3.5%	40.7%	0%	-	-	-
% Total	1.8%	28.6%	1.3%	0.1%	31.7%	-	4.2%	1.7%	7.8%	0%	13.7%	-	2.6%	36.1%	3.2%	0%	41.9%	-	7.1%	0.4%	5.2%	0%	12.7%	-	-
PHF	0.583	0.882	0.625	0.250	0.875	-	0.868	0.722	0.803	-	0.811	-	0.603	0.861	0.595	-	0.877	-	0.793	0.350	0.723	-	0.888	-	0.868
Lights	27	436	20	1	484	-	66	26	121	0	213	-	40	556	49	0	645	-	110	7	81	0	198	-	1540
% Lights	96.4%	97.3%	100%	100%	97.4%	-	100%	100%	99.2%	0%	99.5%	-	97.6%	98.4%	98.0%	0%	98.3%	-	99.1%	100%	100%	0%	99.5%	-	98.3%
Articulate d Trucks	0	2	0	0	2	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	3
% Articulate d Trucks	0%	0.4%	0%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0%	0.2%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.2%
Buses and Single-Unit Trucks	1	10	0	0	11	-	0	0	1	0	1	-	1	8	1	0	10	-	1	0	0	0	1	-	23
% Buses and Single-Unit Trucks	3.6%	2.2%	0%	0%	2.2%	-	0%	0%	0.8%	0%	0.5%	-	2.4%	1.4%	2.0%	0%	1.5%	-	0.9%	0%	0%	0%	0.5%	-	1.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. P St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

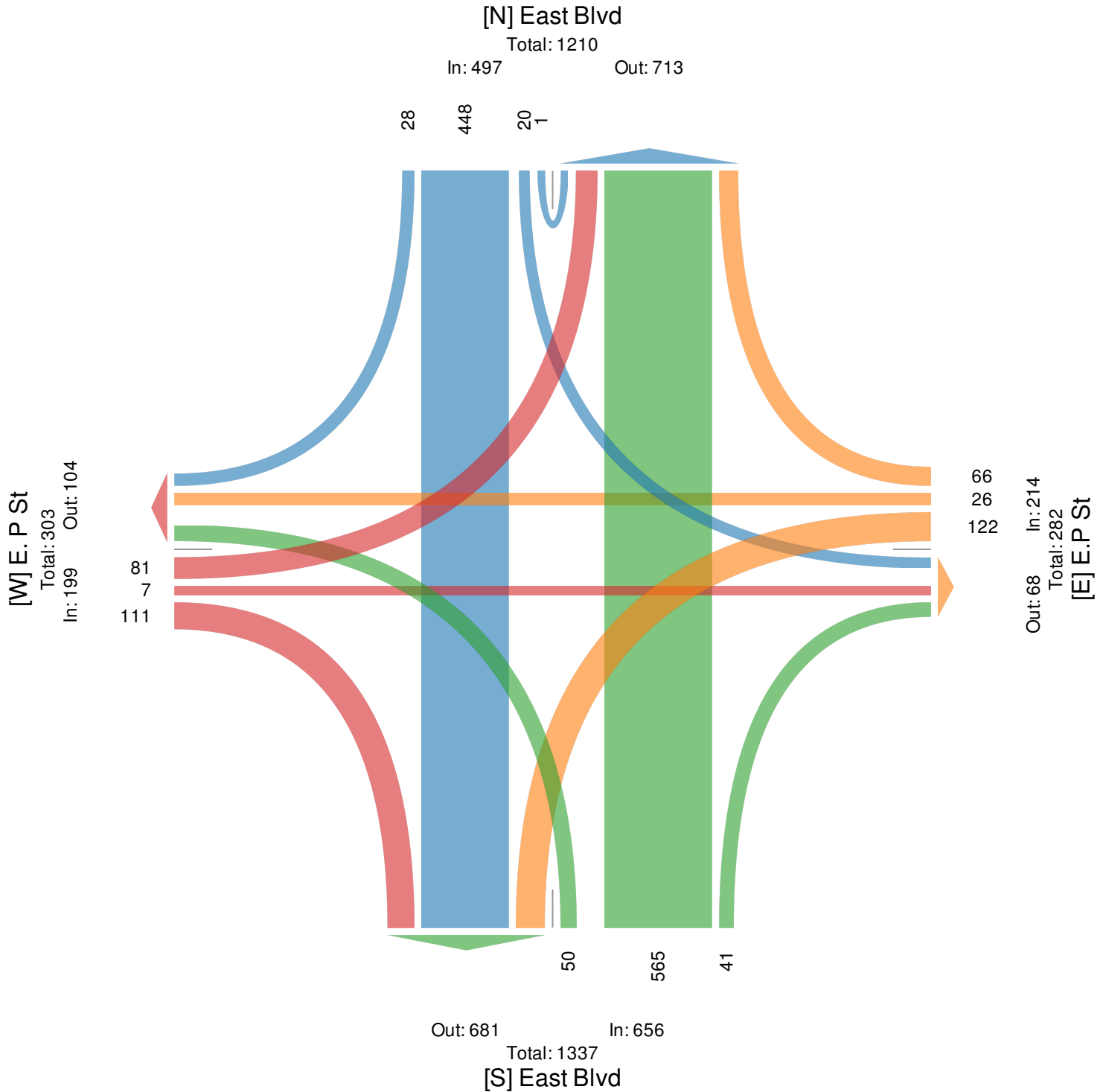
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. P St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 11:45AM - 12:45PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E. P St Westbound						East Blvd Northbound						E. P St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 11:45AM	6	118	3	0	127	0	8	3	12	0	23	0	11	114	7	0	132	0	18	5	4	0	27	0	309
12:00PM	7	144	5	0	156	0	2	2	14	0	18	0	8	106	14	0	128	0	13	2	6	0	21	0	323
12:15PM	9	114	5	0	128	0	3	3	7	0	13	0	11	123	11	0	145	0	11	3	6	0	20	0	306
12:30PM	5	112	6	0	123	0	4	2	9	0	15	0	12	143	11	0	166	0	13	1	7	0	21	0	325
Total	27	488	19	0	534	0	17	10	42	0	69	0	42	486	43	0	571	0	55	11	23	0	89	0	1263
% Approach	5.1%	91.4%	3.6%	0%	-	-	24.6%	14.5%	60.9%	0%	-	-	7.4%	85.1%	7.5%	0%	-	-	61.8%	12.4%	25.8%	0%	-	-	-
% Total	2.1%	38.6%	1.5%	0%	42.3%	-	1.3%	0.8%	3.3%	0%	5.5%	-	3.3%	38.5%	3.4%	0%	45.2%	-	4.4%	0.9%	1.8%	0%	7.0%	-	-
PHF	0.750	0.847	0.792	-	0.856	-	0.531	0.833	0.750	-	0.750	-	0.875	0.850	0.768	-	0.860	-	0.764	0.550	0.821	-	0.824	-	0.972
Lights	27	482	19	0	528	-	16	10	41	0	67	-	42	480	43	0	565	-	55	11	22	0	88	-	1248
% Lights	100%	98.8%	100%	0%	98.9%	-	94.1%	100%	97.6%	0%	97.1%	-	100%	98.8%	100%	0%	98.9%	-	100%	100%	95.7%	0%	98.9%	-	98.8%
Articulated Trucks	0	1	0	0	1	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	1	0	1	-	3
% Articulated Trucks	0%	0.2%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0.2%	0%	0%	0.2%	-	0%	0%	4.3%	0%	1.1%	-	0.2%
Buses and Single-Unit Trucks	0	5	0	0	5	-	1	0	1	0	2	-	0	5	0	0	5	-	0	0	0	0	0	-	12
% Buses and Single-Unit Trucks	0%	1.0%	0%	0%	0.9%	-	5.9%	0%	2.4%	0%	2.9%	-	0%	1.0%	0%	0%	0.9%	-	0%	0%	0%	0%	0%	-	1.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. P St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 11:45AM - 12:45PM)

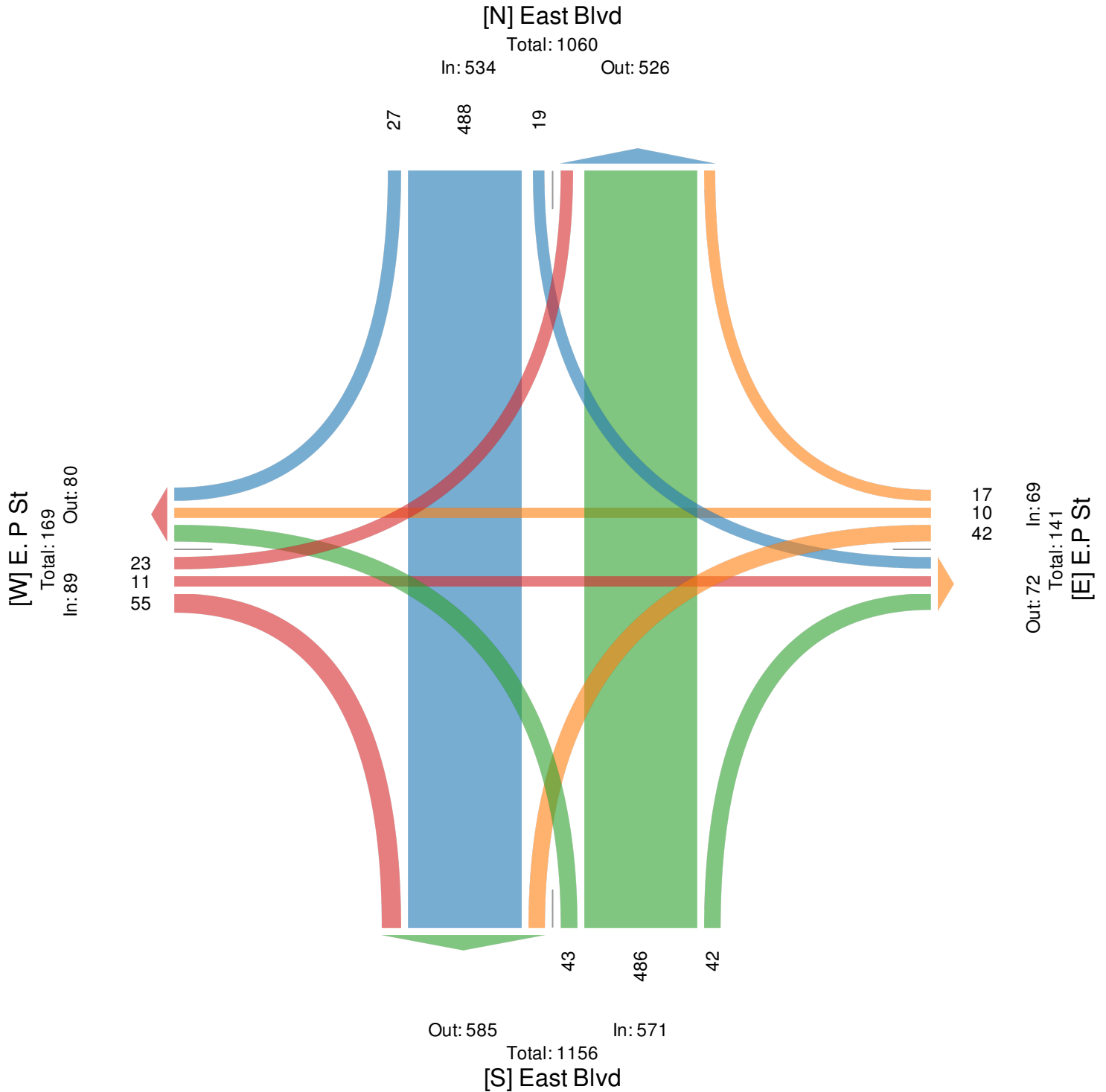
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E. P St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:15PM - 5:15PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound							E.P St Westbound							East Blvd Northbound							E. P St Eastbound							
Time	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		Int
2018-12-18 4:15PM	16	222	12	0	250	0		8	5	20	0	33	0		27	126	35	0	188	0		37	9	8	0	54	0		525
4:30PM	17	221	11	0	249	0		4	7	17	0	28	0		23	117	35	0	175	0		30	4	14	0	48	0		500
4:45PM	29	260	20	0	309	0		7	13	14	0	34	0		26	124	19	1	170	0		18	1	4	0	23	0		536
5:00PM	24	230	15	0	269	0		7	4	20	0	31	0		20	113	44	0	177	0		22	9	10	0	41	1		518
Total	86	933	58	0	1077	0		26	29	71	0	126	0		96	480	133	1	710	0		107	23	36	0	166	1		2079
% Approach	8.0%	86.6%	5.4%	0%	-	-		20.6%	23.0%	56.3%	0%	-	-		13.5%	67.6%	18.7%	0.1%	-	-		64.5%	13.9%	21.7%	0%	-	-		-
% Total	4.1%	44.9%	2.8%	0%	51.8%	-		1.3%	1.4%	3.4%	0%	6.1%	-		4.6%	23.1%	6.4%	0%	34.2%	-		5.1%	1.1%	1.7%	0%	8.0%	-		-
PHF	0.741	0.897	0.725	-	0.871	-		0.813	0.558	0.888	-	0.926	-		0.889	0.952	0.756	0.250	0.944	-		0.723	0.639	0.643	-	0.769	-		0.970
Lights	85	923	58	0	1066	-		26	29	70	0	125	-		94	473	132	1	700	-		106	23	33	0	162	-		2053
% Lights	98.8%	98.9%	100%	0%	99.0%	-		100%	100%	98.6%	0%	99.2%	-		97.9%	98.5%	99.2%	100%	98.6%	-		99.1%	100%	91.7%	0%	97.6%	-		98.7%
Articulated Trucks	0	0	0	0	0	-		0	0	0	0	0	-		0	1	0	0	1	-		0	0	0	0	0	-		1
% Articulated Trucks	0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%	0.2%	0%	0%	0.1%	-		0%	0%	0%	0%	0%	-		0%
Buses and Single-Unit Trucks	1	10	0	0	11	-		0	0	1	0	1	-		2	6	1	0	9	-		1	0	3	0	4	-		25
% Buses and Single-Unit Trucks	1.2%	1.1%	0%	0%	1.0%	-		0%	0%	1.4%	0%	0.8%	-		2.1%	1.3%	0.8%	0%	1.3%	-		0.9%	0%	8.3%	0%	2.4%	-		1.2%
Pedestrians	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	1		
% Pedestrians	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	100%		-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E. P St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:15PM - 5:15PM) - Overall Peak Hour

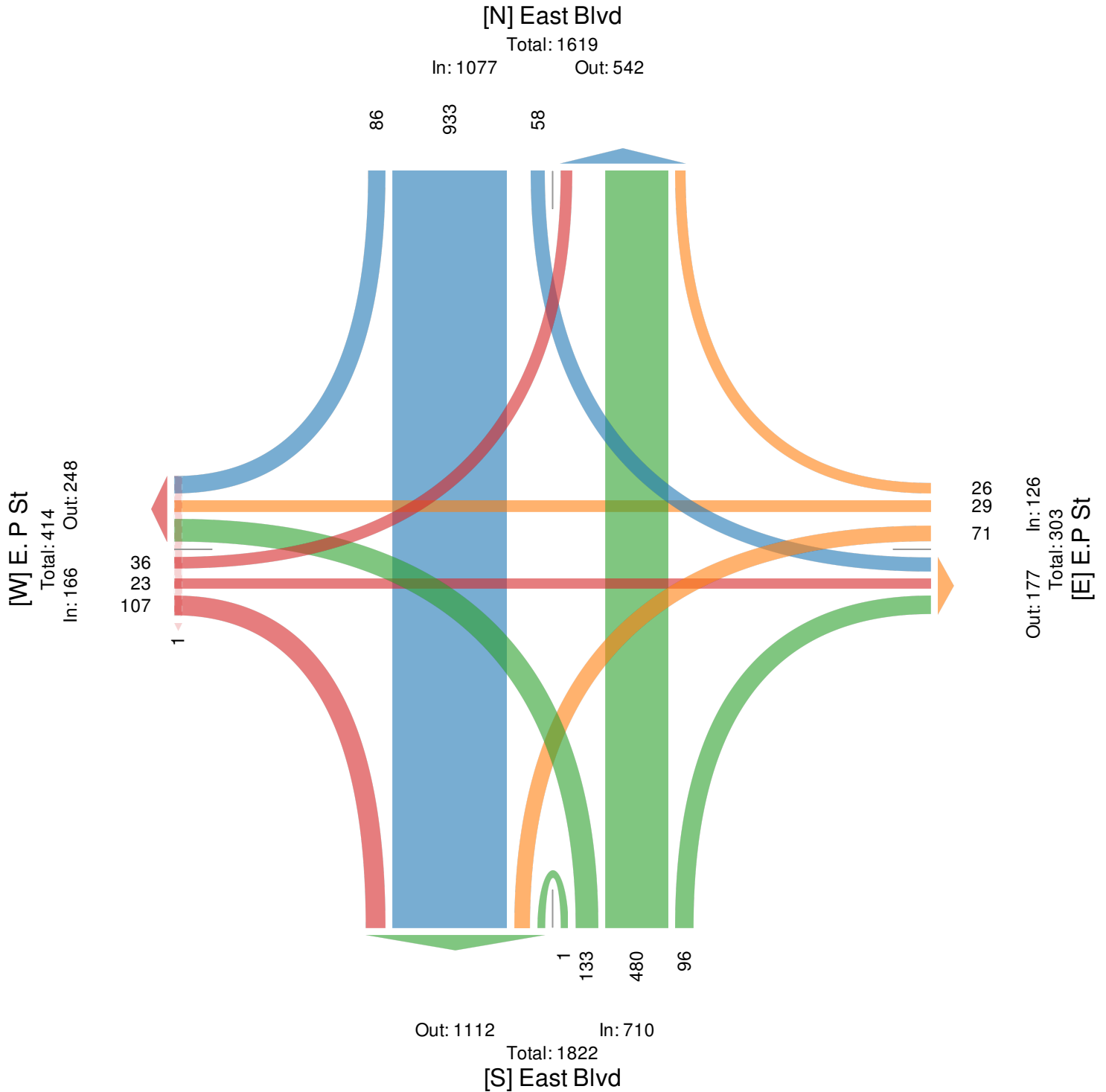
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599584, Location: 29.684829, -95.098527



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM(+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599580, Location: 29.679747, -95.098455


 Provided by: C. J. Hensch & Associates Inc.
 5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E Pasadena Blvd Westbound						East Blvd Northbound						E Pasadena Blvd Eastbound							
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int	
2018-12-18																										
12:00AM	0	3	0	0	3	0	0	2	0	0	2	0	0	11	3	0	0	14	0	2	4	2	0	8	0	27
12:15AM	1	5	1	0	7	0	1	3	0	0	4	0	0	10	1	0	0	11	0	2	6	2	0	10	0	32
12:30AM	2	2	0	1	5	0	0	2	0	0	2	0	1	9	2	0	0	12	0	4	0	2	0	6	0	25
12:45AM	3	3	0	0	6	0	0	1	0	0	1	0	0	10	3	0	0	13	0	3	1	0	0	4	0	24
Hourly Total	6	13	1	1	21	0	1	8	0	0	9	0	1	40	9	0	0	50	0	11	11	6	0	28	0	108
1:00AM	1	7	0	0	8	0	0	2	0	0	2	0	0	3	0	0	0	3	0	1	1	0	0	2	0	15
1:15AM	0	4	2	0	6	0	0	2	1	0	3	0	0	7	1	0	0	8	0	0	2	0	0	2	0	19
1:30AM	1	7	0	0	8	0	1	1	0	0	2	0	0	5	1	0	0	6	0	0	2	0	0	2	0	18
1:45AM	0	3	0	0	3	0	0	1	0	0	1	0	2	7	0	0	0	9	0	1	1	0	0	2	0	15
Hourly Total	2	21	2	0	25	0	1	6	1	0	8	0	2	22	2	0	0	26	0	2	6	0	0	8	0	67
2:00AM	0	5	2	0	7	0	1	1	3	0	5	0	0	3	0	0	0	3	0	1	0	1	0	2	0	17
2:15AM	0	3	1	0	4	0	1	1	0	0	2	0	1	5	0	0	0	6	0	0	0	2	0	2	0	14
2:30AM	1	1	0	0	2	0	0	1	0	0	1	0	0	2	0	0	0	2	0	1	2	1	0	4	0	9
2:45AM	0	1	0	0	1	0	1	0	1	0	2	0	0	1	1	0	0	2	0	2	3	0	0	5	0	10
Hourly Total	1	10	3	0	14	0	3	3	4	0	10	0	1	11	1	0	0	13	0	4	5	4	0	13	0	50
3:00AM	0	6	1	0	7	0	0	2	0	0	2	0	1	2	1	0	0	4	0	1	2	4	0	7	0	20
3:15AM	0	0	1	0	1	0	0	3	1	0	4	0	0	8	0	0	0	8	0	1	1	5	0	7	0	20
3:30AM	0	7	0	0	7	0	1	1	0	0	2	0	1	11	0	0	0	12	0	2	5	1	0	8	0	29
3:45AM	3	10	0	0	13	0	0	1	2	0	3	0	0	7	1	0	0	8	0	0	4	4	0	8	0	32
Hourly Total	3	23	2	0	28	0	1	7	3	0	11	0	2	28	2	0	0	32	0	4	12	14	0	30	0	101
4:00AM	0	16	1	0	17	0	1	1	0	0	2	0	1	13	5	0	0	19	0	1	8	5	0	14	0	52
4:15AM	2	20	5	0	27	0	0	6	0	0	6	0	0	21	1	0	0	22	0	0	8	8	0	16	0	71
4:30AM	4	12	4	0	20	0	8	4	1	0	13	0	0	32	4	0	0	36	0	5	11	11	0	27	0	96
4:45AM	7	13	1	0	21	0	6	6	1	0	13	0	1	33	0	0	0	34	0	9	18	7	0	34	0	102
Hourly Total	13	61	11	0	85	0	15	17	2	0	34	0	2	99	10	0	0	111	0	15	45	31	0	91	0	321
5:00AM	3	26	4	0	33	0	4	7	5	0	16	0	6	44	2	0	0	52	0	4	30	10	0	44	0	145
5:15AM	0	27	7	0	34	0	5	10	1	0	16	0	4	54	3	0	0	61	0	4	28	17	0	49	0	160
5:30AM	9	35	6	0	50	0	7	7	3	0	17	0	5	81	1	0	0	87	0	7	34	27	0	68	0	222
5:45AM	6	41	6	0	53	0	9	13	1	0	23	0	9	77	2	0	0	88	0	10	42	33	0	85	0	249
Hourly Total	18	129	23	0	170	0	25	37	10	0	72	0	24	256	8	0	0	288	0	25	134	87	0	246	0	776
6:00AM	4	48	8	0	60	0	13	17	6	0	36	0	3	116	6	0	0	125	0	17	40	31	0	88	0	309
6:15AM	13	65	11	0	89	0	7	18	7	0	32	0	9	84	7	0	0	100	0	16	48	25	0	89	0	310
6:30AM	11	70	15	0	96	0	8	24	6	0	38	0	24	90	4	0	0	118	0	14	49	26	0	89	0	341
6:45AM	21	70	26	0	117	0	20	54	17	0	91	0	28	80	23	0	0	131	0	34	56	28	0	118	0	457
Hourly Total	49	253	60	0	362	0	48	113	36	0	197	0	64	370	40	0	0	474	0	81	193	110	0	384	0	1417
7:00AM	16	98	20	0	134	0	23	53	15	0	91	0	18	93	19	0	0	130	0	25	52	34	0	111	0	466
7:15AM	24	132	18	0	174	0	26	58	15	0	99	0	15	114	22	0	0	151	0	35	55	43	0	133	0	557
7:30AM	17	132	23	0	172	0	17	62	11	0	90	0	29	115	26	0	0	170	0	34	63	26	0	123	0	555
7:45AM	22	145	26	0	193	0	22	44	17	0	83	0	26	115	30	0	0	171	0	38	73	30	0	141	0	588
Hourly Total	79	507	87	0	673	0	88	217	58	0	363	0	88	437	97	0	0	622	0	132	243	133	0	508	0	2166
8:00AM	21	85	20	0	126	0	19	48	12	0	79	0	22	94	27	1	0	144	0	32	52	26	0	110	0	459
8:15AM	17	73	15	0	105	0	15	36	7	0	58	0	13	88	15	0	0	116	0	16	29	14	0	59	0	338
8:30AM	8	76	12	0	96	0	6	32	12	0	50	0	16	64	17	0	0	97	0	18	33	19	0	70	0	313
8:45AM	13	67	15	0	95	0	7	37	14	0	58	0	18	64	16	0	0	98	0	24	30	20	0	74	0	325
Hourly Total	59	301	62	0	422	0	47	153	45	0	245	0	69	310	75	1	0	455	0	90	144	79	0	313	0	1435
9:00AM	18	66	10	0	94	0	6	25	9	0	40	0	7	56	13	0	0	76	0	20	22	20	0	62	0	272
9:15AM	8	73	6	0	87	0	8	25	12	0	45	0	6	72	25	0	0	103	0	28	13	8	0	49	0	284
9:30AM	9	67	8	0	84	0	8	32	8	0	48	0	15	67	16	0	0	98	0	25	26	13	0	64	0	294
9:45AM	13	85	3	0	101	0	8	39	14	0	61	0	11	58	27	0	0	96	0	26	29	8	0	63	0	321
Hourly Total	48	291	27	0	366	0	30	121	43	0	194	0	39	253	81	0	0	373	0	99	90	49	0	238	0	1171
10:00AM	8	72	11	0	91	1	12	42	11	0	65	1	7	57	26	0	0	90	0	28	21	10	0	59	0	305
10:15AM	6	73	12	0	91	0	8	24	15	0	47	0	12	66	16	0	0	94	0	32	28	15	0	75	0	307
10:30AM	11	96	6	0	113	0	12	32	7	0	51	0	13	81	22	0	0	116	0	32	22	5	0	59	0	339
10:45AM	8	87	11	0	106	0	9	19	10	0	38	0	17	87	30	0	0	134	0	44	29	16	0	89	0	367
Hourly Total	33	328	40	0	401																					

Leg Direction	East Blvd Southbound						E Pasadena Blvd Westbound						East Blvd Northbound						E Pasadena Blvd Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
1:30PM	15	88	9	0	112	0	14	30	17	0	61	0	25	111	38	0	174	0	36	29	11	0	76	0	423
1:45PM	17	93	8	0	118	0	17	48	20	0	85	0	20	98	35	0	153	0	50	40	25	0	115	0	471
Hourly Total	58	399	54	0	511	0	61	152	60	0	273	0	81	412	135	0	628	0	172	161	61	1	395	0	1807
2:00PM	17	96	8	0	121	0	8	26	14	0	48	0	24	94	38	0	156	0	40	31	23	0	94	0	419
2:15PM	15	94	8	0	117	0	11	38	12	0	61	0	21	97	32	0	150	0	41	41	12	0	94	0	422
2:30PM	13	92	13	0	118	0	8	36	9	0	53	0	23	103	35	0	161	0	32	44	18	0	94	0	426
2:45PM	20	99	21	0	140	0	13	42	14	0	69	0	22	116	39	0	177	0	44	29	14	0	87	0	473
Hourly Total	65	381	50	0	496	0	40	142	49	0	231	0	90	410	144	0	644	0	157	145	67	0	369	0	1740
3:00PM	19	116	26	0	161	0	17	55	17	0	89	0	19	102	37	0	158	0	34	52	19	0	105	0	513
3:15PM	21	123	23	0	167	0	19	38	21	0	78	0	18	115	25	0	158	0	32	46	20	0	98	0	501
3:30PM	20	132	26	0	178	2	21	55	27	0	103	0	21	104	33	0	158	0	39	42	19	0	100	0	539
3:45PM	31	144	32	0	207	0	27	59	21	0	107	0	29	150	59	0	238	0	42	52	16	0	110	0	662
Hourly Total	91	515	107	0	713	2	84	207	86	0	377	0	87	471	154	0	712	0	147	192	74	0	413	0	2215
4:00PM	38	172	35	0	245	0	22	50	24	0	96	0	26	134	52	0	212	0	35	59	22	0	116	0	669
4:15PM	35	195	29	0	259	0	27	63	23	0	113	0	26	126	42	0	194	0	44	58	27	0	129	0	695
4:30PM	36	202	35	0	273	0	25	83	44	0	152	0	19	129	45	0	193	0	47	66	18	0	131	0	749
4:45PM	47	228	28	0	303	0	19	80	25	0	124	0	19	140	50	0	209	0	55	71	18	0	144	0	780
Hourly Total	156	797	127	0	1080	0	93	276	116	0	485	0	90	529	189	0	808	0	181	254	85	0	520	0	2893
5:00PM	37	197	32	0	266	0	25	127	38	0	190	0	34	139	53	0	226	0	37	59	16	0	112	0	794
5:15PM	52	186	27	0	265	0	34	107	40	0	181	0	37	143	49	0	229	0	53	76	11	0	140	0	815
5:30PM	44	174	21	0	239	0	17	128	33	0	178	0	29	129	50	0	208	0	39	54	16	0	109	0	734
5:45PM	40	216	30	0	286	0	16	94	21	0	131	0	31	141	51	0	223	0	46	66	18	0	130	0	770
Hourly Total	173	773	110	0	1056	0	92	456	132	0	680	0	131	552	203	0	886	0	175	255	61	0	491	0	3113
6:00PM	31	123	14	0	168	0	20	67	32	0	119	0	27	148	58	0	233	0	44	51	9	0	104	0	624
6:15PM	27	149	16	0	192	0	18	51	18	0	87	0	23	128	54	0	205	0	49	38	18	0	105	0	589
6:30PM	26	105	22	0	153	0	20	53	18	0	91	0	22	111	41	0	174	0	47	49	25	0	121	0	539
6:45PM	24	108	14	0	146	0	15	53	30	0	98	0	31	112	36	0	179	0	40	38	15	0	93	0	516
Hourly Total	108	485	66	0	659	0	73	224	98	0	395	0	103	499	189	0	791	0	180	176	67	0	423	0	2268
7:00PM	15	110	12	0	137	0	23	30	18	0	71	0	25	109	38	0	172	0	49	35	11	0	95	0	475
7:15PM	12	98	11	0	121	0	5	27	17	0	49	0	20	119	50	0	189	0	34	29	16	0	79	0	438
7:30PM	10	80	4	0	94	0	11	22	21	0	54	0	24	86	36	0	146	0	26	23	7	0	56	0	350
7:45PM	9	70	8	0	87	0	6	24	11	0	41	0	17	121	19	0	157	0	16	28	14	0	58	0	343
Hourly Total	46	358	35	0	439	0	45	103	67	0	215	0	86	435	143	0	664	0	125	115	48	0	288	0	1606
8:00PM	13	63	7	0	83	0	11	18	6	0	35	0	20	108	33	0	161	0	32	27	7	0	66	0	345
8:15PM	7	53	13	1	74	0	8	11	9	0	28	0	12	92	26	0	130	0	22	21	6	0	49	0	281
8:30PM	8	61	6	0	75	0	10	15	7	0	32	0	10	64	25	0	99	0	20	30	5	0	55	0	261
8:45PM	7	71	5	0	83	0	5	18	3	0	26	0	17	82	17	0	116	0	16	23	7	0	46	0	271
Hourly Total	35	248	31	1	315	0	34	62	25	0	121	0	59	346	101	0	506	0	90	101	25	0	216	0	1158
9:00PM	5	63	5	0	73	0	7	16	6	0	29	0	10	64	24	0	98	0	27	17	10	0	54	0	254
9:15PM	8	44	3	0	55	0	11	11	8	0	30	0	12	78	35	0	125	0	18	14	7	0	39	0	249
9:30PM	6	29	6	0	41	0	5	13	3	0	21	0	12	59	19	0	90	0	21	18	5	0	44	0	196
9:45PM	6	31	2	0	39	0	2	19	7	0	28	0	9	55	17	0	81	0	12	7	5	0	24	0	172
Hourly Total	25	167	16	0	208	0	25	59	24	0	108	0	43	256	95	0	394	0	78	56	27	0	161	0	871
10:00PM	4	35	3	0	42	0	4	7	2	0	13	0	3	47	13	0	63	0	14	14	2	0	30	0	148
10:15PM	8	22	3	0	33	0	1	8	2	0	11	0	10	38	11	0	59	0	13	14	5	0	32	0	135
10:30PM	5	15	3	0	23	0	2	9	4	0	15	0	9	35	15	0	59	0	11	8	4	0	23	0	120
10:45PM	3	18	3	0	24	0	3	7	1	0	11	0	6	26	7	0	39	0	3	4	2	0	9	0	83
Hourly Total	20	90	12	0	122	0	10	31	9	0	50	0	28	146	46	0	220	0	41	40	13	0	94	0	486
11:00PM	5	18	2	0	25	0	2	4	3	0	9	0	4	20	8	0	32	0	4	5	3	0	12	0	78
11:15PM	3	12	2	0	17	0	1	10	1	0	12	0	3	20	7	0	30	0	7	6	4	0	17	0	76
11:30PM	0	14	0	0	14	0	2	3	0	0	5	0	2	14	6	0	22	0	3	7	3	0	13	0	54
11:45PM	2	9	0	0	11	0	1	4	2	0	7	0	4	19	4	0	27	0	4	4	1	0	9	0	54
Hourly Total	10	53	4	0	67	0	6	21	6	0	33	0	13	73	25	0	111	0	18	22	11	0	51	0	262
Total	1229	7110	1039	2	9380	3	964	2858	1091	0	4913	1	1359	7086	2116	1	10562	0	2260	2790	1209	1	6260	0	31115
% Approach	13.1%	75.8%	11.1%	0%	-	-	19.6%	58.2%	22.2%	0%	-	-	12.9%	67.1%	20.0%	0%	-	-	36.1%	44.6%	19.3%	0%	-	-	-
% Total	3.9%	22.9%	3.3%	0%	30.1%	-	3.1%	9.2%	3.5%	0%	15.8%	-	4.4%	22.8%	6.8%	0%	33.9%	-	7.3%	9.0%	3.9%	0%	20.1%	-	-
Lights	1183	7032	1019	2	9236	-	954	2818	1076	0	4848	-	1338	7011	2103	1	10453	-	2246	2745	1173	1	6165	-	30702
% Lights	96.3%	98.9%	98.1%	100%	98.5%	-	99.0%	98.6%	98.6%	0%	98.7%	-	98.5%	98.9%	99.4%	100%	99.0%	-	99.4%	98.4%	97.0%	100%	98.5%	-	98.7%
Articulate d Trucks	0	26	2	0	28	-	1	5	3	0	9	-	4	20	2	0	26	-	3	5	0	0	8	-	71
% Articulate d Trucks	0%	0.4%	0.2%	0%	0.3%	-	0.1%	0.2%	0.3%	0%	0.2%	-	0.3%	0.3%	0.1%	0%	0.2%	-	0.1%	0.2%	0%	0%	0.1%	-	0.2%
Buses and Single-Unit Trucks	46	52	18	0	116	-	9	35	12	0	56	-	17	55	11	0	83	-	11	40	36	0	87	-	342
% Buses and Single-Unit Trucks	3.7%	0.7%	1.7%	0%	1.2%	-	0.9%	1.2%	1.1%	0%	1.1%	-	1.3%	0.8%	0.5%	0%	0.8%	-	0.5%	1.4%	3.0%	0%	1.4%	-	1.1%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-

East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

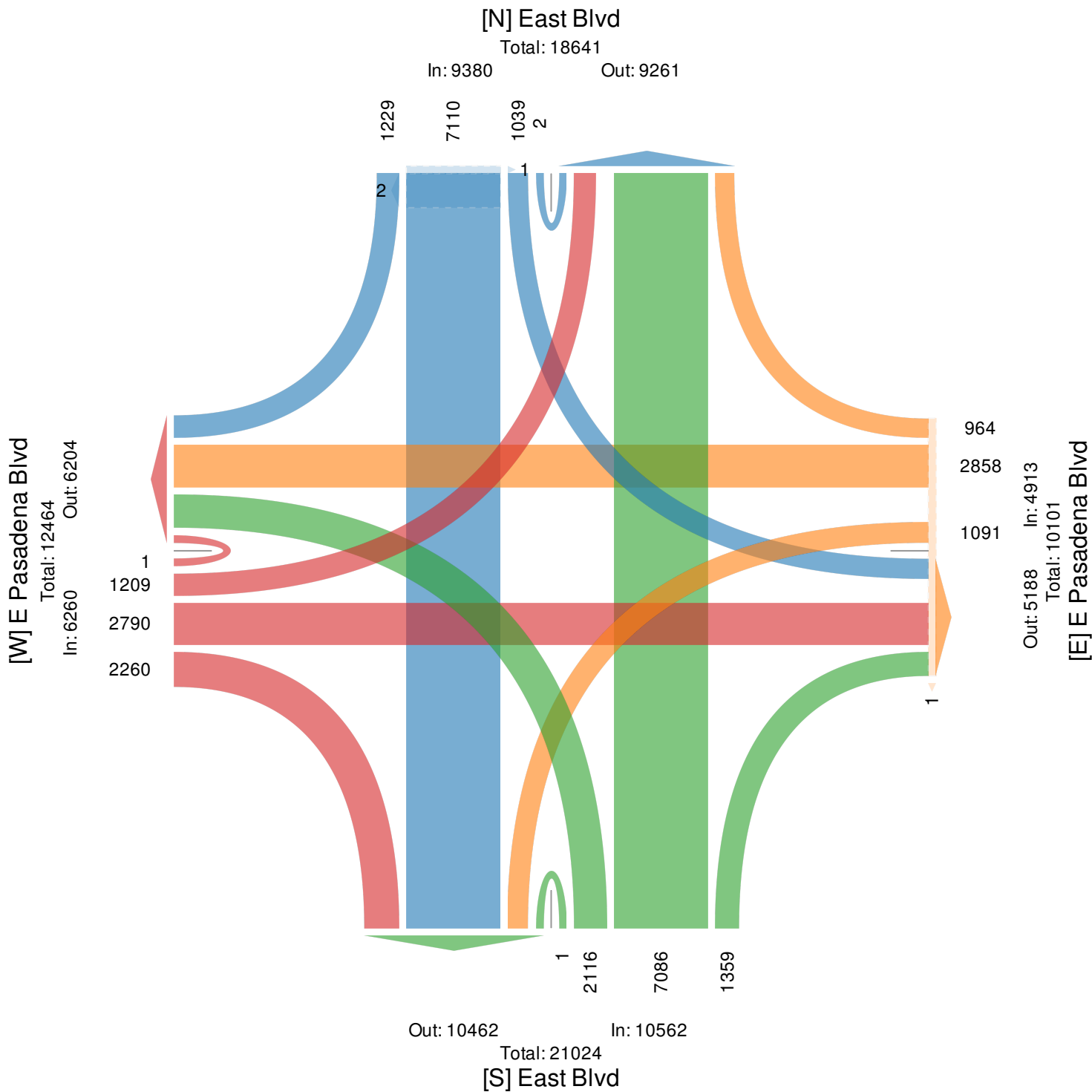
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599580, Location: 29.679747, -95.098455



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599580, Location: 29.679747, -95.098455



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E Pasadena Blvd Westbound						East Blvd Northbound						E Pasadena Blvd Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 7:00AM	16	98	20	0	134	0	23	53	15	0	91	0	18	93	19	0	130	0	25	52	34	0	111	0	466
7:15AM	24	132	18	0	174	0	26	58	15	0	99	0	15	114	22	0	151	0	35	55	43	0	133	0	557
7:30AM	17	132	23	0	172	0	17	62	11	0	90	0	29	115	26	0	170	0	34	63	26	0	123	0	555
7:45AM	22	145	26	0	193	0	22	44	17	0	83	0	26	115	30	0	171	0	38	73	30	0	141	0	588
Total	79	507	87	0	673	0	88	217	58	0	363	0	88	437	97	0	622	0	132	243	133	0	508	0	2166
% Approach	11.7%	75.3%	12.9%	0%	-	-	24.2%	59.8%	16.0%	0%	-	-	14.1%	70.3%	15.6%	0%	-	-	26.0%	47.8%	26.2%	0%	-	-	-
% Total	3.6%	23.4%	4.0%	0%	31.1%	-	4.1%	10.0%	2.7%	0%	16.8%	-	4.1%	20.2%	4.5%	0%	28.7%	-	6.1%	11.2%	6.1%	0%	23.5%	-	-
PHF	0.823	0.874	0.837	-	0.872	-	0.846	0.875	0.853	-	0.917	-	0.759	0.950	0.808	-	0.909	-	0.868	0.832	0.773	-	0.901	-	0.921
Lights	73	500	86	0	659	-	87	212	56	0	355	-	83	432	95	0	610	-	132	237	129	0	498	-	2122
% Lights	92.4%	98.6%	98.9%	0%	97.9%	-	98.9%	97.7%	96.6%	0%	97.8%	-	94.3%	98.9%	97.9%	0%	98.1%	-	100%	97.5%	97.0%	0%	98.0%	-	98.0%
Articulated Trucks	0	2	0	0	2	-	0	1	0	0	1	-	0	1	0	0	1	-	0	0	0	0	0	-	4
% Articulated Trucks	0%	0.4%	0%	0%	0.3%	-	0%	0.5%	0%	0%	0.3%	-	0%	0.2%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.2%
Buses and Single-Unit Trucks	6	5	1	0	12	-	1	4	2	0	7	-	5	4	2	0	11	-	0	6	4	0	10	-	40
% Buses and Single-Unit Trucks	7.6%	1.0%	1.1%	0%	1.8%	-	1.1%	1.8%	3.4%	0%	1.9%	-	5.7%	0.9%	2.1%	0%	1.8%	-	0%	2.5%	3.0%	0%	2.0%	-	1.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7AM - 8AM)

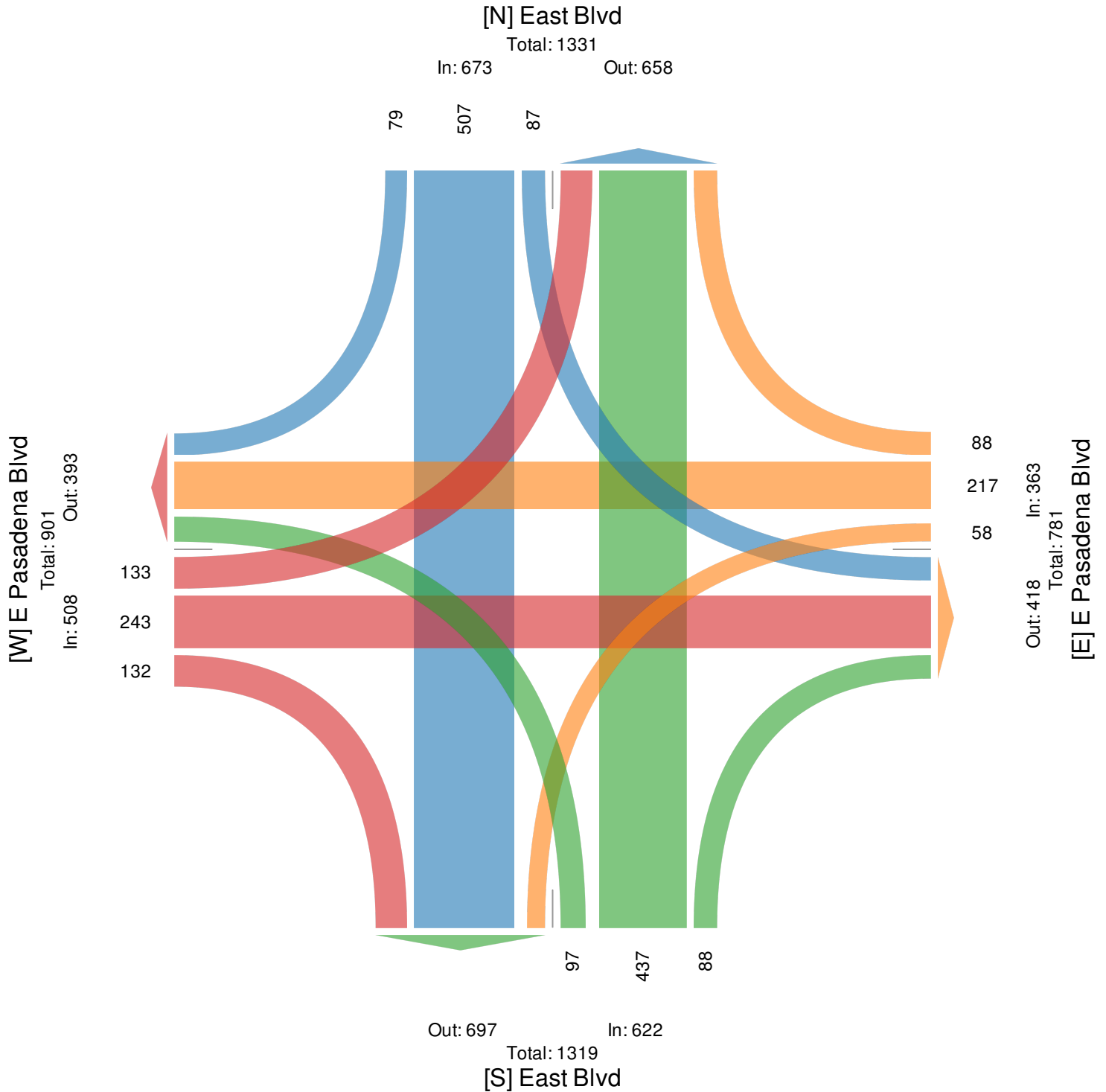
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599580, Location: 29.679747, -95.098455



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599580, Location: 29.679747, -95.098455



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E Pasadena Blvd Westbound						East Blvd Northbound						E Pasadena Blvd Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 12:00PM	22	133	13	0	168	0	12	48	30	0	90	0	25	109	39	0	173	0	32	37	18	0	87	0	518
12:15PM	19	112	11	0	142	0	16	36	28	0	80	0	39	117	43	0	199	0	39	45	18	0	102	0	523
12:30PM	10	104	16	0	130	0	12	34	13	0	59	0	28	132	45	0	205	0	41	37	10	0	88	0	482
12:45PM	16	104	16	0	136	0	14	36	24	0	74	0	32	113	30	0	175	0	46	39	14	0	99	0	484
Total	67	453	56	0	576	0	54	154	95	0	303	0	124	471	157	0	752	0	158	158	60	0	376	0	2007
% Approach	11.6%	78.6%	9.7%	0%	-	-	17.8%	50.8%	31.4%	0%	-	-	16.5%	62.6%	20.9%	0%	-	-	42.0%	42.0%	16.0%	0%	-	-	-
% Total	3.3%	22.6%	2.8%	0%	28.7%	-	2.7%	7.7%	4.7%	0%	15.1%	-	6.2%	23.5%	7.8%	0%	37.5%	-	7.9%	7.9%	3.0%	0%	18.7%	-	-
PHF	0.761	0.852	0.875	-	0.857	-	0.844	0.802	0.792	-	0.842	-	0.795	0.892	0.872	-	0.917	-	0.859	0.878	0.833	-	0.922	-	0.959
Lights	64	446	56	0	566	-	54	152	95	0	301	-	124	462	156	0	742	-	157	157	60	0	374	-	1983
% Lights	95.5%	98.5%	100%	0%	98.3%	-	100%	98.7%	100%	0%	99.3%	-	100%	98.1%	99.4%	0%	98.7%	-	99.4%	99.4%	100%	0%	99.5%	-	98.8%
Articulated Trucks	0	0	0	0	0	-	0	1	0	0	1	-	0	1	0	0	1	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.6%	0%	0%	0.3%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0.1%
Buses and Single-Unit Trucks	3	7	0	0	10	-	0	1	0	0	1	-	0	8	1	0	9	-	1	1	0	0	2	-	22
% Buses and Single-Unit Trucks	4.5%	1.5%	0%	0%	1.7%	-	0%	0.6%	0%	0%	0.3%	-	0%	1.7%	0.6%	0%	1.2%	-	0.6%	0.6%	0%	0%	0.5%	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

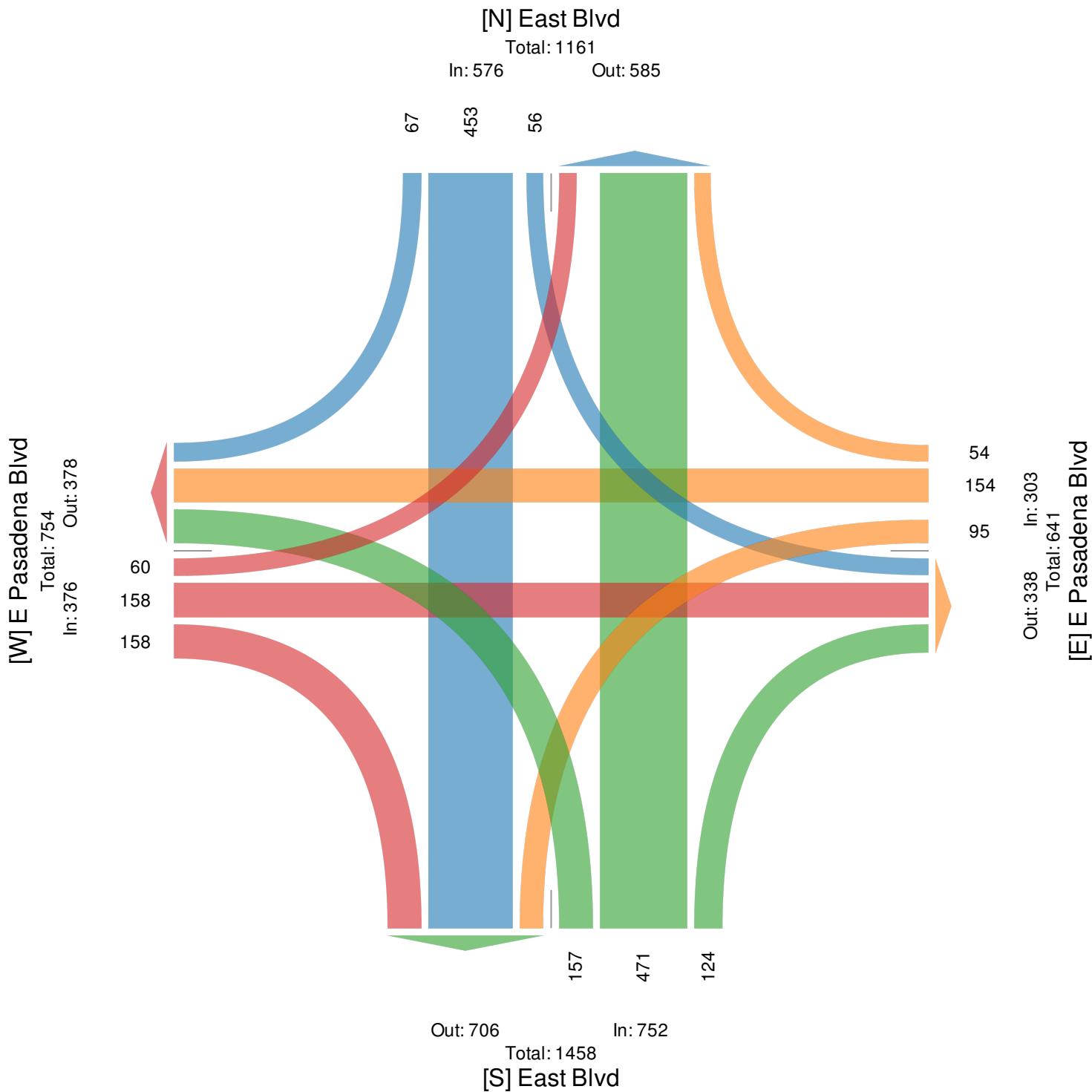
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599580, Location: 29.679747, -95.098455



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599580, Location: 29.679747, -95.098455



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						E Pasadena Blvd Westbound						East Blvd Northbound						E Pasadena Blvd Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 4:30PM	36	202	35	0	273	0	25	83	44	0	152	0	19	129	45	0	193	0	47	66	18	0	131	0	749
4:45PM	47	228	28	0	303	0	19	80	25	0	124	0	19	140	50	0	209	0	55	71	18	0	144	0	780
5:00PM	37	197	32	0	266	0	25	127	38	0	190	0	34	139	53	0	226	0	37	59	16	0	112	0	794
5:15PM	52	186	27	0	265	0	34	107	40	0	181	0	37	143	49	0	229	0	53	76	11	0	140	0	815
Total	172	813	122	0	1107	0	103	397	147	0	647	0	109	551	197	0	857	0	192	272	63	0	527	0	3138
% Approach	15.5%	73.4%	11.0%	0%	-	-	15.9%	61.4%	22.7%	0%	-	-	12.7%	64.3%	23.0%	0%	-	-	36.4%	51.6%	12.0%	0%	-	-	-
% Total	5.5%	25.9%	3.9%	0%	35.3%	-	3.3%	12.7%	4.7%	0%	20.6%	-	3.5%	17.6%	6.3%	0%	27.3%	-	6.1%	8.7%	2.0%	0%	16.8%	-	-
PHF	0.827	0.891	0.871	-	0.913	-	0.757	0.781	0.835	-	0.851	-	0.736	0.963	0.929	-	0.936	-	0.873	0.895	0.875	-	0.915	-	0.963
Lights	171	809	118	0	1098	-	102	392	146	0	640	-	109	547	196	0	852	-	192	270	62	0	524	-	3114
% Lights	99.4%	99.5%	96.7%	0%	99.2%	-	99.0%	98.7%	99.3%	0%	98.9%	-	100%	99.3%	99.5%	0%	99.4%	-	100%	99.3%	98.4%	0%	99.4%	-	99.2%
Articulated Trucks	0	0	0	0	0	-	0	1	1	0	2	-	0	1	0	0	1	-	0	0	0	0	0	-	3
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0.3%	0.7%	0%	0.3%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0.1%
Buses and Single-Unit Trucks	1	4	4	0	9	-	1	4	0	0	5	-	0	3	1	0	4	-	0	2	1	0	3	-	21
% Buses and Single-Unit Trucks	0.6%	0.5%	3.3%	0%	0.8%	-	1.0%	1.0%	0%	0%	0.8%	-	0%	0.5%	0.5%	0%	0.5%	-	0%	0.7%	1.6%	0%	0.6%	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at E Pasadena Blvd - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

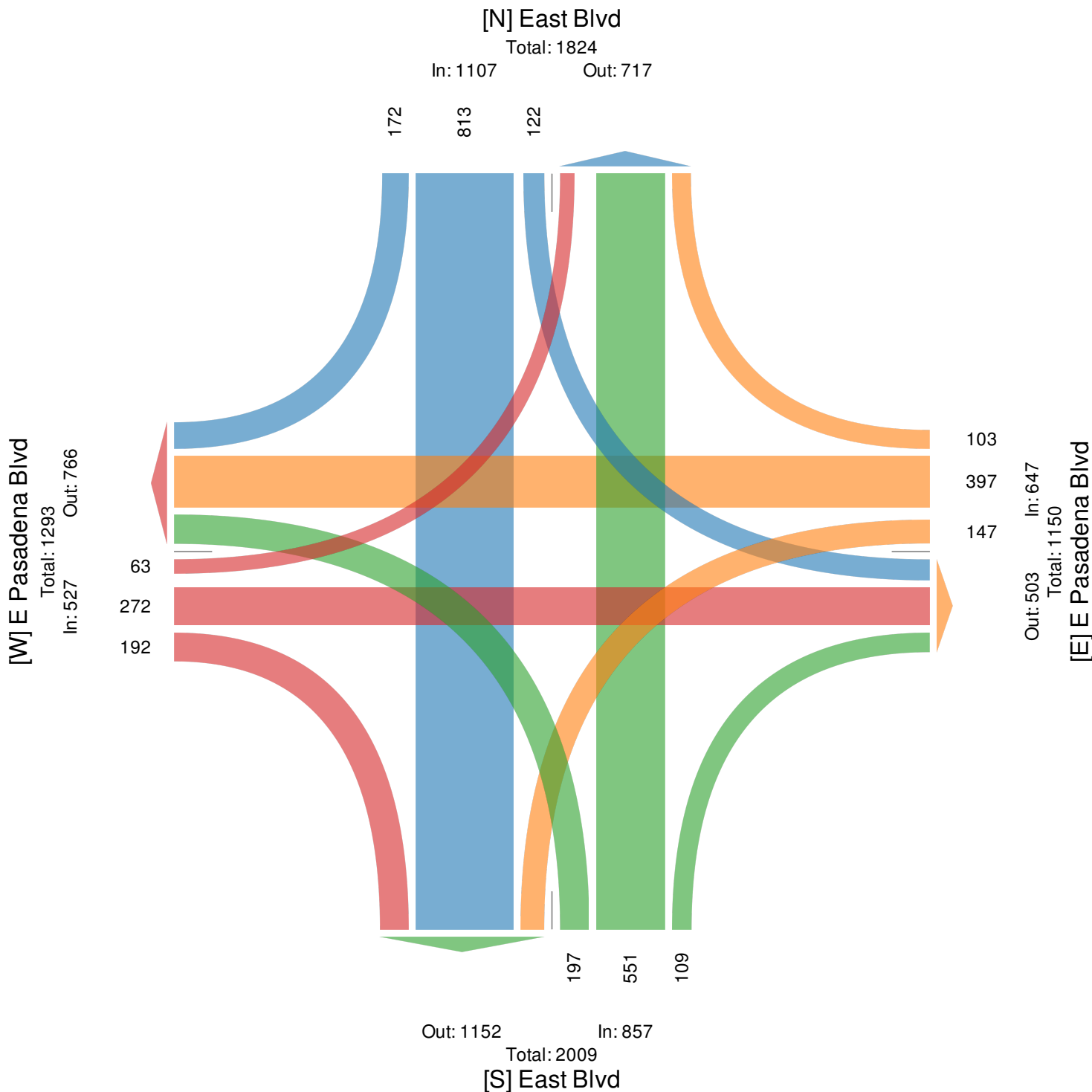
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

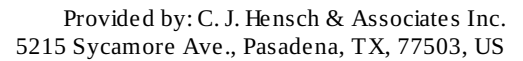
ID: 599580, Location: 29.679747, -95.098455



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



ID: 599579, Location: 29.674497, -95.098355



Leg Direction	East Blvd Southbound						Aaron St Westbound						East Blvd Northbound						Aaron St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 12:00AM	0	5	0	0	5	0	0	0	0	0	0	0	2	13	0	0	15	0	0	0	0	0	0	0	20
12:15AM	0	7	0	0	7	0	0	0	0	0	0	0	2	11	0	0	13	0	0	0	0	0	0	0	20
12:30AM	0	5	1	0	6	0	0	0	0	0	0	0	1	13	0	0	14	0	0	0	0	0	0	0	20
12:45AM	0	6	0	0	6	0	0	0	0	0	0	0	1	12	0	0	13	0	0	0	0	0	0	0	19
Hourly Total	0	23	1	0	24	0	0	0	0	0	0	0	6	49	0	0	55	0	0	0	0	0	0	0	79
1:00AM	0	6	0	0	6	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	9
1:15AM	0	6	0	0	6	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	15
1:30AM	0	7	0	0	7	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	13
1:45AM	0	3	0	0	3	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	12
Hourly Total	0	22	0	0	22	0	0	0	0	0	0	0	0	27	0	0	27	0	0	0	0	0	0	0	49
2:00AM	0	10	0	0	10	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	13
2:15AM	0	3	0	0	3	0	0	0	1	0	1	0	0	6	0	0	6	0	0	0	0	0	0	0	10
2:30AM	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4
2:45AM	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	6
Hourly Total	0	19	0	0	19	0	0	0	1	0	1	0	0	13	0	0	13	0	0	0	0	0	0	0	33
3:00AM	0	6	0	0	6	0	0	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	0	11
3:15AM	0	3	0	0	3	0	1	0	0	0	1	0	0	7	0	0	7	0	0	0	0	0	0	0	11
3:30AM	0	8	0	0	8	0	0	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	0	22
3:45AM	0	12	1	0	13	0	1	0	0	0	1	0	0	7	0	0	7	0	0	0	0	0	0	0	21
Hourly Total	0	29	1	0	30	0	2	0	0	0	2	0	1	32	0	0	33	0	0	0	0	0	0	0	65
4:00AM	0	17	0	0	17	0	3	0	0	0	3	0	0	16	0	0	16	0	0	0	0	0	0	0	36
4:15AM	0	20	0	0	20	0	2	0	0	0	2	0	0	20	0	0	20	0	0	0	0	0	0	0	42
4:30AM	0	17	1	0	18	0	2	0	2	0	4	0	0	30	0	0	30	0	0	0	0	0	0	0	52
4:45AM	0	24	0	0	24	0	5	0	1	0	6	0	0	30	0	0	30	0	0	0	0	0	0	0	60
Hourly Total	0	78	1	0	79	0	12	0	3	0	15	0	0	96	0	0	96	0	0	0	0	0	0	0	190
5:00AM	0	31	0	0	31	0	4	0	0	0	4	0	0	50	0	1	51	0	0	0	0	0	0	0	86
5:15AM	0	35	0	0	35	0	2	0	4	0	6	0	3	59	0	0	62	0	0	0	0	0	0	0	103
5:30AM	0	42	3	1	46	0	6	0	5	0	11	0	4	83	0	0	87	0	0	0	0	0	0	0	144
5:45AM	0	54	0	0	54	0	11	0	3	0	14	0	1	78	0	0	79	0	0	0	0	0	0	0	147
Hourly Total	0	162	3	1	166	0	23	0	12	0	35	0	8	270	0	1	279	0	0	0	0	0	0	0	480
6:00AM	0	67	1	0	68	0	5	0	3	0	8	0	1	121	0	0	122	0	0	0	0	0	0	0	198
6:15AM	0	88	1	0	89	0	9	0	7	0	16	0	4	87	0	0	91	0	0	0	0	0	0	0	196
6:30AM	0	93	0	0	93	0	8	0	12	0	20	0	3	120	0	0	123	0	0	0	0	0	0	0	236
6:45AM	0	115	1	0	116	1	13	0	11	0	24	1	1	128	0	0	129	0	0	0	0	0	0	0	269
Hourly Total	0	363	3	0	366	1	35	0	33	0	68	1	9	456	0	0	465	0	0	0	0	0	0	0	899
7:00AM	0	126	7	0	133	0	11	0	8	0	19	0	7	113	0	0	120	0	0	0	0	0	0	0	272
7:15AM	0	176	21	0	197	0	26	0	35	0	61	0	16	131	0	0	147	0	0	0	0	0	0	0	405
7:30AM	0	153	14	0	167	0	32	0	40	0	72	0	38	141	0	0	179	0	0	0	0	0	0	0	418
7:45AM	0	149	39	0	188	0	41	0	52	0	93	0	43	140	0	0	183	0	0	0	0	0	0	0	464
Hourly Total	0	604	81	0	685	0	110	0	135	0	245	0	104	525	0	0	629	0	0	0	0	0	0	0	1559
8:00AM	0	129	12	0	141	0	13	0	36	0	49	0	24	142	0	1	167	0	0	0	0	0	0	0	357
8:15AM	0	102	2	0	104	0	5	0	5	0	10	0	4	113	0	0	117	0	0	0	0	0	0	0	231
8:30AM	0	100	0	0	100	0	2	0	5	0	7	0	2	87	0	0	89	0	0	0	0	0	0	0	196
8:45AM	0	114	1	0	115	0	3	0	7	0	10	0	1	93	0	0	94	0	0	0	0	0	0	0	219
Hourly Total	0	445	15	0	460	0	23	0	53	0	76	0	31	435	0	1	467	0	0	0	0	0	0	0	1003
9:00AM	0	97	0	0	97	0	4	0	7	0	11	0	0	78	0	0	78	0	0	0	0	0	0	0	186
9:15AM	0	107	4	0	111	0	4	0	8	0	12	0	8	98	0	0	106	0	0	0	0	0	0	0	229
9:30AM	0	98	2	0	100	0	3	0	5	0	8	0	6	95	0	0	101	0	0	0	0	0	0	0	209
9:45AM	0	120	1	0	121	0	3	0	3	0	6	0	8	95	0	0	103	0	0	0	0	0	0	0	230
Hourly Total	0	422	7	0	429	0	14	0	23	0	37	0	22	366	0	0	388	0	0	0	0	0	0	0	854
10:00AM	0	106	4	0	110	0	7	0	10	0	17	0	5	86	0	0	91	0	0	0	0	0	0	0	218
10:15AM	0	124	1	0	125	0	9	0	5	0	14	0	7	95	0	1	103	0	0	0	0	0	0	0	242
10:30AM	0	133	2	0	135	0	4	0	8	0	12	0	6	114	0	0	120	0	0	0	0	0	0	0	267
10:45AM	0	140	3	0	143	0	5	0	6	0	11	0	4	127	0	0	131	0	0	0	0	0	0	0	285
Hourly Total	0	503	10	0	513	0	25	0	29	0	54	0	22	422	0	1	445	0	0	0	0	0	0	0	1012
11:00AM	0	145	2	0	147	0	2	0	3	0	5	0	4	116	0	1	121	0	0	0	0	0	0	0	273
11:15AM	0	186	3	0	189	0	1	0	5	0	6	0	4	148	0	0	152	0	0	0	0	0	0	0	347
11:30AM	0	166	4	0	170	0	3	0	4	0	7	0	2	136	0	1	139	0	0	0	0	0	0	0	316
11:45AM	1	168	2	0	171	0	3	0	4	0	7	0	9	159	0	0	168	0	0	0	0	0	0	0	346
Hourly Total	1	665	11	0	677	0	9	0	16	0	25	0	19	559	0	2	580	0	0	0	0	0	0	0	1282

Leg Direction	East Blvd Southbound						Aaron St Westbound						East Blvd Northbound						Aaron St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
12:00PM	0	194	4	0	198	0	6	0	6	0	12	0	6	169	0	0	175	0	0	0	0	0	0	0	385
12:15PM	0	169	4	0	173	0	3	0	7	0	10	0	4	191	0	0	195	1	0	0	0	0	0	1	378
12:30PM	0	162	4	0	166	0	6	0	9	0	15	0	10	202	0	1	213	0	0	0	0	0	0	0	394
12:45PM	0	174	2	0	176	0	5	0	7	0	12	0	7	169	0	0	176	0	0	0	0	0	0	0	364
Hourly Total	0	699	14	0	713	0	20	0	29	0	49	0	27	731	0	1	759	1	0	0	0	0	0	1	1521
1:00PM	0	161	7	0	168	0	6	0	10	0	16	0	9	139	0	0	148	0	0	0	0	0	0	0	332
1:15PM	0	156	5	0	161	0	3	0	10	0	13	0	7	158	0	0	165	0	0	0	0	0	0	0	339
1:30PM	0	133	5	0	138	0	7	0	10	0	17	0	9	156	0	0	165	0	0	0	0	0	0	1	320
1:45PM	0	163	2	0	165	0	4	0	6	0	10	0	12	153	0	0	165	0	0	0	0	0	0	0	340
Hourly Total	0	613	19	0	632	0	20	0	36	0	56	0	37	606	0	0	643	0	0	0	0	0	0	1	1331
2:00PM	0	146	3	0	149	0	6	0	2	0	8	0	11	151	0	0	162	0	0	0	0	0	0	0	319
2:15PM	0	144	2	0	146	0	5	0	4	0	9	0	10	157	0	0	167	0	0	0	0	0	0	0	322
2:30PM	0	134	4	0	138	0	1	0	7	0	8	0	3	170	0	0	173	0	0	0	0	0	0	0	319
2:45PM	0	151	5	0	156	0	3	0	6	0	9	0	4	179	0	0	183	0	0	0	0	0	0	0	348
Hourly Total	0	575	14	0	589	0	15	0	19	0	34	0	28	657	0	0	685	0	0	0	0	0	0	0	1308
3:00PM	0	153	9	0	162	0	3	0	4	0	7	0	7	148	0	0	155	0	0	0	0	0	0	0	324
3:15PM	0	165	10	0	175	0	5	0	6	0	11	0	26	156	0	0	182	0	0	0	0	0	0	0	368
3:30PM	0	179	18	0	197	0	4	0	9	0	13	0	33	161	0	0	194	0	0	0	0	0	0	0	404
3:45PM	0	186	24	0	210	0	31	0	46	0	77	0	32	202	0	0	234	0	0	0	0	0	0	0	521
Hourly Total	0	683	61	0	744	0	43	0	65	0	108	0	98	667	0	0	765	0	0	0	0	0	0	0	1617
4:00PM	0	207	9	0	216	0	19	0	26	0	45	0	16	179	0	1	196	0	0	0	0	0	0	0	457
4:15PM	0	264	11	0	275	0	5	0	11	0	16	0	15	215	0	0	230	0	0	0	0	0	0	0	521
4:30PM	0	277	15	0	292	0	5	0	9	0	14	0	15	189	0	0	204	0	0	0	0	0	0	0	510
4:45PM	0	304	7	0	311	0	4	0	13	0	17	0	12	212	0	1	225	0	0	0	0	0	0	0	553
Hourly Total	0	1052	42	0	1094	0	33	0	59	0	92	0	58	795	0	2	855	0	0	0	0	0	0	0	2041
5:00PM	0	249	13	0	262	0	8	0	13	0	21	0	17	214	0	0	231	0	0	0	0	0	0	0	514
5:15PM	0	247	13	0	260	0	7	0	13	0	20	0	22	231	0	0	253	0	0	0	0	0	0	0	533
5:30PM	0	239	9	0	248	0	5	0	10	0	15	0	19	213	0	0	232	0	0	0	0	0	0	0	495
5:45PM	0	272	8	0	280	0	5	0	14	0	19	0	19	224	0	1	244	0	0	0	0	0	0	0	543
Hourly Total	0	1007	43	0	1050	0	25	0	50	0	75	0	77	882	0	1	960	0	0	0	0	0	0	0	2085
6:00PM	0	207	8	0	215	0	4	0	12	1	17	0	17	227	0	0	244	0	0	0	0	0	0	0	476
6:15PM	0	207	9	0	216	0	5	0	16	0	21	0	20	189	0	1	210	0	0	0	0	0	0	0	447
6:30PM	0	189	7	0	196	0	4	0	6	0	10	0	17	171	0	1	189	0	0	0	0	0	0	0	395
6:45PM	0	187	5	0	192	0	4	0	11	0	15	0	15	181	0	0	196	0	0	0	0	0	0	0	403
Hourly Total	0	790	29	0	819	0	17	0	45	1	63	0	69	768	0	2	839	0	0	0	0	0	0	0	1721
7:00PM	0	167	6	1	174	0	3	0	6	0	9	0	14	179	0	2	195	0	0	0	0	0	0	0	378
7:15PM	0	139	2	0	141	0	9	0	4	0	13	0	11	173	0	0	184	0	0	0	0	0	0	0	338
7:30PM	0	135	6	0	141	0	1	0	3	0	4	0	13	150	0	0	163	0	0	0	0	0	0	0	308
7:45PM	0	96	6	0	102	0	4	0	6	0	10	0	10	148	0	0	158	0	0	0	0	0	0	0	270
Hourly Total	0	537	20	1	558	0	17	0	19	0	36	0	48	650	0	2	700	0	0	0	0	0	0	0	1294
8:00PM	0	93	2	0	95	0	8	0	7	0	15	0	9	159	0	0	168	0	0	0	0	0	0	0	278
8:15PM	0	89	3	0	92	0	2	0	4	0	6	0	6	135	0	0	141	0	0	0	0	0	0	0	239
8:30PM	0	79	2	0	81	0	3	0	2	0	5	0	8	99	0	0	107	0	0	0	0	0	0	0	193
8:45PM	0	94	0	0	94	0	2	0	5	0	7	0	12	112	0	0	124	0	0	0	0	0	0	0	225
Hourly Total	0	355	7	0	362	0	15	0	18	0	33	0	35	505	0	0	540	0	0	0	0	0	0	0	935
9:00PM	0	88	9	0	97	0	0	0	3	0	3	0	8	103	0	0	111	0	0	0	0	0	0	0	211
9:15PM	0	65	3	0	68	0	5	0	2	0	7	0	7	123	0	0	130	0	0	0	0	0	0	0	205
9:30PM	0	50	1	0	51	0	1	0	2	0	3	0	7	83	0	0	90	0	0	0	0	0	0	0	144
9:45PM	0	52	2	0	54	0	0	0	5	0	5	0	5	86	0	0	91	0	0	0	0	0	0	0	150
Hourly Total	0	255	15	0	270	0	6	0	12	0	18	0	27	395	0	0	422	0	0	0	0	0	0	0	710
10:00PM	0	49	1	0	50	0	1	0	3	0	4	0	2	60	0	0	62	0	0	0	0	0	0	0	116
10:15PM	0	36	1	0	37	0	2	0	1	0	3	0	3	58	0	0	61	0	0	0	0	0	0	0	101
10:30PM	0	26	5	0	31	0	1	0	0	0	1	0	0	56	0	0	56	0	0	0	0	0	0	0	88
10:45PM	0	24	0	0	24	0	2	0	1	0	3	0	3	39	0	0	42	0	0	0	0	0	0	0	69
Hourly Total	0	135	7	0	142	0	6	0	5	0	11	0	8	213	0	0	221	0	0	0	0	0	0	0	374
11:00PM	0	26	0	0	26	0	0	0	1	0	1	0	0	31	0	0	31	0	0	0	0	0	0	0	58
11:15PM	0	19	1	0	20	0	0	0	0	0	0	0	1	29	0	0	30	0	0	0	0	0	0	0	50
11:30PM	0	16	0	0	16	0	0	0	1	0	1	0	6	23	0	0	29	0	0	0	0	0	0	0	46
11:45PM	0	12	1	0	13	0	0	0	2	0	2	0	4	24	0	0	28	0	0	0	0	0	0	0	43
Hourly Total	0	73	2	0	75	0	0	0	4	0	4	0	11	107	0	0	118	0	0	0	0	0	0	0	197
Total	1	10109	406	2	10518	1	470	0	666	1	1137	1	745	10226	0	13	10984	1	0	0	0	0	0	2	22639
% Approach	0%	96.1%	3.9%	0%	-	-	41.3%	0%	58.6%	0.1%	-	-	6.8%	93.1%	0%	0.1%	-	-	0%	0%	0%	0%	-	-	-
% Total	0%	44.7%	1.8%	0%	46.5%	-	2.1%	0%	2.9%	0%	5.0%	-	3.3%	45.2%	0%	0.1%	48.5%	-	0%	0%	0%	0%	0	-	-
Lights	1	10001	402	2	10406	-	466	0	657	1	1124	-	738	10120	0	11	10869	-	0	0	0	0	0	-	22399
% Lights	100%	98.9%	99.0%	100%	98.9%	-	99.1%	0%	98.6%	100%	98.9%	-	99.1%	99.0%	0%	84.6%	99.0%	-	0%	0%	0%	0%	-	-	98.9%
Articulated Trucks	0	30	0	0	30	-	0	0	0	0	0	-	0	27	0	1	28	-	0	0	0	0	0	-	58

Leg Direction	East Blvd Southbound						Aaron St Westbound						East Blvd Northbound						Aaron St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
% Articulated Trucks	0%	0.3%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	7.7%	0.3%	-	0%	0%	0%	0%	-	-	0.3%
Buses and Single-Unit Trucks	0	78	4	0	82	-	4	0	9	0	13	-	7	79	0	1	87	-	0	0	0	0	0	-	182
% Buses and Single-Unit Trucks	0%	0.8%	1.0%	0%	0.8%	-	0.9%	0%	1.4%	0%	1.1%	-	0.9%	0.8%	0%	7.7%	0.8%	-	0%	0%	0%	0%	-	-	0.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Aaron St - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

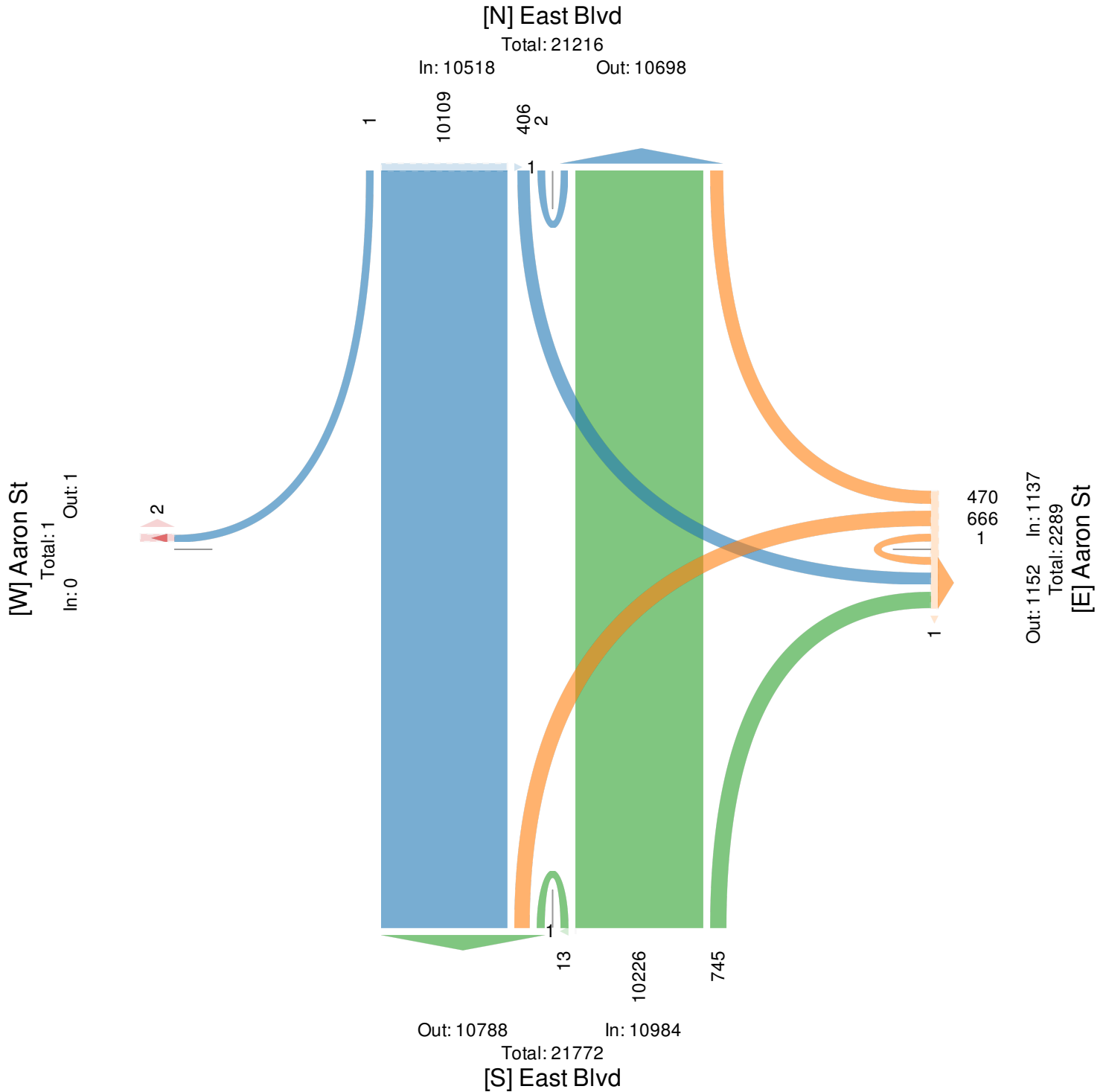
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599579, Location: 29.674497, -95.098355



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Aaron St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7:15AM - 8:15AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599579, Location: 29.674497, -95.098355



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						Aaron St Westbound						East Blvd Northbound						Aaron St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 7:15AM	0	176	21	0	197	0	26	0	35	0	61	0	16	131	0	0	147	0	0	0	0	0	0	0	405
7:30AM	0	153	14	0	167	0	32	0	40	0	72	0	38	141	0	0	179	0	0	0	0	0	0	0	418
7:45AM	0	149	39	0	188	0	41	0	52	0	93	0	43	140	0	0	183	0	0	0	0	0	0	0	464
8:00AM	0	129	12	0	141	0	13	0	36	0	49	0	24	142	0	1	167	0	0	0	0	0	0	0	357
Total	0	607	86	0	693	0	112	0	163	0	275	0	121	554	0	1	676	0	0	0	0	0	0	0	1644
% Approach	0%	87.6%	12.4%	0%	-	-	40.7%	0%	59.3%	0%	-	-	17.9%	82.0%	0%	0.1%	-	-	0%	0%	0%	0%	-	-	-
% Total	0%	36.9%	5.2%	0%	42.2%	-	6.8%	0%	9.9%	0%	16.7%	-	7.4%	33.7%	0%	0.1%	41.1%	-	0%	0%	0%	0%	0%	-	-
PHF	-	0.862	0.551	-	0.879	-	0.683	-	0.784	-	0.739	-	0.703	0.975	-	0.250	0.923	-	-	-	-	-	-	-	0.886
Lights	0	598	86	0	684	-	111	0	161	0	272	-	120	536	0	1	657	-	0	0	0	0	0	-	1613
% Lights	0%	98.5%	100%	0%	98.7%	-	99.1%	0%	98.8%	0%	98.9%	-	99.2%	96.8%	0%	100%	97.2%	-	0%	0%	0%	0%	-	-	98.1%
Articulated Trucks	0	2	0	0	2	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	3
% Articulated Trucks	0%	0.3%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0%	0%	-	-	0.2%
Buses and Single-Unit Trucks	0	7	0	0	7	-	1	0	2	0	3	-	1	17	0	0	18	-	0	0	0	0	0	-	28
% Buses and Single-Unit Trucks	0%	1.2%	0%	0%	1.0%	-	0.9%	0%	1.2%	0%	1.1%	-	0.8%	3.1%	0%	0%	2.7%	-	0%	0%	0%	0%	-	-	1.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Aaron St - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7:15AM - 8:15AM)

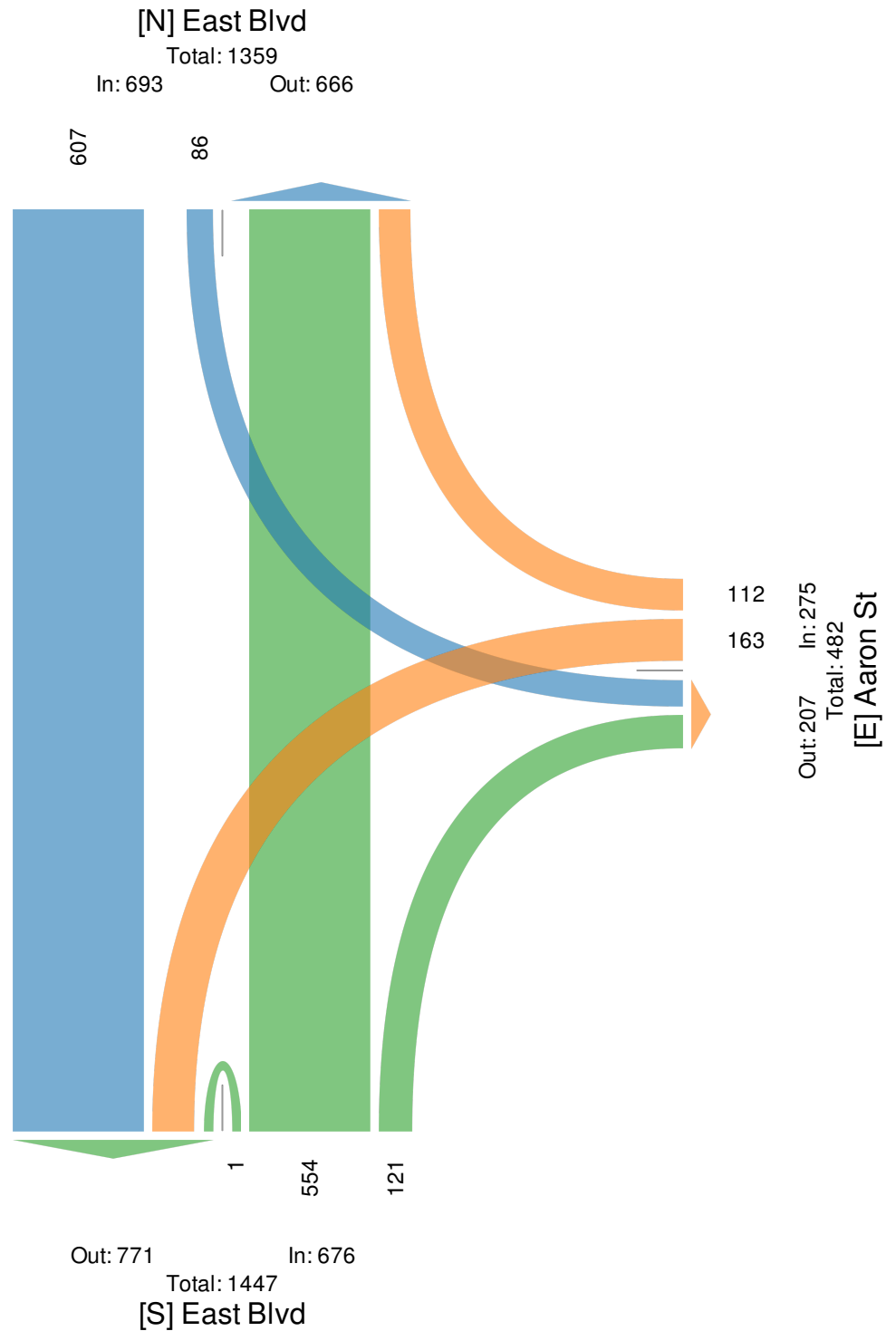
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599579, Location: 29.674497, -95.098355



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Aaron St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599579, Location: 29.674497, -95.098355



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						Aaron St Westbound						East Blvd Northbound						Aaron St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 12:00PM	0	194	4	0	198	0	6	0	6	0	12	0	6	169	0	0	175	0	0	0	0	0	0	0	385
12:15PM	0	169	4	0	173	0	3	0	7	0	10	0	4	191	0	0	195	1	0	0	0	0	0	1	378
12:30PM	0	162	4	0	166	0	6	0	9	0	15	0	10	202	0	1	213	0	0	0	0	0	0	0	394
12:45PM	0	174	2	0	176	0	5	0	7	0	12	0	7	169	0	0	176	0	0	0	0	0	0	0	364
Total	0	699	14	0	713	0	20	0	29	0	49	0	27	731	0	1	759	1	0	0	0	0	0	1	1521
% Approach	0%	98.0%	2.0%	0%	-	-	40.8%	0%	59.2%	0%	-	-	3.6%	96.3%	0%	0.1%	-	-	0%	0%	0%	0%	-	-	-
% Total	0%	46.0%	0.9%	0%	46.9%	-	1.3%	0%	1.9%	0%	3.2%	-	1.8%	48.1%	0%	0.1%	49.9%	-	0%	0%	0%	0%	0%	-	-
PHF	-	0.901	0.875	-	0.900	-	0.833	-	0.806	-	0.817	-	0.675	0.905	-	0.250	0.891	-	-	-	-	-	-	-	0.965
Lights	0	692	13	0	705	-	20	0	29	0	49	-	26	723	0	1	750	-	0	0	0	0	0	-	1504
% Lights	0%	99.0%	92.9%	0%	98.9%	-	100%	0%	100%	0%	100%	-	96.3%	98.9%	0%	100%	98.8%	-	0%	0%	0%	0%	-	-	98.9%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	-	-	0%
Buses and Single-Unit Trucks	0	7	1	0	8	-	0	0	0	0	0	-	1	8	0	0	9	-	0	0	0	0	0	-	17
% Buses and Single-Unit Trucks	0%	1.0%	7.1%	0%	1.1%	-	0%	0%	0%	0%	0%	-	3.7%	1.1%	0%	0%	1.2%	-	0%	0%	0%	0%	-	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Aaron St - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

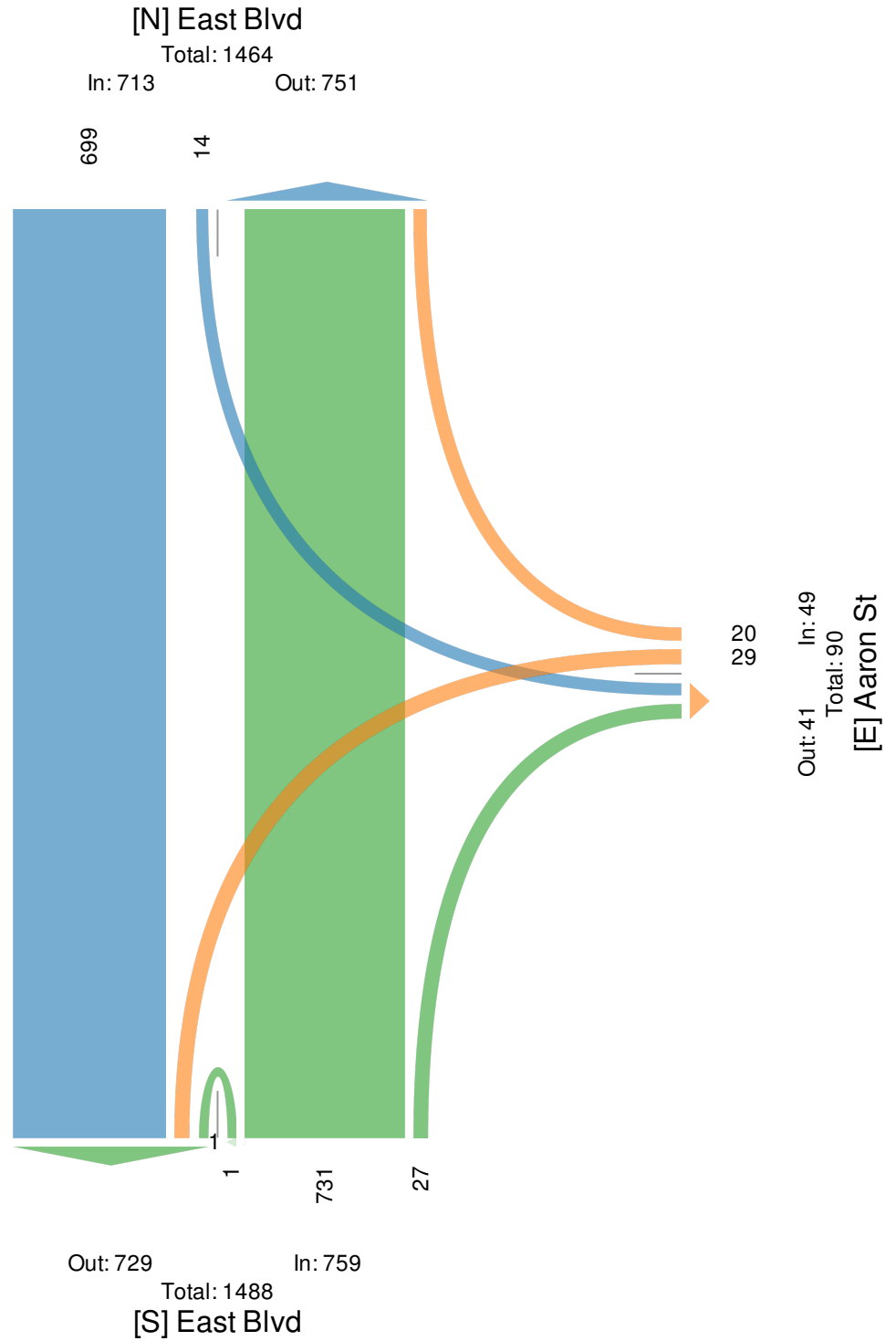
All Movements

ID: 599579, Location: 29.674497, -95.098355



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

[W] Aaron St



East Blvd at Aaron St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599579, Location: 29.674497, -95.098355



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						Aaron St Westbound						East Blvd Northbound						Aaron St Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 4:30PM	0	277	15	0	292	0	5	0	9	0	14	0	15	189	0	0	204	0	0	0	0	0	0	0	510
4:45PM	0	304	7	0	311	0	4	0	13	0	17	0	12	212	0	1	225	0	0	0	0	0	0	0	553
5:00PM	0	249	13	0	262	0	8	0	13	0	21	0	17	214	0	0	231	0	0	0	0	0	0	0	514
5:15PM	0	247	13	0	260	0	7	0	13	0	20	0	22	231	0	0	253	0	0	0	0	0	0	0	533
Total	0	1077	48	0	1125	0	24	0	48	0	72	0	66	846	0	1	913	0	0	0	0	0	0	0	2110
% Approach	0%	95.7%	4.3%	0%	-	-	33.3%	0%	66.7%	0%	-	-	7.2%	92.7%	0%	0.1%	-	-	0%	0%	0%	0%	-	-	-
% Total	0%	51.0%	2.3%	0%	53.3%	-	1.1%	0%	2.3%	0%	3.4%	-	3.1%	40.1%	0%	0%	43.3%	-	0%	0%	0%	0%	0%	-	-
PHF	-	0.886	0.800	-	0.904	-	0.750	-	0.923	-	0.857	-	0.750	0.916	-	0.250	0.902	-	-	-	-	-	-	-	0.954
Lights	0	1073	47	0	1120	-	23	0	48	0	71	-	64	843	0	1	908	-	0	0	0	0	0	-	2099
% Lights	0%	99.6%	97.9%	0%	99.6%	-	95.8%	0%	100%	0%	98.6%	-	97.0%	99.6%	0%	100%	99.5%	-	0%	0%	0%	0%	-	-	99.5%
Articulated Trucks	0	1	0	0	1	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0%	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	-	-	0.1%
Buses and Single-Unit Trucks	0	3	1	0	4	-	1	0	0	0	1	-	2	2	0	0	4	-	0	0	0	0	0	-	9
% Buses and Single-Unit Trucks	0%	0.3%	2.1%	0%	0.4%	-	4.2%	0%	0%	0%	1.4%	-	3.0%	0.2%	0%	0%	0.4%	-	0%	0%	0%	0%	-	-	0.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Aaron St - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:30PM - 5:30PM) - Overall Peak Hour

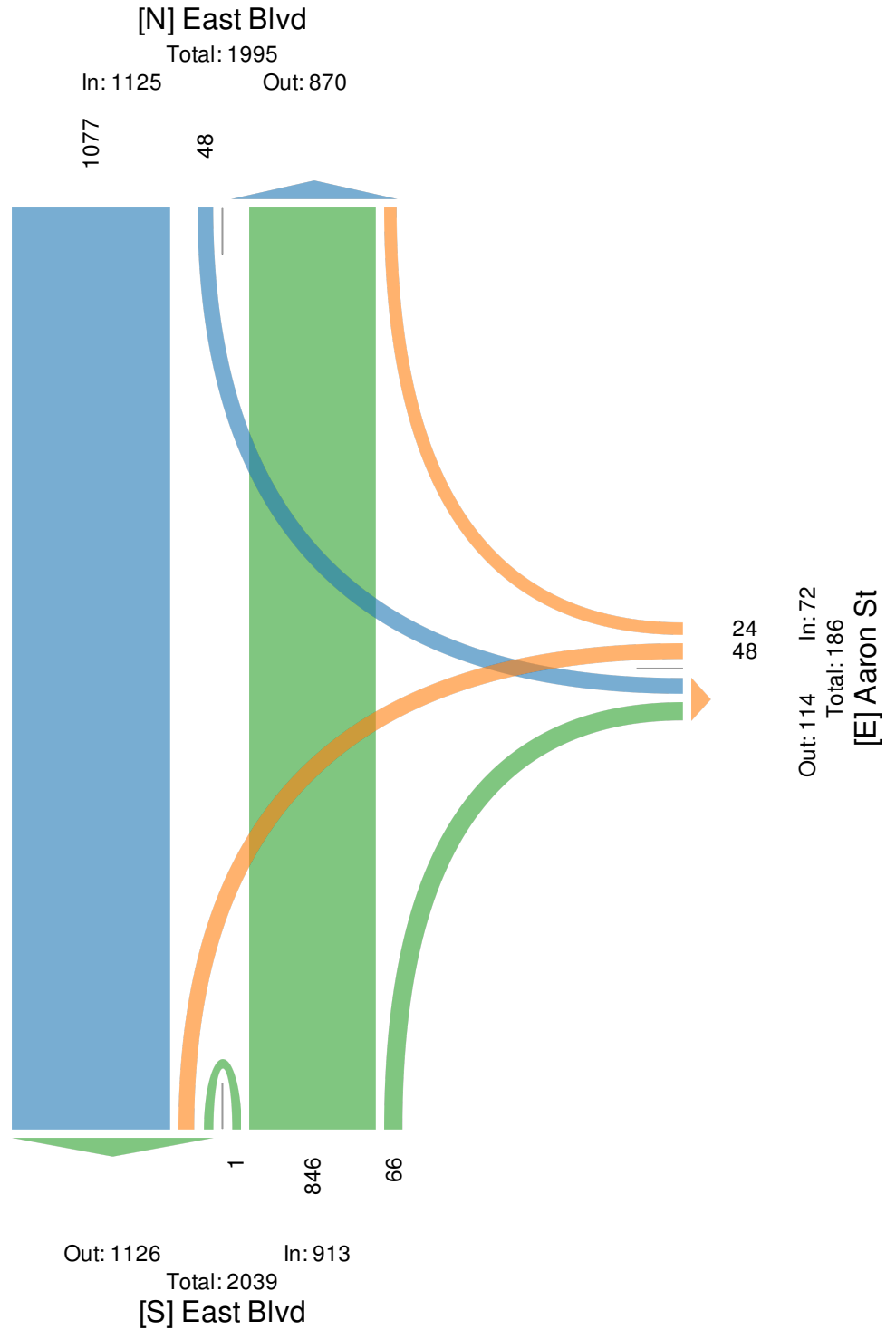
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599579, Location: 29.674497, -95.098355



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM(+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						HEB Drwy Westbound						East Blvd Northbound						Walmart Drwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18																									
12:00AM	4	6	0	0	10	0	0	0	0	0	0	0	1	11	1	0	13	0	0	0	4	0	4	0	27
12:15AM	0	7	0	0	7	0	0	0	1	0	1	0	0	9	0	0	9	0	1	0	2	0	3	0	20
12:30AM	1	4	0	0	5	0	3	0	0	0	3	0	0	6	0	0	6	0	1	0	5	0	6	0	20
12:45AM	2	3	1	0	6	0	0	0	0	0	0	0	0	11	0	0	11	0	1	0	2	0	3	0	20
Hourly Total	7	20	1	0	28	0	3	0	1	0	4	0	1	37	1	0	39	0	3	0	13	0	16	0	87
1:00AM	3	5	0	0	8	0	1	0	0	0	1	0	0	2	0	1	3	0	2	1	1	0	4	0	16
1:15AM	1	5	0	0	6	0	1	0	0	0	1	1	0	8	0	0	8	0	1	0	1	0	2	0	17
1:30AM	2	5	0	0	7	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	1	0	2	0	13
1:45AM	1	4	0	0	5	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	14
Hourly Total	7	19	0	0	26	0	2	0	0	0	2	1	0	23	0	1	24	0	4	1	3	0	8	0	60
2:00AM	3	6	0	0	9	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	13
2:15AM	1	4	0	0	5	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	11
2:30AM	1	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3
2:45AM	2	2	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	5
Hourly Total	7	13	0	0	20	0	0	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	0	32
3:00AM	2	4	0	0	6	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	11
3:15AM	0	3	0	0	3	0	0	0	0	0	0	0	1	7	0	0	8	0	0	0	1	0	1	0	12
3:30AM	1	5	0	0	6	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	1	0	1	0	16
3:45AM	3	11	1	0	15	0	0	0	0	0	0	0	0	11	0	0	11	0	1	0	0	0	1	0	27
Hourly Total	6	23	1	0	30	0	0	0	0	0	0	0	1	32	0	0	33	0	1	0	2	0	3	0	66
4:00AM	4	11	0	0	15	0	0	0	0	0	0	0	0	15	1	0	16	0	2	0	0	0	2	0	33
4:15AM	1	20	0	0	21	0	0	0	0	0	0	0	0	22	0	0	22	0	0	0	3	0	3	0	46
4:30AM	1	16	0	0	17	0	0	0	0	0	0	0	0	27	0	0	27	0	0	0	3	0	3	0	47
4:45AM	5	19	2	0	26	0	0	0	0	0	0	0	0	31	0	0	31	0	1	0	1	0	2	0	59
Hourly Total	11	66	2	0	79	0	0	0	0	0	0	0	0	95	1	0	96	0	3	0	7	0	10	0	185
5:00AM	8	20	0	0	28	0	1	0	0	0	1	0	1	45	0	0	46	0	0	0	2	0	2	0	77
5:15AM	8	33	0	0	41	0	1	0	0	0	1	0	0	62	0	0	62	0	0	0	3	0	3	0	107
5:30AM	8	38	1	0	47	0	0	1	0	0	1	0	1	89	0	0	90	0	2	0	4	0	6	0	144
5:45AM	5	48	1	0	54	0	0	0	0	0	0	0	2	84	0	0	86	0	1	0	4	0	5	0	145
Hourly Total	29	139	2	0	170	0	2	1	0	0	3	0	4	280	0	0	284	0	3	0	13	0	16	0	473
6:00AM	6	58	4	0	68	0	2	0	0	0	2	0	3	107	0	0	110	0	2	0	4	0	6	0	186
6:15AM	7	80	4	0	91	0	2	0	0	0	2	0	2	83	1	0	86	0	2	1	4	0	7	0	186
6:30AM	8	84	2	0	94	0	4	1	2	0	7	0	1	94	1	0	96	0	1	0	3	0	4	0	201
6:45AM	14	108	2	0	124	0	3	0	1	0	4	0	5	124	0	0	129	1	3	0	4	0	7	0	264
Hourly Total	35	330	12	0	377	0	11	1	3	0	15	0	11	408	2	0	421	1	8	1	15	0	24	0	837
7:00AM	17	113	4	0	134	0	2	1	4	0	7	0	2	115	1	1	119	0	7	2	12	0	21	0	281
7:15AM	21	167	8	0	196	0	4	1	5	0	10	0	4	141	1	0	146	0	4	1	13	0	18	0	370
7:30AM	17	151	9	0	177	0	10	0	3	0	13	0	2	167	2	2	173	0	7	1	10	0	18	0	381
7:45AM	27	171	20	1	219	0	9	0	5	0	14	0	3	157	6	0	166	0	7	1	12	0	20	0	419
Hourly Total	82	602	41	1	726	0	25	2	17	0	44	0	11	580	10	3	604	0	25	5	47	0	77	0	1451
8:00AM	18	131	11	0	160	0	3	1	7	0	11	0	1	130	4	0	135	0	5	2	15	0	22	0	328
8:15AM	12	82	5	0	99	0	9	1	5	0	15	0	4	99	2	0	105	0	10	2	6	0	18	0	237
8:30AM	23	72	10	0	105	0	5	0	1	0	6	0	8	71	4	0	83	0	7	3	8	0	18	0	212
8:45AM	33	82	8	1	124	0	9	0	3	0	12	0	4	70	2	0	76	0	6	1	10	0	17	0	229
Hourly Total	86	367	34	1	488	0	26	2	16	0	44	0	17	370	12	0	399	0	28	8	39	0	75	0	1006
9:00AM	24	69	11	0	104	0	7	2	2	0	11	1	5	68	8	0	81	0	7	5	14	0	26	0	222
9:15AM	26	74	16	0	116	0	12	2	3	0	17	0	3	75	2	0	80	0	6	3	7	0	16	0	229
9:30AM	24	71	10	1	106	0	8	1	2	0	11	0	7	75	5	0	87	0	16	5	14	0	35	0	239
9:45AM	32	82	7	0	121	0	10	4	5	0	19	0	4	70	3	0	77	0	10	2	15	0	27	0	244
Hourly Total	106	296	44	1	447	0	37	9	12	0	58	1	19	288	18	0	325	0	39	15	50	0	104	0	934
10:00AM	29	71	11	0	111	0	4	2	5	0	11	0	10	74	2	0	86	0	9	7	14	0	30	0	238
10:15AM	35	76	17	0	128	0	11	4	5	0	20	0	8	68	1	1	78	0	6	4	11	0	21	0	247
10:30AM	32	97	18	0	147	0	12	2	5	0	19	0	9	88	2	0	99	0	14	5	19	0	38	0	303
10:45AM	36	86	23	0	145	0	15	2	6	0	23	0	5	94	5	0	104	0	12	3	11	0	26	0	298
Hourly Total	132	330	69	0	531	0	42	10	21	0	73	0	32	324	10	1	367	0	41	19	55	0	115	0	1086
11:00AM	33	94	17	0	144	0	14	1	5	0	20	0	6	84	9	1	100	0	12	6	13	0	31	0	295
11:15AM	38	116	19	0	173	0	10	2	3	0	15	0	8	99	7	0	114	0	19	11	21	0	51	0	353
11:30AM	43	126	20																						

Leg Direction	East Blvd Southbound						HEB Drwy Westbound						East Blvd Northbound						Walmart Drwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
1:30PM	31	89	16	0	136	0	16	4	10	0	30	0	11	137	3	0	151	2	16	3	12	0	31	0	348
1:45PM	41	98	29	0	168	0	27	2	9	0	38	0	9	101	9	0	119	0	19	4	24	0	47	0	372
Hourly Total	151	394	91	0	636	0	77	14	36	0	127	0	44	462	26	1	533	2	74	17	77	0	168	0	1464
2:00PM	44	91	17	0	152	0	14	3	6	0	23	0	6	114	3	0	123	1	12	5	23	0	40	0	338
2:15PM	40	81	16	0	137	0	16	3	9	0	28	0	18	106	5	0	129	0	16	3	25	0	44	0	338
2:30PM	36	98	23	0	157	0	24	0	8	0	32	0	8	110	3	1	122	0	13	4	31	0	48	0	359
2:45PM	35	93	22	0	150	0	19	5	9	0	33	0	10	123	3	1	137	0	7	7	24	0	38	0	358
Hourly Total	155	363	78	0	596	0	73	11	32	0	116	0	42	453	14	2	511	1	48	19	103	0	170	0	1393
3:00PM	43	94	20	0	157	0	23	0	7	0	30	0	12	101	5	0	118	0	19	8	22	0	49	0	354
3:15PM	49	102	16	0	167	0	21	2	5	0	28	0	16	129	6	0	151	0	11	4	19	0	34	0	380
3:30PM	30	132	27	0	189	0	30	2	11	0	43	0	7	122	8	1	138	0	13	3	21	0	37	0	407
3:45PM	31	161	38	0	230	0	27	2	9	0	38	0	6	139	12	1	158	0	10	5	27	0	42	0	468
Hourly Total	153	489	101	0	743	0	101	6	32	0	139	0	41	491	31	2	565	0	53	20	89	0	162	0	1609
4:00PM	43	148	33	0	224	0	19	3	7	0	29	0	12	136	9	1	158	0	20	10	19	0	49	0	460
4:15PM	54	194	33	0	281	0	24	4	7	0	35	0	11	175	13	1	200	0	26	9	27	0	62	0	578
4:30PM	54	183	45	0	282	0	28	4	7	0	39	0	12	118	15	1	146	1	18	5	29	0	52	0	519
4:45PM	45	185	51	0	281	0	19	1	9	0	29	0	14	157	18	1	190	0	20	13	29	0	62	0	562
Hourly Total	196	710	162	0	1068	0	90	12	30	0	132	0	49	586	55	4	694	1	84	37	104	0	225	0	2119
5:00PM	55	157	36	0	248	0	35	8	16	0	59	0	15	158	14	0	187	0	20	16	33	0	69	0	563
5:15PM	61	170	42	0	273	2	19	4	8	0	31	0	16	151	17	0	184	0	21	4	44	0	69	0	557
5:30PM	49	146	37	1	233	0	33	1	9	0	43	0	18	144	7	0	169	0	23	6	27	0	56	0	501
5:45PM	47	188	44	0	279	0	28	3	13	0	44	0	10	172	10	2	194	0	20	3	30	0	53	0	570
Hourly Total	212	661	159	1	1033	2	115	16	46	0	177	0	59	625	48	2	734	0	84	29	134	0	247	0	2191
6:00PM	42	142	26	0	210	1	27	1	8	0	36	0	8	160	11	3	182	0	18	6	34	0	58	0	486
6:15PM	40	141	33	0	214	0	21	5	12	0	38	0	6	147	3	0	156	0	16	5	17	0	38	0	446
6:30PM	34	162	24	0	220	0	17	3	13	0	33	0	14	125	11	0	150	0	28	4	24	0	56	0	459
6:45PM	48	118	29	0	195	0	20	2	8	0	30	0	5	122	8	1	136	0	19	2	28	0	49	0	410
Hourly Total	164	563	112	0	839	1	85	11	41	0	137	0	33	554	33	4	624	0	81	17	103	0	201	0	1801
7:00PM	34	108	28	0	170	0	24	2	10	0	36	0	9	134	5	0	148	0	25	2	21	0	48	0	402
7:15PM	39	99	16	0	154	0	19	0	6	0	25	0	14	115	2	0	131	0	18	1	23	0	42	0	352
7:30PM	38	86	16	0	140	0	20	7	11	0	38	0	12	106	0	1	119	0	14	3	26	0	43	0	340
7:45PM	23	61	13	0	97	0	19	3	7	0	29	0	7	109	2	0	118	0	9	5	27	0	41	0	285
Hourly Total	134	354	73	0	561	0	82	12	34	0	128	0	42	464	9	1	516	0	66	11	97	0	174	0	1379
8:00PM	25	62	18	0	105	0	16	2	6	0	24	0	4	103	4	1	112	0	15	1	27	0	43	0	284
8:15PM	26	53	12	0	91	0	16	1	9	0	26	0	5	94	3	0	102	0	15	2	22	0	39	0	258
8:30PM	18	43	17	0	78	0	12	2	3	0	17	0	8	78	2	0	88	0	9	3	11	0	23	0	206
8:45PM	35	46	11	1	93	0	18	2	4	0	24	0	7	79	1	0	87	0	13	1	11	0	25	0	229
Hourly Total	104	204	58	1	367	0	62	7	22	0	91	0	24	354	10	1	389	0	52	7	71	0	130	0	977
9:00PM	20	60	12	0	92	0	13	0	2	0	15	0	6	68	3	0	77	0	9	0	19	0	28	0	212
9:15PM	20	36	12	0	68	0	19	1	1	0	21	0	5	86	3	0	94	0	9	0	19	0	28	0	211
9:30PM	18	30	8	0	56	0	16	1	4	0	21	0	3	55	0	0	58	0	4	3	15	0	22	0	157
9:45PM	21	35	1	0	57	0	10	0	1	0	11	0	4	58	0	0	62	0	5	1	17	0	23	0	153
Hourly Total	79	161	33	0	273	0	58	2	8	0	68	0	18	267	6	0	291	0	27	4	70	0	101	0	733
10:00PM	15	32	7	0	54	0	9	1	1	0	11	0	1	37	2	0	40	0	2	2	9	0	13	0	118
10:15PM	9	23	3	0	35	0	8	1	2	0	11	0	1	29	3	0	33	0	5	2	21	0	28	0	107
10:30PM	7	14	4	0	25	0	7	3	4	0	14	0	0	37	0	0	37	0	5	1	10	0	16	0	92
10:45PM	8	15	0	0	23	0	8	3	4	0	15	0	2	23	0	0	25	0	2	1	8	0	11	0	74
Hourly Total	39	84	14	0	137	0	32	8	11	0	51	0	4	126	5	0	135	0	14	6	48	0	68	0	391
11:00PM	9	19	1	0	29	0	3	1	0	0	4	0	0	16	0	0	16	0	3	1	9	0	13	0	62
11:15PM	7	14	0	0	21	0	0	0	1	0	1	0	2	23	0	0	25	0	1	1	5	0	7	0	54
11:30PM	3	12	2	0	17	0	4	0	1	0	5	0	2	18	0	0	20	0	1	1	4	0	6	0	48
11:45PM	1	15	0	0	16	0	2	0	1	0	3	0	1	15	0	0	16	0	3	0	10	0	13	0	48
Hourly Total	20	60	3	0	83	0	9	1	3	0	13	0	5	72	0	0	77	0	8	3	28	0	39	0	212
Total	2215	7173	1247	5	10640	5	1059	146	424	0	1629	4	538	7854	346	28	8766	5	868	265	1352	0	2485		

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

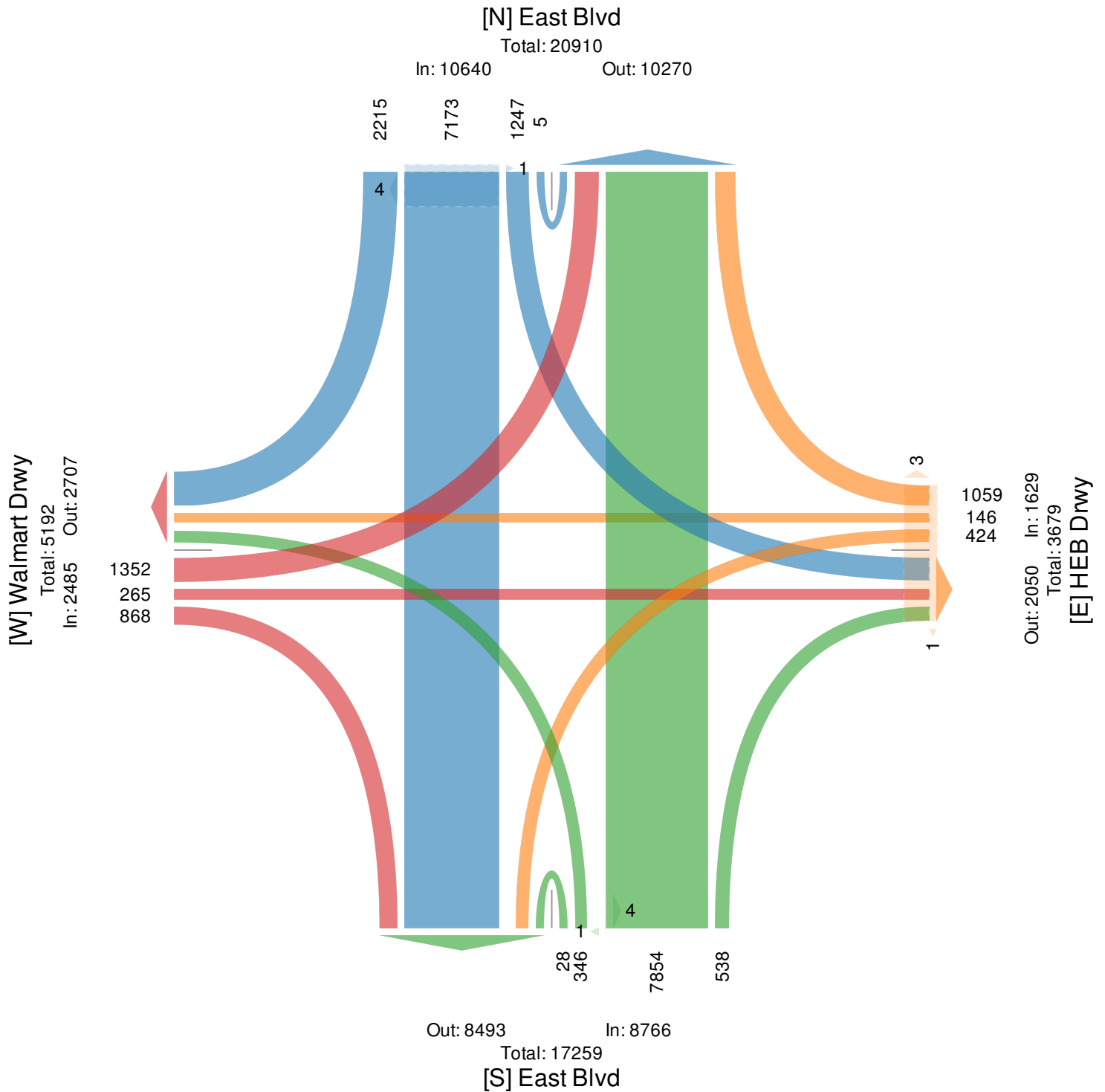
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194

CJ Hensch &
Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7:15AM - 8:15AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						HEB Drwy Westbound						East Blvd Northbound						Walmart Drwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 7:15AM	21	167	8	0	196	0	4	1	5	0	10	0	4	141	1	0	146	0	4	1	13	0	18	0	370
7:30AM	17	151	9	0	177	0	10	0	3	0	13	0	2	167	2	2	173	0	7	1	10	0	18	0	381
7:45AM	27	171	20	1	219	0	9	0	5	0	14	0	3	157	6	0	166	0	7	1	12	0	20	0	419
8:00AM	18	131	11	0	160	0	3	1	7	0	11	0	1	130	4	0	135	0	5	2	15	0	22	0	328
Total	83	620	48	1	752	0	26	2	20	0	48	0	10	595	13	2	620	0	23	5	50	0	78	0	1498
% Approach	11.0%	82.4%	6.4%	0.1%	-	-	54.2%	4.2%	41.7%	0%	-	-	1.6%	96.0%	2.1%	0.3%	-	-	29.5%	6.4%	64.1%	0%	-	-	-
% Total	5.5%	41.4%	3.2%	0.1%	50.2%	-	1.7%	0.1%	1.3%	0%	3.2%	-	0.7%	39.7%	0.9%	0.1%	41.4%	-	1.5%	0.3%	3.3%	0%	5.2%	-	-
PHF	0.769	0.906	0.600	0.250	0.858	-	0.650	0.500	0.714	-	0.857	-	0.625	0.891	0.542	0.250	0.896	-	0.821	0.625	0.833	-	0.886	-	0.894
Lights	83	612	48	1	744	-	25	2	20	0	47	-	10	584	13	2	609	-	23	5	49	0	77	-	1477
% Lights	100%	98.7%	100%	100%	98.9%	-	96.2%	100%	100%	0%	97.9%	-	100%	98.2%	100%	100%	98.2%	-	100%	100%	98.0%	0%	98.7%	-	98.6%
Articulated Trucks	0	3	0	0	3	-	0	0	0	0	0	-	0	2	0	0	2	-	0	0	0	0	0	-	5
% Articulated Trucks	0%	0.5%	0%	0%	0.4%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0.3%
Buses and Single-Unit Trucks	0	5	0	0	5	-	1	0	0	0	1	-	0	9	0	0	9	-	0	0	1	0	1	-	16
% Buses and Single-Unit Trucks	0%	0.8%	0%	0%	0.7%	-	3.8%	0%	0%	0%	2.1%	-	0%	1.5%	0%	0%	1.5%	-	0%	0%	2.0%	0%	1.3%	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7:15AM - 8:15AM)

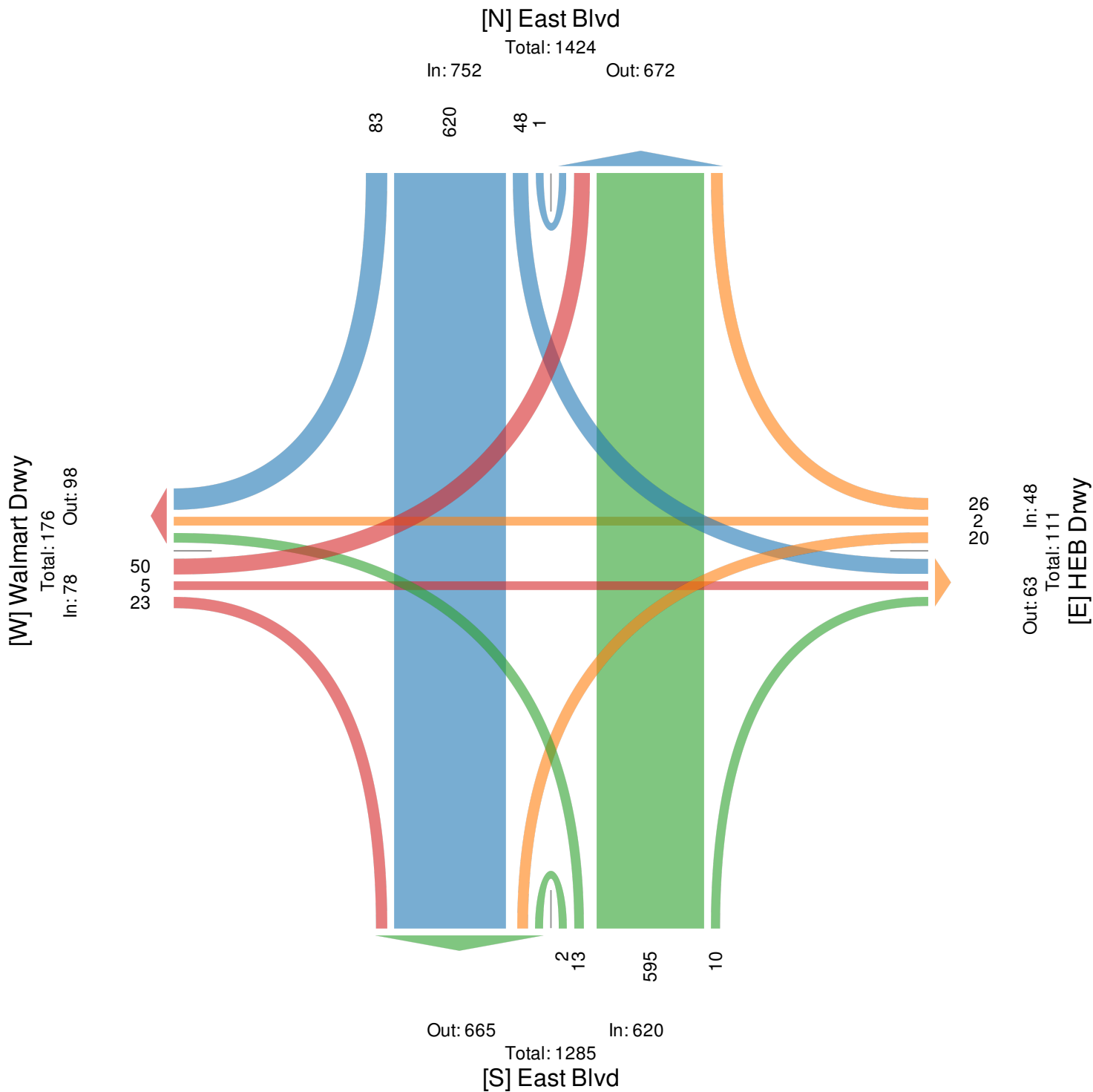
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						HEB Drwy Westbound						East Blvd Northbound						Walmart Drwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 12:00PM	43	136	24	0	203	0	19	1	9	0	29	0	16	129	15	1	161	0	16	4	26	0	46	0	439
12:15PM	36	112	21	0	169	2	17	4	7	0	28	2	13	141	9	1	164	0	17	7	22	0	46	0	407
12:30PM	34	117	26	0	177	0	21	0	14	0	35	0	10	155	1	0	166	0	18	4	23	0	45	0	423
12:45PM	34	114	17	0	165	0	15	10	6	0	31	0	7	112	6	2	127	0	15	1	33	0	49	0	372
Total	147	479	88	0	714	2	72	15	36	0	123	2	46	537	31	4	618	0	66	16	104	0	186	0	1641
% Approach	20.6%	67.1%	12.3%	0%	-	-	58.5%	12.2%	29.3%	0%	-	-	7.4%	86.9%	5.0%	0.6%	-	-	35.5%	8.6%	55.9%	0%	-	-	-
% Total	9.0%	29.2%	5.4%	0%	43.5%	-	4.4%	0.9%	2.2%	0%	7.5%	-	2.8%	32.7%	1.9%	0.2%	37.7%	-	4.0%	1.0%	6.3%	0%	11.3%	-	-
PHF	0.855	0.881	0.846	-	0.879	-	0.857	0.375	0.643	-	0.879	-	0.719	0.866	0.517	0.500	0.931	-	0.917	0.571	0.788	-	0.949	-	0.935
Lights	147	472	88	0	707	-	72	15	35	0	122	-	46	524	30	4	604	-	65	16	104	0	185	-	1618
% Lights	100%	98.5%	100%	0%	99.0%	-	100%	100%	97.2%	0%	99.2%	-	100%	97.6%	96.8%	100%	97.7%	-	98.5%	100%	100%	0%	99.5%	-	98.6%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	1	1	0	2	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.2%	3.2%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0.1%
Buses and Single-Unit Trucks	0	7	0	0	7	-	0	0	1	0	1	-	0	12	0	0	12	-	1	0	0	0	1	-	21
% Buses and Single-Unit Trucks	0%	1.5%	0%	0%	1.0%	-	0%	0%	2.8%	0%	0.8%	-	0%	2.2%	0%	0%	1.9%	-	1.5%	0%	0%	0%	0.5%	-	1.3%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

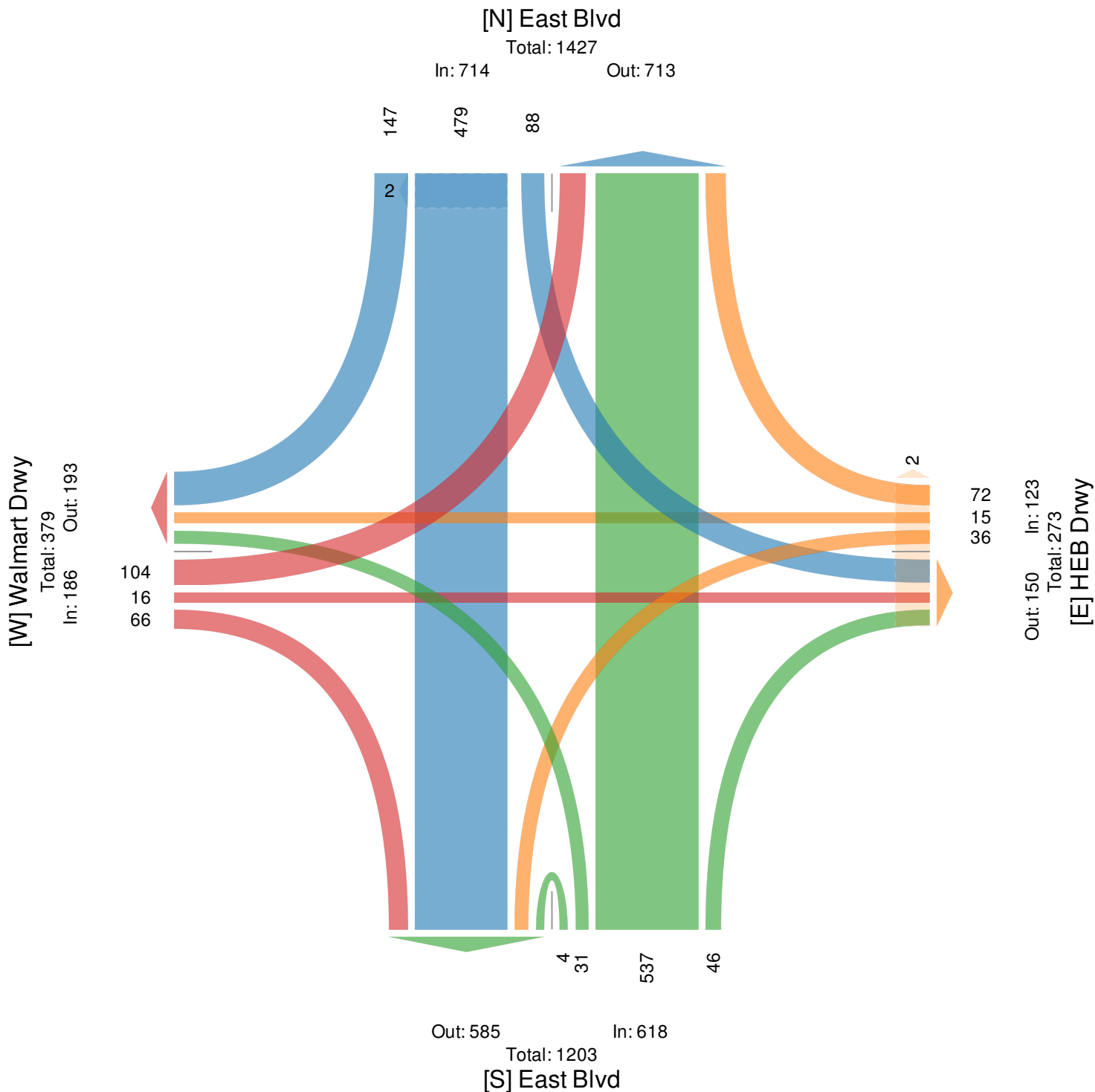
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:15PM - 5:15PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						HEB Drwy Westbound						East Blvd Northbound						Walmart Drwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 4:15PM	54	194	33	0	281	0	24	4	7	0	35	0	11	175	13	1	200	0	26	9	27	0	62	0	578
4:30PM	54	183	45	0	282	0	28	4	7	0	39	0	12	118	15	1	146	1	18	5	29	0	52	0	519
4:45PM	45	185	51	0	281	0	19	1	9	0	29	0	14	157	18	1	190	0	20	13	29	0	62	0	562
5:00PM	55	157	36	0	248	0	35	8	16	0	59	0	15	158	14	0	187	0	20	16	33	0	69	0	563
Total	208	719	165	0	1092	0	106	17	39	0	162	0	52	608	60	3	723	1	84	43	118	0	245	0	2222
% Approach	19.0%	65.8%	15.1%	0%	-	-	65.4%	10.5%	24.1%	0%	-	-	7.2%	84.1%	8.3%	0.4%	-	-	34.3%	17.6%	48.2%	0%	-	-	-
% Total	9.4%	32.4%	7.4%	0%	49.1%	-	4.8%	0.8%	1.8%	0%	7.3%	-	2.3%	27.4%	2.7%	0.1%	32.5%	-	3.8%	1.9%	5.3%	0%	11.0%	-	-
PHF	0.945	0.927	0.809	-	0.968	-	0.757	0.531	0.609	-	0.686	-	0.867	0.869	0.833	0.750	0.904	-	0.808	0.672	0.894	-	0.888	-	0.961
Lights	207	715	164	0	1086	-	106	17	39	0	162	-	52	602	60	3	717	-	84	43	118	0	245	-	2210
% Lights	99.5%	99.4%	99.4%	0%	99.5%	-	100%	100%	100%	0%	100%	-	100%	99.0%	100%	100%	99.2%	-	100%	100%	100%	0%	100%	-	99.5%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	2	0	0	2	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.3%	0%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0.1%
Buses and Single-Unit Trucks	1	4	1	0	6	-	0	0	0	0	0	-	0	4	0	0	4	-	0	0	0	0	0	-	10
% Buses and Single-Unit Trucks	0.5%	0.6%	0.6%	0%	0.5%	-	0%	0%	0%	0%	0%	-	0%	0.7%	0%	0%	0.6%	-	0%	0%	0%	0%	0%	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Walmart/HEB Driveways - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 4:15PM - 5:15PM) - Overall Peak Hour

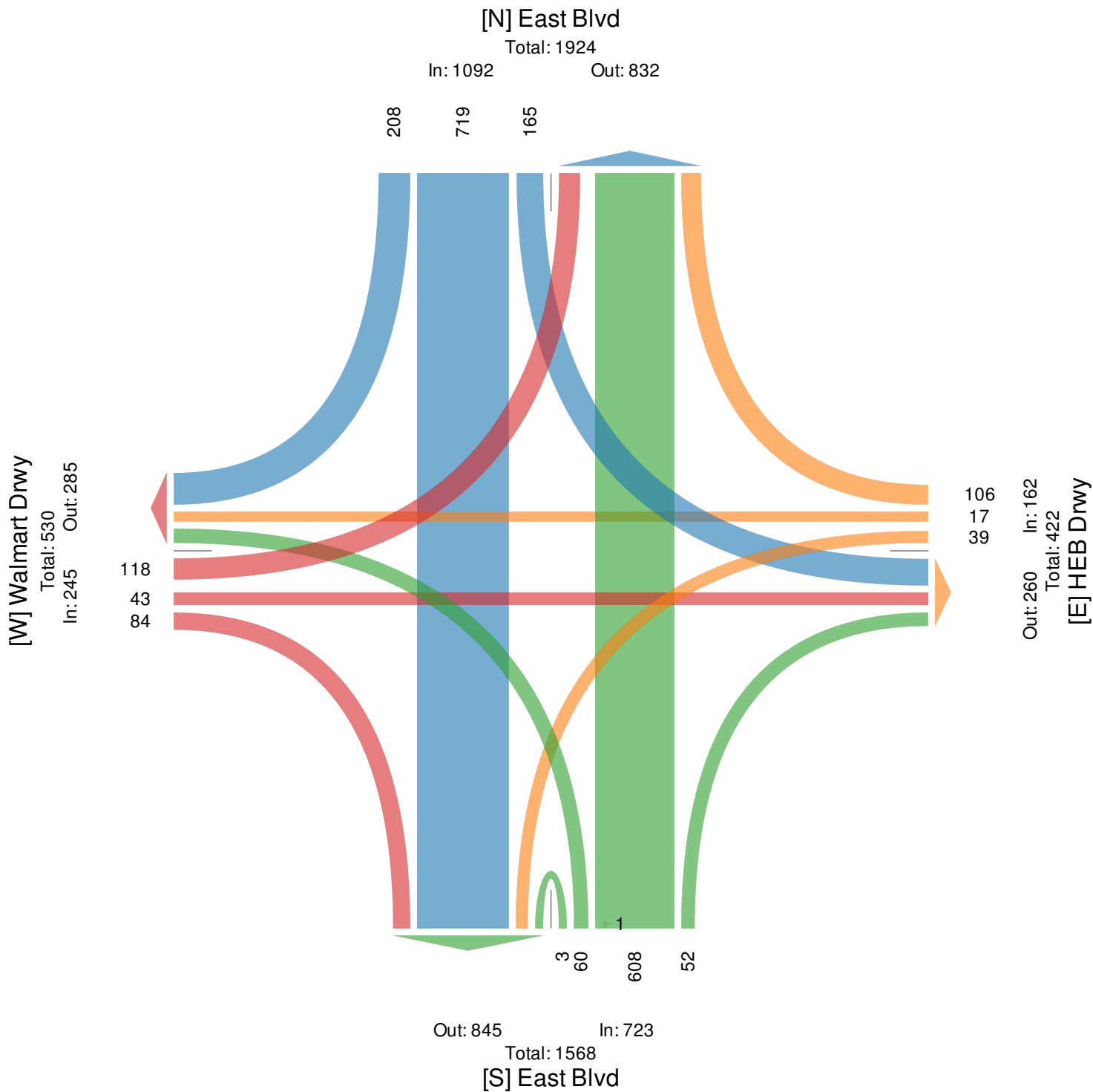
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599586, Location: 29.666591, -95.098194



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM(+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162


 Provided by: C. J. Hensch & Associates Inc.
 5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						Spencer Hwy Westbound						Canada Rd Northbound						Spencer Hwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18																									
12:00AM	2	4	1	0	7	0	1	9	3	0	13	0	0	8	8	0	16	0	4	22	4	0	30	0	66
12:15AM	4	4	3	0	11	0	2	8	1	1	12	0	1	2	2	0	5	0	3	17	5	0	25	0	53
12:30AM	1	2	2	0	5	0	1	11	0	0	12	0	2	6	3	0	11	0	3	9	3	0	15	0	43
12:45AM	0	4	1	0	5	0	3	13	1	0	17	0	4	6	7	0	17	0	2	8	2	0	12	0	51
Hourly Total	7	14	7	0	28	0	7	41	5	1	54	0	7	22	20	0	49	0	12	56	14	0	82	0	213
1:00AM	2	1	3	0	6	0	1	10	1	0	12	0	0	1	4	0	5	1	1	6	1	0	8	0	31
1:15AM	2	5	1	0	8	0	0	5	1	0	6	0	1	3	1	0	5	0	1	10	4	0	15	0	34
1:30AM	0	5	1	0	6	0	1	5	0	0	6	0	1	3	2	0	6	0	1	5	0	0	6	0	24
1:45AM	0	2	2	0	4	0	1	9	0	0	10	0	1	2	1	0	4	0	3	10	3	0	16	0	34
Hourly Total	4	13	7	0	24	0	3	29	2	0	34	0	3	9	8	0	20	1	6	31	8	0	45	0	123
2:00AM	2	2	1	0	5	0	0	5	0	0	5	0	1	1	1	0	3	0	1	7	2	0	10	0	23
2:15AM	1	3	0	0	4	0	1	1	0	0	2	0	1	2	2	0	5	0	1	4	3	0	8	0	19
2:30AM	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3	1	0	4	0	6
2:45AM	1	1	0	0	2	0	1	2	0	0	3	0	2	0	0	0	2	0	2	6	0	0	8	0	15
Hourly Total	5	6	1	0	12	0	2	8	1	0	11	0	4	3	3	0	10	0	4	20	6	0	30	0	63
3:00AM	0	3	1	0	4	0	0	5	0	0	5	0	0	3	0	0	3	0	1	4	2	0	7	0	19
3:15AM	1	3	0	0	4	0	1	6	0	0	7	0	1	6	2	0	9	0	2	5	1	0	8	0	28
3:30AM	3	2	0	0	5	0	0	7	2	0	9	0	1	7	1	0	9	0	0	8	4	0	12	0	35
3:45AM	2	8	1	0	11	0	5	10	2	0	17	0	1	5	5	0	11	0	2	9	2	0	13	0	52
Hourly Total	6	16	2	0	24	0	6	28	4	0	38	0	3	21	8	0	32	0	5	26	9	0	40	0	134
4:00AM	4	6	3	0	13	0	3	9	2	0	14	0	4	5	2	0	11	0	1	10	9	0	20	0	58
4:15AM	2	16	2	0	20	0	2	12	1	0	15	0	1	13	2	0	16	0	6	17	6	0	29	0	80
4:30AM	3	10	3	0	16	0	5	21	4	0	30	0	6	16	0	0	22	0	4	20	7	0	31	0	99
4:45AM	1	16	4	0	21	0	3	19	3	0	25	0	6	20	4	0	30	0	4	27	8	0	39	0	115
Hourly Total	10	48	12	0	70	0	13	61	10	0	84	0	17	54	8	0	79	0	15	74	30	0	119	0	352
5:00AM	1	14	2	0	17	0	5	22	3	0	30	0	2	22	3	0	27	0	4	33	23	0	60	0	134
5:15AM	4	28	6	0	38	0	9	25	3	0	37	0	5	38	6	0	49	0	2	39	15	0	56	0	180
5:30AM	6	19	8	0	33	0	18	31	3	0	52	0	9	43	5	0	57	0	9	71	33	0	113	0	255
5:45AM	2	38	7	0	47	0	13	37	7	0	57	0	20	70	6	0	96	0	12	91	24	0	127	0	327
Hourly Total	13	99	23	0	135	0	45	115	16	0	176	0	36	173	20	0	229	0	27	234	95	0	356	0	896
6:00AM	9	45	13	0	67	1	13	48	6	0	67	1	15	53	2	0	70	0	6	85	43	0	134	0	338
6:15AM	12	60	15	1	88	0	12	49	12	0	73	0	26	77	9	0	112	0	11	124	21	0	156	0	429
6:30AM	13	55	22	0	90	0	13	89	18	0	120	0	24	63	13	0	100	0	17	122	37	0	176	0	486
6:45AM	13	56	25	0	94	0	30	95	11	0	136	0	33	95	22	0	150	0	11	115	26	0	152	0	532
Hourly Total	47	216	75	1	339	1	68	281	47	0	396	1	98	288	46	0	432	0	45	446	127	0	618	0	1785
7:00AM	29	89	24	1	143	0	19	135	16	0	170	0	40	72	15	0	127	0	10	108	39	0	157	0	597
7:15AM	30	87	25	0	142	0	31	148	19	0	198	0	31	92	25	0	148	0	16	106	36	0	158	0	646
7:30AM	43	131	34	0	208	0	31	126	31	0	188	0	46	96	13	0	155	0	12	102	46	0	160	0	711
7:45AM	35	94	37	0	166	0	36	124	19	0	179	0	62	100	20	1	183	0	18	112	31	0	161	0	689
Hourly Total	137	401	120	1	659	0	117	533	85	0	735	0	179	360	73	1	613	0	56	428	152	0	636	0	2643
8:00AM	33	96	35	0	164	0	36	123	26	0	185	0	50	71	12	0	133	0	8	84	40	0	132	0	614
8:15AM	30	52	24	0	106	0	15	131	13	0	159	2	49	79	17	0	145	0	13	80	20	0	113	0	523
8:30AM	18	63	20	0	101	0	12	94	18	0	124	0	14	40	12	0	66	0	9	72	31	0	112	0	403
8:45AM	21	52	23	0	96	0	26	127	16	0	169	2	16	50	19	0	85	0	14	100	18	0	132	0	482
Hourly Total	102	263	102	0	467	0	89	475	73	0	637	4	129	240	60	0	429	0	44	336	109	0	489	0	2022
9:00AM	26	46	28	0	100	1	24	98	13	0	135	0	22	37	16	0	75	0	8	74	25	0	107	0	417
9:15AM	26	35	25	0	86	0	22	108	15	0	145	0	15	47	20	0	82	0	16	86	28	0	130	0	443
9:30AM	19	56	30	0	105	0	15	102	15	0	132	0	15	55	10	0	80	0	10	59	24	0	93	0	410
9:45AM	33	41	34	0	108	0	17	128	8	0	153	0	6	55	19	0	80	0	20	86	30	0	136	0	477
Hourly Total	104	178	117	0	399	1	78	436	51	0	565	0	58	194	65	0	317	0	54	305	107	0	466	0	1747
10:00AM	30	43	35	0	108	0	25	90	12	0	127	0	16	37	13	0	66	0	17	85	30	0	132	0	433
10:15AM	19	49	29	0	97	0	26	133	11	0	170	0	10	46	22	0	78	0	20	94	18	0	132	0	477
10:30AM	36	80	29	0	145	0	23	98	18	0	139	0	16	57	25	0	98	0	12	86	36	0	134	0	516
10:45AM	34	42	34	0	110	1	36	127	12	0	175	1	11	56	25	0	92	0	6	113	25	0	144	0	521
Hourly Total	119	214	127	0	460	1	110	448	53	0	611	1	53	196	85	0	334	0	55	378	109	0	542	0	1947
11:00AM	40	50	44	0	134	0</																			

Leg Direction	East Blvd Southbound						Spencer Hwy Westbound						Canada Rd Northbound						Spencer Hwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
1:45PM	38	52	41	0	131	0	29	137	16	0	182	0	14	73	19	0	106	0	20	150	44	0	214	0	633
Hourly Total	159	270	181	1	611	0	114	563	70	0	747	0	52	254	112	0	418	0	65	586	185	0	836	0	2612
2:00PM	36	61	52	1	150	0	21	112	15	0	148	0	15	63	30	0	108	0	19	114	37	0	170	0	576
2:15PM	37	45	41	1	124	0	23	150	13	0	186	0	13	62	23	0	98	0	21	134	45	0	200	0	608
2:30PM	48	69	53	0	170	0	30	117	13	0	160	0	15	89	33	0	137	0	14	129	41	0	184	0	651
2:45PM	36	53	29	0	118	0	26	163	30	0	219	0	14	72	21	0	107	0	20	161	39	0	220	0	664
Hourly Total	157	228	175	2	562	0	100	542	71	0	713	0	57	286	107	0	450	0	74	538	162	0	774	0	2499
3:00PM	43	58	59	0	160	0	19	140	13	0	172	0	16	76	36	0	128	0	14	117	40	0	171	0	631
3:15PM	35	53	41	0	129	0	27	165	27	0	219	0	20	71	25	0	116	0	29	172	61	0	262	0	726
3:30PM	45	93	60	1	199	0	24	153	33	0	210	0	24	101	35	0	160	0	24	153	37	0	214	0	783
3:45PM	49	65	59	0	173	0	30	183	26	0	239	0	20	91	36	0	147	0	24	177	54	0	255	0	814
Hourly Total	172	269	219	1	661	0	100	641	99	0	840	0	80	339	132	0	551	0	91	619	192	0	902	0	2954
4:00PM	52	106	46	0	204	0	37	183	42	0	262	0	25	95	38	0	158	0	12	128	51	0	191	0	815
4:15PM	55	115	48	0	218	0	30	241	54	0	325	0	17	107	32	0	156	0	15	187	36	0	238	0	937
4:30PM	40	127	49	0	216	0	31	198	58	0	287	0	23	106	42	0	171	0	25	164	42	0	231	0	905
4:45PM	46	116	33	0	195	0	38	254	67	0	359	0	33	75	24	0	132	0	24	156	52	0	232	0	918
Hourly Total	193	464	176	0	833	0	136	876	221	0	1233	0	98	383	136	0	617	0	76	635	181	0	892	0	3575
5:00PM	40	128	50	1	219	0	36	301	59	0	396	0	22	108	50	0	180	0	33	189	38	0	260	0	1055
5:15PM	38	133	31	0	202	0	26	330	84	0	440	0	20	106	29	0	155	0	18	246	62	0	326	0	1123
5:30PM	52	104	64	0	220	0	36	328	38	0	402	0	20	123	34	0	177	0	32	175	58	0	265	0	1064
5:45PM	59	106	54	0	219	0	46	225	42	0	313	0	17	103	28	0	148	0	24	179	51	0	254	0	934
Hourly Total	189	471	199	1	860	0	144	1184	223	0	1551	0	79	440	141	0	660	0	107	789	209	0	1105	0	4176
6:00PM	65	82	52	0	199	0	38	195	40	0	273	0	26	111	41	0	178	0	23	167	47	0	237	0	887
6:15PM	53	71	55	0	179	0	31	193	39	0	263	0	11	69	26	0	106	0	33	188	49	0	270	0	818
6:30PM	63	75	70	0	208	0	29	160	32	0	221	0	19	90	45	0	154	0	22	168	45	0	235	0	818
6:45PM	62	73	68	1	204	0	36	171	24	0	231	0	11	64	22	0	97	0	19	158	42	0	219	0	751
Hourly Total	243	301	245	1	790	0	134	719	135	0	988	0	67	334	134	0	535	0	97	681	183	0	961	0	3274
7:00PM	38	70	58	1	167	0	29	195	12	0	236	0	13	73	26	0	112	0	9	116	37	0	162	0	677
7:15PM	49	53	53	2	157	0	32	135	13	0	180	0	8	53	23	0	84	0	23	136	49	0	208	0	629
7:30PM	36	39	48	1	124	0	28	100	14	0	142	0	23	65	26	0	114	0	19	118	31	0	168	0	548
7:45PM	37	36	55	0	128	0	17	98	11	0	126	0	13	44	19	0	76	0	19	125	40	0	184	0	514
Hourly Total	160	198	214	4	576	0	106	528	50	0	684	0	57	235	94	0	386	0	70	495	157	0	722	0	2368
8:00PM	31	35	43	0	109	0	20	87	12	0	119	0	7	66	24	0	97	0	16	93	26	0	135	0	460
8:15PM	30	25	32	0	87	0	11	78	13	0	102	0	12	54	17	1	84	0	10	106	29	0	145	0	418
8:30PM	21	15	32	0	68	0	14	78	5	0	97	0	5	43	15	0	63	0	9	90	27	0	126	0	354
8:45PM	18	29	35	0	82	0	19	69	8	0	96	0	5	41	10	0	56	0	5	90	34	0	129	0	363
Hourly Total	100	104	142	0	346	0	64	312	38	0	414	0	29	204	66	1	300	0	40	379	116	0	535	0	1595
9:00PM	16	27	22	0	65	0	10	65	4	0	79	0	7	60	16	0	83	0	20	72	23	0	115	0	342
9:15PM	17	24	32	0	73	0	12	32	8	0	52	0	9	38	10	0	57	0	14	56	32	0	102	0	284
9:30PM	19	18	16	0	53	0	8	54	1	0	63	0	5	29	12	0	46	0	14	65	18	0	97	0	259
9:45PM	19	18	16	0	53	0	11	34	7	0	52	0	1	29	11	0	41	0	5	40	18	0	63	0	209
Hourly Total	71	87	86	0	244	0	41	185	20	0	246	0	22	156	49	0	227	0	53	233	91	0	377	0	1094
10:00PM	10	16	13	0	39	0	9	35	5	0	49	0	6	24	7	0	37	0	10	50	7	0	67	0	192
10:15PM	9	12	13	0	34	0	0	22	0	0	22	0	3	23	6	0	32	0	4	43	9	0	56	0	144
10:30PM	10	12	6	0	28	0	5	25	4	0	34	0	1	17	4	1	23	0	7	38	10	0	55	0	140
10:45PM	8	7	11	0	26	0	7	31	1	0	39	0	3	12	1	0	16	0	4	23	9	0	36	0	117
Hourly Total	37	47	43	0	127	0	21	113	10	0	144	0	13	76	18	1	108	0	25	154	35	0	214	0	593
11:00PM	4	12	4	0	20	0	5	23	2	0	30	0	2	16	8	0	26	0	3	27	2	0	32	0	108
11:15PM	5	8	6	0	19	1	3	19	0	0	22	1	3	17	4	0	24	0	6	22	8	0	36	0	101
11:30PM	7	7	5	0	19	0	7	16	5	0	28	0	4	15	1	0	20	0	7	27	3	0	37	1	104
11:45PM	7	9	7	0	23	0	3	15	0	0	18	1	1	13	3	0	17	0	7	21	3	0	31	0	89
Hourly Total	23	36	22	0	81	1	18	73	7	0	98	2	10	61	16	0	87	0	23	97	16	0	136	1	402
Total	2437	4426	2701	12	9576	4	1755	9485	1433	1	12674	8	1269	4838	1665	3	7775	1	1212	8638	2666	0	12516	4	42541
% Approach	25.4%	46.2%	28.2%	0.1%	-	-	13.8%	74.8%	11.3%	0%	-	-	16.3%	62.2%	21.4%	0%	-	-	9.7%	69.0%	21.3%	0%	-	-	-
% Total	5.7%	10.4%	6.3%	0%	22.5%	-	4.1%	22.3%	3.4%	0%	29.8%	-	3.0%	11.4%	3.9%	0%	18.3%	-	2.8%	20.3%	6.3%	0%	29.4%	-	-
Lights	2395	4382	2668	12	9457	-	1723	9350	1405	1	12479	-	1253	4794	1651	3	7701	-	1188	8498	2637	0	12323	-	41960
% Lights	98.3%	99.0%	98.8%	100%	98.8%	-	98.2%	98.6%	98.0%	100%	98.5%	-	98.7%	99.1%	99.2%	100%	99.0%	-	98.0%	98.4%	98.9%	0%	98.5%	-	98.6%
Articulated Trucks	12	14	9	0	35	-	9	21	2	0	32	-	7	13	2	0	22	-	4	25	7	0	36	-	125
% Articulated Trucks	0.5%	0.3%	0.3%	0%	0.4%	-	0.5%	0.2%	0.1%	0%	0.3%	-	0.6%	0.3%	0.1%	0%	0.3%	-	0.3%	0.3%	0.3%	0%	0.3%	-	0.3%
Buses and Single-Unit Trucks	30	30	24	0	84	-	23	114	26	0	163	-	9	31	12	0	52	-	20	115	22	0	157	-	456
% Buses and Single-Unit Trucks	1.2%	0.7%	0.9%	0%	0.9%	-	1.3%	1.2%	1.8%	0%	1.3%	-	0.7%	0.6%	0.7%	0%	0.7%	-	1.7%	1.3%	0.8%	0%	1.3%	-	1.1%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	8	-	-	-	-	-	1	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	100%

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T:

East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

Full Length (12AM-12AM (+1))

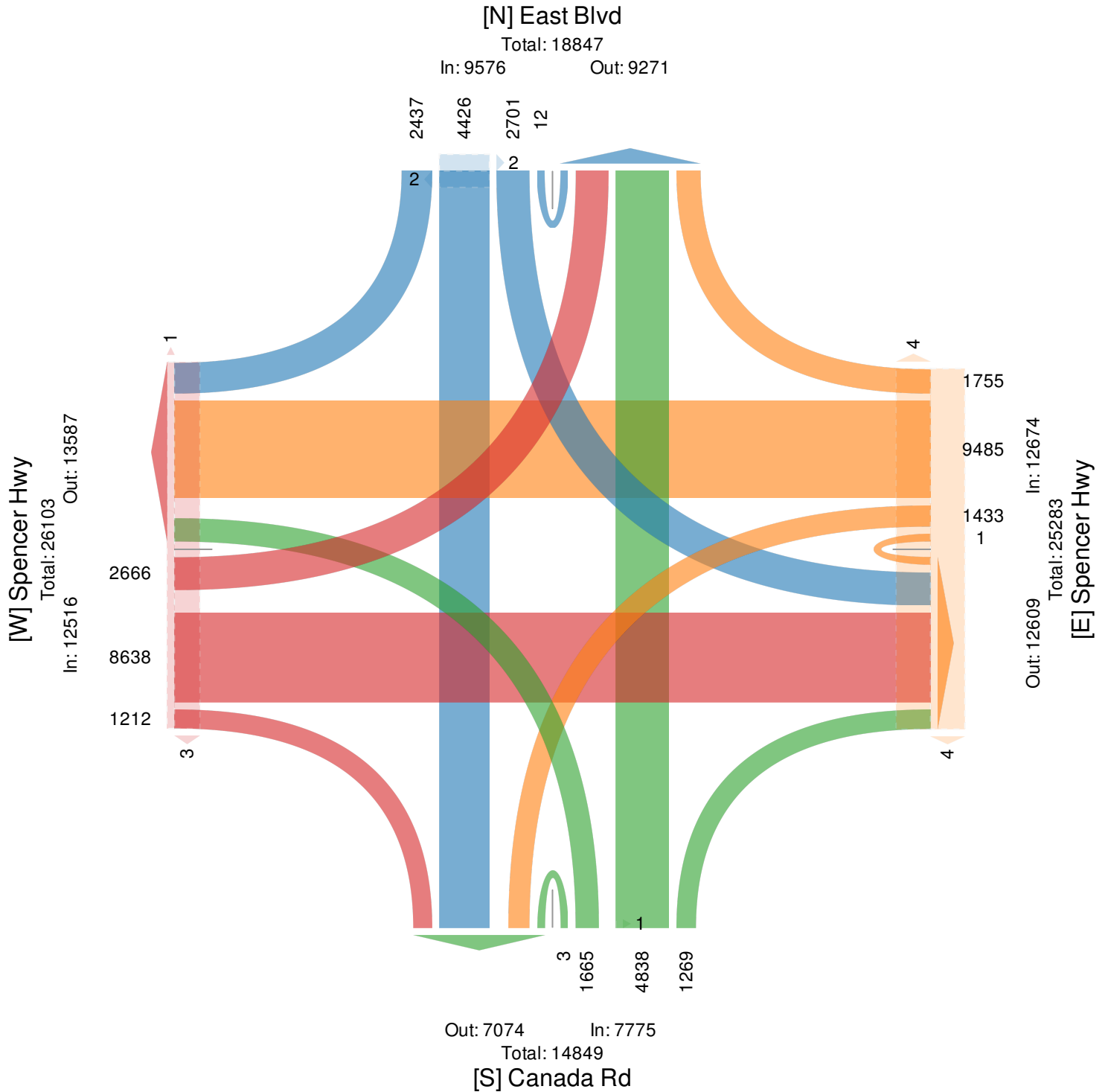
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7:15AM - 8:15AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						Spencer Hwy Westbound						Canada Rd Northbound						Spencer Hwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 7:15AM	30	87	25	0	142	0	31	148	19	0	198	0	31	92	25	0	148	0	16	106	36	0	158	0	646
7:30AM	43	131	34	0	208	0	31	126	31	0	188	0	46	96	13	0	155	0	12	102	46	0	160	0	711
7:45AM	35	94	37	0	166	0	36	124	19	0	179	0	62	100	20	1	183	0	18	112	31	0	161	0	689
8:00AM	33	96	35	0	164	0	36	123	26	0	185	0	50	71	12	0	133	0	8	84	40	0	132	0	614
Total	141	408	131	0	680	0	134	521	95	0	750	0	189	359	70	1	619	0	54	404	153	0	611	0	2660
% Approach	20.7%	60.0%	19.3%	0%	-	-	17.9%	69.5%	12.7%	0%	-	-	30.5%	58.0%	11.3%	0.2%	-	-	8.8%	66.1%	25.0%	0%	-	-	-
% Total	5.3%	15.3%	4.9%	0%	25.6%	-	5.0%	19.6%	3.6%	0%	28.2%	-	7.1%	13.5%	2.6%	0%	23.3%	-	2.0%	15.2%	5.8%	0%	23.0%	-	-
PHF	0.820	0.779	0.885	-	0.817	-	0.931	0.880	0.766	-	0.947	-	0.762	0.898	0.700	0.250	0.846	-	0.750	0.902	0.832	-	0.949	-	0.935
Lights	139	405	128	0	672	-	130	513	90	0	733	-	188	356	70	1	615	-	52	393	148	0	593	-	2613
% Lights	98.6%	99.3%	97.7%	0%	98.8%	-	97.0%	98.5%	94.7%	0%	97.7%	-	99.5%	99.2%	100%	100%	99.4%	-	96.3%	97.3%	96.7%	0%	97.1%	-	98.2%
Articulated Trucks	1	1	0	0	2	-	0	1	0	0	1	-	0	0	0	0	0	-	0	1	1	0	2	-	5
% Articulated Trucks	0.7%	0.2%	0%	0%	0.3%	-	0%	0.2%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0%	0.2%	0.7%	0%	0.3%	-	0.2%
Buses and Single-Unit Trucks	1	2	3	0	6	-	4	7	5	0	16	-	1	3	0	0	4	-	2	10	4	0	16	-	42
% Buses and Single-Unit Trucks	0.7%	0.5%	2.3%	0%	0.9%	-	3.0%	1.3%	5.3%	0%	2.1%	-	0.5%	0.8%	0%	0%	0.6%	-	3.7%	2.5%	2.6%	0%	2.6%	-	1.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

AM Peak (Dec 18 2018 7:15AM - 8:15AM)

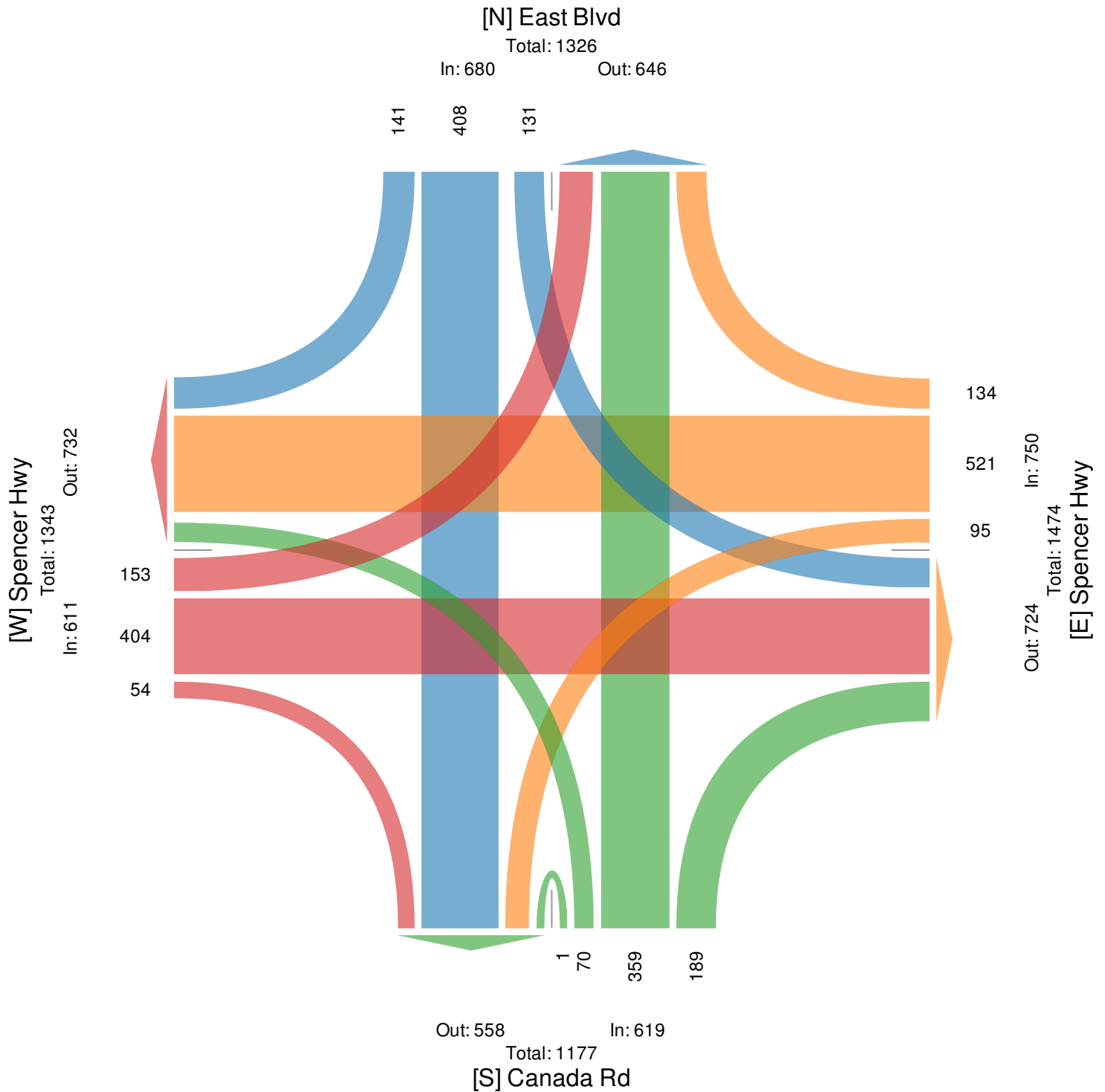
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162

CJ Hensch &
Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound						Spencer Hwy Westbound						Canada Rd Northbound						Spencer Hwy Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2018-12-18 12:00PM	51	62	55	0	168	0	36	177	23	0	236	0	16	67	78	0	161	0	28	165	47	0	240	1	805
12:15PM	52	67	64	0	183	0	37	196	19	0	252	0	13	70	27	0	110	0	31	176	64	0	271	0	816
12:30PM	56	83	55	0	194	0	38	144	20	0	202	0	14	67	30	0	111	0	20	137	50	0	207	0	714
12:45PM	35	60	49	0	144	0	26	160	11	0	197	0	12	58	22	0	92	0	27	184	49	0	260	0	693
Total	194	272	223	0	689	0	137	677	73	0	887	0	55	262	157	0	474	0	106	662	210	0	978	1	3028
% Approach	28.2%	39.5%	32.4%	0%	-	-	15.4%	76.3%	8.2%	0%	-	-	11.6%	55.3%	33.1%	0%	-	-	10.8%	67.7%	21.5%	0%	-	-	-
% Total	6.4%	9.0%	7.4%	0%	22.8%	-	4.5%	22.4%	2.4%	0%	29.3%	-	1.8%	8.7%	5.2%	0%	15.7%	-	3.5%	21.9%	6.9%	0%	32.3%	-	-
PHF	0.866	0.819	0.871	-	0.888	-	0.901	0.864	0.793	-	0.880	-	0.859	0.936	0.503	-	0.736	-	0.855	0.899	0.820	-	0.902	-	0.928
Lights	192	269	220	0	681	-	136	661	71	0	868	-	54	257	157	0	468	-	105	650	206	0	961	-	2978
% Lights	99.0%	98.9%	98.7%	0%	98.8%	-	99.3%	97.6%	97.3%	0%	97.9%	-	98.2%	98.1%	100%	0%	98.7%	-	99.1%	98.2%	98.1%	0%	98.3%	-	98.3%
Articulated Trucks	0	0	0	0	0	-	1	3	0	0	4	-	1	0	0	0	1	-	0	2	0	0	2	-	7
% Articulated Trucks	0%	0%	0%	0%	0%	-	0.7%	0.4%	0%	0%	0.5%	-	1.8%	0%	0%	0%	0.2%	-	0%	0.3%	0%	0%	0.2%	-	0.2%
Buses and Single-Unit Trucks	2	3	3	0	8	-	0	13	2	0	15	-	0	5	0	0	5	-	1	10	4	0	15	-	43
% Buses and Single-Unit Trucks	1.0%	1.1%	1.3%	0%	1.2%	-	0%	1.9%	2.7%	0%	1.7%	-	0%	1.9%	0%	0%	1.1%	-	0.9%	1.5%	1.9%	0%	1.5%	-	1.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

Midday Peak (Dec 18 2018 12PM - 1PM)

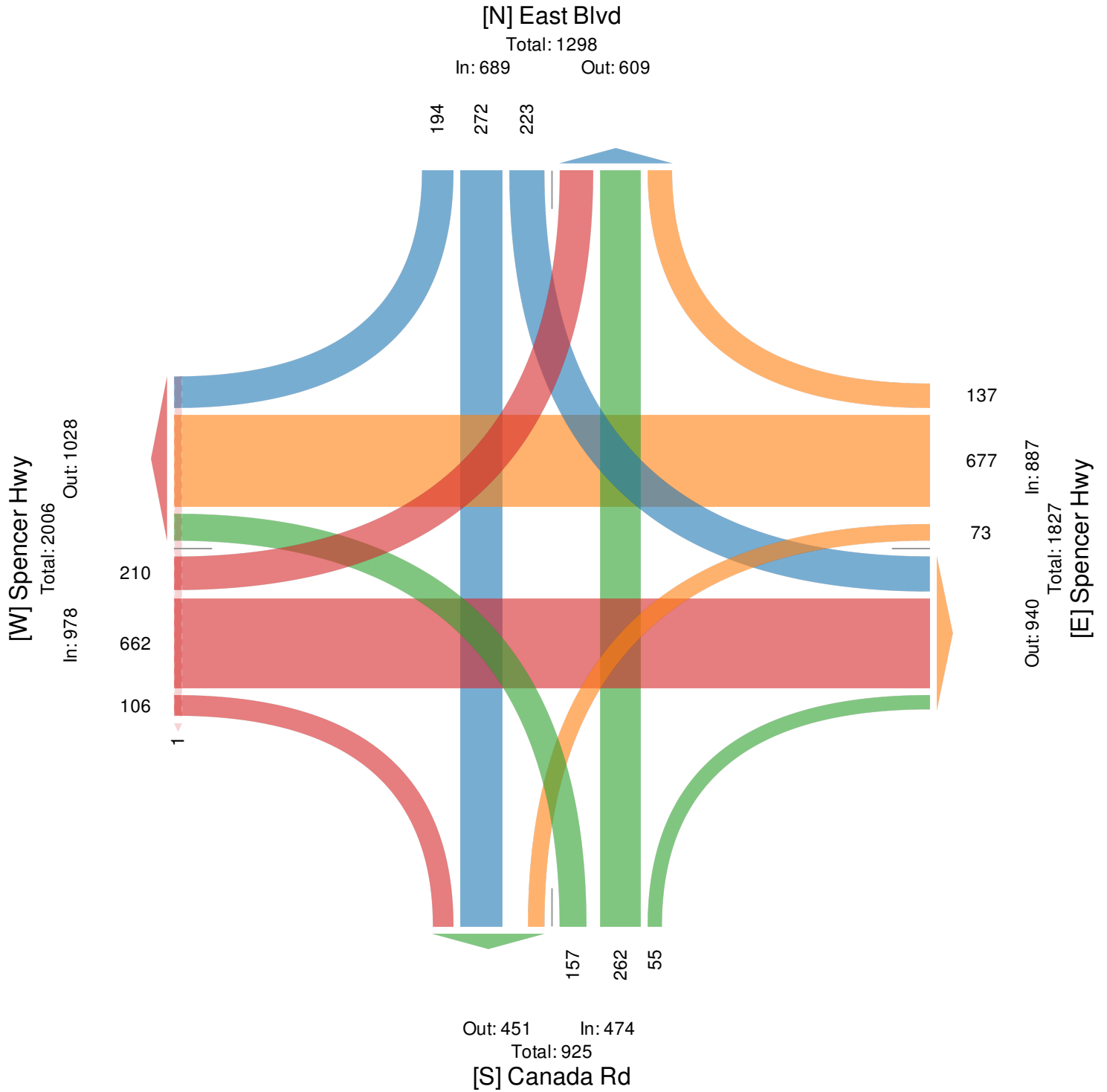
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 5PM - 6PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	East Blvd Southbound							Spencer Hwy Westbound							Canada Rd Northbound							Spencer Hwy Eastbound							
Time	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		Int
2018-12-18 5:00PM	40	128	50	1	219	0		36	301	59	0	396	0		22	108	50	0	180	0		33	189	38	0	260	0		1055
5:15PM	38	133	31	0	202	0		26	330	84	0	440	0		20	106	29	0	155	0		18	246	62	0	326	0		1123
5:30PM	52	104	64	0	220	0		36	328	38	0	402	0		20	123	34	0	177	0		32	175	58	0	265	0		1064
5:45PM	59	106	54	0	219	0		46	225	42	0	313	0		17	103	28	0	148	0		24	179	51	0	254	0		934
Total	189	471	199	1	860	0		144	1184	223	0	1551	0		79	440	141	0	660	0		107	789	209	0	1105	0		4176
% Approach	22.0%	54.8%	23.1%	0.1%	-	-		9.3%	76.3%	14.4%	0%	-	-		12.0%	66.7%	21.4%	0%	-	-		9.7%	71.4%	18.9%	0%	-	-		-
% Total	4.5%	11.3%	4.8%	0%	20.6%	-		3.4%	28.4%	5.3%	0%	37.1%	-		1.9%	10.5%	3.4%	0%	15.8%	-		2.6%	18.9%	5.0%	0%	26.5%	-		-
PHF	0.801	0.885	0.777	0.250	0.977	-		0.783	0.897	0.664	-	0.881	-		0.898	0.894	0.705	-	0.917	-		0.811	0.802	0.843	-	0.847	-		0.930
Lights	189	470	199	1	859	-		143	1171	220	0	1534	-		78	438	139	0	655	-		106	786	209	0	1101	-		4149
% Lights	100%	99.8%	100%	100%	99.9%	-		99.3%	98.9%	98.7%	0%	98.9%	-		98.7%	99.5%	98.6%	0%	99.2%	-		99.1%	99.6%	100%	0%	99.6%	-		99.4%
Articulated Trucks	0	0	0	0	0	-		0	3	1	0	4	-		0	0	1	0	1	-		1	2	0	0	3	-		8
% Articulated Trucks	0%	0%	0%	0%	0%	-		0%	0.3%	0.4%	0%	0.3%	-		0%	0%	0.7%	0%	0.2%	-		0.9%	0.3%	0%	0%	0.3%	-		0.2%
Buses and Single-Unit Trucks	0	1	0	0	1	-		1	10	2	0	13	-		1	2	1	0	4	-		0	1	0	0	1	-		19
% Buses and Single-Unit Trucks	0%	0.2%	0%	0%	0.1%	-		0.7%	0.8%	0.9%	0%	0.8%	-		1.3%	0.5%	0.7%	0%	0.6%	-		0%	0.1%	0%	0%	0.1%	-		0.5%
Pedestrians	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		
% Pedestrians	-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

East Blvd at Spencer Hwy - TMC

Tue Dec 18, 2018

PM Peak (Dec 18 2018 5PM - 6PM) - Overall Peak Hour

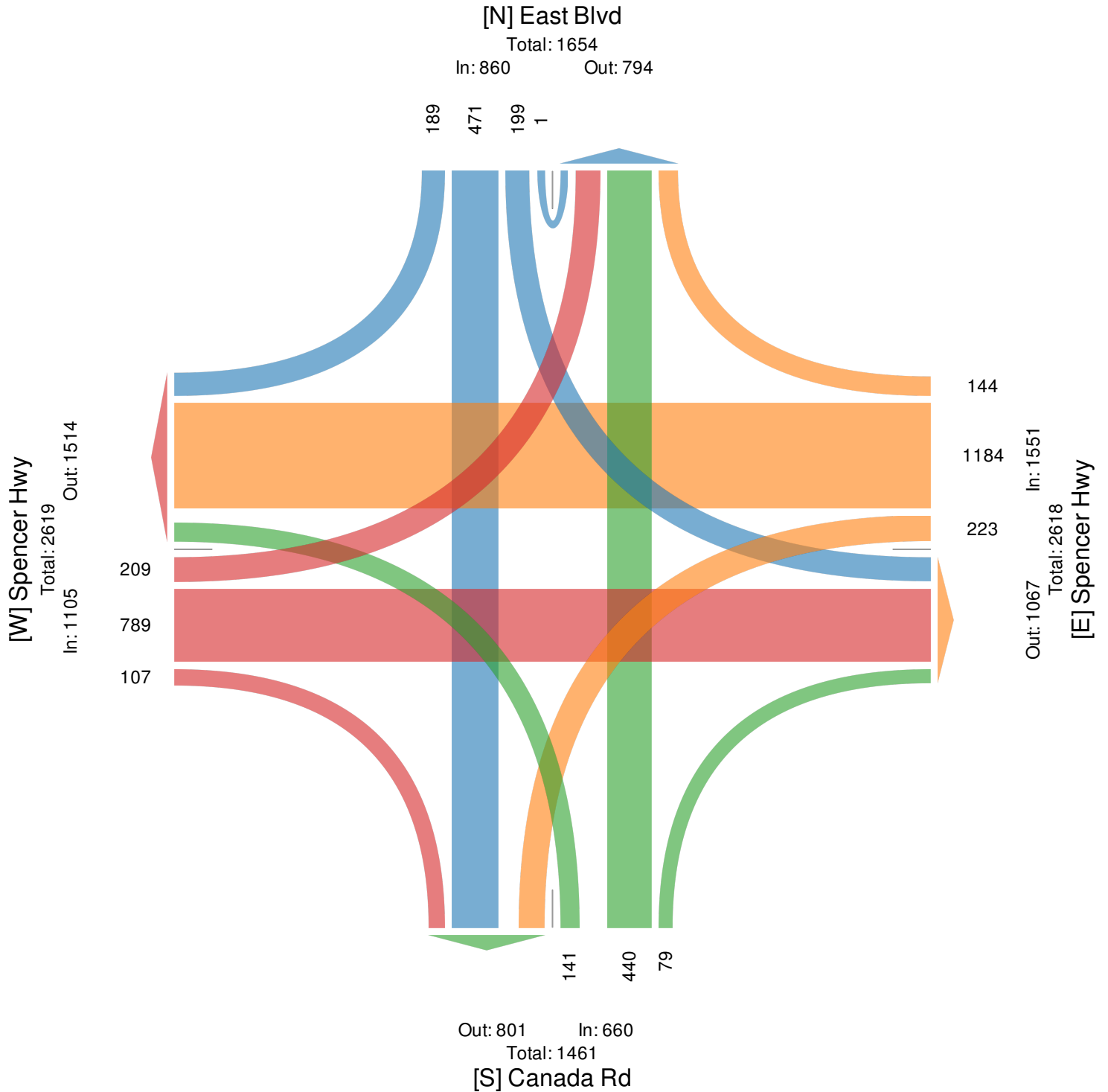
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians)

All Movements

ID: 599585, Location: 29.664147, -95.098162



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Appendix C:

Synchro Outputs

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	67	116	2	44	43	162	519	72	153	312	62
Future Volume (vph)	97	67	116	2	44	43	162	519	72	153	312	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	300		0	120		0	185		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3203	0	1770	3277	0	1770	3476	0	1770	3451	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3203	0	1770	3277	0	1770	3476	0	1770	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		126			47			17			25	
Link Speed (mph)		30			45			40			40	
Link Distance (ft)		1097			1373			1987			2625	
Travel Time (s)		24.9			20.8			33.9			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	199	0	2	95	0	176	642	0	166	406	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	16.6	29.6		9.6	22.6		21.1	30.1		20.7	29.7	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	10.0	17.3		5.1	6.9		16.6	43.7		13.6	40.6	
Actuated g/C Ratio	0.11	0.19		0.06	0.08		0.18	0.49		0.15	0.45	
v/c Ratio	0.53	0.28		0.02	0.32		0.54	0.38		0.62	0.26	
Control Delay	47.4	12.7		40.5	24.8		26.0	10.5		45.6	16.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	47.4	12.7		40.5	24.8		26.0	10.5		45.6	16.3	
LOS	D	B		D	C		C	B		D	B	
Approach Delay		24.7			25.2			13.8			24.8	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	57	16		1	13		47	43		90	71	
Queue Length 95th (ft)	107	48		8	36		95	113		145	113	
Internal Link Dist (ft)		1017			1293			1907			2545	
Turn Bay Length (ft)	275			300			120			185		
Base Capacity (vph)	237	984		100	696		326	1695		327	1571	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.44	0.20		0.02	0.14		0.54	0.38		0.51	0.26	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 19.8

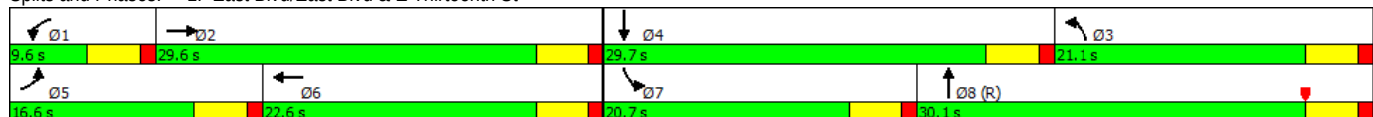
Intersection LOS: B

Intersection Capacity Utilization 48.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: East Blvd/East Blvd & E Thirteenth St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	88	63	23	85	24	62	712	120	42	350	22
Future Volume (vph)	32	88	63	23	85	24	62	712	120	42	350	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		0	125		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3328	0	0	3413	0	1770	3461	0	1770	3507	0
Flt Permitted		0.991			0.991		0.950			0.950		
Satd. Flow (perm)	0	3328	0	0	3413	0	1770	3461	0	1770	3507	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		68			26			23			7	
Link Speed (mph)		40			40			50			40	
Link Distance (ft)		1287			1741			1887			1987	
Travel Time (s)		21.9			29.7			25.7			33.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	199	0	0	143	0	67	904	0	46	404	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.6	22.6		22.6	22.6		13.8	34.8		10.0	31.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		9.0			8.5		8.7	53.1		5.5	47.8	
Actuated g/C Ratio		0.10			0.09		0.10	0.59		0.06	0.53	
v/c Ratio		0.51			0.42		0.39	0.44		0.43	0.22	
Control Delay		29.3			34.6		29.9	14.3		40.3	6.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		29.3			34.6		29.9	14.3		40.3	6.6	
LOS		C			C		C	B		D	A	
Approach Delay		29.3			34.6			15.4			10.0	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)		37			33		28	217		26	33	
Queue Length 95th (ft)		68			61		62	305		60	54	
Internal Link Dist (ft)		1207			1661			1807			1907	
Turn Bay Length (ft)							125			125		
Base Capacity (vph)		723			707		196	2049		108	1866	
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		0.28			0.20		0.34	0.44		0.43	0.22	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 2 (2%), Referenced to phase 4:SBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 17.1

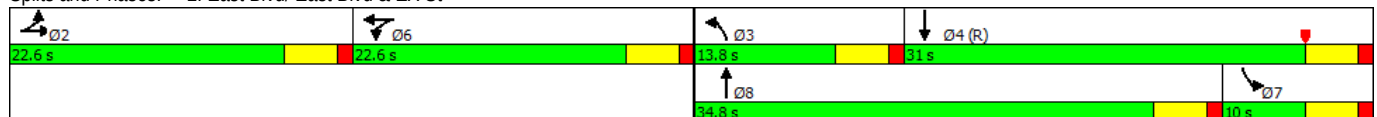
Intersection LOS: B

Intersection Capacity Utilization 52.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: East Blvd/ East Blvd & EX St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	10	88	49	35	70	54	655	14	24	355	65
Future Volume (vph)	122	10	88	49	35	70	54	655	14	24	355	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3237	0	0	3246	0	1770	3529	0	1770	3458	0
Flt Permitted		0.973			0.984		0.950			0.950		
Satd. Flow (perm)	0	3237	0	0	3246	0	1770	3529	0	1770	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96			76			3			26	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1505			1283			1889			1887	
Travel Time (s)		25.7			21.9			25.8			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	240	0	0	167	0	59	727	0	26	457	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	17.0	17.0		24.0	24.0		13.0	38.0		11.0	36.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		9.3			8.1		8.4	54.7		6.2	48.2	
Actuated g/C Ratio		0.10			0.09		0.09	0.61		0.07	0.54	
v/c Ratio		0.57			0.47		0.36	0.34		0.21	0.25	
Control Delay		27.8			25.5		49.9	6.2		40.7	8.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		27.8			25.5		49.9	6.2		40.7	8.0	
LOS		C			C		D	A		D	A	
Approach Delay		27.8			25.5			9.5			9.7	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)		41			25		33	64		16	45	
Queue Length 95th (ft)		75			55		66	125		42	150	
Internal Link Dist (ft)		1425			1203			1809			1807	
Turn Bay Length (ft)							180			180		
Base Capacity (vph)		532			762		183	2146		127	1863	
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		0.45			0.22		0.32	0.34		0.20	0.25	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 35 (39%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 13.8

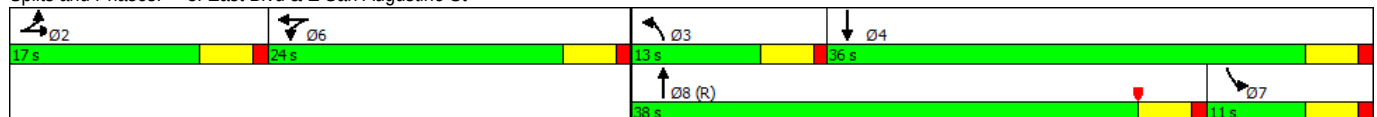
Intersection LOS: B

Intersection Capacity Utilization 47.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: East Blvd & E San Augustine St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	7	111	122	26	66	50	565	41	20	448	28
Future Volume (vph)	81	7	111	122	26	66	50	565	41	20	448	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3177	0	0	3282	0	1770	3504	0	1770	3507	0
Flt Permitted		0.980			0.972		0.950			0.950		
Satd. Flow (perm)	0	3177	0	0	3282	0	1770	3504	0	1770	3507	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		121			71			9			7	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1773			1725			1883			1889	
Travel Time (s)		30.2			29.4			25.7			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	0	0	233	0	54	659	0	22	517	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	23.0	23.0		23.0	23.0		12.0	34.0		10.0	32.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		8.3			9.9		7.1	53.3		6.7	48.7	
Actuated g/C Ratio		0.09			0.11		0.08	0.59		0.07	0.54	
v/c Ratio		0.54			0.55		0.39	0.32		0.17	0.27	
Control Delay		22.5			30.7		28.7	3.3		26.6	10.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		22.5			30.7		28.7	3.3		26.6	10.4	
LOS		C			C		C	A		C	B	
Approach Delay		22.5			30.7			5.2			11.0	
Approach LOS		C			C			A			B	
Queue Length 50th (ft)		27			46		30	13		8	112	
Queue Length 95th (ft)		60			80		m44	66		m16	155	
Internal Link Dist (ft)		1693			1645			1803			1809	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		749			731		147	2079		131	1899	
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			0.32		0.37	0.32		0.17	0.27	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 1 (1%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 12.8

Intersection LOS: B

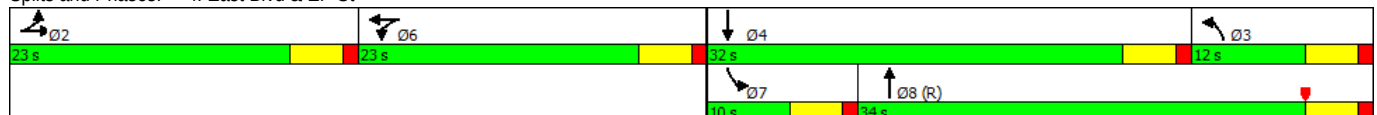
Intersection Capacity Utilization 45.8%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 4: East Blvd & EP St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	133	243	132	58	217	88	97	437	88	87	507	79
Future Volume (vph)	133	243	132	58	217	88	97	437	88	87	507	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	145		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3357	0	0	3385	0	1770	3451	0	1770	3468	0
Flt Permitted		0.987			0.992		0.950			0.950		
Satd. Flow (perm)	0	3357	0	0	3385	0	1770	3451	0	1770	3468	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		49			43			26			19	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1569			1385			1882			1883	
Travel Time (s)		23.8			21.0			25.7			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	552	0	0	395	0	105	571	0	95	637	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	24.0	24.0		22.6	22.6		15.0	29.4		14.0	28.4	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		17.8			14.5		9.7	33.0		8.8	32.2	
Actuated g/C Ratio		0.20			0.16		0.11	0.37		0.10	0.36	
v/c Ratio		0.79			0.68		0.55	0.45		0.55	0.51	
Control Delay		39.7			37.5		31.0	15.9		37.7	14.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		39.7			37.5		31.0	15.9		37.7	14.7	
LOS		D			D		C	B		D	B	
Approach Delay		39.7			37.5			18.3			17.7	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)		140			100		55	156		55	81	
Queue Length 95th (ft)		198			142		95	218		97	105	
Internal Link Dist (ft)		1489			1305			1802			1803	
Turn Bay Length (ft)							150			145		
Base Capacity (vph)		765			715		213	1281		186	1251	
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		0.72			0.55		0.49	0.45		0.51	0.51	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 85 (94%), Referenced to phase 4:SBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 26.3

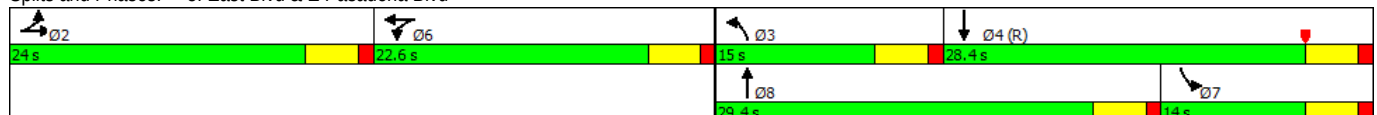
Intersection LOS: C

Intersection Capacity Utilization 62.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 5: East Blvd & E Pasadena Blvd



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑		↖		↗	↖	↗	↗	↖	↗	
Traffic Volume (vph)	0	0	0	163	0	112	0	554	121	86	607	0
Future Volume (vph)	0	0	0	163	0	112	0	554	121	86	607	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	175		0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1863	0	1770	0	1583	1863	3444	0	1770	3539	0
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	1863	0	1770	0	1583	1863	3444	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						127		30				
Link Speed (mph)		30			20			50			50	
Link Distance (ft)		94			1176			2888			1882	
Travel Time (s)		2.1			40.1			39.4			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	177	0	122	0	734	0	93	660	0
Turn Type				Prot		Perm	Prot	NA		Prot	NA	
Protected Phases		5		6			3	8		7	4	
Permitted Phases						8						
Total Split (s)		22.5		22.5		32.8	22.5	32.8		12.2	22.5	
Total Lost Time (s)		4.5		4.5		4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)				13.9		54.6		54.6		10.2	67.1	
Actuated g/C Ratio				0.15		0.61		0.61		0.11	0.75	
v/c Ratio				0.65		0.12		0.35		0.47	0.25	
Control Delay				46.5		2.4		4.8		63.4	1.7	
Queue Delay				0.0		0.0		0.0		0.0	0.0	
Total Delay				46.5		2.4		4.8		63.4	1.7	
LOS				D		A		A		E	A	
Approach Delay					28.5			4.8			9.3	
Approach LOS					C			A			A	
Queue Length 50th (ft)				95		0		11		58	16	
Queue Length 95th (ft)				155		25		24		m89	22	
Internal Link Dist (ft)		14			1096			2808			1802	
Turn Bay Length (ft)										175		
Base Capacity (vph)				354		1010		2100		205	2638	
Starvation Cap Reductn				0		0		0		0	0	
Spillback Cap Reductn				0		0		0		0	0	
Storage Cap Reductn				0		0		0		0	0	
Reduced v/c Ratio				0.50		0.12		0.35		0.45	0.25	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 50 (56%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 10.7

Intersection LOS: B

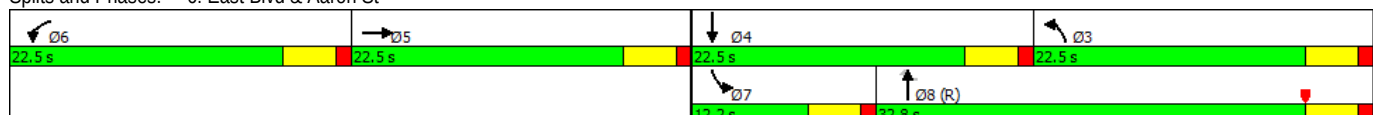
Intersection Capacity Utilization 43.8%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 6: East Blvd & Aaron St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	5	23	20	2	26	13	595	10	48	620	83
Future Volume (vph)	50	5	23	20	2	26	13	595	10	48	620	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		75	115		110
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1630	0	1770	1602	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1630	0	1770	1602	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			28				127			127
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		193			193			900			2888	
Travel Time (s)		4.4			4.4			15.3			49.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	30	0	22	30	0	14	647	11	52	674	90
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases									8			4
Total Split (s)	23.0	23.0		23.0	23.0		10.0	32.0	32.0	12.0	34.0	34.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	8.2	8.2		6.7	6.7		5.5	60.3	60.3	8.1	66.6	66.6
Actuated g/C Ratio	0.09	0.09		0.07	0.07		0.06	0.67	0.67	0.09	0.74	0.74
v/c Ratio	0.34	0.18		0.17	0.21		0.13	0.27	0.01	0.33	0.26	0.07
Control Delay	43.3	19.2		41.4	19.1		36.1	5.0	0.0	54.8	4.3	0.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	19.2		41.4	19.1		36.1	5.0	0.0	54.8	4.3	0.9
LOS	D	B		D	B		D	A	A	D	A	A
Approach Delay		34.7			28.5			5.6			7.1	
Approach LOS		C			C			A			A	
Queue Length 50th (ft)	29	3		12	1		8	54	0	31	48	1
Queue Length 95th (ft)	63	28		35	27		m19	116	m0	m62	96	6
Internal Link Dist (ft)		113			113			820			2808	
Turn Bay Length (ft)							125		75	115		110
Base Capacity (vph)	363	354		363	351		108	2370	1102	169	2618	1204
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.08		0.06	0.09		0.13	0.27	0.01	0.31	0.26	0.07

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 5 (6%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 8.6

Intersection LOS: A

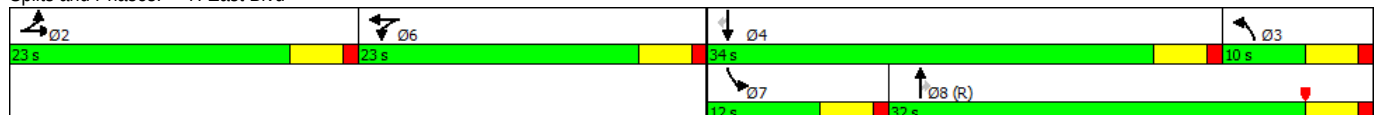
Intersection Capacity Utilization 42.0%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 7: East Blvd



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	404	54	95	521	134	70	359	70	131	408	141
Future Volume (vph)	153	404	54	95	521	134	70	359	70	131	408	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		0	100		0	140		0	155		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	4994	0	1770	4928	0	1770	3454	0	3433	3401	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	4994	0	1770	4928	0	1770	3454	0	3433	3401	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			65			26			54	
Link Speed (mph)		45			45			35			40	
Link Distance (ft)		1366			1434			903			900	
Travel Time (s)		20.7			21.7			17.6			15.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	498	0	103	712	0	76	466	0	142	596	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	21.0	28.0		17.0	24.0		14.0	32.0		13.0	31.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	13.2	22.6		10.1	17.3		8.5	33.0		8.5	35.1	
Actuated g/C Ratio	0.15	0.25		0.11	0.19		0.09	0.37		0.09	0.39	
v/c Ratio	0.64	0.39		0.52	0.71		0.46	0.36		0.44	0.44	
Control Delay	47.4	27.6		46.7	34.9		47.2	21.8		33.8	12.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	47.4	27.6		46.7	34.9		47.2	21.8		33.8	12.7	
LOS	D	C		D	C		D	C		C	B	
Approach Delay		32.6			36.4			25.3			16.7	
Approach LOS		C			D			C			B	
Queue Length 50th (ft)	90	83		56	126		41	96		43	77	
Queue Length 95th (ft)	149	111		105	164		85	149		73	134	
Internal Link Dist (ft)		1286			1354			823			820	
Turn Bay Length (ft)	115			100			140			155		
Base Capacity (vph)	324	1353		245	1118		189	1284		324	1358	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.51	0.37		0.42	0.64		0.40	0.36		0.44	0.44	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 4:SBT, Start of Yellow, Master Intersection

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 28.0

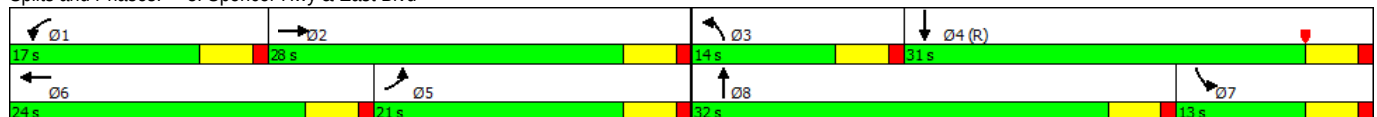
Intersection LOS: C

Intersection Capacity Utilization 56.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 8: Spencer Hwy & East Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	67	116	2	44	43	162	519	72	153	312	62
Future Volume (vph)	97	67	116	2	44	43	162	519	72	153	312	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	300		0	120		0	185		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3203	0	1770	3277	0	1770	3476	0	1770	3451	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3203	0	1770	3277	0	1770	3476	0	1770	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		126			47			13			20	
Link Speed (mph)		30			45			40			40	
Link Distance (ft)		1097			1373			1987			2625	
Travel Time (s)		24.9			20.8			33.9			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	199	0	2	95	0	176	642	0	166	406	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	23.0	37.0		10.0	24.0		30.0	44.0		29.0	43.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	12.8	34.8		5.5	19.5		17.2	45.2		24.5	52.5	
Actuated g/C Ratio	0.11	0.29		0.05	0.16		0.14	0.38		0.20	0.44	
v/c Ratio	0.56	0.20		0.02	0.17		0.70	0.49		0.46	0.27	
Control Delay	61.4	12.7		55.5	24.3		49.9	20.6		46.7	22.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	61.4	12.7		55.5	24.3		49.9	20.6		46.7	22.5	
LOS	E	B		E	C		D	C		D	C	
Approach Delay		29.5			24.9			26.9			29.5	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	79	21		2	16		107	122		114	97	
Queue Length 95th (ft)	130	52		11	42		150	338		184	160	
Internal Link Dist (ft)		1017			1293			1907			2545	
Turn Bay Length (ft)	275			300			120			185		
Base Capacity (vph)	272	1019		81	571		376	1316		361	1520	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.39	0.20		0.02	0.17		0.47	0.49		0.46	0.27	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green, Master Intersection

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 28.1

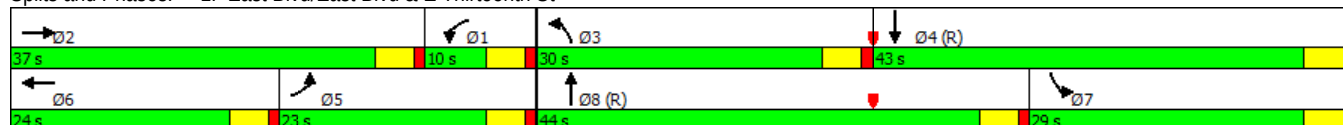
Intersection LOS: C

Intersection Capacity Utilization 48.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: East Blvd/East Blvd & E Thirteenth St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔↔			↔↔		↔	↔↔		↔	↔↔	
Traffic Volume (vph)	32	88	63	23	85	24	62	712	120	42	350	22
Future Volume (vph)	32	88	63	23	85	24	62	712	120	42	350	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		0	125		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3328	0	0	3413	0	1770	3461	0	1770	3507	0
Flt Permitted		0.991			0.991		0.950			0.950		
Satd. Flow (perm)	0	3328	0	0	3413	0	1770	3461	0	1770	3507	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		66			19			20			6	
Link Speed (mph)		40			40			50			40	
Link Distance (ft)		1287			1741			1887			1987	
Travel Time (s)		21.9			29.7			25.7			33.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	199	0	0	143	0	67	904	0	46	404	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	25.0	25.0		24.0	24.0		17.0	56.0		15.0	54.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		24.7			9.7		10.0	61.3		8.3	59.7	
Actuated g/C Ratio		0.21			0.08		0.08	0.51		0.07	0.50	
v/c Ratio		0.27			0.49		0.46	0.51		0.38	0.23	
Control Delay		29.0			50.8		39.3	16.6		52.5	9.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		29.0			50.8		39.3	16.6		52.5	9.1	
LOS		C			D		D	B		D	A	
Approach Delay		29.0			50.8			18.2			13.5	
Approach LOS		C			D			B			B	
Queue Length 50th (ft)		46			48		49	97		36	34	
Queue Length 95th (ft)		83			81		80	246		77	51	
Internal Link Dist (ft)		1207			1661			1807			1907	
Turn Bay Length (ft)							125			125		
Base Capacity (vph)		737			570		184	1776		154	1746	
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			0.25		0.36	0.51		0.30	0.23	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 25 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 20.9

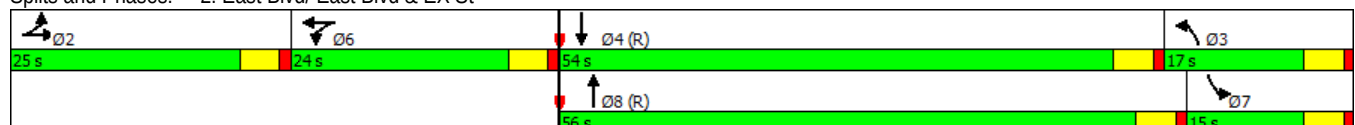
Intersection LOS: C

Intersection Capacity Utilization 52.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: East Blvd/ East Blvd & EX St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	122	10	88	49	35	70	54	655	14	24	355	65
Future Volume (vph)	122	10	88	49	35	70	54	655	14	24	355	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3237	0	0	3246	0	1770	3529	0	1770	3458	0
Flt Permitted		0.973			0.984		0.950			0.950		
Satd. Flow (perm)	0	3237	0	0	3246	0	1770	3529	0	1770	3458	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		96			76			2			18	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1505			1283			1889			1887	
Travel Time (s)		25.7			21.9			25.8			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	240	0	0	167	0	59	727	0	26	457	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	27.0	27.0		26.0	26.0		26.0	54.0		13.0	41.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		22.5			8.8		9.4	67.4		7.4	63.4	
Actuated g/C Ratio		0.19			0.07		0.08	0.56		0.06	0.53	
v/c Ratio		0.35			0.54		0.43	0.37		0.24	0.25	
Control Delay		26.6			35.1		46.2	25.9		53.9	8.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		26.6			35.1		46.2	25.9		53.9	8.3	
LOS		C			D		D	C		D	A	
Approach Delay		26.6			35.1			27.4			10.8	
Approach LOS		C			D			C			B	
Queue Length 50th (ft)		50			35		47	274		21	68	
Queue Length 95th (ft)		89			70		93	340		53	93	
Internal Link Dist (ft)		1425			1203			1809			1807	
Turn Bay Length (ft)							180			180		
Base Capacity (vph)		684			643		317	1982		125	1834	
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		0.35			0.26		0.19	0.37		0.21	0.25	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 71 (59%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 23.3

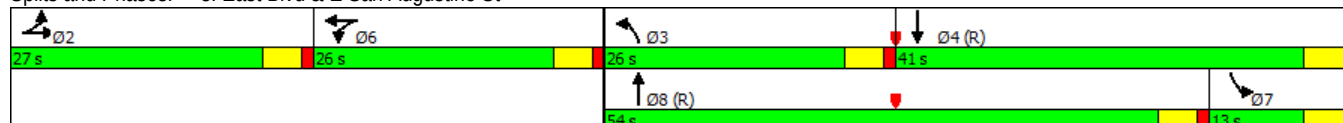
Intersection LOS: C

Intersection Capacity Utilization 47.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: East Blvd & E San Augustine St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	81	7	111	122	26	66	50	565	41	20	448	28
Future Volume (vph)	81	7	111	122	26	66	50	565	41	20	448	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3177	0	0	3282	0	1770	3504	0	1770	3507	0
Flt Permitted		0.980			0.972		0.950			0.950		
Satd. Flow (perm)	0	3177	0	0	3282	0	1770	3504	0	1770	3507	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		121			53			7			6	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1773			1725			1883			1889	
Travel Time (s)		30.2			29.4			25.7			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	0	0	233	0	54	659	0	22	517	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	28.0	28.0		28.0	28.0		18.0	50.0		14.0	46.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		23.5			12.0		11.9	63.5		7.1	56.6	
Actuated g/C Ratio		0.20			0.10		0.10	0.53		0.06	0.47	
v/c Ratio		0.30			0.62		0.31	0.35		0.21	0.31	
Control Delay		19.4			46.9		30.6	5.3		87.6	10.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		19.4			46.9		30.6	5.3		87.6	10.9	
LOS		B			D		C	A		F	B	
Approach Delay		19.4			46.9			7.2			14.0	
Approach LOS		B			D			A			B	
Queue Length 50th (ft)		32			71		39	61		18	61	
Queue Length 95th (ft)		68			111		m63	83		48	81	
Internal Link Dist (ft)		1693			1645			1803			1809	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		719			685		199	1858		140	1657	
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		0.30			0.34		0.27	0.35		0.16	0.31	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 90 (75%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 16.3

Intersection LOS: B

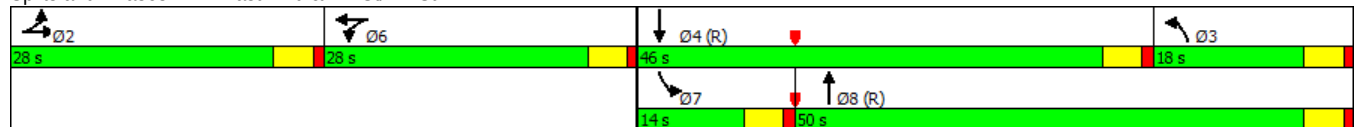
Intersection Capacity Utilization 45.8%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 4: East Blvd & EP St/NP St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔		↔	↔↔		↔	↔↔	
Traffic Volume (vph)	133	243	132	58	217	88	97	437	88	87	507	79
Future Volume (vph)	133	243	132	58	217	88	97	437	88	87	507	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	145		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3357	0	0	3385	0	1770	3451	0	1770	3468	0
Flt Permitted		0.987			0.992		0.950			0.950		
Satd. Flow (perm)	0	3357	0	0	3385	0	1770	3451	0	1770	3468	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		38			32			20			15	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1569			1385			1882			1883	
Travel Time (s)		23.8			21.0			25.7			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	552	0	0	395	0	105	571	0	95	637	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	33.0	33.0		27.0	27.0		20.0	41.8		18.2	40.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		28.5			18.1		12.1	41.7		13.7	43.4	
Actuated g/C Ratio		0.24			0.15		0.10	0.35		0.11	0.36	
v/c Ratio		0.67			0.74		0.59	0.47		0.47	0.50	
Control Delay		43.1			53.0		47.0	18.7		42.8	17.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		43.1			53.0		47.0	18.7		42.8	17.1	
LOS		D			D		D	B		D	B	
Approach Delay		43.1			53.0			23.1			20.5	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)		191			143		86	184		74	142	
Queue Length 95th (ft)		254			190		119	269		133	258	
Internal Link Dist (ft)		1489			1305			1802			1803	
Turn Bay Length (ft)							150			145		
Base Capacity (vph)		826			660		228	1212		202	1262	
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		0.67			0.60		0.46	0.47		0.47	0.50	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 100 (83%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 32.0

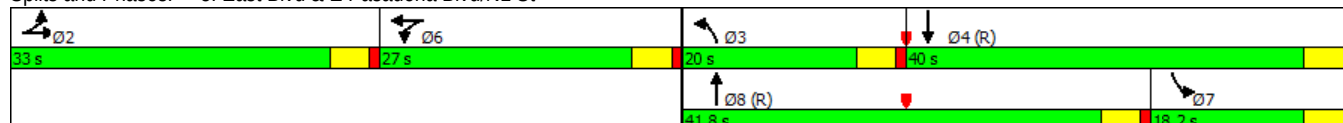
Intersection LOS: C

Intersection Capacity Utilization 62.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 5: East Blvd & E Pasadena Blvd/NL St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↑		↵		↵	↵	↵		↵	↵	
Traffic Volume (vph)	0	0	0	163	0	112	0	554	121	86	607	0
Future Volume (vph)	0	0	0	163	0	112	0	554	121	86	607	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	175		0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1863	0	1770	0	1583	1863	3444	0	1770	3539	0
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	1863	0	1770	0	1583	1863	3444	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						136		24				
Link Speed (mph)		30			20			50			50	
Link Distance (ft)		94			1176			2888			1882	
Travel Time (s)		2.1			40.1			39.4			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	177	0	122	0	734	0	93	660	0
Turn Type				Prot		Perm	Prot	NA		Prot	NA	
Protected Phases		2		1			3	8		7	4	
Permitted Phases						8						
Total Split (s)		22.5		28.0		45.5	9.5	45.5		24.0	60.0	
Total Lost Time (s)		4.5		4.5		4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)				17.2		55.2		55.2		11.6	71.3	
Actuated g/C Ratio				0.14		0.46		0.46		0.10	0.59	
v/c Ratio				0.70		0.15		0.46		0.54	0.31	
Control Delay				63.2		3.6		19.8		39.2	10.3	
Queue Delay				0.0		0.0		0.0		0.0	0.0	
Total Delay				63.2		3.6		19.8		39.2	10.3	
LOS				E		A		B		D	B	
Approach Delay					38.9			19.8			13.8	
Approach LOS					D			B			B	
Queue Length 50th (ft)				132		0		238		53	206	
Queue Length 95th (ft)				198		32		338		m77	224	
Internal Link Dist (ft)		14			1096			2808			1802	
Turn Bay Length (ft)										175		
Base Capacity (vph)				346		801		1597		287	2103	
Starvation Cap Reductn				0		0		0		0	0	
Spillback Cap Reductn				0		0		0		0	0	
Storage Cap Reductn				0		0		0		0	0	
Reduced v/c Ratio				0.51		0.15		0.46		0.32	0.31	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 20.5

Intersection LOS: C

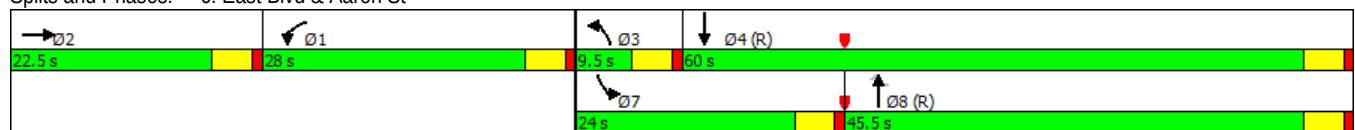
Intersection Capacity Utilization 43.8%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 6: East Blvd & Aaron St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱	↱	↰	↱	↱
Traffic Volume (vph)	50	5	23	20	2	26	13	595	10	48	620	83
Future Volume (vph)	50	5	23	20	2	26	13	595	10	48	620	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		75	110		115
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1630	0	1770	1602	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1630	0	1770	1602	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			28				95			95
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		193			193			900			2888	
Travel Time (s)		4.4			4.4			15.3			49.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	30	0	22	30	0	14	647	11	52	674	90
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases									8			4
Total Split (s)	26.0	26.0		24.0	24.0		12.0	51.0	51.0	19.0	58.0	58.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	21.5	21.5		7.1	7.1		6.5	68.5	68.5	8.9	75.1	75.1
Actuated g/C Ratio	0.18	0.18		0.06	0.06		0.05	0.57	0.57	0.07	0.63	0.63
v/c Ratio	0.17	0.10		0.21	0.25		0.15	0.32	0.01	0.40	0.30	0.09
Control Delay	43.4	18.6		58.0	24.9		64.0	20.5	0.1	43.5	24.0	11.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.4	18.6		58.0	24.9		64.0	20.5	0.1	43.5	24.0	11.0
LOS	D	B		E	C		E	C	A	D	C	B
Approach Delay		34.6			38.9			21.0			23.8	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	36	3		17	2		7	156	0	42	208	25
Queue Length 95th (ft)	74	30		44	32		m17	260	m0	m83	336	77
Internal Link Dist (ft)		113			113			820			2808	
Turn Bay Length (ft)							125		75	110		115
Base Capacity (vph)	317	312		287	283		110	2021	944	213	2215	1026
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.10		0.08	0.11		0.13	0.32	0.01	0.24	0.30	0.09

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 23.7

Intersection LOS: C

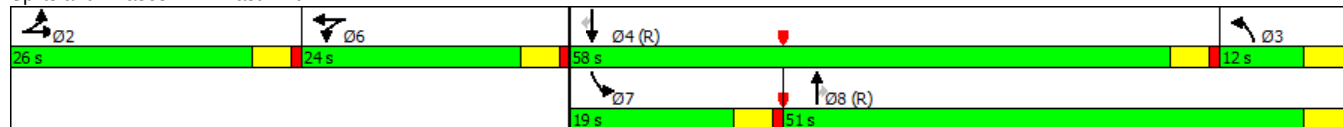
Intersection Capacity Utilization 42.0%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 7: East Blvd



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 		 	 	
Traffic Volume (vph)	153	404	54	95	521	134	70	359	70	131	408	141
Future Volume (vph)	153	404	54	95	521	134	70	359	70	131	408	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		0	100		0	140		0	155		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	4994	0	1770	4928	0	1770	3454	0	3433	3401	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	4994	0	1770	4928	0	1770	3454	0	3433	3401	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			47			18			38	
Link Speed (mph)		45			45			35			40	
Link Distance (ft)		1366			1434			903			900	
Travel Time (s)		20.7			21.7			17.6			15.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	166	498	0	103	712	0	76	466	0	142	596	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Total Split (s)	25.3	34.3		19.0	28.0		32.7	32.7		34.0	34.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	16.1	32.5		11.8	28.2		32.2	32.2		25.5	25.5	
Actuated g/C Ratio	0.13	0.27		0.10	0.24		0.27	0.27		0.21	0.21	
v/c Ratio	0.70	0.36		0.60	0.60		0.16	0.50		0.19	0.79	
Control Delay	64.8	35.4		65.5	41.2		36.4	38.6		9.4	19.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	64.8	35.4		65.5	41.2		36.4	38.6		9.4	19.3	
LOS	E	D		E	D		D	D		A	B	
Approach Delay		42.7			44.3			38.3			17.4	
Approach LOS		D			D			D			B	
Queue Length 50th (ft)	124	110		77	169		46	156		14	216	
Queue Length 95th (ft)	192	149		134	224		91	217		8	15	
Internal Link Dist (ft)		1286			1354			823			820	
Turn Bay Length (ft)	115			100			140			155		
Base Capacity (vph)	306	1367		213	1192		474	938		843	864	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.54	0.36		0.48	0.60		0.16	0.50		0.17	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 8:NBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 35.5

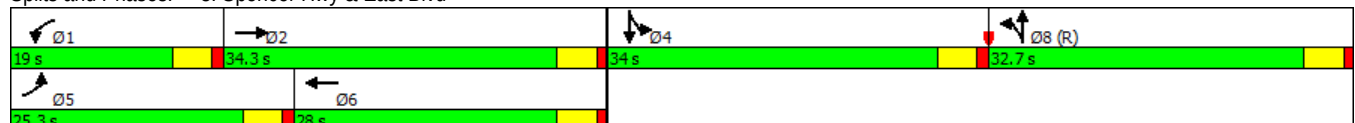
Intersection LOS: D

Intersection Capacity Utilization 56.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 8: Spencer Hwy & East Blvd



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰	↰
Traffic Volume (vph)	24	82	149	64	87	132	97	224	30	58	814	114
Future Volume (vph)	24	82	149	64	87	132	97	224	30	58	814	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	300		0	120		0	185		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3196	0	1770	3221	0	1770	3476	0	1770	3476	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3196	0	1770	3221	0	1770	3476	0	1770	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		162			143			20			20	
Link Speed (mph)		30			45			40			40	
Link Distance (ft)		1097			1373			1987			2625	
Travel Time (s)		24.9			20.8			33.9			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	251	0	70	238	0	105	276	0	63	1009	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	10.2	22.6		13.0	25.4		15.0	41.0		13.4	39.4	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effect Green (s)	5.7	20.7		7.9	27.0		9.4	39.2		8.2	38.2	
Actuated g/C Ratio	0.06	0.23		0.09	0.30		0.10	0.44		0.09	0.42	
v/c Ratio	0.23	0.29		0.45	0.22		0.57	0.18		0.39	0.68	
Control Delay	45.5	12.5		48.3	11.5		32.2	13.8		45.5	24.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	45.5	12.5		48.3	11.5		32.2	13.8		45.5	24.4	
LOS	D	B		D	B		C	B		D	C	
Approach Delay		15.6			19.9			18.8			25.6	
Approach LOS		B			B			B			C	
Queue Length 50th (ft)	14	22		38	18		52	64		34	249	
Queue Length 95th (ft)	40	54		80	53		116	110		74	324	
Internal Link Dist (ft)		1017			1293			1907			2545	
Turn Bay Length (ft)	275			300			120			185		
Base Capacity (vph)	112	860		167	1066		206	1524		175	1487	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.23	0.29		0.42	0.22		0.51	0.18		0.36	0.68	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green, Master Intersection

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 22.1

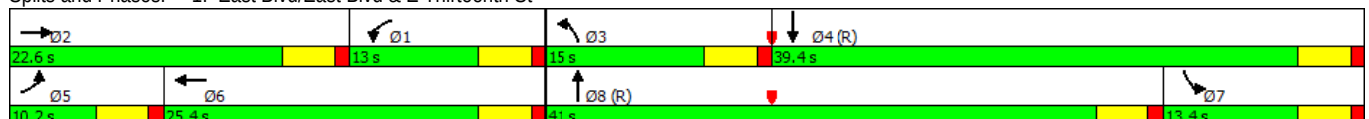
Intersection LOS: C

Intersection Capacity Utilization 57.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: East Blvd/East Blvd & E Thirteenth St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	19	81	78	166	129	36	106	281	60	24	1025	73
Future Volume (vph)	19	81	78	166	129	36	106	281	60	24	1025	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		0	125		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3289	0	0	3399	0	1770	3447	0	1770	3504	0
Flt Permitted		0.995			0.976		0.950			0.950		
Satd. Flow (perm)	0	3289	0	0	3399	0	1770	3447	0	1770	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85			13			30			9	
Link Speed (mph)		40			40			50			40	
Link Distance (ft)		1287			1741			1887			1987	
Travel Time (s)		21.9			29.7			25.7			33.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	194	0	0	359	0	115	370	0	26	1193	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.5	22.5		22.5	22.5		11.2	34.9		10.1	33.8	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		18.0			14.3		6.7	40.1		5.6	33.0	
Actuated g/C Ratio		0.20			0.16		0.07	0.45		0.06	0.37	
v/c Ratio		0.27			0.65		0.88	0.24		0.24	0.93	
Control Delay		18.1			39.7		88.8	6.0		30.3	31.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.1			39.7		88.8	6.0		30.3	31.7	
LOS		B			D		F	A		C	C	
Approach Delay		18.1			39.7			25.6			31.7	
Approach LOS		B			D			C			C	
Queue Length 50th (ft)		27			98		70	21		14	147	
Queue Length 95th (ft)		56			137		#173	75		m23	#497	
Internal Link Dist (ft)		1207			1661			1807			1907	
Turn Bay Length (ft)							125			125		
Base Capacity (vph)		725			690		131	1554		110	1289	
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			0.52		0.88	0.24		0.24	0.93	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 25 (28%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 30.5

Intersection LOS: C

Intersection Capacity Utilization 66.4%

ICU Level of Service C

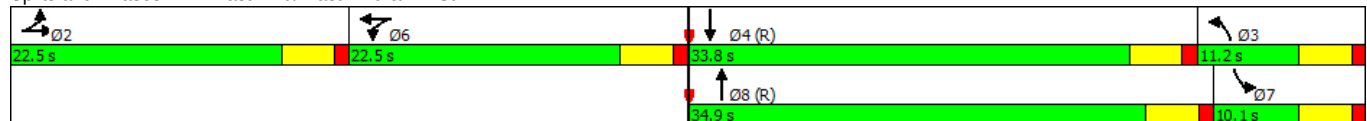
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 2: East Blvd/ East Blvd & EX St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	59	25	138	34	13	26	139	367	43	75	920	174
Future Volume (vph)	59	25	138	34	13	26	139	367	43	75	920	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3168	0	0	3275	0	1770	3483	0	1770	3454	0
Flt Permitted		0.987			0.977		0.950			0.950		
Satd. Flow (perm)	0	3168	0	0	3275	0	1770	3483	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		150			28			14			25	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1505			1283			1889			1887	
Travel Time (s)		25.7			21.9			25.8			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	241	0	0	79	0	151	446	0	82	1189	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.5	22.5		22.5	22.5		12.0	30.8		14.2	33.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effect Green (s)		18.0			6.9		7.5	41.7		9.5	41.6	
Actuated g/C Ratio		0.20			0.08		0.08	0.46		0.11	0.46	
v/c Ratio		0.32			0.28		1.03	0.28		0.44	0.74	
Control Delay		13.5			29.5		107.8	10.1		34.3	15.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		13.5			29.5		107.8	10.1		34.3	15.3	
LOS		B			C		F	B		C	B	
Approach Delay		13.5			29.5			34.8			16.5	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)		22			14		~50	17		35	381	
Queue Length 95th (ft)		55			35		#195	81		m36	m421	
Internal Link Dist (ft)		1425			1203			1809			1807	
Turn Bay Length (ft)							180			180		
Base Capacity (vph)		753			677		147	1619		208	1608	
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		0.32			0.12		1.03	0.28		0.39	0.74	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 82 (91%), Referenced to phase 4: SBT and 8: NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 21.7

Intersection LOS: C

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

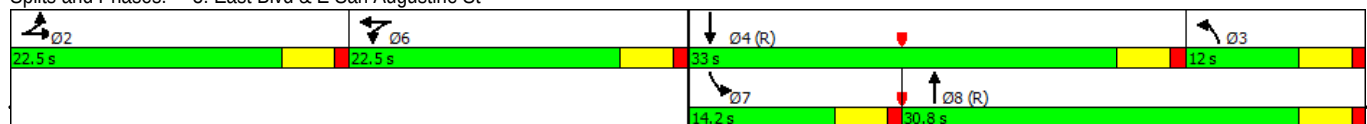
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 3: East Blvd & E San Augustine St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	36	23	107	71	29	26	133	480	96	58	933	86
Future Volume (vph)	36	23	107	71	29	26	133	480	96	58	933	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3161	0	0	3337	0	1770	3451	0	1770	3493	0
Flt Permitted		0.989			0.973		0.950			0.950		
Satd. Flow (perm)	0	3161	0	0	3337	0	1770	3451	0	1770	3493	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		116			28			26			11	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1773			1725			1883			1889	
Travel Time (s)		30.2			29.4			25.7			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	180	0	0	137	0	145	626	0	63	1107	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.5	22.5		22.5	22.5		13.0	31.7		13.3	32.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		18.0			8.3		13.4	39.5		8.1	32.2	
Actuated g/C Ratio		0.20			0.09		0.15	0.44		0.09	0.36	
v/c Ratio		0.25			0.41		0.55	0.41		0.39	0.88	
Control Delay		13.0			33.7		30.4	22.2		26.3	19.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		13.0			33.7		30.4	22.2		26.3	19.9	
LOS		B			C		C	C		C	B	
Approach Delay		13.0			33.7			23.7			20.3	
Approach LOS		B			C			C			C	
Queue Length 50th (ft)		15			31		89	183		31	122	
Queue Length 95th (ft)		43			58		m122	m231		m43	#466	
Internal Link Dist (ft)		1693			1645			1803			1809	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		725			689		263	1530		173	1258	
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		0.25			0.20		0.55	0.41		0.36	0.88	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 21.7

Intersection LOS: C

Intersection Capacity Utilization 60.2%

ICU Level of Service B

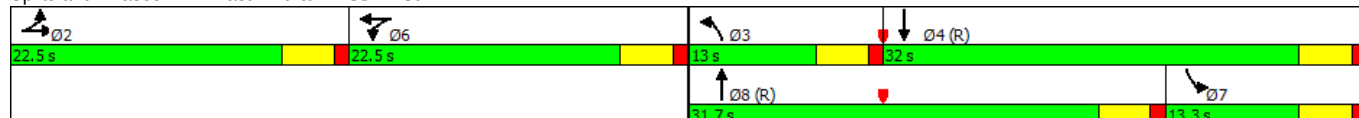
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 4: East Blvd & EP St/NP St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	63	272	192	147	397	103	197	551	109	122	813	172
Future Volume (vph)	63	272	192	147	397	103	197	551	109	122	813	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	145		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3324	0	0	3416	0	1770	3451	0	1770	3447	0
Flt Permitted		0.994			0.989		0.950			0.950		
Satd. Flow (perm)	0	3324	0	0	3416	0	1770	3451	0	1770	3447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		112			22			26			28	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1569			1385			1882			1883	
Travel Time (s)		23.8			21.0			25.7			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	573	0	0	704	0	214	717	0	133	1071	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.5	22.5		22.5	22.5		15.0	30.4		14.6	30.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effect Green (s)		18.0			18.0		10.5	25.9		10.1	25.5	
Actuated g/C Ratio		0.20			0.20		0.12	0.29		0.11	0.28	
v/c Ratio		0.76			1.01		1.04	0.71		0.67	1.08	
Control Delay		34.6			71.7		102.9	12.5		33.8	64.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		34.6			71.7		102.9	12.5		33.8	64.1	
LOS		C			E		F	B		C	E	
Approach Delay		34.6			71.7			33.3			60.8	
Approach LOS		C			E			C			E	
Queue Length 50th (ft)		131			~208		~137	177		80	~359	
Queue Length 95th (ft)		191			#331		#257	83		m93	m#463	
Internal Link Dist (ft)		1489			1305			1802			1803	
Turn Bay Length (ft)							150			145		
Base Capacity (vph)		754			700		206	1011		198	996	
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		0.76			1.01		1.04	0.71		0.67	1.08	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 34 (38%), Referenced to phase 4: SBT and 8: NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 51.1

Intersection LOS: D

Intersection Capacity Utilization 87.9%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

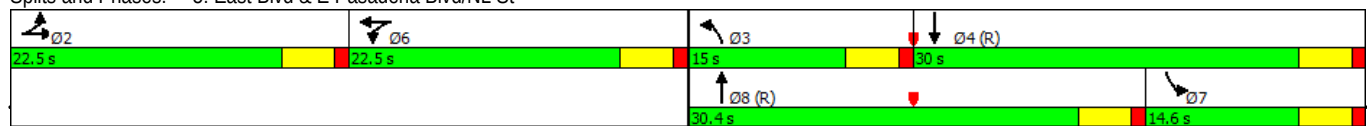
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 5: East Blvd & E Pasadena Blvd/NL St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑		↖		↗	↖	↗	↕	↖	↗	
Traffic Volume (vph)	0	0	0	48	0	24	0	846	66	48	1077	0
Future Volume (vph)	0	0	0	48	0	24	0	846	66	48	1077	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	175		0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1863	0	1770	0	1583	1863	3500	0	1770	3539	0
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	1863	0	1770	0	1583	1863	3500	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						127		12				
Link Speed (mph)		30			20			50			50	
Link Distance (ft)		94			1176			2887			1882	
Travel Time (s)		2.1			40.1			39.4			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	52	0	26	0	992	0	52	1171	0
Turn Type				Prot		Perm	Prot	NA		Prot	NA	
Protected Phases		2		1			3	8		7	4	
Permitted Phases						8						
Total Split (s)		22.5		11.4		44.7	9.5	44.7		11.4	46.6	
Total Lost Time (s)		4.5		4.5		4.5	4.5	4.5		4.5	4.5	
Act Effect Green (s)				6.6		49.3		49.3		6.6	56.2	
Actuated g/C Ratio				0.07		0.55		0.55		0.07	0.62	
v/c Ratio				0.40		0.03		0.52		0.40	0.53	
Control Delay				49.3		0.0		8.6		54.6	5.1	
Queue Delay				0.0		0.0		0.0		0.0	0.0	
Total Delay				49.3		0.0		8.6		54.6	5.1	
LOS				D		A		A		D	A	
Approach Delay					32.9			8.6			7.2	
Approach LOS					C			A			A	
Queue Length 50th (ft)				29		0		79		27	56	
Queue Length 95th (ft)				65		0		104		m27	m54	
Internal Link Dist (ft)		14			1096			2807			1802	
Turn Bay Length (ft)										175		
Base Capacity (vph)				135		925		1923		135	2208	
Starvation Cap Reductn				0		0		0		0	0	
Spillback Cap Reductn				0		0		0		0	0	
Storage Cap Reductn				0		0		0		0	0	
Reduced v/c Ratio				0.39		0.03		0.52		0.39	0.53	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 70 (78%), Referenced to phase 4: SBT and 8: NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 8.7

Intersection LOS: A

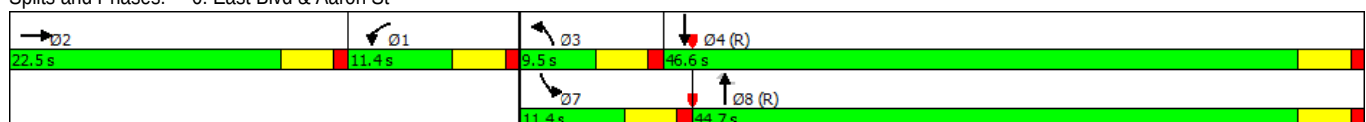
Intersection Capacity Utilization 48.1%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 6: East Blvd & Aaron St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	43	84	39	17	106	60	608	52	165	719	208
Future Volume (vph)	118	43	84	39	17	106	60	608	52	165	719	208
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		75	110		115
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1678	0	1770	1621	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1678	0	1770	1621	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		91			115				127			183
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		193			193			900			2887	
Travel Time (s)		4.4			4.4			15.3			49.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	138	0	42	133	0	65	661	57	179	782	226
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases									8			4
Total Split (s)	22.5	22.5		22.5	22.5		11.0	27.0	27.0	18.0	34.0	34.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Act Effect Green (s)	18.0	18.0		8.0	8.0		6.3	31.5	31.5	14.4	41.7	41.7
Actuated g/C Ratio	0.20	0.20		0.09	0.09		0.07	0.35	0.35	0.16	0.46	0.46
v/c Ratio	0.36	0.34		0.27	0.53		0.53	0.53	0.09	0.63	0.48	0.27
Control Delay	34.5	14.9		41.4	18.4		33.7	12.9	0.9	39.4	4.8	1.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.5	14.9		41.4	18.4		33.7	12.9	0.9	39.4	4.8	1.1
LOS	C	B		D	B		C	B	A	D	A	A
Approach Delay		24.3			23.9			13.8			9.3	
Approach LOS		C			C			B			A	
Queue Length 50th (ft)	63	22		23	10		32	53	0	57	21	1
Queue Length 95th (ft)	116	72		52	61		m37	m181	m2	97	80	1
Internal Link Dist (ft)		113			113			820			2807	
Turn Bay Length (ft)							125		75	110		115
Base Capacity (vph)	354	408		354	416		127	1240	637	305	1638	831
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.34		0.12	0.32		0.51	0.53	0.09	0.59	0.48	0.27

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 47 (52%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 13.5

Intersection LOS: B

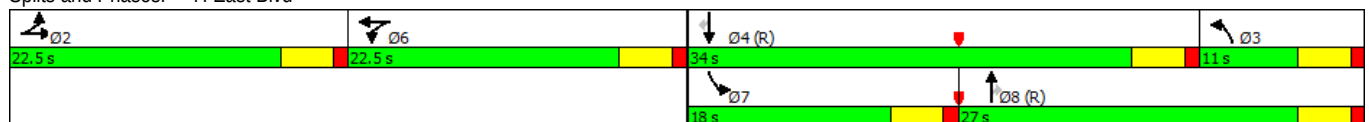
Intersection Capacity Utilization 54.9%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 7: East Blvd



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑↑		↰	↑↑↑		↰	↑↑		↰	↑↑	
Traffic Volume (vph)	209	789	107	223	1184	144	141	440	79	199	471	189
Future Volume (vph)	209	789	107	223	1184	144	141	440	79	199	471	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		0	100		0	140		0	155		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	4994	0	1770	5004	0	1770	3458	0	3433	3387	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	4994	0	1770	5004	0	1770	3458	0	3433	3387	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			23			21			60	
Link Speed (mph)		45			45			35			40	
Link Distance (ft)		1366			1434			903			900	
Travel Time (s)		20.7			21.7			17.6			15.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	227	974	0	242	1444	0	153	564	0	216	717	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Total Split (s)	16.2	26.5		18.0	28.3		23.0	23.0		22.5	22.5	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	11.7	22.0		13.5	23.8		18.5	18.5		18.0	18.0	
Actuated g/C Ratio	0.13	0.24		0.15	0.26		0.21	0.21		0.20	0.20	
v/c Ratio	0.99	0.79		0.91	1.08		0.42	0.78		0.31	0.99	
Control Delay	97.8	36.3		76.7	80.9		35.3	41.0		40.7	72.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	97.8	36.3		76.7	80.9		35.3	41.0		40.7	72.7	
LOS	F	D		E	F		D	D		D	E	
Approach Delay		47.9			80.3			39.8			65.3	
Approach LOS		D			F			D			E	
Queue Length 50th (ft)	131	185		137	~335		76	154		66	218	
Queue Length 95th (ft)	#276	235		#276	#430		135	#215		99	#330	
Internal Link Dist (ft)		1286			1354			823			820	
Turn Bay Length (ft)	115			100			140			155		
Base Capacity (vph)	230	1239		265	1340		363	727		686	725	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.99	0.79		0.91	1.08		0.42	0.78		0.31	0.99	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 19 (21%), Referenced to phase 8:NBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 62.2

Intersection LOS: E

Intersection Capacity Utilization 79.5%

ICU Level of Service D

Analysis Period (min) 15

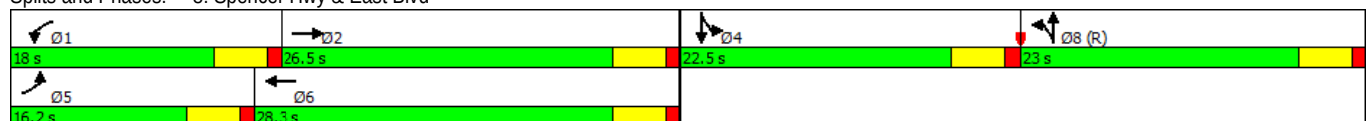
~ Volume exceeds capacity, queue is theoretically infinite.

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: 8: Spencer Hwy & East Blvd



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	82	149	64	87	132	97	224	30	58	814	114
Future Volume (vph)	24	82	149	64	87	132	97	224	30	58	814	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	300		0	120		0	185		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3196	0	1770	3221	0	1770	3476	0	1770	3476	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3196	0	1770	3221	0	1770	3476	0	1770	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		162			143			18			17	
Link Speed (mph)		30			45			40			40	
Link Distance (ft)		1097			1373			1987			1738	
Travel Time (s)		24.9			20.8			33.9			29.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	251	0	70	238	0	105	276	0	63	1009	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	11.0	24.0		16.0	29.0		21.0	64.0		16.0	59.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	6.2	20.5		9.8	26.1		16.5	66.6		9.2	57.3	
Actuated g/C Ratio	0.05	0.17		0.08	0.22		0.14	0.56		0.08	0.48	
v/c Ratio	0.29	0.37		0.48	0.29		0.43	0.14		0.46	0.60	
Control Delay	62.7	18.0		63.4	17.0		40.2	4.4		63.5	25.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	62.7	18.0		63.4	17.0		40.2	4.4		63.5	25.1	
LOS	E	B		E	B		D	A		E	C	
Approach Delay		22.2			27.6			14.3			27.4	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	20	31		52	32		82	15		47	303	
Queue Length 95th (ft)	50	71		101	68		m141	23		93	375	
Internal Link Dist (ft)		1017			1293			1907			1658	
Turn Bay Length (ft)	275			300			120			185		
Base Capacity (vph)	95	680		169	812		243	1938		169	1668	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.27	0.37		0.41	0.29		0.43	0.14		0.37	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 70 (58%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 24.3

Intersection LOS: C

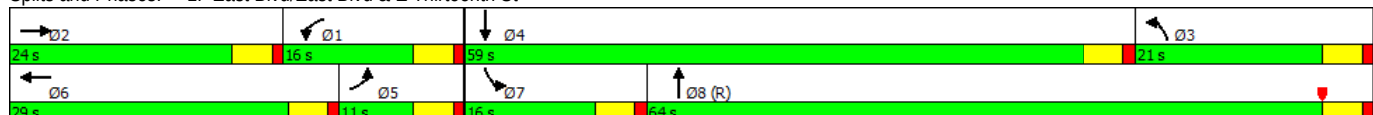
Intersection Capacity Utilization 57.7%

ICU Level of Service B

Analysis Period (min) 15

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

Splits and Phases: 1: East Blvd/East Blvd & E Thirteenth St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	81	78	166	129	36	106	281	60	24	1025	73
Future Volume (vph)	19	81	78	166	129	36	106	281	60	24	1025	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		0	125		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3289	0	0	3399	0	1770	3447	0	1770	3504	0
Flt Permitted		0.995			0.976		0.950			0.950		
Satd. Flow (perm)	0	3289	0	0	3399	0	1770	3447	0	1770	3504	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		85			9			30			8	
Link Speed (mph)		40			40			50			40	
Link Distance (ft)		1287			1741			1887			1987	
Travel Time (s)		21.9			29.7			25.7			33.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	194	0	0	359	0	115	370	0	26	1193	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.6	22.6		23.0	23.0		18.0	63.8		10.6	56.4	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		9.4			17.5		12.5	73.2		6.0	62.5	
Actuated g/C Ratio		0.08			0.15		0.10	0.61		0.05	0.52	
v/c Ratio		0.58			0.71		0.62	0.18		0.30	0.65	
Control Delay		36.2			55.5		42.2	6.8		45.0	11.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		36.2			55.5		42.2	6.8		45.0	11.0	
LOS		D			E		D	A		D	B	
Approach Delay		36.2			55.5			15.2			11.7	
Approach LOS		D			E			B			B	
Queue Length 50th (ft)		43			137		57	52		20	114	
Queue Length 95th (ft)		79			182		127	122		m36	183	
Internal Link Dist (ft)		1207			1661			1807			1907	
Turn Bay Length (ft)							125			125		
Base Capacity (vph)		568			556		208	2113		89	1830	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.34			0.65		0.55	0.18		0.29	0.65	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 69 (58%), Referenced to phase 4:SBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 21.5

Intersection LOS: C

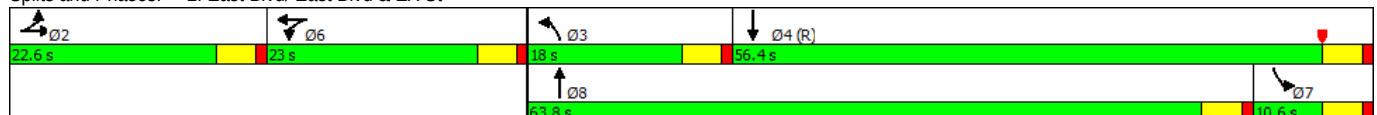
Intersection Capacity Utilization 66.4%

ICU Level of Service C

Analysis Period (min) 15

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

Splits and Phases: 2: East Blvd/ East Blvd & EX St



	↖	→	↗	↖	←	↖	↖	↑	↗	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↙	↕↕		↙	↕↕	
Traffic Volume (vph)	59	25	138	34	13	26	139	367	43	75	920	174
Future Volume (vph)	59	25	138	34	13	26	139	367	43	75	920	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3168	0	0	3275	0	1770	3483	0	1770	3454	0
Flt Permitted		0.987			0.977		0.950			0.950		
Satd. Flow (perm)	0	3168	0	0	3275	0	1770	3483	0	1770	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		150			28			14			22	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1505			1283			1889			1887	
Travel Time (s)		25.7			21.9			25.8			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	241	0	0	79	0	151	446	0	82	1189	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.6	22.6		22.6	22.6		20.0	58.0		16.8	54.8	
Total Lost Time (s)		4.5			4.5		4.5	4.6		4.5	4.5	
Act Effct Green (s)		18.1			7.4		15.5	69.8		10.9	63.0	
Actuated g/C Ratio		0.15			0.06		0.13	0.58		0.09	0.52	
v/c Ratio		0.40			0.35		0.66	0.22		0.51	0.65	
Control Delay		19.8			40.0		49.8	2.9		64.6	16.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		19.8			40.0		49.8	2.9		64.6	16.3	
LOS		B			D		D	A		E	B	
Approach Delay		19.8			40.0			14.7			19.5	
Approach LOS		B			D			B			B	
Queue Length 50th (ft)		32			20		119	14		60	376	
Queue Length 95th (ft)		72			45		#199	27		m81	455	
Internal Link Dist (ft)		1425			1203			1809			1807	
Turn Bay Length (ft)							180			180		
Base Capacity (vph)		605			517		228	2030		190	1824	
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		0.40			0.15		0.66	0.22		0.43	0.65	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 19.0

Intersection LOS: B

Intersection Capacity Utilization 64.7%

ICU Level of Service C

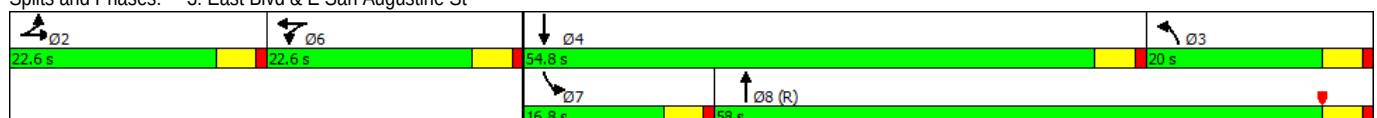
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 3: East Blvd & E San Augustine St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	23	107	71	29	26	133	480	96	58	933	86
Future Volume (vph)	36	23	107	71	29	26	133	480	96	58	933	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3161	0	0	3337	0	1770	3451	0	1770	3493	0
Flt Permitted		0.989			0.973		0.950			0.950		
Satd. Flow (perm)	0	3161	0	0	3337	0	1770	3451	0	1770	3493	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		116			22			26			10	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1773			1725			1883			1889	
Travel Time (s)		30.2			29.4			25.7			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	180	0	0	137	0	145	626	0	63	1107	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.6	22.6		22.6	22.6		22.0	60.2		14.6	52.8	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		18.1			9.5		15.0	67.2		9.3	59.4	
Actuated g/C Ratio		0.15			0.08		0.12	0.56		0.08	0.50	
v/c Ratio		0.31			0.48		0.66	0.32		0.46	0.64	
Control Delay		18.9			49.6		46.5	9.9		41.3	6.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.9			49.6		46.5	9.9		41.3	6.3	
LOS		B			D		D	A		D	A	
Approach Delay		18.9			49.6			16.7			8.1	
Approach LOS		B			D			B			A	
Queue Length 50th (ft)		23			45		84	158		50	56	
Queue Length 95th (ft)		57			77		m122	m148		m75	187	
Internal Link Dist (ft)		1693			1645			1803			1809	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		575			522		267	1944		148	1732	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.31			0.26		0.54	0.32		0.43	0.64	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 4:SBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 14.5

Intersection LOS: B

Intersection Capacity Utilization 60.2%

ICU Level of Service B

Analysis Period (min) 15

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

Splits and Phases: 4: East Blvd & EP St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	272	192	147	397	103	197	551	109	122	813	172
Future Volume (vph)	63	272	192	147	397	103	197	551	109	122	813	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	145		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3324	0	0	3416	0	1770	3451	0	1770	3447	0
Flt Permitted		0.994			0.989		0.950			0.950		
Satd. Flow (perm)	0	3324	0	0	3416	0	1770	3451	0	1770	3447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		81			16			21			22	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1569			1385			1882			1883	
Travel Time (s)		23.8			21.0			25.7			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	573	0	0	704	0	214	717	0	133	1071	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	24.0	24.0		30.0	30.0		21.0	44.9		21.1	45.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		19.5			25.5		16.5	43.3		13.7	40.5	
Actuated g/C Ratio		0.16			0.21		0.14	0.36		0.11	0.34	
v/c Ratio		0.94			0.95		0.88	0.57		0.66	0.91	
Control Delay		68.0			69.5		63.9	12.1		49.3	34.5	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		68.0			69.5		63.9	12.1		49.3	34.5	
LOS		E			E		E	B		D	C	
Approach Delay		68.0			69.5			24.0			36.1	
Approach LOS		E			E			C			D	
Queue Length 50th (ft)		203			280		173	176		83	446	
Queue Length 95th (ft)		#316			#403		#305	110		m137	#552	
Internal Link Dist (ft)		1489			1305			1802			1803	
Turn Bay Length (ft)							150			145		
Base Capacity (vph)		607			738		243	1259		244	1177	
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		0.94			0.95		0.88	0.57		0.55	0.91	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 60 (50%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 45.0

Intersection LOS: D

Intersection Capacity Utilization 87.9%

ICU Level of Service E

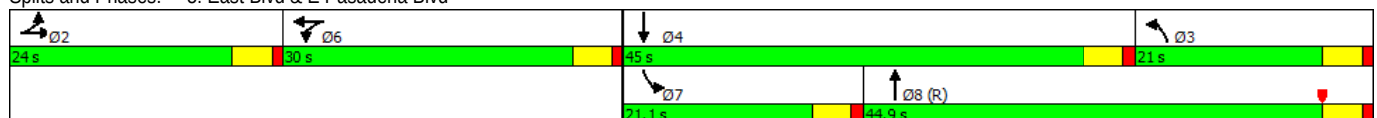
Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

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

Splits and Phases: 5: East Blvd & E Pasadena Blvd



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑		↓		↑	↓	↑↓		↓	↑↑	
Traffic Volume (vph)	0	0	0	48	0	24	0	846	66	48	1077	0
Future Volume (vph)	0	0	0	48	0	24	0	846	66	48	1077	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	175		0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1863	0	1770	0	1583	1863	3500	0	1770	3539	0
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	1863	0	1770	0	1583	1863	3500	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						95		9				
Link Speed (mph)		30			20			50			50	
Link Distance (ft)		94			1176			2887			1882	
Travel Time (s)		2.1			40.1			39.4			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	52	0	26	0	992	0	52	1171	0
Turn Type				Prot		Perm	Prot	NA		Prot	NA	
Protected Phases		2		1			3	8		7	4	
Permitted Phases						8						
Total Split (s)		22.5		17.0		63.5	9.5	63.5		17.0	71.0	
Total Lost Time (s)		4.5		4.5		4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)				8.9		91.4		91.4		11.1	105.0	
Actuated g/C Ratio				0.07		0.76		0.76		0.09	0.88	
v/c Ratio				0.40		0.02		0.37		0.32	0.38	
Control Delay				61.0		0.0		5.5		33.9	0.2	
Queue Delay				0.0		0.0		0.0		0.0	0.0	
Total Delay				61.0		0.0		5.5		33.9	0.2	
LOS				E		A		A		C	A	
Approach Delay					40.7			5.5			1.6	
Approach LOS					D			A			A	
Queue Length 50th (ft)				39		0		86		38	2	
Queue Length 95th (ft)				79		0		117		m38	m2	
Internal Link Dist (ft)		14			1096			2807			1802	
Turn Bay Length (ft)										175		
Base Capacity (vph)				184		1228		2667		184	3096	
Starvation Cap Reductn				0		0		0		0	0	
Spillback Cap Reductn				0		0		0		0	0	
Storage Cap Reductn				0		0		0		0	0	
Reduced v/c Ratio				0.28		0.02		0.37		0.28	0.38	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 70 (58%), Referenced to phase 4:SBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 4.6

Intersection LOS: A

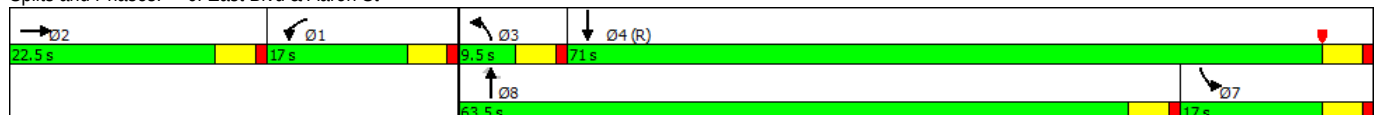
Intersection Capacity Utilization 48.1%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 6: East Blvd & Aaron St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	43	84	39	17	106	60	608	52	165	719	208
Future Volume (vph)	118	43	84	39	17	106	60	608	52	165	719	208
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		75	110		115
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1678	0	1770	1621	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1678	0	1770	1621	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		70			115				95			159
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		193			193			900			2887	
Travel Time (s)		4.4			4.4			15.3			49.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	128	138	0	42	133	0	65	661	57	179	782	226
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases									8			4
Total Split (s)	25.0	25.0		24.0	24.0		16.0	42.0	42.0	29.0	55.0	55.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	14.0	14.0		8.7	8.7		10.4	62.0	62.0	17.4	71.1	71.1
Actuated g/C Ratio	0.12	0.12		0.07	0.07		0.09	0.52	0.52	0.14	0.59	0.59
v/c Ratio	0.62	0.54		0.33	0.60		0.42	0.36	0.07	0.70	0.37	0.23
Control Delay	63.1	32.4		58.6	24.2		48.3	10.0	0.8	75.8	5.9	1.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.1	32.4		58.6	24.2		48.3	10.0	0.8	75.8	5.9	1.5
LOS	E	C		E	C		D	B	A	E	A	A
Approach Delay		47.2			32.5			12.5			15.6	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	96	49		32	13		54	86	1	140	70	5
Queue Length 95th (ft)	154	110		66	74		m78	m215	m3	199	110	16
Internal Link Dist (ft)		113			113			820			2807	
Turn Bay Length (ft)							125		75	110		115
Base Capacity (vph)	302	344		287	359		169	1828	863	361	2095	1002
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.40		0.15	0.37		0.38	0.36	0.07	0.50	0.37	0.23

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 8:NBT, Start of Yellow

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 19.3

Intersection LOS: B

Intersection Capacity Utilization 54.9%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 7: East Blvd



	↖	→	↗	↖	←	↖	↖	↑	↗	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖	↑↑↑		↖	↑↑		↖↖	↑↑	
Traffic Volume (vph)	209	789	107	223	1184	144	141	440	79	199	471	189
Future Volume (vph)	209	789	107	223	1184	144	141	440	79	199	471	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		0	100		0	140		0	155		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	4994	0	1770	5004	0	1770	3458	0	3433	3387	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	4994	0	1770	5004	0	1770	3458	0	3433	3387	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			18			16			47	
Link Speed (mph)		45			45			35			40	
Link Distance (ft)		1366			1434			903			900	
Travel Time (s)		20.7			21.7			17.6			15.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	227	974	0	242	1444	0	153	564	0	216	717	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	25.0	35.9		31.2	42.1		19.0	35.4		17.5	33.9	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	20.5	37.0		21.1	37.6		13.5	24.8		19.1	30.4	
Actuated g/C Ratio	0.17	0.31		0.18	0.31		0.11	0.21		0.16	0.25	
v/c Ratio	0.75	0.63		0.78	0.91		0.77	0.78		0.40	0.80	
Control Delay	63.9	37.8		63.8	49.1		76.8	51.1		33.1	30.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	63.9	37.8		63.8	49.1		76.8	51.1		33.1	30.6	
LOS	E	D		E	D		E	D		C	C	
Approach Delay		42.7			51.2			56.6			31.2	
Approach LOS		D			D			E			C	
Queue Length 50th (ft)	169	233		180	389		116	212		63	204	
Queue Length 95th (ft)	#283	301		259	#478		#211	260		115	304	
Internal Link Dist (ft)		1286			1354			823			820	
Turn Bay Length (ft)	115			100			140			155		
Base Capacity (vph)	302	1551		393	1580		213	902		546	893	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.75	0.63		0.62	0.91		0.72	0.63		0.40	0.80	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:SBT, Start of Yellow, Master Intersection

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 45.7

Intersection LOS: D

Intersection Capacity Utilization 79.5%

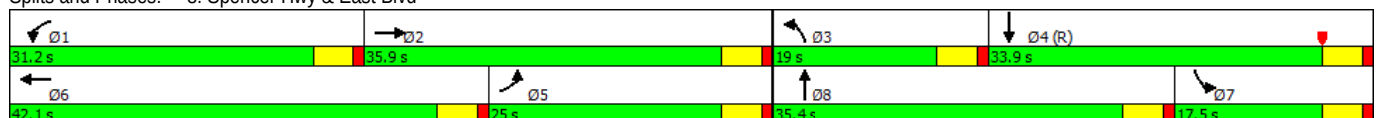
ICU Level of Service D

Analysis Period (min) 15

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

Queue shown is maximum after two cycles.

Splits and Phases: 8: Spencer Hwy & East Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	41	49	14	21	19	46	177	17	32	170	24
Future Volume (vph)	27	41	49	14	21	19	46	177	17	32	170	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	300		0	120		0	185		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3253	0	1770	3284	0	1770	3493	0	1770	3476	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3253	0	1770	3284	0	1770	3493	0	1770	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			21			11			18	
Link Speed (mph)		30			45			40			40	
Link Distance (ft)		1097			1373			1987			2625	
Travel Time (s)		24.9			20.8			33.9			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	98	0	15	44	0	50	210	0	35	211	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	16.0	26.0		14.0	24.0		18.0	33.0		17.0	32.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	11.5	21.5		9.5	19.5		13.5	28.5		12.5	27.5	
Actuated g/C Ratio	0.13	0.24		0.11	0.22		0.15	0.32		0.14	0.31	
v/c Ratio	0.13	0.12		0.08	0.06		0.19	0.19		0.14	0.20	
Control Delay	36.4	14.5		37.5	18.0		27.0	12.1		35.8	21.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.4	14.5		37.5	18.0		27.0	12.1		35.8	21.6	
LOS	D	B		D	B		C	B		D	C	
Approach Delay		19.5			23.0			15.0			23.6	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	15	10		8	5		28	40		18	42	
Queue Length 95th (ft)	41	30		27	19		63	54		45	70	
Internal Link Dist (ft)		1017			1293			1907			2545	
Turn Bay Length (ft)	275			300			120			185		
Base Capacity (vph)	226	817		186	727		265	1113		245	1074	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.12		0.08	0.06		0.19	0.19		0.14	0.20	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green, Master Intersection

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.20

Intersection Signal Delay: 19.6

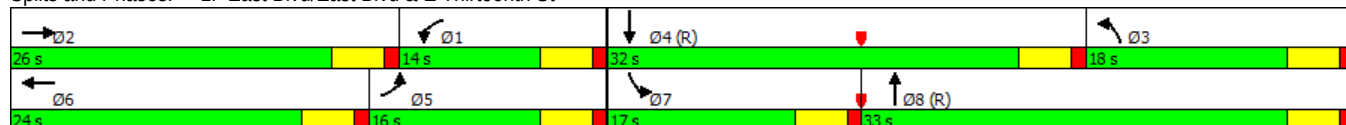
Intersection LOS: B

Intersection Capacity Utilization 29.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: East Blvd/East Blvd & E Thirteenth St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	8	56	40	23	39	9	36	206	38	10	235	105
Future Volume (vph)	8	56	40	23	39	9	36	206	38	10	235	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		0	125		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3324	0	0	3416	0	1770	3458	0	1770	3376	0
Flt Permitted		0.996			0.984		0.950			0.950		
Satd. Flow (perm)	0	3324	0	0	3416	0	1770	3458	0	1770	3376	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		43			10			24			80	
Link Speed (mph)		40			40			50			40	
Link Distance (ft)		1287			1741			1887			1987	
Travel Time (s)		21.9			29.7			25.7			33.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	113	0	0	77	0	39	265	0	11	369	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	24.0	24.0		23.0	23.0		13.0	32.0		11.0	30.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		7.4			7.2		7.2	64.4		6.2	59.2	
Actuated g/C Ratio		0.08			0.08		0.08	0.72		0.07	0.66	
v/c Ratio		0.36			0.27		0.27	0.11		0.09	0.16	
Control Delay		28.0			36.2		29.9	1.9		30.0	5.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		28.0			36.2		29.9	1.9		30.0	5.4	
LOS		C			D		C	A		C	A	
Approach Delay		28.0			36.2			5.5			6.1	
Approach LOS		C			D			A			A	
Queue Length 50th (ft)		20			18		22	7		4	17	
Queue Length 95th (ft)		45			40		54	15		18	98	
Internal Link Dist (ft)		1207			1661			1807			1907	
Turn Bay Length (ft)							125			125		
Base Capacity (vph)		753			710		167	2482		130	2249	
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		0.15			0.11		0.23	0.11		0.08	0.16	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 43 (48%), Referenced to phase 4:SBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 11.4

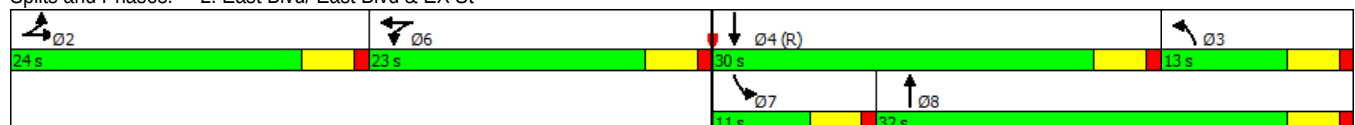
Intersection LOS: B

Intersection Capacity Utilization 33.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: East Blvd/ East Blvd & EX St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	39	9	89	18	17	13	75	250	14	7	247	32
Future Volume (vph)	39	9	89	18	17	13	75	250	14	7	247	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3148	0	0	3333	0	1770	3511	0	1770	3479	0
Flt Permitted		0.986			0.981		0.950			0.950		
Satd. Flow (perm)	0	3148	0	0	3333	0	1770	3511	0	1770	3479	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		97			14			7			16	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1505			1283			1889			1887	
Travel Time (s)		25.7			21.9			25.8			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	0	0	52	0	82	287	0	8	303	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	15.0	15.0		24.0	24.0		20.0	39.0		12.0	31.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		7.2			22.8		9.5	44.1		6.1	34.6	
Actuated g/C Ratio		0.08			0.25		0.11	0.49		0.07	0.38	
v/c Ratio		0.44			0.06		0.44	0.17		0.07	0.23	
Control Delay		19.7			21.2		27.3	5.1		26.0	9.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		19.7			21.2		27.3	5.1		26.0	9.6	
LOS		B			C		C	A		C	A	
Approach Delay		19.7			21.2			10.0			10.0	
Approach LOS		B			C			B			A	
Queue Length 50th (ft)		14			8		26	23		4	34	
Queue Length 95th (ft)		43			24		43	12		18	48	
Internal Link Dist (ft)		1425			1203			1809			1807	
Turn Bay Length (ft)							180			180		
Base Capacity (vph)		452			853		304	1724		147	1346	
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		0.33			0.06		0.27	0.17		0.05	0.23	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 44 (49%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 12.3

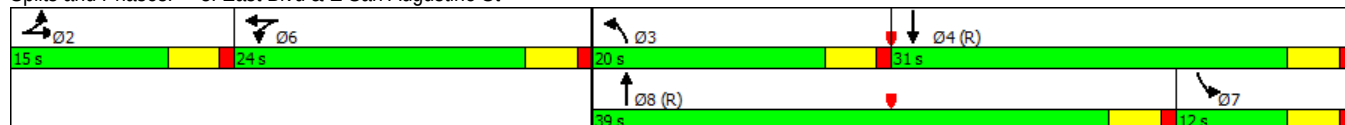
Intersection LOS: B

Intersection Capacity Utilization 32.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: East Blvd & E San Augustine St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔↔			↔↔		↖	↕↕		↖	↕↕	
Traffic Volume (vph)	21	5	43	36	10	13	41	308	26	8	329	13
Future Volume (vph)	21	5	43	36	10	13	41	308	26	8	329	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3158	0	0	3320	0	1770	3497	0	1770	3518	0
Flt Permitted		0.985			0.970		0.950			0.950		
Satd. Flow (perm)	0	3158	0	0	3320	0	1770	3497	0	1770	3518	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			14			10			4	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1773			1725			1883			1889	
Travel Time (s)		30.2			29.4			25.7			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	64	0	45	363	0	9	372	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	23.0	23.0		23.0	23.0		14.0	33.0		11.0	30.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		18.5			6.9		8.1	50.8		6.1	44.7	
Actuated g/C Ratio		0.21			0.08		0.09	0.56		0.07	0.50	
v/c Ratio		0.11			0.24		0.28	0.18		0.08	0.21	
Control Delay		14.5			34.0		28.6	3.1		35.9	6.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		14.5			34.0		28.6	3.1		35.9	6.7	
LOS		B			C		C	A		D	A	
Approach Delay		14.5			34.0			6.0			7.3	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)		6			14		25	12		2	49	
Queue Length 95th (ft)		25			33		59	34		m12	33	
Internal Link Dist (ft)		1693			1645			1803			1809	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		686			693		186	1978		129	1750	
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		0.11			0.09		0.24	0.18		0.07	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 3 (3%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 9.1

Intersection LOS: A

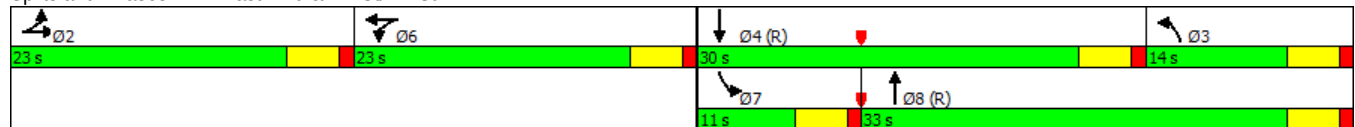
Intersection Capacity Utilization 33.6%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 4: East Blvd & EP St/NP St



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	100	136	43	117	41	94	291	49	40	328	33
Future Volume (vph)	46	100	136	43	117	41	94	291	49	40	328	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	145		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3258	0	0	3392	0	1770	3461	0	1770	3490	0
Flt Permitted		0.992			0.989		0.950			0.950		
Satd. Flow (perm)	0	3258	0	0	3392	0	1770	3461	0	1770	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		148			32			22			11	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1569			1385			1882			1883	
Travel Time (s)		23.8			21.0			25.7			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	307	0	0	219	0	102	369	0	43	393	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	23.0	23.0		23.0	23.0		17.0	33.0		11.0	27.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		18.5			10.3		10.5	41.1		6.3	34.9	
Actuated g/C Ratio		0.21			0.11		0.12	0.46		0.07	0.39	
v/c Ratio		0.39			0.53		0.50	0.23		0.35	0.29	
Control Delay		17.3			36.1		28.9	7.4		30.1	10.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		17.3			36.1		28.9	7.4		30.1	10.8	
LOS		B			D		C	A		C	B	
Approach Delay		17.3			36.1			12.1			12.7	
Approach LOS		B			D			B			B	
Queue Length 50th (ft)		40			53		52	71		17	31	
Queue Length 95th (ft)		77			86		98	106		37	50	
Internal Link Dist (ft)		1489			1305			1802			1803	
Turn Bay Length (ft)							150			145		
Base Capacity (vph)		787			722		253	1591		127	1360	
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		0.39			0.30		0.40	0.23		0.34	0.29	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 88 (98%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 17.1

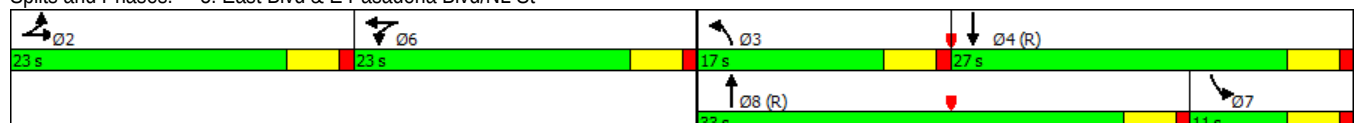
Intersection LOS: B

Intersection Capacity Utilization 44.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: East Blvd & E Pasadena Blvd/NL St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↑		↵		↵	↵	↵		↵	↵	
Traffic Volume (vph)	0	0	0	29	0	25	0	422	22	10	503	0
Future Volume (vph)	0	0	0	29	0	25	0	422	22	10	503	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	175		0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1863	0	1770	0	1583	1863	3514	0	1770	3539	0
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	1863	0	1770	0	1583	1863	3514	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						127		6				
Link Speed (mph)		30			20			50			50	
Link Distance (ft)		94			1176			2888			1882	
Travel Time (s)		2.1			40.1			39.4			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	32	0	27	0	483	0	11	547	0
Turn Type				Prot		Perm	Prot	NA		Prot	NA	
Protected Phases		5		6			3	8		7	4	
Permitted Phases						8						
Total Split (s)		22.5		22.5		35.5	22.5	35.5		9.5	22.5	
Total Lost Time (s)		4.5		4.5		4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)				18.0		61.1		61.1		5.0	63.0	
Actuated g/C Ratio				0.20		0.68		0.68		0.06	0.70	
v/c Ratio				0.09		0.02		0.20		0.11	0.22	
Control Delay				30.2		0.0		3.9		49.2	3.6	
Queue Delay				0.0		0.0		0.0		0.0	0.0	
Total Delay				30.2		0.0		3.9		49.2	3.6	
LOS				C		A		A		D	A	
Approach Delay					16.4			3.9			4.5	
Approach LOS					B			A			A	
Queue Length 50th (ft)				15		0		4		6	45	
Queue Length 95th (ft)				39		0		19		m20	63	
Internal Link Dist (ft)		14			1096			2808			1802	
Turn Bay Length (ft)										175		
Base Capacity (vph)				354		1115		2387		98	2477	
Starvation Cap Reductn				0		0		0		0	0	
Spillback Cap Reductn				0		0		0		0	0	
Storage Cap Reductn				0		0		0		0	0	
Reduced v/c Ratio				0.09		0.02		0.20		0.11	0.22	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 73 (81%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.22

Intersection Signal Delay: 4.9

Intersection LOS: A

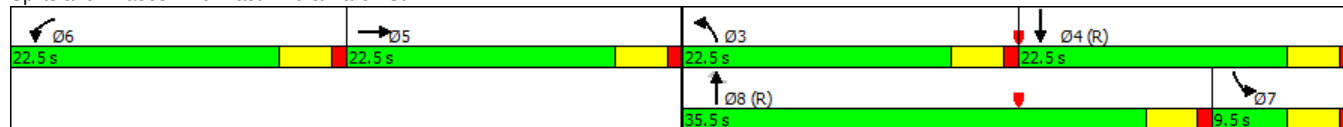
Intersection Capacity Utilization 24.3%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 6: East Blvd & Aaron St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱	↱	↰	↱	↱
Traffic Volume (vph)	55	19	41	21	10	42	10	324	32	69	330	132
Future Volume (vph)	55	19	41	21	10	42	10	324	32	69	330	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		75	110		115
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1673	0	1770	1637	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1673	0	1770	1637	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			46				182			143
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		193			193			900			2888	
Travel Time (s)		4.4			4.4			15.3			49.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	60	66	0	23	57	0	11	352	35	75	359	143
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases									8			4
Total Split (s)	24.0	24.0		23.0	23.0		10.0	27.0	27.0	16.0	33.0	33.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	19.5	19.5		6.9	6.9		6.2	40.5	40.5	9.1	49.7	49.7
Actuated g/C Ratio	0.22	0.22		0.08	0.08		0.07	0.45	0.45	0.10	0.55	0.55
v/c Ratio	0.16	0.17		0.17	0.34		0.09	0.22	0.04	0.42	0.18	0.15
Control Delay	29.9	14.5		40.9	21.1		40.3	11.9	1.1	66.6	4.6	0.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	14.5		40.9	21.1		40.3	11.9	1.1	66.6	4.6	0.5
LOS	C	B		D	C		D	B	A	E	A	A
Approach Delay		21.9			26.8			11.7			11.7	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	28	10		13	6		6	69	0	47	20	0
Queue Length 95th (ft)	61	43		36	41		m16	107	m3	93	28	1
Internal Link Dist (ft)		113			113			820			2808	
Turn Bay Length (ft)							125		75	110		115
Base Capacity (vph)	383	397		363	373		121	1591	811	230	1954	938
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.17		0.06	0.15		0.09	0.22	0.04	0.33	0.18	0.15

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 89 (99%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 13.8

Intersection LOS: B

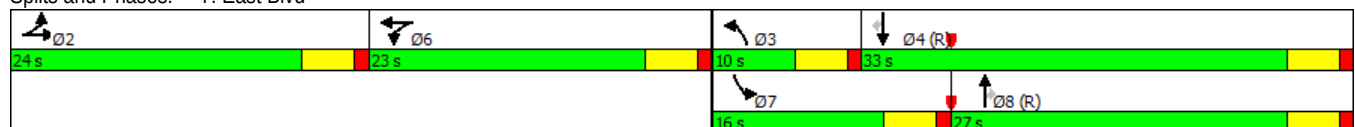
Intersection Capacity Utilization 34.3%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 7: East Blvd



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 		 	 	
Traffic Volume (vph)	109	378	55	53	448	110	85	196	53	127	214	119
Future Volume (vph)	109	378	55	53	448	110	85	196	53	127	214	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		0	100		0	140		0	155		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	4989	0	1770	4933	0	1770	3426	0	3433	3352	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	4989	0	1770	4933	0	1770	3426	0	3433	3352	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29			59			34			109	
Link Speed (mph)		45			45			35			40	
Link Distance (ft)		1366			1434			903			900	
Travel Time (s)		20.7			21.7			17.6			15.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	471	0	58	607	0	92	271	0	138	362	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Total Split (s)	18.0	29.0		12.0	23.0		23.0	23.0		26.0	26.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	20.7	31.2		7.0	15.6		11.8	11.8		24.0	24.0	
Actuated g/C Ratio	0.23	0.35		0.08	0.17		0.13	0.13		0.27	0.27	
v/c Ratio	0.29	0.27		0.42	0.67		0.40	0.57		0.15	0.37	
Control Delay	32.3	20.9		49.0	34.8		40.2	36.3		15.0	9.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.3	20.9		49.0	34.8		40.2	36.3		15.0	9.6	
LOS	C	C		D	C		D	D		B	A	
Approach Delay		23.1			36.0			37.3			11.1	
Approach LOS		C			D			D			B	
Queue Length 50th (ft)	54	64		32	106		49	67		26	57	
Queue Length 95th (ft)	114	98		70	136		91	101		44	87	
Internal Link Dist (ft)		1286			1354			823			820	
Turn Bay Length (ft)	115			100			140			155		
Base Capacity (vph)	406	1750		147	1081		363	731		914	973	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.29	0.27		0.39	0.56		0.25	0.37		0.15	0.37	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 11 (12%), Referenced to phase 4:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 26.8

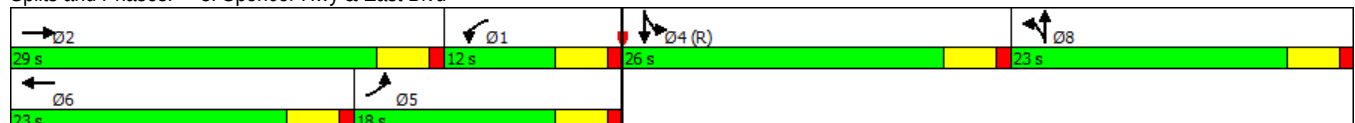
Intersection LOS: C

Intersection Capacity Utilization 46.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 8: Spencer Hwy & East Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	41	49	14	21	19	46	177	17	32	170	24
Future Volume (vph)	27	41	49	14	21	19	46	177	17	32	170	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	300		0	120		0	185		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3253	0	1770	3284	0	1770	3493	0	1770	3476	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3253	0	1770	3284	0	1770	3493	0	1770	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			21			9			13	
Link Speed (mph)		30			45			40			40	
Link Distance (ft)		1097			1373			1987			2625	
Travel Time (s)		24.9			20.8			33.9			44.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	98	0	15	44	0	50	210	0	35	211	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Total Split (s)	22.0	30.0		20.0	28.0		28.0	47.0		23.0	42.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	7.5	9.5		6.6	6.6		8.8	88.4		7.9	85.3	
Actuated g/C Ratio	0.06	0.08		0.06	0.06		0.07	0.74		0.07	0.71	
v/c Ratio	0.26	0.32		0.15	0.22		0.39	0.08		0.30	0.09	
Control Delay	58.7	28.9		57.0	36.0		76.5	2.2		59.4	6.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	58.7	28.9		57.0	36.0		76.5	2.2		59.4	6.9	
LOS	E	C		E	D		E	A		E	A	
Approach Delay		35.7			41.3			16.5			14.4	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)	22	15		11	8		40	13		26	26	
Queue Length 95th (ft)	53	45		34	28		84	11		59	49	
Internal Link Dist (ft)		1017			1293			1907			2545	
Turn Bay Length (ft)	275			300			120			185		
Base Capacity (vph)	258	733		228	660		346	2576		272	2474	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.11	0.13		0.07	0.07		0.14	0.08		0.13	0.09	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green, Master Intersection

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 21.4

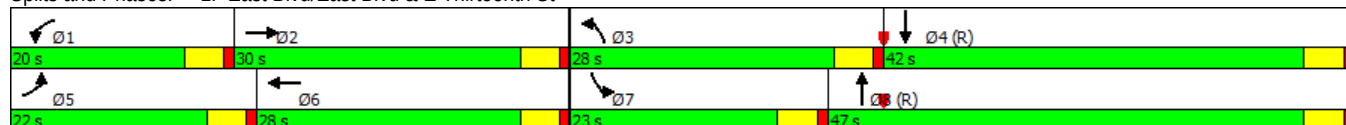
Intersection LOS: C

Intersection Capacity Utilization 29.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: East Blvd/East Blvd & E Thirteenth St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	8	56	40	23	39	9	36	206	38	10	235	105
Future Volume (vph)	8	56	40	23	39	9	36	206	38	10	235	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		0	125		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3324	0	0	3416	0	1770	3458	0	1770	3376	0
Flt Permitted		0.996			0.984		0.950			0.950		
Satd. Flow (perm)	0	3324	0	0	3416	0	1770	3458	0	1770	3376	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		43			10			20			65	
Link Speed (mph)		40			40			50			40	
Link Distance (ft)		1287			1741			1887			1987	
Travel Time (s)		21.9			29.7			25.7			33.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	113	0	0	77	0	39	265	0	11	369	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	29.0	29.0		27.0	27.0		19.0	50.0		14.0	45.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		8.0			7.8		21.1	90.3		6.3	71.4	
Actuated g/C Ratio		0.07			0.06		0.18	0.75		0.05	0.60	
v/c Ratio		0.43			0.33		0.13	0.10		0.12	0.18	
Control Delay		38.3			50.1		42.8	4.5		54.5	18.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		38.3			50.1		42.8	4.5		54.5	18.9	
LOS		D			D		D	A		D	B	
Approach Delay		38.3			50.1			9.4			19.9	
Approach LOS		D			D			A			B	
Queue Length 50th (ft)		27			26		27	12		9	84	
Queue Length 95th (ft)		57			51		51	86		28	139	
Internal Link Dist (ft)		1207			1661			1807			1907	
Turn Bay Length (ft)							125			125		
Base Capacity (vph)		712			648		360	2607		140	2033	
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		0.16			0.12		0.11	0.10		0.08	0.18	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 96 (80%), Referenced to phase 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 21.3

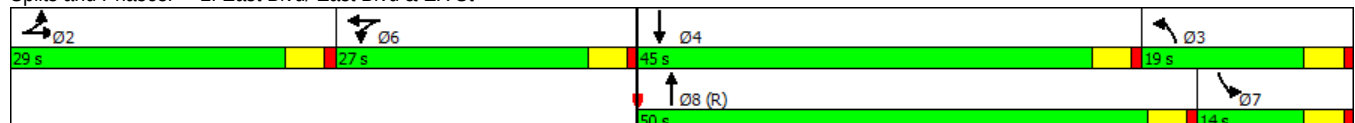
Intersection LOS: C

Intersection Capacity Utilization 33.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: East Blvd/ East Blvd & EX St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	39	9	89	18	17	13	75	250	14	7	247	32
Future Volume (vph)	39	9	89	18	17	13	75	250	14	7	247	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3148	0	0	3333	0	1770	3511	0	1770	3479	0
Flt Permitted		0.986			0.981		0.950			0.950		
Satd. Flow (perm)	0	3148	0	0	3333	0	1770	3511	0	1770	3479	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		97			14			6			12	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1505			1283			1889			1887	
Travel Time (s)		25.7			21.9			25.8			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	0	0	52	0	82	287	0	8	303	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	23.0	23.0		26.0	26.0		29.0	57.0		14.0	42.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		7.7			6.9		12.6	91.5		6.2	79.0	
Actuated g/C Ratio		0.06			0.06		0.10	0.76		0.05	0.66	
v/c Ratio		0.51			0.25		0.44	0.11		0.09	0.13	
Control Delay		27.0			44.8		41.7	3.2		76.3	5.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		27.0			44.8		41.7	3.2		76.3	5.3	
LOS		C			D		D	A		E	A	
Approach Delay		27.0			44.8			11.8			7.2	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)		20			15		63	16		6	26	
Queue Length 95th (ft)		53			35		79	36		25	41	
Internal Link Dist (ft)		1425			1203			1809			1807	
Turn Bay Length (ft)							180			180		
Base Capacity (vph)		567			608		361	2679		140	2295	
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		0.26			0.09		0.23	0.11		0.06	0.13	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 116 (97%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 14.7

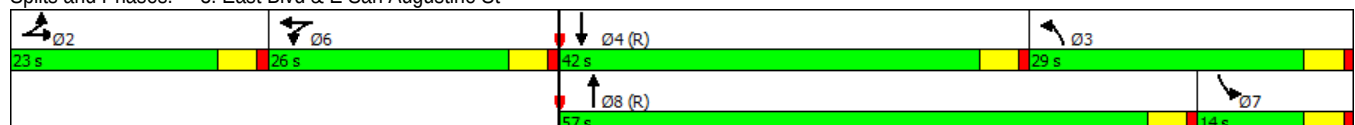
Intersection LOS: B

Intersection Capacity Utilization 32.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: East Blvd & E San Augustine St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	21	5	43	36	10	13	41	308	26	8	329	13
Future Volume (vph)	21	5	43	36	10	13	41	308	26	8	329	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	175		0	175		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3158	0	0	3320	0	1770	3497	0	1770	3518	0
Flt Permitted		0.985			0.970		0.950			0.950		
Satd. Flow (perm)	0	3158	0	0	3320	0	1770	3497	0	1770	3518	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		47			14			9			3	
Link Speed (mph)		40			40			50			50	
Link Distance (ft)		1773			1725			1883			1889	
Travel Time (s)		30.2			29.4			25.7			25.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	64	0	45	363	0	9	372	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	27.0	27.0		26.0	26.0		23.0	53.0		14.0	44.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		6.8			7.3		15.9	95.0		6.2	79.0	
Actuated g/C Ratio		0.06			0.06		0.13	0.79		0.05	0.66	
v/c Ratio		0.34			0.30		0.19	0.13		0.10	0.16	
Control Delay		28.7			46.2		37.0	1.1		76.2	3.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		28.7			46.2		37.0	1.1		76.2	3.9	
LOS		C			D		D	A		E	A	
Approach Delay		28.7			46.2			5.1			5.6	
Approach LOS		C			D			A			A	
Queue Length 50th (ft)		11			20		32	2		7	32	
Queue Length 95th (ft)		35			42		69	25		22	15	
Internal Link Dist (ft)		1693			1645			1803			1809	
Turn Bay Length (ft)							175			175		
Base Capacity (vph)		630			606		272	2770		140	2316	
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		0.12			0.11		0.17	0.13		0.06	0.16	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 13 (11%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 10.1

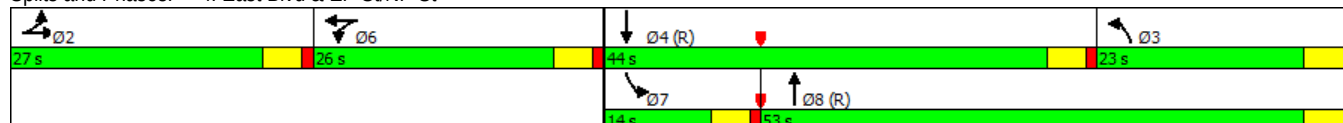
Intersection LOS: B

Intersection Capacity Utilization 33.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4: East Blvd & EP St/NP St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (vph)	46	100	136	43	117	41	94	291	49	40	328	33
Future Volume (vph)	46	100	136	43	117	41	94	291	49	40	328	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		0	145		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3258	0	0	3392	0	1770	3461	0	1770	3490	0
Flt Permitted		0.992			0.989		0.950			0.950		
Satd. Flow (perm)	0	3258	0	0	3392	0	1770	3461	0	1770	3490	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		148			24			17			9	
Link Speed (mph)		45			45			50			50	
Link Distance (ft)		1569			1385			1882			1883	
Travel Time (s)		23.8			21.0			25.7			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	307	0	0	219	0	102	369	0	43	393	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Total Split (s)	30.0	30.0		28.0	28.0		25.0	46.0		16.0	37.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)		11.5			12.3		12.2	69.9		10.3	66.0	
Actuated g/C Ratio		0.10			0.10		0.10	0.58		0.09	0.55	
v/c Ratio		0.69			0.60		0.57	0.18		0.28	0.20	
Control Delay		34.8			52.2		57.2	4.7		41.0	5.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		34.8			52.2		57.2	4.7		41.0	5.3	
LOS		C			D		E	A		D	A	
Approach Delay		34.8			52.2			16.1			8.8	
Approach LOS		C			D			B			A	
Queue Length 50th (ft)		62			76		59	32		34	26	
Queue Length 95th (ft)		107			115		96	50		71	42	
Internal Link Dist (ft)		1489			1305			1802			1803	
Turn Bay Length (ft)							150			145		
Base Capacity (vph)		808			683		302	2023		169	1923	
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		0.38			0.32		0.34	0.18		0.25	0.20	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 23.4

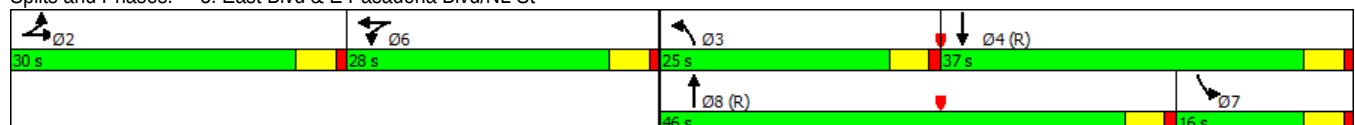
Intersection LOS: C

Intersection Capacity Utilization 44.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: East Blvd & E Pasadena Blvd/NL St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations		↑		↵		↵	↵	↵		↵	↵	
Traffic Volume (vph)	0	0	0	29	0	25	0	422	22	10	503	0
Future Volume (vph)	0	0	0	29	0	25	0	422	22	10	503	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	180		0	175		0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1863	0	1770	0	1583	1863	3514	0	1770	3539	0
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	1863	0	1770	0	1583	1863	3514	0	1770	3539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						95		6				
Link Speed (mph)		30			20			50			50	
Link Distance (ft)		94			1176			2888			1882	
Travel Time (s)		2.1			40.1			39.4			25.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	32	0	27	0	483	0	11	547	0
Turn Type				Prot		Perm	Prot	NA		Prot	NA	
Protected Phases		5		6			3	8		7	4	
Permitted Phases						8						
Total Split (s)		22.5		26.0		58.5	22.5	58.5		13.0	49.0	
Total Lost Time (s)		4.5		4.5		4.5	4.5	4.5		4.5	4.5	
Act Effct Green (s)				7.7		106.7		106.7		6.5	109.3	
Actuated g/C Ratio				0.06		0.89		0.89		0.05	0.91	
v/c Ratio				0.28		0.02		0.15		0.11	0.17	
Control Delay				59.2		0.0		1.1		59.4	2.1	
Queue Delay				0.0		0.0		0.0		0.0	0.0	
Total Delay				59.2		0.0		1.1		59.4	2.1	
LOS				E		A		A		E	A	
Approach Delay					32.1			1.1			3.3	
Approach LOS					C			A			A	
Queue Length 50th (ft)				24		0		29		8	35	
Queue Length 95th (ft)				56		0		15		m20	40	
Internal Link Dist (ft)		14			1096			2808			1802	
Turn Bay Length (ft)										175		
Base Capacity (vph)				317		1418		3125		125	3224	
Starvation Cap Reductn				0		0		0		0	0	
Spillback Cap Reductn				0		0		0		0	0	
Storage Cap Reductn				0		0		0		0	0	
Reduced v/c Ratio				0.10		0.02		0.15		0.09	0.17	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 113 (94%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 3.9

Intersection LOS: A

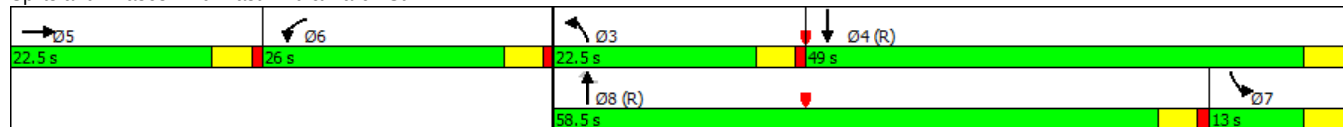
Intersection Capacity Utilization 24.3%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 6: East Blvd & Aaron St



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱	↱	↰	↱	↱
Traffic Volume (vph)	55	19	41	21	10	42	10	324	32	69	330	132
Future Volume (vph)	55	19	41	21	10	42	10	324	32	69	330	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	125		75	110		115
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1673	0	1770	1637	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1673	0	1770	1637	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			46				136			143
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		193			193			900			2888	
Travel Time (s)		4.4			4.4			15.3			49.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	60	66	0	23	57	0	11	352	35	75	359	143
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases									8			4
Total Split (s)	29.0	29.0		28.0	28.0		13.0	38.0	38.0	25.0	50.0	50.0
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Act Effct Green (s)	9.4	9.4		7.3	7.3		6.3	80.9	80.9	11.5	92.3	92.3
Actuated g/C Ratio	0.08	0.08		0.06	0.06		0.05	0.67	0.67	0.10	0.77	0.77
v/c Ratio	0.43	0.38		0.21	0.40		0.12	0.15	0.03	0.44	0.13	0.11
Control Delay	61.6	28.3		57.4	28.2		68.7	2.5	1.1	50.6	4.4	1.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.6	28.3		57.4	28.2		68.7	2.5	1.1	50.6	4.4	1.4
LOS	E	C		E	C		E	A	A	D	A	A
Approach Delay		44.1			36.6			4.2			9.6	
Approach LOS		D			D			A			A	
Queue Length 50th (ft)	45	16		17	8		9	3	0	57	33	0
Queue Length 95th (ft)	88	59		44	50		m22	91	m8	83	65	11
Internal Link Dist (ft)		113			113			820			2808	
Turn Bay Length (ft)							125		75	110		115
Base Capacity (vph)	361	377		346	357		125	2386	1111	302	2721	1250
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.18		0.07	0.16		0.09	0.15	0.03	0.25	0.13	0.11

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 4:SBT and 8:NBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 13.3

Intersection LOS: B

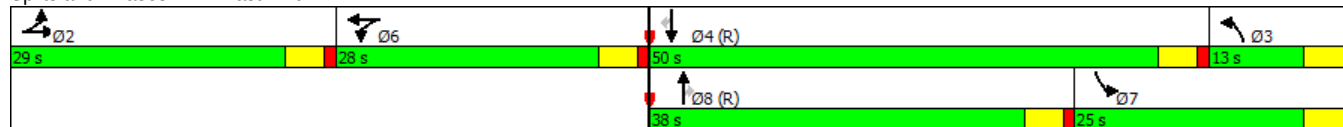
Intersection Capacity Utilization 34.3%

ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 7: East Blvd



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 		 	 	
Traffic Volume (vph)	109	378	55	53	448	110	85	196	53	127	214	119
Future Volume (vph)	109	378	55	53	448	110	85	196	53	127	214	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		0	100		0	140		0	155		0
Storage Lanes	1		0	1		0	1		0	2		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	4989	0	1770	4933	0	1770	3426	0	3433	3352	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	4989	0	1770	4933	0	1770	3426	0	3433	3352	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			46			25			83	
Link Speed (mph)		45			45			35			40	
Link Distance (ft)		1366			1434			903			900	
Travel Time (s)		20.7			21.7			17.6			15.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	471	0	58	607	0	92	271	0	138	362	0
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Total Split (s)	26.0	40.0		18.0	32.0		28.0	28.0		34.0	34.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Act Effct Green (s)	13.3	25.7		9.3	19.7		23.5	23.5		45.5	45.5	
Actuated g/C Ratio	0.11	0.21		0.08	0.16		0.20	0.20		0.38	0.38	
v/c Ratio	0.61	0.43		0.43	0.72		0.27	0.39		0.11	0.27	
Control Delay	63.2	39.9		61.5	48.6		43.4	39.9		20.1	15.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	63.2	39.9		61.5	48.6		43.4	39.9		20.1	15.5	
LOS	E	D		E	D		D	D		C	B	
Approach Delay		44.6			49.7			40.8			16.8	
Approach LOS		D			D			D			B	
Queue Length 50th (ft)	89	113		44	152		61	87		27	59	
Queue Length 95th (ft)	145	139		86	186		111	130		47	84	
Internal Link Dist (ft)		1286			1354			823			820	
Turn Bay Length (ft)	115			100			140			155		
Base Capacity (vph)	317	1492		199	1165		346	691		1302	1323	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.37	0.32		0.29	0.52		0.27	0.39		0.11	0.27	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 97 (81%), Referenced to phase 4:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 39.0

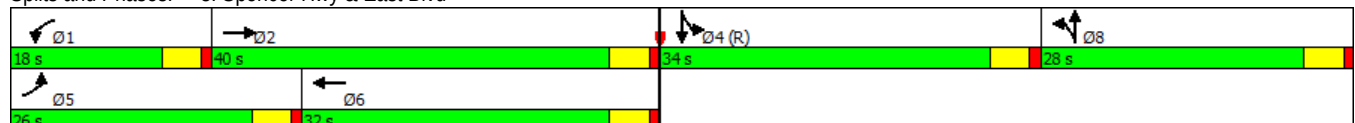
Intersection LOS: D

Intersection Capacity Utilization 46.6%

ICU Level of Service A

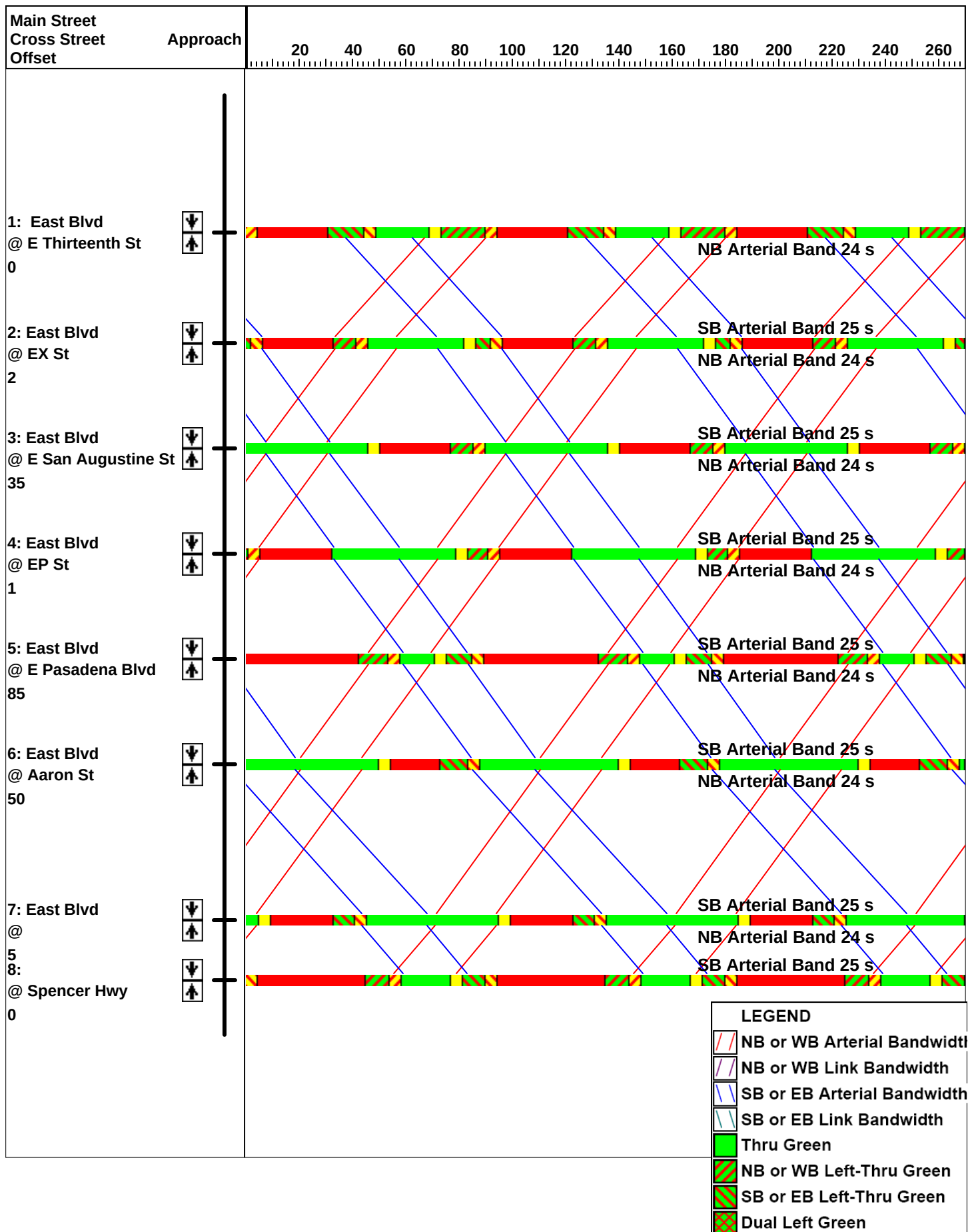
Analysis Period (min) 15

Splits and Phases: 8: Spencer Hwy & East Blvd

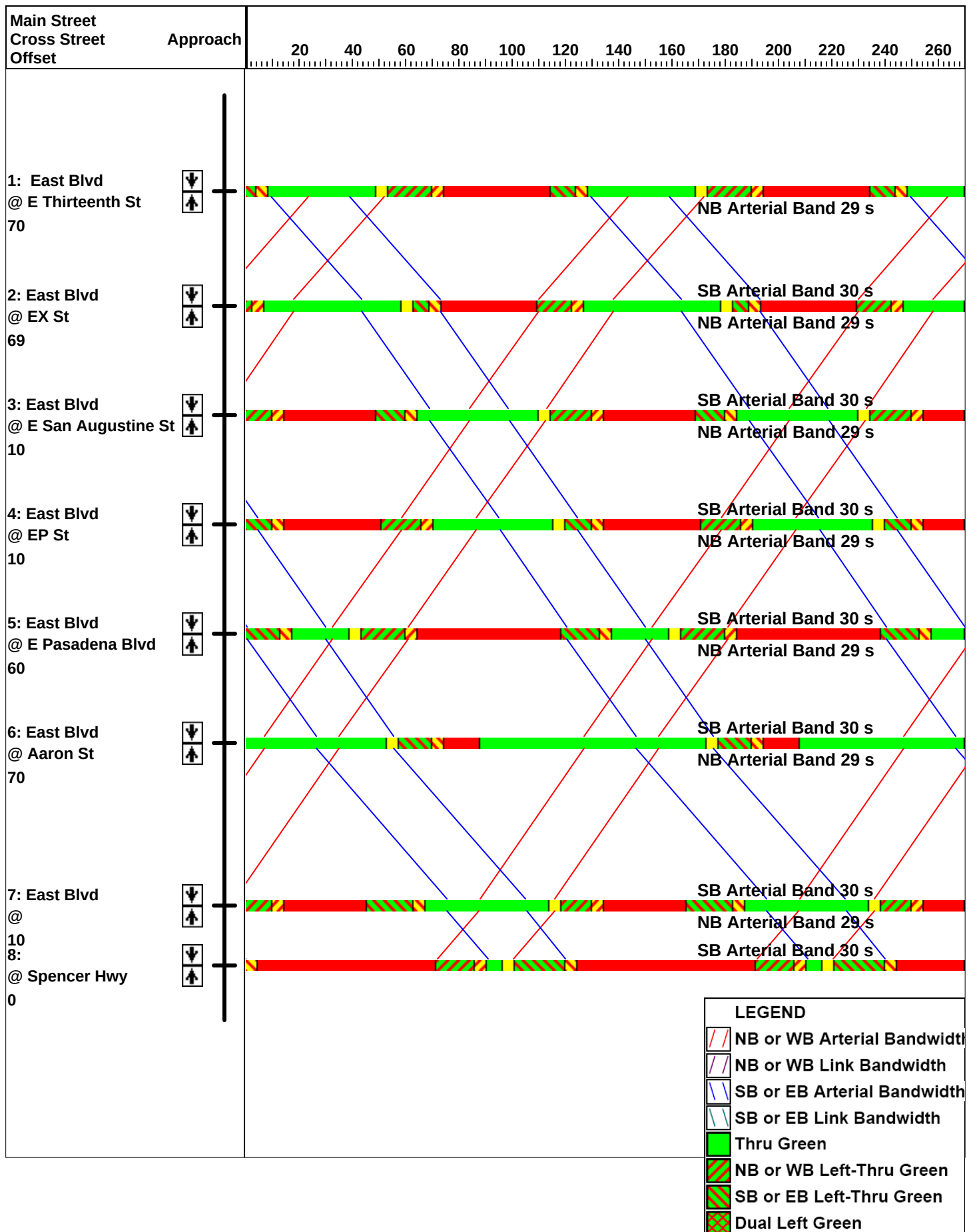


Appendix D: Time-Space Diagrams

Time-Space Diagram 90 AM



Time-Space Diagram 120 PM





Legislation Details (With Text)

File #: DIS 19-051 **Version:** 1 **Name:**
Type: Discussion **Status:** Agenda Ready
File created: 5/1/2019 **In control:** City Council Workshop
On agenda: 5/7/2019 **Final action:**
Title: Discussion of issues relating to the status of Type B projects for January - March 2019.
Sponsors:
Indexes:
Code sections:
Attachments: [DPCDC Quarterly Project Update - 042219](#)
[HAI DeerPark Softball Final Punch List-5-22-19](#)
[DP Substantial Completion Letter](#)

Date	Ver.	Action By	Action	Result
5/7/2019	1	City Council Workshop		

Discussion of issues relating to the status of Type B projects for January - March 2019.

Attached is the Type B Comprehensive Project Update that was submitted to and discussed with the Deer Park Community Development Corporation (DPCDC) Board of Directors at the April 22nd quarterly DPCDC meeting. Since the time that said project update list was submitted to the DPCDC Board we have had two (2) punch list walk-throughs with the contractor (Tandem Services), architect (Halff Associates) and City staff for the Girls Softball Complex Project. Attached is the punch list from the 1st walk-through conducted on April 22, 2019. The contractor has corrected most of the items on this list prior to the 2nd walk-through on May 1. As a result of the 2nd walk-through, it is expected that the architect will issue a Substantial Completion letter on May 3, 2019 stating that the project is substantially complete with the exception of the fields for play. Once the fields are deemed ready, the architect will make another visit to the site and if it is verified that the fields are ready for play, the architect will then issue a Substantially Complete letter for the fields. If there are items that need to be addressed on the fields, the letter will include a punch list. Upon completion of all punch list items, the contractor can request a Final inspection. After the final inspection is completed and any deficiencies are corrected, the architect can issue the final acceptance letter and the contractor's 1-year warranty period will begin.

n/a

Discussion only

Deer Park CDC Project Update

January – March 2019

Dow Park Pavilion Project - This project was identified as one of seven approved projects in the 2015 Type B dedicated sales tax election that was voted for by Deer Park residents. The City entered into a contract with Halff Associates as the architect and South Pool and Spa as the general contractor. The project is funded with \$1.5 million from Type B sales tax. The new restroom buildings were installed and progress continues on the pavilion structures. The City terminated the contract with the previous general contractor and awarded a contract for the completion of the project to Mills Construction. The project was completed in September of 2018.

- Acceptance of completion of and retainage release for DPCDC Dow Park Pavilion project.
- Ribbon cutting and dedication for the Dow Park Pavilion held on September 27th.

Maxwell Adult Center - This project was one of seven approved projects in the 2015 Type B dedicated sales tax election that was voted for by Deer Park residents. The project is funded with \$2 million from Type B sales tax. The City of Deer Park selected Halff Associates as the architect and Frost Construction as the general contractor for the project. Construction began in November of 2017. Demo of the interior and site preparation for the new addition has been completed. The project is complete and building is currently in use with minimal punch list items remaining.

- Project is complete with only minor punch list items.
- Parks and Recreation Department hosted pre-opening tours on November 20th and 21st.
- December 19, 2018 marked the first day of Maxwell regular operations post renovations.
- [January 15, 2019 ribbon cutting](#)
- [Ongoing work to complete Maxwell close out documents.](#)
- [Discussions with Frost Construction concerning canopy extension.](#)

Girls Softball Complex - This project was identified as one of seven approved projects in the 2015 Type B dedicated sales tax election that was voted for by Deer Park residents. This project is funded by \$3 million from Type B sales tax. The City selected Tandem Services as the general contractor and Halff Associates as the architect for this project. Construction began in January 2018. The project is on schedule to be completed by the end of 2018.

- [Project is roughly 98% complete.](#)
- Meeting on Bi-weekly basis with Tandem Services, City staff, and Halff.
- Several contingency modifications have been executed for the project.
- [Concession and restroom building is completed.](#)
- [Turf has been installed and is being cared for.](#)
 - [Several areas were removed and replaced due to the wrong type of turf being installed.](#)
- Batting cages have been installed and completed.
- [Hydramulching around complex has been completed.](#)

- Work completed to fine grade the skinned areas of the fields.
- Irrigation has been installed and inspected.
- Field lights, parking lot lights, and security lights have been commissioned.
- Scheduling of walk through for substantial completion.
- Scheduled completion of the facility is May 2019 with usage to begin once grass playing surfaced is determined to be safe for play.

New Soccer Complex - This project is another one of the seven approved projects in the 2015 Type B dedicated sales tax election. The project is being funded with \$4 million from Type B sales tax. The City of Deer Park selected Halff Associates as the architect and Tandem Services as the general contractor. Construction began in January 2018. The project is on schedule and is expected to be completed in early 2019.

- Project is roughly 95% complete.
- Meeting on Bi-weekly basis with Tandem Services, City staff, and Halff.
- Concession and restroom building is completed.
- Center Point has installed the electrical meter for the facility.
- Irrigation has been installed and is approved.
- Parking lot and driveway for facility has been completed.
- City Council approved change order for additional dirt and sod for 2 playing fields.
- Field sprigging will begin once weather allows for sprigging.
- Fields are expected to take several months for turf to establish.
- Sod expected to be established and ready for fall play.
- Flatwork has been completed around the site.

Community Center – This project is another one of the seven approved projects in the 2015 Type B dedicated sales tax election. The project is being funded with \$6 million from Type B sales tax. This project is currently under staff review and discussion.

- City of Deer Park has hired Brinkley, Sargent, Wigington has architectural firm for consulting and design of the potential renovations and expansion of the Deer Park Community Center.
- City staff visited 5 Houston area recreation centers to begin researching facility design and trends.
 - December 13 – Eagle Pointe, Imperial Recreation Center, Pearland Recreation Center
 - December 20 – C.K. Ray Recreation Center and West University Place Recreation Center
- January 14 - City staff visited 4 DFW area recreation centers to continue researching facility design and trends.
 - Richardson Heights Center, Farmers Branch Aquatics and Recreation Centers, Keller Pointe Recreation Center, The Link (Richland Hills) Recreation Center
- January 28 – Joint meeting of the City Council/Deer Park Community Development Corp. Parks and Recreation Commission to discuss items related to the Community Center Renovations.
- February 25 – Joint meeting of the City Council/Deer Park Community Development Corp. Parks and Recreation Commission to discuss items related to the Community Center Renovations
- March 25 – Joint meeting postponed due to incident related to International Terminals Company Incident. The joint meeting was rescheduled to April 22, 2019.

Hike and Bike Trails - This project is another one of the seven approved projects in the 2015 Type B dedicated sales tax election. The project is being funded with \$500,000 from Type B sales tax.

- Limited discussions with staff have taken place.
- City staff met with Bruditt Consultants for potential design of the Hike and Bike Trails comprehensive plan.
- [Enter into agreement with Burditt Consultants, LLC. for professional services for the development of the Type B Hike and Bike trails.](#)

Spencerview Athletic Complex - This project is another one of the seven approved projects in the 2015 Type B dedicated sales tax election. The project is being funded with \$3 million from Type B sales tax.

- This project was completed in August of 2017 and is currently in use.
- [Ongoing discussions with Harris County Flood Control on Spencerview Bridge project](#)



14800 St. Mary's Lane, Ste. 160
Houston, TX 77079-2943
(713) 588-2450
Fax (281) 310-5259

PUNCH LIST

To: Tandem Services
Attn: Dustin Johnson

Date: April 23, 2019

From: Kristin M. LeBlanc, P.E.; Tim May, RLA

AVO: 31558.022

Email: kbleblanc@halff.com; tmay@halff.com

Project: Deer Park Softball Field Renovation

Contract for: Deer Park Softball Field Renovations

The following items require the attention of the Contractor for completion or correction. This list may not be all-inclusive, and the failure to include any items on this list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

A site visit was conducted on April 22, 2019.

ITEM NO.	LOCATION (AREA)	DESCRIPTION	COMPLETION DATE	A/E CHECK DATE
1.	Grate Inlet A1	Grout all cracks, grout around pipes, install invert.		
2.	Grate Inlet A2	Grout all cracks, remove excess concrete, install invert, and remove debris.		
3.	Grate Inlet B1	Grout all cracks, install invert, and cut pipe flush with the box.		
4.	Grate Inlet B2	Grout all cracks, grout between box and top, install invert.		
5.	Main sidewalk entrance	Install "No Parking on Grass" signs on each side of the main sidewalk entrance to the complex. See sheet L1.01.		
6.	Main sidewalk entrance	The existing "No Parking on Grass" sign near Field 2 needs to be turned to face the drive aisle. See sheet L1.01.		
7.	Fire Lane Striping at main sidewalk entrance	Finish striping the fire lane on the driveway at the main sidewalk entrance to the complex.		
8.	Fire Lane Striping at hammerhead	Finish striping the fire lane at the hammer head on the west side of the new parking area.		

9.	Hammerhead	Install "No Parking on Grass" sign. See sheet L1.01.
10.	Hammerhead	Remove piles of dirt. Coordinate with the City on where they want the dirt relocated.
11.	Electrical Conduit	Cut all electrical conduits to grade.
12.	Dugouts	Check the dimensions of the dugouts. See detail 3 on sheet L3.06 for dimensions.
13.	Dugouts	Verify the placement of the player bench within the dugouts. See detail 3 on sheet L3.06 for dimensions.
14.	Dugouts	All dugout outlets need to be accessible. Any outlet that is not centered on the fence, should be turned 90 degrees to face the fields.
15.	Parking area	Remove broken wheelstops from parking area. As discussed in the field, move extra wheelstops to the end of the hammerhead (near the dumpster enclosure) and place them to block vehicles from driving onto the grass.
16.	Southeast corner of the existing parking lot – Ex. Light pole	Repair the concrete on the top of the light pole base. Backfill around the electrical box.
17.	Drainage swale along West Parking	Remove debris and mow drainage swale to ensure positive drainage.
18.	Existing drainage swale	Mow and desilt existing swale per approved plans. Remove all debris from the swale.
19.	Outfall drainage swale	Root rake, desilt, remove debris and hydromulch the swale.
20.	SET's	Remove all debris from the SET's.
21.	East of Field 2 (in open area)	Remove the stake and existing wire from the demolished light pole east of Field 2.
22.	Handicap Parking	Backfill the hole from the sign that was demolished near the HC parking area, next to the existing light pole.
23.	Pavement	Clean all pavement of debris, dirt, etc.
24.	Dedication Plaque	Install the dedication plaque per the plans and specifications.

25.	Grass areas	Hydromulch remaining areas as well as any thin and/or bare areas.
26.	Play fields	See attached notes on site plan for play field punch items
	Field #1	1. Low spot in right center field 2. Low spot at outfield fence 3. Center to left field – re-nozzle as needed to match GPM with rotor pattern 4. Center to right field – re-nozzle as needed to match GPM with rotor pattern 5. Dead grass behind 3rd base 6. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface
	Field #2	1. Dead grass behind 1st and 2nd bases 2. Low spot at outfield fence (center field) 3. Irrigation head off at 3rd base 4. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface
	Field #3	1. Low spot at lip behind 1st & 2nd base 2. Dead grass center field 3. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface
	Field #4 (practice)	1. Several dead grass spots throughout outfield 2. Lip too high from 1st base to 3rd base. Will require excavation of approx. 3' of sod at lip, lower grade, and re-sod to fix drainage and playability 3. Low spots in infield – can perhaps be repaired by intention grooming of infield 4. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface
	Field #5 (practice)	1. Lip too high behind 2nd base 2. Low spots center field near outfield fence 3. Quick coupler repaired behind 3rd base – grade needs to be repaired and re-sod 4. Dead grass right-center field 5. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface
	Field #6	1. Large low spot left-center field

2. Entire outfield irrigation needs to be re-nozzle to match GPM with rotor pattern
3. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface

27.	Turf outfields	The rolling of sod is not acceptable to correct drainage, level field of play, or tighten sod gaps.
28.	Irrigation	Submit an record drawings of irrigation plan per Specification 328400 Section 1.9
29.	Irrigation	Submit controller chart of irrigation plan per Specification 328400 Section 1.10
30.	Irrigation	Submit Operation and Maintenance Manuals per Specification 328400 Section 1.11
31.	Irrigation	Submit Attic Stock per Specification 328400 Section 1.16
32.	All Fields	Red dirt elevation is too low at backstop curbing. This 1"-1½" exposed lip will create a playability issue. Raise elevation to flush with top of backstop curb
33.	All fields	Lip issues at each field is impeding infield drainage. It is imperative that surface drainage flow across infield, lip and out the back of field (outfield fence) effectively. Nearly every field has sod too high at lip, the migration of red dirt into the turf was not part of the grooming procedure, and some instances the infield grade dips lower than the lip area.
34.	Irrigation controller	Place electrical cord in conduit. Intent of contract documents was to hard wire the electrical connection and not have a plug in connection for the controller. Hard wire connection is required.

PICTURES:

Item 1:



Item 2:



Item 3



Item 4



Item 6



Item 7



Item 8-10



Item 12-14



Item 16:



Item 18:



Item 19:



Item 20:



Item 21:



Item 22:



Item 26: applies to all fields, lip condition



Item 26: applies to all fields, dead grass patches



Item 32:



Item 34:





14800 St. Mary's Lane, Ste. 160
Houston, TX 77079-2943
(713) 588-2450
Fax (281) 310-5259

Attachment: Play field punch notes

SIGNED: *Kristin LeBlanc, P.E.*

Timothy May

I:\31000s\31558\Phase 16006A\ConstrAdmin\FieldRpts\Final Punch List.docx

COPIES: ☒ OWNER ☒ CONTRACTOR ☒ FILE

[illegible][illegible]

WEST, X STREET
 the first flight-of-ideas
 Volume 508, Page 126 of 126

[illegible]

Diagram illustrating the components of a concrete wash-out area:

- Filter Fabric Fence
- Grate Inlet Protection
- Curb Inlet Protection
- Stabilized Construction Access
- Concrete Wash-Out Area

1. SEE SHEETS C7.00-C7.04 FOR ALL APPLICABLE CITY OF DEER PARK STANDARD DETAILS.

2. SEE SHEETS C0.01 FOR ALL APPLICABLE CITY OF DEER PARK STANDARD NOTES.

PHASE III
MAINTAIN EXIST. EROSION CONTROLS, MODIFY
INLET PROTECTION TO METHOD COMPATIBLE
WITH PAVEMENT. ADD ADDITIONAL CONTROLS
AS NEEDED FOR CONSTRUCTION ACTIVITIES.

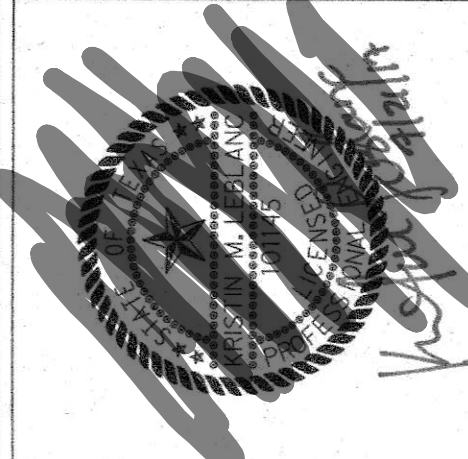
PHASE IV
REVEGETATE ALL DISTURBED AREAS NOT
COVERED IN THE LANDSCAPE PLAN.
ESTABLISH MIN. COVER OF 70% OF
NATIVE BACKGROUND COVER. REMOVE
EROSION CONTROLS WHEN 70% MIN. COVER
HAS BEEN ESTABLISHED.

ENCLARK:
THE BEARINGS SHOWN HEREON ARE REFERENCED TO THE
TEXAS STATE COORDINATE SYSTEM, SOUTH CENTRAL ZONE
120-4 NORTH AMERICAN DATUM OF 1983 (NAD83)

1. A CHISELED BOX IN CONCRETE ON A CURB INLET
APPROXIMATELY 110.00 FEET SOUTHEASTERLY FROM THE
CENTERLINE OF THE WESTERN MOST ACCESS DRIVEWAY TO
THE SOFTBALL FIELD PARKING LOT AND APPROXIMATELY
15.00 FEET
ELEVATION: 30.99 FEET

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) MAP NO. 48201C0910M, WITH THE EFFECTIVE DATE OF JANUARY 1, 2017, THE PROPERTY IS LOCATED IN ZONE 'X UNSHADED' AREAS DETERMINED TO BE OUTSIDE OF THE 100 YEAR (100-YEAR) FLOODPLAIN STATUS IS SUBJECT TO CHANGE AS FEMA FIRM MAPS ARE UPDATED.

HOUSTON, TEXAS
77079-2943
TEL (713) 588-2450
FAX (281) 310-5259

[illegible]

Sheet Key

The seal appearing on this document was authorized by Kristin M. LeBlanc, PE#101145 on 7/21/2017. Alteration of a sealed document without proper notification under the Texas Engineering Practice Act. The record copy of this drawing is on file at the offices of Half Associates, Inc. 14800 St. Mary's Lane Suite 160, Houston, TX 77075-2843. TBPE FIRM #5-312

ENGINEERING DEPARTMENT

Project No.:	31558-6A
Issued:	7/21/2017
Drawn By:	JD
Checked By:	SP
Sheet Title	

EROSION CONTROL PLAN

C6.00
Sheet Number



14800 St. Mary's Lane, Ste. 160
Houston, TX 77079-2943
(713) 588-2450
Fax (281) 310-5259

CERTIFICATE OF SUBSTANTIAL COMPLETION FOR
DEER PARK GIRLS SOFTBALL RENOVATIONS PHASE I
301 WEST X STREET, CITY OF DEER PARK, TEXAS

May 3, 2019

OWNER: City of Deer Park
710 East San Augustine
Deer Park, TX 77536

CONTRACTOR: Tandem Services
4425 FM 2351
Suite 5
Friendswood, TX 77546

CONTRACT: Construction of Deer Park Girls Softball Renovations Phase I

Gentleman:

We have observed the subject project constructed by the CONTRACTOR and find it to be substantially complete in accordance with the approved plans and specifications except for the fields (meaning the field grass, skinned infield, etc.). The project was routinely observed during construction by the OWNER inspector and periodically observed by Halff Associates, Inc.

The CONTRACTOR shall be responsible for addressing all outstanding punch list items noted on the attached Punch List Update. At such time as the turf has had sufficient grow-in time, the infield skinned areas have been groomed daily and weather conditions have aided in settlement and surface firmness, an inspection will be done on the fields.

Per the contract documents, the CONTRACTOR's guarantee period of one (1) year will begin after Final Inspection and Acceptance.

Sincerely,
Halff Associates, Inc.

A handwritten signature in blue ink, appearing to read "Kristin M. LeBlanc".

Kristin M. LeBlanc, P.E.
Site Development Team Leader
TBPE Registration No. F-312



HALFF ASSOCIATES, INC.

14800 ST. MARY'S LANE, STE. 160
HOUSTON, TX 77079-2943

TEL: 713-588-2450
FAX: 281-310-5259

WWW.HALFF.COM

PUNCH LIST

To: Tandem Services
Attn: Dustin Johnson

Date: May 3, 2019

From: Kristin M. LeBlanc, P.E.; Tim May, RLA

AVO: 31558.022

Email: kleblanc@halff.com; tmay@halff.com

Project: Deer Park Softball Field Renovation

Contract for: Deer Park Softball Field Renovations

The following items require the attention of the Contractor for completion or correction. This list may not be all-inclusive, and the failure to include any items on this list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

A site visit was conducted on May 1, 2019.

ITEM NO.	LOCATION (AREA)	DESCRIPTION	A/E PUNCH VERIFICATION DATE
1.	Grate Inlet A1	Grout all cracks, grout around pipes, install invert.	5/1
2.	Grate Inlet A2	Grout all cracks, remove excess concrete, install invert, and remove debris.	5/1
3.	Grate Inlet B1	Grout all cracks, install invert, and cut pipe flush with the box. 5/1 Update: Pipe not cut. Cut pipe flush with the box.	5/1
4.	Grate Inlet B2	Grout all cracks, grout between box and top, install invert.	5/1
5.	Main sidewalk entrance	Install "No Parking on Grass" signs on each side of the main sidewalk entrance to the complex. See sheet L1.01.	5/1
6.	Main sidewalk entrance	The existing "No Parking on Grass" sign near Field 2 needs to be turned to face the drive aisle. See sheet L1.01.	5/1
7.	Fire Lane Striping at main sidewalk entrance	Finish striping the fire lane on the driveway at the main sidewalk entrance to the complex.	5/1
8.	Fire Lane Striping at hammerhead	Finish striping the fire lane at the hammer head on the west side of the new parking area.	5/1

9.	Hammerhead	Install "No Parking on Grass" sign. See sheet L1.01.	5/1
10.	Hammerhead	Remove piles of dirt. Coordinate with the City on where they want the dirt relocated. 5/1 Update: Per Eugene Wyble, City requested the dirt piles remain on the pavement. Eugene stated the Fire Marshal had no objection to the fire lane turn around being blocked.	5/1
11.	Electrical Conduit	Cut all electrical conduits to grade. 5/1 Update: This item has not been completed.	5/1
12.	Dugouts	Check the dimensions of the dugouts. See detail 3 on sheet L3.06 for dimensions. 5/1 Update: Unknown if this was completed. Tandem to verify and provide an update.	5/1
13.	Dugouts	Verify the placement of the player bench within the dugouts. See detail 3 on sheet L3.06 for dimensions. 5/1 Update: Per Eugene Wyble, this item was not completed. Eugene to coordinate with City staff to decide on if the benches need to be moved or can remain in the current location.	5/1
14.	Dugouts	All dugout outlets need to be accessible. Any outlet that is not centered on the fence, should be turned 90 degrees to face the fields. 5/1 Update: This item has not been completed.	5/1
15.	Parking area	Remove broken wheelstops from parking area. As discussed in the field, move extra wheelstops to the end of the hammerhead (near the dumpster enclosure) and place them to block vehicles from driving onto the grass.	5/1
16.	Southeast corner of the existing parking lot – Ex. Light pole	Repair the concrete on the top of the light pole base. Backfill around the electrical box.	5/1
17.	Drainage swale along West Parking	Remove debris and mow drainage swale to ensure positive drainage.	5/1
18.	Existing drainage swale	Mow and desilt existing swale per approved plans. Remove all debris from the swale.	5/1

19.	Outfall drainage swale	Root rake, desilt, remove debris and hydromulch the swale.	5/1
20.	SET's	Remove all debris from the SET's.	5/1
21.	East of Field 2 (in open area)	Remove the stake and existing wire from the demolished light pole east of Field 2.	5/1
22.	Handicap Parking	Backfill the hole from the sign that was demolished near the HC parking area, next to the existing light pole.	5/1
23.	Pavement	Clean all pavement of debris, dirt, etc.	5/1
24.	Dedication Plaque	Install the dedication plaque per the plans and specifications. 5/1 Update: Per Eugene, this is to be installed on May 6.	5/1
25.	Grass areas	Hydromulch remaining areas as well as any thin and/or bare areas.	5/1
26.	Play fields	See attached notes on site plan for play field punch items. 5/1 Update: Play fields are not ready for use and thus the check will be completed when the fields are ready. See below for updates to the punch list based on the preliminary review.	
	Field #1	1. Low spot in right center field 2. Low spot at outfield fence 3. Center to left field – re-nozzle as needed to match GPM with rotor pattern 4. Center to right field – re-nozzle as needed to match GPM with rotor pattern 5. Dead grass behind 3rd base 6. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface	
	Field #2	1. Dead grass behind 1st and 2nd bases 2. Low spot at outfield fence (center field) 3. Irrigation head off at 3rd base 4. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface	
	Field #3	1. Low spot at lip behind 1st & 2nd base 2. Dead grass center field 3. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface	
	Field #4 (practice)	1. Several dead grass spots throughout outfield	

2. Lip too high from 1st base to 3rd base. Will require excavation of approx. 3' of sod at lip, lower grade, and re-sod to fix drainage and playability
3. Low spots in infield – can perhaps be repaired by intention grooming of infield
4. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface

- | | |
|---------------------|--|
| Field #5 (practice) | <ol style="list-style-type: none"> 1. Lip too high behind 2nd base 2. Low spots center field near outfield fence 3. Quick coupler repaired behind 3rd base – grade needs to be repaired and re-sod 4. Dead grass right-center field 5. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface |
|---------------------|--|

- | | |
|----------|---|
| Field #6 | <ol style="list-style-type: none"> 1. Large low spot left-center field 2. Entire outfield irrigation needs to be re-nozzle to match GPM with rotor pattern 3. Edge the infield lip then chemically eradicate spreading bermuda (runners) on the clay surface |
|----------|---|

5/1 Update: There is an irrigation head in left center that needs to be adjusted to grade.

- | | | |
|-----|----------------|---|
| 27. | Turf outfields | The rolling of sod is not acceptable to correct drainage, level field of play, or tighten sod gaps. |
| 28. | Irrigation | Submit a record drawings of irrigation plan per Specification 328400 Section 1.9 |
| 29. | Irrigation | Submit controller chart of irrigation plan per Specification 328400 Section 1.10 |
| 30. | Irrigation | Submit Operation and Maintenance Manuals per Specification 328400 Section 1.11 |
| 31. | Irrigation | Submit Attic Stock per Specification 328400 Section 1.16 |
| 32. | All Fields | Red dirt elevation is too low at backstop curbing. This 1"-1½" exposed lip will create a playability issue. Raise elevation to flush with top of backstop curb |
| 33. | All fields | Lip issues at each field is impeding infield drainage. It is imperative that surface drainage flow across infield, lip and out the back of field (outfield fence) effectively. Nearly every field has sod too high at lip, the migration of red dirt into the turf was not part of the grooming |

procedure, and some instances the infield grade dips lower than the lip area.

34. Irrigation
 controller

Place electrical cord in conduit. Intent of contract documents was to hard wire the electrical connection and not have a plug-in connection for the controller. Hard wire connection is required.

35. Entire Park

5/1 Update: Has the RAS Inspection taken place? Owner to coordinate with RAS inspector to schedule inspection if one has not already occurred.

36. All fields

5/1 Update: Tandem to provide a list of all chemicals used on the fields and the date of application.

PICTURES:

Item 8-10



Item 12-14



Item 26: applies to all fields, lip condition



Item 26: applies to all fields, dead grass patches



Item 32:



Item 34:





14800 St. Mary's Lane, Ste. 160
Houston, TX 77079-2943
(713) 588-2450
Fax (281) 310-5259

Attachment: Play field punch notes

SIGNED: Kristin LeBlanc, P.E.

Timothy May

I:\31000s\31558\Phase 16006A\ConstrAdmin\FieldRpts\Punch List Update.docx

COPIES: ☒ OWNER ☒ CONTRACTOR ☒ FILE