

# **Broadway Bridge PA/ED Transportation Report**

Prepared for:  
City of West Sacramento &  
City of Sacramento

June 2020

RS17-3529

FEHR  PEERS

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## Introduction

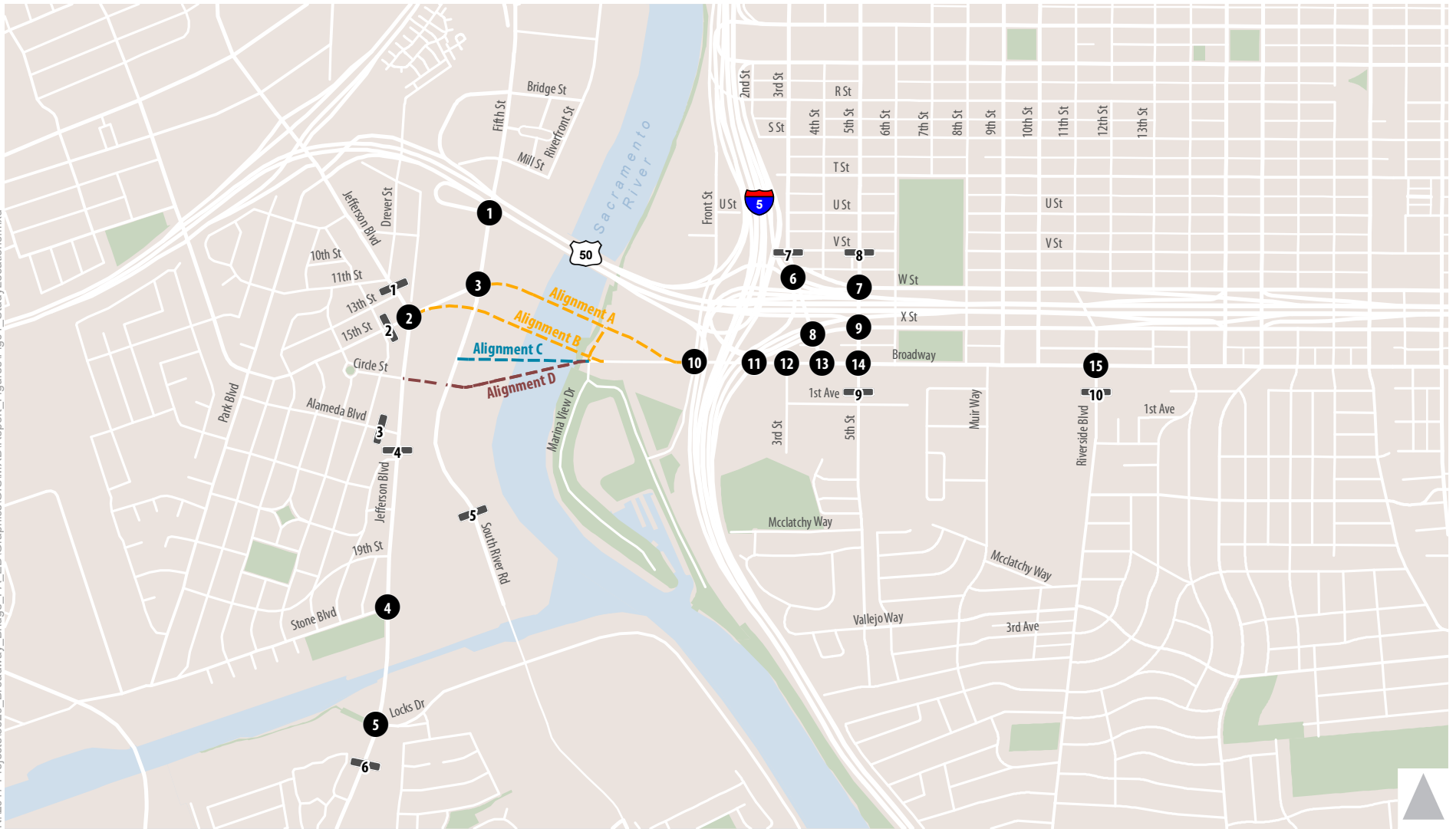
This study analyzes the transportation impacts of the proposed Broadway Bridge between West Sacramento and Sacramento. Notice of preparation for this project occurred in 2017, which represents the baseline condition when data collection occurred. The study analyzes transportation conditions under Existing (2017), Opening Year (2030), and Design Year (2040) conditions.

## Project Description

The project would provide a new local bridge connection between the cities of West Sacramento and Sacramento just south of the US 50 Pioneer Bridge. On the West Sacramento side, the bridge would connect to the Pioneer Bluff neighborhood, with connection near South River Road, Jefferson Boulevard, and 15<sup>th</sup> Street. On the Sacramento side, the bridge would connect adjacent to Miller Regional Park with connection to Broadway. Four alignment alternatives were analyzed as part of this study.

## Study Area

An extensive study area was developed based on collaborations between the EIR consultants, the City of West Sacramento, and the City of Sacramento staff. The following factors were considered when developing the study area: the project's expected travel characteristics, primary travel routes to/from the project vicinity, and other considerations. Figure 1 shows the study area, bridge location, the 15 existing study intersections, and 10 roadway segments selected for analysis. The study area also includes bicycle, pedestrian, and transit facilities in the project vicinity.



- 1 Study Intersection
- 1-1 Study Roadway Segment
- Broadway Bridge (Alignment A/B)
- Broadway Bridge (Alignment C)
- Broadway Bridge (Alignment D)



Figure 1  
Study Locations

The study intersections are listed in Table 1.

ID	Intersection	Jurisdiction	Control Type
1	South River Road / US 50 Eastbound On-Ramp	West Sacramento	Uncontrolled
2	Jefferson Boulevard / 15th Street	West Sacramento	Signal
3	South River Road / 15th Street	West Sacramento	Signal
4	Jefferson Blvd. / Stone Boulevard	West Sacramento	Signal
5	Jefferson Boulevard / Locks Drive	West Sacramento	Signal
6	W Street / 3rd Street	Sacramento	SSSC
7	W Street / 5th Street	Sacramento	Signal
8	X Street / 3rd Street	Sacramento	SSSC
9	X Street / 5th Street	Sacramento	Signal
10	Broadway / Front Street	Sacramento	SSSC
11	Broadway / I-5 Northbound Off-Ramp	Sacramento	SSSC
12	Broadway / 3rd Street (South)	Sacramento	SSSC
13	Broadway / 3rd Street (North)	Sacramento	SSSC
14	Broadway / 5th Street	Sacramento	Signal
15	Broadway / Riverside Boulevard	Sacramento	Signal

Notes: SSSC = Side Street Stop Controlled

Table 2 identifies the list of study freeway off-ramps for reporting maximum queue lengths.

ID	Location
1	I-5 Southbound Off-Ramp at 3 <sup>rd</sup> Street/X Street
2	US 50 Eastbound Off-Ramp at 5 <sup>th</sup> Street/X Street
3	I-5 Northbound Off-Ramp at Broadway

Table 3 lists the study roadway segments and the roadway facility type.

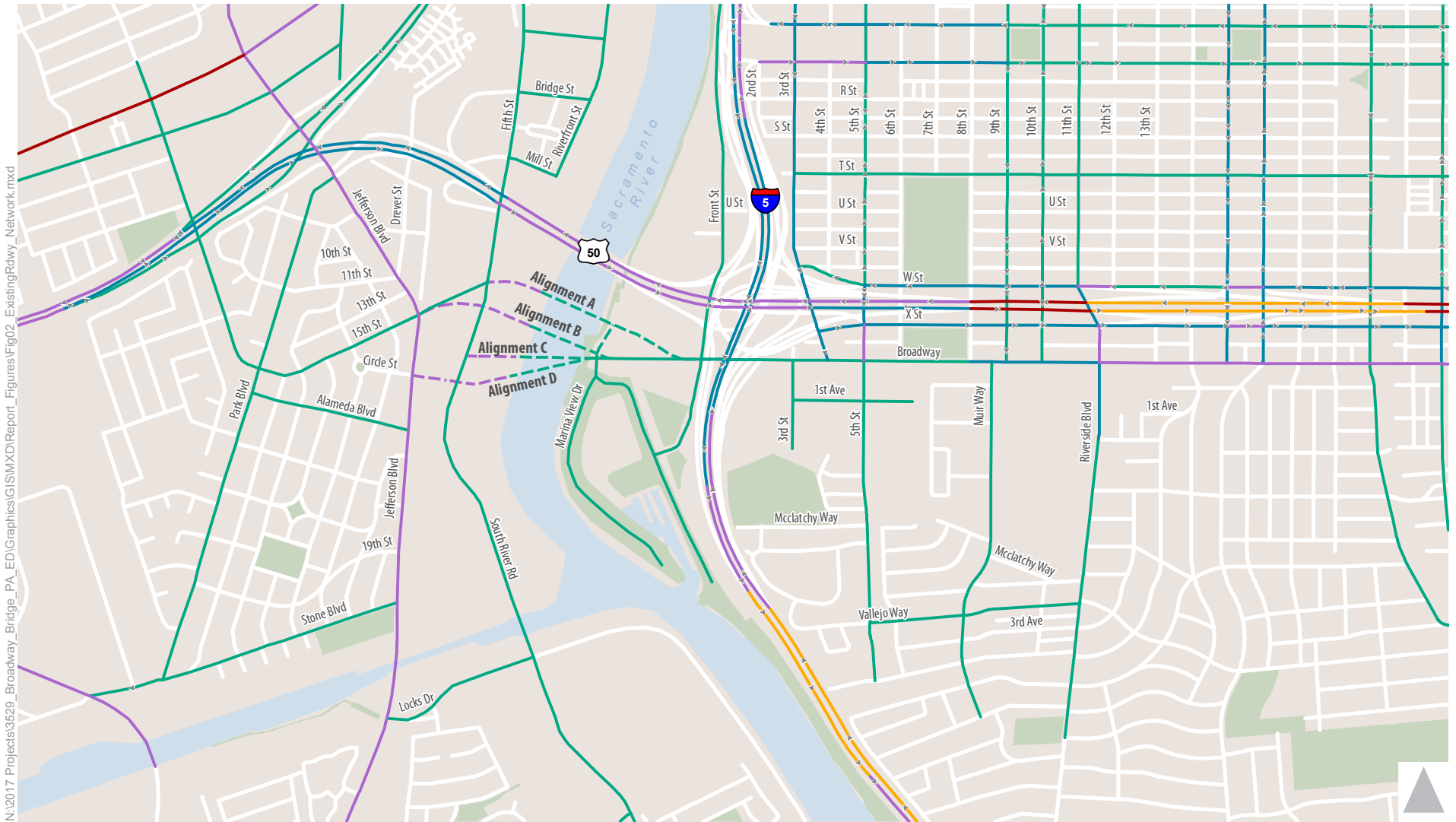
ID	Roadway	Segment	Direction	Jurisdiction	Type
1	Jefferson Boulevard	North of 15th Street	N/S	West Sacramento	Arterial, low access control (4+ stops/miles, many driveways, 25-35 mph)
2	15th Street	West of Jefferson Boulevard	E/W	West Sacramento	Residential collector with access
3	Alameda Boulevard	West of Jefferson Boulevard	E/W	West Sacramento	Residential
4	Jefferson Boulevard	South of Alameda Boulevard	N/S	West Sacramento	Arterial, moderate access control (2-4 stops/miles, few driveways, 35-45 mph)

5	South River Road	South of 15th St (Alameda Boulevard)	N/S	West Sacramento	Arterial, low access control (4+ stops/miles, many driveways, 25-35 mph)
6	Jefferson Boulevard	South of Locks Drive	N/S	West Sacramento	Arterial, moderate access control (2-4 stops/miles, few driveways, 35-45 mph)
7	3rd Street	North of W Street	N/S	Sacramento	Arterial, low access control (4+ stops/miles, frequent driveways, 25-35 mph)
8	5th Street	North of W Street	N/S	Sacramento	Arterial, low access control (4+ stops/miles, frequent driveways, 25-35 mph)
9	5th Street	South of Broadway	N/S	Sacramento	Collector Street - Minor
10	Riverside Boulevard	South of Broadway	N/S	Sacramento	Collector Street - Major
<p>Note: Roadway facility types are identified by the City of West Sacramento TIA Guidelines, Table 2 - Level of Service Criteria for Roadway Segments (2006), and the City of Sacramento 2035 General Plan, Table 3-3 - Level of Service Thresholds for City Roadway Segments (2015).</p>					

## Roadway Network

This section describes the roadways in the study area. All roadway classifications were designated by the Transportation & Circulation Element of the City of West Sacramento General Plan and City of Sacramento General Plan. The number of lanes and directions for roadways in the study area are also shown in Figure 2.





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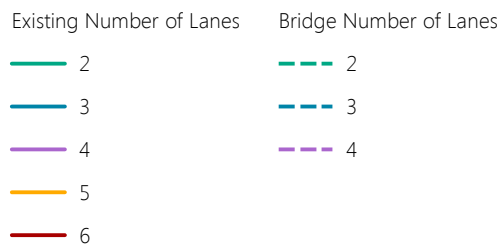


Figure 2  
Existing Roadway Network

### West Sacramento:

- **Jefferson Boulevard** is a north-south, four-lane major arterial that runs from Sacramento Avenue to the north through the City of West Sacramento into southern Yolo County. In the study area, the roadway has a center turn lane between US 50 ramps to Stone Boulevard, and a raised median south of Stone Boulevard. Bike lanes are provided south of 15<sup>th</sup> Street, and sidewalks exist along the corridor except on the east side of the roadway south of 15<sup>th</sup> Street. Street parking is provided on the west side of the roadway. The posted speed is 45 miles per hour (mph).
- **South River Road** is a north-south, two-lane collector, that runs transitions into 5<sup>th</sup> Street to the north and Village Parkway to the south. The roadway traverses through the currently industrial area of the Pioneer Bluff neighborhood in West Sacramento, and does not include bicycle or pedestrian facilities. The posted speed limit is 35 mph.
- **15<sup>th</sup> Street** is an east-west, two-lane collector that terminates at South River Road to the east and transitions into Westacre Road to the west. The roadway includes sidewalks and street parking to the west of Jefferson Boulevard. East of Jefferson Boulevard, bicycle lanes exist on both sides of the roadway, and sidewalks only on the north side of the roadway. The posted speed limit is 25 mph.
- **Stone Boulevard** is an east-west, two-lane collector that currently terminates at Jefferson Boulevard to the east and Industrial Boulevard to the west. The roadway includes sidewalks and street parking generally along the corridor. The posted speed limit is 25 mph.
- **Locks Drive** is an east-west, two-lane local roadway that connects Jefferson Boulevard to the west and South River Road/Village Parkway to the east. No sidewalks, bicycle facilities, or parking existing along the corridor. The posted speed limit is 30 mph.

### Sacramento:

- **Broadway** is an east-west arterial in Sacramento, extending from the Sacramento River in the west to 65<sup>th</sup> Street. Broadway transitions from two lanes west of 8<sup>th</sup> Street, to three lanes between 8<sup>th</sup> Street and Riverside Boulevard (two eastbound lanes, one westbound lane), and four lanes east of Riverside Boulevard. The roadway includes sidewalks and bicycle lanes east of Front Street, and also street parking generally along the corridor east of 3<sup>rd</sup> Street. The posted speed limit of 30 mph west of Riverside Boulevard, and 25 mph east of Riverside Boulevard.
- **W Street** is a one-way westbound arterial roadway that travels along the north side of Business 80/US-50, and functions as a frontage road for the freeway. Within the study area, most segments of W Street have three lanes. On-street parking is allowed on the north side of the roadway. W Street has a posted speed limit of 35 mph.
- **X Street** is a one-way eastbound arterial that forms a couplet with W Street. X Street begins at 3<sup>rd</sup> Street (north), and ends at Alhambra Boulevard. It runs along the south side of Business 80/US-50

and serves as a frontage road for the freeway. X Street has three lanes with on-street parking allowed on the south side. It has a posted speed limit of 35 mph.

- **Front Street** is a two-lane, north-south roadway, on the western side of the study area and adjacent to the Sacramento River. The roadway connects to Downtown and Old Sacramento to the north and the Sacramento Marina to the south of Broadway. Bike lanes exist along both sides of the roadway; however, sidewalks and on-street parking are intermittent. The posted speed limit is 40 mph.
- **3<sup>rd</sup> Street** is a north-south street on the western side of the study area. 3rd Street is discontinuous on either side of Broadway, creating two nearby intersections. North of Broadway, 3rd Street is a one-way southbound arterial between W Street and X Street. South of Broadway, 3rd Street is a two-lane collector that extends through the specific plan area, terminating south of 1st Avenue.
- **5<sup>th</sup> Street** is a two-lane collector south of Broadway with a posted speed limit of 30 mph. Portions of this street permit on-street parking. North of Broadway, 5th Street is classified as an arterial. The segment immediately north of Broadway has two lanes in each direction, and north of X Street it becomes a one-way street with three northbound lanes.
- **Riverside Boulevard** is a two to four lane, two-way north-south roadway. The roadway transitions into 11th Street north of W Street. No sidewalks or on-street parking exist along the west side of the roadway adjacent to the Sacramento Historic City Cemetery and Masonic Lawn Cemetery. Bicycle lanes exist along both sides of the street. The posted speed limit is 30 mph.

#### **Freeway Facilities:**

- **Business 80/US 50** is a freeway that extends from Interstate 80 in West Sacramento to the State Route 99/US-50 interchange in Midtown Sacramento. Business 80 then extends northward to rejoin Interstate 80 near Watt Avenue, while US-50 continues east to South Lake Tahoe and points beyond. Within the study area, Business 80/US-50 has twelve lanes east of the I-5 interchange with five mainline lanes plus one auxiliary lane in the eastbound direction, and four mainline lanes plus two lanes that exit to I-5 in the westbound direction. On the structure crossing I-5 and the Sacramento River, Business 80/US-50 has eight lanes with four mainline lanes in the eastbound direction, and three mainline lanes plus one auxiliary lane in the westbound direction. Local access from Business 80/US-50 is provided by on and off-ramps at 5th Street, an eastbound on-ramp on X Street, and a westbound off-ramp at W Street.
- **Interstate 5 (I-5)** is a freeway that extends the length of California into Oregon and Washington. Within the study area, I-5 serves as a vital link through Downtown Sacramento. Immediately south of the interchange with Business 80/US-50, I-5 is a ten lane freeway. At its undercrossing of Business 80/US-50, I-5 is a six lane freeway with three mainline lanes in each direction. Local access from I-

5 is provided by a northbound off-ramp at Broadway and a southbound off-ramp at 3rd Street (via the US-50 EB connector ramp).

## Data Collection

Intersection turning movement counts were collected during the morning (7 to 9 AM) and evening (4 to 6 PM) peak periods in May, 2017. The counts included bicycles and pedestrians. In addition, 72-hour roadway counts were collected in March and May, 2017.

Based on the traffic data collection, the AM peak hour occurred from 7:30 to 8:30 AM, and the PM peak hour occurred from 4:30 to 5:30 PM.

## Project Alternatives

The following bridge alignment alternatives are analyzed, as shown previously in Figure 1:

- **Alignment A/B** is the northern most alignment on the West Sacramento side. The bridge connects directly to the South River Road / 15<sup>th</sup> Street intersection. Alignment A and B have a slight variation in the actual alignment across the Sacramento River; however, for purposes of comparing and analyzing the effects on transportation and circulation, they are essentially the same and analyzed as one alternative in this report.
- **Alignment C** is the middle alignment on the West Sacramento side. The bridge connects directly to South River Road, creating a T-intersection south of the South River Road / 15<sup>th</sup> Street intersection.
- **Alignment D** is the southern most alignment on the West Sacramento side. The bridge alignment would create a four-legged intersection at South River Road, and extend west to tie into Jefferson Boulevard / Circle Street.

On the Sacramento side of the bridge, each of the alignments are consistent at Broadway / Front Street. There is some variation in the location of where Marina View Drive would tie into the bridge approach; however, there are no differences in the alignment alternatives on the Sacramento side at the study locations.

## Analysis Scenarios

The following scenarios are analyzed under no build and with each bridge alignment alternative:

- Existing Conditions – represents the baseline condition, upon which project impacts are measured. The baseline condition represents conditions in 2017.

- Opening Year 2030 Conditions – reflects conditions under the opening year of the proposed bridge, which include foreseeable land use growth and planned transportation improvement projects expected to be implemented by year 2030.
- Design Year 2040 Conditions – reflects conditions under the design year of the proposed bridge, which include foreseeable land use growth and planned transportation improvement projects expected to be implemented by year 2040.

## Analysis Methodology

The analysis was conducted for AM and PM peak hour conditions following the prescribed methodology for each facility type contained in the *Highway Capacity Manual* (Transportation Research Board, 2010). Input variables were based on field observed data, estimates, and parameters specified by the City of West Sacramento and City of Sacramento.

The *Highway Capacity Manual* procedures describe traffic operating conditions from a driver’s perspective based on the concept of level of service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades provide an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions. Perspectives from other roadway network users such as bicyclists and pedestrians are not accounted for in this methodology.

Table 4 displays the average control delay per vehicle for each LOS threshold for signalized and unsignalized intersections. For signalized and all-way stop-controlled intersections the LOS is based on the average control delay of all vehicles traveling through the intersection. For side-street stop-controlled intersections, the delay and LOS for the movement with the greatest average delay is reported along with the average delay for the entire intersection.

Level of Service	Average Delay (seconds/vehicle)	
	Signalized	Unsignalized
A	< 10	< 10
B	> 10 to 20	> 10 to 15
C	> 20 to 35	> 15 to 25
D	> 35 to 55	> 25 to 35
E	> 55 to 80	> 35 to 50
F	> 80	> 50

Source: *Highway Capacity Manual* (Transportation Research Board, 2010)

These methodologies were applied using the SimTraffic microsimulation software program, which considers the effects of lane utilization, turn pocket storage lengths, upstream/downstream queue spillbacks, coordinated signal timings, pedestrian crossing activity, and other conditions on intersection and overall corridor operations. Utilization of SimTraffic microsimulation analysis is appropriate given the presence of coordinated signal timing plans, close spacing of signalized intersections, and overall levels of traffic and peak-hour congestion within the study area. Reported results are based on an average of 10 runs.

The following procedures and assumptions were applied in the development of the SimTraffic model.

- Roadway geometric data were gathered using aerial photographs and field observations.
- Peak-hour traffic volumes were entered into the model according to the peak hour of the study area section.
- Signal phasing and timings were based on existing signal timing plans provided by the City of West Sacramento and City of Sacramento.
- The peak hour factor (PHF) was entered for each study section. The value based on the traffic counts was used for all scenarios.
- The heavy vehicle percentage was entered for each study section. The value based on the traffic counts was used for all scenarios.
- Bicycle and pedestrian volumes match the count data collected in May 2017.
- Speeds for the model network were based on the posted speed limits.

The study roadway segments in West Sacramento were evaluated using the City of West Sacramento's Traffic Impact Analysis Guidelines (2006). The study area roadways were assigned a roadway type based on their characteristics. The daily volume table in the guidelines was then used to assign the roadway LOS, as reflected in the following Table 5.

Facility Type	Number of Lanes	Maximum Average Daily Traffic per LOS				
		A	B	C	D	E
Residential	2	600	1,200	2,000	3,000	4,500
Residential collector with access	2	1,600	3,200	4,800	6,400	8,000
Residential collector without access	2	6,000	7,000	8,000	9,000	10,000
Arterial, low access control (4+ stops/miles, many driveways, 25-35 mph)	2	9,000	10,500	12,000	13,500	15,000
Arterial, low access control (4+ stops/miles, many driveways, 25-35 mph)	4	18,000	21,000	24,000	27,000	30,000
Arterial, low access control (4+ stops/miles, many driveways, 25-35 mph)	6	27,000	31,500	36,000	40,500	45,000
Arterial, moderate access control (2-4 stops/miles, few driveways, 35-45 mph)	2	10,800	12,600	14,400	16,200	18,000
Arterial, moderate access control	4	21,600	25,200	28,800	32,400	36,000

(2-4 stops/miles, few driveways, 35-45 mph)						
Arterial, moderate access control (2-4 stops/miles, few driveways, 35-45 mph)	6	32,400	37,800	43,200	48,600	54,000
Arterial, high access control (1-2 stops/miles, no driveways, 45-55 mph)	2	12,000	14,000	16,000	18,000	20,000
Arterial, high access control (1-2 stops/miles, no driveways, 45-55 mph)	4	24,000	28,000	32,000	36,000	40,000
Arterial, high access control (1-2 stops/miles, no driveways, 45-55 mph)	6	36,000	42,000	48,000	54,000	60,000
Rural, 2-lane highway	2	2,400	4,800	7,900	13,500	22,900
Rural, 2-lane road, 24-36' paved, shoulder	2	2,200	4,300	7,100	12,000	20,000
Rural, 2-lane road, 24-36' paved, no shoulder	2	1,800	3,600	5,900	10,100	17,000
Note: LOS = Level of Service						
Source: City of West Sacramento TIA Guidelines, Table 2 – Level of Service Criteria for Roadway Segments, 2006.						

Similarly, the roadway segments in Sacramento were evaluated using the City of Sacramento’s General Plan Level of Service Thresholds for City Roadway Segments (2015). The daily volume thresholds for LOS under each roadway type are presented in Table 6.

Operational Class	Number of Lanes	Maximum Average Daily Traffic per LOS				
		A	B	C	D	E
Arterial, low access control (4+ stops/miles, frequent driveways, 25-35 mph)	2	9,000	10,500	12,000	13,500	15,000
Arterial, low access control (4+ stops/miles, frequent driveways, 25-35 mph)	4	18,000	21,000	24,000	27,000	30,000
Arterial, low access control (4+ stops/miles, frequent driveways, 25-35 mph)	6	27,000	31,500	36,000	40,500	45,000
Arterial, moderate access control (2-4 stops/miles, limited driveways, 35-45 mph)	2	10,800	12,600	14,400	16,200	18,000
Arterial, moderate access control (2-4 stops/miles, limited driveways, 35-45 mph)	4	21,600	25,200	28,800	32,400	36,000
Arterial, moderate access control (2-4 stops/miles, limited driveways, 35-45 mph)	6	32,400	37,800	43,200	48,600	54,000
Arterial, high access control (1-2 stops/miles, no driveways, 45-55 mph)	2	12,000	14,000	16,000	18,000	20,000
Arterial, high access control (1-2 stops/miles, no driveways, 45-55 mph)	4	24,000	28,000	32,000	36,000	40,000
Arterial, high access control (1-2 stops/miles, no driveways, 45-55 mph)	6	36,000	43,000	48,000	54,000	60,000
Collector Street - Minor	2	5,250	6,125	7,000	7,875	8,750
Collector Street - Major	2	8,400	9,800	11,200	12,600	14,000
Collector Street - Major	4	16,800	19,600	22,400	25,200	28,000
Local Street	2	3,000	3,500	4,000	4,500	5,000
Note: LOS = Level of Service						
Source: City of Sacramento 2035 General Plan, Table 3-3 – Level of Service Thresholds for City Roadway Segments, 2015.						

## Existing Conditions

This section describes the physical and operational characteristics of the existing transportation system within the study area, including the roadway, bicycle, pedestrian, and transit facilities.

### Roadway System

The roadway system is analyzed under Existing Conditions at the study intersections, freeway off-ramps, and roadway segment locations previously identified.

### Intersection Traffic Volumes

Based on the traffic data collection, the AM and PM peak hour intersection volumes are shown in Figure 3.

### Intersection Operations

Table 7 summarizes the Existing AM and PM peak hour intersection operations at the study intersections. As shown, all intersections operate at LOS C or better, reflective of generally light levels of congestion. Key travel patterns during the AM peak hour include high demand of volume entering the US 50 eastbound on-ramp at South River Road, which creates queuing that spills back to the eastbound left-turn and northbound through movements at the Jefferson Boulevard/15<sup>th</sup> Street intersection. During the PM peak hour, there is a high demand of traffic destined for the I-5 and US 50 on-ramp at X Street/5<sup>th</sup> Street; however, traffic continues to move smoothly without a high level of delay. The LOS at each study intersection is also reflected in Figure 4.

**Table 7: Intersection Operations – Existing Conditions**

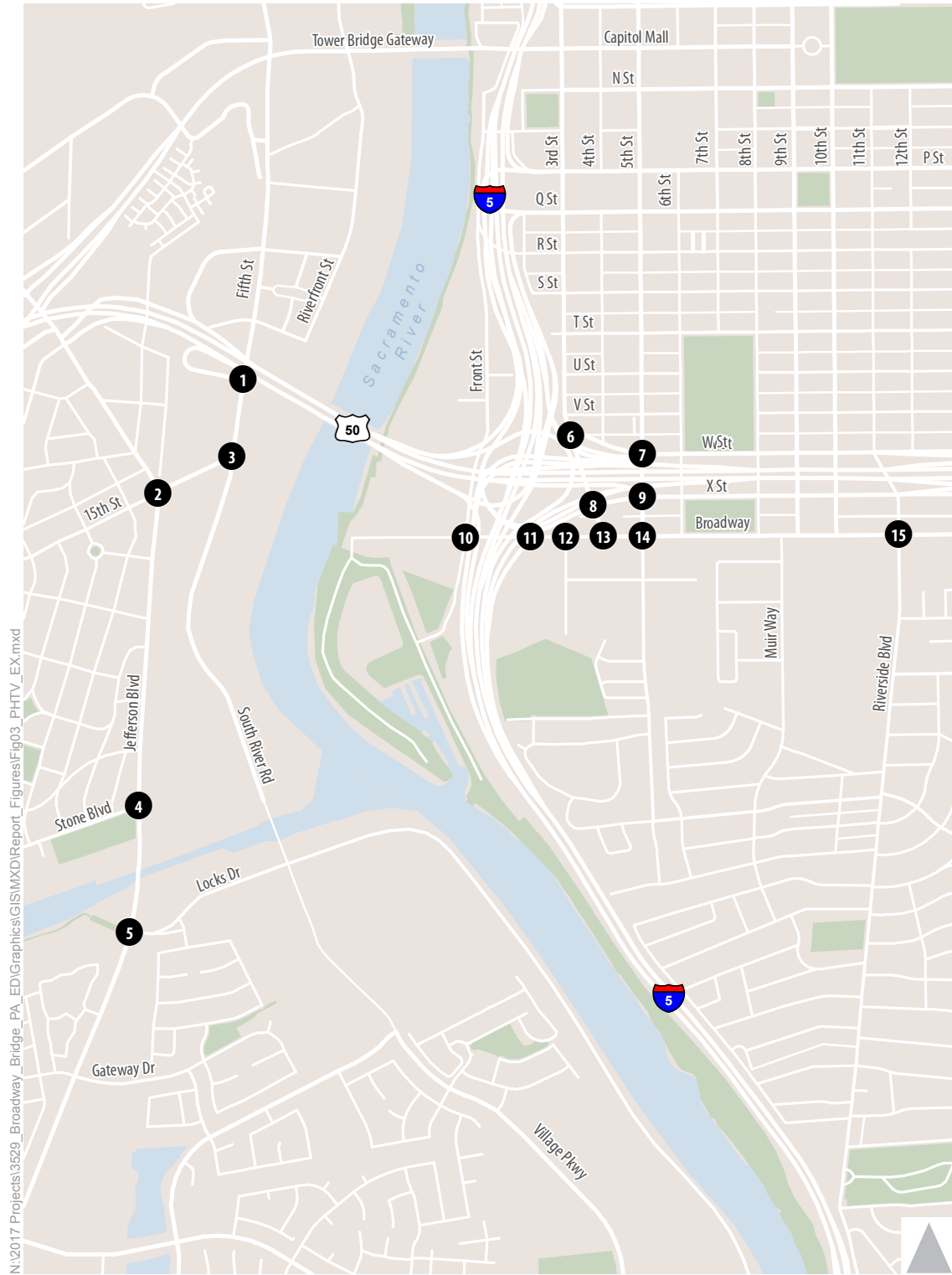
ID	Intersection	Jurisdiction	Control Type	Peak Hour	Existing Conditions	
					Delay	LOS
1	S. River Rd. / US 50 EB On-Ramp	West Sacramento	Uncontrolled	AM	21	C
				PM	11	B
2	Jefferson Blvd. / 15th St.	West Sacramento	Signal	AM	20	B
				PM	23	C
3	S. River Rd. / 15th St.	West Sacramento	Signal	AM	27	C
				PM	24	C
4	Jefferson Blvd. / Stone Blvd.	West Sacramento	Signal	AM	10	A
				PM	15	B
5	Jefferson Blvd. / Locks Dr.	West Sacramento	Signal	AM	6	A
				PM	11	B
6	W St. / 3rd St.	Sacramento	SSSC	AM	1 (5)	A (A)
				PM	1 (9)	A (A)
7	W St. / 5th St.	Sacramento	Signal	AM	10	A
				PM	20	B
8	X St. / 3rd St.	Sacramento	SSSC	AM	3 (7)	A (A)
				PM	3 (9)	A (A)



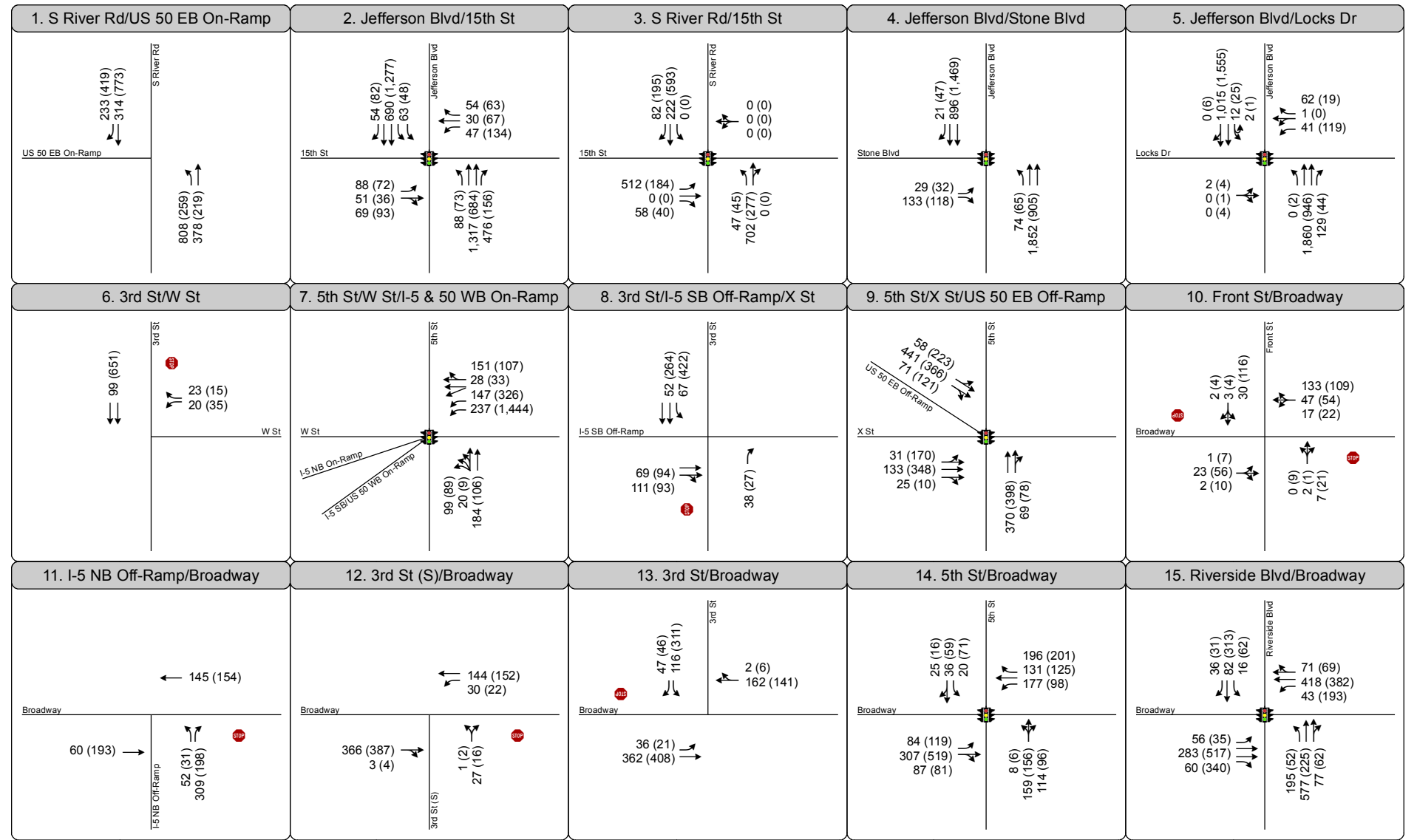
9	X St. / 5th St.	Sacramento	Signal	AM PM	16 25	B C
10	Broadway / Front St.	Sacramento	SSSC	AM PM	1 (5) 2 (5)	A (A) A (A)
11	Broadway / I-5 NB Off-Ramp	Sacramento	SSSC	AM PM	4 (6) 3 (5)	A (A) A (A)
12	Broadway / 3rd St. (South)	Sacramento	SSSC	AM PM	1 (3) 1 (4)	A (A) A (A)
13	Broadway / 3rd St. (North)	Sacramento	SSSC	AM PM	2 (9) 11 (28)	A (A) B (D)
14	Broadway / 5th St.	Sacramento	Signal	AM PM	12 16	B B
15	Broadway / Riverside Blvd.	Sacramento	Signal	AM PM	16 17	B B

Notes: LOS = Level of Service. SSSC = Side Street Stop Controlled  
For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Impacts to intersections are determined based on the overall LOS and average delay. All intersections were analyzed in SimTraffic.

Source: Fehr & Peers, 2020



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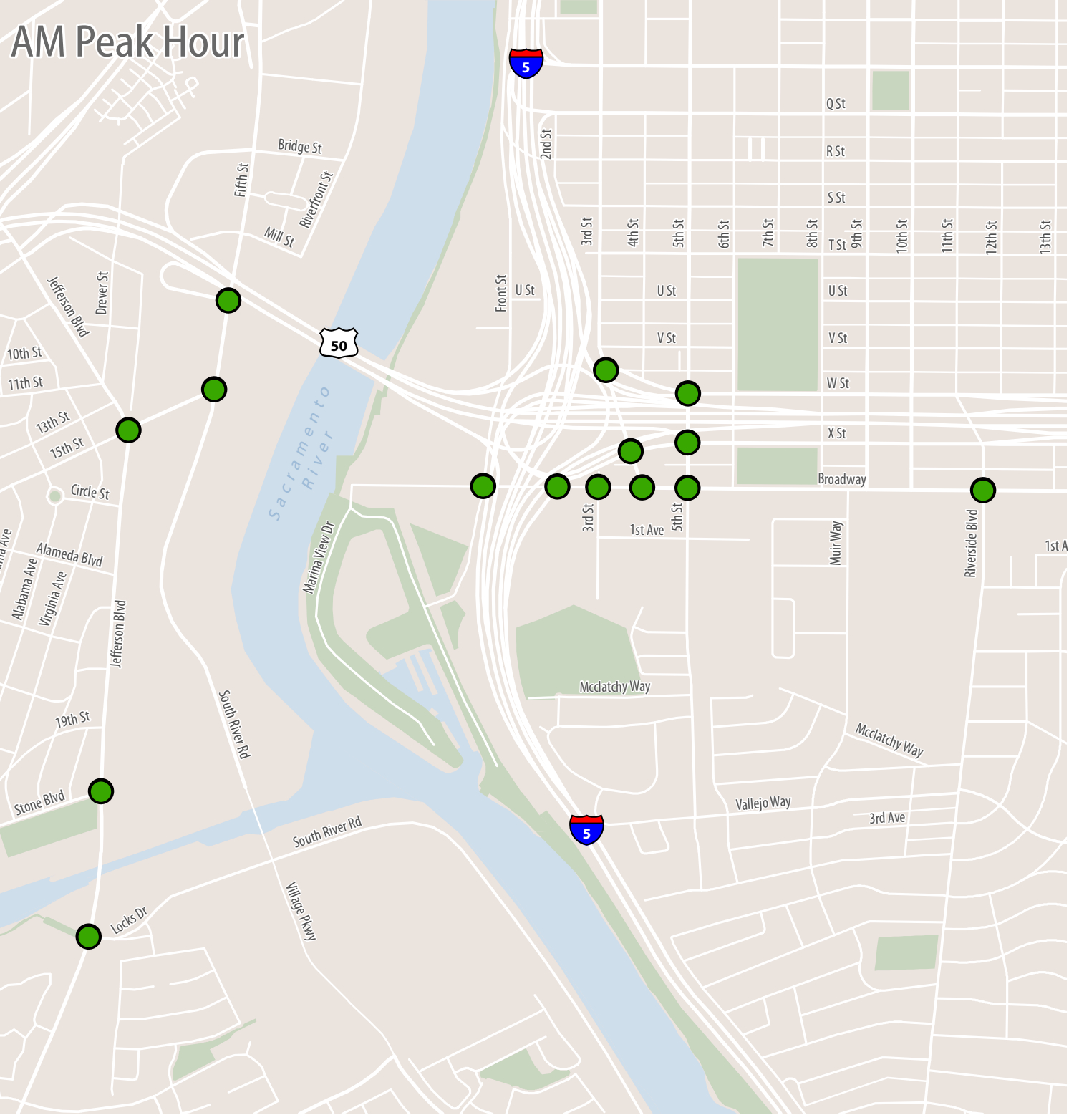
- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

**1** Study Intersection

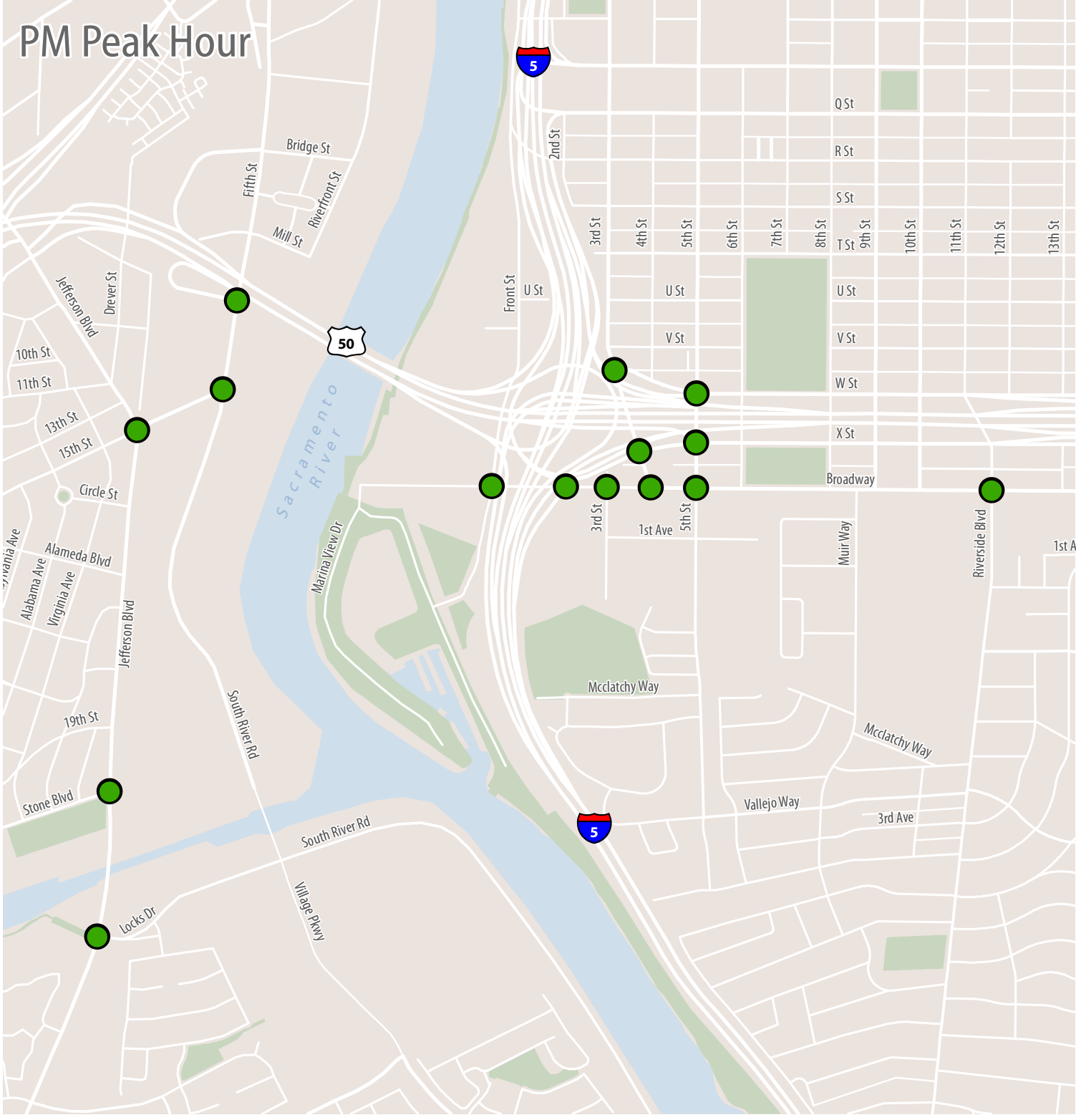


Figure 3  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Existing Conditions

# AM Peak Hour



# PM Peak Hour



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- Level of Service
- A-C
  - D
  - E
  - F



Figure 4

Existing Peak Hour Interseccion LOS

## Freeway Off-Ramp Queuing

The freeway off-ramp queues under the Existing AM and PM peak hours are presented in Table 8. All off-ramp queues remain well below the available storage capacity.

ID	Location	Available Storage (feet)	Peak Hour	Existing Conditions	
				Queue (feet)	
1	I-5 SB Off-Ramp at 3rd St./X St.	1,150	AM	75	
			PM	75	
2	US 50 EB Off-Ramp at 5th St./X St.	1,300	AM	175	
			PM	250	
3	I-5 NB Off-Ramp at Broadway	1,000	AM	75	
			PM	75	

Notes: The available storage length for off-ramp queuing is measured from the noted off-ramp terminal intersection to the freeway off-ramp gore point. Maximum queue length is based upon output from SimTraffic microsimulation software.  
Source: Fehr & Peers, 2020

## Roadway Segment Operations

Table 9 shows the daily roadway segment operations analysis results. All roadway segments operate at LOS D or better, except for Jefferson Boulevard north of 15<sup>th</sup> Street in West Sacramento, which operates at LOS E.

ID	Roadway	Segment	Jurisdiction	Lanes	Existing Conditions	
					LOS	V/C
1	Jefferson Blvd.	North of 15th Street	West Sacramento	4	E	0.93
2	15th St.	West of Jefferson Blvd.	West Sacramento	2	C	0.43
3	Alameda Blvd.	West of Jefferson Blvd.	West Sacramento	2	B	0.24
4	Jefferson Blvd.	South of Alameda Blvd.	West Sacramento	4	D	0.84
5	S. River Rd.	South of 15th St. (Alameda Blvd.)	West Sacramento	2	B	0.62
6	Jefferson Blvd.	South of Locks Dr.	West Sacramento	4	D	0.85
7	3rd St.	North of W St.	Sacramento	2	A	0.21
8	5th St.	North of W St.	Sacramento	2	A	0.18
9	5th St.	South of Broadway	Sacramento	2	D	0.80
10	Riverside Blvd.	South of Broadway	Sacramento	2	D	0.81

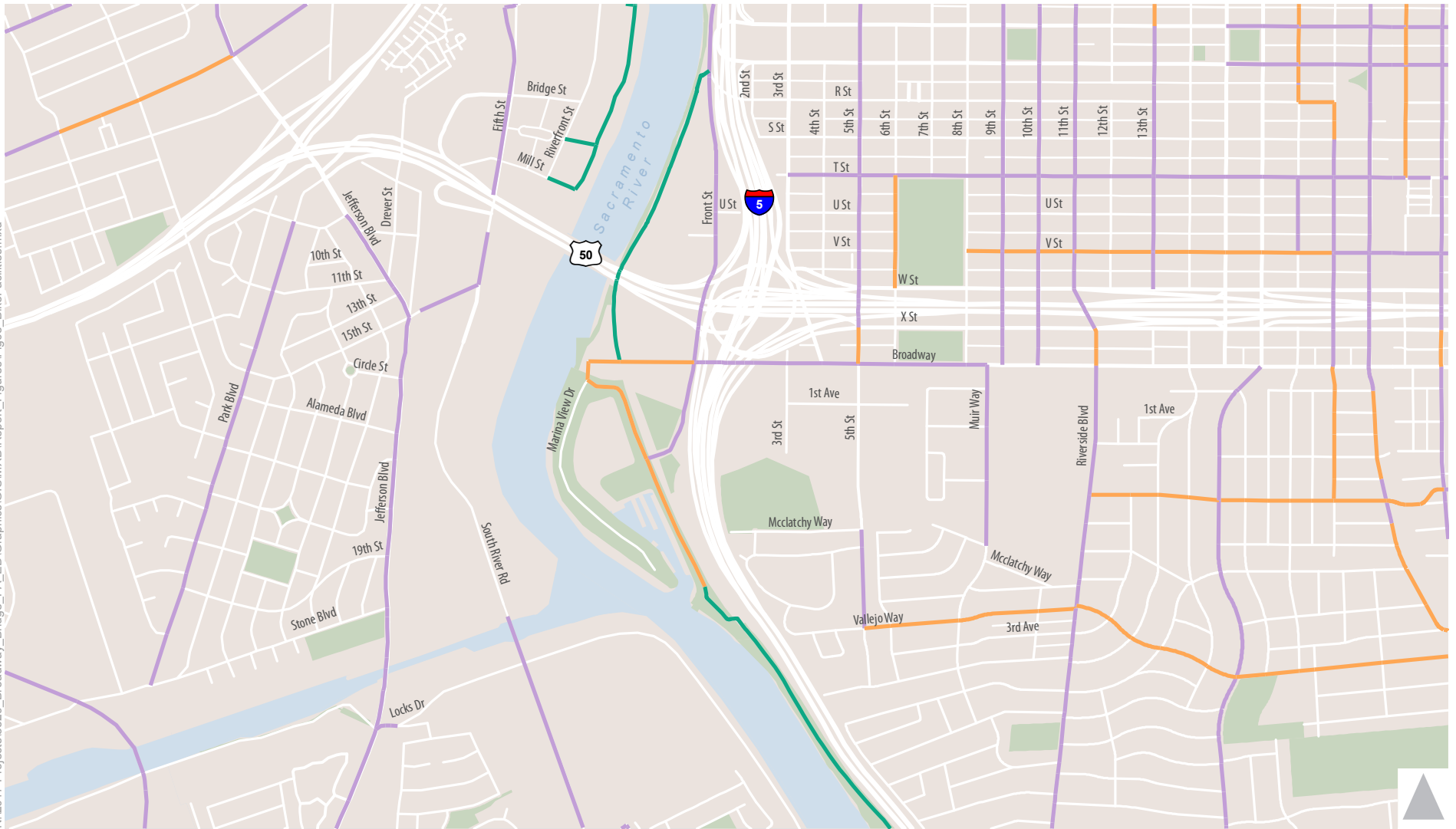
Notes: LOS = Level of Service. V/C = Volume to Capacity Ratio  
Source: Fehr & Peers, 2020

## Bicycle System

Figure 5 displays the existing bicycle infrastructure, which consists of the following facilities as defined by the *Highway Design Manual* (Caltrans, 2012):

- Multi-use paths (Class I) – are paved trails that are separated from roadways and allow for shared use by both cyclists and pedestrians.
- On-street bike lanes (Class II) – are designated for use by bicycles by striping, pavement legends, and signs.
- On-street bike routes (Class III) – are designated by signage for shared bicycle use with vehicles but do not necessarily include any additional pavement width.

As shown, the River Walk Trail (Class 1 multi-use path) runs along the West Sacramento side of the Sacramento River, but terminates at Mill Street. Class II bicycle lanes are intermittent along South River Road as it transitions from 5<sup>th</sup> Street to the north to Village Parkway to the south. The Sacramento River Bike Trail (Class 1 multi-use path) runs along the Sacramento side of the river, transitioning as a Class III bike route through Miller Regional Park. In addition, bicycle lanes exist on Broadway between Front Street and Muir Way.



- Existing Bicycle Facilities
- Class I Bike Path
  - Class II Bike Lane
  - Class III Bike Route

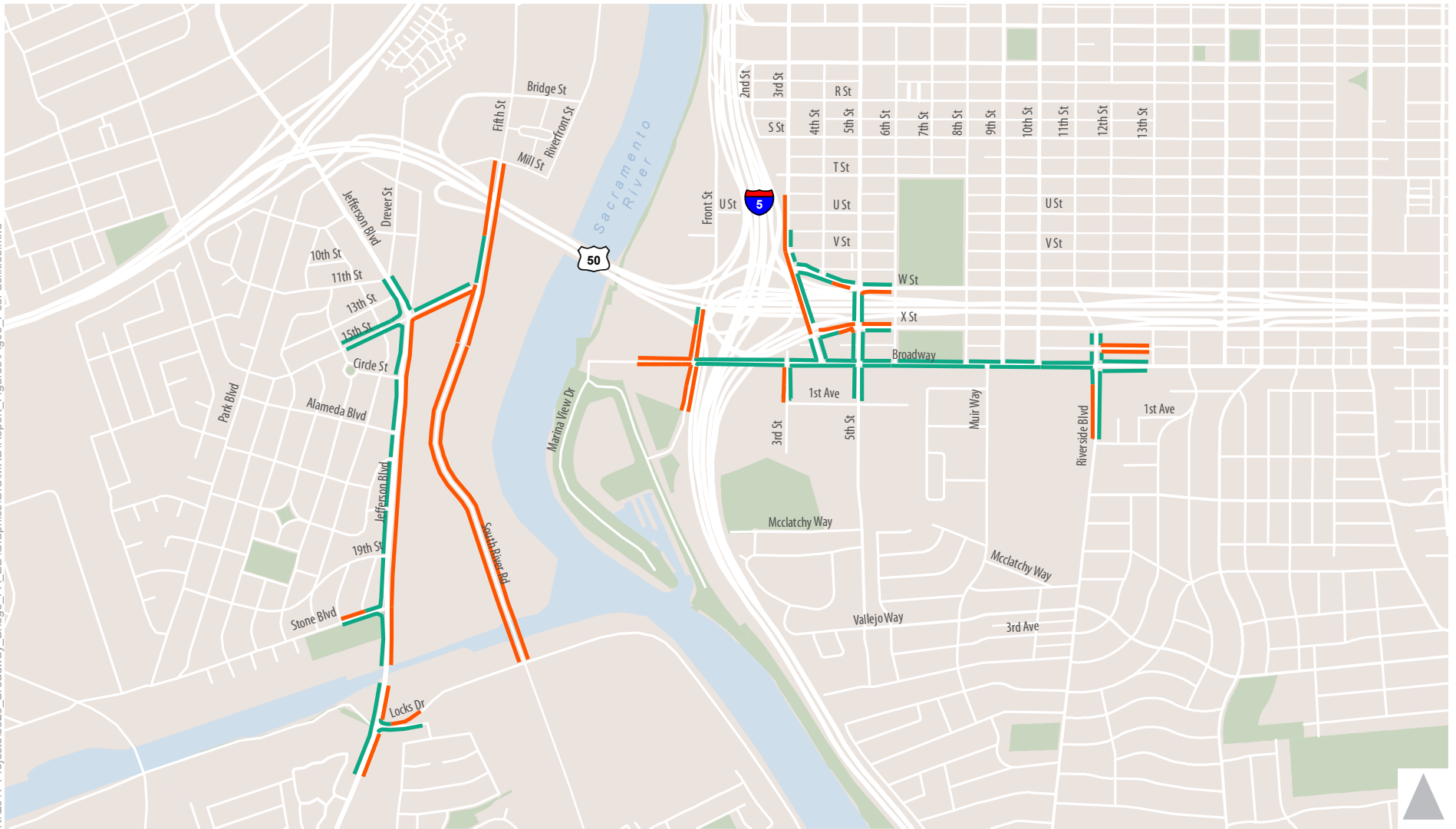


Figure 5  
Existing Bicycle Facilities

## **Pedestrian System**

Figure 6 shows the existing pedestrian facilities and highlights locations where sidewalks are missing. As shown, sidewalk connectivity within the study area is intermittent. Although some roadways have continuous sidewalks lining both sides of the street, many have discontinuous sidewalks or lack sidewalks on one side. Notable locations where sidewalks are missing include most of South River Road and the east side of Jefferson Boulevard in West Sacramento, and the section of Broadway west of Front Street in Sacramento.





- Missing Sidewalk
- Existing Sidewalk

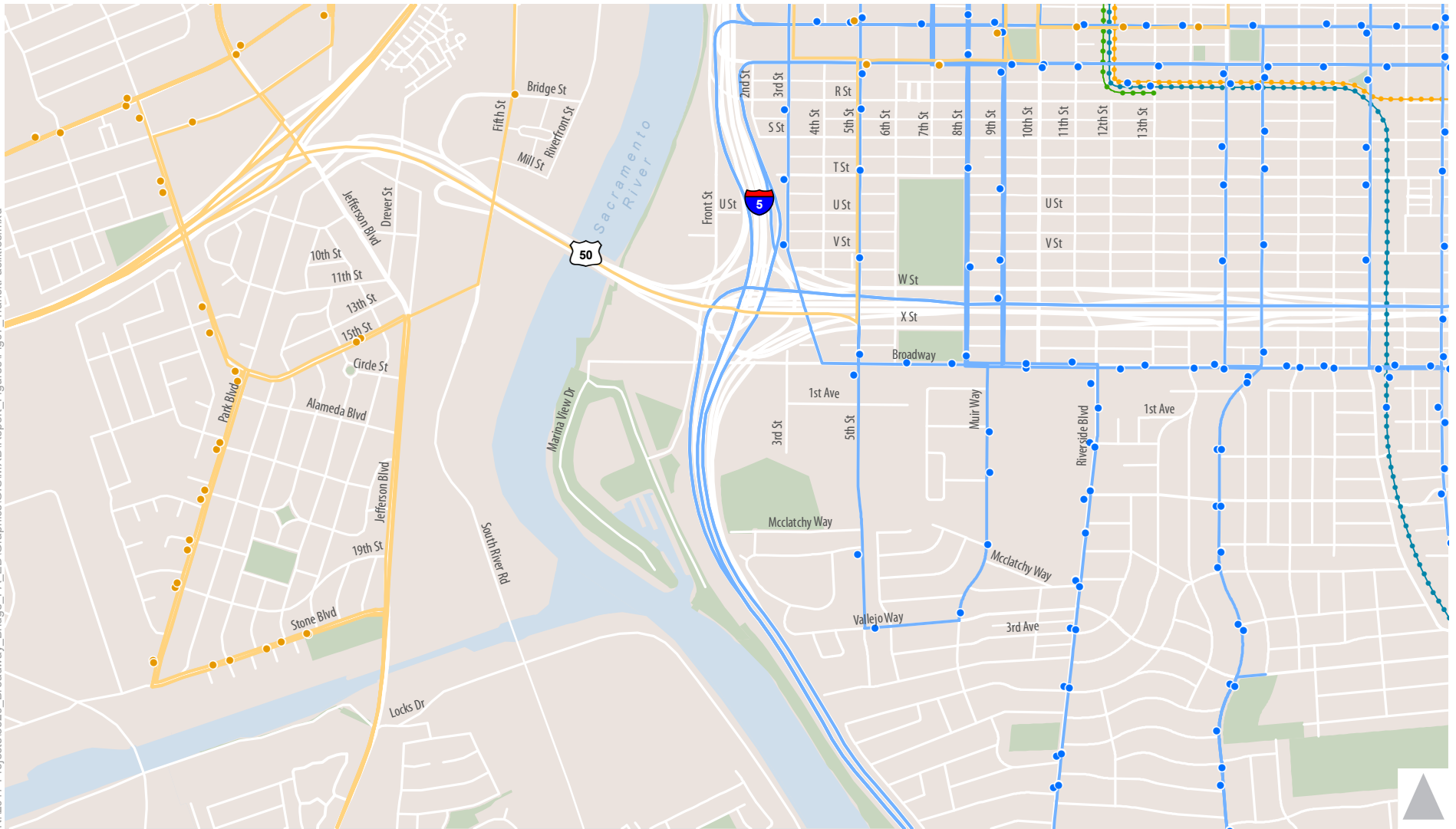


Figure 6  
Existing Pedestrian Facilities



## Transit System

Local transit service in the study area is provided by both the Sacramento Regional Transit District (RT) and the Yolo County Transportation District (Yolobus). The transit routes and stops for both RT and Yolobus are shown in Figure 7. Currently, Yolobus route 39, a commuter bus between the Southport area of West Sacramento and Downtown Sacramento, is the only bus that provides connection across the Sacramento River within the study area.



- Yolobus Stop
- Yolobus Route
- SacRT Stop
- SacRT Route
- Sac RT Light Rail
- Blue Line
- Gold Line
- Green Line



Figure 7  
Transit Facilities

# Regulatory Setting

## Federal Requirements

Caltrans, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR Part 27) implementing Section 504 of the Rehabilitation Act (29 USC 794). FHWA has enacted regulations for implementation of the ADA, including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to federal-aid projects, including Transportation Enhancement Activities.

## State Requirements

### Interstate 5 Transportation Corridor Concept Report

In 2017, the California Department of Transportation (Caltrans) released the Interstate 5 Transportation Concept Report (TCR) that includes portions of Interstate 5 (I-5) within the study area. Figure 1 of this report shows existing operations on I-5 within the study area as being at level of service (LOS) F. The report also indicates a Concept LOS E for this corridor. The ultimate concept LOS represents the minimum acceptable service conditions over the next 20 years. The TCR indicates that the No-Build and Build scenarios will not meet the LOS E ultimate concept LOS, and that targeted operational improvements, intelligent transportation systems, and integrated corridor management will be needed.

### US 50 Transportation Concept Report and Corridor System Management Plan

In 2014, Caltrans released the United States Route 50 Transportation Concept Report and Corridor System Management Plan for portions of United States Route 50 (US 50) within the study area. Table 13 of this report shows existing operations on US 50 west of the Sacramento River as being at LOS E, and east of the river at LOS F. The report also indicates a Concept LOS E for this corridor.

The above-referenced Caltrans LOS results are based on daily volume-to-capacity comparisons and do not necessarily consider specific operational characteristics (e.g., length of weave sections, peak hour factors,

etc.) within the I-5 and US 50 corridors. Nevertheless, these data are valuable in understanding Caltrans' expectations of their current and projected operating performance.

### **Senate Bill 743**

Senate Bill (SB) 743, passed in 2013, required the California Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." OPR recently updated its CEQA Guidelines to implement SB 743 and require that vehicle miles traveled (VMT) be the primary metric used to identify transportation impacts. Local agencies have an opt-in period until July 1, 2020.

## **Regional Requirements**

### **2036 Metropolitan Transportation Plan/Sustainable Communities Strategy**

The Sacramento Area Council of Governments (SACOG) is responsible for the preparation of, and updates to, the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) and the corresponding Metropolitan Transportation Improvement Program (MTIP) for the six-county Sacramento region (SACOG 2016). The MTP/SCS provides a 20-year transportation vision and corresponding list of projects. The MTIP identifies short-term projects (7-year horizon) in more detail. The MTP/SCS was adopted by the SACOG board in 2016. Subsequent to the completion of the analysis documented in this report, SACOG adopted the 2040 MTP/SCS in November 2019.

### **Regional Bicycle, Pedestrian and Trails Master Plan**

The Regional Bicycle, Pedestrian and Trails Master Plan (2013) is a comprehensive list of planned projects prepared by SACOG. This is the first plan shaped by the goals and strategies of the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) adopted in 2012.

## **Local Requirements**

### **City of West Sacramento General Plan 2035**

The *City of West Sacramento General Plan 2035* was adopted in 2016. The Mobility Element of the General Plan outlines goals and policies related to the City's transportation system. The following LOS policy is relevant to this study:

**Policy M-3.2** Automobile Level of Service: The City shall endeavor to maintain a Level of Service "C" on all streets within the City, except at intersections and on roadway segments within one-quarter mile of a

freeway interchange or bridge crossing of the Deep Water Ship Channel, barge canal, or Sacramento River, where a Level of Service "D" shall be deemed acceptable, and within pedestrian oriented, high density, mixed use areas, such as the Bridge District Specific Plan area, the Washington Specific Plan area, and West Capitol Avenue from Harbor Blvd. east, where a Level of Service "E" shall be deemed acceptable. For purposes of CEQA impact analyses, Level of Service shall be considered as part of General Plan consistency.

The following policies from the City of West Sacramento 2035 General Plan are also applicable to this study:

**Policy M-1.1** Connectivity: The City shall strive to develop a comprehensive, safe, and fully integrated multimodal transportation system that connects residents, visitors, and employees to the city and region through all available modes including connected vehicles, car/bikeshare, and autonomous modes.

**Policy M-1.2** Multi-Modal Corridors: The City shall establish multi-modal corridors and hubs within and between urban centers and along major corridors

**Policy M-1.3** Reduce Vehicle Miles Travelled: The City shall endeavor to reduce vehicle miles travelled (VMT) and dependence on fossil fuels by continuing to develop a comprehensive multi-modal transportation system and compact, mixed-use development that includes more transit, bicycle, and pedestrian routes.

**Policy M-1.5** Transportation Planning Efforts: The City shall continue to participate in State, regional, and local transportation planning efforts to insure coordination of the expansion and improvement of the region's transportation system.

**Policy M-1.7** Multimodal Access: As part of the site design during design review for new developments, the City shall incorporate multi-modal access to civic and commercial centers, employment centers, transit stops/stations, schools, parks, recreation areas, and tourist attractions.

**Policy M-1.8** Overcoming Barriers to Accessibility: The City shall strive to remove and minimize the effects of natural and manmade barriers, such as the Capital City Freeway, railways, Sacramento River, and the Deep Water Ship Channel, on accessibility between and within existing neighborhoods and districts.

**Policy M-1.9** Eliminate Gaps: The City shall strive to eliminate roadway, bikeway, and pedestrian way gaps between neighborhoods and districts to create a completely connected city.

**Policy M-1.11** Transportation Impact Studies: The City shall maintain guidelines for Transportation Impact Studies for new developments that identify, evaluate, and address impacts on all modes of travel.

**Policy M-2.4** Accessibility: The City shall endeavor to ensure that all streets are safe and accessible to people with disabilities and others with limited mobility. Streets shall be designed and reconstructed to meet the requirements of the Americans with Disabilities Act (ADA).

**Policy M-2.5** Street Amenities: The City shall require public transit, bicycle, and pedestrian amenities in street design to promote the walking, bicycling, and public transit use and complement the context of nearby centers, corridors, and neighborhoods.

**Policy M-2.7** Complete Streets Requirements: The City, to the extent feasible, shall require that all new street construction and reconstruction be designed to achieve complete streets. Exceptions to complete streets design shall require approval of the Planning Commission.

**Policy M-2.9** Street Design Standards: The City shall require that streets be dedicated, widened, extended, and constructed to provide for a well-connected, walkable community (preferably a grid or modified grid), according to City street design standards and complete streets concepts.

**Policy M-2.11** Complete Bridges: The City shall ensure, to the extent that bridges and overpasses include infrastructure, features, and amenities to provide a continuous, unbroken system of complete streets within the city and to provide a welcoming entrance at the city's gateways.

**Policy M-2.12** Adequate Travel and Crossing of Right of Ways: The City shall ensure that in constructing and reconstructing streets that adequate rights-of-way and crossing of rights-of-way be provided for all users including bicyclists, pedestrians, transit riders, and motorists.

**Policy M-2.13** Reduce Conflicts: The City shall endeavor to ensure that bicycle, pedestrian, and public transit facilities are constructed to minimize conflicts among bicyclists, pedestrians, transit operators/users, and motorists.

**Policy M-3.1** Safe and Efficient: The City shall ensure that the roadway system, street designs, and access provide for redundant (i.e., multiple routes), safe, and efficient movement of goods and people.

**Policy M-4.1** Access to Public Transit: The City shall strive to ensure that all residents have access to adequate and safe public transit options that reduce dependence on fossil fuels and increase physical activity.

**Policy M-4.5** Transit-friendly Streets: The City shall ensure that new streets install infrastructure, features, and amenities that support transit use; are safe, convenient, clean, and efficient; are clearly marked and accessible; and include shelters, benches, and adequate lighting.

**Policy M-4.9** Light Rail/Street Cars: The City shall cooperate with Sacramento Regional Transit District (RT), YoloBus, Yolo TMA, and the City of Sacramento to support and actively pursue extension of light rail/street cars into West Sacramento to serve the Civic Center/Central Business District, the Washington

neighborhood, and the Bridge District. Considerations for future extensions should be given to areas where development patterns will support streetcar ridership, such as Pioneer Bluff.

**Policy M-5.1** Bike and Pedestrian Plan: The City shall maintain and implement a Bike and Pedestrian Plan that requires new development to be consistent with the applicable portions of the Plan as well as the goals and policies of the General Plan.

**Policy M-5.3** Bicycle Routes: The City shall develop, adopt and implement a safe and convenient network of identified bicycle routes connecting residential areas with recreation, parks, scenic areas, the riverfront, schools, the Central Business District, public facilities, shopping, and employment areas within the city.

**Policy M-5.6** Appropriate Bikeways: The City shall ensure that, to the maximum extent possible, an appropriate system of low-stress bikeways that encourages cyclists of all skill levels that includes Class I, II, and III facilities is maintained in appropriate areas of the city.

**Policy M-6.1** Cohesive Network: The City shall develop a cohesive pedestrian network of public sidewalks and street crossings that makes walking a convenient and safe way to travel.

**Policy M-6.2** Continuous Network: The City shall provide a continuous pedestrian network in existing and new neighborhoods that facilitates convenient pedestrian travel free of major impediments and obstacles.

**Policy M-6.3** Pedestrian-friendly Streets: The City shall ensure that new streets in areas of high pedestrian activity support safe and attractive travel by providing features and amenities such as separated sidewalks, bicycle lanes and separated paths, pedestrian signals, street trees, seats, and pedestrian-scale lighting.

**Policy M-6.7** Safe Pedestrian Crossings: The City shall improve pedestrian safety at intersections and mid-block locations by providing pedestrian treatments such as well-marked pedestrian crossings, bulbouts, or median refuges that reduce crossing widths, and/ or audible pedestrian signals.

### **West Sacramento Bicycle, Pedestrian, and Trails Master Plan**

The *2013 West Sacramento Bicycle, Pedestrian, and Trails Master Plan* (Fehr & Peers, 2013) identifies current and proposed bicycle facilities in the City of West Sacramento. The plan proposes to convert the existing Class II on-street bike lanes on West Capitol Avenue from Glide Avenue to Poplar Avenue to a Class III bike route. The Class III route would be provided on future frontage roads that are planned to be added to this section of West Capitol Avenue per the *2007 West Capitol Avenue Streetscape Master Plan*. Class II on-street bike lanes are proposed to be added to Jefferson Boulevard between West Capitol Avenue and Park Boulevard. Elsewhere in the study area, the existing bicycle facilities would remain.

## City of Sacramento 2035 General Plan

On March 3, 2015, the City of Sacramento City Council adopted the 2035 General Plan. The Mobility Element of the City of Sacramento's 2035 General Plan outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The following LOS policy is relevant to this study:

**Policy M 1.2.2:** The City shall implement a flexible context-sensitive Level of Service (LOS) standard and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure vehicle LOS based on the methodology contained in the latest version of the Highway Capacity Manual (HCM) published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday conditions, including AM and PM peak hour, with certain exceptions mapped on Figure M-1 (and listed in the actual General Plan document).

- A. Core Area (Central City Community Plan Area) – LOS F allowed
- B. Priority Investment Areas – LOS F allowed
- C. LOS E roadways (11 distinct segments listed). LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of a light rail stations.
- D. LOS F roadways (24 distinct segments listed)
- E. If maintaining the above LOS standards would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation and/or implement vehicle trip reduction measures as part of a development project or a city-initiated project. Additionally, the City shall not expand the physical capacity of the planned roadway network to accommodate a project beyond that identified in Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

According to Figure M1 (Vehicle Level of Service Exception Areas) of the 2035 City of Sacramento General Plan, the proposed project is located within one of three Priority Investment Areas. The project site is also located within the Core Area, which is bounded by the Sacramento River, American River, Broadway, and Alhambra Boulevard. All study intersections are located within the Core Area as well as a Priority Investment Area; therefore, LOS F is allowed at all study locations. The City's policy was adopted to allow decreased levels of service (i.e., LOS F) in the urbanized Core Area of the City that supports more transportation



alternatives and places residents proximate to employment, entertainment, retail and neighborhood centers and thus reduces overall vehicle miles traveled and results in environmental benefits (e.g., improved air quality and reduced GHG emissions). Based on this evaluation, the City determined that LOS F is considered acceptable during peak hours within the Core Area.

The following policies from the City of Sacramento 2035 General Plan are also applicable to this study:

**Policy M 1.1.1: Rights-of-Way.** The City shall preserve and manage rights-of-way consistent with: the circulation diagram, the City Street Design Standards, the goal to provide Complete Streets as described in Goal M 4.2, and the modal priorities for each street segment and intersection established in Policy M4.4.1: Roadway Network Development, Street Typology System.

**Policy M 1.2.3: Transportation Evaluation.** The City shall evaluate discretionary projects for potential impacts to traffic operations, traffic safety, transit service, bicycle facilities, and pedestrian facilities, consistent with the City's Traffic Study Guidelines.

**Policy M 1.2.4: Multimodal Access.** The City shall facilitate the provision of multimodal access to activity centers such as commercial centers and corridors, employment centers, transit stops / stations, airports, schools, parks, recreation areas, medical centers, and tourist attractions.

**Policy M 1.3.1: Grid Network.** To promote efficient travel for all modes, the City shall require all new residential, commercial or mixed-use development that proposes or is required to construct or extend streets to develop a transportation network that is well-connected, both internally and to off-site networks preferably with a grid or modified grid-form.

**Policy M 1.3.2: Eliminate Gaps.** The City shall eliminate "gaps" in roadways, bikeways, and pedestrian networks. To this end:

- A. The City shall construct new multi-modal crossings of the Sacramento and American Rivers.
- B. The City shall plan and pursue funding to construct grade-separated crossings of freeways, rail lines, canals, creeks, and other barriers to improve connectivity.
- C. The City shall construct new bikeways and pedestrian paths in existing neighborhoods to improve connectivity.

**Policy M 1.3.3: Improve Transit Access.** The City shall support the Sacramento Regional Transit District (RT) in addressing identified gaps in public transit networks by working with RT to appropriately locate passenger facilities and stations, pedestrian walkways and bicycle access to transit stations and stops, and

public rights-of-way as necessary for transit- only lanes, transit stops, and transit vehicle stations and layover.

**Policy M 2.1.2:** Sidewalk Design. The City shall require that sidewalks wherever possible be developed at sufficient width to accommodate all users including persons with disabilities and complement the form and function of both the current and planned land use context of each street segment (i.e., necessary buffers, amenities, outdoor seating space).

**Policy M 2.1.4:** Cohesive and Continuous Network. The City shall develop a pedestrian network of public sidewalks, street crossings, and other pedestrian paths that makes walking a convenient and safe way to travel citywide. The network should include a dense pattern of routes in pedestrian-oriented areas such as the Central City and include wayfinding where appropriate.

**Policy M 3.1.12:** New Facilities. The City shall work with transit providers and private developers to incorporate transit facilities into new private development and City project designs including incorporation of transit infrastructure (i.e., electricity, fiber-optic cable), alignments for transit route extensions, new station locations, bus stops, and transit patron waiting area amenities (i.e., benches, real-time traveler information screens).

**Policy M 3.1.14:** Direct Access to stations. The City shall ensure that development projects located in the Central City and within ½ mile walking distance of existing and planned light rail stations provide direct pedestrian and bicycle access to the station area, to the extent feasible.

**Policy M 3.1.16:** Streetcar Facilities. The City shall support the development of streetcar lines and related infrastructure and services in the Central City and other multi-modal districts.

**Policy M 4.2.1:** Accommodate All Users. The City shall ensure that all new roadway projects and any reconstruction projects designate sufficient travel space for all users including bicyclists, pedestrians, transit riders, and motorists except where pedestrians and bicyclists are prohibited by law from using a given facility.

**Policy M 4.2.2:** Pedestrian- and Bicycle-Friendly Streets. In areas with high levels of pedestrian activity (e.g., employment centers, residential areas, mixed-use areas, schools), the City shall ensure that all street projects support pedestrian and bicycle travel. Improvements may include narrow lanes, target speeds less than 35 miles per hour, sidewalk widths consistent with the Pedestrian Master Plan, street trees, high-visibility pedestrian crossings, and bikeways (e.g. Class II and Class III bike lanes, bicycle boulevards, separated bicycle lanes and/or parallel multi-use pathways).

**Policy M 4.2.5:** Multi-Modal Corridors. Consistent with the Roadway Network and Street Typologies established in this General Plan, the City shall designate multi-modal corridors in the Central City, within

and between urban centers, along major transit lines, and/ or along commercial corridors appropriate for comprehensive multimodal corridor planning and targeted investment in transit, bikeway, and pedestrian path improvements if discretionary funds become available.

**Policy M 4.4.4:** Traffic Signal Management. To improve traffic flow and associated fuel economy of vehicles traveling on city streets, the City shall synchronize the remaining estimated 50 percent of the city's eligible traffic signals by 2035, while ensuring that signal timing considers safe and efficient travel for all modes.

**Policy M 5.1.2:** Appropriate Bikeway Facilities. The City shall provide bikeway facilities that are appropriate to the street classifications and type, number of lanes, traffic volume, and speed on all rights-of-way.

**Policy M 5.1.3:** Continuous Bikeway Network. The City shall provide a continuous bikeway network consisting of bike-friendly facilities connecting residential neighborhoods with key destinations and activity centers (e.g., transit facilities, shopping areas, education institutions, employment centers).

**Policy M 5.1.5:** Motorists, Bicyclists, and Pedestrian Conflicts. The City shall develop safe and convenient bikeways, streets, roadways, and intersections that reduce conflicts between bicyclists and motor vehicles on streets, between bicyclists and pedestrians on multi-use trails and sidewalk, and between all users at intersections.

**Policy M 5.1.6:** Connections between New Development and Bicycle Facilities. The City shall require that new development provides connections to and does not interfere with existing and proposed bicycle facilities.

**Policy M 5.1.7:** Bikeway Requirements. The City shall provide bike lanes on all repaved and/ or reconstructed arterial and collector streets to the maximum extent feasible. The appropriate facility type for each roadway segment shall be consistent with the Roadway Network and Street Typologies defined in this General Plan.

### **Central City Specific Plan**

In April of 2018, the City of Sacramento adopted the Central City Specific Plan (CCSP) that establishes a future vision for the Sacramento Central City area, which includes the site of the proposed project. The following policies from the CCSP Mobility section apply to this study.

**Policy M.1.1** Neighborhood Connections. Improve connections between the Central City and surrounding neighborhoods, especially for walking, bicycling, and transit trips.

**Policy M.1.2** Commercial Corridors. Enhance commercial corridors for safe walking and bicycling while accommodating both through and local traffic.

**Policy M.1.3** Grid Connectivity. Preserve and enhance the high level of connectivity provided by the street grid for all travel modes.

**Policy M.1.4** Curb Cuts for Driveways. Discourage new curb cuts for driveways for properties with adequate alley access.

**Policy M.1.5** Complete Streets. Promote two-way travel, support use of smart technologies to improve mobility, support pilot projects to test out mobility options, and encourage convenient and affordable transit options.

**Policy M.1.6** Riverfront Connections. Integrate the Riverfront into the grid through improved connections, emphasizing visibility, wayfinding, and enhanced pedestrian and bicycle routes that highlight the riverfront destination.

**Policy M.2.1** Safe Travel Modes. Target safe mobility for all travel modes, working in concert with the Vision Zero Action Plan and the Council-adopted goal of zero traffic fatalities and serious injuries by 2027.

**Policy M.2.2** Neighborhood Streets. Ensure neighborhood streets are places where people feel safe to walk and bike.

**Policy M.3.1** Minimize Conflicts. Promote safety and efficiency for all travel modes by prioritizing modes by block, minimizing conflicts between competing modes on high volume (transit, bike, motor vehicle) routes.

**Policy M.3.2** Balanced Network. Reduce the number of lanes dedicated to automobiles in order to regain right-of-way for other modes to balance the network

**Policy M.4.1** Bicycle Network Projects and Improvements. Pursue bicycle network projects and improvements that accomplish the following objectives:

- a. Fill gaps in the existing bicycle network by adding new facilities through travel lane reductions and conversions.
- b. Provide new buffered and/or protected bike lanes.
- c. Complete the bicycle network between the Sacramento and American Rivers consistent with adopted plans.
- d. Establish a more complete Low Stress Bicycle Network with appropriate crossing treatments at high volume streets.

**Policy M.5.1** Pedestrian Network Projects and Improvements. Pursue pedestrian network projects and improvements that accomplish the following objectives:

- a. Streetscape projects for commercial/transit streets to improve conditions for walking.
- b. Improve connections between the Central City and surrounding neighborhoods (“Connector Street Enhancements”).
- c. Provide new sidewalks where they don’t currently exist (“Gap Projects”).
- d. Increase sidewalk capacity in areas with high pedestrian volumes (“Activity Center Enhancements”).
- e. Shaded sidewalks and improved street lighting.

**Policy M.5.2** Walkability. Preserve a high level of walkability across the grid by minimizing pedestrian delay at intersections.

**Policy M.6.1** Transit Connectivity. Promote transit connectivity with transit stops and stations that facilitate attractive and convenient transfers between light rail, streetcar, bus services, and that support active transportation connections.

**Policy M.6.2** Regional Transit Hub. Preserve and strengthen the role of the Central City as the hub of the regional transit system.

**Policy M.6.3** Transit Network Expansion. Support transit network expansion and improvement and coordinate transit planning and operations between transit operators serving the Central City.

**Policy M.6.4** Streetcar. Promote visibility and access to the streetcar line, light rail stations and other key public transit facilities through enhanced pedestrian and bicycle connections, lighting, and wayfinding signage.

**Policy M.6.5** Transit Vehicle Movement. Prioritize transit vehicle movement over the private automobile on blocks with high transit vehicle volumes, high transit ridership, or high levels of transit delay, implementing exclusive lanes and priority signalization per the preferred transit network (Figure 3.9-2).

**Policy M.6.7** Transit Stop Structures. Ensure that transit stop structures are transparent to provide visibility to and support vibrant and inviting storefronts.

**Policy M.6.8** Streetcar Station Design. Ensure streetcar station design that provides a comfortable environment for waiting passengers without compromising the pedestrian and bicycle travel way. A clear pedestrian path should be available when transit is present.

**Policy M.6.9** Sidewalks as Streetcar Station Platforms. Allow sidewalks to serve as station platforms provided that the needs of both the streetcar passengers and pedestrians not utilizing the streetcar service are reasonably accommodated.

**Policy M.6.10** On-Street Parking Minimization. Locate streetcar stops and design length of streetcar platforms that minimize reduction of on-street parking where possible.

**Policy M.6.11** Access to Transit Stations. Support safe and convenient pedestrian and bicycle access to/from light rail and streetcar stations while minimizing conflicts between travel modes.

**Policy M.7.1** High Speed Rail. Advance City engagement with high speed rail planning, emphasizing integration with other transportation modes in the Central City.

**Policy M.7.2** Rail Stations. Partner with transit agencies in the planning and development of appropriate rail stations, in conjunction with developing intercity rail services.

**Policy M.7.3** Regional Rail. Promote the Central City as a regional rail destination connecting Sacramento with the Bay Area, the Central Valley, base of the Sierras and north.

**Policy M.8.1** Minimize Impacts to On-Street Parking. Minimize impacts to on-street parking, including residential permit parking, resulting from development with reduced parking requirements.

**Policy M.8.2** Electric Vehicle Parking and Charging. Ensure availability of public infrastructure for Zero Emission Vehicles to support multi-family and daytime users, including publicly accessible charging in the right-of-way.

**Policy M.8.3** Flexible On-street Curb Space. Promote flexible use of on-street curb space and loading areas in commercial corridors, prioritizing different uses by time of day.

**Policy M.10.1** Emerging Transportation Technologies. Support emerging transportation technologies and services to increase transportation system efficiency. Allow for flexibility in the transportation network to take advantage of alternate methods to achieve mobility goals.

**Policy M.10.2** Zero-emission and Low-emission Vehicles. Continue to collaborate with State and regional partners to support rapid adoption of zero-emission and low-emission vehicles, which involves the following objectives:

- a. Standardizing infrastructure and regulations for public EV charging stations.
- b. Developing guidelines and standards for dedicated and preferential parking for zero- and low-emission vehicles (including charging stations for plugin EVs, where necessary).

- c. Expanding access to zero emission transportation for multifamily and low income households
- d. Allowing a diversity of business models and approaches to enable zero emission technology (such as free chargers operated by a third party, pay to charge installations, etc.)

**Policy M.10.3** Evolving Technologies and Transportation Platforms. Monitor evolving technologies and transportation platforms, such as transportation network companies and autonomous vehicles, and adapt plans and standards to accommodate emerging technologies as appropriate.

**Policy M.10.4** Adaptable Transportation Design. Encourage adaptable transportation design, allowing for future reuse of such facilities as parking garages as well as conversion of on-street parking to loading zones for pick-up/drop-off activities.

**Policy M.10.5** Intelligent Transportation System (ITS measures). Develop an ITS Master Plan and implement ITS technologies to improve signal timing and efficiency to improve traffic operations and improve the overall mobility system.

### **I-5 Freeway Subregional Corridor Mitigation Program**

The I-5 Freeway Subregional Corridor Mitigation Program (SCMP) is a voluntary development impact fee for new developments within the I-5 corridor between Elk Grove, Downtown Sacramento, and West Sacramento that is intended to be used to construct a set of transportation improvements identified in the SACOG 2016 MTP/SCS. Under the SCMP, a project applicant whose project would generate vehicle trips over the threshold could choose to either pay the fee, which would constitute mitigation of their development project's impacts on the freeway mainline, or conduct a Traffic Impact Study, which would evaluate that project's impact on the freeway system and identify mitigation for those impacts.

According to the Draft Final Nexus Study for the I-5 Freeway Subregional Corridor Mitigation Program (DKS Associates, January 2016), the following roadway improvements would be partially funded by the plan (with the remainder coming from other sources):

- extension of light rail from the Township 9/Richards station to Natomas Center,
- new bridge across the American River,
- two new bridges across the Sacramento River,
- reconstruction of I-5/Richards Boulevard Interchange,
- construction of HOV lanes on I-5 from Elk Grove to US 50, and
- construction of a transition lane on I-5 between the Garden Highway off- and on-ramps.

Page 36 of the study specifies that “Caltrans would consider the fees as an adequate mitigation for freeway mainline impacts.” Table 18 on Page 32 of the Nexus Study shows the proposed fee per dwelling unit, and per thousand square feet of non-residential space.



## Significance Criteria

In accordance with CEQA, the lead agency evaluates the effects of a proposed project to determine if they could result in significant adverse impacts on the environment. The standards of significance in this analysis are based upon the thresholds found in the City of West Sacramento's 2035 General Plan and the City of Sacramento's 2035 General Plan. For the purposes of this analysis, an impact is considered significant if implementation of the project would result in any of the following:

### Roadway Facilities

In West Sacramento, impacts to the roadway system (intersections and roadway segments) would be significant if:

- traffic generated by the project degrades the overall roadway system operation to the extent that the project would not be consistent with City of West Sacramento General Plan Policy M-3.2 related to the City's allowable Level of Service; or
- traffic generated by the project would cause the average vehicle delay to increase by more than five seconds at an intersection operating at an unacceptable LOS without the project.

All study roadway facilities within West Sacramento are in the pedestrian oriented, high density, mixed use area planned for the Pioneer Bluff area, under which LOS E is acceptable.

In Sacramento, impacts to the roadway system (intersections and roadway segments) would be significant if:

- traffic generated by the project degrades the overall roadway system operation to the extent that the project would not be consistent with City of Sacramento General Plan Policy M 1.2.2 relating to the City's allowable Level of Service; or
- traffic generated by the project substantially degrades operation of intersections and roadway segments, despite compliance with General Plan policies.

All study intersections within Sacramento are in the Core Area, under which LOS F is acceptable during peak hours, provided the project contribute other acceptable improvements to transportation-system-wide roadway capacity, intersections, or non-auto travel modes in furtherance of General Plan goals. Road widening or other improvements to road segments are not required.

In urban environments, such as the study area, roadway capacity is governed by the operations of intersections. For this reason and because roadway segments were included in the traffic analysis for the

2035 General Plan, the City of Sacramento determines impacts to the roadway system based upon the operations of intersections. Therefore, the roadway capacity utilization results contained in this report are for information purposes only, and not utilized for impact analysis.

## **Freeway Facilities**

Impacts to the freeway system would be significant if:

- The project traffic causes off-ramp traffic to queue back to beyond the freeway gore point, or worsens an existing/projected queuing problem on a freeway off-ramp.

## **Bicycle and Pedestrian Facilities**

Impacts to bicycle facilities are considered significant if the project would:

- adversely affect existing or planned bicycle or pedestrian facilities, or
- fail to adequately provide for access for bicyclists or pedestrians bicycle.

## **Transit Facilities**

Impacts to the transit system would be significant if the project would:

- adversely affect public transit operations, or
- fail to adequately provide access to transit.

## **Vehicle Miles Traveled**

Impacts related to VMT would be considered significant if the project would:

- substantially increase VMT per service population (total residents and employees) within the SACOG region.

## Existing Plus Project Conditions

This section details the effects of the proposed project on the existing transportation infrastructure.

### Traffic Forecasts

The SACMET regional travel demand model, developed and maintained by SACOG, was used to forecast expected changes in daily traffic and peak hour turning movement volumes under Existing Plus Project conditions. Modifications to the base year model were made as part of this project to enhance the ability to accurately forecast changes to travel patterns in the study area, which represents a sub-area of the SACOG region, described as follows:

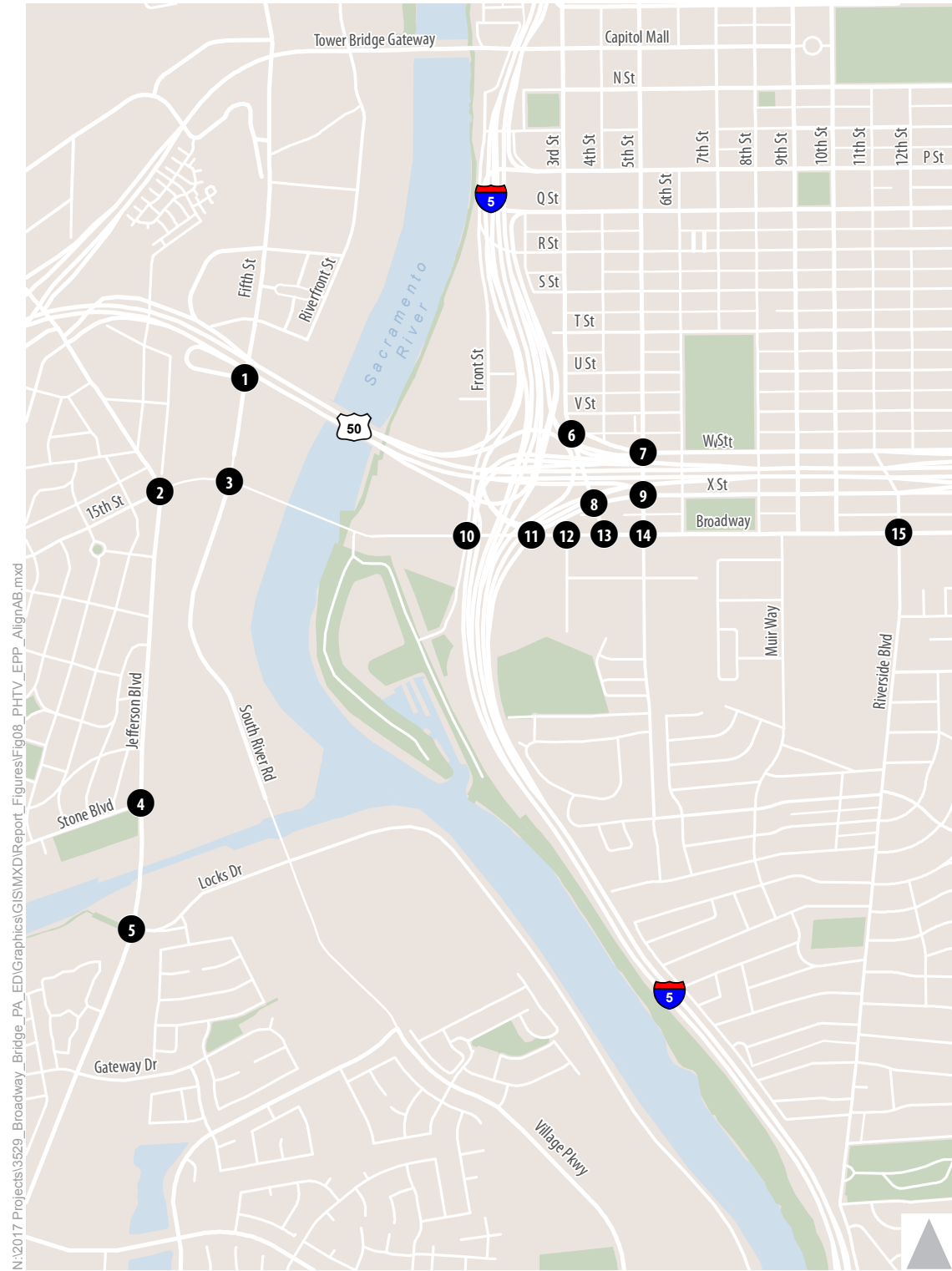
- Additional Land Use Detail – Transportation analysis zones (TAZs) were added to the model to allow for more accurate loading of trips to the transportation network.
- Refined TAZ Loading – Connections between the TAZ network and the transportation network were reviewed and adjusted as necessary to ensure that trips accurately loaded onto the transportation network.
- Additional Transportation Network Detail – Detail was added to the transportation network to account for all study roadways and intersections.
- Transportation Network Coding – The coding of attributes in the model transportation network was reviewed for accuracy and adjusted as appropriate.

The proposed Broadway Bridge was then added to the base year model. The traffic forecasting procedure known as the “difference method” calculation was used to develop the Existing Plus Project forecasts. The procedure adds the difference in traffic between the base year model without and with the project to the existing traffic counts, as displayed below:

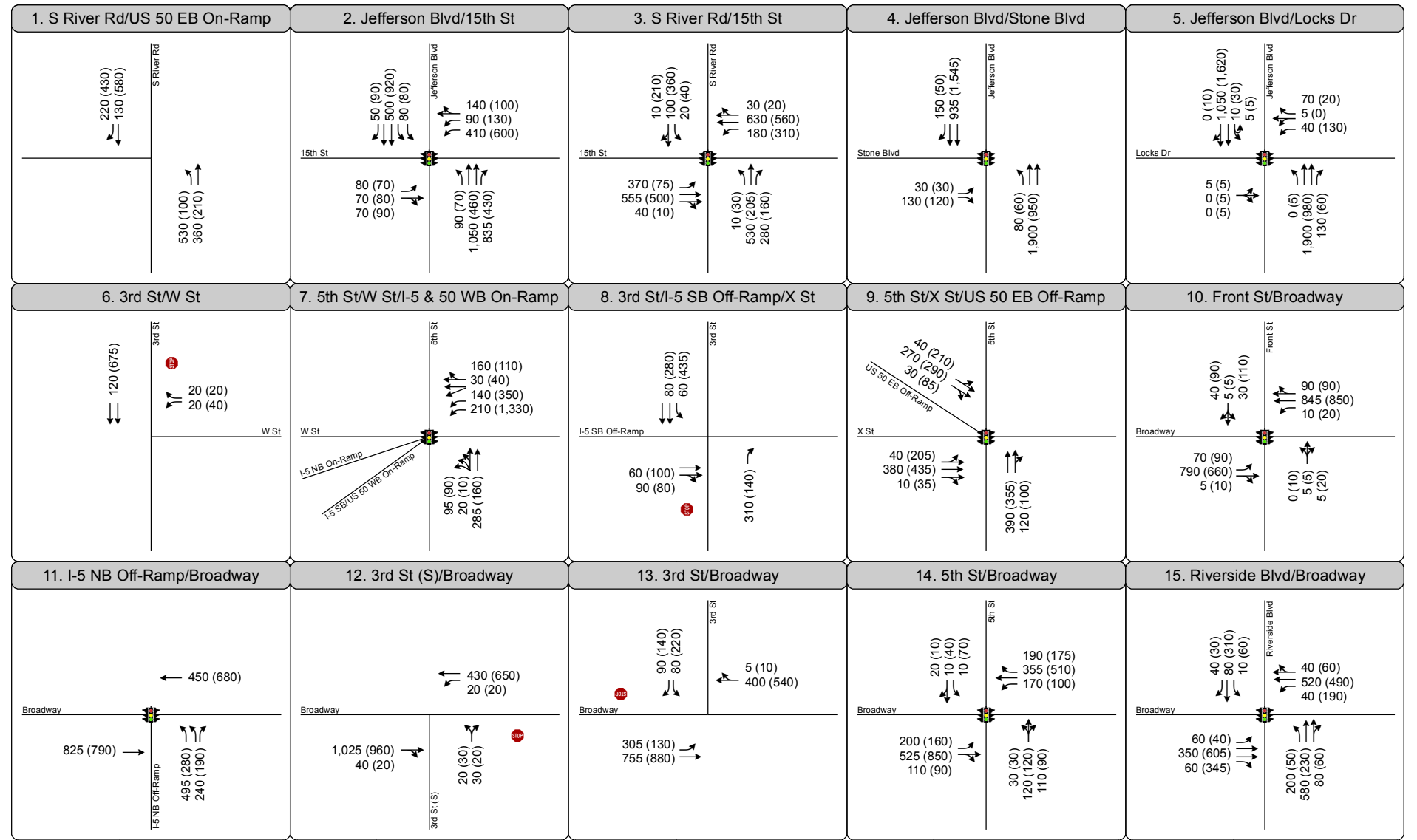
$$\text{Existing Plus Project Forecast} = \text{Existing Volume} + (\text{Base Model} \\ \text{Plus Project} - \text{Base Model})$$

### Project Impacts to Intersection Operations

Figures 8, 9, and 10 show the AM and PM peak hour turning movement volumes at the study intersections under Existing Plus Project conditions, with Bridge Alignment A/B, C, and D respectively.



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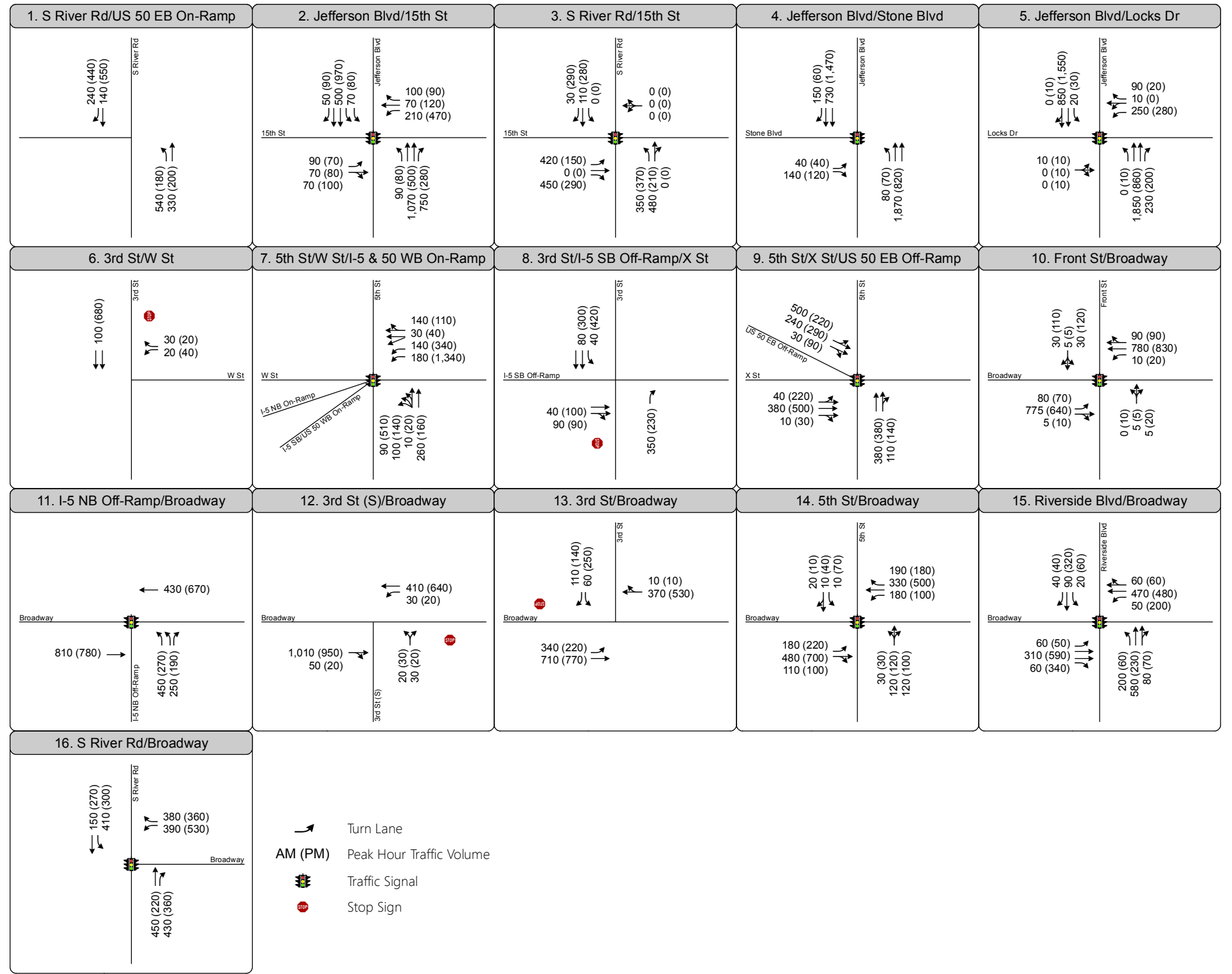
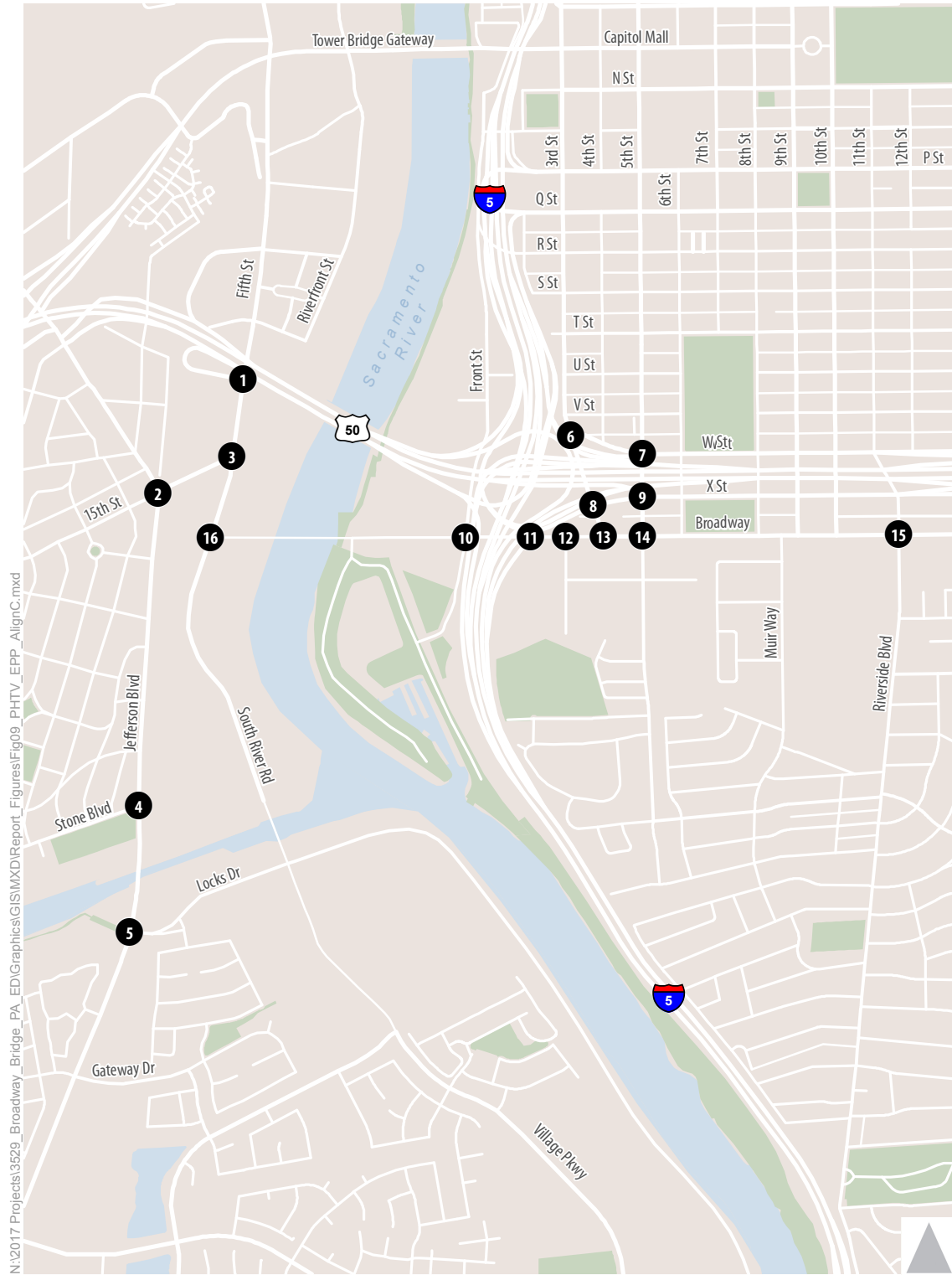


- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

**1** Study Intersection



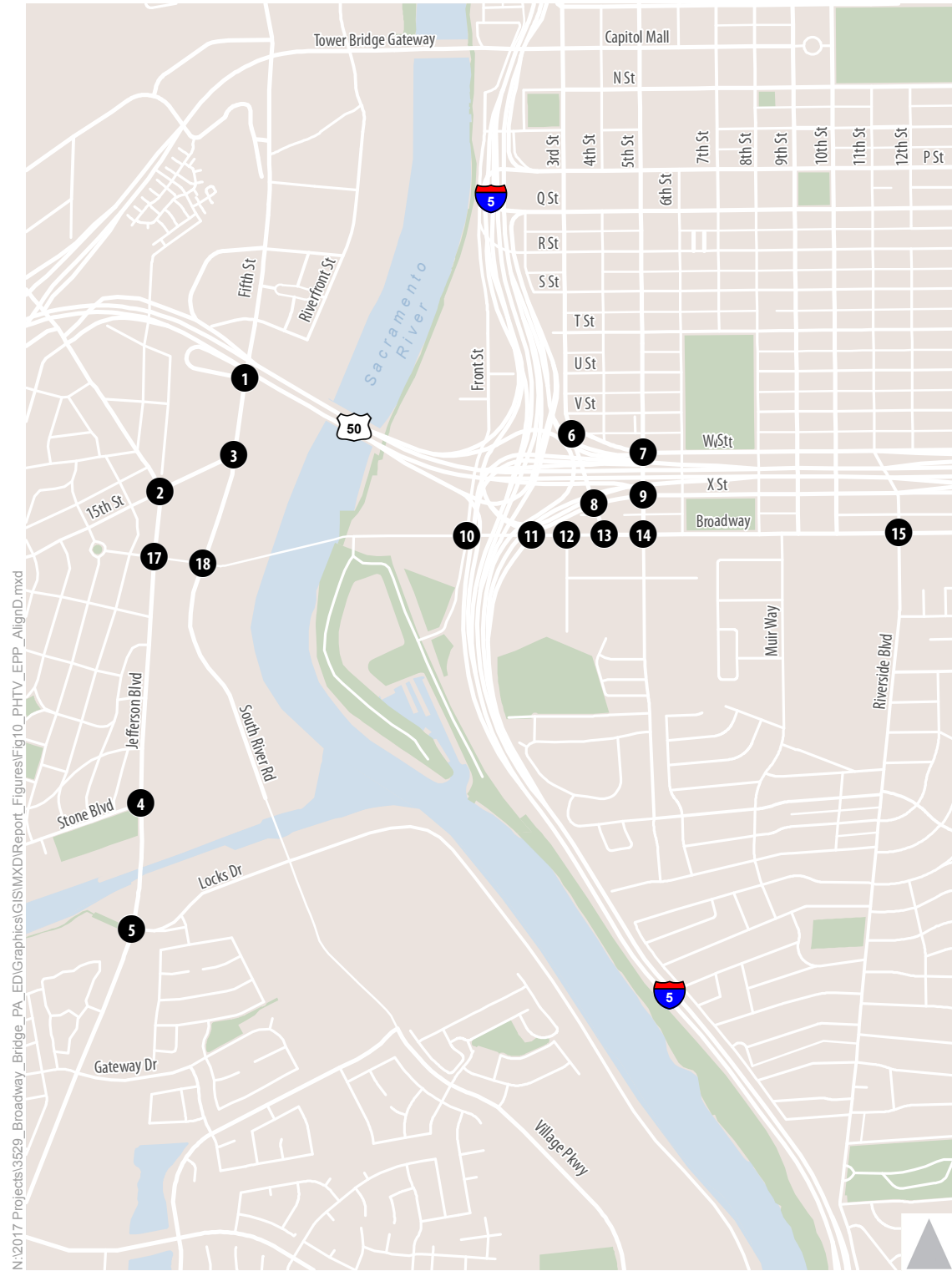
Figure 8  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Existing With Bridge Alignment A/B Conditions



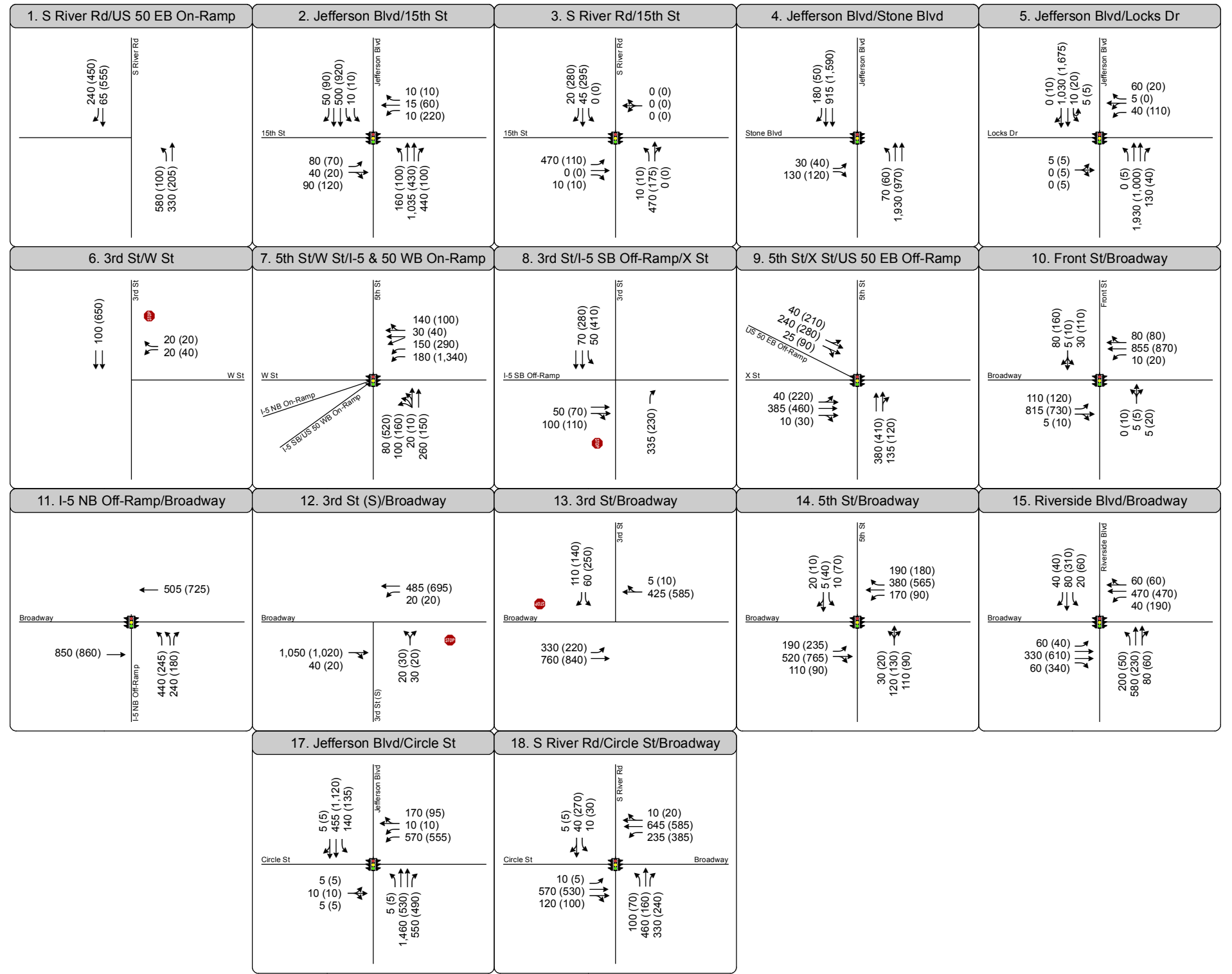
1 Study Intersection



Figure 9  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Existing With Bridge Alignment C Conditions



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1 Study Intersection

- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 10  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Existing With Bridge Alignment D Conditions



As displayed in Table 10, all intersections operate acceptably at LOS E or better under Existing Conditions and continue to operate acceptably under Existing Plus Project conditions for each bridge alignment alternative. Therefore, implementation of the project would not result in impacts to study intersections under each bridge alignment alternative. The level of service results are also displayed in Figures 11, 12, and 13 for each of the with bridge alignment alternatives.

#### **Existing with Bridge Alignment A/B**

The addition of the bridge eases queuing leading up to the South River Road / US 50 Eastbound On-Ramp; however, at the South River Road / 15<sup>th</sup> Street intersection, where the bridge approach is located on West Sacramento for this alignment, the added signal phases and cycle length associated with the addition of the fourth intersection leg (Broadway Bridge) creates additional delay; however, still within acceptable LOS E. Also, with the bridge there is an increase in delay along Broadway, but less traffic utilizing the freeway and passing through the ramp terminal intersections. This alternative would create a **less-than-significant** impact to intersection operations under Existing Plus Project conditions.

#### **Existing with Bridge Alignment C**

The bridge creates a T-intersection with South River Road (Intersection 16 – South River Road / Broadway), with the intersection operating at LOS D under both the AM and PM peak hours. Similar increases in delay occur along Broadway, and decrease at the ramp terminal intersections, compared to Alignment A/B. This alternative would create a **less-than-significant** impact to intersection operations under Existing Plus Project conditions.

#### **Existing with Bridge Alignment D**

The bridge approach would create two closely spaced intersections of Jefferson Boulevard / Circle Street (Intersection 17) and South River Road / Circle Street (Intersection 18), which would introduce conflicting turning movements that increase the level of delay in this area; however, still operating within acceptable LOS. This alternative would create a **less-than-significant** impact to intersection operations under Existing Plus Project conditions.

**Table 10: Intersection Operations – Existing Plus Project**

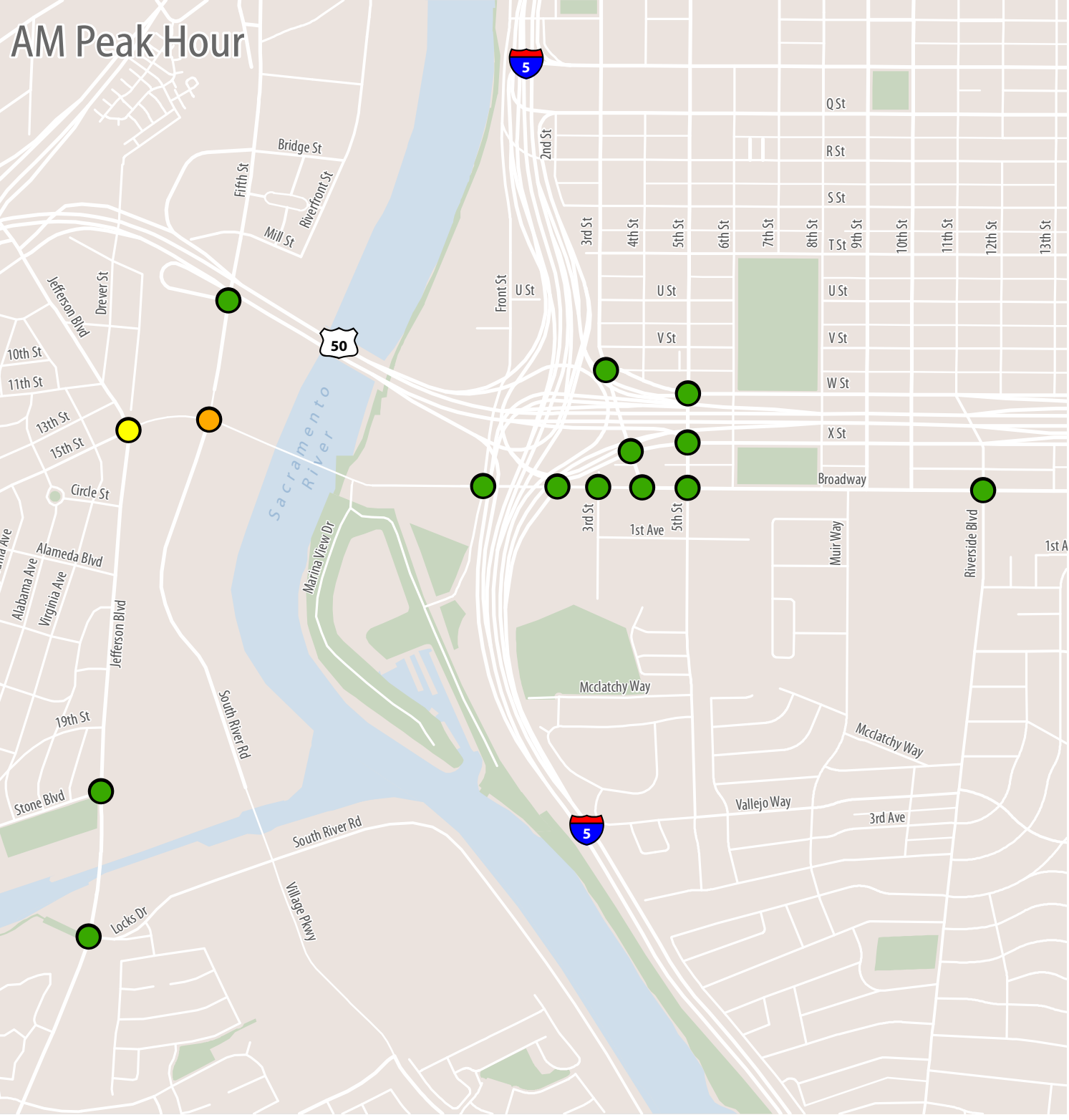
ID	Intersection	Jurisdiction	Control Type	Peak Hour	Existing Conditions		Existing Plus Project					
							Bridge Alignment A/B		Bridge Alignment C		Bridge Alignment D	
					Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	S. River Rd. / US 50 EB On-Ramp	West Sacramento	Un controlled	AM PM	21 11	C B	7 3	A A	5 4	A A	6 2	A A
2	Jefferson Blvd. / 15th St.	West Sacramento	Signal	AM PM	20 23	B C	36 28	D C	26 41	C D	13 21	B C
3	S. River Rd. / 15th St	West Sacramento	Signal	AM PM	27 24	C C	75 53	E D	24 49	C D	16 9	B A
4	Jefferson Blvd. / Stone Blvd.	West Sacramento	Signal	AM PM	10 15	A B	12 14	B B	12 14	B B	10 13	B B
5	Jefferson Blvd / Locks Dr.	West Sacramento	Signal	AM PM	6 11	A B	7 12	A B	17 16	B B	8 11	A B
6	W St. / 3rd St.	Sacramento	SSSC	AM PM	1 (5) 1 (9)	A (A) A (A)	1 (5) 1 (9)	A (A) A (A)	1 (4) 1 (7)	A (A) A (A)	1 (5) 1 (8)	A (A) A (A)
7	W St. / 5th St.	Sacramento	Signal	AM PM	10 20	A B	9 16	A B	9 16	A B	10 16	A B
8	X St. / 3rd St.	Sacramento	SSSC	AM PM	3 (7) 3 (9)	A (A) A (A)	2 (7) 2 (9)	A (A) A (A)	2 (7) 3 (8)	A (A) A (C)	2 (7) 9 (25)	A (A) A (D)
9	X St. / 5th St.	Sacramento	Signal	AM PM	16 25	B C	19 27	B C	19 29	B C	19 26	B C
10	Broadway / Front St.	Sacramento	SSSC	AM PM	1 (5) 2 (5)	A (A) A (A)	19 31	B C	20 24	B C	19 33	B C
11	Broadway / I-5 NB Off-Ramp	Sacramento	SSSC	AM PM	4 (6) 3 (5)	A (A) A (A)	15 20	B C	17 14	B B	14 16	B B
12	Broadway / 3rd St. (South)	Sacramento	SSSC	AM PM	1 (3) 1 (4)	A (A) A (A)	4 (40) 11 (88)	A (E) B (F)	5 (71) 8 (97)	A (F) A (F)	4 (35) 10 (106)	A (D) A (F)
13	Broadway / 3rd St. (North)	Sacramento	SSSC	AM PM	2 (9) 11 (28)	A (A) B (D)	5 (17) 16 (33)	A (C) C (D)	5 (17) 18 (72)	A (C) C (F)	5 (16) 19 (79)	A (C) C (F)
14	Broadway / 5th St.	Sacramento	Signal	AM PM	12 16	B B	22 55	C E	20 38	C D	19 39	B D
15	Broadway / Riverside Blvd.	Sacramento	Signal	AM PM	16 17	B B	17 17	B B	17 17	B B	17 18	B B
16	S. River Rd. / Broadway	West Sacramento	Signal	AM PM	-- --	-- --	-- --	-- --	43 35	D D	-- --	-- --
17	Jefferson Blvd. / Circle St.	West Sacramento	Signal	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	79 18	E B
18	S. River Rd. / Circle St.	West Sacramento	Signal	AM PM	-- --	-- --	-- --	-- --	-- --	-- --	67 39	E D

Notes: LOS = Level of Service. SSSC = Side Street Stop Controlled  
For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Impacts to intersections are determined based on the overall LOS and average delay. All intersections were analyzed in SimTraffic.

Source: Fehr & Peers, 2020



# AM Peak Hour



# PM Peak Hour

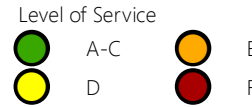
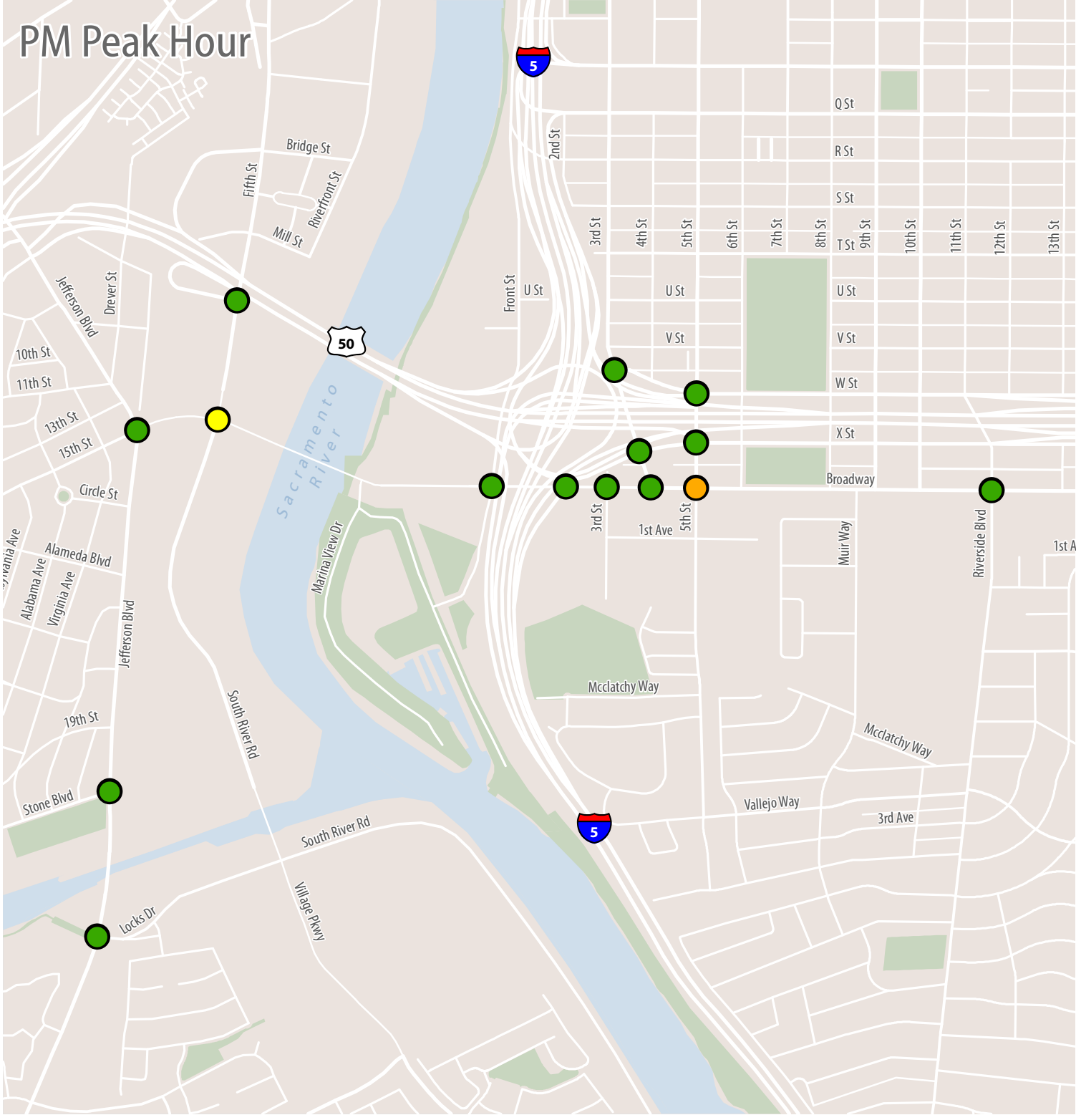
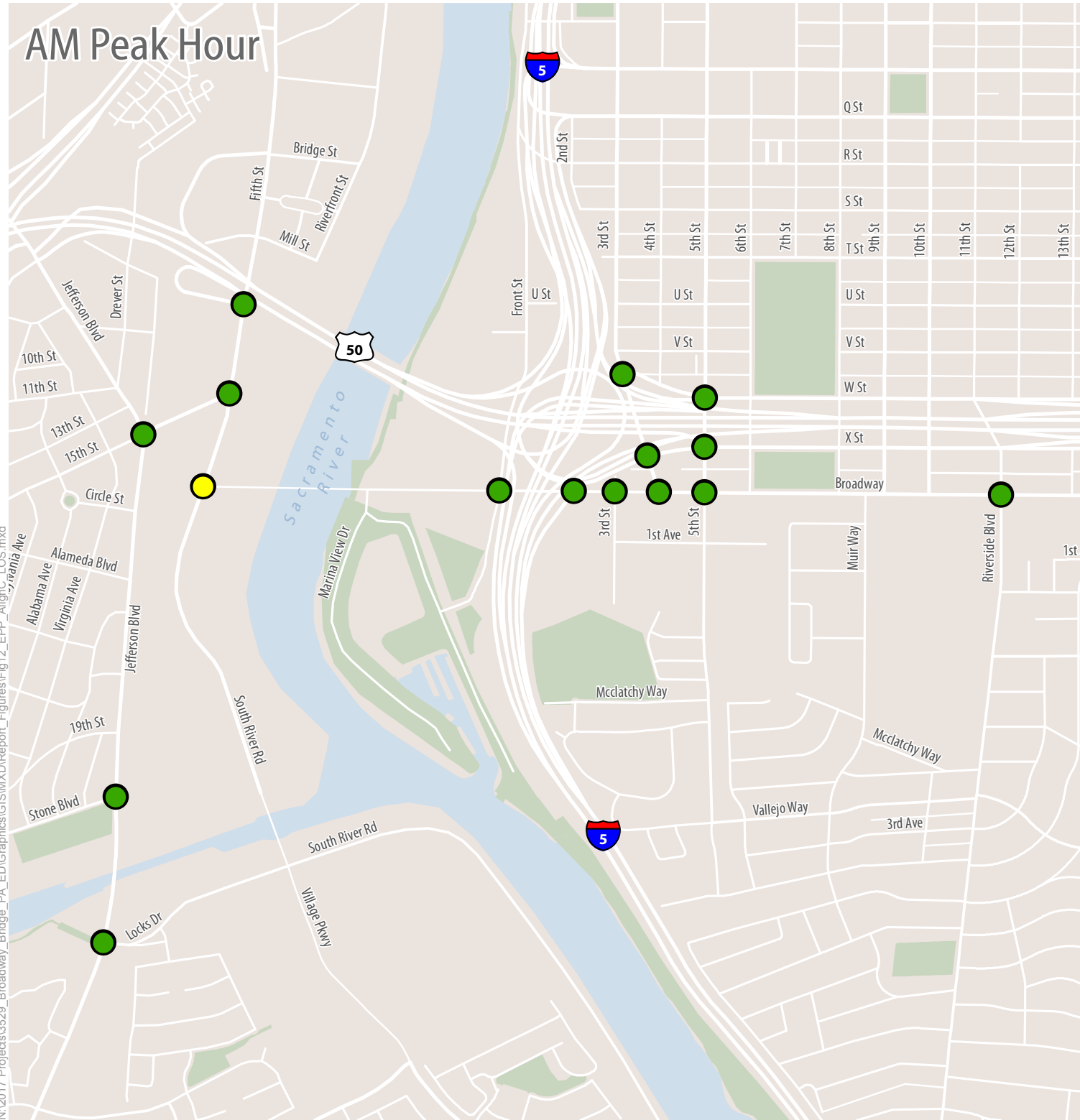
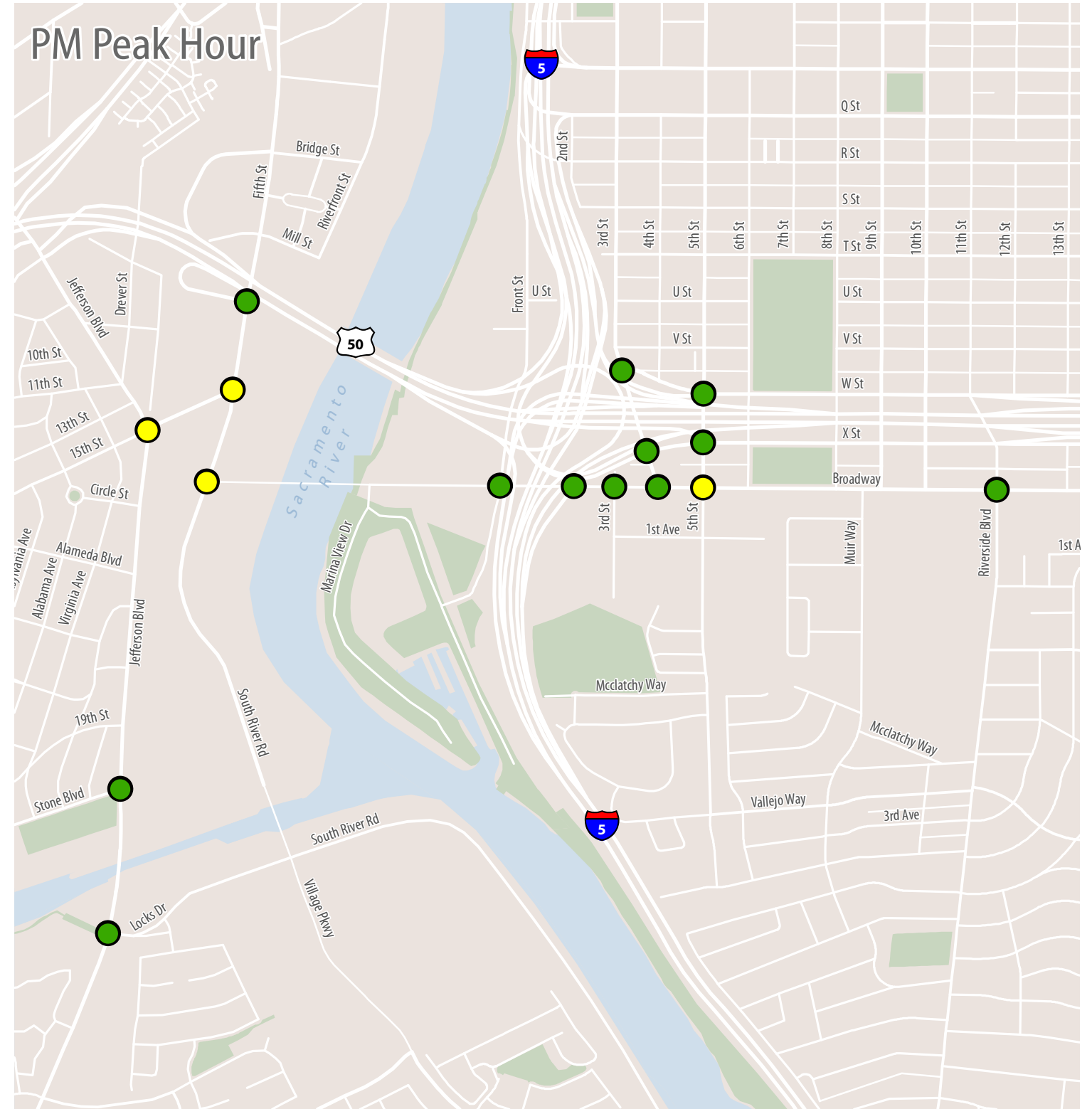


Figure 11  
Existing Plus Bridge Alignment A/B -  
Peak Hour Intersection LOS

# AM Peak Hour



# PM Peak Hour

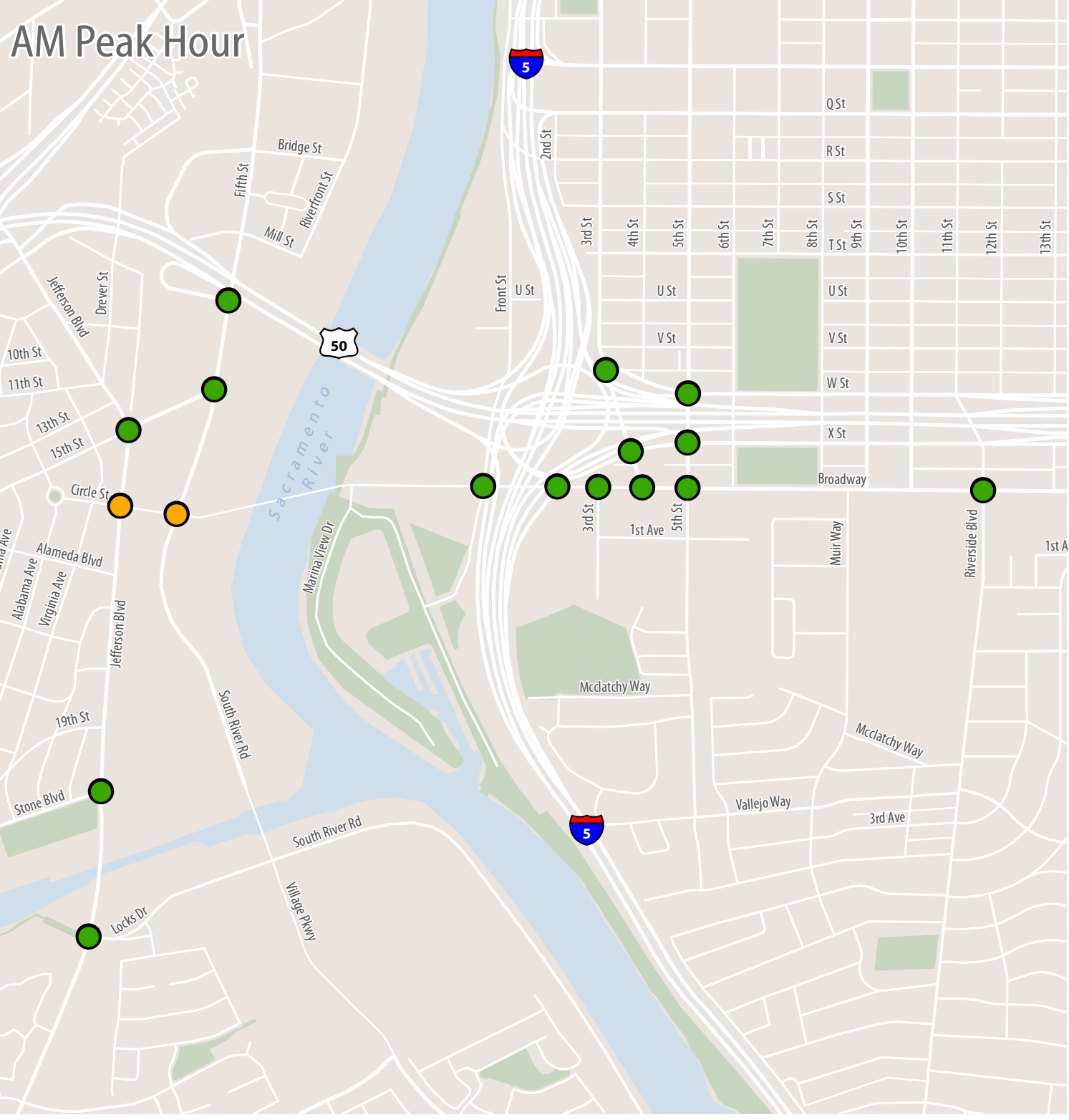


- Level of Service
- A-C
  - D
  - E
  - F



Figure 12  
Existing Plus Bridge Alignment C -  
Peak Hour Interseccion LOS

# AM Peak Hour



# PM Peak Hour

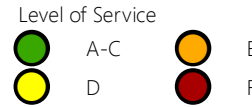
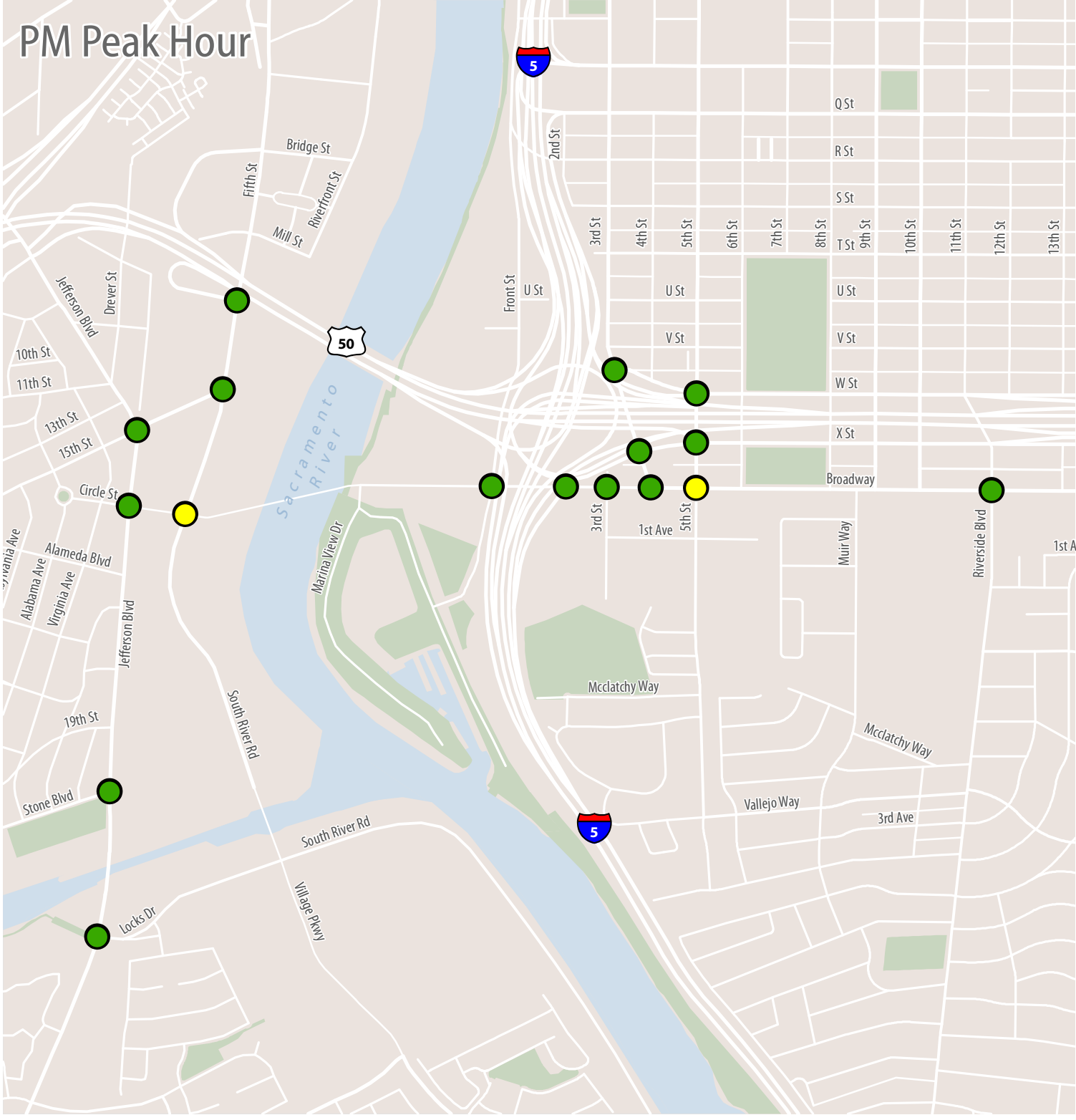


Figure 13  
Existing Plus Bridge Alignment D -  
Peak Hour Interseccion LOS

## Project Impacts to Freeway Off-Ramp Queuing

Table 11 displays the freeway off-ramp queuing under Existing Plus Project conditions with each bridge alignment alternative.

ID	Location	Available Storage	Peak Hour	Existing Conditions	Existing Plus Project		
					Bridge Alignment A/B	Bridge Alignment C	Bridge Alignment D
					Queue	Queue	Queue
1	I-5 SB Off-Ramp at 3rd St./X St.	1,150	AM	75	75	75	75
			PM	75	75	100	100
2	US 50 EB Off-Ramp at 5th St./X St.	1,300	AM	175	75	75	75
			PM	250	125	175	150
3	I-5 NB Off-Ramp at Broadway	1,000	AM	75	175	175	175
			PM	75	150	150	150

Notes: The available storage length for off-ramp queuing is measured from the noted off-ramp terminal intersection to the freeway off-ramp gore point. Maximum queue length is based upon output from SimTraffic microsimulation software.  
Source: Fehr & Peers, 2020

As shown, the inclusion of the bridge would not drastically change queuing at the freeway off-ramps in the study area. The bridge would shift some traffic off of utilizing the freeway facility; thereby, generally decreasing off-ramp queuing. Still, all queues would remain within the available storage capacity for each off-ramp for all of the bridge alignment alternatives under Existing Plus Project; therefore, this would be a **less-than-significant** impact.

## Project Impacts to Roadway Operations

Table 12 shows the roadway segment operations analysis results under Existing Plus Project conditions. All roadway segments would continue to operate within acceptable LOS. Notably, the inclusion of the bridge, for all alignment alternatives, would reduce traffic on Jefferson Boulevard north of 15<sup>th</sup> Street; thereby, lowering the delay on that roadway segment on a daily basis. Roadway capacity utilization results contained in this section are for information purposes only, and not utilized for impact analysis.

ID	Roadway	Segment	Jurisdiction	Lanes	Existing		Existing Plus Project					
					LOS	V/C	Bridge Alignment A/B		Bridge Alignment C		Bridge Alignment D	
							LOS	V/C	LOS	V/C	LOS	V/C
1	Jefferson Blvd.	North of 15th Street	West Sacramento	4	E	0.93	C	0.74	C	0.73	B	0.68



2	15th St.	West of Jefferson Blvd.	West Sacramento	2	C	0.43	C	0.55	C	0.51	C	0.50
3	Alameda Blvd.	West of Jefferson Blvd.	West Sacramento	2	B	0.24	C	0.27	C	0.29	C	0.31
4	Jefferson Blvd.	South of Alameda Blvd.	West Sacramento	4	D	0.84	D	0.88	D	0.81	D	0.88
5	S. River Rd.	South of 15th St. (Alameda Blvd.)	West Sacramento	2	B	0.62	B	0.69	D	0.86	C	0.75
6	Jefferson Blvd.	South of Locks Dr.	West Sacramento	4	D	0.85	D	0.87	D	0.88	D	0.87
7	3rd St.	North of W St.	Sacramento	2	A	0.21	A	0.23	A	0.23	A	0.23
8	5th St.	North of W St.	Sacramento	2	A	0.18	A	0.23	A	0.23	A	0.23
9	5th St.	South of Broadway	Sacramento	2	D	0.80	C	0.77	C	0.77	C	0.77
10	Riverside Blvd.	South of Broadway	Sacramento	2	D	0.81	D	0.84	D	0.83	D	0.84
Notes: LOS = Level of Service. V/C = Volume to Capacity Ratio Source: Fehr & Peers, 2020												

## Project Impacts to Bicycle Facilities

Broadway bridge will include Class II on-street bike lanes. In addition, the bridge will feed into a planned Class I trail along the Sacramento River on the West Sacramento side, and into the existing Class I trail on the Sacramento side. The bridge, for all alignments, would not interfere with existing or planned bicycle facilities; therefore, would have a **less-than-significant** impact to bicycle facilities.

## Project Impacts to Pedestrian Facilities

Broadway bridge will include sidewalks, provide access for pedestrians crossing along the bridge. In addition, the bridge would not impede in sidewalks planned along the bridge approach in West Sacramento as part of development in the Pioneer Bluff area, or in Sacramento along Broadway. Therefore, for all alignments, the bridge would have a **less-than-significant** impact to pedestrian facilities.

## Project Impacts to Transit Facilities

Since all intersections would operate acceptably under Existing Plus Project conditions for each bridge alignment, the proposed project would not adversely affect transit operation or access to transit facilities. Additionally, the bridge will be designed to accommodate buses; thereby providing an alternative for future bus route realignment or expansion. Plus, the bridge will be designed to accommodate a potential future streetcar line. Therefore, the project would create a **less-than-significant** impacts to transit facilities.

## Project Impacts to Vehicle Miles of Travel (VMT)

Table 13 displays the daily vehicle miles of travel under Existing Conditions and each Existing With Bridge Alignment alternative for all trips in the Sacramento Region, analyzed using the SACMET regional travel demand model. Under this scenario, travel patterns are not expected to change drastically; therefore, all With Bridge Alignment alternatives under Existing Plus Project conditions are analyzed as “assignment only” with the same trip distribution patterns as under Existing Conditions.

<b>Scenario</b>	<b>Regional Daily VMT Total</b>	<b>Difference (From Existing)</b>
Existing Conditions	55,823,950	--
Existing With Bridge Alignment A/B	55,816,069	-7,882
Existing With Bridge Alignment C	55,820,862	-3,088
Existing With Bridge Alignment D	55,805,532	-18,418

Source: Fehr & Peers, 2020

In the short-term, the only travel pattern change is the route that vehicle trips take between existing origins and destinations. Therefore, the bridge reflects the opening of a shorter route for existing trips, which is reflected in that all bridge alignment alternatives represent lower daily regional VMT than Existing Conditions.

## Opening Year 2030 Conditions

This section describes the anticipated travel conditions under opening year (2030) conditions for the roadway, bicycle, pedestrian, and transit systems. The effect of the proposed project on opening year conditions is measured to identify potential cumulative impacts and recommend further improvements to the transportation infrastructure.

### Traffic Forecasts

Opening Year 2030 traffic forecasts were developed using the SACMET regional travel demand model. The model was developed with a linear interpolation of land use growth within the Sacramento region in place by 2030, and specific land use growth assumed for the Pioneer Bluff area as identified by the City of West Sacramento planning staff. The model also assumes roadway infrastructure projects expected to be completed by 2030, as identified by SACOG in the Metropolitan Transportation Plan and Sustainable Communities Strategy (MTP/SCS). Key roadway network improvements include:

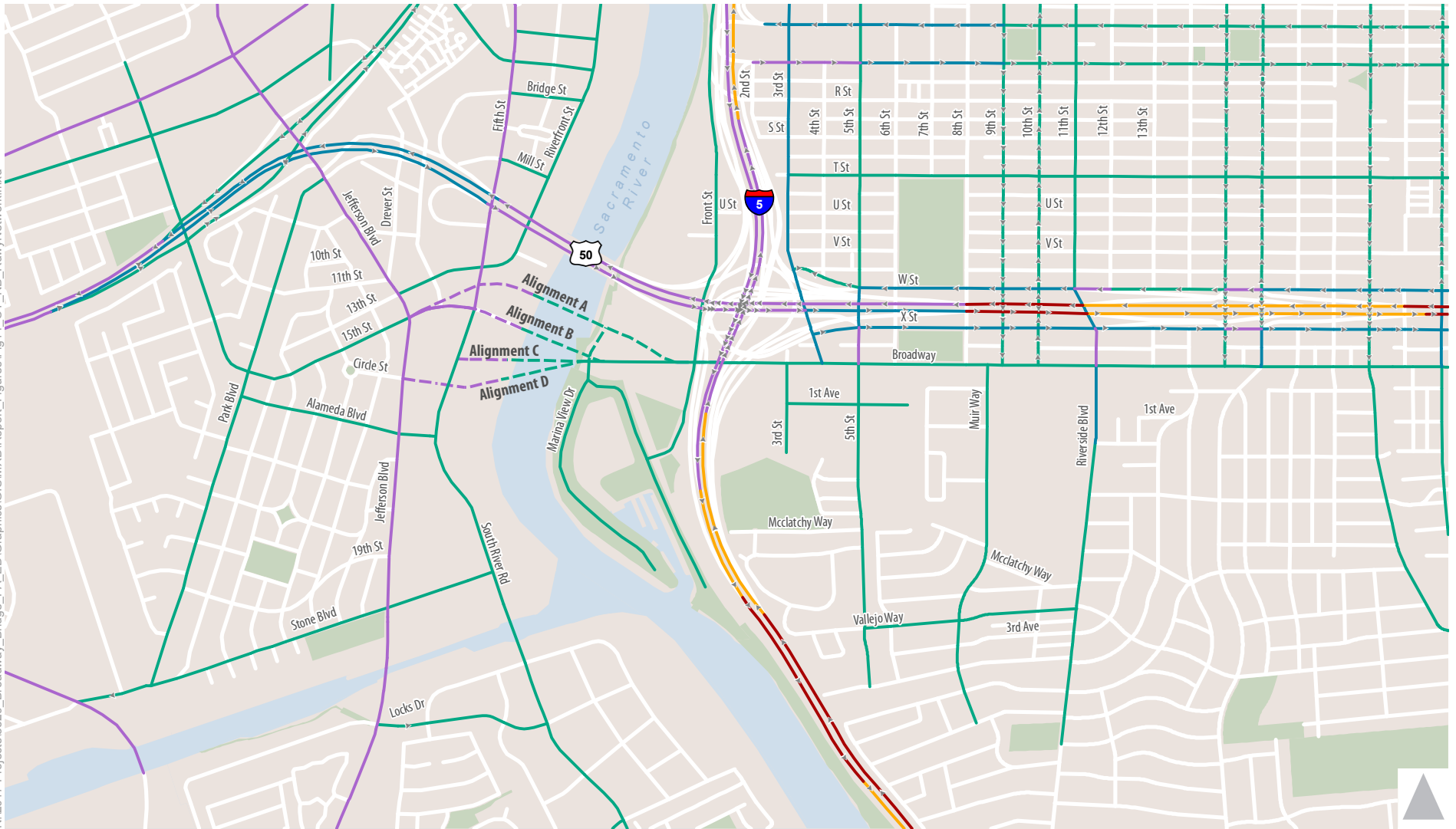
- Extensions of Alameda Boulevard and Stone Boulevard between Jefferson Boulevard and South River Road, and widening of South River Road to four lanes from the US 50 ramps to 15<sup>th</sup> Street in West Sacramento
- Grid 3.0 network changes within Downtown Sacramento
- I-80 HOV lanes from Davis to I-5
- I-5 HOV lanes through Downtown Sacramento

The traffic forecasting procedure known as the “difference method” calculation was used to develop the Opening Year forecasts. The procedure adds the difference in traffic between the base year and opening year model to the existing traffic counts, as displayed below:

$$\text{Opening Year Forecast} = \text{Existing Volume} + (\text{Opening Year Model} - \text{Base Model})$$

The roadway network, including number of lanes and directions, assumed in place by Opening Year (2030) conditions is displayed in Figure 14.

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Opening Year Number of Lanes

- 2
- 3
- 4
- 5
- 6

Bridge Number of Lanes

- 2
- 3
- 4

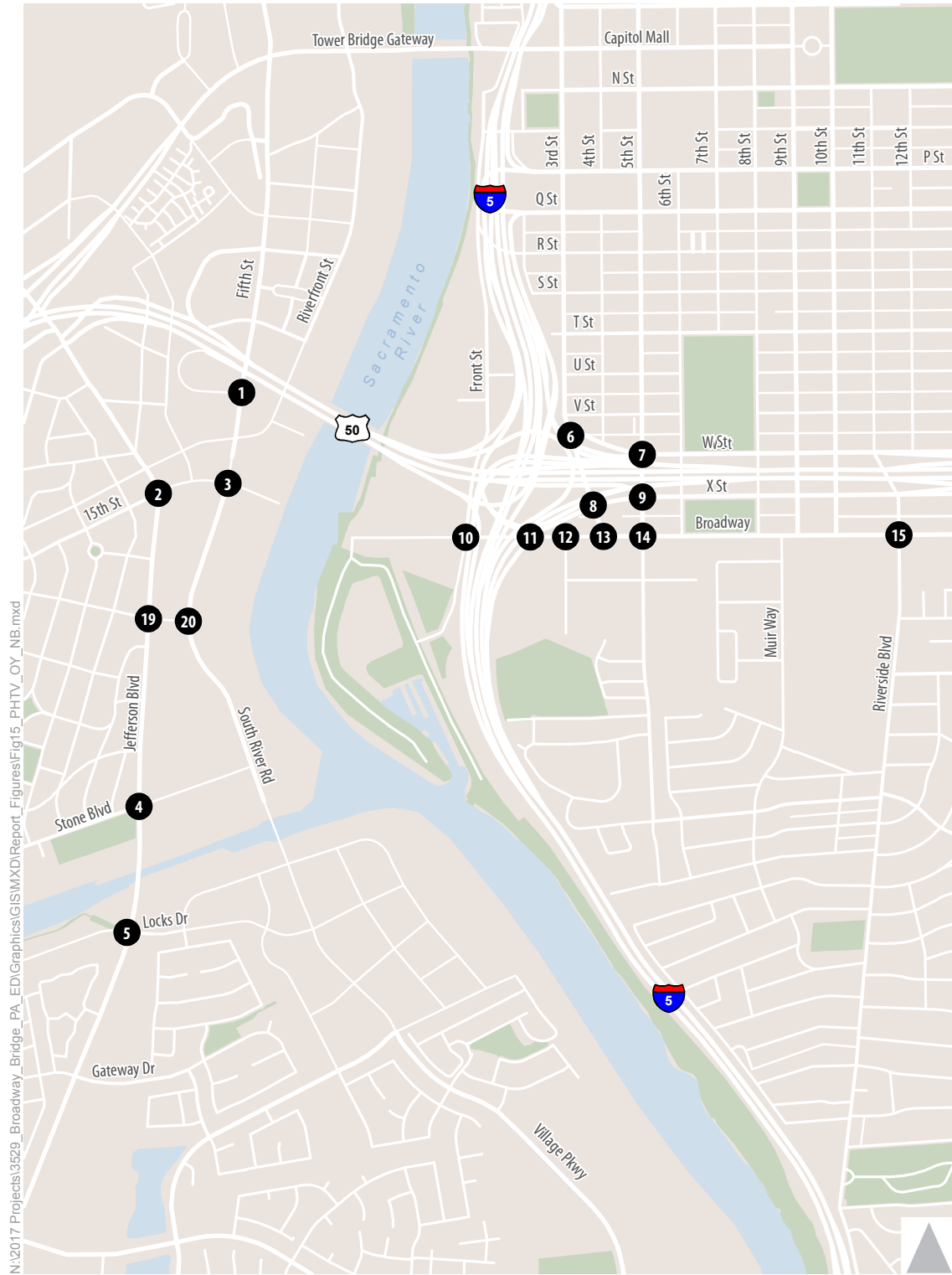


Figure 14  
Opening Year 2030 Roadway Network

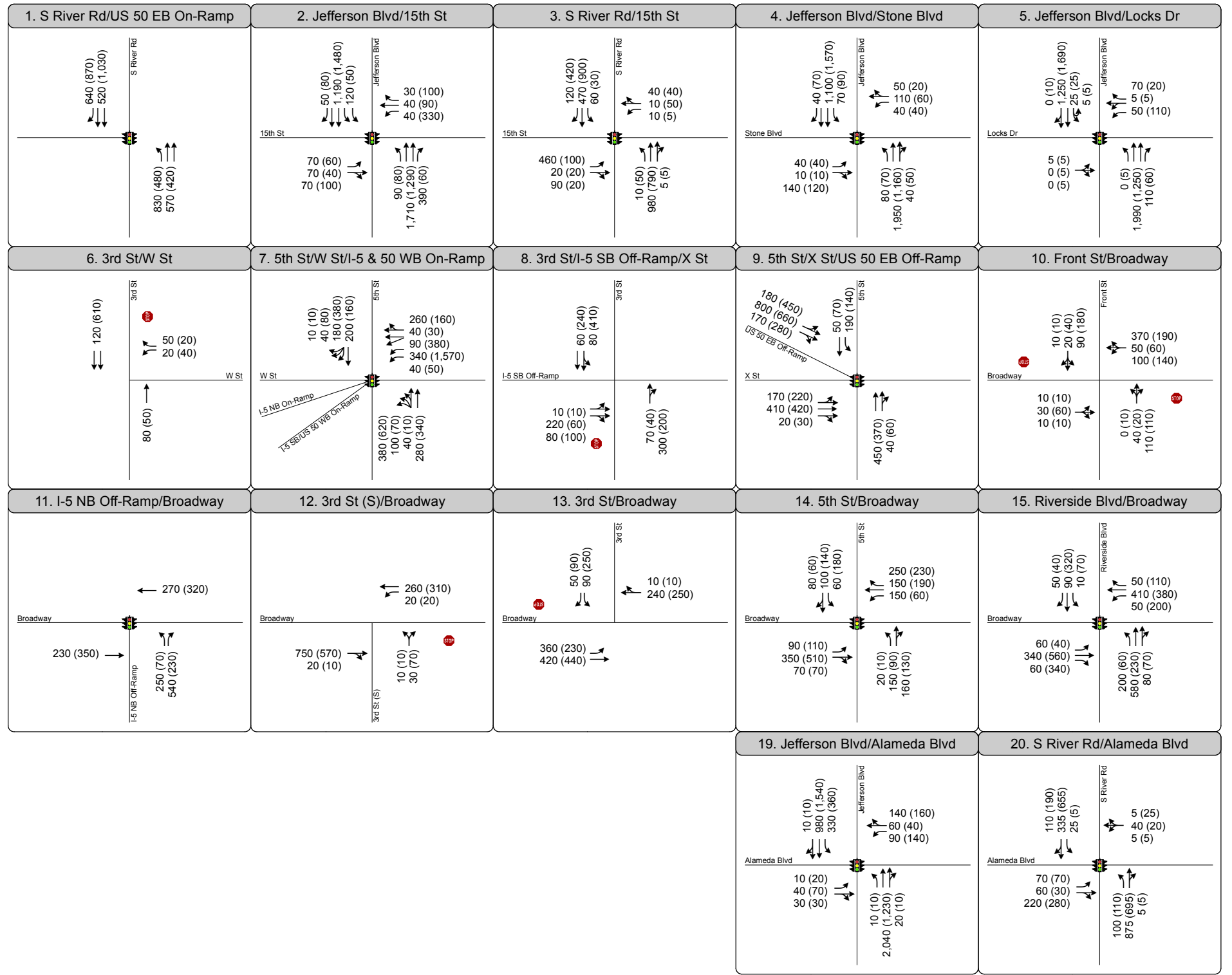


## Opening Year Impacts to Intersection Operations

Figure 15 shows the AM and PM peak hour turning movement volumes at the study intersections under Opening Year No Build, and Figures 16, 17, and 18 show the peak hour turning movement volumes under Opening Year with Bridge Alignment A/B, C, and D respectively.



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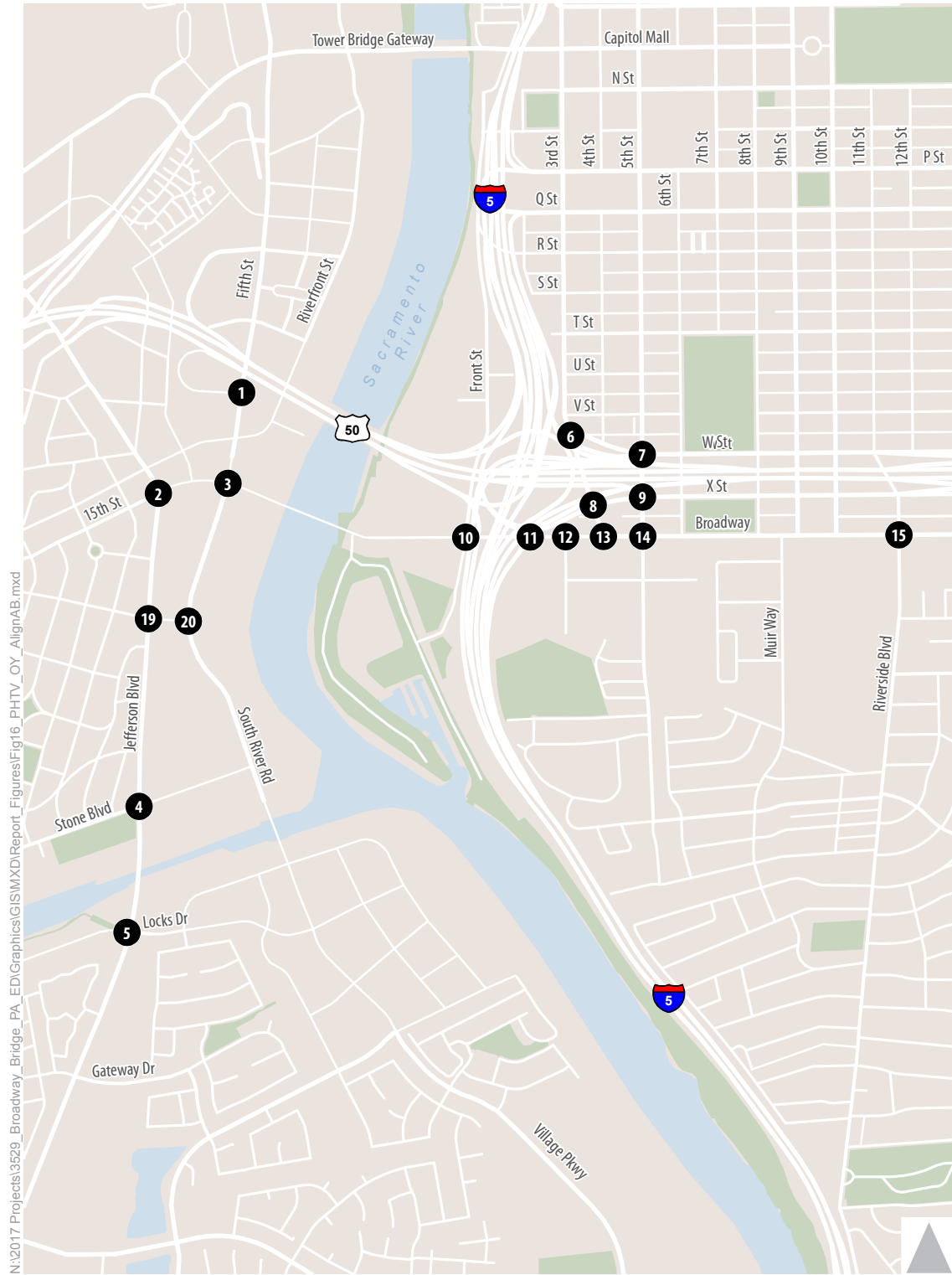


1 Study Intersection

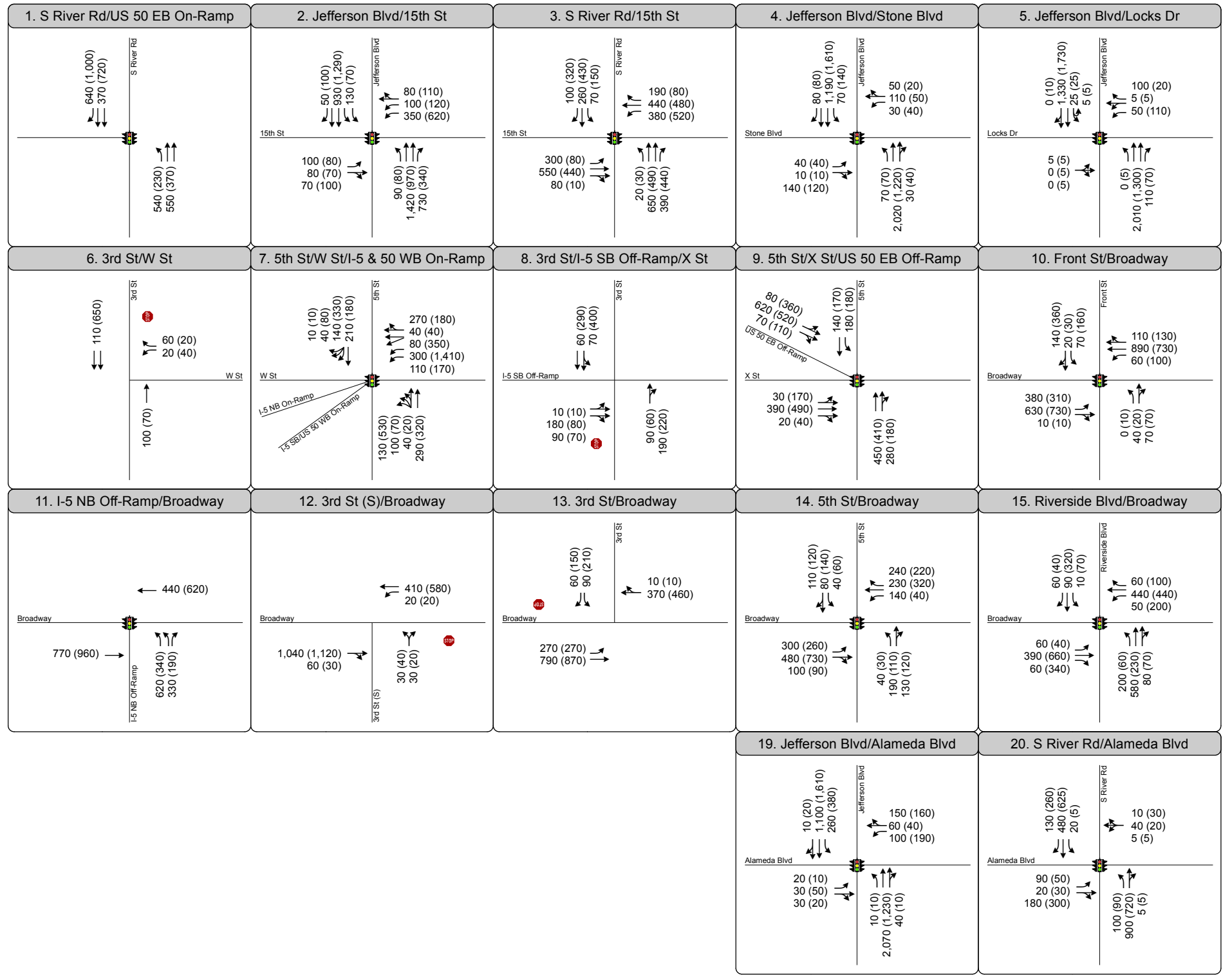
- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 15  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Opening Year 2030 No Build Conditions



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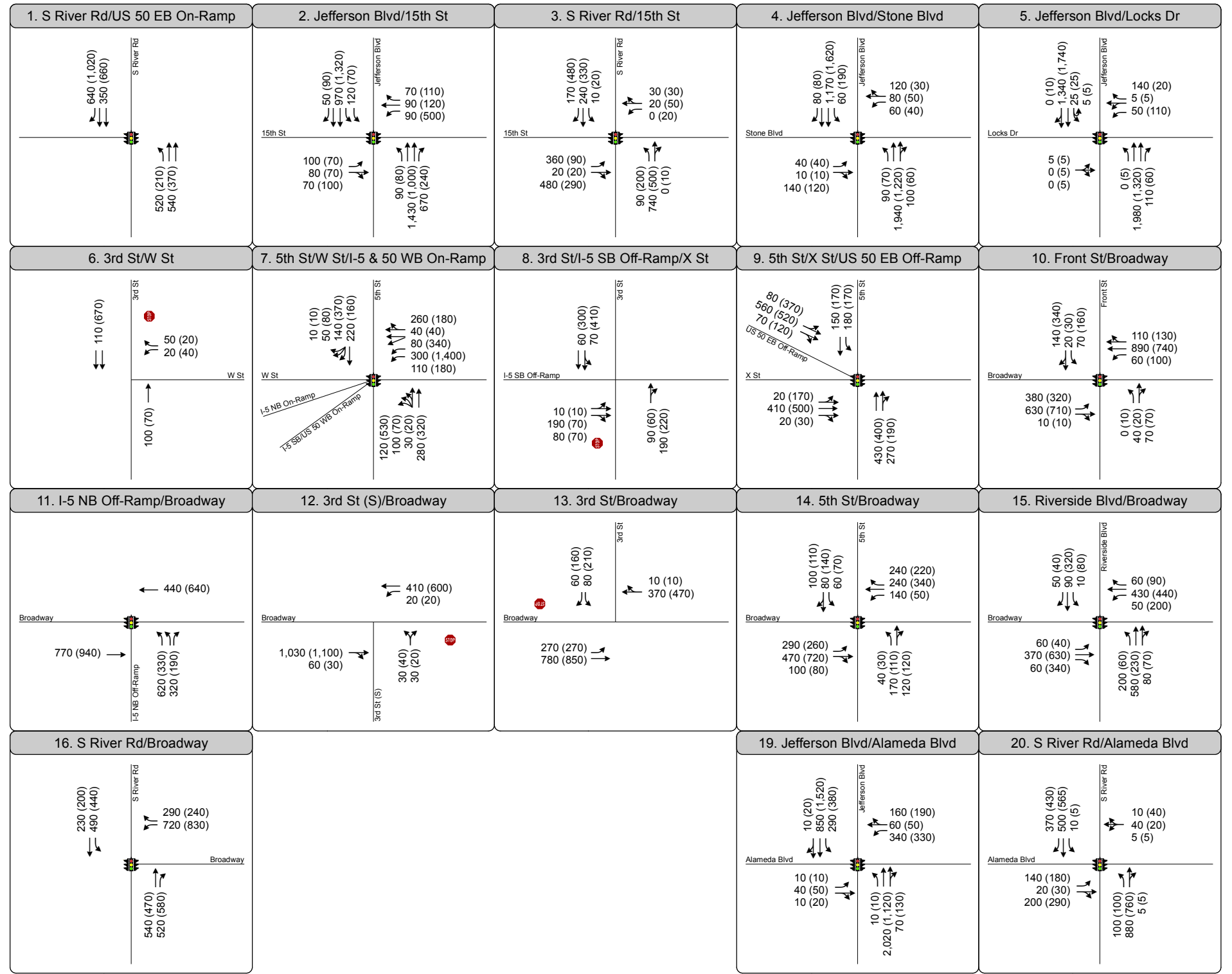
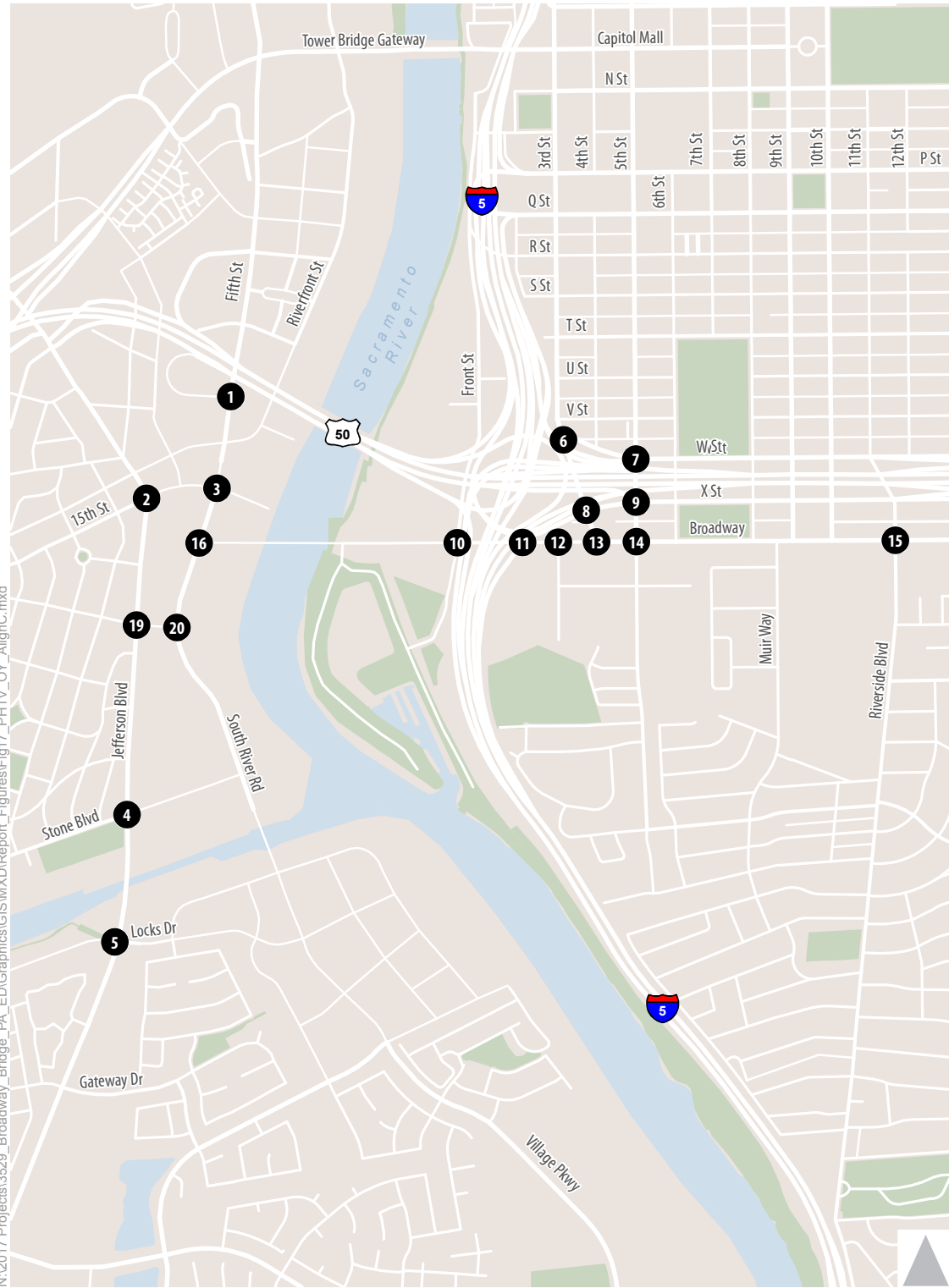
1 Study Intersection

- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 16  
 Peak Hour Traffic Volumes  
 and Lane Configurations -  
 Opening Year 2030 With Bridge Alignment A/B Conditions

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1 Study Intersection

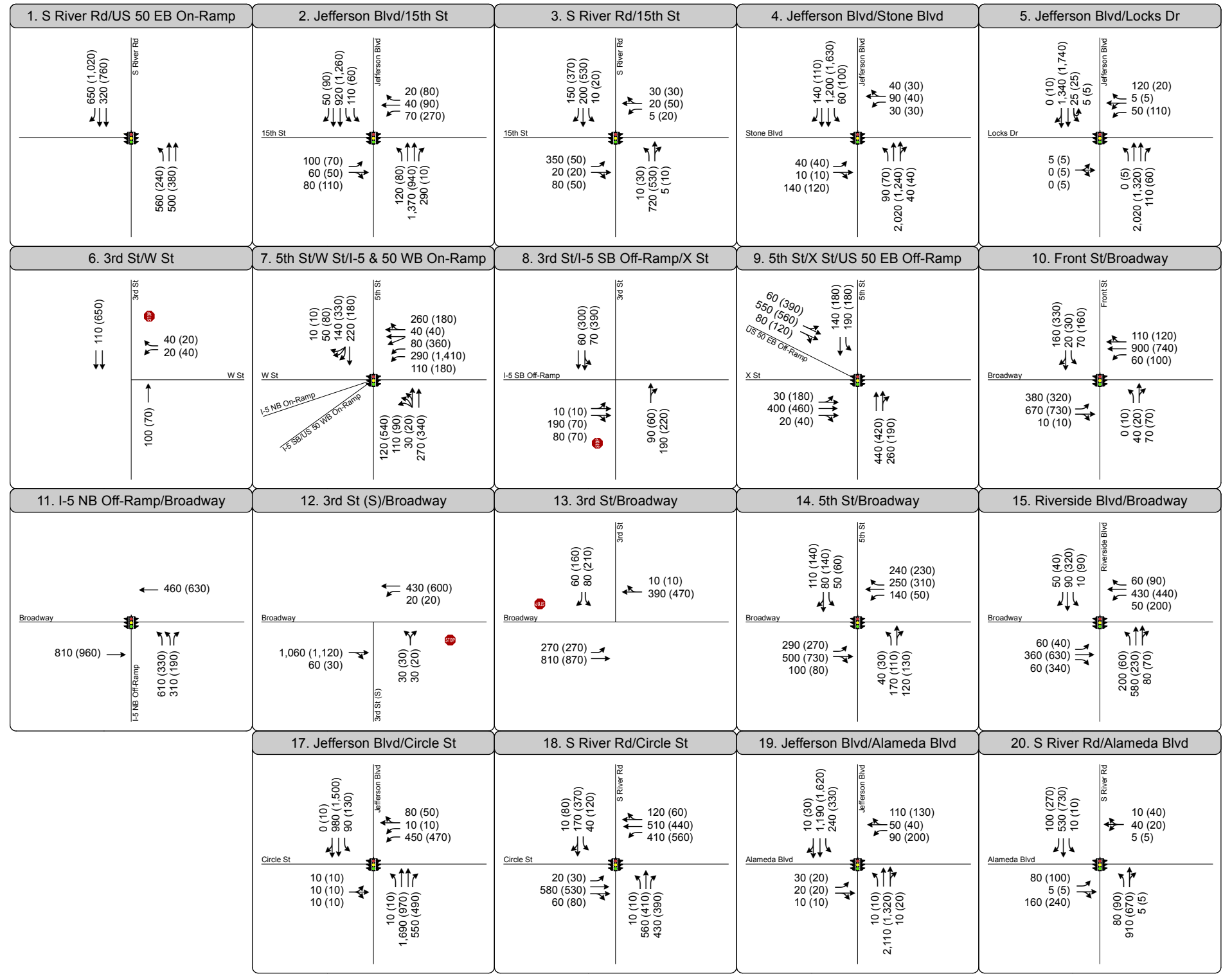
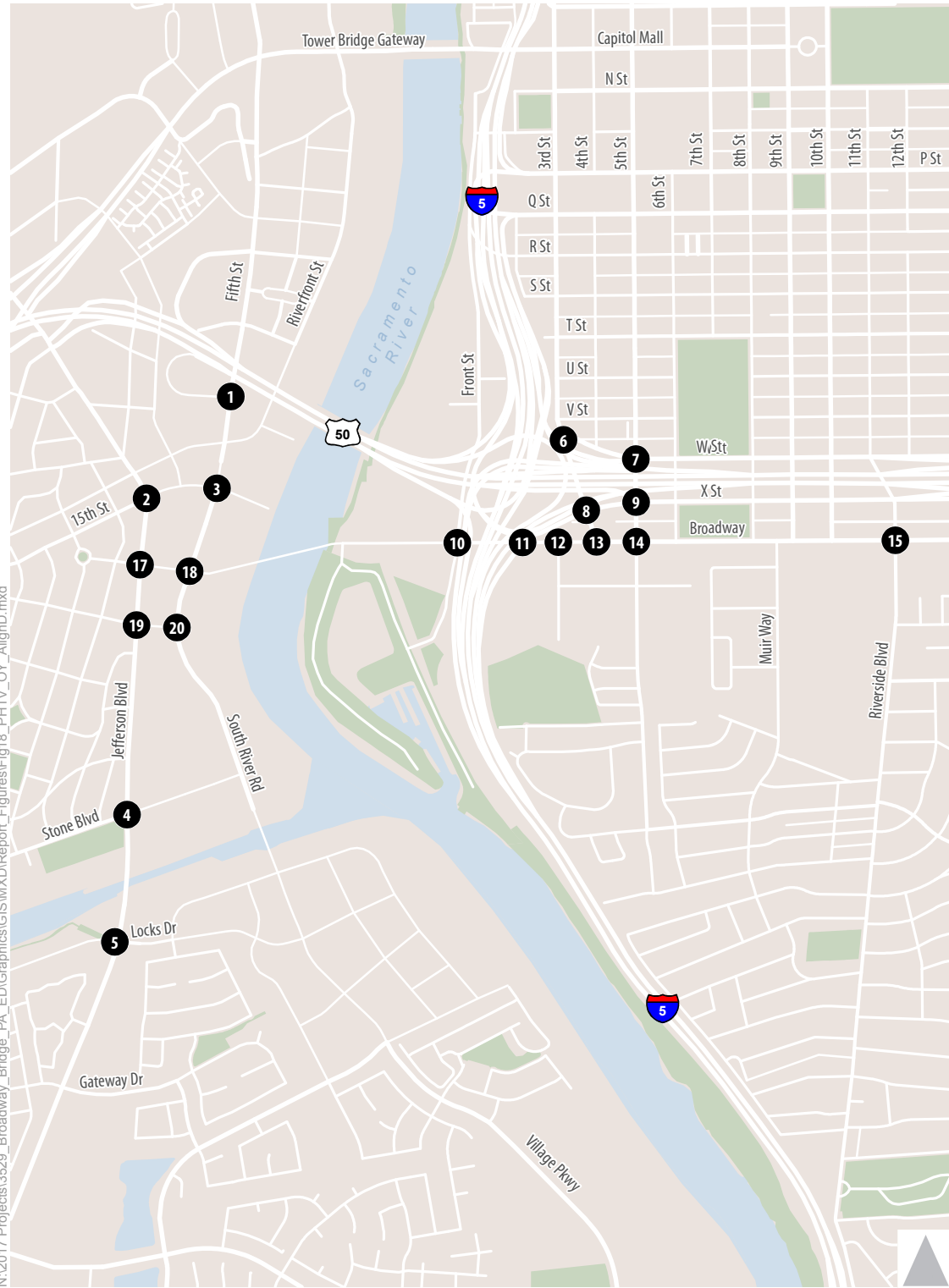
- Turn Lane
  - Traffic Signal
  - Stop Sign
- AM (PM) Peak Hour Traffic Volume



Figure 17  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Opening Year 2030 With Bridge Alignment C Conditions



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1 Study Intersection

- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 18  
 Peak Hour Traffic Volumes  
 and Lane Configurations -  
 Opening Year 2030 With Bridge Alignment D Conditions

The AM and PM peak hour intersection operations under Opening Year 2030 are shown in Table 14. The LOS is also displayed under no build and each bridge alignment alternative for Opening Year conditions in Figures 19, 20, 21, and 22.

ID	Intersection	Jurisdiction	Control Type	Peak Hour	Opening Year 2030							
					No Build		Bridge Alignment A/B		Bridge Alignment C		Bridge Alignment D	
					Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	S. River Rd. / US 50 EB On-Ramp	West Sacramento	Signal	AM	28	C	17	B	12	B	17	B
				PM	54	D	22	C	19	B	12	B
2	Jefferson Blvd. / 15th St.	West Sacramento	Signal	AM	25	C	31	C	32	C	34	C
				PM	38	D	48	D	56	E	53	D
3	S. River Rd. / 15th St.	West Sacramento	Signal	AM	59	E	45	D	52	D	53	D
				PM	29	C	49	D	51	D	34	C
4	Jefferson Blvd. / Stone Blvd.	West Sacramento	Signal	AM	60	E	63	E	68	E	60	E
				PM	30	C	34	C	38	D	31	C
5	Jefferson Blvd. / Locks Dr.	West Sacramento	Signal	AM	18	B	24	C	33	C	28	C
				PM	12	B	11	B	12	B	11	B
6	W St. / 3rd St.	Sacramento	SSSC	AM	1 (6)	A (A)	1 (6)	A (A)	1 (6)	A (A)	1 (6)	A (A)
				PM	1 (9)	A (A)	1 (10)	A (B)	1 (8)	A (A)	1 (11)	A (B)
7	W St. / 5th St.	Sacramento	Signal	AM	25	C	23	C	21	C	21	C
				PM	65	E	70	E	68	E	63	E
8	X St. / 3rd St.	Sacramento	SSSC	AM	4 (10)	A (A)	4 (9)	A (A)	3 (8)	A (A)	4 (8)	A (A)
				PM	7 (33)	A (D)	7 (13)	A (B)	6 (20)	A (C)	5 (14)	A (B)
9	X St. / 5th St.	Sacramento	Signal	AM	46	D	35	C	30	C	32	C
				PM	71	E	39	D	42	D	47	D
10	Broadway / Front St.	Sacramento	SSSC / Signal	AM	5 (13)	A (B)	44	D	53	D	45	D
				PM	5 (13)	A (B)	33	C	30	C	33	C
11	Broadway / I-5 NB Off-Ramp	Sacramento	SSSC	AM	10	B	17	B	17	B	18	B
				PM	7	A	16	B	16	B	17	B
12	Broadway / 3rd St. (South)	Sacramento	SSSC	AM	2 (20)	A (C)	5 (55)	A (F)	3 (37)	A (E)	4 (50)	A (E)
				PM	2 (14)	A (B)	9 (78)	A (F)	7 (60)	A (F)	9 (99)	A (F)
13	Broadway / 3rd St. (North)	Sacramento	SSSC	AM	5 (24)	A (C)	6 (26)	A (D)	4 (14)	A (B)	5 (15)	A (C)
				PM	10 (30)	A (D)	17 (71)	C (F)	15 (57)	C (F)	16 (56)	C (F)
14	Broadway / 5th St.	Sacramento	Signal	AM	27	C	35	C	29	C	33	C
				PM	54	D	37	D	42	D	44	D
15	Broadway / Riverside Blvd.	Sacramento	Signal	AM	17	B	20	B	18	B	18	B
				PM	34	C	38	D	31	C	42	D
16	S. River Rd. / Broadway	West Sacramento	Signal	AM	--	--	--	--	<b>103</b>	<b>F</b>	--	--
				PM	--	--	--	--	<b>112</b>	<b>F</b>	--	--
17	Jefferson Blvd. / Circle St.	West Sacramento	Signal	AM	--	--	--	--	--	--	29	C
				PM	--	--	--	--	--	--	41	D
18	S. River Rd. / Circle St.	West Sacramento	Signal	AM	--	--	--	--	--	--	57	E
				PM	--	--	--	--	--	--	73	E
19	Jefferson Blvd. / Alameda Blvd.	West Sacramento	Signal	AM	79	E	62	E	<b>106</b>	<b>F</b>	70	E
				PM	57	E	63	E	<b>88</b>	<b>F</b>	60	E

20	S. River Rd. / Alameda Blvd.	West Sacramento	Signal	AM PM	29 29	C C	27 27	C C	<b>103</b> <b>84</b>	<b>F</b> <b>F</b>	55 30	E C
<p>Notes: LOS = Level of Service. SSSC = Side Street Stop Controlled</p> <p>For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Impacts to intersections are determined based on the overall LOS and average delay. All intersections were analyzed in SimTraffic.</p> <p>Intersection 10 (Broadway / Front St.) is analyzed as a side street stop controlled intersection under no build conditions, and signalized under all with bridge alignment alternatives.</p> <p>LOS in bold font is worse than the LOS minimum for the intersection. LOS in bold and red font is an impact. An impact is a change in LOS between No Build and Alternative scenarios from acceptable to unacceptable or a worsening of an unacceptable condition.</p> <p>Source: Fehr &amp; Peers, 2020</p>												

### Opening Year No Build

All study intersections operate within acceptable LOS under Opening Year No Build conditions.

Growth in land use in West Sacramento south of the study area adds traffic to Jefferson Boulevard and South River Road, especially northbound on both roadways during the morning commute, and southbound during the afternoon/evening commute. Higher congestion occurs at Jefferson Boulevard / Alameda Boulevard with the addition of the Alameda Boulevard extension to South River Road. The close spacing with the intersection of South River Road / Alameda Boulevard creates minimal storage for turning vehicles to queue without blocking through movements.

In Sacramento, the overall growth in traffic and addition of the 5<sup>th</sup> Street roadway conversion to two-way, creates added congestion along the roadway, notably in the PM peak hour at the ramp terminal intersections.

### Opening Year with Bridge Alignment A/B

All study intersections operate within acceptable LOS under Opening Year with Bridge Alignment A/B conditions. The inclusion of the bridge eases northbound queuing along Jefferson Boulevard and South River Road in West Sacramento, shifting away some traffic that was destined for the US 50 ramps. This alternative would create a **less-than-significant** impact to intersection operations under Opening Year conditions.

### Opening Year with Bridge Alignment C

Most study intersections operate within acceptable LOS under Opening Year with Bridge Alignment C conditions, except for intersection 16 (South River Road / Broadway), intersection 17 (Jefferson Boulevard / Alameda Boulevard), and intersection 18 (South River Road / Alameda Boulevard) which operate at LOS F. This would be a **significant** impact.

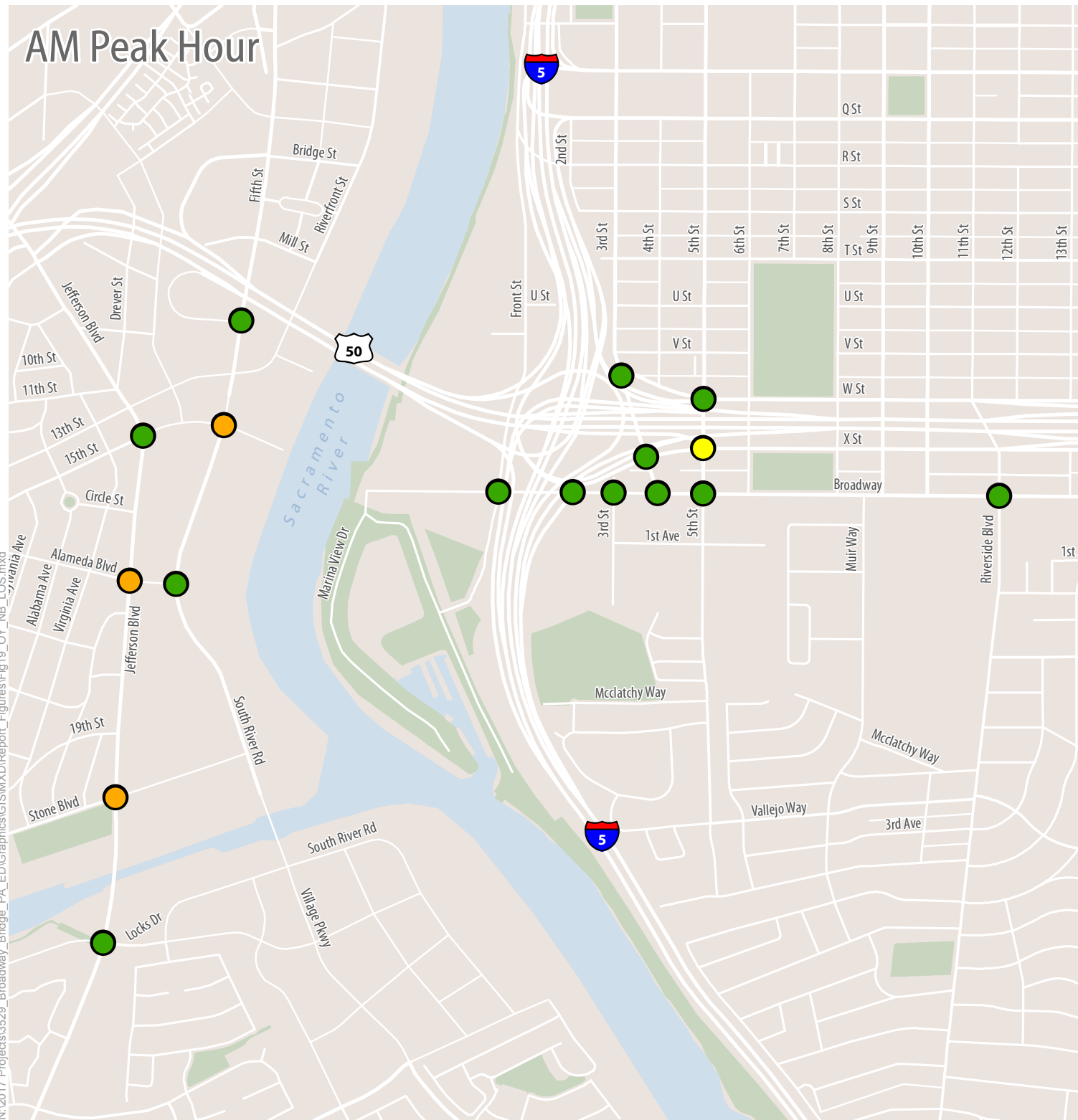
Within West Sacramento, much of the travel demand for traffic crossing the bridge is destined to Jefferson Boulevard; however, considering Bridge Alignment C does not have a direct connection to Jefferson Boulevard, the demand is shifted to 15<sup>th</sup> Street and Alameda Boulevard. The closely spaced intersections of Jefferson Boulevard and South River Road with Alameda Boulevard also create limited storage for turning vehicles to queue without blocking the through movements. The high level of delay also creates westbound traffic to queue across the bridge during the both the AM and PM peak hour.

#### **Opening Year with Bridge Alignment D**

All study intersections operate within acceptable LOS under Opening Year with Bridge Alignment D. In West Sacramento, intersections operate similarly to Alignment A/B due to the direct connection of the bridge to Jefferson Boulevard via extension of Circle Street between Jefferson Boulevard and South River Road. There is moderate levels of congestion still around the bridge approach intersections around Jefferson Boulevard, South River Road, Circle Street and Alameda Boulevard due to the close spacing of the roadways creating minimal storage space for turning vehicles to queue. This alternative would create a **less-than-significant** impact to intersection operations under Opening Year conditions.



# AM Peak Hour



# PM Peak Hour

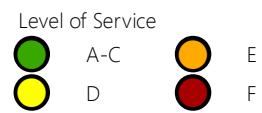
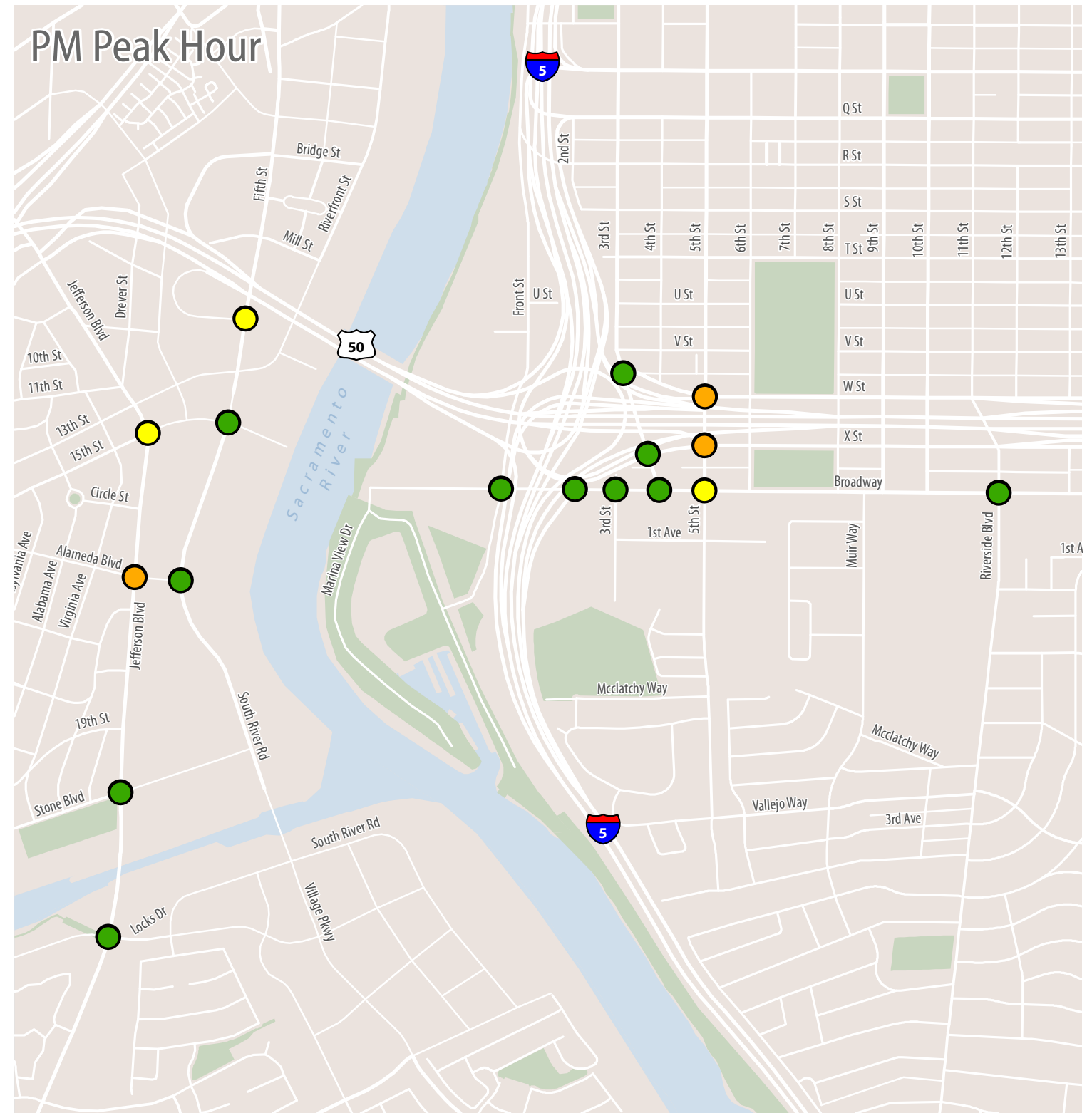
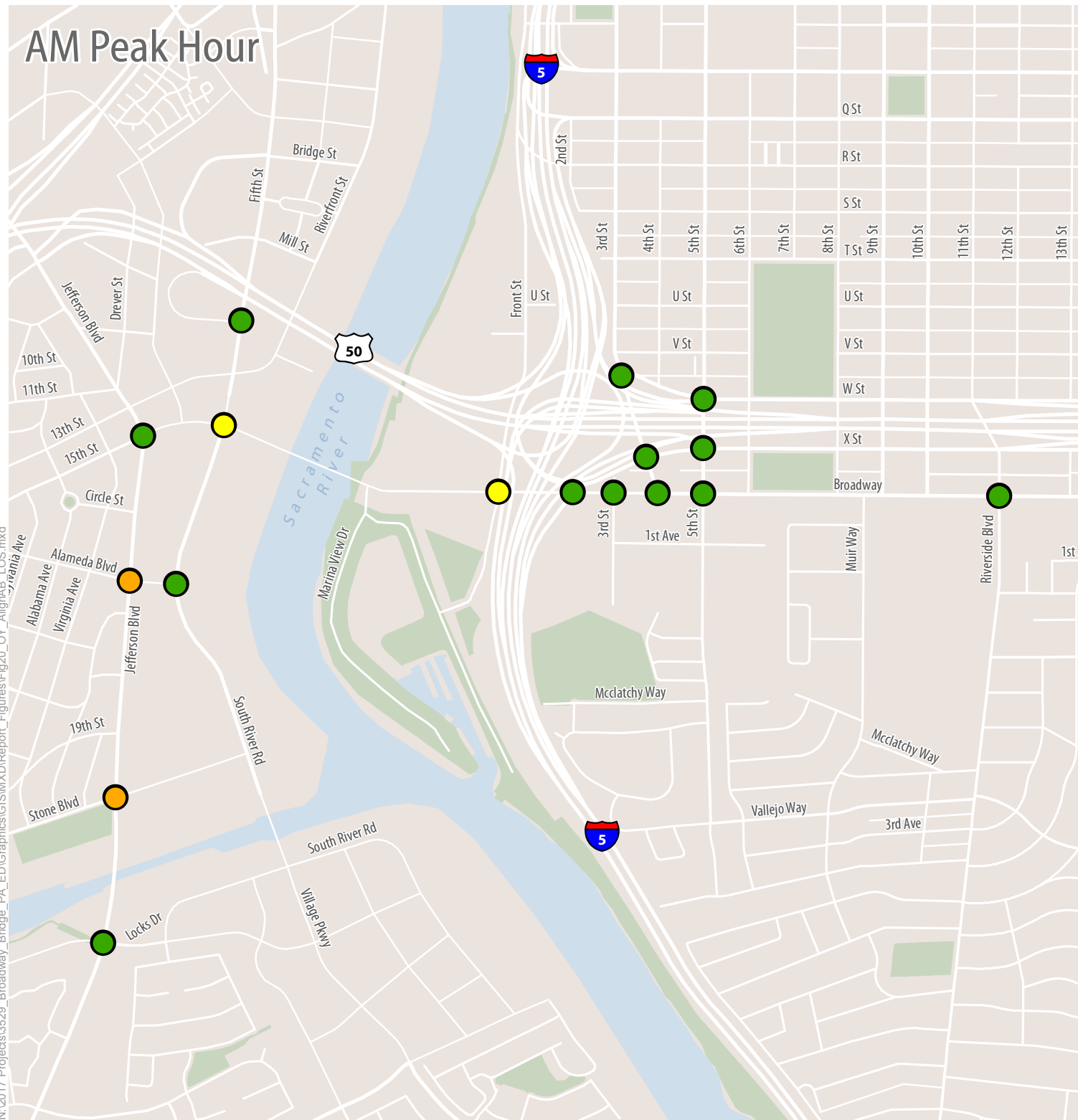


Figure 19  
Opening Year 2030 No Build -  
Peak Hour Intersection LOS

# AM Peak Hour



# PM Peak Hour

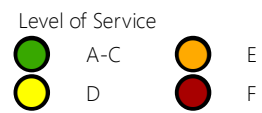
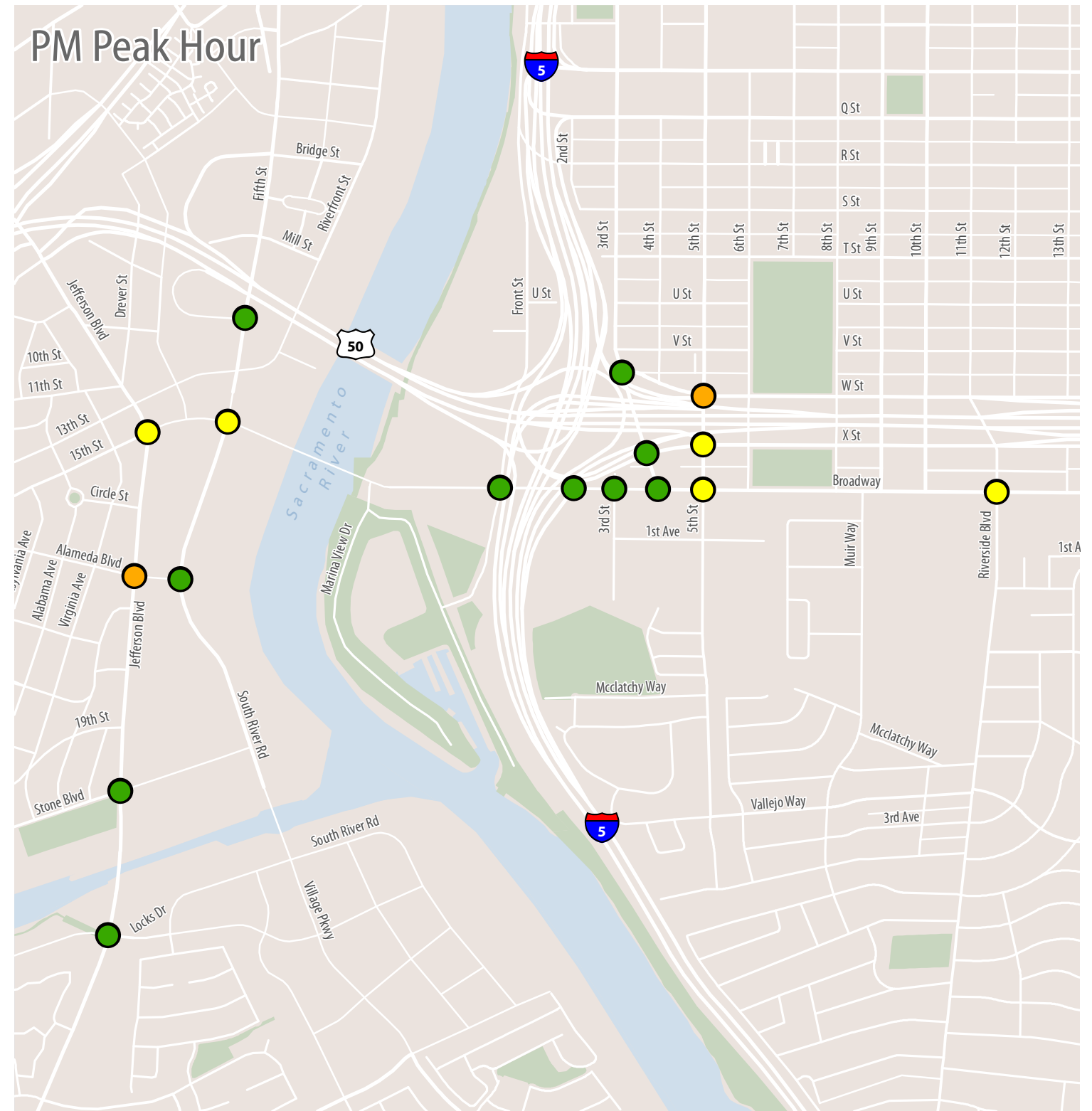
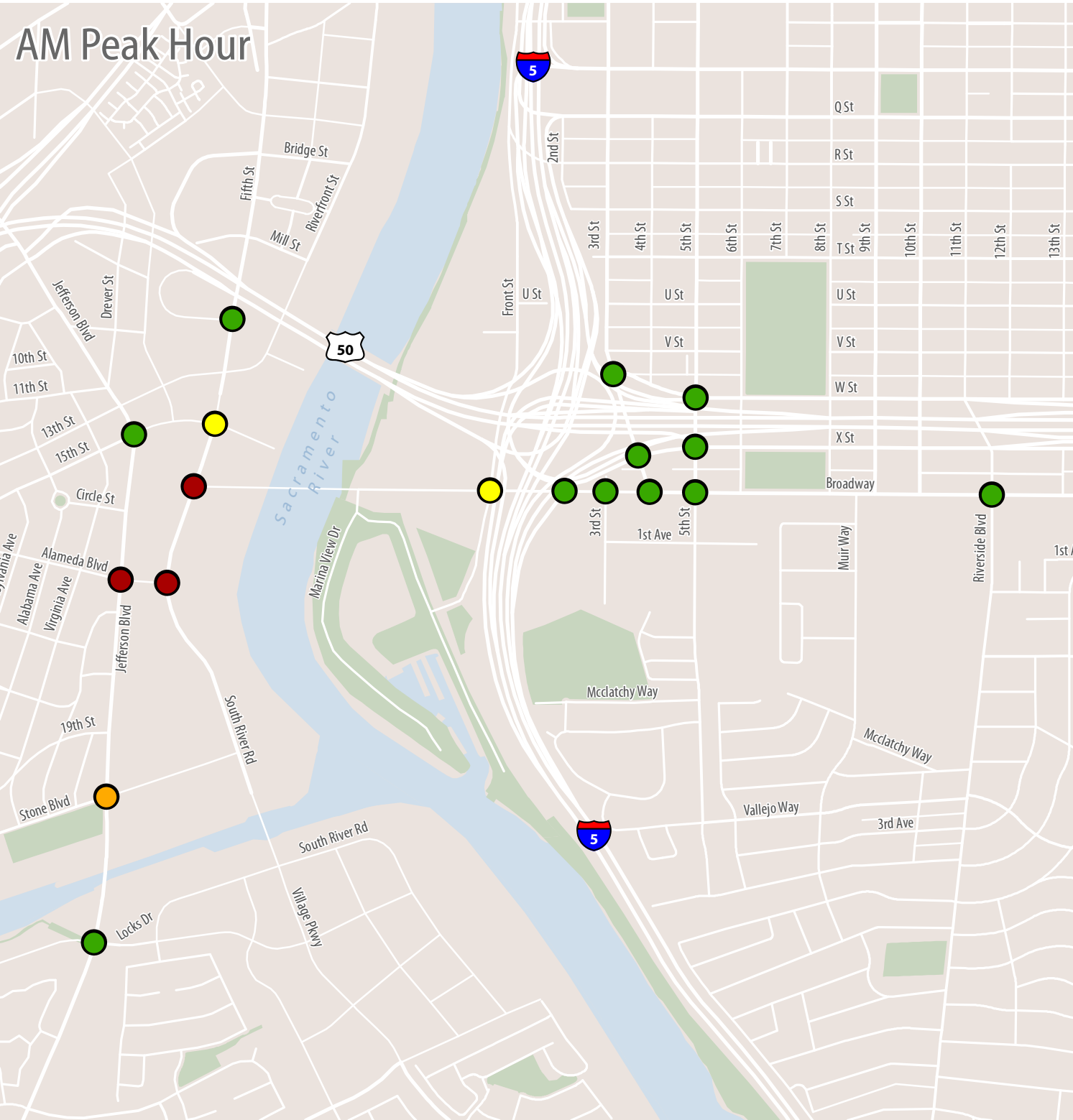


Figure 20

Opening Year 2030 Plus Bridge Alignment A/B - Peak Hour Intersection LOS

# AM Peak Hour



# PM Peak Hour

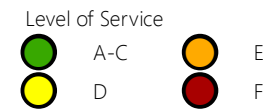
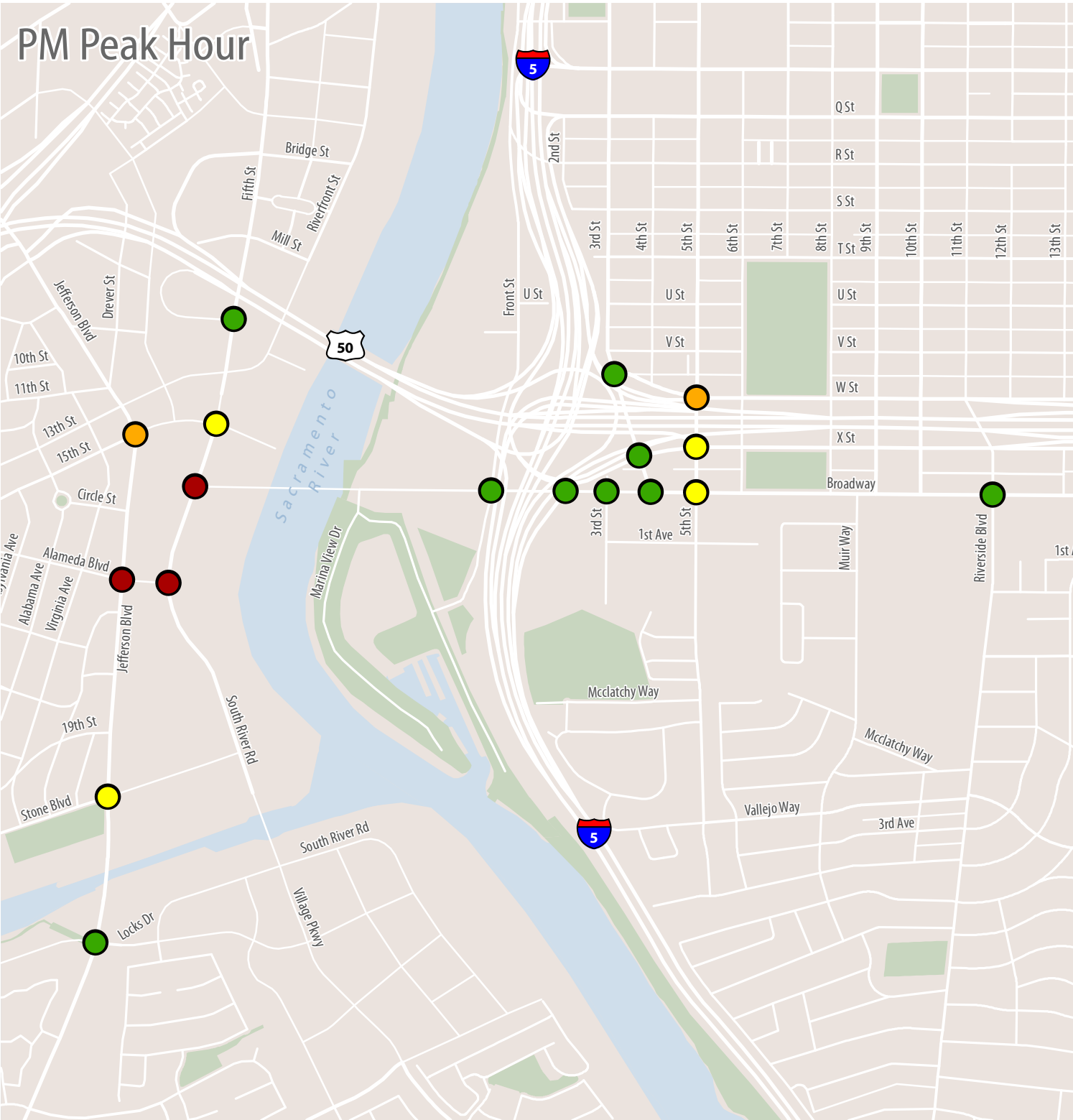
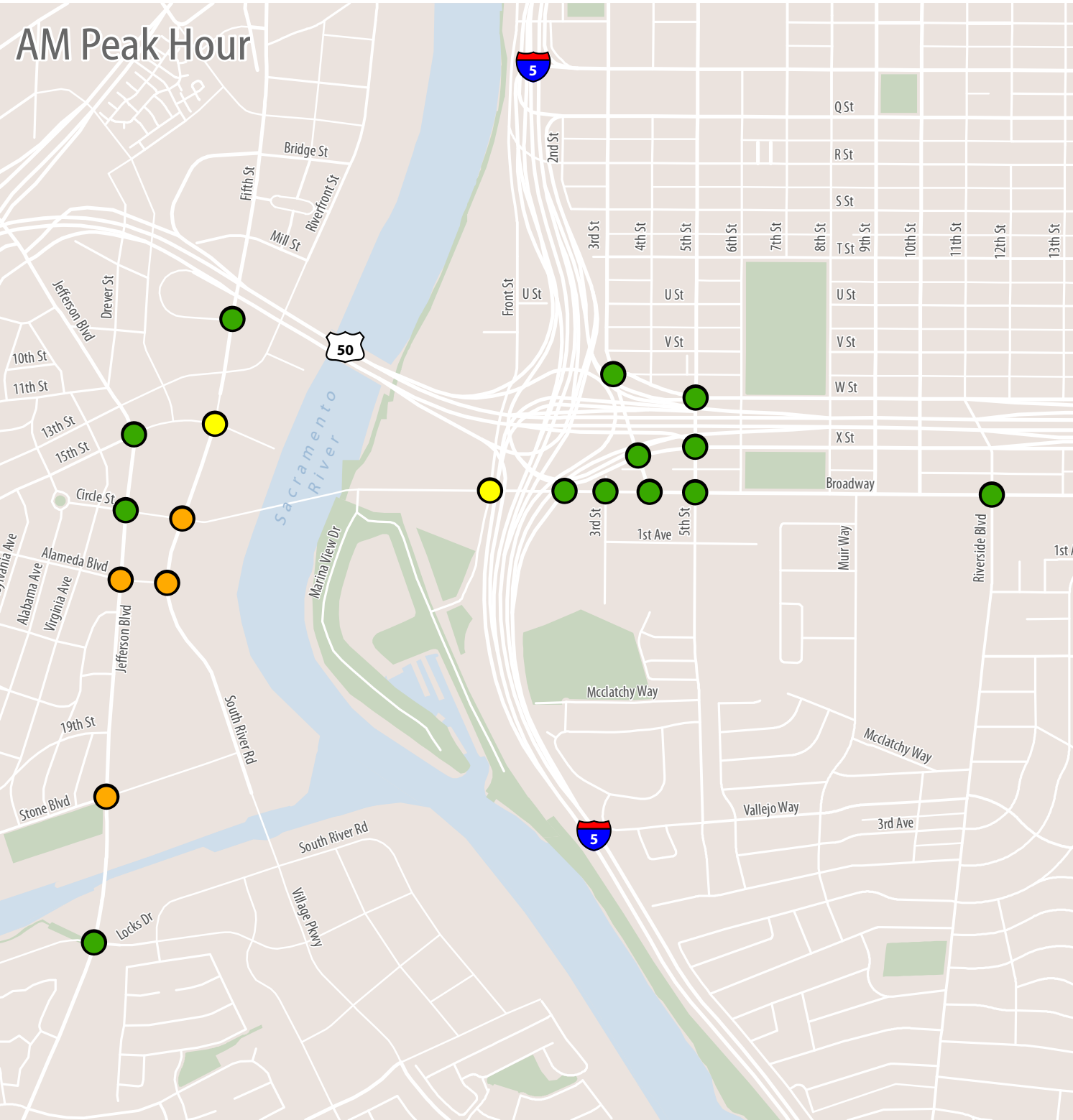


Figure 21

Opening Year 2030 Plus Bridge Alignment C - Peak Hour Interseccion LOS



# AM Peak Hour



# PM Peak Hour

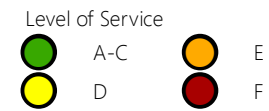
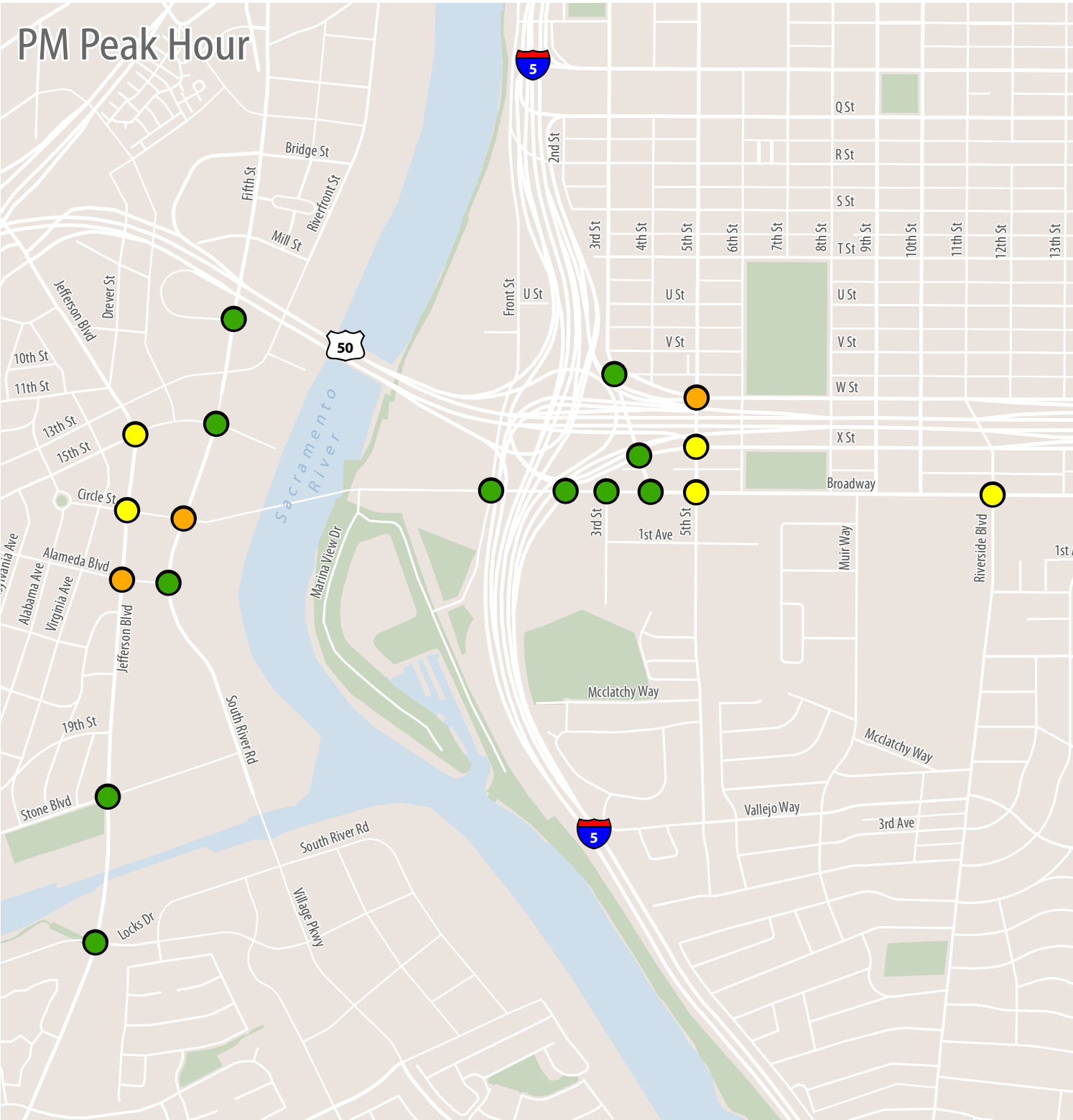


Figure 22

Opening Year 2030 Plus Bridge Alignment D - Peak Hour Interseccion LOS

## Mitigations

The following mitigations address the significant impact under Opening Year – Alignment C Conditions:

- Intersection 16 (South River Road/Broadway): extending the northbound right-turn pocket to 275 feet, and adding a second southbound left-turn lane.
- Intersection 19 (Jefferson Boulevard/Alameda Boulevard): changing the eastbound and westbound protected left-turns to permitted left-turn signal phasing.
- Intersection 20 (South River Road/Alameda): extending the northbound left-turn pocket to 175 feet, and extending the southbound right-turn pocket to 250 feet.

Table 15 shows the intersection operations under Opening Year – Alignment C conditions with mitigations in the vicinity of the impacted intersections.

ID	Intersection	Jurisdiction	Control Type	Peak Hour	Opening Year 2030					
					No Build		Bridge Alignment C		Bridge Alignment C with Mitigations	
					Delay	LOS	Delay	LOS	Delay	LOS
3	S. River Rd. / 15th St.	West Sacramento	Signal	AM	59	E	52	D	42	D
				PM	29	C	51	D	38	D
10	Broadway / Front St.	Sacramento	SSSC / Signal	AM	5 (13)	A (B)	53	D	56	E
				PM	5 (13)	A (B)	30	C	32	C
16	S. River Rd. / Broadway	West Sacramento	Signal	AM	--	--	<b>103</b>	<b>F</b>	69	E
				PM	--	--	<b>112</b>	<b>F</b>	73	E
19	Jefferson Blvd. / Alameda Blvd.	West Sacramento	Signal	AM	79	E	<b>106</b>	<b>F</b>	73	E
				PM	57	E	<b>88</b>	<b>F</b>	63	E
20	S. River Rd. / Alameda Blvd.	West Sacramento	Signal	AM	29	C	<b>103</b>	<b>F</b>	68	E
				PM	29	C	<b>84</b>	<b>F</b>	38	D

Notes: LOS = Level of Service. SSSC = Side Street Stop Controlled

For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Impacts to intersections are determined based on the overall LOS and average delay. All intersections were analyzed in SimTraffic.

Intersection 10 (Broadway / Front St.) is analyzed as a side street stop controlled intersection under no build conditions, and signalized under all with bridge alignment alternatives.

LOS in bold font is worse than the LOS minimum for the intersection. LOS in bold and red font is an impact. An impact is a change in LOS between No Build and Alternative scenarios from acceptable to unacceptable or a worsening of an unacceptable condition.

Source: Fehr & Peers, 2020

With the mitigations, the impacted intersections would operate within acceptable LOS, and no other study intersections would worsen to unacceptable conditions. Therefore, this would be a **less-than-significant** impact after mitigations.

## Opening Year Impacts to Freeway Off-Ramp Queuing

Table 16 displays the freeway off-ramp queuing under Opening Year 2030 conditions.

ID	Location	Available Storage	Peak Hour	Opening Year 2030			
				No Build	Bridge Alignment A/B	Bridge Alignment C	Bridge Alignment D
				Queue	Queue	Queue	Queue
1	I-5 SB Off-Ramp at 3rd St./X St.	1,150	AM	75	75	75	75
			PM	100	100	75	75
2	US 50 EB Off-Ramp at 5th St./X St.	1,300	AM	525	325	250	275
			PM	800	425	450	450
3	I-5 NB Off-Ramp at Broadway	1,000	AM	150	225	175	275
			PM	75	125	175	150

Notes: The available storage length for off-ramp queuing is measured from the noted off-ramp terminal intersection to the freeway off-ramp gore point. Maximum queue length is based upon output from SimTraffic microsimulation software.  
Source: Fehr & Peers, 2020

As shown, off-ramp queues under Opening Year No Build conditions would remain within the available storage. The inclusion of the bridge for each alignment alternative would shift some traffic off of utilizing the freeway facility; thereby, generally decreasing off-ramp queuing. All off-ramp queues would remain within the available storage capacity for each bridge alignment alternative under Opening Year conditions; therefore, this would be a **less-than-significant** impact.

## Opening Year Impacts to Roadway Operations

Table 17 shows the roadway segment operations analysis results under Opening Year 2030 conditions.

ID	Roadway	Segment	Jurisdiction	Lanes	Opening Year 2030							
					No Build		Bridge Alignment A/B		Bridge Alignment C		Bridge Alignment D	
					LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
1	Jefferson Blvd.	North of 15th Street	West Sacramento	4	F	1.35	F	1.11	F	1.13	F	1.04
2	15th St.	West of Jefferson Blvd.	West Sacramento	2	C	0.45	C	0.58	C	0.55	C	0.50

3	Alameda Blvd.	West of Jefferson Blvd.	West Sacramento	2	C	0.27	C	0.31	C	0.31	C	0.36
4	Jefferson Blvd.	South of Alameda Blvd.	West Sacramento	4	<b>F</b>	<b>1.09</b>	<b>F</b>	<b>1.13</b>	<b>F</b>	<b>1.14</b>	<b>F</b>	<b>1.14</b>
5	S. River Rd.	South of 15th St. (Alameda Blvd.)	West Sacramento	2	<b>F</b>	<b>1.15</b>	<b>F</b>	<b>1.29</b>	<b>F</b>	<b>1.28</b>	<b>F</b>	<b>1.35</b>
6	Jefferson Blvd.	South of Locks Dr.	West Sacramento	4	<b>F</b>	<b>1.08</b>	<b>F</b>	<b>1.12</b>	<b>F</b>	<b>1.12</b>	<b>F</b>	<b>1.11</b>
7	3rd St.	North of W St.	Sacramento	2	A	0.13	A	0.17	A	0.16	A	0.16
8	5th St.	North of W St.	Sacramento	2	C	0.79	D	0.81	D	0.81	D	0.80
9	5th St.	South of Broadway	Sacramento	2	D	0.80	D	0.81	D	0.81	D	0.81
10	Riverside Blvd.	South of Broadway	Sacramento	2	D	0.87	E	0.90	E	0.90	D	0.89

Notes: LOS = Level of Service. V/C = Volume to Capacity Ratio  
 LOS in bold font is worse than the LOS minimum for the intersection.  
 Source: Fehr & Peers, 2020

The growth in land use within West Sacramento south of the study area would increase traffic volume along Jefferson Boulevard and South River Road, worsening the daily roadway operations to LOS F under Opening Year No Build conditions. The inclusion of the bridge would reduce volumes on Jefferson Boulevard north of 15<sup>th</sup> Street; however, would increase volumes on Jefferson Boulevard and South River Road south of Alameda Boulevard. Roadway capacity utilization results contained in this section are for information purposes only, and not utilized for impact analysis.

## Opening Year Impacts to Bicycle, Pedestrian and Transit Facilities

The proposed project would have similar impacts to bicycle, pedestrian, and transit facilities under Opening Year conditions as discussed in the previous section under Existing Pus Project. The project would not interfere with existing or planned bicycle, pedestrian, or transit facilities. This includes sidewalks planned as part of development in the Pioneer Bluff area of West Sacramento and along Broadway in Sacramento. Additionally, the bridge will be designed to accommodate buses and a potential future streetcar line; thereby providing an alternative for future transit realignment or expansion. Therefore, the project would create a **less-than-significant** impacts to bicycle, pedestrian, and transit facilities.

## Opening Year Impacts to Vehicle Miles of Travel (VMT)

Table 18 displays the daily regional vehicle miles of travel under Opening Year 2030 conditions. This scenario assumes that the short-term travel response to the bridge being opened is likely limited to route choices; therefore, all regional trip origins and destinations remain constant from the no build scenario. The bridge then reflects the opening of a shorter route for trips that would already occur. For all bridge

alignment alternatives, the daily regional VMT total is lower than under the Opening Year 2030 No Build scenario.

**Table 18: Daily Regional Vehicle Miles of Travel (VMT) – Opening Year 2030 Conditions**

Scenario	Regional Daily VMT Total	Difference (From No Build)
Opening Year 2030 No Build	69,959,845	--
Opening Year 2030 With Bridge Alignment A/B	69,946,445	-13,400
Opening Year 2030 With Bridge Alignment C	69,943,850	-15,995
Opening Year 2030 With Bridge Alignment D	69,939,269	-20,576

Source: Fehr & Peers, 2020



## Design Year 2040 Conditions

This section describes the anticipated travel conditions under design year (2040) conditions for the roadway, bicycle, pedestrian, and transit systems. The effect of the proposed project on cumulative conditions is measured to identify potential cumulative impacts and recommend further improvements to the transportation infrastructure.

### Traffic Forecasts

Design Year 2040 traffic forecasts were developed using the SACMET regional travel demand model. The model includes the land use growth and roadway infrastructure projects within the Sacramento region assumed under cumulative conditions, as identified by SACOG in the Metropolitan Transportation Plan and Sustainable Communities Strategy (MTP/SCS). Key roadway network improvements, on top of those already in place under Opening Year conditions, include:

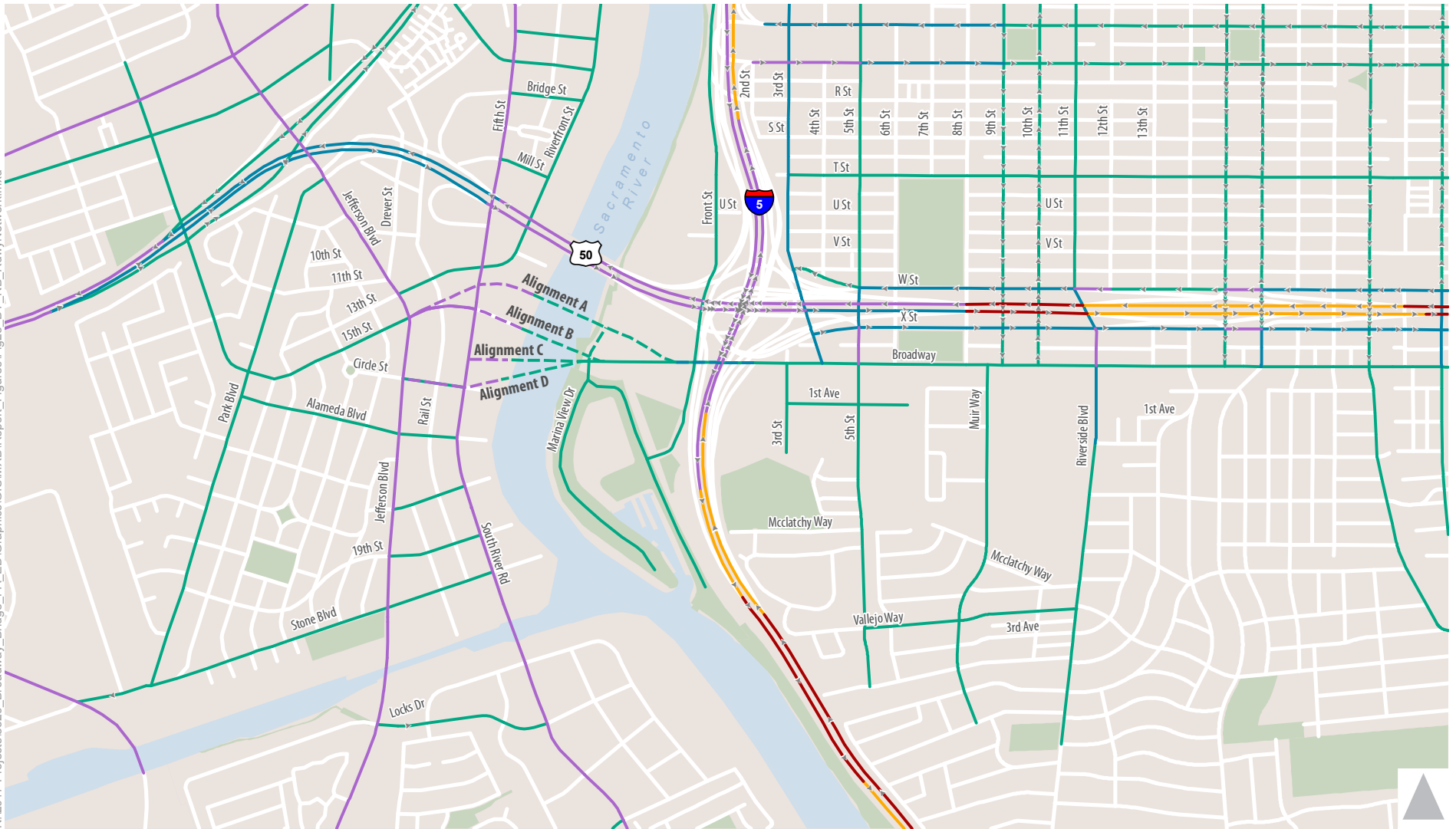
- Realignment of South River Road, between 15<sup>th</sup> Street and Stone Boulevard, and widening of the roadway to four travel lanes.
- Addition of Rail Street, parallel and between Jefferson Boulevard and South River Road.
- Extensions of Circle Street, 17<sup>th</sup> Street, and 19<sup>th</sup> Street between Jefferson Boulevard and South River Road.

The traffic forecasting procedure known as the “difference method” calculation was used to develop the Design Year forecasts. The procedure adds the difference in traffic between the base year and design year model to the existing traffic counts, as displayed below:

$$\text{Design Year Forecast} = \text{Existing Volume} + (\text{Design Year Model} - \text{Base Model})$$

Figure 23 shows the roadway network under design year conditions, including number of lanes and directions.

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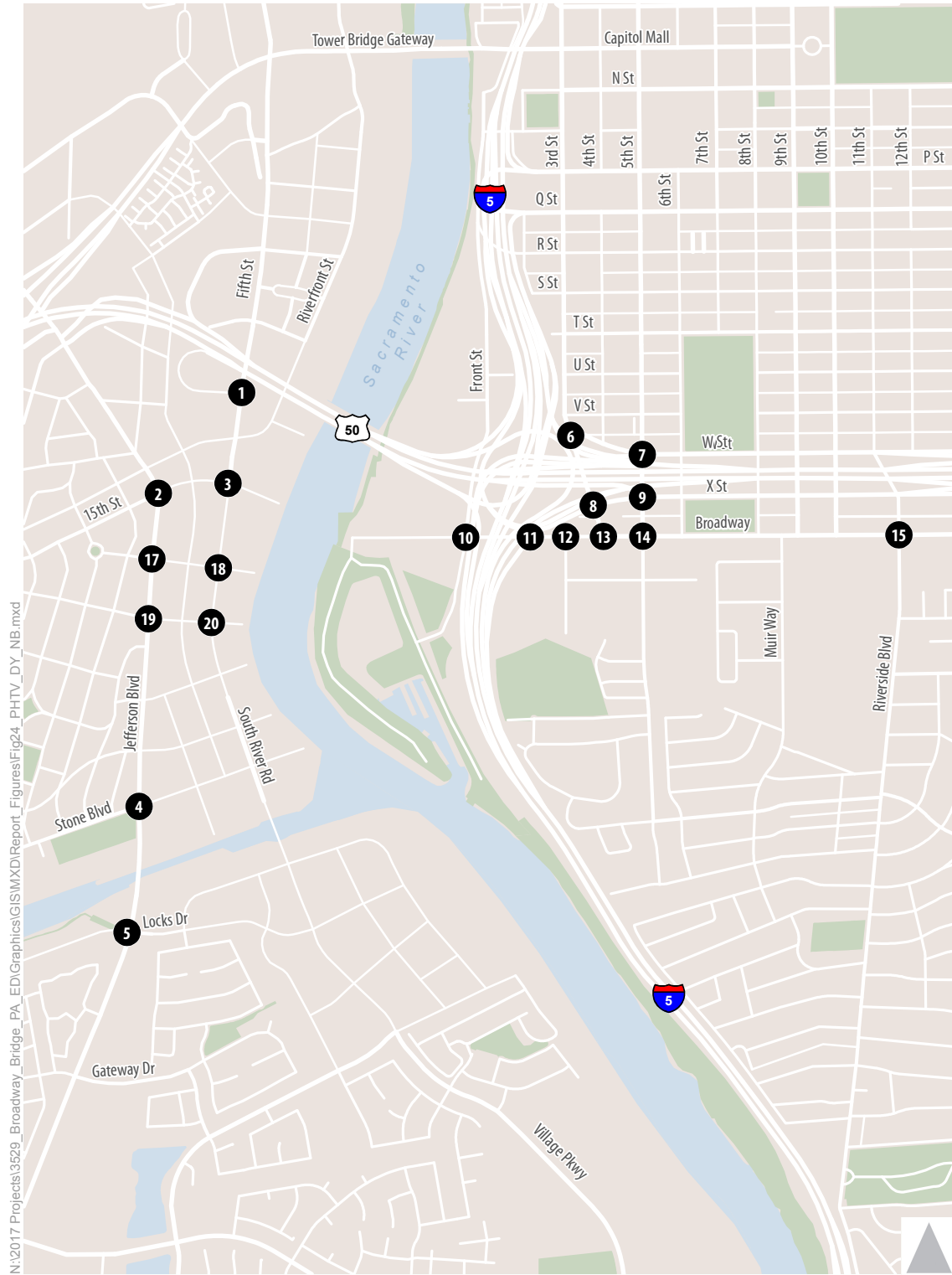
Design Year	Number of Lanes	Bridge Alignment	Number of Lanes
Green	2	Green Dashed	2
Blue	3	Blue Dashed	3
Purple	4	Purple Dashed	4
Yellow	5		
Red	6		



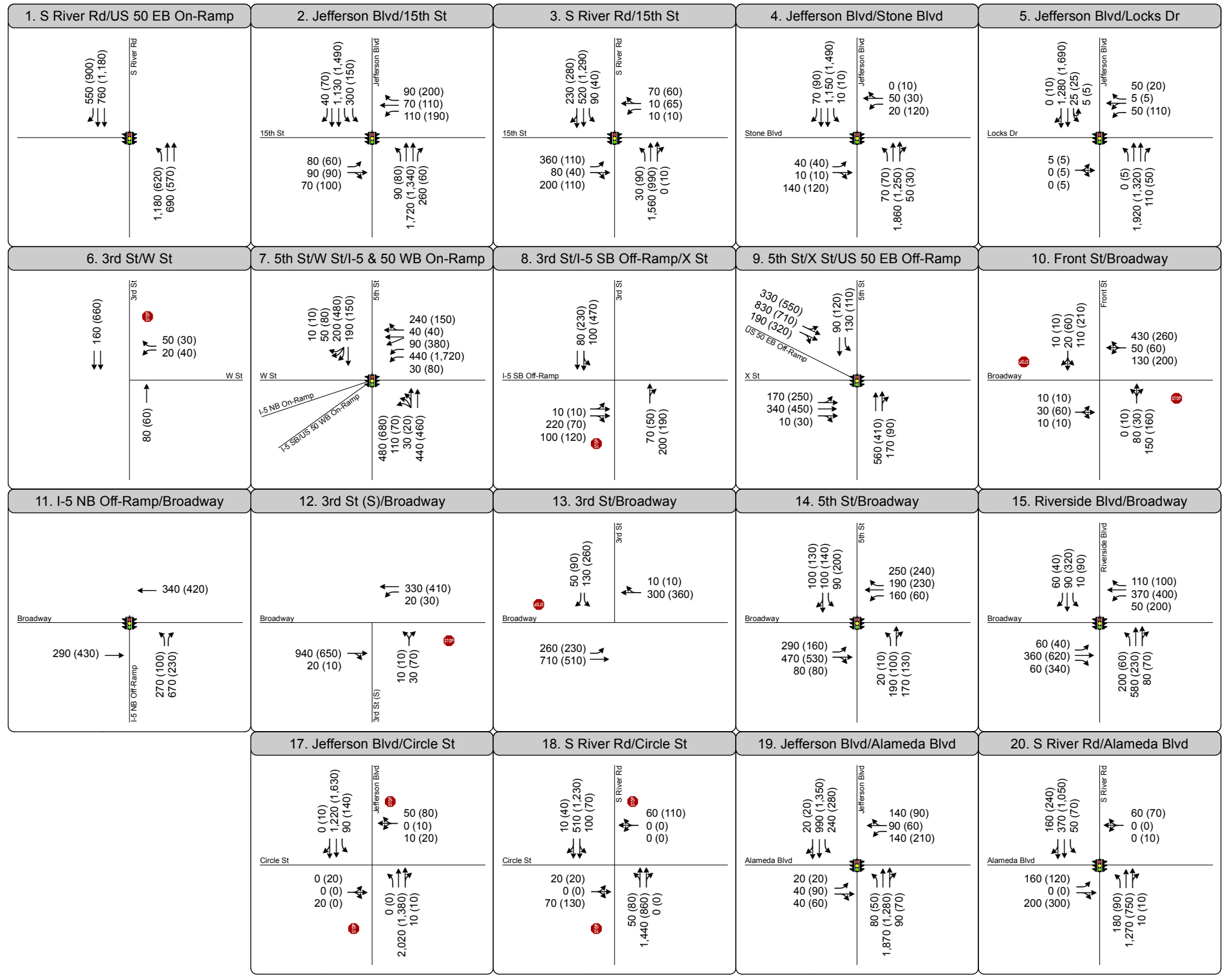
Figure 23  
Design Year 2040 Roadway Network

## **Design Year Impacts to Intersection Operations**

Figure 24 displays the AM and PM peak hour turning movement volumes at the study intersections under Design Year No Build, and Figures 25, 26, and 27 show the peak hour turning movement volumes under Design Year with Bridge Alignment A/B, C, and D respectively.



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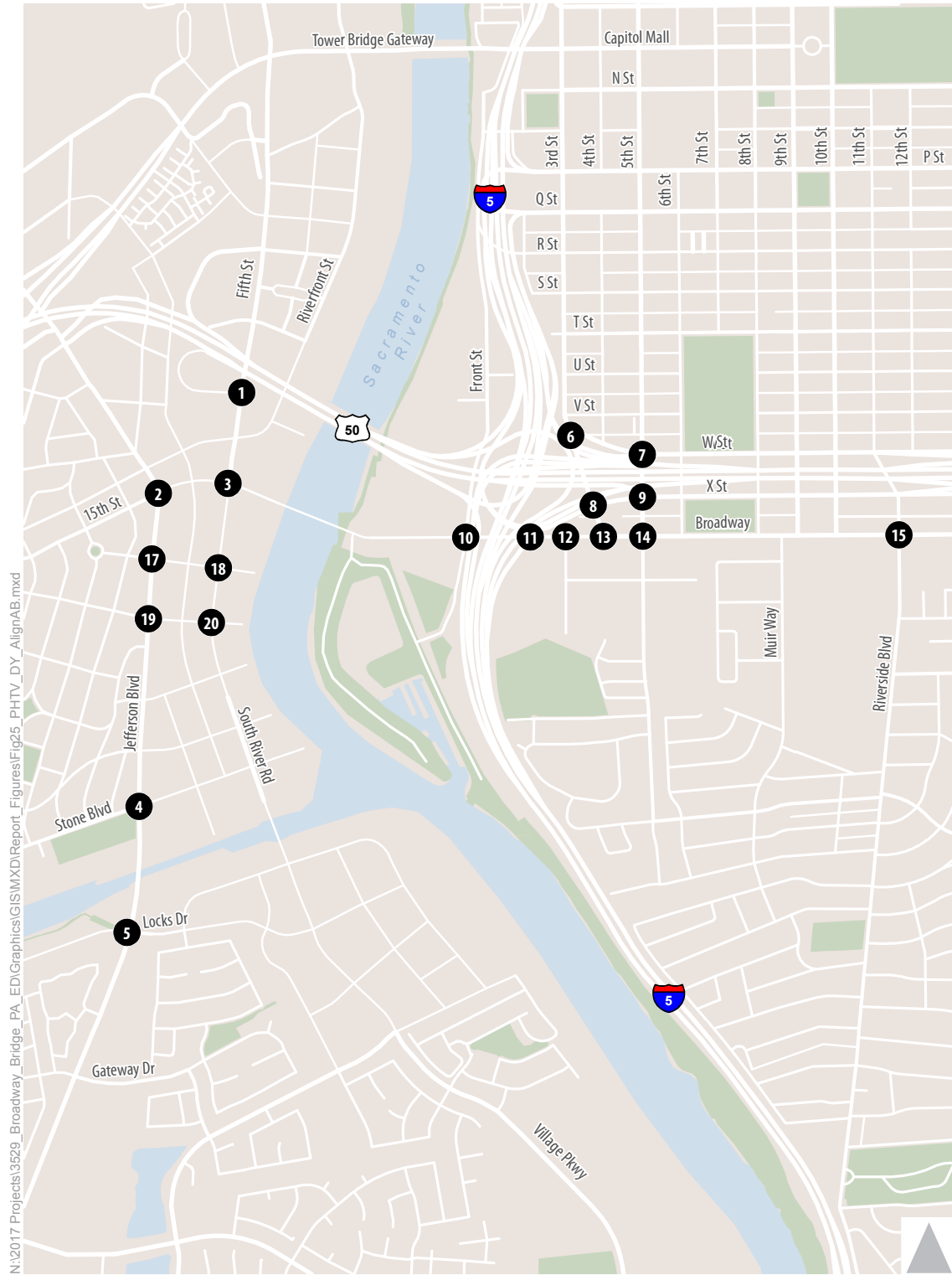


1 Study Intersection

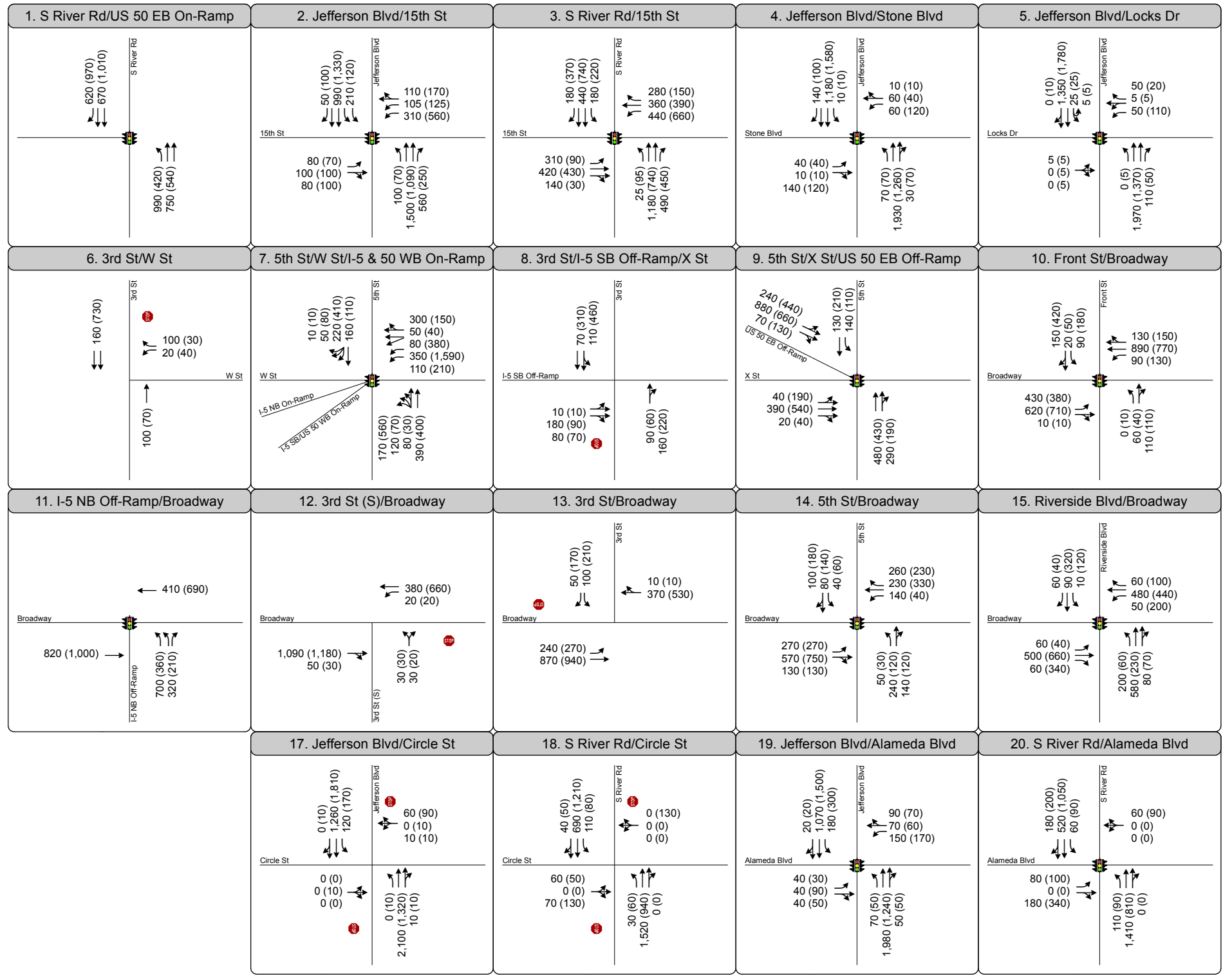
- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

Figure 24  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Design Year 2040 No Build Conditions





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1 Study Intersection

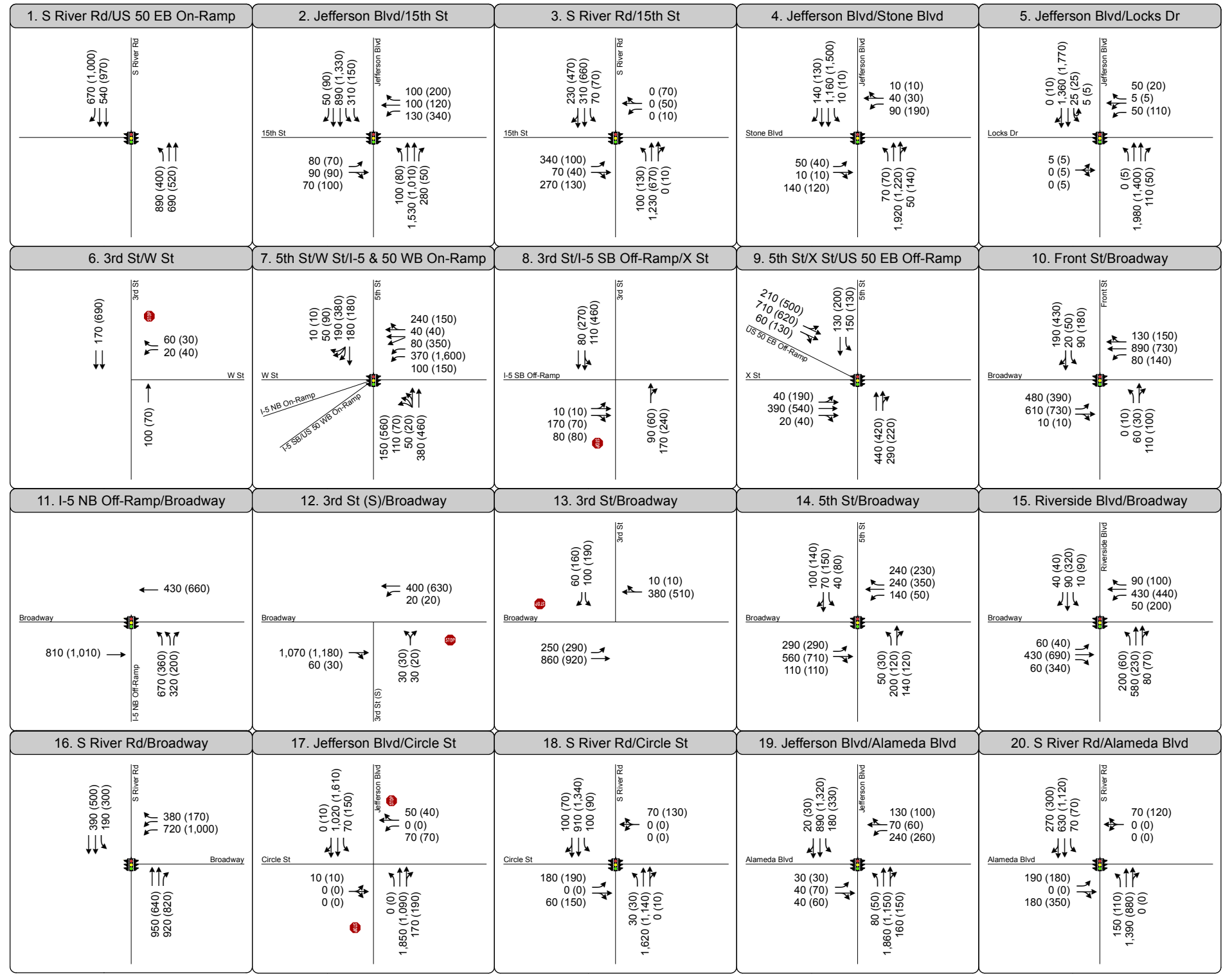
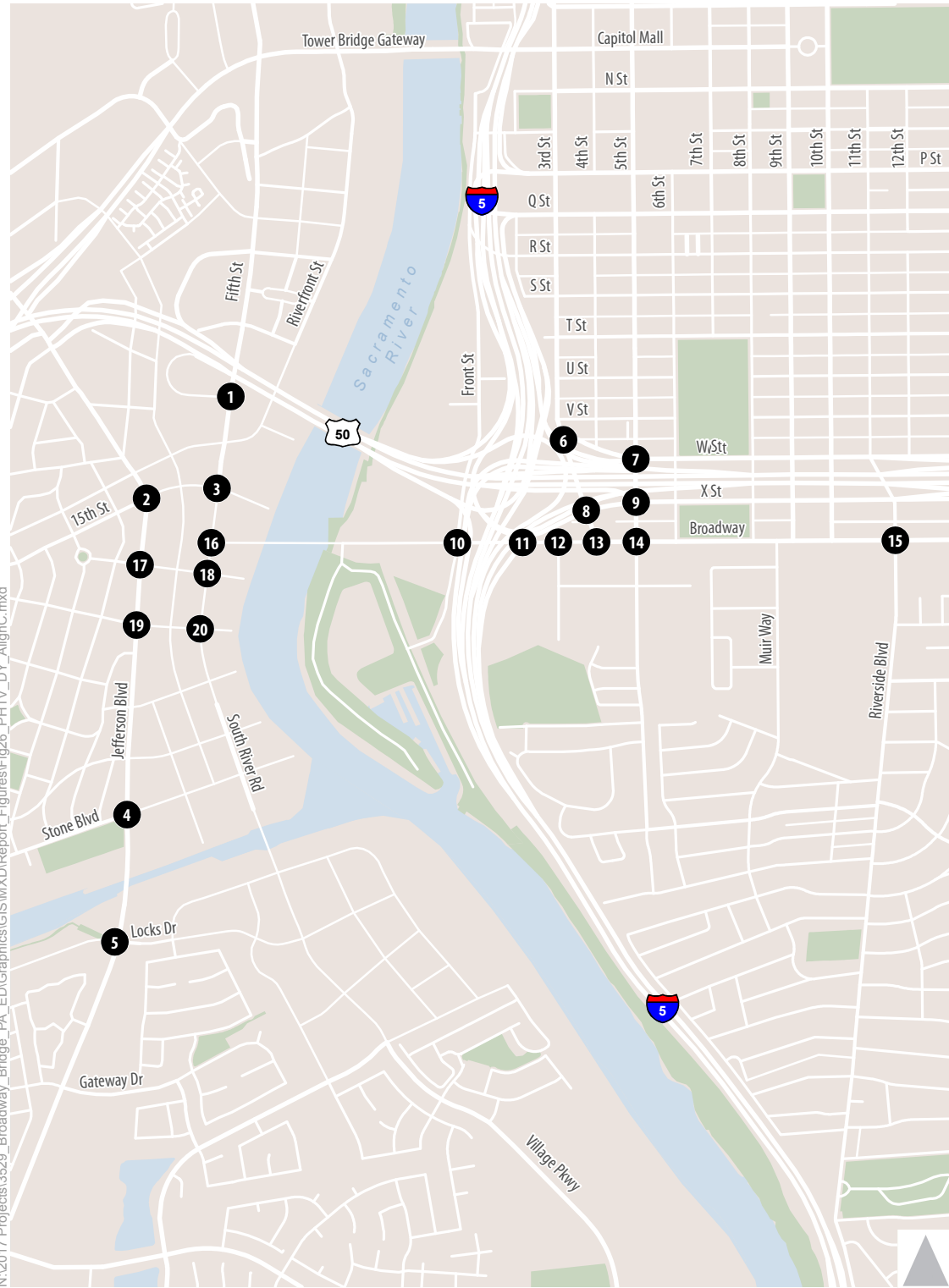
- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 25  
 Peak Hour Traffic Volumes  
 and Lane Configurations -  
 Design Year 2040 With Bridge Alignment A/B Conditions



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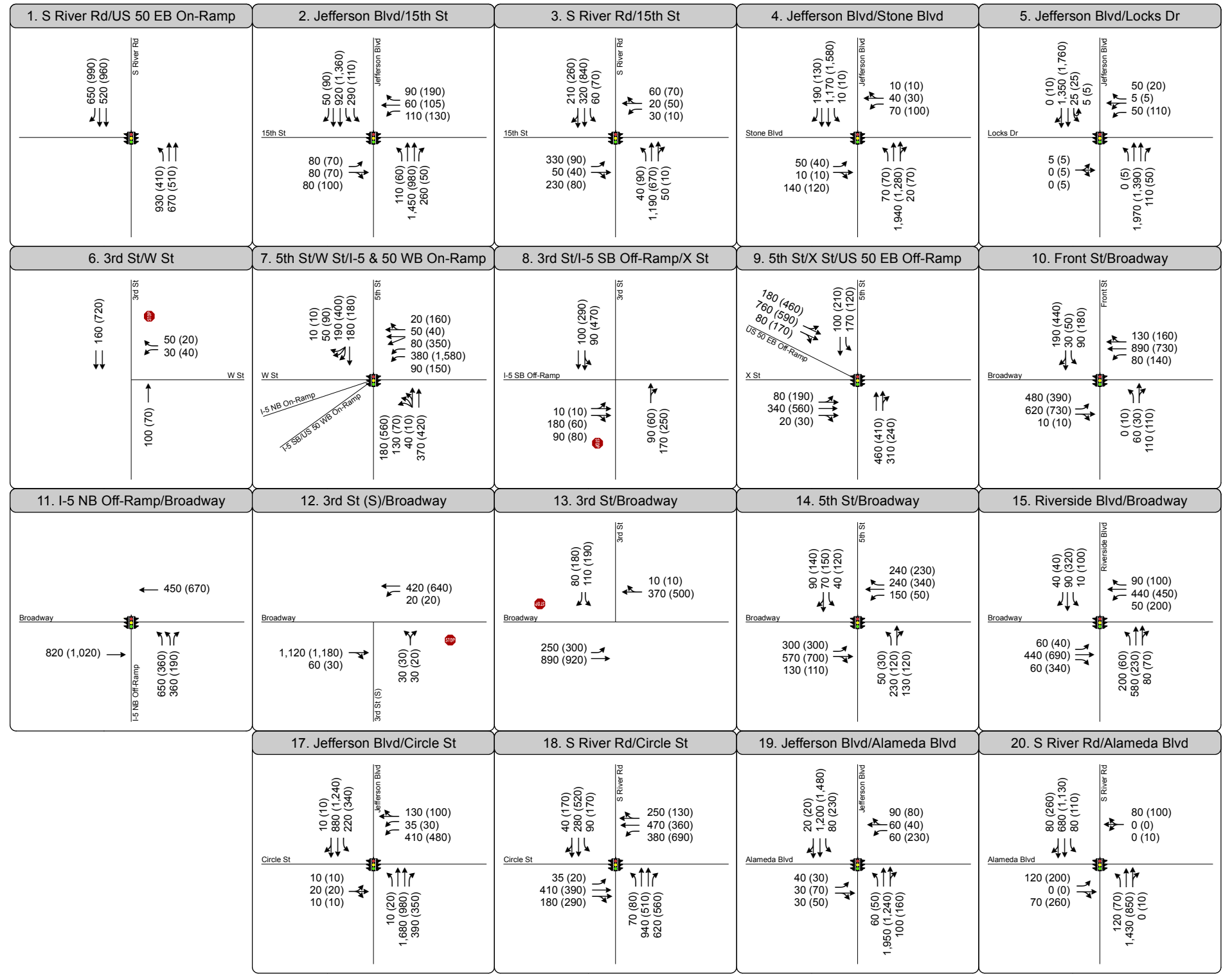
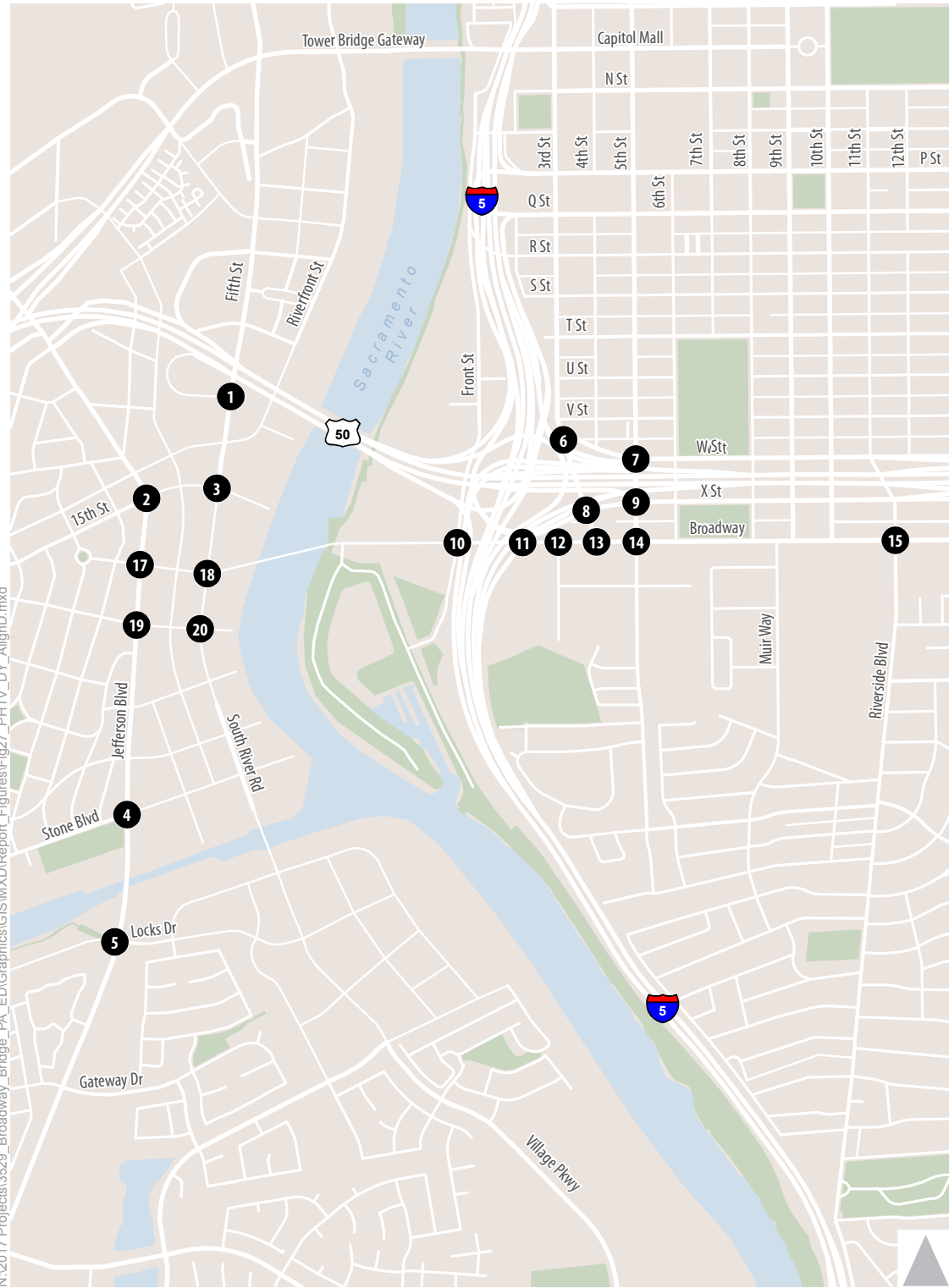
1 Study Intersection

- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 26  
Peak Hour Traffic Volumes  
and Lane Configurations -  
Design Year 2040 With Bridge Alignment C Conditions

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1 Study Intersection

- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign



Figure 27  
 Peak Hour Traffic Volumes  
 and Lane Configurations -  
 Design Year 2040 With Bridge Alignment D Conditions

The AM and PM peak hour intersection operations under Design Year 2040 are shown in Table 19. Figures 28, 29, 30, and 31 also show the LOS results under each Design Year scenario.

ID	Intersection	Jurisdiction	Control Type	Peak Hour	Design Year 2040							
					No Build		Bridge Alignment A/B		Bridge Alignment C		Bridge Alignment D	
					Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	S. River Rd. / US 50 EB On-Ramp	West Sacramento	Signal	AM	39	D	33	C	25	C	29	C
				PM	42	D	25	C	28	C	21	C
2	Jefferson Blvd. / 15th St.	West Sacramento	Signal	AM	35	D	34	C	33	C	32	C
				PM	39	D	40	D	43	D	34	C
3	S. River Rd. / 15th St.	West Sacramento	Signal	AM	71	E	77	E	28	C	48	D
				PM	35	D	80	E	31	C	28	C
4	Jefferson Blvd. / Stone Blvd.	West Sacramento	Signal	AM	43	D	45	D	50	D	52	D
				PM	31	C	29	C	38	D	30	C
5	Jefferson Blvd. / Locks Dr.	West Sacramento	Signal	AM	11	B	12	B	12	B	15	B
				PM	11	B	12	B	13	B	12	B
6	W St. / 3rd St.	Sacramento	SSSC	AM	1 (6)	A (A)	1 (6)	A (A)	1 (6)	A (A)	1 (6)	A (A)
				PM	3 (15)	A (C)	1 (11)	A (B)	1 (10)	A (A)	1 (11)	A (B)
7	W St. / 5th St.	Sacramento	Signal	AM	26	C	25	C	23	C	26	C
				PM	74	E	70	E	72	E	70	E
8	X St. / 3rd St.	Sacramento	SSSC	AM	4 (10)	A (A)	4 (9)	A (A)	3 (9)	A (A)	4 (9)	A (A)
				PM	18 (28)	C (D)	7 (17)	A (C)	4 (19)	A (C)	5 (19)	A (C)
9	X St. / 5th St.	Sacramento	Signal	AM	60	E	48	D	37	D	41	D
				PM	112	F	58	E	79	E	72	E
10	Broadway / Front St.	Sacramento	SSSC / Signal	AM	8 (25)	A (D)	54	D	49	D	49	D
				PM	7 (15)	A (C)	54	D	54	D	56	E
11	Broadway / I-5 NB Off-Ramp	Sacramento	SSSC	AM	13	B	24	C	20	B	24	C
				PM	8	A	27	C	22	C	26	C
12	Broadway / 3rd St. (South)	Sacramento	SSSC	AM	3 (36)	A (E)	9 (76)	A (F)	6 (49)	A (E)	10 (73)	A (F)
				PM	5 (20)	A (C)	14 (172)	B (F)	12 (132)	B (F)	14 (158)	B (F)
13	Broadway / 3rd St. (North)	Sacramento	SSSC	AM	8 (34)	A (D)	11 (29)	B (D)	7 (16)	A (C)	11 (20)	B (C)
				PM	27 (93)	D (F)	19 (61)	C (F)	18 (59)	C (F)	21 (72)	C (F)
14	Broadway / 5th St.	Sacramento	Signal	AM	38	D	58	E	43	D	77	E
				PM	55	E	56	E	57	E	65	E
15	Broadway / Riverside Blvd.	Sacramento	Signal	AM	17	B	20	C	20	B	19	B
				PM	35	D	47	D	43	D	50	D
16	S. River Rd. / Broadway	West Sacramento	Signal	AM	--	--	--	--	30	C	--	--
				PM	--	--	--	--	36	D	--	--
17	Jefferson Blvd. / Circle St.	West Sacramento	SSSC / Signal	AM	9 (141)	A (F)	9 (84)	A (F)	10 (118)	A (F)	33	C
				PM	12 (173)	B (F)	11 (160)	B (F)	12 (206)	B (F)	37	D
18	S. River Rd. / Circle St.	West Sacramento	SSSC / Signal	AM	19 (223)	C (F)	17 (198)	C (F)	33	C	45	D
				PM	13 (145)	B (F)	10 (143)	B (F)	31	C	66	E
19	Jefferson Blvd. / Alameda Blvd.	West Sacramento	Signal	AM	<b>82</b>	<b>F</b>	60	E	<b>94</b>	<b>F</b>	56	E
				PM	56	E	50	D	66	E	50	D
20	S. River Rd. / Alameda Blvd.	West Sacramento	Signal	AM	39	D	19	B	39	D	48	D
				PM	23	C	20	C	26	C	21	C



Notes: LOS = Level of Service. SSSC = Side Street Stop Controlled

For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Impacts to intersections are determined based on the overall LOS and average delay. All intersections were analyzed in SimTraffic.

Intersection 10 (Broadway / Front St.) is analyzed as a side street stop controlled intersection under no build conditions, and signalized under all with bridge alignment alternatives.

Intersection 17 (Jefferson Blvd. / Circle St.) is analyzed as a side street stop controlled intersection under no build, bridge alignment A/B, and bridge alignment C, and signalized under bridge alignment D.

Intersection 18 (S. River Rd. / Circle St.) is analyzed as a side street stop controlled intersection under no build conditions and bridge alignment A/B, and signalized under bridge alignment C and bridge alignment D.

LOS in bold font is worse than the LOS minimum for the intersection. LOS in bold and red font is an impact. An impact is a change in LOS between No Build and Alternative scenarios from acceptable to unacceptable or a worsening of an unacceptable condition.

Source: Fehr & Peers, 2020

### Design Year No Build

Most study intersections operate within acceptable LOS under Design Year No Build conditions, except for Intersection 19 (Jefferson Boulevard / Alameda Boulevard), which operates at LOS F during the AM peak hour.

Growth in land use in West Sacramento south of the study area adds traffic to Jefferson Boulevard and South River Road, especially northbound on both roadways during the morning commute, and southbound during the afternoon/evening commute. Some of the growth in traffic is accommodated by the increase in capacity on South River Road as part of the realignment and widening to four travel lanes; however, congestion increases for intersection along Jefferson Boulevard.

In Sacramento, the overall growth in the area creates an increase in traffic and congestion along 5<sup>th</sup> Street, notably in the PM peak hour at the ramp terminal intersections.

### Design Year with Bridge Alignment A/B

All study intersections operate within acceptable LOS under Design Year with Bridge Alignment A/B conditions. The bridge approach intersection of South River Road / 15<sup>th</sup> Street in West Sacramento faces a high level of delay; however, within acceptable LOS E conditions during both the AM and PM peak hours. The bridge also shifts some traffic from utilizing the freeway facilities. The shift of traffic to Broadway is most notable at the Broadway / 5<sup>th</sup> Street intersection compared to No Build. Overall, this alternative would create a **less-than-significant** impact to intersection operations under Design Year conditions.

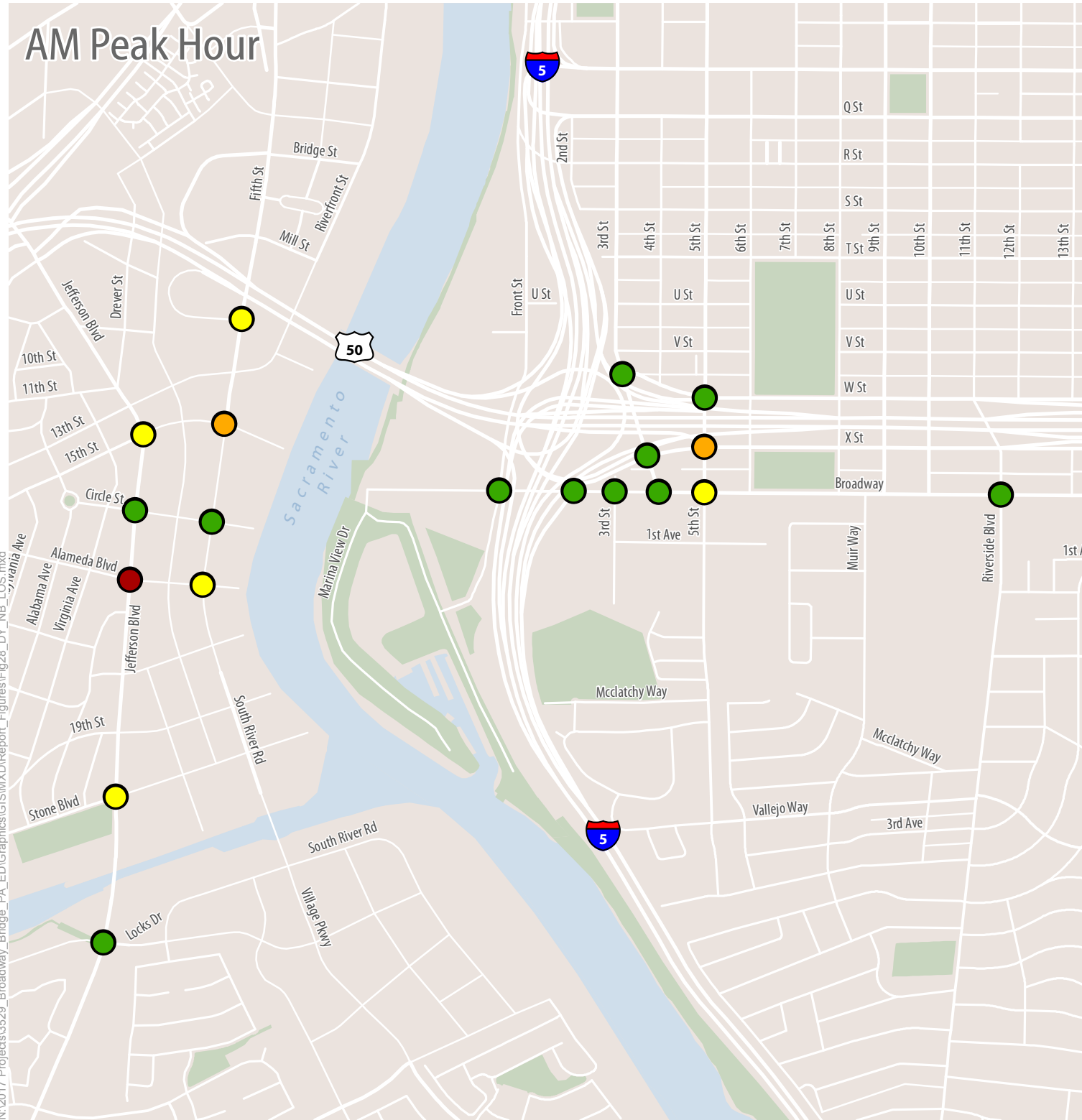
### Design Year with Bridge Alignment C

Most study intersections operate within acceptable LOS under Design Year with Bridge Alignment C conditions. Bridge Alignment C creates a T-intersection with South River Road. Due to the lack of a direct connection to Jefferson Boulevard, a high demand of traffic requires traversing multiple turning movements using Circle Street or Alameda Boulevard. This also creates a high demand for conflicting movements at the intersections in this area. Thus, Intersection 19 (Jefferson Boulevard / Alameda Boulevard), operates at LOS F during the AM peak hour, with the average delay worsening by more than five seconds compared to Design Year No Project conditions. This would be a **significant** impact.

#### **Design Year with Bridge Alignment D**

All study intersections operate within acceptable LOS under Design Year with Bridge Alignment D. Bridge Alignment D allows for a high demand of traffic a direct route to Jefferson Boulevard via Circle Street. The intersections of Jefferson Boulevard / Circle Street and South River Road / Circle Street require signalization as part of this project alternative. Overall, this alternative would create a **less-than-significant** impact to intersection operations under Design Year conditions.

# AM Peak Hour



# PM Peak Hour

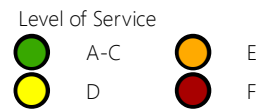
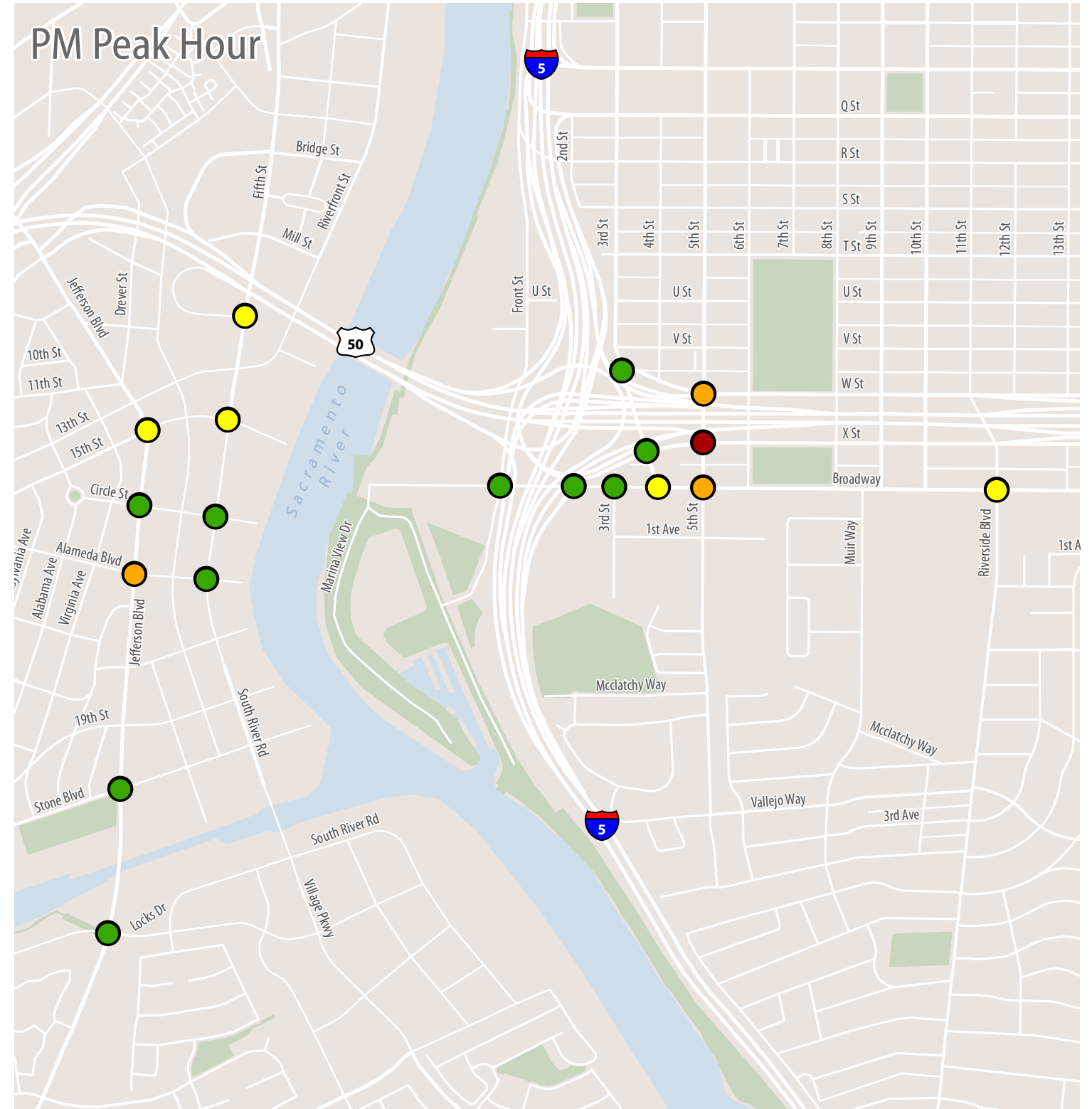
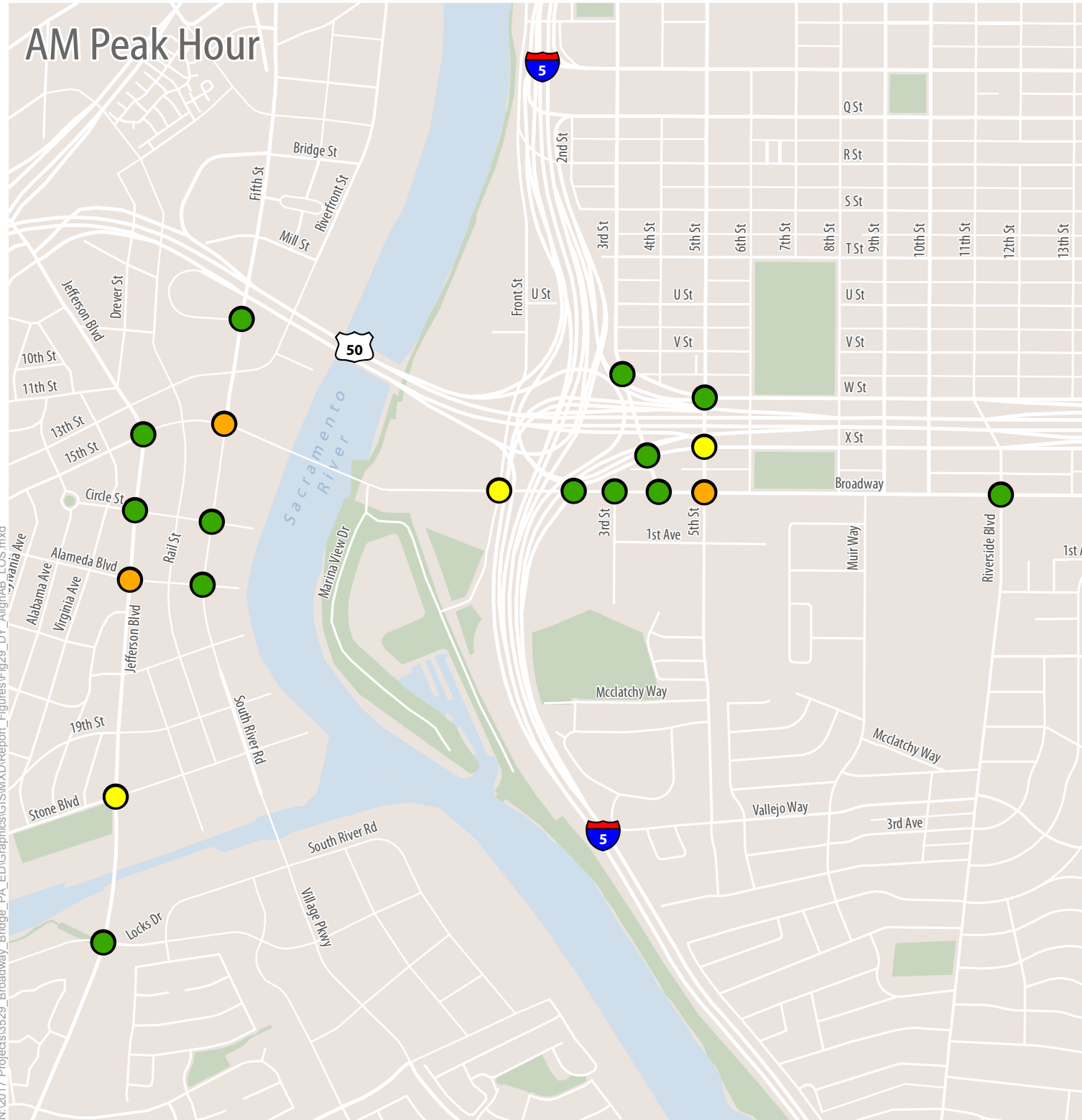


Figure 28

Design Year 2040 No Build -  
Peak Hour Interseccion LOS

# AM Peak Hour



# PM Peak Hour

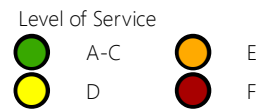
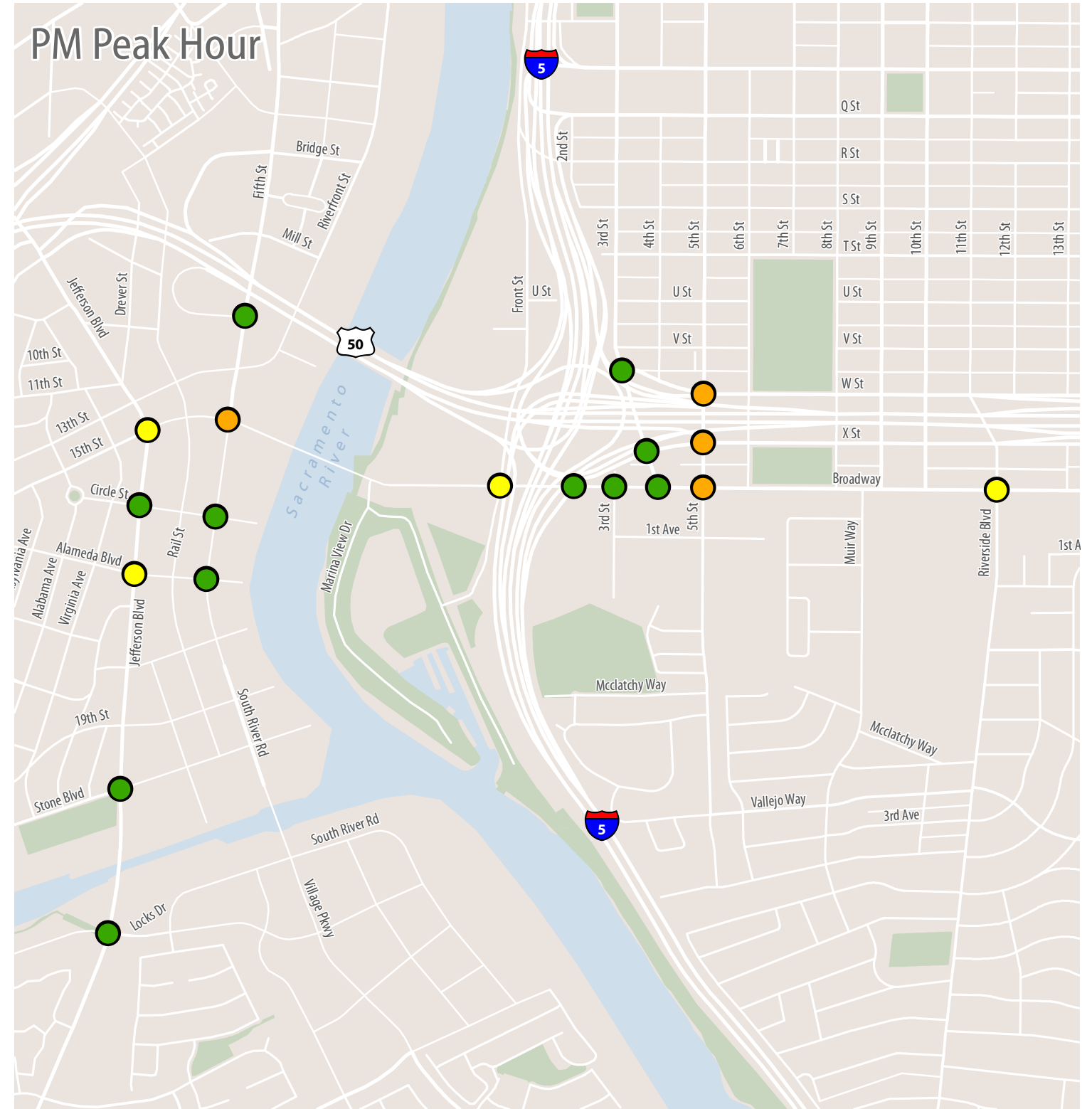
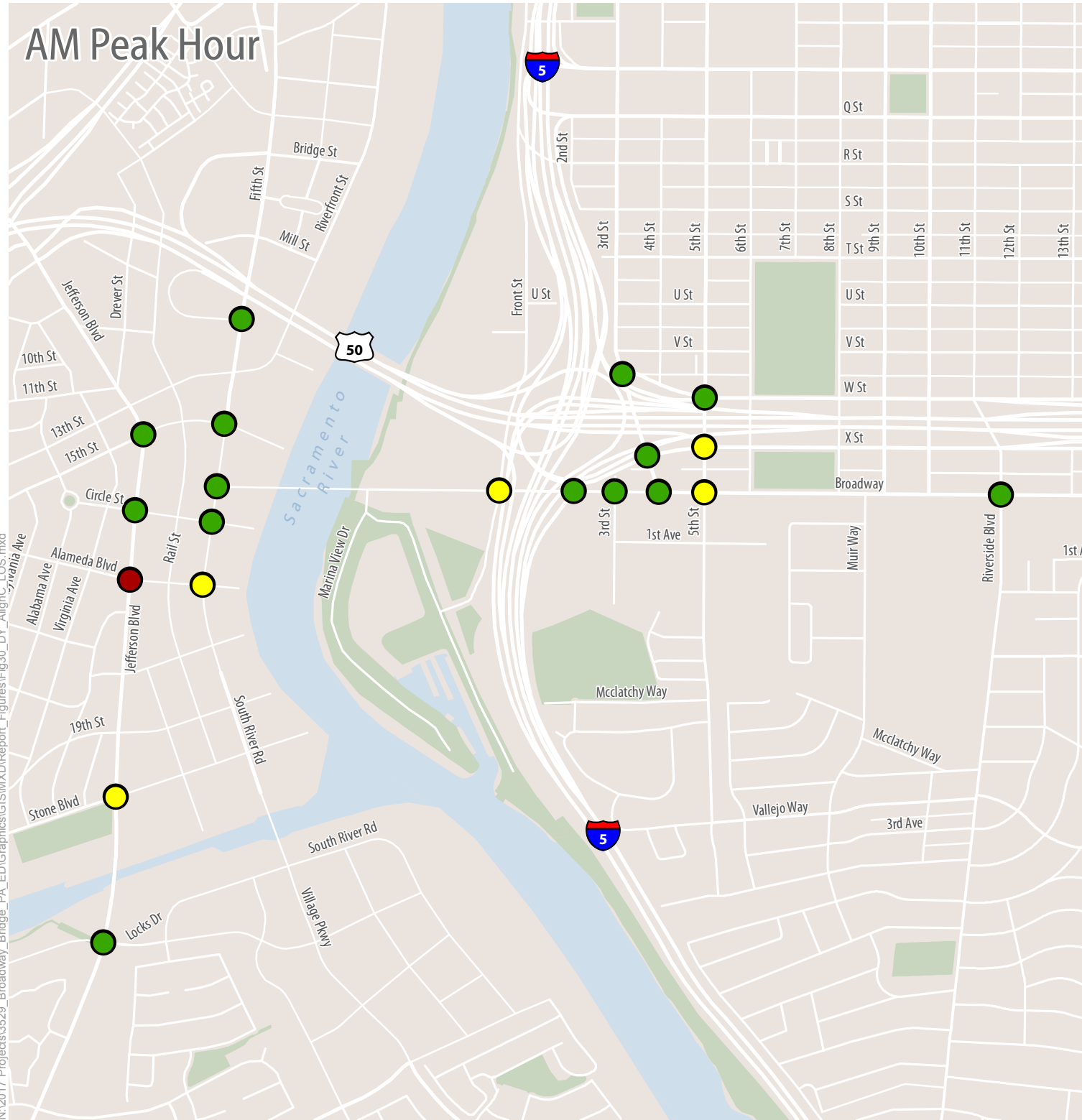


Figure 29

Design Year 2040 Plus Bridge Alignment A/B - Peak Hour Intersection LOS



# AM Peak Hour



# PM Peak Hour

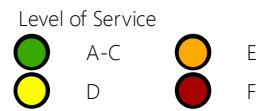
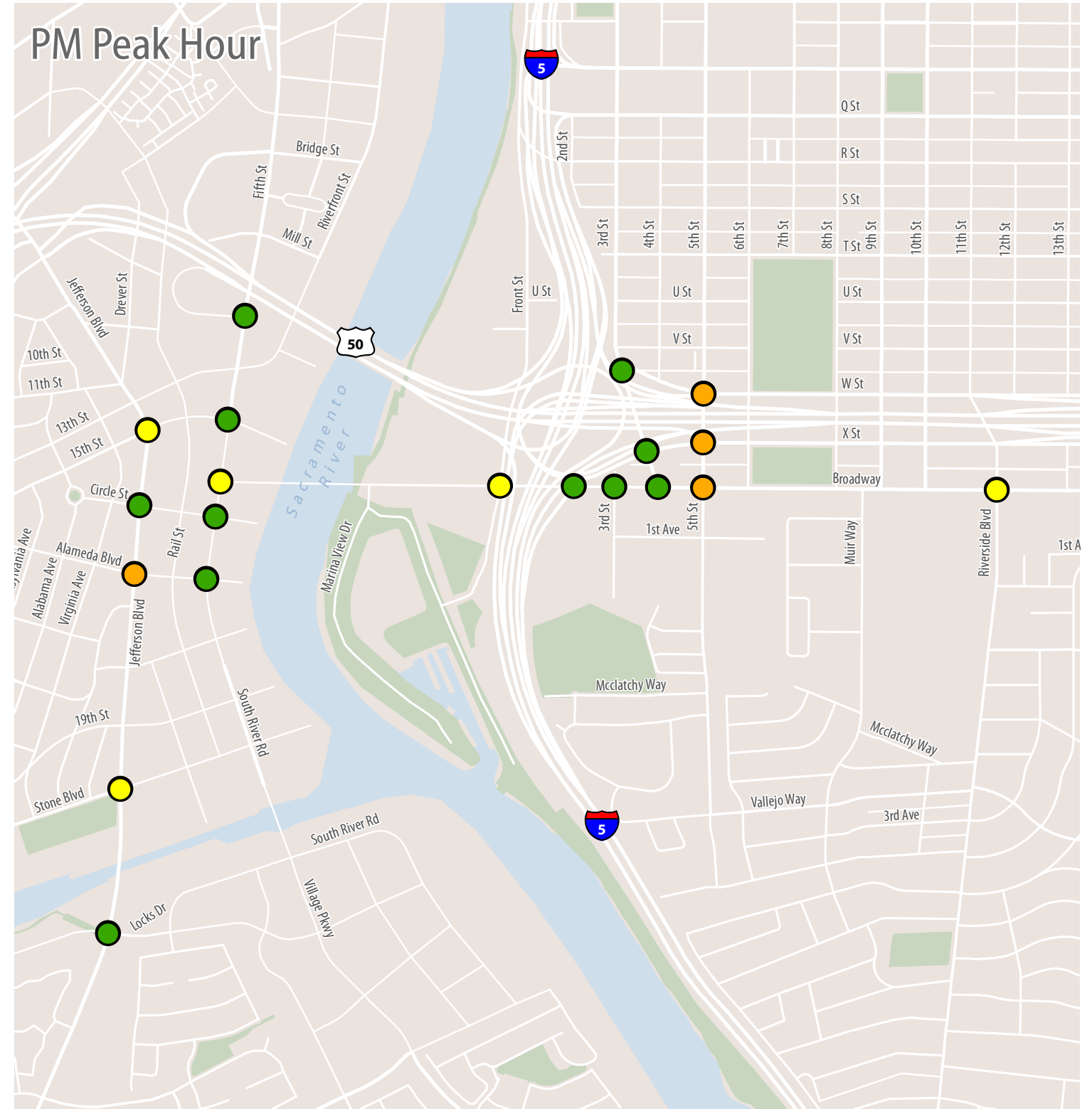
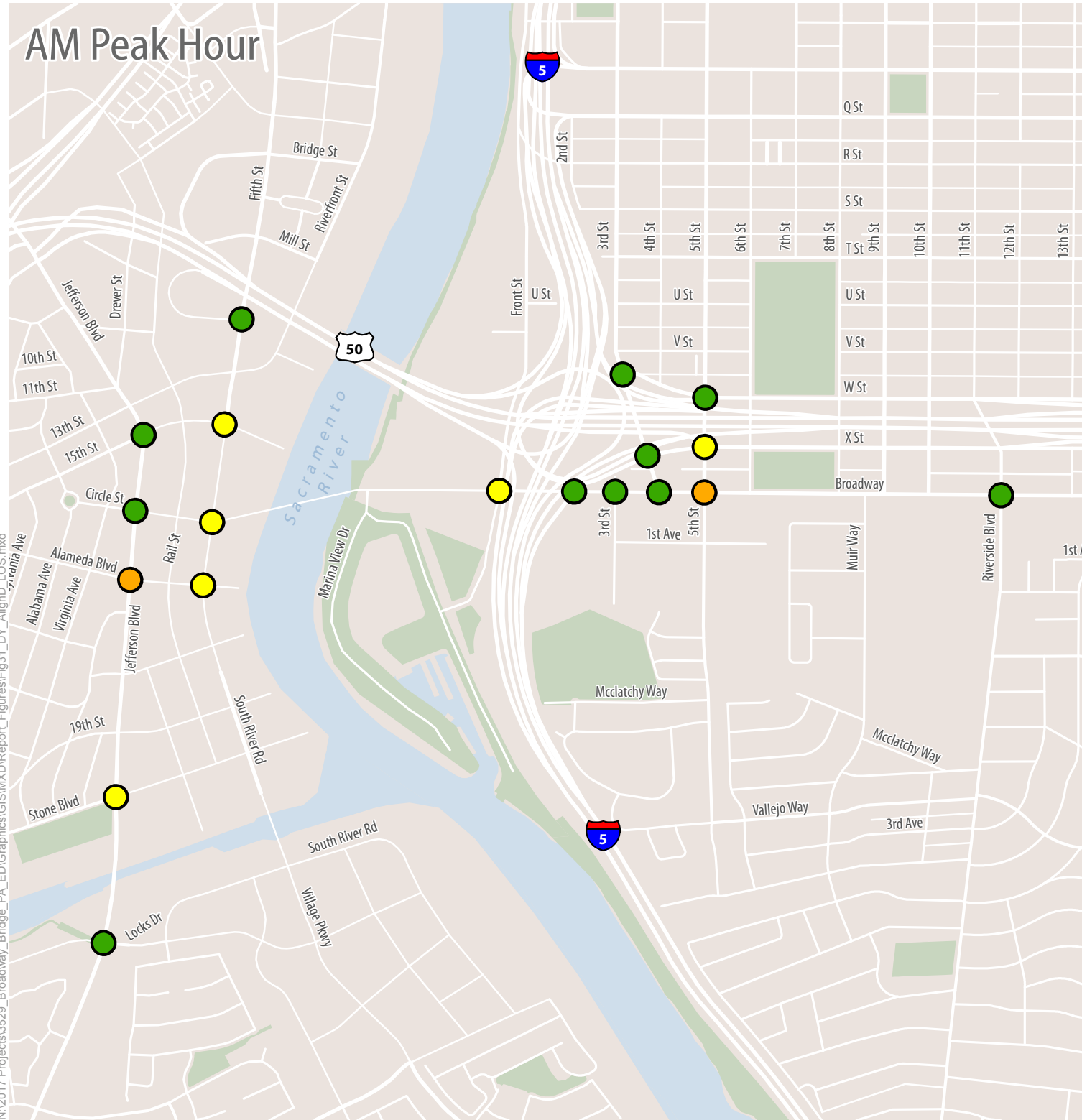


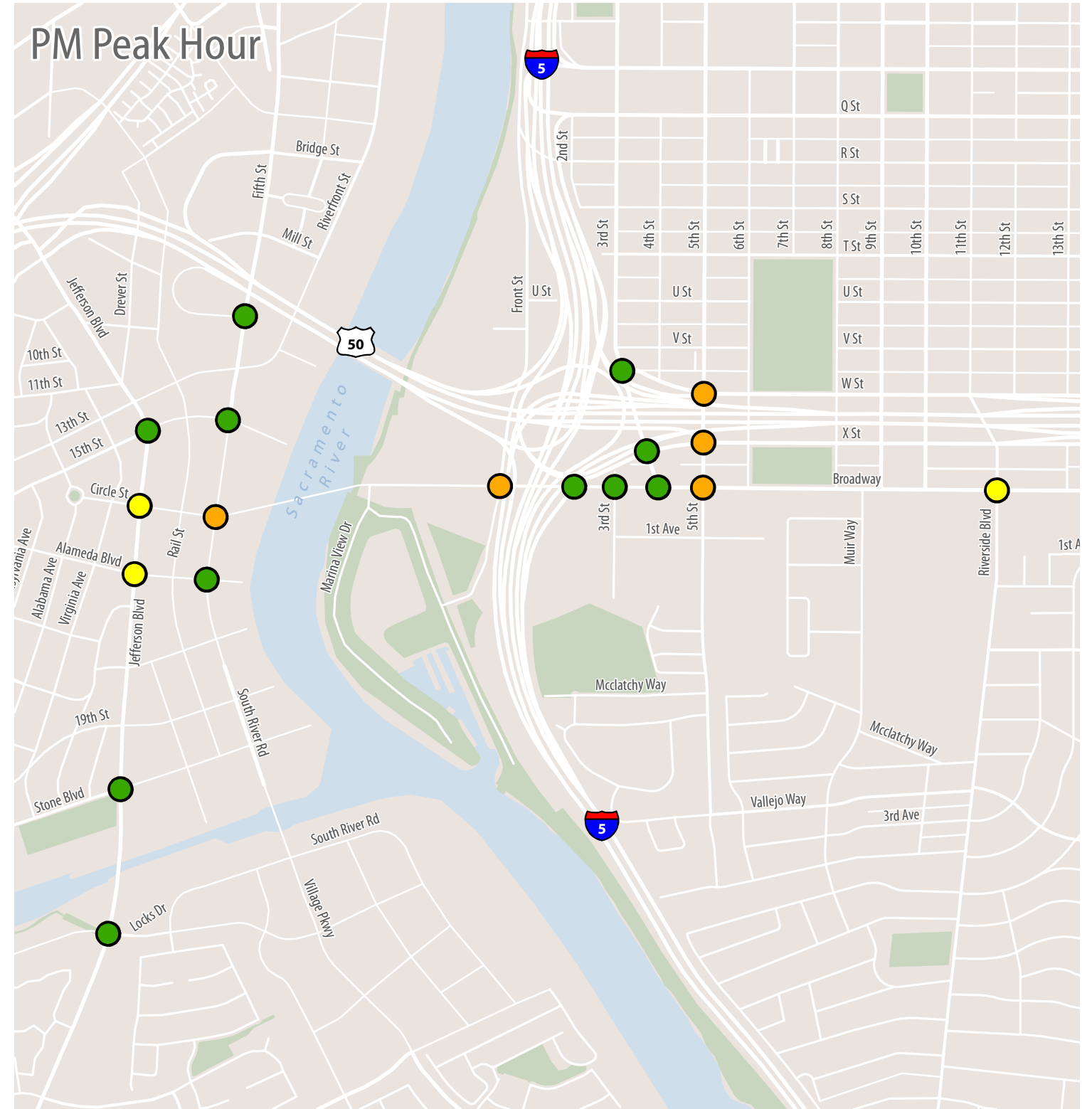
Figure 30

Design Year 2040 Plus Bridge Alignment C -  
Peak Hour Intersection LOS

# AM Peak Hour



# PM Peak Hour



- Level of Service
- A-C
  - D
  - E
  - F



Figure 31

Design Year 2040 Plus Bridge Alignment D - Peak Hour Interseccion LOS

## Mitigations

The following mitigations address the significant impact under Design Year – Alignment C Conditions:

- Intersection 17 (Jefferson Boulevard/Circle Street), installing a traffic signal and adding signal coordination with Intersection 19 (Jefferson Boulevard/Alameda Boulevard)

Table 20 shows the intersection operations under Design Year – Alignment C conditions with mitigations in the vicinity of the impacted intersections.

ID	Intersection	Jurisdiction	Control Type	Peak Hour	Design Year 2040					
					No Build		Bridge Alignment C		Bridge Alignment C with Mitigations	
					Delay	LOS	Delay	LOS	Delay	LOS
3	S. River Rd. / 15th St.	West Sacramento	Signal	AM	71	E	28	C	31	C
10	Broadway / Front St.	Sacramento	SSSC / Signal	AM	8 (25)	A (D)	49	D	49	D
16	S. River Rd. / Broadway	West Sacramento	Signal	AM	--	--	30	C	30	C
17	Jefferson Blvd. / Circle St.	West Sacramento	SSSC / Signal	AM	9 (141)	A (F)	10 (118)	A (F)	34	C
18	S. River Rd. / Circle St.	West Sacramento	SSSC / Signal	AM	19 (223)	C (F)	33	C	36	D
19	Jefferson Blvd. / Alameda Blvd.	West Sacramento	Signal	AM	<b>82</b>	<b>F</b>	<b>94</b>	<b>F</b>	67	E
20	S. River Rd. / Alameda Blvd.	West Sacramento	Signal	AM	39	D	39	D	46	D

Notes: LOS = Level of Service. SSSC = Side Street Stop Controlled

For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Impacts to intersections are determined based on the overall LOS and average delay. All intersections were analyzed in SimTraffic.

Intersection 10 (Broadway / Front St.) is analyzed as a side street stop controlled intersection under no build conditions, and signalized under all with bridge alignment alternatives.

Intersection 17 (Jefferson Blvd. / Circle St.) is analyzed as a side street stop controlled intersection under no build, bridge alignment A/B, and bridge alignment C, and signalized under bridge alignment D.

Intersection 18 (S. River Rd. / Circle St.) is analyzed as a side street stop controlled intersection under no build conditions and bridge alignment A/B, and signalized under bridge alignment C and bridge alignment D.

LOS in bold font is worse than the LOS minimum for the intersection. LOS in bold and red font is an impact. An impact is a change in LOS between No Build and Alternative scenarios from acceptable to unacceptable or a worsening of an unacceptable condition.

Source: Fehr & Peers, 2020

With the mitigations, the impacted intersections would operate within acceptable LOS, and no other study intersections would worsen to unacceptable conditions. Therefore, this would be a **less-than-significant** impact after mitigations.

## Design Year Impacts to Freeway Off-Ramp Queuing

Table 21 displays the freeway off-ramp queuing under Design Year 2040 conditions.

ID	Location	Available Storage	Peak Hour	Design Year 2040			
				No Build	Bridge Alignment A/B	Bridge Alignment C	Bridge Alignment D
				Queue	Queue	Queue	Queue
1	I-5 SB Off-Ramp at 3rd St./X St.	1,150	AM	75	100	75	75
			PM	125	75	75	75
2	US 50 EB Off-Ramp at 5th St./X St.	1,300	AM	850	575	350	375
			PM	<b>1,775</b>	675	1,175	1,000
3	I-5 NB Off-Ramp at Broadway	1,000	AM	200	225	200	300
			PM	100	250	175	275

Notes: The available storage length for off-ramp queuing is measured from the noted off-ramp terminal intersection to the freeway off-ramp gore point. Maximum queue length is based upon output from SimTraffic microsimulation software.

Queues noted in bold font are longer than available storage length of the off-ramp.

Source: Fehr & Peers, 2020

As shown, off-ramp queues under Opening Year No Build conditions would remain within the available storage except for the US 50 eastbound off-ramp at 5<sup>th</sup> Street / X Street during the PM peak hour. The inclusion of the bridge for each alignment alternative would shift some traffic off of utilizing the freeway facility; thereby, generally decreasing off-ramp queuing. All off-ramp queues would remain within the available storage capacity for each bridge alignment alternative under Design Year conditions; therefore, this would be a **less-than-significant** impact.

## Design Year Impacts to Roadway Operations

Table 22 shows the roadway segment operations analysis results under Design Year 2040 conditions.

ID	Roadway	Segment	Jurisdiction	Lanes	Design Year 2040							
					No Build		Bridge Alignment A/B		Bridge Alignment C		Bridge Alignment D	
					LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C



1	Jefferson Blvd.	North of 15th Street	West Sacramento	<b>4</b>	<b>F</b>	<b>1.43</b>	<b>F</b>	<b>1.18</b>	<b>F</b>	<b>1.19</b>	<b>F</b>	<b>1.14</b>
2	15th St.	West of Jefferson Blvd.	West Sacramento	2	C	0.50	C	0.59	C	0.58	C	0.54
3	Alameda Blvd.	West of Jefferson Blvd.	West Sacramento	2	C	0.27	C	0.31	C	0.31	C	0.33
4	Jefferson Blvd.	South of Alameda Blvd.	West Sacramento	<b>4</b>	<b>F</b>	<b>1.12</b>	<b>F</b>	<b>1.16</b>	<b>F</b>	<b>1.17</b>	<b>F</b>	<b>1.17</b>
5	S. River Rd.	South of 15th St. (Alameda Blvd.)	West Sacramento	4	B	0.66	C	0.75	C	0.77	C	0.78
6	Jefferson Blvd.	South of Locks Dr.	West Sacramento	<b>4</b>	<b>F</b>	<b>1.10</b>	<b>F</b>	<b>1.15</b>	<b>F</b>	<b>1.16</b>	<b>F</b>	<b>1.16</b>
7	3rd St.	North of W St.	Sacramento	2	A	0.15	A	0.19	A	0.18	A	0.18
8	5th St.	North of W St.	Sacramento	2	D	0.88	E	0.91	E	0.90	D	0.89
9	5th St.	South of Broadway	Sacramento	2	D	0.85	D	0.85	D	0.83	D	0.85
10	Riverside Blvd.	South of Broadway	Sacramento	2	E	0.92	E	0.95	E	0.95	E	0.95
Notes: LOS = Level of Service. V/C = Volume to Capacity Ratio LOS in bold font is worse than the LOS minimum for the intersection. Source: Fehr & Peers, 2020												

The growth in land use within West Sacramento south of the study area would increase traffic volume along Jefferson Boulevard and South River Road. Traffic operations worsen specifically along Jefferson Boulevard to LOS F conditions under Design Year conditions. Roadway capacity utilization results contained in this section are for information purposes only, and not utilized for impact analysis.

## Design Year Impacts to Bicycle, Pedestrian and Transit Facilities

Under Design Year conditions, the areas surrounding both sides of the bridge approaches are planned to be redeveloped with the inclusion of bicycle and pedestrian facilities, notably the Pioneer Bluff neighborhood in West Sacramento. The proposed bridge under each alignment alternative is planned to have bicycle, pedestrian, and transit facilities, and would not interfere with any planned facilities in the study area. Additionally, the bridge will be designed to accommodate buses and a potential future streetcar line; thereby providing an alternative for future transit realignment or expansion. Therefore, the project would create a **less-than-significant** impacts to bicycle, pedestrian, and transit facilities.

## Design Year Impacts to Vehicle Miles of Travel (VMT)

Table 23 shows the daily regional vehicle miles of travel under Design Year 2040 conditions.

Scenario	Regional Daily VMT Total	Difference (From No Build)
Design Year 2040 No Build	75,314,215	--

Design Year 2040 With Bridge Alignment A/B	75,320,445	6,230
Design Year 2040 With Bridge Alignment C	75,357,106	42,890
Design Year 2040 With Bridge Alignment D	75,327,449	13,234
Source: Fehr & Peers, 2020		

The VMT under Design Year conditions for each scenario reflect changes in travel behavior that may change including designation locations and travel modes, which is represented by the full model runs presented in the table above. The VMT is expected to increase slightly within the Sacramento region with the inclusion of the bridge due to the added capacity across a constrained network of options between each side of the Sacramento River. The increase in VMT is highest under Bridge Alignment C compared to No Build conditions; however, the difference is much less than even one percent of the overall VMT within the region.

# Appendix

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
AM Peak Hour

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Uncontrolled**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	808	766	94.8%	41.8	11.2	E
	Through	378	361	95.4%	5.9	2.5	A
	Right Turn						
	Subtotal	1,186	1,127	95.0%	30.3	8.3	D
SB	Left Turn						
	Through	314	309	98.3%	1.7	0.1	A
	Right Turn	233	223	95.9%	1.7	0.2	A
	Subtotal	547	532	97.3%	1.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,733	1,659	95.7%	21.1	5.5	C

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	88	84	95.1%	39.0	6.9	D
	Through	1,317	1,310	99.5%	22.9	4.5	C
	Right Turn	476	466	97.9%	7.7	1.1	A
	Subtotal	1,881	1,860	98.9%	19.8	3.6	B
SB	Left Turn	63	69	109.2%	39.7	5.6	D
	Through	690	670	97.2%	15.8	2.3	B
	Right Turn	54	53	98.4%	2.9	0.5	A
	Subtotal	807	792	98.2%	17.0	1.8	B
EB	Left Turn	88	88	100.5%	33.2	5.6	C
	Through	51	39	75.7%	34.8	6.1	C
	Right Turn	69	59	84.9%	16.2	5.2	B
	Subtotal	208	186	89.3%	27.8	3.9	C
WB	Left Turn	47	44	94.5%	36.4	8.6	D
	Through	30	28	94.6%	41.9	13.5	D
	Right Turn	54	46	85.6%	17.2	5.0	B
	Subtotal	131	119	90.9%	29.7	4.6	C
Total		3,027	2,957	97.7%	19.9	2.5	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
AM Peak Hour

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	47	42	89.1%	45.4	15.1	D
	Through	702	696	99.2%	25.1	12.4	C
	Right Turn						
	Subtotal	749	738	98.6%	26.3	12.4	C
SB	Left Turn						
	Through	222	218	98.2%	16.1	2.4	B
	Right Turn	82	77	94.1%	8.7	2.4	A
	Subtotal	304	295	97.1%	14.2	2.4	B
EB	Left Turn	512	489	95.6%	35.7	10.1	D
	Through						
	Right Turn	58	57	97.9%	7.8	5.3	A
	Subtotal	570	546	95.8%	32.8	9.6	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
<b>Total</b>		<b>1,623</b>	<b>1,579</b>	<b>97.3%</b>	<b>26.6</b>	<b>7.1</b>	<b>C</b>

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	74	73	98.9%	31.2	4.6	C
	Through	1,852	1,822	98.4%	10.2	4.8	B
	Right Turn						
	Subtotal	1,926	1,895	98.4%	11.0	4.7	B
SB	Left Turn						
	Through	896	867	96.8%	7.0	1.8	A
	Right Turn	21	17	81.5%	2.5	1.6	A
	Subtotal	917	885	96.5%	6.9	1.8	A
EB	Left Turn	29	29	99.2%	25.7	4.6	C
	Through						
	Right Turn	133	122	91.4%	9.0	1.8	A
	Subtotal	162	150	92.8%	12.0	2.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
<b>Total</b>		<b>3,005</b>	<b>2,930</b>	<b>97.5%</b>	<b>9.9</b>	<b>3.5</b>	<b>A</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
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Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,860	1,855	99.7%	5.7	1.3	A
	Right Turn	129	134	103.8%	2.3	0.9	A
	Subtotal	1,989	1,989	100.0%	5.4	1.3	A
SB	Left Turn	14	10	72.8%	56.0	20.0	E
	Through	1,015	980	96.6%	3.8	0.5	A
	Right Turn						
	Subtotal	1,029	990	96.3%	4.3	0.5	A
EB	Left Turn	2	3	127.4%	30.8	34.1	C
	Through						
	Right Turn						
	Subtotal	2	3	127.4%	30.8	34.1	C
WB	Left Turn	41	37	90.6%	52.2	10.2	D
	Through	1	2	218.4%	22.6	25.8	C
	Right Turn	62	58	93.3%	20.6	3.0	C
	Subtotal	104	97	93.5%	32.9	3.3	C
Total		3,124	3,079	98.6%	6.0	1.1	A

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	99	105	105.9%	0.1	0.1	A
	Right Turn						
	Subtotal	99	105	105.9%	0.1	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	18	92.0%	4.7	0.5	A
	Through						
	Right Turn	23	24	104.3%	2.2	0.4	A
	Subtotal	43	42	98.6%	3.3	0.5	A
Total		142	147	103.7%	1.0	0.3	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
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Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	370	368	99.4%	19.9	2.0	B
	Right Turn	69	69	99.7%	8.4	2.2	A
	Subtotal	439	436	99.4%	18.0	1.6	B
SE	Left Turn 2	58	66	113.8%	12.6	2.1	B
	Left Turn	441	449	101.9%	13.3	1.6	B
	Right Turn	71	72	101.4%	13.5	3.4	B
	Subtotal	570	587	103.0%	13.3	1.3	B
EB	Left Turn	31	32	104.5%	23.0	7.5	C
	Through	133	148	111.0%	22.7	2.9	C
	Right Turn	10	8	84.0%	8.3	6.0	A
	Subtotal	174	188	108.3%	22.1	2.7	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,183	1,212	102.5%	16.4	1.1	B

Intersection 10                      Front St/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	2	2	100.0%	1.4	2.3	A
	Right Turn	7	8	120.0%	2.4	0.8	A
	Subtotal	9	10	115.6%	2.7	1.1	A
SB	Left Turn	30	29	97.3%	3.1	0.6	A
	Through	3	3	106.7%	4.5	4.2	A
	Right Turn	2	2	100.0%	0.8	1.2	A
	Subtotal	35	34	98.3%	3.5	0.8	A
EB	Left Turn	1	0	40.0%	0.2	0.5	A
	Through	23	25	109.6%	0.2	0.3	A
	Right Turn	2	3	140.0%	0.0	0.0	A
	Subtotal	26	28	109.2%	0.2	0.3	A
WB	Left Turn	17	17	98.8%	2.1	0.4	A
	Through	47	46	98.7%	1.4	0.6	A
	Right Turn	133	129	96.8%	0.8	0.1	A
	Subtotal	197	192	97.5%	1.0	0.2	A
Total		267	265	99.3%	1.4	0.2	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
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**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	52	45	86.9%	5.8	1.2	A
	Through						
	Right Turn	309	300	97.1%	5.8	0.6	A
	Subtotal	361	345	95.6%	5.8	0.5	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	60	64	106.7%	0.6	0.3	A
	Right Turn						
	Subtotal	60	64	106.7%	0.6	0.3	A
WB	Left Turn						
	Through	145	147	101.2%	0.1	0.1	A
	Right Turn						
	Subtotal	145	147	101.2%	0.1	0.1	A
Total		566	556	98.2%	3.7	0.3	A

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	1	0	40.0%	0.4	1.4	A
	Through						
	Right Turn	27	22	81.5%	3.2	0.9	A
	Subtotal	28	22	80.0%	3.2	0.9	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	366	355	97.0%	0.8	0.1	A
	Right Turn	3	7	226.7%	0.5	0.4	A
	Subtotal	369	362	98.1%	0.8	0.1	A
WB	Left Turn	30	25	82.7%	3.0	1.0	A
	Through	144	148	102.5%	0.4	0.1	A
	Right Turn						
	Subtotal	174	172	99.1%	0.7	0.2	A
Total		571	557	97.5%	0.9	0.1	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	116	113	97.2%	8.8	1.4	A
	Through						
	Right Turn	47	49	103.8%	3.6	0.5	A
	Subtotal	163	162	99.1%	7.3	1.0	A
EB	Left Turn	36	39	107.8%	2.4	0.7	A
	Through	362	346	95.7%	0.5	0.1	A
	Right Turn						
	Subtotal	398	385	96.8%	0.7	0.2	A
WB	Left Turn						
	Through	162	154	94.8%	1.1	0.1	A
	Right Turn	2	3	160.0%	0.5	0.8	A
	Subtotal	164	157	95.6%	1.1	0.1	A
Total		725	704	97.0%	2.3	0.2	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	8	8	95.0%	18.7	10.1	B
	Through	159	172	107.9%	19.9	2.7	B
	Right Turn	114	122	106.7%	13.6	2.3	B
	Subtotal	281	301	107.0%	17.3	1.9	B
SB	Left Turn	20	23	116.0%	31.7	15.6	C
	Through	36	32	87.8%	12.5	2.8	B
	Right Turn	25	25	100.8%	5.5	1.9	A
	Subtotal	81	80	98.8%	16.8	7.4	B
EB	Left Turn	84	75	89.5%	12.4	2.7	B
	Through	307	295	96.2%	10.7	1.1	B
	Right Turn	87	90	103.0%	7.0	1.2	A
	Subtotal	478	460	96.2%	10.3	1.0	B
WB	Left Turn	177	183	103.5%	20.0	1.7	B
	Through	131	123	94.0%	6.9	1.0	A
	Right Turn	196	193	98.6%	3.5	0.6	A
	Subtotal	504	500	99.1%	10.4	0.7	B
Total		1,344	1,340	99.7%	12.3	0.8	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
AM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	195	174	89.0%	21.7	2.8	C
	Through	577	590	102.3%	17.3	2.4	B
	Right Turn	77	75	97.7%	12.4	2.7	B
	Subtotal	849	839	98.8%	17.8	1.6	B
SB	Left Turn	16	15	95.0%	25.6	17.4	C
	Through	82	80	97.6%	13.1	3.5	B
	Right Turn	36	38	104.4%	5.9	1.4	A
	Subtotal	134	133	99.1%	12.9	2.7	B
EB	Left Turn	56	56	100.7%	30.6	10.2	C
	Through	283	294	103.9%	14.0	1.9	B
	Right Turn	60	58	97.3%	0.9	0.2	A
	Subtotal	399	409	102.5%	14.4	3.0	B
WB	Left Turn	43	43	100.5%	26.0	6.6	C
	Through	418	404	96.7%	16.6	1.3	B
	Right Turn	71	66	93.0%	10.4	2.5	B
	Subtotal	532	514	96.5%	16.6	1.4	B
Total		1,914	1,894	99.0%	16.4	1.1	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Uncontrolled**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	259	233	89.9%	62.3	30.4	F
	Through	219	198	90.3%	3.6	4.1	A
	Right Turn						
	Subtotal	478	431	90.1%	35.0	16.8	E
SB	Left Turn						
	Through	773	803	103.9%	3.0	1.0	A
	Right Turn	419	407	97.0%	2.8	0.6	A
	Subtotal	1,192	1,210	101.5%	2.9	0.9	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,670	1,640	98.2%	11.1	4.3	B

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	73	76	103.7%	40.1	5.5	D
	Through	684	641	93.7%	15.3	2.7	B
	Right Turn	156	156	100.1%	2.7	0.5	A
	Subtotal	913	873	95.6%	15.2	2.2	B
SB	Left Turn	48	40	83.4%	43.0	8.5	D
	Through	1,277	1,213	95.0%	26.2	3.9	C
	Right Turn	82	76	92.3%	7.6	1.7	A
	Subtotal	1,407	1,329	94.5%	25.7	3.8	C
EB	Left Turn	72	66	92.0%	34.2	7.8	C
	Through	36	39	108.2%	34.9	9.4	C
	Right Turn	93	95	102.5%	23.0	6.1	C
	Subtotal	201	201	99.8%	29.2	4.9	C
WB	Left Turn	134	135	101.1%	39.3	7.0	D
	Through	67	75	111.4%	29.3	4.2	C
	Right Turn	63	63	100.5%	6.7	1.2	A
	Subtotal	264	273	103.5%	29.0	4.1	C
Total		2,785	2,675	96.1%	22.8	2.8	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	45	42	93.8%	35.7	11.2	D
	Through	277	270	97.4%	6.0	0.9	A
	Right Turn						
	Subtotal	322	312	96.9%	10.1	2.6	B
SB	Left Turn						
	Through	593	595	100.4%	30.2	6.6	C
	Right Turn	195	204	104.5%	24.8	6.6	C
	Subtotal	788	799	101.4%	28.8	6.5	C
EB	Left Turn	184	177	96.3%	29.3	3.2	C
	Through						
	Right Turn	40	36	90.1%	3.6	1.4	A
	Subtotal	224	213	95.2%	24.9	2.8	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,334	1,324	99.3%	23.9	4.6	C

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	65	68	104.7%	31.0	5.9	C
	Through	905	918	101.4%	5.8	1.4	A
	Right Turn						
	Subtotal	970	986	101.6%	7.6	1.7	A
SB	Left Turn						
	Through	1,469	1,453	98.9%	19.6	13.8	B
	Right Turn	47	51	109.2%	10.1	12.5	B
	Subtotal	1,516	1,504	99.2%	19.3	13.7	B
EB	Left Turn	32	28	88.7%	24.7	8.7	C
	Through						
	Right Turn	118	120	101.5%	14.8	3.1	B
	Subtotal	150	148	98.8%	16.7	3.1	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,636	2,638	100.1%	14.8	8.4	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	2	2	109.2%	39.8	40.5	D
	Through	946	955	101.0%	5.0	1.2	A
	Right Turn	44	46	104.2%	1.4	0.8	A
	Subtotal	992	1,003	101.1%	4.9	1.0	A
SB	Left Turn	26	26	100.8%	70.8	14.7	E
	Through	1,555	1,533	98.6%	11.2	2.1	B
	Right Turn	6	5	91.0%	11.2	9.6	B
	Subtotal	1,587	1,565	98.6%	12.1	2.3	B
EB	Left Turn	4	3	63.7%	54.6	49.9	D
	Through	1	1	145.6%	28.9	45.7	C
	Right Turn	4	6	145.6%	20.2	16.1	C
	Subtotal	9	10	109.2%	39.7	22.6	D
WB	Left Turn	119	121	101.6%	53.7	4.6	D
	Through						
	Right Turn	19	20	105.4%	6.7	3.1	A
	Subtotal	138	141	102.1%	47.3	5.8	D
Total		2,726	2,719	99.7%	11.4	1.5	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	651	647	99.4%	0.8	0.1	A
	Right Turn						
	Subtotal	651	647	99.4%	0.8	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	35	38	107.4%	8.8	2.5	A
	Through						
	Right Turn	15	13	88.0%	2.4	0.3	A
	Subtotal	50	51	101.6%	7.1	1.9	A
Total		701	698	99.6%	1.3	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

**Intersection 7**                      **5th St/W St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	587	534	91.0%	37.8	4.8	D
	Left Turn 2	89	104	116.4%	19.2	6.6	B
	Left Turn	9	12	137.8%	20.3	6.5	C
	Through	106	130	122.3%	20.1	6.0	C
	Subtotal	791	780	98.6%	32.1	5.4	C
WB	Left Turn 2	1,444	1,429	98.9%	16.9	4.5	B
	Left Turn	326	310	95.1%	9.0	1.4	A
	Through	33	36	110.3%	10.2	1.1	B
	Right Turn	107	113	105.4%	4.1	0.8	A
	Subtotal	1,910	1,888	98.8%	14.7	3.4	B
Total		2,701	2,668	98.8%	19.8	3.1	B

**Intersection 8**                      **3rd St/X St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn	27	20	75.6%	0.2	0.2	A
Subtotal		27	20	75.6%	0.2	0.2	A
SB	Left Turn	422	424	100.6%	1.1	0.1	A
	Through	264	255	96.5%	1.9	4.8	A
	Right Turn						
Subtotal		686	679	99.0%	1.5	2.0	A
EB	Left Turn						
	Through	94	97	103.4%	8.6	1.2	A
	Right Turn	93	98	105.8%	3.4	1.5	A
Subtotal		187	196	104.6%	6.1	1.2	A
WB	Left Turn						
	Through						
	Right Turn						
Subtotal							
Total		900	895	99.5%	2.5	1.7	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	398	364	91.5%	29.2	8.8	C
	Right Turn	78	81	104.1%	4.3	1.1	A
	Subtotal	476	445	93.5%	24.7	7.7	C
SE	Left Turn 2	223	227	101.9%	19.6	6.3	B
	Left Turn	366	367	100.3%	16.0	2.7	B
	Right Turn	121	126	104.5%	15.7	1.8	B
	Subtotal	710	721	101.5%	17.0	3.2	B
EB	Left Turn	170	175	102.8%	42.2	6.1	D
	Through	348	343	98.6%	32.2	3.5	C
	Right Turn	25	26	102.4%	16.1	5.9	B
	Subtotal	543	544	100.1%	34.7	3.9	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,729	1,710	98.9%	24.7	3.2	C

Intersection 10                      Front St/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	9	8	93.3%	3.2	1.7	A
	Through	1	0	40.0%	0.4	1.4	A
	Right Turn	21	21	101.0%	2.7	0.3	A
	Subtotal	31	30	96.8%	3.1	0.3	A
SB	Left Turn	116	105	90.7%	5.0	0.8	A
	Through	4	4	110.0%	4.9	4.6	A
	Right Turn	4	5	120.0%	2.3	3.1	A
	Subtotal	124	114	92.3%	5.1	0.9	A
EB	Left Turn	7	4	51.4%	1.3	2.1	A
	Through	56	49	87.1%	0.4	0.4	A
	Right Turn	10	16	156.0%	0.0	0.0	A
	Subtotal	73	68	93.2%	0.4	0.4	A
WB	Left Turn	22	17	76.4%	2.4	0.8	A
	Through	54	52	97.0%	1.3	0.7	A
	Right Turn	109	107	98.3%	0.6	0.3	A
	Subtotal	185	176	95.4%	0.9	0.4	A
Total		413	389	94.1%	2.3	0.5	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	31	28	89.0%	5.1	1.3	A
	Through						
	Right Turn	198	208	105.3%	5.4	0.7	A
	Subtotal	229	236	103.1%	5.4	0.5	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	193	172	89.1%	0.8	0.2	A
	Right Turn						
	Subtotal	193	172	89.1%	0.8	0.2	A
WB	Left Turn						
	Through	154	152	99.0%	0.2	0.1	A
	Right Turn						
	Subtotal	154	152	99.0%	0.2	0.1	A
Total		576	560	97.3%	2.6	0.5	A

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	2	2	100.0%	2.5	3.5	A
	Through						
	Right Turn	16	15	92.5%	3.8	1.4	A
	Subtotal	18	17	93.3%	4.0	1.4	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	387	376	97.2%	0.6	0.1	A
	Right Turn	4	5	120.0%	0.5	0.4	A
	Subtotal	391	381	97.4%	0.6	0.1	A
WB	Left Turn	22	24	107.3%	3.2	0.6	A
	Through	152	152	100.3%	0.4	0.2	A
	Right Turn						
	Subtotal	174	176	101.1%	0.8	0.2	A
Total		583	574	98.4%	0.8	0.1	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	311	308	99.2%	27.6	19.5	D
	Through						
	Right Turn	46	49	106.1%	5.9	5.1	A
	Subtotal	357	357	100.1%	24.8	18.1	C
EB	Left Turn	21	14	66.7%	2.4	0.8	A
	Through	408	405	99.3%	0.9	0.2	A
	Right Turn						
	Subtotal	429	419	97.7%	1.0	0.2	A
WB	Left Turn						
	Through	141	138	98.2%	1.2	0.2	A
	Right Turn	6	6	106.7%	1.0	1.1	A
	Subtotal	147	145	98.5%	1.2	0.2	A
Total		933	921	98.7%	10.5	7.9	B

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	6	8	126.7%	19.0	22.2	B
	Through	156	153	98.2%	22.9	5.5	C
	Right Turn	96	94	97.5%	15.9	6.6	B
	Subtotal	258	254	98.6%	20.3	6.1	C
SB	Left Turn	71	62	87.9%	23.7	7.2	C
	Through	59	68	115.3%	13.7	2.0	B
	Right Turn	16	18	115.0%	5.9	2.6	A
	Subtotal	146	149	101.9%	17.1	3.5	B
EB	Left Turn	119	113	94.8%	17.3	4.1	B
	Through	519	525	101.2%	13.6	2.6	B
	Right Turn	81	84	103.2%	10.3	2.4	B
	Subtotal	719	722	100.4%	13.8	2.4	B
WB	Left Turn	98	102	103.7%	41.0	29.3	D
	Through	125	117	93.4%	8.2	1.0	A
	Right Turn	201	190	94.7%	4.6	1.0	A
	Subtotal	424	409	96.4%	14.8	7.6	B
Total		1,547	1,534	99.1%	15.5	3.3	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Conditions  
PM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	52	50	96.9%	26.2	3.6	C
	Through	225	216	95.8%	13.9	2.4	B
	Right Turn	62	58	93.5%	6.4	2.8	A
	Subtotal	339	324	95.6%	14.6	1.9	B
SB	Left Turn	62	59	94.8%	24.3	4.7	C
	Through	313	310	99.0%	16.8	1.6	B
	Right Turn	31	32	101.9%	6.3	2.8	A
	Subtotal	406	400	98.6%	17.1	1.2	B
EB	Left Turn	35	37	105.1%	38.2	6.3	D
	Through	517	507	98.1%	17.8	1.4	B
	Right Turn	340	358	105.4%	5.7	1.2	A
	Subtotal	892	902	101.2%	13.9	1.5	B
WB	Left Turn	193	205	106.3%	37.2	11.6	D
	Through	382	380	99.5%	15.5	2.1	B
	Right Turn	69	62	89.3%	9.4	3.5	A
	Subtotal	644	647	100.4%	22.0	5.0	C
Total		2,281	2,274	99.7%	16.9	1.7	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
AM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Uncontrolled

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	530	499	94.2%	11.9	2.5	B
	Through	360	344	95.4%	4.2	0.5	A
	Right Turn						
	Subtotal	890	843	94.7%	8.8	1.7	A
SB	Left Turn						
	Through	130	122	94.1%	0.9	0.2	A
	Right Turn	220	224	101.8%	1.1	0.2	A
	Subtotal	350	346	98.9%	1.0	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,240	1,189	95.9%	6.5	1.1	A

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	89	99.1%	54.9	8.9	D
	Through	1,050	1,024	97.5%	28.7	3.5	C
	Right Turn	835	803	96.2%	44.0	15.0	D
	Subtotal	1,975	1,916	97.0%	36.4	7.9	D
SB	Left Turn	80	74	92.4%	45.8	7.1	D
	Through	500	463	92.7%	17.0	2.1	B
	Right Turn	50	52	104.1%	3.7	1.5	A
	Subtotal	630	589	93.5%	19.6	2.7	B
EB	Left Turn	80	79	98.7%	50.6	12.2	D
	Through	70	71	101.9%	46.9	9.8	D
	Right Turn	70	72	103.0%	27.9	7.1	C
	Subtotal	220	222	101.1%	42.3	7.3	D
WB	Left Turn	410	374	91.2%	48.6	12.2	D
	Through	90	82	90.6%	55.5	18.9	E
	Right Turn	140	133	95.2%	41.7	12.2	D
	Subtotal	640	589	92.0%	48.2	10.6	D
Total		3,465	3,316	95.7%	35.9	6.3	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
AM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	11	109.2%	119.3	32.2	F
	Through	530	476	89.9%	87.2	20.3	F
	Right Turn	280	267	95.4%	63.1	20.4	E
	Subtotal	820	755	92.0%	79.2	20.3	E
SB	Left Turn	20	18	91.0%	52.6	18.7	D
	Through	100	90	90.3%	27.4	5.1	C
	Right Turn	10	13	134.7%	15.6	14.7	B
	Subtotal	130	122	93.8%	30.0	6.1	C
EB	Left Turn	370	369	99.8%	68.8	18.0	E
	Through	555	524	94.4%	35.2	4.9	D
	Right Turn	40	37	92.8%	30.0	7.1	C
	Subtotal	965	930	96.4%	48.3	9.7	D
WB	Left Turn	180	162	89.8%	81.2	14.1	F
	Through	630	585	92.8%	118.9	30.9	F
	Right Turn	30	33	110.4%	103.2	34.0	F
	Subtotal	840	779	92.8%	110.5	27.3	F
Total		2,755	2,586	93.9%	75.1	9.6	E

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	76	95.6%	38.2	8.9	D
	Through	1,900	1,868	98.3%	12.5	4.1	B
	Right Turn						
	Subtotal	1,980	1,945	98.2%	13.5	4.2	B
SB	Left Turn						
	Through	935	927	99.2%	8.7	2.2	A
	Right Turn	150	150	100.0%	3.9	1.0	A
	Subtotal	1,085	1,077	99.3%	8.0	2.1	A
EB	Left Turn	30	27	91.0%	26.7	6.8	C
	Through						
	Right Turn	130	140	107.8%	10.3	2.2	B
	Subtotal	160	167	104.7%	13.1	2.1	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,225	3,190	98.9%	11.6	2.9	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,900	1,905	100.3%	7.3	2.3	A
	Right Turn	130	124	95.2%	2.4	0.7	A
	Subtotal	2,030	2,029	99.9%	7.0	2.2	A
SB	Left Turn	15	10	67.9%	44.4	26.5	D
	Through	1,050	1,049	99.9%	4.5	0.8	A
	Right Turn						
	Subtotal	1,065	1,060	99.5%	5.0	1.0	A
EB	Left Turn	5	5	109.2%	42.0	34.1	D
	Through						
	Right Turn						
	Subtotal	5	5	109.2%	40.3	35.9	D
WB	Left Turn	40	32	81.0%	50.4	13.9	D
	Through	5	4	87.4%	29.7	33.6	C
	Right Turn	70	71	101.4%	25.6	8.8	C
	Subtotal	115	108	93.7%	33.6	7.7	C
Total		3,215	3,201	99.6%	7.3	1.6	A

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	120	116	97.0%	0.1	0.1	A
	Right Turn						
	Subtotal	120	116	97.0%	0.1	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	14	70.0%	4.7	0.8	A
	Through						
	Right Turn	20	21	106.0%	2.4	0.6	A
	Subtotal	40	35	88.0%	3.3	0.8	A
Total		160	152	94.8%	0.8	0.4	A

Intersection 7                                  5th St/W St    Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	70	72	102.3%	4.5	1.3	A
	Left Turn 2	95	91	95.6%	16.5	2.2	B
	Left Turn	20	22	110.0%	17.2	4.1	B
	Through	285	265	92.9%	17.2	2.2	B
	Subtotal	470	449	95.6%	15.0	2.0	B
WB	Left Turn 2	210	195	92.8%	4.2	0.9	A
	Left Turn	140	144	103.1%	5.0	1.3	A
	Through	30	26	85.3%	5.5	3.2	A
	Right Turn	160	159	99.3%	3.7	1.0	A
	Subtotal	540	524	97.0%	4.3	0.7	A
Total		1,010	973	96.3%	9.2	1.0	A

Intersection 8                                  3rd St/X St    Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn	310	311	100.3%	1.3	0.2	A
Subtotal		310	311	100.3%	1.3	0.2	A
SB	Left Turn	60	55	92.0%	0.2	0.1	A
	Through	80	77	96.5%	0.2	0.1	A
	Right Turn						
Subtotal		140	132	94.6%	0.2	0.0	A
EB	Left Turn						
	Through	60	63	104.7%	7.2	0.5	A
	Right Turn	90	90	100.4%	2.5	0.3	A
Subtotal		150	153	102.1%	4.5	0.4	A
WB	Left Turn						
	Through						
	Right Turn						
Subtotal							
Total		600	596	99.4%	1.8	0.1	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	390	373	95.6%	19.4	1.6	B
	Right Turn	120	121	101.0%	11.8	2.8	B
	Subtotal	510	494	96.9%	17.5	1.3	B
SE	Left Turn 2	40	40	101.0%	10.0	4.1	A
	Left Turn	270	266	98.5%	11.9	1.2	B
	Right Turn	30	36	121.3%	10.2	3.2	B
	Subtotal	340	343	100.8%	11.5	1.4	B
EB	Left Turn	40	38	95.0%	24.5	6.3	C
	Through	380	379	99.7%	27.0	2.4	C
	Right Turn	10	8	84.0%	15.8	16.3	B
	Subtotal	430	425	98.9%	26.6	2.2	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,280	1,262	98.6%	19.0	1.1	B

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	5	5	96.0%	21.9	23.7	C
	Right Turn	5	6	128.0%	10.2	14.5	B
	Subtotal	10	11	112.0%	20.6	22.8	C
SB	Left Turn	30	28	92.0%	34.3	8.9	C
	Through	5	4	88.0%	18.1	23.6	B
	Right Turn	40	42	106.0%	12.1	5.0	B
	Subtotal	75	74	99.2%	21.6	6.9	C
EB	Left Turn	70	62	89.1%	35.2	9.5	D
	Through	790	758	95.9%	22.6	8.8	C
	Right Turn	5	2	40.0%	9.7	6.7	A
	Subtotal	865	822	95.0%	23.6	8.0	C
WB	Left Turn	10	10	100.0%	38.0	14.7	D
	Through	845	844	99.8%	15.7	4.6	B
	Right Turn	90	88	97.3%	13.1	7.5	B
	Subtotal	945	941	99.6%	15.7	4.9	B
Total		1,895	1,849	97.6%	19.4	3.3	B

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	495	497	100.4%	21.5	2.1	C
	Through						
	Right Turn	240	263	109.5%	15.8	2.7	B
	Subtotal	735	760	103.3%	19.5	2.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	825	790	95.8%	13.6	1.9	B
	Right Turn						
	Subtotal	825	790	95.8%	13.6	1.9	B
WB	Left Turn						
	Through	450	453	100.7%	8.2	1.0	A
	Right Turn						
	Subtotal	450	453	100.7%	8.2	1.0	A
<b>Total</b>		<b>2,010</b>	<b>2,003</b>	<b>99.7%</b>	<b>14.6</b>	<b>0.9</b>	<b>B</b>

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	20	20	98.0%	39.7	23.1	E
	Through						
	Right Turn	30	28	93.3%	29.9	13.7	D
	Subtotal	50	48	95.2%	33.0	15.0	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,025	1,014	99.0%	3.3	0.5	A
	Right Turn	40	43	107.0%	1.9	0.4	A
	Subtotal	1,065	1,057	99.3%	3.2	0.4	A
WB	Left Turn	20	18	92.0%	22.9	12.1	C
	Through	430	438	101.8%	1.2	0.2	A
	Right Turn						
	Subtotal	450	456	101.3%	2.1	0.5	A
<b>Total</b>		<b>1,565</b>	<b>1,561</b>	<b>99.7%</b>	<b>3.8</b>	<b>0.7</b>	<b>A</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	80	84	105.0%	17.1	6.4	C
	Through						
	Right Turn	90	86	96.0%	6.3	1.5	A
	Subtotal	170	170	100.2%	11.7	3.7	B
EB	Left Turn	305	308	101.0%	7.4	1.0	A
	Through	755	734	97.2%	4.3	0.6	A
	Right Turn						
	Subtotal	1,060	1,042	98.3%	5.2	0.7	A
WB	Left Turn						
	Through	400	409	102.3%	1.8	0.2	A
	Right Turn	5	4	80.0%	1.6	0.2	A
	Subtotal	405	413	102.0%	1.8	0.2	A
Total		1,635	1,625	99.4%	5.1	0.8	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	29	96.0%	20.7	7.8	C
	Through	120	129	107.3%	19.9	4.9	B
	Right Turn	110	100	90.5%	14.9	3.5	B
	Subtotal	260	257	98.9%	18.1	3.7	B
SB	Left Turn	10	12	116.0%	24.0	6.8	C
	Through	10	10	100.0%	19.1	7.3	B
	Right Turn	20	23	114.0%	4.9	2.3	A
	Subtotal	40	44	111.0%	12.3	2.0	B
EB	Left Turn	200	171	85.4%	27.8	2.5	C
	Through	525	541	103.1%	21.2	3.3	C
	Right Turn	110	107	97.5%	17.6	3.3	B
	Subtotal	835	819	98.1%	22.2	2.9	C
WB	Left Turn	170	162	95.3%	75.9	28.1	E
	Through	355	362	101.9%	12.1	5.5	B
	Right Turn	190	197	103.8%	7.8	8.3	A
	Subtotal	715	721	100.8%	24.7	9.7	C
Total		1,850	1,842	99.5%	22.4	4.4	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
AM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	200	208	104.0%	24.1	3.5	C
	Through	580	571	98.5%	17.1	1.8	B
	Right Turn	80	81	101.5%	12.3	4.5	B
	Subtotal	860	860	100.0%	18.3	1.5	B
SB	Left Turn	10	5	52.0%	14.4	16.3	B
	Through	80	81	101.0%	14.0	3.8	B
	Right Turn	40	51	127.0%	5.4	0.6	A
	Subtotal	130	137	105.2%	11.1	2.6	B
EB	Left Turn	60	62	102.7%	33.2	5.5	C
	Through	350	360	103.0%	15.4	1.9	B
	Right Turn	60	64	106.0%	1.2	0.3	A
	Subtotal	470	486	103.3%	15.8	1.6	B
WB	Left Turn	40	43	108.0%	22.9	4.9	C
	Through	520	531	102.2%	15.7	1.1	B
	Right Turn	40	42	105.0%	10.0	5.3	B
	Subtotal	600	616	102.7%	15.9	1.1	B
Total		2,060	2,099	101.9%	16.6	0.9	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Uncontrolled

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	100	101	101.2%	15.0	4.7	C
	Through	210	196	93.4%	2.5	0.4	A
	Right Turn						
	Subtotal	310	297	95.9%	6.8	1.7	A
SB	Left Turn						
	Through	580	572	98.6%	2.2	1.7	A
	Right Turn	430	426	99.0%	1.7	0.4	A
	Subtotal	1,010	998	98.8%	2.0	1.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,320	1,295	98.1%	3.1	1.2	A

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	70	63	90.4%	48.1	9.3	D
	Through	460	461	100.3%	22.2	2.2	C
	Right Turn	430	451	104.8%	7.5	0.8	A
	Subtotal	960	976	101.6%	17.1	1.6	B
SB	Left Turn	80	66	81.9%	46.7	4.9	D
	Through	920	909	98.8%	27.1	3.1	C
	Right Turn	90	99	110.4%	6.9	1.4	A
	Subtotal	1,090	1,073	98.5%	26.4	2.3	C
EB	Left Turn	70	71	100.9%	51.7	9.0	D
	Through	80	70	87.9%	51.7	10.6	D
	Right Turn	90	89	98.5%	34.5	11.3	C
	Subtotal	240	230	95.7%	44.8	8.9	D
WB	Left Turn	600	559	93.2%	40.2	7.4	D
	Through	130	120	92.3%	33.0	4.9	C
	Right Turn	100	102	102.3%	23.2	6.4	C
	Subtotal	830	781	94.1%	36.8	6.0	D
Total		3,120	3,060	98.1%	27.5	1.9	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	33	109.2%	55.1	12.0	E
	Through	205	205	100.0%	28.9	3.8	C
	Right Turn	160	159	99.4%	7.0	2.1	A
	Subtotal	395	397	100.4%	22.3	2.5	C
SB	Left Turn	40	39	96.6%	105.1	29.5	F
	Through	360	326	90.5%	82.0	27.8	F
	Right Turn	210	197	93.6%	73.4	27.1	E
	Subtotal	610	561	91.9%	80.5	27.2	F
EB	Left Turn	75	71	95.2%	54.9	11.4	D
	Through	500	493	98.6%	43.1	5.9	D
	Right Turn	10	10	103.0%	33.3	22.6	C
	Subtotal	585	574	98.2%	44.5	4.6	D
WB	Left Turn	310	300	96.6%	80.9	15.5	F
	Through	560	535	95.6%	42.0	5.1	D
	Right Turn	20	18	90.2%	24.4	8.2	C
	Subtotal	890	853	95.8%	55.5	7.5	E
Total		2,480	2,385	96.2%	53.3	7.2	D

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	58	96.3%	34.9	5.9	C
	Through	950	926	97.5%	6.3	2.5	A
	Right Turn						
	Subtotal	1,010	984	97.4%	8.0	2.3	A
SB	Left Turn						
	Through	1,545	1,543	99.8%	17.2	10.1	B
	Right Turn	50	53	105.2%	7.9	7.5	A
	Subtotal	1,595	1,595	100.0%	16.9	10.0	B
EB	Left Turn	30	32	105.5%	29.6	10.1	C
	Through						
	Right Turn	120	120	100.3%	16.7	2.5	B
	Subtotal	150	152	101.3%	19.9	4.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,755	2,731	99.1%	13.9	6.9	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	4	88.3%	37.6	44.4	D
	Through	980	954	97.3%	5.8	1.0	A
	Right Turn	60	63	104.9%	1.8	0.7	A
	Subtotal	1,045	1,021	97.7%	5.9	0.9	A
SB	Left Turn	35	35	99.9%	58.8	6.4	E
	Through	1,620	1,613	99.5%	11.7	2.3	B
	Right Turn	10	11	114.1%	7.1	5.1	A
	Subtotal	1,665	1,659	99.6%	12.7	2.4	B
EB	Left Turn	5	4	73.6%	28.4	32.3	C
	Through	5	3	66.2%	36.2	39.5	D
	Right Turn	5	5	95.7%	9.6	11.5	A
	Subtotal	15	12	78.5%	44.5	27.4	D
WB	Left Turn	130	129	99.1%	48.4	5.6	D
	Through						
	Right Turn	20	24	119.6%	5.4	1.0	A
	Subtotal	150	153	101.8%	41.8	6.0	D
Total		2,875	2,845	98.9%	11.9	1.7	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	675	696	103.1%	0.7	0.2	A
	Right Turn						
	Subtotal	675	696	103.1%	0.7	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	40	99.0%	8.6	1.9	A
	Through						
	Right Turn	20	22	108.0%	2.5	0.3	A
	Subtotal	60	61	102.0%	6.4	1.3	A
Total		735	757	103.0%	1.2	0.2	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	510	488	95.6%	31.7	3.1	C
	Left Turn 2	90	93	103.1%	13.4	2.2	B
	Left Turn	10	14	136.0%	20.4	9.6	C
	Through	160	180	112.5%	14.0	2.2	B
	Subtotal	770	774	100.5%	25.2	2.6	C
WB	Left Turn 2	1,330	1,334	100.3%	13.4	1.0	B
	Left Turn	350	329	94.1%	7.5	0.8	A
	Through	40	37	93.0%	7.9	3.3	A
	Right Turn	110	122	110.9%	4.2	0.9	A
	Subtotal	1,830	1,822	99.6%	11.6	0.8	B
Total		2,600	2,596	99.9%	15.7	1.2	B

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn	140	138	98.9%	0.7	0.2	A
Subtotal		140	138	98.9%	0.7	0.2	A
SB	Left Turn	435	442	101.7%	1.1	0.2	A
	Through	280	296	105.7%	0.3	0.0	A
	Right Turn						
Subtotal		715	738	103.3%	0.8	0.1	A
EB	Left Turn						
	Through	100	103	102.8%	8.5	0.6	A
	Right Turn	80	87	108.5%	3.5	0.7	A
Subtotal		180	190	105.3%	6.2	0.4	A
WB	Left Turn						
	Through						
	Right Turn						
Subtotal							
Total		1,035	1,066	103.0%	1.7	0.2	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	355	321	90.5%	21.6	4.9	C
	Right Turn	100	96	96.4%	5.1	1.4	A
	Subtotal	455	418	91.8%	17.9	4.1	B
SE	Left Turn 2	210	224	106.9%	20.3	15.2	C
	Left Turn	290	284	97.9%	15.1	1.8	B
	Right Turn	85	86	100.7%	15.9	4.4	B
	Subtotal	585	594	101.5%	17.4	7.3	B
EB	Left Turn	205	210	102.6%	53.3	19.6	D
	Through	435	430	98.9%	36.1	7.4	D
	Right Turn	35	40	114.3%	21.7	8.8	C
	Subtotal	675	681	100.9%	40.8	11.6	D
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,715	1,692	98.7%	26.9	7.1	C

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	13	132.0%	37.3	18.0	D
	Through	5	3	64.0%	24.4	26.8	C
	Right Turn	20	21	106.0%	15.3	6.1	B
	Subtotal	35	38	107.4%	25.5	7.4	C
SB	Left Turn	110	123	111.6%	38.7	4.7	D
	Through	5	6	128.0%	38.2	23.5	D
	Right Turn	90	82	91.6%	26.4	5.7	C
	Subtotal	205	212	103.2%	33.9	4.9	C
EB	Left Turn	90	94	104.0%	48.5	8.6	D
	Through	660	636	96.3%	39.1	8.5	D
	Right Turn	10	11	112.0%	34.7	17.3	C
	Subtotal	760	740	97.4%	40.4	7.4	D
WB	Left Turn	20	22	110.0%	41.8	22.5	D
	Through	850	842	99.1%	22.0	2.7	C
	Right Turn	90	88	97.3%	20.3	5.7	C
	Subtotal	960	952	99.1%	22.5	2.8	C
Total		1,960	1,941	99.0%	30.7	4.0	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	280	300	107.0%	19.9	2.6	B
	Through						
	Right Turn	190	198	104.2%	21.0	13.3	C
	Subtotal	470	498	105.9%	20.4	5.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	790	765	96.9%	29.6	16.6	C
	Right Turn						
	Subtotal	790	765	96.9%	29.6	16.6	C
WB	Left Turn						
	Through	680	654	96.2%	9.0	1.2	A
	Right Turn						
	Subtotal	680	654	96.2%	9.0	1.2	A
Total		1,940	1,917	98.8%	20.1	7.6	C

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	28	93.3%	72.4	32.6	F
	Through						
	Right Turn	20	14	70.0%	87.9	74.4	F
	Subtotal	50	42	84.0%	73.5	35.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	960	932	97.1%	14.6	7.1	B
	Right Turn	20	18	90.0%	15.9	11.6	C
	Subtotal	980	950	97.0%	14.6	7.2	B
WB	Left Turn	20	22	110.0%	19.0	8.4	C
	Through	650	619	95.2%	1.3	0.2	A
	Right Turn						
	Subtotal	670	641	95.6%	1.9	0.6	A
Total		1,700	1,633	96.1%	11.1	3.8	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	220	212	96.5%	33.0	13.9	D
	Through						
	Right Turn	140	166	118.6%	8.9	1.6	A
	Subtotal	360	378	105.1%	22.5	7.7	C
EB	Left Turn	130	128	98.2%	20.3	5.2	C
	Through	880	826	93.8%	20.7	6.2	C
	Right Turn						
	Subtotal	1,010	953	94.4%	20.6	6.0	C
WB	Left Turn						
	Through	540	483	89.5%	2.0	0.3	A
	Right Turn	10	9	92.0%	1.8	0.2	A
	Subtotal	550	492	89.5%	2.0	0.3	A
Total		1,920	1,824	95.0%	16.1	4.7	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	27	89.3%	20.7	5.4	C
	Through	120	108	90.0%	23.0	5.0	C
	Right Turn	90	91	101.3%	19.1	3.4	B
	Subtotal	240	226	94.2%	21.3	3.8	C
SB	Left Turn	70	70	99.4%	28.0	7.5	C
	Through	40	44	110.0%	14.5	3.8	B
	Right Turn	10	9	92.0%	5.1	4.0	A
	Subtotal	120	123	102.3%	21.7	4.9	C
EB	Left Turn	160	160	100.0%	78.5	12.4	E
	Through	850	797	93.7%	63.0	14.8	E
	Right Turn	90	87	96.4%	59.1	16.3	E
	Subtotal	1,100	1,044	94.9%	65.1	14.2	E
WB	Left Turn	100	63	62.8%	251.8	85.4	F
	Through	510	454	88.9%	44.7	47.4	D
	Right Turn	175	161	91.9%	37.6	50.8	D
	Subtotal	785	677	86.3%	62.6	52.4	E
Total		2,245	2,070	92.2%	55.3	16.9	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing + Alignment A/B Conditions  
PM Peak Hour

Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	50	48	96.8%	26.9	4.4	C
	Through	230	217	94.3%	15.0	3.1	B
	Right Turn	60	51	85.3%	6.9	2.8	A
	Subtotal	340	316	93.1%	15.7	2.5	B
SB	Left Turn	60	58	96.0%	24.0	5.1	C
	Through	310	300	96.6%	17.1	1.8	B
	Right Turn	30	26	88.0%	6.8	1.1	A
	Subtotal	400	384	95.9%	17.5	1.8	B
EB	Left Turn	40	40	101.0%	34.2	5.2	C
	Through	605	614	101.5%	18.7	2.0	B
	Right Turn	345	354	102.7%	6.0	1.6	A
	Subtotal	990	1,009	101.9%	14.9	1.6	B
WB	Left Turn	190	193	101.5%	31.0	7.9	C
	Through	490	498	101.6%	15.2	1.9	B
	Right Turn	60	57	95.3%	11.9	3.2	B
	Subtotal	740	748	101.0%	19.2	2.7	B
Total		2,470	2,456	99.4%	16.7	1.2	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Uncontrolled

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	540	507	93.8%	9.6	1.3	A
	Through	330	320	96.8%	2.7	0.3	A
	Right Turn						
	Subtotal	870	826	95.0%	6.9	0.9	A
SB	Left Turn						
	Through	140	131	93.9%	1.0	0.2	A
	Right Turn	240	240	99.9%	1.1	0.1	A
	Subtotal	380	371	97.7%	1.0	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,250	1,198	95.8%	5.1	0.6	A

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	88	97.5%	45.1	5.8	D
	Through	1,070	1,060	99.0%	27.9	3.3	C
	Right Turn	750	732	97.6%	22.4	5.0	C
	Subtotal	1,910	1,879	98.4%	26.6	3.7	C
SB	Left Turn	70	61	86.8%	42.2	7.2	D
	Through	500	508	101.6%	17.9	2.7	B
	Right Turn	50	55	109.2%	3.7	1.0	A
	Subtotal	620	623	100.5%	19.0	2.6	B
EB	Left Turn	90	87	96.7%	36.5	7.6	D
	Through	70	71	101.4%	42.0	9.3	D
	Right Turn	70	67	95.7%	22.9	7.3	C
	Subtotal	230	225	97.8%	34.1	5.0	C
WB	Left Turn	210	193	91.7%	37.2	5.3	D
	Through	70	64	92.0%	31.9	8.2	C
	Right Turn	100	95	95.4%	15.5	5.3	B
	Subtotal	380	352	92.7%	30.5	4.1	C
Total		3,140	3,080	98.1%	26.0	2.8	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	350	339	96.7%	33.0	3.9	C
	Through	480	453	94.3%	17.6	1.9	B
	Right Turn						
	Subtotal	830	791	95.3%	24.2	2.4	C
SB	Left Turn						
	Through	110	105	95.3%	28.8	1.8	C
	Right Turn	30	27	88.6%	11.1	5.2	B
	Subtotal	140	131	93.9%	25.4	2.2	C
EB	Left Turn	420	416	99.1%	28.9	9.4	C
	Through						
	Right Turn	450	418	92.8%	15.9	9.0	B
	Subtotal	870	834	95.8%	22.5	9.3	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,840	1,756	95.5%	23.5	5.0	C

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	73	91.0%	32.0	4.3	C
	Through	1,870	1,819	97.2%	13.5	3.0	B
	Right Turn						
	Subtotal	1,950	1,891	97.0%	14.2	3.1	B
SB	Left Turn						
	Through	730	706	96.7%	8.0	2.0	A
	Right Turn	150	142	94.9%	3.2	0.7	A
	Subtotal	880	848	96.4%	7.1	1.6	A
EB	Left Turn	40	39	97.4%	26.2	5.8	C
	Through						
	Right Turn	140	150	106.9%	7.4	1.1	A
	Subtotal	180	189	104.8%	11.3	1.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,010	2,928	97.3%	11.9	2.3	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,850	1,811	97.9%	16.3	4.1	B
	Right Turn	230	228	99.2%	6.4	1.5	A
	Subtotal	2,080	2,039	98.0%	15.2	3.9	B
SB	Left Turn	20	19	96.5%	60.9	15.9	E
	Through	850	832	97.9%	6.0	1.0	A
	Right Turn						
	Subtotal	870	852	97.9%	7.3	1.1	A
EB	Left Turn	10	8	83.7%	70.6	37.8	E
	Through						
	Right Turn						
	Subtotal	10	8	83.7%	70.6	37.8	E
WB	Left Turn	250	250	99.9%	50.3	6.7	D
	Through	10	14	142.0%	49.9	20.4	D
	Right Turn	90	85	94.6%	30.5	8.8	C
	Subtotal	350	349	99.7%	45.6	4.9	D
Total		3,310	3,248	98.1%	16.5	2.6	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	100	112	112.0%	0.1	0.1	A
	Right Turn						
	Subtotal	100	112	112.0%	0.1	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	18	90.0%	4.2	1.4	A
	Through						
	Right Turn	30	29	97.3%	2.2	0.3	A
	Subtotal	50	47	94.4%	3.0	0.5	A
Total		150	159	106.1%	0.9	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	90	82	91.1%	4.6	0.8	A
	Left Turn 2	100	100	100.4%	14.9	4.3	B
	Left Turn	20	26	130.0%	14.8	4.2	B
	Through	260	256	98.5%	16.1	4.3	B
	Subtotal	470	464	98.8%	13.7	3.5	B
WB	Left Turn 2	180	173	96.2%	5.4	0.9	A
	Left Turn	140	126	89.7%	5.4	1.4	A
	Through	30	22	74.7%	5.4	2.9	A
	Right Turn	140	142	101.4%	3.2	0.7	A
	Subtotal	490	463	94.5%	4.8	0.5	A
Total		960	928	96.6%	9.3	1.8	A

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn	350	338	96.6%	1.2	0.2	A
	Subtotal	350	338	96.6%	1.2	0.2	A
SB	Left Turn	40	44	109.0%	0.1	0.2	A
	Through	80	86	108.0%	0.2	0.1	A
	Right Turn						
	Subtotal	120	130	108.3%	0.2	0.1	A
EB	Left Turn						
	Through	40	43	107.0%	7.1	0.7	A
	Right Turn	90	90	99.6%	2.6	0.3	A
	Subtotal	130	132	101.8%	4.1	0.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		600	600	100.1%	1.6	0.1	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	380	388	102.2%	20.5	1.7	C
	Right Turn	110	114	103.3%	13.2	2.0	B
	Subtotal	490	502	102.4%	18.8	1.5	B
SE	Left Turn 2	50	51	101.6%	10.2	3.6	B
	Left Turn	240	256	106.7%	11.0	1.5	B
	Right Turn	30	27	90.7%	10.7	5.8	B
	Subtotal	320	334	104.4%	10.9	1.1	B
EB	Left Turn	40	34	85.0%	26.6	6.9	C
	Through	380	376	98.9%	26.7	2.3	C
	Right Turn	10	8	76.0%	18.9	11.4	B
	Subtotal	430	418	97.1%	26.6	2.4	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,240	1,254	101.1%	19.4	1.3	B

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	5	6	128.0%	26.7	19.7	C
	Right Turn	5	4	88.0%	11.3	12.4	B
	Subtotal	10	11	108.0%	25.9	15.8	C
SB	Left Turn	30	32	106.7%	27.2	6.2	C
	Through	5	6	120.0%	31.8	23.4	C
	Right Turn	30	33	109.3%	12.2	4.3	B
	Subtotal	65	71	108.9%	20.8	3.5	C
EB	Left Turn	80	74	92.5%	33.9	4.5	C
	Through	775	755	97.4%	22.9	4.7	C
	Right Turn	5	6	112.0%	10.1	12.0	B
	Subtotal	860	835	97.1%	23.9	4.5	C
WB	Left Turn	10	12	116.0%	33.1	16.6	C
	Through	780	782	100.2%	15.5	4.2	B
	Right Turn	90	94	104.0%	13.7	6.7	B
	Subtotal	880	887	100.8%	15.6	4.3	B
Total		1,815	1,803	99.3%	19.8	2.5	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	450	462	102.6%	24.6	2.6	C
	Through						
	Right Turn	250	272	108.6%	17.6	3.0	B
	Subtotal	700	733	104.7%	22.2	1.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	810	790	97.6%	16.0	4.6	B
	Right Turn						
	Subtotal	810	790	97.6%	16.0	4.6	B
WB	Left Turn						
	Through	430	420	97.7%	8.3	1.2	A
	Right Turn						
	Subtotal	430	420	97.7%	8.3	1.2	A
Total		1,940	1,944	100.2%	16.7	2.2	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	20	20	102.0%	71.2	50.2	F
	Through						
	Right Turn	30	32	106.7%	44.4	29.6	E
	Subtotal	50	52	104.8%	52.9	33.9	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,010	1,005	99.5%	3.8	0.8	A
	Right Turn	50	54	108.8%	3.1	0.6	A
	Subtotal	1,060	1,059	99.9%	3.7	0.8	A
WB	Left Turn	30	30	98.7%	21.1	15.9	C
	Through	410	403	98.3%	1.1	0.3	A
	Right Turn						
	Subtotal	440	433	98.4%	2.6	1.7	A
Total		1,550	1,544	99.6%	5.0	1.6	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	60	62	102.7%	16.8	6.5	C
	Through						
	Right Turn	110	112	101.5%	5.9	0.9	A
	Subtotal	170	173	101.9%	10.1	2.8	B
EB	Left Turn	340	334	98.2%	8.0	1.6	A
	Through	710	716	100.9%	4.5	0.9	A
	Right Turn						
	Subtotal	1,050	1,050	100.0%	5.6	1.0	A
WB	Left Turn						
	Through	370	356	96.2%	1.8	0.3	A
	Right Turn	10	9	92.0%	1.6	0.3	A
	Subtotal	380	365	96.1%	1.8	0.3	A
Total		1,600	1,589	99.3%	5.2	0.9	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	30	98.7%	19.5	5.7	B
	Through	120	122	102.0%	21.1	3.1	C
	Right Turn	120	130	108.0%	14.8	4.5	B
	Subtotal	270	282	104.3%	17.8	3.4	B
SB	Left Turn	10	8	76.0%	13.4	8.3	B
	Through	10	8	84.0%	14.7	9.8	B
	Right Turn	20	19	94.0%	5.6	2.4	A
	Subtotal	40	35	87.0%	10.2	3.8	B
EB	Left Turn	180	186	103.3%	27.5	5.5	C
	Through	480	473	98.5%	19.8	2.1	B
	Right Turn	110	115	104.7%	16.2	2.1	B
	Subtotal	770	774	100.5%	21.2	2.8	C
WB	Left Turn	180	172	95.3%	52.1	17.1	D
	Through	330	315	95.4%	11.0	3.3	B
	Right Turn	190	195	102.7%	6.3	3.5	A
	Subtotal	700	682	97.4%	20.1	7.4	C
Total		1,780	1,772	99.6%	20.1	3.3	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	200	206	103.2%	25.9	2.4	C
	Through	580	551	95.0%	17.0	2.1	B
	Right Turn	80	76	94.5%	12.4	4.9	B
	Subtotal	860	833	96.8%	18.9	1.9	B
SB	Left Turn	20	10	52.0%	21.2	8.8	C
	Through	90	102	112.9%	15.7	3.3	B
	Right Turn	40	33	82.0%	5.5	1.7	A
	Subtotal	150	145	96.5%	13.8	2.4	B
EB	Left Turn	60	59	98.0%	32.6	5.7	C
	Through	310	322	103.7%	15.7	1.8	B
	Right Turn	60	58	97.3%	0.3	0.1	A
	Subtotal	430	439	102.0%	15.8	1.5	B
WB	Left Turn	50	48	95.2%	24.9	5.1	C
	Through	470	454	96.5%	16.0	1.9	B
	Right Turn	60	70	116.7%	11.6	3.4	B
	Subtotal	580	571	98.5%	16.2	1.9	B
Total		2,020	1,988	98.4%	17.1	1.1	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
AM Peak Hour

Intersection 16

S. River Rd/Broadway Bridge

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	450	438	97.3%	52.6	19.8	D
	Right Turn	430	423	98.4%	28.8	18.4	C
	Subtotal	880	861	97.9%	41.0	19.5	D
SB	Left Turn	410	380	92.8%	48.1	8.3	D
	Through	150	134	89.1%	29.4	3.8	C
	Right Turn						
	Subtotal	560	514	91.8%	43.3	6.4	D
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	390	385	98.7%	65.5	16.6	E
	Through						
	Right Turn	380	361	95.0%	20.8	5.9	C
	Subtotal	770	746	96.9%	43.9	11.0	D
Total		2,210	2,121	96.0%	42.8	8.3	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Uncontrolled

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	180	162	90.2%	14.3	5.6	B
	Through	200	180	90.1%	1.2	0.2	A
	Right Turn						
	Subtotal	380	343	90.1%	7.4	3.0	A
SB	Left Turn						
	Through	550	540	98.1%	2.6	2.8	A
	Right Turn	440	424	96.5%	1.8	0.5	A
	Subtotal	990	964	97.4%	2.3	1.8	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,370	1,307	95.4%	3.6	1.4	A

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	80	79	98.3%	50.0	7.8	D
	Through	500	493	98.6%	23.6	1.9	C
	Right Turn	280	293	104.5%	5.1	0.7	A
	Subtotal	860	865	100.5%	19.7	1.8	B
SB	Left Turn	80	74	91.9%	53.9	8.6	D
	Through	970	990	102.0%	30.5	2.6	C
	Right Turn	90	100	110.8%	8.2	2.1	A
	Subtotal	1,140	1,163	102.0%	30.1	2.7	C
EB	Left Turn	70	62	88.4%	48.8	11.2	D
	Through	80	88	109.7%	48.4	12.0	D
	Right Turn	100	104	104.5%	31.2	11.3	C
	Subtotal	250	254	101.6%	41.6	11.1	D
WB	Left Turn	470	377	80.2%	111.4	22.6	F
	Through	120	96	80.1%	72.5	19.5	E
	Right Turn	90	70	78.1%	38.8	12.9	D
	Subtotal	680	543	79.9%	95.3	21.6	F
Total		2,930	2,825	96.4%	40.5	3.5	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	370	306	82.8%	89.4	35.3	F
	Through	210	175	83.4%	35.0	21.2	D
	Right Turn						
	Subtotal	580	482	83.0%	69.7	30.3	E
SB	Left Turn						
	Through	280	243	86.7%	58.5	29.7	E
	Right Turn	290	264	91.0%	48.7	32.5	D
	Subtotal	570	507	88.9%	53.4	31.0	D
EB	Left Turn	150	154	102.9%	38.5	3.0	D
	Through						
	Right Turn	290	293	101.0%	16.8	3.9	B
	Subtotal	440	447	101.7%	24.3	3.6	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,590	1,436	90.3%	49.4	14.9	D

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	69	98.3%	32.4	9.5	C
	Through	820	828	101.0%	7.0	2.2	A
	Right Turn						
	Subtotal	890	897	100.8%	8.9	2.5	A
SB	Left Turn						
	Through	1,470	1,426	97.0%	16.8	8.5	B
	Right Turn	60	70	116.5%	8.1	9.4	A
	Subtotal	1,530	1,496	97.8%	16.4	8.5	B
EB	Left Turn	40	37	92.8%	27.5	6.1	C
	Through						
	Right Turn	120	109	90.7%	14.6	2.1	B
	Subtotal	160	146	91.2%	18.2	2.5	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,580	2,539	98.4%	13.9	5.8	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	5	47.3%	42.2	36.0	D
	Through	860	865	100.6%	8.0	1.6	A
	Right Turn	200	198	98.8%	2.4	0.6	A
	Subtotal	1,070	1,068	99.8%	7.2	1.5	A
SB	Left Turn	30	33	109.2%	63.0	9.7	E
	Through	1,550	1,492	96.3%	13.6	2.1	B
	Right Turn	10	12	123.8%	14.2	6.1	B
	Subtotal	1,590	1,538	96.7%	14.7	2.3	B
EB	Left Turn	10	10	98.3%	71.1	15.8	E
	Through	10	12	123.8%	50.4	12.8	D
	Right Turn	10	11	105.6%	30.4	13.8	C
	Subtotal	30	33	109.2%	48.7	10.9	D
WB	Left Turn	280	262	93.7%	55.8	7.2	E
	Through						
	Right Turn	20	19	92.8%	7.3	4.0	A
	Subtotal	300	281	93.7%	52.5	7.0	D
Total		2,990	2,919	97.6%	16.0	2.2	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	680	725	106.6%	0.7	0.2	A
	Right Turn						
	Subtotal	680	725	106.6%	0.7	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	38	94.0%	7.4	0.7	A
	Through						
	Right Turn	20	22	110.0%	2.6	0.4	A
	Subtotal	60	60	99.3%	5.7	0.9	A
Total		740	784	106.0%	1.1	0.2	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	510	485	95.1%	31.9	1.9	C
	Left Turn 2	140	136	97.4%	15.5	2.2	B
	Left Turn	10	11	112.0%	15.2	3.2	B
	Through	160	173	108.3%	16.6	2.3	B
	Subtotal	820	806	98.2%	25.6	2.0	C
WB	Left Turn 2	1,340	1,346	100.5%	13.9	1.8	B
	Left Turn	340	332	97.6%	8.2	1.2	A
	Through	40	42	106.0%	7.4	3.0	A
	Right Turn	110	118	107.6%	3.9	0.6	A
	Subtotal	1,830	1,839	100.5%	12.1	1.3	B
Total		2,650	2,645	99.8%	16.2	1.4	B

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn	230	228	99.3%	1.1	0.2	A
	Subtotal	230	228	99.3%	1.1	0.2	A
SB	Left Turn	420	429	102.2%	1.0	0.1	A
	Through	300	315	104.9%	5.5	7.5	A
	Right Turn						
	Subtotal	720	744	103.3%	2.9	3.3	A
EB	Left Turn						
	Through	100	97	96.8%	8.4	0.9	A
	Right Turn	90	98	108.4%	6.1	5.8	A
	Subtotal	190	194	102.3%	7.4	3.2	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,140	1,167	102.4%	3.3	2.5	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	380	361	94.9%	22.2	4.1	C
	Right Turn	140	130	92.9%	6.8	2.4	A
	Subtotal	520	491	94.4%	18.1	3.6	B
SE	Left Turn 2	220	223	101.3%	17.6	2.9	B
	Left Turn	290	285	98.3%	14.7	1.7	B
	Right Turn	90	85	94.2%	14.4	2.8	B
	Subtotal	600	593	98.8%	15.7	1.6	B
EB	Left Turn	220	215	97.8%	60.1	18.7	E
	Through	500	508	101.7%	39.6	11.0	D
	Right Turn	30	28	94.7%	29.4	13.5	C
	Subtotal	750	752	100.3%	45.3	13.0	D
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,870	1,836	98.2%	28.7	5.8	C

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	9	92.0%	34.4	17.5	C
	Through	5	6	120.0%	24.1	21.3	C
	Right Turn	20	22	108.0%	11.2	7.5	B
	Subtotal	35	37	105.1%	22.9	8.0	C
SB	Left Turn	120	117	97.3%	34.2	5.7	C
	Through	5	4	88.0%	23.7	21.5	C
	Right Turn	110	107	97.5%	20.2	6.1	C
	Subtotal	235	228	97.2%	27.6	5.4	C
EB	Left Turn	70	65	92.6%	44.3	8.0	D
	Through	640	639	99.9%	26.1	8.2	C
	Right Turn	10	10	96.0%	20.6	17.0	C
	Subtotal	720	714	99.1%	27.8	7.6	C
WB	Left Turn	20	14	68.0%	34.6	17.4	C
	Through	830	833	100.3%	20.1	4.5	C
	Right Turn	90	88	97.3%	17.2	4.1	B
	Subtotal	940	934	99.4%	20.0	4.4	C
Total		1,930	1,913	99.1%	23.9	3.1	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	270	279	103.3%	19.1	2.8	B
	Through						
	Right Turn	190	186	97.7%	18.0	8.2	B
	Subtotal	460	464	101.0%	18.7	4.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	780	788	101.0%	14.7	4.4	B
	Right Turn						
	Subtotal	780	788	101.0%	14.7	4.4	B
WB	Left Turn						
	Through	670	669	99.8%	9.1	1.2	A
	Right Turn						
	Subtotal	670	669	99.8%	9.1	1.2	A
Total		1,910	1,921	100.6%	13.7	2.9	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	33	110.7%	96.7	62.1	F
	Through						
	Right Turn	20	19	96.0%	72.3	54.4	F
	Subtotal	50	52	104.8%	88.0	58.4	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	950	954	100.5%	7.0	4.0	A
	Right Turn	20	22	108.0%	6.5	4.8	A
	Subtotal	970	976	100.6%	7.0	4.0	A
WB	Left Turn	20	16	82.0%	11.4	8.4	B
	Through	640	637	99.5%	1.3	0.2	A
	Right Turn						
	Subtotal	660	653	99.0%	1.5	0.2	A
Total		1,680	1,682	100.1%	7.8	5.0	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	250	250	99.8%	72.3	29.4	F
	Through						
	Right Turn	140	150	106.9%	18.2	10.3	C
	Subtotal	390	399	102.4%	51.9	21.3	F
EB	Left Turn	220	217	98.5%	14.1	3.9	B
	Through	770	774	100.5%	10.8	4.6	B
	Right Turn						
	Subtotal	990	990	100.0%	11.5	4.4	B
WB	Left Turn						
	Through	530	525	99.0%	2.5	0.7	A
	Right Turn	10	8	84.0%	2.2	0.6	A
	Subtotal	540	533	98.7%	2.5	0.7	A
Total		1,920	1,923	100.1%	17.5	5.6	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	27	90.7%	22.4	5.4	C
	Through	120	109	91.0%	21.5	4.0	C
	Right Turn	100	96	96.0%	16.2	3.4	B
	Subtotal	250	232	93.0%	19.4	2.7	B
SB	Left Turn	70	56	80.0%	23.7	3.5	C
	Through	40	44	110.0%	15.7	2.9	B
	Right Turn	10	9	88.0%	6.4	5.1	A
	Subtotal	120	109	90.7%	19.3	3.5	B
EB	Left Turn	220	225	102.4%	70.3	22.9	E
	Through	700	696	99.4%	37.7	9.5	D
	Right Turn	100	108	108.0%	34.3	10.5	C
	Subtotal	1,020	1,029	100.9%	44.6	12.2	D
WB	Left Turn	100	98	98.0%	152.2	60.7	F
	Through	500	499	99.8%	21.8	14.0	C
	Right Turn	180	172	95.6%	14.9	16.5	B
	Subtotal	780	769	98.6%	36.8	19.6	D
Total		2,170	2,139	98.6%	37.8	8.1	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	58	96.7%	26.4	5.8	C
	Through	230	231	100.3%	14.5	1.9	B
	Right Turn	70	66	93.7%	6.6	2.1	A
	Subtotal	360	354	98.4%	15.1	1.4	B
SB	Left Turn	60	52	86.7%	21.5	3.9	C
	Through	320	310	96.9%	17.9	1.8	B
	Right Turn	40	46	115.0%	6.6	1.6	A
	Subtotal	420	408	97.1%	17.1	1.7	B
EB	Left Turn	50	45	89.6%	40.8	4.9	D
	Through	590	576	97.6%	16.3	1.2	B
	Right Turn	340	338	99.4%	3.5	0.9	A
	Subtotal	980	958	97.8%	13.0	1.1	B
WB	Left Turn	200	209	104.6%	37.4	8.3	D
	Through	480	490	102.2%	17.1	2.1	B
	Right Turn	60	61	102.0%	13.1	4.1	B
	Subtotal	740	761	102.8%	22.5	3.1	C
Total		2,500	2,482	99.3%	16.9	1.3	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative C  
PM Peak Hour

Intersection 16

S. River Rd/Broadway Bridge

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	220	187	85.0%	52.4	26.2	D
	Right Turn	360	352	97.8%	11.2	6.0	B
	Subtotal	580	539	93.0%	25.1	11.2	C
SB	Left Turn	300	298	99.2%	49.3	9.3	D
	Through	270	257	95.1%	40.8	4.5	D
	Right Turn						
	Subtotal	570	555	97.3%	45.6	6.6	D
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	530	517	97.6%	39.6	6.7	D
	Through						
	Right Turn	360	342	94.9%	26.8	20.4	C
	Subtotal	890	859	96.5%	34.5	7.8	C
Total		2,040	1,953	95.7%	35.1	6.2	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Uncontrolled

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	580	506	87.2%	9.7	1.1	A
	Through	330	287	86.9%	2.7	0.4	A
	Right Turn						
	Subtotal	910	793	87.1%	7.2	0.8	A
SB	Left Turn						
	Through	65	63	96.3%	1.0	0.3	A
	Right Turn	240	240	99.9%	1.1	0.2	A
	Subtotal	305	302	99.2%	1.1	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,215	1,095	90.1%	5.5	0.6	A

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	160	141	88.0%	31.1	7.8	C
	Through	1,035	891	86.1%	11.8	2.4	B
	Right Turn	440	374	85.0%	7.3	1.1	A
	Subtotal	1,635	1,406	86.0%	12.6	2.2	B
SB	Left Turn	10	7	69.2%	28.6	20.9	C
	Through	500	490	98.0%	12.8	2.4	B
	Right Turn	50	54	108.5%	3.2	1.1	A
	Subtotal	560	551	98.4%	12.0	2.0	B
EB	Left Turn	80	78	97.4%	24.3	3.2	C
	Through	40	36	91.0%	29.6	8.0	C
	Right Turn	90	89	98.7%	10.3	5.1	B
	Subtotal	210	203	96.7%	19.0	4.2	B
WB	Left Turn	10	7	65.5%	32.6	25.3	C
	Through	15	14	92.2%	31.7	10.4	C
	Right Turn	10	9	91.0%	14.4	9.9	B
	Subtotal	35	29	84.2%	27.5	10.8	C
Total		2,440	2,189	89.7%	13.2	2.1	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	7	69.2%	41.0	19.7	D
	Through	470	431	91.7%	13.2	3.6	B
	Right Turn						
	Subtotal	480	438	91.2%	13.7	3.6	B
SB	Left Turn						
	Through	45	44	97.9%	11.3	3.6	B
	Right Turn	20	17	83.7%	3.3	1.8	A
	Subtotal	65	61	93.5%	9.0	2.8	A
EB	Left Turn	470	398	84.7%	19.5	4.5	B
	Through						
	Right Turn	10	11	105.6%	3.4	1.5	A
	Subtotal	480	409	85.2%	19.1	4.4	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,025	907	88.5%	15.8	3.2	B

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	67	95.2%	32.2	4.9	C
	Through	1,930	1,917	99.3%	11.6	2.3	B
	Right Turn						
	Subtotal	2,000	1,984	99.2%	12.3	2.3	B
SB	Left Turn						
	Through	915	878	96.0%	6.6	1.3	A
	Right Turn	180	181	100.3%	2.9	0.6	A
	Subtotal	1,095	1,059	96.7%	6.0	1.2	A
EB	Left Turn	30	32	106.8%	27.2	5.9	C
	Through						
	Right Turn	130	118	91.0%	7.9	2.0	A
	Subtotal	160	150	94.0%	12.4	3.0	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,255	3,193	98.1%	10.2	1.8	B



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,930	1,929	99.9%	8.9	3.0	A
	Right Turn	130	130	100.2%	2.9	1.0	A
	Subtotal	2,060	2,059	100.0%	8.5	2.8	A
SB	Left Turn	15	13	87.4%	55.7	13.7	E
	Through	1,030	988	95.9%	4.3	0.7	A
	Right Turn						
	Subtotal	1,045	1,001	95.8%	5.0	0.8	A
EB	Left Turn	5	5	94.6%	51.2	44.2	D
	Through						
	Right Turn						
	Subtotal	5	5	94.6%	50.2	45.4	D
WB	Left Turn	40	35	86.5%	51.5	11.2	D
	Through	5	5	94.6%	40.0	28.7	D
	Right Turn	60	61	101.9%	23.4	5.9	C
	Subtotal	105	100	95.7%	35.4	7.2	D
Total		3,215	3,165	98.5%	8.3	2.1	A

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	100	112	112.0%	0.1	0.1	A
	Right Turn						
	Subtotal	100	112	112.0%	0.1	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	18	92.0%	4.9	0.6	A
	Through						
	Right Turn	20	13	66.0%	2.2	0.4	A
	Subtotal	40	32	79.0%	3.8	0.4	A
Total		140	144	102.6%	0.9	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn 3	80	78	97.0%	4.5	1.2	A
	Left Turn 2	100	96	95.6%	16.8	4.2	B
	Left Turn	20	15	74.0%	17.5	3.1	B
	Through	260	244	94.0%	18.4	4.7	B
	Subtotal	460	432	94.0%	15.5	3.6	B
WB	Left Turn 2	180	186	103.6%	5.1	1.2	A
	Left Turn	150	142	94.9%	5.1	1.0	A
	Through	30	28	92.0%	5.0	2.5	A
	Right Turn	140	144	102.9%	3.1	0.8	A
	Subtotal	500	500	100.1%	4.5	0.6	A
Total		960	933	97.2%	9.6	1.6	A

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	335	283	84.5%	1.2	0.2	A
	Subtotal	335	283	84.5%	1.2	0.2	A
SB	Left Turn	50	58	116.0%	0.3	0.2	A
	Through	70	73	104.6%	0.2	0.0	A
	Right Turn						
	Subtotal	120	131	109.3%	0.2	0.1	A
EB	Left Turn						
	Through	50	57	113.6%	7.2	0.7	A
	Right Turn	100	104	104.4%	3.1	0.8	A
	Subtotal	150	161	107.5%	4.6	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		605	576	95.1%	1.9	0.2	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	380	350	92.2%	18.9	2.1	B
	Right Turn	120	111	92.3%	10.6	3.2	B
	Subtotal	500	461	92.2%	16.8	2.6	B
SE	Left Turn 2	40	48	120.0%	11.4	2.8	B
	Left Turn	240	236	98.2%	11.8	1.4	B
	Right Turn	25	26	105.6%	12.1	5.6	B
	Subtotal	305	310	101.6%	11.8	1.4	B
EB	Left Turn	40	36	91.0%	28.1	5.6	C
	Through	385	354	91.8%	27.2	2.2	C
	Right Turn	10	8	80.0%	20.6	12.5	C
	Subtotal	435	398	91.5%	27.2	2.3	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,240	1,169	94.3%	19.0	1.1	B

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	5	2	32.0%	8.5	13.7	A
	Right Turn	5	6	120.0%	12.3	12.0	B
	Subtotal	10	8	76.0%	13.3	11.7	B
SB	Left Turn	30	24	78.7%	32.0	13.1	C
	Through	5	8	152.0%	44.9	20.3	D
	Right Turn	80	83	103.5%	14.8	5.3	B
	Subtotal	115	114	99.1%	20.9	6.1	C
EB	Left Turn	110	106	96.7%	41.0	8.6	D
	Through	815	750	92.0%	22.0	5.8	C
	Right Turn	5	4	88.0%	11.4	7.2	B
	Subtotal	930	861	92.6%	24.4	5.1	C
WB	Left Turn	10	8	76.0%	40.5	29.5	D
	Through	855	868	101.6%	14.5	6.1	B
	Right Turn	80	89	111.5%	13.6	6.2	B
	Subtotal	945	965	102.1%	14.6	6.1	B
Total		2,000	1,948	97.4%	19.3	4.0	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	440	442	100.5%	21.9	1.7	C
	Through						
	Right Turn	240	225	93.7%	14.1	3.3	B
	Subtotal	680	667	98.1%	19.3	1.9	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	850	774	91.1%	13.6	3.0	B
	Right Turn						
	Subtotal	850	774	91.1%	13.6	3.0	B
WB	Left Turn						
	Through	505	531	105.1%	9.5	1.7	A
	Right Turn						
	Subtotal	505	531	105.1%	9.5	1.7	A
Total		2,035	1,972	96.9%	14.4	1.7	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	20	16	80.0%	34.7	15.8	D
	Through						
	Right Turn	30	26	88.0%	30.9	13.4	D
	Subtotal	50	42	84.8%	31.5	9.5	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,050	960	91.4%	3.6	0.8	A
	Right Turn	40	34	86.0%	2.2	0.8	A
	Subtotal	1,090	994	91.2%	3.6	0.8	A
WB	Left Turn	20	14	72.0%	17.4	8.0	C
	Through	485	519	107.0%	1.1	0.2	A
	Right Turn						
	Subtotal	505	533	105.6%	1.6	0.4	A
Total		1,645	1,570	95.4%	3.7	0.8	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	60	56	93.3%	15.7	2.9	C
	Through						
	Right Turn	110	121	110.2%	7.7	1.6	A
	Subtotal	170	177	104.2%	10.2	1.2	B
EB	Left Turn	330	276	83.5%	8.4	1.8	A
	Through	760	716	94.2%	4.4	1.0	A
	Right Turn						
	Subtotal	1,090	991	90.9%	5.5	1.3	A
WB	Left Turn						
	Through	425	442	104.0%	1.8	0.2	A
	Right Turn	5	6	128.0%	1.6	0.2	A
	Subtotal	430	448	104.3%	1.8	0.2	A
Total		1,690	1,617	95.7%	5.0	0.8	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	29	96.0%	19.1	3.4	B
	Through	120	107	89.3%	20.6	3.3	C
	Right Turn	110	110	100.0%	13.7	2.7	B
	Subtotal	260	246	94.6%	17.3	2.3	B
SB	Left Turn	10	9	88.0%	18.9	4.9	B
	Through	5	5	104.0%	8.7	8.1	A
	Right Turn	20	20	102.0%	4.4	1.5	A
	Subtotal	35	34	98.3%	10.4	2.4	B
EB	Left Turn	190	181	95.2%	28.7	3.4	C
	Through	520	485	93.3%	20.9	2.3	C
	Right Turn	110	105	95.6%	16.7	2.8	B
	Subtotal	820	771	94.0%	22.2	2.3	C
WB	Left Turn	170	170	100.2%	42.9	14.9	D
	Through	380	396	104.1%	11.7	3.2	B
	Right Turn	190	177	93.3%	5.2	1.7	A
	Subtotal	740	743	100.4%	17.6	6.1	B
Total		1,855	1,795	96.8%	19.4	2.8	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	200	195	97.4%	23.2	2.0	C
	Through	580	578	99.7%	16.7	1.1	B
	Right Turn	80	72	89.5%	12.1	2.8	B
	Subtotal	860	845	98.2%	17.9	1.2	B
SB	Left Turn	20	20	98.0%	27.2	7.3	C
	Through	80	84	105.5%	12.8	2.5	B
	Right Turn	40	42	104.0%	5.8	1.4	A
	Subtotal	140	146	104.0%	12.9	2.5	B
EB	Left Turn	60	51	84.7%	34.1	7.6	C
	Through	330	329	99.6%	14.5	2.0	B
	Right Turn	60	60	100.7%	1.1	0.4	A
	Subtotal	450	440	97.8%	15.0	2.5	B
WB	Left Turn	40	41	103.0%	26.4	5.7	C
	Through	470	469	99.8%	16.6	1.7	B
	Right Turn	60	60	100.0%	12.1	3.0	B
	Subtotal	570	570	100.1%	16.9	1.3	B
Total		2,020	2,001	99.0%	16.6	0.9	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
AM Peak Hour

Intersection 17                      Circle St/Jefferson Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	5	94.6%	109.7	70.8	F
	Through	1,460	1,273	87.2%	105.0	19.4	F
	Right Turn	550	448	81.5%	108.3	20.6	F
	Subtotal	2,015	1,726	85.6%	106.0	19.6	F
SB	Left Turn	140	130	93.1%	83.1	27.1	F
	Through	455	459	100.9%	14.9	2.2	B
	Right Turn	5	4	80.1%	11.3	19.9	B
	Subtotal	600	593	98.9%	30.9	9.6	C
EB	Left Turn	5	5	94.6%	40.4	44.1	D
	Through	10	11	112.8%	57.4	23.4	E
	Right Turn	5	5	109.2%	24.4	20.5	C
	Subtotal	20	21	107.4%	46.6	15.3	D
WB	Left Turn	570	499	87.6%	65.0	6.4	E
	Through	10	13	131.0%	22.3	22.2	C
	Right Turn	170	157	92.3%	15.8	5.1	B
	Subtotal	750	669	89.3%	52.8	5.1	D
Total		3,385	3,010	88.9%	78.8	11.3	E

Intersection 18                      S. River Rd/Circle St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	100	91	90.6%	106.7	35.7	F
	Through	460	425	92.3%	75.2	29.9	E
	Right Turn	330	314	95.1%	55.5	30.6	E
	Subtotal	890	829	93.2%	71.1	30.9	E
SB	Left Turn	10	5	54.6%	65.0	35.9	E
	Through	40	45	111.9%	30.3	6.0	C
	Right Turn	5	5	109.2%	26.9	23.8	C
	Subtotal	55	56	101.3%	33.8	6.1	C
EB	Left Turn	10	5	51.0%	69.2	46.0	E
	Through	570	475	83.3%	41.0	2.4	D
	Right Turn	120	115	95.9%	35.0	7.1	C
	Subtotal	700	595	85.0%	40.4	2.3	D
WB	Left Turn	235	230	97.9%	86.8	20.8	F
	Through	645	573	88.8%	81.1	17.5	F
	Right Turn	10	8	83.7%	54.4	30.9	D
	Subtotal	890	811	91.1%	82.8	15.1	F
Total		2,535	2,291	90.4%	66.7	13.9	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Uncontrolled

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	100	95	95.3%	12.5	4.1	B
	Through	205	191	93.0%	1.3	0.3	A
	Right Turn						
	Subtotal	305	286	93.7%	5.1	1.6	A
SB	Left Turn						
	Through	555	553	99.7%	1.3	0.2	A
	Right Turn	450	464	103.1%	1.7	0.2	A
	Subtotal	1,005	1,017	101.2%	1.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,310	1,303	99.5%	2.3	0.4	A

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	100	102	102.3%	40.9	7.7	D
	Through	430	431	100.1%	14.6	3.8	B
	Right Turn	100	100	100.5%	4.1	0.8	A
	Subtotal	630	633	100.5%	17.2	3.9	B
SB	Left Turn	10	8	77.3%	52.8	26.6	D
	Through	920	878	95.4%	20.8	3.3	C
	Right Turn	90	96	106.3%	4.9	0.8	A
	Subtotal	1,020	981	96.2%	19.5	3.1	B
EB	Left Turn	70	72	102.5%	36.0	8.2	D
	Through	20	15	75.4%	48.7	21.6	D
	Right Turn	120	121	101.2%	18.4	11.4	B
	Subtotal	210	208	99.2%	26.6	10.0	C
WB	Left Turn	220	216	98.2%	33.6	3.2	C
	Through	60	57	94.5%	37.1	9.1	D
	Right Turn	10	11	106.7%	5.6	2.9	A
	Subtotal	290	283	97.7%	33.3	2.6	C
Total		2,150	2,106	98.0%	21.4	3.0	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	10	95.7%	19.3	13.4	B
	Through	175	160	91.7%	6.9	2.9	A
	Right Turn						
	Subtotal	185	170	91.9%	7.8	2.9	A
SB	Left Turn						
	Through	295	300	101.8%	9.1	1.6	A
	Right Turn	280	276	98.4%	6.3	1.2	A
	Subtotal	575	576	100.2%	7.8	1.4	A
EB	Left Turn	110	104	94.3%	14.9	3.2	B
	Through						
	Right Turn	10	10	103.0%	2.0	0.8	A
	Subtotal	120	114	95.1%	13.9	3.2	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		880	860	97.7%	8.6	1.4	A

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	57	95.1%	31.5	4.4	C
	Through	970	931	95.9%	5.7	1.7	A
	Right Turn						
	Subtotal	1,030	988	95.9%	7.2	1.7	A
SB	Left Turn						
	Through	1,590	1,604	100.9%	15.7	6.6	B
	Right Turn	50	50	99.4%	8.8	6.1	A
	Subtotal	1,640	1,653	100.8%	15.5	6.5	B
EB	Left Turn	40	36	90.2%	26.8	6.2	C
	Through						
	Right Turn	120	110	92.0%	17.4	3.6	B
	Subtotal	160	146	91.5%	19.7	2.9	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,830	2,788	98.5%	12.8	4.3	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	4	88.3%	40.7	36.2	D
	Through	1,000	967	96.7%	5.4	1.9	A
	Right Turn	40	41	102.1%	0.9	0.6	A
	Subtotal	1,045	1,013	96.9%	5.5	1.8	A
SB	Left Turn	25	24	95.7%	60.7	15.7	E
	Through	1,675	1,688	100.8%	10.9	2.5	B
	Right Turn	10	9	92.0%	9.3	5.2	A
	Subtotal	1,710	1,722	100.7%	11.6	2.4	B
EB	Left Turn	5	5	95.7%	56.6	37.5	E
	Through	5	2	44.2%	24.3	32.4	C
	Right Turn	5	6	117.8%	12.8	13.2	B
	Subtotal	15	13	85.9%	39.8	25.0	D
WB	Left Turn	110	107	97.4%	46.8	5.0	D
	Through						
	Right Turn	20	19	93.8%	7.4	2.5	A
	Subtotal	130	126	96.8%	40.9	5.1	D
Total		2,900	2,873	99.1%	10.9	1.5	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through	650	666	102.4%	0.7	0.1	A
	Right Turn						
	Subtotal	650	666	102.4%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	37	93.0%	7.8	1.3	A
	Through						
	Right Turn	20	20	102.0%	2.5	0.4	A
	Subtotal	60	58	96.0%	6.0	0.8	A
Total		710	723	101.9%	1.1	0.1	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	520	488	93.9%	30.9	2.9	C
	Left Turn 2	160	164	102.3%	16.9	2.9	B
	Left Turn	10	10	100.0%	16.2	2.7	B
	Through	150	140	93.1%	18.0	3.0	B
	Subtotal	840	802	95.4%	25.6	3.2	C
WB	Left Turn 2	1,340	1,329	99.2%	12.3	0.9	B
	Left Turn	290	273	94.2%	7.8	1.0	A
	Through	40	41	103.0%	8.2	2.3	A
	Right Turn	100	104	104.4%	3.7	0.8	A
	Subtotal	1,770	1,748	98.7%	11.0	0.8	B
Total		2,610	2,549	97.7%	15.6	1.2	B

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn	230	212	92.3%	1.2	0.2	A
Subtotal		230	212	92.3%	1.2	0.2	A
SB	Left Turn	410	418	101.9%	1.0	0.2	A
	Through	280	276	98.6%	25.2	9.0	D
	Right Turn						
Subtotal		690	694	100.5%	10.6	3.2	B
EB	Left Turn						
	Through	70	69	98.9%	8.3	1.0	A
	Right Turn	110	104	94.5%	9.0	13.9	A
Subtotal		180	173	96.2%	8.9	8.8	A
WB	Left Turn						
	Through						
	Right Turn						
Subtotal							
Total		1,100	1,079	98.1%	8.5	3.6	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	410	375	91.5%	21.5	2.9	C
	Right Turn	135	122	90.4%	5.1	0.9	A
	Subtotal	545	497	91.2%	17.4	2.3	B
SE	Left Turn 2	210	207	98.5%	16.9	5.0	B
	Left Turn	280	286	102.0%	14.9	2.1	B
	Right Turn	90	93	103.6%	14.9	2.3	B
	Subtotal	580	586	101.0%	15.6	2.6	B
EB	Left Turn	220	213	96.7%	51.8	8.3	D
	Through	460	459	99.7%	35.3	4.5	D
	Right Turn	30	36	118.7%	24.5	11.9	C
	Subtotal	710	707	99.6%	39.8	4.7	D
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,835	1,790	97.5%	25.7	2.6	C

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	9	88.0%	26.9	20.4	C
	Through	5	3	64.0%	24.8	29.8	C
	Right Turn	20	24	118.0%	20.6	11.2	C
	Subtotal	35	36	101.7%	26.8	10.2	C
SB	Left Turn	110	105	95.3%	50.1	18.0	D
	Through	10	11	108.0%	46.3	27.5	D
	Right Turn	160	151	94.3%	38.4	24.7	D
	Subtotal	280	266	95.1%	43.3	21.0	D
EB	Left Turn	120	117	97.7%	55.8	13.4	E
	Through	730	672	92.1%	40.2	16.7	D
	Right Turn	10	10	100.0%	29.1	13.9	C
	Subtotal	860	799	92.9%	42.3	15.2	D
WB	Left Turn	20	24	118.0%	53.7	19.9	D
	Through	870	870	100.0%	22.5	3.8	C
	Right Turn	80	83	104.0%	21.0	6.9	C
	Subtotal	970	977	100.7%	23.2	4.0	C
Total		2,145	2,078	96.9%	33.1	8.8	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	245	246	100.6%	23.9	4.6	C
	Through						
	Right Turn	180	182	100.9%	24.9	13.2	C
	Subtotal	425	428	100.7%	24.5	6.0	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	860	785	91.3%	19.9	11.2	B
	Right Turn						
	Subtotal	860	785	91.3%	19.9	11.2	B
WB	Left Turn						
	Through	725	744	102.6%	7.2	1.5	A
	Right Turn						
	Subtotal	725	744	102.6%	7.2	1.5	A
Total		2,010	1,957	97.4%	16.0	5.4	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	26	88.0%	105.8	44.8	F
	Through						
	Right Turn	20	18	92.0%	80.0	61.7	F
	Subtotal	50	45	89.6%	96.3	50.2	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,020	935	91.7%	12.2	9.4	B
	Right Turn	20	17	86.0%	10.8	9.6	B
	Subtotal	1,040	952	91.6%	12.2	9.4	B
WB	Left Turn	20	22	108.0%	11.5	4.7	B
	Through	695	722	103.9%	1.6	0.2	A
	Right Turn						
	Subtotal	715	744	104.1%	1.9	0.3	A
Total		1,805	1,741	96.5%	9.9	6.1	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	250	219	87.7%	78.8	27.5	F
	Through						
	Right Turn	140	151	108.0%	18.9	16.8	C
	Subtotal	390	370	95.0%	54.6	22.6	F
EB	Left Turn	220	203	92.2%	18.4	5.9	C
	Through	840	747	89.0%	15.5	8.3	C
	Right Turn						
	Subtotal	1,060	950	89.6%	16.1	7.7	C
WB	Left Turn						
	Through	585	610	104.3%	2.8	0.9	A
	Right Turn	10	9	92.0%	2.4	0.7	A
	Subtotal	595	620	104.1%	2.7	0.9	A
Total		2,045	1,940	94.9%	19.2	6.7	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	20	18	92.0%	20.9	6.1	C
	Through	130	116	88.9%	23.4	4.0	C
	Right Turn	90	104	115.6%	19.6	3.4	B
	Subtotal	240	238	99.2%	21.5	3.2	C
SB	Left Turn	70	70	100.6%	26.6	8.6	C
	Through	40	44	109.0%	15.4	5.3	B
	Right Turn	10	12	124.0%	7.6	4.0	A
	Subtotal	120	126	105.3%	21.2	6.1	C
EB	Left Turn	235	197	83.9%	114.5	32.0	F
	Through	765	693	90.6%	47.9	17.8	D
	Right Turn	90	74	82.2%	45.0	18.5	D
	Subtotal	1,090	964	88.5%	61.7	20.1	E
WB	Left Turn	90	86	95.1%	93.3	44.6	F
	Through	565	589	104.2%	14.6	1.8	B
	Right Turn	180	195	108.2%	8.0	1.4	A
	Subtotal	835	869	104.1%	20.5	5.2	C
Total		2,285	2,198	96.2%	38.6	8.2	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	50	48	95.2%	25.2	7.2	C
	Through	230	232	101.0%	13.3	2.5	B
	Right Turn	60	60	99.3%	7.4	3.3	A
	Subtotal	340	340	99.9%	14.1	2.5	B
SB	Left Turn	60	61	102.0%	23.6	5.1	C
	Through	310	292	94.3%	17.7	1.7	B
	Right Turn	40	42	105.0%	5.9	1.3	A
	Subtotal	410	396	96.5%	17.5	1.8	B
EB	Left Turn	40	42	104.0%	42.3	3.3	D
	Through	610	643	105.4%	19.7	1.5	B
	Right Turn	340	344	101.2%	6.8	1.2	A
	Subtotal	990	1,029	103.9%	16.3	1.5	B
WB	Left Turn	190	196	103.2%	37.5	11.3	D
	Through	470	488	103.8%	16.2	1.4	B
	Right Turn	60	71	118.7%	12.3	4.5	B
	Subtotal	720	755	104.9%	21.5	3.8	C
Total		2,460	2,519	102.4%	17.8	1.6	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Existing Plus Project - Alternative D  
PM Peak Hour

Intersection 17                      Circle St/Jefferson Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	3	58.9%	31.0	25.8	C
	Through	530	528	99.7%	17.7	2.4	B
	Right Turn	490	500	102.1%	9.6	1.3	A
	Subtotal	1,025	1,032	100.6%	13.9	1.5	B
SB	Left Turn	135	125	92.7%	43.8	7.4	D
	Through	1,120	1,094	97.7%	15.2	2.7	B
	Right Turn	5	5	103.0%	10.8	9.6	B
	Subtotal	1,260	1,224	97.2%	18.1	2.7	B
EB	Left Turn	5	6	110.4%	33.2	18.0	C
	Through	10	6	55.2%	27.8	20.1	C
	Right Turn	5	3	51.5%	6.0	13.0	A
	Subtotal	20	14	68.1%	32.5	12.8	C
WB	Left Turn	555	540	97.3%	28.5	3.4	C
	Through	10	9	92.0%	23.9	15.5	C
	Right Turn	95	93	98.0%	8.6	2.2	A
	Subtotal	660	643	97.4%	25.6	3.1	C
Total		2,965	2,912	98.2%	18.3	1.9	B

Intersection 18                      S. River Rd/Circle St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	68	96.7%	46.1	10.2	D
	Through	160	156	97.8%	32.6	3.6	C
	Right Turn	240	232	96.6%	11.0	2.5	B
	Subtotal	470	456	97.0%	23.6	1.8	C
SB	Left Turn	30	37	123.9%	42.9	10.2	D
	Through	270	268	99.4%	37.7	4.9	D
	Right Turn	5	3	51.5%	17.8	19.3	B
	Subtotal	305	308	101.0%	38.3	3.8	D
EB	Left Turn	5	3	66.2%	33.3	36.5	C
	Through	530	516	97.3%	44.0	6.2	D
	Right Turn	100	93	93.1%	43.3	8.7	D
	Subtotal	635	612	96.4%	43.9	6.4	D
WB	Left Turn	385	365	94.8%	54.8	13.1	D
	Through	585	562	96.0%	34.0	5.0	C
	Right Turn	20	19	93.8%	20.9	14.4	C
	Subtotal	990	945	95.5%	41.8	5.9	D
Total		2,400	2,322	96.7%	38.5	3.0	D



**Intersection 1**                                      **S River Rd/US 50 EB On-Ramp**                                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	830	722	86.9%	9.5	1.3	A
	Through	570	491	86.1%	2.1	0.2	A
	Right Turn						
	Subtotal	1,400	1,212	86.6%	6.5	0.8	A
SB	Left Turn						
	Through	520	515	99.0%	37.6	10.8	D
	Right Turn	640	637	99.6%	61.4	14.5	E
	Subtotal	1,160	1,152	99.3%	51.1	10.1	D
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,560	2,364	92.4%	28.2	5.0	C

**Intersection 2**                                      **Jefferson Blvd/15th St**                                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	71	79.4%	61.3	5.7	E
	Through	1,710	1,417	82.9%	25.3	4.2	C
	Right Turn	390	321	82.4%	14.5	1.7	B
	Subtotal	2,190	1,810	82.6%	24.8	3.7	C
SB	Left Turn	120	120	99.8%	56.4	6.5	E
	Through	1,190	1,170	98.3%	17.9	1.9	B
	Right Turn	50	38	76.0%	5.7	1.8	A
	Subtotal	1,360	1,328	97.6%	21.1	1.9	C
EB	Left Turn	70	75	106.9%	46.8	11.6	D
	Through	70	68	96.6%	42.8	6.4	D
	Right Turn	70	67	96.1%	25.7	7.0	C
	Subtotal	210	210	99.9%	39.1	5.6	D
WB	Left Turn	40	40	100.7%	43.3	12.1	D
	Through	40	33	83.6%	46.3	15.8	D
	Right Turn	30	29	97.5%	26.6	10.1	C
	Subtotal	110	103	93.6%	39.2	9.0	D
Total		3,870	3,450	89.2%	24.7	2.2	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	11	110.2%	98.7	49.0	F
	Through	980	849	86.6%	92.3	17.4	F
	Right Turn	5	6	114.0%	77.0	46.2	E
	Subtotal	995	865	87.0%	92.5	17.5	F
SB	Left Turn	60	56	93.7%	69.2	10.2	E
	Through	470	461	98.0%	25.1	5.3	C
	Right Turn	120	116	96.9%	3.8	0.3	A
	Subtotal	650	633	97.4%	25.1	3.2	C
EB	Left Turn	460	385	83.6%	53.9	14.8	D
	Through	20	20	98.8%	35.9	15.1	D
	Right Turn	90	83	92.0%	17.0	5.9	B
	Subtotal	570	487	85.5%	47.1	12.3	D
WB	Left Turn	10	8	79.8%	36.4	31.0	D
	Through	10	11	114.0%	36.6	23.1	D
	Right Turn	40	36	91.2%	16.7	7.3	B
	Subtotal	60	56	93.1%	24.4	10.1	C
Total		2,275	2,041	89.7%	59.2	8.0	E

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	66	82.7%	118.5	14.5	F
	Through	1,950	1,747	89.6%	82.1	15.6	F
	Right Turn	40	33	82.7%	76.0	16.0	E
	Subtotal	2,070	1,846	89.2%	83.3	15.4	F
SB	Left Turn	70	51	72.7%	93.1	16.4	F
	Through	1,100	1,081	98.2%	25.2	5.0	C
	Right Turn	40	44	109.3%	14.9	5.4	B
	Subtotal	1,210	1,175	97.1%	27.7	4.7	C
EB	Left Turn	40	44	109.3%	81.3	27.3	F
	Through	10	11	106.4%	48.5	20.4	D
	Right Turn	140	138	98.8%	29.0	14.2	C
	Subtotal	190	193	101.4%	42.0	17.2	D
WB	Left Turn	40	47	117.8%	81.6	20.6	F
	Through	110	102	92.9%	51.7	9.8	D
	Right Turn	50	55	111.0%	42.9	10.7	D
	Subtotal	200	205	102.4%	56.7	9.9	E
Total		3,670	3,419	93.2%	60.2	8.8	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,990	1,849	92.9%	20.6	9.2	C
	Right Turn	110	105	95.3%	9.5	4.8	A
	Subtotal	2,100	1,954	93.1%	20.0	9.0	C
SB	Left Turn	30	30	100.1%	59.9	17.5	E
	Through	1,250	1,228	98.3%	9.3	2.5	A
	Right Turn						
	Subtotal	1,280	1,258	98.3%	10.6	2.5	B
EB	Left Turn	5	8	159.6%	42.8	32.3	D
	Through						
	Right Turn						
	Subtotal	5	8	159.6%	42.1	33.3	D
WB	Left Turn	50	51	101.8%	45.9	11.0	D
	Through	5	6	114.0%	44.6	36.1	D
	Right Turn	70	76	109.1%	44.0	12.5	D
	Subtotal	125	133	106.4%	45.0	7.6	D
Total		3,510	3,354	95.5%	17.5	5.1	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	80	77	96.5%	0.6	0.2	A
	Right Turn						
	Subtotal	80	77	96.5%	0.6	0.2	A
SB	Left Turn						
	Through	120	127	106.0%	0.1	0.1	A
	Right Turn						
	Subtotal	120	127	106.0%	0.1	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	18	92.0%	6.2	1.2	A
	Through						
	Right Turn	50	51	102.4%	3.5	0.5	A
	Subtotal	70	70	99.4%	4.3	0.8	A
Total		270	274	101.5%	1.3	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	380	369	97.1%	14.7	3.1	B
	Left Turn 2	100	96	96.4%	23.0	9.3	C
	Left Turn	40	38	95.0%	20.8	3.2	C
	Through	280	292	104.1%	21.4	3.3	C
	Subtotal	800	795	99.4%	18.4	3.1	B
SB	Right Turn 3	10	8	76.0%	18.9	15.4	B
	Right Turn 2	40	39	98.0%	29.8	10.1	C
	Right Turn	180	172	95.6%	33.7	2.7	C
	Through	200	198	99.2%	34.7	3.1	C
	Subtotal	430	417	97.0%	33.7	3.2	C
WB	Left Turn 3	40	38	94.0%	43.9	24.7	D
	Left Turn 2	340	346	101.6%	36.7	9.8	D
	Left Turn	90	80	89.3%	27.4	6.0	C
	Through	40	45	112.0%	36.3	9.0	D
	Right Turn	260	259	99.5%	12.5	3.2	B
	Subtotal	770	767	99.6%	27.7	4.6	C
Total		2,000	1,979	99.0%	25.2	3.1	C

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	70	66	94.3%	2.0	0.5	A
	Right Turn	300	309	102.9%	1.0	0.3	A
	Subtotal	370	375	101.3%	1.2	0.3	A
SB	Left Turn	80	82	102.5%	3.0	0.9	A
	Through	60	64	106.0%	0.5	0.4	A
	Right Turn						
	Subtotal	140	146	104.0%	1.9	0.6	A
EB	Left Turn	10	10	96.0%	5.2	4.1	A
	Through	220	221	100.5%	9.5	1.2	A
	Right Turn	80	90	112.5%	3.3	0.7	A
	Subtotal	310	321	103.5%	7.7	0.9	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		820	841	102.6%	3.8	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	450	466	103.6%	55.2	14.5	E
	Right Turn	40	39	97.0%	29.4	9.0	C
	Subtotal	490	505	103.1%	53.4	14.4	D
SE	Left Turn 2	180	171	95.1%	49.5	16.5	D
	Left Turn	800	808	101.0%	48.6	15.0	D
	Right Turn	170	178	104.5%	53.2	17.6	D
	Subtotal	1150	1156	100.6%	49.4	15.6	D
EB	Left Turn	170	161	94.8%	45.2	10.0	D
	Through	410	434	106.0%	38.0	3.7	D
	Right Turn	20	19	96.0%	35.6	6.9	D
	Subtotal	600	615	102.5%	39.7	5.0	D
SB	Left Turn	190	187	98.5%	25.7	12.4	C
	Through	50	50	100.0%	8.9	2.9	A
	Right Turn						
	Subtotal	240	237	98.8%	21.9	9.9	C
Total		2480	2514	101.4%	45.5	6.9	D

Intersection 10                      Front St/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	40	38	95.0%	12.7	6.7	B
	Right Turn	110	113	102.5%	6.0	3.9	A
	Subtotal	150	151	100.5%	7.7	4.6	A
SB	Left Turn	90	92	102.2%	6.6	1.2	A
	Through	20	19	94.0%	10.0	2.6	A
	Right Turn	10	9	92.0%	3.7	2.6	A
	Subtotal	120	120	100.0%	7.0	1.2	A
EB	Left Turn	10	13	128.0%	4.6	2.0	A
	Through	30	29	96.0%	0.3	0.4	A
	Right Turn	10	10	100.0%	1.0	2.6	A
	Subtotal	50	52	103.2%	1.5	1.1	A
WB	Left Turn	100	99	98.8%	4.4	0.7	A
	Through	50	49	98.4%	4.5	1.1	A
	Right Turn	370	373	100.9%	3.1	0.4	A
	Subtotal	520	521	100.2%	3.5	0.4	A
Total		840	844	100.4%	4.6	1.0	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	250	237	94.7%	10.1	1.1	B
	Through						
	Right Turn	540	534	99.0%	8.7	1.0	A
	Subtotal	790	771	97.6%	9.2	0.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	230	237	103.1%	11.1	1.9	B
	Right Turn						
	Subtotal	230	237	103.1%	11.1	1.9	B
WB	Left Turn						
	Through	270	286	106.1%	12.5	1.4	B
	Right Turn						
	Subtotal	270	286	106.1%	12.5	1.4	B
Total		1,290	1,295	100.4%	10.3	0.9	B

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	8	80.0%	19.7	14.2	C
	Through						
	Right Turn	30	37	124.0%	11.1	5.7	B
	Subtotal	40	45	113.0%	12.5	5.8	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	750	753	100.4%	1.6	0.2	A
	Right Turn	20	18	88.0%	1.3	0.6	A
	Subtotal	770	770	100.1%	1.6	0.2	A
WB	Left Turn	20	20	98.0%	6.1	3.2	A
	Through	260	278	106.9%	0.7	0.3	A
	Right Turn						
	Subtotal	280	298	106.3%	1.1	0.4	A
Total		1,090	1,113	102.1%	1.9	0.5	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	90	97	108.0%	23.9	14.5	C
	Through						
	Right Turn	50	57	114.4%	4.4	0.9	A
	Subtotal	140	154	110.3%	17.0	10.2	C
EB	Left Turn	360	363	100.9%	5.5	1.1	A
	Through	420	429	102.1%	2.9	0.8	A
	Right Turn						
	Subtotal	780	792	101.5%	4.1	0.9	A
WB	Left Turn						
	Through	240	251	104.7%	1.6	0.4	A
	Right Turn	10	10	104.0%	1.4	0.3	A
	Subtotal	250	262	104.6%	1.6	0.4	A
Total		1,170	1,208	103.2%	5.3	2.1	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	20	22	110.0%	38.8	15.7	D
	Through	150	148	98.4%	36.6	14.4	D
	Right Turn	160	164	102.8%	29.7	14.3	C
	Subtotal	330	334	101.2%	33.5	14.2	C
SB	Left Turn	60	62	102.7%	60.7	24.4	E
	Through	100	104	104.4%	30.5	4.2	C
	Right Turn	80	82	102.5%	19.3	4.4	B
	Subtotal	240	248	103.3%	34.6	6.7	C
EB	Left Turn	90	88	98.2%	43.3	8.0	D
	Through	350	359	102.5%	27.4	3.9	C
	Right Turn	70	74	106.3%	23.1	2.5	C
	Subtotal	510	522	102.3%	29.8	3.6	C
WB	Left Turn	150	143	95.2%	38.4	4.5	D
	Through	150	156	104.3%	16.2	3.6	B
	Right Turn	250	273	109.1%	6.6	1.9	A
	Subtotal	550	572	104.0%	17.4	2.3	B
Total		1,630	1,676	102.8%	27.2	3.5	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	200	196	97.8%	22.7	4.2	C
	Through	580	575	99.1%	17.6	1.1	B
	Right Turn	80	81	101.5%	11.1	2.5	B
	Subtotal	860	852	99.0%	18.1	1.1	B
SB	Left Turn	10	8	84.0%	28.3	17.7	C
	Through	90	85	94.7%	14.3	3.2	B
	Right Turn	50	56	111.2%	6.4	2.3	A
	Subtotal	150	149	99.5%	12.2	2.0	B
EB	Left Turn	60	56	93.3%	35.7	3.9	D
	Through	340	343	100.8%	17.8	2.1	B
	Right Turn	60	57	94.7%	2.3	0.8	A
	Subtotal	460	456	99.0%	18.0	1.6	B
WB	Left Turn	50	49	98.4%	26.2	6.4	C
	Through	410	402	98.0%	17.1	2.2	B
	Right Turn	50	51	101.6%	5.7	2.3	A
	Subtotal	510	502	98.4%	16.7	1.9	B
Total		1,980	1,958	98.9%	17.3	0.9	B



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
AM Peak Hour

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	6	64.6%	111.4	44.5	F
	Through	2,040	1,672	81.9%	93.9	15.0	F
	Right Turn	20	15	76.0%	91.2	32.2	F
	Subtotal	2,070	1,693	81.8%	94.0	15.1	F
SB	Left Turn	330	254	76.9%	170.8	46.0	F
	Through	980	938	95.7%	28.6	8.8	C
	Right Turn	10	11	110.2%	21.5	11.9	C
	Subtotal	1,320	1,203	91.1%	58.8	17.2	E
EB	Left Turn	10	10	95.0%	75.4	32.5	E
	Through	40	39	97.9%	54.7	10.5	D
	Right Turn	30	26	87.4%	25.5	14.3	C
	Subtotal	80	75	93.6%	46.9	8.2	D
WB	Left Turn	90	87	96.7%	147.5	51.8	F
	Through	60	60	100.7%	69.0	16.7	E
	Right Turn	140	124	88.5%	54.1	10.5	D
	Subtotal	290	271	93.6%	86.9	21.9	F
Total		3,760	3,242	86.2%	79.1	11.2	E

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	100	98	98.4%	59.0	10.7	E
	Through	875	850	97.2%	24.9	6.2	C
	Right Turn	5	5	106.4%	12.1	6.8	B
	Subtotal	980	954	97.4%	28.3	6.0	C
SB	Left Turn	25	19	77.5%	52.4	14.8	D
	Through	335	306	91.3%	26.7	5.9	C
	Right Turn	110	98	89.5%	22.3	6.3	C
	Subtotal	470	424	90.1%	26.9	5.4	C
EB	Left Turn	70	51	72.2%	42.1	7.7	D
	Through	60	48	80.4%	37.8	10.0	D
	Right Turn	220	172	78.2%	25.8	4.3	C
	Subtotal	350	271	77.4%	30.9	5.3	C
WB	Left Turn	5	3	68.4%	19.0	22.8	B
	Through	40	42	105.5%	37.8	11.7	D
	Right Turn	5	3	53.2%	23.9	27.9	C
	Subtotal	50	48	96.5%	37.6	12.0	D
Total		1,850	1,697	91.7%	28.7	3.1	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
PM Peak Hour

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	480	461	96.0%	72.9	3.5	E
	Through	420	363	86.3%	2.1	0.7	A
	Right Turn						
	Subtotal	900	823	91.5%	41.8	2.7	D
SB	Left Turn						
	Through	1,030	844	81.9%	74.3	11.9	E
	Right Turn	870	712	81.8%	44.8	6.4	D
	Subtotal	1,900	1,555	81.9%	60.8	8.9	E
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,800	2,379	85.0%	54.1	5.7	D

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	73	90.7%	70.4	14.0	E
	Through	1,290	1,191	92.3%	30.6	6.5	C
	Right Turn	60	52	86.8%	12.8	3.1	B
	Subtotal	1,430	1,316	92.0%	32.1	5.9	C
SB	Left Turn	50	49	98.8%	66.1	11.7	E
	Through	1,480	1,384	93.5%	41.5	12.9	D
	Right Turn	80	76	94.5%	19.6	10.7	B
	Subtotal	1,610	1,509	93.7%	41.2	12.8	D
EB	Left Turn	60	58	96.3%	54.0	10.9	D
	Through	40	38	95.0%	47.9	15.0	D
	Right Turn	100	107	107.2%	30.2	6.7	C
	Subtotal	200	203	101.5%	40.5	5.3	D
WB	Left Turn	330	277	83.8%	55.7	12.4	E
	Through	90	70	77.7%	43.9	9.5	D
	Right Turn	100	83	83.2%	21.6	5.6	C
	Subtotal	520	430	82.7%	47.3	10.9	D
Total		3,760	3,458	92.0%	38.4	5.2	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
PM Peak Hour

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	50	51	101.1%	65.8	15.3	E
	Through	790	718	90.9%	32.8	4.2	C
	Right Turn	5	6	129.2%	22.3	12.5	C
	Subtotal	845	775	91.7%	35.0	3.3	D
SB	Left Turn	30	25	84.9%	79.3	10.2	E
	Through	900	694	77.1%	26.2	4.9	C
	Right Turn	420	321	76.4%	6.2	0.6	A
	Subtotal	1,350	1,040	77.0%	21.3	3.4	C
EB	Left Turn	100	93	93.1%	51.1	7.6	D
	Through	20	21	102.6%	46.6	21.9	D
	Right Turn	20	19	95.0%	19.6	11.4	B
	Subtotal	140	133	94.7%	46.6	6.2	D
WB	Left Turn	5	3	60.8%	19.3	22.9	B
	Through	50	44	88.9%	39.2	7.7	D
	Right Turn	40	40	98.8%	21.5	14.0	C
	Subtotal	95	87	91.6%	31.3	9.4	C
Total		2,430	2,035	83.7%	28.6	1.3	C

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	68	97.7%	64.8	9.2	E
	Through	1,160	1,154	99.5%	23.4	4.7	C
	Right Turn	50	45	89.7%	21.6	9.0	C
	Subtotal	1,280	1,268	99.0%	25.6	4.8	C
SB	Left Turn	90	81	89.9%	73.4	9.9	E
	Through	1,570	1,403	89.4%	29.6	4.5	C
	Right Turn	70	56	80.3%	18.3	4.4	B
	Subtotal	1,730	1,540	89.0%	31.5	4.0	C
EB	Left Turn	40	37	93.1%	76.1	29.3	E
	Through	10	13	133.0%	56.3	29.5	E
	Right Turn	120	129	107.7%	27.6	12.9	C
	Subtotal	170	180	105.7%	39.5	16.3	D
WB	Left Turn	40	43	107.4%	46.8	13.3	D
	Through	60	52	87.4%	38.0	7.5	D
	Right Turn	20	18	91.2%	24.1	7.8	C
	Subtotal	120	114	94.7%	38.7	5.8	D
Total		3,300	3,101	94.0%	29.9	3.5	C

**Intersection 5**                      **Jefferson Blvd/Locks Dr**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	4	83.6%	57.0	49.3	E
	Through	1,250	1,262	100.9%	7.0	1.9	A
	Right Turn	60	59	98.8%	1.8	0.7	A
	Subtotal	1,315	1,325	100.8%	7.0	1.9	A
SB	Left Turn	30	30	101.3%	61.1	12.3	E
	Through	1,690	1,541	91.2%	11.7	3.8	B
	Right Turn	10	9	87.4%	9.3	5.6	A
	Subtotal	1,730	1,580	91.3%	12.7	3.7	B
EB	Left Turn	5	5	91.2%	52.5	34.0	D
	Through	5	6	121.6%	45.9	36.1	D
	Right Turn	5	8	167.2%	11.2	9.0	B
	Subtotal	15	19	126.7%	45.0	15.8	D
WB	Left Turn	110	103	93.3%	51.3	3.8	D
	Through	5	6	114.0%	38.9	39.8	D
	Right Turn	20	18	91.2%	9.2	4.2	A
	Subtotal	135	127	93.7%	45.4	3.6	D
Total		3,195	3,050	95.5%	11.8	2.2	B

**Intersection 6**                      **3rd St/W St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	50	55	109.6%	0.6	0.2	A
	Right Turn						
	Subtotal	50	55	109.6%	0.6	0.2	A
SB	Left Turn						
	Through	610	638	104.5%	0.7	0.1	A
	Right Turn						
	Subtotal	610	638	104.5%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	35	87.0%	9.3	1.4	A
	Through						
	Right Turn	20	23	114.0%	3.0	0.4	A
	Subtotal	60	58	96.0%	6.8	1.1	A
Total		720	750	104.2%	1.1	0.1	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	620	546	88.1%	28.5	0.6	C
	Left Turn 2	70	82	117.1%	47.4	7.8	D
	Left Turn	10	9	92.0%	47.2	7.9	D
	Through	340	412	121.1%	47.9	7.9	D
	Subtotal	1,040	1,049	100.9%	37.8	4.3	D
SB	Right Turn 3	10	8	80.0%	190.2	70.8	F
	Right Turn 2	80	56	70.0%	208.5	39.4	F
	Right Turn	380	276	72.6%	216.5	31.7	F
	Through	160	115	71.8%	217.2	31.7	F
	Subtotal	630	455	72.2%	215.7	31.2	F
WB	Left Turn 3	50	48	96.0%	51.8	10.7	D
	Left Turn 2	1,570	1,385	88.2%	52.5	3.2	D
	Left Turn	380	364	95.7%	28.7	4.1	C
	Through	30	33	109.3%	20.6	8.8	C
	Right Turn	160	167	104.5%	14.8	3.8	B
Subtotal	2,190	1,997	91.2%	44.5	3.0	D	
Total		3,860	3,501	90.7%	64.6	3.0	E

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	40	42	104.0%	2.3	2.2	A
	Right Turn	200	210	104.8%	1.6	2.7	A
	Subtotal	240	251	104.7%	1.7	2.6	A
SB	Left Turn	410	422	102.8%	7.7	5.7	A
	Through	240	249	103.7%	4.9	4.4	A
	Right Turn						
	Subtotal	650	670	103.1%	6.7	5.2	A
EB	Left Turn	10	11	108.0%	32.7	46.6	D
	Through	60	70	116.7%	20.1	12.3	C
	Right Turn	100	92	92.0%	8.2	7.4	A
	Subtotal	170	173	101.6%	14.9	10.8	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,060	1,094	103.2%	6.6	4.7	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	370	300	81.0%	115.3	16.9	F
	Right Turn	60	62	102.7%	23.6	9.5	C
	Subtotal	430	361	84.0%	99.6	14.2	F
SE	Left Turn 2	450	456	101.3%	68.8	34.2	E
	Left Turn	660	663	100.4%	62.8	29.8	E
	Right Turn	280	298	106.3%	63.2	30.5	E
	Subtotal	1390	1416	101.9%	65.1	30.9	E
EB	Left Turn	220	225	102.4%	99.0	30.0	F
	Through	420	438	104.4%	57.5	6.5	E
	Right Turn	30	38	125.3%	53.6	12.8	D
	Subtotal	670	701	104.7%	70.9	12.3	E
SB	Left Turn	140	104	74.3%	65.7	8.1	E
	Through	70	56	79.4%	54.3	7.7	D
	Right Turn						
	Subtotal	210	160	76.0%	61.6	7.3	E
Total		2700	2638	97.7%	71.4	18.2	E

Intersection 10                      Front St/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	9	92.0%	7.1	3.8	A
	Through	20	21	104.0%	12.8	5.6	B
	Right Turn	110	108	98.2%	5.8	2.4	A
	Subtotal	140	138	98.6%	6.9	2.5	A
SB	Left Turn	180	187	104.0%	9.1	1.8	A
	Through	40	41	103.0%	12.4	1.8	B
	Right Turn	10	10	96.0%	8.7	6.6	A
	Subtotal	230	238	103.5%	9.5	1.5	A
EB	Left Turn	10	10	100.0%	4.0	2.8	A
	Through	60	65	108.7%	0.6	0.3	A
	Right Turn	10	8	80.0%	1.0	2.6	A
	Subtotal	80	83	104.0%	1.0	0.4	A
WB	Left Turn	140	130	92.6%	3.7	0.6	A
	Through	60	56	93.3%	2.9	0.7	A
	Right Turn	190	168	88.6%	2.0	0.4	A
	Subtotal	390	354	90.8%	2.8	0.3	A
Total		840	813	96.8%	5.3	0.6	A

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	71	101.7%	9.1	2.2	A
	Through						
	Right Turn	230	233	101.4%	5.8	0.8	A
	Subtotal	300	304	101.5%	6.6	0.7	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	350	359	102.6%	7.2	1.0	A
	Right Turn						
	Subtotal	350	359	102.6%	7.2	1.0	A
WB	Left Turn						
	Through	320	284	88.8%	8.0	1.2	A
	Right Turn						
	Subtotal	320	284	88.8%	8.0	1.2	A
Total		970	948	97.7%	7.3	0.4	A

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	9	88.0%	14.0	6.1	B
	Through						
	Right Turn	70	66	93.7%	7.2	2.2	A
	Subtotal	80	74	93.0%	8.0	2.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	570	577	101.2%	1.6	0.3	A
	Right Turn	10	12	120.0%	0.9	0.7	A
	Subtotal	580	589	101.5%	1.5	0.3	A
WB	Left Turn	20	17	86.0%	5.2	2.0	A
	Through	310	280	90.5%	0.9	0.2	A
	Right Turn						
	Subtotal	330	298	90.2%	1.1	0.2	A
Total		990	961	97.1%	1.9	0.4	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	250	250	99.8%	30.3	15.0	D
	Through						
	Right Turn	90	82	91.1%	9.9	5.0	A
	Subtotal	340	332	97.5%	25.3	12.5	D
EB	Left Turn	230	242	105.4%	6.0	2.3	A
	Through	440	424	96.3%	3.8	3.1	A
	Right Turn						
	Subtotal	670	666	99.4%	4.6	2.7	A
WB	Left Turn						
	Through	250	232	93.0%	2.0	0.4	A
	Right Turn	10	12	124.0%	1.8	0.3	A
	Subtotal	260	245	94.2%	2.0	0.4	A
Total		1,270	1,242	97.8%	9.7	3.8	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	9	92.0%	47.4	30.2	D
	Through	90	81	90.2%	44.7	11.4	D
	Right Turn	130	126	96.9%	31.9	8.0	C
	Subtotal	230	216	94.1%	37.5	9.6	D
SB	Left Turn	180	167	92.7%	80.0	39.9	F
	Through	140	130	92.6%	36.4	4.3	D
	Right Turn	60	59	98.7%	25.3	5.1	C
	Subtotal	380	356	93.6%	55.1	20.6	E
EB	Left Turn	110	103	93.8%	79.8	38.7	E
	Through	510	520	102.0%	32.2	4.2	C
	Right Turn	70	65	92.6%	29.6	6.1	C
	Subtotal	690	688	99.8%	39.0	8.5	D
WB	Left Turn	60	56	93.3%	75.9	36.8	E
	Through	190	180	94.5%	80.6	52.4	F
	Right Turn	230	208	90.4%	93.8	67.2	F
	Subtotal	480	444	92.4%	86.4	57.1	F
Total		1,780	1,704	95.7%	53.8	19.7	D



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
PM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	52	87.3%	51.7	8.4	D
	Through	230	227	98.6%	29.4	3.4	C
	Right Turn	70	74	105.1%	16.4	4.5	B
	Subtotal	360	353	98.0%	30.0	2.6	C
SB	Left Turn	70	77	110.3%	56.7	16.2	E
	Through	320	325	101.6%	37.9	7.5	D
	Right Turn	40	45	113.0%	14.4	6.4	B
	Subtotal	430	448	104.1%	38.8	9.2	D
EB	Left Turn	40	41	102.0%	87.8	19.8	F
	Through	560	576	102.8%	42.3	19.1	D
	Right Turn	340	323	95.1%	31.7	20.5	C
	Subtotal	940	940	100.0%	40.7	19.2	D
WB	Left Turn	200	198	99.0%	48.9	10.2	D
	Through	380	377	99.3%	12.9	1.2	B
	Right Turn	110	107	97.5%	6.0	1.7	A
	Subtotal	690	682	98.9%	22.5	4.4	C
Total		2,420	2,422	100.1%	34.1	7.1	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - No Build  
PM Peak Hour

Intersection 19                      Jefferson Blvd/Alameda Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	7	68.4%	78.9	44.8	E
	Through	1,230	1,175	95.5%	58.5	8.9	E
	Right Turn	10	7	72.2%	48.8	18.0	D
	Subtotal	1,250	1,189	95.1%	58.7	9.1	E
SB	Left Turn	360	298	82.8%	150.9	43.3	F
	Through	1,540	1,373	89.2%	40.3	12.8	D
	Right Turn	10	13	129.2%	34.7	10.8	C
	Subtotal	1,910	1,684	88.2%	59.9	18.1	E
EB	Left Turn	20	15	74.1%	65.8	14.6	E
	Through	70	78	110.7%	48.2	10.4	D
	Right Turn	30	29	97.5%	39.6	10.0	D
	Subtotal	120	122	101.3%	47.3	6.0	D
WB	Left Turn	140	125	89.3%	67.7	10.4	E
	Through	40	35	86.5%	38.3	9.7	D
	Right Turn	160	142	88.8%	23.9	4.4	C
	Subtotal	340	302	88.7%	43.6	6.6	D
Total		3,620	3,296	91.1%	57.4	10.1	E

Intersection 20                      S. River Rd/Alameda Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	110	98	89.1%	55.8	12.5	E
	Through	695	675	97.2%	17.9	4.0	B
	Right Turn	5	5	91.2%	9.6	3.8	A
	Subtotal	810	778	96.0%	22.6	4.5	C
SB	Left Turn	5	1	22.8%	33.3	34.3	C
	Through	655	531	81.0%	33.7	2.9	C
	Right Turn	190	173	91.0%	27.9	1.8	C
	Subtotal	850	705	82.9%	32.3	2.6	C
EB	Left Turn	70	59	84.7%	47.3	10.4	D
	Through	30	26	87.4%	55.0	9.1	E
	Right Turn	280	252	90.0%	33.1	7.5	C
	Subtotal	380	337	88.8%	37.4	7.2	D
WB	Left Turn	5	3	60.8%	43.2	45.0	D
	Through	20	19	96.9%	43.7	16.7	D
	Right Turn	25	22	89.7%	15.6	7.0	B
	Subtotal	50	45	89.7%	29.7	7.4	C
Total		2,090	1,865	89.2%	29.1	3.2	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	540	492	91.2%	24.3	2.1	C
	Through	550	512	93.1%	1.7	0.2	A
	Right Turn						
	Subtotal	1,090	1,005	92.2%	12.8	1.8	B
SB	Left Turn						
	Through	370	378	102.2%	15.3	2.1	B
	Right Turn	640	652	101.9%	23.8	2.5	C
	Subtotal	1,010	1,030	102.0%	20.7	1.8	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,100	2,035	96.9%	16.8	1.1	B

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	68	75.6%	61.2	7.8	E
	Through	1,420	1,170	82.4%	30.9	2.9	C
	Right Turn	730	610	83.6%	23.3	2.7	C
	Subtotal	2,240	1,848	82.5%	29.5	2.6	C
SB	Left Turn	130	126	97.0%	50.9	5.8	D
	Through	930	915	98.4%	21.0	1.9	C
	Right Turn	50	50	99.6%	6.0	1.8	A
	Subtotal	1,110	1,091	98.3%	23.8	1.6	C
EB	Left Turn	100	98	98.4%	49.6	10.5	D
	Through	80	72	89.8%	49.7	9.5	D
	Right Turn	70	69	98.3%	29.1	8.2	C
	Subtotal	250	239	95.6%	43.9	6.6	D
WB	Left Turn	350	343	97.9%	46.3	13.1	D
	Through	100	94	93.9%	46.5	12.2	D
	Right Turn	80	70	87.9%	32.4	10.9	C
	Subtotal	530	507	95.6%	44.5	11.5	D
Total		4,130	3,685	89.2%	30.8	2.6	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	20	14	72.2%	63.9	17.5	E
	Through	650	614	94.5%	56.9	15.6	E
	Right Turn	390	368	94.4%	27.8	13.1	C
	Subtotal	1,060	997	94.1%	46.4	14.6	D
SB	Left Turn	70	73	104.8%	72.5	4.2	E
	Through	260	250	96.2%	18.6	2.6	B
	Right Turn	100	92	92.0%	7.5	1.9	A
	Subtotal	430	415	96.6%	25.9	2.7	C
EB	Left Turn	300	280	93.2%	47.0	9.0	D
	Through	550	445	80.9%	37.6	2.2	D
	Right Turn	80	71	89.3%	35.3	8.3	D
	Subtotal	930	796	85.6%	40.8	4.1	D
WB	Left Turn	380	381	100.3%	65.5	13.7	E
	Through	440	422	95.9%	58.5	7.6	E
	Right Turn	190	165	86.6%	25.2	4.9	C
	Subtotal	1,010	967	95.8%	55.7	8.5	E
Total		3,430	3,176	92.6%	45.3	3.5	D

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	61	87.4%	127.3	20.0	F
	Through	2,020	1,740	86.1%	91.0	13.0	F
	Right Turn	30	23	77.3%	92.1	13.8	F
	Subtotal	2,120	1,824	86.0%	92.2	13.0	F
SB	Left Turn	70	63	90.1%	89.0	17.7	F
	Through	1,190	1,150	96.6%	24.0	5.2	C
	Right Turn	80	79	98.8%	14.3	5.8	B
	Subtotal	1,340	1,292	96.4%	26.7	5.0	C
EB	Left Turn	40	37	92.2%	80.3	24.2	F
	Through	10	9	87.4%	37.2	30.4	D
	Right Turn	140	135	96.6%	28.2	9.1	C
	Subtotal	190	181	95.2%	40.0	15.0	D
WB	Left Turn	30	18	60.8%	88.9	17.1	F
	Through	110	105	95.3%	46.4	9.3	D
	Right Turn	50	51	101.1%	37.4	10.7	D
	Subtotal	190	174	91.4%	48.2	7.3	D
Total		3,840	3,471	90.4%	63.0	8.0	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	2,010	1,761	87.6%	32.5	13.3	C
	Right Turn	110	99	90.2%	17.3	9.0	B
	Subtotal	2,120	1,860	87.7%	31.7	13.0	C
SB	Left Turn	30	25	83.6%	57.6	15.1	E
	Through	1,330	1,237	93.0%	9.3	1.8	A
	Right Turn						
	Subtotal	1,360	1,262	92.8%	10.2	1.7	B
EB	Left Turn	5	3	60.8%	45.6	46.3	D
	Through						
	Right Turn						
	Subtotal	5	3	60.8%	45.6	46.3	D
WB	Left Turn	50	56	111.7%	46.8	9.9	D
	Through	5	6	121.6%	29.7	28.6	C
	Right Turn	100	111	111.0%	40.8	5.5	D
	Subtotal	155	173	111.5%	43.6	6.2	D
Total		3,640	3,298	90.6%	24.0	7.0	C

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	100	92	92.0%	0.5	0.2	A
	Right Turn						
	Subtotal	100	92	92.0%	0.5	0.2	A
SB	Left Turn						
	Through	110	114	103.3%	0.1	0.1	A
	Right Turn						
	Subtotal	110	114	103.3%	0.1	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	16	82.0%	5.6	1.1	A
	Through						
	Right Turn	60	58	96.7%	3.6	0.9	A
	Subtotal	80	74	93.0%	4.1	0.9	A
Total		290	280	96.6%	1.3	0.4	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	130	120	92.0%	7.6	3.1	A
	Left Turn 2	100	93	93.2%	21.2	5.4	C
	Left Turn	40	36	90.0%	20.6	5.9	C
	Through	290	270	93.2%	19.7	2.2	B
	Subtotal	560	519	92.7%	17.1	2.2	B
SB	Right Turn 3	10	11	108.0%	13.9	13.5	B
	Right Turn 2	40	28	71.0%	19.6	8.3	B
	Right Turn	140	150	106.9%	26.4	2.9	C
	Through	210	218	103.8%	28.1	3.3	C
	Subtotal	400	407	101.7%	26.6	3.0	C
WB	Left Turn 3	110	106	96.7%	34.2	6.2	C
	Left Turn 2	300	288	96.1%	31.5	6.7	C
	Left Turn	80	79	99.0%	28.3	8.1	C
	Through	40	39	97.0%	31.7	13.0	C
	Right Turn	270	269	99.6%	13.4	4.7	B
	Subtotal	800	782	97.7%	25.4	6.0	C
Total		1,760	1,708	97.0%	23.2	3.0	C

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	90	85	94.2%	1.6	0.4	A
	Right Turn	190	176	92.6%	0.9	0.2	A
	Subtotal	280	261	93.1%	1.1	0.2	A
SB	Left Turn	70	70	100.6%	2.9	1.3	A
	Through	60	60	100.7%	0.5	0.5	A
	Right Turn						
	Subtotal	130	131	100.6%	1.8	0.8	A
EB	Left Turn	10	9	88.0%	6.7	4.1	A
	Through	180	169	94.0%	8.5	0.5	A
	Right Turn	90	90	99.6%	3.1	0.4	A
	Subtotal	280	268	95.6%	6.7	0.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		690	659	95.5%	3.5	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	450	409	90.9%	40.4	5.8	D
	Right Turn	280	262	93.6%	39.0	9.0	D
	Subtotal	730	671	91.9%	39.8	6.9	D
SE	Left Turn 2	80	78	97.5%	32.8	4.6	C
	Left Turn	620	632	101.9%	34.7	3.3	C
	Right Turn	70	79	112.6%	35.5	3.8	D
	Subtotal	770	789	102.4%	34.6	3.0	C
EB	Left Turn	30	28	94.7%	39.3	6.3	D
	Through	390	373	95.7%	39.3	3.0	D
	Right Turn	20	16	82.0%	26.1	11.2	C
	Subtotal	440	418	95.0%	38.7	2.9	D
SB	Left Turn	180	173	96.2%	25.3	6.4	C
	Through	140	146	104.3%	10.4	1.7	B
	Right Turn						
	Subtotal	320	319	99.8%	18.6	4.7	B
Total		2260	2197	97.2%	34.8	2.0	C

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	40	35	87.0%	35.4	8.1	D
	Right Turn	70	68	97.7%	17.0	5.2	B
	Subtotal	110	103	93.8%	23.2	5.7	C
SB	Left Turn	70	73	104.0%	47.7	8.2	D
	Through	20	17	84.0%	28.5	17.9	C
	Right Turn	140	144	102.9%	12.1	4.0	B
	Subtotal	230	234	101.6%	24.5	4.6	C
EB	Left Turn	380	319	83.9%	58.9	7.9	E
	Through	630	554	87.9%	34.1	4.7	C
	Right Turn	10	6	64.0%	18.7	15.0	B
	Subtotal	1,020	879	86.2%	43.1	5.1	D
WB	Left Turn	60	56	94.0%	64.1	21.2	E
	Through	890	858	96.4%	49.7	23.2	D
	Right Turn	110	97	88.4%	49.9	26.1	D
	Subtotal	1,060	1,012	95.5%	50.6	23.1	D
Total		2,420	2,228	92.0%	44.0	11.6	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	620	606	97.7%	23.2	6.9	C
	Through						
	Right Turn	330	337	102.1%	16.8	3.7	B
	Subtotal	950	942	99.2%	20.9	5.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	770	674	87.5%	14.6	9.6	B
	Right Turn						
	Subtotal	770	674	87.5%	14.6	9.6	B
WB	Left Turn						
	Through	440	443	100.6%	10.7	2.9	B
	Right Turn						
	Subtotal	440	443	100.6%	10.7	2.9	B
Total		2,160	2,059	95.3%	16.8	4.8	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	26	86.7%	54.8	39.2	F
	Through						
	Right Turn	30	34	112.0%	51.1	50.3	F
	Subtotal	60	60	99.3%	52.6	44.6	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,040	958	92.2%	3.8	3.7	A
	Right Turn	60	56	93.3%	3.5	5.0	A
	Subtotal	1,100	1,014	92.2%	3.8	3.8	A
WB	Left Turn	20	16	80.0%	15.6	10.8	C
	Through	410	424	103.4%	0.8	0.3	A
	Right Turn						
	Subtotal	430	440	102.3%	1.5	0.7	A
Total		1,590	1,514	95.2%	4.8	3.3	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	90	87	96.9%	25.7	18.2	D
	Through						
	Right Turn	60	66	109.3%	5.8	1.2	A
	Subtotal	150	153	101.9%	17.3	10.9	C
EB	Left Turn	270	252	93.5%	8.9	4.3	A
	Through	790	731	92.5%	5.2	4.3	A
	Right Turn						
	Subtotal	1,060	983	92.8%	6.2	4.2	A
WB	Left Turn						
	Through	370	374	101.0%	2.0	0.9	A
	Right Turn	10	12	120.0%	1.8	0.7	A
	Subtotal	380	386	101.5%	2.0	0.9	A
Total		1,590	1,522	95.7%	6.3	2.9	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	40	41	103.0%	50.4	13.8	D
	Through	190	190	100.2%	44.4	17.2	D
	Right Turn	130	129	99.4%	31.7	17.3	C
	Subtotal	360	361	100.2%	40.9	15.9	D
SB	Left Turn	40	36	90.0%	75.2	25.9	E
	Through	80	85	106.5%	29.5	4.7	C
	Right Turn	110	114	104.0%	17.9	2.9	B
	Subtotal	230	236	102.4%	30.8	6.3	C
EB	Left Turn	300	264	88.1%	51.0	24.8	D
	Through	480	452	94.3%	27.0	7.6	C
	Right Turn	100	92	92.4%	23.8	9.7	C
	Subtotal	880	809	92.0%	34.6	13.8	C
WB	Left Turn	140	133	95.1%	53.4	15.6	D
	Through	230	226	98.4%	28.3	7.6	C
	Right Turn	240	223	92.8%	22.6	16.3	C
	Subtotal	610	582	95.5%	31.9	8.8	C
Total		2,080	1,988	95.6%	34.7	7.9	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	200	208	104.2%	28.1	4.7	C
	Through	580	584	100.8%	20.3	2.0	C
	Right Turn	80	81	101.5%	15.3	3.6	B
	Subtotal	860	874	101.6%	21.8	2.4	C
SB	Left Turn	10	12	116.0%	44.0	35.5	D
	Through	90	92	102.2%	18.3	3.9	B
	Right Turn	60	65	108.0%	8.2	2.1	A
	Subtotal	160	168	105.3%	15.8	2.9	B
EB	Left Turn	60	61	101.3%	42.6	7.3	D
	Through	390	376	96.3%	18.2	2.8	B
	Right Turn	60	63	104.7%	3.2	1.9	A
	Subtotal	510	499	97.9%	19.3	2.6	B
WB	Left Turn	50	46	92.0%	30.5	6.8	C
	Through	440	416	94.5%	17.1	1.3	B
	Right Turn	60	69	115.3%	5.6	1.1	A
	Subtotal	550	531	96.6%	16.8	1.4	B
Total		2,080	2,073	99.7%	19.5	1.2	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
AM Peak Hour

Intersection 19                      Jefferson Blvd/Alameda Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	8	79.8%	109.9	42.3	F
	Through	2,070	1,698	82.0%	75.8	17.0	E
	Right Turn	40	25	63.7%	75.3	20.6	E
	Subtotal	2,120	1,732	81.7%	76.0	17.0	E
SB	Left Turn	260	217	83.6%	141.6	45.9	F
	Through	1,100	1,058	96.2%	20.6	10.3	C
	Right Turn	10	11	110.2%	15.3	9.3	B
	Subtotal	1,370	1,287	93.9%	41.4	17.5	D
EB	Left Turn	20	19	95.0%	57.7	20.5	E
	Through	30	30	101.3%	58.9	15.1	E
	Right Turn	30	27	88.7%	26.7	12.9	C
	Subtotal	80	76	95.0%	48.6	11.7	D
WB	Left Turn	100	86	85.9%	106.8	21.0	F
	Through	60	57	94.4%	58.9	15.5	E
	Right Turn	150	144	95.8%	43.1	7.7	D
	Subtotal	310	286	92.3%	66.1	10.4	E
Total		3,880	3,380	87.1%	61.6	8.9	E

Intersection 20                      S. River Rd/Alameda Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	100	86	85.5%	55.8	13.7	E
	Through	900	901	100.1%	29.7	6.9	C
	Right Turn	5	3	68.4%	19.0	10.0	B
	Subtotal	1,005	990	98.5%	32.0	7.5	C
SB	Left Turn	20	15	74.1%	45.2	14.8	D
	Through	480	458	95.4%	20.0	4.9	C
	Right Turn	130	115	88.6%	12.1	4.1	B
	Subtotal	630	588	93.3%	19.1	4.4	B
EB	Left Turn	90	66	73.0%	35.4	9.2	D
	Through	20	18	91.2%	39.3	18.3	D
	Right Turn	180	155	85.9%	19.2	5.3	B
	Subtotal	290	239	82.3%	24.6	5.2	C
WB	Left Turn	5	5	106.4%	39.3	25.2	D
	Through	40	46	115.9%	34.0	6.2	C
	Right Turn	10	10	95.0%	23.4	17.5	C
	Subtotal	55	61	111.2%	33.5	7.5	C
Total		1,980	1,877	94.8%	27.0	4.1	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	230	213	92.7%	47.6	7.6	D
	Through	370	342	92.5%	1.3	0.2	A
	Right Turn						
	Subtotal	600	556	92.6%	19.2	5.1	B
SB	Left Turn						
	Through	720	675	93.7%	28.1	35.1	C
	Right Turn	1,000	944	94.4%	18.6	9.4	B
	Subtotal	1,720	1,618	94.1%	22.9	20.5	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,320	2,174	93.7%	21.6	14.7	C

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	80	62	77.4%	66.0	8.1	E
	Through	970	885	91.2%	32.0	6.1	C
	Right Turn	340	302	88.9%	15.8	1.7	B
	Subtotal	1,390	1,249	89.8%	29.8	4.4	C
SB	Left Turn	70	70	99.3%	73.5	28.8	E
	Through	1,290	1,183	91.7%	59.2	36.1	E
	Right Turn	100	88	88.2%	32.5	29.3	C
	Subtotal	1,460	1,341	91.9%	58.2	35.4	E
EB	Left Turn	80	82	102.1%	53.0	12.5	D
	Through	70	68	96.6%	60.8	22.3	E
	Right Turn	100	98	98.0%	46.0	21.4	D
	Subtotal	250	247	99.0%	52.4	17.1	D
WB	Left Turn	620	571	92.1%	66.1	18.9	E
	Through	120	112	93.7%	46.4	14.0	D
	Right Turn	110	105	95.0%	35.2	12.2	D
	Subtotal	850	788	92.7%	59.6	15.7	E
Total		3,950	3,625	91.8%	47.9	14.8	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	39	129.2%	54.8	14.4	D
	Through	490	489	99.8%	43.9	2.9	D
	Right Turn	440	422	95.9%	19.2	2.8	B
	Subtotal	960	950	98.9%	33.5	3.0	C
SB	Left Turn	150	141	94.2%	82.2	14.5	F
	Through	430	419	97.5%	57.0	7.7	E
	Right Turn	320	299	93.5%	9.8	1.9	A
	Subtotal	900	860	95.5%	45.0	4.6	D
EB	Left Turn	80	71	88.4%	54.0	9.3	D
	Through	440	379	86.2%	44.5	2.7	D
	Right Turn	10	10	102.6%	33.5	22.7	C
	Subtotal	530	460	86.8%	45.9	3.2	D
WB	Left Turn	520	451	86.7%	89.0	26.8	F
	Through	480	424	88.4%	57.5	18.9	E
	Right Turn	80	84	105.5%	34.5	17.2	C
	Subtotal	1,080	960	88.8%	70.5	22.3	E
Total		3,470	3,229	93.1%	49.2	6.2	D

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	66	94.5%	77.6	18.6	E
	Through	1,220	1,240	101.6%	30.3	10.6	C
	Right Turn	40	43	107.4%	26.3	8.0	C
	Subtotal	1,330	1,349	101.4%	32.5	10.5	C
SB	Left Turn	140	116	82.5%	74.9	21.5	E
	Through	1,610	1,459	90.6%	31.6	9.8	C
	Right Turn	80	63	78.9%	21.3	8.9	C
	Subtotal	1,830	1,638	89.5%	34.3	10.6	C
EB	Left Turn	40	38	96.0%	79.0	21.5	E
	Through	10	14	136.8%	50.7	14.3	D
	Right Turn	120	128	106.4%	29.2	9.8	C
	Subtotal	170	180	105.7%	40.9	10.8	D
WB	Left Turn	40	38	94.1%	53.3	20.6	D
	Through	50	43	85.1%	36.4	9.7	D
	Right Turn	20	16	77.9%	22.4	18.7	C
	Subtotal	110	96	87.1%	41.9	12.9	D
Total		3,440	3,262	94.8%	34.2	8.2	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	6	129.2%	22.9	20.2	C
	Through	1,300	1,320	101.5%	6.2	1.0	A
	Right Turn	70	77	109.7%	1.9	0.6	A
	Subtotal	1,375	1,403	102.0%	6.1	1.0	A
SB	Left Turn	30	22	74.7%	58.0	11.3	E
	Through	1,730	1,594	92.2%	11.2	2.7	B
	Right Turn	10	8	79.8%	9.5	6.2	A
	Subtotal	1,770	1,625	91.8%	11.8	2.6	B
EB	Left Turn	5	5	91.2%	38.2	47.5	D
	Through	5	2	30.4%	22.6	30.9	C
	Right Turn	5	6	114.0%	14.2	16.1	B
	Subtotal	15	12	78.5%	38.2	34.3	D
WB	Left Turn	110	100	90.9%	48.6	6.7	D
	Through	5	4	76.0%	44.9	31.1	D
	Right Turn	20	24	121.6%	11.1	4.0	B
	Subtotal	135	128	94.9%	41.7	6.7	D
Total		3,295	3,168	96.1%	10.6	1.5	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	70	61	86.9%	0.5	0.2	A
	Right Turn						
	Subtotal	70	61	86.9%	0.5	0.2	A
SB	Left Turn						
	Through	650	646	99.4%	0.6	0.1	A
	Right Turn						
	Subtotal	650	646	99.4%	0.6	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	35	88.0%	10.0	3.1	B
	Through						
	Right Turn	20	20	98.0%	2.9	0.9	A
	Subtotal	60	55	91.3%	7.4	2.9	A
Total		780	762	97.7%	1.1	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	530	458	86.3%	24.4	1.3	C
	Left Turn 2	70	76	108.6%	27.6	2.7	C
	Left Turn	20	26	130.0%	27.9	3.7	C
	Through	320	334	104.4%	27.5	2.0	C
	Subtotal	940	894	95.1%	25.9	1.3	C
SB	Right Turn 3	10	6	64.0%	202.6	135.3	F
	Right Turn 2	80	57	71.5%	263.0	29.1	F
	Right Turn	330	228	69.2%	268.0	24.0	F
	Through	180	109	60.4%	268.1	23.1	F
	Subtotal	600	401	66.8%	267.4	24.3	F
WB	Left Turn 3	170	160	94.1%	54.5	2.6	D
	Left Turn 2	1,410	1,196	84.8%	58.7	3.4	E
	Left Turn	350	311	88.8%	29.1	5.1	C
	Through	40	33	83.0%	24.8	4.7	C
	Right Turn	180	181	100.7%	16.0	3.8	B
	Subtotal	2,150	1,881	87.5%	48.8	3.0	D
Total		3,690	3,176	86.1%	69.8	3.2	E

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	56	92.7%	1.7	0.5	A
	Right Turn	220	208	94.7%	1.0	0.3	A
	Subtotal	280	264	94.3%	1.1	0.3	A
SB	Left Turn	400	378	94.5%	10.3	12.2	A
	Through	290	296	101.9%	5.2	7.1	A
	Right Turn						
	Subtotal	690	674	97.6%	7.9	9.6	A
EB	Left Turn	10	7	68.0%	12.2	9.9	B
	Through	80	82	102.5%	12.6	2.4	B
	Right Turn	70	68	97.7%	8.5	9.5	A
	Subtotal	160	157	98.3%	11.2	5.6	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,130	1,095	96.9%	6.7	6.4	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	410	374	91.1%	42.5	3.0	D
	Right Turn	180	177	98.4%	17.2	3.6	B
	Subtotal	590	551	93.4%	34.5	2.6	C
SE	Left Turn 2	360	373	103.6%	40.4	5.1	D
	Left Turn	520	523	100.6%	33.8	4.2	C
	Right Turn	110	106	96.0%	30.3	2.5	C
	Subtotal	990	1002	101.2%	35.9	4.0	D
EB	Left Turn	170	154	90.8%	48.5	9.6	D
	Through	490	470	95.8%	41.2	2.9	D
	Right Turn	40	44	110.0%	41.7	8.1	D
	Subtotal	700	668	95.4%	43.0	4.5	D
SB	Left Turn	180	137	76.2%	59.7	9.4	E
	Through	170	134	79.1%	29.1	5.6	C
	Right Turn						
	Subtotal	350	272	77.6%	44.6	8.2	D
Total		2630	2492	94.8%	38.5	2.7	D

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	11	112.0%	62.2	22.0	E
	Through	20	20	100.0%	44.9	12.0	D
	Right Turn	70	73	104.6%	22.0	4.2	C
	Subtotal	100	104	104.4%	29.7	3.6	C
SB	Left Turn	160	152	95.3%	47.1	9.5	D
	Through	30	33	109.3%	39.9	11.2	D
	Right Turn	360	362	100.4%	20.5	5.9	C
	Subtotal	550	547	99.4%	29.3	4.7	C
EB	Left Turn	310	276	88.9%	50.1	8.5	D
	Through	730	668	91.6%	35.9	9.4	D
	Right Turn	10	10	100.0%	21.8	10.4	C
	Subtotal	1,050	954	90.9%	40.0	8.0	D
WB	Left Turn	100	92	92.4%	41.5	5.7	D
	Through	730	743	101.8%	27.4	4.4	C
	Right Turn	130	137	105.5%	25.4	5.0	C
	Subtotal	960	972	101.3%	28.6	3.8	C
Total		2,660	2,578	96.9%	33.1	3.4	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	340	362	106.5%	23.6	2.3	C
	Through						
	Right Turn	190	192	101.3%	18.5	3.5	B
	Subtotal	530	554	104.6%	21.7	2.3	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	960	871	90.8%	17.5	4.8	B
	Right Turn						
	Subtotal	960	871	90.8%	17.5	4.8	B
WB	Left Turn						
	Through	620	609	98.3%	8.6	1.0	A
	Right Turn						
	Subtotal	620	609	98.3%	8.6	1.0	A
Total		2,110	2,035	96.4%	16.0	2.3	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	40	45	112.0%	76.0	33.2	F
	Through						
	Right Turn	20	20	100.0%	77.7	41.6	F
	Subtotal	60	65	108.0%	78.6	34.6	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,120	1,033	92.2%	8.3	3.4	A
	Right Turn	30	29	97.3%	7.6	5.3	A
	Subtotal	1,150	1,062	92.3%	8.3	3.5	A
WB	Left Turn	20	21	106.0%	22.3	8.8	C
	Through	580	565	97.4%	1.2	0.2	A
	Right Turn						
	Subtotal	600	586	97.7%	2.1	0.9	A
Total		1,810	1,713	94.7%	8.9	3.0	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	210	204	97.3%	70.9	48.8	F
	Through						
	Right Turn	150	149	99.5%	14.4	10.8	B
	Subtotal	360	354	98.2%	46.3	30.3	E
EB	Left Turn	270	251	93.0%	15.6	4.0	C
	Through	870	796	91.4%	13.2	4.2	B
	Right Turn						
	Subtotal	1,140	1,047	91.8%	13.8	4.1	B
WB	Left Turn						
	Through	460	446	97.0%	2.1	0.2	A
	Right Turn	10	12	116.0%	1.8	0.2	A
	Subtotal	470	458	97.4%	2.1	0.2	A
Total		1,970	1,858	94.3%	17.2	7.1	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	28	93.3%	47.1	12.6	D
	Through	110	107	97.1%	34.2	5.2	C
	Right Turn	120	121	101.0%	23.8	3.9	C
	Subtotal	260	256	98.5%	31.2	3.5	C
SB	Left Turn	60	54	89.3%	55.7	22.3	E
	Through	140	126	90.0%	30.0	6.0	C
	Right Turn	120	103	86.0%	20.4	5.4	C
	Subtotal	320	283	88.4%	31.5	6.0	C
EB	Left Turn	260	240	92.3%	66.4	11.2	E
	Through	730	661	90.5%	45.0	8.0	D
	Right Turn	90	90	99.6%	41.7	8.8	D
	Subtotal	1,080	990	91.7%	50.1	8.4	D
WB	Left Turn	40	35	87.0%	46.4	7.6	D
	Through	320	327	102.1%	22.8	3.1	C
	Right Turn	220	205	93.1%	8.2	1.4	A
	Subtotal	580	566	97.7%	19.0	2.8	B
Total		2,240	2,096	93.6%	36.9	4.2	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	60	64	106.7%	82.4	35.6	F
	Through	230	223	97.0%	25.6	2.1	C
	Right Turn	70	70	99.4%	19.6	7.4	B
	Subtotal	360	357	99.1%	35.2	9.2	D
SB	Left Turn	70	64	90.9%	58.7	13.7	E
	Through	320	329	102.8%	36.7	3.4	D
	Right Turn	40	38	96.0%	12.3	3.3	B
	Subtotal	430	431	100.2%	37.9	4.1	D
EB	Left Turn	40	38	96.0%	85.2	19.6	F
	Through	660	643	97.4%	49.6	20.7	D
	Right Turn	340	332	97.5%	40.4	21.4	D
	Subtotal	1,040	1,013	97.4%	48.1	20.7	D
WB	Left Turn	200	214	107.0%	56.4	9.6	E
	Through	440	451	102.5%	15.4	2.3	B
	Right Turn	100	91	90.8%	6.5	2.8	A
	Subtotal	740	756	102.1%	26.1	3.4	C
Total		2,570	2,556	99.5%	38.1	8.3	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative A/B  
PM Peak Hour

Intersection 19

Jefferson Blvd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	8	79.8%	92.2	36.6	F
	Through	1,230	1,170	95.1%	71.4	27.0	E
	Right Turn	10	9	87.4%	68.0	35.0	E
	Subtotal	1,250	1,186	94.9%	71.5	27.0	E
SB	Left Turn	380	304	79.9%	136.6	57.2	F
	Through	1,610	1,452	90.2%	43.3	23.0	D
	Right Turn	20	15	76.0%	46.2	34.4	D
	Subtotal	2,010	1,770	88.1%	59.4	28.8	E
EB	Left Turn	10	10	98.8%	68.2	37.3	E
	Through	50	56	111.7%	55.7	7.9	E
	Right Turn	20	25	125.4%	37.9	12.3	D
	Subtotal	80	91	113.5%	51.8	5.4	D
WB	Left Turn	190	166	87.4%	85.6	21.6	F
	Through	40	33	82.7%	60.0	25.0	E
	Right Turn	160	128	80.0%	35.4	12.4	D
	Subtotal	390	327	83.9%	63.8	20.4	E
Total		3,730	3,375	90.5%	63.1	23.0	E

Intersection 20

S. River Rd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	82	91.2%	68.6	19.8	E
	Through	720	667	92.6%	24.7	9.0	C
	Right Turn	5	6	121.6%	16.4	9.7	B
	Subtotal	815	755	92.6%	29.6	9.5	C
SB	Left Turn	5	3	60.8%	33.6	25.7	C
	Through	625	548	87.7%	23.6	8.0	C
	Right Turn	260	229	88.0%	22.8	20.8	C
	Subtotal	890	780	87.6%	23.5	11.9	C
EB	Left Turn	50	48	96.5%	37.6	8.5	D
	Through	30	28	93.7%	41.8	10.9	D
	Right Turn	300	250	83.2%	27.3	3.9	C
	Subtotal	380	326	85.8%	30.0	4.4	C
WB	Left Turn	5	3	60.8%	20.5	25.5	C
	Through	20	19	96.9%	38.9	25.7	D
	Right Turn	30	32	105.1%	13.6	7.6	B
	Subtotal	55	54	98.1%	23.1	7.3	C
Total		2,140	1,915	89.5%	26.8	6.6	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	520	398	76.6%	15.8	1.1	B
	Through	540	422	78.2%	1.3	0.2	A
	Right Turn						
	Subtotal	1,060	820	77.4%	8.3	0.9	A
SB	Left Turn						
	Through	350	359	102.6%	11.0	1.2	B
	Right Turn	640	633	98.9%	15.9	2.5	B
	Subtotal	990	992	100.2%	14.1	1.7	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,050	1,813	88.4%	11.5	1.1	B

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	69	76.4%	63.1	10.3	E
	Through	1,430	1,048	73.3%	30.0	7.2	C
	Right Turn	670	454	67.8%	37.3	24.9	D
	Subtotal	2,190	1,571	71.7%	33.5	11.0	C
SB	Left Turn	120	111	92.2%	57.7	15.1	E
	Through	970	983	101.3%	22.2	4.8	C
	Right Turn	50	51	102.6%	5.3	1.9	A
	Subtotal	1,140	1,145	100.4%	24.9	3.9	C
EB	Left Turn	100	92	91.6%	54.8	14.0	D
	Through	80	69	86.0%	64.5	28.9	E
	Right Turn	70	65	92.3%	45.7	30.0	D
	Subtotal	250	225	90.0%	55.0	22.4	E
WB	Left Turn	90	73	81.1%	42.1	8.4	D
	Through	90	85	94.6%	41.3	5.6	D
	Right Turn	70	65	92.8%	15.1	5.6	B
	Subtotal	250	223	89.2%	33.9	4.4	C
Total		3,830	3,164	82.6%	31.9	7.2	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	61	68.0%	69.6	9.4	E
	Through	740	556	75.1%	22.9	1.6	C
	Right Turn						
	Subtotal	830	617	74.4%	27.5	2.1	C
SB	Left Turn	10	10	102.6%	62.1	21.5	E
	Through	240	233	97.1%	40.7	6.7	D
	Right Turn	170	176	103.7%	4.9	1.0	A
	Subtotal	420	420	99.9%	26.3	3.4	C
EB	Left Turn	360	254	70.6%	78.7	20.4	E
	Through	20	10	47.5%	142.0	51.9	F
	Right Turn	480	313	65.2%	117.0	45.2	F
	Subtotal	860	577	67.1%	100.9	33.5	F
WB	Left Turn						
	Through	20	17	87.4%	47.9	26.0	D
	Right Turn	30	34	112.7%	16.5	8.0	B
	Subtotal	50	51	102.6%	26.0	11.9	C
Total		2,160	1,665	77.1%	52.3	10.7	D

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	81	89.9%	131.0	11.8	F
	Through	1,940	1,605	82.7%	98.8	9.1	F
	Right Turn	100	86	85.5%	97.1	12.2	F
	Subtotal	2,130	1,771	83.2%	100.3	8.6	F
SB	Left Turn	60	49	81.1%	77.5	9.1	E
	Through	1,170	1,035	88.4%	25.3	2.9	C
	Right Turn	80	73	91.2%	13.6	3.4	B
	Subtotal	1,310	1,156	88.3%	26.9	2.5	C
EB	Left Turn	40	44	110.2%	81.7	18.5	F
	Through	10	8	83.6%	47.4	35.5	D
	Right Turn	140	148	105.9%	26.3	6.3	C
	Subtotal	190	201	105.6%	39.6	6.7	D
WB	Left Turn	60	62	102.6%	83.3	21.8	F
	Through	80	71	89.3%	45.2	9.4	D
	Right Turn	120	84	69.7%	32.7	6.0	C
	Subtotal	260	217	83.3%	50.6	9.3	D
Total		3,890	3,345	86.0%	68.1	5.0	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,980	1,728	87.3%	47.7	12.2	D
	Right Turn	110	108	97.8%	26.0	9.0	C
	Subtotal	2,090	1,835	87.8%	46.4	12.1	D
SB	Left Turn	30	27	89.9%	59.6	11.1	E
	Through	1,340	1,220	91.0%	9.4	1.4	A
	Right Turn						
	Subtotal	1,370	1,247	91.0%	10.5	1.6	B
EB	Left Turn	5	6	129.2%	39.1	27.7	D
	Through						
	Right Turn						
	Subtotal	5	6	129.2%	39.1	27.7	D
WB	Left Turn	50	48	96.5%	40.6	12.8	D
	Through	5	5	91.2%	20.7	23.3	C
	Right Turn	140	135	96.6%	54.0	17.4	D
	Subtotal	195	188	96.5%	50.9	14.0	D
Total		3,660	3,277	89.5%	32.9	6.6	C

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	100	82	82.4%	0.5	0.3	A
	Right Turn						
	Subtotal	100	82	82.4%	0.5	0.3	A
SB	Left Turn						
	Through	110	115	104.7%	0.1	0.0	A
	Right Turn						
	Subtotal	110	115	104.7%	0.1	0.0	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	17	84.0%	5.6	0.8	A
	Through						
	Right Turn	50	50	99.2%	3.4	0.6	A
	Subtotal	70	66	94.9%	3.9	0.4	A
Total		280	264	94.3%	1.2	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn 3	120	105	87.3%	6.2	2.4	A
	Left Turn 2	100	93	93.2%	11.5	1.1	B
	Left Turn	30	25	84.0%	11.5	1.1	B
	Through	280	250	89.1%	11.9	1.2	B
	Subtotal	530	473	89.2%	10.6	1.1	B
SB	Right Turn 3	10	12	120.0%	15.5	9.7	B
	Right Turn 2	50	53	105.6%	25.0	6.3	C
	Right Turn	140	136	96.9%	27.2	2.3	C
	Through	220	234	106.5%	28.3	2.9	C
	Subtotal	420	435	103.5%	27.2	2.6	C
WB	Left Turn 3	110	121	110.2%	29.0	5.4	C
	Left Turn 2	300	315	104.9%	30.4	2.7	C
	Left Turn	80	82	102.0%	27.4	4.6	C
	Through	40	41	102.0%	25.7	7.8	C
	Right Turn	260	252	96.9%	10.6	5.4	B
	Subtotal	790	810	102.6%	23.5	2.4	C
Total		1,740	1,718	98.7%	20.9	1.8	C

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	90	75	83.1%	1.1	0.3	A
	Right Turn	190	148	77.9%	0.6	0.1	A
	Subtotal	280	223	79.6%	0.8	0.2	A
SB	Left Turn	70	65	92.6%	2.3	0.4	A
	Through	60	64	106.0%	0.3	0.3	A
	Right Turn						
	Subtotal	130	128	98.8%	1.3	0.4	A
EB	Left Turn	10	9	88.0%	6.3	3.3	A
	Through	190	163	85.7%	8.4	0.5	A
	Right Turn	80	89	111.5%	3.3	0.5	A
	Subtotal	280	261	93.1%	6.6	0.5	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		690	612	88.7%	3.4	0.4	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	430	390	90.6%	35.9	5.6	D
	Right Turn	270	250	92.4%	35.9	10.7	D
	Subtotal	700	639	91.3%	35.8	7.7	D
SE	Left Turn 2	80	79	99.0%	27.2	4.3	C
	Left Turn	560	582	103.9%	28.5	2.0	C
	Right Turn	70	79	113.1%	29.2	4.7	C
	Subtotal	710	740	104.3%	28.4	2.1	C
EB	Left Turn	20	11	56.0%	32.5	15.6	C
	Through	410	343	83.7%	33.1	2.6	C
	Right Turn	20	14	72.0%	25.8	9.9	C
	Subtotal	450	369	82.0%	32.8	2.6	C
SB	Left Turn	180	195	108.4%	28.5	5.0	C
	Through	150	143	95.5%	7.9	1.9	A
	Right Turn						
	Subtotal	330	338	102.5%	19.9	3.8	B
Total		2190	2087	95.3%	30.2	2.5	C

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	40	41	103.0%	32.7	7.1	C
	Right Turn	70	75	107.4%	13.9	5.6	B
	Subtotal	110	116	105.8%	20.6	5.2	C
SB	Left Turn	70	62	88.6%	36.2	3.4	D
	Through	20	18	88.0%	25.2	12.5	C
	Right Turn	140	140	99.7%	11.5	2.4	B
	Subtotal	230	219	95.3%	19.8	2.2	B
EB	Left Turn	380	265	69.7%	46.2	3.4	D
	Through	630	438	69.5%	27.5	2.8	C
	Right Turn	10	6	64.0%	16.9	14.6	B
	Subtotal	1,020	709	69.5%	34.4	2.1	C
WB	Left Turn	60	54	90.0%	84.8	19.3	F
	Through	890	841	94.5%	75.2	17.6	E
	Right Turn	110	113	102.9%	77.2	20.2	E
	Subtotal	1,060	1,008	95.1%	76.0	17.6	E
Total		2,420	2,053	84.8%	52.7	9.4	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	620	600	96.8%	22.6	3.8	C
	Through						
	Right Turn	320	315	98.4%	12.9	1.3	B
	Subtotal	940	915	97.3%	19.2	2.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	770	574	74.5%	16.4	1.6	B
	Right Turn						
	Subtotal	770	574	74.5%	16.4	1.6	B
WB	Left Turn						
	Through	440	442	100.5%	12.0	2.3	B
	Right Turn						
	Subtotal	440	442	100.5%	12.0	2.3	B
Total		2,150	1,931	89.8%	16.7	1.8	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	32	105.3%	36.5	20.6	E
	Through						
	Right Turn	30	28	93.3%	15.4	6.1	C
	Subtotal	60	60	99.3%	26.0	9.8	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,030	834	81.0%	2.8	0.3	A
	Right Turn	60	50	82.7%	2.0	0.6	A
	Subtotal	1,090	884	81.1%	2.8	0.3	A
WB	Left Turn	20	20	102.0%	10.7	4.8	B
	Through	410	418	102.0%	1.0	0.2	A
	Right Turn						
	Subtotal	430	438	102.0%	1.5	0.4	A
Total		1,580	1,382	87.4%	3.3	0.5	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	80	91	114.0%	13.7	2.8	B
	Through						
	Right Turn	60	67	112.0%	5.8	2.6	A
	Subtotal	140	158	113.1%	10.4	2.1	B
EB	Left Turn	270	209	77.3%	6.8	1.3	A
	Through	780	651	83.4%	3.1	0.7	A
	Right Turn						
	Subtotal	1,050	860	81.9%	4.0	0.9	A
WB	Left Turn						
	Through	370	368	99.4%	2.1	0.4	A
	Right Turn	10	11	112.0%	1.9	0.3	A
	Subtotal	380	379	99.7%	2.1	0.4	A
Total		1,570	1,397	89.0%	4.2	0.9	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	40	31	77.0%	36.8	6.8	D
	Through	170	167	98.4%	29.0	5.5	C
	Right Turn	120	131	109.3%	20.4	5.4	C
	Subtotal	330	329	99.8%	26.2	5.2	C
SB	Left Turn	60	64	107.3%	68.9	27.7	E
	Through	80	67	83.5%	24.4	4.0	C
	Right Turn	100	99	99.2%	13.5	3.1	B
	Subtotal	240	230	96.0%	32.4	9.6	C
EB	Left Turn	290	258	89.0%	38.3	8.6	D
	Through	470	401	85.3%	25.8	2.7	C
	Right Turn	100	91	90.8%	20.5	2.8	C
	Subtotal	860	750	87.2%	29.7	4.1	C
WB	Left Turn	140	145	103.7%	40.2	8.2	D
	Through	240	246	102.7%	28.8	8.1	C
	Right Turn	240	241	100.5%	21.6	15.5	C
	Subtotal	620	633	102.1%	29.1	9.6	C
Total		2,050	1,942	94.7%	29.2	4.8	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 15 Riverside Blvd/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	200	196	97.8%	22.9	1.8	C
	Through	580	554	95.6%	17.2	1.3	B
	Right Turn	80	80	99.5%	11.3	3.8	B
	Subtotal	860	830	96.5%	18.0	1.4	B
SB	Left Turn	10	6	64.0%	15.1	16.0	B
	Through	90	105	116.4%	15.8	2.5	B
	Right Turn	50	53	105.6%	7.0	2.1	A
	Subtotal	150	164	109.3%	13.2	1.9	B
EB	Left Turn	60	65	108.7%	38.9	4.8	D
	Through	370	366	98.9%	18.6	2.5	B
	Right Turn	60	66	110.7%	3.3	0.9	A
	Subtotal	490	498	101.6%	19.2	2.6	B
WB	Left Turn	50	49	98.4%	27.9	4.6	C
	Through	430	432	100.4%	18.9	2.4	B
	Right Turn	60	65	108.0%	6.2	1.3	A
	Subtotal	540	546	101.0%	18.1	1.8	B
Total		2,040	2,037	99.8%	18.0	1.1	B

Intersection 16 S. River Rd/Broadway Bridge Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	540	363	67.2%	125.5	17.0	F
	Right Turn	520	322	62.0%	71.3	13.4	F
	Subtotal	1,060	685	64.6%	100.1	14.1	F
SB	Left Turn	490	367	74.8%	77.4	3.8	F
	Through	230	174	75.5%	50.9	19.7	F
	Right Turn						
	Subtotal	720	540	75.1%	68.8	7.0	F
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	720	562	78.1%	146.7	32.8	F
	Through						
	Right Turn	290	251	86.6%	86.7	27.3	F
	Subtotal	1,010	814	80.6%	128.2	31.3	F
Total		2,790	2,039	73.1%	102.8	17.1	F

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
AM Peak Hour

Intersection 19

Jefferson Blvd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	5	49.4%	132.2	65.2	F
	Through	2,020	1,452	71.9%	134.5	20.6	F
	Right Turn	70	50	71.7%	134.5	22.0	F
	Subtotal	2,100	1,507	71.7%	134.6	20.6	F
SB	Left Turn	290	206	71.0%	224.0	75.2	F
	Through	850	827	97.2%	40.7	16.3	D
	Right Turn	10	8	76.0%	33.5	24.8	C
	Subtotal	1,150	1,040	90.4%	77.0	27.7	E
EB	Left Turn	10	11	106.4%	64.5	20.8	E
	Through	40	34	84.6%	49.4	15.8	D
	Right Turn	10	11	110.2%	21.2	17.0	C
	Subtotal	60	55	92.5%	44.7	13.0	D
WB	Left Turn	340	220	64.8%	98.9	12.8	F
	Through	60	49	81.1%	85.9	32.5	F
	Right Turn	160	119	74.3%	55.2	16.0	E
	Subtotal	560	388	69.3%	83.9	17.0	F
Total		3,870	2,990	77.3%	105.8	13.5	F

Intersection 20

S. River Rd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	100	53	53.2%	263.0	103.5	F
	Through	880	556	63.1%	185.5	60.2	F
	Right Turn	5	5	91.2%	148.4	47.8	F
	Subtotal	985	613	62.3%	193.1	65.8	F
SB	Left Turn	10	8	76.0%	75.6	27.4	E
	Through	500	370	74.0%	35.7	20.9	D
	Right Turn	370	269	72.7%	63.9	45.4	E
	Subtotal	880	647	73.5%	48.3	31.9	D
EB	Left Turn	140	93	66.5%	75.2	23.3	E
	Through	20	14	70.3%	44.8	15.7	D
	Right Turn	200	152	76.0%	25.2	11.2	C
	Subtotal	360	259	72.0%	43.9	15.4	D
WB	Left Turn	5	5	91.2%	73.9	52.4	E
	Through	40	41	101.7%	86.9	41.3	F
	Right Turn	10	11	110.2%	59.0	35.7	E
	Subtotal	55	56	102.3%	83.6	35.2	F
Total		2,280	1,575	69.1%	102.5	25.4	F

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
PM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	210	175	83.2%	43.4	3.7	D
	Through	370	318	86.0%	1.4	0.2	A
	Right Turn						
	Subtotal	580	493	85.0%	16.3	2.3	B
SB	Left Turn						
	Through	660	629	95.3%	20.9	17.5	C
	Right Turn	1,020	996	97.7%	18.8	4.1	B
	Subtotal	1,680	1,626	96.8%	19.8	9.0	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,260	2,119	93.7%	19.0	7.2	B

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	58	72.2%	87.0	16.9	F
	Through	1,000	842	84.2%	32.0	10.0	C
	Right Turn	240	190	79.2%	11.9	2.3	B
	Subtotal	1,320	1,089	82.5%	31.7	7.6	C
SB	Left Turn	70	68	96.6%	89.6	13.8	F
	Through	1,320	1,183	89.6%	63.1	13.5	E
	Right Turn	90	86	95.0%	28.6	13.4	C
	Subtotal	1,480	1,336	90.3%	62.3	13.2	E
EB	Left Turn	70	65	92.3%	116.5	71.3	F
	Through	70	62	88.5%	117.2	67.0	F
	Right Turn	100	94	94.2%	103.2	66.9	F
	Subtotal	240	221	92.0%	110.9	68.3	F
WB	Left Turn	500	431	86.2%	74.1	12.7	E
	Through	120	101	84.2%	68.1	17.4	E
	Right Turn	110	88	80.1%	34.7	13.4	C
	Subtotal	730	620	85.0%	67.4	13.9	E
Total		3,770	3,267	86.7%	56.2	8.0	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
PM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	200	147	73.7%	73.2	12.5	E
	Through	500	379	75.8%	51.4	2.5	D
	Right Turn	10	5	49.4%	42.3	29.6	D
	Subtotal	710	531	74.8%	57.2	3.3	E
SB	Left Turn	20	16	77.9%	81.7	25.2	F
	Through	330	304	92.0%	60.6	11.1	E
	Right Turn	480	454	94.5%	23.3	9.6	C
	Subtotal	830	773	93.1%	38.9	7.9	D
EB	Left Turn	90	74	82.3%	51.9	15.1	D
	Through	20	14	68.4%	79.9	63.4	E
	Right Turn	290	208	71.8%	79.2	56.6	E
	Subtotal	400	296	74.0%	72.9	45.7	E
WB	Left Turn	20	11	53.2%	136.5	152.7	F
	Through	50	54	107.9%	55.9	11.0	E
	Right Turn	30	27	89.9%	27.8	14.0	C
	Subtotal	100	92	91.6%	50.6	11.4	D
Total		2,040	1,692	82.9%	50.8	9.2	D

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	70	71	101.5%	80.1	18.5	F
	Through	1,220	1,228	100.7%	33.8	8.6	C
	Right Turn	60	56	93.7%	27.4	11.3	C
	Subtotal	1,350	1,355	100.4%	36.0	8.4	D
SB	Left Turn	190	164	86.4%	85.0	12.4	F
	Through	1,620	1,360	84.0%	34.5	9.9	C
	Right Turn	80	70	86.9%	25.1	11.8	C
	Subtotal	1,890	1,594	84.3%	39.3	9.5	D
EB	Left Turn	40	37	93.1%	79.5	18.4	E
	Through	10	10	98.8%	58.3	46.9	E
	Right Turn	120	127	105.8%	32.9	10.8	C
	Subtotal	170	174	102.4%	43.9	11.3	D
WB	Left Turn	40	32	79.8%	61.8	17.5	E
	Through	50	42	84.4%	45.3	7.5	D
	Right Turn	30	26	86.1%	19.9	10.3	B
	Subtotal	120	100	83.3%	43.4	7.1	D
Total		3,530	3,223	91.3%	38.3	7.5	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
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Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	4	83.6%	33.0	30.6	C
	Through	1,320	1,333	101.0%	7.0	1.4	A
	Right Turn	60	65	107.7%	1.9	0.5	A
	Subtotal	1,385	1,402	101.2%	6.9	1.2	A
SB	Left Turn	30	24	79.8%	59.6	11.0	E
	Through	1,740	1,477	84.9%	12.1	3.8	B
	Right Turn	10	9	91.2%	9.1	6.1	A
	Subtotal	1,780	1,511	84.9%	12.9	3.8	B
EB	Left Turn	5	6	121.6%	52.7	35.0	D
	Through	5	3	60.8%	46.7	43.6	D
	Right Turn	5	3	53.2%	17.4	17.8	B
	Subtotal	15	12	78.5%	56.8	22.3	E
WB	Left Turn	110	99	89.8%	53.6	4.1	D
	Through	5	5	98.8%	29.8	25.5	C
	Right Turn	20	22	108.3%	13.5	6.0	B
	Subtotal	135	125	92.9%	45.9	5.2	D
Total		3,315	3,050	92.0%	11.6	2.3	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	70	59	84.0%	0.6	0.2	A
	Right Turn						
	Subtotal	70	59	84.0%	0.6	0.2	A
SB	Left Turn						
	Through	670	673	100.5%	0.7	0.1	A
	Right Turn						
	Subtotal	670	673	100.5%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	37	93.0%	8.3	1.7	A
	Through						
	Right Turn	20	20	98.0%	2.9	0.5	A
	Subtotal	60	57	94.7%	6.5	1.6	A
Total		800	789	98.6%	1.1	0.2	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	530	470	88.6%	28.4	0.8	C
	Left Turn 2	70	73	104.6%	31.8	2.3	C
	Left Turn	20	25	126.0%	31.7	2.4	C
	Through	320	335	104.6%	32.2	2.3	C
	Subtotal	940	903	96.0%	30.2	1.4	C
SB	Right Turn 3	10	7	72.0%	207.5	82.0	F
	Right Turn 2	80	59	73.5%	221.7	49.8	F
	Right Turn	370	273	73.7%	220.5	52.1	F
	Through	160	117	73.0%	225.8	56.1	F
	Subtotal	620	456	73.5%	221.4	51.2	F
WB	Left Turn 3	180	158	87.8%	56.2	9.1	E
	Left Turn 2	1,400	1,188	84.9%	58.6	5.4	E
	Left Turn	340	294	86.5%	30.6	2.4	C
	Through	40	33	83.0%	27.5	6.8	C
	Right Turn	180	189	104.9%	13.8	3.2	B
	Subtotal	2,140	1,862	87.0%	48.8	4.0	D
Total		3,700	3,220	87.0%	67.7	7.9	E

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	45	75.3%	1.9	0.3	A
	Right Turn	220	190	86.2%	1.0	0.2	A
	Subtotal	280	235	83.9%	1.2	0.1	A
SB	Left Turn	410	399	97.4%	8.1	7.6	A
	Through	300	310	103.3%	4.8	6.6	A
	Right Turn						
	Subtotal	710	709	99.9%	6.6	7.1	A
EB	Left Turn	10	14	140.0%	20.3	8.4	C
	Through	70	60	86.3%	12.4	2.3	B
	Right Turn	70	74	106.3%	3.8	1.4	A
	Subtotal	150	149	99.2%	8.7	1.8	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,140	1,093	95.9%	5.8	4.6	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
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Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	400	362	90.5%	67.2	16.3	E
	Right Turn	190	180	94.9%	22.3	5.7	C
	Subtotal	590	542	91.9%	52.4	12.1	D
SE	Left Turn 2	370	364	98.5%	36.5	2.7	D
	Left Turn	520	542	104.2%	31.9	2.9	C
	Right Turn	120	114	95.3%	33.0	2.8	C
	Subtotal	1010	1020	101.0%	33.7	1.9	C
EB	Left Turn	170	156	92.0%	45.1	4.2	D
	Through	500	460	92.0%	42.2	3.3	D
	Right Turn	30	27	90.7%	38.1	8.3	D
	Subtotal	700	644	91.9%	42.7	2.8	D
SB	Left Turn	170	127	74.6%	65.9	21.1	E
	Through	170	130	76.7%	44.8	43.7	D
	Right Turn						
	Subtotal	340	257	75.6%	56.5	33.6	E
Total		2640	2464	93.3%	42.4	4.1	D

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	7	68.0%	41.7	27.1	D
	Through	20	19	96.0%	37.9	11.5	D
	Right Turn	70	83	118.3%	21.0	8.8	C
	Subtotal	100	109	108.8%	26.3	7.1	C
SB	Left Turn	160	159	99.3%	51.3	15.4	D
	Through	30	28	94.7%	44.6	13.8	D
	Right Turn	340	344	101.3%	23.9	12.7	C
	Subtotal	530	532	100.3%	33.2	12.7	C
EB	Left Turn	320	226	70.8%	42.6	6.2	D
	Through	710	544	76.7%	32.3	9.8	C
	Right Turn	10	9	92.0%	24.4	22.3	C
	Subtotal	1,040	780	75.0%	35.1	8.3	D
WB	Left Turn	100	85	85.2%	40.9	6.3	D
	Through	740	717	96.9%	23.2	1.7	C
	Right Turn	130	135	103.7%	21.3	3.7	C
	Subtotal	970	937	96.6%	24.5	2.1	C
Total		2,640	2,357	89.3%	30.2	3.8	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative C  
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Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	330	314	95.2%	22.8	2.9	C
	Through						
	Right Turn	190	192	100.8%	30.0	26.7	C
	Subtotal	520	506	97.2%	25.4	11.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	940	772	82.2%	16.9	13.4	B
	Right Turn						
	Subtotal	940	772	82.2%	16.9	13.4	B
WB	Left Turn						
	Through	640	627	97.9%	8.4	1.2	A
	Right Turn						
	Subtotal	640	627	97.9%	8.4	1.2	A
Total		2,100	1,905	90.7%	16.3	8.4	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	40	35	87.0%	60.2	20.6	F
	Through						
	Right Turn	20	16	82.0%	54.2	29.9	F
	Subtotal	60	51	85.3%	58.4	19.8	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,100	937	85.2%	7.7	7.0	A
	Right Turn	30	22	73.3%	7.2	8.1	A
	Subtotal	1,130	959	84.9%	7.7	7.0	A
WB	Left Turn	20	16	78.0%	14.7	10.8	B
	Through	600	594	99.0%	1.2	0.2	A
	Right Turn						
	Subtotal	620	610	98.3%	1.6	0.5	A
Total		1,810	1,620	89.5%	6.9	3.8	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
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Opening Year - Alternative C  
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Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	210	211	100.4%	57.4	31.5	F
	Through						
	Right Turn	160	171	107.0%	14.2	7.0	B
	Subtotal	370	382	103.2%	38.4	22.6	E
EB	Left Turn	270	231	85.6%	14.6	6.7	B
	Through	850	714	84.0%	10.9	6.6	B
	Right Turn						
	Subtotal	1,120	945	84.4%	11.8	6.6	B
WB	Left Turn						
	Through	470	444	94.5%	2.2	0.6	A
	Right Turn	10	6	60.0%	1.8	0.4	A
	Subtotal	480	450	93.8%	2.2	0.6	A
Total		1,970	1,777	90.2%	15.2	6.7	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	37	124.0%	66.8	17.8	E
	Through	110	114	103.6%	45.3	11.7	D
	Right Turn	120	133	111.0%	33.6	7.9	C
	Subtotal	260	284	109.4%	43.0	8.4	D
SB	Left Turn	70	54	77.1%	157.9	137.1	F
	Through	140	118	84.6%	39.5	6.6	D
	Right Turn	110	87	78.9%	26.5	7.8	C
	Subtotal	320	259	81.0%	61.6	37.0	E
EB	Left Turn	260	242	93.1%	77.9	36.0	E
	Through	720	612	85.1%	38.3	12.9	D
	Right Turn	80	71	89.0%	37.4	14.4	D
	Subtotal	1,060	926	87.3%	48.9	19.4	D
WB	Left Turn	50	53	105.6%	41.9	11.2	D
	Through	340	320	94.0%	24.4	6.6	C
	Right Turn	220	222	101.1%	15.5	14.5	B
	Subtotal	610	595	97.5%	22.7	9.4	C
Total		2,250	2,064	91.7%	41.8	11.5	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
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Opening Year - Alternative C  
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Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	62	103.3%	57.6	26.5	E
	Through	230	224	97.2%	23.4	3.0	C
	Right Turn	70	79	112.6%	16.0	2.3	B
	Subtotal	360	364	101.2%	27.9	5.1	C
SB	Left Turn	80	77	96.0%	46.1	11.9	D
	Through	320	316	98.8%	29.3	4.4	C
	Right Turn	40	30	76.0%	10.3	2.3	B
	Subtotal	440	423	96.2%	31.0	5.5	C
EB	Left Turn	40	31	77.0%	73.7	13.2	E
	Through	630	597	94.7%	40.1	19.1	D
	Right Turn	340	358	105.2%	30.4	18.9	C
	Subtotal	1,010	985	97.5%	37.7	18.7	D
WB	Left Turn	200	204	102.2%	53.7	11.9	D
	Through	440	448	101.7%	15.4	1.3	B
	Right Turn	90	103	114.2%	6.9	1.8	A
	Subtotal	730	755	103.4%	24.7	4.2	C
Total		2,540	2,528	99.5%	31.4	7.5	C

Intersection 16                      S. River Rd/Broadway Bridge                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	470	338	71.9%	133.5	15.5	F
	Right Turn	580	404	69.7%	68.7	12.1	F
	Subtotal	1,050	742	70.7%	98.4	15.1	F
SB	Left Turn	440	348	79.0%	99.7	9.9	F
	Through	200	145	72.4%	60.2	20.9	F
	Right Turn						
	Subtotal	640	492	77.0%	88.1	12.8	F
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	830	641	77.2%	151.7	33.3	F
	Through						
	Right Turn	240	190	79.3%	105.0	27.2	F
	Subtotal	1,070	831	77.7%	141.2	32.0	F
Total		2,760	2,066	74.9%	112.4	12.3	F

SimTraffic Post-Processor  
Average Results from 10 Runs  
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Opening Year - Alternative C  
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Intersection 19

Jefferson Blvd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	7	72.2%	141.4	62.1	F
	Through	1,120	908	81.1%	129.2	42.1	F
	Right Turn	130	103	79.5%	145.5	47.7	F
	Subtotal	1,260	1,018	80.8%	130.9	42.5	F
SB	Left Turn	380	247	65.0%	172.5	53.8	F
	Through	1,520	1,311	86.3%	46.7	14.6	D
	Right Turn	20	19	95.0%	39.7	22.0	D
	Subtotal	1,920	1,577	82.1%	66.3	20.6	E
EB	Left Turn	10	11	110.2%	85.7	29.9	F
	Through	50	45	89.7%	54.1	19.8	D
	Right Turn	20	19	93.1%	39.8	27.5	D
	Subtotal	80	74	93.1%	54.0	15.0	D
WB	Left Turn	330	223	67.7%	93.3	18.0	F
	Through	50	35	70.7%	68.5	19.0	E
	Right Turn	190	137	72.0%	48.1	16.2	D
	Subtotal	570	396	69.4%	75.1	17.3	E
Total		3,830	3,065	80.0%	87.9	19.5	F

Intersection 20

S. River Rd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	100	67	66.5%	183.5	50.7	F
	Through	760	557	73.4%	136.0	59.3	F
	Right Turn	5	4	83.6%	100.5	78.9	F
	Subtotal	865	628	72.6%	141.2	57.5	F
SB	Left Turn	5	4	76.0%	58.6	41.6	E
	Through	565	413	73.1%	38.9	16.2	D
	Right Turn	430	308	71.6%	61.1	29.9	E
	Subtotal	1,000	725	72.5%	48.6	22.4	D
EB	Left Turn	180	119	65.9%	97.2	28.2	F
	Through	30	19	63.3%	65.7	13.5	E
	Right Turn	290	194	67.0%	46.3	12.9	D
	Subtotal	500	332	66.3%	65.6	18.3	E
WB	Left Turn	5	6	121.6%	57.5	46.4	E
	Through	20	23	114.0%	83.6	44.1	F
	Right Turn	40	39	97.9%	46.3	23.1	D
	Subtotal	65	68	104.6%	63.9	30.0	E
Total		2,430	1,753	72.1%	83.9	21.2	F

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	240	470	195.9%	34.9	2.3	C
	Through	380	461	121.3%	1.9	0.2	A
	Right Turn						
	Subtotal	620	931	150.2%	18.6	1.7	B
SB	Left Turn						
	Through	760	324	42.6%	10.1	0.9	B
	Right Turn	1,020	629	61.7%	19.0	3.2	B
	Subtotal	1,780	953	53.5%	16.0	2.2	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,400	1,884	78.5%	17.3	1.5	B

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	80	90	112.6%	62.5	10.2	E
	Through	940	1,112	118.3%	46.6	4.9	D
	Right Turn	10	242	2416.8%	27.7	2.8	C
	Subtotal	1,030	1,444	140.2%	44.5	4.9	D
SB	Left Turn	60	102	170.4%	38.3	8.9	D
	Through	1,260	917	72.8%	18.9	4.0	B
	Right Turn	90	49	54.5%	4.7	1.0	A
	Subtotal	1,410	1,069	75.8%	20.2	3.5	C
EB	Left Turn	70	100	142.8%	33.5	6.4	C
	Through	50	59	117.8%	29.4	7.7	C
	Right Turn	110	76	68.7%	19.6	6.6	B
	Subtotal	230	234	101.9%	28.1	6.2	C
WB	Left Turn	270	65	24.2%	38.2	6.3	D
	Through	90	46	51.5%	38.5	7.7	D
	Right Turn	80	19	24.2%	14.9	8.2	B
	Subtotal	440	131	29.8%	34.5	3.5	C
Total		3,110	2,878	92.5%	33.6	3.8	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 3 S River Rd/15th St Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	8	26.6%	82.0	42.2	F
	Through	530	634	119.7%	56.2	8.9	E
	Right Turn	10	4	41.8%	41.8	31.2	D
	Subtotal	570	646	113.4%	56.6	8.8	E
SB	Left Turn	20	10	49.4%	27.3	20.4	C
	Through	530	224	42.2%	23.6	3.0	C
	Right Turn	370	154	41.5%	5.3	1.0	A
	Subtotal	920	387	42.1%	16.5	2.1	B
EB	Left Turn	50	264	527.4%	108.4	42.4	F
	Through	20	23	115.9%	49.8	15.9	D
	Right Turn	50	63	126.9%	21.9	13.6	C
	Subtotal	120	350	292.0%	90.1	37.1	F
WB	Left Turn	20	5	24.7%	29.3	31.2	C
	Through	50	20	39.5%	47.6	14.2	D
	Right Turn	30	27	89.9%	15.5	10.3	B
	Subtotal	100	52	51.7%	28.6	8.2	C
Total		1,710	1,436	84.0%	52.7	10.6	D

Intersection 4 Jefferson Blvd/Stone Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	70	73	104.2%	122.4	31.6	F
	Through	1,240	1,725	139.1%	81.9	19.7	F
	Right Turn	40	35	88.4%	77.5	19.6	E
	Subtotal	1,350	1,833	135.8%	83.4	20.0	F
SB	Left Turn	100	52	52.1%	84.6	15.2	F
	Through	1,630	1,129	69.3%	30.0	7.7	C
	Right Turn	110	117	106.7%	19.7	5.6	B
	Subtotal	1,840	1,298	70.6%	31.3	7.7	C
EB	Left Turn	40	38	94.1%	90.6	30.2	F
	Through	10	8	76.0%	49.8	39.3	D
	Right Turn	120	135	112.4%	27.1	6.4	C
	Subtotal	170	180	106.0%	41.1	10.3	D
WB	Left Turn	30	27	88.7%	82.1	21.0	F
	Through	40	86	215.7%	49.8	7.0	D
	Right Turn	30	37	122.9%	35.2	10.2	D
	Subtotal	100	150	149.7%	51.5	6.3	D
Total		3,460	3,461	100.0%	60.0	11.4	E



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	0	0.0%	0.0	0.0	A
	Through	1,320	1,756	133.0%	38.0	23.7	D
	Right Turn	60	109	181.8%	21.8	16.6	C
	Subtotal	1,385	1,865	134.7%	37.1	23.4	D
SB	Left Turn	30	34	112.7%	59.9	14.1	E
	Through	1,740	1,219	70.0%	10.0	2.2	A
	Right Turn	10	0	0.0%	0.0	0.0	A
	Subtotal	1,780	1,252	70.4%	11.3	2.3	B
EB	Left Turn	5	7	136.8%	53.7	34.8	D
	Through	5	0	0.0%	0.0	0.0	A
	Right Turn	5	0	0.0%	0.0	0.0	A
	Subtotal	15	7	45.6%	53.7	34.8	D
WB	Left Turn	110	53	48.4%	45.2	8.5	D
	Through	5	7	144.4%	41.7	29.8	D
	Right Turn	20	132	659.3%	49.6	15.2	D
	Subtotal	135	192	142.4%	47.5	9.8	D
Total		3,315	3,317	100.0%	27.5	13.1	C

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	70	74	105.1%	0.4	0.2	A
	Right Turn						
	Subtotal	70	74	105.1%	0.4	0.2	A
SB	Left Turn						
	Through	650	108	16.6%	0.0	0.1	A
	Right Turn						
	Subtotal	650	108	16.6%	0.0	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	19	47.0%	6.3	1.7	A
	Through						
	Right Turn	20	36	182.0%	3.4	0.8	A
	Subtotal	60	55	92.0%	4.4	0.7	A
Total		780	237	30.4%	1.2	0.2	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn 3	540	118	21.8%	10.0	4.1	B
	Left Turn 2	90	105	116.4%	17.0	1.9	B
	Left Turn	20	31	154.0%	16.9	1.9	B
	Through	340	265	77.9%	17.4	1.9	B
	Subtotal	990	518	52.3%	15.6	1.7	B
SB	Right Turn 3	10	7	72.0%	10.5	11.0	B
	Right Turn 2	80	58	73.0%	24.3	9.6	C
	Right Turn	330	139	42.1%	26.0	2.2	C
	Through	180	195	108.4%	27.4	2.2	C
	Subtotal	600	400	66.6%	26.2	2.6	C
WB	Left Turn 3	180	110	61.1%	28.2	4.2	C
	Left Turn 2	1,410	276	19.6%	28.4	1.8	C
	Left Turn	360	80	22.1%	26.9	3.0	C
	Through	40	42	104.0%	29.7	7.0	C
	Right Turn	180	274	152.4%	11.5	2.9	B
	Subtotal	2,170	782	36.0%	22.4	1.7	C
Total		3,760	1,700	45.2%	21.3	1.4	C

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	60	68	113.3%	1.3	0.3	A
	Right Turn	220	166	75.5%	0.8	0.2	A
	Subtotal	280	234	83.6%	0.9	0.1	A
SB	Left Turn	390	72	18.4%	2.2	0.4	A
	Through	300	57	18.9%	0.4	0.5	A
	Right Turn						
	Subtotal	690	128	18.6%	1.4	0.4	A
EB	Left Turn	10	8	84.0%	8.0	6.7	A
	Through	70	185	264.6%	8.4	0.5	A
	Right Turn	70	82	116.6%	3.2	0.6	A
	Subtotal	150	275	183.5%	6.8	0.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,120	638	56.9%	3.6	0.5	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	420	428	102.0%	38.8	4.6	D
	Right Turn	190	242	127.4%	37.0	8.3	D
	Subtotal	610	670	109.9%	38.1	5.6	D
SE	Left Turn 2	390	63	16.2%	32.5	5.7	C
	Left Turn	560	530	94.6%	32.2	4.2	C
	Right Turn	120	79	66.0%	33.3	4.5	C
	Subtotal	1070	672	62.8%	32.4	3.8	C
EB	Left Turn	180	25	14.0%	34.6	11.6	C
	Through	460	380	82.7%	35.8	3.0	D
	Right Turn	40	21	53.0%	25.4	12.8	C
	Subtotal	680	427	62.8%	35.3	2.4	D
SB	Left Turn	180	180	100.2%	18.1	4.6	B
	Through	180	125	69.6%	8.1	2.0	A
	Right Turn						
	Subtotal	360	306	84.9%	14.0	2.4	B
Total		2720	2075	76.3%	32.3	1.7	C

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	0	0.0%	0.0	0.0	A
	Through	20	44	222.0%	30.6	6.5	C
	Right Turn	70	65	92.6%	17.8	3.0	B
	Subtotal	100	109	109.2%	23.1	3.8	C
SB	Left Turn	160	62	39.0%	38.6	8.8	D
	Through	30	19	62.7%	26.2	14.5	C
	Right Turn	330	140	42.3%	12.5	2.9	B
	Subtotal	520	221	42.5%	21.8	3.9	C
EB	Left Turn	320	302	94.4%	56.1	9.4	E
	Through	730	569	78.0%	44.1	11.4	D
	Right Turn	10	9	88.0%	32.5	17.7	C
	Subtotal	1,060	880	83.0%	48.3	9.0	D
WB	Left Turn	100	51	50.8%	66.2	14.5	E
	Through	740	841	113.7%	47.6	18.1	D
	Right Turn	120	106	88.0%	47.9	20.7	D
	Subtotal	960	998	103.9%	48.6	18.0	D
Total		2,640	2,208	83.6%	44.7	10.1	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	330	598	181.1%	36.5	4.0	D
	Through						
	Right Turn	190	310	162.9%	21.9	3.5	C
	Subtotal	520	907	174.5%	31.6	2.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	960	694	72.3%	4.5	0.8	A
	Right Turn						
	Subtotal	960	694	72.3%	4.5	0.8	A
WB	Left Turn						
	Through	630	445	70.6%	11.8	1.5	B
	Right Turn						
	Subtotal	630	445	70.6%	11.8	1.5	B
Total		2,110	2,046	96.9%	18.1	1.2	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	26	86.7%	49.6	26.5	E
	Through						
	Right Turn	20	29	144.0%	31.0	14.8	D
	Subtotal	50	55	109.6%	39.7	17.3	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,120	941	84.0%	2.7	0.6	A
	Right Turn	30	60	198.7%	1.5	0.9	A
	Subtotal	1,150	1,000	87.0%	2.6	0.6	A
WB	Left Turn	20	17	84.0%	14.5	7.9	B
	Through	600	414	69.0%	0.9	0.3	A
	Right Turn						
	Subtotal	620	431	69.5%	1.5	0.5	A
Total		1,820	1,486	81.6%	3.7	0.9	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	210	72	34.5%	15.4	3.5	C
	Through						
	Right Turn	160	65	40.5%	6.0	2.0	A
	Subtotal	370	137	37.1%	11.0	2.3	B
EB	Left Turn	270	225	83.3%	7.9	1.3	A
	Through	870	725	83.3%	4.2	1.2	A
	Right Turn						
	Subtotal	1,140	950	83.3%	5.1	1.2	A
WB	Left Turn						
	Through	470	372	79.1%	1.9	0.4	A
	Right Turn	10	10	96.0%	1.7	0.3	A
	Subtotal	480	381	79.4%	1.9	0.4	A
Total		1,990	1,468	73.8%	4.8	0.9	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	42	138.7%	39.3	6.5	D
	Through	110	154	140.0%	30.6	6.7	C
	Right Turn	130	129	99.4%	23.6	10.4	C
	Subtotal	270	325	120.3%	29.0	7.4	C
SB	Left Turn	60	52	87.3%	79.1	46.9	E
	Through	140	73	52.0%	27.5	3.3	C
	Right Turn	140	104	74.6%	18.1	3.7	B
	Subtotal	340	230	67.5%	35.4	10.8	D
EB	Left Turn	270	261	96.6%	45.7	9.4	D
	Through	730	447	61.3%	24.9	3.2	C
	Right Turn	80	82	102.0%	22.2	4.5	C
	Subtotal	1,080	790	73.1%	31.6	4.3	C
WB	Left Turn	50	131	262.4%	55.3	9.2	E
	Through	310	243	78.5%	32.8	14.4	C
	Right Turn	230	246	107.1%	29.2	24.8	C
	Subtotal	590	621	105.2%	36.6	16.3	D
Total		2,280	1,965	86.2%	33.3	7.5	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	60	202	336.7%	25.4	3.6	C
	Through	230	594	258.1%	17.1	1.5	B
	Right Turn	70	82	116.6%	11.0	2.2	B
	Subtotal	360	877	243.7%	18.5	1.7	B
SB	Left Turn	90	12	13.3%	35.1	14.7	D
	Through	320	92	28.9%	14.4	2.1	B
	Right Turn	40	50	126.0%	6.9	1.3	A
	Subtotal	450	155	34.4%	13.3	1.7	B
EB	Left Turn	40	58	145.0%	36.3	7.7	D
	Through	630	362	57.4%	18.4	1.1	B
	Right Turn	340	61	18.0%	2.7	0.9	A
	Subtotal	1,010	481	47.6%	18.6	2.0	B
WB	Left Turn	200	43	21.6%	28.7	3.6	C
	Through	440	451	102.5%	18.8	2.7	B
	Right Turn	90	64	71.6%	6.5	2.7	A
	Subtotal	730	559	76.5%	18.1	2.5	B
Total		2,550	2,072	81.2%	18.0	1.3	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
AM Peak Hour

Intersection 19

Jefferson Blvd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	9	91.2%	150.2	44.7	F
	Through	1,320	1,694	128.3%	99.4	32.3	F
	Right Turn	20	7	34.2%	100.6	63.4	F
	Subtotal	1,350	1,710	126.7%	99.7	32.3	F
SB	Left Turn	330	187	56.5%	143.1	52.7	F
	Through	1,620	1,121	69.2%	13.3	3.1	B
	Right Turn	30	12	39.3%	6.7	3.8	A
	Subtotal	1,980	1,319	66.6%	31.3	9.0	C
EB	Left Turn	20	31	153.9%	80.5	32.0	F
	Through	20	20	100.7%	42.4	25.3	D
	Right Turn	10	11	110.2%	18.3	18.4	B
	Subtotal	50	62	123.9%	61.2	24.1	E
WB	Left Turn	200	77	38.4%	132.7	40.6	F
	Through	40	49	122.6%	59.1	13.9	E
	Right Turn	130	100	77.2%	44.4	8.1	D
	Subtotal	370	226	61.1%	78.1	19.5	E
Total		3,750	3,317	88.5%	70.4	19.4	E

Intersection 20

S. River Rd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	65	72.6%	110.4	33.0	F
	Through	670	799	119.2%	80.9	32.9	F
	Right Turn	5	4	83.6%	61.8	33.0	E
	Subtotal	765	868	113.5%	83.1	32.6	F
SB	Left Turn	10	9	87.4%	38.3	13.7	D
	Through	730	455	62.4%	13.9	1.9	B
	Right Turn	270	90	33.2%	6.5	3.3	A
	Subtotal	1,010	554	54.8%	13.2	1.9	B
EB	Left Turn	100	45	44.8%	129.7	65.3	F
	Through	5	7	144.4%	53.4	38.8	D
	Right Turn	240	131	54.5%	34.1	26.0	C
	Subtotal	345	183	53.0%	58.4	32.4	E
WB	Left Turn	5	4	83.6%	33.6	34.3	C
	Through	20	39	195.7%	45.9	13.5	D
	Right Turn	40	7	17.1%	50.9	38.1	D
	Subtotal	65	50	77.2%	48.8	17.2	D
Total		2,185	1,655	75.7%	55.2	17.2	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	240	218	90.9%	27.7	7.7	C
	Through	380	344	90.6%	0.9	0.2	A
	Right Turn						
	Subtotal	620	562	90.7%	11.4	3.7	B
SB	Left Turn						
	Through	760	744	97.9%	8.0	2.7	A
	Right Turn	1,020	995	97.5%	15.2	4.1	B
	Subtotal	1,780	1,739	97.7%	12.1	3.4	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,400	2,301	95.9%	12.0	2.9	B

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	80	74	92.2%	76.1	10.9	E
	Through	940	847	90.1%	60.3	8.7	E
	Right Turn	10	12	117.8%	35.6	7.4	D
	Subtotal	1,030	933	90.5%	61.3	8.0	E
SB	Left Turn	60	52	86.1%	56.5	17.9	E
	Through	1,260	1,084	86.0%	57.8	23.9	E
	Right Turn	90	75	83.2%	28.5	19.7	C
	Subtotal	1,410	1,210	85.8%	55.9	23.5	E
EB	Left Turn	70	71	101.0%	40.5	6.6	D
	Through	50	43	86.6%	47.1	7.0	D
	Right Turn	110	118	107.4%	28.6	6.6	C
	Subtotal	230	232	100.9%	35.4	5.3	D
WB	Left Turn	270	243	89.9%	53.2	17.7	D
	Through	90	86	95.8%	34.1	8.0	C
	Right Turn	80	81	101.2%	11.3	2.6	B
	Subtotal	440	410	93.2%	40.8	11.7	D
Total		3,110	2,785	89.6%	53.4	10.5	D



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 3                      S River Rd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	21	69.7%	56.1	11.3	E
	Through	530	477	89.9%	48.3	11.2	D
	Right Turn	10	9	91.2%	40.7	31.6	D
	Subtotal	570	507	88.9%	48.7	11.0	D
SB	Left Turn	20	13	66.5%	65.7	16.4	E
	Through	530	506	95.4%	36.6	12.1	D
	Right Turn	370	343	92.6%	8.2	1.5	A
	Subtotal	920	862	93.7%	25.8	7.3	C
EB	Left Turn	50	43	85.9%	46.2	11.2	D
	Through	20	18	91.2%	35.0	11.5	C
	Right Turn	50	45	89.7%	14.8	3.1	B
	Subtotal	120	106	88.4%	30.4	4.8	C
WB	Left Turn	20	18	89.3%	25.3	12.3	C
	Through	50	44	88.9%	34.6	6.4	C
	Right Turn	30	35	117.8%	14.1	5.1	B
	Subtotal	100	98	97.7%	25.6	5.7	C
Total		1,710	1,572	91.9%	33.5	5.3	C

Intersection 4                      Jefferson Blvd/Stone Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	70	67	96.1%	73.6	20.6	E
	Through	1,240	1,241	100.1%	24.4	8.0	C
	Right Turn	40	36	91.2%	18.9	7.9	B
	Subtotal	1,350	1,345	99.6%	26.7	8.2	C
SB	Left Turn	100	79	78.7%	78.1	11.3	E
	Through	1,630	1,437	88.2%	31.5	7.5	C
	Right Turn	110	97	88.1%	21.9	5.8	C
	Subtotal	1,840	1,613	87.6%	33.3	6.9	C
EB	Left Turn	40	44	109.3%	69.3	20.7	E
	Through	10	12	121.6%	42.1	11.7	D
	Right Turn	120	117	97.5%	28.1	6.8	C
	Subtotal	170	173	101.7%	39.3	9.7	D
WB	Left Turn	30	22	72.2%	56.7	13.3	E
	Through	40	41	103.6%	36.4	6.0	D
	Right Turn	30	31	103.9%	23.4	9.3	C
	Subtotal	100	94	94.2%	36.5	4.2	D
Total		3,460	3,225	93.2%	31.0	6.0	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 5

Jefferson Blvd/Locks Dr

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	5	3	53.2%	21.1	29.0	C
	Through	1,320	1,308	99.1%	6.3	0.8	A
	Right Turn	60	58	96.9%	2.3	0.6	A
	Subtotal	1,385	1,369	98.9%	6.2	0.9	A
SB	Left Turn	30	24	79.8%	65.7	25.2	E
	Through	1,740	1,539	88.4%	11.5	2.6	B
	Right Turn	10	11	114.0%	9.9	3.9	A
	Subtotal	1,780	1,574	88.4%	12.3	2.5	B
EB	Left Turn	5	4	83.6%	34.2	40.3	C
	Through	5	6	114.0%	49.1	38.9	D
	Right Turn	5	3	53.2%	13.1	19.6	B
	Subtotal	15	13	83.6%	44.8	28.5	D
WB	Left Turn	110	105	95.0%	52.1	10.2	D
	Through	5	6	114.0%	35.6	26.6	D
	Right Turn	20	19	93.1%	17.4	9.8	B
	Subtotal	135	129	95.4%	47.5	9.4	D
Total		3,315	3,084	93.0%	11.2	1.6	B

Intersection 6

3rd St/W St

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	70	69	98.3%	0.5	0.2	A
	Right Turn						
	Subtotal	70	69	98.3%	0.5	0.2	A
SB	Left Turn						
	Through	650	654	100.7%	0.7	0.2	A
	Right Turn						
	Subtotal	650	654	100.7%	0.7	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	40	100.0%	10.7	4.1	B
	Through						
	Right Turn	20	14	70.0%	2.6	0.8	A
	Subtotal	60	54	90.0%	8.5	2.6	A
Total		780	777	99.6%	1.2	0.2	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	540	492	91.2%	31.1	0.6	C
	Left Turn 2	90	101	112.4%	42.7	9.2	D
	Left Turn	20	23	114.0%	42.2	9.6	D
	Through	340	375	110.2%	42.7	9.7	D
	Subtotal	990	991	100.1%	37.1	5.4	D
SB	Right Turn 3	10	6	60.0%	205.4	85.4	F
	Right Turn 2	80	60	75.0%	198.1	26.3	F
	Right Turn	330	256	77.6%	201.1	27.1	F
	Through	180	130	72.2%	203.8	27.0	F
	Subtotal	600	452	75.3%	202.2	24.5	F
WB	Left Turn 3	180	161	89.6%	51.6	4.2	D
	Left Turn 2	1,410	1,288	91.3%	53.3	1.5	D
	Left Turn	360	354	98.3%	29.5	5.8	C
	Through	40	38	96.0%	29.5	16.8	C
	Right Turn	180	188	104.4%	15.5	5.0	B
	Subtotal	2,170	2,029	93.5%	45.1	2.6	D
Total		3,760	3,472	92.4%	63.3	4.4	E

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	58	97.3%	1.6	0.6	A
	Right Turn	220	205	93.3%	1.0	0.2	A
	Subtotal	280	264	94.1%	1.2	0.2	A
SB	Left Turn	390	387	99.3%	6.4	3.8	A
	Through	300	308	102.7%	3.4	2.5	A
	Right Turn						
	Subtotal	690	695	100.8%	5.0	3.1	A
EB	Left Turn	10	11	108.0%	13.9	7.5	B
	Through	70	66	94.3%	14.4	3.0	B
	Right Turn	70	69	98.9%	5.3	3.5	A
	Subtotal	150	146	97.3%	10.0	3.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,120	1,105	98.6%	4.8	2.1	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	420	348	82.9%	69.6	12.2	E
	Right Turn	190	171	90.1%	32.7	10.4	C
	Subtotal	610	519	85.1%	57.9	10.7	E
SE	Left Turn 2	390	411	105.3%	41.7	9.5	D
	Left Turn	560	572	102.1%	33.9	6.4	C
	Right Turn	120	126	105.0%	31.6	7.1	C
	Subtotal	1070	1108	103.6%	36.6	7.3	D
EB	Left Turn	180	174	96.4%	56.5	9.6	E
	Through	460	422	91.7%	49.3	5.3	D
	Right Turn	40	36	90.0%	42.3	11.8	D
	Subtotal	680	631	92.8%	50.7	6.3	D
SB	Left Turn	180	147	81.6%	71.1	14.0	E
	Through	180	141	78.4%	41.0	14.1	D
	Right Turn						
	Subtotal	360	288	80.0%	56.4	13.6	E
Total		2720	2547	93.6%	46.9	3.6	D

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	6	56.0%	26.6	25.1	C
	Through	20	19	96.0%	31.4	14.7	C
	Right Turn	70	80	113.7%	19.4	6.5	B
	Subtotal	100	104	104.4%	23.5	7.9	C
SB	Left Turn	160	152	94.8%	52.1	11.8	D
	Through	30	33	109.3%	30.2	6.2	C
	Right Turn	330	349	105.7%	17.3	5.0	B
	Subtotal	520	533	102.5%	28.0	5.6	C
EB	Left Turn	320	290	90.6%	49.6	7.7	D
	Through	730	638	87.4%	35.2	8.3	D
	Right Turn	10	8	76.0%	33.9	17.8	C
	Subtotal	1,060	936	88.3%	39.8	7.2	D
WB	Left Turn	100	95	95.2%	47.5	10.1	D
	Through	740	719	97.1%	26.7	6.8	C
	Right Turn	120	112	93.7%	24.4	7.6	C
	Subtotal	960	926	96.5%	28.6	6.5	C
Total		2,640	2,500	94.7%	32.5	4.9	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	330	344	104.2%	25.9	3.4	C
	Through						
	Right Turn	190	205	107.8%	26.3	9.6	C
	Subtotal	520	549	105.5%	26.0	4.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	960	840	87.5%	17.9	7.8	B
	Right Turn						
	Subtotal	960	840	87.5%	17.9	7.8	B
WB	Left Turn						
	Through	630	588	93.3%	7.5	1.2	A
	Right Turn						
	Subtotal	630	588	93.3%	7.5	1.2	A
Total		2,110	1,977	93.7%	17.2	4.7	B

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	28	93.3%	99.1	57.8	F
	Through						
	Right Turn	20	16	80.0%	67.2	58.2	F
	Subtotal	50	44	88.0%	88.5	57.2	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,120	1,012	90.4%	9.9	5.1	A
	Right Turn	30	25	82.7%	8.4	5.3	A
	Subtotal	1,150	1,037	90.2%	9.9	5.1	A
WB	Left Turn	20	18	90.0%	22.5	12.3	C
	Through	600	566	94.4%	1.1	0.2	A
	Right Turn						
	Subtotal	620	584	94.3%	1.8	0.6	A
Total		1,820	1,665	91.5%	9.2	4.4	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	210	206	97.9%	56.2	25.0	F
	Through						
	Right Turn	160	166	103.8%	12.5	4.6	B
	Subtotal	370	372	100.4%	37.2	16.1	E
EB	Left Turn	270	250	92.4%	15.9	3.4	C
	Through	870	770	88.5%	14.3	4.1	B
	Right Turn						
	Subtotal	1,140	1,020	89.4%	14.7	3.8	B
WB	Left Turn						
	Through	470	432	92.0%	2.0	0.3	A
	Right Turn	10	13	132.0%	1.8	0.4	A
	Subtotal	480	446	92.8%	2.0	0.3	A
Total		1,990	1,837	92.3%	16.2	4.5	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	25	84.0%	82.8	25.2	F
	Through	110	99	89.8%	49.0	9.7	D
	Right Turn	130	122	94.2%	33.0	9.1	C
	Subtotal	270	246	91.3%	44.7	8.6	D
SB	Left Turn	60	41	68.7%	92.5	42.0	F
	Through	140	122	87.1%	47.0	11.2	D
	Right Turn	140	119	84.9%	29.9	7.8	C
	Subtotal	340	282	82.9%	46.9	12.5	D
EB	Left Turn	270	228	84.4%	78.3	18.3	E
	Through	730	693	95.0%	46.2	9.6	D
	Right Turn	80	73	91.0%	43.2	12.5	D
	Subtotal	1,080	994	92.0%	53.4	11.5	D
WB	Left Turn	50	45	89.6%	44.1	11.5	D
	Through	310	303	97.8%	28.0	10.1	C
	Right Turn	230	230	100.2%	17.0	16.7	B
	Subtotal	590	578	98.0%	24.9	12.0	C
Total		2,280	2,101	92.1%	43.8	8.6	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	60	62	102.7%	77.3	26.8	E
	Through	230	234	101.7%	30.9	3.0	C
	Right Turn	70	74	106.3%	19.0	3.9	B
	Subtotal	360	370	102.8%	36.9	6.0	D
SB	Left Turn	90	88	97.3%	63.5	17.1	E
	Through	320	326	102.0%	46.5	9.5	D
	Right Turn	40	45	112.0%	17.0	6.7	B
	Subtotal	450	459	102.0%	47.2	10.8	D
EB	Left Turn	40	38	94.0%	89.1	25.4	F
	Through	630	630	100.0%	57.3	23.6	E
	Right Turn	340	328	96.5%	48.5	25.0	D
	Subtotal	1,010	996	98.6%	55.6	23.9	E
WB	Left Turn	200	198	99.2%	44.4	8.8	D
	Through	440	442	100.5%	13.0	1.4	B
	Right Turn	90	91	100.9%	4.8	1.0	A
	Subtotal	730	731	100.2%	20.5	2.2	C
Total		2,550	2,556	100.2%	41.6	8.4	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Opening Year - Alternative D  
PM Peak Hour

Intersection 19

Jefferson Blvd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	7	68.4%	136.7	48.5	F
	Through	1,320	1,209	91.6%	91.9	46.6	F
	Right Turn	20	22	108.3%	114.9	77.3	F
	Subtotal	1,350	1,238	91.7%	92.6	47.0	F
SB	Left Turn	330	242	73.4%	138.3	47.4	F
	Through	1,620	1,415	87.3%	22.4	3.7	C
	Right Turn	30	31	103.9%	15.0	5.0	B
	Subtotal	1,980	1,688	85.3%	38.3	7.5	D
EB	Left Turn	20	19	96.9%	67.7	14.2	E
	Through	20	13	62.7%	79.6	38.5	E
	Right Turn	10	14	144.4%	34.9	19.9	C
	Subtotal	50	46	92.7%	56.8	15.6	E
WB	Left Turn	200	164	82.1%	65.7	16.8	E
	Through	40	35	87.4%	52.8	7.7	D
	Right Turn	130	115	88.6%	37.5	7.0	D
	Subtotal	370	314	84.9%	54.3	12.0	D
Total		3,750	3,286	87.6%	60.2	21.1	E

Intersection 20

S. River Rd/Alameda Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	59	65.4%	92.6	41.2	F
	Through	670	628	93.8%	29.9	9.7	C
	Right Turn	5	6	114.0%	14.1	8.8	B
	Subtotal	765	693	90.6%	35.0	11.0	D
SB	Left Turn	10	8	83.6%	44.4	27.3	D
	Through	730	654	89.6%	12.6	1.3	B
	Right Turn	270	241	89.1%	8.3	6.6	A
	Subtotal	1,010	903	89.4%	11.8	1.8	B
EB	Left Turn	100	71	71.1%	147.7	69.1	F
	Through	5	4	83.6%	120.1	81.3	F
	Right Turn	240	163	67.8%	56.6	22.9	E
	Subtotal	345	238	69.0%	83.9	34.8	F
WB	Left Turn	5	5	98.8%	87.3	46.0	F
	Through	20	15	74.1%	45.3	18.3	D
	Right Turn	40	42	105.5%	43.3	20.2	D
	Subtotal	65	62	95.3%	47.4	18.3	D
Total		2,185	1,896	86.8%	30.0	6.0	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	1,180	944	80.0%	10.9	1.3	B
	Through	690	614	88.9%	2.8	0.2	A
	Right Turn						
	Subtotal	1,870	1,558	83.3%	7.7	0.8	A
SB	Left Turn						
	Through	760	670	88.2%	67.2	12.8	E
	Right Turn	550	471	85.7%	101.8	18.1	F
	Subtotal	1,310	1,142	87.1%	81.7	14.1	F
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
<b>Total</b>		<b>3,180</b>	<b>2,699</b>	<b>84.9%</b>	<b>39.0</b>	<b>5.9</b>	<b>D</b>

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	72	80.2%	58.7	11.7	E
	Through	1,720	1,440	83.7%	32.2	4.8	C
	Right Turn	260	215	82.7%	18.8	4.0	B
	Subtotal	2,070	1,727	83.4%	31.7	4.7	C
SB	Left Turn	300	283	94.4%	86.6	18.4	F
	Through	1,130	1,133	100.3%	22.6	3.2	C
	Right Turn	40	39	96.9%	7.1	2.2	A
	Subtotal	1,470	1,455	99.0%	34.6	5.9	C
EB	Left Turn	80	90	112.6%	63.1	18.6	E
	Through	90	83	92.5%	50.4	16.5	D
	Right Turn	70	69	98.8%	36.3	17.3	D
	Subtotal	240	242	101.0%	51.6	13.6	D
WB	Left Turn	110	80	72.5%	64.9	22.6	E
	Through	70	59	84.7%	58.3	20.7	E
	Right Turn	90	73	80.6%	37.8	21.3	D
	Subtotal	270	212	78.4%	53.7	21.0	D
<b>Total</b>		<b>4,050</b>	<b>3,636</b>	<b>89.8%</b>	<b>35.3</b>	<b>4.9</b>	<b>D</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	24	81.1%	151.1	24.8	F
	Through	1,560	1,338	85.8%	88.2	18.6	F
	Right Turn						
	Subtotal	1,590	1,363	85.7%	89.3	18.4	F
SB	Left Turn	90	81	89.9%	99.6	8.8	F
	Through	520	472	90.8%	14.6	1.7	B
	Right Turn	230	196	85.1%	11.2	3.9	B
	Subtotal	840	749	89.2%	22.9	2.7	C
EB	Left Turn	360	274	76.2%	118.5	22.9	F
	Through	80	64	79.8%	62.9	12.2	E
	Right Turn	200	183	91.6%	40.1	6.7	D
	Subtotal	640	521	81.5%	84.3	13.2	F
WB	Left Turn	10	11	114.0%	67.7	18.2	E
	Through	10	7	68.4%	140.1	81.5	F
	Right Turn	70	42	60.3%	154.3	91.3	F
	Subtotal	90	60	67.1%	134.5	66.9	F
<b>Total</b>		<b>3,160</b>	<b>2,693</b>	<b>85.2%</b>	<b>70.8</b>	<b>9.9</b>	<b>E</b>

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	56	80.3%	90.6	12.5	F
	Through	1,860	1,713	92.1%	52.8	11.6	D
	Right Turn	50	41	81.3%	47.5	18.5	D
	Subtotal	1,980	1,810	91.4%	53.9	11.3	D
SB	Left Turn	10	11	106.4%	60.8	26.4	E
	Through	1,150	1,034	89.9%	26.8	8.3	C
	Right Turn	70	62	87.9%	15.9	6.4	B
	Subtotal	1,230	1,107	90.0%	26.6	8.2	C
EB	Left Turn	40	40	100.7%	62.3	14.1	E
	Through	10	13	133.0%	40.6	14.6	D
	Right Turn	140	139	99.3%	22.1	10.0	C
	Subtotal	190	193	101.4%	31.5	10.7	C
WB	Left Turn	20	17	87.4%	54.3	25.1	D
	Through	50	60	120.1%	38.1	8.7	D
	Right Turn						
	Subtotal	70	78	110.7%	42.3	9.7	D
<b>Total</b>		<b>3,470</b>	<b>3,187</b>	<b>91.8%</b>	<b>42.8</b>	<b>8.0</b>	<b>D</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

**Intersection 5**                      **Jefferson Blvd/Locks Dr**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,920	1,871	97.5%	10.5	2.1	B
	Right Turn	110	107	97.1%	4.0	1.2	A
	Subtotal	2,030	1,978	97.4%	10.1	2.1	B
SB	Left Turn	30	27	91.2%	56.4	20.4	E
	Through	1,280	1,163	90.8%	7.9	2.2	A
	Right Turn						
	Subtotal	1,310	1,190	90.9%	9.0	2.7	A
EB	Left Turn	5	6	129.2%	59.9	35.9	E
	Through						
	Right Turn						
	Subtotal	5	6	129.2%	59.9	35.9	E
WB	Left Turn	50	48	96.5%	45.8	9.4	D
	Through	5	6	121.6%	46.3	40.2	D
	Right Turn	50	47	94.2%	27.4	5.3	C
	Subtotal	105	101	96.6%	38.2	3.1	D
<b>Total</b>		<b>3,450</b>	<b>3,276</b>	<b>95.0%</b>	<b>10.7</b>	<b>1.7</b>	<b>B</b>

**Intersection 6**                      **3rd St/W St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	80	73	91.5%	0.5	0.2	A
	Right Turn						
	Subtotal	80	73	91.5%	0.5	0.2	A
SB	Left Turn						
	Through	160	172	107.3%	0.2	0.1	A
	Right Turn						
	Subtotal	160	172	107.3%	0.2	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	22	112.0%	6.1	0.9	A
	Through						
	Right Turn	50	46	91.2%	3.3	0.8	A
	Subtotal	70	68	97.1%	4.3	0.6	A
<b>Total</b>		<b>310</b>	<b>313</b>	<b>100.9%</b>	<b>1.1</b>	<b>0.2</b>	<b>A</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

**Intersection 7**                      **5th St/W St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	480	480	99.9%	12.7	2.0	B
	Left Turn 2	110	112	101.5%	23.1	2.2	C
	Left Turn	30	30	101.3%	23.1	2.3	C
	Through	440	417	94.8%	23.7	2.3	C
	Subtotal	1,060	1,039	98.0%	18.6	1.8	B
SB	Right Turn 3	10	9	92.0%	29.6	19.3	C
	Right Turn 2	50	50	99.2%	39.1	10.3	D
	Right Turn	200	200	100.0%	41.3	6.6	D
	Through	190	178	93.9%	42.4	7.7	D
	Subtotal	450	437	97.2%	41.4	7.2	D
WB	Left Turn 3	30	32	108.0%	28.1	8.6	C
	Left Turn 2	440	424	96.5%	35.1	2.5	D
	Left Turn	90	82	91.6%	28.5	6.2	C
	Through	40	42	106.0%	28.1	5.9	C
	Right Turn	240	257	107.2%	14.6	3.7	B
	Subtotal	840	839	99.9%	27.6	2.4	C
<b>Total</b>		<b>2,350</b>	<b>2,315</b>	<b>98.5%</b>	<b>26.3</b>	<b>1.8</b>	<b>C</b>

**Intersection 8**                      **3rd St/X St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	70	64	91.4%	1.4	0.5	A
	Right Turn	200	206	103.2%	0.9	0.2	A
	Subtotal	270	270	100.1%	1.0	0.2	A
SB	Left Turn	100	104	104.0%	3.2	0.8	A
	Through	80	92	115.0%	1.2	1.2	A
	Right Turn						
	Subtotal	180	196	108.9%	2.2	0.9	A
EB	Left Turn	10	8	84.0%	7.5	3.8	A
	Through	220	212	96.5%	9.8	1.0	A
	Right Turn	100	96	95.6%	3.7	1.9	A
	Subtotal	330	316	95.9%	7.9	1.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
<b>Total</b>		<b>780</b>	<b>783</b>	<b>100.4%</b>	<b>4.1</b>	<b>0.5</b>	<b>A</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	560	563	100.6%	52.4	6.0	D
	Right Turn	170	162	95.5%	34.0	8.9	C
	Subtotal	730	726	99.4%	48.4	6.3	D
SE	Left Turn 2	330	291	88.1%	76.7	20.7	E
	Left Turn	830	796	95.9%	76.6	23.3	E
	Right Turn	190	184	96.8%	76.2	22.2	E
	Subtotal	1350	1270	94.1%	76.6	22.4	E
EB	Left Turn	170	183	107.5%	66.6	21.1	E
	Through	340	333	98.0%	41.3	4.1	D
	Right Turn	10	8	76.0%	25.4	14.8	C
	Subtotal	520	524	100.7%	50.8	9.3	D
SB	Left Turn	130	116	88.9%	34.8	10.5	C
	Through	90	86	96.0%	6.9	2.3	A
	Right Turn						
	Subtotal	220	202	91.8%	22.8	6.4	C
Total		2820	2722	96.5%	60.3	10.4	E

Intersection 10                      Front St/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	80	82	102.5%	25.2	3.1	D
	Right Turn	150	161	107.2%	13.6	3.7	B
	Subtotal	230	243	105.6%	17.4	2.7	C
SB	Left Turn	110	104	94.9%	10.1	2.7	B
	Through	20	19	96.0%	12.8	5.1	B
	Right Turn	10	12	124.0%	5.8	2.7	A
	Subtotal	140	136	97.1%	10.0	2.2	B
EB	Left Turn	10	10	104.0%	4.9	4.0	A
	Through	30	22	74.7%	0.4	0.3	A
	Right Turn	10	10	104.0%	0.5	0.6	A
	Subtotal	50	43	86.4%	1.7	1.4	A
WB	Left Turn	130	126	97.2%	4.8	0.5	A
	Through	50	48	96.8%	5.6	1.3	A
	Right Turn	430	437	101.7%	3.7	0.4	A
	Subtotal	610	612	100.3%	4.1	0.4	A
Total		1,030	1,034	100.4%	7.9	1.0	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	270	270	100.0%	10.9	1.5	B
	Through						
	Right Turn	670	676	100.8%	11.8	1.1	B
	Subtotal	940	946	100.6%	11.5	1.0	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	290	284	97.8%	14.7	2.3	B
	Right Turn						
	Subtotal	290	284	97.8%	14.7	2.3	B
WB	Left Turn						
	Through	340	339	99.8%	15.8	3.0	B
	Right Turn						
	Subtotal	340	339	99.8%	15.8	3.0	B
<b>Total</b>		<b>1,570</b>	<b>1,568</b>	<b>99.9%</b>	<b>13.0</b>	<b>1.2</b>	<b>B</b>

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	9	92.0%	36.2	23.3	E
	Through						
	Right Turn	30	30	100.0%	17.9	7.8	C
	Subtotal	40	39	98.0%	21.0	8.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	940	932	99.1%	3.2	1.6	A
	Right Turn	20	24	118.0%	2.1	2.1	A
	Subtotal	960	955	99.5%	3.2	1.6	A
WB	Left Turn	20	22	112.0%	10.7	7.0	B
	Through	330	331	100.2%	0.8	0.2	A
	Right Turn						
	Subtotal	350	353	100.9%	1.5	0.7	A
<b>Total</b>		<b>1,350</b>	<b>1,348</b>	<b>99.8%</b>	<b>3.3</b>	<b>1.3</b>	<b>A</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	130	134	102.8%	33.7	29.9	D
	Through						
	Right Turn	50	47	94.4%	7.3	2.1	A
	Subtotal	180	181	100.4%	26.2	20.4	D
EB	Left Turn	260	261	100.3%	8.6	2.7	A
	Through	710	700	98.6%	6.2	3.2	A
	Right Turn						
	Subtotal	970	961	99.1%	6.9	3.0	A
WB	Left Turn						
	Through	300	306	102.0%	2.0	0.7	A
	Right Turn	10	8	76.0%	1.8	0.5	A
	Subtotal	310	314	101.2%	2.0	0.7	A
Total		1,460	1,455	99.7%	8.2	4.0	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	20	20	102.0%	47.4	19.7	D
	Through	190	193	101.7%	44.6	10.1	D
	Right Turn	170	163	96.0%	35.9	10.0	D
	Subtotal	380	377	99.2%	40.9	9.8	D
SB	Left Turn	90	85	94.2%	107.6	61.9	F
	Through	100	96	96.4%	25.4	3.8	C
	Right Turn	100	95	94.8%	15.5	3.3	B
	Subtotal	290	276	95.2%	46.1	14.4	D
EB	Left Turn	290	288	99.3%	53.4	12.1	D
	Through	470	456	97.0%	33.2	6.8	C
	Right Turn	80	80	99.5%	28.3	8.7	C
	Subtotal	840	824	98.0%	39.8	8.2	D
WB	Left Turn	160	155	96.8%	50.0	13.4	D
	Through	190	201	105.9%	28.2	4.1	C
	Right Turn	250	249	99.7%	14.6	6.4	B
	Subtotal	600	605	100.9%	28.3	3.9	C
Total		2,110	2,082	98.7%	37.5	3.5	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	200	184	92.0%	24.0	2.5	C
	Through	580	572	98.6%	17.8	2.1	B
	Right Turn	80	81	101.5%	11.4	2.0	B
	Subtotal	860	837	97.3%	18.5	1.6	B
SB	Left Turn	10	10	100.0%	29.6	20.0	C
	Through	90	97	108.0%	15.3	3.6	B
	Right Turn	60	64	107.3%	7.0	2.0	A
	Subtotal	160	172	107.3%	13.0	2.0	B
EB	Left Turn	60	63	104.7%	37.7	6.2	D
	Through	360	378	105.0%	18.6	2.2	B
	Right Turn	60	64	106.0%	2.5	0.7	A
	Subtotal	480	504	105.1%	19.0	2.7	B
WB	Left Turn	50	55	109.6%	24.4	9.2	C
	Through	370	386	104.2%	17.2	2.1	B
	Right Turn	110	118	107.6%	5.9	1.6	A
	Subtotal	530	559	105.4%	15.6	2.6	B
Total		2,030	2,072	102.1%	17.4	1.2	B



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

**Intersection 17**                      **Jefferson Blvd/Circle St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	2,020	1,693	83.8%	7.0	0.6	A
	Right Turn	10	10	95.0%	4.9	3.4	A
	Subtotal	2,030	1,702	83.9%	7.0	0.6	A
SB	Left Turn	90	93	103.9%	39.0	9.0	E
	Through	1,220	1,183	97.0%	6.7	2.3	A
	Right Turn						
	Subtotal	1,310	1,276	97.4%	9.1	2.6	A
EB	Left Turn						
	Through						
	Right Turn	20	19	96.9%	12.2	7.2	B
	Subtotal	20	19	96.9%	12.2	7.2	B
WB	Left Turn	10	6	64.6%	141.3	190.5	F
	Through						
	Right Turn	50	39	77.5%	73.5	54.9	F
	Subtotal	60	45	75.4%	79.6	55.0	F
<b>Total</b>		<b>3,420</b>	<b>3,043</b>	<b>89.0%</b>	<b>9.0</b>	<b>1.5</b>	<b>A</b>

**Intersection 18**                      **S. River Rd/Circle St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	50	43	86.6%	29.3	16.3	D
	Through	1,440	1,298	90.1%	18.0	8.7	C
	Right Turn						
	Subtotal	1,490	1,341	90.0%	18.3	8.9	C
SB	Left Turn	100	93	92.7%	25.5	8.5	D
	Through	510	456	89.4%	2.6	1.1	A
	Right Turn	10	10	98.8%	0.6	1.4	A
	Subtotal	620	559	90.1%	6.5	2.4	A
EB	Left Turn	20	10	49.4%	222.7	166.6	F
	Through						
	Right Turn	70	49	70.0%	147.0	160.1	F
	Subtotal	90	59	65.4%	156.7	161.9	F
WB	Left Turn						
	Through						
	Right Turn	60	55	91.8%	64.9	43.4	F
	Subtotal	60	55	91.8%	64.9	43.4	F
<b>Total</b>		<b>2,260</b>	<b>2,014</b>	<b>89.1%</b>	<b>19.2</b>	<b>8.7</b>	<b>C</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
AM Peak Hour

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	73	90.7%	141.2	37.9	F
	Through	1,870	1,536	82.1%	108.6	34.3	F
	Right Turn	90	73	81.5%	110.9	33.8	F
	Subtotal	2,040	1,682	82.4%	110.1	34.4	F
SB	Left Turn	240	206	86.0%	137.3	26.4	F
	Through	990	943	95.2%	26.5	4.0	C
	Right Turn	20	16	81.7%	19.5	8.4	B
	Subtotal	1,250	1,165	93.2%	46.3	8.9	D
EB	Left Turn	20	22	110.2%	63.6	31.8	E
	Through	40	43	107.4%	51.3	12.0	D
	Right Turn	40	42	104.5%	23.7	10.3	C
	Subtotal	100	107	106.8%	41.4	7.7	D
WB	Left Turn	140	124	88.8%	122.8	58.3	F
	Through	90	84	92.9%	68.8	26.2	E
	Right Turn	140	130	92.6%	56.8	23.6	E
	Subtotal	370	337	91.2%	85.5	38.7	F
<b>Total</b>		<b>3,760</b>	<b>3,291</b>	<b>87.5%</b>	<b>82.4</b>	<b>18.4</b>	<b>F</b>

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	180	170	94.6%	66.2	38.4	E
	Through	1,270	1,200	94.5%	41.0	31.9	D
	Right Turn	10	15	148.2%	34.0	22.5	C
	Subtotal	1,460	1,385	94.8%	43.7	31.1	D
SB	Left Turn	50	55	110.2%	61.4	14.5	E
	Through	370	315	85.2%	36.8	9.1	D
	Right Turn	160	135	84.1%	38.6	13.5	D
	Subtotal	580	505	87.1%	40.0	9.4	D
EB	Left Turn	160	127	79.6%	32.6	10.0	C
	Through						
	Right Turn	200	174	86.8%	11.9	4.5	B
	Subtotal	360	301	83.6%	20.9	7.9	C
WB	Left Turn						
	Through						
	Right Turn	60	57	95.0%	15.7	7.0	B
	Subtotal	60	57	95.0%	15.7	7.0	B
<b>Total</b>		<b>2,460</b>	<b>2,248</b>	<b>91.4%</b>	<b>38.9</b>	<b>19.2</b>	<b>D</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	620	537	86.7%	22.9	3.6	C
	Through	570	510	89.5%	2.7	0.2	A
	Right Turn						
	Subtotal	1,190	1,048	88.0%	13.1	2.1	B
SB	Left Turn						
	Through	1,180	1,021	86.5%	65.6	11.1	E
	Right Turn	900	814	90.4%	50.4	5.2	D
	Subtotal	2,080	1,835	88.2%	58.9	6.5	E
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,270	2,882	88.1%	42.3	3.8	D

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	75	93.6%	63.8	12.1	E
	Through	1,340	1,241	92.6%	33.5	4.1	C
	Right Turn	60	54	90.6%	14.4	1.7	B
	Subtotal	1,480	1,370	92.6%	34.5	4.1	C
SB	Left Turn	150	138	92.0%	61.7	12.7	E
	Through	1,490	1,434	96.2%	42.5	14.9	D
	Right Turn	70	79	113.5%	22.0	13.6	C
	Subtotal	1,710	1,651	96.6%	43.1	14.6	D
EB	Left Turn	60	63	105.1%	50.8	7.8	D
	Through	90	76	84.9%	48.0	12.1	D
	Right Turn	100	98	98.4%	33.1	9.0	C
	Subtotal	250	238	95.2%	42.5	7.6	D
WB	Left Turn	190	178	93.8%	43.0	3.7	D
	Through	110	102	92.6%	35.4	5.6	D
	Right Turn	200	192	96.1%	21.1	3.6	C
	Subtotal	500	472	94.5%	32.4	3.2	C
Total		3,940	3,732	94.7%	38.6	6.5	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	87	96.7%	88.9	10.4	F
	Through	990	973	98.3%	41.9	4.9	D
	Right Turn	10	12	121.6%	34.7	13.4	C
	Subtotal	1,090	1,072	98.3%	45.7	4.8	D
SB	Left Turn	40	34	84.6%	57.9	13.0	E
	Through	1,290	1,192	92.4%	20.0	0.6	B
	Right Turn	280	251	89.6%	18.0	1.8	B
	Subtotal	1,610	1,477	91.7%	20.5	0.7	C
EB	Left Turn	110	81	73.6%	87.0	39.7	F
	Through	40	41	101.7%	61.6	17.4	E
	Right Turn	110	98	89.5%	39.2	16.6	D
	Subtotal	260	220	84.6%	61.0	18.2	E
WB	Left Turn	10	8	76.0%	49.3	46.6	D
	Through	65	51	78.3%	92.8	67.5	F
	Right Turn	60	39	65.2%	88.3	83.0	F
	Subtotal	135	98	72.3%	86.8	69.0	F
<b>Total</b>		<b>3,095</b>	<b>2,866</b>	<b>92.6%</b>	<b>35.0</b>	<b>3.2</b>	<b>D</b>

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	63	90.7%	67.3	13.1	E
	Through	1,250	1,256	100.5%	21.8	6.8	C
	Right Turn	30	35	117.8%	17.5	7.9	B
	Subtotal	1,350	1,355	100.4%	23.9	6.9	C
SB	Left Turn	10	10	95.0%	74.3	34.3	E
	Through	1,490	1,453	97.5%	35.0	8.5	C
	Right Turn	90	82	91.6%	25.7	7.4	C
	Subtotal	1,590	1,545	97.2%	34.7	8.4	C
EB	Left Turn	40	31	77.0%	63.9	14.3	E
	Through	10	11	110.2%	36.5	15.8	D
	Right Turn	120	111	92.5%	25.7	5.2	C
	Subtotal	170	153	89.9%	34.3	5.6	C
WB	Left Turn	120	99	82.3%	55.4	14.4	E
	Through	30	24	78.5%	39.5	16.5	D
	Right Turn	10	7	72.2%	20.8	15.7	C
	Subtotal	160	130	81.0%	51.2	12.8	D
<b>Total</b>		<b>3,270</b>	<b>3,183</b>	<b>97.3%</b>	<b>30.8</b>	<b>6.4</b>	<b>C</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	5	91.2%	64.7	41.0	E
	Through	1,320	1,309	99.2%	6.2	0.9	A
	Right Turn	50	51	101.1%	1.5	0.7	A
	Subtotal	1,375	1,364	99.2%	6.3	0.9	A
SB	Left Turn	30	25	82.3%	58.6	16.9	E
	Through	1,690	1,617	95.7%	12.2	3.0	B
	Right Turn	10	13	129.2%	11.8	3.8	B
	Subtotal	1,730	1,655	95.6%	12.9	3.0	B
EB	Left Turn	5	3	68.4%	35.4	37.6	D
	Through	5	6	114.0%	39.0	31.6	D
	Right Turn	5	7	144.4%	19.0	15.8	B
	Subtotal	15	16	108.9%	32.1	16.7	C
WB	Left Turn	110	104	94.7%	49.9	6.2	D
	Through	5	6	121.6%	45.3	30.5	D
	Right Turn	20	19	95.0%	8.4	2.7	A
	Subtotal	135	129	95.7%	44.0	5.6	D
Total		3,255	3,164	97.2%	11.4	1.9	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	53	88.7%	0.5	0.3	A
	Right Turn						
	Subtotal	60	53	88.7%	0.5	0.3	A
SB	Left Turn						
	Through	660	639	96.8%	2.0	2.8	A
	Right Turn						
	Subtotal	660	639	96.8%	2.0	2.8	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	33	83.0%	15.2	9.2	C
	Through						
	Right Turn	30	28	93.3%	3.3	0.8	A
	Subtotal	70	61	87.4%	9.2	3.6	A
Total		790	754	95.4%	2.5	2.7	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

**Intersection 7**                      **5th St/W St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	660	510	77.3%	27.9	0.9	C
	Left Turn 2	70	53	76.0%	75.4	6.9	E
	Left Turn	20	16	80.0%	74.9	6.8	E
	Through	460	400	86.9%	75.4	6.7	E
	Subtotal	1,210	979	80.9%	50.6	3.6	D
SB	Right Turn 3	10	8	80.0%	241.6	71.2	F
	Right Turn 2	80	56	70.5%	241.9	23.4	F
	Right Turn	480	309	64.3%	237.8	13.0	F
	Through	150	106	70.7%	237.7	13.4	F
	Subtotal	720	479	66.6%	238.4	13.2	F
WB	Left Turn 3	80	70	87.5%	48.0	6.0	D
	Left Turn 2	1,720	1,364	79.3%	53.4	0.6	D
	Left Turn	380	322	84.8%	29.6	2.7	C
	Through	40	38	96.0%	27.8	4.1	C
	Right Turn	150	147	98.1%	17.7	3.3	B
Subtotal	2,370	1,942	82.0%	46.0	0.9	D	
Total		4,300	3,400	79.1%	74.4	1.7	E

**Intersection 8**                      **3rd St/X St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	50	45	90.4%	2.2	2.6	A
	Right Turn	190	184	96.8%	1.1	0.4	A
	Subtotal	240	229	95.5%	1.3	0.7	A
SB	Left Turn	470	429	91.2%	28.1	27.4	D
	Through	230	233	101.4%	18.0	16.2	C
	Right Turn						
Subtotal	700	662	94.6%	24.4	23.2	C	
EB	Left Turn	10	10	104.0%	19.0	18.1	C
	Through	70	68	97.1%	18.5	11.1	C
	Right Turn	120	126	104.7%	14.6	11.6	B
	Subtotal	200	204	102.0%	16.7	9.2	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,140	1,095	96.1%	18.2	15.7	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

Intersection 9		5th St/X St			Signal		
Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	410	326	79.5%	110.0	10.5	F
	Through	90	66	73.8%	64.2	38.3	E
	Right Turn						
	Subtotal	500	392	78.5%	102.4	10.2	F
SE	Left Turn 2	550	419	76.2%	177.3	48.8	F
	Left Turn	710	600	84.5%	143.3	35.6	F
	Right Turn	320	252	78.6%	128.5	33.3	F
	Subtotal	1580	1271	80.4%	152.1	38.4	F
EB	Left Turn	250	230	91.8%	79.6	24.3	E
	Through	450	426	94.7%	46.7	5.8	D
	Right Turn	30	30	101.3%	39.8	7.0	D
	Subtotal	730	686	94.0%	57.3	9.9	E
SB	Left Turn	110	79	72.0%	57.3	8.2	E
	Through	120	86	71.7%	42.4	4.3	D
	Right Turn						
	Subtotal	230	165	71.8%	49.7	5.2	D
Total		3040	2514	82.7%	111.6	19.9	F

Intersection 10		Front St/Broadway			Side-street Stop		
Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	11	108.0%	7.5	2.9	A
	Through	30	28	94.7%	11.7	1.6	B
	Right Turn	160	152	95.0%	7.7	4.5	A
	Subtotal	200	191	95.6%	8.3	3.9	A
SB	Left Turn	210	200	95.0%	12.8	2.4	B
	Through	60	58	96.7%	15.4	2.7	C
	Right Turn	10	10	100.0%	6.1	3.1	A
	Subtotal	280	268	95.6%	13.1	2.1	B
EB	Left Turn	10	8	80.0%	3.4	2.2	A
	Through	60	58	96.0%	0.5	0.3	A
	Right Turn	10	10	100.0%	0.1	0.3	A
	Subtotal	80	76	94.5%	0.8	0.3	A
WB	Left Turn	200	186	93.2%	4.0	0.6	A
	Through	60	65	108.7%	3.7	1.0	A
	Right Turn	260	228	87.8%	2.3	0.3	A
	Subtotal	520	480	92.3%	3.1	0.4	A
Total		1,080	1,014	93.9%	6.5	1.0	A

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	100	111	110.8%	10.2	1.4	B
	Through						
	Right Turn	230	230	99.8%	7.5	2.1	A
	Subtotal	330	340	103.2%	8.4	1.7	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	430	414	96.3%	8.0	1.6	A
	Right Turn						
	Subtotal	430	414	96.3%	8.0	1.6	A
WB	Left Turn						
	Through	420	372	88.6%	8.7	1.5	A
	Right Turn						
	Subtotal	420	372	88.6%	8.7	1.5	A
<b>Total</b>		<b>1,180</b>	<b>1,126</b>	<b>95.5%</b>	<b>8.4</b>	<b>0.7</b>	<b>A</b>

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	12	116.0%	20.0	18.8	C
	Through						
	Right Turn	70	70	100.6%	14.4	10.6	B
	Subtotal	80	82	102.5%	15.4	11.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	650	624	96.0%	5.4	5.6	A
	Right Turn	10	9	92.0%	4.0	5.5	A
	Subtotal	660	633	95.9%	5.4	5.6	A
WB	Left Turn	30	32	105.3%	5.4	1.8	A
	Through	410	356	86.8%	0.9	0.2	A
	Right Turn						
	Subtotal	440	388	88.1%	1.3	0.2	A
<b>Total</b>		<b>1,180</b>	<b>1,103</b>	<b>93.5%</b>	<b>4.8</b>	<b>4.2</b>	<b>A</b>



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	260	262	100.9%	93.2	37.3	F
	Through						
	Right Turn	90	90	100.0%	26.8	19.3	D
	Subtotal	350	352	100.7%	76.6	33.9	F
EB	Left Turn	230	217	94.3%	12.4	5.8	B
	Through	510	488	95.6%	13.5	8.2	B
	Right Turn						
	Subtotal	740	704	95.2%	13.2	7.4	B
WB	Left Turn						
	Through	360	301	83.7%	2.2	0.5	A
	Right Turn	10	9	92.0%	1.9	0.3	A
	Subtotal	370	310	83.9%	2.2	0.5	A
Total		1,460	1,367	93.6%	27.3	9.6	D

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	11	112.0%	43.3	27.4	D
	Through	100	97	96.8%	58.9	30.1	E
	Right Turn	130	129	99.1%	43.4	25.9	D
	Subtotal	240	237	98.7%	50.0	27.3	D
SB	Left Turn	200	158	79.0%	72.2	40.4	E
	Through	140	110	78.9%	27.7	4.1	C
	Right Turn	130	96	74.2%	16.9	3.5	B
	Subtotal	470	365	77.6%	44.8	19.7	D
EB	Left Turn	160	138	86.3%	127.2	52.0	F
	Through	530	516	97.4%	50.3	16.8	D
	Right Turn	80	80	100.0%	46.4	14.5	D
	Subtotal	770	734	95.3%	64.2	19.7	E
WB	Left Turn	60	54	90.7%	47.5	19.6	D
	Through	230	202	87.7%	46.5	23.6	D
	Right Turn	240	202	84.3%	56.7	26.8	E
	Subtotal	530	458	86.5%	51.0	22.8	D
Total		2,010	1,794	89.3%	55.1	16.5	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	52	86.0%	65.7	22.1	E
	Through	230	229	99.7%	30.5	5.1	C
	Right Turn	70	70	100.0%	19.0	6.6	B
	Subtotal	360	351	97.4%	33.5	3.9	C
SB	Left Turn	90	88	98.2%	62.4	20.4	E
	Through	320	320	100.0%	44.3	8.9	D
	Right Turn	40	40	99.0%	16.5	5.0	B
	Subtotal	450	448	99.6%	45.3	9.8	D
EB	Left Turn	40	43	107.0%	83.7	16.2	F
	Through	620	620	100.0%	42.9	19.5	D
	Right Turn	340	349	102.6%	33.3	19.4	C
	Subtotal	1,000	1,012	101.2%	41.2	19.5	D
WB	Left Turn	200	186	93.2%	46.5	7.8	D
	Through	400	428	106.9%	12.8	1.7	B
	Right Turn	100	97	96.8%	5.1	0.9	A
	Subtotal	700	711	101.5%	20.6	3.0	C
Total		2,510	2,521	100.4%	35.1	7.6	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

**Intersection 17**                      **Jefferson Blvd/Circle St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,380	1,275	92.4%	6.3	0.7	A
	Right Turn	10	10	102.6%	4.6	1.2	A
	Subtotal	1,390	1,285	92.5%	6.3	0.7	A
SB	Left Turn	140	142	101.5%	26.6	4.9	D
	Through	1,630	1,568	96.2%	7.9	1.2	A
	Right Turn	10	8	79.8%	3.1	2.4	A
	Subtotal	1,780	1,718	96.5%	9.5	1.5	A
EB	Left Turn	20	19	96.9%	143.7	53.6	F
	Through						
	Right Turn						
	Subtotal	20	19	96.9%	143.7	53.6	F
WB	Left Turn	20	18	89.3%	155.8	76.5	F
	Through	10	9	91.2%	173.0	116.3	F
	Right Turn	80	65	81.7%	124.8	51.0	F
	Subtotal	110	92	83.9%	136.7	57.2	F
Total		3,300	3,115	94.4%	12.4	1.4	B

**Intersection 18**                      **S. River Rd/Circle St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	80	90	112.1%	30.7	6.8	D
	Through	860	829	96.4%	12.2	2.0	B
	Right Turn						
	Subtotal	940	919	97.7%	14.0	2.4	B
SB	Left Turn	70	68	97.7%	9.3	1.7	A
	Through	1,230	1,092	88.8%	3.0	0.6	A
	Right Turn	40	28	70.3%	1.7	0.9	A
	Subtotal	1,340	1,189	88.7%	3.3	0.7	A
EB	Left Turn	20	18	89.3%	145.1	101.7	F
	Through						
	Right Turn	130	117	90.3%	94.7	54.5	F
	Subtotal	150	135	90.2%	99.4	58.5	F
WB	Left Turn						
	Through						
	Right Turn	110	112	101.6%	9.5	2.8	A
	Subtotal	110	112	101.6%	9.5	2.8	A
Total		2,540	2,354	92.7%	13.4	3.6	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year - No Build  
PM Peak Hour

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	50	46	92.0%	111.3	24.5	F
	Through	1,280	1,159	90.5%	69.6	17.2	E
	Right Turn	70	73	104.2%	70.8	22.9	E
	Subtotal	1,400	1,278	91.3%	71.1	17.7	E
SB	Left Turn	280	246	87.9%	87.6	24.1	F
	Through	1,350	1,288	95.4%	34.2	3.5	C
	Right Turn	20	19	96.9%	25.6	9.8	C
	Subtotal	1,650	1,553	94.1%	42.8	6.3	D
EB	Left Turn	20	18	89.3%	87.0	23.2	F
	Through	90	90	99.6%	55.0	9.8	D
	Right Turn	60	71	119.1%	36.4	6.8	D
	Subtotal	170	179	105.3%	50.0	7.2	D
WB	Left Turn	210	188	89.6%	70.6	19.9	E
	Through	60	58	96.3%	50.4	23.6	D
	Right Turn	90	91	101.3%	40.6	20.3	D
	Subtotal	360	337	93.6%	58.8	19.1	E
<b>Total</b>		<b>3,580</b>	<b>3,347</b>	<b>93.5%</b>	<b>55.8</b>	<b>8.1</b>	<b>E</b>

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	92	102.2%	45.1	10.5	D
	Through	750	730	97.4%	15.2	2.3	B
	Right Turn	10	8	79.8%	9.0	6.0	A
	Subtotal	850	830	97.7%	18.5	2.5	B
SB	Left Turn	70	59	83.6%	48.7	4.6	D
	Through	1,050	920	87.6%	26.4	3.0	C
	Right Turn	240	212	88.5%	26.2	5.5	C
	Subtotal	1,360	1,191	87.5%	27.5	3.0	C
EB	Left Turn	120	119	99.1%	33.1	3.4	C
	Through						
	Right Turn	300	269	89.6%	17.4	3.4	B
	Subtotal	420	388	92.3%	22.2	2.8	C
WB	Left Turn	10	11	110.2%	34.8	21.3	C
	Through						
	Right Turn	70	71	101.0%	8.7	3.8	A
	Subtotal	80	82	102.1%	11.5	4.0	B
<b>Total</b>		<b>2,710</b>	<b>2,490</b>	<b>91.9%</b>	<b>23.2</b>	<b>2.0</b>	<b>C</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 1                      S River Rd/US 50 EB On-Ramp                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	990	819	82.7%	13.8	2.0	B
	Through	750	648	86.4%	2.2	0.2	A
	Right Turn						
	Subtotal	1,740	1,466	84.3%	8.7	1.3	A
SB	Left Turn						
	Through	670	612	91.3%	48.7	4.6	D
	Right Turn	620	549	88.5%	81.7	13.2	F
	Subtotal	1,290	1,161	90.0%	64.4	8.8	E
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		3,030	2,627	86.7%	33.3	3.3	C

Intersection 2                      Jefferson Blvd/15th St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	100	95	95.4%	62.2	6.2	E
	Through	1,500	1,270	84.7%	33.2	3.5	C
	Right Turn	560	493	88.0%	21.9	1.9	C
	Subtotal	2,160	1,859	86.0%	31.7	2.9	C
SB	Left Turn	210	205	97.7%	60.3	6.9	E
	Through	990	958	96.8%	22.8	3.8	C
	Right Turn	50	52	103.4%	6.9	2.1	A
	Subtotal	1,250	1,215	97.2%	28.5	3.8	C
EB	Left Turn	80	78	97.4%	56.2	9.6	E
	Through	100	108	108.3%	58.1	13.7	E
	Right Turn	80	68	85.0%	38.7	11.0	D
	Subtotal	260	254	97.8%	52.3	10.0	D
WB	Left Turn	310	286	92.3%	53.7	6.8	D
	Through	105	93	88.3%	52.4	11.2	D
	Right Turn	110	97	87.7%	38.3	5.9	D
	Subtotal	525	475	90.5%	50.5	3.4	D
Total		4,195	3,803	90.7%	34.3	2.7	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	25	21	82.1%	134.7	21.3	F
	Through	1,180	970	82.2%	123.4	20.4	F
	Right Turn	490	381	77.7%	64.5	19.9	E
	Subtotal	1,695	1,371	80.9%	107.3	20.2	F
SB	Left Turn	180	171	94.8%	108.3	23.4	F
	Through	440	428	97.2%	15.5	2.1	B
	Right Turn	180	164	91.0%	6.9	1.6	A
	Subtotal	800	762	95.2%	34.9	7.5	C
EB	Left Turn	310	257	82.7%	63.8	12.0	E
	Through	420	363	86.4%	56.9	7.3	E
	Right Turn	140	146	104.2%	54.3	12.2	D
	Subtotal	870	765	88.0%	58.8	8.8	E
WB	Left Turn	440	363	82.6%	96.0	35.5	F
	Through	360	315	87.6%	75.9	26.0	E
	Right Turn	280	257	91.7%	70.7	30.3	E
	Subtotal	1,080	936	86.6%	82.6	30.3	F
<b>Total</b>		<b>4,445</b>	<b>3,834</b>	<b>86.3%</b>	<b>76.9</b>	<b>7.3</b>	<b>E</b>

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	71	101.0%	97.8	20.1	F
	Through	1,930	1,872	97.0%	55.8	15.2	E
	Right Turn	30	36	119.1%	51.5	16.2	D
	Subtotal	2,030	1,978	97.4%	57.2	15.1	E
SB	Left Turn	10	11	106.4%	74.9	24.3	E
	Through	1,180	1,082	91.7%	27.5	10.5	C
	Right Turn	140	130	92.6%	17.0	7.7	B
	Subtotal	1,330	1,222	91.9%	26.8	10.4	C
EB	Left Turn	40	34	85.5%	67.7	14.9	E
	Through	10	9	87.4%	37.0	25.0	D
	Right Turn	140	128	91.7%	21.5	6.9	C
	Subtotal	190	171	90.2%	32.2	10.3	C
WB	Left Turn	60	60	99.4%	59.6	9.7	E
	Through	60	59	98.2%	39.6	5.9	D
	Right Turn	10	13	125.4%	26.3	18.9	C
	Subtotal	130	131	100.8%	47.9	7.3	D
<b>Total</b>		<b>3,680</b>	<b>3,503</b>	<b>95.2%</b>	<b>45.0</b>	<b>10.0</b>	<b>D</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,970	1,924	97.6%	12.7	7.0	B
	Right Turn	110	97	88.1%	5.7	4.6	A
	Subtotal	2,080	2,020	97.1%	12.3	6.9	B
SB	Left Turn	30	26	87.4%	65.8	16.2	E
	Through	1,350	1,236	91.5%	9.0	2.2	A
	Right Turn						
	Subtotal	1,380	1,262	91.4%	10.2	2.4	B
EB	Left Turn	5	4	76.0%	47.6	43.5	D
	Through						
	Right Turn						
	Subtotal	5	4	76.0%	47.6	43.5	D
WB	Left Turn	50	54	107.9%	41.2	7.4	D
	Through	5	3	68.4%	39.1	44.4	D
	Right Turn	50	51	101.8%	33.7	8.9	C
	Subtotal	105	108	103.1%	38.2	8.2	D
Total		3,570	3,395	95.1%	12.4	4.8	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	100	91	90.8%	0.5	0.2	A
	Right Turn						
	Subtotal	100	91	90.8%	0.5	0.2	A
SB	Left Turn						
	Through	160	164	102.3%	0.2	0.1	A
	Right Turn						
	Subtotal	160	164	102.3%	0.2	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	21	104.0%	6.1	1.4	A
	Through						
	Right Turn	100	94	93.6%	3.6	0.7	A
	Subtotal	120	114	95.3%	4.1	0.6	A
Total		380	369	97.1%	1.4	0.2	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	170	142	83.8%	10.8	2.0	B
	Left Turn 2	120	113	94.0%	18.2	1.9	B
	Left Turn	80	81	101.5%	18.3	1.9	B
	Through	390	356	91.4%	18.8	1.9	B
	Subtotal	760	693	91.2%	17.0	1.5	B
SB	Right Turn 3	10	12	116.0%	29.2	19.9	C
	Right Turn 2	50	46	92.8%	37.0	9.5	D
	Right Turn	220	226	102.9%	37.6	8.3	D
	Through	160	173	108.3%	39.0	7.5	D
	Subtotal	440	458	104.0%	38.1	7.9	D
WB	Left Turn 3	110	113	102.5%	27.9	3.8	C
	Left Turn 2	350	344	98.4%	30.6	3.9	C
	Left Turn	80	70	87.0%	27.1	7.5	C
	Through	50	46	91.2%	26.7	8.2	C
	Right Turn	300	303	101.1%	14.4	2.0	B
	Subtotal	890	876	98.4%	24.2	2.2	C
Total		2,090	2,026	96.9%	25.0	2.2	C

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	90	80	88.9%	1.3	0.4	A
	Right Turn	160	134	84.0%	0.7	0.2	A
	Subtotal	250	214	85.8%	0.9	0.2	A
SB	Left Turn	110	112	101.8%	2.6	0.4	A
	Through	70	74	106.3%	0.5	0.3	A
	Right Turn						
	Subtotal	180	186	103.6%	1.8	0.4	A
EB	Left Turn	10	10	96.0%	5.2	3.3	A
	Through	180	182	100.9%	9.2	0.6	A
	Right Turn	80	78	97.5%	3.5	0.7	A
	Subtotal	270	269	99.7%	7.4	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		700	670	95.7%	3.8	0.3	A



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	480	415	86.5%	46.7	7.7	D
	Through	290	274	94.3%	49.4	10.4	D
	Right Turn	770	689	89.5%	47.9	8.5	D
	Subtotal						
SE	Left Turn 2	240	242	101.0%	58.2	14.7	E
	Left Turn	880	859	97.6%	54.4	11.9	D
	Right Turn	1190	1179	99.1%	55.6	12.5	E
	Subtotal						
EB	Left Turn	40	38	94.0%	41.9	10.4	D
	Through	390	375	96.1%	44.4	4.8	D
	Right Turn	450	429	95.3%	43.7	5.0	D
	Subtotal						
SB	Left Turn	140	146	104.6%	36.5	8.3	D
	Through	130	143	109.8%	10.8	2.5	B
	Right Turn	270	289	107.1%	23.7	4.7	C
	Subtotal						
Total		2680	2586	96.5%	48.0	6.0	D

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	61	101.3%	47.3	9.7	D
	Through	110	101	92.0%	27.1	5.9	C
	Right Turn	170	162	95.3%	34.4	6.7	C
	Subtotal						
SB	Left Turn	90	83	92.4%	58.3	27.7	E
	Through	20	20	102.0%	42.6	13.7	D
	Right Turn	260	244	93.7%	32.5	6.8	C
	Subtotal						
EB	Left Turn	430	326	75.9%	61.2	16.1	E
	Through	620	548	88.4%	39.2	29.5	D
	Right Turn	1,060	884	83.4%	47.6	24.3	D
	Subtotal						
WB	Left Turn	90	81	90.2%	87.7	14.5	F
	Through	890	915	102.8%	65.6	18.8	E
	Right Turn	1,110	1,136	102.4%	67.0	18.3	E
	Subtotal						
Total		2,600	2,426	93.3%	54.3	12.4	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	700	699	99.8%	23.1	2.4	C
	Through						
	Right Turn	320	300	93.6%	24.3	8.1	C
	Subtotal	1,020	998	97.9%	23.5	3.0	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	820	703	85.7%	31.6	18.6	C
	Right Turn						
	Subtotal	820	703	85.7%	31.6	18.6	C
WB	Left Turn						
	Through	410	394	96.0%	13.1	3.5	B
	Right Turn						
	Subtotal	410	394	96.0%	13.1	3.5	B
Total		2,250	2,095	93.1%	24.1	6.8	C

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	28	92.0%	76.0	60.5	F
	Through						
	Right Turn	30	22	72.0%	72.0	47.0	F
	Subtotal	60	49	82.0%	73.4	52.2	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,090	946	86.8%	9.0	5.7	A
	Right Turn	50	42	84.0%	6.9	4.9	A
	Subtotal	1,140	988	86.7%	8.9	5.6	A
WB	Left Turn	20	24	120.0%	24.1	12.9	C
	Through	380	373	98.2%	1.0	0.2	A
	Right Turn						
	Subtotal	400	397	99.3%	2.5	1.3	A
Total		1,600	1,434	89.7%	9.4	5.0	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	100	100	99.6%	29.1	16.1	D
	Through						
	Right Turn	50	52	104.0%	5.1	0.8	A
	Subtotal	150	152	101.1%	20.6	9.2	C
EB	Left Turn	240	203	84.7%	13.4	4.4	B
	Through	870	752	86.5%	12.4	6.1	B
	Right Turn						
	Subtotal	1,110	956	86.1%	12.5	5.7	B
WB	Left Turn						
	Through	370	366	99.0%	2.0	0.5	A
	Right Turn	10	10	100.0%	1.8	0.4	A
	Subtotal	380	376	99.1%	2.0	0.5	A
Total		1,640	1,484	90.5%	10.8	4.1	B

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	50	51	101.6%	87.5	48.8	F
	Through	240	228	94.8%	79.4	41.0	E
	Right Turn	140	140	100.3%	71.8	38.2	E
	Subtotal	430	419	97.4%	78.1	41.4	E
SB	Left Turn	40	34	84.0%	153.9	76.9	F
	Through	80	88	109.5%	25.8	5.3	C
	Right Turn	100	107	106.8%	15.7	4.6	B
	Subtotal	220	228	103.6%	40.9	15.7	D
EB	Left Turn	270	220	81.3%	93.5	57.7	F
	Through	570	509	89.3%	44.5	13.1	D
	Right Turn	130	111	85.5%	40.2	13.1	D
	Subtotal	970	840	86.6%	55.5	20.3	E
WB	Left Turn	140	137	98.0%	67.9	27.6	E
	Through	230	224	97.4%	48.7	37.2	D
	Right Turn	260	243	93.5%	54.5	42.9	D
	Subtotal	630	604	95.9%	55.4	36.0	E
Total		2,250	2,091	92.9%	58.0	20.2	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	200	198	98.8%	20.8	2.7	C
	Through	580	577	99.5%	17.8	2.1	B
	Right Turn	80	88	109.5%	12.4	2.1	B
	Subtotal	860	862	100.3%	17.9	1.5	B
SB	Left Turn	10	12	116.0%	36.0	16.5	D
	Through	90	86	95.6%	13.1	4.1	B
	Right Turn	60	50	84.0%	7.7	1.7	A
	Subtotal	160	148	92.5%	13.2	2.9	B
EB	Left Turn	60	60	100.7%	42.8	6.5	D
	Through	500	505	101.0%	25.1	7.0	C
	Right Turn	60	55	91.3%	7.7	5.7	A
	Subtotal	620	620	100.0%	25.3	6.8	C
WB	Left Turn	50	53	105.6%	31.8	6.8	C
	Through	480	468	97.5%	20.5	3.6	C
	Right Turn	60	65	108.0%	8.9	2.3	A
	Subtotal	590	586	99.3%	20.3	2.9	C
Total		2,230	2,216	99.4%	20.4	1.9	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
AM Peak Hour

Intersection 17                      Jefferson Blvd/Circle St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	2,100	1,855	88.3%	7.3	0.4	A
	Right Turn	10	8	83.6%	5.9	2.2	A
	Subtotal	2,110	1,863	88.3%	7.2	0.4	A
SB	Left Turn	120	114	95.0%	47.1	4.9	E
	Through	1,260	1,201	95.3%	5.3	1.0	A
	Right Turn						
	Subtotal	1,380	1,315	95.3%	8.9	1.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	10	9	91.2%	84.1	54.0	F
	Through						
	Right Turn	60	44	72.8%	74.4	37.4	F
	Subtotal	70	53	75.5%	75.4	37.2	F
Total		3,560	3,231	90.8%	9.1	1.1	A

Intersection 18                      S. River Rd/Circle St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	21	70.9%	17.3	12.3	C
	Through	1,520	1,339	88.1%	15.6	8.2	C
	Right Turn						
	Subtotal	1,550	1,360	87.8%	15.6	8.2	C
SB	Left Turn	110	98	89.1%	23.7	6.9	C
	Through	690	620	89.9%	1.1	0.4	A
	Right Turn	40	37	92.2%	0.3	0.2	A
	Subtotal	840	755	89.9%	4.0	1.2	A
EB	Left Turn	60	35	58.9%	197.7	109.2	F
	Through						
	Right Turn	70	43	61.3%	184.1	101.0	F
	Subtotal	130	78	60.2%	188.7	101.8	F
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,520	2,194	87.1%	17.0	6.3	C

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	59	83.6%	122.5	24.3	F
	Through	1,980	1,739	87.8%	73.3	20.0	E
	Right Turn	50	39	78.3%	69.2	25.5	E
	Subtotal	2,100	1,837	87.5%	74.9	20.0	E
SB	Left Turn	180	150	83.2%	122.5	45.4	F
	Through	1,070	1,018	95.2%	22.3	3.5	C
	Right Turn	20	29	142.5%	21.3	8.7	C
	Subtotal	1,270	1,197	94.2%	35.1	9.5	D
EB	Left Turn	40	36	89.3%	66.5	12.1	E
	Through	40	41	103.6%	58.2	11.8	E
	Right Turn	40	44	111.2%	28.4	6.0	C
	Subtotal	120	122	101.3%	50.0	5.4	D
WB	Left Turn	150	125	83.6%	86.8	31.7	F
	Through	70	63	90.7%	55.9	19.9	E
	Right Turn	90	90	99.6%	46.7	15.6	D
	Subtotal	310	279	89.9%	67.2	25.0	E
<b>Total</b>		<b>3,800</b>	<b>3,433</b>	<b>90.4%</b>	<b>59.6</b>	<b>12.1</b>	<b>E</b>

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	110	105	95.7%	41.6	7.9	D
	Through	1,410	1,332	94.5%	19.7	5.0	B
	Right Turn						
	Subtotal	1,520	1,438	94.6%	21.3	5.0	C
SB	Left Turn	60	54	89.3%	34.5	8.3	C
	Through	520	454	87.4%	15.2	3.0	B
	Right Turn	180	165	91.8%	12.9	2.6	B
	Subtotal	760	673	88.6%	16.2	3.0	B
EB	Left Turn	80	68	84.6%	27.8	5.4	C
	Through						
	Right Turn	180	158	87.6%	10.0	1.3	A
	Subtotal	260	225	86.7%	15.3	2.3	B
WB	Left Turn						
	Through						
	Right Turn	60	60	100.1%	14.9	4.8	B
	Subtotal	60	60	100.1%	14.9	4.8	B
<b>Total</b>		<b>2,600</b>	<b>2,396</b>	<b>92.2%</b>	<b>19.1</b>	<b>3.5</b>	<b>B</b>

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	420	357	85.0%	44.7	4.4	D
	Through	540	458	84.8%	2.0	0.3	A
	Right Turn						
	Subtotal	960	815	84.9%	20.8	3.2	C
SB	Left Turn						
	Through	1,010	967	95.7%	26.0	12.3	C
	Right Turn	970	928	95.7%	28.1	3.9	C
	Subtotal	1,980	1,895	95.7%	27.1	7.8	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,940	2,710	92.2%	25.2	5.9	C

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	64	91.2%	54.6	8.9	D
	Through	1,090	1,040	95.4%	36.8	5.5	D
	Right Turn	250	222	88.8%	16.6	4.5	B
	Subtotal	1,410	1,326	94.0%	34.3	5.4	C
SB	Left Turn	120	120	100.4%	49.6	7.0	D
	Through	1,330	1,270	95.5%	42.2	7.9	D
	Right Turn	100	99	99.2%	19.4	6.6	B
	Subtotal	1,550	1,490	96.1%	41.3	7.4	D
EB	Left Turn	70	66	94.5%	51.2	13.1	D
	Through	100	112	111.7%	47.1	11.2	D
	Right Turn	100	93	93.1%	38.4	10.6	D
	Subtotal	270	271	100.3%	45.1	8.4	D
WB	Left Turn	510	469	91.9%	51.9	18.9	D
	Through	125	104	83.0%	38.7	8.5	D
	Right Turn	170	158	92.8%	28.3	7.7	C
	Subtotal	805	730	90.7%	44.9	13.7	D
Total		4,035	3,816	94.6%	40.0	5.2	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 3 S River Rd/15th St Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	95	82	86.0%	130.0	24.5	F
	Through	740	632	85.4%	122.3	29.5	F
	Right Turn	450	403	89.5%	46.4	18.6	D
	Subtotal	1,285	1,117	86.9%	95.8	25.9	F
SB	Left Turn	220	204	92.8%	106.7	7.3	F
	Through	740	633	85.6%	47.2	3.7	D
	Right Turn	370	309	83.4%	14.4	3.1	B
	Subtotal	1,330	1,146	86.1%	49.1	2.1	D
EB	Left Turn	90	91	100.9%	59.5	8.6	E
	Through	430	398	92.6%	61.1	6.9	E
	Right Turn	30	32	107.7%	51.4	18.3	D
	Subtotal	550	521	94.8%	60.4	5.6	E
WB	Left Turn	710	567	79.9%	119.5	42.0	F
	Through	340	337	99.0%	98.1	38.4	F
	Right Turn	150	125	83.1%	79.0	38.8	E
	Subtotal	1,200	1,028	85.7%	107.8	41.1	F
Total		4,365	3,812	87.3%	79.9	15.7	E

Intersection 4 Jefferson Blvd/Stone Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	74	105.3%	69.3	21.5	E
	Through	1,260	1,324	105.0%	22.5	9.2	C
	Right Turn	70	75	107.5%	19.9	11.5	B
	Subtotal	1,400	1,473	105.2%	24.7	9.7	C
SB	Left Turn	10	8	83.6%	58.1	31.2	E
	Through	1,560	1,502	96.3%	30.9	5.8	C
	Right Turn	100	95	95.0%	22.4	4.9	C
	Subtotal	1,670	1,605	96.1%	30.6	5.6	C
EB	Left Turn	40	42	105.5%	70.7	14.6	E
	Through	10	10	98.8%	39.5	28.0	D
	Right Turn	120	125	104.2%	28.9	5.7	C
	Subtotal	170	177	104.2%	40.1	6.0	D
WB	Left Turn	140	104	74.4%	53.2	10.1	D
	Through	40	29	71.3%	43.0	13.1	D
	Right Turn	10	8	76.0%	27.1	19.6	C
	Subtotal	190	140	73.8%	49.7	8.9	D
Total		3,430	3,395	99.0%	29.4	6.2	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	6	114.0%	39.5	32.9	D
	Through	1,370	1,412	103.0%	7.5	1.8	A
	Right Turn	50	56	112.5%	2.0	0.6	A
	Subtotal	1,425	1,474	103.4%	7.5	1.8	A
SB	Left Turn	30	28	93.7%	65.8	16.2	E
	Through	1,780	1,667	93.7%	12.9	3.6	B
	Right Turn	10	9	91.2%	11.2	5.4	B
	Subtotal	1,820	1,705	93.7%	13.8	3.6	B
EB	Left Turn	5	3	68.4%	28.8	35.2	C
	Through	5	4	76.0%	35.6	42.7	D
	Right Turn	5	6	129.2%	21.9	16.9	C
	Subtotal	15	14	91.2%	37.3	20.5	D
WB	Left Turn	110	107	97.4%	46.8	6.3	D
	Through	5	5	98.8%	54.6	38.7	D
	Right Turn	20	19	95.0%	11.6	4.1	B
	Subtotal	135	131	97.1%	42.9	4.7	D
Total		3,395	3,323	97.9%	12.3	2.0	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	70	63	89.7%	0.6	0.2	A
	Right Turn						
	Subtotal	70	63	89.7%	0.6	0.2	A
SB	Left Turn						
	Through	730	706	96.7%	0.7	0.1	A
	Right Turn						
	Subtotal	730	706	96.7%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	28	71.0%	10.9	2.8	B
	Through						
	Right Turn	30	36	120.0%	3.5	0.9	A
	Subtotal	70	64	92.0%	6.7	1.3	A
Total		870	833	95.8%	1.2	0.2	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	560	516	92.2%	33.1	0.8	C
	Left Turn 2	70	72	102.3%	69.2	5.0	E
	Left Turn	30	30	98.7%	69.2	5.0	E
	Through	400	402	100.5%	69.6	5.1	E
	Subtotal	1,060	1,020	96.2%	51.1	2.7	D
SB	Right Turn 3	10	4	36.0%	223.1	106.5	F
	Right Turn 2	80	52	65.0%	274.0	17.1	F
	Right Turn	410	266	64.9%	258.4	11.2	F
	Through	110	69	62.5%	260.4	12.6	F
	Subtotal	610	390	64.0%	261.8	7.8	F
WB	Left Turn 3	210	183	87.2%	47.9	2.4	D
	Left Turn 2	1,590	1,362	85.6%	49.6	1.1	D
	Left Turn	380	365	96.1%	32.5	3.5	C
	Through	40	44	109.0%	29.4	5.5	C
	Right Turn	150	147	97.9%	18.5	3.0	B
Subtotal	2,370	2,100	88.6%	43.9	1.2	D	
Total		4,040	3,510	86.9%	70.2	1.4	E

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	53	88.7%	1.9	0.6	A
	Right Turn	220	188	85.3%	1.0	0.2	A
Subtotal		280	241	86.0%	1.2	0.3	A
SB	Left Turn	460	441	95.9%	8.9	8.8	A
	Through	310	298	96.0%	4.3	4.6	A
	Right Turn						
Subtotal		770	739	95.9%	7.0	7.1	A
EB	Left Turn	10	9	92.0%	15.8	9.5	C
	Through	90	90	100.0%	16.7	3.9	C
	Right Turn	70	66	93.7%	4.4	1.5	A
Subtotal		170	165	96.9%	12.0	2.2	B
WB	Left Turn						
	Through						
	Right Turn						
Subtotal							
Total		1,220	1,144	93.8%	6.5	4.8	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	430	350	81.5%	79.7	13.1	E
	Right Turn	190	166	87.4%	57.5	33.1	E
	Subtotal	620	516	83.3%	72.3	15.3	E
SE	Left Turn 2	440	435	98.8%	72.4	20.3	E
	Left Turn	660	664	100.5%	53.4	13.0	D
	Right Turn	130	143	110.2%	48.3	13.9	D
	Subtotal	1230	1242	100.9%	59.6	15.4	E
EB	Left Turn	190	181	95.2%	56.4	8.2	E
	Through	540	482	89.2%	45.8	4.1	D
	Right Turn	40	32	79.0%	43.9	11.8	D
	Subtotal	770	694	90.1%	48.6	3.7	D
SB	Left Turn	110	86	78.5%	75.3	10.6	E
	Through	210	156	74.5%	36.0	12.7	D
	Right Turn						
	Subtotal	320	243	75.9%	50.0	10.5	D
Total		2940	2695	91.7%	58.4	9.1	E

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	10	100.0%	54.5	20.9	D
	Through	40	38	96.0%	38.2	6.8	D
	Right Turn	110	102	93.1%	27.9	7.5	C
	Subtotal	160	151	94.3%	31.8	6.6	C
SB	Left Turn	180	150	83.3%	85.1	36.6	F
	Through	50	50	99.2%	56.7	24.1	E
	Right Turn	420	394	93.8%	42.9	25.3	D
	Subtotal	650	594	91.3%	54.9	26.0	D
EB	Left Turn	380	320	84.1%	78.5	39.5	E
	Through	710	602	84.7%	79.2	61.5	E
	Right Turn	10	10	104.0%	75.3	63.1	E
	Subtotal	1,100	932	84.7%	78.7	53.4	E
WB	Left Turn	130	112	85.8%	54.3	9.2	D
	Through	770	748	97.2%	35.4	3.7	D
	Right Turn	150	144	95.7%	32.1	3.2	C
	Subtotal	1,050	1,004	95.6%	37.1	3.8	D
Total		2,960	2,680	90.5%	54.3	20.3	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 11 I-5 NB Off-Ramp/Broadway Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	360	371	103.0%	25.6	2.5	C
	Through						
	Right Turn	210	206	98.3%	39.9	12.4	D
	Subtotal	570	577	101.3%	30.7	4.9	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,000	827	82.7%	39.6	20.6	D
	Right Turn						
	Subtotal	1,000	827	82.7%	39.6	20.6	D
WB	Left Turn						
	Through	690	618	89.6%	9.4	0.9	A
	Right Turn						
	Subtotal	690	618	89.6%	9.4	0.9	A
Total		2,260	2,022	89.5%	27.3	8.5	C

Intersection 12 3rd St (South)/Broadway Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	26	88.0%	153.6	109.0	F
	Through						
	Right Turn	20	17	84.0%	172.3	115.4	F
	Subtotal	50	43	86.4%	165.6	105.6	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,180	985	83.5%	16.9	8.2	C
	Right Turn	30	28	94.7%	16.2	22.8	C
	Subtotal	1,210	1,014	83.8%	16.8	8.3	C
WB	Left Turn	20	14	68.0%	18.3	10.5	C
	Through	660	595	90.2%	1.3	0.3	A
	Right Turn						
	Subtotal	680	609	89.5%	1.7	0.3	A
Total		1,940	1,666	85.9%	14.0	5.0	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	210	208	99.0%	61.1	20.7	F
	Through						
	Right Turn	170	151	88.7%	13.3	5.2	B
	Subtotal	380	359	94.4%	41.1	15.8	E
EB	Left Turn	270	226	83.9%	20.7	6.4	C
	Through	940	769	81.8%	19.1	7.6	C
	Right Turn						
	Subtotal	1,210	996	82.3%	19.5	7.3	C
WB	Left Turn						
	Through	530	484	91.4%	2.1	0.3	A
	Right Turn	10	10	96.0%	1.8	0.3	A
	Subtotal	540	494	91.5%	2.1	0.3	A
Total		2,130	1,848	86.8%	18.8	4.8	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	27	89.3%	95.7	37.1	F
	Through	120	118	98.0%	54.6	10.5	D
	Right Turn	120	111	92.3%	40.1	11.2	D
	Subtotal	270	255	94.5%	52.8	13.7	D
SB	Left Turn	60	44	73.3%	86.3	44.6	F
	Through	140	127	90.6%	45.8	12.3	D
	Right Turn	180	140	78.0%	30.5	10.0	C
	Subtotal	380	311	81.9%	45.0	11.5	D
EB	Left Turn	270	234	86.5%	101.3	32.1	F
	Through	750	652	86.9%	59.5	17.9	E
	Right Turn	130	120	92.6%	54.6	17.6	D
	Subtotal	1,150	1,006	87.5%	68.5	20.8	E
WB	Left Turn	40	37	93.0%	52.5	32.9	D
	Through	330	328	99.4%	42.5	36.5	D
	Right Turn	230	221	96.0%	42.7	46.8	D
	Subtotal	600	586	97.7%	43.3	39.8	D
Total		2,400	2,158	89.9%	56.0	13.6	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	63	104.7%	72.9	30.7	E
	Through	230	230	100.0%	30.5	2.2	C
	Right Turn	70	68	97.7%	22.7	6.3	C
	Subtotal	360	361	100.3%	36.8	6.7	D
SB	Left Turn	120	128	106.7%	84.9	25.6	F
	Through	320	310	96.8%	61.6	22.5	E
	Right Turn	40	36	89.0%	29.4	18.0	C
	Subtotal	480	473	98.6%	65.5	22.8	E
EB	Left Turn	40	39	98.0%	102.8	29.3	F
	Through	660	638	96.7%	61.3	15.7	E
	Right Turn	340	317	93.2%	50.6	15.4	D
	Subtotal	1,040	994	95.6%	59.7	15.6	E
WB	Left Turn	200	199	99.6%	50.4	14.4	D
	Through	440	428	97.3%	13.6	2.2	B
	Right Turn	100	110	109.6%	5.9	1.4	A
	Subtotal	740	737	99.6%	22.7	6.5	C
Total		2,620	2,566	97.9%	47.2	9.7	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 17                      Jefferson Blvd/Circle St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	10	95.0%	18.0	13.8	C
	Through	1,320	1,265	95.8%	7.7	4.1	A
	Right Turn	10	8	83.6%	11.8	16.9	B
	Subtotal	1,340	1,283	95.7%	7.9	4.1	A
SB	Left Turn	170	141	83.2%	27.7	9.1	D
	Through	1,760	1,685	95.8%	7.2	1.0	A
	Right Turn	10	14	136.8%	4.3	1.5	A
	Subtotal	1,940	1,840	94.9%	8.8	1.4	A
EB	Left Turn						
	Through	10	7	68.4%	160.1	124.4	F
	Right Turn						
	Subtotal	10	7	68.4%	152.9	131.9	F
WB	Left Turn	10	11	106.4%	111.6	79.7	F
	Through	10	5	49.4%	131.7	104.1	F
	Right Turn	90	72	79.8%	79.1	63.1	F
	Subtotal	110	87	79.5%	87.5	67.9	F
Total		3,400	3,217	94.6%	10.8	2.9	B

Intersection 18                      S. River Rd/Circle St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	60	52	86.1%	15.3	3.6	C
	Through	940	933	99.2%	4.9	2.7	A
	Right Turn						
	Subtotal	1,000	985	98.5%	5.4	2.6	A
SB	Left Turn	80	60	75.1%	11.4	4.1	B
	Through	1,260	1,058	84.0%	1.5	0.3	A
	Right Turn	50	49	98.8%	0.9	0.3	A
	Subtotal	1,390	1,167	84.0%	2.0	0.4	A
EB	Left Turn	50	40	80.6%	142.7	117.9	F
	Through						
	Right Turn	130	89	68.1%	118.0	109.0	F
	Subtotal	180	129	71.6%	123.9	109.5	F
WB	Left Turn						
	Through						
	Right Turn	130	121	93.2%	27.2	22.2	D
	Subtotal	130	121	93.2%	27.2	22.2	D
Total		2,700	2,402	89.0%	10.1	5.1	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment A/B Conditions  
PM Peak Hour

Intersection 19 Jefferson Blvd/Alameda Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	50	42	83.6%	95.0	23.7	F
	Through	1,240	1,193	96.2%	64.8	15.0	E
	Right Turn	50	56	112.5%	65.9	22.0	E
	Subtotal	1,340	1,291	96.3%	65.9	15.0	E
SB	Left Turn	300	274	91.2%	79.2	19.9	E
	Through	1,450	1,368	94.3%	30.8	2.8	C
	Right Turn	20	21	106.4%	30.3	11.2	C
	Subtotal	1,770	1,663	93.9%	38.9	5.5	D
EB	Left Turn	30	26	87.4%	68.9	28.5	E
	Through	90	93	103.0%	49.9	8.8	D
	Right Turn	50	49	97.3%	39.9	10.0	D
	Subtotal	170	168	98.6%	49.7	8.0	D
WB	Left Turn	200	152	76.0%	61.7	12.4	E
	Through	60	65	108.9%	35.7	8.7	D
	Right Turn	70	63	90.7%	26.7	5.3	C
	Subtotal	330	281	85.1%	47.8	7.6	D
Total		3,610	3,402	94.2%	50.4	8.1	D

Intersection 20 S. River Rd/Alameda Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	81	90.4%	45.0	11.6	D
	Through	810	813	100.4%	15.8	2.3	B
	Right Turn						
	Subtotal	900	895	99.4%	18.5	3.3	B
SB	Left Turn	90	79	87.4%	39.7	6.2	D
	Through	1,070	886	82.8%	20.7	2.4	C
	Right Turn	230	181	78.8%	19.3	2.8	B
	Subtotal	1,390	1,146	82.4%	21.8	2.4	C
EB	Left Turn	100	86	85.5%	29.7	3.9	C
	Through						
	Right Turn	340	329	96.9%	19.0	3.2	B
	Subtotal	440	415	94.3%	21.3	2.5	C
WB	Left Turn						
	Through						
	Right Turn	90	86	95.0%	9.7	2.7	A
	Subtotal	90	86	95.0%	9.7	2.7	A
Total		2,820	2,541	90.1%	20.1	2.1	C





SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment C Conditions  
AM Peak Hour

Intersection 3 S River Rd/15th St Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	100	87	86.6%	57.3	2.3	E
	Through	1,230	1,123	91.3%	25.7	4.2	C
	Right Turn						
	Subtotal	1,330	1,210	91.0%	27.9	4.0	C
SB	Left Turn	70	66	94.5%	63.5	5.5	E
	Through	310	317	102.4%	12.1	1.8	B
	Right Turn	230	231	100.6%	6.4	1.1	A
	Subtotal	610	615	100.8%	15.5	2.3	B
EB	Left Turn	340	274	80.5%	55.3	18.9	E
	Through	70	59	84.7%	44.4	14.5	D
	Right Turn	270	252	93.2%	29.1	9.6	C
	Subtotal	680	584	85.9%	43.1	11.1	D
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		2,620	2,409	92.0%	28.4	3.6	C

Intersection 4 Jefferson Blvd/Stone Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	52	73.8%	107.1	24.0	F
	Through	1,920	1,685	87.8%	67.3	16.3	E
	Right Turn	50	47	94.2%	70.3	20.5	E
	Subtotal	2,040	1,784	87.5%	68.6	16.4	E
SB	Left Turn	10	10	98.8%	60.1	29.7	E
	Through	1,160	1,024	88.3%	23.3	4.9	C
	Right Turn	140	122	87.4%	13.3	3.8	B
	Subtotal	1,310	1,156	88.3%	22.6	4.5	C
EB	Left Turn	50	58	115.5%	80.2	24.6	F
	Through	10	13	129.2%	42.2	24.9	D
	Right Turn	140	130	92.6%	33.3	13.1	C
	Subtotal	200	200	100.1%	47.6	15.9	D
WB	Left Turn	90	70	77.3%	64.3	18.3	E
	Through	40	31	77.0%	40.7	13.5	D
	Right Turn	10	9	91.2%	31.2	17.7	C
	Subtotal	140	109	78.2%	54.9	9.8	D
Total		3,690	3,250	88.1%	50.4	9.4	D



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment C Conditions  
AM Peak Hour

Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	150	119	79.5%	7.8	2.3	A
	Left Turn 2	110	98	88.7%	19.0	1.9	B
	Left Turn	50	44	87.2%	19.0	2.0	B
	Through	380	349	91.9%	19.6	1.9	B
	Subtotal	690	610	88.3%	17.2	1.6	B
SB	Right Turn 3	10	11	112.0%	29.3	10.6	C
	Right Turn 2	50	48	96.0%	29.7	6.6	C
	Right Turn	190	187	98.5%	32.2	3.1	C
	Through	180	179	99.6%	33.2	3.7	C
	Subtotal	430	426	99.0%	32.3	3.0	C
WB	Left Turn 3	100	97	97.2%	28.2	4.9	C
	Left Turn 2	370	375	101.4%	28.8	3.9	C
	Left Turn	80	85	106.0%	24.8	3.2	C
	Through	40	42	104.0%	25.5	6.0	C
	Right Turn	240	247	103.0%	11.1	1.8	B
	Subtotal	830	846	101.9%	22.9	2.3	C
Total		1,950	1,881	96.5%	23.2	1.4	C

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	90	98	109.3%	1.2	0.4	A
	Right Turn	170	160	94.1%	0.7	0.1	A
	Subtotal	260	258	99.4%	0.9	0.1	A
SB	Left Turn	110	102	92.4%	2.4	0.3	A
	Through	80	91	113.5%	0.5	0.2	A
	Right Turn						
	Subtotal	190	192	101.3%	1.5	0.3	A
EB	Left Turn	10	10	96.0%	7.1	3.1	A
	Through	170	150	88.2%	8.6	0.8	A
	Right Turn	80	83	104.0%	3.2	0.4	A
	Subtotal	260	243	93.4%	6.6	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		710	694	97.7%	3.1	0.4	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year + Alignment C Conditions  
AM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	440	371	84.4%	47.6	6.4	D
	Through	290	266	91.6%	50.9	10.5	D
	Right Turn	730	637	87.2%	48.9	7.8	D
SE	Subtotal						
	Left Turn 2	210	203	96.6%	37.9	10.8	D
	Left Turn	710	722	101.6%	33.7	9.0	C
EB	Right Turn	60	66	110.0%	34.3	11.3	C
	Subtotal	980	990	101.1%	34.6	9.2	C
	Left Turn	40	36	90.0%	40.4	6.5	D
SB	Through	390	363	93.1%	37.1	3.9	D
	Right Turn	20	20	98.0%	24.6	13.0	C
	Subtotal	450	419	93.1%	36.9	3.8	D
SB	Left Turn	150	154	102.9%	30.0	6.2	C
	Through	130	125	96.0%	8.5	1.4	A
	Right Turn	280	279	99.7%	20.4	4.3	C
Subtotal		280	279	99.7%	20.4	4.3	C
Total		2440	2325	95.3%	37.4	5.3	D

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	58	96.0%	43.2	7.3	D
	Through	110	112	101.8%	26.3	7.1	C
	Right Turn	170	170	99.8%	31.9	7.7	C
SB	Subtotal						
	Left Turn	90	86	95.6%	69.3	21.9	E
	Through	20	18	90.0%	48.7	21.6	D
EB	Right Turn	190	197	103.8%	17.0	4.9	B
	Subtotal	300	301	100.4%	33.6	8.2	C
	Left Turn	480	432	90.0%	67.4	22.8	E
WB	Through	610	553	90.7%	32.4	9.3	C
	Right Turn	10	8	84.0%	29.7	20.1	C
	Subtotal	1,100	994	90.3%	47.7	15.2	D
WB	Left Turn	80	68	85.0%	74.3	15.7	E
	Through	890	852	95.7%	55.1	14.3	E
	Right Turn	130	140	107.4%	56.1	14.3	E
Subtotal		1,100	1,060	96.3%	56.5	14.0	E
Total		2,670	2,524	94.5%	48.8	9.7	D

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	670	632	94.3%	27.5	3.2	C
	Through						
	Right Turn	320	331	103.4%	18.5	3.5	B
	Subtotal	990	963	97.3%	24.4	2.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	810	731	90.3%	18.9	5.7	B
	Right Turn						
	Subtotal	810	731	90.3%	18.9	5.7	B
WB	Left Turn						
	Through	430	408	95.0%	9.6	1.8	A
	Right Turn						
	Subtotal	430	408	95.0%	9.6	1.8	A
<b>Total</b>		<b>2,230</b>	<b>2,102</b>	<b>94.3%</b>	<b>19.6</b>	<b>2.3</b>	<b>B</b>

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	27	90.7%	44.3	24.3	E
	Through						
	Right Turn	30	28	93.3%	49.4	39.9	E
	Subtotal	60	55	92.0%	47.9	29.4	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,070	990	92.5%	4.9	2.1	A
	Right Turn	60	54	89.3%	3.0	1.1	A
	Subtotal	1,130	1,044	92.4%	4.8	2.0	A
WB	Left Turn	20	14	72.0%	14.6	7.4	B
	Through	400	381	95.2%	1.0	0.3	A
	Right Turn						
	Subtotal	420	395	94.1%	1.5	0.5	A
<b>Total</b>		<b>1,610</b>	<b>1,494</b>	<b>92.8%</b>	<b>5.7</b>	<b>1.9</b>	<b>A</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
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Broadway Bridge PA ED  
Design Year + Alignment C Conditions  
AM Peak Hour

Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	100	114	114.0%	16.2	5.5	C
	Through						
	Right Turn	60	58	96.7%	5.4	1.5	A
	Subtotal	160	172	107.5%	12.4	3.4	B
EB	Left Turn	250	245	97.9%	9.1	2.5	A
	Through	860	782	90.9%	7.0	3.4	A
	Right Turn						
	Subtotal	1,110	1,026	92.5%	7.5	3.2	A
WB	Left Turn						
	Through	380	353	92.8%	1.9	0.3	A
	Right Turn	10	12	120.0%	1.7	0.2	A
	Subtotal	390	365	93.5%	1.9	0.3	A
Total		1,660	1,563	94.2%	6.7	2.2	A

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	50	60	120.0%	53.5	18.8	D
	Through	200	184	91.8%	51.8	16.7	D
	Right Turn	140	141	100.9%	42.1	16.1	D
	Subtotal	390	385	98.7%	48.5	16.4	D
SB	Left Turn	40	36	91.0%	82.6	48.2	F
	Through	70	76	108.6%	26.9	4.3	C
	Right Turn	100	92	92.0%	13.5	2.5	B
	Subtotal	210	204	97.3%	30.7	8.3	C
EB	Left Turn	290	257	88.6%	62.0	14.2	E
	Through	560	503	89.9%	32.6	8.7	C
	Right Turn	110	115	104.4%	28.6	8.4	C
	Subtotal	960	875	91.1%	40.8	9.6	D
WB	Left Turn	140	122	87.1%	58.2	26.2	E
	Through	240	214	89.0%	38.4	22.3	D
	Right Turn	240	206	86.0%	53.3	39.4	D
	Subtotal	620	542	87.4%	48.8	29.1	D
Total		2,180	2,006	92.0%	43.4	13.0	D

**Intersection 15**                      **Riverside Blvd/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	200	196	98.0%	25.9	4.2	C
	Through	580	587	101.2%	18.8	1.3	B
	Right Turn	80	86	108.0%	14.3	1.7	B
	Subtotal	860	870	101.1%	19.9	1.3	B
SB	Left Turn	10	10	104.0%	29.4	12.4	C
	Through	90	87	96.9%	16.1	2.9	B
	Right Turn	40	41	102.0%	7.6	1.4	A
	Subtotal	140	138	98.9%	14.4	1.9	B
EB	Left Turn	60	58	96.7%	39.6	8.4	D
	Through	430	424	98.7%	20.9	4.6	C
	Right Turn	60	69	114.7%	3.0	1.4	A
	Subtotal	550	551	100.2%	20.7	5.0	C
WB	Left Turn	50	49	98.4%	28.1	3.3	C
	Through	430	433	100.7%	20.7	6.1	C
	Right Turn	90	100	111.6%	7.7	3.5	A
	Subtotal	570	583	102.2%	19.1	5.2	B
<b>Total</b>		<b>2,120</b>	<b>2,142</b>	<b>101.0%</b>	<b>19.7</b>	<b>1.9</b>	<b>B</b>

**Intersection 16**                      **S. River Rd/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	950	859	90.4%	46.1	3.8	D
	Right Turn	920	803	87.2%	14.2	1.6	B
	Subtotal	1,870	1,662	88.9%	30.8	2.0	C
SB	Left Turn	190	177	93.4%	39.6	5.7	D
	Through	390	385	98.6%	23.5	3.6	C
	Right Turn						
	Subtotal	580	562	96.9%	28.7	3.7	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	720	668	92.8%	34.3	1.0	C
	Through						
	Right Turn	380	366	96.3%	19.4	2.1	B
	Subtotal	1,100	1,034	94.0%	29.0	0.8	C
<b>Total</b>		<b>3,550</b>	<b>3,258</b>	<b>91.8%</b>	<b>29.9</b>	<b>1.3</b>	<b>C</b>



SimTraffic Post-Processor  
Average Results from 10 Runs  
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Broadway Bridge PA ED  
Design Year + Alignment C Conditions  
AM Peak Hour

Intersection 17                      Jefferson Blvd/Circle St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,850	1,485	80.3%	7.3	0.6	A
	Right Turn	170	133	78.5%	6.6	0.8	A
	Subtotal	2,020	1,618	80.1%	7.3	0.6	A
SB	Left Turn	70	65	93.4%	36.5	7.9	E
	Through	1,020	998	97.8%	3.7	0.3	A
	Right Turn						
	Subtotal	1,090	1,063	97.5%	5.8	0.9	A
EB	Left Turn	10	14	144.4%	74.6	67.5	F
	Through						
	Right Turn						
	Subtotal	10	14	144.4%	74.6	67.5	F
WB	Left Turn	70	65	92.3%	118.2	56.3	F
	Through						
	Right Turn	50	55	110.2%	15.9	4.7	C
	Subtotal	120	120	99.8%	72.4	32.4	F
Total		3,240	2,815	86.9%	9.9	1.4	A

Intersection 18                      S. River Rd/Circle St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	26	87.4%	68.1	16.9	E
	Through	1,620	1,484	91.6%	37.9	5.4	D
	Right Turn						
	Subtotal	1,650	1,511	91.5%	38.5	5.5	D
SB	Left Turn	100	87	87.0%	58.7	10.5	E
	Through	910	878	96.5%	17.1	1.4	B
	Right Turn	100	106	105.6%	17.4	4.7	B
	Subtotal	1,110	1,071	96.5%	20.6	1.4	C
EB	Left Turn	180	130	72.2%	72.6	35.7	E
	Through						
	Right Turn	60	54	89.9%	14.7	13.9	B
	Subtotal	240	184	76.6%	55.4	28.8	E
WB	Left Turn						
	Through						
	Right Turn	70	63	90.1%	24.9	11.3	C
	Subtotal	70	63	90.1%	24.9	11.3	C
Total		3,070	2,828	92.1%	32.5	3.7	C

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	63	78.9%	174.5	35.4	F
	Through	1,860	1,458	78.4%	136.9	30.9	F
	Right Turn	160	121	75.5%	139.6	30.5	F
	Subtotal	2,100	1,642	78.2%	138.6	31.1	F
SB	Left Turn	180	153	85.1%	134.3	55.1	F
	Through	890	884	99.3%	23.0	3.0	C
	Right Turn	20	18	91.2%	23.0	8.5	C
	Subtotal	1,090	1,055	96.8%	39.9	11.1	D
EB	Left Turn	30	35	117.8%	63.1	16.8	E
	Through	40	43	108.3%	52.5	11.9	D
	Right Turn	40	36	90.3%	26.7	9.8	C
	Subtotal	110	115	104.3%	47.5	9.5	D
WB	Left Turn	240	212	88.4%	80.1	19.4	F
	Through	70	58	82.5%	57.5	16.6	E
	Right Turn	130	122	93.5%	42.3	10.6	D
	Subtotal	440	391	89.0%	65.0	14.0	E
<b>Total</b>		<b>3,740</b>	<b>3,203</b>	<b>85.7%</b>	<b>93.8</b>	<b>17.7</b>	<b>F</b>

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	150	138	92.2%	58.6	18.6	E
	Through	1,390	1,269	91.3%	53.1	24.6	D
	Right Turn						
	Subtotal	1,540	1,408	91.4%	53.6	24.0	D
SB	Left Turn	70	63	90.7%	40.1	4.1	D
	Through	630	588	93.3%	19.3	3.2	B
	Right Turn	270	255	94.4%	19.8	3.4	B
	Subtotal	970	906	93.4%	20.9	2.8	C
EB	Left Turn	190	157	82.4%	47.1	7.2	D
	Through						
	Right Turn	180	144	80.0%	9.4	1.6	A
	Subtotal	370	301	81.2%	29.1	4.5	C
WB	Left Turn						
	Through						
	Right Turn	70	71	101.0%	20.3	4.0	C
	Subtotal	70	71	101.0%	20.3	4.0	C
<b>Total</b>		<b>2,950</b>	<b>2,685</b>	<b>91.0%</b>	<b>38.9</b>	<b>12.5</b>	<b>D</b>



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**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	130	127	97.6%	55.2	3.8	E
	Through	670	592	88.4%	20.9	3.5	C
	Right Turn	10	9	87.4%	11.1	12.4	B
	Subtotal	810	728	89.9%	26.8	3.0	C
SB	Left Turn	70	64	91.7%	49.4	10.0	D
	Through	660	557	84.3%	25.2	1.0	C
	Right Turn	470	409	87.0%	22.0	2.7	C
	Subtotal	1,200	1,030	85.8%	25.5	1.3	C
EB	Left Turn	100	90	89.7%	133.5	104.3	F
	Through	40	43	108.3%	45.9	8.4	D
	Right Turn	130	123	94.4%	22.6	7.9	C
	Subtotal	270	256	94.7%	67.4	39.7	E
WB	Left Turn	10	5	53.2%	31.0	23.6	C
	Through	50	54	107.2%	45.9	15.3	D
	Right Turn	70	67	95.5%	23.7	14.8	C
	Subtotal	130	126	96.8%	34.0	14.5	C
<b>Total</b>		<b>2,410</b>	<b>2,139</b>	<b>88.8%</b>	<b>31.3</b>	<b>4.2</b>	<b>C</b>

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	74	105.9%	92.2	33.2	F
	Through	1,220	1,246	102.2%	28.0	4.8	C
	Right Turn	140	132	94.2%	23.9	6.6	C
	Subtotal	1,430	1,452	101.6%	31.2	4.2	C
SB	Left Turn	10	7	68.4%	72.9	34.0	E
	Through	1,500	1,371	91.4%	42.8	11.9	D
	Right Turn	130	118	90.9%	29.9	9.4	C
	Subtotal	1,640	1,496	91.2%	42.0	11.6	D
EB	Left Turn	40	37	93.1%	68.4	26.0	E
	Through	10	11	110.2%	43.7	29.7	D
	Right Turn	120	113	94.1%	27.4	6.2	C
	Subtotal	170	161	94.8%	38.1	10.4	D
WB	Left Turn	190	154	81.0%	52.3	7.7	D
	Through	30	24	79.8%	42.9	11.8	D
	Right Turn	10	12	117.8%	28.9	19.5	C
	Subtotal	230	190	82.4%	49.7	6.5	D
<b>Total</b>		<b>3,470</b>	<b>3,299</b>	<b>95.1%</b>	<b>37.6</b>	<b>7.2</b>	<b>D</b>

**Intersection 5**                      **Jefferson Blvd/Locks Dr**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	2	45.6%	22.6	24.0	C
	Through	1,400	1,417	101.2%	7.4	1.5	A
	Right Turn	50	52	104.1%	2.1	1.0	A
	Subtotal	1,455	1,471	101.1%	7.3	1.5	A
SB	Left Turn	30	25	83.6%	67.3	23.6	E
	Through	1,770	1,586	89.6%	14.0	3.9	B
	Right Turn	10	10	98.8%	8.9	5.7	A
	Subtotal	1,810	1,621	89.6%	14.8	4.3	B
EB	Left Turn	5	6	121.6%	43.8	35.0	D
	Through	5	5	106.4%	30.0	31.1	C
	Right Turn	5	5	91.2%	10.1	16.2	B
	Subtotal	15	16	106.4%	38.0	28.1	D
WB	Left Turn	110	108	98.1%	49.0	5.1	D
	Through	5	3	60.8%	39.4	40.9	D
	Right Turn	20	19	95.0%	9.1	3.9	A
	Subtotal	135	130	96.3%	43.7	5.5	D
<b>Total</b>		<b>3,415</b>	<b>3,238</b>	<b>94.8%</b>	<b>12.7</b>	<b>2.7</b>	<b>B</b>

**Intersection 6**                      **3rd St/W St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	70	61	86.9%	0.6	0.2	A
	Right Turn						
	Subtotal	70	61	86.9%	0.6	0.2	A
SB	Left Turn						
	Through	690	673	97.5%	0.6	0.2	A
	Right Turn						
	Subtotal	690	673	97.5%	0.6	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	38	94.0%	9.5	2.9	A
	Through						
	Right Turn	30	26	86.7%	2.7	0.4	A
	Subtotal	70	64	90.9%	6.6	1.8	A
<b>Total</b>		<b>830</b>	<b>797</b>	<b>96.0%</b>	<b>1.1</b>	<b>0.2</b>	<b>A</b>

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Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	560	500	89.4%	33.0	1.1	C
	Left Turn 2	70	70	100.6%	72.2	4.1	E
	Left Turn	20	20	102.0%	72.2	4.2	E
	Through	460	428	93.0%	72.5	4.0	E
	Subtotal	1,110	1,019	91.8%	53.1	2.2	D
SB	Right Turn 3	10	8	76.0%	239.3	125.7	F
	Right Turn 2	90	60	66.7%	269.5	30.4	F
	Right Turn	380	239	62.8%	256.0	12.8	F
	Through	180	107	59.6%	258.7	11.4	F
	Subtotal	660	414	62.7%	259.6	12.0	F
WB	Left Turn 3	150	130	86.9%	44.9	3.5	D
	Left Turn 2	1,600	1,399	87.5%	49.6	1.1	D
	Left Turn	350	326	93.3%	28.7	4.2	C
	Through	40	44	109.0%	24.7	9.4	C
	Right Turn	150	137	91.2%	15.7	4.8	B
	Subtotal	2,290	2,036	88.9%	43.1	1.6	D
Total		4,060	3,469	85.4%	71.8	2.1	E

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	49	82.0%	2.0	0.4	A
	Right Turn	240	205	85.5%	1.1	0.1	A
	Subtotal	300	254	84.8%	1.2	0.1	A
SB	Left Turn	460	454	98.8%	4.9	0.7	A
	Through	270	258	95.6%	2.0	0.4	A
	Right Turn						
	Subtotal	730	712	97.6%	3.8	0.5	A
EB	Left Turn	10	12	116.0%	18.6	6.7	C
	Through	70	68	97.7%	15.2	2.7	C
	Right Turn	80	77	96.5%	3.8	0.9	A
	Subtotal	160	157	98.3%	9.9	2.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,190	1,124	94.5%	4.1	0.5	A

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Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	420	335	79.8%	83.4	8.3	F
	Through	220	160	72.7%	81.4	36.3	F
	Right Turn	640	495	77.4%	83.0	14.0	F
	Subtotal						
SE	Left Turn 2	500	462	92.5%	130.5	36.7	F
	Left Turn	620	593	95.6%	81.1	32.5	F
	Right Turn	130	128	98.5%	70.8	29.3	E
	Subtotal	1250	1183	94.7%	99.4	32.1	F
EB	Left Turn	190	166	87.6%	57.5	6.4	E
	Through	540	501	92.7%	46.3	3.7	D
	Right Turn	40	42	104.0%	42.6	10.2	D
	Subtotal	770	709	92.1%	48.9	4.1	D
SB	Left Turn	130	99	76.0%	73.5	4.8	E
	Through	200	141	70.6%	39.6	6.5	D
	Right Turn	330	240	72.7%	53.7	4.1	D
	Subtotal						
Total		2990	2627	87.9%	78.7	16.9	E

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	12	116.0%	45.8	21.1	D
	Through	30	30	98.7%	45.6	14.2	D
	Right Turn	100	106	105.6%	28.5	6.9	C
	Subtotal	140	147	104.9%	33.4	5.6	C
SB	Left Turn	180	139	77.3%	87.9	35.8	F
	Through	50	41	81.6%	59.6	24.6	E
	Right Turn	430	416	96.7%	43.2	22.5	D
	Subtotal	660	596	90.2%	54.9	25.0	D
EB	Left Turn	390	342	87.8%	75.1	19.4	E
	Through	730	631	86.4%	68.9	24.3	E
	Right Turn	10	8	76.0%	49.5	35.0	D
	Subtotal	1,130	981	86.8%	71.2	22.2	E
WB	Left Turn	140	146	104.0%	62.2	15.1	E
	Through	730	688	94.3%	34.3	6.2	C
	Right Turn	150	141	94.1%	31.7	8.3	C
	Subtotal	1,020	975	95.6%	38.2	6.4	D
Total		2,950	2,698	91.5%	53.5	10.5	D

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	360	354	98.3%	25.7	2.5	C
	Through						
	Right Turn	200	178	88.8%	28.0	12.7	C
	Subtotal	560	532	94.9%	26.2	3.9	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,010	835	82.7%	28.3	12.1	C
	Right Turn						
	Subtotal	1,010	835	82.7%	28.3	12.1	C
WB	Left Turn						
	Through	660	597	90.5%	10.2	3.6	B
	Right Turn						
	Subtotal	660	597	90.5%	10.2	3.6	B
Total		2,230	1,964	88.1%	22.1	6.4	C

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	23	76.0%	105.2	85.5	F
	Through						
	Right Turn	20	17	86.0%	131.9	92.1	F
	Subtotal	50	40	80.0%	114.9	85.3	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,180	969	82.1%	13.6	5.5	B
	Right Turn	30	24	81.3%	14.3	13.6	B
	Subtotal	1,210	994	82.1%	13.6	5.6	B
WB	Left Turn	20	16	82.0%	22.9	8.2	C
	Through	630	576	91.4%	1.8	1.2	A
	Right Turn						
	Subtotal	650	592	91.1%	2.3	1.3	A
Total		1,910	1,626	85.1%	11.7	4.2	B



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Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	190	186	97.7%	59.3	27.3	F
	Through						
	Right Turn	160	161	100.5%	12.7	5.2	B
	Subtotal	350	346	99.0%	37.7	17.8	E
EB	Left Turn	290	243	83.9%	19.5	4.6	C
	Through	920	744	80.9%	18.1	6.2	C
	Right Turn						
	Subtotal	1,210	987	81.6%	18.5	5.8	C
WB	Left Turn						
	Through	510	462	90.6%	3.7	2.7	A
	Right Turn	10	7	72.0%	2.9	2.0	A
	Subtotal	520	469	90.2%	3.7	2.7	A
Total		2,080	1,803	86.7%	18.3	6.3	C

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	29	97.3%	97.9	49.1	F
	Through	120	106	88.3%	63.3	23.0	E
	Right Turn	120	107	89.3%	45.7	18.2	D
	Subtotal	270	242	89.8%	60.9	24.0	E
SB	Left Turn	80	57	71.0%	133.9	57.6	F
	Through	150	125	83.5%	42.1	5.4	D
	Right Turn	140	110	78.3%	30.4	5.7	C
	Subtotal	370	292	78.8%	55.8	10.0	E
EB	Left Turn	290	243	83.9%	110.6	29.3	F
	Through	710	602	84.8%	52.6	12.2	D
	Right Turn	110	94	85.8%	50.1	14.3	D
	Subtotal	1,110	940	84.6%	67.2	16.0	E
WB	Left Turn	50	40	80.8%	44.6	10.8	D
	Through	350	333	95.2%	38.3	13.7	D
	Right Turn	230	209	90.8%	38.7	24.4	D
	Subtotal	630	582	92.4%	39.0	16.3	D
Total		2,380	2,056	86.4%	56.7	12.4	E

**Intersection 15**                      **Riverside Blvd/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	64	107.3%	50.6	18.7	D
	Through	230	218	94.8%	25.0	3.2	C
	Right Turn	70	75	106.9%	18.1	4.9	B
	Subtotal	360	357	99.2%	28.6	5.1	C
SB	Left Turn	90	86	95.1%	44.3	9.0	D
	Through	320	319	99.6%	30.0	4.1	C
	Right Turn	40	43	108.0%	13.2	4.0	B
	Subtotal	450	448	99.5%	31.2	5.0	C
EB	Left Turn	40	38	94.0%	97.0	22.8	F
	Through	690	633	91.8%	70.3	26.2	E
	Right Turn	340	316	92.8%	59.8	24.8	E
	Subtotal	1,070	986	92.2%	68.0	25.8	E
WB	Left Turn	200	207	103.4%	52.5	8.1	D
	Through	440	454	103.2%	15.3	1.6	B
	Right Turn	100	102	102.4%	6.4	1.0	A
	Subtotal	740	763	103.1%	24.3	3.3	C
<b>Total</b>		<b>2,620</b>	<b>2,554</b>	<b>97.5%</b>	<b>43.0</b>	<b>9.7</b>	<b>D</b>

**Intersection 16**                      **S. River Rd/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	640	551	86.2%	56.8	1.3	E
	Right Turn	820	772	94.2%	15.9	1.0	B
	Subtotal	1,460	1,324	90.7%	32.9	0.7	C
SB	Left Turn	300	254	84.7%	73.3	2.9	E
	Through	500	422	84.4%	25.1	9.2	C
	Right Turn						
	Subtotal	800	676	84.6%	43.4	5.4	D
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	1,000	1,007	100.7%	38.2	3.6	D
	Through						
	Right Turn	170	169	99.2%	13.9	2.0	B
	Subtotal	1,170	1,176	100.5%	34.7	3.5	C
<b>Total</b>		<b>3,430</b>	<b>3,176</b>	<b>92.6%</b>	<b>35.8</b>	<b>1.7</b>	<b>D</b>

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Intersection 17                      Jefferson Blvd/Circle St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	1,090	956	87.7%	7.7	2.0	A
	Right Turn	190	173	91.0%	11.2	8.9	B
	Subtotal	1,280	1,129	88.2%	8.2	2.8	A
SB	Left Turn	150	134	89.2%	31.7	14.1	D
	Through	1,610	1,545	95.9%	6.4	0.8	A
	Right Turn	10	8	76.0%	3.5	2.3	A
	Subtotal	1,770	1,686	95.3%	8.5	1.7	A
EB	Left Turn	10	11	106.4%	126.8	101.7	F
	Through						
	Right Turn						
	Subtotal	10	11	106.4%	126.8	101.7	F
WB	Left Turn	70	40	57.0%	205.6	71.6	F
	Through						
	Right Turn	40	35	88.4%	11.0	9.2	B
	Subtotal	110	75	68.4%	115.8	50.8	F
Total		3,170	2,901	91.5%	11.5	1.7	B

Intersection 18                      S. River Rd/Circle St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	29	95.0%	54.5	14.6	D
	Through	1,140	1,153	101.2%	31.3	3.5	C
	Right Turn	10	11	106.4%	22.8	15.3	C
	Subtotal	1,180	1,192	101.1%	31.8	3.4	C
SB	Left Turn	90	72	79.8%	58.4	5.8	E
	Through	1,340	1,322	98.7%	12.9	2.6	B
	Right Turn	70	62	88.5%	13.5	3.7	B
	Subtotal	1,500	1,456	97.1%	15.2	2.5	B
EB	Left Turn	190	143	75.4%	150.5	63.0	F
	Through						
	Right Turn	150	114	76.0%	64.8	38.3	E
	Subtotal	340	257	75.7%	112.7	53.9	F
WB	Left Turn						
	Through						
	Right Turn	130	117	90.3%	27.5	8.6	C
	Subtotal	130	117	90.3%	27.5	8.6	C
Total		3,150	3,023	96.0%	30.5	4.9	C

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	50	52	103.4%	135.0	25.4	F
	Through	1,150	1,021	88.8%	97.3	29.7	F
	Right Turn	150	127	84.9%	96.0	31.8	F
	Subtotal	1,350	1,200	88.9%	98.9	29.6	F
SB	Left Turn	330	283	85.9%	93.5	18.3	F
	Through	1,320	1,245	94.3%	30.3	3.0	C
	Right Turn	30	29	96.3%	27.1	6.5	C
	Subtotal	1,680	1,557	92.7%	41.9	4.6	D
EB	Left Turn	30	29	95.0%	70.2	25.9	E
	Through	70	71	102.1%	49.0	9.7	D
	Right Turn	60	65	108.9%	41.0	13.4	D
	Subtotal	160	165	103.3%	49.3	9.7	D
WB	Left Turn	260	226	87.0%	85.7	25.2	F
	Through	60	55	91.2%	48.7	14.9	D
	Right Turn	100	101	100.7%	32.7	15.5	C
	Subtotal	420	382	90.8%	66.9	20.1	E
<b>Total</b>		<b>3,610</b>	<b>3,304</b>	<b>91.5%</b>	<b>66.0</b>	<b>13.2</b>	<b>E</b>

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	110	107	97.4%	58.0	14.8	E
	Through	880	857	97.4%	18.5	3.2	B
	Right Turn						
	Subtotal	990	964	97.4%	23.0	3.3	C
SB	Left Turn	70	57	81.4%	48.7	8.0	D
	Through	1,120	1,010	90.2%	24.6	4.7	C
	Right Turn	300	290	96.8%	26.3	6.1	C
	Subtotal	1,490	1,358	91.1%	26.0	5.1	C
EB	Left Turn	180	155	86.3%	51.9	15.6	D
	Through						
	Right Turn	350	282	80.5%	22.4	6.1	C
	Subtotal	530	437	82.5%	32.8	8.8	C
WB	Left Turn						
	Through						
	Right Turn	120	119	99.4%	16.8	5.1	B
	Subtotal	120	119	99.4%	16.8	5.1	B
<b>Total</b>		<b>3,130</b>	<b>2,879</b>	<b>92.0%</b>	<b>25.7</b>	<b>2.9</b>	<b>C</b>

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	930	803	86.4%	13.1	1.0	B
	Through	670	588	87.7%	2.4	0.3	A
	Right Turn						
	Subtotal	1,600	1,391	86.9%	8.6	0.5	A
SB	Left Turn						
	Through	520	497	95.7%	34.5	8.7	C
	Right Turn	650	583	89.7%	72.2	18.6	E
	Subtotal	1,170	1,080	92.3%	54.9	13.3	D
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
<b>Total</b>		<b>2,770</b>	<b>2,472</b>	<b>89.2%</b>	<b>28.8</b>	<b>5.8</b>	<b>C</b>

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	110	105	95.3%	51.3	9.6	D
	Through	1,450	1,224	84.4%	31.6	4.2	C
	Right Turn	260	212	81.4%	12.9	1.9	B
	Subtotal	1,820	1,541	84.6%	30.4	4.0	C
SB	Left Turn	290	269	92.6%	70.9	23.8	E
	Through	920	903	98.1%	22.8	1.7	C
	Right Turn	50	52	104.1%	5.8	1.2	A
	Subtotal	1,260	1,223	97.1%	32.9	6.8	C
EB	Left Turn	80	86	106.9%	42.5	7.5	D
	Through	80	67	83.1%	41.4	7.0	D
	Right Turn	80	82	102.6%	26.7	7.9	C
	Subtotal	240	234	97.5%	36.6	6.5	D
WB	Left Turn	110	103	94.0%	46.2	13.5	D
	Through	60	61	102.0%	40.6	13.3	D
	Right Turn	90	81	90.4%	21.1	9.8	C
	Subtotal	260	246	94.6%	37.0	11.8	D
<b>Total</b>		<b>3,580</b>	<b>3,244</b>	<b>90.6%</b>	<b>32.2</b>	<b>3.9</b>	<b>C</b>

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	40	30	75.1%	70.6	15.8	E
	Through	1,190	1,028	86.4%	51.2	11.0	D
	Right Turn	50	39	77.5%	30.4	10.7	C
	Subtotal	1,280	1,097	85.7%	50.9	10.7	D
SB	Left Turn	60	58	96.9%	59.4	9.0	E
	Through	320	306	95.6%	12.9	1.8	B
	Right Turn	210	208	99.0%	6.2	1.6	A
	Subtotal	590	572	96.9%	15.2	2.9	B
EB	Left Turn	330	250	75.9%	123.1	50.1	F
	Through	50	44	88.2%	45.7	9.0	D
	Right Turn	230	201	87.6%	28.7	8.7	C
	Subtotal	610	496	81.3%	77.4	28.4	E
WB	Left Turn	30	25	82.3%	43.1	11.8	D
	Through	20	20	98.8%	83.6	43.5	F
	Right Turn	60	55	91.2%	69.8	49.2	E
	Subtotal	110	99	90.2%	66.2	37.7	E
<b>Total</b>		<b>2,590</b>	<b>2,264</b>	<b>87.4%</b>	<b>48.2</b>	<b>10.7</b>	<b>D</b>

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	61	87.4%	106.3	23.8	F
	Through	1,940	1,817	93.7%	67.1	17.5	E
	Right Turn	20	20	100.7%	75.9	33.6	E
	Subtotal	2,030	1,898	93.5%	68.5	18.0	E
SB	Left Turn	10	10	98.8%	59.3	35.7	E
	Through	1,170	1,098	93.8%	28.0	6.3	C
	Right Turn	190	182	95.8%	18.9	5.3	B
	Subtotal	1,370	1,290	94.1%	27.0	6.3	C
EB	Left Turn	50	46	92.0%	83.9	34.5	F
	Through	10	10	95.0%	55.2	17.1	E
	Right Turn	140	146	104.2%	29.6	12.4	C
	Subtotal	200	201	100.7%	43.3	17.8	D
WB	Left Turn	70	65	92.8%	71.6	34.5	E
	Through	40	36	90.3%	51.2	15.2	D
	Right Turn	10	10	102.6%	36.7	20.9	D
	Subtotal	120	111	92.8%	62.8	25.4	E
<b>Total</b>		<b>3,720</b>	<b>3,501</b>	<b>94.1%</b>	<b>51.6</b>	<b>10.0</b>	<b>D</b>

SimTraffic Post-Processor  
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Intersection 5                      Jefferson Blvd/Locks Dr                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	1,970	1,916	97.3%	16.7	7.7	B
	Right Turn	110	115	104.3%	7.2	4.0	A
	Subtotal	2,080	2,031	97.6%	16.2	7.3	B
SB	Left Turn	30	26	87.4%	57.5	13.9	E
	Through	1,350	1,263	93.6%	8.9	1.8	A
	Right Turn						
	Subtotal	1,380	1,289	93.4%	9.9	1.7	A
EB	Left Turn	5	5	91.2%	22.1	22.7	C
	Through						
	Right Turn						
	Subtotal	5	5	91.2%	22.1	22.7	C
WB	Left Turn	50	56	111.7%	41.9	13.8	D
	Through	5	3	68.4%	33.1	38.9	C
	Right Turn	50	57	113.2%	46.0	5.7	D
	Subtotal	105	116	110.4%	44.6	9.1	D
Total		3,570	3,441	96.4%	14.8	4.3	B

Intersection 6                      3rd St/W St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	100	91	91.2%	0.5	0.2	A
	Right Turn						
	Subtotal	100	91	91.2%	0.5	0.2	A
SB	Left Turn						
	Through	160	162	101.3%	0.2	0.1	A
	Right Turn						
	Subtotal	160	162	101.3%	0.2	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	30	21	70.7%	6.1	1.4	A
	Through						
	Right Turn	50	47	93.6%	3.2	0.4	A
	Subtotal	80	68	85.0%	4.0	0.6	A
Total		340	321	94.5%	1.1	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
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Intersection 7                      5th St/W St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	180	166	92.4%	15.4	2.9	B
	Left Turn 2	130	122	93.8%	22.2	1.4	C
	Left Turn	40	31	78.0%	22.1	1.5	C
	Through	370	350	94.6%	22.8	1.5	C
	Subtotal	720	670	93.0%	20.8	1.1	C
SB	Right Turn 3	10	10	104.0%	28.7	21.1	C
	Right Turn 2	50	52	103.2%	35.1	9.8	D
	Right Turn	190	189	99.4%	35.1	2.3	D
	Through	180	179	99.3%	36.4	3.1	D
	Subtotal	430	430	99.9%	35.4	3.4	D
WB	Left Turn 3	90	98	108.4%	29.9	3.7	C
	Left Turn 2	380	346	90.9%	31.2	3.4	C
	Left Turn	80	76	95.0%	25.3	4.5	C
	Through	50	45	89.6%	28.8	6.4	C
	Right Turn	260	257	98.8%	14.7	2.9	B
	Subtotal	860	821	95.4%	25.1	2.0	C
Total		2,010	1,920	95.5%	25.9	0.9	C

Intersection 8                      3rd St/X St                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	90	84	93.3%	1.2	0.4	A
	Right Turn	170	153	90.1%	0.8	0.2	A
	Subtotal	260	237	91.2%	0.9	0.2	A
SB	Left Turn	90	85	94.7%	2.8	1.2	A
	Through	100	101	100.8%	0.5	0.2	A
	Right Turn						
	Subtotal	190	186	97.9%	1.6	0.7	A
EB	Left Turn	10	6	56.0%	5.8	6.7	A
	Through	180	189	104.9%	8.9	0.9	A
	Right Turn	90	85	94.2%	3.4	0.8	A
	Subtotal	280	279	99.7%	7.2	0.8	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		730	702	96.2%	3.6	0.4	A



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Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	460	418	91.0%	50.4	3.2	D
	Right Turn	310	268	86.3%	53.4	5.8	D
	Subtotal	770	686	89.1%	51.6	3.8	D
SE	Left Turn 2	180	170	94.2%	40.0	7.8	D
	Left Turn	760	762	100.2%	38.5	6.4	D
	Right Turn	80	75	93.5%	39.1	8.6	D
	Subtotal	1020	1006	98.6%	38.9	6.6	D
EB	Left Turn	80	80	99.5%	45.8	8.3	D
	Through	340	333	98.0%	39.8	3.5	D
	Right Turn	20	19	94.0%	26.6	14.0	C
	Subtotal	440	432	98.1%	40.5	3.8	D
SB	Left Turn	170	176	103.8%	32.6	11.6	C
	Through	100	102	101.6%	12.0	1.9	B
	Right Turn						
	Subtotal	270	278	103.0%	25.3	7.9	C
Total		2500	2402	96.1%	41.4	3.3	D

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	62	102.7%	47.5	8.2	D
	Right Turn	110	110	100.4%	29.9	7.2	C
	Subtotal	170	172	101.2%	36.3	7.0	D
SB	Left Turn	90	87	96.4%	62.5	10.0	E
	Through	30	30	98.7%	71.0	16.0	E
	Right Turn	190	196	103.2%	30.1	12.2	C
	Subtotal	310	312	100.8%	43.2	10.5	D
EB	Left Turn	480	433	90.3%	63.9	12.6	E
	Through	620	556	89.6%	35.3	5.3	D
	Right Turn	10	9	92.0%	36.6	14.5	D
	Subtotal	1,110	998	89.9%	47.9	7.4	D
WB	Left Turn	80	74	92.5%	67.0	13.7	E
	Through	890	866	97.3%	51.8	8.8	D
	Right Turn	130	125	96.3%	53.1	11.5	D
	Subtotal	1,100	1,065	96.8%	53.0	9.3	D
Total		2,690	2,547	94.7%	48.9	5.0	D

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	650	626	96.4%	26.0	3.0	C
	Through						
	Right Turn	360	330	91.8%	36.3	23.9	D
	Subtotal	1,010	957	94.7%	29.8	9.0	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	820	737	89.9%	24.8	11.0	C
	Right Turn						
	Subtotal	820	737	89.9%	24.8	11.0	C
WB	Left Turn						
	Through	450	400	89.0%	9.4	2.0	A
	Right Turn						
	Subtotal	450	400	89.0%	9.4	2.0	A
Total		2,280	2,094	91.9%	24.1	7.8	C

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	27	89.3%	71.3	52.6	F
	Through						
	Right Turn	30	27	90.7%	73.4	52.0	F
	Subtotal	60	54	90.0%	73.3	48.8	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,120	1,005	89.7%	9.6	5.5	A
	Right Turn	60	51	85.3%	8.2	6.1	A
	Subtotal	1,180	1,056	89.5%	9.5	5.5	A
WB	Left Turn	20	18	88.0%	22.0	11.4	C
	Through	420	376	89.5%	0.9	0.4	A
	Right Turn						
	Subtotal	440	394	89.5%	2.0	1.1	A
Total		1,680	1,504	89.5%	9.8	4.7	A

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Intersection 13                      3rd St (North)/Broadway                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	110	106	96.0%	19.7	8.3	C
	Through						
	Right Turn	80	80	100.0%	6.6	1.6	A
	Subtotal	190	186	97.7%	14.2	6.0	B
EB	Left Turn	250	230	92.2%	13.6	5.1	B
	Through	890	793	89.1%	12.2	5.6	B
	Right Turn						
	Subtotal	1,140	1,023	89.8%	12.5	5.4	B
WB	Left Turn						
	Through	370	321	86.7%	2.2	0.9	A
	Right Turn	10	8	80.0%	1.8	0.4	A
	Subtotal	380	329	86.5%	2.2	0.9	A
Total		1,710	1,538	89.9%	10.5	4.1	B

Intersection 14                      5th St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	50	40	80.8%	79.9	37.9	E
	Through	230	237	103.1%	82.1	45.6	F
	Right Turn	130	128	98.8%	71.8	42.9	E
	Subtotal	410	406	99.0%	78.8	44.1	E
SB	Left Turn	40	29	72.0%	196.9	99.9	F
	Through	70	71	101.7%	28.7	2.1	C
	Right Turn	90	84	93.8%	15.6	2.6	B
	Subtotal	200	184	92.2%	46.8	16.5	D
EB	Left Turn	300	260	86.7%	90.0	28.8	F
	Through	570	515	90.4%	44.0	11.2	D
	Right Turn	130	116	89.2%	41.0	13.1	D
	Subtotal	1,000	891	89.1%	57.5	16.2	E
WB	Left Turn	150	123	82.1%	115.0	42.2	F
	Through	240	198	82.7%	108.8	52.3	F
	Right Turn	240	198	82.7%	138.4	60.4	F
	Subtotal	630	520	82.5%	121.8	52.1	F
Total		2,240	2,002	89.4%	77.0	23.6	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
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Intersection 15                      Riverside Blvd/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	200	194	97.2%	24.7	3.8	C
	Through	580	557	96.1%	16.8	1.4	B
	Right Turn	80	73	91.5%	12.1	3.5	B
	Subtotal	860	825	95.9%	18.3	1.7	B
SB	Left Turn	10	10	104.0%	27.1	18.4	C
	Through	90	95	105.3%	15.6	2.6	B
	Right Turn	40	40	99.0%	9.7	3.1	A
	Subtotal	140	145	103.4%	14.7	3.0	B
EB	Left Turn	60	58	96.0%	40.1	8.0	D
	Through	440	451	102.5%	21.7	2.6	C
	Right Turn	60	61	102.0%	4.2	2.5	A
	Subtotal	560	570	101.8%	21.6	2.7	C
WB	Left Turn	50	52	104.0%	28.6	6.7	C
	Through	440	443	100.6%	19.5	2.1	B
	Right Turn	90	89	99.1%	6.6	1.6	A
	Subtotal	580	584	100.7%	18.4	2.2	B
Total		2,140	2,124	99.2%	18.9	1.3	B

**Intersection 17**                      **Jefferson Blvd/Circle St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	10	98.8%	80.3	25.8	F
	Through	1,680	1,417	84.3%	30.8	7.3	C
	Right Turn	390	342	87.6%	21.3	5.7	C
	Subtotal	2,080	1,768	85.0%	29.3	7.0	C
SB	Left Turn	220	200	90.9%	94.8	29.9	F
	Through	880	878	99.8%	15.2	2.5	B
	Right Turn	10	12	121.6%	11.5	10.8	B
	Subtotal	1,110	1,090	98.2%	30.3	8.6	C
EB	Left Turn	10	7	68.4%	76.9	46.3	E
	Through	20	16	81.7%	49.7	22.5	D
	Right Turn	10	9	87.4%	15.2	12.3	B
	Subtotal	40	32	79.8%	51.4	11.5	D
WB	Left Turn	410	386	94.2%	56.1	15.0	E
	Through	35	33	95.5%	45.8	9.3	D
	Right Turn	130	123	94.4%	35.8	8.8	D
	Subtotal	575	542	94.3%	50.6	12.2	D
<b>Total</b>		<b>3,805</b>	<b>3,433</b>	<b>90.2%</b>	<b>33.0</b>	<b>3.9</b>	<b>C</b>

**Intersection 18**                      **S. River Rd/Circle St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	65	93.4%	87.2	8.5	F
	Through	940	850	90.4%	55.0	5.4	D
	Right Turn	620	560	90.3%	34.8	5.1	C
	Subtotal	1,630	1,475	90.5%	48.9	3.9	D
SB	Left Turn	90	90	100.5%	57.9	10.4	E
	Through	280	260	92.7%	32.6	4.5	C
	Right Turn	40	37	93.1%	25.5	7.9	C
	Subtotal	410	387	94.4%	38.2	4.4	D
EB	Left Turn	35	30	85.8%	57.1	8.1	E
	Through	410	370	90.2%	43.6	4.1	D
	Right Turn	180	162	89.9%	37.9	7.5	D
	Subtotal	625	562	89.9%	42.9	4.6	D
WB	Left Turn	380	352	92.5%	66.0	9.7	E
	Through	470	445	94.7%	33.6	7.6	C
	Right Turn	250	229	91.7%	29.5	7.1	C
	Subtotal	1,100	1,026	93.2%	43.8	8.1	D
<b>Total</b>		<b>3,765</b>	<b>3,450</b>	<b>91.6%</b>	<b>45.2</b>	<b>3.9</b>	<b>D</b>

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	45	74.7%	115.9	44.1	F
	Through	1,950	1,647	84.4%	79.0	35.8	E
	Right Turn	100	75	75.2%	74.8	37.5	E
	Subtotal	2,110	1,767	83.7%	79.7	35.9	E
SB	Left Turn	80	76	95.5%	106.9	48.3	F
	Through	1,200	1,160	96.6%	14.1	5.5	B
	Right Turn	20	17	87.4%	14.0	9.0	B
	Subtotal	1,300	1,254	96.4%	20.4	8.3	C
EB	Left Turn	40	45	113.1%	107.2	86.9	F
	Through	30	31	103.9%	55.4	12.9	E
	Right Turn	30	28	93.7%	32.0	16.7	C
	Subtotal	100	105	104.5%	71.0	43.4	E
WB	Left Turn	60	55	92.5%	77.1	45.3	E
	Through	60	58	96.9%	52.3	10.3	D
	Right Turn	90	92	102.6%	47.3	12.4	D
	Subtotal	210	206	98.1%	58.2	23.4	E
<b>Total</b>		<b>3,720</b>	<b>3,331</b>	<b>89.5%</b>	<b>55.7</b>	<b>19.5</b>	<b>E</b>

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	120	115	95.6%	67.6	25.7	E
	Through	1,430	1,306	91.3%	67.2	30.9	E
	Right Turn						
	Subtotal	1,550	1,420	91.6%	67.3	30.4	E
SB	Left Turn	80	73	90.7%	41.3	8.4	D
	Through	680	619	91.1%	15.8	2.3	B
	Right Turn	80	81	101.2%	13.7	2.9	B
	Subtotal	840	773	92.0%	18.0	2.6	B
EB	Left Turn	120	105	87.1%	42.4	9.4	D
	Through						
	Right Turn	70	60	85.2%	7.8	1.6	A
	Subtotal	190	164	86.4%	30.0	7.0	C
WB	Left Turn						
	Through						
	Right Turn	80	82	102.1%	23.0	5.4	C
	Subtotal	80	82	102.1%	23.0	5.4	C
<b>Total</b>		<b>2,660</b>	<b>2,439</b>	<b>91.7%</b>	<b>47.5</b>	<b>18.2</b>	<b>D</b>

**Intersection 1**                      **S River Rd/US 50 EB On-Ramp**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	410	376	91.8%	32.5	5.2	C
	Through	510	448	87.9%	2.3	0.2	A
	Right Turn						
	Subtotal	920	825	89.6%	16.1	3.0	B
SB	Left Turn						
	Through	960	926	96.5%	17.7	5.8	B
	Right Turn	990	951	96.1%	28.2	4.8	C
	Subtotal	1,950	1,878	96.3%	23.0	4.4	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
<b>Total</b>		<b>2,870</b>	<b>2,702</b>	<b>94.2%</b>	<b>20.9</b>	<b>3.4</b>	<b>C</b>

**Intersection 2**                      **Jefferson Blvd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	52	86.1%	46.5	8.6	D
	Through	980	887	90.5%	30.2	8.4	C
	Right Turn	50	39	77.5%	7.3	2.4	A
	Subtotal	1,090	977	89.7%	30.2	7.5	C
SB	Left Turn	110	101	91.9%	45.8	9.3	D
	Through	1,360	1,346	98.9%	38.9	10.0	D
	Right Turn	90	91	101.3%	16.0	6.9	B
	Subtotal	1,560	1,538	98.6%	38.0	9.7	D
EB	Left Turn	70	62	87.9%	38.5	12.3	D
	Through	70	71	101.5%	42.4	9.1	D
	Right Turn	100	100	99.6%	30.7	8.3	C
	Subtotal	240	232	96.7%	36.4	8.8	D
WB	Left Turn	130	113	87.1%	35.8	4.6	D
	Through	105	96	91.2%	26.6	3.7	C
	Right Turn	190	167	88.0%	14.6	3.0	B
	Subtotal	425	376	88.5%	24.1	2.6	C
<b>Total</b>		<b>3,315</b>	<b>3,124</b>	<b>94.2%</b>	<b>33.7</b>	<b>6.1</b>	<b>C</b>

**Intersection 3**                      **S River Rd/15th St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	90	76	84.0%	44.4	7.1	D
	Through	670	620	92.5%	23.5	2.0	C
	Right Turn	10	9	91.2%	11.0	7.9	B
	Subtotal	770	705	91.5%	25.6	2.0	C
SB	Left Turn	70	63	90.7%	51.5	10.5	D
	Through	840	768	91.5%	27.3	2.2	C
	Right Turn	260	245	94.1%	24.9	3.4	C
	Subtotal	1,170	1,077	92.0%	28.1	2.1	C
EB	Left Turn	90	87	96.7%	55.8	19.8	E
	Through	40	32	80.8%	37.2	13.5	D
	Right Turn	80	75	94.1%	17.5	6.3	B
	Subtotal	210	195	92.6%	38.2	8.8	D
WB	Left Turn	10	11	106.4%	31.6	22.6	C
	Through	50	44	87.4%	41.9	9.7	D
	Right Turn	70	74	106.4%	18.1	10.1	B
	Subtotal	130	129	99.1%	27.6	9.5	C
<b>Total</b>		<b>2,280</b>	<b>2,104</b>	<b>92.3%</b>	<b>28.2</b>	<b>1.8</b>	<b>C</b>

**Intersection 4**                      **Jefferson Blvd/Stone Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	69	98.3%	69.7	14.9	E
	Through	1,280	1,238	96.8%	20.0	6.2	B
	Right Turn	70	68	97.2%	16.6	6.9	B
	Subtotal	1,420	1,375	96.8%	22.3	5.5	C
SB	Left Turn	10	6	60.8%	63.7	39.8	E
	Through	1,580	1,457	92.2%	32.3	3.7	C
	Right Turn	130	118	90.6%	23.6	4.3	C
	Subtotal	1,720	1,581	91.9%	31.8	3.6	C
EB	Left Turn	40	42	104.5%	75.1	15.4	E
	Through	10	14	140.6%	45.4	23.3	D
	Right Turn	120	121	100.7%	30.8	7.7	C
	Subtotal	170	177	103.9%	42.3	7.4	D
WB	Left Turn	100	93	93.5%	67.2	23.7	E
	Through	30	30	98.8%	48.6	26.1	D
	Right Turn	10	10	98.8%	38.7	39.3	D
	Subtotal	140	133	95.0%	61.1	23.9	E
<b>Total</b>		<b>3,450</b>	<b>3,266</b>	<b>94.7%</b>	<b>29.7</b>	<b>4.2</b>	<b>C</b>



**Intersection 5**                      **Jefferson Blvd/Locks Dr**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	5	4	76.0%	58.2	41.6	E
	Through	1,390	1,344	96.7%	6.5	1.3	A
	Right Turn	50	52	104.9%	2.1	0.5	A
	Subtotal	1,445	1,400	96.9%	6.5	1.3	A
SB	Left Turn	30	25	82.3%	67.0	11.6	E
	Through	1,760	1,623	92.2%	13.6	3.8	B
	Right Turn	10	10	98.8%	9.2	8.2	A
	Subtotal	1,800	1,658	92.1%	14.3	3.8	B
EB	Left Turn	5	3	68.4%	40.4	39.0	D
	Through	5	3	60.8%	34.4	30.1	C
	Right Turn	5	5	91.2%	14.4	17.5	B
	Subtotal	15	11	73.5%	42.0	21.2	D
WB	Left Turn	110	114	103.6%	47.2	5.8	D
	Through	5	4	76.0%	45.1	29.4	D
	Right Turn	20	17	85.5%	13.7	8.9	B
	Subtotal	135	135	99.9%	43.5	6.5	D
<b>Total</b>		<b>3,395</b>	<b>3,204</b>	<b>94.4%</b>	<b>12.2</b>	<b>2.2</b>	<b>B</b>

**Intersection 6**                      **3rd St/W St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	70	54	76.6%	0.6	0.1	A
	Right Turn						
	Subtotal	70	54	76.6%	0.6	0.1	A
SB	Left Turn						
	Through	720	716	99.4%	0.7	0.1	A
	Right Turn						
	Subtotal	720	716	99.4%	0.7	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	37	92.0%	10.6	3.9	B
	Through						
	Right Turn	20	18	90.0%	3.1	0.7	A
	Subtotal	60	55	91.3%	8.3	2.9	A
<b>Total</b>		<b>850</b>	<b>824</b>	<b>97.0%</b>	<b>1.2</b>	<b>0.3</b>	<b>A</b>

**Intersection 7**                      **5th St/W St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn 3	560	504	90.0%	32.9	1.3	C
	Left Turn 2	70	75	106.9%	70.0	6.2	E
	Left Turn	10	11	108.0%	68.8	7.4	E
	Through	420	418	99.6%	69.2	7.4	E
	Subtotal	1,060	1,008	95.1%	51.1	4.0	D
SB	Right Turn 3	10	4	44.0%	183.3	117.9	F
	Right Turn 2	90	59	65.8%	240.7	19.8	F
	Right Turn	400	258	64.6%	242.2	21.9	F
	Through	180	112	62.4%	243.7	21.0	F
	Subtotal	680	434	63.9%	242.3	18.5	F
WB	Left Turn 3	150	130	86.4%	50.3	8.4	D
	Left Turn 2	1,580	1,362	86.2%	49.8	3.6	D
	Left Turn	350	324	92.5%	27.9	4.8	C
	Through	40	42	105.0%	24.0	6.6	C
	Right Turn	160	162	101.3%	16.5	4.4	B
	Subtotal	2,280	2,019	88.5%	43.1	3.6	D
<b>Total</b>		<b>4,020</b>	<b>3,461</b>	<b>86.1%</b>	<b>70.3</b>	<b>1.5</b>	<b>E</b>

**Intersection 8**                      **3rd St/X St**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through	60	42	70.0%	2.2	0.4	A
	Right Turn	250	216	86.4%	1.6	1.6	A
Subtotal		310	258	83.2%	1.7	1.3	A
SB	Left Turn	470	466	99.1%	6.5	3.5	A
	Through	290	286	98.5%	3.0	2.1	A
	Right Turn						
Subtotal		760	751	98.8%	5.2	3.0	A
EB	Left Turn	10	12	120.0%	16.5	18.4	C
	Through	60	54	90.0%	19.2	9.6	C
	Right Turn	80	69	86.0%	4.9	1.8	A
Subtotal		150	135	89.9%	12.5	7.8	B
WB	Left Turn						
	Through						
	Right Turn						
Subtotal							
<b>Total</b>		<b>1,220</b>	<b>1,144</b>	<b>93.8%</b>	<b>5.2</b>	<b>2.4</b>	<b>A</b>

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

Broadway Bridge PA ED  
Design Year+ Alignment D Conditions  
PM Peak Hour

Intersection 9                      5th St/X St                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	410	328	80.1%	79.9	14.5	E
	Through	240	178	74.2%	72.3	41.4	E
	Right Turn	650	506	77.9%	76.7	21.8	E
SE	Subtotal						
	Left Turn 2	460	444	96.4%	106.7	54.9	F
	Left Turn	590	570	96.7%	72.6	29.6	E
	Right Turn	170	181	106.6%	67.2	28.0	E
EB	Subtotal	1220	1195	98.0%	84.7	38.9	F
	Left Turn	190	180	94.9%	65.4	25.5	E
	Through	560	508	90.8%	49.2	8.7	D
	Right Turn	30	30	98.7%	40.7	10.6	D
SB	Subtotal	780	718	92.1%	52.9	11.6	D
	Left Turn	120	90	74.7%	79.6	18.3	E
	Through	210	154	73.1%	43.9	12.5	D
	Right Turn	330	243	73.7%	57.2	15.4	E
Total		2980	2663	89.4%	71.8	21.8	E

Intersection 10                      Front St/Broadway                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	10	10	96.0%	49.9	19.6	D
	Through	30	26	88.0%	43.6	19.9	D
	Right Turn	110	107	97.5%	27.4	8.7	C
	Subtotal	150	143	95.5%	32.6	10.1	C
SB	Left Turn	180	155	86.2%	80.5	30.5	F
	Through	50	51	102.4%	50.2	17.4	D
	Right Turn	440	438	99.5%	34.8	18.4	C
	Subtotal	670	644	96.2%	46.6	18.6	D
EB	Left Turn	390	320	82.1%	90.2	29.1	F
	Through	730	574	78.6%	88.6	48.4	F
	Right Turn	10	10	100.0%	78.4	39.7	E
	Subtotal	1,130	904	80.0%	89.4	41.0	F
WB	Left Turn	140	132	94.3%	58.0	7.9	E
	Through	730	710	97.3%	34.5	5.9	C
	Right Turn	160	152	94.8%	31.9	6.0	C
	Subtotal	1,030	994	96.5%	37.2	5.7	D
Total		2,980	2,685	90.1%	56.1	13.1	E

**Intersection 11**                      **I-5 NB Off-Ramp/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	360	363	100.8%	26.8	2.6	C
	Through						
	Right Turn	190	166	87.6%	48.0	37.5	D
	Subtotal	550	529	96.2%	33.4	11.7	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,020	791	77.5%	35.1	15.7	D
	Right Turn						
	Subtotal	1,020	791	77.5%	35.1	15.7	D
WB	Left Turn						
	Through	670	613	91.5%	9.4	4.0	A
	Right Turn						
	Subtotal	670	613	91.5%	9.4	4.0	A
<b>Total</b>		<b>2,240</b>	<b>1,933</b>	<b>86.3%</b>	<b>26.4</b>	<b>8.9</b>	<b>C</b>

**Intersection 12**                      **3rd St (South)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	30	20	66.7%	123.1	114.6	F
	Through						
	Right Turn	20	11	56.0%	158.0	75.7	F
	Subtotal	50	31	62.4%	127.8	84.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,180	917	77.7%	17.1	6.4	C
	Right Turn	30	28	92.0%	21.5	20.6	C
	Subtotal	1,210	945	78.1%	17.2	6.5	C
WB	Left Turn	20	19	94.0%	21.1	11.8	C
	Through	640	590	92.1%	1.4	0.2	A
	Right Turn						
	Subtotal	660	608	92.2%	2.0	0.6	A
<b>Total</b>		<b>1,920</b>	<b>1,584</b>	<b>82.5%</b>	<b>13.5</b>	<b>5.2</b>	<b>B</b>

**Intersection 13**                      **3rd St (North)/Broadway**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	190	164	86.1%	72.3	39.4	F
	Through						
	Right Turn	180	180	99.8%	16.7	7.6	C
	Subtotal	370	343	92.8%	44.0	23.9	E
EB	Left Turn	300	243	80.9%	22.6	5.5	C
	Through	920	684	74.3%	20.8	5.7	C
	Right Turn						
	Subtotal	1,220	926	75.9%	21.2	5.2	C
WB	Left Turn						
	Through	500	456	91.2%	3.7	4.1	A
	Right Turn	10	11	108.0%	3.0	3.2	A
	Subtotal	510	467	91.5%	3.7	4.1	A
<b>Total</b>		<b>2,100</b>	<b>1,736</b>	<b>82.7%</b>	<b>20.7</b>	<b>5.9</b>	<b>C</b>

**Intersection 14**                      **5th St/Broadway**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	30	25	84.0%	68.0	24.8	E
	Through	120	113	94.3%	54.8	14.2	D
	Right Turn	120	110	92.0%	42.3	17.7	D
	Subtotal	270	249	92.1%	50.9	15.3	D
SB	Left Turn	120	81	67.7%	145.4	68.3	F
	Through	150	125	83.2%	35.8	5.6	D
	Right Turn	140	129	92.3%	24.6	4.0	C
	Subtotal	410	335	81.8%	57.9	18.0	E
EB	Left Turn	300	235	78.3%	116.5	35.2	F
	Through	700	540	77.1%	60.0	13.2	E
	Right Turn	110	84	76.7%	58.1	17.4	E
	Subtotal	1,110	859	77.4%	75.3	19.0	E
WB	Left Turn	50	41	81.6%	53.7	23.7	D
	Through	340	328	96.4%	60.8	43.5	E
	Right Turn	230	194	84.3%	67.5	57.8	E
	Subtotal	620	562	90.7%	62.9	47.2	E
<b>Total</b>		<b>2,410</b>	<b>2,006</b>	<b>83.2%</b>	<b>65.3</b>	<b>20.9</b>	<b>E</b>

Intersection 15

Riverside Blvd/Broadway

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	60	54	89.3%	55.2	15.7	E
	Through	230	235	102.3%	30.0	2.9	C
	Right Turn	70	71	101.7%	18.4	3.3	B
	Subtotal	360	360	100.0%	31.6	4.0	C
SB	Left Turn	100	102	102.0%	75.3	31.3	E
	Through	320	329	102.9%	47.6	18.4	D
	Right Turn	40	44	109.0%	20.5	11.9	C
	Subtotal	460	475	103.2%	51.2	20.5	D
EB	Left Turn	40	39	98.0%	116.7	18.8	F
	Through	690	655	94.9%	73.8	18.3	E
	Right Turn	340	303	89.1%	64.5	19.6	E
	Subtotal	1,070	997	93.2%	72.6	19.0	E
WB	Left Turn	200	208	103.8%	56.2	13.9	E
	Through	450	441	98.0%	15.7	4.8	B
	Right Turn	100	106	106.0%	7.3	5.3	A
	Subtotal	750	754	100.6%	25.8	8.0	C
Total		2,640	2,586	98.0%	49.5	8.3	D

**Intersection 17**                      **Jefferson Blvd/Circle St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	20	17	83.6%	74.5	15.2	E
	Through	980	893	91.1%	48.8	5.6	D
	Right Turn	350	298	85.0%	29.1	4.1	C
	Subtotal	1,350	1,207	89.4%	44.3	5.1	D
SB	Left Turn	340	313	92.1%	60.1	10.6	E
	Through	1,240	1,226	98.9%	26.4	4.6	C
	Right Turn	10	5	53.2%	15.6	16.7	B
	Subtotal	1,590	1,545	97.2%	33.3	4.5	C
EB	Left Turn	10	10	95.0%	38.4	26.4	D
	Through	20	21	106.4%	49.6	10.0	D
	Right Turn	10	10	95.0%	27.5	16.0	C
	Subtotal	40	40	100.7%	42.7	11.2	D
WB	Left Turn	480	417	86.9%	33.3	3.5	C
	Through	30	23	76.0%	31.3	10.9	C
	Right Turn	100	89	88.5%	14.8	2.2	B
	Subtotal	610	529	86.7%	30.0	2.6	C
<b>Total</b>		<b>3,590</b>	<b>3,321</b>	<b>92.5%</b>	<b>36.9</b>	<b>3.3</b>	<b>D</b>

**Intersection 18**                      **S. River Rd/Circle St**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	80	68	84.6%	71.4	16.5	E
	Through	510	478	93.7%	56.6	8.1	E
	Right Turn	560	558	99.7%	32.9	9.7	C
	Subtotal	1,150	1,104	96.0%	45.7	7.7	D
SB	Left Turn	170	143	84.3%	127.7	39.0	F
	Through	520	427	82.1%	83.9	17.0	F
	Right Turn	170	145	85.2%	83.9	26.5	F
	Subtotal	860	715	83.1%	93.2	19.8	F
EB	Left Turn	20	19	96.9%	75.6	18.7	E
	Through	390	337	86.3%	62.7	7.2	E
	Right Turn	290	238	82.2%	56.3	12.1	E
	Subtotal	700	594	84.9%	60.5	8.8	E
WB	Left Turn	690	606	87.8%	83.6	32.7	F
	Through	360	326	90.6%	57.2	30.3	E
	Right Turn	130	112	86.5%	51.6	29.6	D
	Subtotal	1,180	1,045	88.5%	72.0	32.7	E
<b>Total</b>		<b>3,890</b>	<b>3,457</b>	<b>88.9%</b>	<b>65.8</b>	<b>10.1</b>	<b>E</b>

**Intersection 19**                      **Jefferson Blvd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	50	49	98.0%	93.0	21.2	F
	Through	1,240	1,103	89.0%	59.5	18.7	E
	Right Turn	160	146	91.0%	63.1	20.8	E
	Subtotal	1,450	1,298	89.5%	61.2	18.9	E
SB	Left Turn	230	211	91.5%	108.1	27.9	F
	Through	1,480	1,355	91.6%	27.6	2.2	C
	Right Turn	20	20	100.7%	24.1	15.4	C
	Subtotal	1,730	1,586	91.7%	38.3	5.1	D
EB	Left Turn	30	29	96.3%	83.8	29.8	F
	Through	70	70	100.4%	56.6	9.0	E
	Right Turn	50	57	114.8%	37.1	9.7	D
	Subtotal	150	157	104.4%	52.8	6.7	D
WB	Left Turn	230	197	85.6%	65.4	16.4	E
	Through	40	37	92.2%	58.1	13.5	E
	Right Turn	80	73	90.7%	36.2	13.3	D
	Subtotal	350	306	87.5%	58.0	12.2	E
<b>Total</b>		<b>3,680</b>	<b>3,347</b>	<b>90.9%</b>	<b>49.7</b>	<b>8.1</b>	<b>D</b>

**Intersection 20**                      **S. River Rd/Alameda Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	70	72	103.1%	41.3	9.3	D
	Through	850	832	97.9%	18.6	3.5	B
	Right Turn	10	13	133.0%	18.6	7.6	B
	Subtotal	930	918	98.7%	20.5	3.6	C
SB	Left Turn	110	89	80.5%	41.6	7.1	D
	Through	1,130	967	85.6%	18.3	3.0	B
	Right Turn	260	220	84.8%	17.4	3.2	B
	Subtotal	1,500	1,276	85.1%	19.8	2.6	B
EB	Left Turn	200	185	92.7%	37.9	14.9	D
	Through						
	Right Turn	260	246	94.7%	20.6	10.2	C
	Subtotal	460	432	93.8%	28.1	12.4	C
WB	Left Turn	10	13	125.4%	31.4	15.2	C
	Through						
	Right Turn	100	101	101.5%	15.6	4.1	B
	Subtotal	110	114	103.6%	17.0	3.8	B
<b>Total</b>		<b>3,000</b>	<b>2,739</b>	<b>91.3%</b>	<b>21.3</b>	<b>2.8</b>	<b>C</b>



Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	2	50	14	75	17	0%	0%
	Through/Right	350	50	3	75	8	75	11	0%	0%
NB	Right Turn	250	25	1	25	5	25	7	0%	0%
0										
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	50	7	75	12	75	15	0%	0%
	Through	300	50	6	75	12	75	15	0%	0%
	Through/Right	300	50	11	75	10	75	14	0%	0%
NB	Through	325	125	12	175	12	175	18	0%	0%
	Through/Right	325	75	10	125	19	125	25	0%	0%
SE	Left Turn	1,775	125	23	175	37	175	32	0%	0%
	Shared	1,775	100	17	175	36	175	47	0%	0%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	575	25	7	50	10	50	17	0%	0%
	Right Turn	1,825	50	9	75	22	75	31	0%	0%
0										
0										
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	9	50	20	75	23	0%	0%
	Through/Right	350	50	8	75	19	75	18	0%	0%
SB	Through	650	25	28	25	63	25	54	0%	0%
0										
0										

Intersection 9

5th St/X St/US 50 EB Off Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	150	20	225	42	225	46	0%	0%
	Through	300	125	15	200	45	200	56	0%	0%
	Through/Right	300	75	13	125	23	125	23	0%	0%
NB	Through	325	175	27	250	67	250	63	0%	2%
	Through/Right	325	50	5	75	9	50	13	0%	0%
SE	Left Turn	1,775	150	42	250	61	250	73	0%	0%
	Shared	1,775	125	38	225	65	225	73	0%	0%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Left Turn	575	25	4	50	8	50	14	0%	0%
	Right Turn	1,825	50	7	75	14	75	17	0%	0%
0										
0										
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	3	50	9	50	14	0%	0%
	Through/Right	350	50	4	75	13	75	13	0%	0%
NB	Right Turn	250	25	1	25	5	25	7	0%	0%
	Through	150	25	0	25	0	25	0	0%	0%
SB	Through	150	25	0	25	0	25	0	0%	0%
	Through/Right	150	25	0	25	0	25	0	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	50	7	100	14	100	18	0%	0%
	Through	300	75	13	125	17	125	23	0%	0%
	Through/Right	300	100	13	150	22	150	23	0%	0%
NB	Through	325	100	17	150	30	175	38	0%	0%
	Through/Right	325	100	16	150	29	150	30	0%	0%
SE	Left Turn	1,775	25	5	25	10	50	11	0%	0%
	Shared	25	50	7	75	8	75	9	0%	16%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	225	39	375	75	375	82	0%	0%
	Left Turn Right Turn	575 1,825	125 75	18 18	175 150	21 30	175 150	26 21	0% 0%	0% 0%
WB	Through	300	100	17	175	31	175	34	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	4	50	10	50	13	0%	0%
	Through/Right	350	50	5	75	14	75	18	0%	0%
NB	Right Turn	350	25	0	25	0	25	0	0%	0%
SB	Through	150	25	0	25	0	25	0	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	200	49	250	71	250	65	0%	3%
	Through	300	150	48	225	82	225	77	0%	1%
	Through/Right	300	125	26	175	51	175	48	0%	0%
NB	Through	325	150	38	225	55	225	48	0%	0%
	Through/Right	325	50	9	100	23	100	24	0%	0%
SE	Left Turn	1,775	50	23	100	40	125	44	0%	0%
	Shared	25	75	9	100	11	100	15	0%	32%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	350	106	575	141	550	98	0%	3%
	Left Turn Right Turn	575 1,825	100 75	13 35	150 150	30 69	150 150	40 67	0% 0%	0% 0%
WB	Through	300	125	19	200	28	200	23	0%	0%
0										



Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	3	50	9	50	14	0%	0%
	Through/Right	350	50	4	75	13	75	13	0%	0%
NB	Right Turn	250	25	1	25	5	25	7	0%	0%
SB	Through	150	25	0	25	0	25	0	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	50	7	100	14	100	18	0%	0%
	Through	300	75	13	125	17	125	23	0%	0%
	Through/Right	300	100	13	150	22	150	23	0%	0%
NB	Through	325	100	17	150	30	175	38	0%	0%
	Through/Right	325	100	16	150	29	150	30	0%	0%
SE	Left Turn	1,775	25	11	75	17	75	17	0%	0%
	Shared	25	50	7	75	8	75	9	0%	16%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	225	39	375	75	375	82	0%	0%
	Left Turn Right Turn	575 1,825	125 75	18 18	175 150	21 30	175 150	26 21	0% 0%	0% 0%
WB	Through	300	100	17	175	31	175	34	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	4	50	12	50	11	0%	0%
	Through/Right	350	50	8	75	20	100	28	0%	0%
SB	Through	100	25	21	75	60	100	66	0%	7%
NB	Right Turn	350	25	0	25	0	25	0	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	225	64	275	79	275	67	0%	4%
	Through	300	175	60	250	71	250	62	0%	2%
	Through/Right	300	125	34	200	55	200	50	0%	0%
NB	Through	325	175	17	250	47	250	42	0%	0%
	Through/Right	325	75	16	125	31	125	35	0%	0%
SE	Left Turn	1,775	100	25	175	30	175	28	0%	0%
	Shared	25	75	8	100	10	100	12	0%	27%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	25	75	6	100	14	100	16	0%	23%
	Left Turn Right Turn	575 1,825	75 75	10 16	125 125	20 39	125 150	25 45	0% 0%	0% 0%
WB	Through	250	125	17	200	32	200	45	0%	0%
	0									

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	6	50	11	50	17	0%	0%
	Through/Right	350	50	6	75	15	75	16	0%	0%
NB	Right Turn	250	25	1	25	4	25	6	0%	0%
SB	Through	150	25	0	25	0	25	0	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	50	12	100	21	100	21	0%	0%
	Through	300	75	11	125	19	125	20	0%	0%
	Through/Right	300	100	10	150	15	150	21	0%	0%
NB	Through	325	100	8	150	16	150	19	0%	0%
	Through/Right	325	100	9	150	17	150	20	0%	0%
SE	Left Turn	1,775	25	9	25	13	25	12	0%	0%
	Shared	25	50	8	75	12	75	16	0%	15%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	225	42	375	88	400	122	0%	0%
NB	Left Turn	575	125	17	175	24	175	30	0%	0%
	Right Turn	1,825	75	25	125	39	125	37	0%	0%
WB	Through	300	125	18	200	33	200	38	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1,700	50	5	50	10	50	12	0%	0%
	Through/Right	350	50	18	75	46	100	45	0%	0%
NB	Right Turn	250	25	1	25	4	25	6	0%	0%
	Through	100	25	22	50	60	75	63	0%	5%
SB	Through	100	25	22	50	60	75	63	0%	5%
	Through/Right	350	50	18	75	46	100	45	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	300	200	23	275	35	275	44	0%	1%
	Through	300	150	29	250	41	250	44	0%	0%
	Through/Right	300	125	23	175	29	175	28	0%	0%
NB	Through	325	175	21	250	52	250	56	0%	0%
	Through/Right	325	50	16	100	44	100	46	0%	0%
SE	Left Turn	1,775	75	19	150	20	150	21	0%	0%
	Shared	25	75	7	100	7	100	7	0%	28%
0										

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	250	81	475	158	450	147	0%	2%
	Left Turn Right Turn	575 1,825	75 75	12 33	125 150	17 61	125 150	31 75	0% 0%	0% 0%
WB	Through	250	125	27	225	52	200	51	0%	0%
	0									



Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	8	75	12	75	15	0%	0%
	Through/Right	350	50	6	75	12	75	15	0%	0%
NB	Through/Right	250	25	3	25	12	25	23	0%	0%
	Left/Through	725	25	7	75	15	50	20	0%	0%
0										

Intersection 9

5th St/X St/ US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	150	33	225	48	225	45	0%	0%
	Through	450	150	17	200	33	200	45	0%	0%
	Through/Right	450	150	16	200	25	200	24	0%	0%
NB	Through	325	250	60	325	58	325	47	0%	6%
	Through/Right	325	200	90	300	137	275	115	0%	5%
SB	Left Turn	75	50	17	75	17	75	13	24%	0%
	Through	325	50	42	125	99	125	94	1%	0%
SE	Left Turns	1,825	400	96	500	118	525	130	0%	0%
	Left Turn	1,825	375	104	500	139	525	135	58%	0%
	Right Turn	50	50	4	75	5	75	7	28%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	100	14	150	37	150	41	0%	0%
NB	Left Turn	575	75	7	125	27	125	34	0%	0%
	Right Turn	2,975	75	19	125	37	150	39	0%	0%
WB	Through	325	100	19	150	31	175	45	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-Street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	9	75	21	75	35	0%	0%
	Through/Right	350	50	12	100	24	100	41	0%	0%
NB	Through/Right	250	25	25	50	67	50	63	0%	0%
SB	Left/Through	725	100	42	200	95	200	120	0%	0%
	Through	725	25	18	50	92	75	128	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	300	66	400	99	375	88	0%	3%
	Through	450	225	31	325	76	300	85	0%	1%
	Through/Right	450	225	38	300	89	300	88	0%	0%
NB	Through	325	325	26	375	23	350	16	0%	47%
	Through/Right	325	250	89	400	120	325	82	0%	32%
SB	Left Turn	75	75	9	100	6	100	2	39%	0%
	Through	325	100	40	200	68	175	48	18%	0%
SE	Left Turns	1,825	625	257	775	300	800	306	0%	0%
	Left Turn	1,825	575	242	750	278	750	277	41%	0%
	Right Turn	50	50	3	75	5	75	8	37%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	75	9	125	17	150	29	0%	0%
	Left Turn Right Turn	575 1,825	50 50	10 8	75 75	16 13	75 75	17 22	0% 0%	0% 0%
WB	Through	325	75	14	150	35	175	46	0%	0%
	0									

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	6	75	16	75	22	0%	0%
	Through/Right	350	50	5	75	9	75	7	0%	0%
NB	Through/Right	250	25	2	25	9	25	12	0%	0%
	Left/Through	725	25	7	50	13	50	18	0%	0%
SB	Left/Through	725	25	7	50	13	50	18	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	100	8	150	16	150	15	0%	0%
	Through	450	100	8	150	12	150	15	0%	0%
	Through/Right	450	100	13	150	15	150	19	0%	0%
NB	Through	325	150	20	275	53	300	64	0%	0%
	Through/Right	325	300	29	375	14	350	8	0%	16%
SB	Left Turn	75	50	10	100	10	100	2	19%	0%
	Through	325	75	25	175	55	200	51	6%	0%
SE	Left Turns	1,825	225	35	300	56	325	88	0%	0%
	Left Turn	1,825	225	33	300	52	300	109	62%	0%
	Right Turn	50	50	7	75	6	75	5	16%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	25	100	2	100	12	100	12	0%	28%
	Left Turn Right Turn	575 2,975	150 100	75 25	225 175	102 37	225 175	110 42	0% 0%	0% 0%
WB	Through	300	125	39	225	49	225	52	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	7	75	13	75	21	0%	0%
	Through/Right	350	50	10	75	24	100	38	0%	0%
NB	Through/Right	250	25	4	25	11	25	13	0%	0%
SB	Left/Through	725	100	73	175	137	200	171	0%	0%
	Through	725	25	25	75	110	100	156	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	175	26	250	58	250	60	0%	0%
	Through	450	150	16	200	27	200	26	0%	0%
	Through/Right	450	150	18	200	24	200	27	0%	0%
NB	Through	325	225	21	300	25	300	21	0%	0%
	Through/Right	325	125	22	200	44	200	49	0%	0%
SB	Left Turn	75	75	2	100	3	100	1	46%	0%
	Through	325	150	41	250	63	250	59	21%	1%
SE	Left Turns	1,825	325	37	425	60	425	56	0%	0%
	Left Turn	1,825	300	31	375	44	375	32	59%	0%
	Right Turn	50	50	3	75	8	75	5	23%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	25	100	4	100	12	100	16	0%	28%
	Left Turn Right Turn	575 1,825	100 75	17 4	150 125	24 17	125 125	26 27	0% 0%	0% 0%
WB	Through	300	125	21	200	43	200	41	0%	0%
	0									



Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	7	75	14	75	13	0%	0%
	Through/Right	350	50	6	75	10	75	13	0%	0%
NB	Through/Right	250	25	1	25	8	25	12	0%	0%
	Left/Through	725	25	7	50	16	50	16	0%	0%
SB	Through/Right	250	25	1	25	8	25	12	0%	0%
	Left/Through	725	25	7	50	16	50	16	0%	0%
O	Through/Right	250	25	1	25	8	25	12	0%	0%
	Left/Through	725	25	7	50	16	50	16	0%	0%

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	75	13	125	23	125	25	0%	0%
	Through	450	100	11	125	19	150	20	0%	0%
	Through/Right	450	75	16	125	28	125	27	0%	0%
NB	Through	325	150	26	275	57	275	70	0%	0%
	Through/Right	325	275	39	350	38	325	34	0%	9%
SB	Left Turn	75	75	11	100	7	100	1	28%	0%
	Through	325	75	29	175	57	200	69	4%	0%
SE	Left Turns	1,825	175	14	250	37	250	43	0%	0%
	Left Turn	1,825	175	17	250	42	250	42	58%	0%
	Right Turn	50	50	5	75	7	75	6	25%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	250	26	375	44	350	41	0%	0%
NB	Left Turn	575	125	14	175	22	175	29	0%	0%
	Right Turn	2,975	75	12	125	19	125	23	0%	0%
WB	Through	300	125	15	225	27	225	22	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	8	75	15	75	14	0%	0%
	Through/Right	350	50	5	75	16	75	17	0%	0%
NB	Through/Right	250	25	2	25	10	25	12	0%	0%
SB	Left/Through	725	100	72	200	156	200	125	0%	0%
	Through	725	25	35	75	127	75	131	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	175	13	225	20	225	16	0%	0%
	Through	450	150	14	200	23	200	28	0%	0%
	Through/Right	450	150	16	200	20	200	24	0%	0%
NB	Through	325	275	46	350	23	325	28	0%	13%
	Through/Right	325	200	79	350	90	325	55	0%	8%
SB	Left Turn	75	75	12	100	8	100	1	43%	0%
	Through	325	175	61	275	79	275	59	32%	7%
SE	Left Turns	1,825	325	34	450	48	450	54	0%	0%
	Left Turn	1,825	275	34	400	31	375	27	53%	0%
	Right Turn	50	50	5	75	7	75	7	30%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	200	99	375	194	375	180	0%	2%
	Left Turn Right Turn	575 1,825	100 100	17 49	150 175	29 83	150 175	28 79	0% 0%	0% 0%
WB	Through	300	125	14	200	31	225	35	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	6	75	13	75	13	0%	0%
	Through/Right	350	50	6	75	9	75	9	0%	0%
NB	Through/Right	250	25	2	25	9	25	13	0%	0%
	Left/Through	725	25	9	50	22	50	21	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	100	11	125	17	125	13	0%	0%
	Through	450	100	12	150	18	150	22	0%	0%
	Through/Right	450	100	13	150	29	150	31	0%	0%
NB	Through	325	175	26	300	42	300	35	0%	0%
	Through/Right	325	275	44	375	30	350	21	0%	10%
SB	Left Turn	75	50	8	100	11	100	4	14%	0%
	Through	325	75	24	125	42	150	47	4%	0%
SE	Left Turns	1,825	175	22	250	36	250	40	0%	0%
	Left Turn	1,825	175	23	275	33	275	41	60%	0%
	Right Turn	50	50	4	75	5	75	0	25%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	50	19	100	33	100	34	0%	0%
NB	Left Turn	575	175	22	250	31	275	48	0%	0%
	Right Turn	2,975	125	24	200	51	200	53	0%	0%
WB	Through	300	150	17	250	32	250	44	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	4	75	12	75	15	0%	0%
	Through/Right	350	50	9	75	23	75	24	0%	0%
NB	Through/Right	250	25	4	25	12	25	13	0%	0%
SB	Left/Through	725	150	95	325	234	300	203	0%	2%
	Through	725	50	86	150	261	150	247	0%	1%
O										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	200	21	275	45	275	49	0%	0%
	Through	450	150	15	225	21	225	24	0%	0%
	Through/Right	450	175	16	225	24	225	30	0%	0%
NB	Through	325	275	42	350	21	325	15	0%	13%
	Through/Right	325	200	55	375	69	350	41	0%	10%
SB	Left Turn	75	75	9	100	3	100	2	56%	0%
	Through	325	175	50	300	71	300	49	32%	4%
SE	Left Turns	1,825	375	47	450	59	450	61	0%	0%
	Left Turn	1,825	325	41	400	52	425	49	49%	0%
	Right Turn	50	50	6	75	4	75	7	29%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	250	114	400	130	425	141	0%	1%
	Left Turn Right Turn	575 1,825	100 75	18 17	150 125	30 35	150 150	34 71	0% 0%	0% 0%
WB	Through	300	100	14	175	33	175	51	0%	0%
	0									



Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	6	75	13	75	13	0%	0%
	Through/Right	350	50	7	75	20	75	28	0%	0%
NB	Through/Right	250	25	3	25	10	25	13	0%	0%
SB	Left/Through	725	25	10	75	17	75	19	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	200	44	275	61	250	58	0%	0%
	Through	450	125	16	200	35	200	48	0%	0%
	Through/Right	450	125	13	175	20	175	26	0%	0%
NB	Through	325	300	33	350	24	350	10	0%	12%
	Through/Right	325	275	43	400	46	350	10	0%	10%
SB	Left Turn	75	50	11	75	16	75	12	18%	0%
	Through	325	50	27	100	84	150	104	2%	0%
SE	Left Turns	1,825	600	157	825	222	850	246	0%	0%
	Left Turn	1,825	600	157	800	214	825	247	53%	0%
	Right Turn	50	50	4	75	4	75	7	32%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	100	16	175	28	175	40	0%	0%
	Left Turn Right Turn	575 2,975	75 125	19 22	125 200	28 36	125 200	39 37	0% 0%	0% 0%
WB	Through	325	125	22	200	33	200	47	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	8	75	12	75	16	0%	0%
	Through/Right	350	75	19	125	33	125	37	0%	0%
NB	Through/Right	250	25	6	25	21	25	26	0%	0%
	Through/Right	250	25	6	25	21	25	26	0%	0%
SB	Left/Through	725	250	179	475	317	425	248	0%	3%
	Through	725	100	148	250	338	250	309	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	250	62	375	83	375	81	0%	3%
	Through	450	175	26	275	75	275	89	0%	0%
	Through/Right	450	150	25	225	49	225	51	0%	0%
NB	Through	325	325	14	400	27	375	10	0%	47%
	Through/Right	325	275	34	450	39	350	15	0%	34%
SB	Left Turn	75	75	10	100	12	100	4	26%	0%
	Through	325	100	35	150	51	150	55	31%	0%
SE	Left Turns	1,825	1,350	301	1,875	309	1,775	245	0%	16%
	Left Turn	1,825	1,275	307	1,800	306	1,725	253	49%	5%
	Right Turn	50	50	3	75	6	75	8	38%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	100	14	150	27	150	34	0%	0%
	Left Turn Right Turn	575 1,825	50 50	8 14	100 100	22 28	100 100	30 37	0% 0%	0% 0%
WB	Through	325	100	18	150	29	175	44	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	6	75	13	75	12	0%	0%
	Through/Right	350	50	4	75	15	100	21	0%	0%
NB	Through/Right	250	25	2	25	6	25	7	0%	0%
SB	Left/Through	725	25	4	50	11	50	16	0%	0%
	Through	725	25	1	25	6	25	8	0%	0%
O										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	125	12	150	25	150	27	0%	0%
	Through	450	125	10	150	24	150	27	0%	0%
	Through/Right	450	100	16	150	32	150	38	0%	0%
NB	Through	325	200	24	325	37	300	23	0%	0%
	Through/Right	325	325	30	375	30	350	9	0%	23%
SB	Left Turn	75	75	10	100	7	100	2	23%	0%
	Through	325	100	37	200	76	200	74	8%	0%
SE	Left Turns	1,825	450	76	575	83	575	78	0%	0%
	Left Turn	1,825	425	79	550	89	550	83	61%	0%
	Right Turn	50	50	9	75	12	50	3	16%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	575	300	112	525	130	525	101	0%	4%
	Left Turn	575	150	16	200	32	200	40	0%	0%
NB	Right Turn	2,975	125	26	200	51	225	71	0%	0%
	Through	300	125	20	175	37	200	63	0%	0%
WB										
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	7	75	16	75	17	0%	0%
	Through/Right	350	50	7	75	17	75	25	0%	0%
NB	Through/Right	250	25	5	25	17	25	20	0%	0%
	Left/Through	725	125	72	225	140	225	124	0%	0%
SB	Through	725	25	32	75	121	75	144	0%	0%
	0									

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	200	16	275	22	275	31	0%	0%
	Through	450	175	14	225	25	250	35	0%	0%
	Through/Right	450	175	22	250	43	250	47	0%	0%
NB	Through	325	300	35	375	41	350	19	0%	19%
	Through/Right	325	250	59	400	47	350	15	0%	20%
SB	Left Turn	75	75	10	100	8	100	2	35%	0%
	Through	325	125	32	225	45	250	65	37%	0%
SE	Left Turns	1,825	525	90	675	126	675	127	0%	0%
	Left Turn	1,825	475	93	625	131	650	131	54%	0%
	Right Turn	50	50	4	75	5	75	7	23%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	575	425	115	600	128	550	110	0%	8%
	Left Turn Right Turn	575 1,825	100 125	16 38	150 225	24 64	175 250	26 64	0% 0%	0% 0%
WB	Through	300	150	18	250	27	250	29	0%	0%
0										



Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	6	75	9	75	7	0%	0%
	Through/Right	350	50	6	75	11	75	11	0%	0%
NB	Through/Right	250	25	1	25	8	25	11	0%	0%
	Left/Through	725	25	6	50	12	50	11	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	100	15	125	24	125	21	0%	0%
	Through	450	100	15	150	24	150	25	0%	0%
	Through/Right	450	100	13	125	15	125	14	0%	0%
NB	Through	325	175	44	300	63	300	54	0%	0%
	Through/Right	325	300	34	350	18	350	11	0%	24%
SB	Left Turn	75	75	9	100	10	100	5	23%	0%
	Through	325	75	30	150	81	175	97	3%	0%
SE	Left Turns	1,825	275	67	375	109	350	109	0%	0%
	Left Turn	1,825	250	68	350	101	350	94	59%	0%
	Right Turn	50	50	9	75	5	75	4	16%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	300	62	450	100	450	85	0%	1%
	Left Turn Right Turn	575 2,975	150 125	21 22	200 200	29 48	200 200	23 57	0% 0%	0% 0%
WB	Through	300	100	21	175	36	200	44	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	7	75	14	75	18	0%	0%
	Through/Right	350	50	4	75	10	75	16	0%	0%
NB	Through/Right	250	25	4	25	12	25	11	0%	0%
SB	Left/Through	725	75	19	150	31	150	35	0%	0%
	Through	725	25	1	25	7	25	10	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	200	20	275	35	275	41	0%	0%
	Through	450	175	18	250	38	250	48	0%	0%
	Through/Right	450	175	20	250	35	250	49	0%	0%
NB	Through	325	275	37	375	28	350	13	0%	20%
	Through/Right	325	275	31	425	29	350	16	0%	26%
SB	Left Turn	75	75	6	100	4	100	1	39%	0%
	Through	325	125	23	250	43	250	29	38%	0%
SE	Left Turns	1,825	825	244	1,150	354	1,175	284	0%	0%
	Left Turn	1,825	750	227	1,075	311	1,100	290	57%	0%
	Right Turn	50	50	4	75	4	75	7	20%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	350	96	600	121	575	80	0%	6%
	Left Turn Right Turn	575 1,825	100 75	15 17	175 150	30 65	175 175	35 80	0% 0%	0% 0%
WB	Through	300	125	25	200	59	200	66	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	7	75	13	75	12	0%	0%
	Through/Right	350	50	4	75	13	75	13	0%	0%
NB	Through/Right	250	25	1	25	5	25	7	0%	0%
SB	Left/Through	725	25	10	50	23	50	24	0%	0%
O										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	125	15	175	30	175	31	0%	0%
	Through	450	100	13	150	30	150	35	0%	0%
	Through/Right	450	100	15	150	25	150	26	0%	0%
NB	Through	325	175	17	325	34	325	21	0%	0%
	Through/Right	325	325	12	350	18	350	11	0%	34%
SB	Left Turn	75	75	8	100	7	100	1	28%	0%
	Through	325	100	27	225	59	225	65	4%	0%
SE	Left Turns	1,825	300	45	400	63	375	66	0%	0%
	Left Turn	1,825	300	46	400	53	375	57	61%	0%
	Right Turn	50	50	9	75	6	75	4	21%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	325	80	475	99	475	92	0%	1%
	Left Turn Right Turn	575 2,975	150 175	16 85	200 300	29 165	200 300	29 155	0% 0%	0% 0%
WB	Through	300	125	23	200	60	200	62	0%	0%
0										

Intersection 8

3rd St/X St/I-5 SB Off-Ramp

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,700	50	10	75	19	75	26	0%	0%
	Through/Right	350	50	5	75	14	75	17	0%	0%
NB	Through/Right	250	25	16	50	55	50	58	0%	0%
SB	Left/Through	725	100	60	225	132	225	143	0%	0%
0										

Intersection 9

5th St/X St/US 50 EB Off-Ramp

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	450	225	43	325	92	325	88	0%	1%
	Through	450	200	29	275	71	300	83	0%	0%
	Through/Right	450	175	33	275	59	250	54	0%	0%
NB	Through	325	275	40	375	47	325	32	0%	16%
	Through/Right	325	250	74	375	69	350	32	0%	25%
SB	Left Turn	75	75	8	100	6	100	1	34%	0%
	Through	325	150	55	275	76	250	63	38%	3%
SE	Left Turns	1,825	675	257	925	367	1,000	339	0%	0%
	Left Turn	1,825	625	246	875	354	950	333	53%	0%
	Right Turn	50	50	3	75	5	75	6	34%	0%

Intersection 11

I-5 NB Off-Ramp/Broadway

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	600	350	102	600	159	575	75	0%	10%
	Left Turn Right Turn	575 1,825	125 125	27 86	200 250	119 211	200 275	169 226	0% 2%	0% 0%
WB	Through	300	125	20	200	29	175	33	0%	0%
0										