

# Beck Property

Traffic  
Impact  
Analysis

Van Buren Street/143rd Avenue  
Goodyear, Arizona

December 2012  
Project No. 11-570

CITY OF GOODYEAR - REPORT APPROVAL	
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HTE# 13-0870	QS# 68

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## **BECK PROPERTY TRAFFIC IMPACT ANALYSIS**

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Expires 12-31-13

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## EXECUTIVE SUMMARY

This report documents a traffic impact and traffic signal warrant analysis performed for the proposed Beck Property Development located along the 143<sup>rd</sup> Avenue alignment between Van Buren Street and Yuma Road in Goodyear, Arizona. The proposed development is located on 232 acres and will consist of approximately 2,432,000 square feet of Warehouse and 838,000 square feet of High-cube Warehouse land uses within four large building.

The following conclusions and recommendations have been documented in this study.

- ◆ Under the existing conditions all of the movements at the Van Buren Street intersections – 143<sup>rd</sup> Avenue, 145<sup>th</sup> Avenue, Bullard Avenue and Litchfield Road – and the Yuma Road intersections – Bullard Avenue and Litchfield Road – are projected to operate with level of service D or better in the peak hours.
- ◆ The proposed Beck Property Development is anticipated to generate 9,870 daily trips, with approximately 810 trips occurring during the AM peak hour and 865 trips occurring during the PM peak hour.
- ◆ Under the future 2013 traffic conditions all of the movements at each study intersection are projected to continue to operate with level of service D or better.
- ◆ Under the future 2018 traffic conditions all of the movements at each study intersection are projected to continue to operate with level of service D or better.
- ◆ The calculated storage lengths in Table 6 should be provided where possible. Existing median breaks and left turn lanes in existing medians may prohibit the construction of the calculated storage lengths.
- ◆ A 3-lane collector roadway should be provided for 143<sup>rd</sup> Avenue from Van Buren Street south to the development.
- ◆ Striping modifications may be required at the Van Buren Street/Bullard Avenue intersection (provide dual southbound left turn lanes) as well as traffic signal modifications (provide a protected southbound left turn phase and a westbound right turn overlap phase).
- ◆ Striping modifications may be required at the Van Buren Street/Litchfield Road intersection (provide a longer eastbound left turn lane storage).
- ◆ Striping modifications may be required at the Yuma Road/Litchfield Road intersection (provide a longer eastbound left turn lane storage).
- ◆ A traffic signal should be installed at the intersection of Van Buren Street and 143<sup>rd</sup> Avenue to provide acceptable levels of service for the northbound and southbound movements.

## INTRODUCTION

The Beck Property Development is located along the 143<sup>rd</sup> Avenue alignment between Van Buren Street and Yuma Road west of Litchfield Road in Goodyear, Arizona. A location map is illustrated in **Figure 1**. The proposed development will consist of approximately 3,270,000 square feet of warehouse use.

CivTech Inc. has been retained by Beck Consulting Engineers and the Property Owner to prepare a Traffic Impact Analysis (TIA) for the proposed Beck Property Development as requested by the City of Goodyear.

### PURPOSE OF REPORT AND STUDY OBJECTIVES

The purpose of this study is to analyze the impacts of the proposed Beck Property Development on the existing surrounding street system in support of the proposed lot split. The study will be prepared in conformance with the guidelines contained in Chapter 4, Section 1, "Streets and Right-of ways" of the November 2007 City of Goodyear *Design Standards & Policies Manual*. The specific objectives of the study are:

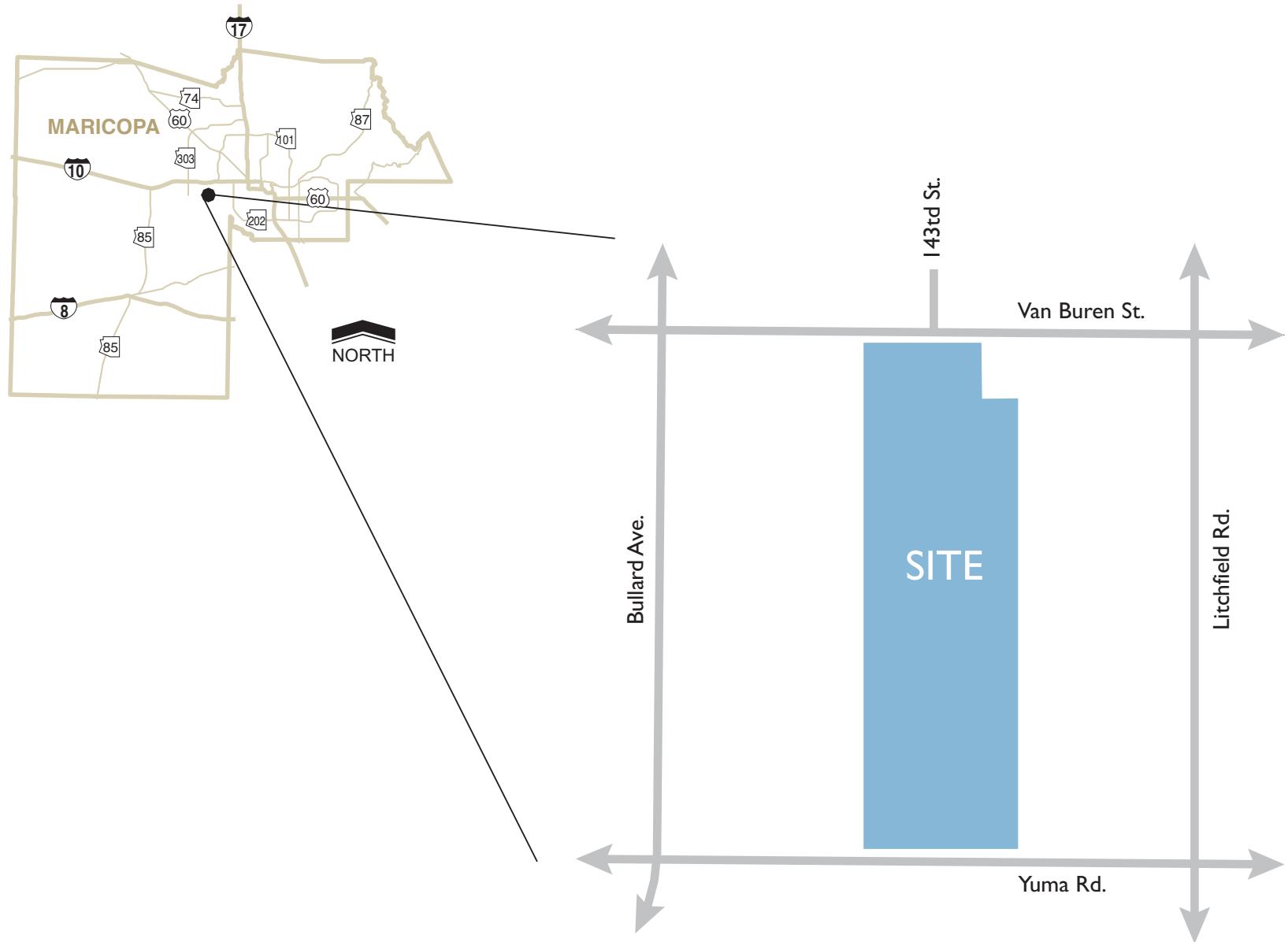
- ◆ To determine whether the existing street system in the vicinity of the site is adequate to accommodate the increased traffic that results from the proposed development, and
- ◆ To evaluate/determine the roadway cross section for 143<sup>rd</sup> Avenue south of Van Buren Street.

### Study Area

The City of Goodyear uses the Maricopa County Department of Transportation (MCDOT) Traffic Impact Procedures. The MCDOT traffic study requirements are dependent on the maximum trip generation potential during the peak hours. The site is anticipated to generate between 500 and 1,000 trips during the PM peak hour. This amount of generated trips requires a Category II type study. The study area should include site accesses and signalized and major unsignalized intersections within ½ mile of the site. The study area for this TIA includes the existing intersections of Van Buren Street at Bullard Avenue, 145<sup>th</sup> Avenue, 143<sup>rd</sup> Avenue, and Litchfield Road and the intersections of Yuma Road at Bullard Avenue and Litchfield Road.

### Horizon Year

The MCDOT TIA study year requirements for a Category II type study include the opening year and opening year plus 5 years. The opening/build-out year is assumed to be 2013. Therefore, the horizon years were defined as 2013 and 2018. The analysis will be provided for the AM and PM peak hours of the horizon years.



**Figure I:** Vicinity Map

## EXISTING CONDITIONS

### SURROUNDING LAND USE

The majority of the surrounding area is undeveloped agricultural land. Per the City's Land Use Plan (Dated December 2009), the surrounding area is zoned Light Industrial. The City of Goodyear's Engineering Office is located west of the development on the south side of Van Buren Street. The Phoenix Goodyear Airport is to the south of the development.

### ROADWAY NETWORK

The existing roadway network within the study area includes Van Buren Street, Bullard Avenue, Litchfield Road, Yuma Road, 143<sup>rd</sup> Avenue and 145<sup>th</sup> Avenue.

**Van Buren Street** is an east-west major arterial roadway located approximately ½ mile south of Interstate 10 (I-10). West of 143<sup>rd</sup> Avenue, Van Buren Street has three (3) eastbound through lanes and two (2) westbound through lanes separated by a raised median, with median breaks at key intersections. East of 143<sup>rd</sup> Avenue, Van Buren Street has two (2) through lanes in each direction with a middle two-way left-turn lane. Bullard Avenue (located west of the proposed site) and Litchfield Road (located east of the proposed site) each connect to Van Buren Street and have an interchange with I-10. It has a posted speed limit of 45 mph adjacent to the project site.

**Bullard Avenue** is a north-south major arterial roadway located approximately ½ mile west of the site. It provides a connection to I-10 to the north and has a posted speed limit of 45 mph. It has three (3) northbound through lanes and one (1) southbound through lane separated by a raised median north of Van Buren Street. South of Van Buren Street it is a two-lane roadway that connects to Yuma Road and eventually Estrella Parkway.

**Litchfield Road** is a north-south major arterial roadway located approximately ½ mile east of the site. It has three (3) northbound through lanes and two (2) southbound through lanes separated by either a raised median or two-way left turn lane. It provides a connection to I-10 to the north as well as Luke Air Force Base and has a posted speed limit of 40 mph.

**Yuma Road** is an east-west scenic arterial roadway located 1 mile south of Van Buren Street and forms the southern border of the site. Immediately south and west of the site Yuma Road is a two-lane roadway. At Estrella Parkway it provides two lanes in each direction separated by a raised median. East of the site, Yuma Road consists of two (2) through lanes in each direction separated by a two-way left-turn lane until Central Avenue, where it transitions to a two (2) lane undivided roadway. Yuma Road has posted speed limits of 45 mph westbound, 35 mph eastbound adjacent to the project site and 25 mph (both directions) when it becomes Western Avenue to the east of the site.

**143<sup>rd</sup> Avenue** is a north-south collector roadway that currently only exists north of Van Buren Street. It has one (1) through lane in each direction separated by a raised median and provides access to the business complexes north of Van Buren Street. It has a posted speed limit of 35 mph and terminates in a cul-de-sac approximately 1,900 feet north of Van Buren Street.

**145<sup>th</sup> Avenue** is a north-south collector roadway located approximately ¼ mile west of the site. It has a posted speed limit of 25 mph. It currently only exists south of Van Buren Street and provides access to the business park complex immediately west of the project site. It has a full access median break at its intersection with Van Buren Street.

### **INTERSECTION CONFIGURATIONS AND TRAFFIC CONTROLS**

The intersection of **Van Buren Street/Bullard Avenue** is currently a four-legged signalized intersection. The northbound approach consists of an exclusive left-turn lane, two (2) through lanes, and an exclusive right-turn lane. The westbound approach consists of an exclusive left-turn lane, two (2) through lanes, and an exclusive right-turn lane. The southbound approach consists of an exclusive left-turn lane, one (1) through lane, and an exclusive right-turn lane. The eastbound approach consists of an exclusive left-turn lane, three (3) through lanes, and an exclusive right-turn lane. The traffic signal operates with lagging permissive/protected left turn phasing. The intersection has been improved to be able to provide dual left turn lanes in the westbound, eastbound and southbound directions, as well as three (3) southbound through lanes. These areas are currently striped out, restricting traffic to the lanes mentioned above.

The intersection of **Van Buren Street/145<sup>th</sup> Avenue** is currently a three-legged unsignalized intersection. The northbound approach consists of an exclusive left-turn lane and an exclusive right-turn lane under stop sign control. The westbound approach consists of an exclusive left-turn lane and two (2) through lanes. The eastbound approach consists of an exclusive left-turn lane, three (3) through lanes, and an exclusive right-turn lane.

The intersection of **Van Buren Street/143<sup>rd</sup> Avenue** is currently a three-legged unsignalized intersection. The southbound approach consists of an exclusive left-turn lane and an exclusive right-turn lane under stop sign control. The westbound approach consists of an exclusive left-turn lane, one (1) through lane, and a shared through/right-turn lane. The eastbound approach consists of an exclusive left-turn lane and two (2) through lanes.

The intersection of **Van Buren Street/Litchfield Road** is currently a four-legged signalized intersection. The northbound approach consists of an exclusive left-turn lane, two (2) through lanes, and a shared through/right-turn lane. The westbound approach consists of an exclusive left-turn lane, one (1) through lane, and a shared through/left-turn lane. The southbound approach consists of an exclusive left-turn lane, two (2) through lanes, and an exclusive right-turn lane. The eastbound approach consists of an exclusive left-turn lane, two (2) through lanes, and an exclusive right-turn lane. The traffic signal operates with lagging permissive/protected left turn phasing. The intersection is fully developed and would require right-of-way acquisition to provide any additional lanes.

The intersection of **Yuma Road/Bullard Road** is currently a four-legged signalized intersection. The northbound approach consists of an exclusive left-turn lane, one (1) through lane, and an exclusive right-turn lane. The southbound approach consists of an exclusive left-turn lane and a shared through/right-turn lane. The east- and westbound approaches consist of a single general purpose lane. The traffic signal operates with permissive left turn phasing.

The intersection of **Yuma Road/Litchfield Road** is currently a four-legged signalized intersection. All approaches consist of an exclusive left-turn lane, one (1) through lane, and a shared through/right turn lane. The traffic signal operates with lagging permissive/protected left turn phasing.

The existing lane configurations and traffic controls are illustrated in **Figure 2**.

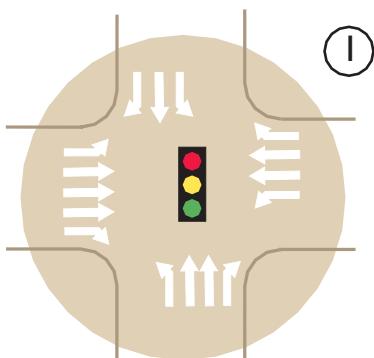
### **TRAFFIC VOLUMES**

CivTech conducted peak hour turning movement counts at the intersections of Van Buren Street/143<sup>rd</sup> Avenue and Van Buren Street/145<sup>th</sup> Avenue on Tuesday, May 17, 2011. At the City's request CivTech also collected peak hour turning movement counts at the intersections of Van Buren Street/Bullard Avenue and Van Buren Street/Litchfield Road on Thursday, July 7, 2011. Additional traffic counts were collected at the intersections of Yuma Road/Bullard Avenue and Yuma Road/Litchfield Road on Wednesday, December 5, 2012. In addition, updated traffic counts were collected at the intersection of Van Buren Street/Bullard Avenue on December 5, 2012. The turning movement counts were conducted from 7AM to 9AM and 4PM to 6PM.

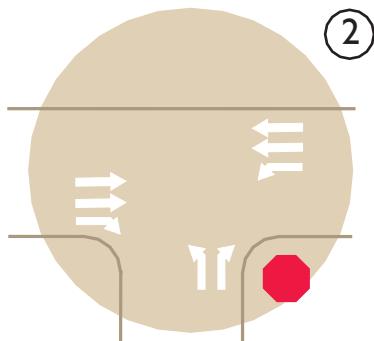
A comparison between the traffic volumes recorded at the intersection of Van Buren Street and Bullard Avenue in 2011 and 2012 indicated a small increase in the AM peak hour (approximately 1.5%) and a decrease in the PM peak hour (approximately 4%). For the purposes of this analysis the recorded traffic volumes for the three (3) intersections counted in December were utilized while a two (2) percent increase was applied to the traffic volumes at the three (3) intersections counted in July of 2011. **Figure 3** depicts the recently recorded (and adjusted) peak hour turning movement volumes during the peak hours. The traffic volume summaries are provided in **Appendix B**.

### **CAPACITY ANALYSIS**

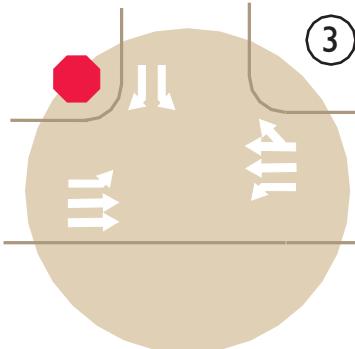
The concept of level of service (LOS) uses qualitative measures that characterize operational conditions within the traffic stream. The individual levels of service are described by factors that include speed, travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations A through F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service represents a range of operating conditions. Levels of service for intersections are defined in terms of average delay ranges for vehicles. **Table 1** lists the level of service criteria for signalized and unsignalized intersections.



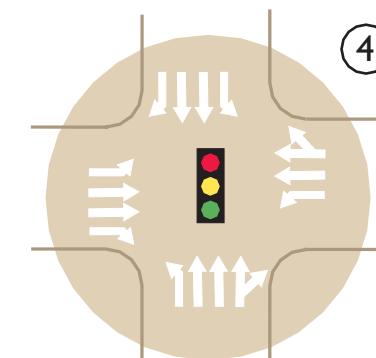
Bullard Ave. & Van Buren St.



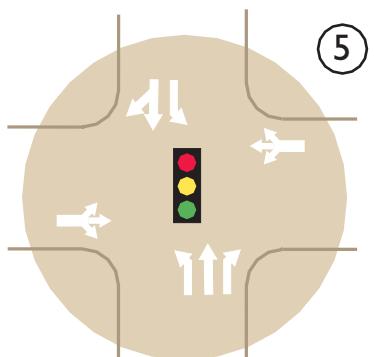
145th Ave. & Van Buren St.



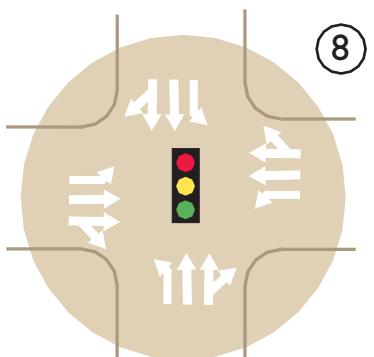
143rd Ave. & Van Buren St.



Litchfield Rd. & Van Buren St.



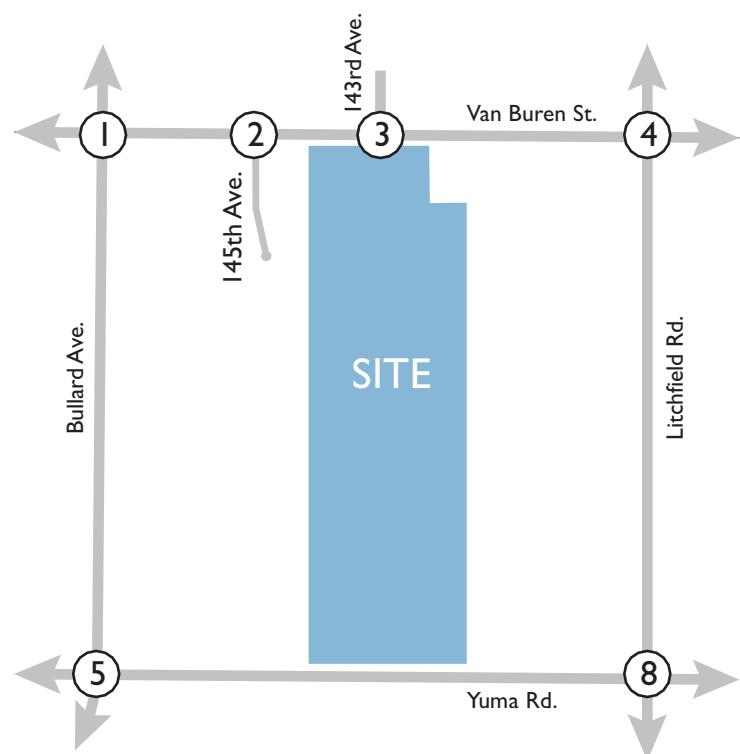
Yuma Rd. & Bullard Ave.



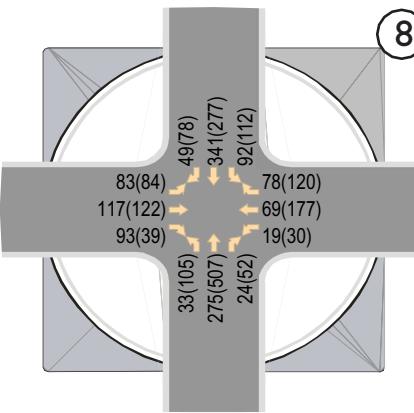
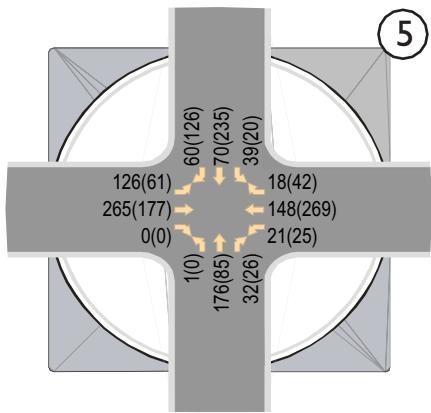
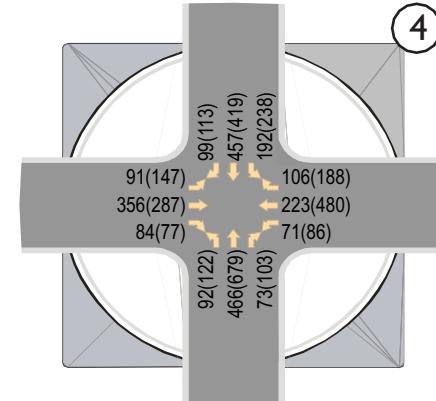
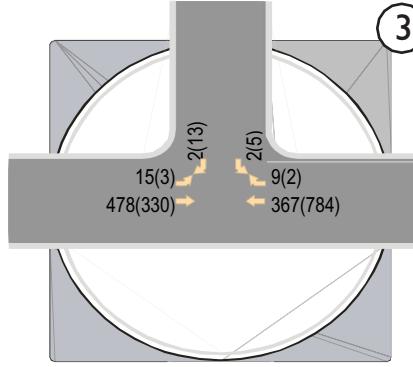
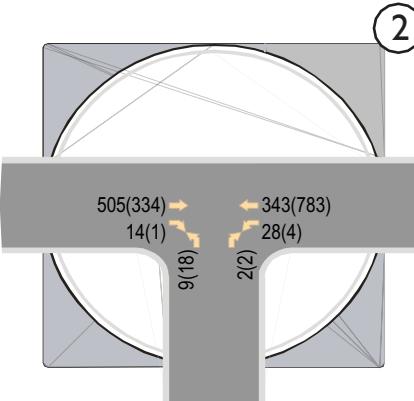
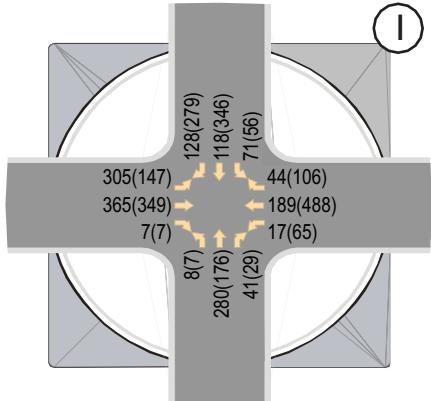
Yuma Rd. & Litchfield Rd.

#### LEGEND

- Thru or Turning Movement
- Stop Sign
- Traffic Signal



**Figure 2:** Existing Lane Configurations and Stop Controls

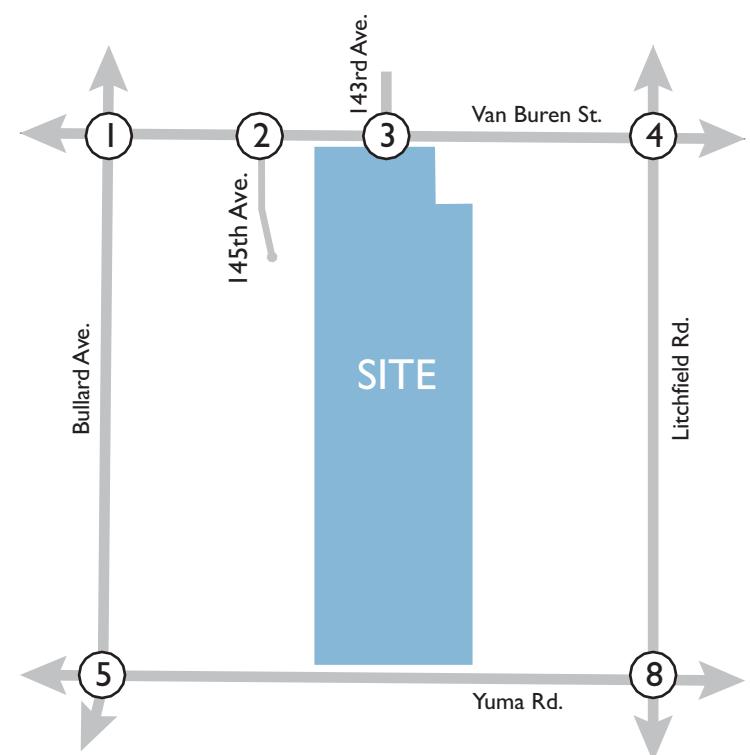


#### LEGEND

XX(XX) - AM(PM) Peak Hour Traffic Volumes



NORTH



**Figure 3: Existing Peak Hour Traffic Volumes**

**Table 1: Level of Service Criteria**

Level of Service	Control Delay (seconds/vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

Source: Exhibit 18-4 and Exhibit 19-1, *Highway Capacity Manual 2010*

Peak hour capacity analyses were conducted for the study intersections based on the existing intersection configurations provided in **Figure 2** and 2011 traffic volumes presented in **Figure 3**. The intersections were analyzed using the methodologies presented in the *Highway Capacity Manual* (HCM), using HCS software. The LOS for each stop-controlled movement is reported for unsignalized intersections. The resulting levels of service for the existing conditions are summarized in **Table 2**. The existing conditions analyses (2012) have been included in **Appendix C**.

**Table 2: 2012 Peak Hour Levels of Service**

Intersection	Traffic Control	Approach	Existing LOS	
			AM Peak Hour	PM Peak Hour
Van Buren Street/143 <sup>rd</sup> Avenue	1-way stop (SB)	SB LT	B	C
		SB RT	A	B
		EB LT	A	A
Van Buren Street/145 <sup>th</sup> Avenue	1-way stop (NB)	NB LT	C	C
		NB RT	A	A
		WB LT	A	A
Van Buren Street/Bullard Avenue	Signal	NB	C	C
		SB	C	C
		EB	B	C
		WB	D	C
		Overall	C	C
Van Buren Street/Litchfield Road	Signal	NB	C	C
		SB	C	C
		EB	C	C
		WB	C	C
		Overall	C	C
Yuma Road/Bullard Avenue	Signal	NB	C	B
		SB	C	B
		EB	A	B
		WB	A	B
		Overall	B	B

**Table 2: 2012 Peak Hour Levels of Service (Con't)**

Intersection	Traffic Control	Approach	Existing LOS		
			AM Peak Hour	PM Peak Hour	
Yuma Road/Litchfield Road	Signal	NB	B	C	
		SB	B	C	
		EB	C	C	
		WB	D	C	
		Overall	B	C	

Under the existing conditions, all of the movements at each intersection are projected to operate with level of service D or better.

## PROPOSED DEVELOPMENT

### LAND USE AND INTENSITY

The proposed Beck Property Development is located south of Van Buren Street along the 143<sup>rd</sup> Avenue alignment in the City of Goodyear. The project is being proposed for a lot split – creating four (4) lots. The project will have one initial access to Van Buren Street that will form the southern leg of the existing Van Buren Street/143<sup>rd</sup> Avenue intersection. 143<sup>rd</sup> Avenue will be extended south connecting to Yuma Road creating a T-intersection. In addition, there will be an additional site access intersection with Yuma Road, east of the 143<sup>rd</sup> Avenue intersection. It will consist of approximately 2,432,000 square feet of Warehouse and 838,000 square feet of High-cube Warehouse land uses within four large buildings on approximately 232 acres.

The site plan of the proposed Beck Property Development is illustrated in **Figure 4**.

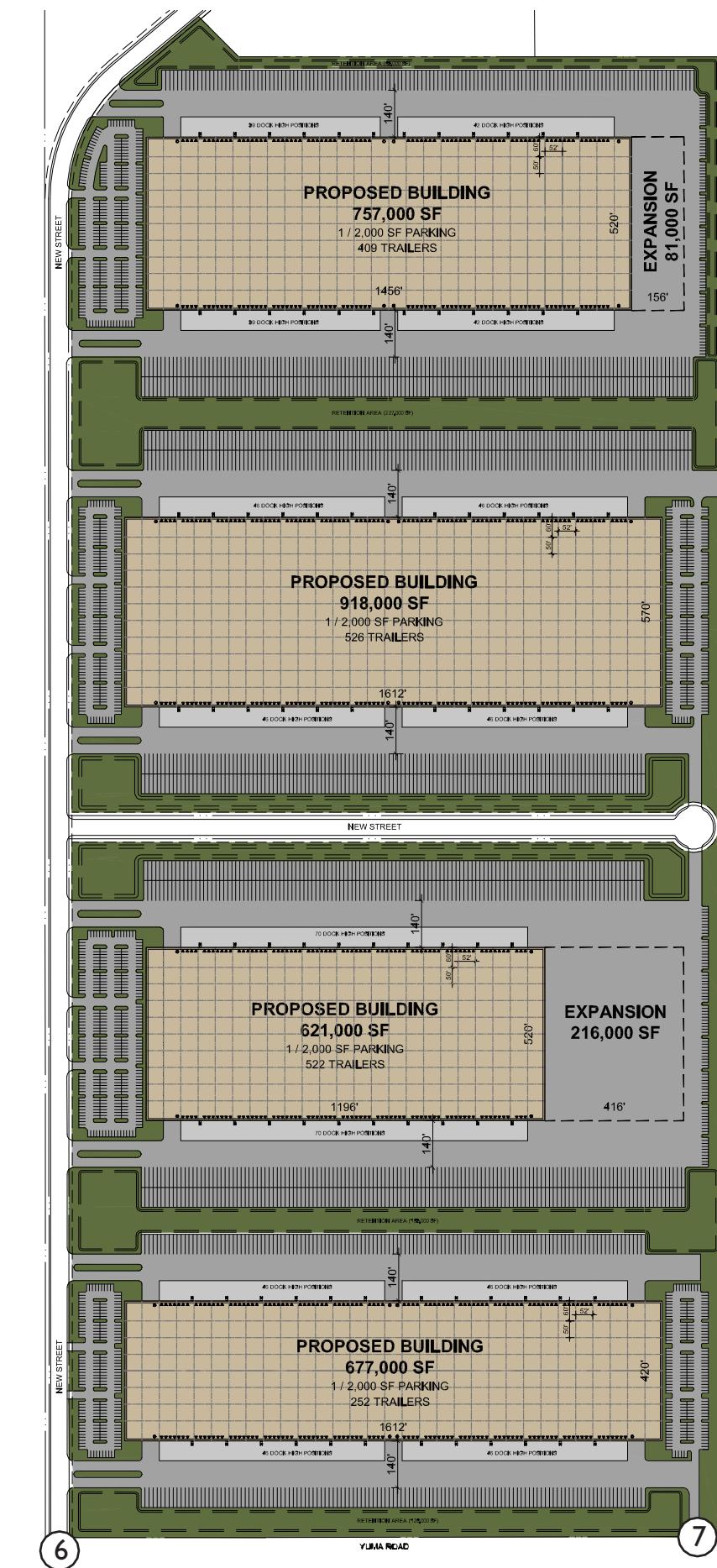
### SITE TRIP GENERATION

The Institute of Transportation Engineers (ITE) *Trip Generation, 8<sup>th</sup> Edition* contains data for a wide range of different land uses. The data includes average rates and equations that correlate between an independent variable that describes the development size and generated trips for each categorized land use. The report provides information for daily, AM and PM peak hour trips for warehouse land uses. Detailed trip generation calculations have been included in **Appendix D**.

The trip generation for the Beck Property Development is based on ITE land use codes 150 and 152, and is illustrated in **Table 3**.

**Table 3: Project Generated Trips**

Land Use	ITE LUC	Size	Units	Weekday Trips Generated						
				Daily Total	AM Peak Hour			PM Peak Hour		
					Enter	Exit	Total	Enter	Exit	
Warehousing	150	2,432	KSF	8,662	550	182	732	213	566	779
High-cube Warehouse	152	838	KSF	1,208	60	16	76	21	63	84
Totals				9,870	610	198	808	234	629	863



NORTH

Figure 4: Site Plan and Access Points

Based on ITE rates as summarized in **Table 3**, the Beck Property Development could generate approximately 9,870 daily trips, with approximately 810 trips occurring during the AM peak hour and 865 trips occurring during the PM peak hour.

### **DIRECTIONAL DISTRIBUTION AND TRIP ASSIGNMENT**

As mentioned earlier, access to I-10 and the regional freeway system is available to the east and west of the development along Van Buren Street. Residential areas (origins/destinations for employees) are located in all directions with the majority to the east of the project. With I-10 providing regional access for employee and less than a mile north of the project site, it is anticipated that the majority of the traffic will be to/from I-10.

The trip distribution utilized for this analysis is depicted in **Figure 5**.

### **TRIP ASSIGNMENT**

The distribution percentages were applied to the generated trips to determine the AM and PM peak hour site traffic at the intersections within the study area. **Figure 6** illustrates the opening year/full-build of the proposed Beck Property Development site generated traffic volumes.

### **BACKGROUND TRAFFIC**

The project is scheduled for opening in 2013. An expansion factor of 1.02 was applied to the 2012 traffic volumes in **Figure 3** for the opening year (2013) and an expansion factor of 1.126 was applied for horizon year 2018. These expansion factors explore a linear growth rate of 2.0 percent per year. Background growth calculations are included in **Appendix E**.

The opening year 2013 peak hour background traffic volumes are shown in **Figure 7** and the horizon year 2018 peak hour background traffic is depicted in **Figure 8**.

### **TOTAL TRAFFIC**

The opening year and opening plus five year (2013 and 2018) total traffic volumes were determined by adding the respective background traffic to the build-out site generated traffic for the Beck Property Development. The opening year 2013 total peak hour traffic volumes are shown in **Figure 9** and the horizon year 2018 total peak hour traffic volumes are shown in **Figure 10**.

### **2013 PEAK HOUR CAPACITY ANALYSIS**

Peak hour capacity analyses have been conducted for the study intersections and site driveways. All intersections have been analyzed using the methodologies as described previously and presented in the *Highway Capacity Manual (HCM)*, *Special Report 209*, Updated 2010 and using TRAFFIX Software version 8.0 under the HCM 2010 methodology.

Results of the 2013 level-of-service analyses with the project developed are shown in **Table 4**. The analysis worksheets for the 2013 horizon year conditions have been included in **Appendix F**. The lane configurations provided on **Figure 11** were utilized for the intersection analyses.

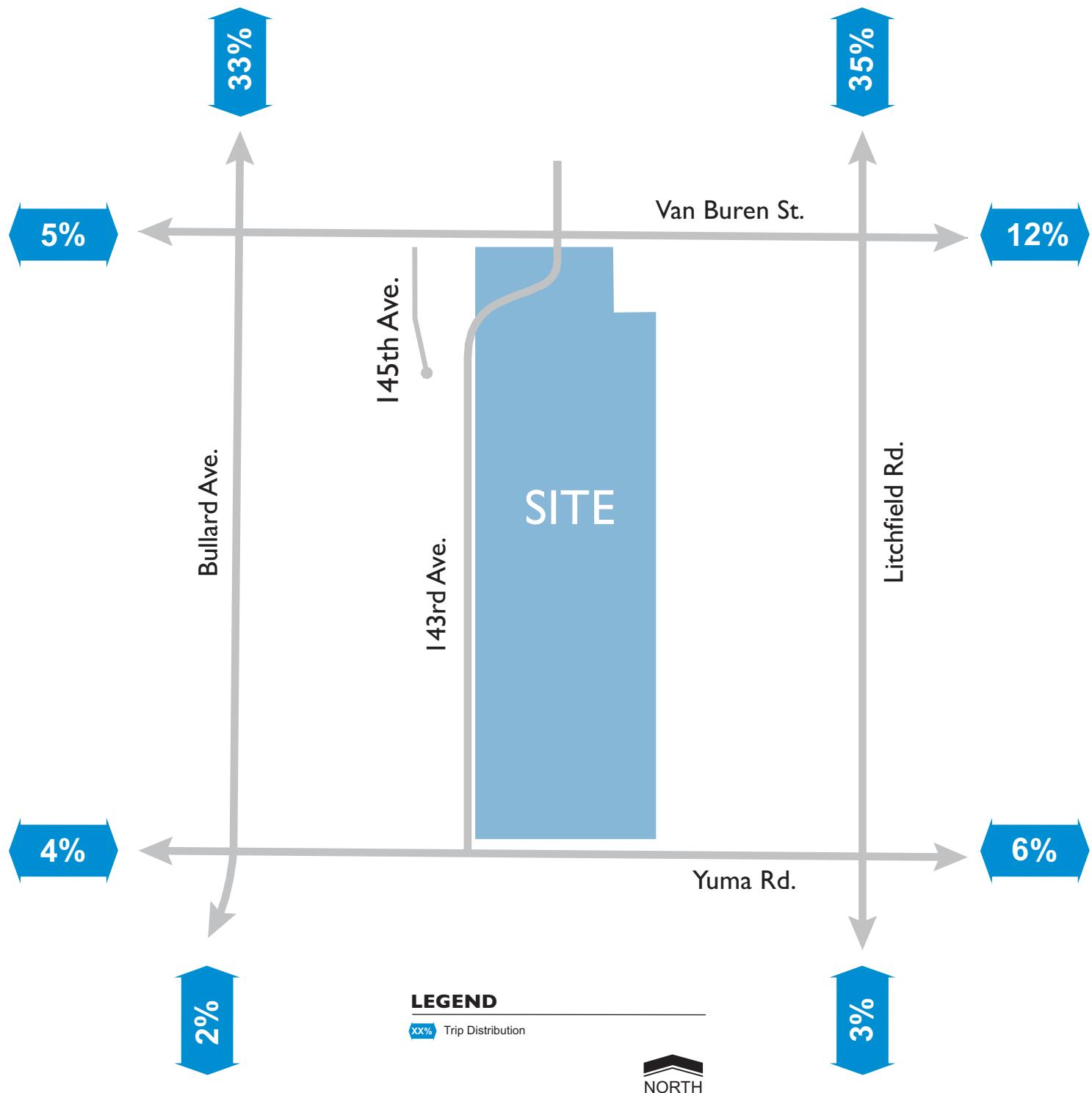
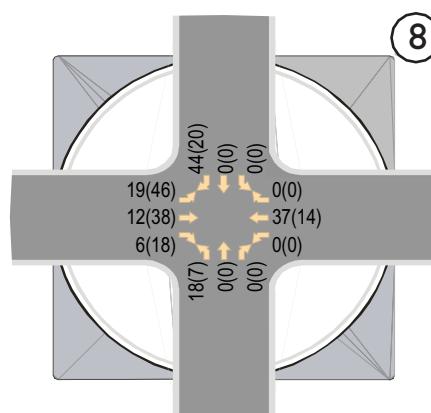
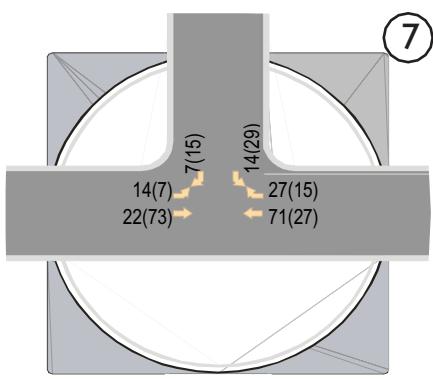
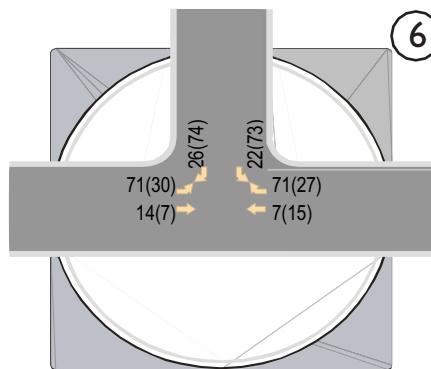
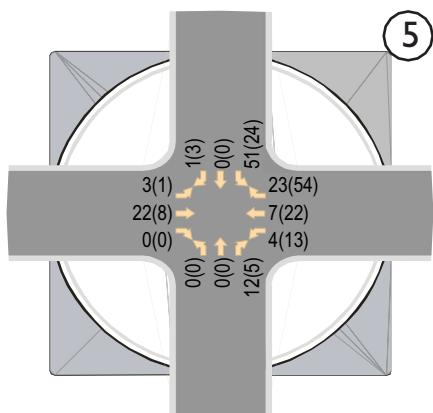
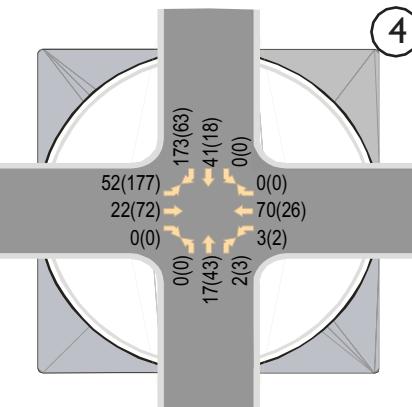
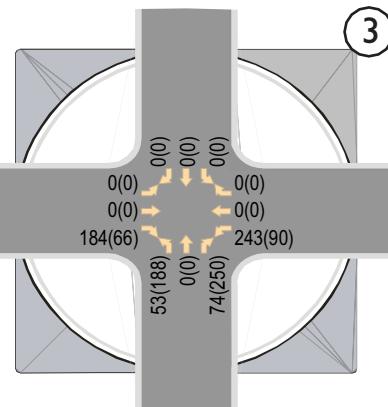
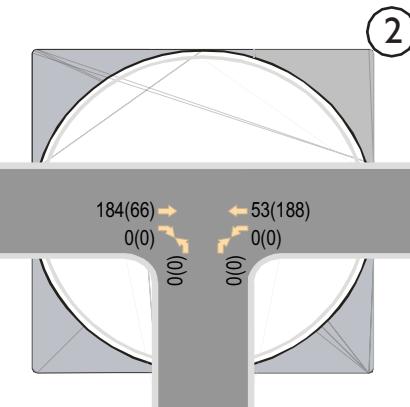
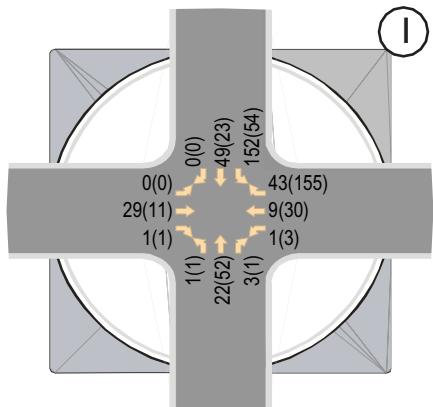
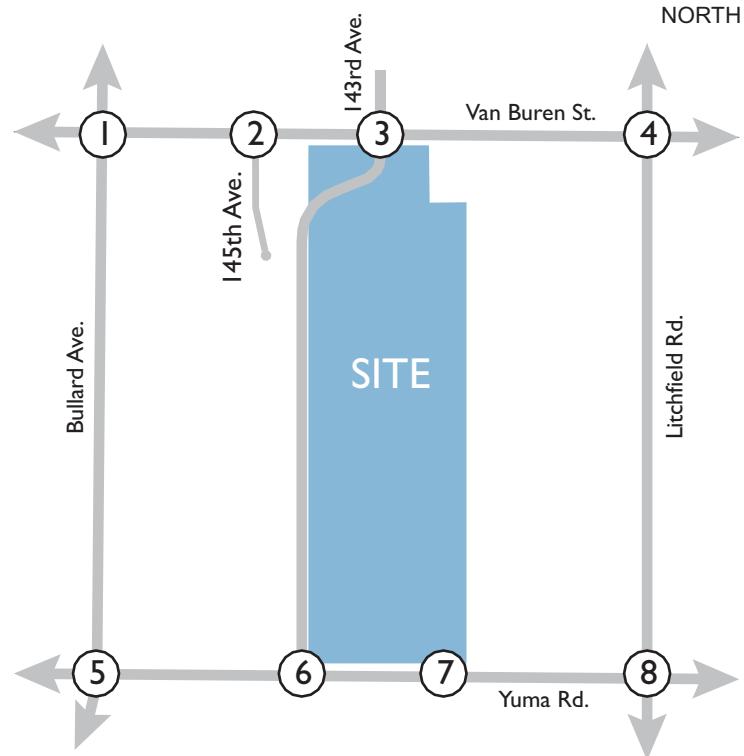


Figure 5: Trip Distribution



#### LEGEND

XX(XX) - AM(PM) Peak Hour Traffic Volumes



**Figure 6:** Site Generated Traffic Volumes

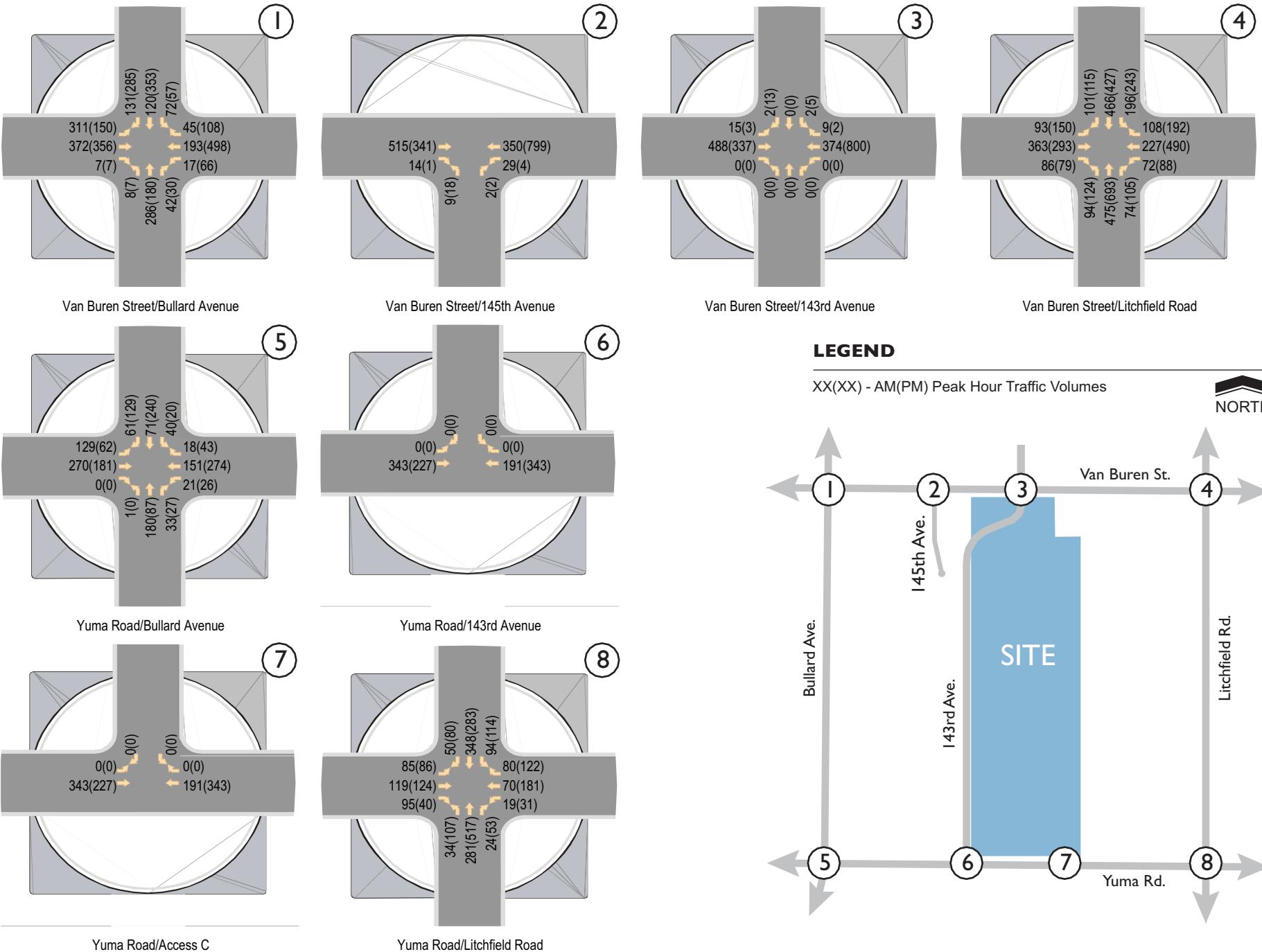


Figure 7: 2013 Background Traffic Volumes

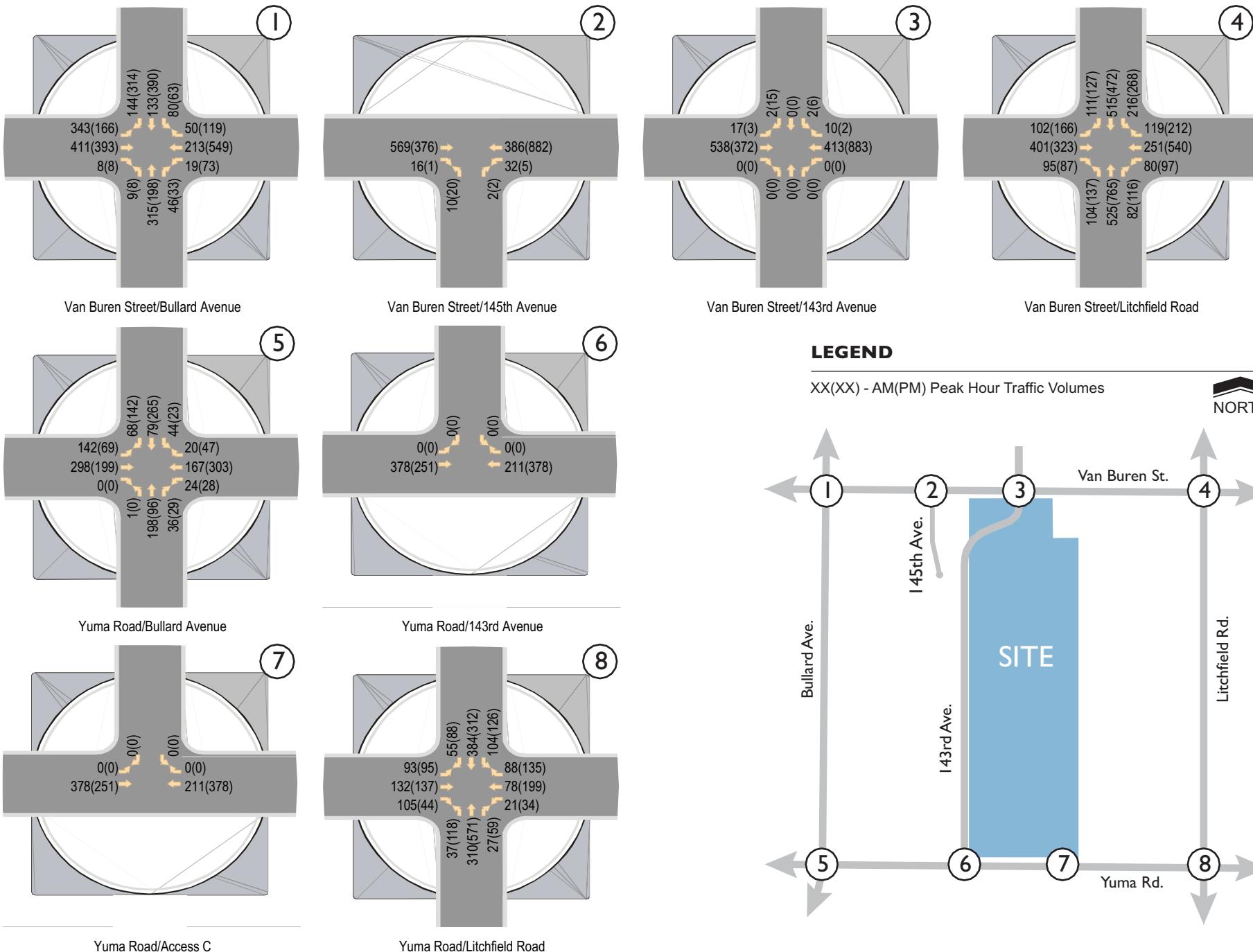
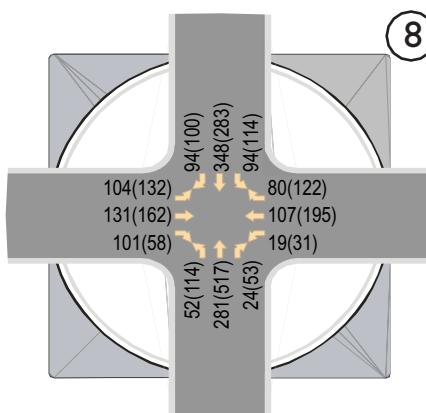
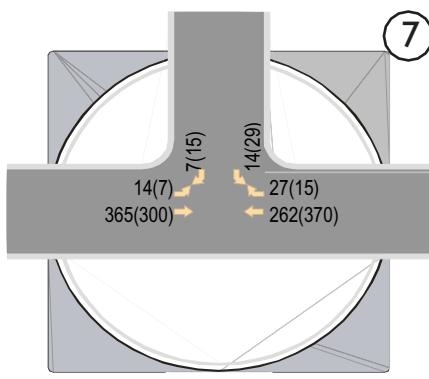
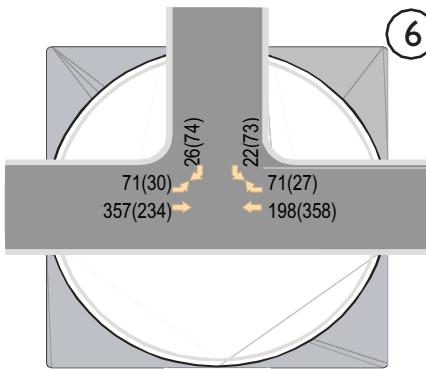
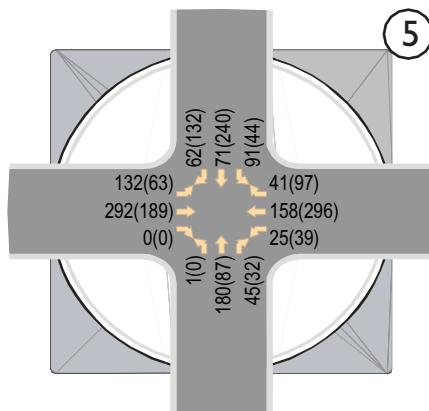
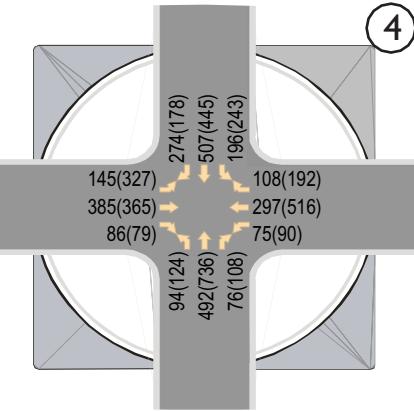
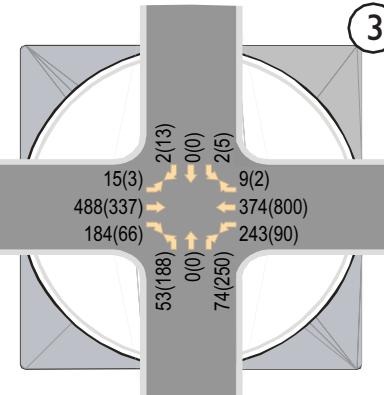
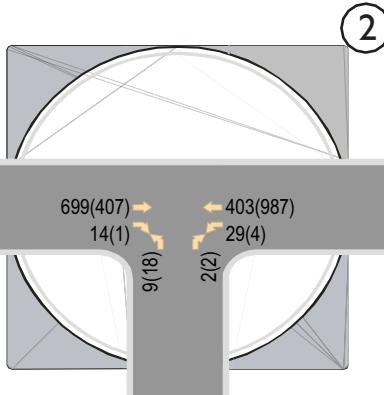
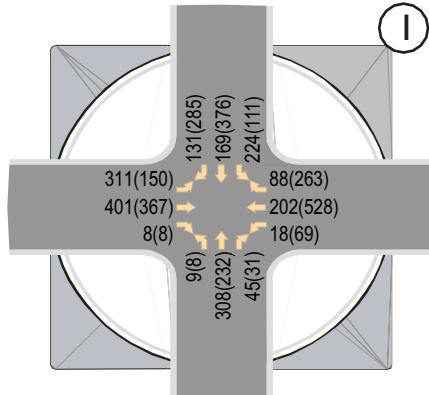
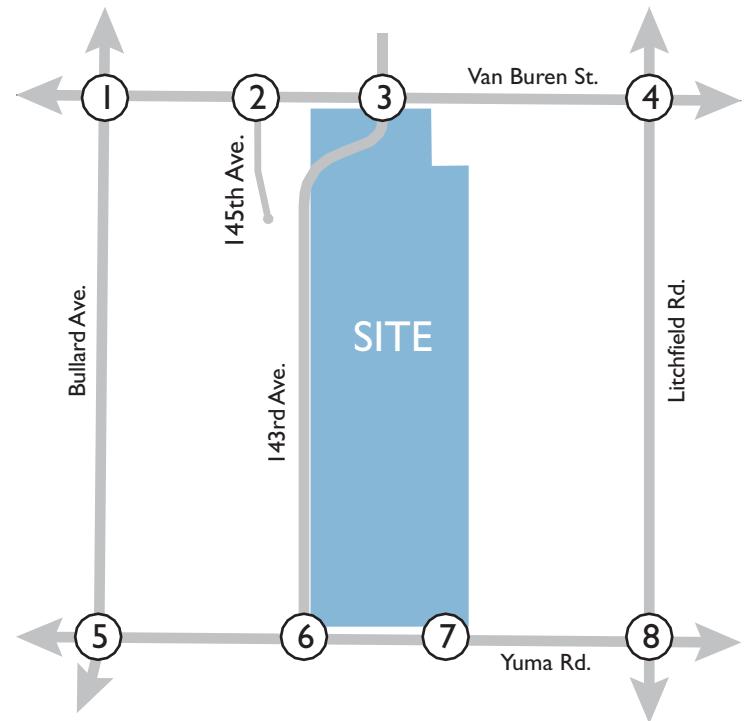


Figure 8: 2018 Background Traffic Volumes



#### LEGEND

XX(XX) - AM(PM) Peak Hour Traffic Volumes



**Figure 9: 2013 Total Traffic Volumes**

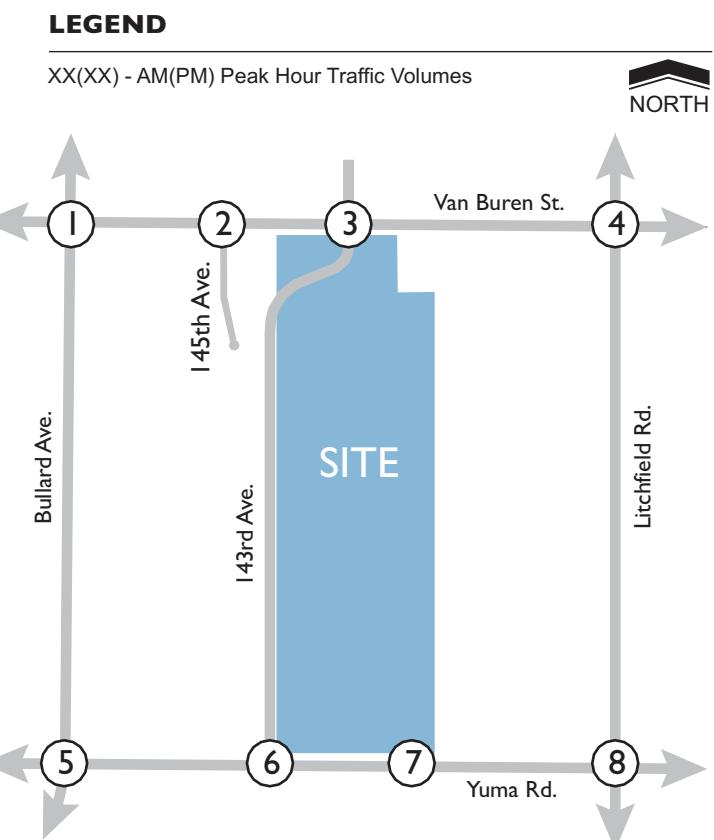
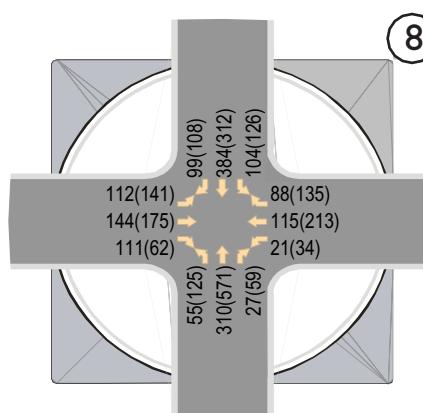
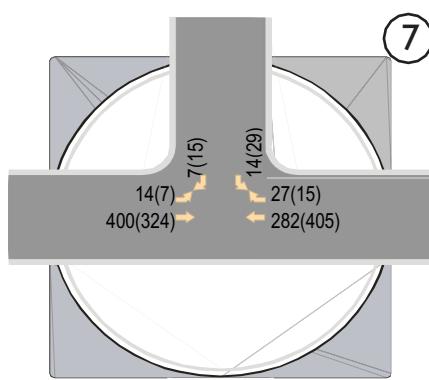
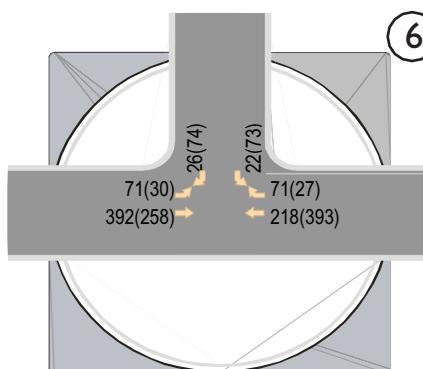
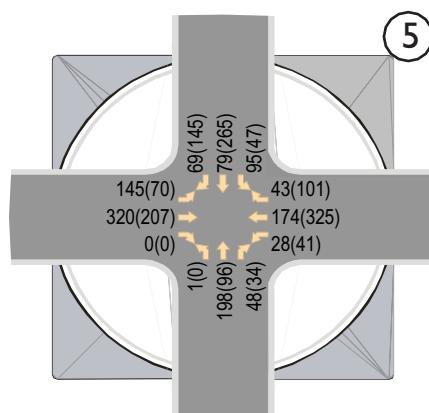
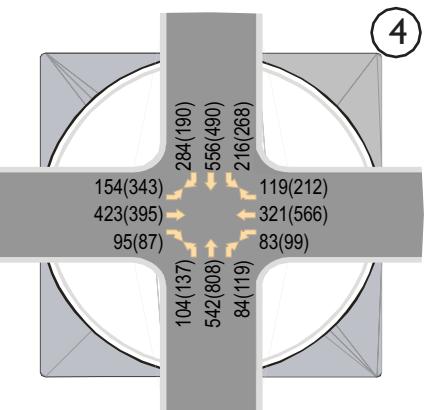
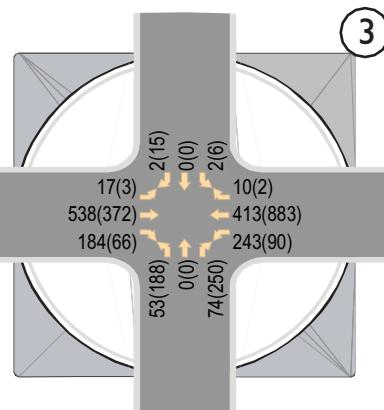
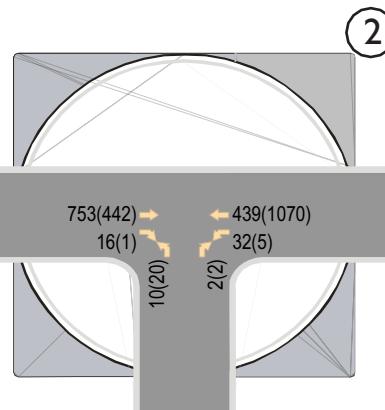
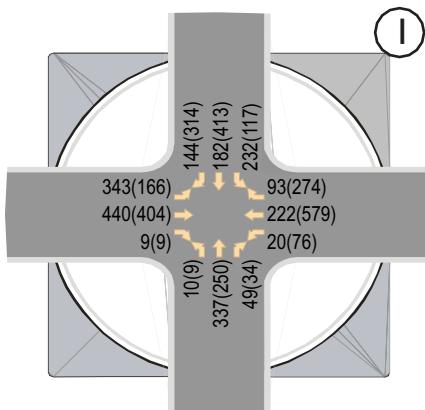
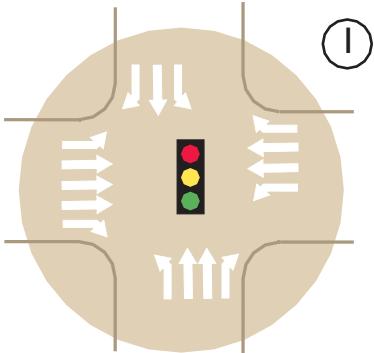
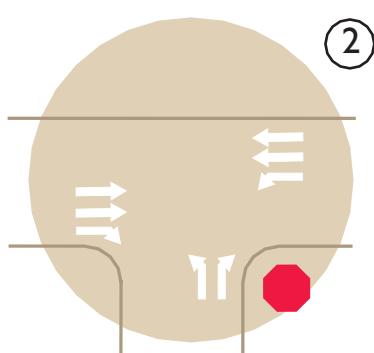


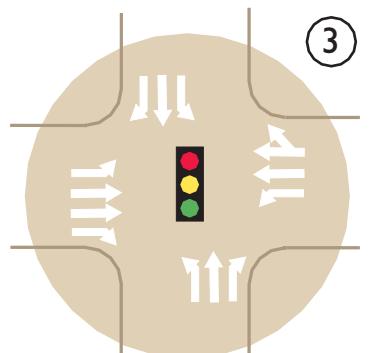
Figure 10: 2018 Total Traffic Volumes



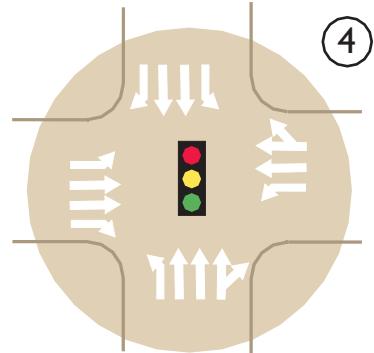
Bullard Ave. & Van Buren St.



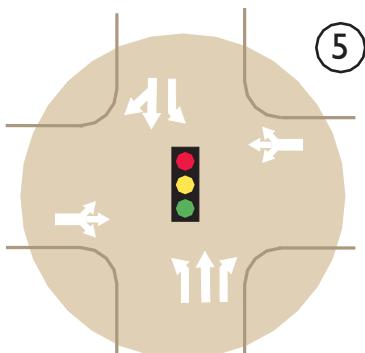
145th Ave. & Van Buren St.



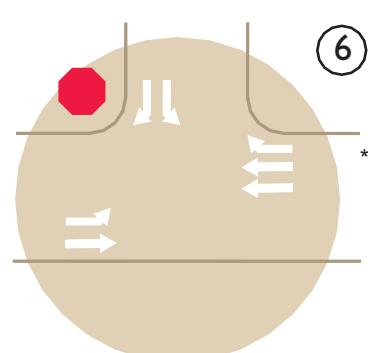
143rd Ave. & Van Buren St.



Litchfield Rd. & Van Buren St.

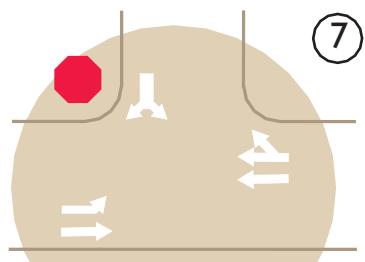


Yuma Rd. & Bullard Ave.

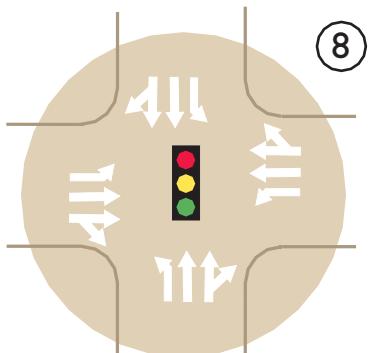


143rd Ave. & Yuma Rd.

\* WB approach will be striped with only 1 thru and 1 right-turn lane until Yuma Rd. is widened to the west of the site.



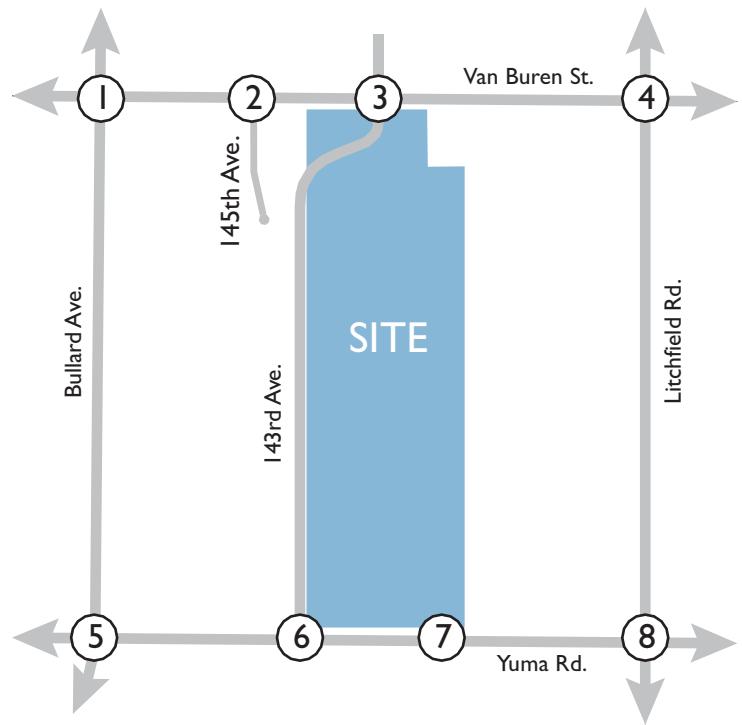
Access C & Yuma Rd.



Yuma Rd. & Litchfield Rd.

#### LEGEND

- Thru or Turning Movement
- Traffic Signal
- Stop Sign



**Figure II:** Proposed Lane Configurations and Stop Controls

**Table 4: 2013 Peak Hour Levels of Service**

Intersection	Traffic Control	Approach	Total Traffic LOS	
			AM Peak Hour	PM Peak Hour
Van Buren Street/143 <sup>rd</sup> Avenue	Signal	NB	D	B
		SB	D	B
		EB	A	B
		WB	A	B
		<b>Overall</b>	<b>A</b>	<b>B</b>
Van Buren Street/145 <sup>th</sup> Avenue	1-way stop (NB)	NB LT	C	C
		NB RT	B	A
		WB LT	A	A
Van Buren Street/Bullard Avenue	Signal	NB	C	C
		SB	B	C
		EB	B	C
		WB	D	C
		<b>Overall</b>	<b>C</b>	<b>C</b>
Van Buren Street/Litchfield Road	Signal	NB	C	D
		SB	C	C
		EB	C	C
		WB	C	D
		<b>Overall</b>	<b>C</b>	<b>C</b>
Yuma Road/Bullard Avenue	Signal	NB	C	B
		SB	C	C
		EB	A	B
		WB	A	B
		<b>Overall</b>	<b>B</b>	<b>B</b>
Yuma Road/Litchfield Road	Signal	NB	C	C
		SB	B	C
		EB	C	C
		WB	D	C
		<b>Overall</b>	<b>C</b>	<b>C</b>
Yuma Road/143 <sup>rd</sup> Avenue	1-way stop (SB)	SB LT	C	C
		SB RT	A	B
		EB LT	A	A
Yuma Road/Access Road	1-way stop (SB)	SB LT/RT EB LT	B A	B A

Under the future 2013 traffic conditions all of the movements at each study intersection are projected to continue to operate with level of service D or better.

The resulting 2018 levels of service for the study intersections are summarized in **Table 5** for the background volumes only and **Table 5** for the with site traffic volumes. The analyses have been included in **Appendix F**. The lane configurations provided on **Figure 11** were utilized for the intersection analyses.

**Table 5: 2018 Peak Hour Levels of Service**

Intersection	Traffic Control	Approach	Total Traffic LOS	
			AM Peak Hour	PM Peak Hour
Van Buren Street/143 <sup>rd</sup> Avenue	Signal	NB	D	B
		SB	D	B
		EB	A	B
		WB	A	B
		<b>Overall</b>	<b>A</b>	<b>B</b>
Van Buren Street/145 <sup>th</sup> Avenue	1-way stop (NB)	NB LT	C	C
		NB RT	B	A
		WB LT	A	A
Van Buren Street/Bullard Avenue	Signal	NB	C	C
		SB	B	C
		EB	B	C
		WB	D	C
		<b>Overall</b>	<b>C</b>	<b>C</b>
Van Buren Street/Litchfield Road	Signal	NB	C	D
		SB	C	C
		EB	C	C
		WB	C	D
		<b>Overall</b>	<b>C</b>	<b>C</b>
Yuma Road/Bullard Avenue	Signal	NB	C	B
		SB	C	B
		EB	A	B
		WB	A	B
		<b>Overall</b>	<b>B</b>	<b>B</b>
Yuma Road/Litchfield Road	Signal	NB	C	C
		SB	B	C
		EB	C	C
		WB	D	C
		<b>Overall</b>	<b>C</b>	<b>C</b>
Yuma Road/143 <sup>rd</sup> Avenue	1-way stop (SB)	SB LT	C	C
		SB RT	A	B
		EB LT	A	A
Yuma Road/Access Road	1-way stop (SB)	SB LT/RT	B	B
		EB LT	A	A

Under the future 2018 conditions with the site traffic the movements at each study intersection are projected to continue to operate with level of service D or better. The analyses have been included in **Appendix G**. The lane configurations provided on **Figure 11** were utilized for the intersection analyses.

### **ROADWAY ANALYSIS**

As shown in **Table 3 – Project Generated Trips**, the Beck Property Development is projected to generate approximately 9,870 daily trips. 143<sup>rd</sup> Avenue will provide the primary access for the development. A 3-lane collector roadway can adequately accommodate up to 10,000 daily vehicles; therefore it is suggested that a 3-lane collector roadway be provided for 143<sup>rd</sup> Avenue from Van Buren Street south to Yuma Road.

### **QUEUE LENGTH ANALYSIS**

Queuing analyses were performed for the left and right turn lanes at the Van Buren Street/143<sup>rd</sup> Avenue intersection and the Yuma Road/143<sup>rd</sup> Avenue intersection. The City of Goodyear currently does not have queuing criteria but follows Maricopa County Department of Transportation (MCDOT) criteria. A queuing analysis was performed, according to the methodology documented in the *MCDOT Traffic Impact Procedures*. The formulas used for the calculations are stated below. The study area intersections were analyzed to determine the queue length needed to accommodate the expected traffic volumes in the horizon years 2013 and 2018.

*For signal controlled intersections:*

$$\text{Queue Length} = [2 \times (\text{vehicles}/\text{hour})/(\text{cycles}/\text{hour})] \times 25 \text{ feet/vehicle}$$

*For unsignalized intersections:*

$$\text{Queue Length} = [(\text{vehicles}/\text{hour})/(30 \text{ periods}/\text{hour})] \times 25 \text{ feet/vehicle}$$

The City of Goodyear requires a minimum 250 feet storage length for turn lanes on arterial roadways and a minimum 150 feet storage length for collector roadway intersections that are signalized. A minimum of 75 feet of storage is required on collector roadways at unsignalized intersections. All turn lanes should be between 10 and 12 feet in width and have a minimum taper length of approximately 180 feet.

The calculated queue length requirements for the movements with site traffic are summarized in **Table 6**. The queue length calculations are provided in **Appendix H**.

**Table 6: Van Buren Street/143<sup>rd</sup> Avenue Storage Lengths**

Intersection	Movement	Storage Length (feet)		
		Existing <sup>(1)</sup>	Calculated	Recommended
Van Buren Street/143 <sup>rd</sup> Avenue	EB LT	150'	25'	150' <sup>(2)</sup>
	EB RT	'	250'	250'
	WB LT	100'	325'	100' <sup>(3)</sup>
	NB LT	'	250'	150' <sup>(4)</sup>
	NB RT	'	325'	150'
	SB RT	140'	25'	140' <sup>(2)</sup>
	SB LT	330'	25'	330' <sup>(2)</sup>
Van Buren Street/Bullard Avenue	WB RT	260'	350'	250' <sup>(5)</sup>
	SB LT	260'	300'	250' <sup>(6)</sup>
Van Buren Street/Litchfield Road	EB LT	125'	450'	300' <sup>(8)</sup>
	SB RT	>400' <sup>(7)</sup>	375'	375' <sup>(9)</sup>
Yuma Road/Bullard Avenue	SB LT	160'	125'	125' <sup>(2)</sup>
Yuma Road/Litchfield Road	NB LT	160'	175'	160' <sup>(10)</sup>
	EB LT	100'	200'	200' <sup>(11)</sup>
Yuma Road/143 <sup>rd</sup> Avenue	SB LT	'	75'	150'
	SB RT	'	75'	150'
	EB LT	'	75'	150'
Yuma Road/Access Road	EB LT	'	25'	150'

(1) Measured from stop bar.

(2) Existing queue storage exceeds calculated queue storage length and is sufficient.

(3) Providing longer than the existing storage would require modifications to the existing median which would impact the storage for the median break to the east.

(4) The geometrics for the northbound 143<sup>rd</sup> Avenue approach to Van Buren Street restrict the ability to construct a longer northbound left turn lane.

(5) The Van Buren/Bullard traffic signal phasing could be modified to add a westbound right turn overlap to reduce the possible right turn lane queuing.

(6) The existing southbound left turn striping approaching Van Buren Street could be modified to provide dual left turn lanes. This would also require modifications to the traffic signal to convert the permissive/protected left turn phasing to protected left turn phasing only, which also supports the westbound right turn overlap.

(7) The southbound Litchfield Road right turn lane at Van Buren Street is an actual trap lane and has an available striped storage length over 500'.

(8) The eastbound approach to Litchfield Road currently has a striped two-way left turn lane. The striping could be modified to change the existing eastbound left turn storage from 125 feet to 300 feet. Any additional required storage could use the striped two-way left turn lane.

(9) Adequate storage is available in the existing southbound right turn lane.

(10) Providing longer than the existing storage would require modifications to the existing median which would impact the storage for the median break to the south.

(11) The eastbound approach to Litchfield Road currently has a striped two-way left turn lane. The striping could be modified to change the existing eastbound left turn storage from 100 feet to 200 feet. Any additional required storage could use the striped two-way left turn lane.

(12) Recommend minimum of 75 feet

The minimum storage lengths for the northbound approach to the 143<sup>rd</sup> Avenue intersection with Van Buren Street, as well as the southbound and eastbound approaches to the Yuma Road/143<sup>rd</sup> Avenue intersection should be constructed to the recommended distances provided in **Table 6**.

Some striping modifications may be required at the Van Buren Street/Bullard Avenue intersection (provide dual southbound left turn lanes), the Van Buren Street/Litchfield Road intersection (provide a longer eastbound left turn lane storage), and the Yuma Road/ Litchfield Road intersection (provide a longer eastbound left turn lane storage).

## CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations have been documented in this study.

- ◆ Under the existing conditions all of the movements at the Van Buren Street intersections – 143<sup>rd</sup> Avenue, 145<sup>th</sup> Avenue, Bullard Avenue and Litchfield Road – and the Yuma Road intersections – Bullard Avenue and Litchfield Road – are projected to operate with level of service D or better in the peak hours.
- ◆ The proposed Beck Property Development with 2,432,000 square feet of Warehouse and 838,000 square feet of High-cube Warehouse land uses within four large buildings is anticipated to generate 9,870 daily trips, with approximately 810 trips occurring during the AM peak hour and 865 trips occurring during the PM peak hour.
- ◆ Under the future 2013 traffic conditions all of the movements at each study intersection are projected to continue to operate with level of service D or better.
- ◆ Under the future 2018 traffic conditions all of the movements at each study intersection are projected to continue to operate with level of service D or better.
- ◆ The calculated storage lengths in Table 6 should be provided where possible. Existing median breaks and left turn lanes in existing medians may prohibit the construction of the calculated storage lengths.
- ◆ A 3-lane collector roadway should be provided for 143<sup>rd</sup> Avenue from Van Buren Street south to the development.
- ◆ Striping modifications may be required at the Van Buren Street/Bullard Avenue intersection (provide dual southbound left turn lanes) as well as traffic signal modifications (provided a protected southbound left turn phase and a westbound right turn overlap phase).
- ◆ Striping modifications may be required at the Van Buren Street/Litchfield Road intersection (provide a longer eastbound left turn lane storage).
- ◆ Striping modifications may be required at the Yuma Road/Litchfield Road intersection (provide a longer eastbound left turn lane storage).
- ◆ A traffic signal should be installed at the intersection of Van Buren Street and 143<sup>rd</sup> Avenue to provide acceptable levels of service for the northbound and southbound movements.

## LIST OF REFERENCES

*A Policy on Geometric Design of Highways and Streets.* American Association of State Highway and Transportation Officials, Washington, D.C., 2001.

*Design Standards & Policies Manual.* City of Goodyear, Goodyear, Arizona, July 2006.

*Highway Capacity Manual.* Transportation Research Board, Washington, D.C., 2000.

*Manual on Uniform Traffic Control Devices.* U.S. Department of Transportation, Federal Highways Administration, Washington, D.C., 2003.

*NPTS Urban Travel Patterns Report:* December 1999.

*Trip Generation 8<sup>th</sup> Edition.* Institute of Transportation Engineers, Washington, D.C., 2008.

*Trip Generation Handbook, 2<sup>nd</sup> Edition,* Institute of Transportation Engineers, Washington, D.C., 2004.

## TECHNICAL APPENDIX

- APPENDIX A:** REVIEW COMMENTS RESPONSES
- APPENDIX B:** EXISTING TRAFFIC COUNTS
- APPENDIX C:** EXISTING PEAK HOUR CAPACITY ANALYSIS
- APPENDIX D:** TRIP GENERATION
- APPENDIX E:** GROWTH RATE CALCULATIONS
- APPENDIX F:** 2013 PEAK HOUR ANALYSIS
- APPENDIX G:** 2018 PEAK HOUR ANALYSIS
- APPENDIX H:** QUEUE LENGTH ANALYSIS

## APPENDIX A

### REVIEW COMMENTS AND RESPONSES

## APPENDIX B

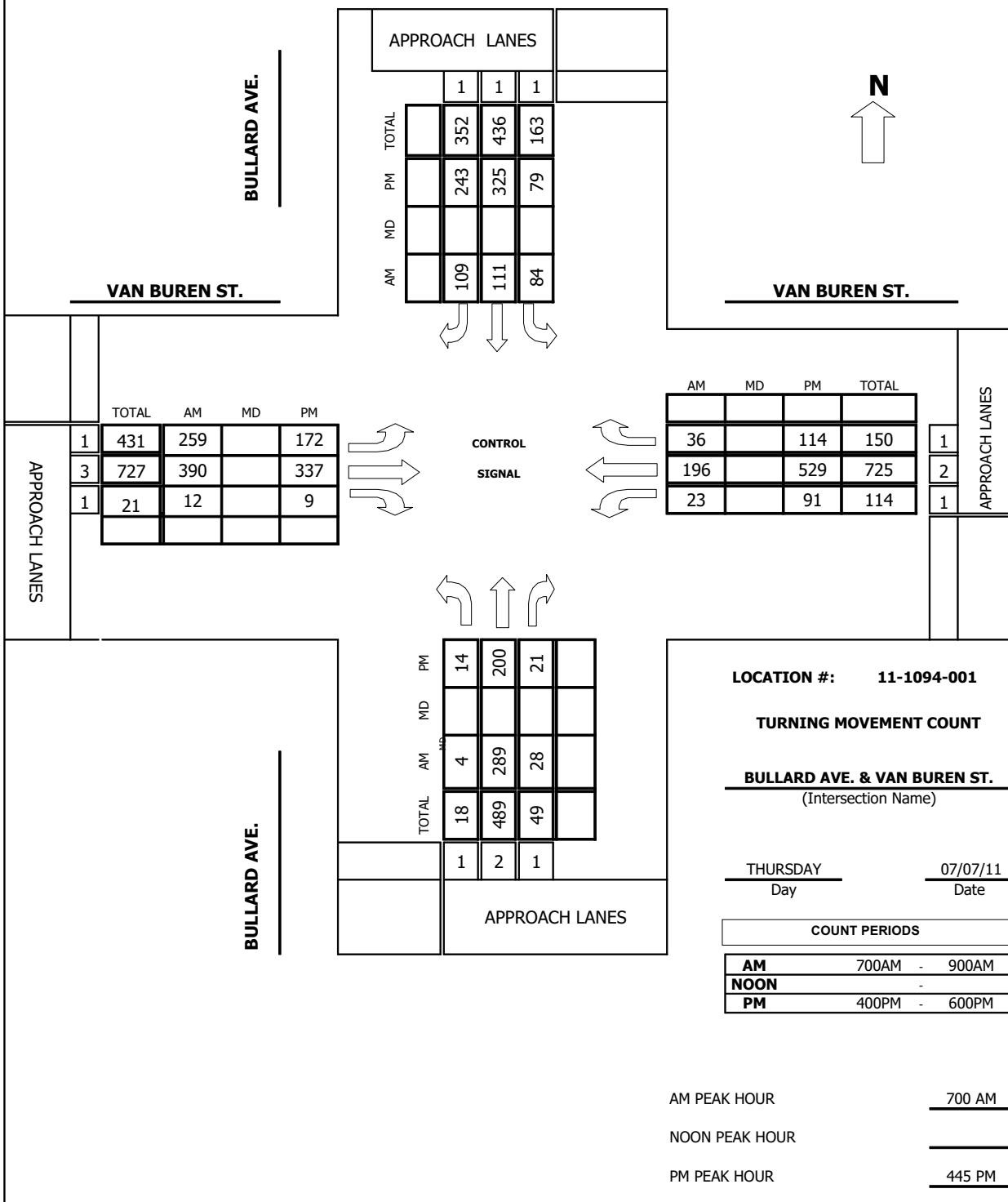
### EXISTING TRAFFIC COUNTS

**Intersection Turning Movement  
Prepared by:**

**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745

**Project #:** 11-1094-001

**TMC SUMMARY OF BULLARD AVE. & VAN BUREN ST.**

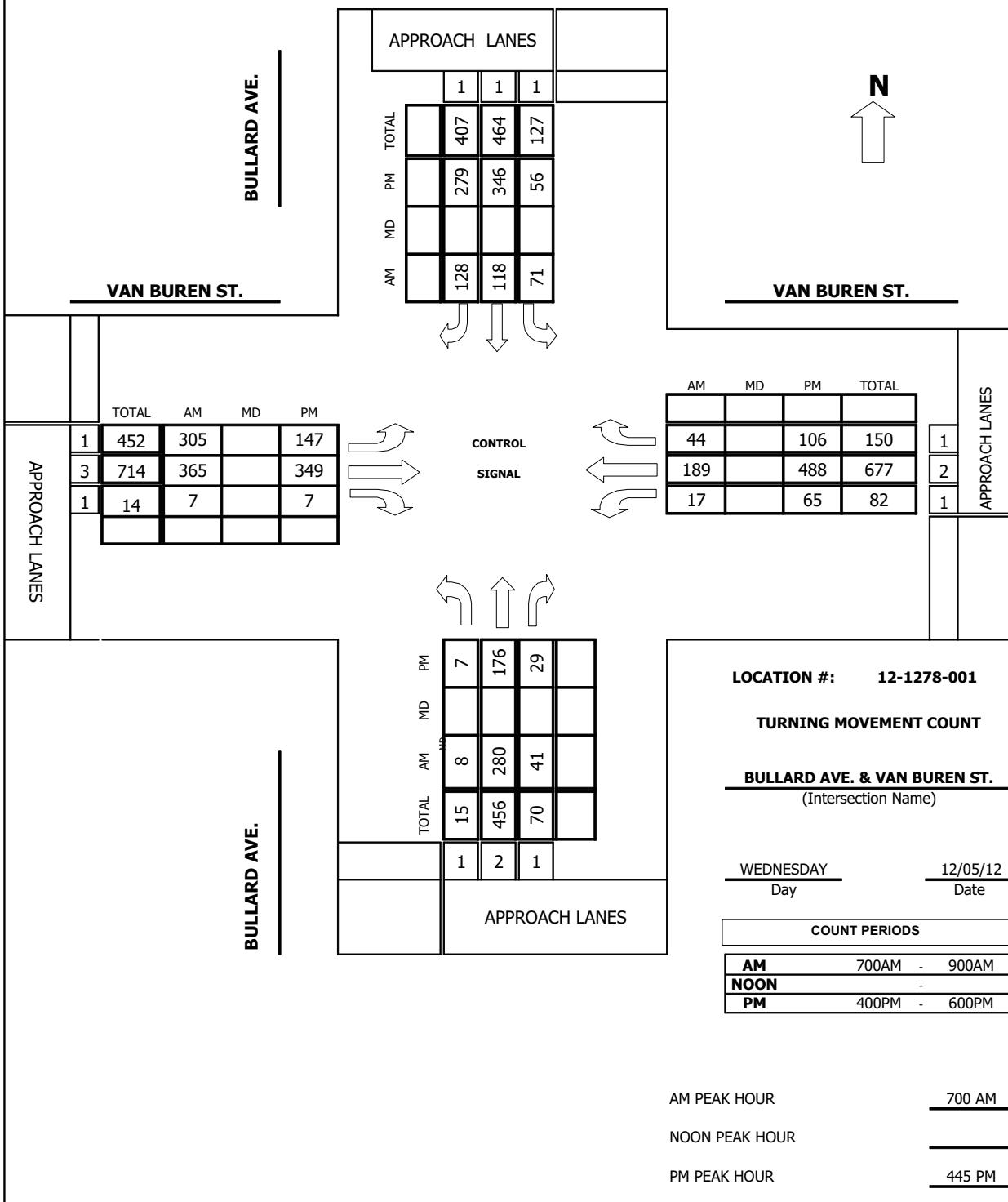


**Intersection Turning Movement  
Prepared by:**

**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745

**Project #:** 12-1278-001

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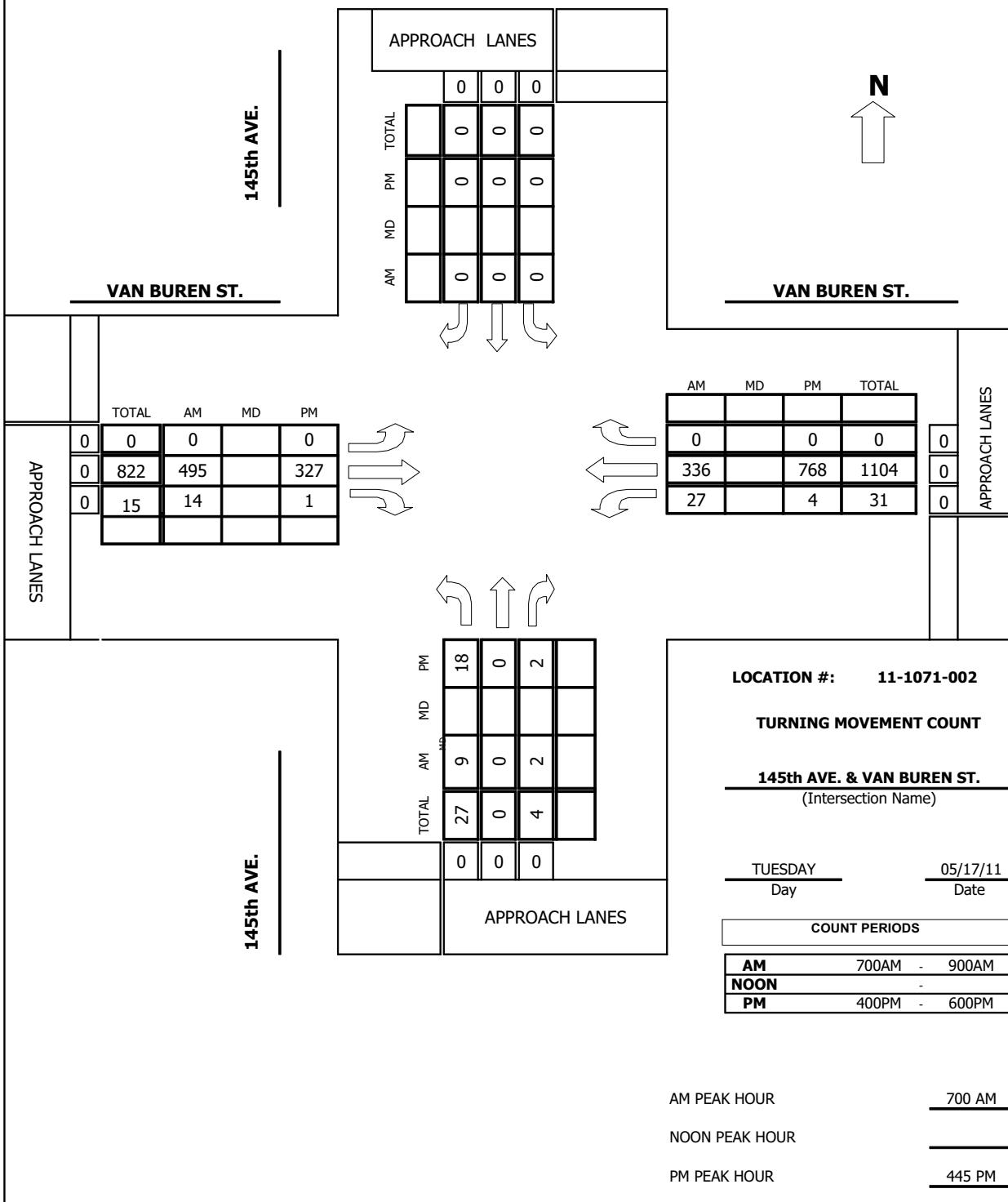


**Intersection Turning Movement**  
**Prepared by:**

**FIELD DATA SERVICES OF ARIZONA, INC.**  
 520.316.6745

**Project #:** 11-1071-002

**TMC SUMMARY OF 145th AVE. & VAN BUREN ST.**

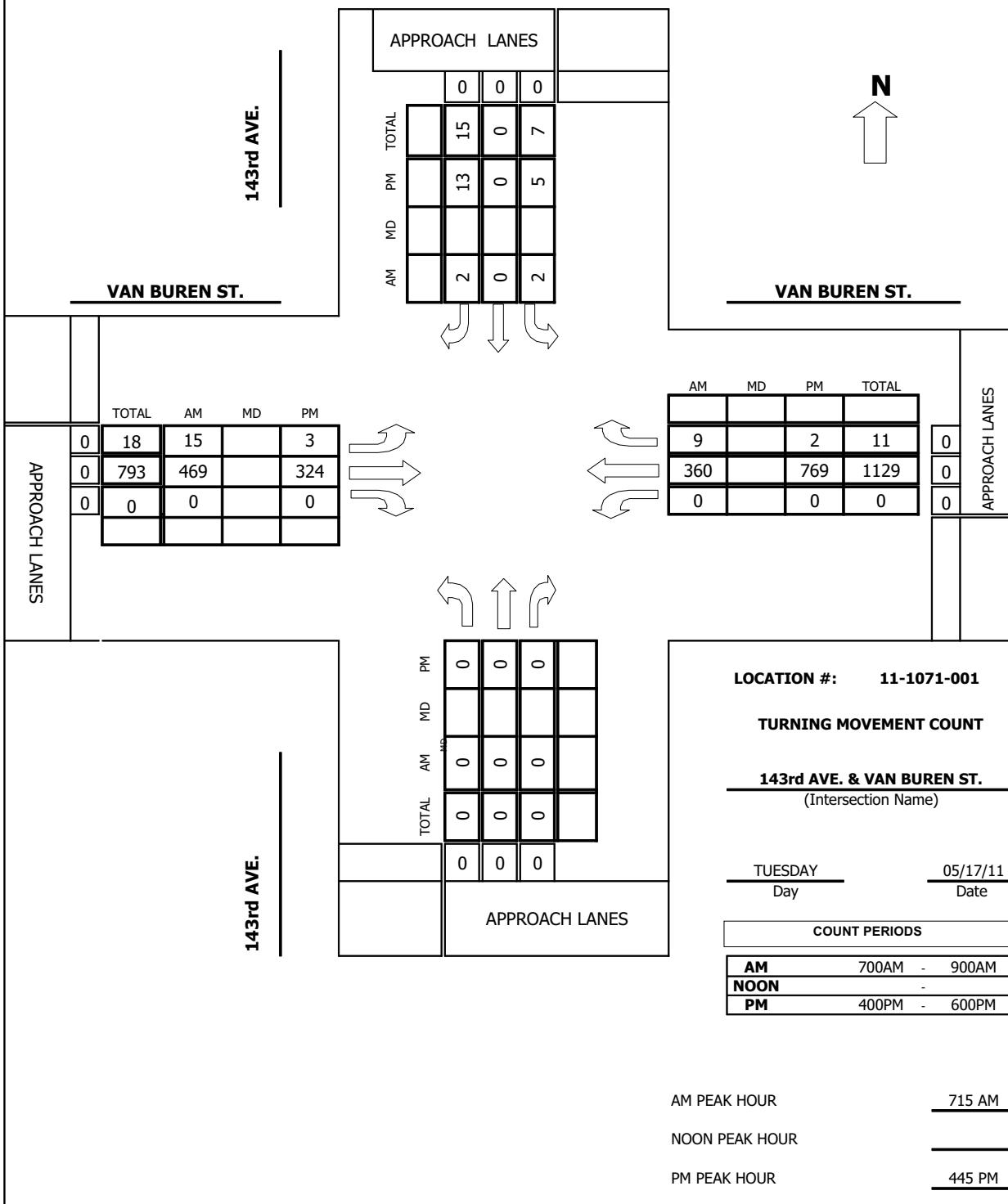


**Intersection Turning Movement  
Prepared by:**

**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745

**Project #:** 11-1071-001

**TMC SUMMARY OF 143rd AVE. & VAN BUREN ST.**



## **Intersection Turning Movement**

## **Prepared by:**

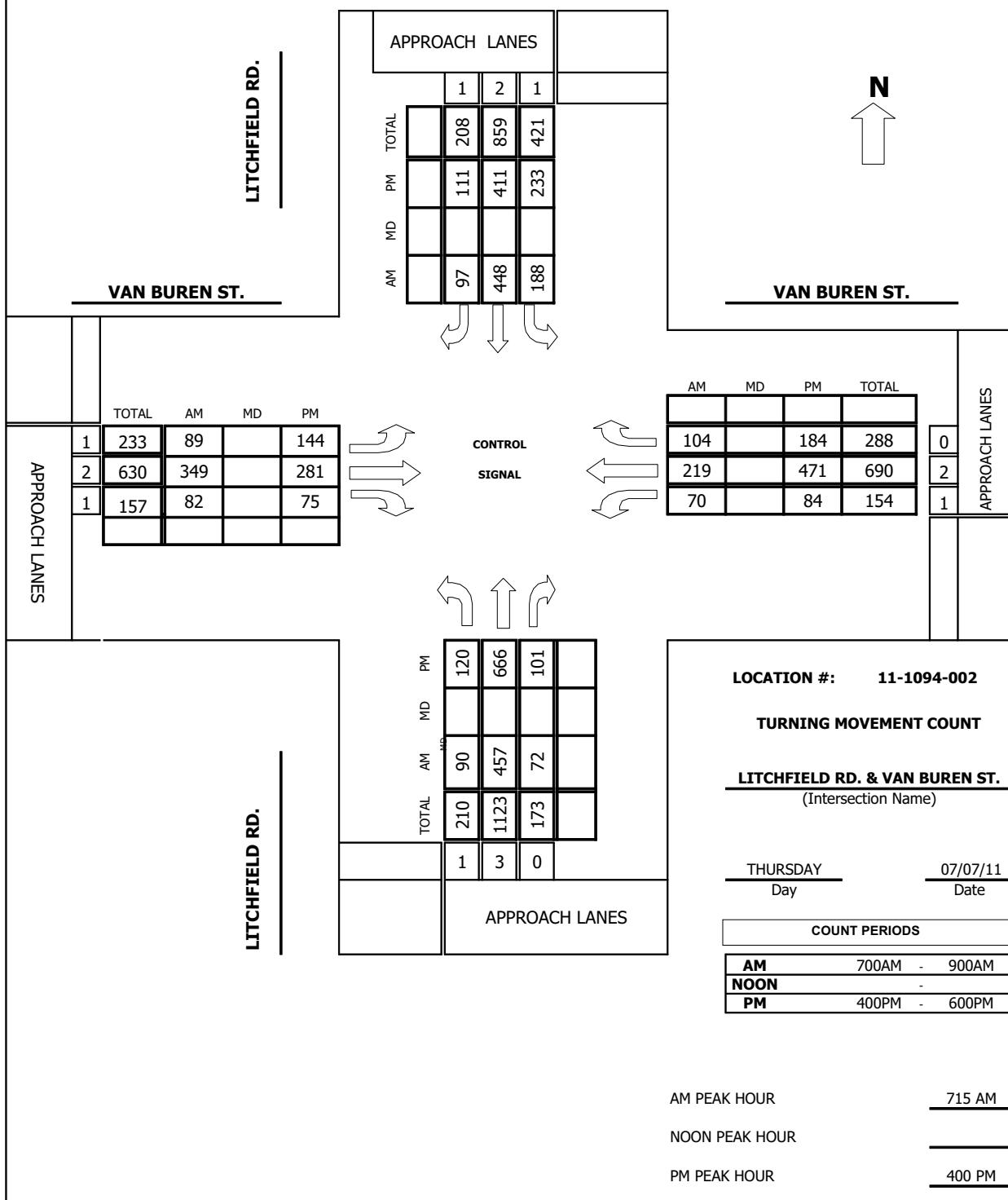


**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745

520.316.6745

**Project #:** 11-1094-002

## **TMC SUMMARY OF LITCHFIELD RD. & VAN BUREN ST.**

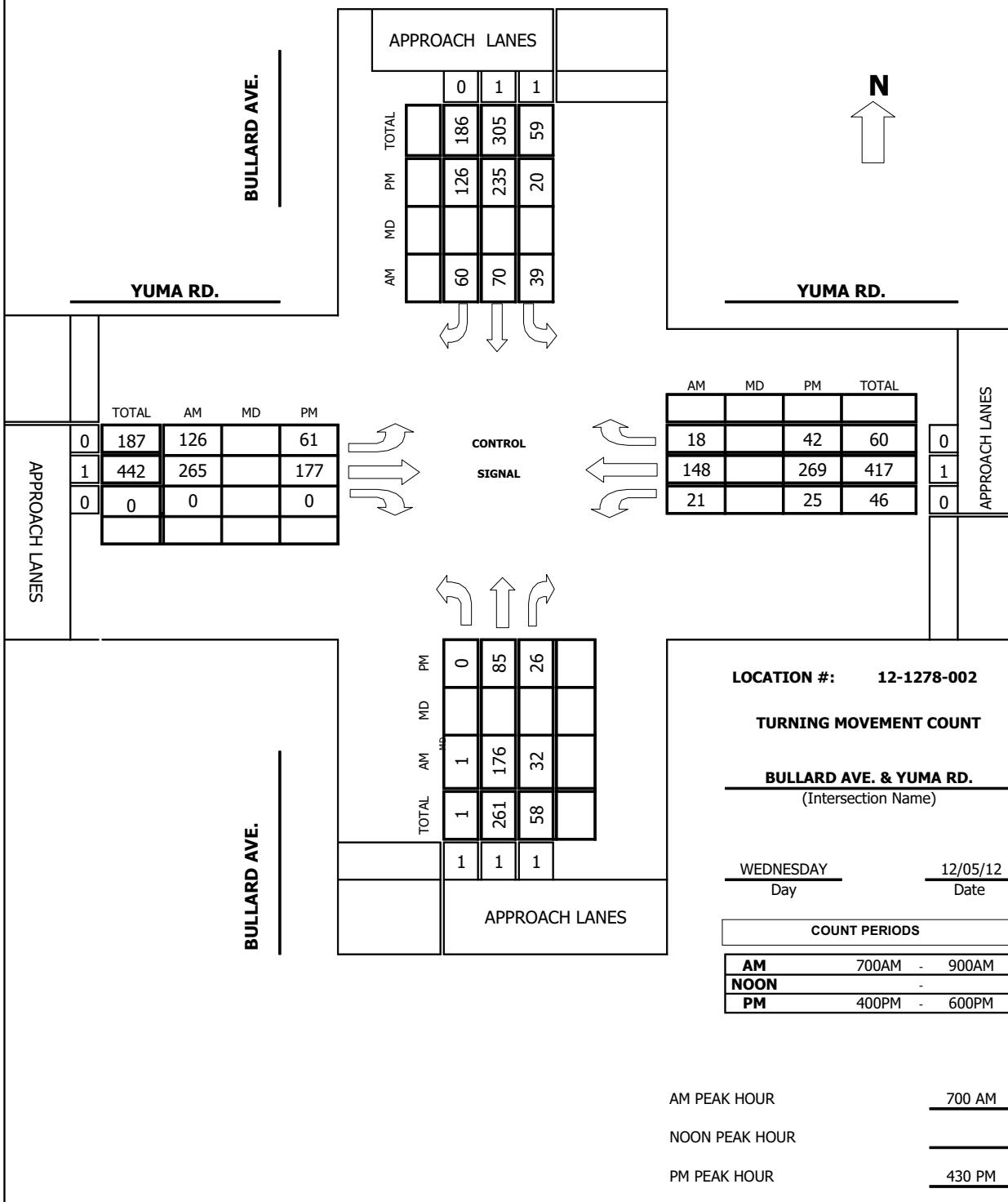


**Intersection Turning Movement  
Prepared by:**

**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745

**Project #:** 12-1278-002

**TMC SUMMARY OF BULLARD AVE. & YUMA RD.**

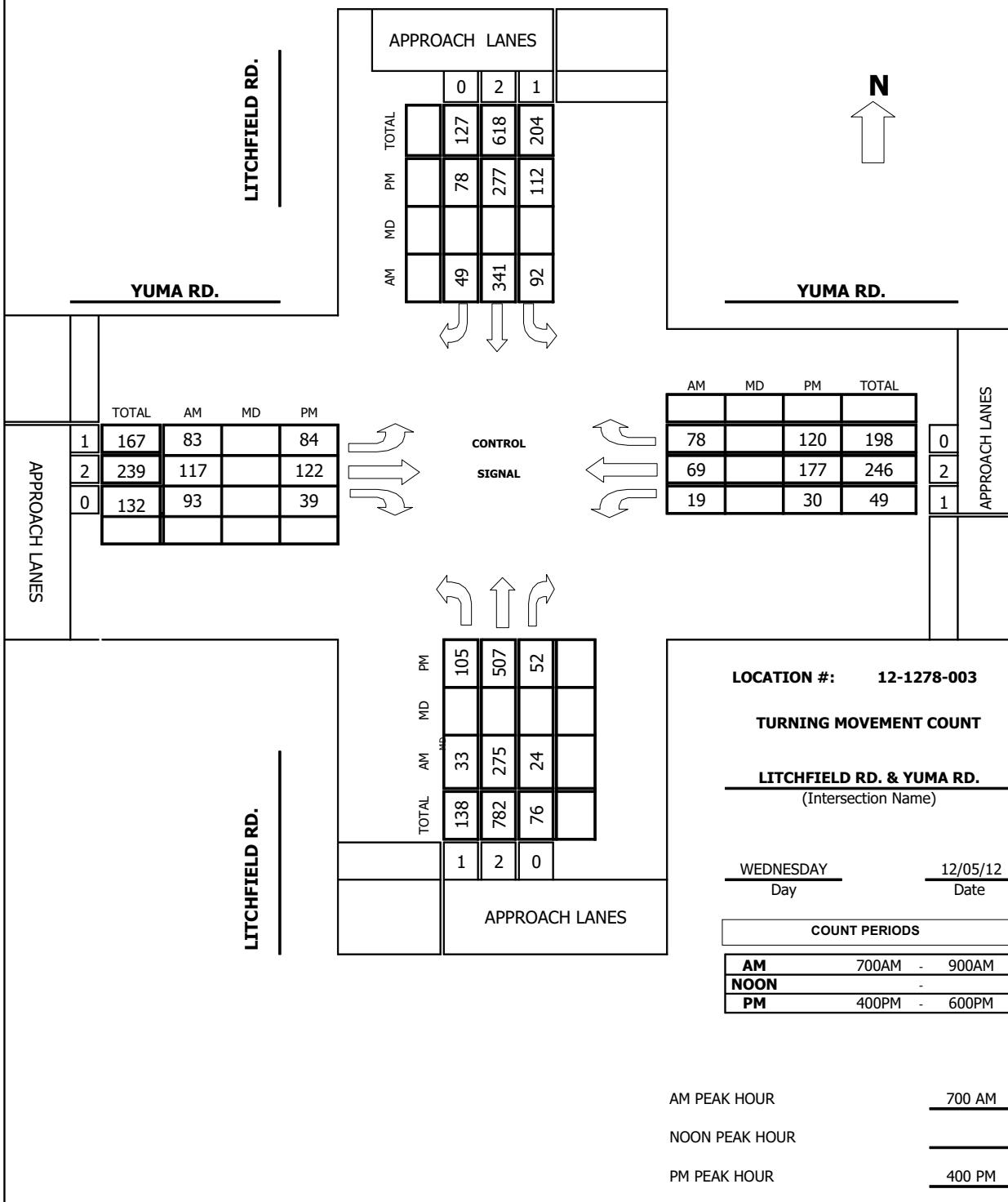


**Intersection Turning Movement  
Prepared by:**

**FIELD DATA SERVICES OF ARIZONA, INC.**  
520.316.6745

**Project #:** 12-1278-003

**TMC SUMMARY OF LITCHFIELD RD. & YUMA RD.**



## APPENDIX C

### EXISTING PEAK HOUR CAPACITY ANALYSIS

---

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2012 AM - Existing

---

Scenario Report

Scenario: AM

Command: AM

Volume: AM

Geometry: Default Geometry

Impact Fee: Default Impact Fee

Trip Generation: AM

Trip Distribution: Default Trip Distribution

Paths: Default Path

Routes: Default Route

Configuration: Default Configuration

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2012 AM - Existing

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Bullard Ave & Van Buren St

Street Name: Bullard Ave Van Buren St														
Approach:	North Bound			South Bound			East Bound			West Bound				
	L	-	T	-	R	L	-	T	-	R	L	-	T	-
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit				
Rights:	Include			Include			Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	0	1	1	0	1	0	1	1	0	2	0
Volume Module:														
Base Vol:	8	280	41	71	118	128	305	365	7	17	189	44		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:	8	280	41	71	118	128	305	365	7	17	189	44		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	8	280	41	71	118	128	305	365	7	17	189	44		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
PHF Volume:	8	295	43	75	124	135	321	384	7	18	199	46		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	8	295	43	75	124	135	321	384	7	18	199	46		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	8	295	43	75	124	135	321	384	7	18	199	46		
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.95	0.85		
Lanes:	1.00	2.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00		
Final Sat.:	1805	3610	1615	1805	1900	1615	1805	5187	1615	1805	3610	1615		
Capacity Analysis Module:														
Vol/Sat:	0.00	0.08	0.03	0.04	0.07	0.08	0.18	0.07	0.00	0.01	0.06	0.03		
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****		
Green/Cycle:	0.21	0.20	0.20	0.33	0.28	0.28	0.60	0.50	0.50	0.20	0.13	0.13		
Volume/Cap:	0.03	0.41	0.13	0.21	0.23	0.29	0.35	0.15	0.01	0.07	0.41	0.21		
Delay/Veh:	27.9	31.8	29.9	21.4	24.9	25.6	9.2	12.2	11.3	29.1	36.3	35.2		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	27.9	31.8	29.9	21.4	24.9	25.6	9.2	12.2	11.3	29.1	36.3	35.2		
LOS by Move:	C	C	C	C	C	C	A	B	B	C	D	D		
HCM2kAvgQ:	0	4	1	2	3	3	5	2	0	0	3	1		

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Beck Property TIA, Goodyear AZ  
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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2012 AM - Existing

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #2 145th St. & Van Buren St.

Average Delay (sec/veh): 0.4      Worst Case Level Of Service: B[ 15.0 ]

Street Name:	145th St				Van Buren St													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled											
Rights:	Include		Include		Include		Include											
Lanes:	1	0	0	0	1	0	0	0	0	0	2	0	1	1	0	2	0	0

## Volume Module:

Base Vol:	9	0	2	0	0	0	0	505	14	28	343	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	0	2	0	0	0	0	505	14	28	343	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	0	2	0	0	0	0	505	14	28	343	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	9	0	2	0	0	0	0	532	15	29	361	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	0	2	0	0	0	0	532	15	29	361	0

#### Critical Gap Module:

Critical Gp: 6.8 xxxx 6.9xxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxx  
FollowUpTim: 3.5 xxxx 3.3xxxx xxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxx

#### Capacity Module

```

Capacity Module:
Cnflict Vol: 771 xxxx 266 xxxx xxxx xxxxx xxxx xxxx xxxx 546 xxxx xxxx
Potent Cap.: 341 xxxx 739 xxxx xxxx xxxxx xxxx xxxx xxxx 1033 xxxx xxxx
Move Cap.: 333 xxxx 739 xxxx xxxx xxxxx xxxx xxxx xxxx 1033 xxxx xxxx
Volume/Cap: 0.03 xxxx 0.00 xxxx xxxx xxxx xxxx xxxx 0.03 xxxx xxxx

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Level Of Service Module:
2Way95thQ:    0.1 xxxx  0.0  xxxx xxxx xxxx  xxxx xxxx xxxx  0.1 xxxx xxxx
Control Del: 16.1 xxxx  9.9 xxxx xxxx xxxx xxxx  xxxx xxxx 8.6 xxxx xxxx
LOS by Move:   C *     A *   * *   * *   * *   A *   *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx
SharedQueue:xxxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx
Shrd ConDel:xxxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx
Shared LOS:    * *   * *   * *   * *   * *   * *   * *   *
ApproachDel:   15.0       xxxxxx       xxxxxx       xxxxxx
ApproachLOS:    B         *           *           *

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Note: Queue reported is the number of cars per lane.

Beck Property TIA, Goodyear AZ  
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Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 143rd St & Van Buren St

Average Delay (sec/veh): 0.2      Worst Case Level Of Service: B[ 11.9]

Street Name:	143rd St	Van Buren St		
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	
Rights:	Include	Include	Include	
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0

Volume Module:

Base Vol:	0 0 0 2 0 2 15 478 0 0 0 367 9
Growth Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 2 0 2 15 478 0 0 0 367 9
Added Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	0 0 0 2 0 2 15 478 0 0 0 367 9
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume:	0 0 0 2 0 2 16 503 0 0 0 386 9
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 0 0 2 0 2 16 503 0 0 0 386 9

Critical Gap Module:

Critical Gp:	7.5 6.5 6.9 6.8 6.5 6.9 4.1 xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx xxxx

Capacity Module:

Cnflict Vol:	728 931 252 674 926 198 396 xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	315 269 754 392 271 816 1174 xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	311 265 754 388 267 816 1174 xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap:	0.00 0.00 0.00 0.01 0.00 0.00 0.01 xxxx xxxx xxxx xxxx xxxx

Level Of Service Module:

2Way95thQ:	xxxx xxxx xxxx 0.0 xxxx 0.0 0.0 xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxx xxxx xxxx 14.3 xxxx 9.4 8.1 xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * B * A A * * * * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx
SharedQueue:	xxxxx xxxx
Shrd ConDel:	xxxxx xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	xxxxxx 11.9 xxxxxxxx xxxxxxxx
ApproachLOS:	* B * *

Note: Queue reported is the number of cars per lane.

Beck Property TIA, Goodyear AZ  
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Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Litchfield Rd & Van Buren St

Street Name: Litchfield Rd Van Buren St															
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit				
Rights:	Include		Include		Include		Include		Include		Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1	0	2	1	0	1	0	2	0	1	1	0	1	1	
Volume Module:															
Base Vol:	92	466	73	192	457	99	91	356	84	71	223	106			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	92	466	73	192	457	99	91	356	84	71	223	106			
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	92	466	73	192	457	99	91	356	84	71	223	106			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
PHF Volume:	97	491	77	202	481	104	96	375	88	75	235	112			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	97	491	77	202	481	104	96	375	88	75	235	112			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	97	491	77	202	481	104	96	375	88	75	235	112			
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Adjustment:	0.95	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.90	0.90			
Lanes:	1.00	2.59	0.41	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.36	0.64			
Final Sat.:	1805	4395	688	1805	3610	1615	1805	3610	1615	1805	2329	1107			
Capacity Analysis Module:															
Vol/Sat:	0.05	0.11	0.11	0.11	0.13	0.06	0.05	0.10	0.05	0.04	0.10	0.10			
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****			
Green/Cycle:	0.40	0.26	0.26	0.55	0.37	0.37	0.39	0.25	0.25	0.33	0.23	0.23			
Volume/Cap:	0.20	0.44	0.44	0.32	0.36	0.18	0.24	0.41	0.22	0.20	0.44	0.44			
Delay/Veh:	17.1	28.3	28.3	11.2	21.0	19.5	18.6	28.4	26.9	21.3	29.9	29.9			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	17.1	28.3	28.3	11.2	21.0	19.5	18.6	28.4	26.9	21.3	29.9	29.9			
LOS by Move:	B	C	C	B	C	B	B	C	C	C	C	C			
HCM2kAvgQ:	2	5	5	3	5	2	2	4	2	2	5	5			

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Beck Property TIA, Goodyear AZ  
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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2012 AM - Existing

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bullard Ave & Yuma Rd

Cycle (sec):	90	Critical Vol./Cap.(X):	0.382
Loss Time (sec):	6	Average Delay (sec/veh):	14.6
Optimal Cycle:	22	Level Of Service:	B

Street Name:	Bullard Ave			Yuma Rd		
	North Bound	South Bound	East Bound	West Bound		
Approach:	L - T - R	L - T - R	L - T - R	L - T - R		
Movement:	-	-	-	-		
Control:	Permitted	Permitted	Permitted	Permitted		
Rights:	Include	Include	Include	Include		
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0		
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0		
Lanes:	1 0 1 0 1	1 0 0 1 0	0 1 0 0 0	0 0 1! 0 0		

Volume Module:												
Base Vol:	1	176	32	39	70	60	126	265	0	21	148	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	1	176	32	39	70	60	126	265	0	21	148	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	176	32	39	70	60	126	265	0	21	148	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	1	185	34	41	74	63	133	279	0	22	156	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	185	34	41	74	63	133	279	0	22	156	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	1	185	34	41	74	63	133	279	0	22	156	19

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.59	1.00	0.85	0.51	0.93	0.93	0.84	0.84	1.00	0.93	0.93	0.93
Lanes:	1.00	1.00	1.00	1.00	0.54	0.46	0.32	0.68	0.00	0.11	0.79	0.10
Final Sat.:	1123	1900	1615	960	952	816	512	1078	0	199	1401	170

Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.02	0.04	0.08	0.08	0.26	0.26	0.00	0.11	0.11	0.11
Crit Moves:	****						****					
Green/Cycle:	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.00	0.68	0.68	0.68
Volume/Cap:	0.00	0.38	0.08	0.17	0.30	0.30	0.38	0.38	0.00	0.16	0.16	0.16
Delay/Veh:	25.0	28.1	25.6	26.4	27.4	27.4	6.5	6.5	0.0	5.3	5.3	5.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.0	28.1	25.6	26.4	27.4	27.4	6.5	6.5	0.0	5.3	5.3	5.3
LOS by Move:	C	C	C	C	C	C	A	A	A	A	A	A
HCM2kAvgQ:	0	4	1	1	3	3	5	5	0	2	2	2

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Beck Property TIA, Goodyear AZ  
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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2012 AM - Existing

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Litchfield Rd & Yuma Rd

Cycle (sec):	90	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	12	Average Delay (sec/veh):	19.9
Optimal Cycle:	33	Level Of Service:	B

Street Name:	Litchfield Rd			Yuma Rd				
	North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 1 1 0	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0				

Volume Module:

Base Vol:	33	275	24	92	341	49	83	117	93	19	69	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	275	24	92	341	49	83	117	93	19	69	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	275	24	92	341	49	83	117	93	19	69	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	35	289	25	97	359	52	87	123	98	20	73	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	289	25	97	359	52	87	123	98	20	73	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	289	25	97	359	52	87	123	98	20	73	82

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	1.00	0.85	0.95	0.89	0.89	0.95	0.87	0.87
Lanes:	1.00	1.84	0.16	1.00	1.00	1.00	1.00	1.11	0.89	1.00	1.00	1.00
Final Sat.:	1805	3280	286	1805	1900	1615	1805	1879	1493	1805	1661	1661

Capacity Analysis Module:

Vol/Sat:	0.02	0.09	0.09	0.05	0.19	0.03	0.05	0.07	0.07	0.01	0.04	0.05
Crit Moves:	****		****		****		****		****		****	
Green/Cycle:	0.42	0.37	0.37	0.62	0.54	0.54	0.31	0.24	0.24	0.18	0.14	0.14
Volume/Cap:	0.07	0.24	0.24	0.13	0.35	0.06	0.21	0.28	0.28	0.09	0.31	0.35
Delay/Veh:	15.4	19.9	19.9	7.0	12.2	10.1	22.8	28.2	28.2	30.8	35.2	35.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.4	19.9	19.9	7.0	12.2	10.1	22.8	28.2	28.2	30.8	35.2	35.5
LOS by Move:	B	B	B	A	B	B	C	C	C	C	D	D
HCM2kAvgQ:	1	3	3	1	5	1	2	3	3	1	2	2

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2012 AM - Existing

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

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Scenario Report

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

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Bullard Ave & Van Buren St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.489
Loss Time (sec):	12	Average Delay (sec/veh):	22.7
Optimal Cycle:	40	Level Of Service:	C

Street Name:	Bullard Ave			Van Buren St				
	North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 2 0 1	1 0 1 0 1	1 0 3 0 1	1 0 2 0 1				

Volume Module:

Base Vol:	7 176	29 56	346 279	147 349	7 65	488 106
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	7 176	29 56	346 279	147 349	7 65	488 106
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	7 176	29 56	346 279	147 349	7 65	488 106
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95
PHF Volume:	7 185	31 59	364 294	155 367	7 68	514 112
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	7 185	31 59	364 294	155 367	7 68	514 112
PCE Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
FinalVolume:	7 185	31 59	364 294	155 367	7 68	514 112

Saturation Flow Module:

Sat/Lane:	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900
Adjustment:	0.95 0.95	0.85 0.95	1.00 0.85	0.95 0.91	0.85 0.95	0.95 0.95	0.85 0.85
Lanes:	1.00 2.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	2.00 1.00
Final Sat.:	1805 3610	1615 1805	1900 1615	1805 5187	1615 1805	3610 1615	1900 1900

Capacity Analysis Module:

Vol/Sat:	0.00 0.05	0.02 0.03	0.19 0.18	0.09 0.07	0.00 0.04	0.14 0.07
Crit Moves:	****	****	****	****	****	****
Green/Cycle:	0.25 0.24	0.24 0.43	0.39 0.39	0.50 0.30	0.30 0.45	0.29 0.29
Volume/Cap:	0.03 0.21	0.08 0.10	0.49 0.46	0.32 0.23	0.02 0.12	0.49 0.24
Delay/Veh:	25.3 27.2	26.3 15.1	21.1 20.9	13.7 23.6	21.9 14.1	26.7 24.6
User DelAdj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
AdjDel/Veh:	25.3 27.2	26.3 15.1	21.1 20.9	13.7 23.6	21.9 14.1	26.7 24.6
LOS by Move:	C C	C B	C C	B C	C B	C C
HCM2kAvgQ:	0 2	1 1	8 6	3 3	0 1	6 2

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 145th St & Van Buren St

Average Delay (sec/veh): 0.3      Worst Case Level Of Service: C[ 15.5]

Street Name:	145th St	Van Buren St		
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
	-----	-----	-----	
Control:	Stop Sign	Stop Sign	Uncontrolled	
Rights:	Include	Include	Include	
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 1 0 2 0 0
	-----	-----	-----	-----

Volume Module:

Base Vol:	18	0	2	0	0	0	0	334	1	4	783	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	0	2	0	0	0	0	334	1	4	783	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	0	2	0	0	0	0	334	1	4	783	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	19	0	2	0	0	0	0	352	1	4	824	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	0	2	0	0	0	0	352	1	4	824	0
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Critical Gap Module:

Critical Gp:	6.8 xxxx	6.9 xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	4.1 xxxx	xxxxx
FollowUpTim:	3.5 xxxx	3.3 xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	2.2 xxxx	xxxxx
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Capacity Module:

Cnflict Vol:	772 xxxx	176	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	353	xxxxx	xxxxxx
Potent Cap.:	340 xxxx	843	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	1217	xxxxx	xxxxxx
Move Cap.:	339 xxxx	843	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	1217	xxxxx	xxxxxx
Volume/Cap:	0.06 xxxx	0.00	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.00	xxxxx	xxxxx
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Level Of Service Module:

2Way95thQ:	0.2 xxxx	0.0	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	0.0	xxxxx	xxxxxx
Control Del:	16.2 xxxx	9.3	xxxxxx	xxxxx	xxxxxx	xxxxxx	xxxxx	xxxxxx	8.0	xxxxx	xxxxxx
LOS by Move:	C *	A *	*	*	*	*	*	*	A *	*	*
Movement:	LT - LTR - RT										
Shared Cap.:	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
SharedQueue:	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx	xxxxx	xxxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.5		xxxxxx		xxxxxx		xxxxxx		xxxxxx		xxxxxx
ApproachLOS:	C		*		*		*		*		*
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 143rd St & Van Buren St

Average Delay (sec/veh): 0.2      Worst Case Level Of Service: B[ 13.7]

Street Name:	143rd St	Van Buren St		
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	
Rights:	Include	Include	Include	
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0

Volume Module:

Base Vol:	0 0 0 5 0 13 3 330 0 0 784 2
Growth Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:	0 0 0 5 0 13 3 330 0 0 784 2
Added Vol:	0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	0 0 0 5 0 13 3 330 0 0 784 2
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume:	0 0 0 5 0 14 3 347 0 0 825 2
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	0 0 0 5 0 14 3 347 0 0 825 2

Critical Gap Module:

Critical Gp:	7.5 6.5 6.9 6.8 6.5 6.9 4.1 xxxx xxxx xxxx xxxx xxxx xxxx
FollowUpTim:	3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx xxxx

Capacity Module:

Cnflict Vol:	766 1181 174 1006 1180 414 827 xxxx xxxx xxxx xxxx xxxx xxxx
Potent Cap.:	296 192 846 241 192 593 813 xxxx xxxx xxxx xxxx xxxx xxxx
Move Cap.:	288 191 846 240 191 593 813 xxxx xxxx xxxx xxxx xxxx xxxx
Volume/Cap:	0.00 0.00 0.00 0.02 0.00 0.02 0.00 xxxx xxxx xxxx xxxx xxxx

Level Of Service Module:

2Way95thQ:	xxxx xxxx xxxx 0.1 xxxx 0.1 0.0 xxxx xxxx xxxx xxxx xxxx xxxx
Control Del:	xxxxx xxxx xxxx 20.3 xxxx 11.2 9.4 xxxx xxxx xxxx xxxx xxxx xxxx
LOS by Move:	* * * C * B A * * * * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx
SharedQueue:	xxxxx xxxx
Shrd ConDel:	xxxxx xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	xxxxxx 13.7 xxxxxxxx xxxxxxxx
ApproachLOS:	* B * *

Note: Queue reported is the number of cars per lane.

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Litchfield Rd & Van Buren St

Cycle (sec):	90	Critical Vol./Cap. (X):	0.681
Loss Time (sec):	12	Average Delay (sec/veh):	27.1
Optimal Cycle:	56	Level Of Service:	C

Street Name:	Litchfield Rd			Van Buren St				
	North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 2 1 0	1 0 2 0 1	1 0 2 0 1	1 0 1 1 0				

Volume Module:												
Base Vol:	122	679	103	238	419	113	147	287	77	86	480	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	122	679	103	238	419	113	147	287	77	86	480	188
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	679	103	238	419	113	147	287	77	86	480	188
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	128	715	108	251	441	119	155	302	81	91	505	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	715	108	251	441	119	155	302	81	91	505	198
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	715	108	251	441	119	155	302	81	91	505	198

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.91	0.91
Lanes:	1.00	2.60	0.40	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.44	0.56
Final Sat.:	1805	4414	670	1805	3610	1615	1805	3610	1615	1805	2485	973

Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.14	0.12	0.07	0.09	0.08	0.05	0.05	0.20	0.20
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.40	0.24	0.24	0.48	0.28	0.28	0.39	0.27	0.27	0.46	0.30	0.30
Volume/Cap:	0.27	0.68	0.68	0.55	0.44	0.26	0.46	0.32	0.19	0.17	0.68	0.68
Delay/Veh:	17.8	32.8	32.8	17.4	26.9	25.5	20.0	26.7	25.8	14.3	29.6	29.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.8	32.8	32.8	17.4	26.9	25.5	20.0	26.7	25.8	14.3	29.6	29.6
LOS by Move:	B	C	C	B	C	C	B	C	C	B	C	C
HCM2kAvgQ:	2	8	8	6	6	3	3	3	2	2	10	10

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bullard Ave & Yuma Rd

Street Name: Bullard Ave Yuma Rd														
Approach:	North Bound			South Bound			East Bound			West Bound				
	L	-	T	-	R	L	-	T	-	R	L	-	T	-
Control:	Permitted		Permitted		Permitted		Permitted		Permitted					
Rights:	Include		Include		Include		Include		Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	1	0	0	1	0	0	0	0	0
Volume Module:														
Base Vol:	0	85	26	20	235	126	61	177	0	25	269	42		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:	0	85	26	20	235	126	61	177	0	25	269	42		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	0	85	26	20	235	126	61	177	0	25	269	42		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
PHF Volume:	0	89	27	21	247	133	64	186	0	26	283	44		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	0	89	27	21	247	133	64	186	0	26	283	44		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	0	89	27	21	247	133	64	186	0	26	283	44		
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	1.00	1.00	0.85	0.70	0.95	0.95	0.85	0.85	1.00	0.95	0.95	0.95		
Lanes:	1.00	1.00	1.00	1.00	0.65	0.35	0.26	0.74	0.00	0.07	0.80	0.13		
Final Sat.:	1900	1900	1615	1326	1173	629	414	1201	0	135	1447	226		
Capacity Analysis Module:														
Vol/Sat:	0.00	0.05	0.02	0.02	0.21	0.21	0.16	0.16	0.00	0.20	0.20	0.20		
Crit Moves:	****													
Green/Cycle:	0.00	0.48	0.48	0.48	0.48	0.48	0.45	0.45	0.00	0.45	0.45	0.45		
Volume/Cap:	0.00	0.10	0.03	0.03	0.44	0.44	0.35	0.35	0.00	0.44	0.44	0.44		
Delay/Veh:	0.0	12.6	12.2	12.2	15.5	15.5	16.5	16.5	0.0	17.4	17.4	17.4		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	0.0	12.6	12.2	12.2	15.5	15.5	16.5	16.5	0.0	17.4	17.4	17.4		
LOS by Move:	A	B	B	B	B	B	B	B	A	B	B	B		
HCM2kAvgQ:	0	1	0	0	7	7	5	5	0	6	6	6		

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Litchfield Rd & Yuma Rd

Street Name: Litchfield Rd Yuma Rd														
Approach:	North Bound			South Bound			East Bound			West Bound				
	L	-	T	-	R	L	-	T	-	R	L	-	T	-
Control:	Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit			
Rights:	Include		Include		Include		Include		Include		Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	1	0	1	0	1	1	0
Volume Module:														
Base Vol:	105	507	52	112	277	78	84	122	39	30	177	120		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:	105	507	52	112	277	78	84	122	39	30	177	120		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	105	507	52	112	277	78	84	122	39	30	177	120		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
PHF Volume:	111	534	55	118	292	82	88	128	41	32	186	126		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	111	534	55	118	292	82	88	128	41	32	186	126		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	111	534	55	118	292	82	88	128	41	32	186	126		
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.95	0.94	0.94	0.95	1.00	0.85	0.95	0.92	0.92	0.95	0.89	0.89		
Lanes:	1.00	1.81	0.19	1.00	1.00	1.00	1.00	1.52	0.48	1.00	1.19	0.81		
Final Sat.:	1805	3228	331	1805	1900	1615	1805	2637	843	1805	2020	1370		
Capacity Analysis Module:														
Vol/Sat:	0.06	0.17	0.17	0.07	0.15	0.05	0.05	0.05	0.05	0.02	0.09	0.09		
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****		
Green/Cycle:	0.57	0.39	0.39	0.54	0.38	0.38	0.36	0.24	0.24	0.30	0.21	0.21		
Volume/Cap:	0.19	0.43	0.43	0.22	0.40	0.13	0.23	0.20	0.20	0.08	0.43	0.43		
Delay/Veh:	9.8	20.6	20.6	10.9	20.5	18.1	19.8	27.3	27.3	22.4	31.0	31.0		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	9.8	20.6	20.6	10.9	20.5	18.1	19.8	27.3	27.3	22.4	31.0	31.0		
LOS by Move:	A	C	C	B	C	B	B	C	C	C	C	C		
HCM2kAvgQ:	2	6	6	2	6	1	2	2	2	1	4	4		

PM

Thu Dec 13, 2012 10:33:44

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2012 PM - Existing

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Note: Queue reported is the number of cars per lane.

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## APPENDIX D

### TRIP GENERATION

Beck Property

## Trip Generation

Proposed Use	ITE LUC	ITE Land Use Name	Total	Units	AM Distribution		PM Distribution	
					In	Out	In	Out
High-Cube Warehouse	152	High-Cube Warehouse	838.0	KSF	79%	21%	25%	75%
Warehousing	150	Warehousing	918.0	KSF	79%	21%	25%	75%
Warehousing	150	Warehousing	837.0	KSF	79%	21%	25%	75%
High-Cube Warehouse	152	High-Cube Warehouse	677.0	KSF	65%	35%	33%	67%

Proposed Use	ADT		AM Peak Hour			PM Peak Hour				
	Avg Rate	Total	Avg Rate	Total	In	Out	Avg Rate	Total	In	Out
High-Cube Warehouse	1.44	1,208	0.09	76	60	16	0.10	84	21	63
Warehousing	3.56	3,270	0.30	276	218	58	0.32	294	74	220
Warehousing	3.56	2,980	0.30	252	199	53	0.32	268	67	201
High-Cube Warehouse	3.56	2,412	0.30	204	133	71	0.32	217	72	145
<hr/>										
<hr/>										
<hr/>										
TOTALS		9,870		808	610	198		863	234	629

Notes: 1. This trip generation calculation is provided for the entire development without applied volume reductions taken as part of this study. If applicable, trips net of interaction and pass-by trips are shown below.

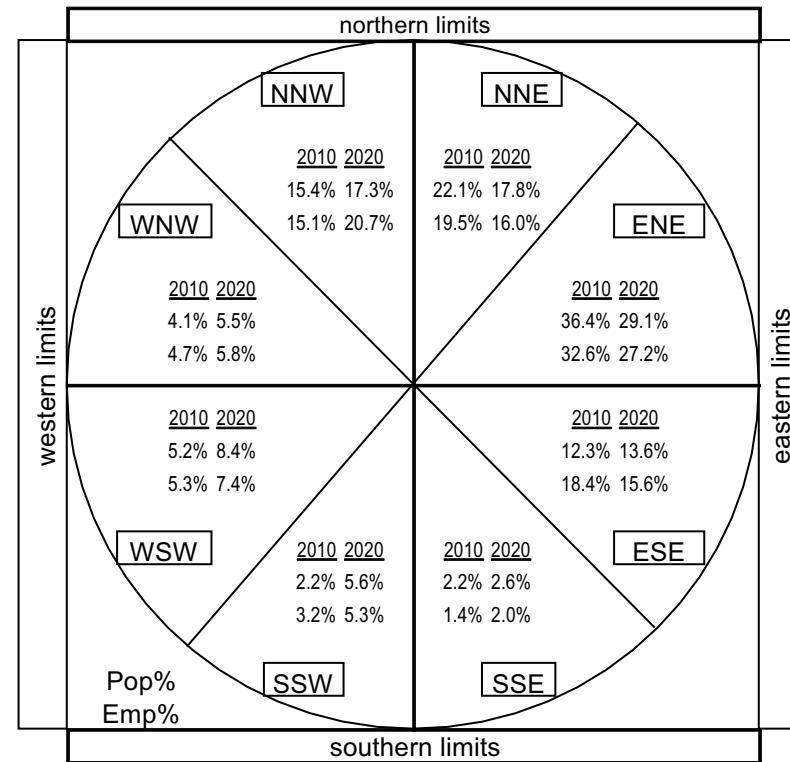
**Beck Property****Trip Distribution - Summaries**

Quadrant	2010				2020			
	Population	Percent	Employment	Percent	Population	Percent	Employment	Percent
North Northwest	104,536	15.4%	32,988	15.1%	161,209	17.3%	73,645	20.7%
North Northeast	150,257	22.1%	42,645	19.5%	166,398	17.8%	56,724	16.0%
<b>North</b>	<b>254,793</b>	<b>37.5%</b>	<b>75,633</b>	<b>34.6%</b>	<b>327,607</b>	<b>35.1%</b>	<b>130,369</b>	<b>36.7%</b>
East Northeast	247,371	36.4%	71,253	32.6%	271,689	29.1%	96,831	27.2%
East Southeast	83,339	12.3%	40,191	18.4%	126,503	13.6%	55,327	15.6%
<b>East</b>	<b>330,710</b>	<b>48.7%</b>	<b>111,444</b>	<b>51.0%</b>	<b>398,192</b>	<b>42.7%</b>	<b>152,158</b>	<b>42.8%</b>
South Southeast	14,678	2.2%	3,046	1.4%	24,586	2.6%	7,096	2.0%
South Southwest	15,097	2.2%	7,061	3.2%	52,673	5.6%	18,709	5.3%
<b>South</b>	<b>29,775</b>	<b>4.4%</b>	<b>10,107</b>	<b>4.6%</b>	<b>77,260</b>	<b>8.2%</b>	<b>25,805</b>	<b>7.3%</b>
West Southwest	35,622	5.2%	11,495	5.3%	78,605	8.4%	26,343	7.4%
West Northwest	28,114	4.1%	10,222	4.7%	51,219	5.5%	20,725	5.8%
<b>West</b>	<b>63,736</b>	<b>9.3%</b>	<b>21,717</b>	<b>10.0%</b>	<b>129,824</b>	<b>13.9%</b>	<b>47,068</b>	<b>13.2%</b>
<b>Totals</b>	<b>679,014</b>	<b>99.9%</b>	<b>218,901</b>	<b>100.2%</b>	<b>932,883</b>	<b>99.9%</b>	<b>355,401</b>	<b>100.0%</b>

**Radii**

Population: 12-mile Radius

Employment: 12-mile Radius



## APPENDIX E

### GROWTH RATE CALCULATIONS

**Location of counts:** Vehicles entering the intersection of Bullard Avenue & Van Buren Street

Source(s): Traffic counts performed by FDS

	Year	AM	PM
Beginning	7/7/2011	1,541	2,134

End	12/5/2012	1,573	2,055
-----	-----------	-------	-------

Avg Growth Rate	1.5%	-2.6%
Per-Year Multiplier	1.015	0.974
Expansion Factor	1.021	0.963

Growth Rate Used: 2% per year

Year	Growth Rate	Expansion Factor(s)	
2012	-	1.000	
<b>2013</b>	2.0%	<b>1.020</b>	<- Expansion factor to opening
2014	2.0%	1.040	
2015	2.0%	1.061	
2016	2.0%	1.082	
2017	2.0%	1.104	
<b>2018</b>	2.0%	<b>1.126</b>	<- Expansion factor to 5 years after opening
2019	2.0%	1.149	
2020	2.0%	1.172	
2021	2.0%	1.195	
2022	2.0%	1.219	
2023	2.0%	1.243	
2024	2.0%	1.268	
2025	2.0%	1.293	
2026	2.0%	1.319	
2027	2.0%	1.345	
2028	2.0%	1.372	
2029	2.0%	1.399	
2030	2.0%	1.427	
2031	2.0%	1.456	
2032	2.0%	1.485	
2033	2.0%	1.515	

Note: intersections with traffic counts performed in 2011 have had an additional 2% growth factor applied to approximate traffic in the 2012 existing year.



## APPENDIX F

### 2013 PEAK HOUR ANALYSIS

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

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Scenario Report

Scenario: AM

Command: AM

Volume: AM

Geometry: Default Geometry

Impact Fee: Default Impact Fee

Trip Generation: AM

Trip Distribution: Default Trip Distribution

Paths: Default Path

Routes: Default Route

Configuration: Default Configuration

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Bullard Ave & Van Buren St

Street Name: Bullard Ave Van Buren St															
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1	0	2	0	1	1	0	1	0	1	1	0	2	0	
Volume Module:															
Base Vol:	8	280	41	71	118	128	305	365	7	17	189	44			
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02			
Initial Bse:	8	286	42	72	120	131	311	372	7	17	193	45			
Added Vol:	1	22	3	152	49	0	0	29	1	1	9	43			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	9	308	45	224	169	131	311	401	8	18	202	88			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
PHF Volume:	10	324	47	236	178	137	327	422	9	19	212	93			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	10	324	47	236	178	137	327	422	9	19	212	93			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	10	324	47	236	178	137	327	422	9	19	212	93			
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Adjustment:	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.95	0.85			
Lanes:	1.00	2.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00			
Final Sat.:	1805	3610	1615	1805	1900	1615	1805	5187	1615	1805	3610	1615			
Capacity Analysis Module:															
Vol/Sat:	0.01	0.09	0.03	0.13	0.09	0.09	0.18	0.08	0.01	0.01	0.06	0.06			
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****			
Green/Cycle:	0.19	0.17	0.17	0.45	0.39	0.39	0.49	0.40	0.40	0.16	0.11	0.11			
Volume/Cap:	0.04	0.53	0.17	0.41	0.24	0.22	0.46	0.20	0.01	0.10	0.53	0.52			
Delay/Veh:	29.7	35.1	32.3	16.6	18.5	18.3	15.3	17.7	16.3	32.1	39.2	40.4			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	29.7	35.1	32.3	16.6	18.5	18.3	15.3	17.7	16.3	32.1	39.2	40.4			
LOS by Move:	C	D	C	B	B	B	B	B	B	C	D	D			
HCM2kAvgQ:	0	4	1	5	3	3	6	3	0	0	3	2			

AM

Fri Dec 14, 2012 16:03:53

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 145th St & Van Buren St

Average Delay (sec/veh): 0.4      Worst Case Level Of Service: C[ 19.2]

Street Name:	145th St	Van Buren St		
Approach:	North Bound	South Bound	East Bound	
Movement:	L - T - R	L - T - R	L - T - R	
Control:	Stop Sign	Stop Sign	Uncontrolled	
Rights:	Include	Include	Include	
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 1 0 2 0 0

Volume Module:

Base Vol:	9 0 2 0 0 0 0 0 505 14 28 343 0
Growth Adj:	1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02 1.02
Initial Bse:	9 0 2 0 0 0 0 0 515 14 29 350 0
Added Vol:	0 0 0 0 0 0 0 0 184 0 0 53 0
PasserByVol:	0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:	9 0 2 0 0 0 0 0 699 14 29 403 0
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume:	10 0 2 0 0 0 0 0 736 15 30 424 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume:	10 0 2 0 0 0 0 0 736 15 30 424 0

Critical Gap Module:

Critical Gp:	6.8 xxxx 6.9 xxxxx xxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxxx
FollowUpTim:	3.5 xxxx 3.3 xxxxx xxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxxx

Capacity Module:

Cnflict Vol:	1008 xxxx 368 xxxx xxxx xxxx xxxx xxxx xxxx 751 xxxx xxxxx
Potent Cap.:	240 xxxx 635 xxxx xxxx xxxx xxxx xxxx 868 xxxx xxxxx
Move Cap.:	234 xxxx 635 xxxx xxxx xxxx xxxx xxxx 868 xxxx xxxxx
Volume/Cap:	0.04 xxxx 0.00 xxxx xxxx xxxx xxxx xxxx 0.03 xxxx xxxx

Level Of Service Module:

2Way95thQ:	0.1 xxxx 0.0 xxxx xxxx xxxx xxxx xxxx xxxx 0.1 xxxx xxxxx
Control Del:	21.0 xxxx 10.7 xxxxx xxxx xxxx xxxx xxxx xxxx 9.3 xxxx xxxxx
LOS by Move:	C * B * * * * * * A * *
Movement:	LT - LTR - RT
Shared Cap.:	xxxx
SharedQueue:	xxxx
Shrd ConDel:	xxxx
Shared LOS:	* * * * * * * * * * * *
ApproachDel:	19.2 xxxxxx xxxxxx xxxxxx
ApproachLOS:	C * * * * *

Note: Queue reported is the number of cars per lane.

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 143rd St & Van Buren St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.442
Loss Time (sec):	6	Average Delay (sec/veh):	5.3
Optimal Cycle:	24	Level Of Service:	A

Street Name:	143rd St			Van Buren St				
	Approach: North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Permitted	Permitted	Permitted	Permitted				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0				

Volume Module:												
Base Vol:	0	0	0	2	0	2	15	478	0	0	367	9
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	2	0	2	15	488	0	0	374	9
Added Vol:	53	0	74	0	0	0	0	0	184	243	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	0	74	2	0	2	15	488	184	243	374	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	56	0	78	2	0	2	16	513	194	256	394	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	78	2	0	2	16	513	194	256	394	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	0	78	2	0	2	16	513	194	256	394	10

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.77	1.00	0.85	0.77	1.00	0.85	0.51	0.91	0.91	0.37	0.95	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.45	0.55	1.00	1.95	0.05
Final Sat.:	1461	1900	1615	1461	1900	1615	975	2513	949	703	3509	86

Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.05	0.00	0.00	0.00	0.02	0.20	0.20	0.36	0.11	0.11
Crit Moves:			****							****		
Green/Cycle:	0.11	0.00	0.11	0.11	0.00	0.11	0.82	0.82	0.82	0.82	0.82	0.82
Volume/Cap:	0.35	0.00	0.44	0.01	0.00	0.01	0.02	0.25	0.25	0.44	0.14	0.14
Delay/Veh:	38.4	0.0	39.3	35.8	0.0	35.8	1.4	1.8	1.8	2.7	1.6	1.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.4	0.0	39.3	35.8	0.0	35.8	1.4	1.8	1.8	2.7	1.6	1.6
LOS by Move:	D	A	D	D	A	D	A	A	A	A	A	A
HCM2kAvgQ:	2	0	3	0	0	0	0	2	2	2	1	1

AM

Fri Dec 14, 2012 16:03:53

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Litchfield Rd & Van Buren St

Street Name: Litchfield Rd Van Buren St														
Approach:	North Bound			South Bound			East Bound			West Bound				
	L	-	T	-	R	L	-	T	-	R	L	-	T	-
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit				
Rights:	Include			Include			Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	1	0	2	0	1	1	0	1	1
Volume Module:														
Base Vol:	92	466	73	192	457	99	91	356	84	71	223	106		
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02		
Initial Bse:	94	475	74	196	466	101	93	363	86	72	227	108		
Added Vol:	0	17	2	0	41	173	52	22	0	3	70	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	94	492	76	196	507	274	145	385	86	75	297	108		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
PHF Volume:	99	518	80	206	534	288	152	405	90	79	313	114		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	99	518	80	206	534	288	152	405	90	79	313	114		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	99	518	80	206	534	288	152	405	90	79	313	114		
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.95	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.91	0.91		
Lanes:	1.00	2.60	0.40	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.47	0.53		
Final Sat.:	1805	4400	683	1805	3610	1615	1805	3610	1615	1805	2542	924		
Capacity Analysis Module:														
Vol/Sat:	0.05	0.12	0.12	0.11	0.15	0.18	0.08	0.11	0.06	0.04	0.12	0.12		
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****		
Green/Cycle:	0.34	0.23	0.23	0.49	0.35	0.35	0.44	0.29	0.29	0.36	0.24	0.24		
Volume/Cap:	0.25	0.51	0.51	0.38	0.42	0.51	0.33	0.38	0.19	0.18	0.51	0.51		
Delay/Veh:	21.1	30.4	30.4	14.3	22.5	23.9	16.3	25.5	23.9	19.6	29.9	29.9		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	21.1	30.4	30.4	14.3	22.5	23.9	16.3	25.5	23.9	19.6	29.9	29.9		
LOS by Move:	C	C	C	B	C	C	B	C	C	B	C	C		
HCM2kAvgQ:	2	5	5	4	6	7	3	5	2	2	6	6		

AM

Fri Dec 14, 2012 16:03:53

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bullard Ave & Yuma Rd

Cycle (sec):	90	Critical Vol./Cap. (X):	0.414	
Loss Time (sec):	6	Average Delay (sec/veh):	15.2	
Optimal Cycle:	23	Level Of Service:	B	
Street Name:	Bullard Ave	Yuma Rd		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 0 1	1 0 0 1 0	0 1 0 0 0	0 0 1! 0 0
Volume Module:				
Base Vol:	1 176 32	39 70 60	126 265 0	21 148 18
Growth Adj:	1.02 1.02 1.02	1.02 1.02 1.02	1.02 1.02 1.02	1.02 1.02 1.02
Initial Bse:	1 180 33	40 71 61	129 270 0	21 151 18
Added Vol:	0 0 12	51 0 1	3 22 0	4 7 23
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	1 180 45	91 71 62	132 292 0	25 158 41
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95
PHF Volume:	1 189 47	96 75 65	138 308 0	27 166 44
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	1 189 47	96 75 65	138 308 0	27 166 44
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	1 189 47	96 75 65	138 308 0	27 166 44
Saturation Flow Module:				
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.58 1.00 0.85	0.49 0.93 0.93	0.83 0.83 1.00	0.91 0.91 0.91
Lanes:	1.00 1.00 1.00	1.00 0.53 0.47	0.31 0.69 0.00	0.11 0.71 0.18
Final Sat.:	1102 1900 1615	933 944 823	487 1082 0	196 1217 319
Capacity Analysis Module:				
Vol/Sat:	0.00 0.10 0.03	0.10 0.08 0.08	0.28 0.28 0.00	0.14 0.14 0.14
Crit Moves:	****	****	****	****
Green/Cycle:	0.25 0.25 0.25	0.25 0.25 0.25	0.69 0.69 0.00	0.69 0.69 0.69
Volume/Cap:	0.00 0.40 0.12	0.41 0.32 0.32	0.41 0.41 0.00	0.20 0.20 0.20
Delay/Veh:	25.5 28.9 26.4	29.6 28.1 28.1	6.5 6.5 0.0	5.2 5.2 5.2
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	25.5 28.9 26.4	29.6 28.1 28.1	6.5 6.5 0.0	5.2 5.2 5.2
LOS by Move:	C C C	C C C	A A A	A A A
HCM2kAvgQ:	0 5 1	2 3 3	6 6 0	2 2 2

AM

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #6 143rd Ave & Yuma Rd

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[ 12.1 ]

Street Name:	143rd Ave					Yuma Rd									
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled								
Rights:	Include		Include		Include		Include								
Lanes:	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	336	0	0	187	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	0	0	0	0	343	0	0	191	0
Added Vol:	0	0	0	22	0	26	71	14	0	0	7	71
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	22	0	26	71	357	0	0	198	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	23	0	27	75	375	0	0	208	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	23	0	27	75	375	0	0	208	75

#### Critical Cap Module:

Critical Gp:xxxxx xxxx xxxx 6.4 xxxx 6.2 4.1 xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxx xxxx xxxx 3.5 xxxx 3.3 2.2 xxxx xxxx xxxx xxxx xxxx

#### Capacity Module:

Cnflict	Vol:	xxxx	xxxx	xxxxxx	733	xxxx	208	283	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent	Cap.:	xxxx	xxxx	xxxxxx	391	xxxx	837	1291	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move	Cap.:	xxxx	xxxx	xxxxxx	373	xxxx	837	1291	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:		xxxx	xxxx	xxxx	0.06	xxxx	0.03	0.06	xxxx	xxxx	xxxx	xxxx	xxxx

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Level Of Service Module:  
 2Way95thQ: xxxx xxxx xxxxx 0.2 xxxx 0.1 0.2 xxxx xxxxx xxxx xxxx xxxx  
 Control Del:xxxxx xxxx xxxxx 15.3 xxxx 9.4 8.0 xxxx xxxxx xxxx xxxx xxxx  
 LOS by Move: \* \* \* C \* A A \* \* \* \* \* \* \*  
 Movement: LT - LTR - RT  
 Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxx xxxx xxxx  
 SharedQueue:xxxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxx xxxx xxxx  
 Shrd ConDel:xxxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxx xxxx xxxx  
 Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \* \*  
 ApproachDel: xxxxx 12.1 xxxxx xxxxx  
 ApproachLOS: \* B \* \*

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #7 Access C & Yuma Rd

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[ 12.6]

Street Name:	Access C				Yuma Rd														
Approach:	North Bound		South Bound		East Bound		West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled												
Rights:	Include		Include		Include		Include												
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	1	0	0	0	1	1	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	336	0	0	187	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	0	0	0	0	343	0	0	191	0
Added Vol:	0	0	0	14	0	7	14	22	0	0	71	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	14	0	7	14	365	0	0	262	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	15	0	7	15	384	0	0	276	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	15	0	7	15	384	0	0	276	28

### Critical Gap Module:

Critical Gp:xxxxxx xxxx xxxx 6.4 6.5 6.2 4.1 xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxxx xxxx xxxx 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx

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Capacity Module:														
Cnflict Vol:	xxxx	xxxx	xxxxxx	703	703	152	304	xxxx	xxxxxx	xxxx	xxxx	xxxx	xxxxxx	
Potent Cap.:	xxxx	xxxx	xxxxxx	407	364	900	1268	xxxx	xxxxxx	xxxx	xxxx	xxxx	xxxxxx	
Move Cap.:	xxxx	xxxx	xxxxxx	403	360	900	1268	xxxx	xxxxxx	xxxx	xxxx	xxxx	xxxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	0.04	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	

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Level Of Service Module:  
 2Way95thQ: xxxx xxxx xxxxxx xxxx xxxx xxxxxx 0.0 xxxx xxxxx xxxx xxxx xxxx  
 Control Del:xxxxx xxxx xxxxx xxxx xxxx xxxxx 7.9 xxxx xxxxx xxxx xxxx xxxx  
 LOS by Move: \* \* \* \* \* \* A \* \* \* \* \* \*  
 Movement: LT - LTR - RT  
 Shared Cap.: xxxx xxxx xxxxx xxxx 494 xxxx xxxx xxxx xxxx xxxx xxxx  
 SharedQueue:xxxxx xxxx xxxxx xxxx 0.1 xxxx xxxx xxxx xxxx xxxx xxxx  
 Shrd ConDel:xxxxx xxxx xxxxx xxxx 12.6 xxxx xxxx xxxx xxxx xxxx xxxx  
 Shared LOS: \* \* \* \* B \* \* \* \* \* \* \*  
 ApproachDel: xxxxxx 12.6 xxxxxx xxxxxx  
 ApproachLOS: \* B \* \*

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Litchfield Rd & Yuma Rd

Street Name: Litchfield Rd Yuma Rd															
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1	0	1	1	0	1	0	1	0	1	1	0	1	1	
Volume Module:															
Base Vol:	33	275	24	92	341	49	83	117	93	19	69	78			
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02			
Initial Bse:	34	281	24	94	348	50	85	119	95	19	70	80			
Added Vol:	18	0	0	0	0	44	19	12	6	0	37	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	52	281	24	94	348	94	104	131	101	19	107	80			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
PHF Volume:	54	295	26	99	366	99	109	138	106	20	113	84			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	54	295	26	99	366	99	109	138	106	20	113	84			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	54	295	26	99	366	99	109	138	106	20	113	84			
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Adjustment:	0.95	0.94	0.94	0.95	1.00	0.85	0.95	0.89	0.89	0.95	0.89	0.89			
Lanes:	1.00	1.84	0.16	1.00	1.00	1.00	1.00	1.13	0.87	1.00	1.15	0.85			
Final Sat.:	1805	3280	286	1805	1900	1615	1805	1909	1466	1805	1941	1438			
Capacity Analysis Module:															
Vol/Sat:	0.03	0.09	0.09	0.05	0.19	0.06	0.06	0.07	0.07	0.01	0.06	0.06			
Crit Moves:	****			****			****			****					
Green/Cycle:	0.43	0.35	0.35	0.60	0.49	0.49	0.33	0.26	0.26	0.19	0.15	0.15			
Volume/Cap:	0.11	0.26	0.26	0.14	0.39	0.13	0.25	0.28	0.28	0.09	0.39	0.39			
Delay/Veh:	15.3	20.9	20.9	7.9	14.8	12.6	21.7	26.7	26.7	30.1	35.2	35.2			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	15.3	20.9	20.9	7.9	14.8	12.6	21.7	26.7	26.7	30.1	35.2	35.2			
LOS by Move:	B	C	C	A	B	B	C	C	C	C	D	D			
HCM2kAvgQ:	1	3	3	1	6	1	2	3	3	1	3	3			

AM

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2013 AM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

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Scenario Report

Scenario: PM

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

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Bullard Ave & Van Buren St

Cycle (sec):	90	Critical Vol./Cap. (X):	0.545
Loss Time (sec):	12	Average Delay (sec/veh):	23.5
Optimal Cycle:	43	Level Of Service:	C

Street Name:	Bullard Ave			Van Buren St				
	North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 2 0 1	1 0 1 0 1	1 0 3 0 1	1 0 2 0 1				

Volume Module:

Base Vol:	7 176	29 56	346 279	147 349	7 65	488 106
Growth Adj:	1.02 1.02	1.02 1.02	1.02 1.02	1.02 1.02	1.02 1.02	1.02 1.02
Initial Bse:	7 180	30 57	353 285	150 356	7 66	498 108
Added Vol:	1 52	1 54	23 0	0 11	1 3	30 155
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0 0
Initial Fut:	8 232	31 111	376 285	150 367	8 69	528 263
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95
PHF Volume:	9 244	32 117	396 300	158 386	9 73	556 277
Reduct Vol:	0 0	0 0	0 0	0 0	0 0	0 0
Reduced Vol:	9 244	32 117	396 300	158 386	9 73	556 277
PCE Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
FinalVolume:	9 244	32 117	396 300	158 386	9 73	556 277

Saturation Flow Module:

Sat/Lane:	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900
Adjustment:	0.95 0.95	0.85 0.95	1.00 0.85	0.95 0.91	0.85 0.95	0.95 0.95	0.85 0.85
Lanes:	1.00 2.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	2.00 1.00
Final Sat.:	1805 3610	1615 1805	1900 1615	1805 5187	1615 1805	3610 1615	1900 1900

Capacity Analysis Module:

Vol/Sat:	0.00 0.07	0.02 0.06	0.21 0.19	0.09 0.07	0.01 0.04	0.15 0.17	
Crit Moves:	****	****	****	****	****	****	
Green/Cycle:	0.21 0.20	0.20 0.42	0.38 0.38	0.47 0.31	0.31 0.51	0.31 0.31	0.31
Volume/Cap:	0.04 0.34	0.10 0.21	0.54 0.48	0.34 0.24	0.02 0.12	0.49 0.49	0.54
Delay/Veh:	28.4 31.2	29.6 16.3	22.5 21.7	14.9 23.3	21.7 11.6	25.3 26.7	
User DelAdj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00
AdjDel/Veh:	28.4 31.2	29.6 16.3	22.5 21.7	14.9 23.3	21.7 11.6	25.3 26.7	
LOS by Move:	C C	C B	C C	B C	C C	B C	C
HCM2kAvgQ:	0 3	1 2	9 7	3 3	0 1	6 6	

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #2 145th St. & Van Buren St.

Average Delay (sec/veh): 0.3      Worst Case Level Of Service: C[ 19.0 ]

Street Name:	145th St				Van Buren St			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled	
Rights:	Include		Include		Include		Include	
Lanes:	1	0	0	0	1	0	0	0

## Volume Module:

Base Vol:	18	0	2	0	0	0	0	334	1	4	783	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	18	0	2	0	0	0	0	341	1	4	799	0
Added Vol:	0	0	0	0	0	0	0	66	0	0	188	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	0	2	0	0	0	0	407	1	4	987	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	19	0	2	0	0	0	0	428	1	4	1039	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	0	2	0	0	0	0	428	1	4	1039	0

#### Critical Gap Module:

Critical Gp: 6.8 xxxx 6.9 xxxxx xxxx xxxxxx xxxx xxxx 4.1 xxxx xxxx  
FollowUpTim: 3.5 xxxx 3.3 xxxxx xxxx xxxxxx xxxx xxxx 2.2 xxxx xxxx

#### Capacity Module

Capacity Module:													
Cnflict Vol:	956	xxxx	214	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	429	xxxx	xxxxxx	
Potent Cap.:	260	xxxx	797	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1141	xxxx	xxxxxx	
Move Cap.:	259	xxxx	797	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1141	xxxx	xxxxxx	
Volume/Cap:	0.07	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	

#### Level Of Service Modules:

```

Level of Service Module:
2Way95thQ:    0.2 xxxx  0.0 xxxx xxxx xxxx xxxx  xxxx xxxx xxxx  0.0 xxxx xxxx
Control Del: 20.0 xxxx  9.5 xxxx xxxx xxxx xxxx xxxx  xxxx xxxx 8.2 xxxx xxxx
LOS by Move:   C * A * * * * * * A * *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx
SharedQueue:xxxxxx xxxx xxxx
Shrd ConDel:xxxxxx xxxx xxxx
Shared LOS:   * * * * * * * * * * * * * *
ApproachDel: 19.0           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:   C             *               *               *

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Note: Queue reported is the number of cars per lane.

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 143rd St & Van Buren St

Cycle (sec):	90	Critical Vol./Cap. (X):	0.425
Loss Time (sec):	6	Average Delay (sec/veh):	13.8
Optimal Cycle:	24	Level Of Service:	B

Street Name:	143rd St			Van Buren St				
	Approach: North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Permitted	Permitted	Permitted	Permitted				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0				

Volume Module:												
Base Vol:	0	0	0	5	0	13	3	330	0	0	784	2
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	5	0	13	3	337	0	0	800	2
Added Vol:	188	0	250	0	0	0	0	0	66	90	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	188	0	250	5	0	13	3	337	66	90	800	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	198	0	263	5	0	14	3	354	69	95	842	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	198	0	263	5	0	14	3	354	69	95	842	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	198	0	263	5	0	14	3	354	69	95	842	2

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.77	1.00	0.85	0.77	1.00	0.85	0.26	0.93	0.93	0.47	0.95	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	0.33	1.00	1.99	0.01
Final Sat.:	1461	1900	1615	1461	1900	1615	498	2943	577	901	3601	9

Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.16	0.00	0.00	0.01	0.01	0.12	0.12	0.11	0.23	0.23
Crit Moves:	****											
Green/Cycle:	0.38	0.00	0.38	0.38	0.00	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Volume/Cap:	0.35	0.00	0.43	0.01	0.00	0.02	0.01	0.22	0.22	0.19	0.43	0.43
Delay/Veh:	20.2	0.0	20.9	17.2	0.0	17.3	9.2	10.4	10.4	10.4	12.0	12.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.2	0.0	20.9	17.2	0.0	17.3	9.2	10.4	10.4	10.4	12.0	12.0
LOS by Move:	C	A	C	B	A	B	A	B	B	B	B	B
HCM2kAvgQ:	4	0	6	0	0	0	0	3	3	1	7	7

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Litchfield Rd & Van Buren St

Street Name: Litchfield Rd Van Buren St														
Approach:	North Bound			South Bound			East Bound			West Bound				
	L	-	T	-	R	L	-	T	-	R	L	-	T	-
Control:	Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit			
Rights:	Include		Include		Include		Include		Include		Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	1	0	2	0	1	1	0	1	1
Volume Module:														
Base Vol:	122	679	103	238	419	113	147	287	77	86	480	188		
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02		
Initial Bse:	124	693	105	243	427	115	150	293	79	88	490	192		
Added Vol:	0	43	3	0	18	63	177	72	0	2	26	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	124	736	108	243	445	178	327	365	79	90	516	192		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
PHF Volume:	131	774	114	256	469	188	344	384	83	94	543	202		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	131	774	114	256	469	188	344	384	83	94	543	202		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	131	774	114	256	469	188	344	384	83	94	543	202		
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.95	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.91	0.91		
Lanes:	1.00	2.62	0.38	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.46	0.54		
Final Sat.:	1805	4437	652	1805	3610	1615	1805	3610	1615	1805	2523	939		
Capacity Analysis Module:														
Vol/Sat:	0.07	0.17	0.17	0.14	0.13	0.12	0.19	0.11	0.05	0.05	0.22	0.22		
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****		
Green/Cycle:	0.35	0.21	0.21	0.41	0.24	0.24	0.52	0.33	0.33	0.42	0.26	0.26		
Volume/Cap:	0.34	0.83	0.83	0.65	0.53	0.48	0.69	0.33	0.16	0.17	0.83	0.83		
Delay/Veh:	21.5	39.8	39.8	23.6	30.2	30.1	22.3	23.0	21.7	16.2	38.3	38.3		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	21.5	39.8	39.8	23.6	30.2	30.1	22.3	23.0	21.7	16.2	38.3	38.3		
LOS by Move:	C	D	D	C	C	C	C	C	C	B	D	D		
HCM2kAvgQ:	3	9	9	7	6	5	7	4	2	2	13	13		

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bullard Ave & Yuma Rd

Cycle (sec):	90	Critical Vol./Cap. (X):	0.509	
Loss Time (sec):	6	Average Delay (sec/veh):	16.2	
Optimal Cycle:	27	Level Of Service:	B	
Street Name:	Bullard Ave	Yuma Rd		
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 0 1	1 0 0 1 0	0 1 0 0 0	0 0 1! 0 0
Volume Module:				
Base Vol:	0 85 26	20 235 126	61 177 0	25 269 42
Growth Adj:	1.02 1.02 1.02	1.02 1.02 1.02	1.02 1.02 1.02	1.02 1.02 1.02
Initial Bse:	0 87 27	20 240 129	62 181 0	26 274 43
Added Vol:	0 0 5	24 0 3	1 8 0	13 22 54
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	0 87 32	44 240 132	63 189 0	39 296 97
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95
PHF Volume:	0 91 33	47 252 138	67 198 0	41 312 102
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	0 91 33	47 252 138	67 198 0	41 312 102
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	0 91 33	47 252 138	67 198 0	41 312 102
Saturation Flow Module:				
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	1.00 1.00 0.85	0.70 0.95 0.95	0.83 0.83 1.00	0.93 0.93 0.93
Lanes:	1.00 1.00 1.00	1.00 0.65 0.35	0.25 0.75 0.00	0.09 0.69 0.22
Final Sat.:	1900 1900 1615	1322 1162 637	395 1178 0	157 1208 395
Capacity Analysis Module:				
Vol/Sat:	0.00 0.05 0.02	0.04 0.22 0.22	0.17 0.17 0.00	0.26 0.26 0.26
Crit Moves:		****		****
Green/Cycle:	0.00 0.43 0.43	0.43 0.43 0.43	0.51 0.51 0.00	0.51 0.51 0.51
Volume/Cap:	0.00 0.11 0.05	0.08 0.51 0.51	0.33 0.33 0.00	0.51 0.51 0.51
Delay/Veh:	0.0 15.6 15.1	15.4 19.5 19.5	13.4 13.4 0.0	15.2 15.2 15.2
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	0.0 15.6 15.1	15.4 19.5 19.5	13.4 13.4 0.0	15.2 15.2 15.2
LOS by Move:	A B B	B B B	B B A	B B B
HCM2kAvgQ:	0 2 1	1 8 8	4 4 0	8 8 8

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #6 143rd Ave & Yuma Rd

Average Delay (sec/veh): 2.8      Worst Case Level Of Service: B[ 13.4]

Street Name:	143rd Ave					Yuma Rd									
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign		Stop Sign		Uncontrolled			Uncontrolled							
Rights:	Include		Include		Include		Include								
Lanes:	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	223	0	0	336	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	0	0	0	0	227	0	0	343	0
Added Vol:	0	0	0	73	0	74	30	7	0	0	15	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	73	0	74	30	234	0	0	358	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	77	0	78	32	247	0	0	377	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	77	0	78	32	247	0	0	377	28

#### Critical Cap Module:

Critical Gp:xxxxx xxxx xxxx 6.4 xxxx 6.2 4.1 xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxx xxxx xxxx 3.5 xxxx 3.3 2.2 xxxx xxxx xxxx xxxx xxxx

#### Capacity Module:

```

Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx 687 xxxx 377 405 xxxx xxxxx xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx 416 xxxx 674 1165 xxxx xxxxx xxxx xxxx xxxxx
Move Cap.: xxxx xxxx xxxxx 407 xxxx 674 1165 xxxx xxxxx xxxx xxxx xxxxx
Volume/Cap: xxxx xxxx xxxx 0.19 xxxx 0.12 0.03 xxxx xxxx xxxx xxxx xxxx

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Level Of Service Module:  
 2Way95thQ: xxxx xxxx xxxxx 0.7 xxxx 0.4 0.1 xxxx xxxxx xxxx xxxx xxxx  
 Control Del:xxxxx xxxx xxxxx 15.9 xxxx 11.0 8.2 xxxx xxxxx xxxx xxxx xxxx  
 LOS by Move: \* \* \* C \* B A \* \* \* \* \* \* \*  
 Movement: LT - LTR - RT  
 Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxx xxxx xxxx  
 SharedQueue:xxxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxx xxxx xxxx  
 Shrd ConDel:xxxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxx xxxx xxxx  
 Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \* \*  
 ApproachDel: xxxxx 13.4 xxxxx xxxxx  
 ApproachLOS: \* B \* \*

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #7 Access C & Yuma Rd

Average Delay (sec/veh): 0.9      Worst Case Level Of Service: B[ 13.3]

Street Name:	Access C				Yuma Rd														
Approach:	North Bound		South Bound		East Bound		West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled												
Rights:	Include		Include		Include		Include												
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	1	0	0	0	1	1	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	223	0	0	336	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	0	0	0	0	0	0	227	0	0	343	0
Added Vol:	0	0	0	29	0	15	7	73	0	0	27	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	29	0	15	7	300	0	0	370	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	31	0	16	7	316	0	0	389	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	31	0	16	7	316	0	0	389	16

## Critical Gap Module:

Critical Gp:xxxxxx xxxx xxxx 6.4 6.5 6.2 4.1 xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxxx xxxx xxxx 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx

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Capacity Module:													
Cnflict Vol:	xxxx	xxxx	xxxxxx	728	728	202	405	xxxx	xxxxxx	xxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	xxxx	xxxx	xxxxxx	393	353	843	1165	xxxx	xxxxxx	xxxx	xxxx	xxxx	xxxxxx
Move Cap.:	xxxx	xxxx	xxxxxx	391	350	843	1165	xxxx	xxxxxx	xxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.08	0.00	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

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Level Of Service Module:  
 2Way95thQ: xxxx xxxx XXXXX XXXX XXXX XXXX 0.0 XXXX XXXXX XXXX XXXX XXXX  
 Control Del:XXXXX XXXX XXXXX XXXX XXXX XXXX 8.1 XXXX XXXXX XXXXX XXXX XXXX  
 LOS by Move: \* \* \* \* \* \* A \* \* \* \* \* \*  
 Movement: LT - LTR - RT  
 Shared Cap.: XXXX XXXX XXXXX XXXX 479 XXXXX XXXX XXXX XXXX XXXX XXXX  
 SharedQueue:XXXXX XXXX XXXXX XXXX 0.3 XXXXX XXXXX XXXX XXXX XXXX XXXX XXXX  
 Shrd ConDel:XXXXX XXXX XXXXX XXXX 13.3 XXXXX XXXXX XXXX XXXX XXXX XXXX XXXX  
 Shared LOS: \* \* \* \* B \* \* \* \* \* \* \*  
 ApproachDel: XXXXX 13.3 XXXXX XXXXX  
 ApproachLOS: \* B \* \*

*Notes: 1. The first two columns are identical to the first two columns of Table 5.*

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Litchfield Rd & Yuma Rd

Cycle (sec):	90	Critical Vol./Cap. (X):	0.473
Loss Time (sec):	12	Average Delay (sec/veh):	22.8
Optimal Cycle:	39	Level Of Service:	C

Street Name:	Litchfield Rd			Yuma Rd		
	North Bound	South Bound	East Bound	West Bound		
Approach:	L - T - R	L - T - R	L - T - R	L - T - R		
Movement:	-   -	-   -	-   -	-   -		
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit		
Rights:	Include	Include	Include	Include		
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0		
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0		
Lanes:	1 0 1 1 0	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0		

Volume Module:

Base Vol:	105	507	52	112	277	78	84	122	39	30	177	120
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	107	517	53	114	283	80	86	124	40	31	181	122
Added Vol:	7	0	0	0	0	20	46	38	18	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	517	53	114	283	100	132	162	58	31	195	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	120	544	56	120	297	105	139	171	61	32	205	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	544	56	120	297	105	139	171	61	32	205	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	544	56	120	297	105	139	171	61	32	205	129

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	1.00	0.85	0.95	0.91	0.91	0.95	0.89	0.89
Lanes:	1.00	1.81	0.19	1.00	1.00	1.00	1.00	1.48	0.52	1.00	1.23	0.77
Final Sat.:	1805	3228	331	1805	1900	1615	1805	2559	910	1805	2087	1313

Capacity Analysis Module:

Vol/Sat:	0.07	0.17	0.17	0.07	0.16	0.06	0.08	0.07	0.07	0.02	0.10	0.10
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.53	0.36	0.36	0.49	0.35	0.35	0.40	0.29	0.29	0.29	0.21	0.21
Volume/Cap:	0.23	0.47	0.47	0.26	0.45	0.19	0.31	0.23	0.23	0.09	0.47	0.47
Delay/Veh:	11.8	22.7	22.7	13.3	23.1	20.6	18.1	24.3	24.3	23.5	31.9	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.8	22.7	22.7	13.3	23.1	20.6	18.1	24.3	24.3	23.5	31.9	31.9
LOS by Move:	B	C	C	B	C	C	B	C	C	C	C	C
HCM2kAvgQ:	2	7	7	2	6	2	2	2	2	1	5	5

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2013 PM - Opening

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Note: Queue reported is the number of cars per lane.

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## APPENDIX G

### 2018 PEAK HOUR ANALYSIS

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

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Scenario Report

Scenario: AM

Command: AM

Volume: AM

Geometry: Default Geometry

Impact Fee: Default Impact Fee

Trip Generation: AM

Trip Distribution: Default Trip Distribution

Paths: Default Path

Routes: Default Route

Configuration: Default Configuration

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Bullard Ave & Van Buren St

Cycle (sec):	90	Critical Vol./Cap. (X):	0.575
Loss Time (sec):	12	Average Delay (sec/veh):	24.3
Optimal Cycle:	45	Level Of Service:	C

Street Name:	Bullard Ave			Van Buren St				
	North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 2 0 1	1 0 1 0 1	1 0 3 0 1	1 0 2 0 1				

Volume Module:												
Base Vol:	8	280	41	71	118	128	305	365	7	17	189	44
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	9	315	46	80	133	144	343	411	8	19	213	50
Added Vol:	1	22	3	152	49	0	0	29	1	1	9	43
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	337	49	232	182	144	343	440	9	20	222	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	11	355	52	244	191	152	362	463	9	21	233	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	355	52	244	191	152	362	463	9	21	233	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	355	52	244	191	152	362	463	9	21	233	97

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	1805	1900	1615	1805	5187	1615	1805	3610	1615

Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.03	0.14	0.10	0.09	0.20	0.09	0.01	0.01	0.06	0.06
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.19	0.17	0.17	0.44	0.38	0.38	0.49	0.41	0.41	0.17	0.11	0.11
Volume/Cap:	0.04	0.58	0.19	0.45	0.26	0.24	0.50	0.22	0.01	0.11	0.58	0.54
Delay/Veh:	29.5	35.6	32.3	17.4	19.2	19.1	15.3	17.4	15.9	31.9	39.9	40.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.5	35.6	32.3	17.4	19.2	19.1	15.3	17.4	15.9	31.9	39.9	40.9
LOS by Move:	C	D	C	B	B	B	B	B	B	C	D	D
HCM2kAvgQ:	0	5	1	5	4	3	7	3	0	0	3	3

AM

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #2 145th St. & Van Buren St.

Average Delay (sec/veh): 0.4      Worst Case Level Of Service: C[ 21.1 ]

Street Name:	145th St				Van Buren St													
Approach:	North Bound		South Bound		East Bound		West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled											
Rights:	Include		Include		Include		Include											
Lanes:	1	0	0	0	1	0	0	0	0	0	2	0	1	1	0	2	0	0

## Volume Module:

Base Vol:	9	0	2	0	0	0	0	505	14	28	343	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	10	0	2	0	0	0	0	569	16	32	386	0
Added Vol:	0	0	0	0	0	0	0	184	0	0	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	0	2	0	0	0	0	753	16	32	439	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	11	0	2	0	0	0	0	792	17	33	462	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	0	2	0	0	0	0	792	17	33	462	0

#### Critical Gap Module:

Critical Gp: 6.8 xxxx 6.9 xxxx xxxx xxxx xxxx xxxx xxxx 4.1 xxxx xxxx  
FollowUpTim: 3.5 xxxx 3.3 xxxx xxxx xxxx xxxx xxxx 2.2 xxxx xxxx

#### Capacity Module

Cnflict	Vol:	1090	xxxx	396	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	809	xxxx	xxxxxx
Potent	Cap.:	213	xxxx	609	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	826	xxxx	xxxxxx
Move	Cap.:	206	xxxx	609	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	826	xxxx	xxxxxx
Volume/Cap:	0.05	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	

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Level Of Service Module:
2Way95thQ:    0.2 xxxx  0.0  xxxx xxxx xxxx xxxx  xxxx xxxx xxxx  0.1 xxxx xxxx
Control Del: 23.4 xxxx 10.9 xxxx xxxx xxxx xxxx xxxx xxxx 9.5 xxxx xxxx
LOS by Move:   C *     B *   *   *   *   *   *   A *   *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx
SharedQueue:xxxxx xxxx xxxx xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx
Shrd ConDel:xxxxx xxxx xxxx xxxx xxxx xxxx  xxxx xxxx xxxx  xxxx xxxx xxxx
Shared LOS:   *   *   *   *   *   *   *   *   *   *   *   *   *
ApproachDel: 21.1           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:   C             *               *               *

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Note: Queue reported is the number of cars per lane

Beck Property TIA, Goodyear AZ  
 AM Peak Hour  
 2018 AM - Horizon

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 143rd St &amp; Van Buren St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	6	Average Delay (sec/veh):	5.1
Optimal Cycle:	25	Level Of Service:	A

Street Name:	143rd St			Van Buren St				
	Approach: North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Permitted	Permitted	Permitted	Permitted				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0				

Volume Module:												
Base Vol:	0	0	0	2	0	2	15	478	0	0	367	9
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	2	0	2	17	538	0	0	413	10
Added Vol:	53	0	74	0	0	0	0	0	184	243	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	0	74	2	0	2	17	538	184	243	413	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	56	0	78	2	0	2	18	567	194	256	435	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	0	78	2	0	2	18	567	194	256	435	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	0	78	2	0	2	18	567	194	256	435	11

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.77	1.00	0.85	0.77	1.00	0.85	0.49	0.91	0.91	0.35	0.95	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.49	0.51	1.00	1.95	0.05
Final Sat.:	1461	1900	1615	1461	1900	1615	933	2588	885	665	3509	86

Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.05	0.00	0.00	0.00	0.02	0.22	0.22	0.38	0.12	0.12
Crit Moves:	****											
Green/Cycle:	0.10	0.00	0.10	0.10	0.00	0.10	0.83	0.83	0.83	0.83	0.83	0.83
Volume/Cap:	0.37	0.00	0.46	0.02	0.00	0.01	0.02	0.26	0.26	0.46	0.15	0.15
Delay/Veh:	39.1	0.0	40.0	36.2	0.0	36.2	1.3	1.7	1.7	2.7	1.5	1.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.1	0.0	40.0	36.2	0.0	36.2	1.3	1.7	1.7	2.7	1.5	1.5
LOS by Move:	D	A	D	D	A	D	A	A	A	A	A	A
HCM2kAvgQ:	2	0	3	0	0	0	0	2	2	2	1	1

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Litchfield Rd & Van Buren St

Street Name: Litchfield Rd Van Buren St														
Approach:	North Bound			South Bound			East Bound			West Bound				
	L	-	T	-	R	L	-	T	-	R	L	-	T	-
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit				
Rights:	Include			Include			Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1	0	1	0	2	0	1	1	0	1	1
Volume Module:														
Base Vol:	92	466	73	192	457	99	91	356	84	71	223	106		
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13		
Initial Bse:	104	525	82	216	515	111	102	401	95	80	251	119		
Added Vol:	0	17	2	0	41	173	52	22	0	3	70	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	104	542	84	216	556	284	154	423	95	83	321	119		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
PHF Volume:	109	570	89	228	585	299	163	445	100	87	338	126		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	109	570	89	228	585	299	163	445	100	87	338	126		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	109	570	89	228	585	299	163	445	100	87	338	126		
Saturation Flow Module:														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.95	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.91	0.91		
Lanes:	1.00	2.60	0.40	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.46	0.54		
Final Sat.:	1805	4399	684	1805	3610	1615	1805	3610	1615	1805	2524	938		
Capacity Analysis Module:														
Vol/Sat:	0.06	0.13	0.13	0.13	0.16	0.19	0.09	0.12	0.06	0.05	0.13	0.13		
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****		
Green/Cycle:	0.35	0.23	0.23	0.50	0.35	0.35	0.44	0.29	0.29	0.36	0.24	0.24		
Volume/Cap:	0.28	0.55	0.55	0.43	0.46	0.53	0.37	0.42	0.21	0.21	0.55	0.55		
Delay/Veh:	20.8	30.9	30.9	14.5	23.1	24.4	16.9	26.1	24.4	19.9	30.7	30.7		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	20.8	30.9	30.9	14.5	23.1	24.4	16.9	26.1	24.4	19.9	30.7	30.7		
LOS by Move:	C	C	C	B	C	C	B	C	C	B	C	C		
HCM2kAvgQ:	2	6	6	4	7	7	3	5	2	2	7	7		

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bullard Ave & Yuma Rd

Street Name: Bullard Ave Yuma Rd															
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted		Permitted		Permitted		Permitted		Permitted		Permitted				
Rights:	Include		Include		Include		Include		Include		Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1	0	1	0	1	1	0	0	1	0	0	0	0	0	
Volume Module:															
Base Vol:	1	176	32	39	70	60	126	265	0	21	148	18			
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13			
Initial Bse:	1	198	36	44	79	68	142	298	0	24	167	20			
Added Vol:	0	0	12	51	0	1	3	22	0	4	7	23			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	1	198	48	95	79	69	145	320	0	28	174	43			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
PHF Volume:	1	209	51	100	83	72	153	337	0	29	183	46			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	1	209	51	100	83	72	153	337	0	29	183	46			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	1	209	51	100	83	72	153	337	0	29	183	46			
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Adjustment:	0.55	1.00	0.85	0.46	0.93	0.93	0.82	0.82	1.00	0.91	0.91	0.91			
Lanes:	1.00	1.00	1.00	1.00	0.53	0.47	0.31	0.69	0.00	0.11	0.71	0.18			
Final Sat.:	1053	1900	1615	868	945	822	482	1066	0	195	1223	305			
Capacity Analysis Module:															
Vol/Sat:	0.00	0.11	0.03	0.12	0.09	0.09	0.32	0.32	0.00	0.15	0.15	0.15			
Crit Moves:	****			****			****			****					
Green/Cycle:	0.25	0.25	0.25	0.25	0.25	0.25	0.68	0.68	0.00	0.68	0.68	0.68			
Volume/Cap:	0.00	0.44	0.13	0.46	0.35	0.35	0.46	0.46	0.00	0.22	0.22	0.22			
Delay/Veh:	25.4	29.2	26.3	30.2	28.3	28.3	6.9	6.9	0.0	5.4	5.4	5.4			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	25.4	29.2	26.3	30.2	28.3	28.3	6.9	6.9	0.0	5.4	5.4	5.4			
LOS by Move:	C	C	C	C	C	C	A	A	A	A	A	A			
HCM2kAvgQ:	0	5	1	2	3	3	7	7	0	3	3	3			

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #6 143rd Ave & Yuma Rd

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[ 12.6 ]

Street Name:	143rd Ave				Yuma Rd			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Stop Sign	Include	Stop Sign	Include	Uncontrolled	Include	Uncontrolled	Include
Rights:	0	0	0	0	1	0	0	1
Lanes:	0	0	0	0	1	0	1	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	336	0	0	187	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	0	0	0	0	378	0	0	211	0
Added Vol:	0	0	0	22	0	26	71	14	0	0	7	71
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	22	0	26	71	392	0	0	218	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	23	0	27	75	413	0	0	229	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	23	0	27	75	413	0	0	229	75

#### Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 6.4 xxxx 6.2 4.1 xxxx xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxx xxxx xxxx 3.5 xxxx 3.3 2.2 xxxx xxxx xxxx xxxx xxxx xxxx

#### Capacity Module:

Cnflict	Vol:	xxxx	xxxx	xxxxxx	791	xxxx	229	304	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent	Cap.:	xxxx	xxxx	xxxxxx	361	xxxx	815	1269	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move	Cap.:	xxxx	xxxx	xxxxxx	345	xxxx	815	1269	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:		xxxx	xxxx	xxxx	0.07	xxxx	0.03	0.06	xxxx	xxxx	xxxx	xxxx	xxxx

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Level Of Service Module:  
 2Way95thQ: xxxx xxxx XXXXX 0.2 xxxx 0.1 0.2 xxxx XXXXX XXXX XXXX XXXXX  
 Control Del:XXXXX XXXX XXXXX 16.2 XXXX 9.6 8.0 XXXX XXXXX XXXXX XXXX XXXXX  
 LOS by Move: \* \* \* C \* A A \* \* \* \* \* \* \*  
 Movement: LT - LTR - RT  
 Shared Cap.: XXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXXX  
 SharedQueue:XXXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXXX  
 Shrd ConDel:XXXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXXX  
 Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*  
 ApproachDel: XXXXX 12.6 XXXXX XXXXX  
 ApproachLOS: \* B \* \*

*Notes: 1. The first two columns are identical to the first two columns of Table 5.*

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #7 Access C & Yuma Rd

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[ 13.2]

Street Name:	Access C				Yuma Rd										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign		Stop Sign		Uncontrolled			Uncontrolled							
Rights:	Include		Include		Include		Include								
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0	1	1	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	336	0	0	187	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	0	0	0	0	378	0	0	211	0
Added Vol:	0	0	0	14	0	7	14	22	0	0	71	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	14	0	7	14	400	0	0	282	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	15	0	7	15	421	0	0	296	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	15	0	7	15	421	0	0	296	28

#### Critical Gap Module:

Critical Gp:xxxxxx xxxx xxxx 6.4 6.5 6.2 4.1 xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxxx xxxx xxxx 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx

#### Capacity Module

Cnflict	Vol:	xxxx	xxxx	xxxxxx	761	761	162	325	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent	Cap.:	xxxx	xxxx	xxxxxx	376	337	888	1246	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move	Cap.:	xxxx	xxxx	xxxxxx	373	333	888	1246	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:		xxxx	xxxx	xxxx	0.04	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx

----- | -----

Level Of Service Module:  
 2Way95thQ: xxxx xxxx XXXXX XXXX XXXX XXXX 0.0 XXXX XXXXX XXXX XXXX XXXX  
 Control Del:XXXXX XXXX XXXXX XXXX XXXX XXXX 7.9 XXXX XXXXX XXXXX XXXX XXXX  
 LOS by Move: \* \* \* \* \* \* \* A \* \* \* \* \* \* \*  
 Movement: LT - LTR - RT  
 Shared Cap.: XXXX XXXX XXXXX XXXX 462 XXXXX XXXX XXXX XXXX XXXX XXXX  
 SharedQueue:XXXXX XXXX XXXXX XXXX 0.2 XXXXX XXXXX XXXX XXXX XXXX XXXX XXXX  
 Shrd ConDel:XXXXX XXXX XXXXX XXXX 13.2 XXXXX XXXXX XXXX XXXX XXXX XXXX XXXX  
 Shared LOS: \* \* \* \* B \* \* \* \* \* \* \* \*  
 ApproachDel: XXXXX 13.2 XXXXX XXXXX  
 ApproachLOS: \* B \* \* \*

Note: Queue reported is the number of cars per lane

Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Litchfield Rd & Yuma Rd

Street Name: Litchfield Rd Yuma Rd															
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit		Prot+Permit				
Rights:	Include		Include		Include		Include		Include		Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1	0	1	1	0	1	0	1	0	1	0	1	0	1	
Volume Module:															
Base Vol:	33	275	24	92	341	49	83	117	93	19	69	78			
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13			
Initial Bse:	37	310	27	104	384	55	93	132	105	21	78	88			
Added Vol:	18	0	0	0	0	44	19	12	6	0	37	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	55	310	27	104	384	99	112	144	111	21	115	88			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
PHF Volume:	58	326	28	109	404	104	118	151	117	23	121	92			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	58	326	28	109	404	104	118	151	117	23	121	92			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	58	326	28	109	404	104	118	151	117	23	121	92			
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900			
Adjustment:	0.95	0.94	0.94	0.95	1.00	0.85	0.95	0.89	0.89	0.95	0.89	0.89			
Lanes:	1.00	1.84	0.16	1.00	1.00	1.00	1.00	1.13	0.87	1.00	1.13	0.87			
Final Sat.:	1805	3280	286	1805	1900	1615	1805	1907	1469	1805	1912	1464			
Capacity Analysis Module:															
Vol/Sat:	0.03	0.10	0.10	0.06	0.21	0.06	0.07	0.08	0.08	0.01	0.06	0.06			
Crit Moves:	****			****			****			****					
Green/Cycle:	0.43	0.35	0.35	0.60	0.49	0.49	0.33	0.26	0.26	0.19	0.15	0.15			
Volume/Cap:	0.12	0.28	0.28	0.15	0.43	0.13	0.28	0.31	0.31	0.10	0.43	0.43			
Delay/Veh:	15.3	21.0	21.0	8.0	15.0	12.4	22.0	27.1	27.1	30.3	35.6	35.6			
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	15.3	21.0	21.0	8.0	15.0	12.4	22.0	27.1	27.1	30.3	35.6	35.6			
LOS by Move:	B	C	C	A	B	B	C	C	C	C	D	D			
HCM2kAvgQ:	1	4	4	1	7	1	2	3	3	1	3	3			

AM

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Beck Property TIA, Goodyear AZ  
AM Peak Hour  
2018 AM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

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Scenario Report

Scenario: PM

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

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Bullard Ave & Van Buren St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.587
Loss Time (sec):	12	Average Delay (sec/veh):	24.2
Optimal Cycle:	46	Level Of Service:	C

Street Name:	Bullard Ave			Van Buren St				
	Approach: North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 2 0 1	1 0 1 0 1	1 0 3 0 1	1 0 2 0 1				

Volume Module:

Base Vol:	7 176	29 56	346 279	147 349	7 65	488 106
Growth Adj:	1.13 1.13	1.13 1.13	1.13 1.13	1.13 1.13	1.13 1.13	1.13 1.13
Initial Bse:	8 198	33 63	390 314	166 393	8 73	549 119
Added Vol:	1 52	1 54	23 0	0 11	1 3	30 155
PasserByVol:	0 0	0 0	0 0	0 0	0 0	0 0
Initial Fut:	9 250	34 117	413 314	166 404	9 76	579 274
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95	0.95 0.95
PHF Volume:	9 263	35 123	434 331	174 425	9 80	610 289
Reduct Vol:	0 0	0 0	0 0	0 0	0 0	0 0
Reduced Vol:	9 263	35 123	434 331	174 425	9 80	610 289
PCE Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
MLF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
FinalVolume:	9 263	35 123	434 331	174 425	9 80	610 289

Saturation Flow Module:

Sat/Lane:	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900	1900 1900
Adjustment:	0.95 0.95	0.85 0.95	1.00 0.85	0.95 0.91	0.85 0.95	0.95 0.95	0.85 0.85
Lanes:	1.00 2.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	2.00 1.00
Final Sat.:	1805 3610	1615 1805	1900 1615	1805 5187	1615 1805	3610 1615	1900 1900

Capacity Analysis Module:

Vol/Sat:	0.01 0.07	0.02 0.07	0.23 0.20	0.10 0.08	0.01 0.04	0.17 0.18	
Crit Moves:	****	****	****	****	****	****	
Green/Cycle:	0.21 0.21	0.21 0.43	0.39 0.39	0.47 0.30	0.30 0.50	0.30 0.30	0.30 0.30
Volume/Cap:	0.04 0.35	0.11 0.23	0.59 0.53	0.40 0.27	0.02 0.14	0.56 0.56	0.59 0.59
Delay/Veh:	28.0 30.9	29.2 16.0	23.0 21.9	15.6 23.8	21.9 12.0	26.8 28.4	28.4 28.4
User DelAdj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
AdjDel/Veh:	28.0 30.9	29.2 16.0	23.0 21.9	15.6 23.8	21.9 12.0	26.8 28.4	28.4 28.4
LOS by Move:	C C	C B	C C	B C	C C	B C	C C
HCM2kAvgQ:	0 3	1 2	10 7	4 3	0 1	7 7	7 7

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
 PM Peak Hour  
 2018 PM - Horizon

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 145th St & Van Buren St

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[ 21.0]

Street Name:	145th St			Van Buren St		
Approach:	North Bound	South Bound	East Bound	West Bound		
Movement:	L - T - R	L - T - R	L - T - R	L - T - R		
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled		
Rights:	Include	Include	Include	Include		
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 1 0 2 0 0		

Volume Module:

Base Vol:	18	0	2	0	0	0	0	334	1	4	783	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	20	0	2	0	0	0	0	376	1	5	882	0
Added Vol:	0	0	0	0	0	0	0	66	0	0	188	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	0	2	0	0	0	0	442	1	5	1070	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	21	0	2	0	0	0	0	465	1	5	1126	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	21	0	2	0	0	0	0	465	1	5	1126	0

Critical Gap Module:

Critical Gp:	6.8 xxxx	6.9	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	4.1	xxxx	xxxxxx
FollowUpTim:	3.5 xxxx	3.3	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx

Capacity Module:

Cnflict Vol:	1038	xxxx	233	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	467	xxxx	xxxxxx
Potent Cap.:	230	xxxx	776	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	1106	xxxx	xxxxxx
Move Cap.:	229	xxxx	776	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	1106	xxxx	xxxxxx
Volume/Cap:	0.09	xxxx	0.00	xxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	0.00	xxxx	xxxx

Level Of Service Module:

2Way95thQ:	0.3	xxxx	0.0	xxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx
Control Del:	22.3	xxxx	9.7	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	8.3	xxxx	xxxxxx
LOS by Move:	C	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	21.0		xxxxxx		xxxxxx		xxxxxx		xxxxxx			
ApproachLOS:	C		*		*		*		*			

Note: Queue reported is the number of cars per lane.

Beck Property TIA, Goodyear AZ  
 PM Peak Hour  
 2018 PM - Horizon

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 143rd St &amp; Van Buren St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	6	Average Delay (sec/veh):	13.4
Optimal Cycle:	25	Level Of Service:	B

Street Name:	143rd St			Van Buren St				
	Approach: North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Permitted	Permitted	Permitted	Permitted				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 1 0 1	1 0 1 0 1	1 0 1 1 0	1 0 1 1 0				

## Volume Module:

Base Vol:	0 0 0	5 0 13	3 330 0	0 0 784	2
Growth Adj:	1.13 1.13 1.13	1.13 1.13 1.13	1.13 1.13 1.13	1.13 1.13 1.13	1.13
Initial Bse:	0 0 0	6 0 15	3 372 0	0 0 883	2
Added Vol:	188 0 250	0 0 0	0 0 66	90 0 0	0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	0
Initial Fut:	188 0 250	6 0 15	3 372 66	90 883 2	
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
PHF Adj:	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95	0.95 0.95 0.95	0.95
PHF Volume:	198 0 263	6 0 15	4 391 69	95 929 2	
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0	0
Reduced Vol:	198 0 263	6 0 15	4 391 69	95 929 2	
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
FinalVolume:	198 0 263	6 0 15	4 391 69	95 929 2	

## Saturation Flow Module:

Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.77 1.00 0.85	0.77 1.00 0.85	0.24 0.93 0.93	0.93 0.46 0.95	0.95 0.95 0.95
Lanes:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.70 0.30	1.00 1.99 0.01	
Final Sat.:	1461 1900 1615	1461 1900 1615	454 2995 532	865 3601 9	

## Capacity Analysis Module:

Vol/Sat:	0.14 0.00 0.16	0.00 0.00 0.01	0.01 0.13 0.13	0.13 0.11 0.26	0.26
Crit Moves:	****			****	
Green/Cycle:	0.36 0.00 0.36	0.36 0.00 0.36	0.57 0.57 0.57	0.57 0.57 0.57	0.57
Volume/Cap:	0.37 0.00 0.45	0.01 0.00 0.03	0.01 0.23 0.23	0.23 0.19 0.45	0.45
Delay/Veh:	21.7 0.0 22.5	18.4 0.0 18.6	8.3 9.5 9.5	9.5 9.4 11.3	11.3
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
AdjDel/Veh:	21.7 0.0 22.5	18.4 0.0 18.6	8.3 9.5 9.5	9.5 9.4 11.3	11.3
LOS by Move:	C A C	B A B	A A A	A A B	B
HCM2kAvgQ:	4 0 6	0 0 0	0 3 3	1 7 7	

PM

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Litchfield Rd & Van Buren St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.905
Loss Time (sec):	12	Average Delay (sec/veh):	34.8
Optimal Cycle:	106	Level Of Service:	C

Street Name:	Litchfield Rd			Van Buren St				
	North Bound		South Bound		East Bound		West Bound	
	Movement:	L - T - R	L - T - R	L - T - R	L - T - R			
Control:	Prot+Permit	Prot+Permit	Prot+Permit	Prot+Permit				
Rights:	Include	Include	Include	Include				
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0				
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0				
Lanes:	1 0 2 1 0	1 0 2 0 1	1 0 2 0 1	1 0 1 1 0				

Volume Module:

Base Vol:	122	679	103	238	419	113	147	287	77	86	480	188
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	137	765	116	268	472	127	166	323	87	97	540	212
Added Vol:	0	43	3	0	18	63	177	72	0	2	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	808	119	268	490	190	343	395	87	99	566	212
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	145	850	125	282	516	200	361	416	91	104	596	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	850	125	282	516	200	361	416	91	104	596	223
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	145	850	125	282	516	200	361	416	91	104	596	223

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.89	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.91	0.91
Lanes:	1.00	2.61	0.39	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.46	0.54
Final Sat.:	1805	4435	653	1805	3610	1615	1805	3610	1615	1805	2520	942

Capacity Analysis Module:

Vol/Sat:	0.08	0.19	0.19	0.16	0.14	0.12	0.20	0.12	0.06	0.06	0.24	0.24
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.35	0.21	0.21	0.42	0.25	0.25	0.52	0.32	0.32	0.42	0.26	0.26
Volume/Cap:	0.39	0.90	0.90	0.71	0.58	0.50	0.75	0.36	0.18	0.19	0.90	0.90
Delay/Veh:	21.7	45.4	45.4	26.0	30.8	30.2	26.1	23.6	22.1	16.1	44.6	44.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.7	45.4	45.4	26.0	30.8	30.2	26.1	23.6	22.1	16.1	44.6	44.6
LOS by Move:	C	D	D	C	C	C	C	C	C	B	D	D
HCM2kAvgQ:	3	11	11	8	7	5	8	4	2	2	15	15

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
 PM Peak Hour  
 2018 PM - Horizon

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bullard Ave &amp; Yuma Rd

Cycle (sec):	90	Critical Vol./Cap.(X):	0.557
Loss Time (sec):	6	Average Delay (sec/veh):	16.8
Optimal Cycle:	30	Level Of Service:	B

Street Name:	Bullard Ave			Yuma Rd											
	North Bound		South Bound		East Bound		West Bound								
	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted			Permitted			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	1	0	0	1	0	0	0	0	0	1!

## Volume Module:

Base Vol:	0	85	26	20	235	126	61	177	0	25	269	42
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	96	29	23	265	142	69	199	0	28	303	47
Added Vol:	0	0	5	24	0	3	1	8	0	13	22	54
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	96	34	47	265	145	70	207	0	41	325	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	101	36	49	279	153	73	218	0	43	342	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	101	36	49	279	153	73	218	0	43	342	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	101	36	49	279	153	73	218	0	43	342	107

## Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.69	0.95	0.95	0.82	0.82	1.00	0.92	0.92	0.92
Lanes:	1.00	1.00	1.00	1.00	0.65	0.35	0.25	0.75	0.00	0.09	0.69	0.22
Final Sat.:	1900	1900	1615	1307	1163	637	390	1159	0	155	1221	381

## Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.02	0.04	0.24	0.24	0.19	0.19	0.00	0.28	0.28	0.28
Crit Moves:				****						****		
Green/Cycle:	0.00	0.43	0.43	0.43	0.43	0.43	0.50	0.50	0.00	0.50	0.50	0.50
Volume/Cap:	0.00	0.12	0.05	0.09	0.56	0.56	0.37	0.37	0.00	0.56	0.56	0.56
Delay/Veh:	0.0	15.5	15.0	15.2	20.1	20.1	14.0	14.0	0.0	16.2	16.2	16.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.5	15.0	15.2	20.1	20.1	14.0	14.0	0.0	16.2	16.2	16.2
LOS by Move:	A	B	B	C	C	B	B	A	B	B	B	B
HCM2kAvgQ:	0	2	1	1	9	9	5	5	0	9	9	9

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

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Note: Queue reported is the number of cars per lane.

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #6 143rd Ave & Yuma Rd

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: B[ 14.2]

Street Name:	143rd Ave					Yuma Rd									
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled								
Rights:	Include		Include		Include		Include								
Lanes:	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	223	0	0	336	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	0	0	0	0	251	0	0	378	0
Added Vol:	0	0	0	73	0	74	30	7	0	0	15	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	73	0	74	30	258	0	0	393	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	77	0	78	32	272	0	0	414	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	77	0	78	32	272	0	0	414	28

#### Critical Gap Module:

Critical Gp:xxxxx xxxx xxxx 6.4 xxxx 6.2 4.1 xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxx xxxx xxxx 3.5 xxxx 3.3 2.2 xxxx xxxx xxxx xxxx xxxx

#### Capacity Module:

Cnflict	Vol:	xxxx	xxxx	xxxxxx	749	xxxx	414	442	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent	Cap.:	xxxx	xxxx	xxxxxx	382	xxxx	643	1128	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move	Cap.:	xxxx	xxxx	xxxxxx	374	xxxx	643	1128	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:		xxxx	xxxx	xxxx	0.21	xxxx	0.12	0.03	xxxx	xxxx	xxxx	xxxx	xxxx

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Level Of Service Module:  
 2Way95thQ: xxxx xxxx XXXXX 0.8 xxxx 0.4 0.1 xxxx XXXXX XXXX XXXX XXXX  
 Control Del:XXXXX XXXX XXXXX 17.1 XXXX 11.4 8.3 XXXX XXXXX XXXXX XXXX XXXX  
 LOS by Move: \* \* \* C \* B A \* \* \* \* \* \* \*  
 Movement: LT - LTR - RT  
 Shared Cap.: xxxx xxxx XXXXX XXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXX  
 SharedQueue:XXXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXXX XXXX XXXX XXXX  
 Shrd ConDel:XXXXX XXXX XXXXX XXXXX XXXX XXXXX XXXXX XXXX XXXX XXXXX XXXX XXXX  
 Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*  
 ApproachDel: XXXXX 14.2 XXXXX XXXXX  
 ApproachLOS: \* B \* \*

Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

# Level Of Service Computation Report

## 2000 HCM Unsigned Method (Future Volume Alternative)

Intersection #7 Access C & Yuma Rd

Average Delay (sec/veh): 0.8      Worst Case Level Of Service: B[ 14.0 ]

Street Name:	Access C				Yuma Rd														
Approach:	North Bound		South Bound		East Bound		West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R				
Control:	Stop Sign		Stop Sign		Uncontrolled		Uncontrolled												
Rights:	Include		Include		Include		Include												
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	1	0	0	0	1	1	0

## Volume Module:

Base Vol:	0	0	0	0	0	0	0	223	0	0	336	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	0	0	0	0	0	0	251	0	0	378	0
Added Vol:	0	0	0	29	0	15	7	73	0	0	27	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	29	0	15	7	324	0	0	405	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	31	0	16	7	341	0	0	427	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	31	0	16	7	341	0	0	427	16

#### Critical Gap Module:

Critical Gp:xxxxxx xxxx xxxx 6.4 6.5 6.2 4.1 xxxx xxxx xxxx xxxx xxxx  
FollowUpTim:xxxxxx xxxx xxxx 3.5 4.0 3.3 2.2 xxxx xxxx xxxx xxxx xxxx

#### Capacity Module

Cnflict	Vol:	xxxx	xxxx	xxxxxx	790	790	221	442	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent	Cap.:	xxxx	xxxx	xxxxxx	362	325	823	1128	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move	Cap.:	xxxx	xxxx	xxxxxx	360	322	823	1128	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:		xxxx	xxxx	xxxx	0.08	0.00	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx

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Level Of Service Module:
2Way95thQ:    xxxx xxxx XXXXX  XXXX  XXXX XXXXX  0.0  XXXX XXXXX  XXXX  XXXX XXXXX
Control Del:XXXXX  XXXX XXXXX  XXXX  XXXX XXXXX  8.2  XXXX XXXXX  XXXX  XXXX XXXXX
LOS by Move:   *   *   *   *   *   *   *   A   *   *   *   *   *   *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.:  XXXX  XXXX XXXXX  XXXX  445  XXXXX  XXXX  XXXX XXXXX  XXXX  XXXX XXXXX
SharedQueue:XXXXX  XXXX XXXXX  XXXX  0.3  XXXXX  XXXXX  XXXX XXXXX  XXXX  XXXX XXXXX
Shrd ConDel:XXXXX  XXXX XXXXX  XXXX  14.0  XXXXX  XXXXX  XXXX XXXXX  XXXX  XXXX XXXXX
Shared LOS:    *   *   *   *   B   *   *   *   *   *   *   *   *
ApproachDel:  XXXXX          14.0          XXXXX          XXXXX
ApproachLOS:   *           B           *           *

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Litchfield Rd & Yuma Rd

Cycle (sec):	90	Critical Vol./Cap.(X):	0.519
Loss Time (sec):	12	Average Delay (sec/veh):	23.2
Optimal Cycle:	41	Level Of Service:	C

Street Name:	Litchfield Rd			Yuma Rd											
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	105	507	52	112	277	78	84	122	39	30	177	120
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	118	571	59	126	312	88	95	137	44	34	199	135
Added Vol:	7	0	0	0	0	20	46	38	18	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	125	571	59	126	312	108	141	175	62	34	213	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	132	601	62	133	328	114	148	185	65	36	225	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	601	62	133	328	114	148	185	65	36	225	142
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	601	62	133	328	114	148	185	65	36	225	142

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	1.00	0.85	0.95	0.91	0.91	0.95	0.89	0.89
Lanes:	1.00	1.81	0.19	1.00	1.00	1.00	1.00	1.48	0.52	1.00	1.22	0.78
Final Sat.:	1805	3228	331	1805	1900	1615	1805	2564	905	1805	2082	1319

Capacity Analysis Module:

Vol/Sat:	0.07	0.19	0.19	0.07	0.17	0.07	0.08	0.07	0.07	0.02	0.11	0.11
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.53	0.36	0.36	0.49	0.35	0.35	0.40	0.29	0.29	0.29	0.21	0.21
Volume/Cap:	0.26	0.52	0.52	0.30	0.49	0.20	0.34	0.25	0.25	0.09	0.52	0.52
Delay/Veh:	12.0	23.1	23.1	13.4	23.4	20.5	18.6	24.8	24.8	23.5	32.3	32.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.0	23.1	23.1	13.4	23.4	20.5	18.6	24.8	24.8	23.5	32.3	32.3
LOS by Move:	B	C	C	B	C	C	B	C	C	C	C	C
HCM2kAvgQ:	2	8	8	2	7	2	3	3	3	1	5	5

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Beck Property TIA, Goodyear AZ  
PM Peak Hour  
2018 PM - Horizon

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Note: Queue reported is the number of cars per lane.

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## APPENDIX H

### QUEUE LENGTH ANALYSIS

**Unsignalized Intersection**  
**2018**

Average Vehicle Length (ft): 25

Equation Used: storage length = 2 x (vehicles/hour)/(60 minutes/hour) x average vehicle length

Intersection	Approach	AM Peak (veh/hr)	Midday Peak	PM Peak (veh/hr)	Veh per 2 minutes	Storage Length (ft)
Van Buren Street/145th Avenue	NB Left	10	0	20	1	25
	WB Left	32	0	5	2	50
	NB Right	2	0	2	1	25
	EB Right	16	0	1	1	25
Yuma Road/143rd Avenue	SB Left	22	0	73	3	75
	EB Left	71	0	30	3	75
	SB Right	26	0	74	3	75
	WB Right	71	0	27	3	75
Yuma Road/Access C	EB Left	14	0	7	1	25

**Beck Property****Queue Length Analysis****Signalized Intersection  
2018**

Average Vehicle Length (ft): 25

Cycles: 2

Intersection Cycle Length (sec): 90

Equation Used: storage length = 2 x (vehicles/hour)/(cycles/hour) x average vehicle length

Intersection	Approach	AM Peak (veh/hr)	Midday Peak	PM Peak (veh/hr)	2x(veh/hr)/ (cycles/hr)	Storage Length (ft)
Van Buren Street/Bullard Avenue	NB Left	10	0	9	1	25
	SB Left	232	0	117	12	300
	EB Left	343	0	166	18	450
	WB Left	20	0	76	4	100
	NB Right	49	0	34	3	75
	SB Right	144	0	314	16	400
	EB Right	9	0	9	1	25
	WB Right	93	0	274	14	350
Van Buren Street/143rd Avenue	NB Left	53	0	188	10	250
	SB Left	2	0	6	1	25
	EB Left	165	0	350	18	450
	WB Left	243	0	90	13	325
	NB Right	74	0	250	13	325
	SB Right	285	0	200	15	375
	EB Right	184	0	66	10	250
	NB Left	104	0	137	7	175
Van Buren Street/Litchfield Road	SB Left	216	0	268	14	350
	EB Left	154	0	343	18	450
	WB Left	83	0	99	5	125
	SB Right	284	0	190	15	375
	EB Right	95	0	87	5	125
	NB Left	1	0	0	1	25
	SB Left	95	0	47	5	125
	NB Right	48	0	34	3	75
Yuma Road/Bullard Avenue	NB Left	55	0	125	7	175
	SB Left	104	0	126	7	175
	EB Left	112	0	141	8	200
	WB Left	21	0	34	2	50