

# 2014 Citywide Traffic Impact Fee Update

Prepared for:

**City of Benicia**

Prepared by:



**2014 CITYWIDE TRAFFIC IMPACT FEE UPDATE**

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## **INTRODUCTION**

This report presents the analysis and findings necessary to update the City of Benicia's Traffic Impact Fee (TIF). The City of Benicia last performed a comprehensive update to the City TIF program and its associated fees in February 2008.<sup>1</sup> This report is intended to provide an overview of the impact fee update methodologies. The fees presented in the report represent the highest level of fees that could be legally adopted based upon State law mandated nexus requirements. Lower fees could ultimately be adopted by removing transportation projects from the fee program and/or funding these projects from other sources.

## **PURPOSE OF THE STUDY**

The primary purpose of this report is to bring the City's 2008 TIF up to date to reflect current development and market conditions. At the time of the last fee update's preparation, growth forecasts for the region and within the City were aggressive. Since then, an economic recession and changes in land use development patterns have slowed growth to levels significantly below those initially projected at that time. Concurrently, construction and material costs have also changed. Based on discussions with City Engineering staff, the needed infrastructure initially determined to be required to support the aggressive forecasts may not be realistically necessary given the changes in market conditions and current growth forecasts.

As such, the City commissioned Omni-Means in June 2013 to perform an update to the TIF, to re-evaluate the improvement needs of the City acknowledging current market trends, and to update improvement costs to reflect current industry costs. The update will ensure fair, adequate and timely funding for necessary improvements. The calculated impact fees are consistent with the nexus requirements of the Mitigation Fee Act, as set forth in Sections 66000 et seq. of the California Government Code. The Mitigation Fee Act was enacted by the California State legislature in 1987 and requires that all public agencies satisfy the following requirements when establishing, increasing, or imposing a fee as a condition of approval for a development project:

- Identify the purpose of the fee;
- Identify the use to which the fee will be put;
- Determine that there is a reasonable relationship between the fee's use and the type of development on which the fee is imposed;
- Determine how there is a reasonable relationship between the need for the public facility and the type of development on which the fee is imposed; and,
- Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

The "reasonable relationship" test was supplemented by a test of "rough proportionality" in the 1994 United States Supreme Court decision *Dolan v. City of Tigard*. In this decision, the Court ruled that, when a public agency requires an exaction from new development, the agency cannot rely solely on a general, qualitative relationship between a land use and required facility but must make a finding that the exaction is related to the proportional impact of that land use. The Court specifically stated in its opinion that "no precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development." This decision effectively added an additional finding that there is a rough proportionality between the amount of the fee and the impact of the development on which the fee is imposed.

As required by Government Code Section 66000 et seq. and subsequent court rulings, this report will show that a reasonable relationship exists between the calculated fee amounts and development land uses on which

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<sup>1</sup> Omni-Means. *2007 Update – Benicia Citywide Traffic Impact Fee Program*. City of Benicia, February, 2008.

they are imposed. Additionally, it will be demonstrated that a rough proportionality exists between the impact of a land use on a facility and amount of the fee imposed on it.

The traffic fees calculated in this report will fund the full cost of the planned traffic facilities, less the costs required for payment or dedication by property owners. Bond financing through a Community Finance District (CFD) is not required because the traffic fee will fund the full cost of the planned facilities. Improvements identified in the Benicia Business Park EIR<sup>2</sup> as mitigation measures for the proposed project are not included in the TIF and will be fully developer-funded.

A continuing premise of the TIF program is that on a citywide basis, traffic improvements will be most important on the major streets. While collector and local streets also serve important travel needs, the major street network is critical in providing the basic transportation network for the City. Thus, this updated TIF has again focused on the major streets and key intersections and interchanges along the major streets.

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<sup>2</sup> LSA Associates. *Benicia Business Park EIR*. City of Benicia, December, 2007.

**OVERVIEW OF EXISTING TRAFFIC IMPACT FEE**

In 2008, Omni-Means prepared the *2007 Update – Benicia Citywide Traffic Impact Fee Program* report for the City of Benicia. The proposed fees developed in the report were adopted by the City through Resolution No. 08-20.

**2007 GROWTH ASSUMPTIONS**

The 2007 TIF update (referenced above) contained a description of the land use assumptions used as the basis of calculating impact fees. Future development potential was inventoried by City staff from the City's General Plan and the Benicia Business Park project proposal. Projected land uses were further refined through discussions with City Engineering staff. The result of this process was a compilation of the PM peak hour traffic that will be generated by all new development citywide. This calculation yielded a total citywide PM peak hour increase of about 19,701 vehicle trips, summarized in Table 1.

**TABLE 1:  
2007 TIF UPDATE FUTURE LAND USE ASSUMPTIONS**

<u>Vacant Industrial Land:</u>		
• 302.9 acres @ 70% FAR = 9,236,027 sq.ft. @ 0.98/1,000	=	9,051 PM trips
Vacant Industrial Land Assuming Partial Development:		
• 289 acres @ 20% FAR <sup>(2)</sup> = 2,517,768 sq.ft. @ 0.98/1,000	=	2,467 PM trips
Underutilized Industrial Land Assuming Infill Development:		
• 204.3 acres @ 20% FAR <sup>(3)</sup> = 1,779,862 sq.ft. @ 0.98/1,000	=	1,744 PM trips
<u>Vacant Retail Commercial Land:</u>		
• 2.47 acres @ 50% FAR = 53,797 sq.ft. @ ITE equation <sup>(4)</sup>	=	208 PM trips
<u>Vacant Office Commercial Land:</u>		
• 6.3 acres @ 50% FAR = 137,214 sq.ft. @ 1.49/1,000	=	204 PM trips
Assumed Downtown Residential Infill Development:		
• 100 units @ 0.78/unit	=	78 PM trips
Benicia Business Park Development:		
• Trip generation from <i>Benicia Business Park EIR</i> <sup>(5)</sup>	=	5,949 PM trips
<b>TOTAL CITYWIDE TRIP GENERATION</b>	<b>=</b>	<b>19,701 PM trips</b>
(1) Except as noted, the FAR ratios reflect the maximum coverage factors allowed by the General Plan.		
(2) This parcel, located west of east 2 <sup>nd</sup> Street opposite the Valero refinery is assumed to have limited development potential (20% FAR).		
(3) Currently underutilized industrial lands are projected to have some limited infill development potential (20% FAR).		
(4) The gross retail trip calculation was reduced by 50% to account for a typical retail “pass-by” trip factor.		
(5) The gross trip calculation in the EIR was adjusted to account for a typical 50% retail “pass-by” trip factor being applied to the project’s retail development component.		

## 2007 TRANSPORTATION IMPROVEMENT NEEDS

The 2007 TIF Update identified transportation improvements on the basis of several sources. These sources included the City's General Plan, traffic studies prepared prior to the 2007 TIF update, and discussions with and direction from City staff at the time. The various improvement recommendations were reviewed in the field and refined as a part of that effort.

The basic factor involved in the need for improvements is the expected growth in traffic volumes. In Benicia, future growth primarily reflects employment and industrial developments expected to occur in the northeastern part of the City, as well as some residential and commercial infill. While different types of development land uses will be located in specific areas of the City, development traffic will have citywide effects. Thus, traffic improvements will be needed on a citywide basis to serve the overall traffic growth from development.

Table 2 contains a description of the roadway improvement projects contained in the existing fee program. Table 2 contains a description of the intersection improvement projects contained in the existing fee program. More detailed cost estimate breakdowns are available in the *2007 Update – Benicia Citywide Traffic Impact Fee Program* report.

**TABLE 2:  
2007 TIF UPDATE ROADWAY IMPROVEMENT NEEDS**

<b>Roadway Improvements</b>		<b>Cost Estimate</b>
East 5 <sup>th</sup> Street	Widen/restripe East 5th Street to three lanes (two through lanes and a center lane/median) between the I-780 westbound ramps and Military East	\$250,000
New Roadway	Construct a new north-south two-lane connector road east of I-680 between Bayshore Road and Industrial Way (includes traffic signals at the I-680 ramp intersections with Bayshore and Industrial)	\$6,900,000
Park Road	Widen Park Road from two to four lanes between Sulphur Springs Creek and Industrial Way	\$960,000
New Roadway	Construct a new two-lane east-west arterial street between East 2nd Street and Park Road	\$5,860,000
Park Road	Widen/realign Park Road (retain two-lane width) between Adams Street and the new east-west connector street	\$1,274,000
Industrial Way	Widen Industrial Way from two to four lanes between East 2nd Street and the I-680 Northbound On-Ramp	\$3,640,000
Military West	Widen/restripe Military West to three lanes (two through lanes and a center lane/median) between West 2nd Street and West 5th Street	\$635,000
New Pedestrian/Bicycle Bridge	Construct a new pedestrian/bicycle bridge across I-780 between the Benicia Middle School off Southampton Road and Benicia High School off Military West	\$600,000
Columbus Parkway	Widen Columbus Parkway at Rose Drive to accommodate a second westbound through lane	\$200,000
Traffic Calming	Implement traffic calming/circulation improvements/signalization at Benicia High School	\$650,000
<b>Total Costs Plus 25% Contingency:</b>		<b>\$26,211,250</b>

**TABLE 3:  
2007 TIF UPDATE INTERSECTION IMPROVEMENT NEEDS**

<b>Intersection Improvements</b>	<b>Cost Estimate</b>
Columbus / Rose	Widen/restripe northbound and eastbound approaches and widen State Park Road bridge over I-780 \$1,332,000
Southhampton / Hastings	Install signal and widen/restripe southbound approach \$355,000
Southhampton / Chelsea Hills	Widen/restripe northbound, southbound and westbound approaches \$18,000
West 7 <sup>th</sup> / I-780 Westbound Ramps	Widen/restripe all approaches \$505,000
West 7 <sup>th</sup> / I-780 Eastbound Ramps	Widen/restripe northbound and southbound approaches \$68,000
East 2 <sup>nd</sup> / Military East	Widen/restripe southbound, eastbound and westbound approaches and coordinate with other signals between Military East and I-780 westbound ramps \$795,000
East 5 <sup>th</sup> / I-780 Westbound Ramps	Install signal and widen/restripe all approaches \$355,000
East 5 <sup>th</sup> / I-780 Eastbound Ramps	Install signal and widen/restripe all approaches \$355,000
East 5 <sup>th</sup> / Military East	Widen/restripe all approaches \$1,140,000
West 7 <sup>th</sup> / Military West	Improve signal controls <u>or</u> construct a roundabout intersection \$1,000,000
<b>Total Costs Plus 25% Contingency:</b>	<b>\$7,403.75</b>

**2007 TRAFFIC IMPACT FEES**

Methodologies used to calculate City transportation impact fees are documented in the *2007 Update – Benicia Citywide Traffic Impact Fee Program* report. This report provides a detailed description of the methodologies used to calculate these impact fees, by dividing total TIP Update program costs (Tables 2 and 3) by the estimated PM peak hour trip generation of future development (Table 1). Recommended fees by land use type contained in the report are summarized in Table 4. Table 5 presents examples of fees by development type, presented in the 2007 TIF Update.

**TABLE 4:  
2007 TIF UPDATE TRAFFIC IMPACT FEE CALCULATIONS**

<b>CONSTRUCTION COST SUMMARY</b>		
Intersection Improvement Costs		\$ 7,403,750
Roadway Improvement Costs		\$ 26,211,250
	<i>Improvement Cost Total</i>	<u>\$ 33,615,000</u>
- Less Existing TIF Funds		\$ (2,000,000)
- Less Benicia Business Park Contribution (5,949 trips x \$1,019 per trip)		\$ (6,062,031)
<b>TOTAL NET TIF PROGRAM COST</b>		<b>\$ 25,552,969</b>
<b>TIF PROGRAM COST</b>		
<b>PER PM PEAK HOUR TRIP</b>	= \$25,552,969 / 13,752 trips	= \$ 1,858

**TABLE 5:  
2007 TIF UPDATE TRAFFIC IMPACT FEE BY USE**

<b>LAND USE</b>	<b>PM PEAK TRIP RATE<sup>(1)</sup></b>	<b>TRAFFIC FEE</b>
<b>Residential:</b>		
Single Family	1.01/D.U.	\$1,877/D.U.
Low-Rise Townhouse/Condo	0.78/D.U.	\$1,449/D.U.
Apartment	0.62/D.U.	\$1,152/D.U.
Accessory Dwelling	0.31/D.U. <sup>(2)</sup>	\$576/D.U.
<b>Commercial:<sup>(3)</sup></b>		
Shopping Center	3.75/1,000 sq.ft. <sup>(4)</sup>	\$3,484/1,000 sq.ft.
Supermarket	10.45/1,000 sq.ft.	\$9,708/1,000 sq.ft.
Convenience Store	34.57/1,000 sq.ft.	\$32,116/1,000 sq.ft.
Sit-Down Restaurant	7.49/1,000 sq.ft.	\$6,958/1,000 sq.ft.
High-Turnover Sit-Down Rest./Deli	10.92/1,000 sq.ft.	\$10,145/1,000 sq.ft.
Fast-Food Restaurant	34.64/1,000 sq.ft.	\$32,181/1,000 sq.ft.
Bank (with drive-through)	45.74/1,000 sq.ft.	\$42,492/1,000 sq.ft.
Drug Store/Pharmacy	8.62/1,000 sq.ft.	\$8,008/1,000 sq.ft.
Service Station/Mart	13.38/fueling position	\$12,430/fueling position
Quick-Lube Vehicle Shop	5.19/service position	\$4,822/service position
Hardware/Paint Store	4.84/1,000 sq.ft.	\$4,496/1,000 sq.ft.
Day Care Facility	0.82/student	\$762/student
<b>Office:</b>		
General Office	1.49/1,000 sq.ft.	\$2,768/1,000 sq.ft.
Medical Office	3.72/1,000 sq.ft.	\$6,912/1,000 sq.ft.
<b>Industrial:</b>		
Light Industrial	0.98/1,000 sq.ft.	\$1,821/1,000 sq.ft.
Warehousing	0.47/1,000 sq.ft.	\$873/1,000 sq.ft.
Self-Storage Units	0.03/unit	\$56/unit

- (1) Institute of Transportation Engineers (ITE), *Trip Generation – 7<sup>th</sup> Edition*, 2003. This table represents a listing of most potential development in the City of Benicia. For any development proposal not on this list, the ITE document should be used to establish the development's PM peak hour trip generation and resulting TIF assessment.
- (2) An accessory dwelling represents a small (less than 800 sq.ft.) apartment type unit accessory to a single family dwelling. It is assumed that this type of unit would generate traffic at one-half the standard apartment rate.
- (3) The calculated fee for the commercial uses reflects a 50% reduction to account for the fact that about one-half of commercial trips are either pass-by trips or trips to/from residential units.
- (4) The trip rate (and resulting TIF) reflect an average sized shopping center. For a specific development proposal, the ITE trip equation for shopping centers should be used.

## BUILDOUT GROWTH PROJECTIONS

This section provides an overview of future growth projections, updated for 2014, associated with buildout of the City's remaining developable lands. An inventory of remaining development is required in order to forecast future traffic conditions, and subsequently identify citywide transportation improvements required to support the forecasted traffic growth. The remaining development inventory will also be used to calculate the traffic impact fees later in the report.

## FUTURE DEVELOPMENT POTENTIAL

Future development potential was inventoried by City staff from the City's General Plan and current or recent development proposals such as the Benicia Business Park. The need for citywide traffic improvements is linked with the traffic growth generated by these developments. Future land uses were refined through discussions with City staff, and are presented in Table 6.

**TABLE 6:2014 TIF UPDATE BUILDOUT GROWTH PROJECTIONS**

Vacant/Underutilized Land	Residential			ITE Category	PM Trip Rate per	
	Acres	Density or Floor Area Ratio <sup>1</sup>	Units or KSF (1,000 S.F.)		Unit	Trips
Single Family Residential	19.5	6,000	142	ITE 210 - Single Family Detached Housing	1	142
Medium Density Residential	0.5	3,000	8	ITE 210 - Single Family Detached Housing	1	8
Office Commercial	9	0.5	197	ITE 710 - General Office Building	1.49	294
General Commercial	44.5	0.5	970	ITE 820 - Shopping Center <sup>2</sup>	3.71	1,799
Town Core	2	0.5	44	ITE 820 - Shopping Center <sup>2</sup>	3.71	82
Town Core - Open	0.5	0.5	11	ITE 820 - Shopping Center <sup>2</sup>	3.71	20
Industrial	73.5	0.7	2,242	ITE 110 - General Light Industrial	0.97	2,175
Industrial (Partial Development) <sup>3</sup>	430	0.1	1,874	ITE 110 - General Light Industrial	0.97	1,818
Industrial (Infill) <sup>3</sup>	60	0.2	523	ITE 110 - General Light Industrial	0.97	507
West Coast Builders (Seeno) <sup>4</sup>	493	Obtained from Benicia Business Park EIR				5,949
Assumed Residential Infill	N/A	N/A	100	ITE 210 - Single Family Detached Housing	1	100
<b>Total New Trip Ends</b>						<b>12,894</b>

*Notes:*

- 1) Except as noted, the densities selected reflect the coverage factors included in the City's General Plan and Zoning Code.
- 2) The gross retail trip calculation was reduced by 50% to account for a typical retail "pass-by" trip factor.
- 3) Currently underutilized and/or "buffer" industrial lands are projected to have limited development potential.
- 4) The gross trip calculation in the EIR was adjusted to account for a typical 50% retail "pass-by" trip factor being applied to the project's retail development component.

As presented in Table 6, 12,894 new PM peak hour trips are expected to be generated by vacant or underutilized lands at buildout of the City's General Plan. This is just under 7,000 fewer new PM peak hour trips than were estimated at building in the 2007 TIF Update.

## **BUILDOUT TRANSPORTATION NEEDS**

In order to obtain a comprehensive understanding of the existing transportation system, land development and other background information pertaining to existing and future growth and travel within and through the City, available transportation and land-use information was collected within the City. The data collection efforts included the following:

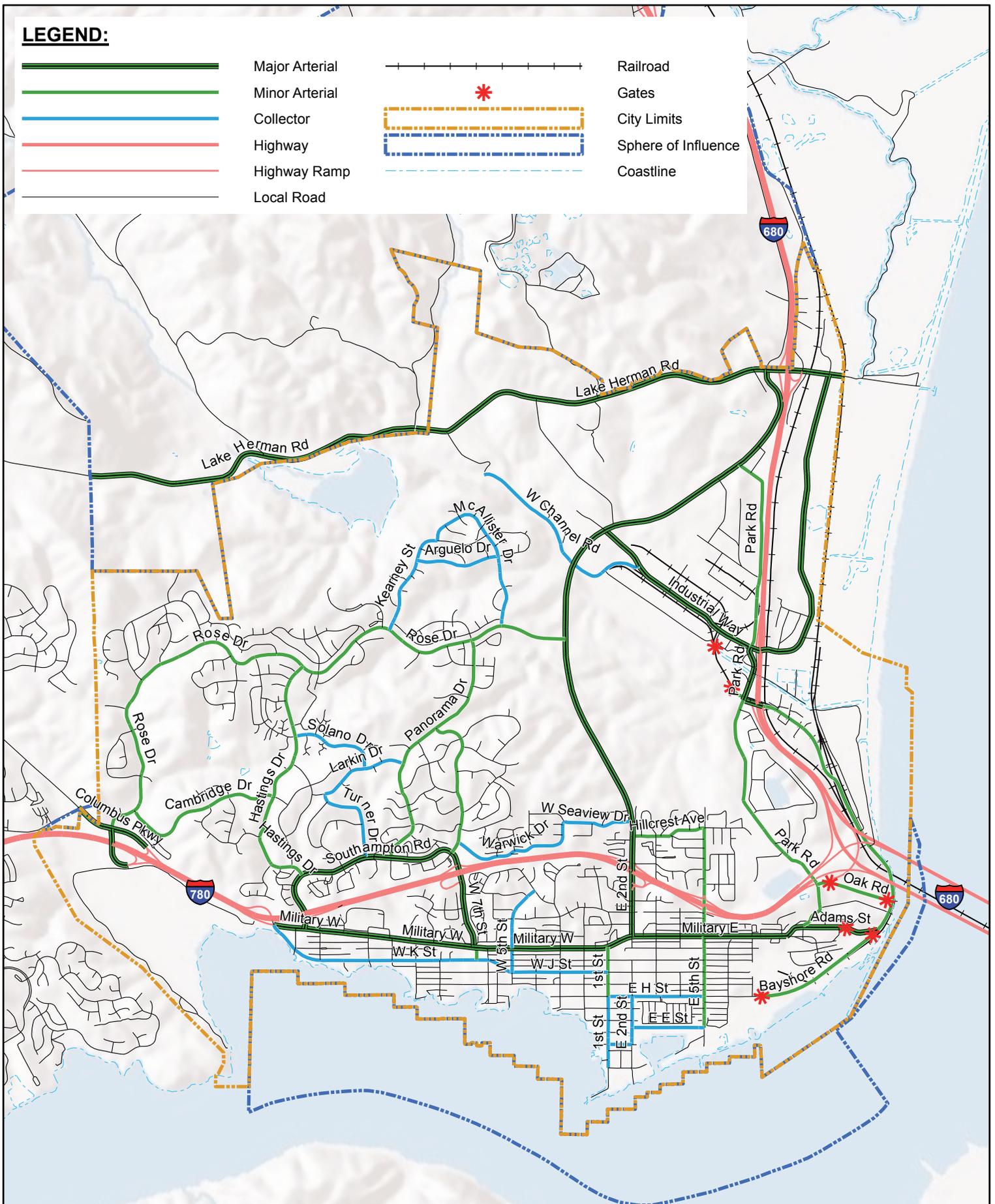
- The adopted City General Plan documents and other recent traffic/circulation studies completed for the City of Benicia were reviewed.
- A field survey and evaluation of existing travel, traffic and circulation conditions was completed by Omni-Means staff.
- Traffic count data and existing capacity configurations were also collected at critical intersections throughout the City. Readily available traffic count data were also reviewed from various sources including Caltrans published traffic count data and miscellaneous traffic count data that City staff were able to provide.
- Digital mapping/drawing files, Geographic Information systems (GIS) based land-use data files, aerial photographs and other types of digital and hard-copy data that were readily available from the City were also obtained and reviewed as part of the data collection efforts.
- City of Benicia Housing Element 2007-14 Appendix E: Sites Inventory and Analysis.

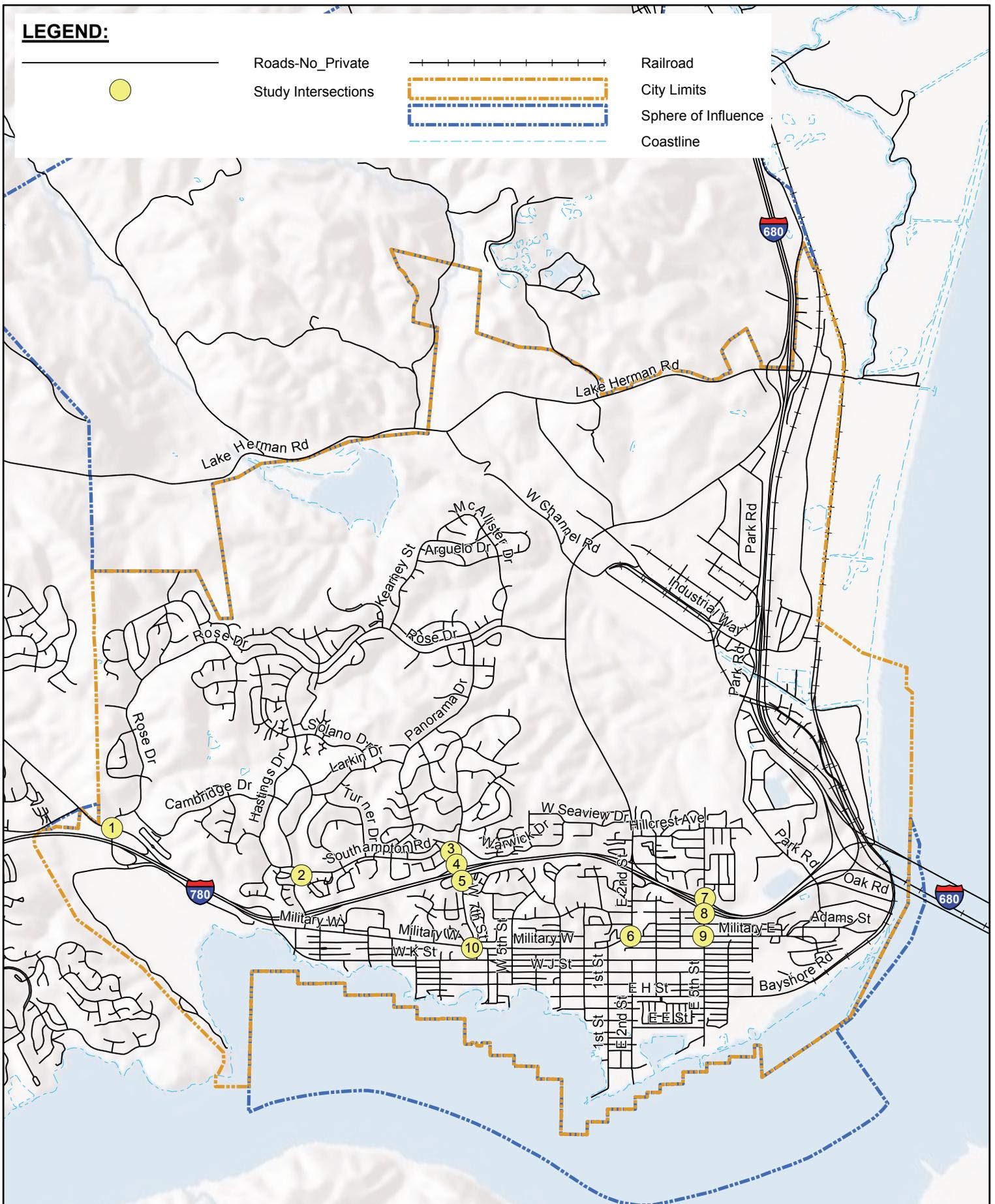
Figure 1 illustrates the City of Benicia's General Plan Street Classification, as well as the City Limits and boundary.

### ***Data Collection***

New traffic counts were collected at critical study locations throughout the City of Benicia in January of 2014. The new traffic counts were collected at all previously identified intersection improvement locations identified in the 2007 TIF Update (Table 3) in order to quantify any changes in baseline conditions between the time of that study's preparation and current conditions. Figure 2 presents a map of the City's circulation system with numbered intersections denoting traffic data collection points.

Figure 3 presents existing intersection lane geometrics at all study intersections and Figure 4 presents existing intersection turning movements at all study intersections.

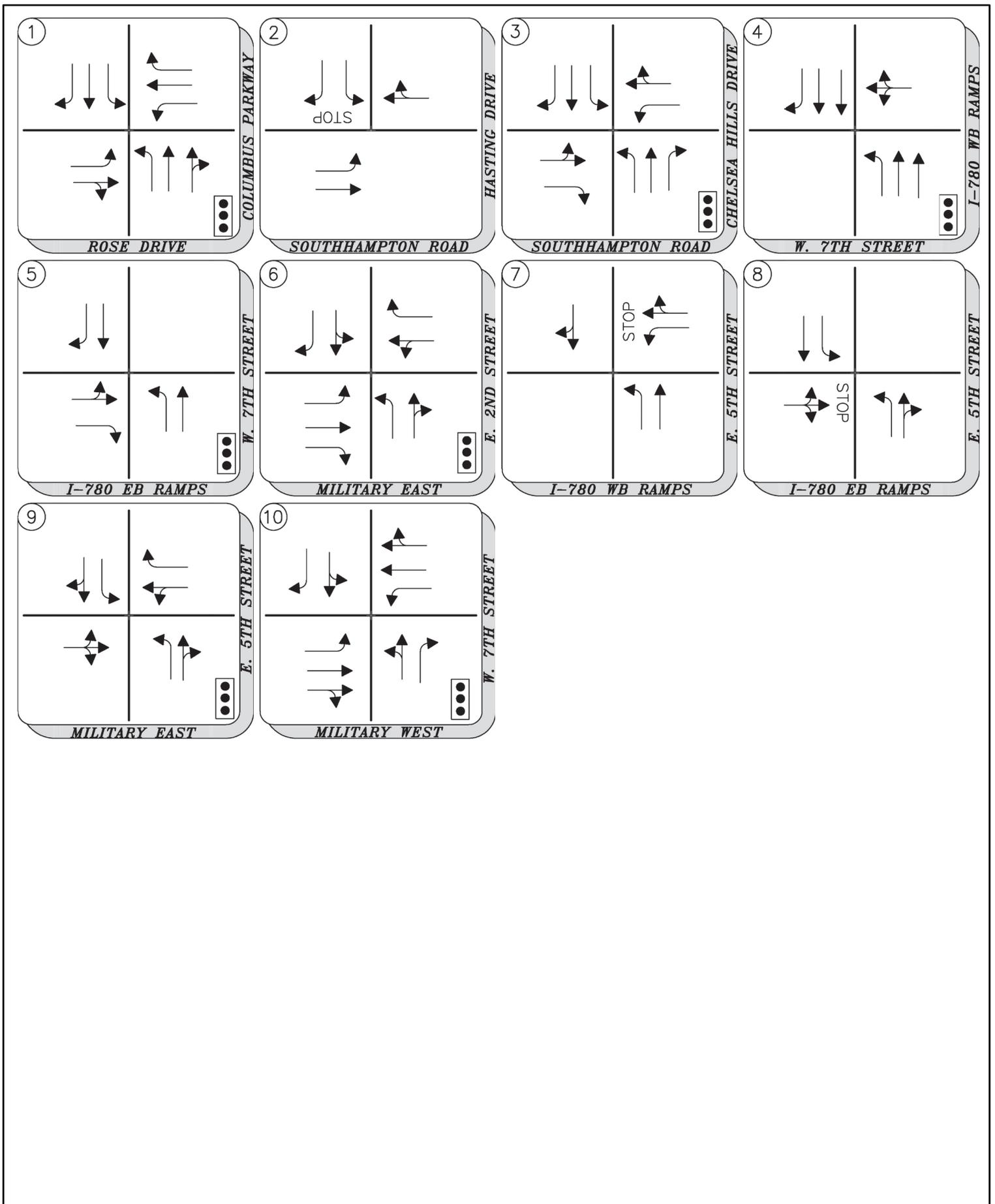


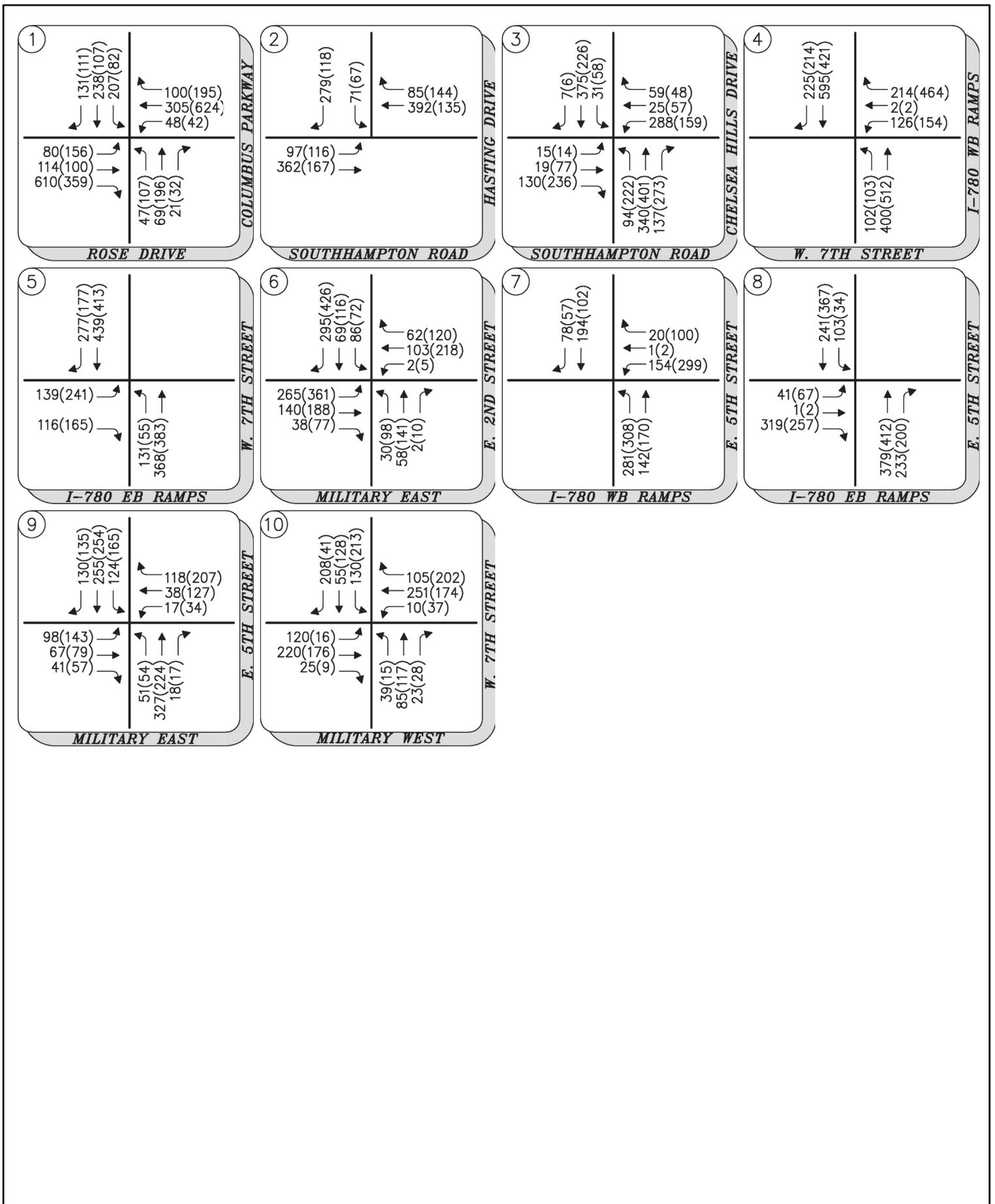


City of Benicia Traffic Impact Fee Update  
**Study Intersection Locations**

Figure 2







City of Benicia Traffic Impact Fee Update  
**Existing Peak Hour Volume**

Figure 4



## EXISTING TRAFFIC CONDITIONS

Existing traffic conditions were simulated using the existing intersection lane geometrics (Figure 3) and existing traffic volumes (Figure 4) collected in January 2014. Consistent with City standards, Circular 212 methodologies were implemented using the Traffix software to analyze traffic operations at signalized intersections. Unsignalized intersections were analyzed using HCM-2000 methodologies, also implemented using the Traffix software. Table 7 presents the existing intersection LOS results.

**TABLE 7:  
EXISTING INTERSECTION TRAFFIC OPERATIONS**

#	Intersection	Control Type <sup>1,2</sup>	Target LOS	AM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met? <sup>3</sup>	Delay	LOS	Warrant Met? <sup>3</sup>
1	Columbus Parkway/Rose Dr.	Signal	D	0.79	C	-	0.63	B	-
2	Southampton Road/Hastings Dr.	TWSC	D	20.3	C	-	12.0	B	-
3	Southampton Road/Chelsea Hills Rd	Signal	D	0.73	C	-	0.66	B	-
4	W. Seventh St/I-780 WB Ramps	Signal	D	0.55	A	-	0.71	B	-
5	W. Seventh St/I-780 EB Ramps	Signal	D	0.55	A	-	0.54	A	-
6	E. Second St/Military East	Signal	D	0.60	A	-	0.86	D	-
7	<b>E. Fifth St/I-780 WB Ramps</b>	<b>TWSC</b>	<b>D</b>	<b>99.2</b>	<b>F</b>	<b>No</b>	<b>220.6</b>	<b>F</b>	<b>Yes</b>
8	<b>E. Fifth St/I-780 EB Ramps</b>	<b>TWSC</b>	<b>D</b>	<b>41.5</b>	<b>E</b>	<b>Yes</b>	<b>41.1</b>	<b>E</b>	<b>Yes</b>
9	E. Fifth St/Military East	Signal	D	0.63	B	-	0.61	A	-
10	W. Seventh St/Military West	Signal	D	0.58	A	-	0.53	A	-

Notes:

Signal Level-of-Service using Circular 212 Method and Stop-Control using HCM 2000

1. TWSC = Two Way Stop Control

2. LOS = Delay based on worst minor street approach for TWSC intersections

3. Warrant = Based on California MUTCD Warrant 3

As presented in Table 7, the East Fifth Street intersections with the I-780 ramp terminals are operating at unacceptable LOS during both the AM and PM peak hours. These intersections are included in the existing traffic impact fee program.

## CUMULATIVE (BUILDOUT) TRAFFIC OPERATIONS

In order to develop cumulative (buildout) traffic volumes, Omni-Means reviewed methodologies used in recent traffic studies, in addition to growth forecasts from the Solano Transportation Authority (STA) Travel Demand Model, and historical growth rates, as calculated from available Caltrans traffic data in addition to observed changes based on traffic counts collected in 1993 and in 2014. The following is a summary of the findings of this review:

- Based on a review of traffic counts collected in 1993 and in 2014, at all study intersections, no observable growth rate could be calculated. On average, traffic in fact decreased at an annual rate of -0.27%. The only growth in total intersection volume observed between these two years occurred at the intersections of Columbus Parkway / Rose Drive and E. Second Street / Military East, which increased at annual rates of 0.36% and 0.15% respectively.
- Based on a review of Caltrans AADT data from 1993 to 2012 (latest available year), area traffic on State Routes 680 and 780 grew on average at an annual growth rate of 0.82%. I-680 grew most, at an annual growth rate of 1.26%, followed by I-780 at E. 2<sup>nd</sup> Street (0.98% annual) and I-780 at Columbus Parkway (0.30% annual)
- Based on a review of the STA Travel Demand Model, between model years 2010 and 2030, area roadways are projected to grow by 3.43% annual during the AM peak hour and 3.02% annual during the PM peak hour. However, the model projects an array of growth in the area that varies

between negative to moderate growth depending on study area. The northeastern industrial area is expected to see the highest amount of growth, while growth in the downtown area (where the TIF study intersections are located) is expected to be negative to mild.

- Based on review of recent traffic studies performed in the area, the *Transportation Impact Analysis for the Benicia Bus Hub Project* (W-Trans, September 2013) used an annual growth rate of 1.6%. Similarly, the *Draft Transportation Impact Analysis Report Valero Benicia Refinery Crude by Rail Project* (Fehr & Peers, May 2013) used an annual growth rate of 1.5% at all study locations, citing a similar lack of growth in observed traffic volumes, noting that the STA model projections were too high, and noting the similar 1.6% growth rate used in the *Benicia Business Park FEIR*.

Having reviewed all available data sources, Omni-Means concurs with the conclusion that the STA model forecasts are overstated relative to the relatively small amount of land use development growth forecasted by the City. Many of the increases in traffic observed in the STA model appear to be due to cut through traffic, in which instances travelers on interregional facilities such as I-680 and I-780 are exiting the freeways, using City streets, and reentering the freeways further downstream. This is likely caused by saturated freeway conditions in the capacity-constrained model, which in turn diverts traffic to the less congested City streets where possible prior to returning to the freeways. However, this trip-diverting behavior created by the model is unrealistic and has not been confirmed in any other sources of local data.

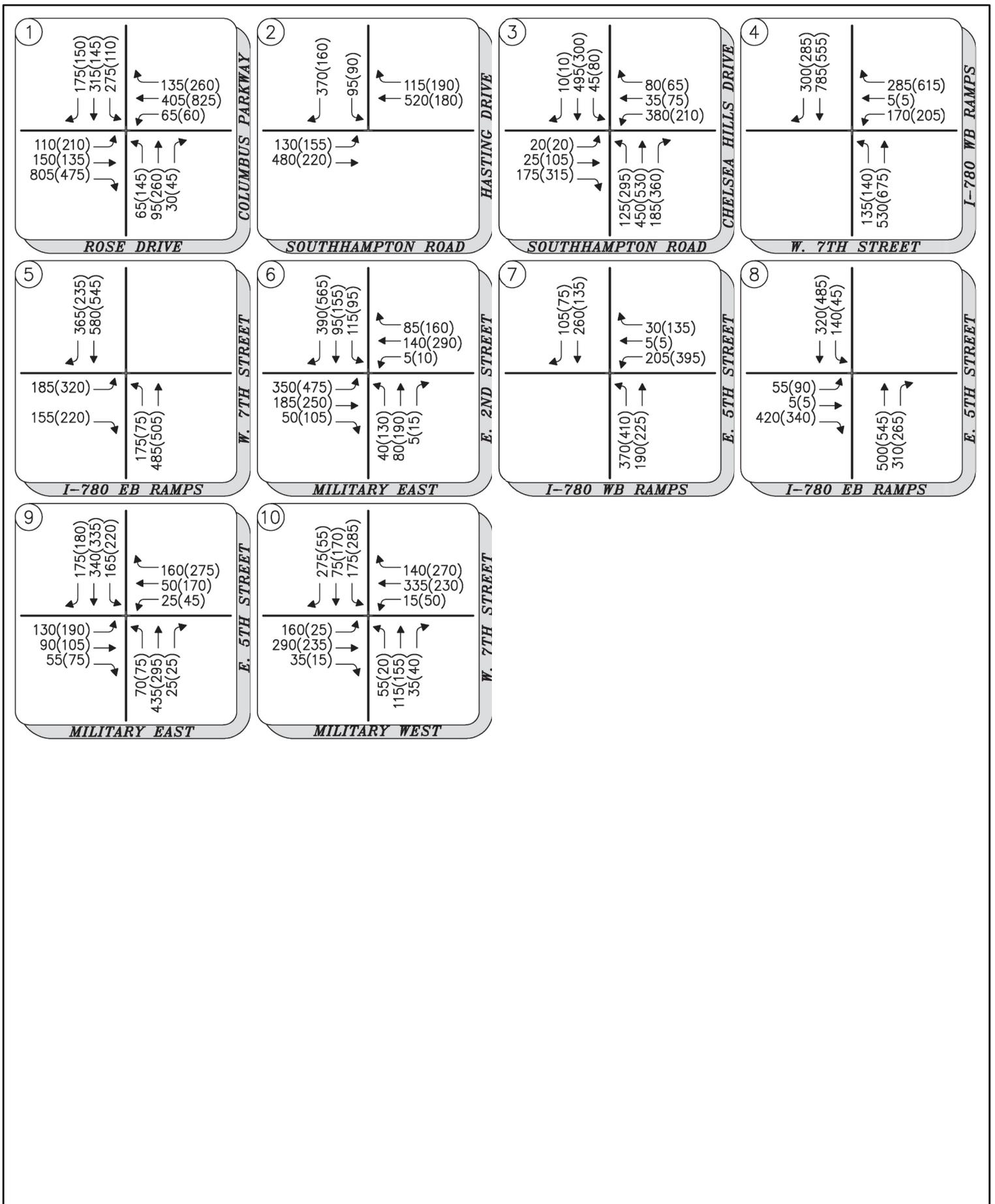
For the reasons described above, Omni-Means therefore assumed a 1.5% annual growth rate on all study intersections for the purposes of this study. Figure 5 presents the buildout (Year 2035) intersection traffic volumes. Buildout intersection traffic operations are presented in Table 8.

**TABLE 8:  
BUILDOUT INTERSECTION TRAFFIC OPERATIONS**

#	Intersection	Control Type <sup>1,2</sup>	Target LOS	AM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met? <sup>3</sup>	Delay	LOS	Warrant Met? <sup>3</sup>
1	Columbus Parkway/Rose Dr.	Signal	D	0.97	E	-	0.84	D	-
2	Southhampton Road/Hastings Dr.	TWSC	D	49.9	E	Yes	15.0	B	No
3	Southhampton Road/Chelsea Hills Rd	Signal	D	0.94	E	-	0.88	D	-
4	W. Seventh St/I-780 WB Ramps	Signal	D	0.74	C	-	0.95	E	-
5	W. Seventh St/I-780 EB Ramps	Signal	D	0.72	C	-	0.72	C	-
6	E. Second St/Military East	Signal	D	0.74	C	-	1.14	F	-
7	E. Fifth St/I-780 WB Ramps	TWSC	D	392.5	F	Yes	825.6	F	Yes
8	E. Fifth St/I-780 EB Ramps	TWSC	D	114.6	F	Yes	199.8	F	Yes
9	E. Fifth St/Military East	Signal	D	0.67	B	-	0.76	C	-
10	W. Seventh St/Military West	Signal	D	0.64	B	-	0.71	B	-

Notes:  
Signal Level-of-Service using Circular 212 Method and Stop-Control using HCM 2000  
1. TWSC = Two Way Stop Control  
2. LOS = Delay based on worst minor street approach for TWSC intersections  
3. Warrant = Based on California MUTCD Warrant 3

As presented in Table 8, seven (7) intersections are projected to operate at unacceptable LOS under buildout conditions during the AM and/or PM peak hour. The intersections of Columbus Parkway / Rose Drive, Southhampton Road / Hastings Road, and Southhampton Road / Chelsea Hills Road are all projected to operate at LOS E during the AM peak hour. The intersections of W. Seventh Street / I-780 WB Ramps and E. Second Street / Military East are projected to operate at LOS E and F during the PM peak hours respectively. Lastly, the intersections of E. Fifth Street and I-780 WB Ramps and EB Ramps are both projected to operate at LOS F during both peak hour conditions.



## **INTERSECTION IMPROVEMENTS IDENTIFICATION**

As part of this task to update the 2007 TIF, Omni-Means was charged with re-evaluating the necessity for many of the previously included improvements. As noted in Table 8, all of the study intersections are not projected to fail, and therefore intersection improvements are not required at all locations. Table 9 presents cumulative (buildout) intersection traffic operations following the construction of the following proposed improvements:

### ***Columbus Parkway / Rose Drive***

Modify traffic signal to allow eastbound right turns to overlap with northbound left turns and to accommodate revised geometrics for westbound Columbus Drive (see related roadway improvement). This improvement will not yield LOS D conditions or better, but will significantly enhance operations at the intersection. Based on field observations and discussions with the City, it has been determined that the extent of existing development on parcels adjacent to the intersection will make further widening economically infeasible. In order to achieve acceptable LOS, a second eastbound right turn lane would be required, which would necessitate widening of the bridge over I-780 in order to provide a corresponding receiving lane.

### ***Southampton Road / Hastings Drive***

Signalize intersection. This intersection meets traffic signal warrants during the AM peak hour and will operate acceptably following signalization.

### ***Southampton Road / Chelsea Hills Drive***

No improvements are proposed at this intersection, despite the projected LOS E operations during the AM peak hour. Based on field observations and discussions with the City, it has been determined that the extent of existing development on parcels adjacent to the intersection will make further widening undesirable. In order to achieve acceptable LOS, additional northbound and southbound through lanes would be required, which would necessitate widening Southampton Road north of and south of the intersection in order to provide corresponding receiving lanes.

### ***W. Seventh Street / I-780 WB Ramps***

Construct a westbound left turn pocket. The westbound (I-780 off-ramp) approach of the intersection currently has a single lane. A dedicated westbound left turn pocket will provide acceptable LOS operations under cumulative conditions.

### ***E. Second Street / Military East***

Restripe intersection to include a dedicated westbound left turn pocket and modify traffic signal to include protected eastbound and westbound left turn movements as well as a southbound right turn overlap phase. With these improvements, the intersection operations will improve from LOS F to LOS E during the PM peak hour. Based on field observations and discussions with the City, it has been determined that the extent of existing development on parcels adjacent to the intersection will make further widening economically infeasible. In order to achieve acceptable LOS, an additional southbound right turn lane, or a “free” southbound right turn lane, would be required.

### ***E. Fifth Street / I-780 WB Ramps***

Signalize intersection and widen westbound approach to accommodate a dedicated left turn pocket. Construct this improvement in conjunction with signalization and improvement of the E. Fifth Street/ I-780 EB Ramps intersection. This improvement will provide acceptable LOS operations under cumulative conditions.

**E. Fifth Street / I-780 EB Ramps**

Signalize intersection and widen northbound approach to accommodate a dedicated right turn pocket. Construct this improvement in conjunction with signalization and improvement of the E. Fifth Street/ I-780 WB Ramps intersection. This improvement will provide acceptable LOS operations under cumulative conditions.

**W. Seventh Street / Military West<sup>3</sup>**

Construct a modern roundabout at this location. This improvement will combine the closely-spaced West 7<sup>th</sup> Street and Military West intersection with the adjacent West 7<sup>th</sup> Street and Carolina Drive/Buena Vista intersection.

**TABLE 9:  
IMPROVED CUMULATIVE INTERSECTION TRAFFIC OPERATIONS**

#	Intersection	Control Type <sup>1,2</sup>	Target LOS	AM Peak Hour			PM Peak Hour		
				Delay	LOS	Warrant Met? <sup>3</sup>	Delay	LOS	Warrant Met? <sup>3</sup>
1	<b>Columbus Parkway/Rose Dr.</b>	<b>Signal</b>	<b>D</b>	<b>0.95</b>	<b>E</b>	-	0.87	D	-
2	Southhampton Road/Hastings Dr.	Signal	D	0.87	D	-	0.50	A	-
3	<b>Southhampton/Chelsea Hill Rd</b>	<b>Signal</b>	<b>D</b>	<b>0.93</b>	<b>E</b>	-	0.88	D	-
4	W. Seventh St/I-780 WB Ramps	Signal	D	0.61	A	-	0.79	C	-
5	W. Seventh St/I-780 EB Ramps	Signal	D	0.72	C	-	0.72	C	-
6	<b>E. Second St/Military East</b>	<b>Signal</b>	<b>D</b>	0.62	B	-	<b>0.93</b>	<b>E</b>	-
7	E. Fifth St/I-780 WB Ramps	Signal	D	0.72	C	-	0.77	C	-
8	E. Fifth St/I-780 EB Ramps	Signal	D	0.85	D	-	0.78	C	-
9	E. Fifth St/Military East	Signal	D	0.67	B	-	0.76	C	-
10	W. Seventh St/Military West	RNDBT	D	ROUNDAABOUT DESIGN TO BE DETERMINED					

Notes:

Signal Level-of-Service using Circular 212 Method and Stop-Control using HCM 2000

1. TWSC = Two Way Stop Control

2. LOS = Delay based on worst minor street approach for TWSC intersections

3. Warrant = Based on California MUTCD Warrant 3

**ROADWAY IMPROVEMENTS IDENTIFICATION**

Roadway improvements have been identified based on feasibility observations made in the field and in consultation with the City. These improvements have been identified as necessary to support further development in the City and are all included in the existing fee program. New cost estimates have been developed in order to reflect current unit cost information.

**New Roadway (Bayshore Road to Industrial Way)**

Improve connectivity between the I-680 ramps at Bayshore Road and Industrial Way by constructing a new one-way connector between the I-680 northbound off-ramp at Bayshore Road and the I-680 northbound on-ramp at Industrial Way. Restripe, improve, and signalize the four (4) I-680 ramp terminal intersections, and the intersections of Park Road / Industrial Way and Park Road / Bayshore Road. Two (2) of the six (6) intersection signalization and improvement projects will not be included in the fee program as they are the responsibility of the Benicia Business Park (Park Road / Industrial Way and Park Road / Bayshore Road).

<sup>3</sup> Intersection LOS analysis performed in *Traffix* software using Circular 212 methodology did not identify a future LOS deficiency at this intersection. However, the design of the intersection, including the presence of a very closely spaced intersection immediately adjacent, will create a safety deficiency with the addition of traffic generated by future development.

*Note: This project should be constructed in conjunction with or with thought given to the proposed improvements to Park Road and Industrial Way, also included in the fee program, to ensure consistency between these plans and the proposed alignments and configurations proposed in those improvements.*

***Park Road (Sulphur Springs Creek to Industrial Way)***

Realign and reconstruct this segment of Park Road, maintaining the three-lane cross section, in conjunction with the New Roadway (Bayshore Road to Industrial Way) and Industrial Way (East 2<sup>nd</sup> Street to I-680 northbound on-ramp) improvement projects. This improvement will be partially funded by the Benicia Industrial Bus Hub project.

***New Roadway (E. Second Street to Park Road)***

Construct a new two-lane east-west arterial street between E. Second Street and Park Road

***Park Road (Oak Road to New Roadway)***

Widen Park Road (retain two-lane width) between Oak Road and the new east-west connector street to include 4' bike lanes (except under bridge section where widening is infeasible).

***Industrial Way (E. Second Street to I-680 NB On-Ramp)***

Widen Industrial Way to a three-lane cross section, providing left turn access where necessary at major driveways along this roadway segment.

***Military West (W. Third Street to W. Fourth Street)***

Restripe existing shoulder and stripe a two-way left turn lane from W. Third Street to about 450 west of W. Third Street for improved access to adjacent development.

***Columbus Parkway (Rose Drive to I-780 WB Off-Ramp)***

Widen Columbus Parkway at Rose Drive to accommodate a second westbound through lane. Extend culvert at creek to accommodate widening and relocate electrical vaults.

**BENICIA INDUSTRIAL PARK BUS HUB PROJECT**

The proposed Benicia Industrial Bus Hub project would realign Park Road at the intersection of Bayshore Road and install new bus pullouts, sidewalks, and shelters. The project would include the construction of 46 paved parking stalls, drop-off and pick-up area, lighting landscaping, and other amenities on the adjacent one (1) acre parcel at the southeast corner of the Park Road / Industrial Way intersection. The City's TIF will include a local share contribution towards the cost of this project.

**FREEWAY IMPROVEMENTS**

It has been assumed that major construction of freeway interchanges will be accomplished through independent efforts coordinated between the City, Solano Transportation Authority and Caltrans. Freeway interchange problems reflect current design deficiencies, and it would be inappropriate for future development to pay for "corrections" in these designs. Thus, the improvement of interchanges should be the responsibility of Caltrans. It is recognized however that due to funding limitations, Caltrans reconstruction of the interchanges could be delayed for many years. With the likely delays, it would be appropriate for the City fee to address particular operational needs at specific interchanges. Therefore, certain intersection modifications and signalization have been recommended at the freeway ramp locations listed above.

## **BENICIA BUSINESS PARK IMPROVEMENTS**

In addition to citywide improvements included in the TIF program, a number of improvement projects have been identified as being directly related to the Benicia Business Park development in the EIR prepared for the project.<sup>4</sup> These improvement projects are not included in the Citywide TIF update and are as follows:

### ***Roadway Improvements***

- Widen Industrial Way to four lanes between East 2nd Street and the Business Park access;
- Construct a new two-lane Industrial Way connection between the Business Park access and Lake Herman Road (Reservoir Road would be abandoned);
- Widen East 2nd Street to four lanes (with a median) between Industrial Way and Lake Herman Road;
- Widen Lake Herman Road to four lanes between Benicia Business Park access (A Boulevard) to I-680.

### ***Intersection Improvements***

- East 2<sup>nd</sup>/Park Road/BBP Access:
  - install signal and widen/restripe all approaches;
- East 2<sup>nd</sup>/Industrial Way:
  - widen/restripe southbound, eastbound and westbound approaches;
- East 2<sup>nd</sup>/Rose Drive:
  - widen/restripe southbound, northbound and eastbound approaches;
- East 2<sup>nd</sup>/I-780 WB Ramps:
  - widen/restripe northbound and southbound approaches;
- East 2<sup>nd</sup>/I-780 EB Ramps:
  - widen/restripe westbound approach;
- Lake Herman Road/Industrial Way:
  - install signal;
- Lake Herman Road/East 2<sup>nd</sup>:
  - install signal and widen/restripe northbound, eastbound, and westbound approaches;
- Lake Herman Road/I-680 SB Ramps:
  - install signal and widen/restripe westbound approach;
- Lake Herman Road/I-680 NB Ramps:
  - install signal and widen/restripe northbound, eastbound, and westbound approaches;
- Park Road/Bayshore Road:
  - widen/restripe westbound and southbound approaches;
- Park Road/Industrial Way:
  - install signal.

These improvements will be the responsibility of the Benicia Business Park development and are not included in the TIF program.

## **CITYWIDE TIF IMPROVEMENT SUMMARY**

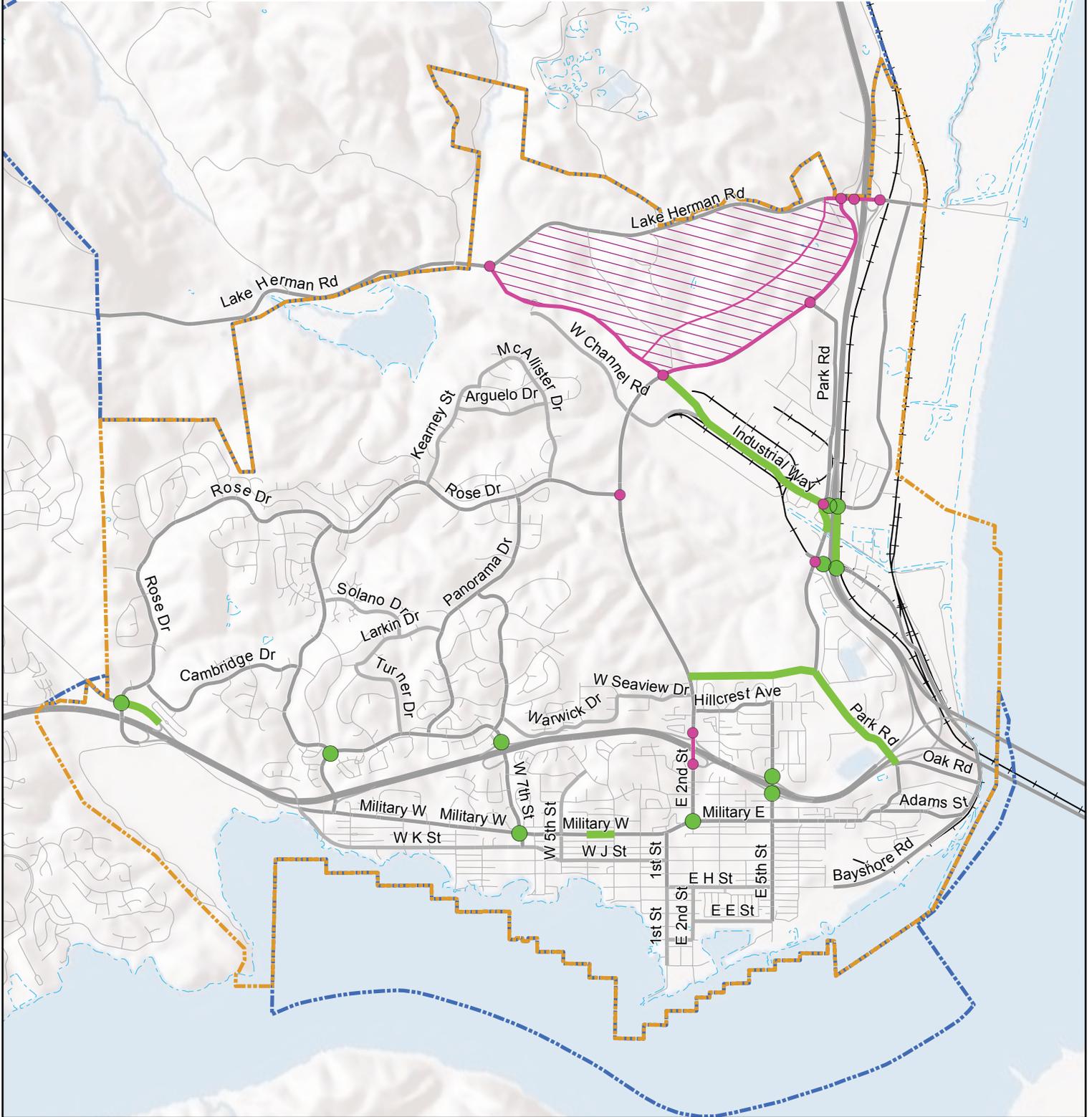
Figure 6 presents a map of all the proposed citywide TIF improvements, including intersection improvement locations and roadway improvement and new roadway construction locations as described in the previous sections. Figure 6 also presents the Benicia Business Park improvements that are not included in the citywide TIF program.

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<sup>4</sup> LSA Associates, Benicia Business Park FEIR, Transportation and Circulation, page 220, January 2007.

**LEGEND:**

- 2014 TIF Intersection Improvement
- Benicia Business Park Improvement
- 2014 TIF Roadway Improvement
- Benicia Business Park Improvement
- Internal Business Park Access Road
- City Limits
- Sphere of Influence
- Benicia Business Park
- Railroad
- Coastline



## TRAFFIC IMPACT FEE IMPROVEMENT COST ESTIMATES

In preparing the preliminary cost estimates for all of the proposed TIF projects, a unit cost sheet was prepared. The unit cost sheet provides an average unit cost per item based on reliable sources and previous recent projects that will give the most accurate total cost for each estimate. The main source used for the creation of the unit cost sheet is the latest version of the Contract Cost Data provided by The State of California Department of Transportation, Caltrans. In addition, recent roadway project bid summary results were also used to determine the unit costs.

Table 10 presents a summary of the cost estimates for the identified intersection and roadway TIF improvements. Detailed unit cost spreadsheets and cost estimate worksheets are provided in the Appendix.

**TABLE 10:  
2014 TIF IMPROVEMENT COST ESTIMATES**

Facility Name	From	To	Intersection	Estimated Total Construction Cost
<i>Roadway Projects</i>				
New Roadway <sup>1</sup>	Bayshore Road	Industrial Way		<b>\$16,347,474</b>
Park Road <sup>1</sup>	Sulphur Springs Creek	Industrial Way		
New Roadway	East 2 <sup>nd</sup> Street	Park Road		<b>\$3,570,000</b>
Park Road	Oak Drive	New Roadway		<b>\$280,000</b>
Industrial Way	East 2 <sup>nd</sup> Street	I-680 NB Off-Ramp		<b>\$1,100,000</b>
Military West	West 2 <sup>nd</sup> Street	West 5 <sup>th</sup> Street		<b>\$20,870</b>
Columbus Parkway	Rose Drive	I-780 WB Off-Ramp		<b>\$706,550</b>
Columbus Parkway <sup>2</sup>	Rose Drive	City Limits		<b>\$150,000</b>
<i>Intersection Projects</i>				
Rose Drive			Columbus Parkway	<b>\$316,250</b>
Hastings Drive			Southampton Road	<b>\$490,500</b>
West 7 <sup>th</sup> Street			I-780 Westbound Ramps	<b>\$198,600</b>
East 2 <sup>nd</sup> Street			Military East	<b>\$154,800</b>
East 5 <sup>th</sup> Street			I-780 Westbound Ramps	<b>\$683,200</b>
East 5 <sup>th</sup> Street			I-780 Eastbound Ramps	<b>\$731,340</b>
West 7 <sup>th</sup> Street			Military West	<b>\$2,800,000</b>
<i>Other Projects</i>				
Benicia Industrial Park Bus Hub Local Contribution				<b>\$100,000</b>
Citywide Traffic Calming Plan & Physical Improvements				<b>\$1,000,000</b>
General Plan Circulation Element Update				<b>\$200,000</b>
Administration and Update of Fee Program				<b>\$200,000</b>
<b>Total Cost of TIF Improvements:</b>				<b>\$29,049,584</b>

*Notes:*

- 1) These projects are combined as a single cost estimate and assume \$2,900,000 RTIF contribution per City direction. Cost estimate includes funding for the signalization of four (4) I-680 ramp terminal intersections.
- 2) Assumes balance funded by adjacent development, per City direction.

As presented in Table 10, a total of just under \$30 million in improvements has been identified in this TIF update.

## **TRAFFIC IMPACT FEE UPDATE CALCULATION METHODOLOGY**

Following is a detailed discussion of these nexus findings relative to the updated City of Benicia traffic impact fees.

### **IDENTIFY THE PURPOSE OF THE FEE**

The purpose of the traffic fee is to fund improvements to the City's traffic circulation system.

### **IDENTIFY THE USE OF THE FEE**

Fee revenue will be used to fund the expansion of existing traffic facilities and to construct new facilities that are required to provide and maintain adequate multi-modal traffic circulation within the City. The transportation facilities that will be required are identified in the City's Capital Improvement Program, which is presented in this report.

### **REASONABLE RELATIONSHIP BETWEEN FEE'S USE AND THE TYPE OF DEVELOPMENT**

Development of remaining vacant land in the City, which is zoned for residential and nonresidential land uses, will place increasing demand on the City's transportation system and create a need to expand the capacity of the City's circulation system. Traffic fees imposed on new residential and nonresidential land uses will be used to fund the expansion and improvement of the City's circulation system and thereby meet the increased demand placed by these development types. Residents and employees utilize the City's circulation system at different rates depending on the land use type. These rates are quantified in the Institute of Transportation Engineers Trip Generation manual through the assignment of trips generated by different land use types.

### **REASONABLE RELATIONSHIP BETWEEN THE NEED FOR THE FACILITY AND THE TYPE OF DEVELOPMENT**

Development within the City will create new residents and employees who will use the City's transportation system. The additional demand placed on the existing facilities from new residents and employees will require the City to expand and upgrade existing facilities as well as construct new facilities to handle the increased demand. Traffic fee revenue from new development will be used to fund a portion of the construction costs associated with these facilities.

### **REASONABLE RELATIONSHIP BETWEEN THE AMOUNT OF THE FEE AND THE COST OF THE PUBLIC FACILITY OR PORTION ATTRIBUTABLE TO THE DEVELOPMENT**

As stated in Section I, various findings must be made to ensure that there is a reasonable relationship or a rough proportionality between the amount of the fee and the cost of the public facility or portion attributable to new development. Although the U.S. Supreme Court specifically stated, "no precise mathematical calculation is required...", an analysis should be presented in enough detail to demonstrate that logical, thorough consideration was applied in the process of determining the fee levied on new development. The relationship between the amount of the fee and the portion of the facility and cost attributable to the development type is based on the average daily trip rates assigned to each specific land use category, as shown in the ITE Trip Generation manual. The amount of average daily trips generated by each land use type, as assigned by the ITE, establishes the usage or demand for traffic facilities and can therefore be used to quantify a proportionate traffic fee.

There are several generally accepted methodologies used to determine fees for new development. The choice of methodology used depends on the type of facility for which a fee is being calculated. Some approaches, for example, look at existing standards and apply these standards on an incremental basis to new development. This approach is commonly used to determine the need for additional parks or government buildings. For transportation facilities, however, the most common approach used to calculate fees is the plan-based methodology. The following section provides a brief discussion of this methodology.

### **PLAN-BASED METHODOLOGY**

The plan-based methodology is used for facilities that must be designed based on future demand projections and the geographic location of anticipated growth. The need for road improvements depends on the projected number of trips that must be accommodated from development occurring in a growth area, in this case the City Limits. The need for roadways and other transportation facilities does not increase proportionately for each residential unit or non-residential acre developed in an area. Existing facilities, geographic constraints, and current levels of service must be considered to identify future facility needs. Therefore, to develop a facilities plan for transportation improvements, a projection of the amount and location of future development is required. Steps to calculate the traffic fee under the plan-based methodology are as follows:

- Step 1 Identify the area of benefit and the land uses within the area of benefit based on a timeline or projection of development
- Step 2 Determine the transportation facilities and improvements to existing facilities needed to adequately meet the demand placed on the transportation system from land uses within the area of benefit
- Step 3 Estimate the gross cost of facilities needed to serve projected growth; the costs of facilities needed to correct existing deficiencies in the transportation system cannot be included in the total cost
- Step 4 Subtract revenues available from existing fee funds or alternative funding sources - this step will determine the total net facilities cost to be funded through traffic fee revenue
- Step 5 Assign average daily trip rates generated by each land use category; the trip rates will be used to allocate the total net facilities cost
- Step 6 Determine the total projected trips that will be generated by future development in the area of benefit by multiplying the expected future development by the respective average daily trip rates
- Step 7 Distribute the total net facilities cost to each land use type based on the distribution of total trips generated by future development
- Step 8 Divide the total costs distributed to each land use category by the expected number of units in that category at build out to determine the fee per unit for each land use category
- Step 9 Subtract credits, if any, for TIF facilities already funded, to arrive at a net impact fee

The traffic fees calculated in this 2014 TCIP Update will fund a portion of the costs associated with the planned transportation facilities. Other funding sources include revenue required to be paid or dedicated by property owners or grants from state and federal sources.

**AREA OF BENEFIT**

The selected Area of Benefit for the 2014 TIF Update is based on future development within the City of Benicia (Figure 1). The selection for one Area of Benefit was based on a “system approach” that all transportation facilities are necessary to provide the required system capacity. New development will be required to pay for and share this benefit. The Citywide 2014 TIF identifies all required transportation facilities in the City that are needed to provide logical local and regional connectivity to complete the Citywide circulation system. The costs of all transportation facilities within the City of Benicia were used to calculate the City TIF.

## 2014 TRAFFIC IMPACT FEES

The total cost of transportation improvements included in the TIF, to support buildout of the City's General Plan, is just over \$30 million. This amount does not include improvements to be funded by new development, including the BBP project, or contributions from the Solano County Regional Traffic Impact Fee.

As with the 2007 TIF update fee calculation presented in Table 4, fee costs per land use designation are based on a cost per PM peak hour trip. In 2007, the cost per PM peak hour trip was calculated to be \$1,858. This cost is determined by dividing the total cost of the fee program, minus the balance of currently collected fees in the City's TIF fund, by the amount new PM peak hour trips estimated to be generated by buildout of remaining land uses.

Table 11 presents the calculation of the cost per PM peak hour that will be used to determine the impact fee per unit for individual land uses.

**TABLE 11:  
COST PER PM PEAK HOUR TRIP CALCULATION**

<b>Description</b>	<b>Amount</b>
Total TCIP Improvement Costs	\$29,049,584
<i>Existing TIF Account Balance</i>	<i>\$ 1,029,000</i>
Amount to be collected by new TIF	\$ 28,020,584
Buildout PM Peak Hour Trips Generated	12,894
<b>Cost per PM Peak Hour Trip</b>	<b>\$ 2,173</b>

As presented in Table 11, based on total cost of citywide improvements, minus the existing City TIF fund balance, divided by the total added PM peak hour trips upon buildout, the cost per new PM peak hour trip to fund the fee program has been calculated to be \$2,173. Table 12 presents the calculation of resulting impact fees per individual land use.

**TABLE 12:  
TRIP RATES AND TRAFFIC FEES FOR VARIOUS LAND USES**

Land Use <sup>1</sup>	Unit <sup>2</sup>	PM Peak Hour		Traffic Fee per Unit
		Trip Rate per Unit <sup>3</sup>	Commercial Use Trip Reduction <sup>5</sup>	
<b>RESIDENTIAL LAND USES</b>				
Single Family	D.U.	1.00	-	\$ 2,173
Low-Rise Townhouse/Condo	D.U.	0.78	-	\$ 1,695
Apartment	D.U.	0.62	-	\$ 1,347
Accessory Dwelling <sup>4</sup>	D.U.	0.31	-	\$ 674
<b>LODGING</b>				
Hotel	Room	0.60	-	\$ 1,304
<b>COMMERCIAL<sup>5</sup></b>				
Shopping Center <sup>6</sup>	KSF	3.71	50%	\$ 4,031
Supermarket	KSF	9.48	50%	\$ 10,300
Convenience Store	KSF	34.57	50%	\$ 37,560
Sit-Down Restaurant	KSF	7.49	50%	\$ 8,138
High-Turnover Sit-Down Rest./Deli	KSF	9.85	50%	\$ 10,702
Fast-Food Restaurant	KSF	32.65	50%	\$ 35,474
Bank (with Drive-Through)	KSF	24.30	50%	\$ 26,402
Drug Store/Pharmacy	KSF	9.91	50%	\$ 10,767
Service Station/Mart	FSP	13.87	50%	\$ 15,070
Quick-Lube Vehicle Shop	FSP	5.19	50%	\$ 5,639
Hardware/Paint Store	KSF	4.84	50%	\$ 5,259
Day Care Facility	STU	0.81	50%	\$ 880
<b>OFFICE</b>				
General Office	KSF	1.49	-	\$ 3,238
Medical Office	KSF	3.57	-	\$ 7,758
<b>INDUSTRIAL</b>				
Light Industrial	KSF	0.97	-	\$ 2,108
Warehousing	KSF	0.32	-	\$ 695
Self-Storage Units	UNIT	0.02	-	\$ 43

*Notes:*

1. This table represents a listing of most potential development in the City of Benicia. For any development proposal not on this list, the ITE Trip Generation Manual should be used to establish the development's PM peak hour trip generation and resulting TIF assessment.
2. D.U. = Dwelling Unit; KSF = 1,000 Square Feet; FSP = Fueling or Service Position; STU = Student.
3. Trip generation rates obtained from ITE Trip Generation Manual 9th Edition.
4. An accessory dwelling represents a small (less than 800 sq.ft.) apartment type unit accessory to a single family dwelling. It is assumed that this type of unit would generate traffic at one-half the standard apartment rate.
5. The calculated fee for the commercial uses reflects a 50% reduction to account for the fact that about one-half of commercial trips are either pass-by trips or trips to/from residential units.
6. The trip rate (and resulting TIF) reflect an average sized shopping center. For a specific development proposal, the ITE trip equation for shopping centers should be used.

## FEE COMPARISONS

Average fees across the United States, across California, and current fees in nearby agencies have been reviewed for comparison purposes and are presented in Table 13. Average national and statewide fees were obtained from *National Impact Fee Survey: 2012* and *National Impact Fee Survey: 2008*, both prepared by Duncan Associates.

**TABLE 13:  
TRAFFIC FEE PROGRAM COMPARISONS**

<b>Jurisdiction</b>	<b>Single Family (1 DU)</b>	<b>Multi Family (1 DU)</b>	<b>Retail (1 KSF)</b>	<b>Office (1 KSF)</b>	<b>Industrial (1 KSF)</b>
United States Average 2008	\$ 3,077	\$ 2,095	\$ 5,237	\$ 3,381	\$ 2,067
United States Average 2012	\$ 3,228	\$ 2,202	\$ 5,685	\$ 3,430	\$ 2,076
California Average 2008	\$ 5,267	\$ 3,538	\$ 8,840	\$ 6,244	\$ 3,641
California Average 2012	\$ 6,348	\$ 4,236	\$ 11,000	\$ 7,030	\$ 3,930
City of American Canyon	\$ 3,954	\$ 2,600	\$ 3,510	\$ 3,510	\$ 2,020
City of Concord	\$ 3,251	\$ 2,624	\$ 8,810	\$ 7,040	\$ 2,980
City of Martinez	\$ 2,221	\$ 1,528	\$ 2,230	\$ 1,810	\$ 990
City of Pleasant Hill	\$ 2,109	\$ 1,691	\$ 5,453	\$ 4,636	\$ 1,710
City of Vallejo	\$ 5,732	\$ 3,224	\$ 2,770	\$ 2,542	\$ 1,420
City of Walnut Creek	\$ 2,535	\$ 1,479	\$ 5,290	\$ 4,230	\$ 4,771
<b>Proposed City of Benicia</b>	<b>\$ 2,173</b>	<b>\$ 1,347</b>	<b>\$ 4,031</b>	<b>\$ 3,238</b>	<b>\$ 2,108</b>
<i>Existing City of Benicia</i>	<i>\$ 1,877</i>	<i>\$ 1,152</i>	<i>\$ 3,484</i>	<i>\$ 2,768</i>	<i>\$ 1,821</i>

*Notes: DU = dwelling unit; KSF = 1,000 square feet*

As presented in Table 13, the proposed traffic impact fees for the City of Benicia are slightly higher than the existing fees. The proposed fees, however, are lower than recent nationwide and statewide averages for similar programs. The proposed fees are also generally lower than most of those currently in place in nearby jurisdictions in Solano and Contra Costa counties.

## **TRAFFIC IMPACT FEE IMPLEMENTATION & ADMINISTRATION**

According to California Government Code, prior to levying a new fee or increasing an existing fee, an agency must hold at least one open and public meeting. At least 10 days prior to this meeting, the agency must make data on infrastructure costs and funding sources available to the public. Notice of the time and place of the meeting, and a general explanation of the matter, are to be published in accordance with Section 6062(a) of the Government Code, which states that publication of notice shall occur, for 10 days in a newspaper regularly published once a week or more.

The updated traffic fees should be adopted through a City ordinance or resolution. Any future increases to the fees resulting from annual inflation or minor adjustments could be adopted annually by resolution. Once the updated traffic fees are adopted by the City Council, they shall become effective no sooner than sixty days later, unless an urgency measure is adopted. An urgency measure is an interim authorization that waives the sixty-day waiting period and allows the new fees to be collected immediately if a finding of a current and immediate threat to the public health, welfare, and safety can be demonstrated. The interim authorization requires a four-fifths vote of the City council and stays in effect for thirty days; no more than two extensions of the authorization can be granted.

## **ANNUAL ADMINISTRATIVE DUTIES**

The Government Code requires the City to report every year and every fifth year certain financial information regarding the fees. The City must make available within 180 days after the last day of each fiscal year the following information for the prior fiscal year:

- (a) A brief description of the type of fee in the account or fund
- (b) The amount of the fee
- (c) The beginning and ending balance in the account or fund
- (d) The amount of the fee collected and the interest earned
- (e) An identification of each public improvement for which fees were expended and the amount of expenditures
- (f) An identification of an approximate date by which time construction on the improvement will commence if it is determined that sufficient funds exist to complete the project
- (g) A description of each interfund transfer or loan made from the account and when it will be repaid
- (h) Identification of any refunds made once it is determined that sufficient monies have been collected to fund all fee-related projects

The City must make this information available for public review and must also present it at the next regularly scheduled public meeting not less than 15 days after this information is made available to the public.

For the fifth fiscal year following the first deposit into the account or fund, and every five years thereafter, the City must make the following findings with respect to any remaining funds in the fee account, regardless of whether those funds are committed or uncommitted:

- (1) Identify the purpose to which the fee is to be put
- (2) Demonstrate a reasonable relationship between the fee and the purpose for which it is charged
- (3) Identify all sources and amounts of funding anticipated to complete financing any incomplete improvements
- (4) Designate the approximate dates on which funding in item (3) above is expected to be deposited into the fee account

As with the annual disclosure, the five-year report must be made public within 180 days after the end of the City's fiscal year and must be reviewed at the next regularly scheduled public meeting. These findings must be made by the City otherwise the law requires that the City refund the money to the then current record owners of the development projects on a prorated basis.

### **INTERFUND TRANSFERS**

It is recommended that the City adopt a policy that will allow for the transfer of fee revenues between fee funds. This will provide greater funding flexibility and facilitate the timely phasing of improvements by allowing fees to be combined and used as necessary. All interfund transfers must be repaid with interest.

### **INFLATION ADJUSTMENTS**

All fees calculated in this 2014 TIF Report are reflected in year 2014 dollars. These fees should be adjusted in future years to reflect revised facility standards, receipt of additional funding from alternative sources (i.e., state or federal grants), revised replacement costs, or changes in demographics or the City's land use plan. In addition to such periodic adjustments, the fees should be inflated each year by a predetermined index, such as the Engineering News Record 20-City Construction Cost Index.

### **FEE CREDITS OR REIMBURSEMENTS**

The City will provide fee credits or possibly reimbursements to developers who dedicate land or construct facilities that are shown in the 2014 TIF as being fee-funded. Fee credits or reimbursements may be provided up to the cost of the improvement, as shown in the 2014 TIF, subject to periodic inflation adjustments, or the actual cost paid by the developer, whichever is lower. For construction cost overruns, only that amount shown in the 2014 TIF, subject to periodic inflation adjustments, should be credited or reimbursed. The City will evaluate the appropriate fee credit or reimbursement based on the value of the dedication or improvement. Credits or reimbursements may be repaid based on the priority of the capital improvements, as determined by the City. In some cases, repayment for constructed facilities that have low priority may be postponed. Fee credits and reimbursements will be determined by the City on a case-by-case basis.

### **PROJECT COSTS**

Actual costs for a particular project may be more or less than the fee portion calculated for that project. It is expected that on average, the amount collected will be appropriate for financing the planned projects. Fee adjustments will need to be made during periodic updates to the 2014 TIF for differences based on actual costs incurred on project work completed and revised cost estimates for remaining projects.

# APPENDIX