



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: June 8, 2010
To: Karen Mack, City of San Jose
CC: Will Burns, David J. Powers, Inc.
From: Robert Del Rio
Subject: Fox Site Mixed-Use Supplemental Traffic Analysis

Hexagon Transportation Consultants, Inc. has completed a supplemental traffic analysis for the proposed mixed-use development of the 27.4-acre Fox site in North San Jose. The project as proposed would consist of up to 650 residential units with either a maximum 150,000 s.f. of retail space or approximately 300,000 s.f. of office/R&D space. There is currently two buildings totaling 129,000 s.f. of office/R&D space on the site. The site is located in the northwest quadrant of the intersection of Oakland Road and Schallenberger Road (see Figure 1). Though the project site is located within the North San Jose Development Policy (NSJDP) boundary, it would not be covered by the completed and approved NSJDP Environmental Impact Report (EIR) because the proposed project is not consistent with the planned industrial uses for the site identified in the EIR. As such, the project is required to prepare this supplemental traffic impact analysis report. The supplemental traffic analysis will be included as part of an Initial Study/Addendum to the NSJDP.

Scope of Study

The purpose of the supplemental traffic analysis is to determine whether the project would have any impacts beyond those identified as part of the completed and approved NSJDP EIR. The analysis was completed according to the requirements of the City of San Jose and the Congestion Management Program (CMP) of the Santa Clara Valley Transportation Authority (VTA). The study focuses on traffic impacts of the proposed development on the key intersections and freeways segments in the vicinity of the project site as identified in Figure 1.

The analysis is based on the adjustment of the land uses assumed for the project site as part of the NSJDP EIR to reflect each of the proposed project alternatives. Traffic conditions were evaluated for the following scenarios:

Existing Conditions. Existing conditions were represented by existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were obtained from the City of San Jose and supplemented with new traffic counts.

NSJDP Buildout Conditions. NSJDP buildout conditions were represented by NSJDP buildout traffic volumes with identified roadway improvements. NSJDP buildout conditions reflect the approved land uses of the NSJDP EIR. NSJDP traffic volumes were obtained directly from the NSJDP EIR.

NSJDP Buildout Conditions with Project. To evaluate the effects of each of the proposed project alternatives on the roadway network analyzed in the already completed NSJDP EIR, buildout traffic volumes from the NSJDP EIR were adjusted to account for the proposed land use changes of the project site. Traffic estimated to be generated by the planned industrial uses assumed for the site in the NSJDP EIR were removed from the NSJDP buildout volumes and replaced with the proposed project generated

traffic for each alternative. NSJDP buildout conditions with project were evaluated relative to NSJDP buildout conditions in order to determine potential project impacts.

Existing and NSJDP Buildout Conditions Traffic Volumes

Existing peak-hour traffic volumes were obtained from the City of San Jose's TRAFFIX database and supplemented with new traffic counts. New peak-hour intersection turning-movement counts were conducted at locations where available counts were more than two years old. NSJDP buildout conditions traffic volumes were obtained from the NSJDP EIR. No adjustments were made to the NSJDP buildout conditions volumes shown in Figure 2.

Trip Generation, Distribution, and Assignment

Trip Generation

The magnitude of traffic generated by each of the proposed project alternatives was estimated by applying to the size of the development the applicable trip generation rates recommended by the City of San Jose *Traffic Impact Analysis Handbook: Volume 1 – Methodologies and Requirements, 2008*. Based on the recommended rates, it is estimated that the proposed project alternative that would include up to 650 residential units and 150,000 s.f. of retail space (hereafter refer to as Project Alternative 1) would generate 13,326 daily trips with 761 AM peak-hour trips (350 inbound trips and 412 outbound trips) and 805 PM peak-hour trips (469 inbound trips and 336 outbound trips). The proposed project alternative that would include up to 650 residential units and 300,000 s.f. of office space (hereafter refer to as Project Alternative 2) would generate 7,131 daily trips with 826 AM peak-hour trips (459 inbound trips and 367 outbound trips) and 781 PM peak-hour trips (354 inbound trips and 426 outbound trips).

As part of the NSJDP EIR, it was assumed that the project site would consist of industrial/R&D uses. Based on the site size (27.4 acres) and a 0.35 FAR of development for R&D uses (typical rate for this type of use and rate used in the NSJDP EIR), a total of 419,265 s.f. of R&D space was assumed as part of the NSJDP for the site. The proposed project would replace the planned industrial uses with mixed-use. Traffic estimated to be generated by the planned R&D uses was removed from the NSJDP buildout volumes and replaced by the proposed project generated traffic for each alternative. The project trip generation estimates for each alternative are presented in Table 1.

Trip Distribution and Assignment

The directional distribution of site-generated traffic to and from the main gateways to the project area shown in Figure 3 was developed based on existing traffic volumes and the location of complimentary land uses.

The peak-hour trips generated by the proposed and NSJDP planned land uses for the project site were assigned to the roadway system in accordance with the trip distribution pattern. The removed R&D trips associated with the NSJDP planned uses for the site were reassigned to areas west of I-880. This analysis is based upon the maximum buildout of the identified land uses for the project site. An actual project has yet to be defined, therefore, a site plan is not available. Project trips were assigned to intersections surrounding the site based on the assumption that access to the site would be provided from Oakland Road and Brokaw Road. Figures 4-6 present trip assignments for each component of trips. Figures 7 and 8 present final adjusted NSJDP buildout condition volumes with the proposed project alternatives.

Impact Criteria

Significance criteria are used to establish what constitutes an impact. For this analysis, the criteria used to determine impacts on intersections is based on a comparison of NSJDP buildout conditions (of the already approved NSJDP EIR) with the adjusted NSJDP buildout conditions that include the proposed project land

use. The evaluation follows City of San Jose and Congestion Management Program (CMP) Level of Service standards.

Intersection Impact Criteria

City of San Jose Definition of Significant Intersection Impacts

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of San Jose if for either peak hour:

1. The level of service at the intersection degrades from an acceptable LOS D or better under NSJDP buildout conditions to an unacceptable LOS E or F under NSJDP buildout with project conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under NSJDP buildout conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e. the change in average stopped delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

A significant impact by municipal standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to NSJDP buildout conditions or better.

CMP Definition of Significant Intersection Impacts

The definition of a significant impact at a CMP intersection is the same as for the City of San Jose criteria, except that the CMP standard for acceptable level of service at a CMP intersection is LOS E or better. The City of San Jose requires that CMP intersections located within their jurisdictions also meet their specific criteria, which are more stringent.

Freeway Segment Impact Criteria

According to the CMP, a development is said to create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak hour:

1. The level of service on the freeway segment degrades from an acceptable LOS E or better under existing conditions to an unacceptable LOS F under project conditions or,
2. The level of service on the freeway segment is an unacceptable LOS F under project conditions, and the number of project trips on that segment constitutes at least one percent of capacity on that segment.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore freeway conditions to LOS E or better.

Analysis Results

Intersection and freeway analysis consists of a comparison of intersection and freeway segment levels of service for buildout conditions of the NSJDP EIR with the adjusted NSJDP buildout with project conditions to determine the effects of the proposed land use changes of each alternative.

Intersection Level of Service Analysis

Existing Conditions

Results of the intersection level of service analysis show that six intersections are currently operating at an unacceptable LOS E or worse during at least one peak hours (see Table 2). The remaining study intersections are currently operating at LOS D or better conditions.

Project Conditions

Results of the intersection level of service analysis for project conditions show that no intersections beyond those identified as part of the NSJDP EIR would be impacted when the planned industrial uses assumed as part of the NSJDP project are replaced by the proposed land uses of either project alternative analyzed (see Table 2). Three intersections identified to be impacted by each of the proposed project alternatives were also identified to be impacted by the NSJDP Buildout and deemed significant and unavailable as part of the NSJDP EIR. Therefore, the proposed project would not result in additional intersection impacts.

Freeway Impacts

An analysis of freeway segments serving the project area show that the land use adjustments of each of the project alternatives would not result in additional impacts to freeway segments, other than those already identified as part of the NSJDP EIR.

NSJDP Impact Fees

The NSJDP has established a traffic fee program to construct necessary improvements in North San Jose. Fees have been identified for residential (per unit) and industrial (per s.f.). Fees are not required for neighborhood serving retail uses, however fees are required for regional retail land uses. The fees are based on the North San Jose Area Development Policy (NSJADP), dated and adopted in June 2005 and updated in June 2009. Credit for the payment of fees is applied since the project would consist of the replacement of existing industrial entitlement. The estimated impact fees are based on the fees outlined in the NSJADP at the time permit applications are filed. The Year 2009-2010 fees for land uses applicable to the project are:

Industrial Space - \$11.89per square foot
Multi-Family Residential Unit – \$6,372per unit

A 3.3% annual escalation fee is applied to the identified impact fees to fund the cost of the identified improvements at the time of construction. The increase in fees due to the escalation occurs in odd years and is due to increase July 1st 2011.

Conclusions and Recommendations

Analysis results indicate that the adjustment of land uses assumed for the project site as part of the NSJDP to reflect either of the proposed project alternatives will not result in any additional impacts to signalized intersections or freeway segments beyond those identified as part of the completed and approved NSJDP EIR.

Though no additional impacts were identified, due to the proposed adjustment of NSJDP assumed land uses for the site, the project must contribute to the NSJDP impact fee program. The Year 2009-2010 required NSJDP Impact Fees are \$11.89 per s.f. of industrial space and \$6,372 per unit. Fees are not required for the neighborhood serving retail component of the project as is currently proposed. However, a fee will be required should the final retail component use of the project be more reflective of regional retail uses.

Intersections along Brokaw Road and Old Oakland Road currently have operational problems such as long vehicle queues and turn-movement conflicts due to the close spacing of intersections along each of the roadways. It can be expected that the operational deficiencies will worsen with the addition of project traffic. Specifically, the intersection of Brokaw Road and Oakland Road will likely continue to see operational problems due to large traffic demands. Upon the identification of an actual project description, an operational analysis will be required to identify the effects of project traffic on intersection operations along its frontage and at site access points. The operational analysis may result in the need for improvements to correct operational deficiencies, but operational deficiencies are not considered impacts.

Attachments: Table 1: Trip Generation Estimates for the Fox Site Mixed-Use Development
Table 2: Intersection Level of Service Summary
Table 3: Freeway Segment Level of Service Summary – Alternative 1
Table 4: Freeway Segment Level of Service Summary – Alternative 2
Figure 1: Project Site Location and Study Intersections
Figure 2: NSJDP Buildout Traffic Volumes
Figure 3: Project Trip Distribution
Figure 4: North San Jose Planned and Relocated R&D Trips
Figure 5: Alternative 1 Project Trip Assignment
Figure 6: Alternative 2 Project Trip Assignment
Figure 7: Alternative 1 Project Traffic Volumes
Figure 8: Alternative 2 Project Traffic Volumes

Table 1
Trip Generation Estimates for the Fox Site Mixed-Use Development

Land Use	Size	Daily Trip Rates /a/	Daily Trips	AM Peak Hour							PM Peak Hour								
				% of Daily	Internal Red.	Splits		Trips			% of Daily	Pass-By Red.	Internal Red.	Splits		Trips			
						In	Out	In	Out	Total				In	Out	In	Out	Total	
NSJ Approved Land Use																			
Research and Development /e/	417,740 s.f.	8.0	3,342	15.0%		83%	17%	416	85	501	13.0%			15%	85%	65	369	434	
Project Alternative 1																			
<i>Proposed Land Use</i>																			
Condominiums/Townhouses	650 units	7.5	4,875	10.0%		35%	65%	171	317	488	10.0%			65%	35%	317	171	488	
15% residential and retail reduction /c/			-731		15%			-26	-48	-73			15%			-48	-26	-73	
Retail	150,000 s.f.	70.0	10,500	4.0%		60%	40%	252	168	420	10.0%			50%	50%	525	525	1,050	
15% residential and retail reduction /c/			-731		15%			-48	-26	-73			15%			-26	-48	-73	
60% pass-by reduction /b/			-586									60%			-300	-286	-586		
Subtotal			13,326					350	412	761					469	336	805		
Net Difference between Approved and Proposed Land Uses			9,984					-67	327	260					404	-33	371		
Project Alternative 2																			
<i>Proposed Land Use</i>																			
Condominiums/Townhouses	650 units	7.5	4,875	10.0%		35%	65%	171	317	488	10.0%			65%	35%	317	171	488	
3% residential and employment reduction /d/			-72		3%			-2	-9	-11			3%			-8	-1	-9	
Research and Development	300,000 s.f.	8.0	2,400	15.0%		83%	17%	299	61	360	13.0%			15%	85%	47	265	312	
3% residential and employment reduction /d/			-72		3%			-9	-2	-11			3%			-1	-8	-9	
Subtotal			7,131					459	367	826					354	426	781		
Net Difference between Approved and Proposed Land Uses			3,789					43	282	325					289	57	346		
<p>/a/ Rates based on trips per unit for residential uses and 1,000 s.f. for retail/R&D uses.</p> <p>/b/ A pass-by reduction of 60% was applied to retail use during the PM peak hour.</p> <p>/c/ A reduction of 15% was applied to retail use for internalization between retail and residential use. Retail use was reduced by a magnitude equal to the residential, in terms of number of trips (as prescribed by VTA Guidelines).</p> <p>/d/ A reduction of 3% was applied to retail use for internalization between employment and residential use. Residential use was reduced by a magnitude equal to the employment, in terms of number of trips (as prescribed by VTA Guidelines).</p> <p>/e/ Assumes 27.4 acre parcel developed at 0.35 FAR.</p>																			
Source: Traffic Impact Analysis Handbook: Volume 1 - Methodologies and Requirements, 2008																			

Table 2
Intersection Level of Service Summary

Study Number		Peak Hour	Count Date	Existing		NSJ Buildout w/Improvements		Alternative 1 NSJ Buildout With Project & Improvements				Alternative 2 NSJ Buildout With Project & Improvements			
				Ave. Delay	LOS	Ave. Delay	LOS	Ave. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Ave. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Oakland Road and Schallenger Road	AM	05/05/10	13.0	B	16.0	B	16.1	B	0.0	0.012	16.1	B	0.0	0.010
		PM	05/05/10	14.8	B	17.3	B	17.4	B	0.0	-0.001	17.4	B	0.0	0.003
2	Oakland Road and Gish Road	AM	05/05/10	13.9	B	18.9	B	19.4	B	1.1	0.012	19.4	B	1.3	0.014
		PM	05/05/10	14.5	B	35.4	D	36.9	D	2.3	0.009	37.1	D	2.7	0.011
3	Oakland Road and Commercial Street	AM	03/24/09	36.2	D	89.0	F	90.6	F	1.4	0.004	91.1	F	2.8	0.005
		PM	03/24/09	48.0	D	59.0	E	59.2	E	0.6	0.002	59.5	E	1.0	0.004
4	Oakland Road and US 101 (N)*	AM	09/24/08	66.4	E	47.9	D	47.1	D	-1.0	-0.003	47.7	D	0.1	0.000
		PM	09/24/08	26.0	C	22.6	C	23.7	C	2.8	0.011	23.3	C	1.8	0.007
5	Oakland Road and US 101 (S)*	AM	09/24/08	26.4	C	20.4	C	20.8	C	0.6	0.008	20.7	C	0.4	0.007
		PM	09/24/08	28.5	C	92.5	F	91.9	F	-0.5	-0.001	92.6	F	0.7	0.002
6	I-880 and Old Bayshore Highway (W)	AM	03/26/09	38.1	D	91.3	F	91.8	F	0.6	0.001	91.8	F	0.6	0.001
		PM	03/26/09	40.5	D	74.6	E	75.0	E	0.8	0.003	75.0	E	0.8	0.003
7	I-880 and Old Bayshore Highway (E)	AM	05/04/10	36.4	D	131.4	F	132.3	F	1.4	0.003	132.7	F	1.8	0.004
		PM	05/04/10	20.6	C	39.7	D	41.0	D	1.8	0.007	40.8	D	1.7	0.006
8	US 101 Southbound off-ramp and Airport Parkway	AM	03/18/09	33.1	C	35.8	D	35.8	D	0.1	0.000	35.9	D	0.2	0.004
		PM	03/18/09	30.8	C	50.0	D	52.2	D	3.0	0.012	51.8	D	2.4	0.010
9	North First Street and Brokaw Road*	AM	09/23/08	54.5	D	114.8	F	116.3	F	3.6	0.008	116.3	F	3.8	0.009
		PM	09/23/08	57.5	E	143.9	F	147.3	F	1.0	0.002	147.0	F	2.2	0.005
10	US 101 and Brokaw Road*	AM	09/23/08	19.9	B	41.0	D	42.0	D	1.8	0.010	42.0	D	1.6	0.009
		PM	09/23/08	25.3	C	38.2	D	38.4	D	0.4	0.011	38.4	D	0.3	0.009
11	Bering Drive and Brokaw Road	AM	03/19/09	17.1	B	36.9	D	37.0	D	0.3	0.009	37.0	D	0.2	0.008
		PM	03/19/09	19.7	B	34.1	C	34.3	C	0.4	0.011	34.3	C	0.3	0.009
12	Zanker Road and Brokaw Road*	AM	09/23/08	26.7	C	91.5	F	94.8	F	5.1	0.012	94.5	F	4.8	0.012
		PM	09/23/08	40.5	D	98.0	F	101.9	F	5.4	0.013	101.3	F	4.5	0.011
13	Junction Avenue and Brokaw Road	AM	03/19/09	25.2	C	32.9	C	33.2	C	0.3	0.014	33.2	C	0.4	0.014
		PM	03/19/09	32.7	C	33.6	C	34.3	C	1.2	0.023	34.3	C	1.3	0.023
14	I-880 and Brokaw Road (W)*	AM	09/23/08	31.6	C	35.7	D	36.1	D	1.0	0.022	36.1	D	0.8	0.021
		PM	09/23/08	43.7	D	39.4	D	41.1	D	1.9	0.028	41.0	D	2.0	0.028
15	I-880 and Brokaw Road (E)*	AM	09/23/08	27.8	C	35.1	D	33.0	C	-5.1	-0.023	34.2	C	-3.0	-0.008
		PM	09/23/08	35.3	D	24.0	C	27.4	C	4.1	0.042	25.8	C	1.8	0.023
16	Ridder Park Drive and Brokaw Road	AM	03/19/09	25.6	C	40.5	D	44.3	D	4.5	0.030	43.4	D	3.9	0.027
		PM	03/19/09	20.9	C	25.8	C	25.6	C	0.1	0.038	25.6	C	0.0	0.028

Table 2
Intersection Level of Service Summary

Study Number		Peak Hour	Count Date	Existing		NSJ Buildout w/Improvements		Alternative 1 NSJ Buildout With Project & Improvements				Alternative 2 NSJ Buildout With Project & Improvements			
				Ave. Delay	LOS	Ave. Delay	LOS	Ave. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Ave. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
17	Oakland Road and Brokaw Road*	AM	10/28/08	47.6	D	110.9	F	133.4	F	39.7	0.084	137.0	F	48.8	0.104
		PM	09/23/08	49.4	D	92.0	F	91.3	F	0.5	0.001	91.8	F	1.3	0.003
18	Ringwood Avenue and Murphy Avenue	AM	04/01/09	25.3	C	52.1	D	52.0	D	0.1	0.001	52.1	D	0.2	0.002
		PM	04/01/09	18.0	B	25.4	C	25.4	C	0.0	0.000	25.4	C	0.0	0.001
19	Lundy Avenue and Murphy Avenue*	AM	09/23/08	47.7	D	59.0	E	59.2	E	0.4	0.002	59.3	E	0.6	0.004
		PM	09/23/08	42.5	D	63.3	E	63.4	E	0.2	0.001	63.5	E	0.3	0.001
20	Trimble Road and Montague Expressway*	AM	09/18/08	29.4	C	21.5	C	21.5	C	0.0	0.001	21.6	C	0.1	0.003
		PM	10/02/08	55.1	E	52.5	D	53.3	D	0.8	0.010	53.1	D	0.6	0.008
21	O'Toole Avenue and Montague Expressway*	AM	10/08/08	32.9	C	34.7	C	34.8	C	0.1	0.002	34.8	C	0.1	0.002
		PM	10/02/08	73.5	E	57.5	E	58.0	E	0.7	0.002	58.0	E	0.7	0.002
22	Oakland Road and Montague Expressway*	AM	10/28/08	56.3	E	172.3	F	176.9	F	8.2	0.018	176.1	F	7.2	0.016
		PM	10/02/08	58.0	E	136.9	F	138.1	F	-14.5	-0.006	140.1	F	1.2	0.003
23	Trade Zone Boulevard and Montague Expressway*	AM	10/07/08	38.7	D	51.4	D	51.6	D	0.6	0.004	51.6	D	0.6	0.004
		PM	10/02/08	80.0	E	106.4	F	106.3	F	0.5	0.002	106.4	F	0.5	0.002
24	Oakland Road and Calle Artis	AM	05/06/10	18.6	B	15.3	B	15.3	B	0.2	0.020	15.3	B	0.1	0.018
		PM	05/06/10	13.5	B	20.4	C	20.8	C	0.4	0.025	20.6	C	0.3	0.018

* Denotes CMP Intersection
 Indicates significant unavoidable impact also identified in NSJDP EIR

**Table 3
Freeway Segment Levels of Service - Alternative 1**

Freeway	Segment	Direction	Peak Hour	NSJ Buildout with Alt. 1 Trips										Project Trips								
				Mixed-Flow Lanes					HOV Lane Traffic Volume					Mixed-Flow				HOV Lane				
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	NSJ Project Trips	Alt. 1 Net Project Trips	NSJ/Alt. 1 Trips	% Capacity	NSJ Project Trips	Alt. 1 Net Project Trips	NSJ/Alt. 1 Trips	% Capacity	
I-880	COLEMAN	SR 87	NB	AM	15	3	5,132	114.0	F	--	--	--	--	--	560	-18	542	7.9%	--	--	--	--
				PM	55	3	6,337	38.4	D	--	--	--	--	--	510	47	557	8.1%	--	--	--	--
I-880	SR 87	COLEMAN	SB	AM	60	3	5,891	32.7	D	--	--	--	--	--	456	35	491	7.1%	--	--	--	--
				PM	25	3	4,623	61.6	F	--	--	--	--	--	506	-13	493	7.1%	--	--	--	--
I-880	SR 87	N. 1ST	NB	AM	15	3	4,372	97.2	F	--	--	--	--	--	560	-18	542	7.9%	--	--	--	--
				PM	60	3	4,877	27.1	D	--	--	--	--	--	510	47	557	8.1%	--	--	--	--
I-880	N. 1ST	SR 87	SB	AM	60	3	4,091	22.7	C	--	--	--	--	--	456	35	491	7.1%	--	--	--	--
				PM	25	3	4,693	62.6	F	--	--	--	--	--	506	-13	493	7.1%	--	--	--	--
I-880	N. 1ST	US 101	NB	AM	15	3	5,223	116.1	F	--	--	--	--	--	651	-18	633	9.2%	--	--	--	--
				PM	60	3	5,460	30.3	D	--	--	--	--	--	413	47	460	0.9%	--	--	--	--
I-880	US 101	N. 1ST	SB	AM	60	3	5,312	29.5	D	--	--	--	--	--	-303	35	-268	-3.9%	--	--	--	--
				PM	25	3	5,660	75.5	F	--	--	--	--	--	793	-13	780	11.3%	--	--	--	--
I-880	US 101	BROKAW	NB	AM	15	2	3,432	114.4	F	--	--	--	--	--	727	-25	702	16.0%	--	--	--	--
				PM	25	2	3,182	63.6	F	--	--	--	--	--	316	66	382	8.7%	--	--	--	--
I-880	BROKAW	US 101	SB	AM	55	2	4,440	40.4	D	--	--	--	--	--	101	49	150	3.4%	--	--	--	--
				PM	20	2	4,027	100.7	F	--	--	--	--	--	1,165	-18	1,147	26.1%	--	--	--	--
I-880	BROKAW	MONTAGUE	NB	AM	55	2	4,328	39.3	D	--	--	--	--	--	429	49	478	10.9%	--	--	--	--
				PM	55	2	4,460	40.5	D	--	--	--	--	--	395	-5	390	8.9%	--	--	--	--
I-880	MONTAGUE	BROKAW	SB	AM	55	2	4,842	44.0	D	--	--	--	--	--	562	-10	552	12.5%	--	--	--	--
				PM	15	2	3,967	132.2	F	--	--	--	--	--	817	60	877	19.9%	--	--	--	--
US 101	MCKEE RD	MABURY RD	NB	AM	10	3	3,680	122.0	F	15	1	1,361	90.0	F	-347	-13	-360	-5.2%	16	-5	11	0.6%
				PM	60	3	3,849	21.4	C	65	1	520	8.0	A	26	43	69	1.0%	126	4	130	7.2%
US 101	MABURY RD	MCKEE RD	SB	AM	65	3	3,668	18.8	C	65	1	650	10.0	B	316	32	348	5.0%	317	3	320	17.8%
				PM	35	3	5,546	52.8	E	55	1	1,998	36.3	D	195	-9	186	2.7%	21	-3	18	1.0%
US 101	MABURY RD	OAKLAND RD	NB	AM	10	3	4,586	152.9	F	15	1	1,558	103.9	F	579	-13	566	8.2%	213	-5	208	11.6%
				PM	60	3	4,710	26.2	D	65	1	604	9.3	A	887	43	930	13.5%	210	4	214	11.9%
US 101	OAKLAND RD	MABURY RD	SB	AM	65	3	3,788	19.4	C	65	1	534	8.2	A	436	32	468	6.8%	201	3	204	11.3%
				PM	35	3	5,713	54.4	E	55	1	1,846	33.6	D	362	-9	353	5.1%	-131	-3	-134	-7.5%
US 101	OAKLAND RD	I-880	NB	AM	10	3	3,984	132.8	F	15	1	1,496	99.7	F	479	-5	474	6.9%	-32	-2	-34	-1.9%
				PM	60	3	4,835	26.9	D	65	1	1,453	22.4	C	680	15	695	10.1%	339	4	343	19.1%
US 101	I-880	OAKLAND RD	SB	AM	65	3	3,019	15.5	B	65	1	675	10.4	B	77	12	89	1.3%	153	2	155	8.6%
				PM	10	3	4,418	147.3	F	20	1	1,472	73.6	F	432	-4	428	6.2%	-87	-1	-88	-4.9%
US 101	I-880	OLD BAYSHORE HWY	NB	AM	10	3	4,739	158.0	F	25	1	1,553	62.1	F	989	0	989	14.3%	-97	0	-97	-5.4%
				PM	65	3	4,572	23.4	C	65	1	848	13.0	B	862	0	862	12.5%	198	0	198	11.0%
US 101	OLD BAYSHORE HWY	I-880	SB	AM	65	3	4,166	21.4	C	65	1	331	5.1	A	846	0	846	12.3%	-59	0	-59	-3.3%
				PM	10	3	4,401	146.7	F	15	1	1,439	95.9	F	891	0	891	12.9%	-61	0	-61	-3.4%
US 101	OLD BAYSHORE HWY	FIRST ST	NB	AM	15	3	5,298	117.7	F	15	1	1,183	78.9	F	618	0	618	9.0%	-97	0	-97	-5.4%
				PM	60	3	5,291	29.4	D	65	1	1,108	17.0	C	-289	0	-289	-4.2%	198	0	198	11.0%
US 101	FIRST ST	OLD BAYSHORE HWY	SB	AM	65	3	2,585	13.3	B	65	1	331	5.1	A	-535	0	-535	-7.8%	-59	0	-59	-3.3%
				PM	10	3	4,044	134.8	F	20	1	1,519	76.0	F	324	0	324	4.7%	-61	0	-61	-3.4%
US 101	FIRST ST	GUADALUPE PKWY	NB	AM	15	3	4,831	107.3	F	30	1	1,597	53.2	E	257	24	281	4.1%	-31	8	-23	-1.3%
				PM	65	3	3,391	17.4	C	65	1	729	11.2	B	74	-3	71	1.0%	80	-1	79	4.4%
US 101	GUADALUPE PKWY	FIRST ST	SB	AM	60	3	3,824	21.2	C	65	1	408	6.3	A	-130	-6	-136	-2.0%	51	-1	52	2.9%
				PM	15	3	4,923	109.4	F	20	1	1,470	73.5	F	342	31	373	5.4%	61	9	70	3.9%
US 101	GUADALUPE PKWY	DE LA CRUZ BLVD	NB	AM	15	3	4,855	107.9	F	25	1	1,889	75.6	F	821	24	845	12.2%	451	8	459	25.5%
				PM	55	3	6,419	38.9	D	65	1	1,019	15.7	B	313	-4	309	4.5%	239	0	239	13.3%
US 101	DE LA CRUZ BLVD	GUADALUPE PKWY	SB	AM	60	3	5,885	32.7	D	65	1	786	12.1	B	131	-6	125	1.8%	67	-1	66	3.7%
				PM	15	3	5,171	114.9	F	15	1	1,929	128.6	F	641	30	671	9.7%	479	10	489	27.1%

Project Impact

/a/ Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2001.

**Table 4
Freeway Segment Levels of Service - Alternative 2**

Freeway	Segment	Direction	Peak Hour	NSJ Buildout with Alt. 1 Trips										Project Trips								
				Mixed-Flow Lanes					HOV Lane Traffic Volume					Mixed-Flow				HOV Lane				
				Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	Ave. Speed/a/	# of Lanes	Volume/a/	Density	LOS	NSJ Project Trips	Alt. 1 Net Project Trips	NSJ/Alt. 1 Trips	% Capacity	NSJ Project Trips	Alt. 1 Net Project Trips	NSJ/Alt. 1 Trips	% Capacity	
I-880	COLEMAN	SR 87	NB	AM	15	3	5,148	114.4	F	--	--	--	--	--	560	-2	558	8.1%	--	--	--	--
				PM	55	3	6,318	38.3	D	--	--	--	--	--	510	28	538	7.8%	--	--	--	--
I-880	SR 87	COLEMAN	SB	AM	60	3	5,883	32.7	D	--	--	--	--	--	456	27	483	7.0%	--	--	--	--
				PM	25	3	4,636	61.8	F	--	--	--	--	--	506	0	506	7.3%	--	--	--	--
I-880	SR 87	N. 1ST	NB	AM	15	3	4,388	97.5	F	--	--	--	--	--	560	-2	558	8.1%	--	--	--	--
				PM	60	3	4,858	27.0	D	--	--	--	--	--	510	28	538	7.8%	--	--	--	--
I-880	N. 1ST	SR 87	SB	AM	60	3	4,083	22.7	C	--	--	--	--	--	456	27	483	7.0%	--	--	--	--
				PM	25	3	4,706	62.7	F	--	--	--	--	--	506	0	506	7.3%	--	--	--	--
I-880	N. 1ST	US 101	NB	AM	15	3	5,239	116.4	F	--	--	--	--	--	651	-2	649	9.4%	--	--	--	--
				PM	60	3	5,441	30.2	D	--	--	--	--	--	41	28	41	0.8%	--	--	--	--
I-880	US 101	N. 1ST	SB	AM	60	3	5,304	29.5	D	--	--	--	--	--	-303	27	-276	-4.0%	--	--	--	--
				PM	25	3	5,673	75.6	F	--	--	--	--	--	793	0	793	11.5%	--	--	--	--
I-880	US 101	BROKAW	NB	AM	15	2	3,454	115.1	F	--	--	--	--	--	727	-3	724	16.5%	--	--	--	--
				PM	25	2	3,155	63.1	F	--	--	--	--	--	316	39	355	8.1%	--	--	--	--
I-880	BROKAW	US 101	SB	AM	55	2	4,428	40.3	D	--	--	--	--	--	101	37	138	3.1%	--	--	--	--
				PM	20	2	4,045	101.1	F	--	--	--	--	--	1,165	0	1,165	26.5%	--	--	--	--
I-880	BROKAW	MONTAGUE	NB	AM	55	2	4,321	39.3	D	--	--	--	--	--	429	42	471	10.7%	--	--	--	--
				PM	55	2	4,473	40.7	D	--	--	--	--	--	395	8	403	9.2%	--	--	--	--
I-880	MONTAGUE	BROKAW	SB	AM	55	2	4,858	44.2	D	--	--	--	--	--	562	6	568	12.9%	--	--	--	--
				PM	15	2	3,951	131.7	F	--	--	--	--	--	817	44	861	19.6%	--	--	--	--
US 101	MCKEE RD	MABURY RD	NB	AM	10	3	3,672	122.4	F	15	1	1,365	91.0	F	-347	-1	-348	-5.1%	16	-1	15	0.9%
				PM	60	3	3,831	21.3	C	65	1	519	8.0	A	26	25	51	0.7%	126	3	129	7.1%
US 101	MABURY RD	MCKEE RD	SB	AM	65	3	3,661	18.8	C	65	1	649	10.0	A	316	25	341	4.9%	317	2	319	17.7%
				PM	35	3	5,555	52.9	E	55	1	2,001	36.4	D	195	0	195	2.8%	21	0	21	1.2%
US 101	MABURY RD	OAKLAND RD	NB	AM	10	3	4,598	153.3	F	15	1	1,562	104.2	F	579	-1	578	8.4%	213	-1	212	11.8%
				PM	60	3	4,692	26.1	D	65	1	603	9.3	A	887	25	912	13.2%	210	3	213	11.8%
US 101	OAKLAND RD	MABURY RD	SB	AM	65	3	3,781	19.4	C	65	1	533	8.2	A	486	25	461	6.7%	201	2	203	11.3%
				PM	35	3	5,722	54.5	E	55	1	1,849	33.6	D	362	0	362	5.2%	-131	0	-131	-7.3%
US 101	OAKLAND RD	I-880	NB	AM	10	3	3,988	132.9	F	15	1	1,498	99.8	F	479	-1	478	6.9%	-32	0	-32	-1.8%
				PM	60	3	4,829	26.8	D	65	1	1,451	22.3	C	680	9	689	10.0%	339	2	341	19.0%
US 101	I-880	OAKLAND RD	SB	AM	65	3	3,016	15.5	B	65	1	675	10.4	B	77	9	86	1.3%	153	2	155	8.6%
				PM	10	3	4,422	147.4	F	20	1	1,473	73.7	F	432	0	432	6.3%	-87	0	-87	-4.8%
US 101	I-880	OLD BAYSHORE HWY	NB	AM	10	3	4,739	158.0	F	25	1	1,553	62.1	F	989	0	989	14.3%	-97	0	-97	-5.4%
				PM	65	3	4,572	23.4	C	65	1	848	13.0	B	862	0	862	12.5%	198	0	198	11.0%
US 101	OLD BAYSHORE HWY	I-880	SB	AM	65	3	4,166	21.4	C	65	1	331	5.1	A	846	0	846	12.3%	-59	0	-59	-3.3%
				PM	10	3	4,401	146.7	F	15	1	1,439	95.9	F	891	0	891	12.9%	-61	0	-61	-3.4%
US 101	OLD BAYSHORE HWY	FIRST ST	NB	AM	15	3	5,298	117.7	F	15	1	1,183	78.9	F	618	0	618	9.0%	-97	0	-97	-5.4%
				PM	60	3	5,291	29.4	D	65	1	1,108	17.0	C	-289	0	-289	-4.2%	198	0	198	11.0%
US 101	FIRST ST	OLD BAYSHORE HWY	SB	AM	65	3	2,585	13.3	B	65	1	331	5.1	A	-535	0	-535	-7.8%	-59	0	-59	-3.3%
				PM	10	3	4,044	134.8	F	20	1	1,519	76.0	F	324	0	324	4.7%	-61	0	-61	-3.4%
US 101	FIRST ST	GUADALUPE PKWY	NB	AM	15	3	4,828	107.3	F	30	1	1,596	53.2	E	257	21	278	4.0%	-31	7	-24	-1.3%
				PM	65	3	3,399	17.4	C	65	1	731	11.2	B	74	5	79	1.1%	80	1	81	4.5%
US 101	GUADALUPE PKWY	FIRST ST	SB	AM	60	3	3,834	21.3	C	65	1	409	6.3	A	-130	4	-126	-1.8%	51	0	51	2.8%
				PM	15	3	4,914	109.2	F	20	1	1,468	73.4	F	342	22	364	5.3%	61	7	68	3.8%
US 101	GUADALUPE PKWY	DE LA CRUZ BLVD	NB	AM	15	3	4,852	107.8	F	25	1	1,888	75.5	F	821	21	842	12.2%	451	7	458	25.5%
				PM	55	3	6,428	39.0	D	65	1	1,020	15.7	B	313	5	318	4.6%	239	1	240	13.3%
US 101	DE LA CRUZ BLVD	GUADALUPE PKWY	SB	AM	60	3	5,895	32.7	D	65	1	787	12.1	B	131	4	135	2.0%	67	0	67	3.7%
				PM	15	3	5,163	114.7	F	15	1	1,926	128.4	F	641	22	663	9.6%	479	7	486	27.0%

Project Impact

/a/ Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2001.

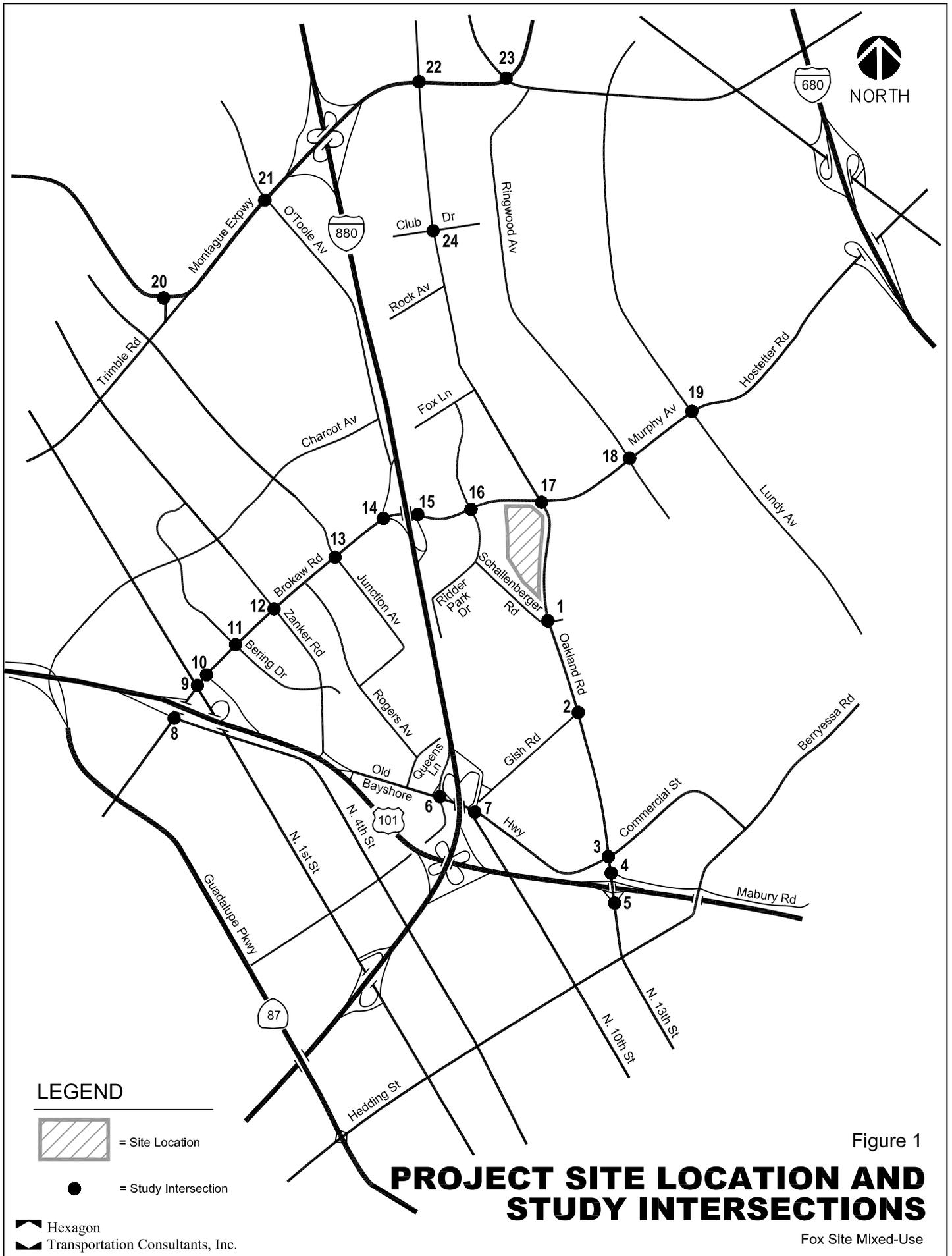
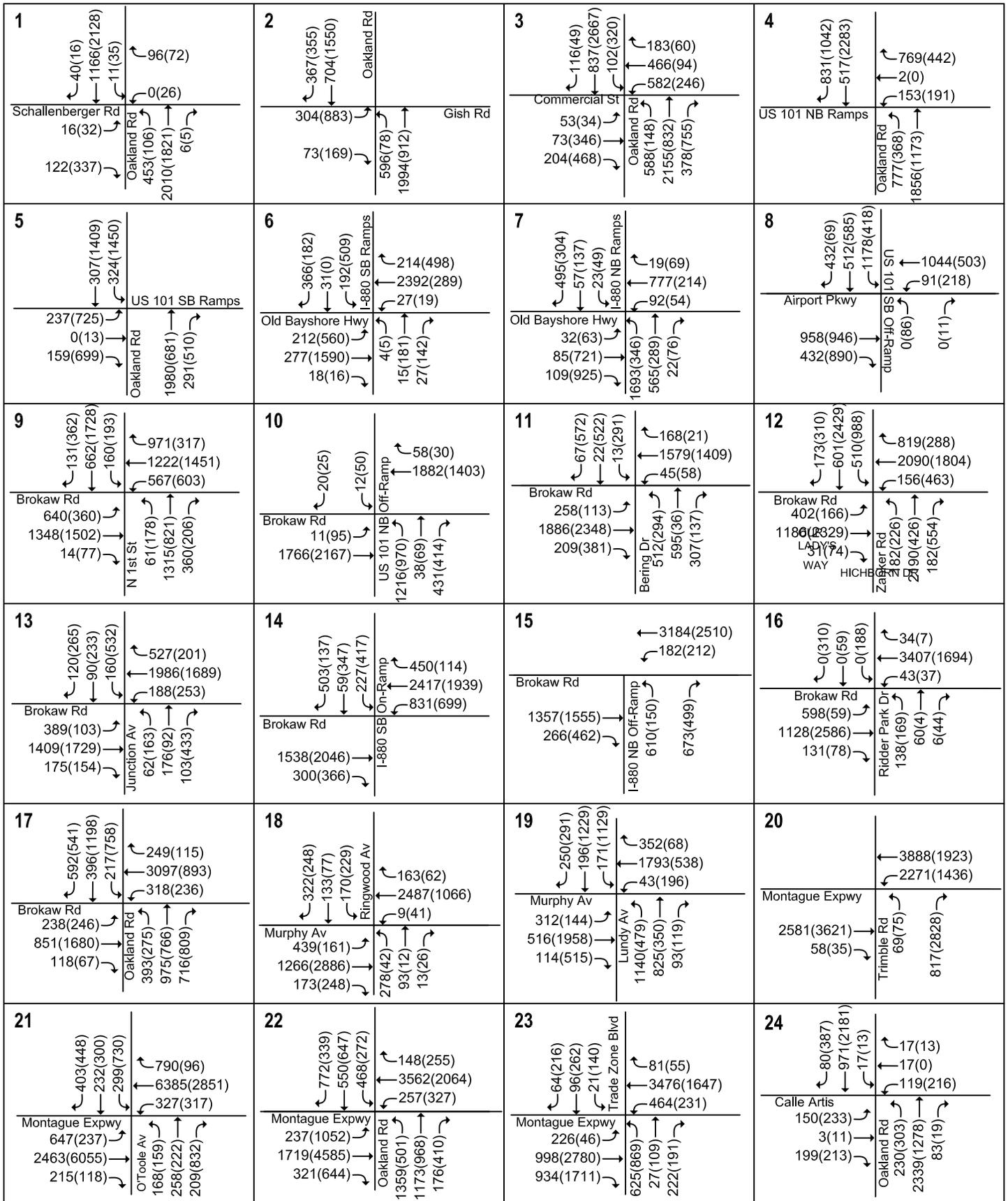


Figure 1



Legend

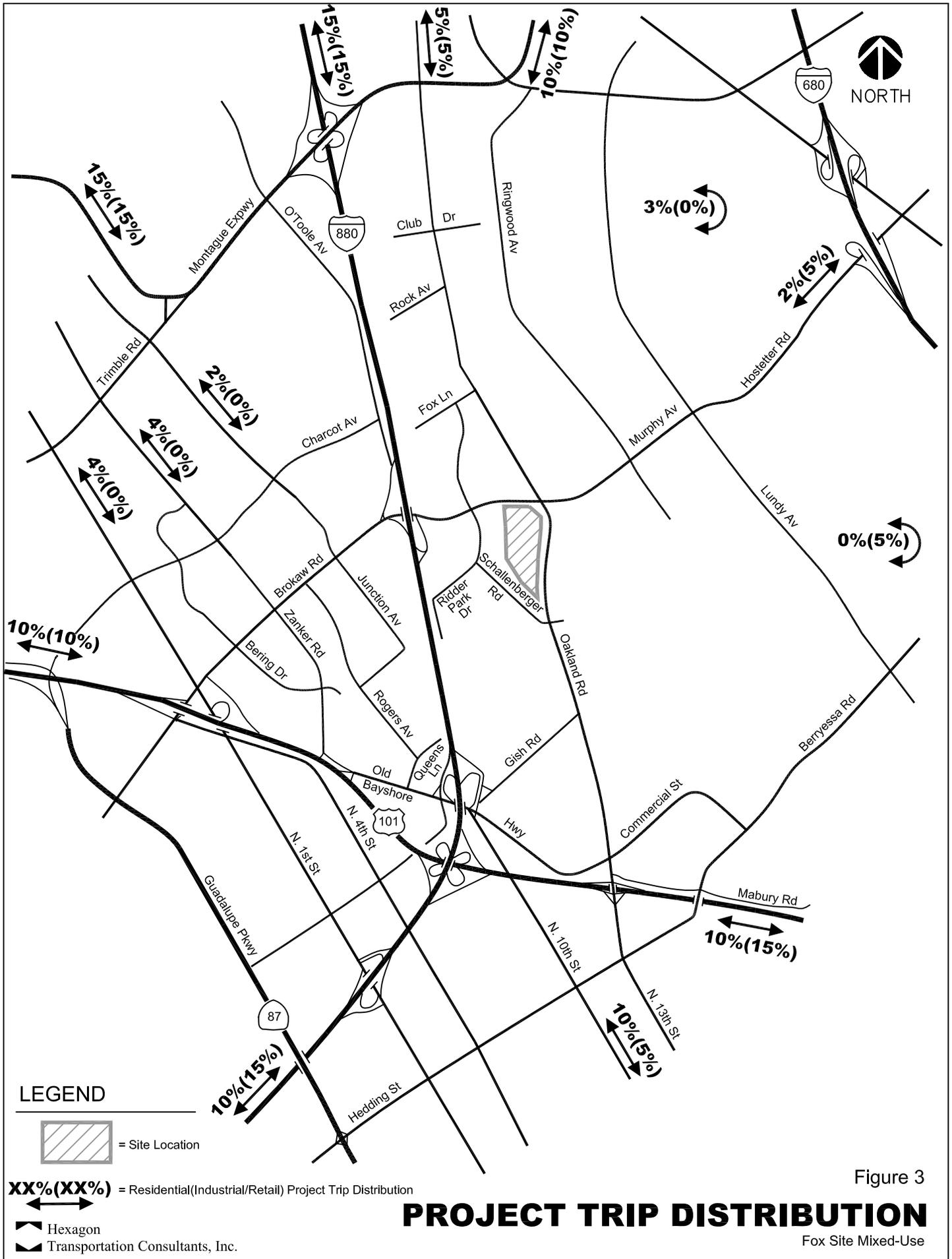
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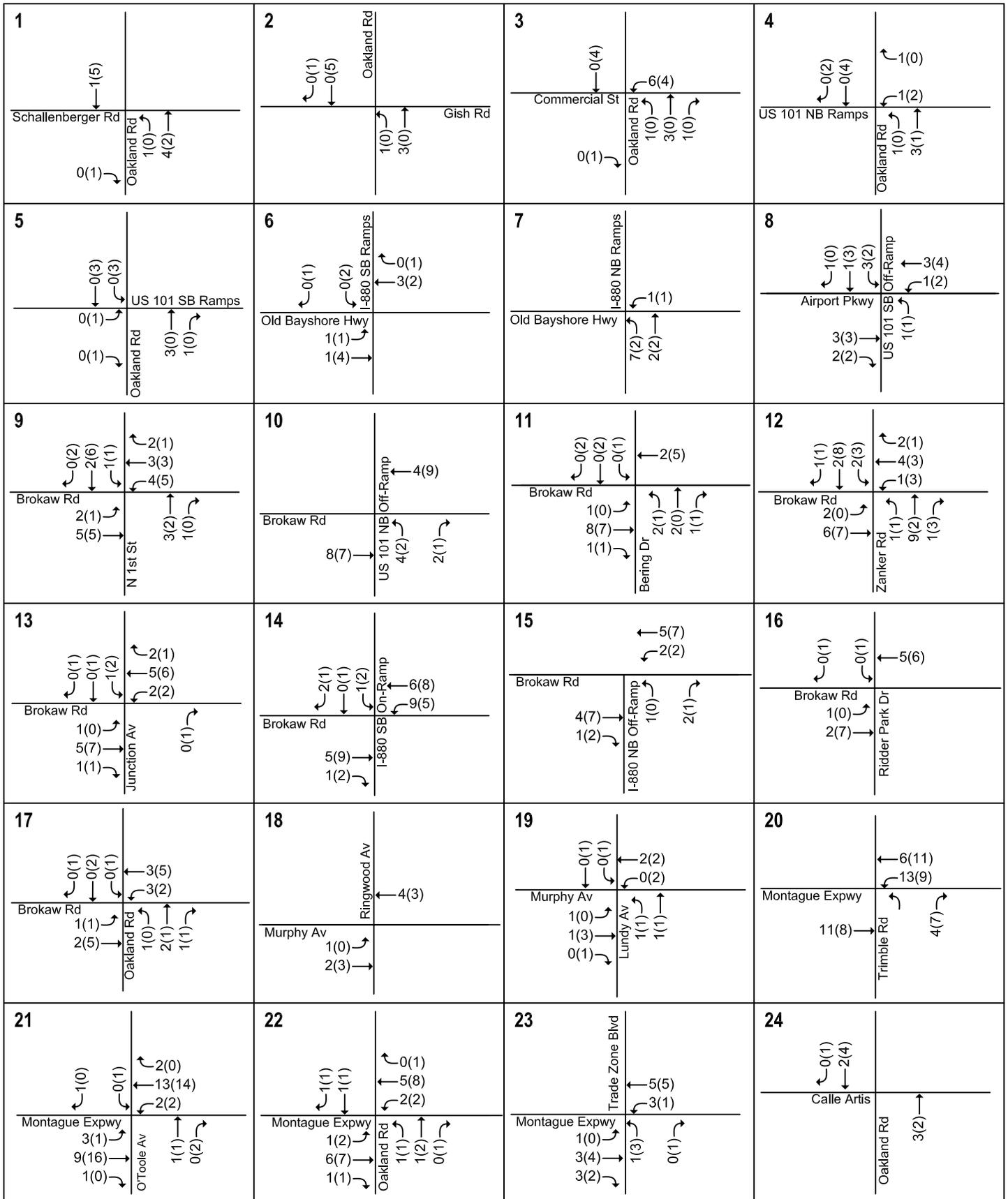
Hexagon
 Transportation Consultants, Inc.

NSJDP BUILDOUT TRAFFIC VOLUMES

Figure 2

Fox Site Mixed-Use





Legend

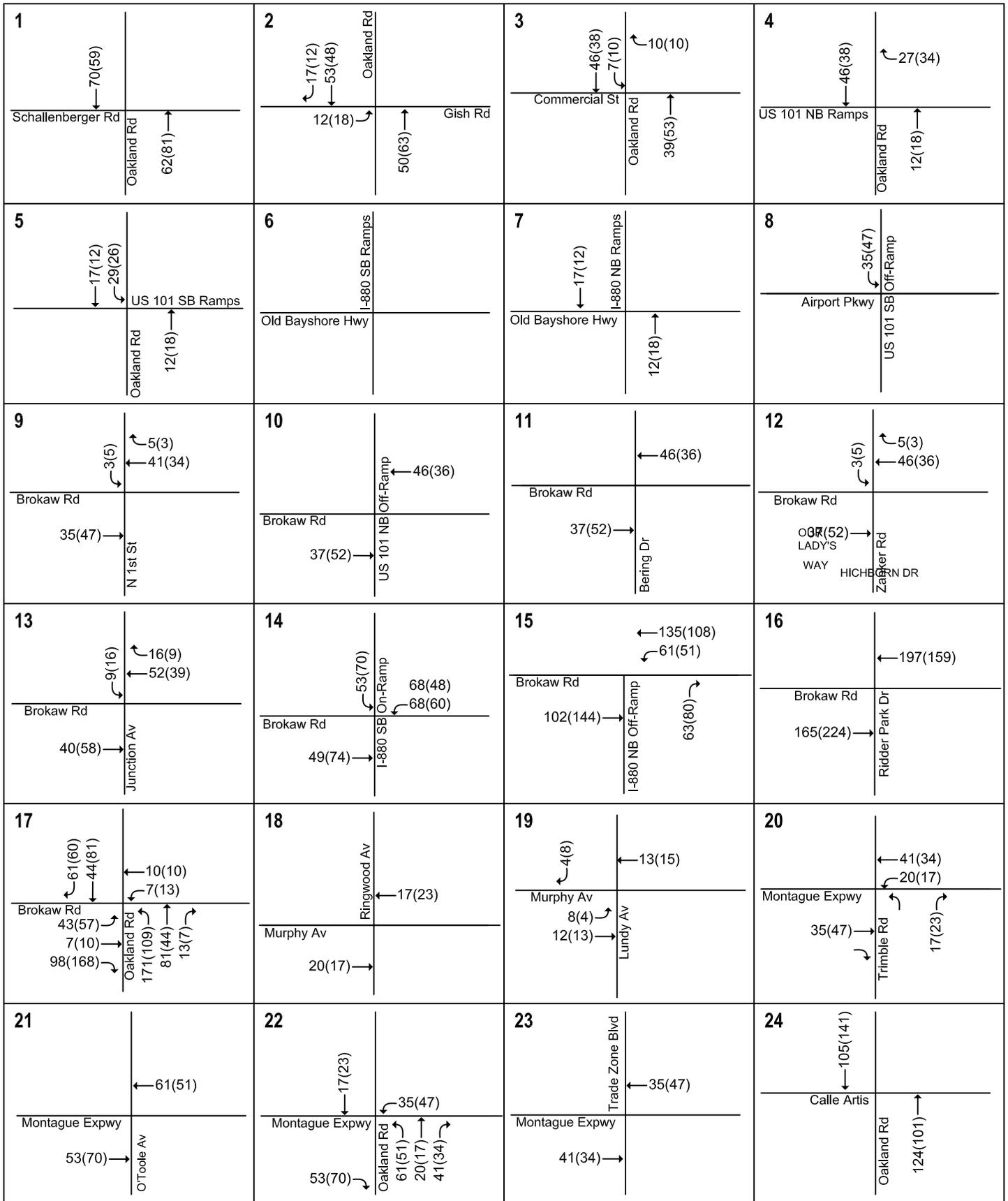
XX(X) = AM(PM) Peak-Hour Traffic Volumes

- Hexagon
- Transportation Consultants, Inc.

Figure 4

NORTH SAN JOSE SITE PLANNED AND RELOCATED R&D TRIPS

Fox Site Mixed-Use



Legend

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

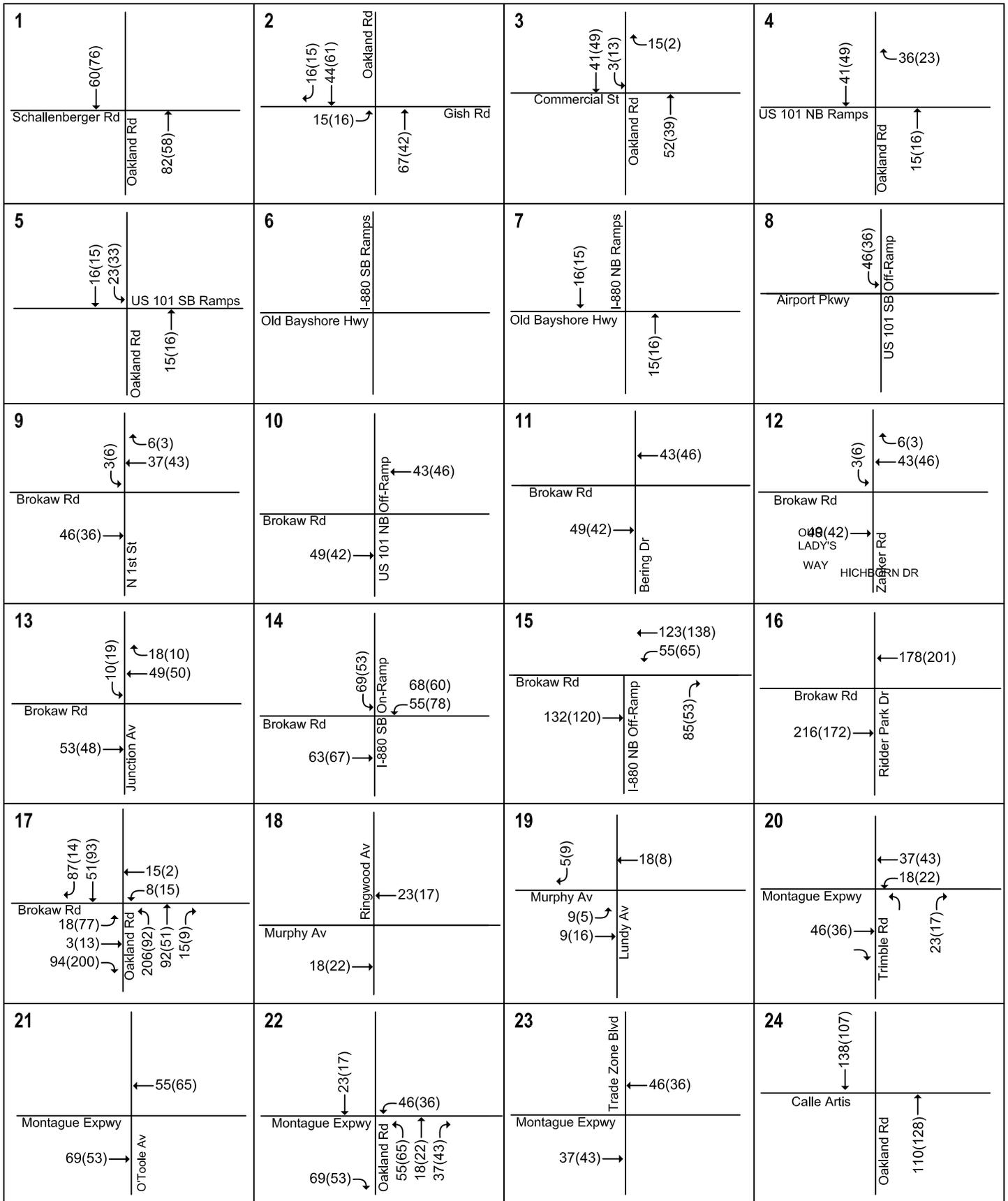
Hexagon

Transportation Consultants, Inc.

ALTERNATIVE 1 PROJECT TRIP ASSIGNMENT

Figure 5

Fox Site Mixed-Use



Legend

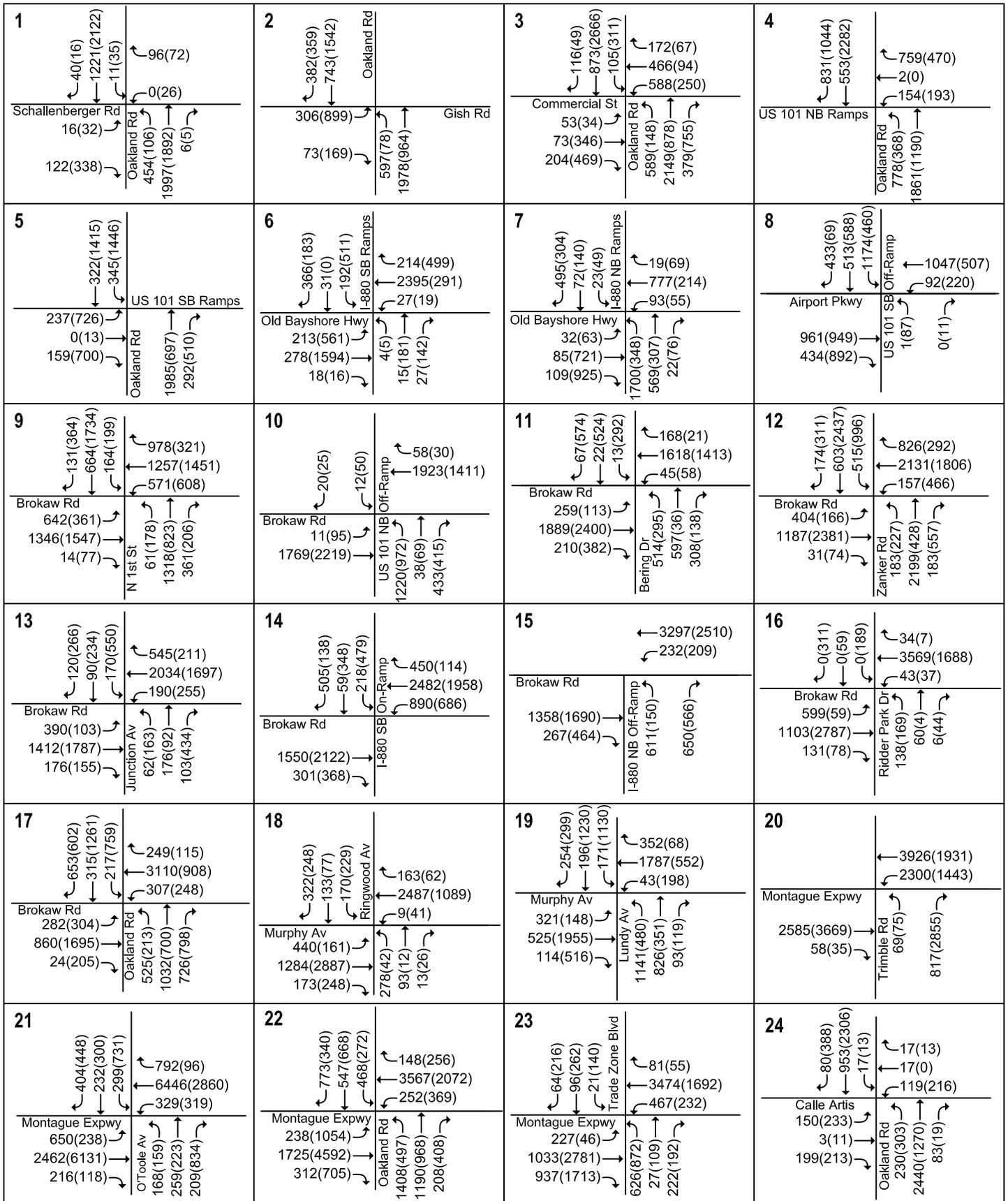
XX(X) = AM(PM) Peak-Hour Traffic Volumes

Hexagon
 Transportation Consultants, Inc.

ALTERNATIVE 2 PROJECT TRIP ASSIGNMENT

Figure 6

Fox Site Mixed-Use



Legend

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

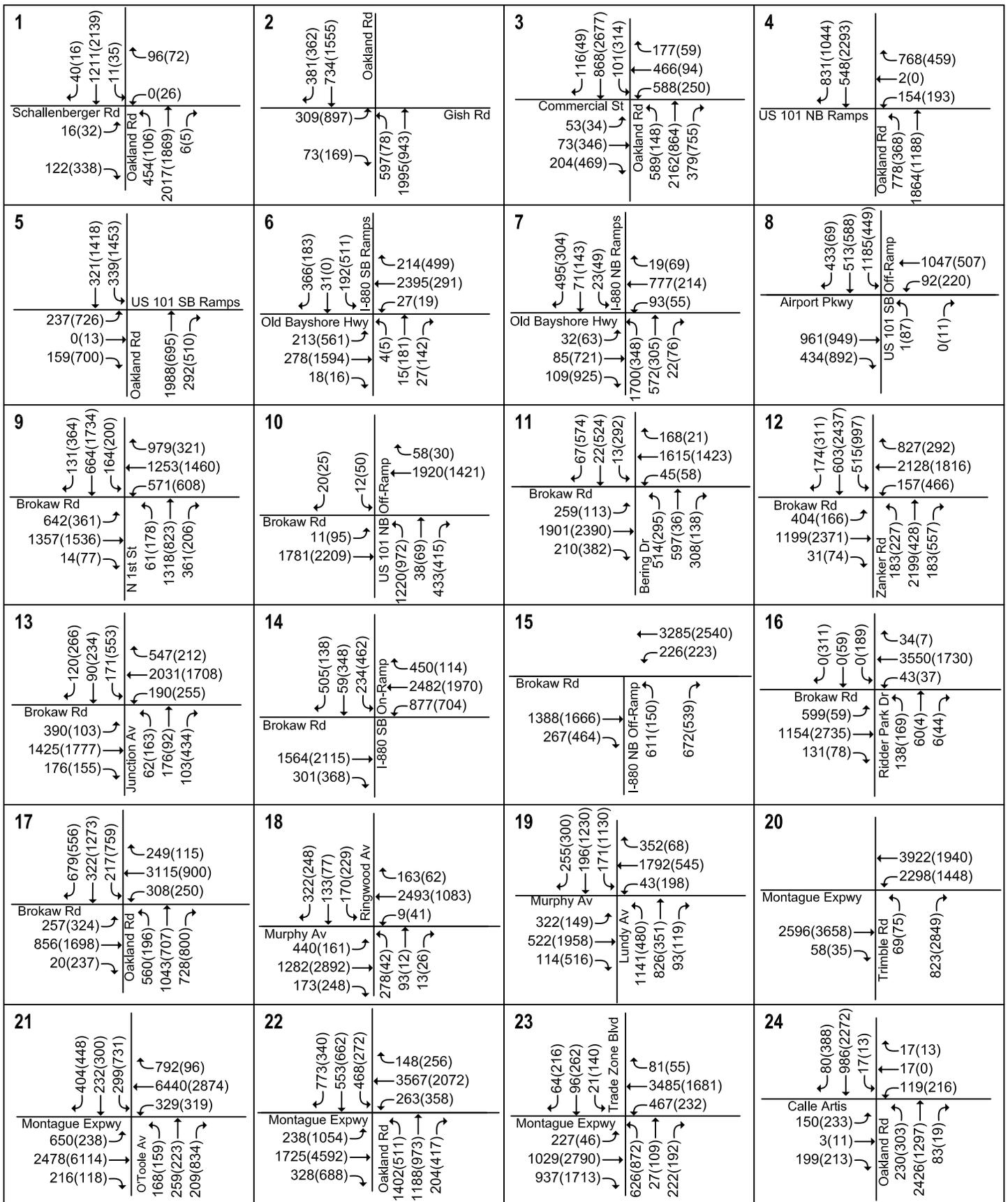
Hexagon

Transportation Consultants, Inc.

ALTERNATIVE 1 PROJECT TRAFFIC VOLUMES

Figure 7

Fox Site Mixed-Use



Legend

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

Hexagon

Transportation Consultants, Inc.

ALTERNATIVE 2 PROJECT TRAFFIC VOLUMES

Figure 8

Fox Site Mixed-Use