TRI-VALLEY TRANSPORTATION COUNCIL

Renee Morgan
TVTC Chair
Councilmember
Town of Danville
(925) 918-3999

David Haubert
TVTC Vice Chair
Supervisor District 1
Alameda County
(510) 272-6691

Jean Josey
Vice Mayor
City of Dublin
(925) 833-2530

If you have any questions related to the Tri-Valley Transportation Council meeting agenda. Please contact Allan Shields, TVTC Administrative staff at (925) 314-3378 or email at ashields@danville.ca.gov.

TVTC FINANCE SUBCOMMITTEE MEETING
SPECIAL MEETING

Thursday, March 12, 2026
11:30 a.m.

In-Person Meeting Locations:

1. Town of Danville, Community Meeting Room, 500 La Gonda Way, Danville, CA 94526

Remote Meeting Link:

Join Zoom Meeting Link:

https://us02web.zoom.us/j/87853375931?pwd=COVobfunNxF4l08BaHazenKNlKgLTG.1

Meeting ID: 878 5337 5931
Passcode: 248506

One tap mobile
+16699006833,87853375931# US (San Jose)

Members of the public who wish to participate in the meeting electronically have the option of giving public comments via Zoom during the Public Comment period (for topics not on the agenda), in addition to each of the items on the agenda.

If you are submitting a public comment via email, please do so **by 10:00 a.m. on Thursday, March 12, 2026,** to ashields@danville.ca.gov. Please include **"Public Comment "03/12/2026"** in the subject line. In the body of the email, please include your name and the item you wish to speak on. Public comments submitted will be read during Public Comment and will be subject to the regular three-minute time restriction.

This AGENDA is posted in accordance with Government Code Section 54954.2(a). If requested, pursuant to Government Code Section 54953.2, this agenda shall be made available in appropriate alternative formats to persons with a disability, as required by

TRI-VALLEY TRANSPORTATION COUNCIL

Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Section 12132) (ADA), and the federal rules and regulations adopted in implementation thereof. To make a request for disability-related modification or accommodation, please contact the Administrator at (925) 314-3378 or by email at ashields@danville.ca.gov at least 24 hours in advance of the meeting. Upon receiving a request, the TVTC will swiftly resolve requests for reasonable accommodation for individuals with disabilities, consistent with the federal ADA, and resolve any doubt in favor of accessibility.

Agenda materials that become available within 24 hours in advance of the meeting, and after publishing of the agenda, will be available at Danville Town Offices, 500 La Gonda Way, and will be posted on the TVTC's website at https://www.tvtc-jpa.com/Meetings/Upcoming-Meetings.aspx

Once connected to the Zoom platform using the Zoom link information provided, the public speaker will be added to the Zoom webinar as an attendee and muted. The speaker will be able to observe the meeting from the Zoom platform. The speaker will be unmuted to give public testimony via Zoom.

TRI-VALLEY TRANSPORTATION COUNCIL

AGENDA

1. **Call to Order**
2. **Roll Call and Self Introductions**
3. **Public Comment**
4. **Consent Calendar**
    a. APPROVE February 9, 2026 Minutes
5. **New Business**
    a. REVIEW AND RECOMMEND AB 3177 Fee Adjustment
    b. REVIEW AND PROVIDE DIRECTION on TVTDF Revenue Conditions and Policy for Project Funding
    c. REVIEW AND RECOMMEND Tri-Valley Transportation Development Fee for FY2027
6. **Administrative Business**
    a. REVIEW Mechanics Bank, LAIF, and Revenue and Expenditure Reports*
7. **Informational Items**
    a. *Audit in progress and performed by Cropper Accountancy Corporation / Cropper Rowe, LLP*
    b. *TVTC Board Meeting – Danville Town Offices, Community Room, April 20, 2026, at 4:00 p.m.*
    c. *Complete Form 700 for the Fair Political Practices Commission (FPPC) https://form700.fppc.ca.gov/ - Due by April 1, 2026*
8. **Adjournment**

***** *Attachment(s)*

This page intentionally left blank.

Item 4

This page intentionally left blank.

Item 4a - DRAFT - MEETING MINUTES

TRI-VALLEY TRANSPORTATION COUNCIL FINANCE SUBCOMMITTEE
SPECIAL MEETING
Community Meeting Room, Danville, 500 La Gonda Way, 94526 and
Zoom Teleconference Call
Monday, February 9, 2026

1. CALL TO ORDER

The Tri-Valley Transportation Council (TVTC) Finance Subcommittee was called to order at 3:36 p.m. by Chair, Renee Morgan, Town of Danville.

2. ROLL CALL, AND SELF-INTRODUCTIONS

TVTC Members in Attendance:

Renee Morgan, Chair, Mayor, Town of Danville
David Haubert, Vice Chair, Supervisor, Alameda County
Jean Josey, Vice Mayor, City of Dublin

TVTC Staff in Attendance:

Allan Shields, Town of Danville
Sai Midididdi, City of Dublin
Maritoni Maravilla, Alameda County

3. PUBLIC COMMENT

None

4. CONSENT CALENDAR

5. NEW BUSINESS

a. REVIEW AND RECOMMEND the AB 1600 Report

Motion to recommend AB 1600 Report by **Josey**; Second by **Haubert** with a caveat to check on the need to report AB1600 fees for the next five years

Approved (Ayes 3; Noes 0; Abstain 0)

b. REVIEW AND RECOMMEND the TVTC Board approve the Revised FY26 Administrative Operating Budget

Motion to recommend the Revised FY26 Administrative Operating Budget by **Haubert;** Second by **Josey**

Approved (Ayes 3; Noes 0; Abstain 0)

c. REVIEW AND RECOMMEND the TVTC Board approve the Proposed FY27 Administrative Operating Budget

Motion to recommend the Proposed FY27 Administrative Operating Budget by **Josey**; Second by **Haubert** with the following conditions:
-reduce Legal Services from $20,000 to $17,500
-reduce Accounting Services from $20,000 to $17,500
-TVTC Administrator has the discretion to move funds around within the line items without having to go to Finance Subcommittee

Approved (Ayes 3; Noes 0; Abstain 0)

d. REVIEW Year End Financial Report

6. ADMINISTRATIVE BUSINESS

a. REVIEW Mechanics Bank, LAIF, and Revenue and Expenditure Reports*

7. INFORMATIONAL ITEMS

a. Audit in progress and performed by Cropper Accountancy Corporation/Cropper Rowe, LLP
b. February 9, 2026, at 4 p.m. – TVTC Board Meeting
c. March 19, 2026, at 4:00 p.m. – TVTC Finance Subcommittee Meeting
d. Complete Form 700 for the Fair Political Practices Commission (FPPC) https://form700.ca.gov/ - Due by April 1, 2026

8. ADJOURNMENT

The meeting was adjourned by Chair Morgan at 4:13 p.m.

Item 5

This page intentionally left blank.

TRI-VALLEY TRANSPORTATION COUNCIL

Item 5a

Renee Morgan
TVTC Chair
Councilmember
Town of Danville
(925) 918-3999

David Haubert
TVTC Vice Chair
Supervisor District 1
Alameda County
(510) 272-6691

Jean Josey
Vice Mayor
Dublin
(925) 833-2530

If you have any questions related to the Tri-Valley Transportation Council meeting agenda. Please contact Diane Friedmann, TVTC Administrative staff at (925) 314-3378 or email at dfriedmann@danville.ca.gov

To: TVTC Finance Subcommittee

From: Technical Advisory Committee (TAC)

Date: March 12, 2026

Subject: Recommend Addition of Transit Priority Area Residential Categories to the TVTDF Rate Schedule Pursuant to AB 3177

BACKGROUND

The Tri-Valley Transportation Development Fee (TVTDF) allocates a fair share of the cost of regionally significant transportation infrastructure to new development across the seven Tri-Valley jurisdictions.

The fee program is administered by the Tri-Valley Transportation Council (TVTC) and is supported by development impact fees collected by the member agencies. Local jurisdictions collect the fee from development projects and transmit not less than 80 percent of the fees collected to the TVTC Treasurer each quarter, while up to 20 percent may be retained locally for eligible projects included in the Strategic Expenditure Plan (SEP).

The current TVTDF rate schedule is based on the findings of the **2020 Nexus Study**, which established the relationship between development-generated travel demand and the regional transportation improvements included in the Strategic Expenditure Plan. The current fee structure includes six land use categories: Single-Family Residential, Multi-Family Residential, Office, Retail, Industrial, and Other.

In September 2024, the State of California adopted **Assembly Bill 3177 (AB 3177)**, which amended the Mitigation Fee Act to require agencies that impose traffic impact fees to establish a **lower impact fee rate for qualifying residential development located within a Transit Priority Area (TPA)**. Under the statute, qualifying housing developments must be located within one-half mile of a major transit stop and meet additional criteria related to nearby retail access and parking supply.

To support compliance with AB 3177, TVTC retained **Kimley-Horn and Associates** to conduct an analysis of potential trip reductions associated with residential development located within TPAs in the Tri-Valley region. The analysis evaluated land use forecasts, trip generation assumptions from the 2020 Nexus Study, and the potential for internal trip capture in transit-rich environments.

The analysis determined that developments within TPAs may experience **average peak-hour trip reductions ranging from approximately 17 percent to 43 percent**, with a weighted average reduction of approximately **27 percent across all sites analyzed**.

However, the analysis also notes that the level of trip reduction is highly dependent on the presence of complementary land uses and the degree to which mixed-use development occurs within each TPA.

DISCUSSION

AB 3177 requires that traffic impact fee programs include a reduced fee rate for qualifying residential development within Transit Priority Areas. The statute does not prescribe a specific percentage reduction but requires that agencies establish a lower rate that reasonably reflects the transportation demand characteristics of housing located near major transit.

The analysis prepared by Kimley-Horn indicates that reductions in vehicle trip generation within TPAs can vary significantly depending on the mix of residential, employment, and retail uses within each transit area. The modeling results show that reductions could range from approximately 9 percent to 33 percent, depending on development patterns and assumptions regarding internal trip capture.

Because the actual level of trip reduction is dependent on the extent to which complementary land uses develop within each TPA, applying the full modeled reduction could create uncertainty in the long-term revenue stability of the TVTDF program. The regional transportation projects funded through the TVTDF support travel demand generated throughout the Tri-Valley area, including trips originating from housing located near transit.

For this reason, the analysis concludes that a conservative reduction of approximately 10 percent could be justified for residential developments located within Transit Priority Areas. This level of reduction reflects the potential for reduced vehicle trips associated with transit-oriented housing while maintaining the nexus relationship between development and the regional transportation infrastructure funded through the TVTDF program.

Under this approach, the TVTDF rate schedule would be amended to add two new residential land use categories applicable only to qualifying housing developments located within Transit Priority Areas.

Current TVTDF Rates:

Single Family Residential:	$7,196.07 per Dwelling Unit (DU)
Multi-Family Residential:	$4,242.76 per DU
Office:	$9.61 per sq. ft. Gross Floor Area
Retail:	$6.13 per sq. ft. Gross Floor Area

Industrial:	$5.42 per sq. ft. Gross Floor Area
Other:	$6,655.28 per avg AM/PM peak hour trip
Accessory / Second Dwelling Unit (ADU/SDU):	$0
Affordable Housing:	$0

Proposed Additional Categories with 10% Fee Reductions:

Single-Family Residential (Transit Priority Area)	$6,476.46 per Dwelling Unit
Multi-Family Residential (Transit Priority Area)	$3,818.48 per Dwelling Unit

These rates represent a **10 percent reduction from the existing residential fee rates** and would apply only to residential projects that meet the eligibility criteria established in AB 3177.

Adding these categories would allow the TVTDF program to comply with State law while maintaining the overall structure of the current fee program and preserving the financial capacity needed to implement regional transportation improvements identified in the Strategic Expenditure Plan.

RECOMMENDATION

Staff recommends that the Finance Subcommittee recommend that the TVTC Board:

1. **Amend the TVTDF Rate Schedule** to add two new residential land use categories for qualifying developments located within Transit Priority Areas.
2. **Establish a reduced fee for these categories reflecting a 10 percent reduction** from the existing residential TVTDF rates.
3. **Adopt the following new fee levels:**

Single-Family Residential (TPA)	$6,476.46 per Dwelling Unit
Multi-Family Residential (TPA)	$3,818.48 per Dwelling Unit

ATTACHMENTS:

A- Resolution 2026-06
B- Kimley-Horn Memorandum – Transit Priority Area TVTDF Reduction Analysis

This page intentionally left blank.

Kimley»Horn

MEMORANDUM

To: Allan Shields
TVTC Administrator

From: Elizabeth Chau, P.E.
Kimley-Horn and Associates

Date: March 9, 2026

Subject: Preliminary Transit Priority Area TVTDF Reduction

The purpose of this memorandum is to summarize the methodology and results of a preliminary analysis to determine the reduction to the Tri-Valley Transportation Development Fee (TVTDF) for multi-family developments within transit priority areas (TPAs) in the Tri-Valley Development Area.

Background

TRI-VALLEY TRANSPORTATION DEVELOPMENT FEE (TVTDF)

The purpose of the Tri-Valley Transportation Development Fee (TVTDF) is to finance transportation improvement projects identified to reduce traffic-related impacts caused by future development in Tri-Valley Development Area (Dublin, Pleasanton, Livermore, Danville, San Ramon, and some unincorporated parts of Alameda County and Contra Costa County).

The current TVTDF rate schedule is based on the findings from a 2020 Nexus Study, adopted on August 16, 2021 and 2022 Update of the Strategic Expenditure Plan (SEP), adopted in June 2022. The current rate schedule includes six land use types: Single Family, Multi-Family, Retail, Office, Industrial, and Other.

AB 3177

California Assembly Bill 3177 (AB 3177) was adopted September 2024. The bill amends the Mitigation Fee Act to require agencies with traffic impact fees to include a lower rate for qualified residential developments within a “transit priority area” (TPA). To qualify, residential development must include the following characteristics:

- The development is located within a transit priority area (within ½ mile of major transit stop) and the major transit stop, if planned, is programmed to be completed before or within one year from the scheduled completion and occupancy of the housing development.
- Convenience retail uses, including a store that sells food, are located within one-half mile of the development.
- The development provides either the minimum number of parking spaces required by the local ordinance, or no more than one onsite parking space for zero- to two-bedroom units, and two onsite parking spaces for three or more bedroom units, whichever is less.

Transit Priority Area (TPA)

Attachment A presents the TPA locations assumed for this analysis. TPA locations were primarily chosen based on MTC's Transit Priority Project Eligible Area[1] within the Tri-Valley Development Area which includes:

- West Dublin/Pleasanton BART Station
- Dublin/Pleasanton BART Station
- Pleasanton ACE Station
- Livermore Transit Center
- South Vasco Road ACE Station

The San Ramon Transit Center was also added to the list as it is a major transit center, and the above list did not include any locations within Contra Costa County.

Fee Reduction Analysis

The preliminary fee reduction analysis utilized existing transit system, GIS, and trip generation data to determine the potential impacts and potential fee reduction for multi-family uses within TPAs. It is recommended that additional analysis be conducted to determine if other land use rates should be adjusted as well.

EXISTING TRANSIT SYSTEM

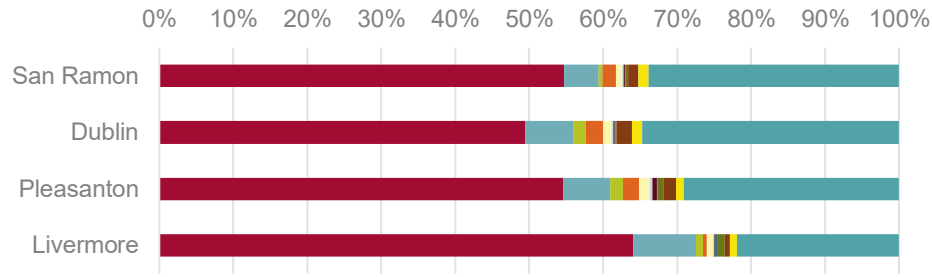
Existing transit conditions were evaluated by reviewing US Census data, existing transit schedule and routing information, and 2024 BART Station Profile. Detail information on each source is discussed in the next sections. The review identified notable gaps in the existing transit system, indicating that many TPA residents would remain dependent on private vehicles for a considerable portion of their trips in the absence of enhanced transit service.

US Census Data

Data from the 2024 Americna Community Survey 5-year estimates for *Means of Transportation to Work* (Table B08301) were pulled for the cities with a TPA (San Ramon, Dublin, Pleasanton, and Livermore), which is summarized in **Figure 1** and the full data as **Attachment B**. Note census data is only at the city level, which may underrepresent the mode split within TPA, but not significantly.

Figure 1 shows that most resident that do have to commute to work drive alone. The percentage of commuters that utilize transit ranges between 2% and 6%, where BART (subway/elevated rail) is highest, followed by bus, and ACE (commuter rail).

[1] MTC Transit Priority Project Eligible Areas, https://opendata.mtc.ca.gov/datasets/165d990e3d1341c4942b79e526eafe0f_0/explore?location=37.776529%2C-122.192197%2C9, accessed February 17, 2026.



	Livermore	Pleasanton	Dublin	San Ramon
Auto (Drive Alone)	64%	55%	49%	55%
Auto (Carpool)	8%	6%	7%	5%
Bus	1%	2%	2%	1%
Subway or elevated rail	1%	2%	2%	2%
Long-distance train or commuter rail	1%	1%	1%	1%
Other Public Transit	0%	0%	0%	0%
Taxi or ride-hailing services	0%	1%	0%	0%
Motorcycle	0%	0%	0%	0%
Bicycle	1%	1%	0%	0%
Walked	1%	2%	2%	1%
Other means	1%	1%	1%	1%
Worked from home	22%	29%	35%	34%

Figure 1: US Census Means of Transportation to Work

Existing Transit Service

Kimley-Horn reviewed current route and schedules information for all transit operators (BART, ACE Trains, Wheels (LAVTA), County Connection, AC Transit) within Tri-Valley Development Area. Currently BART's and Wheels Bus Route 30R provide high frequency headways (15-20 minutes) during peak commute times. All remaining local routes tend to run on 30-minutes and 60-minutes during the peak and off-peak periods respectively. Existing bus services are predominantly concentrated along arterial and major collector facilities and do not provide substantial coverage within local development areas. As a result, direct transit accessibility for residents may be limited.

2024 BART Station Profile

BART Station Profile provides mode splits and home locations for riders at each of their stations. Excerpts for the two stations with Tri-Valley Development Area (Dublin/Pleasanton and West Dublin/Pleasanton) are included as **Attachment C**. For the two stations, approximately 8-9% riders (86-250 riders) live within ½-mile of the station.

TPA LAND USE

To be consistent with the methodology used to determine the current rate schedule, the CCTA travel demand model 2020 and 2040 land use assumption from the 2020 Nexus Study was used in the analysis.

GIS analysis was conducted to identify traffic analysis zones (TAZ) that included any portion of a TPA. A map showing the affected TAZs and the TPA area coverage for each affected TAZ is provided in **Attachment A**. The percentage of TPA (TPA Coverage) within a TAZ area was calculated and summarized in **Table 1**. Detailed calculations are included in **Attachment D**.

The TPA coverage percentage for each TAZ was applied to approximate the land uses amounts within each TPA. **Table 2** presents the total land uses for the entire TVTC and TPA areas. Developments within TPAs account for 33% of total TVTC growth for multi-family residential developments and 8-30% for employment growth.

Table 1: TPA Coverage for Affected TAZ

TPA	Jurisdiction	Total Affected TAZ Area (SF)	TPA Area (SF)	TPA Coverage (%)
San Ramon Transit Center	San Ramon	47,775,426	21,862,422	46%
West Dublin/Pleasanton BART	Dublin	20,552,015	10,431,641	51%
	Pleasanton	39,807,658	11,439,314	29%
Dublin/Pleasanton BART	Dublin	22,269,589	10,978,405	49%
	Pleasanton	17,433,985	10,959,942	63%
Pleasanton ACE	Pleasanton	45,427,469	21,904,356	48%
Livermore Transit Cener	Livermore	64,619,848	21,903,167	34%
South Vasco Rd ACE	Livermore	115,103,758	21,902,660	19%
Total		**372,989,748**	**131,381,907**	**35%**

Table 2: Total Land Use Summary

Model Land Use Type	Total TVTC Area			TPA Area			% Total Growth
	2020	2040	Growth	2020	2040	Growth	
Multi-family Residential Household	29,449	46,905	17,456	2,017	7,743	17,456	33%
Retail Employment	50,168	60,403	10,235	9,285	11,830	2,541	25%
Service Employment	69,029	91,685	22,656	15,982	22,826	6,838	30%
Other Employment	67,621	88,356	20,735	15,873	20,703	4,829	23%
Agriculture Employment	1,225	1,224	-1	117	118	1	-
Manufacturing Employment	14,942	23,842	8,900	3,554	4,305	750	8%
Trading Employment	7,338	8,760	1,422	1,719	1,885	165	12%

Land Use, specifically multi-family residential household and total employment forecasts and growth, are summarized by TPA and by agency within TVTDF in **Table 3** and **Table 4**, respectively. Note the Dublin and Pleasanton portions of the West Dublin/Pleasanton BART and Dublin/Pleasanton BART TPAs were analyzed separately since both portions are separated by I-580 and may have different land use and transportation characteristics.

As noted previously, potential eligible developments account for 33% of total TVTC multi-family residential growth. These developments are only located in Dublin, Livermore, Pleasanton, and San Ramon, where it accounts for 16-48% growth per agency. Detailed land use data is included in **Attachment D**.

Table 3: TPA Land Use Summary for each TPA

TPA	Jurisdiction	Multi-family Residential Household			Total Employment		
		2020	2040	Growth	2020	2040	Growth
San Ramon Transit Center	San Ramon	98	2,921	2,823	18,395	22,083	3,688
West Dublin/Pleasanton BART	Dublin	44	1,008	964	4,421	6,432	2,008
	Pleasanton	14	113	99	5,106	8,080	2,974
Dublin/Pleasanton BART	Dublin	465	1,130	665	3,232	5,372	2,141
	Pleasanton	0	487	487	4,037	7,030	2,994
Pleasanton ACE	Pleasanton	857	949	92	3,269	4,323	1,055
Livermore Transit Center	Livermore	548	1,030	485	4,261	4,262	0
South Vasco Rd ACE	Livermore	21	105	84	3,809	4,081	271
Total		**2,047**	**7,743**	**5,699**	**46,530**	**61,663**	**15,131**

Table 4: TPA Land Use Summary by Agency

Agency	Multi-family Residential Household			Total Employment		
	2020	2040	Growth (% Total TVTC Growth)	2020	2040	Growth
Danville	0	0	0 (0%)	0	0	0
Dublin	509	2,138	1,629 (36%)	7,653	11,804	4,149
Livermore	569	1,135	569 (16%)	8,070	8,343	271
Pleasanton	871	1,549	678 (24%)	12,412	19,433	7,023
San Ramon	98	2,921	2,823 (48%)	18,395	22,083	3,688
Alameda Unincorporated	0	0	0 (0%)	0	0	0
Contra Costa Unincorporated	0	0	0 (0%)	0	0	0
Total	**2,047**	**7,743**	**5,699 (33%)**	**46,530**	**61,663**	**15,131**

TRIP GENERATION ANALYSIS

Trip generation analysis estimated trips based on Institute of Transportation Engineers (ITE) Trip Generation Manual data with internal capture reduction. As discussed in the **Existing Transit Service** section, the TPAs are still in a suburban context, which Trip Generation Manual data is based on. The trip generation analysis included only multi-family and retail uses as one requirement is that residential development must be with ½ mile of convenience retail uses.

Table 5 presents the trip generation rates by land use type utilized in this analysis. This analysis utilized trip generation rates assumption from the 2020 Nexus Study which used data from the ITE *Trip Generation Manual, 10th Edition*. In addition, a 30-percent reduction was applied to retail trips to account for pass-by trips. Note the 2020 Nexus utilized the average AM and PM peak-hour trip rates by land use type.

The trip generation for each TPA was calculated using 2040 land uses summarized in **Table 6**. 2040 employment was converted to square footage based on the retail employee density assumed in the 2020 Nexus Study of 500 square feet per employee**.** Internal capture reduction was determined based on NCHRP 684 methodology and applied where applicable. For the internal capture calculations, TVTDF Retail land use trips were split 50%/50% between retail and restaurant uses.

Table 5: 10th Edition Trip Generation Rates

Land Use Type	ITE LUC	AM Peak	PM Peak	Average Trip Rate
Multi-Family Residential	220	0.46	0.56	0.51
Retail*	820	0.66	2.67	1.66

* 2020 Nexus Study applied a 30% reduction to LUC 820 Shopping Center rates to account for pass-by trips.

Table 6: Land Uses for Trip Generation

TPA	Jurisdiction	MFR (DU)	Retail (SF)
San Ramon Transit Center	San Ramon	2,921	812,500
West Dublin/Pleasanton BART	Dublin	1,008	830,000
	Pleasanton	113	1,381,000
Dublin/Pleasanton BART	Dublin	1,130	1,065,000
	Pleasanton	487	508,000
Pleasanton ACE	Pleasanton	949	598,500
Livermore Transit Cener	Livermore	1,030	493,500
South Vasco Rd ACE	Livermore	105	226,500
Total		7,743	5,915,000

* Converted Retail Employment using 2020 Nexus Study employee density of 500 SF per retail employee.

Table 7 presents the trip generation summary for multi-family land use. The base is the number of trips based on trip generation rates from **Table 5** and reduced is the number or trips after accounting for internal capture as described in previous section. Detailed calculations are included as **Attachment E**.

Table 7: Multi-family Trip Generation Summary

TPA	Jurisdiction	2040 MFR DU	Base		Reduced	
			AM	PM	AM	PM
San Ramon Transit Center	San Ramon	2,921	1,344	1,636	1,291	1,516
West Dublin/Pleasanton BART	Dublin	1,008	464	564	420	444
	Pleasanton	113	52	63	43	38
Dublin/Pleasanton BART	Dublin	1,130	520	633	465	264
	Pleasanton	487	224	273	197	200
Pleasanton ACE	Pleasanton	949	437	531	405	443
Livermore Transit Cener	Livermore	1,030	474	577	446	504
South Vasco Rd ACE	Livermore	105	48	59	40	35

MULTI-FAMILY FEE REDUCTION

The reduction to the TVTDF multi-family fee was determined based on the percentage reduction between the base and reduced trips from the trip generation analysis (**Table 7**) and summarized in **Table 8**.

The AM trip reduction ranges from 4-17% and the PM trip reudction ranges from 7-58%. The AM/PM average trip reduction ranges between 6% and 37%. The weighted average for all sites is 15% and 20% if only considering potential TPAs identified by MTC.

When selecting a reduction, multiple factors should be considered. One factor is how the fee reduction may impact the amount of fees collected for the whole TVTC and individual agencies since TPAs in this study are in four of the seven jurisdictions. Another consideration is anticipated growth for other land uses. The reduction of trips within a TPA is very dependent on the synergy of complimentary land uses. If future employment, service, commercial, and other uses are not built, then the anticipated trip reduction would also decrease. Lastly, the how robust the transit system is to provide frequency and convenient service, so residents do not need an automobile.

Based on the analysis results, additional factors, and recognizing that current land use and transit infrastructure would yield lower trip reduction, a reduction between 10% and 15% could be justified, with a recommended reduction of 10%.

Table 8: Multi-family Trip Reduction Summary

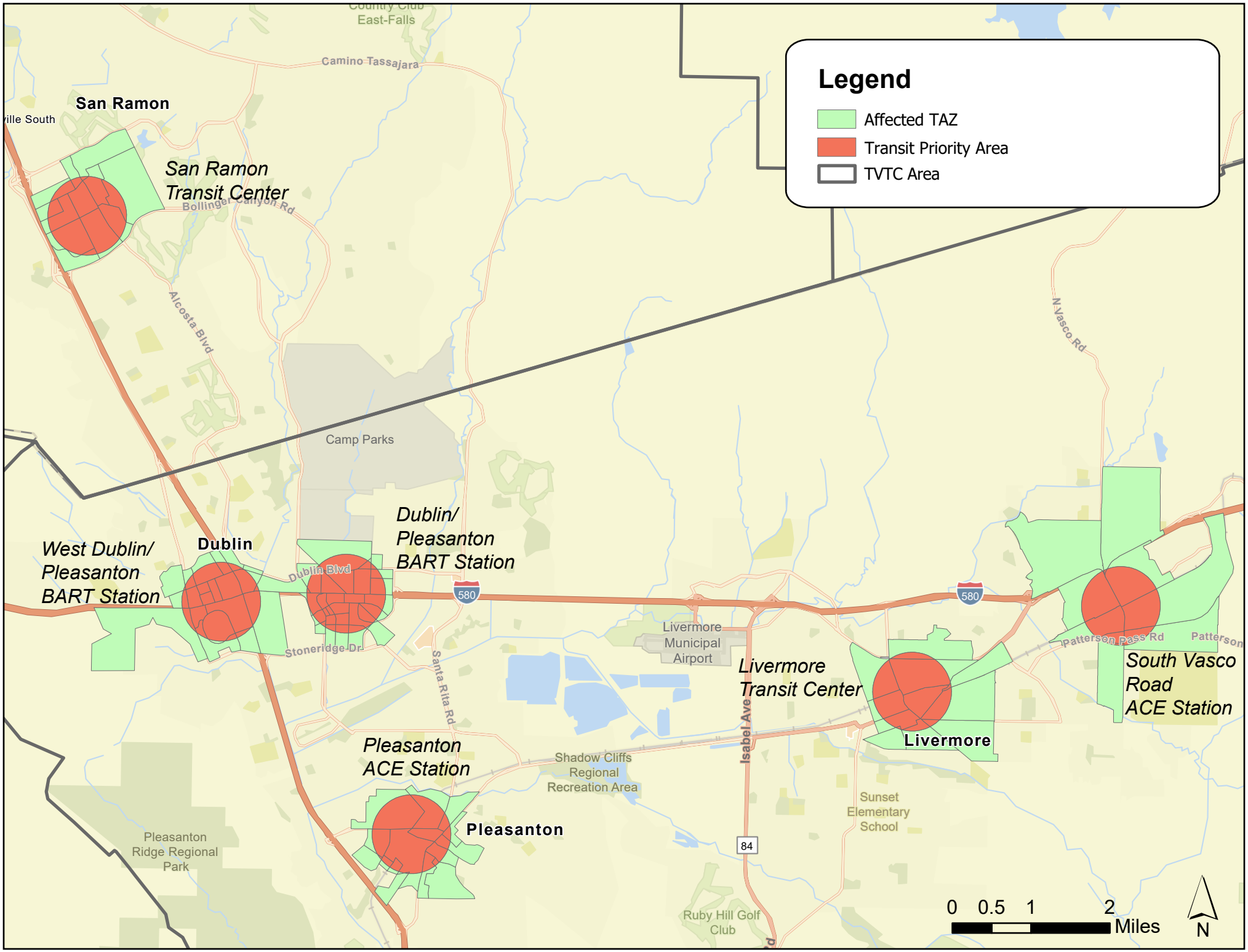
TPA	Jurisdiction	2040 MFR DU	% Trip Reduction		
			AM Peak	PM Peak	AM/PM Average
San Ramon Transit Center	San Ramon	2,921	4%	7%	6%
West Dublin/Pleasanton BART	Dublin	1,008	9%	21%	16%
	Pleasanton	113	17%	40%	30%
Dublin/Pleasanton BART	Dublin	1,130	11%	58%	37%
	Pleasanton	487	12%	27%	20%
Pleasanton ACE	Pleasanton	949	7%	17%	12%
Livermore Transit	Livermore	1,030	6%	13%	10%
South Vasco ACE	Livermore	105	17%	41%	30%
Weighted Average (All Sites)			7%	21%	15%
Weighted Average (MTC TPA - without San Ramon Transit Center)			9%	29%	20%

ATTACHMENT

Attachment A – TPA Locations
Attachment B – US Census Data
Attachment C – 2024 BART Station Profile Excerpts
Attachment D – Detailed Land Use
Attachment E – Trip Generation Calculations

Kimley»Horn

Attachment A – TPA Locations


Legend
Affected TAZ
Transit Priority Area
TVTC Area
San Ramon
San Ramon Transit Center
Bollinger Canyon Rd
Camino Tassajara
East-Falls
Alcosta Blvd
Camp Parks
N Vasco Rd
West Dublin/ Pleasanton BART Station
Dublin
Dublin Blvd
Dublin/ Pleasanton BART Station
580
Stoneridge Dr
Santa Rita Rd
Livermore Municipal Airport
Livermore Transit Center
Isabel Ave
Livermore
Patterson Pass Rd
South Vasco Road ACE Station
Pleasanton ACE Station
Shadow Cliffs Regional Recreation Area
Pleasanton
Pleasanton Ridge Regional Park
Sunset Elementary School
84
Ruby Hill Golf Club
0 0.5 1 2 Miles
N

Kimley»Horn

Attachment B – Detailed Land Use

TCID	Jurisdiction	TPA	Total TAZ Area (SF)	TPA Area (SF)	%	2020										2020 TPA									
						HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
1522	Dublin	Dublin/Pleasanton	1,890,479	1,890,479	100%	0	0	0	719	110	318	202	4	60	25	0	0	0	719	110	318	202	4	60	25
1523	Dublin	Dublin/Pleasanton	1,605,506	1,142,895	71%	0	0	0	330	41	145	95	1	32	16	0	0	0	235	29	103	68	1	23	11
1524	Dublin	Dublin/Pleasanton	925,897	141,774	15%	0	0	0	396	56	166	126	0	32	16	0	0	0	61	9	25	19	0	5	2
1525	Dublin	Dublin/Pleasanton	2,878,768	78,150	3%	0	0	0	838	104	398	220	5	74	37	0	0	0	23	3	11	6	0	2	1
1805	Dublin	Dublin/Pleasanton	8,130,987	2,673,474	33%	13	13	0	3,369	3,369	0	0	0	0	0	4	4	0	1,108	1,108	0	0	0	0	0
1807	Dublin	Dublin/Pleasanton	737,404	85,370	12%	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1825	Dublin	Dublin/Pleasanton	1,883,484	1,883,484	100%	745	280	465	699	699	0	0	0	0	0	745	280	465	699	699	0	0	0	0	0
1826	Dublin	Dublin/Pleasanton	1,605,668	1,035,273	64%	0	0	0	9	1	5	3	0	0	0	0	0	0	6	1	3	2	0	0	0
1827	Dublin	Dublin/Pleasanton	900,555	374,959	42%	0	0	0	9	2	3	4	0	0	0	0	0	0	4	1	1	2	0	0	0
1828	Dublin	Dublin/Pleasanton	1,387,745	1,387,746	100%	0	0	0	377	44	157	123	0	35	18	0	0	0	377	44	157	123	0	35	18
1863	Dublin	Dublin/Pleasanton	323,096	284,801	88%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1542	Pleasanton	Dublin/Pleasanton	859,626	859,624	100%	0	0	0	327	50	147	82	0	44	4	0	0	0	327	50	147	82	0	44	4
1543	Pleasanton	Dublin/Pleasanton	1,740,223	1,027,245	59%	0	0	0	160	31	58	39	0	29	3	0	0	0	94	18	34	23	0	17	2
1544	Pleasanton	Dublin/Pleasanton	1,674,289	433,090	26%	0	0	0	764	148	280	204	0	121	11	0	0	0	198	38	72	53	0	31	3
1545	Pleasanton	Dublin/Pleasanton	1,435,481	473,212	33%	0	0	0	118	20	47	29	0	20	2	0	0	0	39	7	15	10	0	7	1
1546	Pleasanton	Dublin/Pleasanton	1,646,172	239	0%	303	148	155	1,904	551	546	506	0	278	23	0	0	0	0	0	0	0	0	0	0
1698	Pleasanton	Dublin/Pleasanton	489,289	81,084	17%	0	0	0	241	23	95	87	0	30	6	0	0	0	40	4	16	14	0	5	1
1699	Pleasanton	Dublin/Pleasanton	644,117	493,663	77%	0	0	0	299	26	110	109	1	45	8	0	0	0	229	20	84	84	1	34	6
1700	Pleasanton	Dublin/Pleasanton	1,099,991	930,412	85%	0	0	0	828	82	283	323	3	115	22	0	0	0	700	69	239	273	3	97	19
1701	Pleasanton	Dublin/Pleasanton	576,898	576,897	100%	0	0	0	297	55	105	75	0	57	5	0	0	0	297	55	105	75	0	57	5
1702	Pleasanton	Dublin/Pleasanton	783,329	783,328	100%	0	0	0	281	38	121	77	0	41	4	0	0	0	281	38	121	77	0	41	4
1703	Pleasanton	Dublin/Pleasanton	840,466	840,465	100%	0	0	0	161	25	72	46	0	13	5	0	0	0	161	25	72	46	0	13	5
1704	Pleasanton	Dublin/Pleasanton	1,269,921	1,246,684	98%	0	0	0	473	49	279	123	0	21	1	0	0	0	464	48	274	121	0	21	1
1705	Pleasanton	Dublin/Pleasanton	665,611	665,612	100%	0	0	0	219	40	92	53	0	31	3	0	0	0	219	40	92	53	0	31	3
1706	Pleasanton	Dublin/Pleasanton	415,788	415,787	100%	0	0	0	236	48	69	69	0	46	4	0	0	0	236	48	69	69	0	46	4
1707	Pleasanton	Dublin/Pleasanton	1,103,680	230,913	21%	0	0	0	641	95	244	167	0	123	12	0	0	0	134	20	51	35	0	26	3
1722	Pleasanton	Dublin/Pleasanton	814,266	791,741	97%	0	0	0	258	42	101	69	0	42	4	0	0	0	251	41	98	67	0	41	4
1723	Pleasanton	Dublin/Pleasanton	1,048,696	783,803	75%	0	0	0	305	53	127	78	0	43	4	0	0	0	228	40	95	58	0	32	3
1868	Pleasanton	Dublin/Pleasanton	148,105	148,106	100%	0	0	0	64	9	20	18	0	16	1	0	0	0	64	9	20	18	0	16	1
1869	Pleasanton	Dublin/Pleasanton	178,038	178,038	100%	0	0	0	75	16	30	17	0	11	1	0	0	0	75	16	30	17	0	11	1
1617	Livermore	Livermore Transit	8,209,419	898,952	11%	455	319	136	0	0	0	0	0	0	0	50	35	15	0	0	0	0	0	0	0
1621	Livermore	Livermore Transit	8,706,243	6,950,233	80%	1,018	738	280	1,031	387	284	289	0	56	15	813	589	224	823	309	227	231	0	45	12
1622	Livermore	Livermore Transit	7,125,231	2,781,649	39%	923	728	195	404	159	121	109	1	14	0	360	284	76	158	62	47	43	0	5	0
1627	Livermore	Livermore Transit	3,433,046	2,744,893	80%	351	235	116	1,136	167	572	366	0	16	15	281	188	93	908	134	457	293	0	13	12
1628	Livermore	Livermore Transit	3,333,294	3,333,293	100%	203	158	45	1,701	356	723	576	4	29	13	203	158	45	1,701	356	723	576	4	29	13
1635	Livermore	Livermore Transit	2,669,410	36,369	1%	306	199	107	27	10	10	7	0	0	0	4	3	1	0	0	0	0	0	0	0
1636	Livermore	Livermore Transit	4,450,041	681,724	15%	539	411	128	53	53	0	0	0	0	0	83	63	20	8	8	0	0	0	0	0
1639	Livermore	Livermore Transit	8,695,719	304,529	4%	840	567	273	294	0	43	250	1	0	0	29	20	10	10	0	2	9	0	0	0
1642	Livermore	Livermore Transit	10,746,202	2,186,130	20%	1,193	971	222	68	0	3	65	0	0	0	243	198	45	14	0	1	13	0	0	0
1650	Livermore	Livermore Transit	4,606,023	101,359	2%	28	23	5	976	144	478	144	0	126	84	1	1	0	21	3	11	3	0	3	2
1867	Livermore	Livermore Transit	2,645,221	1,884,034	71%	84	58	26	867	162	394	297	0	6	8	60	41	19	618	115	281	212	0	4	6
1581	Pleasanton	Pleasanton ACE	2,743,682	590,474	22%	149	102	47	138	15	37	85	0	1	0	32	22	10	30	3	8	18	0	0	0
1582	Pleasanton	Pleasanton ACE	1,304,253	330,586	25%	126	56	70	581	378	66	87	0	47	3	32	14	18	147	96	17	22	0	12	1
1583	Pleasanton	Pleasanton ACE	2,747,083	522,833	19%	167	59	108	981	244	278	289	0	157	13	32	11	21	187	46	53	55	0	30	2
1584	Pleasanton	Pleasanton ACE	4,929,269	3,030,854	61%	678	241	437	1,214	332	349	337	0	181	15	417	148	269	746	204	215	207	0	111	9
1585	Pleasanton	Pleasanton ACE	9,104,282	5,524,987	61%	48	29	19	1,303	186	447	398	19	230	23	29	18	12	791	113	271	242	12	140	14
1587	Pleasanton	Pleasanton ACE	2,383,707	1,759,636	74%	54	19	35	115	115	0	0	0	0	0	40	14	26	85	85	0	0	0	0	0
1588	Pleasanton	Pleasanton ACE	7,215,886	6,147,034	85%	889	316	573	746	177	217	220	0	122	10	757	269	488	635	151	185	187	0	104	9
1597	Pleasanton	Pleasanton ACE	5,229,358	131,861	3%	373	350	23	752	245	142	255	42	22	46	9	9	1	19	6	4	6	1	1	1
1764	Pleasanton	Pleasanton ACE	1,885,014	30,451	2%	45	16	29	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1767	Pleasanton	Pleasanton ACE	517,232	298,438	58%	0	0	0	8	1	4	3	0	0	0	0	0	0	5	1	2	2	0	0	0
1768	Pleasanton	Pleasanton ACE	583,633	412,270	71%	3	2	1	12	3	3	4	0	2	0	2	1	1	8	2	2	3	0	1	0
1770	Pleasanton	Pleasanton ACE	1,780,707	14,718	1%	68	24	44	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1772	Pleasanton	Pleasanton ACE	1,849,569	730,912	40%	216	203	13	179	28	51	70	8	6	16	85	80	5	71	11	20	28	3	2	6
1773	Pleasanton	Pleasanton ACE	1,368,993	1,369,004	100%	1	0	1	443	103	138	127	1	68	6	1	0	1	443	103	138	127	1	68	6
1774	Pleasanton	Pleasanton ACE	1,784,801	1,010,297	57%	146	137	9	180	29	48	74	13	5	11	83	78	5	102	16	27	42	7	3	6

TCID	Jurisdiction	TPA	Total TAZ Area (SF)	TPA Area (SF)	%	2020										2020 TPA									
						HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
1372	San Ramon	San Ramon Transit Ctr	1,384,959	338,048	24%	0	0	0	1,600	73	472	935	1	73	46	0	0	0	391	18	115	228	0	18	11
1374	San Ramon	San Ramon Transit Ctr	2,673,455	928,131	35%	0	0	0	2,681	126	782	1,584	7	114	68	0	0	0	931	44	271	550	2	40	24
1382	San Ramon	San Ramon Transit Ctr	2,973,609	2,554,540	86%	0	0	0	1,915	53	635	1,127	2	63	35	0	0	0	1,645	46	546	968	2	54	30
1383	San Ramon	San Ramon Transit Ctr	4,830,725	4,087,956	85%	0	0	0	8,284	1,265	3,659	2,328	48	690	294	0	0	0	7,010	1,070	3,096	1,970	41	584	249
1384	San Ramon	San Ramon Transit Ctr	2,692,255	259,136	10%	0	0	0	1,227	63	337	742	0	54	31	0	0	0	118	6	32	71	0	5	3
1412	San Ramon	San Ramon Transit Ctr	4,749,433	4,230,587	89%	0	0	0	3,314	157	1,008	1,952	7	124	66	0	0	0	2,952	140	898	1,739	6	110	59
1413	San Ramon	San Ramon Transit Ctr	2,830,562	2,283,632	81%	142	84	58	0	0	0	0	0	0	0	115	68	47	0	0	0	0	0	0	0
1414	San Ramon	San Ramon Transit Ctr	12,836,736	1,663,887	13%	712	419	293	152	19	45	80	0	5	3	92	54	38	20	2	6	10	0	1	0
1415	San Ramon	San Ramon Transit Ctr	2,654,666	1,953,803	74%	34	20	14	1,852	84	546	1,100	0	77	45	25	15	10	1,363	62	402	810	0	57	33
1416	San Ramon	San Ramon Transit Ctr	2,644,770	2,644,770	100%	0	0	0	3,793	172	1,119	2,231	7	163	101	0	0	0	3,793	172	1,119	2,231	7	163	101
1417	San Ramon	San Ramon Transit Ctr	5,961,461	80,711	1%	500	294	206	0	0	0	0	0	0	0	7	4	3	0	0	0	0	0	0	0
1495	San Ramon	San Ramon Transit Ctr	1,542,795	837,221	54%	0	0	0	317	15	92	189	0	13	8	0	0	0	172	8	50	103	0	7	4
1648	Livermore	Vasco ACE	8,216,023	220,549	3%	636	488	148	7	7	0	0	0	0	0	17	13	4	0	0	0	0	0	0	0
1649	Livermore	Vasco ACE	5,536,301	3,464,195	63%	0	0	0	976	144	478	144	0	126	84	0	0	0	611	90	299	90	0	79	53
1652	Livermore	Vasco ACE	10,191,764	5,227,934	51%	10	8	2	1,303	207	238	570	2	113	173	5	4	1	668	106	122	292	1	58	89
1653	Livermore	Vasco ACE	22,786,199	9,018	0%	1,683	1,324	359	537	261	157	106	0	13	0	1	1	0	0	0	0	0	0	0	0
1656	Livermore	Vasco ACE	10,415,530	5,651,521	54%	60	33	27	3,055	247	592	43	0	1,304	869	33	18	15	1,658	134	321	23	0	708	472
1658	Livermore	Vasco ACE	22,344,492	4,911,431	22%	0	0	0	3,116	181	1,334	850	21	350	380	0	0	0	685	40	293	187	5	77	84
1659	Livermore	Vasco ACE	12,358,714	1,495,970	12%	0	0	0	1,529	89	679	382	6	179	194	0	0	0	185	11	82	46	1	22	23
1666	Livermore	Vasco ACE	22,372,205	39,758	0%	1,427	788	639	304	78	109	112	1	0	4	3	1	1	1	0	0	0	0	0	0
1787	Livermore	Vasco ACE	882,529	882,284	100%	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0
1500	Dublin	West Dublin/Pleasanton	2,640,431	24,191	1%	455	388	67	785	90	305	312	9	25	44	4	4	1	7	1	3	3	0	0	0
1501	Dublin	West Dublin/Pleasanton	1,184,053	430,377	36%	0	0	0	696	84	287	259	8	21	37	0	0	0	253	31	104	94	3	8	13
1502	Dublin	West Dublin/Pleasanton	2,258,470	2,258,468	100%	0	0	0	1,709	500	526	600	4	23	56	0	0	0	1,709	500	526	600	4	23	56
1503	Dublin	West Dublin/Pleasanton	2,824,099	1,798,122	64%	63	38	25	627	185	191	223	4	7	17	40	24	16	399	118	122	142	3	4	11
1504	Dublin	West Dublin/Pleasanton	1,363,874	267,994	20%	27	24	3	501	127	154	183	1	17	19	5	5	1	98	25	30	36	0	3	4
1525	Dublin	West Dublin/Pleasanton	2,878,768	44,336	2%	0	0	0	838	104	398	220	5	74	37	0	0	0	13	2	6	3	0	1	1
1526	Dublin	West Dublin/Pleasanton	1,920,397	1,518,419	79%	0	0	0	812	98	340	276	3	63	32	0	0	0	642	77	269	218	2	50	25
1690	Dublin	West Dublin/Pleasanton	636,211	636,211	100%	0	0	0	37	13	13	11	0	0	0	0	0	0	37	13	13	11	0	0	0
1795	Dublin	West Dublin/Pleasanton	1,150,200	1,150,201	100%	0	0	0	327	89	88	121	0	18	11	0	0	0	327	89	88	121	0	18	11
1796	Dublin	West Dublin/Pleasanton	524,630	524,632	100%	0	0	0	103	32	35	35	0	0	1	0	0	0	103	32	35	35	0	0	1
1797	Dublin	West Dublin/Pleasanton	1,124,287	544,448	48%	0	0	0	160	48	43	64	0	1	4	0	0	0	77	23	21	31	0	0	2
1798	Dublin	West Dublin/Pleasanton	843,153	399,888	47%	54	0	54	246	85	75	77	1	2	6	26	0	26	117	40	36	37	0	1	3
1802	Dublin	West Dublin/Pleasanton	370,411	1,321	0%	16	10	6	254	26	119	93	0	11	5	0	0	0	1	0	0	0	0	0	0
1865	Dublin	West Dublin/Pleasanton	833,030	833,032	100%	0	0	0	638	193	163	243	0	11	28	0	0	0	638	193	163	243	0	11	28
1535	Pleasanton	West Dublin/Pleasanton	3,955,582	3,946,347	100%	0	0	0	1,697	594	689	338	2	40	34	0	0	0	1,693	593	687	337	2	40	34
1536	Pleasanton	West Dublin/Pleasanton	3,427,493	3,292,458	96%	0	0	0	1,821	728	681	334	0	43	35	0	0	0	1,749	699	654	321	0	41	34
1537	Pleasanton	West Dublin/Pleasanton	2,886,161	634,196	22%	0	0	0	2,554	957	1,003	479	0	63	52	0	0	0	561	210	220	105	0	14	11
1538	Pleasanton	West Dublin/Pleasanton	1,890,520	231,708	12%	502	395	107	392	138	163	78	0	7	6	62	48	13	48	17	20	10	0	1	1
1539	Pleasanton	West Dublin/Pleasanton	9,030,486	1,681,728	19%	0	0	0	2,474	212	795	953	4	427	83	0	0	0	461	39	148	177	1	80	15
1688	Pleasanton	West Dublin/Pleasanton	17,511,387	546,849	3%	299	256	43	450	113	151	173	4	4	4	9	8	1	14	4	5	5	0	0	0
1689	Pleasanton	West Dublin/Pleasanton	1,106,029	1,106,029	100%	0	0	0	580	216	236	110	0	10	8	0	0	0	580	216	236	110	0	10	8
		Total	**372,989,748**	**131,381,907**	**35%**	**16,584**	**10,971**	**5,613**	**81,272**	**16,994**	**27,165**	**26,654**	**250**	**6,775**	**3,433**	**4,841**	**2,795**	**2,047**	**46,530**	**9,285**	**15,982**	**15,873**	**117**	**3,554**	**1,719**

TPA	Jurisdiction	Total TAZ Area (SF)	TPA Area (SF)	%	2020										2020 TPA									
					HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
San Ramon Transit Ctr	San Ramon	47,775,426	21,862,422	46%	1,388	817	571	25,135	2,027	8,695	12,268	72	1,376	697	239	141	98	18,395	1,568	6,535	8,680	58	1,039	514
West Dublin/Pleasanton BART	Dublin	20,552,015	10,431,641	51%	615	460	155	7,733	1,674	2,737	2,717	35	273	297	75	33	44	4,421	1,144	1,416	1,574	12	119	155
	Pleasanton	39,807,658	11,439,314	29%	801	651	150	9,968	2,958	3,718	2,465	10	594	222	71	56	14	5,106	1,778	1,970	1,065	3	186	103
Dublin/Pleasanton BART	Dublin	22,269,589	10,978,405	49%	758	293	465	6,748	4,426	1,193	774	10	233	112	749	284	465	3,232	2,004	618	422	5	125	57
	Pleasanton	17,433,985	10,959,942	63%	303	148	155	7,651	1,401	2,826	2,171	4	1,126	123	0	0	0	4,037	586	1,634	1,175	4	570	70
Pleasanton ACE	Pleasanton	45,427,469	21,904,356	48%	2,963	1,554	1,409	6,652	1,856	1,780	1,949	83	841	143	1,521	664	857	3,269	837	942	939	24	472	54
Livermore Transit Ctr	Livermore	64,619,848	21,903,167	34%	5,940	4,407	1,533	6,557	1,438	2,628	2,103	6	247	135	2,127	1,580	548	4,261	987	1,749	1,380	4	99	45
South Vasco Rd ACE	Livermore	115,103,758	21,902,660	19%	3,816	2,641	1,175	10,828	1,214	3,588	2,207	30	2,085	1,704	59	37	21	3,809	381	1,118	638	7	944	721
	Total	**372,989,748**	**131,381,907**	**35%**	**16,584**	**10,971**	**5,613**	**81,272**	**16,994**	**27,165**	**26,654**	**250**	**6,775**	**3,433**	**4,841**	**2,795**	**2,047**	**46,530**	**9,285**	**15,982**	**15,873**	**117**	**3,554**	**1,719**

TCID	Jurisdiction	TPA	2040										2040 TPA								
			HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
1522	Dublin	Dublin/Pleasanton	327	85	242	2,288	378	467	1,193	4	156	90	327	85	242	2,288	378	467	1,193	4	156	90
1523	Dublin	Dublin/Pleasanton	0	0	0	504	52	247	134	3	45	23	0	0	0	359	37	176	95	2	32	16
1524	Dublin	Dublin/Pleasanton	0	0	0	399	57	163	127	0	34	18	0	0	0	61	9	25	19	0	5	3
1525	Dublin	Dublin/Pleasanton	0	0	0	840	106	392	221	5	78	38	0	0	0	23	3	11	6	0	2	1
1805	Dublin	Dublin/Pleasanton	1,753	467	1,286	991	991	0	0	0	0	0	576	154	423	326	326	0	0	0	0	0
1807	Dublin	Dublin/Pleasanton	0	0	0	737	113	338	206	3	54	23	0	0	0	85	13	39	24	0	6	3
1825	Dublin	Dublin/Pleasanton	745	280	465	1,130	1,130	0	0	0	0	0	745	280	465	1,130	1,130	0	0	0	0	0
1826	Dublin	Dublin/Pleasanton	0	0	0	652	171	299	182	0	0	0	0	0	0	420	110	193	117	0	0	0
1827	Dublin	Dublin/Pleasanton	0	0	0	728	192	268	235	0	28	5	0	0	0	303	80	112	98	0	12	2
1828	Dublin	Dublin/Pleasanton	0	0	0	377	44	157	123	0	35	18	0	0	0	377	44	157	123	0	35	18
1863	Dublin	Dublin/Pleasanton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1542	Pleasanton	Dublin/Pleasanton	0	0	0	356	50	178	89	0	36	3	0	0	0	356	50	178	89	0	36	3
1543	Pleasanton	Dublin/Pleasanton	87	48	39	961	164	401	235	0	146	15	51	28	23	567	97	237	139	0	86	9
1544	Pleasanton	Dublin/Pleasanton	499	177	322	1,555	273	631	427	0	206	18	129	46	83	402	71	163	110	0	53	5
1545	Pleasanton	Dublin/Pleasanton	0	0	0	926	123	422	233	0	134	14	0	0	0	305	41	139	77	0	44	5
1546	Pleasanton	Dublin/Pleasanton	303	148	155	1,904	551	546	506	0	278	23	0	0	0	0	0	0	0	0	0	0
1698	Pleasanton	Dublin/Pleasanton	0	0	0	197	16	90	70	0	18	3	0	0	0	33	3	15	12	0	3	0
1699	Pleasanton	Dublin/Pleasanton	0	0	0	278	22	118	98	1	33	6	0	0	0	213	17	90	75	1	25	5
1700	Pleasanton	Dublin/Pleasanton	0	0	0	1,159	115	396	452	4	161	31	0	0	0	980	97	335	382	4	136	26
1701	Pleasanton	Dublin/Pleasanton	0	0	0	416	77	147	105	0	80	7	0	0	0	416	77	147	105	0	80	7
1702	Pleasanton	Dublin/Pleasanton	13	7	6	393	53	169	108	0	57	6	13	7	6	393	53	169	108	0	57	6
1703	Pleasanton	Dublin/Pleasanton	151	83	68	225	35	101	64	0	18	7	151	83	68	225	35	101	64	0	18	7
1704	Pleasanton	Dublin/Pleasanton	254	90	164	395	40	236	103	0	15	1	249	88	161	388	39	232	101	0	15	1
1705	Pleasanton	Dublin/Pleasanton	114	40	74	1,075	171	504	267	0	122	11	114	40	74	1,075	171	504	267	0	122	11
1706	Pleasanton	Dublin/Pleasanton	0	0	0	277	56	81	81	0	54	5	0	0	0	277	56	81	81	0	54	5
1707	Pleasanton	Dublin/Pleasanton	2	1	1	897	133	342	234	0	172	17	0	0	0	188	28	71	49	0	36	4
1722	Pleasanton	Dublin/Pleasanton	118	65	53	539	74	238	146	0	74	7	115	63	52	524	72	231	142	0	72	7
1723	Pleasanton	Dublin/Pleasanton	60	33	27	778	123	362	195	0	90	8	45	25	20	581	92	271	146	0	67	6
1868	Pleasanton	Dublin/Pleasanton	0	0	0	49	4	14	17	0	13	1	0	0	0	49	4	14	17	0	13	1
1869	Pleasanton	Dublin/Pleasanton	0	0	0	58	13	26	13	0	6	0	0	0	0	58	13	26	13	0	6	0
1617	Livermore	Livermore Transit	475	337	138	0	0	0	0	0	0	0	52	37	15	0	0	0	0	0	0	0
1621	Livermore	Livermore Transit	1,093	763	330	1,031	387	284	289	0	56	15	873	609	263	823	309	227	231	0	45	12
1622	Livermore	Livermore Transit	941	728	213	404	159	121	109	1	14	0	367	284	83	158	62	47	43	0	5	0
1627	Livermore	Livermore Transit	1,186	643	543	1,136	167	572	366	0	16	15	948	514	434	908	134	457	293	0	13	12
1628	Livermore	Livermore Transit	294	224	70	1,701	356	723	576	4	29	13	294	224	70	1,701	356	723	576	4	29	13
1635	Livermore	Livermore Transit	336	199	137	54	24	17	13	0	0	0	5	3	2	1	0	0	0	0	0	0
1636	Livermore	Livermore Transit	574	416	158	53	53	0	0	0	0	0	88	64	24	8	8	0	0	0	0	0
1639	Livermore	Livermore Transit	925	633	292	294	0	43	250	1	0	0	32	22	10	10	0	2	9	0	0	0
1642	Livermore	Livermore Transit	1,289	1,048	241	68	0	3	65	0	0	0	262	213	49	14	0	1	13	0	0	0
1650	Livermore	Livermore Transit	169	138	31	976	144	478	144	0	126	84	4	3	1	21	3	11	3	0	3	2
1867	Livermore	Livermore Transit	264	153	111	867	162	394	297	0	6	8	188	109	79	618	115	281	212	0	4	6
1581	Pleasanton	Pleasanton ACE	149	102	47	221	24	59	136	0	2	0	32	22	10	48	5	13	29	0	0	0
1582	Pleasanton	Pleasanton ACE	139	66	73	581	378	66	87	0	47	3	35	17	19	147	96	17	22	0	12	1
1583	Pleasanton	Pleasanton ACE	167	59	108	1,153	287	327	340	0	184	15	32	11	21	219	55	62	65	0	35	3
1584	Pleasanton	Pleasanton ACE	883	350	533	1,426	390	410	396	0	213	18	543	215	328	877	240	252	243	0	131	11
1585	Pleasanton	Pleasanton ACE	48	29	19	1,531	219	525	468	22	270	27	29	18	12	929	133	319	284	14	164	16
1587	Pleasanton	Pleasanton ACE	54	19	35	381	381	0	0	0	0	0	40	14	26	281	281	0	0	0	0	0
1588	Pleasanton	Pleasanton ACE	889	316	573	877	208	255	259	0	143	12	757	269	488	747	177	217	220	0	122	10
1597	Pleasanton	Pleasanton ACE	373	350	23	752	245	142	255	42	22	46	9	9	1	19	6	4	6	1	1	1
1764	Pleasanton	Pleasanton ACE	103	41	62	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0
1767	Pleasanton	Pleasanton ACE	0	0	0	125	19	58	35	0	9	4	0	0	0	72	11	33	20	0	5	2
1768	Pleasanton	Pleasanton ACE	14	8	6	592	110	137	214	0	122	9	10	6	4	418	78	97	151	0	86	6
1770	Pleasanton	Pleasanton ACE	68	24	44	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1772	Pleasanton	Pleasanton ACE	222	208	14	176	28	54	66	8	6	14	88	82	6	70	11	21	26	3	2	6
1773	Pleasanton	Pleasanton ACE	47	19	28	472	100	169	132	1	65	5	47	19	28	472	100	169	132	1	65	5
1774	Pleasanton	Pleasanton ACE	146	137	9	43	7	11	19	3	1	2	83	78	5	24	4	6	11	2	1	1

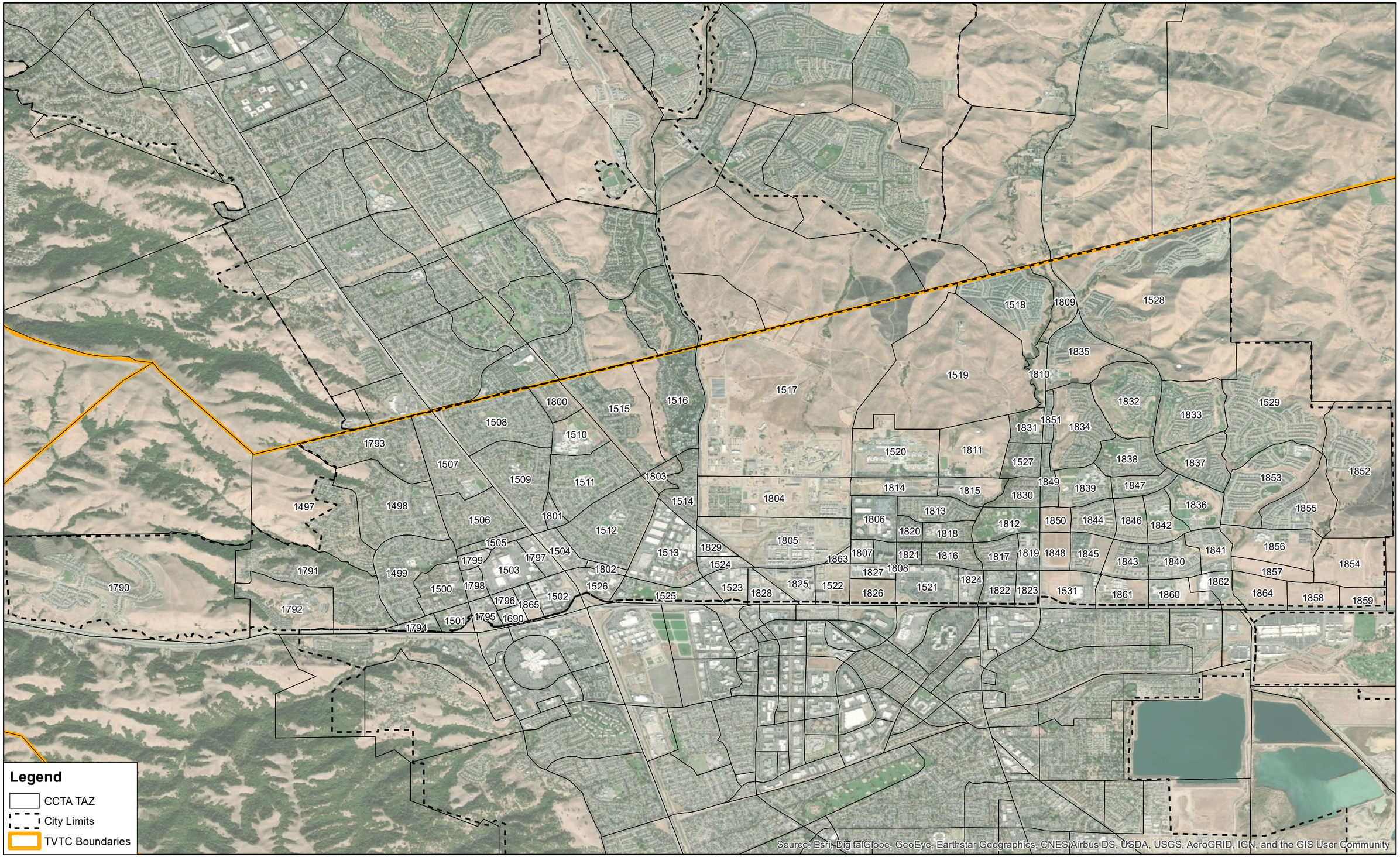
TCID	Jurisdiction	TPA	2040										2040 TPA									
			HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
1372	San Ramon	San Ramon Transit Ctr	474	250	224	2,564	100	990	1,303	1	99	71	116	61	55	626	24	242	318	0	24	17
1374	San Ramon	San Ramon Transit Ctr	639	338	301	3,271	129	1,292	1,660	7	109	74	222	117	104	1,136	45	449	576	2	38	26
1382	San Ramon	San Ramon Transit Ctr	349	193	156	3,199	52	1,193	1,817	3	86	48	300	166	134	2,748	45	1,025	1,561	3	74	41
1383	San Ramon	San Ramon Transit Ctr	1,659	0	1,659	8,613	1,299	4,006	2,366	43	630	269	1,404	0	1,404	7,289	1,099	3,390	2,002	36	533	228
1384	San Ramon	San Ramon Transit Ctr	0	0	0	1,184	56	413	651	0	41	23	0	0	0	114	5	40	63	0	4	2
1412	San Ramon	San Ramon Transit Ctr	1,204	0	1,204	4,296	176	1,586	2,358	7	117	52	1,072	0	1,072	3,827	157	1,413	2,100	6	104	46
1413	San Ramon	San Ramon Transit Ctr	142	75	67	13	13	0	0	0	0	0	115	61	54	10	10	0	0	0	0	0
1414	San Ramon	San Ramon Transit Ctr	712	376	336	149	22	59	62	0	4	2	92	49	44	19	3	8	8	0	1	0
1415	San Ramon	San Ramon Transit Ctr	53	28	25	1,790	71	696	928	1	57	37	39	21	18	1,317	52	512	683	1	42	27
1416	San Ramon	San Ramon Transit Ctr	0	0	0	4,663	173	1,814	2,425	12	144	95	0	0	0	4,663	173	1,814	2,425	12	144	95
1417	San Ramon	San Ramon Transit Ctr	500	264	236	12	12	0	0	0	0	0	7	4	3	0	0	0	0	0	0	0
1495	San Ramon	San Ramon Transit Ctr	136	75	61	616	23	235	321	0	22	15	74	41	33	334	12	128	174	0	12	8
1648	Livermore	Vasco ACE	646	488	158	7	7	0	0	0	0	0	17	13	4	0	0	0	0	0	0	0
1649	Livermore	Vasco ACE	0	0	0	1,093	183	517	183	0	126	84	0	0	0	684	115	323	115	0	79	53
1652	Livermore	Vasco ACE	10	8	2	1,633	299	458	570	2	113	191	5	4	1	838	153	235	292	1	58	98
1653	Livermore	Vasco ACE	1,814	1,436	378	537	261	157	106	0	13	0	1	1	0	0	0	0	0	0	0	0
1656	Livermore	Vasco ACE	75	33	42	3,055	247	592	43	0	1,304	869	41	18	23	1,658	134	321	23	0	708	472
1658	Livermore	Vasco ACE	509	165	344	3,249	181	1,400	850	21	388	409	112	36	76	714	40	308	187	5	85	90
1659	Livermore	Vasco ACE	0	0	0	1,529	89	679	382	6	179	194	0	0	0	185	11	82	46	1	22	23
1666	Livermore	Vasco ACE	1,477	833	644	465	151	182	127	1	0	4	3	1	1	1	0	0	0	0	0	0
1787	Livermore	Vasco ACE	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0
1500	Dublin	West Dublin/Pleasanton	455	388	67	800	67	347	326	0	39	21	4	4	1	7	1	3	3	0	0	0
1501	Dublin	West Dublin/Pleasanton	0	0	0	711	57	312	287	0	35	20	0	0	0	258	21	113	104	0	13	7
1502	Dublin	West Dublin/Pleasanton	87	0	87	1,979	532	564	708	0	111	64	87	0	87	1,979	532	564	708	0	111	64
1503	Dublin	West Dublin/Pleasanton	266	38	228	1,160	308	392	410	9	12	29	169	24	145	739	196	250	261	6	8	18
1504	Dublin	West Dublin/Pleasanton	114	24	90	600	152	187	216	1	21	23	22	5	18	118	30	37	42	0	4	5
1525	Dublin	West Dublin/Pleasanton	0	0	0	840	106	392	221	5	78	38	0	0	0	13	2	6	3	0	1	1
1526	Dublin	West Dublin/Pleasanton	0	0	0	814	100	334	277	3	67	33	0	0	0	644	79	264	219	2	53	26
1690	Dublin	West Dublin/Pleasanton	460	305	155	974	306	392	258	1	5	12	460	305	155	974	306	392	258	1	5	12
1795	Dublin	West Dublin/Pleasanton	87	0	87	416	111	119	149	0	24	13	87	0	87	416	111	119	149	0	24	13
1796	Dublin	West Dublin/Pleasanton	203	0	203	311	90	119	97	0	1	4	203	0	203	311	90	119	97	0	1	4
1797	Dublin	West Dublin/Pleasanton	87	0	87	386	100	122	149	2	4	9	42	0	42	187	48	59	72	1	2	4
1798	Dublin	West Dublin/Pleasanton	141	0	141	310	107	103	90	3	2	5	67	0	67	147	51	49	43	1	1	2
1802	Dublin	West Dublin/Pleasanton	16	10	6	255	27	118	93	0	12	5	0	0	0	1	0	0	0	0	0	0
1865	Dublin	West Dublin/Pleasanton	203	0	203	638	193	163	243	0	11	28	203	0	203	638	193	163	243	0	11	28
1535	Pleasanton	West Dublin/Pleasanton	69	55	14	2,569	872	1,099	510	2	47	39	69	55	14	2,563	870	1,096	509	2	47	39
1536	Pleasanton	West Dublin/Pleasanton	399	318	81	3,149	1,250	1,225	577	1	52	44	383	305	78	3,025	1,201	1,177	554	1	50	42
1537	Pleasanton	West Dublin/Pleasanton	149	119	30	2,904	1,055	1,201	551	0	53	44	33	26	7	638	232	264	121	0	12	10
1538	Pleasanton	West Dublin/Pleasanton	520	413	107	435	150	188	86	0	6	5	64	51	13	53	18	23	11	0	1	1
1539	Pleasanton	West Dublin/Pleasanton	0	0	0	3,958	339	1,272	1,525	6	683	133	0	0	0	737	63	237	284	1	127	25
1688	Pleasanton	West Dublin/Pleasanton	299	256	43	720	180	242	277	7	7	7	9	8	1	22	6	8	9	0	0	0
1689	Pleasanton	West Dublin/Pleasanton	0	0	0	1,042	372	449	199	0	12	10	0	0	0	1,042	372	449	199	0	12	10
		Total	**29,228**	**15,022**	**14,206**	**102,910**	**19,194**	**37,792**	**33,780**	**247**	**8,189**	**3,709**	**12,858**	**5,118**	**7,743**	**61,663**	**11,830**	**22,826**	**20,703**	**118**	**4,305**	**1,885**

TPA	Jurisdiction	2040										2040 TPA									
		HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
San Ramon Transit Ctr	San Ramon	5,868	1,599	4,269	30,370	2,126	12,284	13,891	74	1,309	686	3,441	520	2,921	22,083	1,625	9,021	9,910	60	976	490
West Dublin/Pleasanton BART	Dublin	2,119	765	1,354	10,194	2,256	3,664	3,524	24	422	304	1,344	338	1,008	6,432	1,660	2,138	2,202	11	234	184
	Pleasanton	1,436	1,161	275	14,777	4,218	5,676	3,725	16	860	282	558	445	113	8,080	2,762	3,254	1,687	4	249	127
Dublin/Pleasanton BART	Dublin	2,825	832	1,993	8,646	3,234	2,331	2,421	15	430	215	1,648	519	1,130	5,372	2,130	1,180	1,675	6	248	133
	Pleasanton	1,601	692	909	12,440	2,093	5,002	3,443	5	1,714	182	867	380	487	7,030	1,016	3,004	1,977	5	923	108
Pleasanton ACE	Pleasanton	3,302	1,728	1,574	8,331	2,396	2,213	2,406	76	1,084	155	1,708	761	949	4,323	1,197	1,210	1,209	21	624	62
Livermore Transit Ctr	Livermore	7,546	5,282	2,264	6,584	1,452	2,635	2,109	6	247	135	3,113	2,082	1,030	4,262	987	1,749	1,380	4	99	45
South Vasco Rd ACE	Livermore	4,531	2,963	1,568	11,569	1,418	3,986	2,261	30	2,123	1,751	179	73	105	4,081	453	1,270	663	7	952	736
	Total	**29,228**	**15,022**	**14,206**	**102,910**	**19,194**	**37,792**	**33,780**	**247**	**8,189**	**3,709**	**12,858**	**5,118**	**7,743**	**61,663**	**11,830**	**22,826**	**20,703**	**118**	**4,305**	**1,885**

TCID	Jurisdiction	TPA	2020-2040 Growth										TPA Growth									
			HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
1522	Dublin	Dublin/Pleasanton	327	85	242	1,569	268	149	991	0	96	65	327	85	242	1,569	268	149	991	0	96	65
1523	Dublin	Dublin/Pleasanton	0	0	0	174	11	102	39	2	13	7	0	0	0	124	8	73	28	1	9	5
1524	Dublin	Dublin/Pleasanton	0	0	0	3	1	-3	1	0	2	2	0	0	0	0	0	0	0	0	0	0
1525	Dublin	Dublin/Pleasanton	0	0	0	2	2	-6	1	0	4	1	0	0	0	0	0	0	0	0	0	0
1805	Dublin	Dublin/Pleasanton	1,740	454	1,286	-2,378	-2,378	0	0	0	0	0	572	149	423	-782	-782	0	0	0	0	0
1807	Dublin	Dublin/Pleasanton	0	0	0	735	113	337	205	3	54	23	0	0	0	85	13	39	24	0	6	3
1825	Dublin	Dublin/Pleasanton	0	0	0	431	431	0	0	0	0	0	0	0	0	431	431	0	0	0	0	0
1826	Dublin	Dublin/Pleasanton	0	0	0	643	170	294	179	0	0	0	0	0	0	415	110	190	115	0	0	0
1827	Dublin	Dublin/Pleasanton	0	0	0	719	190	265	231	0	28	5	0	0	0	299	79	110	96	0	12	2
1828	Dublin	Dublin/Pleasanton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1863	Dublin	Dublin/Pleasanton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1542	Pleasanton	Dublin/Pleasanton	0	0	0	29	0	31	7	0	-8	-1	0	0	0	29	0	31	7	0	-8	-1
1543	Pleasanton	Dublin/Pleasanton	87	48	39	801	133	343	196	0	117	12	51	28	23	473	79	202	116	0	69	7
1544	Pleasanton	Dublin/Pleasanton	499	177	322	791	125	351	223	0	85	7	129	46	83	205	32	91	58	0	22	2
1545	Pleasanton	Dublin/Pleasanton	0	0	0	808	103	375	204	0	114	12	0	0	0	266	34	124	67	0	38	4
1546	Pleasanton	Dublin/Pleasanton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1698	Pleasanton	Dublin/Pleasanton	0	0	0	-44	-7	-5	-17	0	-12	-3	0	0	0	-7	-1	-1	-3	0	-2	0
1699	Pleasanton	Dublin/Pleasanton	0	0	0	-21	-4	8	-11	0	-12	-2	0	0	0	-16	-3	6	-8	0	-9	-2
1700	Pleasanton	Dublin/Pleasanton	0	0	0	331	33	113	129	1	46	9	0	0	0	280	28	96	109	1	39	7
1701	Pleasanton	Dublin/Pleasanton	0	0	0	119	22	42	30	0	23	2	0	0	0	119	22	42	30	0	23	2
1702	Pleasanton	Dublin/Pleasanton	13	7	6	112	15	48	31	0	16	2	13	7	6	112	15	48	31	0	16	2
1703	Pleasanton	Dublin/Pleasanton	151	83	68	64	10	29	18	0	5	2	151	83	68	64	10	29	18	0	5	2
1704	Pleasanton	Dublin/Pleasanton	254	90	164	-78	-9	-43	-20	0	-6	0	249	88	161	-77	-9	-42	-20	0	-6	0
1705	Pleasanton	Dublin/Pleasanton	114	40	74	856	131	412	214	0	91	8	114	40	74	856	131	412	214	0	91	8
1706	Pleasanton	Dublin/Pleasanton	0	0	0	41	8	12	12	0	8	1	0	0	0	41	8	12	12	0	8	1
1707	Pleasanton	Dublin/Pleasanton	2	1	1	256	38	98	67	0	49	5	0	0	0	54	8	20	14	0	10	1
1722	Pleasanton	Dublin/Pleasanton	118	65	53	281	32	137	77	0	32	3	115	63	52	273	31	133	75	0	31	3
1723	Pleasanton	Dublin/Pleasanton	60	33	27	473	70	235	117	0	47	4	45	25	20	354	52	176	87	0	35	3
1868	Pleasanton	Dublin/Pleasanton	0	0	0	-15	-5	-6	-1	0	-3	0	0	0	0	-15	-5	-6	-1	0	-3	0
1869	Pleasanton	Dublin/Pleasanton	0	0	0	-17	-3	-4	-4	0	-5	-1	0	0	0	-17	-3	-4	-4	0	-5	-1
1617	Livermore	Livermore Transit	20	18	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
1621	Livermore	Livermore Transit	75	25	50	0	0	0	0	0	0	0	60	20	40	0	0	0	0	0	0	0
1622	Livermore	Livermore Transit	18	0	18	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0	0
1627	Livermore	Livermore Transit	835	408	427	0	0	0	0	0	0	0	668	326	341	0	0	0	0	0	0	0
1628	Livermore	Livermore Transit	91	66	25	0	0	0	0	0	0	0	91	66	25	0	0	0	0	0	0	0
1635	Livermore	Livermore Transit	30	0	30	27	14	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0
1636	Livermore	Livermore Transit	35	5	30	0	0	0	0	0	0	0	5	1	5	0	0	0	0	0	0	0
1639	Livermore	Livermore Transit	85	66	19	0	0	0	0	0	0	0	3	2	1	0	0	0	0	0	0	0
1642	Livermore	Livermore Transit	96	77	19	0	0	0	0	0	0	0	20	16	4	0	0	0	0	0	0	0
1650	Livermore	Livermore Transit	141	115	26	0	0	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0
1867	Livermore	Livermore Transit	180	95	85	0	0	0	0	0	0	0	128	68	61	0	0	0	0	0	0	0
1581	Pleasanton	Pleasanton ACE	0	0	0	83	9	22	51	0	1	0	0	0	0	18	2	5	11	0	0	0
1582	Pleasanton	Pleasanton ACE	13	10	3	0	0	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0
1583	Pleasanton	Pleasanton ACE	0	0	0	172	43	49	51	0	27	2	0	0	0	33	8	9	10	0	5	0
1584	Pleasanton	Pleasanton ACE	205	109	96	212	58	61	59	0	32	3	126	67	59	131	36	38	36	0	19	2
1585	Pleasanton	Pleasanton ACE	0	0	0	228	33	78	70	3	40	4	0	0	0	138	20	47	42	2	24	2
1587	Pleasanton	Pleasanton ACE	0	0	0	266	266	0	0	0	0	0	0	0	0	196	196	0	0	0	0	0
1588	Pleasanton	Pleasanton ACE	0	0	0	131	31	38	39	0	21	2	0	0	0	111	26	32	33	0	18	1
1597	Pleasanton	Pleasanton ACE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1764	Pleasanton	Pleasanton ACE	58	25	33	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
1767	Pleasanton	Pleasanton ACE	0	0	0	117	18	54	32	0	9	4	0	0	0	68	10	31	18	0	5	2
1768	Pleasanton	Pleasanton ACE	11	6	5	580	107	134	210	0	120	9	8	4	4	410	76	95	148	0	85	6
1770	Pleasanton	Pleasanton ACE	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1772	Pleasanton	Pleasanton ACE	6	5	1	-3	0	3	-4	0	0	-2	2	2	0	-1	0	1	-2	0	0	-1
1773	Pleasanton	Pleasanton ACE	46	19	27	29	-3	31	5	0	-3	-1	46	19	27	29	-3	31	5	0	-3	-1
1774	Pleasanton	Pleasanton ACE	0	0	0	-137	-22	-37	-55	-10	-4	-9	0	0	0	-78	-12	-21	-31	-6	-2	-5

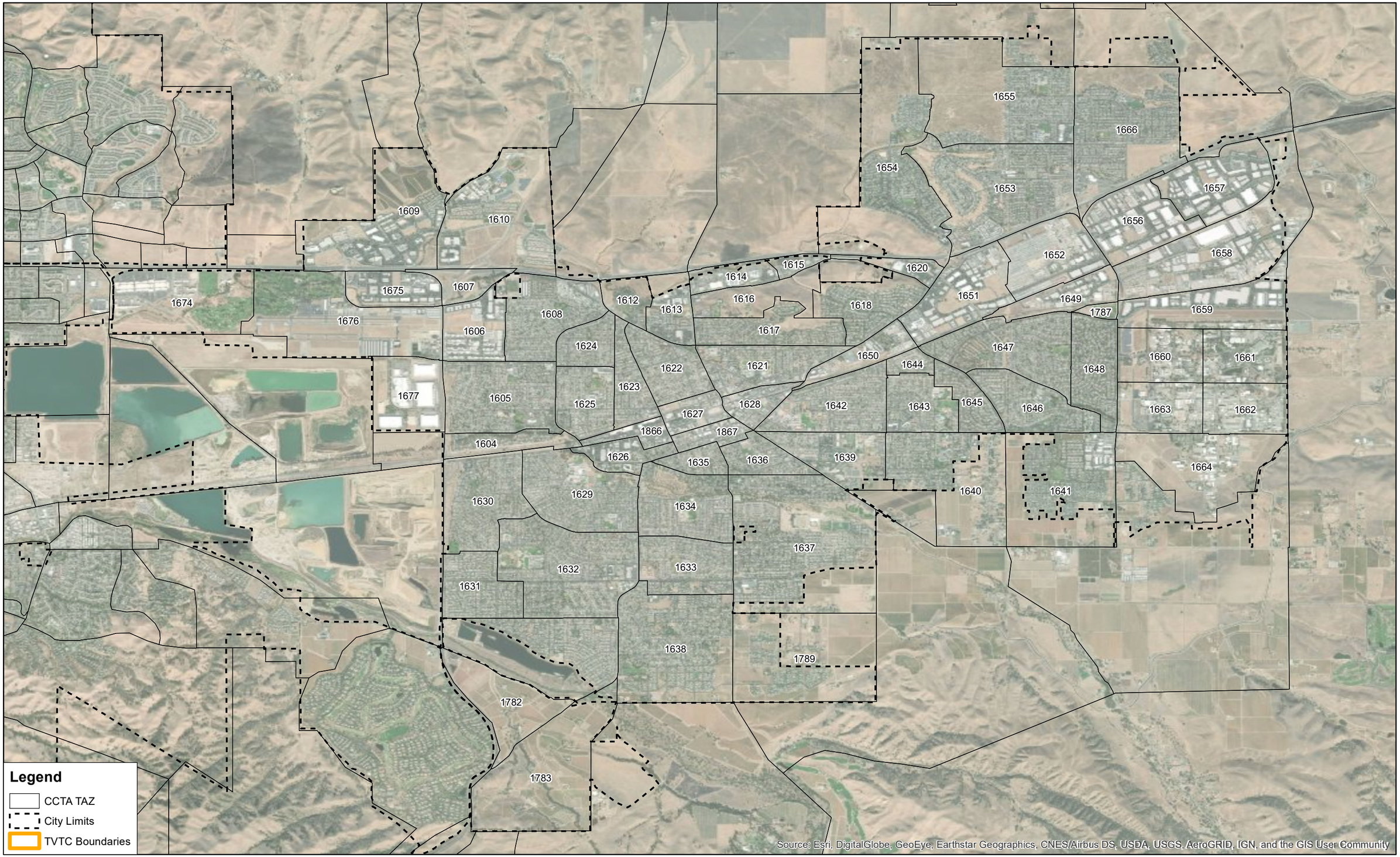
TCID	Jurisdiction	TPA	2020-2040 Growth										TPA Growth									
			HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
1372	San Ramon	San Ramon Transit Ctr	474	250	224	964	27	518	368	0	26	25	116	61	55	235	7	126	90	0	6	6
1374	San Ramon	San Ramon Transit Ctr	639	338	301	590	3	510	76	0	-5	6	222	117	104	205	1	177	26	0	-2	2
1382	San Ramon	San Ramon Transit Ctr	349	193	156	1,284	-1	558	690	1	23	13	300	166	134	1,103	-1	479	593	1	20	11
1383	San Ramon	San Ramon Transit Ctr	1,659	0	1,659	329	34	347	38	-5	-60	-25	1,404	0	1,404	278	29	294	32	-4	-51	-21
1384	San Ramon	San Ramon Transit Ctr	0	0	0	-43	-7	76	-91	0	-13	-8	0	0	0	-4	-1	7	-9	0	-1	-1
1412	San Ramon	San Ramon Transit Ctr	1,204	0	1,204	982	19	578	406	0	-7	-14	1,072	0	1,072	875	17	515	362	0	-6	-12
1413	San Ramon	San Ramon Transit Ctr	0	-9	9	13	13	0	0	0	0	0	0	-7	7	10	10	0	0	0	0	0
1414	San Ramon	San Ramon Transit Ctr	0	-43	43	-3	3	14	-18	0	-1	-1	0	-6	6	0	0	2	-2	0	0	0
1415	San Ramon	San Ramon Transit Ctr	19	8	11	-62	-13	150	-172	1	-20	-8	14	6	8	-46	-10	110	-127	1	-15	-6
1416	San Ramon	San Ramon Transit Ctr	0	0	0	870	1	695	194	5	-19	-6	0	0	0	870	1	695	194	5	-19	-6
1417	San Ramon	San Ramon Transit Ctr	0	-30	30	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1495	San Ramon	San Ramon Transit Ctr	136	75	61	299	8	143	132	0	9	7	74	41	33	162	4	78	72	0	5	4
1648	Livermore	Vasco ACE	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1649	Livermore	Vasco ACE	0	0	0	117	39	39	39	0	0	0	0	0	0	73	24	24	24	0	0	0
1652	Livermore	Vasco ACE	0	0	0	330	92	220	0	0	0	18	0	0	0	169	47	113	0	0	0	9
1653	Livermore	Vasco ACE	131	112	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1656	Livermore	Vasco ACE	15	0	15	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	0
1658	Livermore	Vasco ACE	509	165	344	133	0	66	0	0	38	29	112	36	76	29	0	15	0	0	8	6
1659	Livermore	Vasco ACE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1666	Livermore	Vasco ACE	50	45	5	161	73	73	15	0	0	0	0	0	0	0	0	0	0	0	0	0
1787	Livermore	Vasco ACE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500	Dublin	West Dublin/Pleasanton	0	0	0	15	-23	42	14	-9	14	-23	0	0	0	0	0	0	0	0	0	0
1501	Dublin	West Dublin/Pleasanton	0	0	0	15	-27	25	28	-8	14	-17	0	0	0	5	-10	9	10	-3	5	-6
1502	Dublin	West Dublin/Pleasanton	87	0	87	270	32	38	108	-4	88	8	87	0	87	270	32	38	108	-4	88	8
1503	Dublin	West Dublin/Pleasanton	203	0	203	533	123	201	187	5	5	12	129	0	129	339	78	128	119	3	3	8
1504	Dublin	West Dublin/Pleasanton	87	0	87	99	25	33	33	0	4	4	17	0	17	19	5	6	6	0	1	1
1525	Dublin	West Dublin/Pleasanton	0	0	0	2	2	-6	1	0	4	1	0	0	0	0	0	0	0	0	0	0
1526	Dublin	West Dublin/Pleasanton	0	0	0	2	2	-6	1	0	4	1	0	0	0	2	2	-5	1	0	3	1
1690	Dublin	West Dublin/Pleasanton	460	305	155	937	293	379	247	1	5	12	460	305	155	937	293	379	247	1	5	12
1795	Dublin	West Dublin/Pleasanton	87	0	87	89	22	31	28	0	6	2	87	0	87	89	22	31	28	0	6	2
1796	Dublin	West Dublin/Pleasanton	203	0	203	208	58	84	62	0	1	3	203	0	203	208	58	84	62	0	1	3
1797	Dublin	West Dublin/Pleasanton	87	0	87	226	52	79	85	2	3	5	42	0	42	109	25	38	41	1	1	2
1798	Dublin	West Dublin/Pleasanton	87	0	87	64	22	28	13	2	0	-1	41	0	41	30	10	13	6	1	0	0
1802	Dublin	West Dublin/Pleasanton	0	0	0	1	1	-1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1865	Dublin	West Dublin/Pleasanton	203	0	203	0	0	0	0	0	0	0	203	0	203	0	0	0	0	0	0	0
1535	Pleasanton	West Dublin/Pleasanton	69	55	14	872	278	410	172	0	7	5	69	55	14	870	277	409	172	0	7	5
1536	Pleasanton	West Dublin/Pleasanton	399	318	81	1,328	522	544	243	1	9	9	383	305	78	1,276	501	523	233	1	9	9
1537	Pleasanton	West Dublin/Pleasanton	149	119	30	350	98	198	72	0	-10	-8	33	26	7	77	22	44	16	0	-2	-2
1538	Pleasanton	West Dublin/Pleasanton	18	18	0	43	12	25	8	0	-1	-1	2	2	0	5	1	3	1	0	0	0
1539	Pleasanton	West Dublin/Pleasanton	0	0	0	1,484	127	477	572	2	256	50	0	0	0	276	24	89	106	0	48	9
1688	Pleasanton	West Dublin/Pleasanton	0	0	0	270	68	91	104	3	3	3	0	0	0	8	2	3	3	0	0	0
1689	Pleasanton	West Dublin/Pleasanton	0	0	0	462	156	213	89	0	2	2	0	0	0	462	156	213	89	0	2	2
		Total	**12,644**	**4,051**	**8,593**	**21,638**	**2,200**	**10,626**	**7,126**	**-3**	**1,414**	**276**	**8,017**	**2,320**	**5,699**	**15,131**	**2,541**	**6,838**	**4,829**	**1**	**750**	**165**

TPA	Jurisdiction	2020-2040 Growth										TPA Growth									
		HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp	HH	SF	MF	Total Emp	Retail Emp	Service Emp	Other Emp	Ag. Emp	Man. Emp	Trading Emp
San Ramon Transit Ctr	San Ramon	4,480	782	3,698	5,235	99	3,589	1,623	2	-67	-11	3,202	378	2,823	3,688	57	2,483	1,231	3	-63	-23
West Dublin/Pleasanton BART	Dublin	1,504	305	1,199	2,461	582	927	807	-11	149	7	1,269	305	964	2,008	515	721	628	-1	113	31
	Pleasanton	635	510	125	4,809	1,261	1,958	1,260	6	266	59	487	388	99	2,974	983	1,284	620	1	64	23
Dublin/Pleasanton BART	Dublin	2,067	539	1,528	1,898	-1,192	1,138	1,647	5	197	103	899	234	665	2,141	127	561	1,254	1	123	75
	Pleasanton	1,298	544	754	4,789	692	2,176	1,272	1	588	59	867	380	487	2,994	429	1,369	802	1	354	38
Pleasanton ACE	Pleasanton	339	174	165	1,679	540	433	457	-7	243	12	186	95	92	1,055	359	268	270	-4	151	6
Livermore Transit Ctr	Livermore	1,606	875	731	27	14	7	6	0	0	0	987	504	485	0	0	0	0	0	0	0
South Vasco Rd ACE	Livermore	715	322	393	741	204	398	54	0	38	47	120	36	84	271	71	152	24	0	8	15
	Total	**12,644**	**4,051**	**8,593**	**21,638**	**2,200**	**10,626**	**7,126**	**-3**	**1,414**	**276**	**8,017**	**2,320**	**5,699**	**15,131**	**2,541**	**6,838**	**4,829**	**1**	**750**	**165**



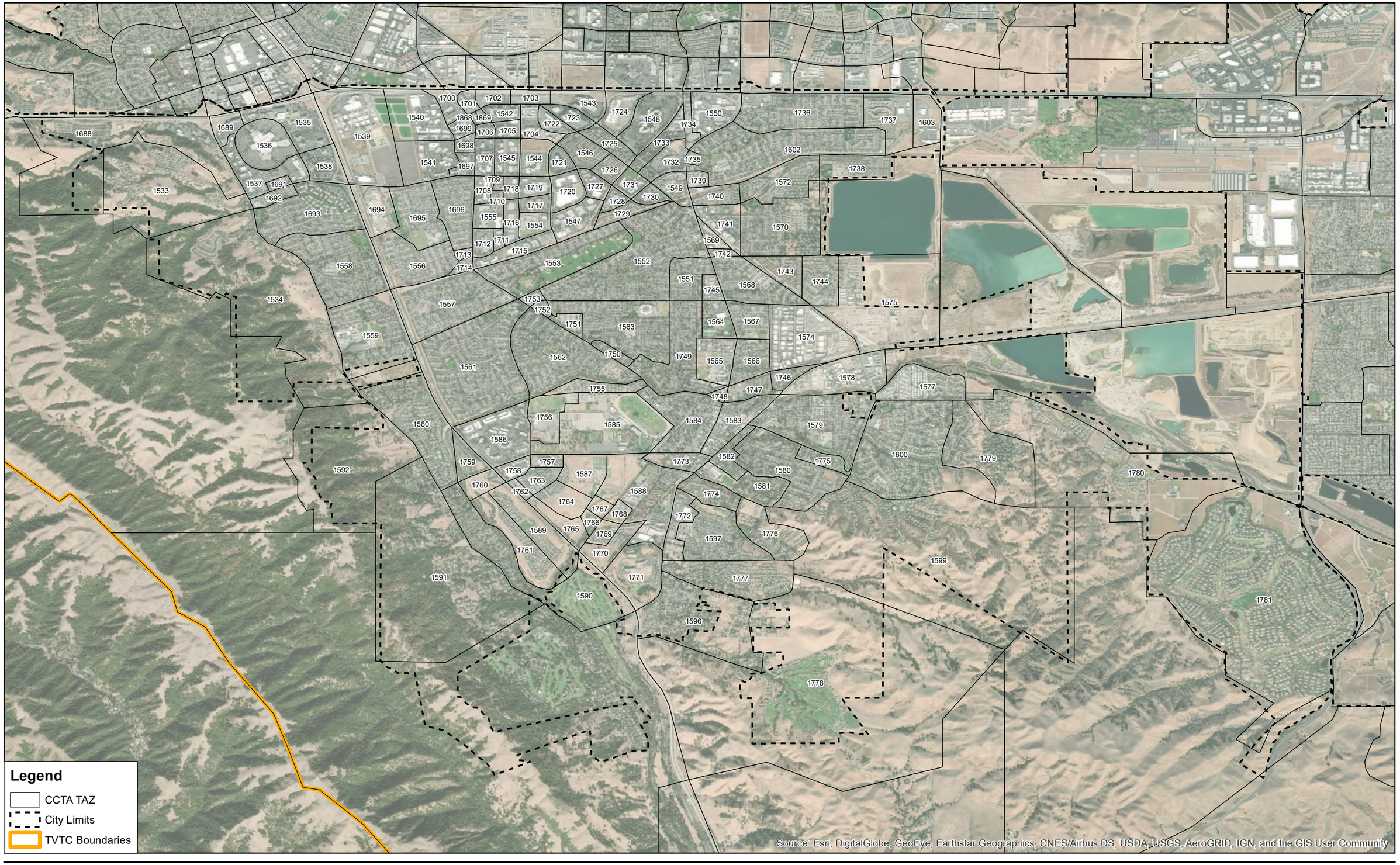
Kimley»Horn

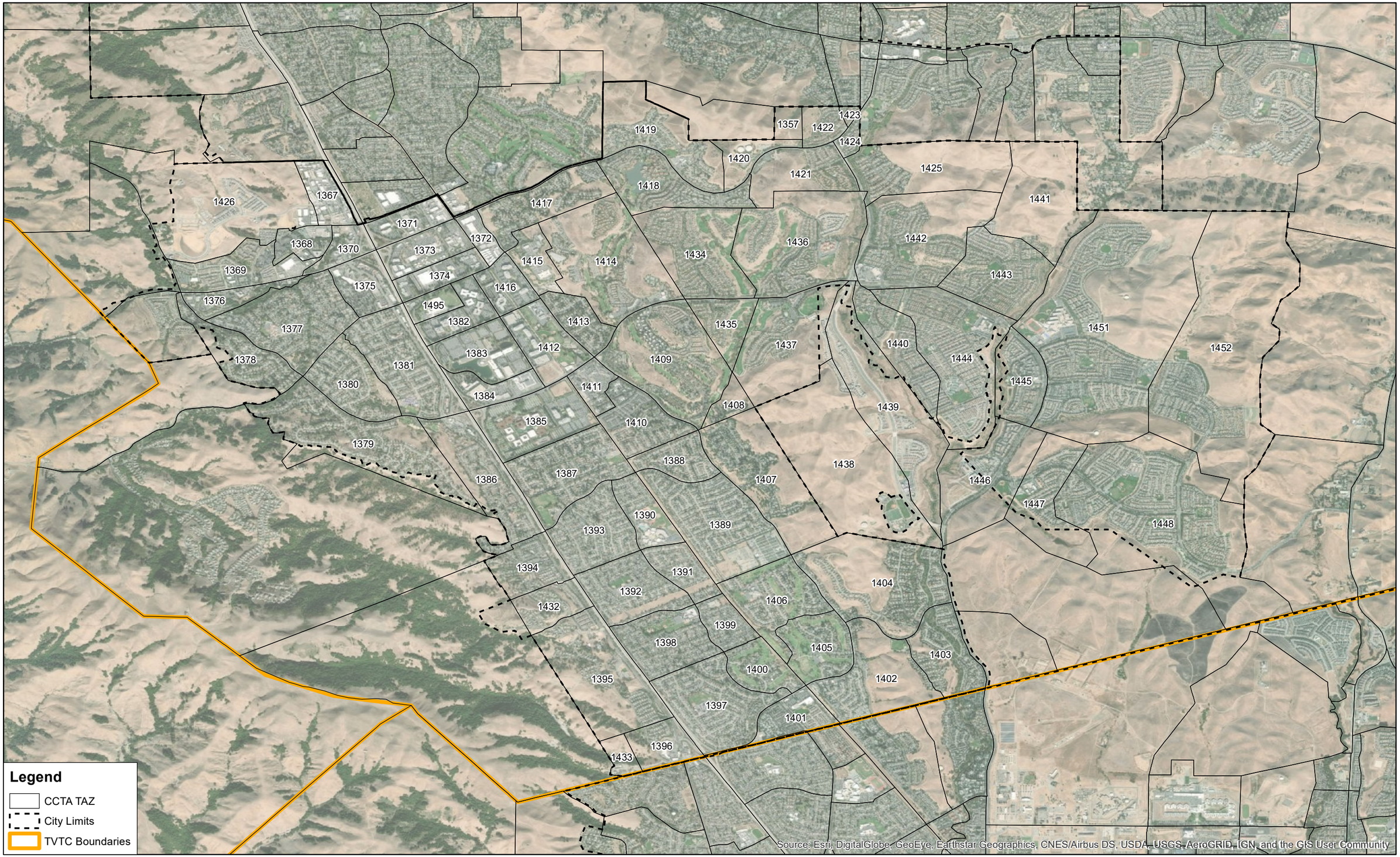
City of Dublin



Kimley»Horn

City of Livermore


1700
1701
1702
1703
1543
1724
1548
1550
1736
1737
1603
1688
1689
1535
1540
1868
1869
1542
1722
1723
1734
1699
1706
1705
1704
1725
1733
1602
1536
1539
1698
1707
1545
1544
1721
1546
1732
1735
1738
1541
1697
1726
1537
1691
1709
1739
1572
1533
1692
1708
1718
1719
1720
1727
1731
1549
1740
1710
1728
1730
1693
1694
1696
1717
1729
1555
1716
1554
1547
1741
1570
1695
1712
1711
1569
1715
1713
1742
1558
1556
1714
1553
1552
1743
1744
1551
1568
1745
1534
1753
1575
1557
1752
1751
1563
1564
1567
1574
1559
1562
1750
1749
1565
1566
1561
1746
1578
1577
1755
1748
1747
1560
1756
1585
1584
1583
1579
1586
1759
1757
1773
1582
1775
1600
1779
1592
1758
1587
1580
1780
1760
1763
1581
1762
1588
1774
1764
1767
1768
1772
1766
1589
1765
1769
1597
1776
1761
1770
1599
1591
1771
1777
1590
1781
1596
1778
Legend
CCTA TAZ
City Limits
TVTC Boundaries
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Kimley»Horn

City of San Ramon

Kimley»Horn

Attachment C – Trip Generation Calculations

San Ramon Transit Center

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	2,921	Dwelling Unit(s)	1,344	309	1,035	1,636	1,031	605
Retail	820	Shopping Center	812.500	1,000 Sq Ft	535	332	203	2,167	1,040	1,127
Total Trips					**1,879**	**641**	**1,238**	**3,803**	**2,071**	**1,732**
Internal Capture (Retail)					42	23	19	451	236	215
Internal Capture (Restaurant)					63	46	17	433	158	275
Internal Capture (Residential)					53	10	43	120	108	12
Residential Net New Trips					**1,291**	**299**	**992**	**1,516**	**923**	**593**
% Trip Reduction					**4%**	**3%**	**4%**	**7%**	**10%**	**2%**
% Trip Reduction (AM/PM Average)					**6%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	San Ramon Transit Center	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		406	1,000 Sq Ft	268	166	102
Restaurant		406	1,000 Sq Ft	268	166	102
Cinema/Entertainment				0		
Residential		2,921	Dwelling Unit(s)	1,344	309	1,035
Hotel				0		
All Other Land Uses[2]				0		
				1,879	641	1,238

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		13	0	6	0
Restaurant	0	13		0	4	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	10	33	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,880	641	1,239
Internal Capture Percentage	8%	12%	6%
External Vehicle-Trips[5]	1,722	562	1,160
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	14%	19%
Restaurant	28%	17%
Cinema/Entertainment	N/A	N/A
Residential	3%	4%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	166	166	1.00	101.5	102
Restaurant	1.00	166	166	1.00	101.5	102
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	309	309	1.00	1035	1035
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	30		13	0	14	0
Restaurant	32	14		0	4	3
Cinema/Entertainment	0	0	0		0	0
Residential	21	10	207	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		53	38	0	0	0
Retail	0		83	0	6	0
Restaurant	0	13		0	15	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	28	33	0		0
Hotel	0	7	10	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	23	143	166	143	0	0
Restaurant	46	120	166	120	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	10	299	309	299	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	19	83	102	83	0	0
Restaurant	17	85	102	85	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	43	992	1035	992	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	San Ramon Transit Center	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		406	1,000 Sq Ft	1,084	520	564
Restaurant		406	1,000 Sq Ft	1,084	520	564
Cinema/Entertainment				0		
Residential		2,921	Dwelling Unit(s)	1,636	1,031	605
Hotel				0		
All Other Land Uses[2]				0		
				3,803	2,071	1,732

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		151	0	64	0
Restaurant	0	231		0	44	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	5	7	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	3,804	2,071	1,733
Internal Capture Percentage	26%	24%	29%
External Vehicle-Trips[5]	2,800	1,569	1,231
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	45%	38%
Restaurant	30%	49%
Cinema/Entertainment	N/A	N/A
Residential	10%	2%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	520	520	1.00	563.5	564
Restaurant	1.00	520	520	1.00	563.5	564
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	1031	1031	1.00	605	605
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	11		164	23	64	28
Restaurant	17	231		45	44	39
Cinema/Entertainment	0	0	0		0	0
Residential	24	25	13	0		18
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		42	10	0	41	0
Retail	0		151	0	474	0
Restaurant	0	260		0	165	0
Cinema/Entertainment	0	21	16		41	0
Residential	0	5	7	0		0
Hotel	0	10	26	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	236	284	520	284	0	0
Restaurant	158	362	520	362	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	108	923	1031	923	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	215	349	564	349	0	0
Restaurant	275	289	564	289	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	12	593	605	593	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

West Dublin/Plesanton BART (Dublin)

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	1,008.000	Dwelling Unit(s)	464	107	357	564	355	209
Retail	820	Shopping Center	830.000	1,000 Sq Ft	546	339	207	2,214	1,063	1,151
Total Trips					**1,010**	**446**	**564**	**2,778**	**1,418**	**1,360**
Internal Capture (Retail)					34	18	16	461	241	220
Internal Capture (Restaurant)					66	48	18	439	158	281
Internal Capture (Residential)					44	6	38	120	111	9
Residential Net New Trips					**420**	**101**	**319**	**444**	**244**	**200**
% Trip Reduction					**9%**	**6%**	**11%**	**21%**	**31%**	**4%**
% Trip Reduction (AM/PM Average)					**16%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	West Dublin/Pleasanton (Dublin)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		415	1,000 Sq Ft	273	170	104
Restaurant		415	1,000 Sq Ft	273	170	104
Cinema/Entertainment				0		
Residential		1,008	Dwelling Unit(s)	464	107	357
Hotel				0		
All Other Land Uses[2]				0		
				1,010	446	564

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		14	0	2	0
Restaurant	0	14		0	4	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	34	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,012	447	565
Internal Capture Percentage	14%	16%	13%
External Vehicle-Trips[5]	868	375	493
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	11%	15%
Restaurant	28%	17%
Cinema/Entertainment	N/A	N/A
Residential	6%	11%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	169.5	170	1.00	103.5	104
Restaurant	1.00	169.5	170	1.00	103.5	104
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	107	107	1.00	357	357
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	30		14	0	15	0
Restaurant	32	15		0	4	3
Cinema/Entertainment	0	0	0		0	0
Residential	7	4	71	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		54	39	0	0	0
Retail	0		85	0	2	0
Restaurant	0	14		0	5	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	29	34	0		0
Hotel	0	7	10	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	18	152	170	152	0	0
Restaurant	48	122	170	122	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	6	101	107	101	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	16	88	104	88	0	0
Restaurant	18	86	104	86	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	38	319	357	319	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	West Dublin/Pleasanton (Dublin)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		415	1,000 Sq Ft	1,107	532	576
Restaurant		415	1,000 Sq Ft	1,107	532	576
Cinema/Entertainment				0		
Residential		1,008	Dwelling Unit(s)	564	355	209
Hotel				0		
All Other Land Uses[2]				0		
				2,778	1,418	1,360

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		154	0	66	0
Restaurant	0	236		0	45	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	5	4	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,780	1,419	1,361
Internal Capture Percentage	37%	36%	37%
External Vehicle-Trips[5]	1,760	909	851
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	45%	38%
Restaurant	30%	49%
Cinema/Entertainment	N/A	N/A
Residential	31%	4%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	531.5	532	1.00	575.5	576
Restaurant	1.00	531.5	532	1.00	575.5	576
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	355	355	1.00	209	209
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	12		167	23	66	29
Restaurant	17	236		46	45	40
Cinema/Entertainment	0	0	0		0	0
Residential	8	9	4	0		6
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		43	11	0	14	0
Retail	0		154	0	163	0
Restaurant	0	266		0	57	0
Cinema/Entertainment	0	21	16		14	0
Residential	0	5	7	0		0
Hotel	0	11	27	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	241	291	532	291	0	0
Restaurant	158	374	532	374	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	111	244	355	244	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	220	356	576	356	0	0
Restaurant	281	295	576	295	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	9	200	209	200	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

West Dublin/Plesanton BART (Pleasanton)

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	113	Dwelling Unit(s)	52	12	40	63	40	23
Retail	820	Shopping Center	1,381.000	1,000 Sq Ft	909	564	345	3,683	1,768	1,915
Total Trips					**961**	**576**	**385**	**3,746**	**1,808**	**1,938**
Internal Capture (Retail)					45	23	22	668	394	274
Internal Capture (Restaurant)					54	30	24	655	256	399
Internal Capture (Residential)					9	1	8	25	24	1
Residential Net New Trips					**43**	**11**	**32**	**38**	**16**	**22**
% Trip Reduction					**17%**	**8%**	**20%**	**40%**	**60%**	**4%**
% Trip Reduction (AM/PM Average)					**30%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	West Dublin/Pleasanton (Pleasanton)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		691	1,000 Sq Ft	455	282	173
Restaurant		691	1,000 Sq Ft	455	282	173
Cinema/Entertainment				0		
Residential		113	Dwelling Unit(s)	52	12	40
Hotel				0		
All Other Land Uses[2]				0		
				961	576	385

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		22	0	0	0
Restaurant	0	23		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	8	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	962	576	386
Internal Capture Percentage	11%	9%	14%
External Vehicle-Trips[5]	854	522	332
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	13%
Restaurant	11%	14%
Cinema/Entertainment	N/A	N/A
Residential	8%	20%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	282	282	1.00	172.5	173
Restaurant	1.00	282	282	1.00	172.5	173
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	12	12	1.00	40	40
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	50		22	0	24	0
Restaurant	54	24		0	7	5
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	8	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		90	65	0	0	0
Retail	0		141	0	0	0
Restaurant	0	23		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	48	56	0		0
Hotel	0	11	17	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	23	259	282	259	0	0
Restaurant	30	252	282	252	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	11	12	11	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	22	151	173	151	0	0
Restaurant	24	149	173	149	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	8	32	40	32	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	West Dublin/Pleasanton (Pleasanton)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		691	1,000 Sq Ft	1,842	884	958
Restaurant		691	1,000 Sq Ft	1,842	884	958
Cinema/Entertainment				0		
Residential		113	Dwelling Unit(s)	63	40	23
Hotel				0		
All Other Land Uses[2]				0		
				3,746	1,808	1,938

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		256	0	18	0
Restaurant	0	393		0	6	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	3,747	1,808	1,939
Internal Capture Percentage	36%	37%	35%
External Vehicle-Trips[5]	2,399	1,134	1,265
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	45%	29%
Restaurant	29%	42%
Cinema/Entertainment	N/A	N/A
Residential	60%	4%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	884	884	1.00	957.5	958
Restaurant	1.00	884	884	1.00	957.5	958
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	40	40	1.00	23	23
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	19		278	38	109	48
Restaurant	29	393		77	76	67
Cinema/Entertainment	0	0	0		0	0
Residential	1	1	0	0		1
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		71	18	0	2	0
Retail	0		256	0	18	0
Restaurant	0	442		0	6	0
Cinema/Entertainment	0	35	27		2	0
Residential	0	9	12	0		0
Hotel	0	18	44	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	394	490	884	490	0	0
Restaurant	256	628	884	628	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	24	16	40	16	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	274	684	958	684	0	0
Restaurant	399	559	958	559	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	22	23	22	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Dublin/Pleasanton BART (Dublin)

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	1,130	Dwelling Unit(s)	520	120	400	633	399	234
Retail	820	Shopping Center	1,065.000	1,000 Sq Ft	701	435	266	2,840	1,363	1,477
Total Trips					**1,221**	**555**	**666**	**3,473**	**1,762**	**1,711**
Internal Capture (Retail)					40	21	19	592	310	282
Internal Capture (Restaurant)					83	61	22	564	203	361
Internal Capture (Residential)					55	7	48	154	142	12
Residential Net New Trips					**465**	**113**	**352**	**479**	**257**	**222**
% Trip Reduction					**11%**	**6%**	**12%**	**24%**	**36%**	**5%**
% Trip Reduction (AM/PM Average)					**18%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Dublin/Plesanton BART (Dublin)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		533	1,000 Sq Ft	351	218	133
Restaurant		533	1,000 Sq Ft	351	218	133
Cinema/Entertainment				0		
Residential		1,130	Dwelling Unit(s)	520	120	400
Hotel				0		
All Other Land Uses[2]				0		
				1,221	555	666

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		17	0	2	0
Restaurant	0	17		0	5	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	44	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,222	556	666
Internal Capture Percentage	15%	16%	13%
External Vehicle-Trips[5]	1,044	467	577
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	10%	14%
Restaurant	28%	17%
Cinema/Entertainment	N/A	N/A
Residential	6%	12%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	217.5	218	1.00	133	133
Restaurant	1.00	217.5	218	1.00	133	133
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	120	120	1.00	400	400
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	39		17	0	19	0
Restaurant	41	19		0	5	4
Cinema/Entertainment	0	0	0		0	0
Residential	8	4	80	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		70	50	0	0	0
Retail	0		109	0	2	0
Restaurant	0	17		0	6	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	37	44	0		0
Hotel	0	9	13	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	21	197	218	197	0	0
Restaurant	61	157	218	157	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	7	113	120	113	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	19	114	133	114	0	0
Restaurant	22	111	133	111	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	48	352	400	352	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Dublin/Plesanton BART (Dublin)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		533	1,000 Sq Ft	1,420	682	739
Restaurant		533	1,000 Sq Ft	1,420	682	739
Cinema/Entertainment				0		
Residential		1,130	Dwelling Unit(s)	633	399	234
Hotel				0		
All Other Land Uses[2]				0		
				3,473	1,762	1,711

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		198	0	84	0
Restaurant	0	303		0	58	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	7	5	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	3,475	1,763	1,712
Internal Capture Percentage	38%	37%	38%
External Vehicle-Trips[5]	2,165	1,108	1,057
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	45%	38%
Restaurant	30%	49%
Cinema/Entertainment	N/A	N/A
Residential	36%	5%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	681.5	682	1.00	738.5	739
Restaurant	1.00	681.5	682	1.00	738.5	739
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	399	399	1.00	234	234
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	15		214	30	84	37
Restaurant	22	303		59	58	52
Cinema/Entertainment	0	0	0		0	0
Residential	9	10	5	0		7
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		55	14	0	16	0
Retail	0		198	0	184	0
Restaurant	0	341		0	64	0
Cinema/Entertainment	0	27	20		16	0
Residential	0	7	10	0		0
Hotel	0	14	34	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	310	372	682	372	0	0
Restaurant	203	479	682	479	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	142	257	399	257	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	282	457	739	457	0	0
Restaurant	361	378	739	378	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	12	222	234	222	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Dublin/Pleasanton BART (Pleasanton)

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	487	Dwelling Unit(s)	224	52	172	273	172	101
Retail	820	Shopping Center	508.000	1,000 Sq Ft	334	207	127	1,355	650	705
Total Trips					**558**	**259**	**299**	**1,628**	**822**	**806**
Internal Capture (Retail)					19	10	9	282	148	134
Internal Capture (Restraunt)					40	29	11	269	96	173
Internal Capture (Residential)					27	4	23	73	68	5
Residential Net New Trips					**197**	**48**	**149**	**200**	**104**	**96**
% Trip Reduction					**12%**	**8%**	**13%**	**27%**	**40%**	**5%**
% Trip Reduction (AM/PM Average)					**20%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Dublin/Pleasanton BART (Pleasanton)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		254	1,000 Sq Ft	167	104	64
Restaurant		254	1,000 Sq Ft	167	104	64
Cinema/Entertainment				0		
Residential		487	Dwelling Unit(s)	224	52	172
Hotel				0		
All Other Land Uses[2]				0		
				558	259	299

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		8	0	1	0
Restaurant	0	8		0	3	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	2	21	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	560	260	300
Internal Capture Percentage	15%	17%	14%
External Vehicle-Trips[5]	474	217	257
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	10%	14%
Restaurant	28%	17%
Cinema/Entertainment	N/A	N/A
Residential	8%	13%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	103.5	104	1.00	63.5	64
Restaurant	1.00	103.5	104	1.00	63.5	64
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	52	52	1.00	172	172
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	19		8	0	9	0
Restaurant	20	9		0	3	2
Cinema/Entertainment	0	0	0		0	0
Residential	3	2	34	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		33	24	0	0	0
Retail	0		52	0	1	0
Restaurant	0	8		0	3	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	18	21	0		0
Hotel	0	4	6	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	10	94	104	94	0	0
Restaurant	29	75	104	75	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	4	48	52	48	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	9	55	64	55	0	0
Restaurant	11	53	64	53	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	23	149	172	149	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Dublin/Pleasanton BART (Pleasanton)	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		254	1,000 Sq Ft	678	325	353
Restaurant		254	1,000 Sq Ft	678	325	353
Cinema/Entertainment				0		
Residential		487	Dwelling Unit(s)	273	172	101
Hotel				0		
All Other Land Uses[2]				0		
				1,628	822	806

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		94	0	40	0
Restaurant	0	145		0	28	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	3	2	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,629	822	807
Internal Capture Percentage	38%	38%	39%
External Vehicle-Trips[5]	1,005	510	495
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	46%	38%
Restaurant	30%	49%
Cinema/Entertainment	N/A	N/A
Residential	40%	5%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	325	325	1.00	352.5	353
Restaurant	1.00	325	325	1.00	352.5	353
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	172	172	1.00	101	101
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	7		102	14	40	18
Restaurant	11	145		28	28	25
Cinema/Entertainment	0	0	0		0	0
Residential	4	4	2	0		3
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		26	7	0	7	0
Retail	0		94	0	79	0
Restaurant	0	163		0	28	0
Cinema/Entertainment	0	13	10		7	0
Residential	0	3	5	0		0
Hotel	0	7	16	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	148	177	325	177	0	0
Restaurant	96	229	325	229	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	68	104	172	104	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	134	219	353	219	0	0
Restaurant	173	180	353	180	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	96	101	96	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Pleasanton ACE

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	949	Dwelling Unit(s)	437	101	336	531	335	196
Retail	820	Shopping Center	598.500	1,000 Sq Ft	394	244	150	1,596	766	830
Total Trips					**831**	**345**	**486**	**2,127**	**1,101**	**1,026**
Internal Capture (Retail)					25	13	12	332	174	158
Internal Capture (Restaurant)					47	34	13	318	115	203
Internal Capture (Residential)					32	5	27	88	80	8
Residential Net New Trips					**405**	**96**	**309**	**443**	**255**	**188**
% Trip Reduction					**7%**	**5%**	**8%**	**17%**	**24%**	**4%**
% Trip Reduction (AM/PM Average)					**12%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Pleasanton ACE	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		299	1,000 Sq Ft	197	122	75
Restaurant		299	1,000 Sq Ft	197	122	75
Cinema/Entertainment				0		
Residential		949	Dwelling Unit(s)	437	101	336
Hotel				0		
All Other Land Uses[2]				0		
				831	345	486

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		10	0	2	0
Restaurant	0	10		0	3	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	3	24	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	831	345	486
Internal Capture Percentage	13%	15%	11%
External Vehicle-Trips[5]	727	293	434
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	11%	16%
Restaurant	28%	17%
Cinema/Entertainment	N/A	N/A
Residential	5%	8%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	122	122	1.00	75	75
Restaurant	1.00	122	122	1.00	75	75
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	101	101	1.00	336	336
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	22		10	0	11	0
Restaurant	23	11		0	3	2
Cinema/Entertainment	0	0	0		0	0
Residential	7	3	67	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		39	28	0	0	0
Retail	0		61	0	2	0
Restaurant	0	10		0	5	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	21	24	0		0
Hotel	0	5	7	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	13	109	122	109	0	0
Restaurant	34	88	122	88	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	96	101	96	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	12	63	75	63	0	0
Restaurant	13	62	75	62	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	27	309	336	309	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Pleasanton ACE	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		299	1,000 Sq Ft	798	383	415
Restaurant		299	1,000 Sq Ft	798	383	415
Cinema/Entertainment				0		
Residential		949	Dwelling Unit(s)	531	335	196
Hotel				0		
All Other Land Uses[2]				0		
				2,127	1,101	1,026

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		111	0	47	0
Restaurant	0	170		0	33	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	4	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,127	1,101	1,026
Internal Capture Percentage	35%	34%	36%
External Vehicle-Trips[5]	1,389	732	657
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	45%	38%
Restaurant	30%	49%
Cinema/Entertainment	N/A	N/A
Residential	24%	4%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	383	383	1.00	415	415
Restaurant	1.00	383	383	1.00	415	415
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	335	335	1.00	196	196
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	8		120	17	47	21
Restaurant	12	170		33	33	29
Cinema/Entertainment	0	0	0		0	0
Residential	8	8	4	0		6
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		31	8	0	13	0
Retail	0		111	0	154	0
Restaurant	0	192		0	54	0
Cinema/Entertainment	0	15	11		13	0
Residential	0	4	5	0		0
Hotel	0	8	19	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	174	209	383	209	0	0
Restaurant	115	268	383	268	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	80	255	335	255	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	158	257	415	257	0	0
Restaurant	203	212	415	212	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	8	188	196	188	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Livermore Transit Center

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	1,030	Dwelling Unit(s)	474	109	365	577	364	213
Retail	820	Shopping Center	493.500	1,000 Sq Ft	325	202	123	1,316	632	684
Total Trips					**799**	**311**	**488**	**1,893**	**996**	**897**
Internal Capture (Retail)					22	12	10	274	143	131
Internal Capture (Restaurant)					38	28	10	263	96	167
Internal Capture (Residential)					28	4	24	73	66	7
Residential Net New Trips					**446**	**105**	**341**	**504**	**298**	**206**
% Trip Reduction					**6%**	**4%**	**7%**	**13%**	**18%**	**3%**
% Trip Reduction (AM/PM Average)					**10%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Livermore Transit Center	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		247	1,000 Sq Ft	163	101	62
Restaurant		247	1,000 Sq Ft	163	101	62
Cinema/Entertainment				0		
Residential		1,030	Dwelling Unit(s)	474	109	365
Hotel				0		
All Other Land Uses[2]				0		
				799	311	488

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		8	0	2	0
Restaurant	0	8		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	20	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	800	311	489
Internal Capture Percentage	11%	14%	9%
External Vehicle-Trips[5]	712	267	445
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	12%	16%
Restaurant	28%	16%
Cinema/Entertainment	N/A	N/A
Residential	4%	7%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	101	101	1.00	61.5	62
Restaurant	1.00	101	101	1.00	61.5	62
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	109	109	1.00	365	365
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	18		8	0	9	0
Restaurant	19	9		0	2	2
Cinema/Entertainment	0	0	0		0	0
Residential	7	4	73	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		32	23	0	0	0
Retail	0		51	0	2	0
Restaurant	0	8		0	5	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	17	20	0		0
Hotel	0	4	6	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	12	89	101	89	0	0
Restaurant	28	73	101	73	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	4	105	109	105	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	10	52	62	52	0	0
Restaurant	10	52	62	52	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	24	341	365	341	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	Livermore Transit Center	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		247	1,000 Sq Ft	658	316	342
Restaurant		247	1,000 Sq Ft	658	316	342
Cinema/Entertainment				0		
Residential		1,030	Dwelling Unit(s)	577	364	213
Hotel				0		
All Other Land Uses[2]				0		
				1,893	996	897

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		92	0	39	0
Restaurant	0	140		0	27	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	3	4	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,893	996	897
Internal Capture Percentage	32%	31%	34%
External Vehicle-Trips[5]	1,283	691	592
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	45%	38%
Restaurant	30%	49%
Cinema/Entertainment	N/A	N/A
Residential	18%	3%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	316	316	1.00	342	342
Restaurant	1.00	316	316	1.00	342	342
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	364	364	1.00	213	213
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	7		99	14	39	17
Restaurant	10	140		27	27	24
Cinema/Entertainment	0	0	0		0	0
Residential	9	9	4	0		6
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		25	6	0	15	0
Retail	0		92	0	167	0
Restaurant	0	158		0	58	0
Cinema/Entertainment	0	13	9		15	0
Residential	0	3	4	0		0
Hotel	0	6	16	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	143	173	316	173	0	0
Restaurant	96	220	316	220	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	66	298	364	298	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	131	211	342	211	0	0
Restaurant	167	175	342	175	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	7	206	213	206	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

South Vasco Rd ACE

ITE Land Use Code	Size	Size	AM Peak			PM Peak		
			Rate	In%	Out%	Rate	In%	Out%
220	Multifamily Housing (Low-Rise)	Dwelling Unit(s)	0.46	0.23	0.77	0.56	0.63	0.37
820	Shopping Center	1,000 Sq Ft	0.66	0.62	0.38	2.67	0.48	0.52

TVTDF Land Use Type	ITE Land Use Code	Land Use	Size	Units	AM Peak			PM Peak		
					Total	In	Out	Total	In	Out
Multi-Family Residential	220	Multifamily Housing (Low-Rise)	105	Dwelling Unit(s)	48	11	37	59	37	22
Retail	820	Shopping Center	226.500	1,000 Sq Ft	149	92	57	604	290	314
Total Trips					**197**	**103**	**94**	**663**	**327**	**336**
Internal Capture (Retail)					8	4	4	124	65	59
Internal Capture (Restaurant)					16	11	5	112	42	70
Internal Capture (Residential)					8	1	7	24	23	1
Residential Net New Trips					**40**	**10**	**30**	**35**	**14**	**21**
% Trip Reduction					**17%**	**9%**	**19%**	**41%**	**62%**	**5%**
% Trip Reduction (AM/PM Average)					**30%**					

Source: ITE Trip Generation, 10th Edition

Consistent with 2020 Nexus Study, a 30% reduction was applied to LUC 820 Shopping Center rates to account for pass-by trips.

Internal Capture assumed 50% Retail and 50% Restaurant split for Retail Land Use Type.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	South Vasco Rd ACE	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		113	1,000 Sq Ft	75	46	29
Restaurant		113	1,000 Sq Ft	75	46	29
Cinema/Entertainment				0		
Residential		105	Dwelling Unit(s)	48	11	37
Hotel				0		
All Other Land Uses[2]				0		
				197	103	94

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		4	0	0	0
Restaurant	0	4		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	7	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	198	103	95
Internal Capture Percentage	16%	16%	17%
External Vehicle-Trips[5]	166	87	79
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	9%	14%
Restaurant	24%	17%
Cinema/Entertainment	N/A	N/A
Residential	9%	19%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	46	46	1.00	28.5	29
Restaurant	1.00	46	46	1.00	28.5	29
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	11	11	1.00	37	37
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	8		4	0	4	0
Restaurant	9	4		0	1	1
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	7	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		15	11	0	0	0
Retail	0		23	0	0	0
Restaurant	0	4		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	8	9	0		0
Hotel	0	2	3	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	4	42	46	42	0	0
Restaurant	11	35	46	35	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	10	11	10	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	4	25	29	25	0	0
Restaurant	5	24	29	24	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	7	30	37	30	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	TVTC AB 3177	**Organization:**	Kimley-Horn and Associates, Inc.
Project Location:	South Vasco Rd ACE	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail		113	1,000 Sq Ft	302	145	157
Restaurant		113	1,000 Sq Ft	302	145	157
Cinema/Entertainment				0		
Residential		105	Dwelling Unit(s)	59	37	22
Hotel				0		
All Other Land Uses[2]				0		
				663	327	336

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.00	0%	0%	1.00	0%	0%
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment	1.00	0%	0%	1.00	0%	0%
Residential	1.00	0%	0%	1.00	0%	0%
Hotel	1.00	0%	0%	1.00	0%	0%
All Other Land Uses[2]	1.00	0%	0%	1.00	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					2640	
Restaurant					2640	
Cinema/Entertainment						
Residential		2640	2640			
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		42	0	17	0
Restaurant	0	64		0	6	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	663	327	336
Internal Capture Percentage	39%	40%	39%
External Vehicle-Trips[5]	403	197	206
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	45%	38%
Restaurant	29%	45%
Cinema/Entertainment	N/A	N/A
Residential	62%	5%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	TVTC AB 3177
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	145	145	1.00	157	157
Restaurant	1.00	145	145	1.00	157	157
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	37	37	1.00	22	22
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	3		46	6	18	8
Restaurant	5	64		13	12	11
Cinema/Entertainment	0	0	0		0	0
Residential	1	1	0	0		1
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		12	3	0	1	0
Retail	0		42	0	17	0
Restaurant	0	73		0	6	0
Cinema/Entertainment	0	6	4		1	0
Residential	0	1	2	0		0
Hotel	0	3	7	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	65	80	145	80	0	0
Restaurant	42	103	145	103	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	23	14	37	14	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	59	98	157	98	0	0
Restaurant	70	87	157	87	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	21	22	21	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

TRI-VALLEY TRANSPORTATION COUNCIL
RESOLUTION NO. 2026-06

A RESOLUTION OF THE TRI-VALLEY TRANSPORTATION COUNCIL AMENDING THE TRI-VALLEY TRANSPORTATION DEVELOPMENT FEE (TVTDF) RATE SCHEDULE TO ADD TRANSIT PRIORITY AREA RESIDENTIAL CATEGORIES PURSUANT TO AB 3177

WHEREAS, the Tri-Valley Transportation Council (TVTC) was established through a Joint Exercise of Powers Agreement (JEPA) among the jurisdictions of Dublin, Livermore, Pleasanton, Danville, San Ramon, Alameda County, and Contra Costa County; and

WHEREAS, the Tri-Valley Transportation Council administers the Tri-Valley Transportation Development Fee (TVTDF) program to fund regional transportation improvements needed to mitigate traffic impacts generated by new development within the Tri-Valley Development Area; and

WHEREAS, the current TVTDF rate schedule is based on the 2020 Nexus Study and the Strategic Expenditure Plan adopted by the TVTC Board; and

WHEREAS, Assembly Bill 3177 (AB 3177), adopted in September 2024, amended the California Mitigation Fee Act to require agencies that impose transportation impact fees to establish a reduced fee for qualifying residential development located within a Transit Priority Area (TPA); and

WHEREAS, a Transit Priority Area is generally defined as an area within one-half mile of a major transit stop, and qualifying developments must meet additional statutory criteria related to parking supply and access to nearby retail uses; and

WHEREAS, TVTC retained Kimley-Horn and Associates to evaluate potential reductions in vehicle trip generation associated with residential development located within Transit Priority Areas in the Tri-Valley region; and

WHEREAS, the analysis concluded that while trip reductions within TPAs may vary based on the mix of land uses and development patterns, a reduction in the range of approximately nine percent to thirty-three percent could be supported by the analysis; and

WHEREAS, the analysis further concluded that a **conservative reduction of ten percent (10%) could be justified** for residential development located within Transit Priority Areas while maintaining the nexus relationship between development and the regional transportation improvements funded by the TVTDF program; and

TRI-VALLEY TRANSPORTATION COUNCIL

WHEREAS, adding new residential land use categories for developments located within Transit Priority Areas will allow the TVTDF program to comply with the requirements of AB 3177 while maintaining the financial stability of the regional fee program; and

WHEREAS, Section 3.d.i. of the Joint Exercise of Powers Agreement requires approval by at least six TVTC member agencies to adopt or amend the Strategic Expenditure Plan or modify the TVTDF fee structure.

NOW THEREFORE BE IT RESOLVED THAT the Tri-Valley Transportation Council hereby amends the Tri-Valley Transportation Development Fee (TVTDF) rate schedule to add the following residential categories applicable to qualifying development within Transit Priority Areas:

Single Family Residential (Transit Priority Area):	$6,476.46 per Dwelling Unit (DU)
Multi-Family Residential (Transit Priority Area):	$3,818.48 per Dwelling Unit (DU)

and be it further,

RESOLVED that these rates represent a **ten percent (10%) reduction** from the existing TVTDF residential rates and shall apply only to residential developments that meet the eligibility requirements established in AB 3177; and be it further

RESOLVED that TVTC staff shall notify all member agencies of the updated fee schedule and direct agencies to apply the Transit Priority Area residential fee categories to qualifying development projects consistent with the requirements of AB 3177.

PASSED, APPROVED AND ADOPTED at the meeting of April 20, 2026, by the following votes:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Renee S. Morgan, Chair
Tri-Valley Transportation Council

ATTEST:

_____
Allan Shields, TVTC Administrator

TRI-VALLEY TRANSPORTATION COUNCIL

Item 5b

Renee Morgan
TVTC Chair
Councilmember
Town of Danville
(925) 918-3999

David Haubert
TVTC Vice Chair
Supervisor District 1
Alameda County
(510) 272-6691

Jean Josey
Vice Mayor
City of Dublin
(925) 833-2530

If you have any questions related to the Tri-Valley Transportation Council meeting agenda. Please contact Allan Shields, TVTC Administrative staff at (925) 314-3374 or email at ashields@danville.ca.gov

To: TVTC Finance Subcommittee

From: Technical Advisory Committee (TAC)

Date: March 12, 2026

Subject: TVTDF Revenue Conditions and Policy Direction for Project Funding

---

BACKGROUND

.

The Tri-Valley Transportation Development Fee (TVTDF) allocates a fair share of the cost of regionally significant transportation infrastructure to new development across the seven Tri-Valley jurisdictions.

The fee program is administered by TVTC and is supported by development impact fees collected by the member agencies. Local jurisdictions collect the fee from development projects and transmit **not less than 80 percent of the fees collected to the TVTC Treasurer each quarter**, while up to 20 percent may be retained locally for eligible projects included in the Strategic Expenditure Plan.

The Joint Exercise of Powers Agreement (JEPA) provides that TVTC shall adopt a Strategic Expenditure Plan (SEP) identifying eligible regional transportation improvements and establishing a funding plan for allocating TVTDF revenues among projects. On August 16, 2021, TVTC Board approved Resolution No. 2021-10 Adopting the Tri-Valley Transportation Council 2020 Nexus Fee Update Study. On April 18, 2022, the TVTC Board approved Resolution No 2022-07 Adopting the Strategic Expenditure Plan (SEP) Update and SEP Funding Plan, which has guided the expenditure of revenue collected from TVTDF over the last four years. On January 29, the SEP Funding Plan was amended to correct a minor error. The SEP Funding Plan is attached as Attachment A.

Section 8(a) the Joint Exercise of Powers Agreement (JEPA) outlines the purpose and content of the SEP stating that: “The [SEP] shall include a list of Projects, the estimated project cost of each Project, revenue estimates for the TVTD Fee, as well as a prioritization plan and timeline for project delivery.” The JEPA further states that in establishing the priority of Projects, TVTC shall consider the following criteria: Project Readiness, Project Ability to Leverage Other Funding and/or Eligibility for External

Funding, and Project Effectiveness. The JEPA contemplates that the SEP will be updated every 5 years

At the **April 2025 TVTC Board meeting**, staff provided an update on recent development fee collections and noted that revenues were arriving at a slower pace than previously anticipated in the SEP and associated Funding Plan. The discussion highlighted that the timing of collections can vary depending on when projects progress through the development cycle and reach the stage at which TVTDF fees are required to be paid. As a result, while projects continue to move through the entitlement pipeline, there can be a lag between project approvals and the receipt of associated fee revenues by TVTC.

The TVTDF program relies heavily on development activity within the region to generate revenue. Development levels used in earlier SEP projections anticipated continued growth across the Tri-Valley. As TVTC's financial reports have reflected over the last few years, recent market conditions have resulted in **lower development activity than originally forecast,** which has resulted in lower annual TVTDF Fee collections.

Additionally, recent changes in state law have affected the timing of when development impact fees may be collected for residential projects. Under **California Government Code §66007, as amended by Senate Bill 937 and related housing legislation**, agencies are generally required to collect development impact fees for residential development **at the time of certificate of occupancy or final inspection**, rather than earlier in the permitting process. This change was intended to reduce upfront costs for housing construction but has the effect of delaying when fee revenues are received by public agencies.

Historically, some member agencies collected regional transportation impact fees earlier in the development process, such as at building permit issuance. However, with the statutory requirement to collect certain development impact fees at or near occupancy for residential projects, fee revenues are now often received **later in the project cycle**, which can delay when funds are transmitted to the TVTC Treasurer. This shift in timing has contributed to slower inflows of TVTDF revenue relative to the timing of project funding requests.

TVTC's recent financial reports indicate that **TVTDF revenues have continued to decline relative to prior years**, while project expenditures and allocations have continued in accordance with previously adopted SEP Funding Plans. TVTC's year-end financial summaries show that **recent years have seen more funds disbursed than received**, resulting in a declining program balance. The current available balance in the TVTC account is approximately **$500,000**.

At the same time, member agencies have recently begun submitting additional project funding requests consistent with the SEP Funding Plan.

These conditions have created a situation in which **funding requests are being received while available program revenues remain limited and uncertain**.

DISCUSSION

The TVTC Board may wish to consider policy direction regarding how to manage project funding requests during this period of limited revenues.

While the SEP identifies eligible projects and establishes a funding framework, the Board retains discretion to amend the SEP Funding Plan to adjust the funding schedule based on current fiscal conditions.

Several potential approaches are available to the Board.

Option 1:
Amend the SEP Funding Plan and Temporarily Pause/Delay Allocations

Under this option, the Board could adopt an amendment to the SEP Funding Plan to **pause project funding allocations for a specified period of time or until the TVTC fund balance reaches a minimum threshold**.

This approach would allow the program to rebuild reserves and ensure that future allocations are large enough to meaningfully advance projects.

Because the Strategic Expenditure Plan represents the adopted regional funding framework, an amendment to the SEP Funding Plan would require approval by a **supermajority of 6 members of the TVTC Board** under the Joint Exercise of Powers Agreement.

Advantages

- Allows the program to rebuild financial capacity
- Avoids partially funding projects without sufficient funds to advance them
- Maintains consistency with the existing SEP project list

Considerations

- Projects may be delayed while the fund balance recovers.

Option 2:
Initiate a Full Strategic Expenditure Plan Update

Under this option, TVTC would initiate a full update of the Strategic Expenditure Plan. The most recent SEP update was adopted in **2022**, and historically the SEP has been updated approximately every five years as development forecasts and project priorities evolve.

A full SEP update would allow TVTC to:

- reassess revenue projections
- reevaluate project priorities

- update the project list
- revise the funding plan based on current development trends

Advantages
- Provides the most comprehensive program update
- Aligns project priorities with current economic conditions

Considerations
- Requires time and resources to complete the update
- May delay near-term project funding decisions.

Option 3:
Continue Funding Requests with a Minimum Reserve Requirement

Under this option, TVTC would continue evaluating project funding requests consistent with the SEP Funding Plan as they are received but would establish a **minimum fund balance threshold** below which allocations would not be approved.

This approach would allow projects to advance when funding is available while maintaining a reserve to ensure program stability.

Advantages
- Allows some projects to continue advancing
- Provides flexibility for the Board

Considerations
- Smaller allocations may not meaningfully advance large projects
- The fund balance could fluctuate depending on timing of requests

RECOMMENDATION

Staff recommends that the Board discuss the options presented in this report and provide direction regarding how project funding requests should be managed given current revenue conditions.

Staff further recommends that the Board consider establishing a **minimum fund balance threshold or temporary pause in allocations** to ensure that the program maintains sufficient funds to meaningfully advance regional transportation projects.

Table 8: 2022 TVTDF Funding Plan

ID	Sponsor	Project		July 1st FY Balance ($)										Total
				$17,000,000	$22,469,002	$13,981,855	$6,057,276	$2,042,094	$5,064,310	$973,440	$6,628,993	$7,024,183	$21,944,751	
				Revenue Forecast ($)										
				$14,577,263	$16,331,555	$14,584,716	$13,862,627	$14,130,377	$12,945,760	$15,598,510	$12,953,043	$33,769,769	$13,979,792	$162,733,410
				Return to Local Source - 20% ($)										
				$2,915,453	$3,266,311	$2,916,943	$2,772,525	$2,826,075	$2,589,152	$3,119,702	$2,590,609	$6,753,954	$2,795,958	$32,546,682
				Admin Fee -0.8% ($)										
				$116,618	$130,652	$116,678	$110,901	$113,043	$103,566	$124,788	$103,624	$270,158	$111,838	$1,301,867
				Rev enue for TVTDF Allocation ($)										
				$28,545,192	$35,403,594	$25,532,950	$17,036,476	$13,233,353	$15,317,352	$13,327,460	$16,887,802	$33,769,840	$33,016,746	$128,884,861
				Proj ected Disbursement - 2022 SEP Update										
				22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	22-32 Total
			Disbursed	$6,076,190	$21,421,738	$19,475,674	$14,994,382	$8,169,043	$14,343,912	$6,698,467	$9,863,619	$11,825,089	$10,419,955	$123,288,069
			Remainder	$22,469,002	$13,981,855	$6,057,276	$2,042,094	$5,064,310	$973,440	$6,628,993	$7,024,183	$21,944,751	$22,596,791	$22,596,791
A-2b		SR 84 / I-580 Interchange - Phase 2									$2,000,000	$1,500,000	$1,650,000	$5,150,000
A-9a		Crow Canyon Improvements Phase 1				$1,550,000								$1,550,000
A-9b		Crow Canyon Improvements Phase 2					$1,690,000							$1,690,000
A-10a		Vasco Road Safety Improvements Phase 1			$500,000	$2,820,000								$3,320,000
A-10b		Vasco Road Safety Improvements Phase 2					$2,580,000							$2,580,000
A-11		Express Bus/Bus Rapid Transit (BRT) - Phase 2						$800,000						$800,000
B-1		I-580/I-680 Interchange (Westbound to Southbound)						$500,000	$500,000					$1,000,000
B-4		I-580/Vasco Road Interchange Modification				$5,139,000	$3,426,000							$8,565,000
B-5		I-580/Greenville Rd Interchange Modification										$5,160,000	$3,440,000	$8,600,000
B-8a		Camino Tassajara/Tassajara Rd Widening Project (Contra Costa County				$4,380,000	$2,000,000							$6,380,000
B-8b		Camino Tassajara/Tassajara Rd Widening Project (Dublin Segment)			$1,450,000									$1,450,000
C-2		Norris Canyon Road Safety Improvement - Segment 1		$538,561										$538,561
C-3		Dublin Boulevard - North Canyons Parkway Extension			$16,039,300									$16,039,300
C-6		Sunol/680 Widening		$2,650,000										$2,650,000
C-7b		I-680 Express Lanes - Hwy 84 to Alcosta (Northbound)				$3,298,382	$5,298,382	$5,298,382	$7,298,382					$21,193,529
C-8		Santa Rita/I-580 Interchange								$1,033,378				$1,033,378
C-10		Innovate 680			$3,432,438	$2,288,292								$5,720,730
C-11a		Iron Horse Trail Bicycle-Pedestrian Overcrossing – Bollinger Canyon Road		$2,287,629										$2,287,629
C-11c		Iron Horse Trail – Dublin		$600,000										$600,000
C-11d		Iron Horse Trail – Livermore									$2,698,530			$2,698,530
C-11e		Iron Horse Trail to Shadow Cliffs											$164,866	$164,866
C-13		Fallon/El Charro Interchange						$2,070,661	$1,380,440					$3,451,101
C-14		Valley Link Rail (Phase 1)							$5,165,089	$5,165,089	$5,165,089	$5,165,089	$5,165,089	$25,825,445

Note: Only Projects receiving funding within SEP 10-year horizon are shown.

KEY	
	Not Allocated
	Pending
	Already Allocated

This page intentionally left blank.

TRI-VALLEY TRANSPORTATION COUNCIL

Item 5c

To: TVTC Finance Subcommittee

From: TVTC Technical Advisory Committee (TAC)

Date: March 12, 2026

Subject: Recommend TVTC Board Adopt the Tri-Valley Transportation Development Fee for FY2027

Renee Morgan
TVTC Chair
Councilmember
Town of Danville
(925) 918-3999

David Haubert
TVTC Vice Chair
Supervisor District 1
Alameda County
(510) 272-6691

Jean Josey
Vice Mayor
City of Dublin
(925) 833-2530

If you have any questions related to the Tri-Valley Transportation Council meeting agenda. Please contact Allan Shields, TVTC Administrative staff at (925) 314-3374 or email at ashields@danville.ca.gov

BACKGROUND

The Joint Exercise of Powers Agreement (JEPA) section 6.d.i. requires each Tri-Valley Transportation Council (TVTC) member to consider an annual automatic adjustment to the Tri-Valley Transportation Development Fee (TVTDF) effective July 1, based on the change in the Engineering News and Record Construction Cost Index (CCI) for the San Francisco Bay Area, as reported for the period ending December 31 of the prior year.

JEPA section 3.d.i. specifies that a vote of at least six TVTC members is needed to adopt or amend the Strategic Expenditure Plan or modify the TVTDF fee structure. However, the annual CCI-based automatic adjustment outlined in section 6.d.i. can be amended with a simple majority vote.

DISCUSSION

The amount of the adjustment is based on the change in the "Construction Cost Index" (CCI) for the San Francisco Bay Area, as reported annually in the Engineering News Record (ENR). The December 2025 ENR CCI for the San Francisco Bay Area is **+0.6%**.

RECOMMENDATION

The TVTC Finance Subcommittee recommends that the Board increase the FY2026 TVTDF rate schedule for FY2027. The TVTC should notify all member agencies to collect these TVTDF rates starting July 1, 2026. The proposed rates, effective July 1, 2026, are:

Single Family Residential:	$7,239.25 per Dwelling Unit (DU)
Multi-Family Residential:	$4,268.22 per DU
Single Family Residential (TPA)	$6,515.32 per DU
Multi-Family Residential (TPA)	$3,841.39 per DU
Office:	$9.67 per sq. ft. Gross Floor Area
Retail:	$6.17 per sq. ft. Gross Floor Area
Industrial:	$5.45 per sq. ft. Gross Floor Area
Other:	$6,695.21 per avg AM/PM peak hour trip

Accessory or Second Dwelling Unit (ADU/SDU): $0
Affordable Housing: $0

TVTDF Historical Fee Rates

	2024	2025	2026
Single Family Residential (per DU)	$7,196.07	$7,196.07	$7,239.25
Multi-Family Residential (per DU)	$4,242.76	$4,242.76	$4,268.22
Single Family Residential TPA (Per DU)***	0	$6,476.46	$6,513.32
Multi-Family Residential TPA (Per DU)***	0	$3,818.48	$3,841.39
Office (per SF Gross Floor Area)	$9.61	$9.61	$9.67
Retail (per SF Gross Floor Area)	$6.13	$6.13	$6.17
Industrial (per SF Gross Floor Area)	$5.42	$5.42	$5.45
Other (average am/pm peak hour trip)	$6,655.28	$6,655.28	$6,6695.21
Affordable Housing *	$0.00	$0.00	$0.00
ADU/SDU**	$0.00	$0.00	$0.00

*Pursuant to Resolution No. 2015-01 Adjusting the Tri-Valley Transportation Development Fee Schedule
**Pursuant to Resolution No. 2019-03 – Resetting the Accessory Dwelling Unit/Secondary Dwelling Unit Fee in the Tri Valley Transportation Council Development Fee Program.
***Pursuant to Resolution No. 2026-04 – Addition of Transit Priority Area Residential Categories to the TVTDF Rate Schedule Pursuant to AB 3177

Item 6

This page intentionally left blank.

Mechanics Bank®
P.O. Box 2200
Corona, CA 92878
800.797.6324
www.mechanicsbank.com

Statement Ending 02/27/2026

Managing Your Accounts

Client Services	800.797.6324
Online	www.mechanicsbank.com
Mobile	Download Our Mobile Apps

TRI-VALLEY
TRANSPORTATION COUNCIL
200 OLD BERNAL AVE
PLEASANTON CA 94566-7016

Do we have your current contact information?

Help us to protect your business from fraud by making sure we have your **correct address**, **phone number** and **email**. Login to online banking, call 800.797.6324 or stop by a branch to verify.

Important Update to Business Deposit Only ATM & Visa® Business Debit Card Agreement
Effective 1/30/2026, the standard for daily transaction limits with a Visa Business Debit Card will increase from $2,500 to $3,000 for POS transactions, including contactless, PIN and Signature transactions.

Summary of Accounts

Account Type	Account Number	Ending Balance
PUBLIC CHECKING	XXXXXXXX0415	$501,830.87

PUBLIC CHECKING - XXXXXXXX0415

Account Summary

Date	Description	Amount
01/31/2026	**Beginning Balance**	**$115,884.74**
	3 Credit(s) This Period	$389,995.38
	4 Debit(s) This Period	$4,049.25
02/27/2026	**Ending Balance**	**$501,830.87**

Deposits

Date	Description	Amount
02/23/2026	Bank by Mail Deposit	$75,713.25

Electronic Credits

Date	Description	Amount
02/09/2026	CITY PLEASANTON ACCTPYBL 3615	$294,198.58

HOW TO CONTACT US

800.797.6324
P.O. Box 8070
Walnut Creek, CA 94596
www.mechanicsbank.com

This information applies only to consumer accounts as defined by the Electronic Fund Transfer Act and Regulation E.

IN CASE OF ERRORS OR QUESTIONS ABOUT YOUR ELECTRONIC TRANSFERS

Call us at 800.797.6324, during regular business hours, or write us at: Mechanics Bank, P.O. Box 8070, Walnut Creek, CA 94596 as soon as you can, if you think your statement or receipt is wrong or if you need more information about a transfer on the statement or receipt. We must hear from you no later than 60 days after we sent you the FIRST statement on which the error or problem appeared.

1. Tell us your name and account number.
2. Describe the error or the transfer you are unsure about, and explain as clearly as you can why you believe it is an error or why you need more information.
3. Tell us the dollar amount of the suspected error.

If you tell us orally, we may require that you send us your complaint or question in writing within 10 business days.

We will determine whether an error occurred within 10 business days after we hear from you and will correct any error promptly. If we need more time, however, we may take up to 45 days to investigate your complaint or question. If we decide to do this, we will credit your account within 10 business days for the amount you think is in error, so that you will have the use of the money during the time it takes us to complete our investigation. If we ask you to put your complaint or question in writing and we do not receive it within 10 business days, we may not credit your account.

For errors involving new accounts, point-of-sale, or foreign-initiated transactions, we may take up to 90 days to investigate your complaint or question. For new accounts, we may take up to 20 business days to credit your account for the amount you think is in error.

We will tell you the results within three (3) business days after completing our investigation. If we decide that there was no error, we will send you a written explanation. You may ask for copies of the documents that we used in our investigation.

NOTICE TO BUSINESS AND COMMERCIAL CUSTOMERS:

Accounts owned by business and commercial customers are not subject to consumer regulations, such as the Truth in Savings Act and the Electronic Fund Transfer Act. The information regarding Electronic Transfers does not apply to business or commercial accounts. You acknowledge the risk of loss from unauthorized items. You further acknowledge that the Bank offers various services that allow business and commercial customers to closely monitor their account activity, such as Business Online Banking, Positive Pay, and other services ("Fraud Prevention Services"), which can reduce potential fraud. If you fail to use one or more of the available Fraud Prevention Services, you agree that you will be deemed to have assumed the risk of any losses that could have been prevented if you had used the Fraud Prevention Services.

FDIC MEMBER FDIC | EQUAL HOUSING LENDER

How to balance your account

1. Subtract from your check register any service, miscellaneous, or automatic charge(s) posted on this statement.
2. Mark ✓ your register after each check listed on the front of this statement.
3. Check off deposits shown on the statement against those shown in your check register.
4. Complete the form below.
5. The final "balance" in the form below should agree with your check register balance. If it does not, read "HINTS FOR FINDING DIFFERENCES".

HINTS FOR FINDING DIFFERENCES

Recheck all additions and subtractions or corrections.

Verify the carryover balance from page to page in your check register.

Make sure you have subtracted the service or miscellaneous charge(s) from your check register balance.

HOW TO BALANCE YOUR ACCOUNTS

TRANSFER AMOUNT FROM PAGE ONE	$	
ADD DEPOSITS MADE SINCE ENDING DATE ON STATEMENT		
SUBTOTAL	$	
LIST CHECKS NOT CLEARED ON THIS STATEMENT OR PRIOR STATEMENTS		
TOTAL CHECKS NOT LISTED →		
SUBTRACT TOTAL CHECKS NOT LISTED FROM SUBTOTAL ABOVE BALANCE	$	

Descriptions of ACH items are printed as supplied by originating company.

THIS SHOULD AGREE WITH YOUR CHECK REGISTER BALANCE

PUBLIC CHECKING - XXXXXXXX0415 (continued)

Other Credits

Date	Description	Amount
02/17/2026	In-Branch Transfer Credit	$20,083.55

Checks Cleared

Check Nbr	Date	Amount	Check Nbr	Date	Amount
2852	02/02/2026	$425.00	2856	02/06/2026	$1,926.75
2855*	02/10/2026	$125.00	2857	02/10/2026	$1,572.50

* Indicates skipped check number

Daily Balances

Date	Amount	Date	Amount	Date	Amount
02/02/2026	$115,459.74	02/09/2026	$407,731.57	02/17/2026	$426,117.62
02/06/2026	$113,532.99	02/10/2026	$406,034.07	02/23/2026	$501,830.87

Overdraft and Returned Item Fees

	Total for this period	Total year-to-date	Previous year-to-date
Total Overdraft Fees	$0.00	$0.00	$0.00
Total Returned Item Fees	$0.00	$0.00	$0.00

This page intentionally left blank.

California State Treasurer
Fiona Ma, CPA

Local Agency Investment Fund
P.O. Box 942809
Sacramento, CA 94209-0001
(916) 653-3001

March 03, 2026

LAIF Home
PMIA Average Monthly Yields

TRI-VALLEY TRANSPORTATION COUNCIL

ADMINISTRATOR
7000 BOLLINGER CANYON ROAD
SAN RAMON, CA 94583

Tran Type Definitions

Account Number: 40-07-023

February 2026 Statement

Account Summary

Total Deposit:	0.00	Beginning Balance:	6,015,017.01
Total Withdrawal:	0.00	Ending Balance:	6,015,017.01

This page intentionally left blank.

Tri-Valley Transportation Council
Balance Sheet
As of February 28, 2026

	Feb 28, 26
ASSETS	
Current Assets	
Checking/Savings	
1300 · Local Agency Invest Fund (023)	6,015,017.01
1000 · Mechanics Bank (0415)	497,796.87
Total Checking/Savings	6,512,813.88
Accounts Receivable	
1200 · Developer Fee Receivables	119,300.75
Total Accounts Receivable	119,300.75
Other Current Assets	
1101 · Interest Receivable - Member Ag	1,271.85
Total Other Current Assets	1,271.85
Total Current Assets	6,633,386.48
Other Assets	
1400 · Prepaid Insurance	2,611.39
Total Other Assets	2,611.39
TOTAL ASSETS	**6,635,997.87**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 · Accounts Payable	1,038.00
Total Accounts Payable	1,038.00
Total Current Liabilities	1,038.00
Total Liabilities	1,038.00
Equity	
3010 · Unrestricted Net Position	10,629,019.57
Net Income	-3,994,059.70
Total Equity	6,634,959.87
TOTAL LIABILITIES & EQUITY	**6,635,997.87**

This page intentionally left blank.

Tri-Valley Transportation Council
Revenue and Expense
YTD Comparison
February 2026

	Feb 26	Jul '25 - Feb 26
Ordinary Income/Expense		
Income		
4051 · Interest - Member Agencies	0.00	565.70
4050 · Investment Income	0.00	190,453.27
4000 · Development Fees	120,427.91	697,811.99
Total Income	120,427.91	888,830.96
Expense		
5070 · Administrative Staff Support	0.00	20,000.00
5000 · Bank Service	0.00	20.00
5090 · Insurance - Liability, D and O	423.45	3,331.48
5060 · Website Development	125.00	1,049.00
5080 · Board Meeting Stipends	1,000.00	1,700.00
5030 · Legal Fees	644.00	10,941.46
5020 · Accounting Fees	269.00	11,103.00
6000 · Transportaion Improvements		
6000.10 · Proj TI200259 Dublin Bvl Parkwa	0.00	4,811,700.00
Total 6000 · Transportaion Improvements	0.00	4,811,700.00
Total Expense	2,461.45	4,859,844.94
Net Ordinary Income	117,966.46	-3,971,013.98
Other Income/Expense		
Other Income		
70600 · Unrealized Gains and Losses	0.00	-23,045.72
Total Other Income	0.00	-23,045.72
Net Other Income	0.00	-23,045.72
Net Income	**117,966.46**	**-3,994,059.70**

This page intentionally left blank.

Tri-Valley Transportation Council
Revenue and Expense
February 2026

	Feb 26
Ordinary Income/Expense	
Income	
4000 · Development Fees	120,427.91
Total Income	120,427.91
Expense	
5090 · Insurance - Liability, D and O	423.45
5060 · Website Development	125.00
5080 · Board Meeting Stipends	1,000.00
5030 · Legal Fees	644.00
5020 · Accounting Fees	269.00
Total Expense	2,461.45
Net Ordinary Income	117,966.46
Net Income	**117,966.46**

This page intentionally left blank.