



DRAFT

ENVIRONMENTAL IMPACT REPORT (APPENDICES)

FOR THE

ENVISION CAMPBELL GENERAL PLAN AND HOUSING ELEMENT UPDATE

(SCH: 2022030566)

SEPTEMBER 2022

Prepared for:

City of Campbell
City Hall 70 N. First St.
Campbell, CA 95008

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



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Appendix A

Notice of Preparation and NOP Comments



ENVISION CAMPBELL

**Notice of Preparation and Scoping Meeting for the
Envision Campbell General Plan and Housing Element ("Campbell's Plan for Housing")
Update
Environmental Impact Report**

Date: March 23, 2022

To: State Clearinghouse, Stakeholder Agencies, Organizations and Interested Parties

Subject: Notice of Preparation and Scoping Meeting for the Envision Campbell General Plan and Housing Element Update Environmental Impact Report

Scoping Meeting: April 12, 2022, 7:30 p.m.

**City Hall Council Chambers
70 N. First St.
Campbell, CA**

Comment Period: March 23, 2022 to April 25, 2022.

The City of Campbell (City) will serve as Lead Agency in the preparation of a programmatic Environmental Impact Report (EIR) for the City of Campbell General Plan and Housing Element Update (General Plan Update, Plan or Proposed Project).

The purpose of this notice is to (1) serve as a Notice of Preparation (NOP) of an EIR pursuant to the State CEQA Guidelines Section 15082, (2) advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project, and (3) provide notice the upcoming public scoping meeting. The proposed project is a General Plan Update, including a Housing Element, consisting of goals, policies, actions, and an updated land use map that will guide future development activities and City actions. No specific development projects are proposed as part of the General Plan and Housing Element Update. Information regarding the project description, project location, and topics to be addressed in the Draft EIR is provided below. Additional project documents and information are available at the City of Campbell, Community Development Department (Planning Division) located at City Hall 70 N. First St. Campbell, CA 95008, and on-line at: <https://www.campbellca.gov/163/Planning>

For questions regarding this notice, please contact Stephen Rose, Senior Planner at (408) 866-2142, or by email: stephenr@campbellca.gov

Notice of Preparation 30-Day Comment Period: The City, as Lead Agency, requests that responsible and trustee agencies, and the Office of Planning and Research, respond in a manner consistent with Section 15082(b) of the CEQA Guidelines. Pursuant to Public Resources Code

Section 21080.4, responsible agencies, trustee agencies and the Office of Planning and Research must submit any comments in response to this notice no later than 30 days after receipt. In accordance with the time limits established by CEQA, the NOP public review period will begin on March 23, 2022 and end on April 25, 2022.

In the event that the City does not receive a response from any Responsible or Trustee Agency by the end of the review period, the City may presume that the Responsible Agency or Trustee Agency has no response to make (State CEQA Guidelines Section 15082(b)(2)). Comments in response to this notice must be submitted in at the address below, or by email by the close of the 30-day NOP review period, which is 5:00 PM on April 25, 2022:

Stephen Rose, Senior Planner
City Hall 70 N. First St.
Campbell, CA 95008
Email: stephenr@campbellca.gov

Scoping Meeting

The City will hold a scoping meeting to provide an opportunity for agency representatives and the public to assist the City in determining the scope and content of the EIR. The scoping meeting will be held during a Planning Commission hearing on **April 12, 2022, at 7:30p.m.** at City Hall Council Chambers, 70 N. First St. Campbell, CA 95008 and available for remote participation via Zoom. The scoping meeting will not discuss the merits of the project, but rather the environmental topics to be included in the environmental review.

Project Location and Setting

As shown on Figure 1, the City of Campbell is located south of the San Francisco Bay in Santa Clara County. The city has a rich startup employment base with a diverse population, quality schools, conveniently-located neighborhood parks, and a variety of retail options and entertainment options in its historic and vibrant Downtown. The city is served by Valley Transportation Authority (VTA) light rail stations (Hamilton, Campbell, and Winchester stations in Campbell, and the Bascom station immediately northeast of city limits). The city is accessed by Highway State Route 17, which runs north/south and bisects the city and runs roughly parallel to Los Gatos Creek, and Highway State Route 85 that runs roughly east-west and cuts through the southwest corner of the city. Campbell is bordered on the east and north by San Jose, on the south by Los Gatos, and on the west by a small portion of Saratoga. The project's regional location is shown in Figure 1.

The Planning Area is the geographic area for which the Plan provides a framework for long-term plans for growth, and resource conservation. State law requires the Plan to include all territory within Campbell's incorporated area as well as "any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (California Government Code Section 65300). The Planning Area, as shown in Figure 2, includes the entire city limits (approximately 3,060.65 acres).

PROJECT DESCRIPTION

The City of Campbell is preparing a comprehensive update to its existing General Plan, including the Housing Element (collectively referred to as the General Plan). The updated Campbell General Plan is expected to be adopted in late 2022 and will guide the City's development and conservation through land use objectives and policy guidance. The Plan is intended to be an expression of the community's vision for the City and Planning Area and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The Housing Element portion of the General Plan addresses the City's obligations and programs for the provision of its fair share of housing in California. The City will implement the Plan by requiring development, infrastructure improvements, and other projects to be consistent with its policies and by implementing the actions included in the Plan.

State law requires the City to adopt a comprehensive, long-term general plan for the physical development of its planning area. The Plan must include land use, circulation, housing, conservation, open space, noise, and safety elements, as specified in Government Code Section 65302, to the extent that the issues identified by State law exist in the City's planning area.

The Campbell General Plan will include a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map (Figure 2).

A goal in the Plan is the broadest statement of community values. It is a generalized ideal which provides a sense of direction for action with a vision of desired future conditions. The essence of the Plan is contained within its policies. Policies are statements which further refine the goals, and guide the course of action the City must take to achieve the goals in the Plan. It is important to note that policies are guides for decision makers, not decisions themselves. Action items are steps or actions the City should take to implement the Plan. The Implementation element identifies the responsible entity and timing for each Action item.

General Plan Elements

The Campbell General Plan will include a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map (Figure 2). The State requires that the General Plan contain seven mandatory elements: Land Use, Circulation, Housing, Open Space, Noise, Safety, and Conservation, as well as address issues related to climate change, resiliency planning, and environmental justice, either as separate Elements or as components of the required Element framework. The Campbell General Plan will include all of the State-mandated elements, as well as optional elements and issue areas, including Community Design, Public Facilities, Economic and Fiscal Sustainability, Community Health and Wellness, and Sustainability.

- The **Land Use Element** designates the general distribution and intensity of residential, commercial, industrial, mixed-use, open space, public/semi-public, and other categories of public and private land uses. The Land Use Element includes the Land Use Map, which identifies land use designations for each parcel in the city limits and Planning Area (Figure 2).

- The **Community Design Element** identifies high-level community design objectives for the City of Campbell, including the relationship between the public and private realm, streetscapes, best site planning practices, and placemaking strategies.
- The **Transportation Element** correlates closely with the Land Use Element, and identifies the general locations and extent of existing and proposed major thoroughfares, transportation routes, and alternative transportation facilities necessary to support a multi-modal transportation system. This element is intended to facilitate mobility of people and goods throughout Campbell by a variety of transportation modes, including bicycle, pedestrian, and transit opportunities.
- The **Housing Element** plans for housing to meet the needs of all segments of the community and addresses state requirements. The current revision to the Housing Element covers the 2023-2031 planning period.
- The **Conservation and Open Space Element** addresses conservation topics including: development and use of natural resources, open space, riparian environments, native plant and animal species, soils, cultural/historical resources, air quality, and alternative energy. It also details objectives and measures for preserving open space for natural resources and the managed production of resources.
- The **Economic and Fiscal Sustainability Elements** Provide tools and strategies to strengthen and diversify the local economy and ensures the City maintains adequate revenues to provide quality public services. These elements seek to sustain and diversify the city's economy, recognizing the importance of supporting existing and local businesses while broadening and expanding the employment base and economic opportunities within the city.
- The **Safety Element** addresses a variety of natural and human-related hazards such as fires, geologic hazards, as well as hazardous materials, and contains goals and policies aimed at reducing risk associated with these hazards.
- The **Noise Element** addresses noise-generating and noise-sensitive uses such as residences and schools. This element also addresses the required topics related to noise, including standards and policies to protect the community from the harmful and annoying effects of exposure to excessive noise levels. This element includes strategies to reduce land use conflicts that may result in exposure to unacceptable noise levels.
- The **Community Services and Facilities Element** establishes policies and programs that address the following public services and facilities: police services; fire protection services; schools; civic, library, and other community facilities; water supplies, sewer services, storm drainage infrastructure, and solid waste disposal. While not specifically required by State law for inclusion in the General Plan, the Community Services and Facilities Element is a

critical component in meeting the infrastructure and utility services needs of businesses and residents. This element also ensures adequate planning for park and recreation services and facilities.

- The **Community Health and Wellness Element** acknowledges the profound effects of the built environment on travel choices, access to food, levels of physical activity, and exposure to risk from accidents or pollution. The Element addresses the topics of active living, healthy lifestyles, environmental justice, and community building.
- The **Sustainability Element** Provides measures that balance resource supply and consumption to develop in harmony with the environment to ensure current residents and future generations to have continued access to resources. The General Plan's policies and actions support the principle of sustainability. Creating and maintaining a sustainable community requires integrating sustainable principles into the City's everyday actions and future policy decisions, while adapting to changing environmental conditions, new technologies, and staying informed of innovations and current best practices.

General Plan Objectives:

The following objectives were identified for the proposed update to the General Plan:

1. Reflect the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders;
2. Address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders;
3. Capitalize on Campbell's location within the Silicon Valley to provide high tech jobs that enable Campbell to be a live/work community while maintaining Campbell's small town community identity;
4. Protect and enhance Campbell community character, and sense of community;
5. Ensure Campbell remains a safe, vibrant, and family-friendly community;
6. Proactively plan for and accommodate local and regional growth in a balanced and sustainable manner, with an emphasis on maintaining Campbell's unique character;
7. Provide a range of high-quality housing options, including housing resources and programs that comply with State Planning Law;
8. Attract and retain businesses and industries that provide high-quality and high-paying jobs;
9. Continue to maintain and improve multimodal transportation opportunities;
10. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
11. Support and enhance Campbell's small business community to sustain a vibrant city with a strong downtown core and community identity;
12. Emphasize sustainability and environmental stewardship in future planning decisions
13. Address new requirements of State law;
14. Address emerging transportation, housing, and employment trends;
15. Promote alternative transportation and community connectivity; and
16. Encourage mixed use corridors that promote vibrant commercial and residential areas.

Proposed General Plan Land Use Designations

The following describes the proposed land use designations for the Proposed General Plan Land Use Map (Figure 2.).

Residential Land Use Designations:

Low-Density Residential (LDR 4.5): This designation generally consists of single-family homes and accessory dwelling units, and uses in support of, and comparable to, such land uses. Allowable Density: Less than 4.5 units per gross acre.

Low-Density Residential (LDR 5.5): This designation generally consists of single-family homes and accessory dwelling units, in support of, and comparable to, such land uses.

Allowable Density: Less than 5.5 dwelling units per gross acre.

Low-Density Residential (LDR 7.5): This designation generally consists of single-family homes and accessory dwelling units and uses in support of, and comparable to, such land uses.

Allowable Density: Less than 7.5 dwelling units per gross acre.

Low-Medium Density Residential (LMDR): This designation generally consists of duplexes, apartment buildings, and uses in support of, and comparable to, such land uses.

Allowable Density: 8 to 16 dwelling units per gross acre.

Medium Density Residential (MDR): This designation generally consists of duplexes, apartment buildings, and uses in support of, and comparable to, such land uses. This designation is typically applied to transition areas between lower-density neighborhoods and higher-density developments or commercial areas.

Allowable Density: 18 to 25 dwelling units per gross acre.

Medium-High Density Residential (MHDR): This designation generally consists of duplexes, apartment buildings, and uses in support of, and comparable to, such land uses. This designation is typically applied to areas away from major commercial intersections.

Allowable Density: 26 to 33 dwelling units per gross acre.

High Density Residential (HDR): This designation generally consists of apartment buildings, and uses in support of, and comparable to, such land uses. This designation is typically applied to sites along Class I, or Class II arterial roadways that abut lower-density neighborhoods.

Allowable Density: Up to 45 dwelling units per gross acre.

Mobile Home Park (MHP): This designation generally consists of mobile homes, modular homes, and uses in support of, and comparable to, such land uses. The MHP designation discourages the conversion of existing mobile home parks to other uses.

Allowable Density: 8 to 16 dwelling units per gross acre.

Commercial/Office Designations:

Neighborhood Commercial (NC): This designation generally consists of small-scale, lower intensity commercial and office uses that are compatible with surrounding neighborhoods. This land use is intended to encourage the location of commercial uses at major intersections in residential areas which are designed to encourage convenient pedestrian and bicycle travel to and from surrounding neighborhoods. The architecture of the buildings should be compatible to the neighborhood.

Allowable FAR: 1.0.

General Commercial (GC): This designation generally consists of commercial uses that need exposure to high volumes of automobile traffic or access to transit corridors. Most of the land in Campbell with a General Commercial land use designation is located along both sides of Bascom and Hamilton Avenues and parts of Winchester Boulevard. Commercial development in these areas is highly visible, hence the placement and scale of buildings is especially important to the community image.

Allowable FAR: 1.0.

Professional Office (PO): This designation generally consists of administrative, professional, and research office uses and instruction for personal and/or professional enrichment.

Allowable FAR: 1.0.

Industrial Designations:

Light Industrial (LI): This designation generally consists of wide range of light manufacturing, industrial processing, general service, warehousing, storage and distribution uses. This designation is intended to provide for, and protect, industrial uses in the community. Nuisance-causing industries, such as those producing substantial amounts of hazardous waste, odor, dust, other pollutants, or excessive noise levels are not permitted. Ancillary uses that support light industrial developments including, cafés, office supply retailers, service commercial uses, etc., may be conditionally allowed onsite as a minor use associated with a primary light industrial use.

Allowable FAR: 1.0.

Research and Development (R&D): This designation generally consists of campus-like environments for corporate headquarters, research and development facilities and offices. The R&D designation also accommodates uses such as incubator-research facilities, testing, packaging, publishing and printing. The designation aims to attract new firms and high quality local jobs and enables existing firms to grow and expand operations within Campbell.

Allowable FAR: 1.0.

Mixed-Use Designations:

Central Commercial (CC): This designation generally consists of shopping, service, and entertainment uses within a pedestrian oriented urban environment. Building forms should edge the street and should include pedestrian-oriented commercial uses on the ground floor with either office or residential uses on upper floors. Residential units within this land use designation are restricted to upper floors and residential-only projects are not permitted within this land use designation.

Allowable Density: 26 to 33 dwelling units per gross acre. Allowable FAR: 1.25.

Commercial/ Light Industrial (C/LI): This designation generally consists of commercial uses as provided for by the General Commercial (GC) land use designation and industrial uses as provided for by the Light Industrial (LI) land use designation.

Allowable FAR: 1.0.

Office/Low-Medium Density Residential (LMDR/O): This designation generally consists of office uses as provided for by the Professional Office (P-O) land use designation and/or residential uses as provided for by the Low-Medium Density Residential (LMDR) land use designation. This designation is intended to serve as a transitional buffer between the more intense uses located in Downtown, and the surrounding low density residential uses.

Allowable Density: 8 to 16 dwelling units per gross acre.

Allowable FAR: 1.0.

Residential/Commercial/Prof. Office (RCPO): This designation generally consists of residential land uses as provided for by the Medium-High Density Residential (MHDR) land use designation, commercial uses as provided for by the General Commercial (GC) land use designation, and office uses as provided for by the Professional Office (P-O) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: 26 to 33 dwelling units per gross acre.

Allowable FAR: 1.0.

Neighborhood Mixed-Use (N-MU): This designation generally consists of commercial land uses as provided for by the Neighborhood Commercial (NC) land use designation and residential uses as provided for by the Medium Density Residential (MDR) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: 18 to 25 dwelling units per gross acre.

Allowable FAR: 1.0.

Medium-High Density Mixed Use (MHDR-MU): This designation generally consists of residential uses as provided for by the Medium-High Density Residential (MHDR) land use designation and commercial uses as provided for by the General Commercial (GC) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: 26 to 33 dwelling units per gross acre.

Allowable FAR: 1.0.

High-Density Mixed-Use (HD-MU): This designation generally consists of residential uses as provided for by the High Density Residential (HDR) land use designation and commercial uses as provided for by the General Commercial (GC) land use designation. Mixed-use residential projects are encouraged within this designation but not required.

Allowable Density: Up to 45 dwelling units per gross acre.

Allowable FAR: 1.0.

Commercial-Corridor Mixed-Use (CC-MU): This designation generally consists of higher-density residential, and mixed-use development that is generally located along Class I and Class II Arterial Roadways, such as Bascom Avenue, Hamilton Avenue, Winchester Boulevard, and parts of Campbell Avenue. Mixed-use residential projects are strongly encouraged within this designation but are not required.

Allowable Density: Up to 60 dwelling units per gross acre.

Allowable FAR: 1.0.

Transit-Oriented Mixed-Use (TO-MU): This designation generally consists of very high density commercial, residential, and mixed-use development within walking distance of high quality transit service such as light rail. Mixed-use residential projects are strongly encouraged within this designation but are not required.

Allowable Density: Up to 75 dwelling units per gross acre.

Allowable FAR: 1.0.

Public/Recreational Designations:

Institutional (I): This designation generally consists of civic, social service, educational, cultural or charitable uses operated by a government or private agency serving the public. Institutional uses can include facilities owned or operated by a private organization, such as a private school or religious organization, as well as facilities owned or operated by a public entity, such as public buildings and grounds, public schools, and government offices.

Open Space (OS): This designation generally consists of public parks and identifies areas for waterways, sensitive habitat, groundwater recharge areas, creek corridors, and trails. Development in these areas shall be limited to such buildings and structures that support the uses described above. Examples of acceptable buildings and structures may include park facilities, restrooms, trails, signage, and utilities infrastructure.

Table 1 below summarizes and compares land use designations under the Existing and Proposed General Plan Land Use Map.

Table 1: Proposed and Existing General Plan – Acreage by Land Use Designation

General Plan Land Use	Proposed GP (Acres)	Existing GP (Acres)	Change (Acres)
Commercial, Office, and Industrial			
Commercial/Light Industrial (C/LI)	24.42	24.42	0.00
Central Commercial (CC)	37.53	59.46	-21.93
General Commercial (GC)	98.08	195.57	-97.49
Neighborhood Commercial (NC)	49.30	34.30	15.00
Light Industrial (LI)	104.86	104.86	0.00
Professional Office (P-O)	33.55	36.05	-2.50
Research and Development (R&D)	85.49	102.89	-17.39
Residential			
Low Density Residential <4.5 (LDR 4.5)	142.40	144.00	-1.60
Low Density Residential <5.5 (LDR 5.5)	211.25	211.25	0.00
Low Density Residential <7.5 (LDR 7.5)	1039.87	1042.27	-2.41
Low-Medium Density Residential (LMDR)	161.99	162.95	-0.95
Medium Density Residential (MDR)	191.28	184.48	6.80
High Density Residential (HDR)	170.54	177.75	-7.21
Mobile Home Park (MHP)	29.66	29.66	0.00
Mixed-Use			
Office/Low-Medium Density Residential (LMDR/O)	4.16	4.16	0.00
Commercial/High-Medium Density Residential (MHDR/C)	0.00	16.37	-16.37
Commercial/Prof. Office/Residential (RCPO)	57.11	54.96	2.15
Commercial-Corridor Mixed-Use (CC-MU)	60.03	0.00	60.03
High Density Mixed-Use (HD-MU)	20.58	0.00	20.58
Medium-High Density Mixed-Use (MHDR-MU)	27.20	0.00	27.20
Neighborhood Mixed-Use (N-MU)	8.12	0.00	8.12
Transit-Oriented Mixed-Use (TO-MU)	44.75	0.00	44.75
Limited Development Public/Quasi Public and ROW Uses			
Institutional (I)	155.66	166.57	-10.91
Open Space (OS)	263.61	269.48	-5.87
Right-of-Way Parcels	39.22	39.22	0.00
Total Acres	3,060.65	3,060.65	0

SOURCE: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022.

Growth Projections

While no specific development projects are proposed as part of the Campbell General Plan Update, the General Plan will accommodate future growth in Campbell, including new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes an approximate 20-year horizon, and 2040 is assumed to be the buildout year of the General Plan.

Table 2 below summarizes the range of new growth, including residential units, and non-residential square footage that could occur upon full buildout of the proposed General Plan. It is noted that there are very few vacant parcels in Campbell. As such, most of the new growth projected through General Plan buildout would occur as existing developed parcels redevelop with new or modified uses over time. The projections shown in the table below represent good-faith estimates of growth that could potentially occur following adoption of the General Plan.

Consistent with the Proposed General Plan Land Use Map (Figure 2), future growth would largely be focused near transit stations, transit corridors, in existing and proposed areas of multifamily and mixed-use development, and in existing business-serving areas. As shown in Table 2 buildout of the General Plan could yield a total of up to 26,224 housing units, a population of 64,929 people, 12,724,055 square feet of non-residential building square footage, and 36,908 jobs within the Planning Area. As shown in Table 2, this represents development growth over existing conditions of up to 8,863 new dwelling units, 22,203 people, 2,633,721 square feet of new non-residential building square footage and 6,194 new jobs.

Table 2: Growth Projections - Proposed Land Use Map

	Population	Dwelling Units	Non-Residential Square Feet	Jobs	Jobs per Housing Unit
Existing Conditions					
	42,726	17,400	10,090,334	30,568	1.76
New Growth Potential					
Existing General Plan	4,123	1,640	2,098,014	4,633	2.83
Proposed General Plan	22,203	8,824*	2,633,721	6,194	0.70
Total Growth: Existing Plus New Growth Potential					
Existing General Plan	46,849	19,040	12,188,348	35,199	1.85
Proposed General Plan	64,929	26,224	12,724,055	36,762	1.40

SOURCES: CITY CAMPBELL GIS DATASET, DE NOVO PLANNING GROUP 2022. Santa Clara County Assessor 2017; California Department of Finance 2017; U.S Census ONTHEMAP; ESRI 2017,

*NOTE: APPROXIMATELY 6,644 NEW DWELLING UNITS ARE ASSUMED TO BE ACCOMMODATED UNDER THE PROPOSED HOUSING ELEMENT OPPORTUNITY SITES, AND THE ADDITIONAL 2,180 NEW DWELLING UNITS ARE ASSUMED TO OCCUR AS NEW DEVELOPMENT AND REDEVELOPMENT THROUGHOUT THE BALANCE OF THE CITY.

Growth projections should not be considered a prediction for growth, as the actual amount of development that will occur throughout the planning horizon of the General Plan is based on many factors outside of the City's control. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, land turnover, and other factors. Additionally, new development and growth are

largely dictated by existing development conditions. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

Program EIR Analysis

The City, as the Lead Agency under the California Environmental Quality Act (CEQA), will prepare a Program EIR for the Campbell General Plan Update. The EIR will be prepared in accordance with CEQA, the CEQA Guidelines (Guidelines), relevant case law, and City procedures. No Initial Study will be prepared pursuant to Section 15063(a) of the CEQA Guidelines.

The EIR will analyze potentially significant impacts associated with adoption and implementation of the General Plan. In particular, the EIR will focus on areas that have development potential. The EIR will evaluate the full range of environmental issues contemplated under CEQA and the CEQA Guidelines including cumulative impacts. At this time, the City anticipates that EIR sections will be organized in the following topical areas:

- Aesthetic Resources
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology, Soils, and Mineral Resources
- Greenhouse Gases, Climate Change, and Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Utilities/Service Systems
- Wildfire
- Mandatory Findings of Significance/Cumulative Impacts
- Project Alternatives
 - Project Alternatives would include a No Project Alternative, a Lesser Intensity Housing Alternative, and other alternatives which are not-yet defined.

Project Approvals:

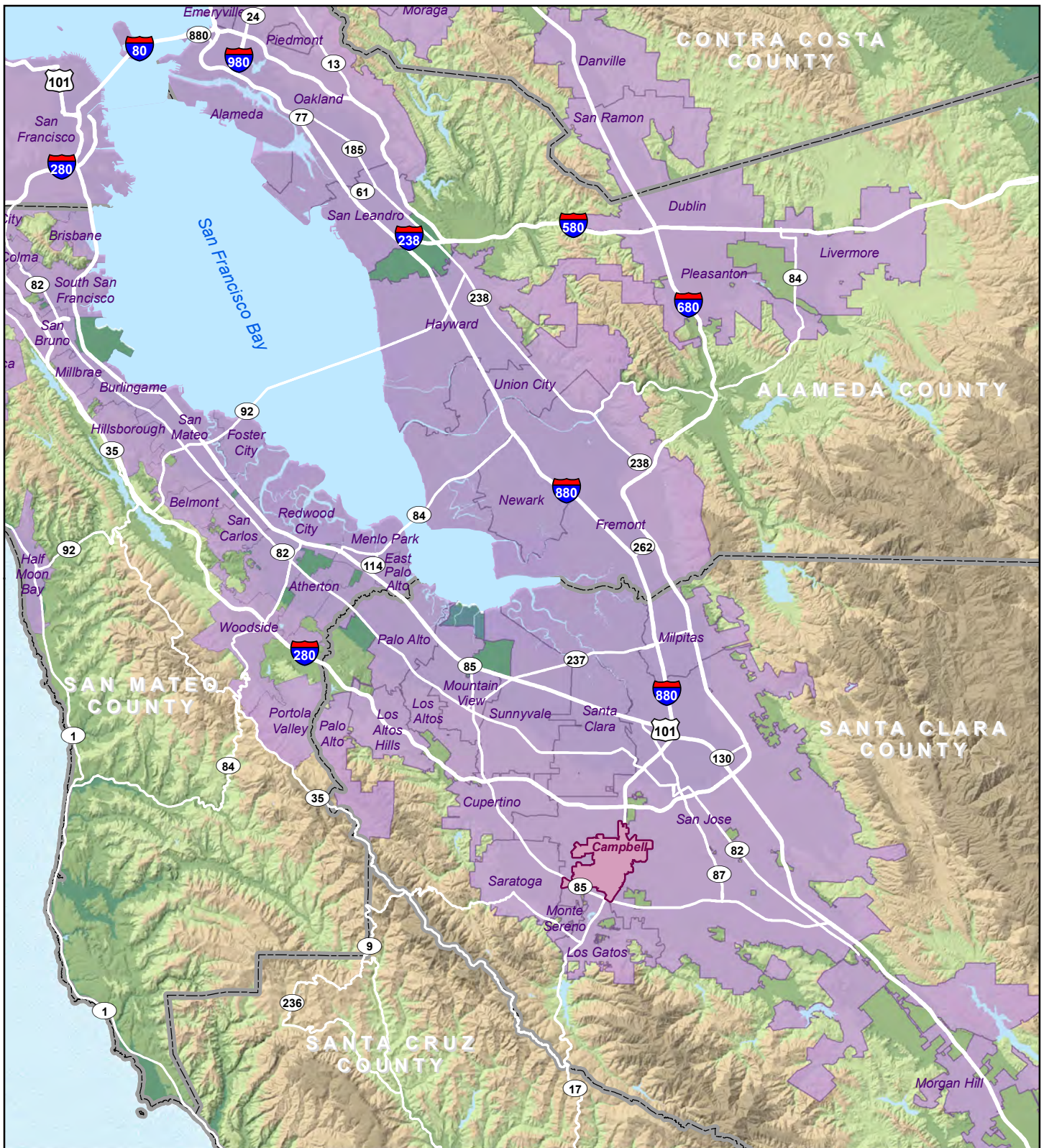
The updated Campbell General Plan will be presented to the Planning Commission for review and recommendation and to the City Council for comment, review, and consideration for adoption. The City Council has the sole discretionary authority to approve and adopt the Campbell General Plan. In order to approve the proposed project, the City Council would consider the following actions:

- Certification of the General Plan EIR;
- Adoption of required CEQA findings for the above action;
- Adoption of a Mitigation Monitoring and Reporting Program; and
- Approval and Adoption of the General Plan Update.

Subsequent Uses of the EIR

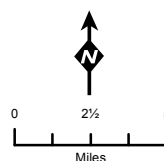
The EIR will provide a review of environmental effects associated with implementation of the proposed General Plan, consistent with the requirements established by CEQA Guidelines Section 15168. When considering approval of subsequent activities under the proposed General Plan, the City of Campbell would utilize the EIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity, consistent with the requirements of CEQA Guidelines Sections 15183 and 15162. Projects or activities successive to this EIR may include, but are not limited to, the following:

- Approval and funding of major projects and capital improvements;
- Future adoption of a Specific Plan, Planned Unit Development, or Master Plan approvals;
- Revision to the Campbell Zoning Ordinance;
- Development plan approvals, such as tentative subdivision maps, variances, conditional use permits, and other land use permits;
- Development Agreements;
- Property rezoning consistent with the General Plan;
- Permit issuances and other approvals necessary for public and private development projects; and
- Issuance of permits and other approvals necessary for implementation of the General Plan.



Legend

-  County Boundary
-  Area Cities
-  City of Campbell



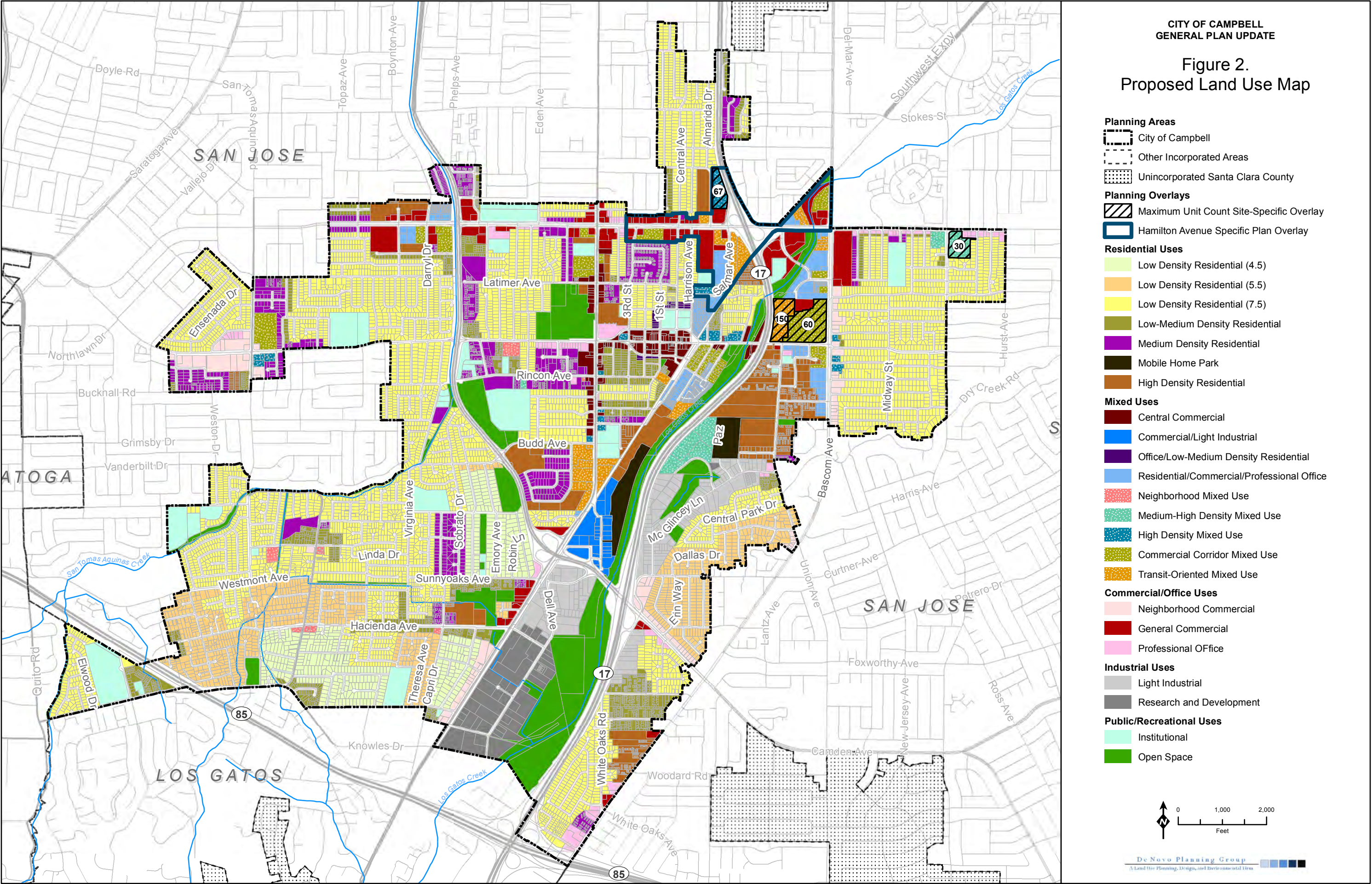
CITY OF CAMPBELL GENERAL PLAN UPDATE

Figure 1. Project Vicinity Map

Sources: CalAtlas; Santa Clara County; Santa Cruz County; Alameda County; Contra Costa County. Map date: March 9, 2020.

De Novo Planning Group
A Land Use, Planning, Design, and Environmental Firm

Figure 2.
Proposed Land Use Map



Sources: City of Campbell; Santa Clara County. Map date: March 15, 2022.

On May 6, 2022, at 3:16 PM, Shani Kleinhaus <shani@scvas.org> wrote:

Dear Chair Ching and Planning Commissioners.

Thank you for your questions regarding outdoor lighting during the Planning Commission meeting on 5/4/21.

As my colleague, Giulianna, mentioned, artificial light at night (ALAN) harms virtually all species and ecosystems, and is emerging as a major threat to human health, bird migration, and insect populations. A [study published last year](#) has found that global light pollution has increased at least 49% over the last 25 years; possibly up to 270% and up to 400% in some areas.

Residents, planning commissioners, and council members have all expressed interest in learning more about how cities and jurisdictions can address the issue of and reduce light pollution and the harmful effects of ALAN.

SCVAS has worked with Cupertino on a [Bird Safe Design and Dark Sky Ordinance](#) (adopted 2021), and we hope the City of Campbell can also become a leader in preserving the dark, night sky.

Other jurisdictions have passed similar ordinances and lighting master plans, including [Malibu](#), and [Salt Lake City](#) and [San Bernardino County](#). The [International Dark-sky Association](#) and a report from the [UN Workshop on Dark and Quiet Skies](#) (pgs. 11-117) provide guidance and recommendations for responsible outdoor lighting guidelines.

I hope you find these policies and resources useful, and please do not hesitate to reach out to us if you have questions? SCVAS is interested and eager to support Campbell in the development of dark Sky and bird Safety policies.

Thank you,
Shani

Shani Kleinhaus, Ph.D.
Environmental Advocate
Santa Clara Valley Audubon Society
22221 McClellan Rd.
Cupertino, CA 95014
650-868-2114
advocate@scvas.org



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



April 20, 2022

Stephen Rose, Senior Planner
City of Campbell
70 N. First Street
Campbell, CA 95008
stephenr@campbellca.gov

Subject: Envision Campbell General Plan and Housing Element Update, Notice of Preparation of a Programmatic Environmental Impact Report, SCH No. 2022030566, City of Campbell, Santa Clara County

Dear Stephen Rose:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Programmatic Environmental Impact Report (PEIR) from the City of Campbell (City) for the Envision Campbell General Plan and Housing Element Update (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.).

PROJECT DESCRIPTION SUMMARY

Proponent: City of Campbell

Objective: Update the City General Plan, including land use map, goals, policies, and actions to guide future development.

Location: All areas within the City of Campbell, Santa Clara County, California.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on potential for the Project to have a significant impact on biological resources, CDFW concludes that an Environmental Impact Report is appropriate for the Project.

Mitigation Measures and Impacts

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or U.S. Fish and Wildlife Service (USFWS)?

COMMENT #1: Figure 2 Proposed Land Use Map, General Commercial page 8, and Transportation Element page 4.

Issue: In review of Google Earth aerials, Los Gatos Creek reaches located within the Project area support contiguous riparian habitat with thick canopy cover. Figure 2 of the NOP designates the furthest downstream reach of Los Gatos Creek, which appears to be approximately 0.25 miles in length, as being General Commercial. The NOP does not discuss potential future impacts to Los Gatos Creek and associated riparian and grassland habitats from the General Commercial land use designation. Additional stream reaches are present within the Project area including stream crossings at Los Gatos Creek, San Thomas Aquinas creek, and unnamed drainage channels. However, the NOP does not discuss potential future impacts to aquatic and riparian habitat from changes to stream crossings in relation to the Transportation Element.

Specific impact: Potential impacts due to a General Commercial use along the Los Gatos Creek reach, and on other stream reaches from implementation of the

Stephen Rose, Senior Planner
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Transportation Element, include loss of riparian habitat, permanent relocation of stream channels, permanent loss of natural bank, change in contour and gradient of bed and bank, temporary loss of bank stability during construction, increase of bank erosion during construction, increased sedimentation from adjacent construction, and diversion of natural flow.

Why impact would occur: The General Commercial physical change may include the construction of buildings, parking lots, and other permanent structures. Construction may result in complete removal of riparian habitat, including diversion of Los Gatos Creek water and substantial change in the creek bed and banks. The Transportation Element physical change may include construction of new automobile or pedestrian bridges, widening of bridges, or widening of culverts.

Evidence impact would be significant: Substantial diversion or obstruction of natural flow, change in stream bed or bank, or deposit of debris into streams without necessary permitting would be a violation under Fish and Game Code §1602.

Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant:

Mitigation Measure #1: Habitat Assessment

A qualified biologist should conduct a habitat assessment to identify freshwater marsh, wetland, and/or riparian communities that could be negatively affected from implementation of the Project. This survey should include, but not be limited to, Los Gatos Creek and San Tomas Aquinas Creek. The PDEIR should include location alternatives for buildings and other permanent structures to avoid impacts to riparian habitat. The PDEIR should also include avoidance, minimization, and/or mitigation measures to reduce the impacts to less-than-significant levels.

Mitigation Measure #2: Wetland Delineation

A formal wetland delineation should be conducted by a qualified biologist prior to Project construction to determine the location and extent of wetlands and riparian habitat present within the Project area. Please note that, while there is overlap, State and federal definitions of wetlands, as well as which activities require Notification pursuant to Fish and Game Code § 1602, differ, therefore, the delineation should identify which activities may require Notification to comply with Fish and Game Code (§ 1602).

Mitigation Measure #3: Notification of Lake or Streambed Alteration

Fish and Game Code §1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river,

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stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake; (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. Project construction activities may necessitate that the Project proponent submit a Notification of Lake and Streambed Alteration (LSA) to CDFW. CDFW is required to comply with CEQA in the issuance of an LSA Agreement. Additional information can be found at <https://www.wildlife.ca.gov/Conservation/LSA>.

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

COMMENT #2: Biological Resources, page 13

Issue: The NOP does not discuss potential impacts to sensitive and special-status species that could be present within the Project area. Special-status species that are potentially present within riparian habitat include, but are not limited to, San Francisco dusky-footed woodrat (woodrat, *Neotoma fuscipes annectens* - State Species of Special Concern), western red bat (*Lasiurus blossevillei* - State Species of Special Concern), western pond turtle (WPT, *Emys marmorata* - State Species of Special Concern), and steelhead (*Oncorhynchus mykiss irideus* pop. 8, Central California Coast Distinct Population Segment - Federally Threatened). Other species of bats may also roost in riparian trees.

Specific impact: Direct mortality, capture, loss of nest or middens, reduced reproductive success due to disturbance, inadvertent entrapment or entrainment, and impingement.

Why impact would occur: The General Commercial physical change may include the construction of buildings, parking lots, and other permanent structures within or adjacent to Los Gatos Creek. Construction may result in complete or partial removal of riparian habitat. The Transportation Element physical change may include construction of new automobile or pedestrian bridges, widening of bridges, or widening of culverts. Construction may result in complete or partial removal of riparian habitat. The Project would include impacts such as noise, groundwork, and movement of workers that would have the potential to significantly impact roosting bats.

Evidence impact would be significant: The woodrat, western red bat, and WPT are special-status species because they are designated by CDFW as a California Species of Special Concern. Steelhead is considered a rare or threatened species under CEQA as it is listed in Title 50, Code of Federal Regulations Sections 17.11 or

Stephen Rose, Senior Planner
City of Campbell
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17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered (CEQA Guidelines, §15380 subds.(c)(2)).

Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant:

Mitigation Measure #1: Focused Surveys for Special-Status Species

The riparian areas and adjacent habitat should be surveyed for special-status species by a qualified biologist following protocol-level surveys. Protocol-level surveys are intended to maximize detectability. In the absence of protocol-level surveys being performed, focused surveys for special-status species presence, nests, or indicators of presence (e.g., bat guano and acoustic surveys) should be conducted. The PDEIR should include an analysis of location alternatives for buildings and other permanent structures to avoid or minimize impacts to special-status species.

Mitigation Measure #2: Special-status Species Avoidance

If special-status species are found within or adjacent to riparian habitat within the Project area, the qualified biologist should establish a no-disturbance buffer appropriate for the species and conduct on-site monitoring during all Project-related activities. The PDEIR should include additional minimization and mitigation measures for each special-status species that could be potentially impacted by Project activities.

COMMENT #3: Biological Resources page 13, Figure 2 Proposed Land Use Map, Residential and Commercial pages 6 – 10.

Issue: In review of Google Earth aerials, the Project area includes riparian habitat, parks, and urban areas with trees, shrubs, and grassland. The NOP designates various areas of the Project area as being residential, commercial, and other uses. However, the NOP does not discuss potential impacts to biological resources, such as nesting birds, related to these land use designations and implementation of the Project.

Specific impact: Direct mortality, nest abandonment, reduced reproductive success, and loss or reduced health or vigor of eggs or young.

Why impact would occur: The physical change in relation to the residential, commercial, and other land use designations may include the construction of buildings, parking lots, and other permanent structures. Construction may result in complete removal of nesting habitat. The Project may also include impacts such as

Stephen Rose, Senior Planner
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noise, groundwork, and movement of workers adjacent to nesting habitat that may potentially significantly impact nesting birds.

Evidence impact would be significant: Take of nesting birds, birds in the orders Falconiformes or Strigiformes, and migratory nongame bird as designated in the Migratory Bird Treaty Act is a violation of Fish and Game Code (§ 3503, 3503.5, 3513).

Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant:

Mitigation Measure #1: Nesting Bird Surveys

If Project-related work is scheduled during the nesting season (typically February 15 to August 30 for small bird species such as passerines; January 15 to September 15 for owls; and February 15 to September 15 for other raptors), a qualified biologist should conduct a minimum of two surveys for active nests of such birds within 14 days prior to the beginning of Project construction, with a final survey conducted within 48 hours prior to construction. However, species-specific survey protocols may be available and should be followed. Appropriate minimum survey radii surrounding the work area are typically the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; and iii) 1,000 feet for larger raptors such as buteos. Surveys should be conducted at the appropriate times of day and during appropriate nesting times.

Mitigation Measure #2: Active Nest Buffers

If the qualified biologist documents active nests within the Project area or in nearby surrounding areas, an appropriate buffer between the nest and active construction should be established. The buffer should be clearly marked and maintained until the young have fledged and are foraging independently. Prior to construction, the qualified biologist should conduct baseline monitoring of the nest to characterize “normal” bird behavior and establish a buffer distance which allows the birds to exhibit normal behavior. The qualified biologist should monitor the nesting birds daily during construction activities and increase the buffer if the birds show signs of unusual or distressed behavior (e.g., defensive flights and vocalizations, standing up from a brooding position, and/or flying away from the nest). If buffer establishment is not possible, the qualified biologist or construction foreman should have the authority to cease all construction work in the area until the young have fledged and the nest is no longer active.

Would the Project interfere substantially with movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede use of native wildlife nursery sites?

Stephen Rose, Senior Planner
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COMMENT #4: Biological Resources page 13, Figure 2 Proposed Land Use Map, Residential and Commercial Use Designations pages 6 – 10, Table 2: Growth Projections - Proposed Land Use Map.

Issue: Based on Figure 2 Proposed Land Use Map, the majority of the Project area consists of buildings and related hardscape (e.g., parking lots and streets). The NOP, Table 2, discusses a 7,184 increase in residential dwelling units and a 535,707 increase in non-residential square feet beyond what currently exists within the City boundaries. The NOP does not discuss if these proposed activities involve changes to the current building height levels or other design or planning changes, especially adjacent to riparian areas. The tall buildings located near riparian habitat could result in avian collisions with the buildings.

Specific impact: Direct mortality or injury and potential inability to reproduce or reduced reproductive success due to injury.

Why impact would occur: The presence of buildings, including glass windows, close to riparian movement corridors may result in avian collision with the buildings.

Evidence impact would be significant: Project impacts may potentially substantially reduce the abundance and diversity of avian species within the riparian corridors.

Recommended Potentially Feasible Mitigation Measures to reduce impacts to less-than-significant:

Mitigation Measure #1: Assessment of Building Height and Location

CDFW recommends that the PDEIR include building height and location alternatives that reduce environmental impacts such as locating tall buildings at a biologically appropriate distance away from the riparian areas. The PDEIR should include alternatives to building locations within the General Commercial designation of Los Gatos Creek (see Comment #1 above), including no change in the use of the grassland habitat located adjacent to this riparian habitat.

Mitigation Measure #2: Building Design Assessment

The PDEIR should analyze all potential impacts on avian species resulting from building height, types of materials used on the exterior façade of buildings, and other design features, and include avoidance and minimization measures that reduce those impacts to a less-than-significant level.

Stephen Rose, Senior Planner
City of Campbell
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ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be filled out and submitted online at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Kristin Garrison, Environmental Scientist, at (707) 944-5534 or Kristin.Garrison@wildlife.ca.gov; or Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 339-0334 or Brenda.Blinn@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Erin Chappell

B77E9A6211EF486

Erin Chappell
Regional Manager
Bay Delta Region

ec: Office of Planning and Research, State Clearinghouse, Sacramento



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Gavin Newsom
Governor

Sent Via Electronic Mail

April 25, 2022

Mr. Stephen Rose
Senior Planner
City of Campbell
City Hall 70 N. First St.
Campbell, CA 95008
StephenR@campbellca.gov

NOTICE OF PREPARATION AND SCOPING MEETING FOR THE ENVISION CAMPBELL GENERAL PLAN AND HOUSING ELEMENT UPDATE ENVIRONMENTAL IMPACT REPORT – DATED MARCH 2022 (STATE CLEARINGHOUSE NUMBER: 2022030566)

Dear Mr. Rose:

The Department of Toxic Substances Control (DTSC) received a Notice of Preparation and Scoping Meeting for the Envision Campbell General Plan and Housing Element Update (Project) Environmental Impact Report (EIR). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

DTSC recommends that the following issues be evaluated in the Hazards and Hazardous Materials section of the EIR:

1. The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate

any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.

2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.
3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 [Abandoned Mine Land Mines Preliminary Assessment Handbook](#).
4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 [Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers](#).
5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to [DTSC's 2001 Information Advisory Clean Imported Fill Material](#).
6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in

accordance with DTSC's 2008 [Interim Guidance for Sampling Agricultural Properties \(Third Revision\)](#).

DTSC appreciates the opportunity to comment on the EIR. Should you need any assistance with an environmental investigation, please visit DTSC's [Site Mitigation and Restoration Program](#) page to apply for lead agency oversight. Additional information regarding voluntary agreements with DTSC can be found at [DTSC's Brownfield website](#).

If you have any questions, please contact me at (916) 255-3582 or via email at Brian.McAloon@dtsc.ca.gov.

Sincerely,



Brian McAloon
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D | OAKLAND, CA 94623-0660
www.dot.ca.gov



April 25, 2022

SCH #: 2022030566
GTS #: 04-SCL-2022-01037
GTS ID: 25910
Co/Rt/Pm: SCL/17/11.2

Stephen Rose, Senior Planner
City of Campbell
City Hall 70 N. First St.
Campbell, CA 95008

Re: Envision Campbell General Plan and Housing Element Update Notice of Preparation (NOP) for Draft Environmental Impact Report (DEIR)

Dear Stephen Rose:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Envision Campbell General Plan and Housing Element Update. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the March 2022 NOP.

Project Understanding

The City of Campbell is preparing a comprehensive update to its existing General Plan, including the Housing Element. The updated Campbell General Plan is expected to be adopted in late 2022 and will guide the City's development and conservation through land use objectives and policy guidance. The Plan is intended to be an expression of the community's vision for the City and Planning Area and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The Housing Element portion of the General Plan addresses the City's obligations and programs for the provision of its fair share of housing in California. The City will implement the Plan by requiring development, infrastructure improvements, and other projects to be consistent with its policies and by implementing the actions included in the Plan.

Travel Demand Analysis

With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide ([link](#)). Please note that current and future land use projects proposed near and adjacent to the State Transportation Network (STN) shall be assessed, in part, through the TISG.

Additionally, Caltrans requests that the City of Campbell General Plan Update is consistent with California Government Code Section 65088-65089.10 Congestion Management.

As well, the City is requested to gain a determination of conformity from the Santa Clara Valley Transportation Authority to determine that the City of Campbell General Plan Update is consistent with and conforms to the Regional Transportation Plan Consistency Requirements of the County's Congestion Management Plan (CMP).

Transportation Impact Fees

We encourage a sufficient allocation of fair share contributions toward multi-modal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. We also strongly support measures to increase sustainable mode shares, thereby reducing VMT. Caltrans welcomes the opportunity to work with the City and local partners to secure funding for needed mitigation. Traffic mitigation or cooperative agreements are examples of such measures.

Lead Agency

As the Lead Agency, the City of Campbell is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Equitable Access

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Stephen Rose, Senior Planner
April 25, 2022
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Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Mark Leong". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

Nancy Tepperman, via email 4/13/22

Hello, hard working people. I'm so impressed with all the work you have done and are doing.

I want to give you my perspective on the map of proposed sites and the impact of the decisions that will be made in the coming months. I have lived since 1984 as a renter in an apartment complex on Budd Avenue across from John D. Morgan Park. We are close to the San Tomas Expressway.

I am gravely concerned that pressure has led the community to put a disproportionate amount of the increased housing near Winchester and Budd. I am quite afraid that the impact on our neighborhood will be great. We have a lovely and relatively quiet area of town. Yes, we have some homeless, we have a few people who drive too fast or turn their radios up too high, but for the most part we have a small town feel with people stopping for pedestrians, sharing the paths in a friendly manner, and we have birds singing in the morning, quiet times and peace.

The proposed developments would drastically alter many of the factors that make our area so pleasant. Too many people without

More parks and recreation facilities and more open space

(Note, the more vocal people at the Campbell Community Center were able to get even a small corner of that property off the list)

A small street (Budd, only two lanes) being the access to San Tomas Expressway which (along with 880/17) leads in multiple directions. This Budd Avenue has finally become safe after several accidents and a lot of requests to get a lit-up stop sign to REMIND people about the crosswalk. This crosswalk leads to a large elementary school (CSI - Campbell School of Innovation) and also is across from a senior facility which houses many people with walkers and slow mobility.

Although parking is more than ample now, you may not know that the "Safeway" parking lot is also used without complaints from the shopping center by people who arrive after about 6:30-7am...and drive to the station...for overflow from the light rail station. It is going to be a nightmare if you build lots and lots of residences with sub-optimal parking facilities (hoping that will get people to use public transit, but it puts the cart before the horse). They will park in the smaller lot, making it difficult for shoppers and patrons.

I'm definitely in favor of one or two major residences in that area, but basically what has happened is that the vocal people in Campbell have done a NIMBY forcing a disproportionate amount of the growth to the Winchester Transit Center.

I am glad to explain my knowledge and thoughts if you find this difficult to follow. Please text me at 408-390-7203 or email me at Nancy_Tepperman@yahoo.com. Thank you for all your

work. I realize your emphasis may be on necessities such as water, electricity, etc. but our quality of life is also very important.

Addendum from 4/23/22

Having just returned from a walk at John D. Morgan, I can personally vouch for the fact that it is full! Sunny weekend, with every area reserved with birthday parties, bicycles, skateboards, walkers, strollers,...We can absorb SOME more people but not the numbers if several high-rises are built. Even though new residents would be able to walk to the park, so the overflowing parking lots would be minimally impacted, additional open space is needed so that overcrowding of the existing park does not occur.



April 25, 2022

City of Campbell
City Hall 70 N. First Street
Campbell, CA 95008

Attn: Stephen Rose
Via Email: stephenr@campbellca.gov

Subject: Envision Campbell General Plan and Housing Element Update - Notice of Preparation

Dear Stephen Rose,

Thank you very much for the opportunity to comment on the Notice of Preparation (NOP) of an Environmental Impact Report for the City of Campbell Envision Campbell General Plan and Housing Element Update. VTA appreciates the early and ongoing coordination between the City of Campbell and VTA staff. VTA's comments are below.

General

VTA supports the City for its overall approach in its General Plan Update. We support the proposed intensification of land uses identified as Transit-Oriented Mixed-Use in the areas adjacent to Hamilton, Downtown Campbell and Winchester Stations. Intensifying land use density within these areas further supports transit use. When complemented by housing at a range of affordability levels, enhanced mobility choices, first-last mile connections, and other community services and amenities, places can become safe and equitable Transit-Oriented Communities.

Equity

VTA is committed to examining the collective role of government in advancing equity, acknowledging historical inequities, working in partnership with our communities and continuously building common understandings in order to recognize the true impact – including the benefits and burdens – of our work. VTA would like to deepen our City-VTA partnership to ensure that we move toward equitable outcomes throughout Campbell. VTA recommends examining the role of equity in the Envision Campbell General Plan and Housing Element Update. VTA looks forward to engaging in further dialogue with City staff to develop shared understandings and guide equitable outcomes that will help make Campbell and Santa Clara County a place that is welcoming for all and where all people can thrive.

Transportation Network Assumptions

Please clearly state the City's assumptions regarding the future transportation network and future land uses both within and outside the City's borders in the horizon year in the Transportation section of the Draft Program Environmental Impact Report (DEIR). In particular, the DEIR should identify any areas where the transportation network assumptions (including freeways, expressways, arterials, and transit network) diverge from the Valley Transportation Plan (VTP) 2040 financially constrained project list. If the City is introducing changes from the VTP 2040 network, we believe it is important to understand the effects on the City's

transportation system as well as Congestion Management Program (CMP) facilities, of including and not including these projects.

Reduction of Vehicle Miles Traveled

VTA encourages the City to include strong policies regarding the reduction of Vehicle Miles Traveled (VMT) in the General Plan Update, as well as robust policies and practices for analyzing the impacts development projects would have on transit, bicycle, and pedestrian performance. In the DEIR Transportation section, VTA recommends that the City clearly document all inputs and assumptions used in the VMT analysis. VTA also recommends that the City take a holistic approach to identifying any necessary VMT mitigation measures, including land use, multimodal transportation, parking, and Transportation Demand Management measures. For more information and coordination on VMT policy language in the General Plan and VMT analysis in the DEIR, please contact Rob Swierk at Robert.Swierk@vta.org.

VTA looks forward to continuing and improving our coordinated planning efforts with the City of Campbell that contribute toward a sustainable future for our county. Thank you again for the opportunity to review this NOP. If you have any questions, please contact me at brent.pearse@vta.org.

Sincerely,

Brent Pearse
Transportation Planner

CM1903



SIERRA CLUB

LOMA PRIETA CHAPTER

SAN MATEO, SANTA CLARA & SAN BENITO COUNTIES

May 16, 2022

City of Campbell
70 N. First St.
Campbell, CA 95008

Honorable Mayor and Members of the City Council
Chair and Members of the Planning Commission
Community Development Director, Rob Eastwood
robe@campbellca.gov

Via City Clerk: cityclerk@cityofcampbell.com

Subject: Planning Review and Entitlements of Biotech Developments

Dear Members of the City Council and Planning Commission:

The Sustainable Land Use Committee of the Loma Prieta Chapter of the Sierra Club (SLU) advocates on land use issues in San Mateo and Santa Clara Counties. In that role, we are interested in the overall planning of our cities for the physical and environmental health of our communities.

More bio-tech development is being proposed in cities in San Mateo and Santa Clara Counties and most of these new developments are in highly urbanized locations. In an urbanized setting, the biological materials being studied could become a regional health hazard if allowed to escape. Furthermore, siting of such facilities in shoreline areas, identified as flood zones, can create vulnerabilities for the Bay ecology as sea levels rise and 100 year flood events occur with increased frequency.

Therefore, cities must be transparent and rigorous in approving these facilities from an environmental and public health perspective. To aid in that endeavor, we've attached the Sierra Club, Loma Prieta Chapter's *Guidelines for Biosafety Levels in Biotech Laboratories*.

Please consider all the planning review suggestions listed in the *Guidelines* before approving any new Bio-Tech developments in your city. Most EIR studies include air and water pollution and chemical hazards, but seldom include bio-hazards; yet bio-hazards can be far more dangerous than most other environmental concerns.

Please establish clear and effective new planning code requirements for Biotechnology developments, including monitoring, emergency and evacuation procedures, before approving any further projects. Thank you for your consideration.

Respectfully Yours,

Gita Dev, FAIA, Co-Chair
Sustainable Land Use Committee
Sierra Club Loma Prieta Chapter

Jennifer Chang Hetterly
Bay Alive Campaign Lead
Sierra Club Loma Prieta Chapter

Cc: James Eggers, Executive Director, Sierra Club Loma Prieta Chapter
Gladwyn d'Souza, Conservation Chair, Sierra Club Loma Prieta Chapter



**SIERRA
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LOMA PRIETA
CHAPTER

Guidelines for Biosafety Levels in Biotech Laboratories



This is a brief overview of biosafety levels for research laboratories, drawing from Lab Manager (www.labmanager.com) Updated Dec 27, 2021 ; November 15, 2021 and from the Centers for Disease Control and National Institutes of Health

In light of numerous proposed biotech developments in highly urbanized locations, this document provides a starting point for identifying issues in facilities using biological materials. Proper facility location and design for research or clinical labs, permitting, and operations are essential to ensuring that people working in the facility and the environment outside the facility are protected.

As a matter of public health, cities must be rigorous in reviewing and approving these facilities.

A specialized laboratory that deals with infectious agents is the biosafety lab. Biosafety labs may be devoted to research or to production activities and involve working with infectious materials or laboratory animals. It is essential to pay attention to the proper design of facilities, to proper protocols in using the facilities and procedures in the event of emergencies and disasters. Biological safety levels (BSL) are ranked from one to four, based on the agents or organisms used in the labs. Each higher level builds on the previous level, adding constraints and barriers. The Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH) are the main sources for biological safety information for infectious agents. The publication *Biosafety in Microbiological and Biomedical Laboratories* <https://www.cdc.gov/labs/BMBL.html> is a principal reference.

The four biosafety levels were developed to protect against a world of select agents, including bacteria, fungi, parasites, prions, rickettsial agents and viruses (the largest group). When the work involves vertebrate animals, additional precautions and safety requirements are necessary. Studying the most infectious agents also means extensive security measures must be in place because of their virulence and because of their potential to escape the lab and infect the surrounding population, or for use in bioterrorism.

Issues for City Planning Departments, County and City Departments of Public Health, City Planning Commissioners, and City Council Members to address when reviewing planning applications for developments including BIOTECH laboratories.

Incidents involving biological, chemical, physical, and radiological hazards can have a significant impact on the safety and health of workers in laboratory settings. In addition, consideration needs to be given to risks to the community and the environment in the event of accidents, disasters and building failure. This is particularly important if proposed developments are in proximity to vulnerable populations and delicate Bay ecosystems, where risk of disruption from sea level and groundwater rise is high.

- Determine the Biological Safety Levels (BSL) for the proposed project - Level 1, 2, 3, or 4. Decide which of these Levels are acceptable or not acceptable to the city from a public safety perspective. While Level 1 labs are generally considered safe, Level 2 labs are not advisable where there is the potential for structural failure. San Francisco Airport and all area airports do not permit Levels 2, 3 and 4 labs within some Land Use Safety Compatibility Zones. In addition, structural failure for biosafety lab buildings on soils subject to liquefaction in seismic events, such as bay fill, should be carefully considered as it could pose a community and environmental safety risk.
- Consider risks from flooding and infrastructure safety, including surface flooding and subsurface impacts from sea level and groundwater rise, for biosafety labs except Level 1.
- Consider prohibiting Level 3 and Level 4 labs, entirely, in urban and shoreline areas.
- Require the applicant to submit in writing the BSL for the proposed project with a provision that changing to a higher level BSL will not be allowed without prior review and approval by the city and may not be allowed at all if so determined by the city.
- In the case of a speculative development where the final tenants or buyers may not be known during the city entitlements process, include the allowed BSL in the entitlements and in the EIR. After entitlement, require the developer to submit, in writing, the BSL for each company that is being considered for rental or purchase of space in the development, as they occur, before the lease or purchase is finalized, to ensure compliance.
- Any change to the BSL level will need review at City Council level and may not be allowed. In addition, re-evaluation under CEQA may be required.
- Require the applicant to identify the range of diseases to be studied and the agents to be used in the proposed facility.
- Require the applicant to define emergency protocols and safety design features for the building(s) and surrounding area, including Bay wetlands.
- Require the applicant to define safety redundancy measures for HVAC and air exhaust systems, waste disposal and storm water management systems, water quality safety, etc. in the building(s) design and long-term use
- Require the applicant to identify any animals to be used in the research and how they will be housed, secured, and protected.
- Require rigorous environmental assessments for any potential air or water pollution, or waste disposal materials generated by the facility, especially airborne particles or bio-hazardous materials.
- Include a biological safety analysis and health impact report on potential short and long-term safety impacts on the city, the bay, and the regional environment. **This should be a key component of the Environmental Impact Review process.**
- Require a monitoring and verification program to ensure that the facility is complying with the city requirements and the proponent's commitments to the city and all related regulatory agencies (e.g. fire dept, Cal-OSHA, CDC, USDA, etc.) including inspections and violations reports.

Reference:

CDC and NIH—Biosafety in Microbiological and Biomedical Laboratories—6th Edition

<https://www.selectagents.gov/>

Level 1 Biosafety level one, the lowest level, applies to work with agents that do not consistently cause disease in healthy adults Non-pathogenic microbe	Biosafety level one, the lowest level, applies to work with agents that usually pose a minimal potential threat to laboratory workers and the environment and do not consistently cause disease in healthy adults. Research with these agents is generally performed on standard open laboratory benches without the use of special containment equipment. BSL 1 labs are not usually isolated from the general building. Lab personnel are trained and supervised on specific procedures by trained scientists. Standard microbiology practices, e.g. mechanical pipetting and safe sharps handling, are usually enough to protect laboratory workers and other employees in the building. Routine decontamination of work surfaces occurs, and potentially infectious materials are decontaminated prior to disposal, generally by autoclaving. Standard microbiological practices also include hand washing and a prohibition on eating or drinking in the lab. Lab workers wear normal personal protective equipment. Biohazard signs are posted and access to the lab is limited whenever infectious agents are present.
Level 2 Biosafety level two covers work with agents associated with human disease, i.e., pathogenic or infectious organisms posing a moderate hazard. Influenza, salmonella,	Biosafety level two covers work with agents associated with human disease, i.e., pathogenic or infectious organisms posing a moderate hazard. Examples are the equine encephalitis viruses and HIV. Care is used to prevent percutaneous injury (needlesticks and cuts), ingestion and mucous membrane exposures in addition to the standard microbiological practices of BSL 1. Caution is used when handling and disposing of contaminated sharps. The laboratory's written biosafety manual details any needed immunizations (e.g., hepatitis B vaccine or TB skin testing). Access to the lab is more controlled than for BSL 1 facilities. Immunocompromised persons with increased risk for infection may be denied admittance at the discretion of the laboratory director. BSL 2 labs must also provide the next level of barriers, i.e., specialty safety equipment and facilities. Work with infectious agents involves a Class II biosafety cabinet, an autoclave, and an eyewash station. Self-closing lockable doors and biohazard warning signs are required at access points
Level 3 These are indigenous or exotic agents that may cause serious or lethal disease via aerosol transmission. HIV, HSN1 flu, SARS-CoV2 plague	Yellow fever, St. Louis encephalitis and West Nile virus are examples of agents requiring biosafety level 3 practices and controls. Work with these agents must be registered with all appropriate government agencies. These are indigenous or exotic agents that may cause serious or lethal disease via aerosol transmission. Beyond the BSL 2 practices and equipment, work in BSL 3 labs involves tighter access control and decontamination of all wastes in the facility. More protective primary barriers are used in BSL 3 laboratories, including solid-front wraparound gowns, scrub suits or coveralls made of materials such as Tyvek® and respirators as necessary. Facility design incorporates self-closing double-door access separated from general building corridors. The ventilation must provide ducted, directional airflow by drawing air into the lab from clean areas and with no recirculation
Level 4 Agents requiring BSL 4 facilities and practices are extremely dangerous and pose a high risk of life-threatening disease. Ebola, smallpox	Agents requiring BSL 4 facilities and practices are extremely dangerous and pose a high risk of life-threatening disease. Examples are the Ebola virus, the Lassa virus, and any agent with unknown risks of pathogenicity and transmission. BSL 4 facilities provide the maximum protection and containment, requiring complete clothing change before entry, a shower on exit, and decontamination of all materials prior to leaving the facility. The BSL 4 laboratory contains a Class III biological safety cabinet or equivalent in combination with a positive-pressure, air-supplied full-body suit. Usually, BSL 4 laboratories are in separate buildings or a totally isolated zone with dedicated supply and exhaust ventilation. Exhaust streams generally are filtered through high-efficiency particulate air (HEPA) filters.

From: Lisa Brancatelli <LBrancatelli@valleywater.org>

Sent: Monday, April 25, 2022 9:47 AM

To: Stephen Rose <stephenr@campbellca.gov>

Cc: Colleen Haggerty <CHaggerty@valleywater.org>

Subject: NOP for an EIR for the Envision Campbell General Plan and Housing Element Update

Hello Stephan,

The Santa Clara Valley Water District (Valley Water) has reviewed the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Envision Campbell General Plan and Housing Element Update, received by Valley Water on March 26, 2022.

Based on our review of the NOP of an EIR submitted we have the following comments:

1. As part of the General Plan and Housing Element, Campbell will need to coordinate with the San Jose Water Company to ensure that there are adequate water supplies to serve proposed and future development identified in the General Plan. The San Jose Water Company, like other water retailers in Santa Clara County, coordinates with Valley Water on water supplies because Valley Water is the Groundwater Sustainability Agency for the groundwater basins and is responsible for wholesale water supplies. Valley Water prepares for future water demands through its Water Supply Master Plan, last adopted in 2019. One component of the Water Supply Master Plan is expanding water conservation and demand management efforts. This includes a Model Water Efficiency New Development Ordinance (MWENDO) that has been developed with cities and other stakeholders in the county. Valley Water is calling on all municipalities to adopt the MWENDO to help ensure new developments meet strong water efficiency standards to extend the region's water supplies.
2. Another element of the county's water supply portfolio is natural groundwater recharge, which is precipitation that infiltrates into the groundwater in the recharge areas of the basin. Within these areas, water from the surface passes through permeable sands and gravels to benefit water supply aquifers. Campbell is in the recharge area of the Santa Clara Subbasin. Natural groundwater recharge has declined over the last 100 years as the county has been developed because impermeable surfaces within the built environment increase stormwater runoff and limit infiltration of precipitation. Precipitation that once supported the groundwater basin through natural recharge is now removed through stormwater infrastructure to San Francisco Bay. A substantial loss of recharge and associated water supply and environmental benefits has resulted from many

small developments over time and is a cumulative impact that needs to be addressed in the EIR.

3. Most new development and redevelopment is subject to stormwater quality requirements. Some of the methods used to meet these requirements, such as low impact development (LID), work by retaining stormwater on the site for infiltration, which supports natural groundwater recharge. However, other methods only work to improve the quality of stormwater prior to releasing it into the stormwater system. To address the long-term cumulative impacts on natural groundwater recharge, Campbell should require new development and redevelopment proposals to include stormwater quality elements, such as LID that meet state standards, with onsite retention to maintain, and in some cases, increase natural groundwater recharge and protect groundwater quality.
4. The EIR for the General Plan and Housing Element should include criteria for setbacks from the creeks as they cross through the General Plan area. Elements to consider are setbacks for environmental purposes, including enhancements for trail purposes and for flood protection benefits. To minimize impacts to the riparian corridor projects should be consistent with the *Guidelines and Standards for Land Use Near Streams*. Valley Water strongly advocates for maximizing vegetated areas to enhance the riparian corridor by increasing setbacks from the existing creek top of bank to any hardscape, roadways, or parking areas associated with the development.

Please forward the DEIR when available for public comment and reference Valley Water File No. 26513 on further correspondence regarding this project. If you have any questions or need further information, you can reach me by email at LBrancatelli@valleywater.org or by phone at (408) 630-2479.

Thank you,

LISA BRANCATELLI
ASSISTANT ENGINEER II (CIVIL)

Community Projects Review Unit

lbrancatelli@valleywater.org

Tel. (408) 630-2479 / Cell. (408) 691-1247

CPRU Hotline: (408) 630-2650

Appendix B

Noise Inputs and Results

A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

B: Continuous and Short-Term Ambient Noise Measurement Results



Appendix B1: Continuous Noise Monitoring Results

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Tuesday, June 28, 2022	15:00	60	72	60	58
Tuesday, June 28, 2022	16:00	60	80	60	58
Tuesday, June 28, 2022	17:00	60	72	60	58
Tuesday, June 28, 2022	18:00	60	66	60	59
Tuesday, June 28, 2022	19:00	59	67	59	58
Tuesday, June 28, 2022	20:00	58	67	58	56
Tuesday, June 28, 2022	21:00	57	71	57	54
Tuesday, June 28, 2022	22:00	56	65	55	53
Tuesday, June 28, 2022	23:00	54	74	53	50
Wednesday, June 29, 2022	0:00	51	59	50	45
Wednesday, June 29, 2022	1:00	50	62	48	42
Wednesday, June 29, 2022	2:00	49	61	47	38
Wednesday, June 29, 2022	3:00	51	60	50	42
Wednesday, June 29, 2022	4:00	55	75	54	49
Wednesday, June 29, 2022	5:00	61	69	61	57
Wednesday, June 29, 2022	6:00	61	68	61	59
Wednesday, June 29, 2022	7:00	61	69	61	59
Wednesday, June 29, 2022	8:00	60	68	60	58
Wednesday, June 29, 2022	9:00	59	64	59	58
Wednesday, June 29, 2022	10:00	60	66	59	58
Wednesday, June 29, 2022	11:00	59	64	59	58
Wednesday, June 29, 2022	12:00	60	65	60	58
Wednesday, June 29, 2022	13:00	60	68	60	58
Wednesday, June 29, 2022	14:00	61	67	60	59

Statistics	Leq	Lmax	L50	L90
Day Average	60	68	59	58
Night Average	57	66	53	48
Day Low	57	64	57	54
Day High	61	80	61	59
Night Low	49	59	47	38
Night High	61	75	61	59
Ldn	64	Day %		77
CNEL	64	Night %		23

Site: LT-1

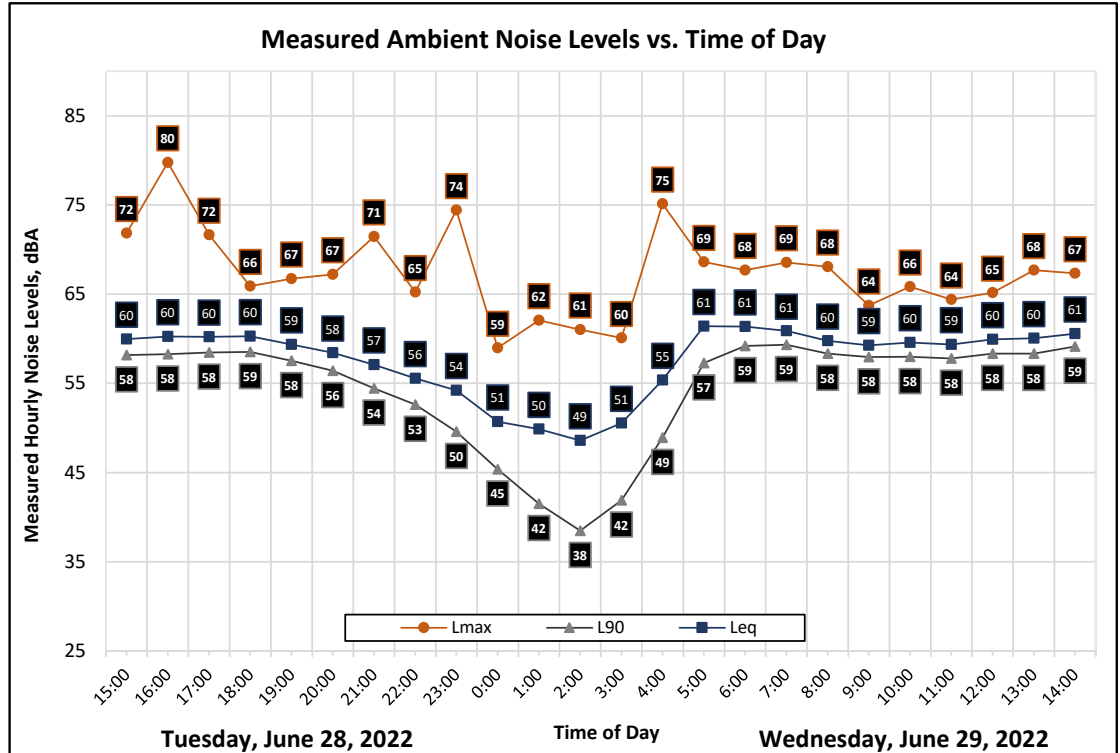
Project: Campbell EIR Update

Location: Rolling Hills Highschool

Coordinates: 37.2668773°, -121.9866729°

Meter: LDL 820-3

Calibrator: CAL200



Appendix B2: Continuous Noise Monitoring Results

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Tuesday, June 28, 2022	16:00	71	85	70	67
Tuesday, June 28, 2022	17:00	70	84	69	66
Tuesday, June 28, 2022	18:00	71	89	71	67
Tuesday, June 28, 2022	19:00	71	85	70	66
Tuesday, June 28, 2022	20:00	70	87	69	64
Tuesday, June 28, 2022	21:00	69	82	68	62
Tuesday, June 28, 2022	22:00	67	78	65	59
Tuesday, June 28, 2022	23:00	66	81	62	55
Wednesday, June 29, 2022	0:00	63	78	59	48
Wednesday, June 29, 2022	1:00	61	76	54	44
Wednesday, June 29, 2022	2:00	60	79	53	43
Wednesday, June 29, 2022	3:00	61	83	54	44
Wednesday, June 29, 2022	4:00	63	78	59	51
Wednesday, June 29, 2022	5:00	68	79	65	59
Wednesday, June 29, 2022	6:00	71	82	70	65
Wednesday, June 29, 2022	7:00	71	79	70	67
Wednesday, June 29, 2022	8:00	72	83	71	68
Wednesday, June 29, 2022	9:00	71	87	71	67
Wednesday, June 29, 2022	10:00	71	82	70	66
Wednesday, June 29, 2022	11:00	71	80	70	66
Wednesday, June 29, 2022	12:00	71	82	70	67
Wednesday, June 29, 2022	13:00	71	79	70	67
Wednesday, June 29, 2022	14:00	71	90	70	67
Wednesday, June 29, 2022	15:00	71	81	71	67

Statistics	Leq	Lmax	L50	L90
Day Average	71	84	70	66
Night Average	66	79	60	52
Day Low	69	79	68	62
Day High	72	90	71	68
Night Low	60	76	53	43
Night High	71	83	70	65
Ldn	73	Day %		84
CNEL	74	Night %		16

Site: LT-2

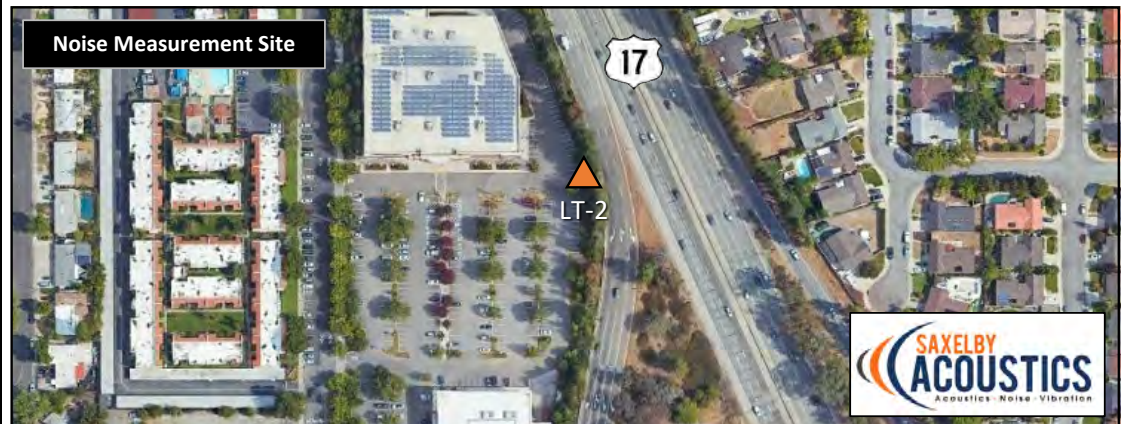
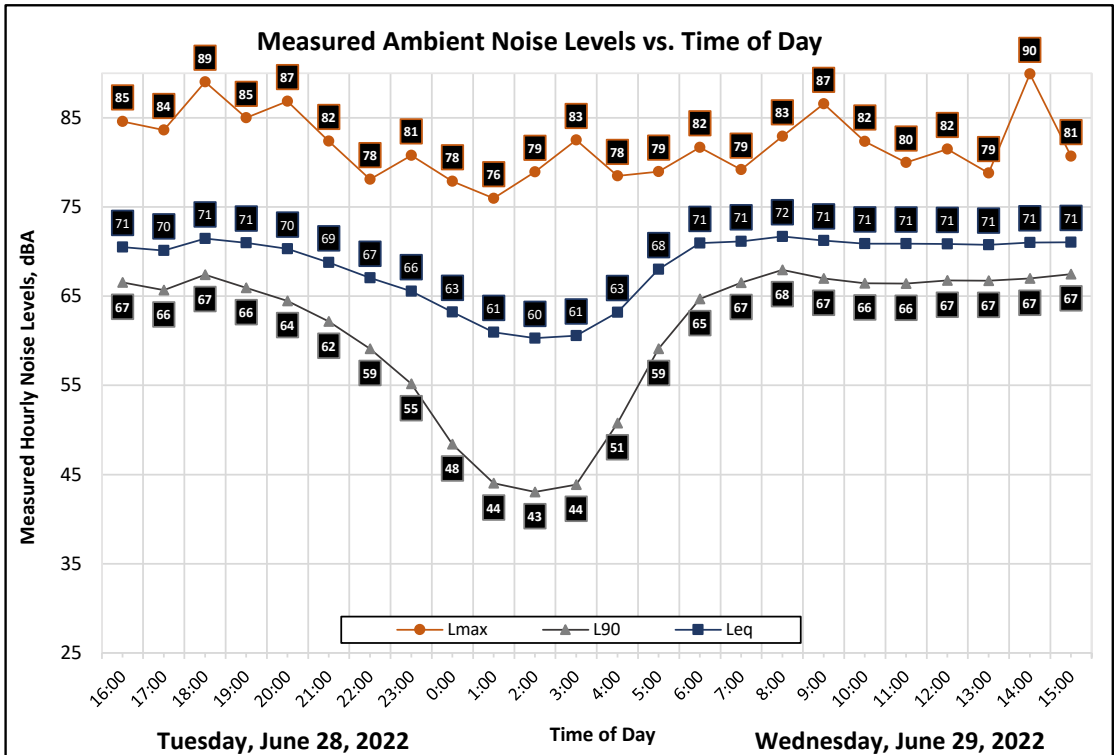
Project: Campbell EIR Update

Location: Kohls Parking Lot

Coordinates: 37.2960399°, -121.9398284°

Meter: LDL 820-9

Calibrator: CAL200



Appendix B3: Continuous Noise Monitoring Results

Site: LT-3

Project: Campbell EIR Update

Meter: LDL 820-6

Location: Gerstco Parking Lot

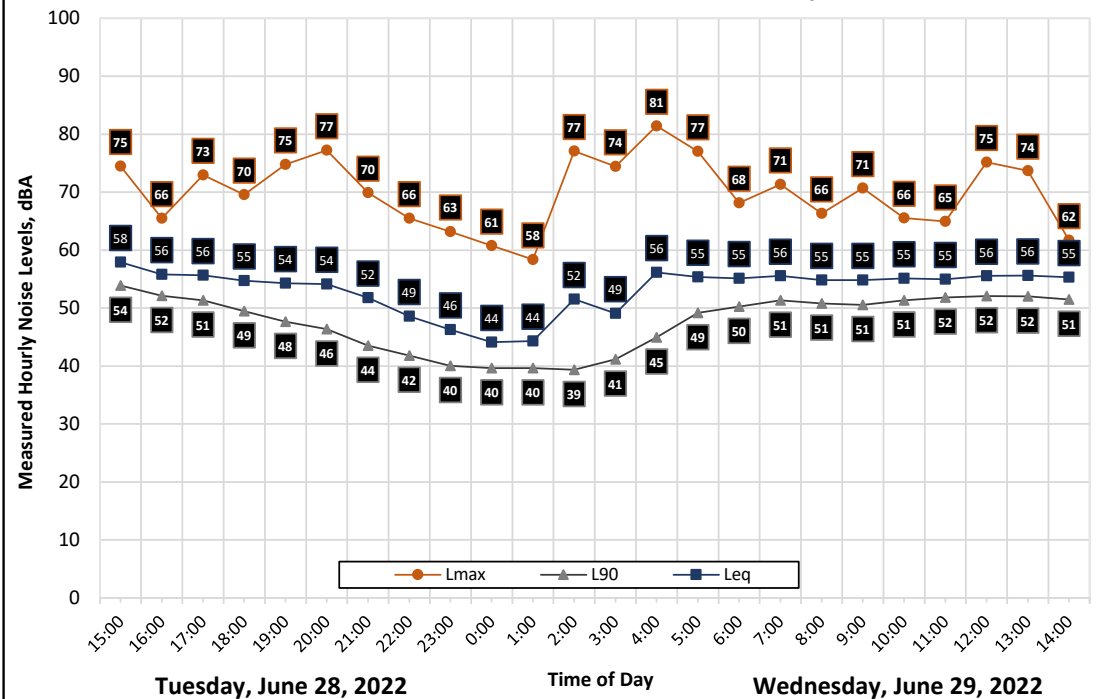
Calibrator: CAL200

Coordinates: 37.2964925°, -121.9327042°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Tuesday, June 28, 2022	15:00	58	75	57	54
Tuesday, June 28, 2022	16:00	56	66	55	52
Tuesday, June 28, 2022	17:00	56	73	55	51
Tuesday, June 28, 2022	18:00	55	70	53	49
Tuesday, June 28, 2022	19:00	54	75	52	48
Tuesday, June 28, 2022	20:00	54	77	51	46
Tuesday, June 28, 2022	21:00	52	70	48	44
Tuesday, June 28, 2022	22:00	49	66	45	42
Tuesday, June 28, 2022	23:00	46	63	43	40
Wednesday, June 29, 2022	0:00	44	61	41	40
Wednesday, June 29, 2022	1:00	44	58	42	40
Wednesday, June 29, 2022	2:00	52	77	41	39
Wednesday, June 29, 2022	3:00	49	74	43	41
Wednesday, June 29, 2022	4:00	56	81	51	45
Wednesday, June 29, 2022	5:00	55	77	53	49
Wednesday, June 29, 2022	6:00	55	68	54	50
Wednesday, June 29, 2022	7:00	56	71	55	51
Wednesday, June 29, 2022	8:00	55	66	54	51
Wednesday, June 29, 2022	9:00	55	71	54	51
Wednesday, June 29, 2022	10:00	55	66	54	51
Wednesday, June 29, 2022	11:00	55	65	54	52
Wednesday, June 29, 2022	12:00	56	75	54	52
Wednesday, June 29, 2022	13:00	56	74	54	52
Wednesday, June 29, 2022	14:00	55	62	55	51

Statistics	Leq	Lmax	L50	L90
Day Average	55	70	54	50
Night Average	52	70	46	43
Day Low	52	62	48	44
Day High	58	77	57	54
Night Low	44	58	41	39
Night High	56	81	54	50
Ldn	59	Day %		77
CNEL	59	Night %		23

Measured Ambient Noise Levels vs. Time of Day



Appendix B4: Continuous Noise Monitoring Results

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Tuesday, June 28, 2022	15:00	70	80	69	59
Tuesday, June 28, 2022	16:00	71	84	70	59
Tuesday, June 28, 2022	17:00	71	85	70	58
Tuesday, June 28, 2022	18:00	71	84	69	56
Tuesday, June 28, 2022	19:00	71	97	67	56
Tuesday, June 28, 2022	20:00	68	84	66	53
Tuesday, June 28, 2022	21:00	68	83	63	49
Tuesday, June 28, 2022	22:00	67	96	60	45
Tuesday, June 28, 2022	23:00	64	79	55	42
Wednesday, June 29, 2022	0:00	60	82	44	39
Wednesday, June 29, 2022	1:00	59	76	42	38
Wednesday, June 29, 2022	2:00	56	77	40	37
Wednesday, June 29, 2022	3:00	57	75	40	37
Wednesday, June 29, 2022	4:00	60	77	44	40
Wednesday, June 29, 2022	5:00	65	77	58	46
Wednesday, June 29, 2022	6:00	68	79	64	50
Wednesday, June 29, 2022	7:00	72	92	70	59
Wednesday, June 29, 2022	8:00	71	83	70	63
Wednesday, June 29, 2022	9:00	70	80	70	63
Wednesday, June 29, 2022	10:00	69	79	68	60
Wednesday, June 29, 2022	11:00	69	86	68	59
Wednesday, June 29, 2022	12:00	69	83	68	59
Wednesday, June 29, 2022	13:00	68	77	67	59
Wednesday, June 29, 2022	14:00	68	81	67	59

Statistics	Leq	Lmax	L50	L90
Day Average	70	84	68	58
Night Average	64	80	50	41
Day Low	68	77	63	49
Day High	72	97	70	63
Night Low	56	75	40	37
Night High	68	96	64	50
Ldn	72	Day %		88
CNEL	72	Night %		12

Site: LT-4

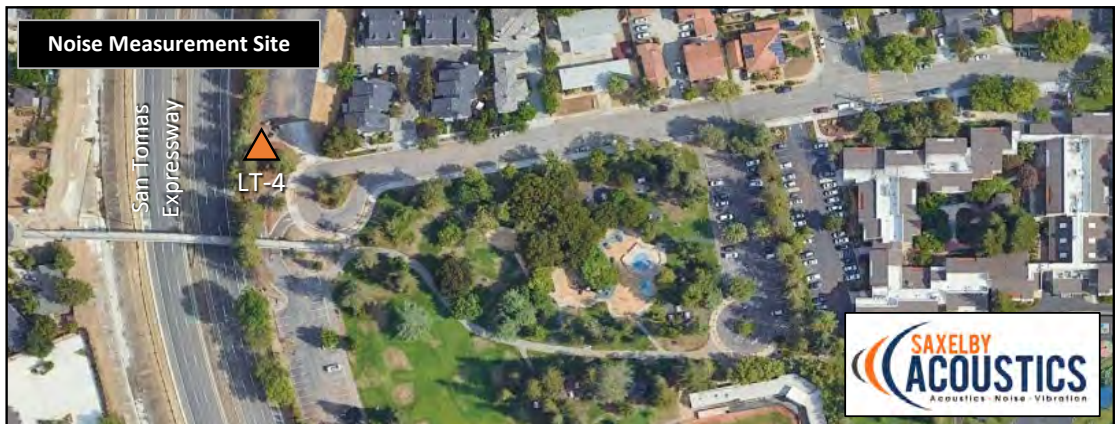
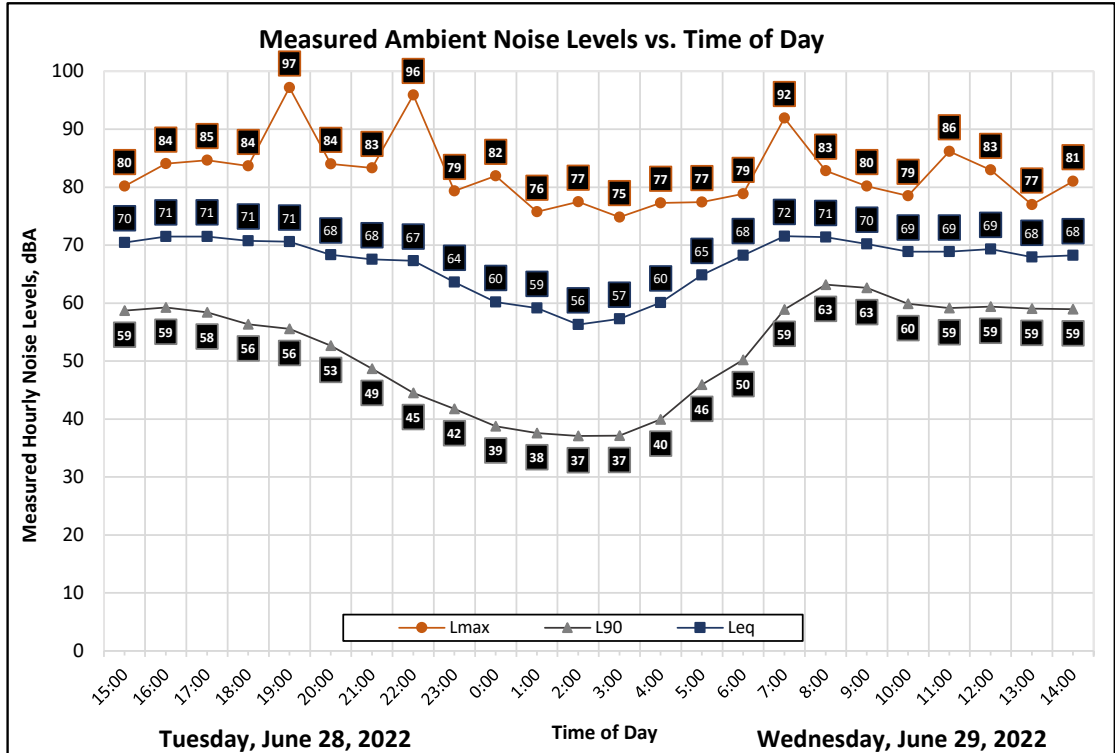
Project: Campbell EIR Update

Meter: LDL 820-6

Location: San Tomas Expressway

Calibrator: CAL200

Coordinates: 37.284536 -121.9606135°



Appendix B5 : Short Term Noise Monitoring Results

Site: ST-1

Project: City of Campbell GP Update

Location: Taco Bell Parking Lot on Camden Ave.

Coordinates: 37.2681161°, -121.9431027°

Meter: LDL 831-3

Calibrator: CAL200

Start: 2022-06-29 10:56:03

Stop: 2022-06-29 11:06:03

SLM: Model 831

Serial: 1329

Measurement Results, dBA

Duration: 0:10

L_{eq} : 72

L_{max} : 99

L_{min} : 52

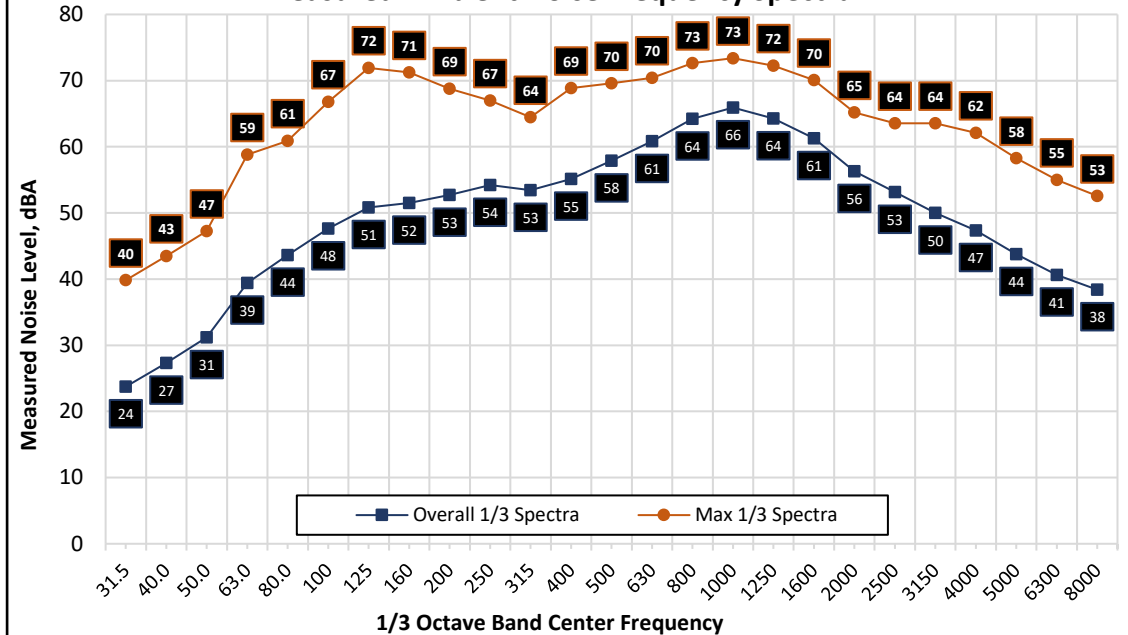
L_{50} : 70

L_{90} : 59

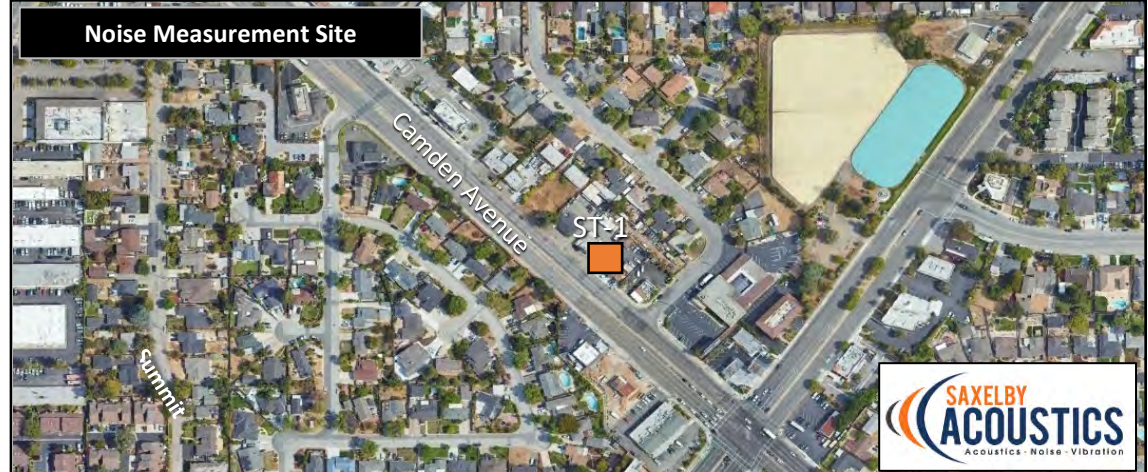
Notes

Primary noise source was traffic on Camden Avenue; Lmax was driven by Motorcyclist passby.

Measured Ambient Noise Frequency Spectrum



Noise Measurement Site



Appendix B6 : Short Term Noise Monitoring Results

Site: ST-2

Project: City of Campbell GP Update

Meter: LDL 831-3

Location: Commercial Center on Winchester Boulevard

Calibrator: CAL200

Coordinates: 37.2636263°, -121.9608305°

Start: 2022-06-29 11:20:47

Stop: 2022-06-29 11:30:47

SLM: Model 831

Serial: 1329

Measurement Results, dBA

Duration: 0:10

L_{eq} : 63

L_{max} : 91

L_{min} : 45

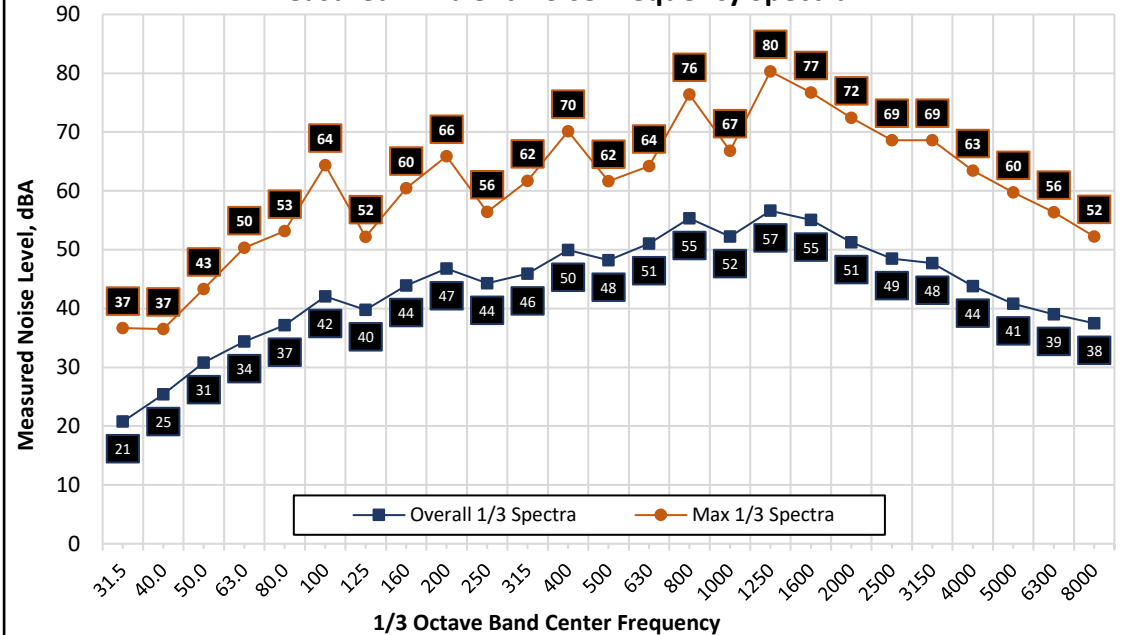
L_{50} : 57

L_{90} : 48

Notes

Primary noise source was traffic on Winchester Boulevard

Measured Ambient Noise Frequency Spectrum



Noise Measurement Site



Appendix B7 : Short Term Noise Monitoring Results

Site: ST-3

Project: City of Campbell GP Update

Location: St. Thomas of Canebury Catholic Church

Coordinates: 37.2763662°, -121.9802326°

Meter: LDL 831-3

Calibrator: CAL200

Start: 2022-06-29 11:45:36

Stop: 2022-06-29 11:55:36

SLM: Model 831

Serial: 1329

Measurement Results, dBA

Duration: 0:10

L_{eq} : 58

L_{max} : 86

L_{min} : 37

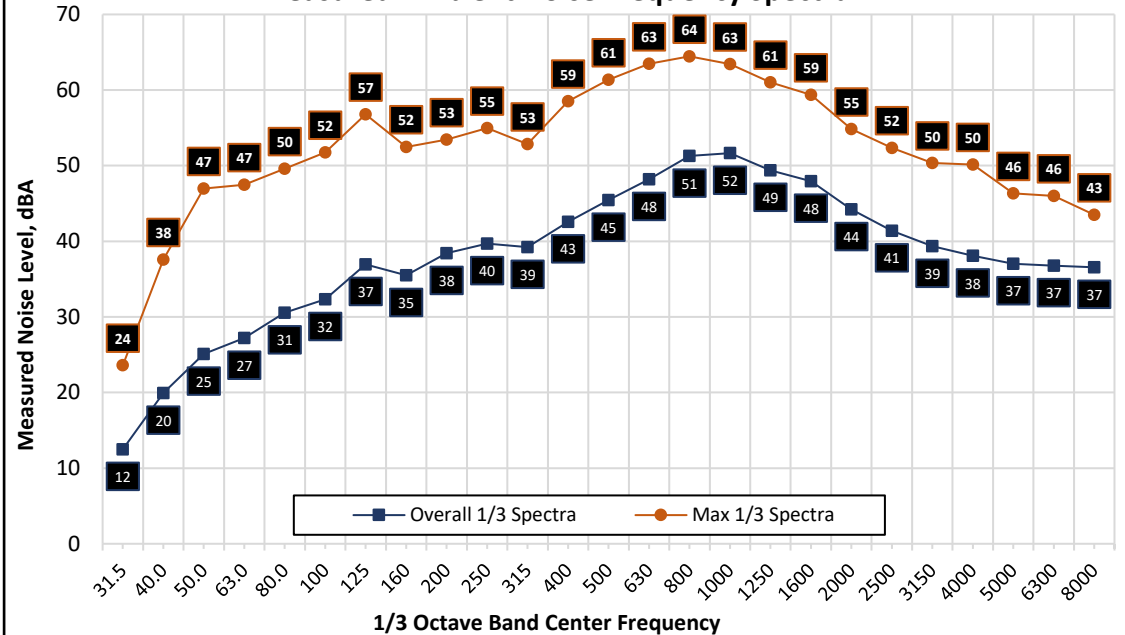
L_{50} : 49

L_{90} : 39

Notes

Primary noise source was traffic on McCoy Avenue

Measured Ambient Noise Frequency Spectrum



Noise Measurement Site



Appendix B8 : Short Term Noise Monitoring Results

Site: ST-4

Project: City of Campbell GP Update

Location: Campbell Community Center

Coordinates: 37.2873997°, -121.9522102°

Meter: LDL 831-3

Calibrator: CAL200

Start: 2022-06-29 13:27:32

Stop: 2022-06-29 13:37:32

SLM: Model 831

Serial: 1329

Measurement Results, dBA

Duration: 0:10

L_{eq} : 54

L_{max} : 82

L_{min} : 44

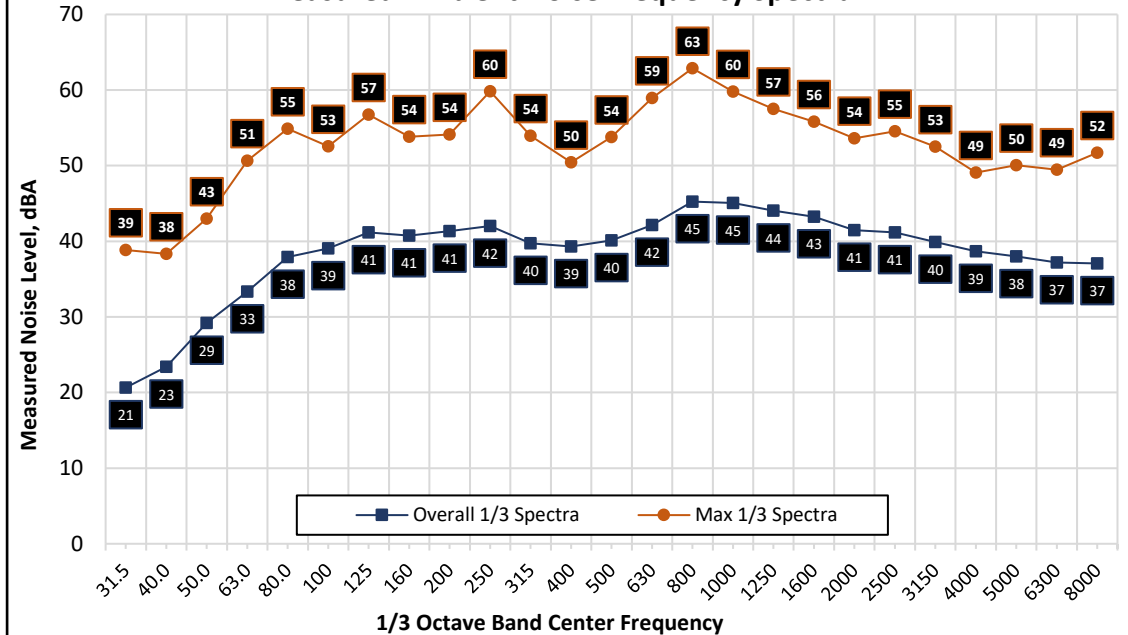
L_{50} : 51

L_{90} : 46

Notes

Primary noise source was traffic on Campbell Avenue and Winchester Boulevard. Secondary noise sources was pedestrian traffic.

Measured Ambient Noise Frequency Spectrum



Noise Measurement Site



Appendix B9 : Short Term Noise Monitoring Results

Site: ST-4

Project: City of Campbell GP Update

Location: Kelly-Moore Paint Shop Parking Lot

Coordinates: 37.2863311°, -121.9764409°

Meter: LDL 831-3

Calibrator: CAL200

Start: 2022-06-29 13:01:25

Stop: 2022-06-29 13:11:25

SLM: Model 831

Serial: 1329

Measurement Results, dBA

Duration: 0:10

L_{eq} : 67

L_{max} : 94

L_{min} : 56

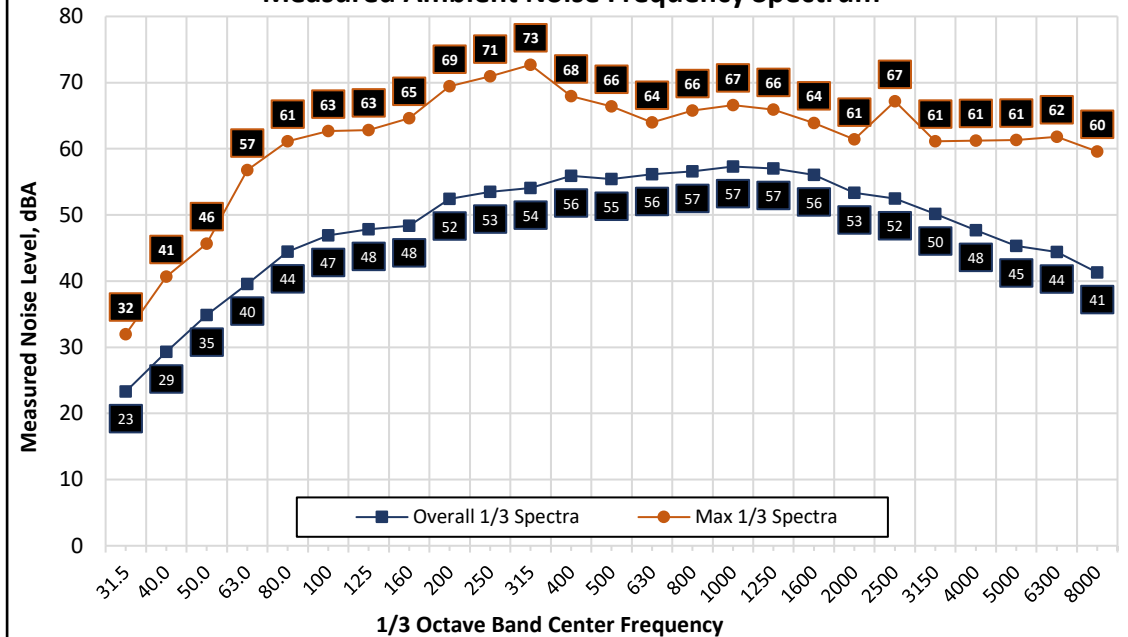
L_{50} : 64

L_{90} : 59

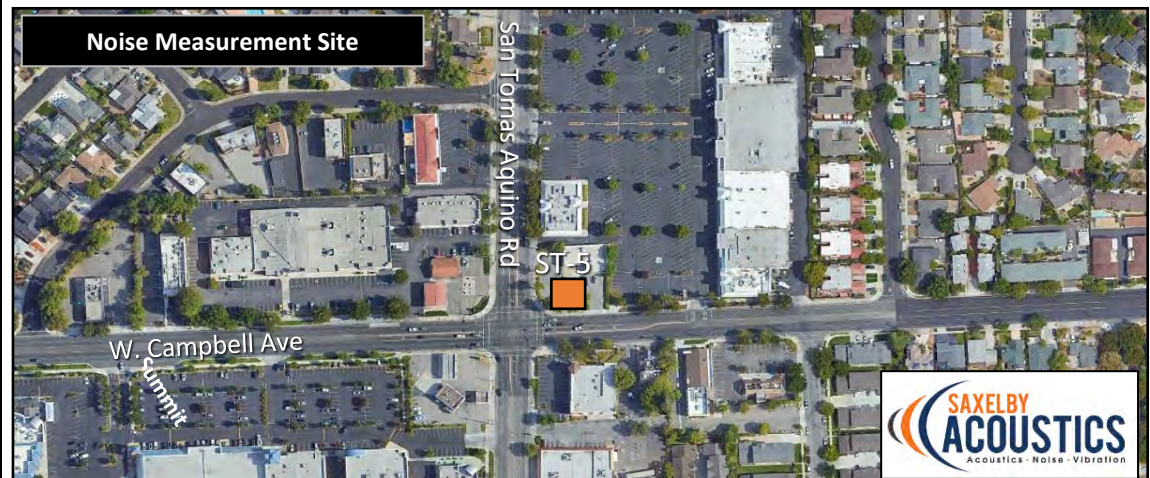
Notes

Primary noise source was traffic on San Tomas Aquino and Landscaping Noise from lawnmowers.

Measured Ambient Noise Frequency Spectrum



Noise Measurement Site



Appendix B10 : Short Term Noise Monitoring Results

Site: ST-6

Project: City of Campbell GP Update

Location: Christensen Studios on E. McGlincy Lane

Coordinates: 37.2776777°, -121.9411705°

Meter: LDL 831-3

Calibrator: CAL200

Start: 2022-06-29 10:32:04

Stop: 2022-06-29 10:42:04

SLM: Model 831

Serial: 1329

Measurement Results, dBA

Duration: 0:10

L_{eq} : 61

L_{max} : 89

L_{min} : 46

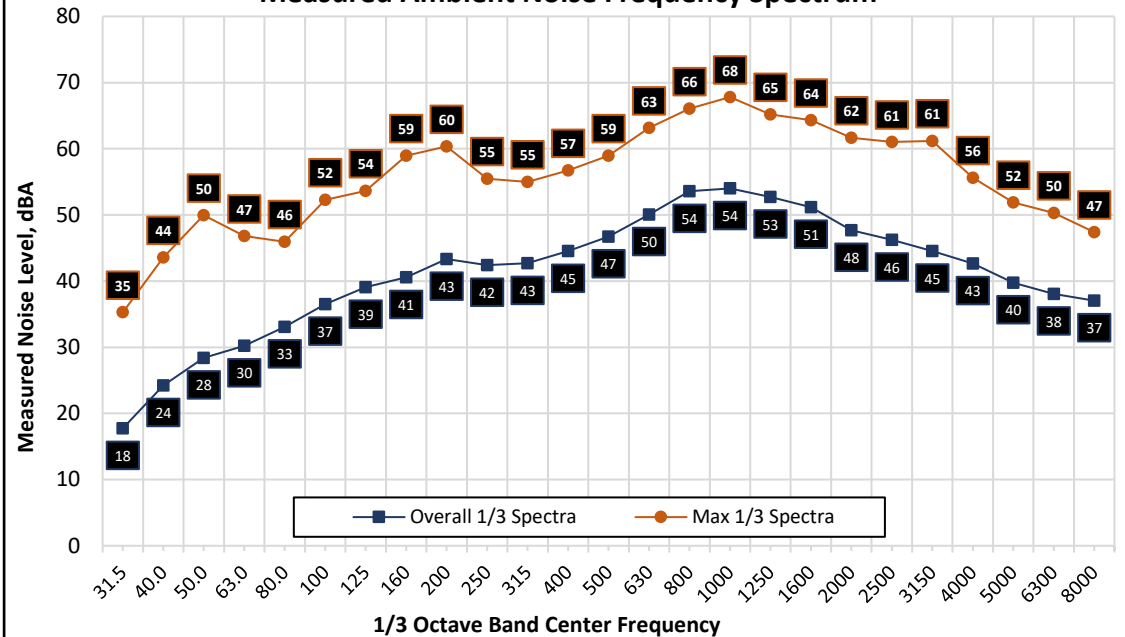
L_{50} : 53

L_{90} : 49

Notes

Primary noise source was traffic on East McGlincy Lane and nearby metal workshops

Measured Ambient Noise Frequency Spectrum



Noise Measurement Site



C: Traffic Noise Calculation Inputs and Results



Appendix C-1

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 220612

Description: City of Campbell GP Update - Existing Traffic

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset			Level, dBA
												60 dBA	65 dBA	70 dBA	
1	Hamilton	w/o Phoenix Dr	20,600	83	0	17	2.0%	1.0%	45	265	0	258	120	56	60
2	San Tomas Expy	n/o Hamilton	47,000	72	0	28	2.0%	1.0%	45	140	-5	558	259	120	64
3	Hamilton	w/o Eden	30,500	83	0	17	2.0%	1.0%	35	120	-5	225	105	49	59
4	Winchester	n/o Hamilton	30,800	83	0	17	2.0%	1.0%	25	115	0	151	70	33	62
5	Hamilton	w/o Central	50,300	83	0	17	2.0%	1.0%	35	250	0	314	146	68	61
6	Hamilton	w/o Bascom	56,000	83	0	17	2.0%	1.0%	35	100	-5	338	157	73	63
7	Bascom	s/o Hamilton	34,100	77	0	23	2.0%	1.0%	35	260	-5	276	128	59	55
8	San Tomas Aquino Rd	s/o Villarita	12,200	72	0	28	2.0%	1.0%	35	70	0	152	71	33	65
9	Civic Center	w/o 1st	7,200	83	0	17	2.0%	1.0%	25	115	0	57	27	12	55
10	Campbell	w/o 1st	5,800	83	0	17	2.0%	1.0%	25	165	0	50	23	11	52
11	Orchard City	w/o 1st	5,300	83	0	17	2.0%	1.0%	25	70	-5	47	22	10	52
12	Campbell	e/o Union	15,200	83	0	17	2.0%	1.0%	25	115	-5	94	44	20	54
13	San Tomas Expy	n/o Winchester	45,400	72	0	28	2.0%	1.0%	45	180	-5	545	253	117	62
14	Winchester	n/o Budd	23,300	83	0	17	2.0%	1.0%	35	240	0	188	87	41	58
15	Union Ave	n/o McGlincy	11,700	83	0	17	2.0%	1.0%	35	115	0	119	55	26	60
16	Camden	e/o 17	73,300	83	0	17	2.0%	1.0%	35	95	-5	404	188	87	64
17	Pollard	w/o 85	13,500	83	0	17	2.0%	1.0%	35	170	0	131	61	28	58
18	Winchester	n/o Parr Ave	23,500	83	0	17	2.0%	1.0%	35	210	-5	189	88	41	54
19	Curtner	w/o Salerno	8,400	83	0	17	2.0%	1.0%	30	135	0	81	38	17	57
20	Dell Ave	s/o Hacienda Ave	6,800	83	0	17	2.0%	1.0%	30	640	0	70	33	15	46
21	Campbell	e/o Railway	20,000	83	0	17	2.0%	1.0%	35	410	0	170	79	37	54

Appendix C-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 220612

Description: City of Campbell GP Update - Future 2040

Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset			Level, dBA
												60	65	70	
1	Hamilton	w/o Phoenix Dr	42,900	83	0	17	2.0%	1.0%	45	265	0	421	196	91	63
2	San Tomas Expy	n/o Hamilton	89,900	72	0	28	2.0%	1.0%	45	140	-5	860	399	185	67
3	Hamilton	w/o Eden	74,200	83	0	17	2.0%	1.0%	35	120	-5	407	189	88	63
4	Winchester	n/o Hamilton	47,000	83	0	17	2.0%	1.0%	25	115	0	200	93	43	64
5	Hamilton	w/o Central	82,400	83	0	17	2.0%	1.0%	35	250	0	437	203	94	64
6	Hamilton	w/o Bascom	80,800	83	0	17	2.0%	1.0%	35	100	-5	431	200	93	65
7	Bascom	s/o Hamilton	55,600	77	0	23	2.0%	1.0%	35	260	-5	382	177	82	58
8	San Tomas Aquino Rd	s/o Villarita	12,300	72	0	28	2.0%	1.0%	35	70	0	153	71	33	65
9	Civic Center	w/o 1st	11,100	83	0	17	2.0%	1.0%	25	115	0	77	36	16	57
10	Campbell	w/o 1st	5,800	83	0	17	2.0%	1.0%	25	165	0	50	23	11	52
11	Orchard City	w/o 1st	10,800	83	0	17	2.0%	1.0%	25	70	-5	75	35	16	55
12	Campbell	e/o Union	24,500	83	0	17	2.0%	1.0%	25	115	-5	130	60	28	56
13	San Tomas Expy	n/o Winchester	64,600	72	0	28	2.0%	1.0%	45	180	-5	690	320	149	64
14	Winchester	n/o Budd	27,000	83	0	17	2.0%	1.0%	35	240	0	208	96	45	59
15	Union Ave	n/o McGlincy	13,000	83	0	17	2.0%	1.0%	35	115	0	128	59	27	61
16	Camden	e/o 17	81,500	83	0	17	2.0%	1.0%	35	95	-5	434	201	93	65
17	Pollard	w/o 85	19,000	83	0	17	2.0%	1.0%	35	170	0	164	76	35	60
18	Winchester	n/o Parr Ave	23,600	83	0	17	2.0%	1.0%	35	210	-5	190	88	41	54
19	Curtner	w/o Salerno	8,500	83	0	17	2.0%	1.0%	30	135	0	82	38	18	57
20	Dell Ave	s/o Hacienda Ave	8,100	83	0	17	2.0%	1.0%	30	640	0	79	37	17	46
21	Campbell	e/o Railway	31,600	83	0	17	2.0%	1.0%	35	410	0	231	107	50	56

D: Example Loading Dock Noise Barrier Reductions

Appendix D-1 : Barrier Insertion Loss Calculation

Project Information:

Project Name: Willows GPU

Location(s): Example Loading Dock - 100' with 12' sound wall

Noise Level Data:

Source Description: Loading Dock

Source Noise Level, dBA Leq: 66.0

Source Frequency (Hz): 1000

Source Height (ft): 8

Site Geometry:

Receiver Description: Sensitive Use

Source to Barrier Distance (C_1): 100

Barrier to Receiver Distance (C_2): 15

Pad/Ground Elevation at Receiver: 0

Receiver Elevation¹: 5

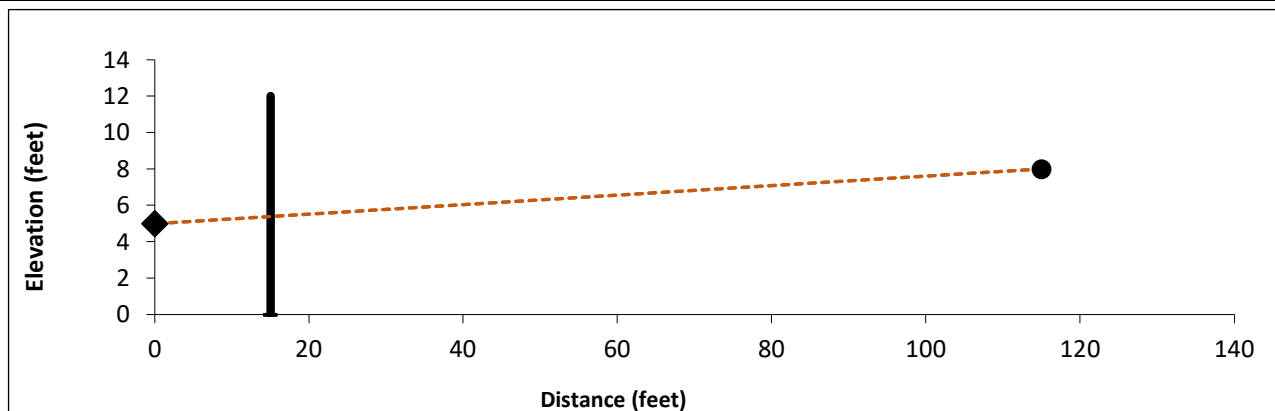
Base of Barrier Elevation: 0

Starting Barrier Height 12

Barrier Effectiveness

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
12	12	-13	53	Yes
13	13	-14	52	Yes
14	14	-15	51	Yes
15	15	-15	51	Yes
16	16	-16	50	Yes
17	17	-17	49	Yes
18	18	-17	49	Yes
19	19	-17	49	Yes
20	20	-17	49	Yes
21	21	-17	49	Yes
22	22	-17	49	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)



Appendix D-2 : Barrier Insertion Loss Calculation

Project Information:

Project Name: Willows GPU

Location(s): Example Loading Dock - 250' with 12' sound wall

Noise Level Data:

Source Description: Loading Dock

Source Noise Level, dBA Leq: 58.0

Source Frequency (Hz): 1000

Source Height (ft): 8

Site Geometry:

Receiver Description: Sensitive Use

Source to Barrier Distance (C_1): 250

Barrier to Receiver Distance (C_2): 15

Pad/Ground Elevation at Receiver: 0

Receiver Elevation¹: 5

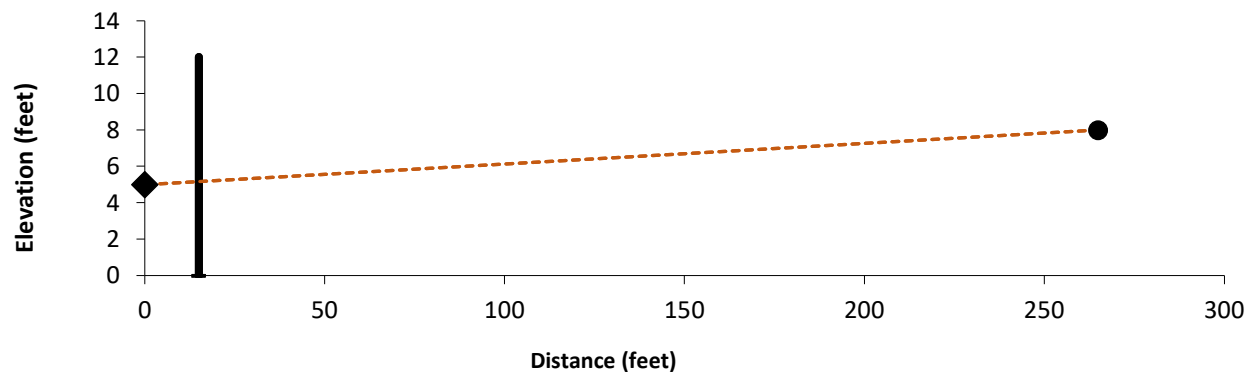
Base of Barrier Elevation: 0

Starting Barrier Height 12

Barrier Effectiveness

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
12	12	-13	45	Yes
13	13	-14	44	Yes
14	14	-15	43	Yes
15	15	-15	43	Yes
16	16	-16	42	Yes
17	17	-16	42	Yes
18	18	-17	41	Yes
19	19	-17	41	Yes
20	20	-17	41	Yes
21	21	-17	41	Yes
22	22	-17	41	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)



Appendix D-3 : Barrier Insertion Loss Calculation

Project Information:

Project Name: Willows GPU

Location(s): Example Loading Dock - 150' with building shielding

Noise Level Data:

Source Description: Loading Dock

Source Noise Level, dBA Leq: 62.5

Source Frequency (Hz): 1000

Source Height (ft): 8

Site Geometry:

Receiver Description: Sensitive Use

Source to Barrier Distance (C_1): 150

Barrier to Receiver Distance (C_2): 15

Pad/Ground Elevation at Receiver: 0

Receiver Elevation¹: 5

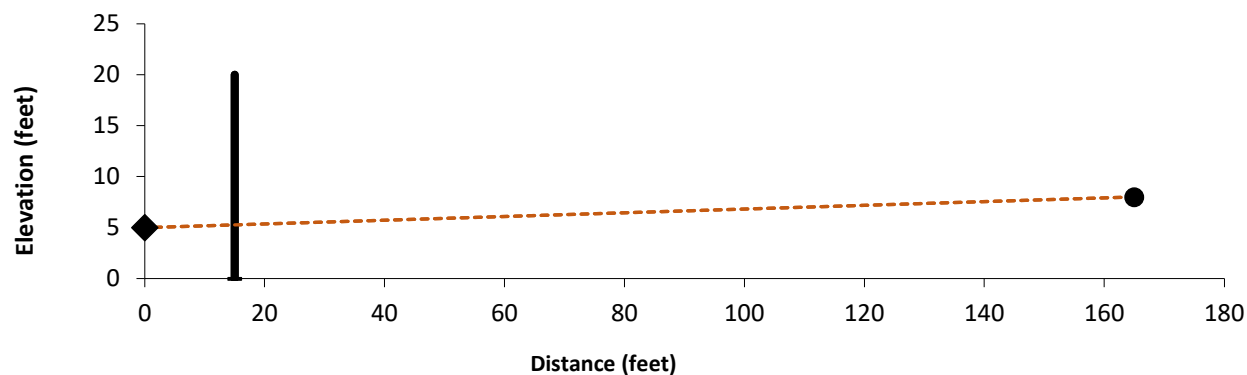
Base of Barrier Elevation: 0

Starting Barrier Height 20

Barrier Effectiveness

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
20	20	-17	45	Yes
21	21	-17	45	Yes
22	22	-17	45	Yes
23	23	-17	45	Yes
24	24	-17	45	Yes
25	25	-17	45	Yes
26	26	-18	44	Yes
27	27	-18	44	Yes
28	28	-18	44	Yes
29	29	-18	44	Yes
30	30	-18	44	Yes

Notes: ¹ Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)



Appendix C

Transportation Study, Modeling and Supporting Transportation Data

Envision Campbell General Plan and Housing Element Update: Draft Transportation Analysis (TA)

Prepared for:
City of Campbell and
De Novo Planning Group

September 2022

SJ21-2117

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Attachment B: VMT Model Land Use and Population Inputs

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(February 3, 2022)

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1. Introduction

This report presents the results of the Transportation Analysis (TA) conducted for the Envision Campbell General Plan and Housing Element Update, also referred to as the proposed “Project.” The City of Campbell is in Santa Clara County and is bordered by the City of San José, the Town of Los Gatos, the City of Saratoga, and unincorporated land. Regional transportation access is provided by the Valley Transportation Authority (VTA) light-rail stations (Hamilton, Campbell, and Winchester stations in Campbell, and Bascom station immediately northeast of the city limits) and by State Route 85 (SR 85) and State Route 17 (SR 17). **Figure 1-1** shows the location of the City of Campbell and the surrounding transportation network.

This chapter discusses the TA purpose, proposed Project description, analysis scenarios, and report organization.

1.1 Purpose

The purpose of the TA is to present the transportation analysis that was conducted for compliance with the California Environmental Quality Act (CEQA). It includes analysis of the proposed Project’s vehicle miles traveled (VMT) and identifies significant impacts and mitigation, where applicable, for inclusion in the Environmental Impact Report (EIR).¹

1.2 Project Description

The proposed Project is an update to the City of Campbell General Plan and Housing Element, which includes a combination of land use changes as described in the *Notice of Preparation and Scoping Meeting for the Envision Campbell General Plan and Housing Element Update Environmental Impact Report* (March 23, 2022).²

1.2.1 Proposed Land Uses

The proposed Project consists of new residential and non-residential (i.e., office, retail, industrial/manufacturing, and institutional) land uses distributed throughout the proposed Project area as compared to existing conditions. It includes the following land uses:

¹ VMT refers to “Vehicle Miles Traveled,” a metric that accounts for the number of vehicle trips generated plus the length or distance of those trips. This report uses Project generated VMT and boundary VMT metrics for specific geographic areas, which are defined in **Chapter 4**.

² Notice of Preparation and Scoping Meeting for the Envision Campbell General Plan and Housing Element Update Environmental Impact Report (March 23, 2022). Available online at https://static1.squarespace.com/static/5727860527d4bd23efdf96db/t/62338d656c9f9f163829aa51/1647545705539/NOP_Campbell+GPU_Final.pdf



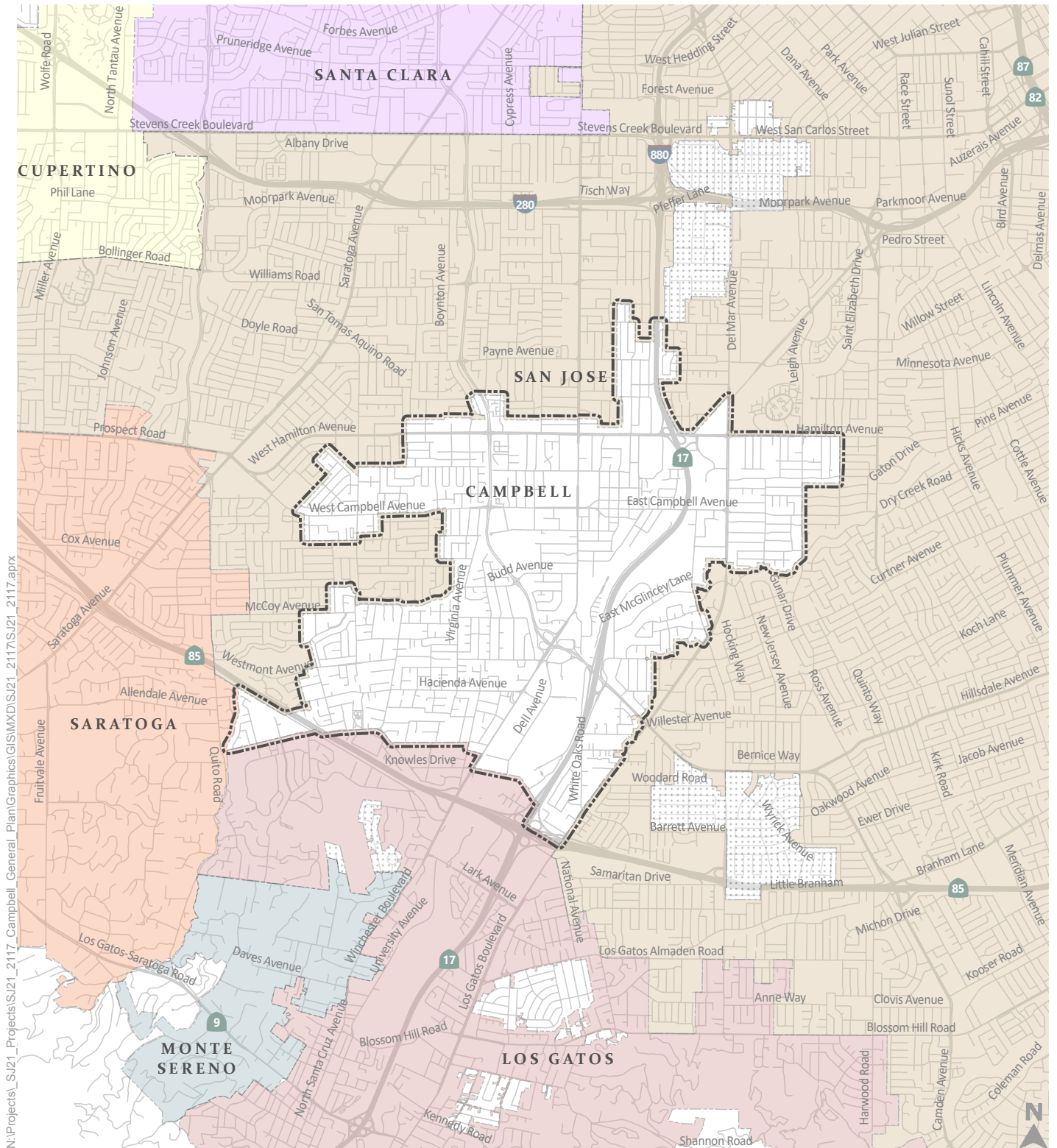
- 8,824 additional housing units (or 22,203 additional residents), including:
 - A maximum of 25 single-family units
 - A maximum of 8,799 multi-family (apartment) units
- 2,633,721 square feet of additional non-residential uses (or 6,194 additional employees)

The potential changes in land use and intensity or density would be the primary changes from the current *City of Campbell General Plan* (2001, revised 2014, revised 2015) that may result in environmental impacts.

1.2.2 Transportation Network

The proposed Project includes a Transportation Element that outlines the goals, policies, and actions designed to promote a multimodal transportation system. It reflects the City's desire to explore the application of innovative technologies and best practices for mobility planning in the City of Campbell, including the desire to provide complete streets and bicycle and pedestrian facilities. Complete streets are streets designed considering the full range of users including vehicles, trucks, pedestrians, bicycles, children, the disabled, and seniors. Key elements of the Transportation Element include the roadway classifications for the street system (see **Figure 2-1** in the ***Environmental Setting*** chapter), a complete streets network that accommodates all users, support for a regional multimodal transportation system, managed traffic demand and reduced VMT, best transportation practices in new developments, efficient parking standards, and well-maintained, safer streets.





- | | | |
|----------------------|-------------------|-----------------------------------|
| City of Campbell | City of Cupertino | City of Santa Clara |
| City of Los Gatos | City of Saratoga | Unincorporated Santa Clara County |
| City of Monte Sereno | City of San Jose | |

Figure 1-1
Project Location

1.3 Analysis Scenarios

The transportation analysis was conducted for a typical weekday for the following scenarios:

Scenario 1: *Existing Conditions* – Existing conditions represent the current transportation system. To evaluate existing conditions, the most current version of the baseline (2015) San Mateo City and County Association of Government (C/CAG) and Santa Clara Valley Transportation Authority (VTA) Bi-County transportation model ("VTA Model") was adjusted to reflect existing (Year 2020) land use in the City of Campbell and was used to determine the baseline VMT per service population, home-based VMT per resident, and home-based work VMT per employee for the traffic analysis zones (TAZs) comprising the Project planning areas.

Scenario 2: *Cumulative (2040) without Project Conditions* – The most current version of the Year 2040 VTA Model was adjusted to reflect only the land use growth and transportation network adjustments that are approved but not yet constructed in the adopted *City of Campbell General Plan* (2001, revised 2014, revised 2015).

Scenario 3: *Cumulative (2040) with Project Conditions* – The proposed land use(s) in the Envision Campbell General Plan and Housing Element Update (in this case, the proposed change in housing units and employment with the Project planning areas) were added to the Cumulative (2040) without Project Conditions model for the relevant TAZs comprising the planning areas, and a full Cumulative (2040) with Project model run was performed.

1.4 Report Organization

The following chapters are included in this report to meet City requirements for evaluating transportation impacts of the proposed Project:

Chapter 1 – Introduction includes the TA purpose, proposed Project description, analysis scenarios, and report organization.

Chapter 2 – Environmental Setting describes the existing transportation system, including the surrounding street system, and existing bicycle, pedestrian, and transit facilities.

Chapter 3 – Regulatory Setting describes the transportation regulatory framework, which includes federal, state, regional, and local programs, and other plans. This chapter provides background information to be used for plan consistency evaluation.

Chapter 4 – Impacts and Mitigation Measures discusses the traffic forecasting methods used to estimate proposed Project generated VMT and the proposed Project's effect on VMT and lists the significance criteria used for the environmental impact analysis. This chapter also evaluates the proposed Project's impacts on the overall transportation system via the VMT analyses and to transit, bicycle, and pedestrian systems, and identifies mitigation measures, if warranted.



2. Environmental Setting

This chapter describes the Existing Conditions (2020) of the roadway system, pedestrian and bicycle facilities, and transit services within the City of Campbell. It also presents existing traffic volumes for the study roadway segments.

COVID-19 Note: The observations and counts that are used for this analysis were collected prior to the voluntary shelter-in-place policies implemented by several large technology firms beginning the first week in March 2020 and the formal shelter-in-place order issued by Santa Clara County Public Health Department on March 16, 2020, to slow the spread of COVID-19, resulting in a reduction in regional vehicle traffic.

2.1 Existing Street System

Regional vehicle access to Campbell is provided by two freeways: State Route (SR) 17 and SR 85. Roadways within the City of Campbell are classified as freeways, expressways, arterials, collectors, local access, and private lanes based on their function and relationship to adjacent land uses. The existing roadway network is shown on **Figure 2-1**. The roadway classifications and descriptions of individual freeways, expressways, and arterials are described below.

2.1.1 Roadway Classifications

Table 2-1 describes each category of street in Campbell and its function as described in the adopted *Campbell General Plan* (2001, revised 2014, revised 2015).

Table 2-1: Roadway Classifications

Category	Function
Freeway	Freeways are designed to be high-speed, high-capacity facilities with limited access and grade separations at cross streets. The primary function of freeways is to provide high mobility for regional and countywide motorized travel. Freeways are designed, operated, and maintained by the State of California. Both SR 17 and SR 85 traverse Campbell.
Expressway	Expressways are major divided arterials with access limited primarily to grade separations and at-grade intersections. The purpose of expressways is to serve countywide trips. Expressways are generally designed, operated, and maintained by the County of Santa Clara. San Tomas Expressway, the only expressway in Campbell, is also used for bus transit and bike travel. Bike use is available in both the northbound and southbound directions. The expressway is not used for pedestrian travel, except for access to transit stops.



Table 2-1: Roadway Classifications

Category	Function
Arterial	Arterials are major multi-lane streets that primarily function to serve through traffic for inter-city and intra-city trips. Arterials also provide access to adjacent properties. Both bike routes and bike lanes can be found on arterials along with ADA accessible pedestrian sidewalks for access to commercial services. • Class I arterials generally have little on-street parking and serve major bus routes such as Hamilton and Bascom Avenues. • Class II arterials generally have on-street parking and serve major bus routes such as Campbell Avenue and Winchester Boulevard.
Collectors	Collectors are low- to medium-speed two-lane or multi-lane streets that serve to collect and channel local traffic to arterials and to distribute arterial traffic onto local streets. Collectors provide mobility and land access via driveways and on-street parking. Collectors serve bus routes, bicyclists, and pedestrians and provide transit opportunities. • Commercial/Industrial Collectors have adjacent commercial and industrial land uses. • Residential Collectors serve the residential neighborhood they penetrate.
Local Street	Local streets are low-speed two-lane streets that provide direct access to abutting land uses. Local streets provide the lowest level of mobility and usually serve no bus routes. Local streets are used for bicycle and pedestrian circulation connecting neighborhoods with services and recreational amenities.
Private Lane	Private lanes are low-speed access streets that provide direct access to properties within a particular subdivision or development. Private lanes are maintained and operated by Home Owners Associations or individual private landowners.

Source: Campbell General Plan, 2002; Updated 2014; Updated 2015.

2.1.2 Freeways and Expressways

State Route 17 is a primary north-south freeway located centrally in the City of Campbell providing three travel lanes in each direction. SR 17 has two interchanges within the city limits, at Hamilton Avenue and San Tomas Expressway-Camden Avenue. The northbound direction is often congested (i.e., a roadway condition characterized by slower travel speeds, longer trip times, and increased vehicle queuing) during the AM peak period, while the southbound direction is often congested during the PM peak period.

State Route 85 is a major east-west freeway that runs south of Campbell and has an interchange with SR 17 immediately south of Campbell's city limits. It has three travel lanes in each direction with one of the travel lanes converting to a high-occupancy vehicle (HOV) lane during peak commute periods. The northbound direction is often congested during the AM peak period and southbound direction is often congested during the PM peak period.

San Tomas Expressway is a north-south expressway located centrally in the City of Campbell providing three travel lanes in each direction. One travel lane in each direction is designated as a HOV lane. HOV lanes, also known as diamond or carpool lanes, are limited to use by vehicles occupied by two or more persons Monday through Friday between 6:00 AM and 9:00 AM. San Tomas Expressway has signalized intersections at Hamilton Avenue, Campbell Avenue, Budd Avenue, SR 17 Southbound Ramps, and White



Oaks Avenue/Curtner Avenue and an interchange at Winchester Boulevard within the city limits. The northbound direction is congested during the AM peak period and the southbound direction is congested during the PM peak period.

2.1.3 Arterials

Bascom Avenue is a north-south Class I arterial providing three travel lanes in each direction north of White Oaks Road-White Oaks Avenue. Bascom Avenue south of Apricot Avenue and north of Mt. Davidson Drive, and south of White Oaks Avenue and north of Route 85, is outside of Campbell's city limits. There are nine signalized intersections along Bascom Avenue within the City of Campbell. Several segments have a center turn lane or a raised median. The northbound direction is typically congested in the AM peak period and the southbound direction is congested in the PM peak period.

Camden Avenue is an east-west Class I arterial providing three travel lanes eastbound and three to five lanes westbound between White Oaks Avenue/Curtner Avenue and Olympia Avenue. There is one signalized intersection along Camden Avenue within the City of Campbell. The westbound direction is congested in the AM peak period and the eastbound direction is congested in the PM peak period.

Hamilton Avenue is an east-west Class I arterial providing two travel lanes in each direction between San Tomas Aquinas Road and Marathon Drive, and three travel lanes in each direction from Marathon Drive to Leigh Avenue. There are 14 signalized intersections along Hamilton Avenue within the City of Campbell. The westbound direction is congested in the AM peak period and the eastbound direction is congested in the PM peak period.

Winchester Boulevard is a north-south Class II arterial providing two travel lanes in each direction between Knowles Drive and Impala Drive, and two northbound and three southbound travel lanes between Impala Drive and Driftwood Drive. Several segments of this roadway have a center turn lane or a raised median. There are 11 signalized intersections along Winchester Boulevard within the City of Campbell. The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period. An interchange with San Tomas Expressway exists with on- and off-ramps along Winchester Boulevard.

Leigh Avenue is a north-south Class II arterial providing two travel lanes in each direction in Campbell. There are two signalized intersections along Leigh Avenue within the City of Campbell. The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period.

Union Avenue is a north-south Class II arterial providing one travel lane in each direction in Campbell. There are three signalized intersections along Union Avenue within the City of Campbell. The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period.

Pollard Road is an east-west Class II arterial providing two travel lanes in each direction between San Tomas Aquino Creek and York Avenue and one travel lane in each direction between York Avenue and



Parr Avenue. Several segments of this roadway have a center turn lane or a raised median. There is one signalized intersection along Pollard Road within the City of Campbell.

Campbell Avenue is an east-west Class II arterial between Fulton Street and Bascom Avenue (except between Civic Center Drive (West) and Railway Avenue, where Campbell Avenue is a commercial/industrial collector) and a residential collector between Bascom Avenue and Leigh Avenue. Campbell Avenue provides two travel lanes in each direction between Fulton Street and Civic Center Drive/Railway Avenue (except between Civic Center Drive and Railway Avenue, where Campbell Avenue provides one travel lane in each direction) and between Civic Center Drive/Railway Avenue and Bascom Avenue, and one travel lane in each direction between Bascom Avenue and Leigh Avenue. Several segments have a center turn lane or a raised median. There are 12 signalized intersections along Campbell Avenue within the City of Campbell. The westbound direction is congested in the AM peak period and the eastbound direction is congested in the PM peak period. Campbell Avenue between Civic Center Drive and Railway Avenue is in historic downtown Campbell.

San Tomas Aquino Road is a north-south Class II arterial providing one travel lane in each direction within Campbell. There are three signalized intersections along San Tomas Aquino Road within the City of Campbell. The northbound direction is congested in the AM peak period and the southbound direction is congested in the PM peak period.

Civic Center Drive is a Class II arterial providing two travel lanes westbound with three signalized intersections. This arterial is congested during the AM peak period. Civic Center Drive provides a westbound bypass of downtown Campbell.

Orchard City Drive is a Class II arterial providing two travel lanes eastbound with three signalized intersections. It connects to Campbell Avenue at its west end and Railway Drive at its east end. Orchard City Drive provides an eastbound bypass of downtown Campbell.

2.1.4 Collectors

Collectors in the City of Campbell are listed below.

- 1st Street south of Latimer and north of Rincon Avenue
- Bucknall Road
- Budd Avenue
- Burrows Road
- Campbell Avenue between Civic Center and Railway Avenue
- Campbell Avenue east of Bascom Avenue
- Campisi Way
- Capri Drive south of Hacienda Avenue
- Harrison Avenue between Civic Center Drive and Salmar Avenue
- Kennedy Avenue between Winchester and Railway Avenue
- Latimer Avenue
- Llewellyn Avenue north of Latimer Avenue
- McCoy Avenue
- McGlincy Lane
- Payne Avenue west of Central Avenue



- Central Avenue
- Creekside Way
- Curtner Avenue
- Darryl Drive north of Latimer Avenue
- Dell Avenue
- Fulton Street
- Grant Street east of 1st Street
- Hacienda Avenue
- Harriet Avenue between Hacienda Avenue and Westmont Avenue and between Westmont Avenue and Fenian Drive
- Railway Avenue between Kennedy Avenue and Campbell Avenue
- Rincon Avenue
- Salmar Avenue
- San Tomas Aquino Road east of Harriet Avenue
- Sunnyside Avenue
- Virginia Avenue
- West Parr Avenue
- Westmont Avenue
- White Oaks Avenue/White Oaks Road

2.1.5 Study Roadway Segments

The following 21 study roadway segments were identified as those most crucial to Campbell's local street system and its connectivity to the regional transportation network. Average Daily Traffic (ADT) is the typical daily traffic volume on a given street. Directional 72-hour traffic counts were collected between September 13 to 16, 2016 and September 26-October 3, 2016 during a typical non-holiday weekday while local schools were in session; the data is shown in **Attachment A**. Average daily traffic volumes collected along the 21 study roadway segments in Campbell are shown on **Table 2-2**. Daily volume forecasts were prepared for use as inputs for the Air Quality, Energy Consumption, and Greenhouse Gas (GHG) analyses but are not directly referenced in this report.

Table 2-2: Average Daily Traffic Volumes

ID	Location	Direction ¹	Existing Count ²
1	Hamilton Avenue west of Phoenix Drive	EB WB	9,900 10,700
2	San Tomas Expressway north of Hamilton Avenue	NB SB	23,400 23,600
3	Hamilton Avenue west of Eden Avenue	EB WB	15,200 15,300
4	Winchester Boulevard north of Hamilton Avenue	NB SB	15,700 15,100
5	Hamilton Avenue west of Central Avenue	EB WB	23,800 26,500
6	Hamilton Avenue west of Bascom Avenue	EB WB	27,700 28,300
7	Bascom Avenue south of Hamilton Avenue	NB SB	18,000 16,100



Table 2-2: Average Daily Traffic Volumes

ID	Location	Direction ¹	Existing Count ²
8	San Tomas Aquino Road south of Villarita Drive	NB SB	6,000 6,200
9	Civic Center Drive west of 1 st Street	WB	7,200
10	Campbell Avenue west of 1 st Street	EB WB	3,500 2,300
11	Orchard City Drive west of 1 st Street	EB	5,300
12	Campbell Avenue east of Union Avenue	EB WB	8,000 7,200
13	San Tomas Expressway north of Winchester Boulevard	NB SB	22,500 22,900
14	Winchester Boulevard north of Budd Avenue	NB SB	12,100 11,200
15	Union Avenue north of McGlinchy Lane	NB SB	5,900 5,800
16	Camden Avenue east of SR 17	EB WB	35,700 37,600
17	Pollard Road west of SR 85	EB WB	6,700 6,800
18	Winchester Boulevard north of Parr Avenue	NB SB	12,000 11,500
19	Curtner Avenue west of Salerno Drive	EB WB	4,500 3,900
20	Dell Avenue south of Hacienda Avenue	NB SB	3,400 3,400
21	Campbell Avenue east of Railway Avenue	EB WB	9,900 10,100

Notes:

1. EB = Eastbound, WB = Westbound, SB = Southbound, NB = Northbound.
2. Average Daily Traffic Counts were collected September 13 to 16, 2016 for most roadways except for #12, #16 and #17 where counts were collected September 26 to October 3, 2016. They are rounded to the nearest 100.

Source: Machine counts collected by Traffic Data Services (TDS), 2016. Fehr & Peers, 2022.



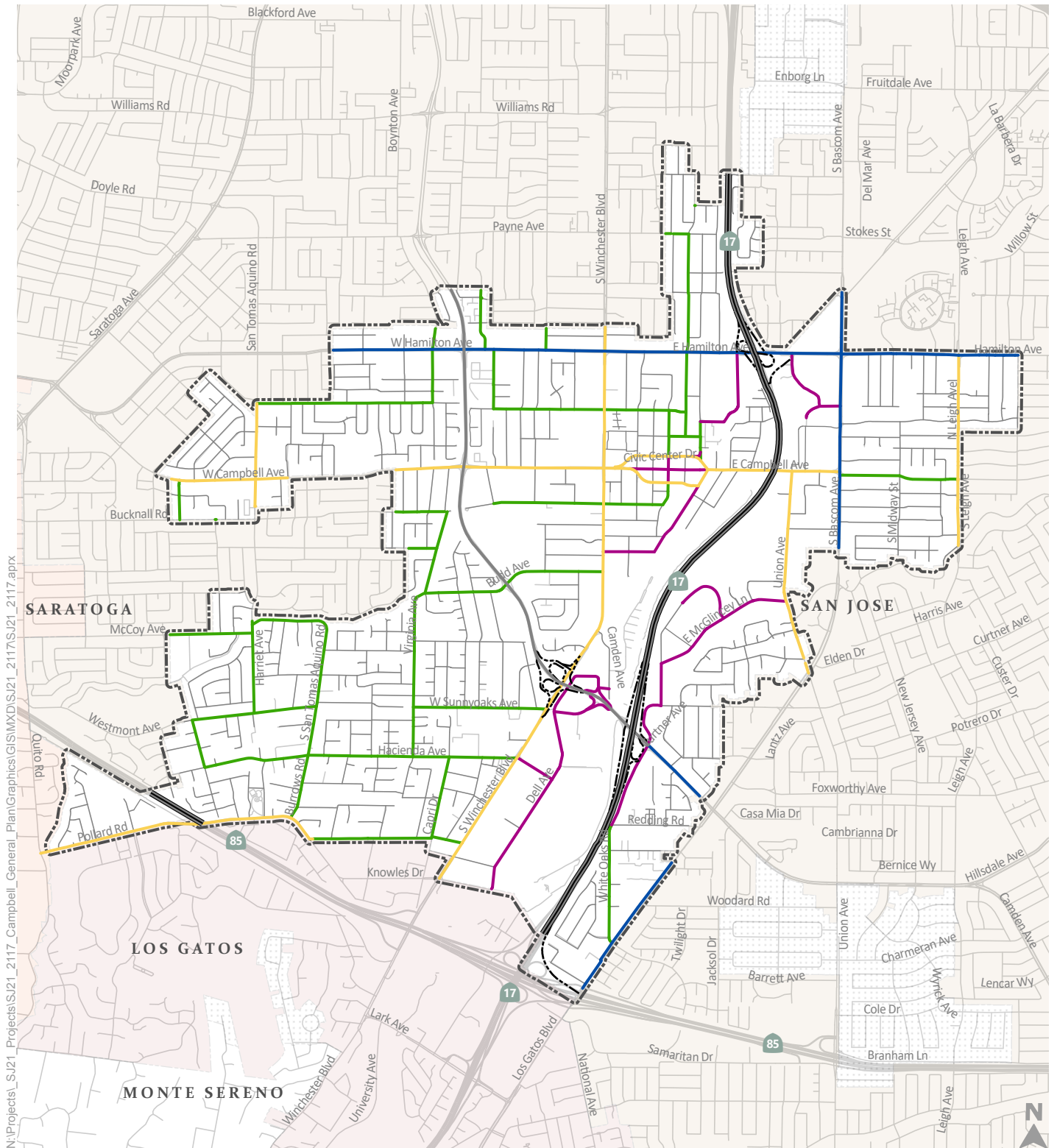


Figure 2-1
Existing Roadway Network

2.2 Existing Pedestrian Facilities

Campbell has many amenities that make walking an important and accessible mode of travel, including level terrain, temperate weather, and numerous destinations that are attractive to walkers. Key pedestrian destinations include:

- Campbell's downtown shopping and restaurant district, along Campbell Avenue between Los Gatos Creek and Winchester Boulevard
- Campbell's library and civic center, on Civic Center Drive in downtown
- Parks and schools throughout the city
- VTA light rail stations (Hamilton, Campbell, and Winchester stations in Campbell, and the Bascom station immediately northeast of city limits)
- Retail destinations, particularly the Pruneyard shopping center on Bascom Avenue

These destinations are connected by the Los Gatos Creek Trail and a system of on-street sidewalks provided along all major streets in the City of Campbell. Only a few locations along Campbell's arterials and commercial/industrial collectors lack sidewalks, notably a short stretch of San Tomas Aquino Road immediately south of Latimer Drive and a short stretch of Orchard City Drive between S. 3rd Street and S. 2nd Street. These locations are shown on **Figure 2-2**. Some residential collectors within the San Tomas Area neighborhood also lack sidewalks, notably along Harriet Avenue between Westmont Avenue and Van Dusen Lane. Some local streets within residential areas of the San Tomas Area neighborhood also lack sidewalks in keeping with the neighborhood's semi-rural character.

Similarly, all signalized intersections in the City of Campbell provide crosswalks on all legs, except for the intersections listed below which are missing one or more marked crosswalks, as shown on **Figure 2-2**.

- S. Bascom Avenue and Pruneyard Entrance
- Union Avenue and Campbell Avenue
- Leigh Avenue and Dry Creek Road
- Winchester Boulevard and Kennedy Avenue
- Winchester Boulevard and Budd Avenue
- White Oaks Avenue-Curtner Avenue and San Tomas Expressway-Camden Avenue
- San Tomas Aquino Road and Latimer Avenue

Unsignalized intersections can also pose a challenge for pedestrians, as many are located on streets with high traffic volumes, which may be difficult to cross. Pedestrians may have to walk long distances to the next signalized intersection or marked crossing. As shown on **Figure 2-2**, Leigh Avenue, San Tomas Expressway, Winchester Boulevard, Pollard Road, and E. Campbell Avenue all include segments with ½ mile or more between marked crosswalks. While pedestrians have the right-of-way at both marked and unmarked crosswalks, drivers may be less likely to yield right-of-way without the presence of striping, signs, or beacons to alert them to the potential for pedestrian crossings.



Campbell's downtown is a particularly attractive destination for pedestrians with the Civic Center complex; the Campbell Public Library; parks; and a commercial area that includes dining, several small retail businesses, and a popular Sunday Farmers' Market. During the Farmers' Market, Campbell Avenue is closed between Civic Center Drive and N. 3rd Street, and pedestrian traffic is high through downtown with approximately 200 pedestrians per hour crossing Civic Center Drive at N. 2nd Street.

The City of Campbell has recently invested in pedestrian infrastructure in the greater downtown area. Many of these investments were guided by the East Campbell Avenue Master Plan, adopted in 2007. Notable improvements include:

- The East Campbell Avenue Portals project, which added a pedestrian walkway under the SR 17 overpass on E. Campbell Avenue, added pedestrian-scale lighting, public art, landscaping, and wayfinding, and extended bicycle lanes under the overpass.
- The addition of curb extensions, benches, and pedestrian-scale lighting along Campbell Avenue east of downtown.
- The installation of curb extensions, ladder-style crosswalks, and high-visibility pedestrian crossing signs at uncontrolled intersections along Orchard City Drive and Civic Center Drive.

While the downtown area is generally walkable, some challenges to pedestrian comfort and safety remain, including high-speed traffic that makes crossing Civic Center Drive and Orchard City Drive, the two one-way streets that parallel Campbell Avenue through downtown, difficult. The City of Campbell prepared a downtown-focused Transportation Improvement Plan that addresses pedestrian access on these streets.

Figure 2-2 shows sidewalk gaps, signalized intersections that are missing crosswalk legs, and corridors where the distance between crosswalks is greater than one half-mile.



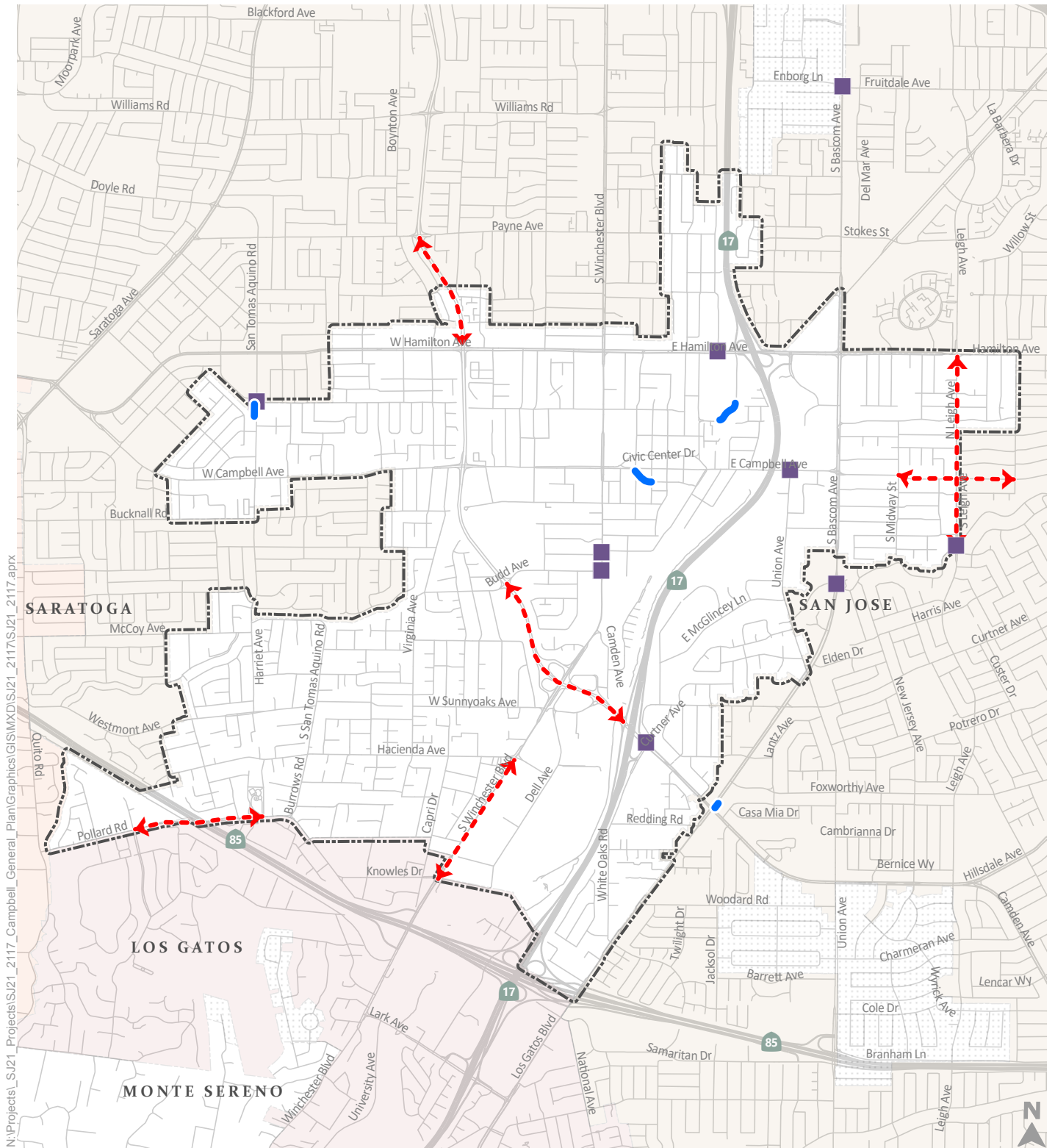


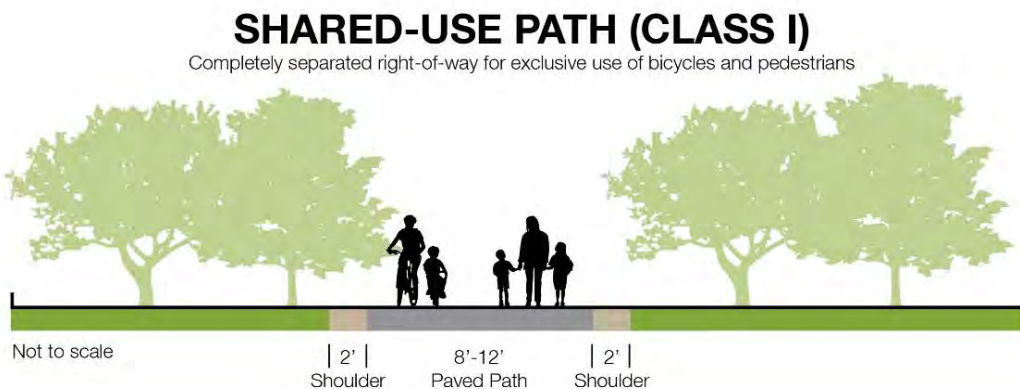
Figure 2-2
Gaps in Pedestrian Facilities

2.3 Existing Bicycle Facilities

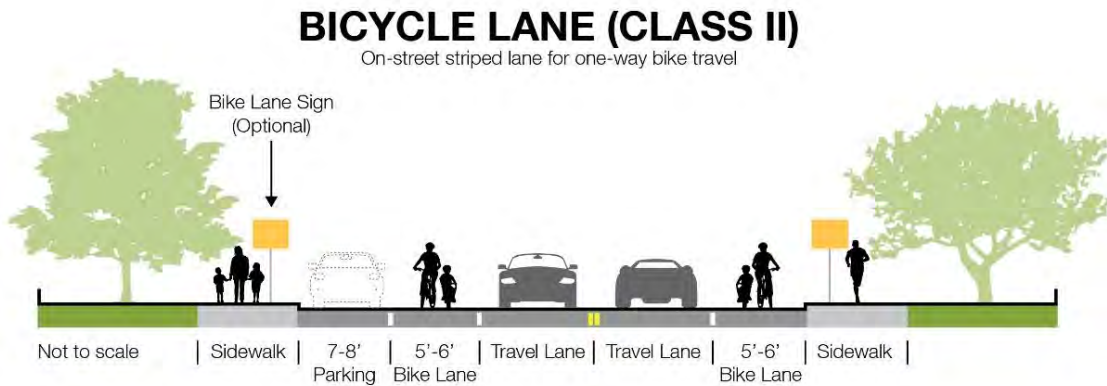
The City of Campbell has a bicycle facilities network that provides dedicated and shared street space for bicycling. The following section presents an overview of the existing bicycle facilities within Campbell and how well they serve the bicycling population. **Figure 2-3** shows existing bicycle facilities in the City of Campbell.

Bikeways are typically divided into four categories, or classes. The four classes of bikeways in Campbell are described in the *Santa Clara Countywide Bike Plan* (2018). These descriptions are based on California Department of Transportation (Caltrans) classifications of bikeways from California Assembly Bill 1193 and the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design). Each bikeway is intended to provide bicyclists with enhanced riding conditions. Bikeways offer various levels of separation from traffic based on traffic volume and speed. Bike lane widths in Campbell are designed per Caltrans Design Standards (*Highway Design Manual* Chapter 1000). The four bikeway types are presented below and shown in the accompanying figures.

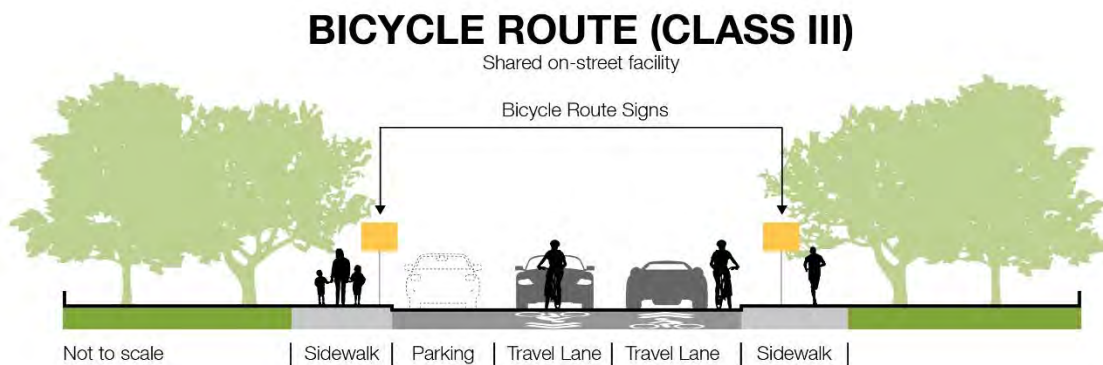
Class I Bikeways (Shared-Use Paths): Class I Bikeways are also described as bike paths, shared paths (shared with pedestrians), and multi-use paths. They provide a separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian crossflow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts. The Los Gatos Creek Trail is a Class I bikeway.



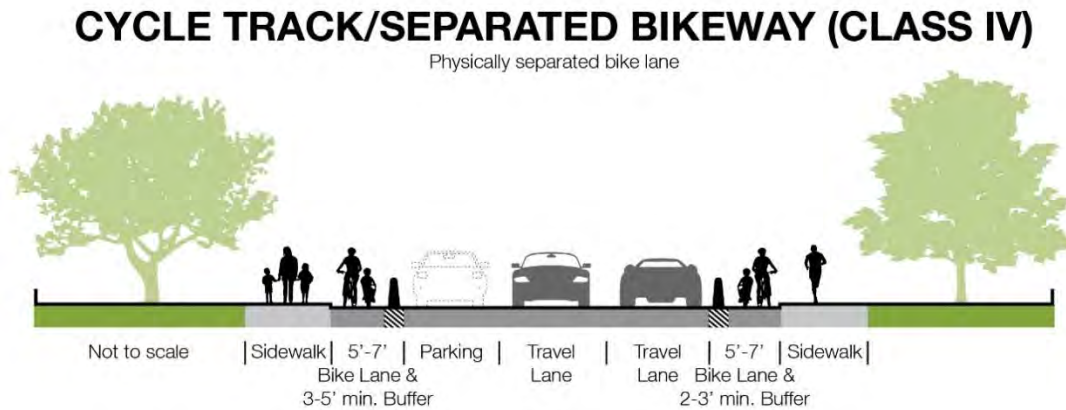
Class II Bikeways (Bike Lanes): Class II Bikeways, or bike lanes, are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and crossing vehicle/pedestrian traffic are permitted.

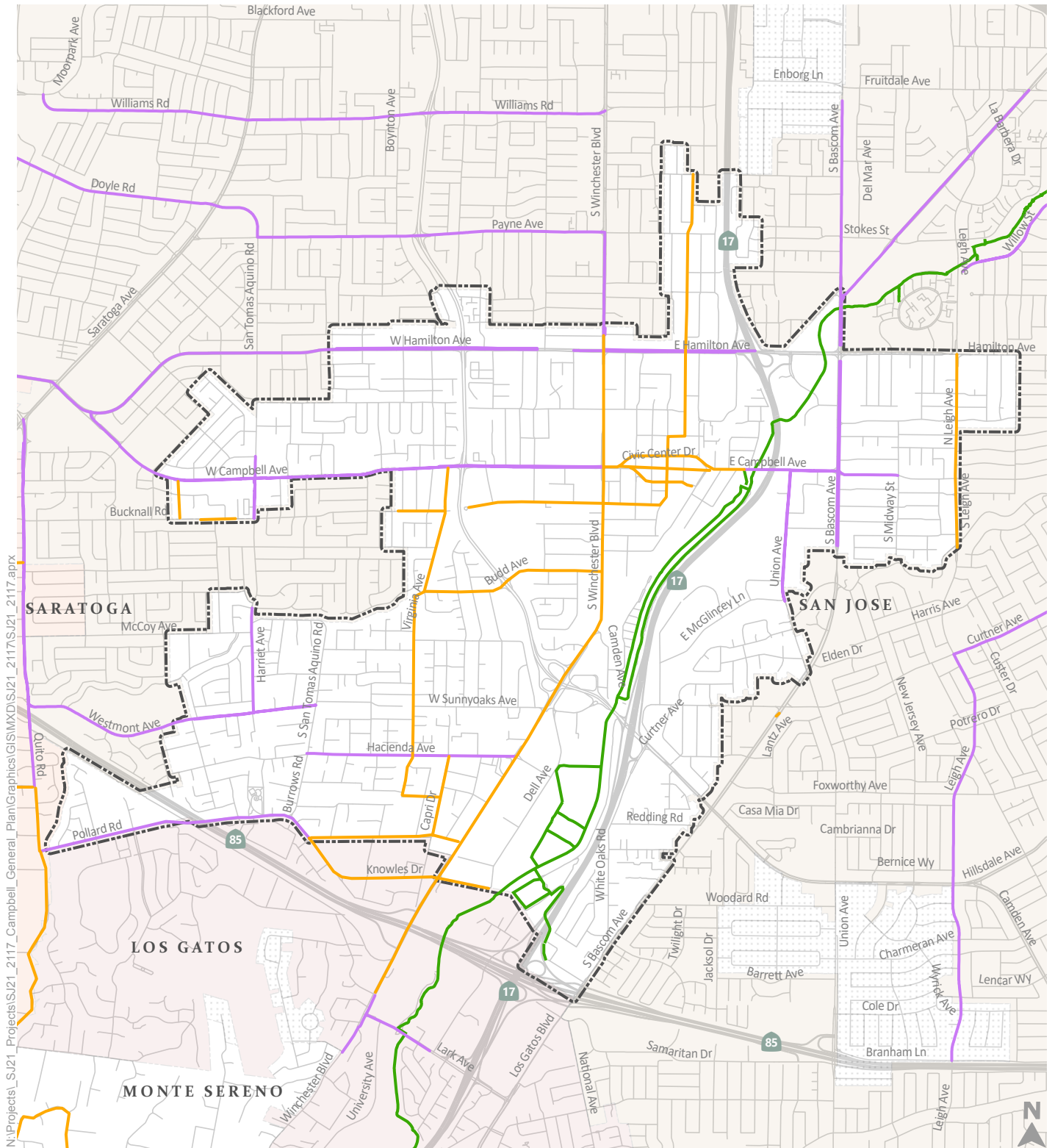


Class III Bikeways (Bike Boulevards/Routes): Class III Bikeways (bike routes) are designated by signs or pavement markings for shared use with motor vehicles but have no separated bike right-of-way or lane striping. Bike routes serve to either provide continuity to other bicycle facilities or designate preferred routes through high demand corridors. Class III Bikeways may be enhanced with traffic calming features and traffic management features that minimize the need for bicyclists to stop along the corridor, such as roundabouts and side-street stops.



Class IV Bikeways (“Separated” Bikeways or Cycle Tracks): Class IV Bikeways provide a right-of-way designated exclusively for bicycle travel within a roadway and which are protected from other vehicle traffic with devices including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars.





-  City of Campbell
-  Class I Trails/Off-Street Paths
-  Class II Bicycle Lanes
-  Class III Shared Use Lanes

Figure 2-3
Existing Bicycle Network

2.4 Existing Transit Service

Transit service in Campbell and surrounding communities is provided by the Santa Clara Valley Transportation Authority (VTA). VTA provides express and local bus and light rail service. There are three frequent bus routes (routes 26, 60, and 61), three local bus routes (routes 27, 37, and 56), one express bus route (Express 101), and one light rail transit route (Green Line) serving Campbell. The end points, streets in Campbell, other destinations, hours of operations, and frequencies for each route are presented in **Table 2-3**. A map of the routes is shown on **Figure 2-4**. Transit service is provided most frequently by bus Route 60, which operates on Winchester Boulevard, and the Green Line light rail route, which starts on Winchester Boulevard, serves downtown Campbell, and extends to downtown San José and points beyond. Since 2019, the VTA has made schedule adjustments to several bus and light rail routes in response to the COVID-19 pandemic.

Table 2-3: Existing Transit Services

					Headways (minutes)	
Route	End Points	Campbell Streets Served	Destinations Served	Hours of Operation	Peak Hour	Non- Peak Hour
Frequent and Local Bus Service						
26	West Valley College Eastridge Transit Center	Campbell, Bascom, and Curtner	Westgate Mall, Downtown Campbell, Campbell City Hall, Pruneyard Shopping Center, Santa Clara County Fairgrounds	5:15 AM - 11:00 PM	20	60
27	Winchester Station, Kaiser San José via Downtown Los Gatos	Knowles Drive, Hacienda Avenue	Downtown Los Gatos, Winchester VTA Station	5:30 AM - 9:30 PM	30	60
37	West Valley College Capitol Station	Pollard Road, San- Tomas Expressway, Camden Avenue, and Hacienda Avenue	Central County Occupational Center, El Camino Hospital Los Gatos, West Valley College	6:30 AM - 7:00 PM	60	60
56	Lockheed Martin Station, Tamien Station	Hamilton Avenue	Tamien VTA Station, Hamilton VTA Station, Lockheed Martin	5:00 AM - 10:30 PM	30	60
60	Milpitas BART, Winchester Station via SJC Airport	Winchester	Santa Clara Convention Center, Levi's Stadium, Great America Park, Mission College, Valley Fair and Santana Row shopping centers	5:00 AM - 12:00 PM	15	30



Table 2-3: Existing Transit Services

Route	End Points	Campbell Streets Served	Destinations Served	Hours of Operation	Headways (minutes)	
					Peak Hour	Non-Peak Hour
61	Sierra & Piedmont, Good Samaritan Hospital	Bascom	San José Flea Market, San José City College, Santa Clara Valley Medical Center, Pruneyard Shopping Center, Good Samaritan Hospital	5:00 AM - 11:00 PM	30	30
Express Bus Service						
Express 101	Camden & Highway 85, Stanford Research Park	Hamilton Avenue, Winchester Boulevard, and Camden Avenue	Vallco Shopping Mall, Westgate Shopping Center	Northbound: 6:15 AM - 8:30 AM Southbound: 4:00 PM - 6:30 PM	60	N/A
Light Rail Service						
Green Line	Old Ironsides, Winchester	Parallels Railway Avenue and Winchester Boulevard	Levi's Stadium, North First Street, Downtown San José, Downtown Campbell	5:45 AM - 12:30 AM	20	30

Source: Santa Clara Valley Transportation Authority, 2019.



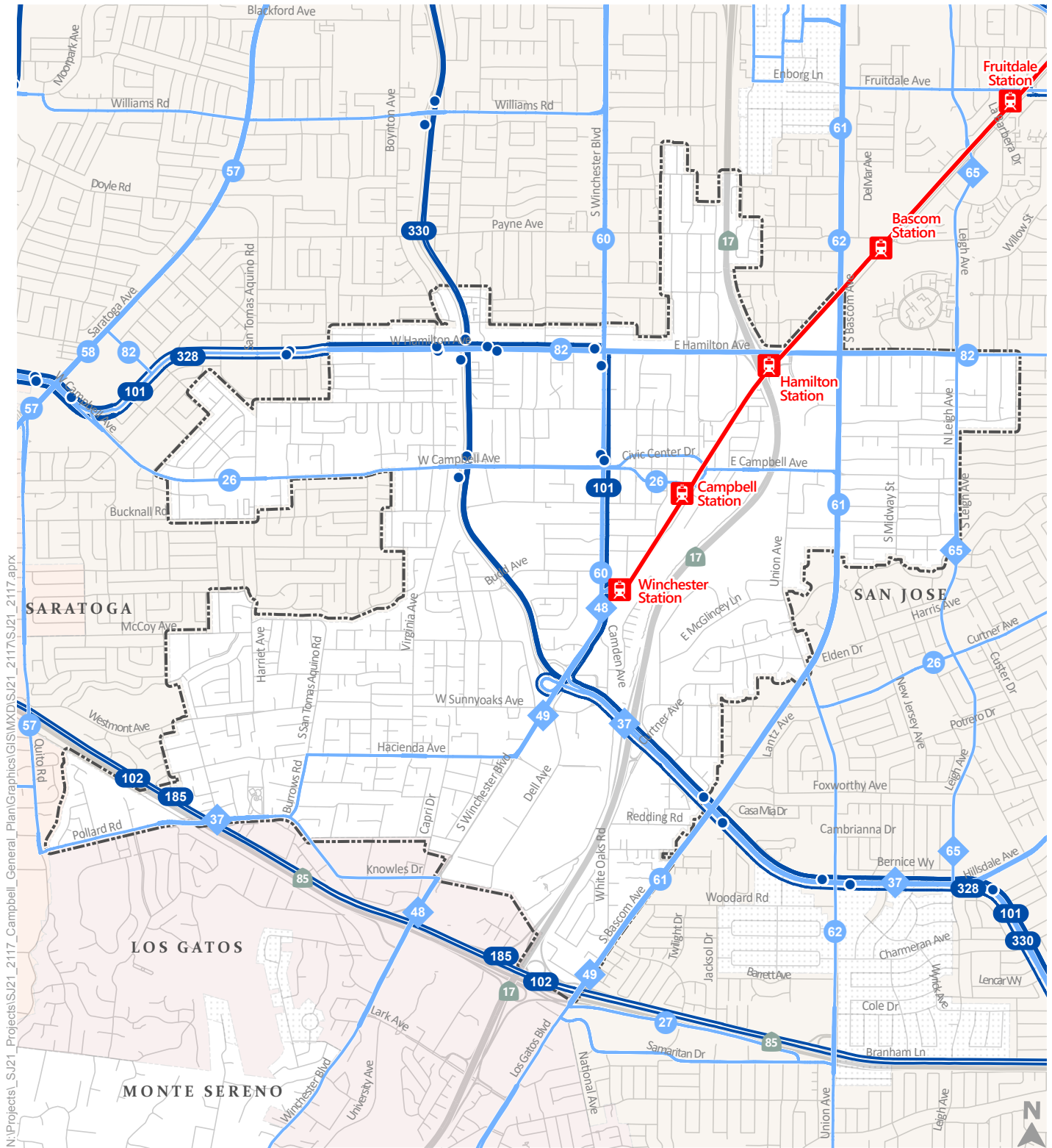


Figure 2-4
Existing Transit Network

3. Regulatory Setting

This chapter describes the transportation regulatory framework, which includes federal, state, regional, and local programs and other plans related to the Envision Campbell General Plan and Housing Element Update and the associated EIR.

3.1 Federal

There are no federal plans, policies, regulations, or laws addressing transportation that pertain to the City of Campbell General Plan or Housing Element. However, federal regulations through the Americans with Disabilities Act, Title VI, which prohibits discrimination based on race, color, and national origin, and Environmental Justice (Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) relate to the way transit service is provided.

3.2 State

California Department of Transportation: The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS), including freeways, interchanges, and defined arterial routes. Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the SHS within the study area would need to be approved by Caltrans. Caltrans operates and maintains SR 17, and SR 85 in Campbell. The *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (May 2020) provides information that Caltrans uses to review the impacts of land use projects on the state highway facilities, including freeway segments. However, as the Congestion Management Agency (CMA), VTA, is responsible for monitoring operations on Caltrans facilities within Santa Clara County and VTA guidelines and thresholds are used to evaluate traffic congestion on Congestion Management Program (CMP) facilities. Caltrans also publishes design guidance for facilities under its jurisdiction. The *Highway Design Manual* (2020) provides guidelines for roadway design and bicycle facility design. Its bicycle design standards provide a minimum acceptable standard within Santa Clara County (*VTA Bicycle Technical Guidelines*, 2011). The *California Manual on Uniform Traffic Control Devices* (2014) adapts federal standards for street markings, traffic signals, and street signs for use in California.

Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG): The *Transportation Impact Study Guide (TISG)* was prepared by Caltrans to provide guidance to Caltrans Districts, lead agencies, tribal governments, developers, and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies, and it is intended to be a reference and informational document. The guidance may be updated based upon need, or in response to updates of the Governor's Office of Planning and Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory)*.



The *TISG* replaces the *Guide for the Preparation of Traffic Impact Studies* (Caltrans, 2002) and is for use with local land use projects, not for transportation projects on the State Highway System.

The *TISG* does not prescribe VMT calculation methods, metrics, or significance criteria, but rather references the guidance in the *Technical Advisory*.

Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners

Guidance (December 18, 2020): The purpose of the *Interim LDIGR Safety Review Practitioners Guidance* is to provide immediate direction about the safety review while final guidance is being developed. The interim guidance is intended to apply to proposed land use projects and plans affecting the State Highway System. Specific effects may include, but are not limited to, adding new automobile, bicycle, or pedestrian trips to state roadways; modifying access to state roadways; or affecting the safety of connections to or travel on state roadways. The interim guidance does not establish thresholds of significance for determining safety impacts under the California Environmental Quality Act (CEQA). The document states that significance of impacts should be determined with careful judgment on the part of a public agency and based, to the greatest extent possible, on scientific and factual data consistent with Caltrans' CEQA guidance contained in Caltrans' Standard Environmental Reference (SER), Chapter 36, "Environmental Impact Report," and CEQA guidelines found in the California Code of Regulations, title 14, division 6, chapter 3, article 5, section 15064, "Determining the Significance of the Environmental Effects Caused by a Project."

California Transportation Commission: The California Transportation Commission (CTC) consists of nine members appointed by the governor. The CTC is responsible for the programming and allocation of funds for the construction of highway, passenger rail, and transit improvements throughout the state. The CTC is also responsible for managing the State Transportation Improvement Program (STIP) and the State Highway Operation and Protection Program (SHOPP) funding programs.

Assembly Bill (AB) 1358: AB 1358, or the California Complete Streets Act of 2008, requires towns, cities, and counties, when updating their general plans, to ensure that local streets meet the needs of all users.

Assembly Bill (AB) 32: With the Global Warming Solutions Act of 2006, AB 32, the State of California committed itself to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. The California Air Resources Board (CARB) is coordinating the response to comply with AB 32.

In 2007, CARB adopted a list of early action programs that could be put in place by January 1, 2010. In 2008, CARB defined its 1990 baseline level of emissions, and by 2011 it completed its major rule making for reducing GHG emissions. Rules on emissions, as well as market-based mechanisms like the proposed cap and trade program, took effect in 2012.

On December 11, 2008, CARB adopted its Proposed Scoping Plan for AB 32. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.



Senate Bill (SB) 743: SB 743, passed in 2013, requires the California Governor’s Office of Planning and Research (OPR) to develop new guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, “automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any.” The new CEQA Guidelines implementing the intent of SB 743 were approved in December 2018.

3.3 Regional

Metropolitan Transportation Commission (MTC): The MTC is the Bay Area regional transportation planning agency and federally designated Metropolitan Planning Organization (MPO). MTC is responsible for preparing the Regional Transportation Plan (RTP), a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities. The RTP is a 20-year plan that is updated every three years to reflect new planning priorities and changing projections of future growth and travel demand. The long-range plan must be based on a realistic forecast of future revenues, and the transportation projects taken as a whole must help improve regional air quality. The MTC also screens requests from local agencies for state and federal grants for transportation projects to determine compatibility with the RTP.

Santa Clara Valley Transportation Authority (VTA): VTA serves two roles in Santa Clara County—first, as the primary transit operator, and second, as the Congestion Management Agency (CMA).

In its role as transit operator, VTA is responsible for development, operation, and maintenance of the bus and light rail system within the county. VTA operates more than 70 bus lines and three light rail lines, in addition to shuttle and paratransit service. It also provides transit service to major regional destinations and transfer centers in adjoining counties.

As the county’s CMA, VTA is responsible for managing the Valley Transportation Plan (VTP) 2040 (adopted in October 2014) to reduce congestion and improve air quality. VTA is authorized to set state and federal funding priorities for transportation improvements that affect the Santa Clara CMP transportation system. Priority projects are also eligible for the RTP. The CMP roadway network in Campbell includes all state highways, county expressways, and some principal arterials and intersections, while the transit network includes rail service and selected bus service.

Valley Transportation Plan (VTP) 2040: As the CMA for Santa Clara County, VTA is responsible for the development of a long-range countywide transportation plan, called *Valley Transportation Plan (VTP) 2040*.³ VTP 2040 provides programs, projects, and policies for roadways, transit, Intelligent Transportation Systems (ITS) and Systems Operations Management, bicycle facilities, pedestrian facilities, and the integration of land use and transportation. VTP 2040 projects serve as VTA’s recommendations for the

³ Santa Clara Valley Transportation Authority. VTP 2040. Available online at http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/VTP2040_final_hi%20res_030315.pdf.



RTP known as the Plan Bay Area. *VTP 2040* was adopted by the VTA Board of Directors in October of 2014.

Plan Bay Area 2040 and Plan Bay Area 2050: *Plan Bay Area 2040*⁴ is a joint regional planning document overseen by the MTC and the Association of Bay Area Governments (ABAG). It serves as the region's Sustainable Communities Strategy (SCS) pursuant to SB 375 and the 2040 RTP (preceded by Transportation 2035) and integrates a multipronged strategy to address housing affordability, transportation requirements, the region's widening income disparities and economic hardships faced by low- and middle-income workers, and the Bay Area's vulnerabilities to natural disasters such as earthquakes and floods. Three principal issues form the core of the Action Plan:

- Housing: Lower the share of income spent on housing and transportation costs, lessen displacement risk, and increase the availability of housing affordable to low- and moderate-income households.
- Economic Development: Improve transportation access to jobs, increase middle wage job creation, and maintain the region's infrastructure.
- Resilience: Enhance climate protection and adaptation efforts, strengthen open space protections, create healthy and safe communities, and protect communities against natural hazards.

Major transit projects included in *Plan Bay Area 2040* include a BART extension to San José/Santa Clara, Caltrain electrification, enhanced service along the Amtrak Capitol Corridor, and improvements to local and express bus services.

In October 2021, ABAG and MTC adopted an updated plan; *Plan Bay Area 2050* (2021).⁵ While the plan has been adopted, it will take up to three years for the plan's growth forecast to be integrated into MTC's transportation model, after which updates to each county's transportation model will take place. For these reasons, and for purposes of this analysis, *Plan Bay Area 2040* is the regional plan that forms the basis for population, housing and employment projections in this analysis.

Santa Clara Countywide Bicycle Plan: The *Santa Clara Countywide Bicycle Plan*⁶ synthesizes other local and county plans into a comprehensive 20-year cross-county bicycle corridor network and expenditure plan. The long-range countywide transportation plan and how projects compete for funding and prioritization are documented in *VTP 2040*. VTA adopted the *Santa Clara Countywide Bicycle Plan* in May 2018.

⁴ Metropolitan Transportation Commission, 2017. *Plan Bay Area 2040*. Available online at <http://2040.planbayarea.org/>.

⁵ Metropolitan Transportation Commission, 2021. *Plan Bay Area 2050*. Available online at <https://www.planbayarea.org/finalplan2050>

⁶ Santa Clara Valley Transportation Authority. Countywide Bicycle Plan. Available online at https://www.vta.org/sites/default/files/2019-05/SCCBP_Final%20Plan%20_05.23.2018.pdf



VTA Transit Sustainability Policy: The *VTA Transit Sustainability Policy*⁷ mandates the use of a market-based approach in determining when and where transit service will be operated. More specifically, it “provides a framework for the efficient and effective expenditure of transit funds, and for realizing the highest return on investment in terms of public good and ridership productivity.” Therefore, instead of requiring VTA to make service available to a large geographic region, these guidelines enable VTA to provide frequent, high-quality service to the areas with the highest ridership demand.

VTA Title VI: System-Wide Service Standards & Policies: In accordance with the Federal Transit Administration (FTA) Title VI requirements, VTA’s *Title VI: System-Wide Service Standards & Policies* (OPS-PL-0059; November 2013) establishes the standards and policies that are used to measure system performance and ensure that transit services are being provided in a fair and equitable manner. VTA’s performance standards for fixed bus and light rail routes relative to system-wide service standards include the following indicators:

- Vehicle Load
- Vehicle Headways
- On-Time Performance
- Service Availability
- Ridership Productivity

According to VTA, any significant service deficiencies identified through this monitoring process must be evaluated further to determine the extent to which minorities are affected.

VTA also monitors vehicle assignments and distribution of transit amenities based on the policies outlined in the VTA’s Title VI: System-Wide Service Standards & Policies.

3.4 Local

Campbell General Plan and Circulation Element: The existing Campbell General Plan was adopted on November 6, 2001, with the Land Use and Transportation Element updated and adopted on August 19, 2014. It acknowledges Campbell’s regional context and how regional land use and transportation planning decisions affect Campbell and how local decisions affect regional facilities. It also acknowledges that Campbell is limited in its ability to influence travel demand that is generated outside of the city limits and that City policy needs to often conform to regional policies to qualify for state and federal funding. The General Plan also focuses on the unique characteristics that define Campbell and addresses Campbell’s specific needs. As stated in the General Plan, “The Goals, Policies and Strategies in the Land Use and Transportation Element concentrate on how the City can provide and ensure coordinated land use and transportation planning in the region, while still promoting a balanced and functional circulation system that satisfies the needs of all users including bicyclists, pedestrians, transit users and persons with disabilities.” The existing General Plan transportation-related goals and policies are presented below.

⁷ *VTA Transit Sustainability Policy* (March 2010). Available at: http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/Transit%20Sustainability%20Policy.pdf



Some goals and policies, as well as the strategies identified to implement them in the 2001 General Plan, have been modified or revised as part of the General Plan Update.

- Goal LUT-1: Coordinated land use and transportation planning in the region.
 - Policy LUT-1.1: Decisions That Affect Campbell: Advocate the City's interests to regional agencies that make land use and transportation system decisions that affect Campbell.
 - Policy LUT-1.2: Regional Land Use and Transportation Planning: Promote integrated and coordinated regional land use and transportation planning.
 - Policy LUT-1.3: Transportation Needs: Plan for the regional transportation needs of the community.
 - Policy LUT-1.4: Regional Traffic Management: Lead and participate in initiatives and functions to manage regional traffic and to reduce congestion on area roadways.
 - Policy LUT-1.5: Land Use Planning and the Regional Transportation System: Support land use planning that complements the regional transportation system.
- Goal LUT-2: To achieve a safe, balanced, and functional multimodal transportation network that accommodates all users.
 - Policy LUT-2.1: Multimodal Transportation: Develop and implement a multimodal transportation network that balances transportation options aimed at reducing automobile traffic and greenhouse gas emissions while promoting healthier travel alternatives for all users
 - Policy LUT-2.3: Roadway and Intersection Disruption Minimization: Minimize traffic disruptions along arterial roadways and major intersections.
 - Policy LUT-2.4: Jobs and Housing Balance: Maintain Campbell's balance of jobs and housing units to encourage residents to work in Campbell, and to limit the impact on the regional transportation system.
- Goal LUT-6: Strong and identifiable City boundaries that provide a sense of arrival into the City and its districts to reinforce Campbell's quality small town image.
 - Policy LUT-6.1: Entries to the City and Special Districts: Identify entries to the city and special districts (Downtown, San Tomas Neighborhood, and others) with special features.
- Goal LUT-7: Attractive, well-maintained, and safe streets, public improvements, and utilities.
 - Policy LUT-7.1: Road Maintenance: Maintain and repair roads.
 - Policy LUT-7.2: Public Utilities and Improvements: Provide a comprehensive network of sidewalks, public utilities and multimodal improvements that are safe, attractive, efficient, well-maintained, and accessible for pedestrians, bicyclists, and motorists.
 - Policy LUT-7.3: Transportation Safety: Make safety a priority of citywide transportation design and planning.



- Goal LUT-11: A physically connected, efficient community with safe access and linkages throughout the city for a variety of transportation modes and users.
 - Policy LUT-11.1: Physically Connected Transportation Infrastructure: Strive to achieve physically connected transportation infrastructure.
 - Policy LUT-11.2: Services Within Walking Distance: Encourage neighborhood services within walking distance of residential uses.
- Goal LUT-12: Minimal traffic disruptions along commercial corridors and arterial roadways and coordinated development of independent sites.
 - Policy LUT-13.2: Business and Activity Centers: Enhance the accessibility of Campbell's business and activity centers.
- Goal LUT-14: The Pruneyard/ Creekside Area as an active, connected "urban village" with a mixture of commercial, office, residential, entertainment and recreational uses functioning as a community and regional focal point.
 - Policy LUT-14.3: Physically Connected: Encourage new development in the Pruneyard/Creekside Area that is physically connected to existing development and oriented towards the creek trail with appropriate setbacks, and that provides logical connections and access to the creek trail.
 - Policy LUT-14.5: Building Orientation: Orient buildings toward public streets. New buildings on corner lots should frame the intersection using reduced setbacks where necessary for access, facades that incorporate prominent entries, windows, design details and landscaping.
- Goal LUT-16: Revitalize Downtown commercial, industrial, and recreational areas and provide housing opportunities.
 - Policy LUT-16.4: Circulation: Encourage logical circulation patterns.
 - Policy LUT-16.5: Public Improvements: Encourage logical public improvements throughout the SOCA area.
- Goal LUT-17: Preserve the informal neighborhood character, low-density residential areas and reduce auto traffic.
 - Policy LUT-17.1: San Tomas Area Neighborhood Plan (STANP): Comply with the requirements of the STANP.
- Goal LUT-18: Revitalization of the Central Campbell Redevelopment Project Area.
 - Policy LUT-18.1: Redevelopment Plan: Ensure that new development within the Redevelopment Project Area is consistent with the Redevelopment Plan.
- Goal LUT-19: A vibrant community-oriented Downtown that serves as the retail, service commercial, cultural and historic center of the city.



- Policy LUT-19.1: Campbell Downtown Development Plan: Ensure that new development within the Downtown Area complies with the requirements of the Campbell Downtown Development Plan.

Campbell Capital Improvement Plan: The City prepares a Five-Year Capital Improvement Plan (CIP) that identifies projects greater than \$25,000. Transportation projects in the current CIP (2023 – 2027) include:

- Campbell Avenue at Page Street Traffic Signal
- Citywide Intelligent Transportation Systems (ITS) enhancements
- Harriet Avenue sidewalks
- Hamilton Avenue/State Route 17 Southbound Off-ramp Widening
- Annual Street Maintenance
- Camden Avenue Resurfacing
- State Route 17/San Tomas Expressway Interim Improvements

Downtown Pedestrian Safety Study: The City has received several petitions from downtown residents regarding pedestrian safety measures along Civic Center Drive and Orchard City Drive. In response to these petitions, the City has installed a variety of treatments and has applied for several grants to install additional treatments and conduct additional studies, including the Transportation Improvement Plan described below. As part of the Downtown Pedestrian Safety Study, the City performed pedestrian counts and observations, conducted a crosswalk analysis, and evaluated the 10-year crash history at downtown intersections.

Campbell Transportation Improvement Plan: The Campbell Transportation Improvement Plan is a complete streets plan for historic downtown Campbell. It includes an extensive review of existing conditions and integrates stakeholder input to identify opportunities and challenges to improving pedestrian, bicycle, and bus stop facilities. The plan includes projects to enhance pedestrian and bicyclist safety, mobility, and comfort within downtown, focusing on improving unsignalized intersections with high potential for collisions. The plan identifies additional projects to improve bicycle facilities, wayfinding, and transit access within downtown.

Downtown Campbell Development Plan & Standards: This plan provides “a vision for Downtown Campbell and a framework for physical development, business development and preservation of the Historic Downtown” and “looks to position the downtown for success in the 21st Century, and to enhance its role as a community gathering place and the heart of the City.” The transportation aspects of the plan are to maintain downtown as a walkable central business district, maintain the light rail connection to San José (and beyond) and maintain supportive land uses near the station. The circulation, parking, and transportation goals and strategies from the plan are:



- Goal CPT-1: To improve vehicular and pedestrian circulation in the Downtown.
 - Policy CPT-1.1: Circulation Improvements: Circulation improvements shall be considered to enhance the perception of the Downtown beyond the loop streets.
 - Policy CPT-1.2: Vehicular/Pedestrian Interface: Employ methods to decrease vehicular speeds along the loop streets and provide a pedestrian environment and downtown feel.
- Goal CPT-2: To create attractive Gateways into the Downtown.
 - Policy CPT-2.1: Gateway Design: Develop and implement plans for the Downtown Gateways.
- Goal CPT-3: To provide adequate and accessible parking in the Downtown.
 - Policy CPT-3.1: Adequate Parking: Encourage the joint utilization of parking.
 - Policy CPT-3.2: Accessible Parking: Provide accessible parking in the Downtown.
- Goal CPT-4: Reduce parking demand in the Downtown.
 - Policy CPT-4.1: Light Rail: Encourage the use of light rail and other mass transit alternatives, as well as bicycles to reduce parking demand.

East Campbell Avenue Master Plan: The East Campbell Avenue Master Plan was prepared to connect downtown Campbell to The Pruneyard through lane configuration changes along East Campbell Avenue, streetscape design concepts, improved bicycle and pedestrian access through the Highway 17 underpass, improved layout of the Railway/Campbell Avenue intersection, improved pedestrian and bicycle comfort on the East Campbell Avenue bridge over Los Gatos Creek, modified alignments of Page and Gilman Avenue, and development standards. The East Campbell Avenue Portals project and recommended roadway, streetscape, bicycle facility, and sidewalk improvements as a result of this study have been constructed.

South of Campbell Avenue Area (SOCA) Plan: The South of Campbell Avenue area is essentially the area south of Campbell Avenue and between the railroad tracks and Highway 17. The South of Campbell Avenue Area (SOCA) Plan contains information regarding the types of development allowed in each of the five subareas. The circulation improvements include an extension of Dillon Avenue, safety improvements to the on- and off-ramps between San Tomas Expressway and Dell Avenue, abandonment of an existing road, and extending Dell Avenue easterly to Camden Avenue.

North of Campbell Avenue Area (NOCA) Plan: The North of Campbell Avenue area is essentially the area south of Campbell Avenue and between the railroad tracks and Harrison Avenue with a portion just west of Salmar Avenue. The North of Campbell Avenue Area (NOCA) Plan contains information regarding the types of development allowed in this area. There are no circulation improvements in the plan, just a statement that development proposals shall assess and mitigate traffic impacts.



Winchester Boulevard Master Plan: The Winchester Boulevard Master Plan was created in response to a number of development applications for properties along the corridor. It included development policies and public improvements. The transportation-related improvements are:

- Pedestrian-oriented improvements, including pedestrian-scaled lighting, in the area located between Budd and Campbell Avenues.
- An evaluation of the feasibility of full bulb-out as all signalized pedestrian crossings and partial bulb-outs at non-signalized locations.
- Street trees in either a curbside planting strip or in tree grates along the corridor.
- A landscaped median with left-turn pockets with a review of entry locations and potential U-turn pockets.

San Tomas Area Neighborhood Plan (STANP): The San Tomas Area neighborhood is the area within the city's boundaries to the west of San Tomas Expressway and Winchester Boulevard that has a unique character with large, irregular lots and lack of curbs, gutters, and sidewalks on its streets. The San Tomas Area Neighborhood Plan (STANP) provides a framework for development in this area and established land use and transportation policies.

The plan had four primary objectives:

- Maintain the rural appearance of the local streets in the San Tomas Area.
- Take the minimum amount of right-of-way and provide only the minimum street widths necessary to maintain appropriate traffic function and safety.
- Match the actual use of streets with their functional classification and also provide for a more uniform physical appearance along all streets.
- Traffic through the area should be discouraged and routed via Winchester Boulevard, Pollard Road, Quito Road, and Campbell Avenue.

The plan identifies the following transportation policies:

- Policy A: Truck Routes: Truck routes in the San Tomas Area should be restricted to arterial routes and only those collectors where the predominant abutting land uses are commercial and industrial. This means that only Pollard Road and Winchester Boulevard are truck routes within the San Tomas Area and the Campbell Municipal Code should be changed accordingly.
- Policy B.1: Street Design Standard Implementation Policies: New Streets: All newly created streets shall be designed and built according to the San Tomas Street Improvement Plan and the corresponding City Standard details. New streets shall be improved with rolled curbs for improved drainage.
- Policy B.2: Street Design Standard Implementation Policies: Existing Streets: Existing streets are required to be improved consistent with the San Tomas Street Improvement Plan. Any proposed new development located on those streets identified for street improvements would be required



to dedicate right-of-way to the predominant dimension and construct the street to the predominant street width, install curb, gutters, sidewalks, and streetlights, as necessary.

- Policy B.3: Street Design Standard Implementation Policies: Deferred Improvement Agreements: Deferred improvement agreements may be taken in lieu of installation of street improvements in the San Tomas Area, as determined by the City Engineer.
- Policy B.4: Street Design Standard Implementation Policies: Removal of Existing Improvements: Property owners may apply for an encroachment permit to remove existing improvements that are not required under the San Tomas Street Improvement Plan. The property owner shall remove these improvements at their cost.
- Policy B.5: Street Design Standard Implementation Policies: Return of Excess Right-of-Way: Property owners may request that any right-of-way no longer necessary under this policy be reverted to the property owner. The City's current procedures for vacation of excess right-of-way will apply.
- Policy B.6: Street Design Standard Implementation Policies: Existing Deferred Street Improvement Agreements: Previous practice has created a number of secured improvement agreements for properties which under the current San Tomas Policy will no longer be required. A notice of fulfillment of the agreement will be recorded and the securities returned.

Municipal Code (Chapter 10.42): Campbell's Municipal Code (Chapter 10.42) requires employers with 100 or more employees during the morning peak commute period to implement and monitor a transportation demand management (TDM) program to reduce traffic impacts in the city. The following list of TDM services and incentives may be included in a TDM program:

- Rideshare matching
- Preferential parking for ridesharing vehicles
- Carpool/vanpool subsidies or rewards
- Transit ticket sales
- Transit ticket subsidies
- Shuttle to transit line
- Flexible work hours for people who do not drive alone
- Compressed workweeks
- Work-at-home programs
- Telecommuting
- Establishing fees for employee parking
- Membership in a transportation management association that provides TDM services and incentives
- Contribution to a transportation systems management program administered by a member agency
- Cycling and walking subsidies or rewards



- Site design amenities that would encourage transit use, ridesharing, cycling, and walking
- Other programs approved by the city's designee to reduce the number of employees who drive alone to the workplace



4. Impacts and Mitigation Measures

This chapter describes the transportation analysis methods and significance criteria used to identify impacts on transportation for the proposed Project, and identifies transportation impacts and mitigation measures, where applicable.

4.1 Recent Changes to CEQA Transportation Analysis

The analysis of transportation impacts under the California Environmental Quality Act (CEQA) was changed with Senate Bill (SB) 743. SB 743 became effective in 2020 and removed the use of automobile delay or traffic congestion, as described solely by level of service (LOS), for determining transportation impacts in environmental review. Instead, the latest *CEQA Statute & Guidelines* now specify that vehicle miles traveled, or VMT, is the appropriate metric to evaluate transportation impacts. In short, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers to measuring the impact of driving. In response to this methodological change in required transportation analysis, the City of Campbell adopted their *VMT Policy to Comply with California Senate Bill 743 (SB 743)*,⁸ which includes baseline VMT screening thresholds, VMT thresholds of significances, VMT mitigations of significant impacts, and requirements for preparing a local transportation analysis. As discussed later, the comprehensive VMT assessment (i.e., VMT including all vehicle trips, vehicle types, and trip purposes without separation by land use) presented in this report considers both the Project's direct impacts relative to Project generated VMT per service population, as well as a cumulative analysis, which considers the Project's long-term effect on VMT using boundary VMT per service population.⁹ For illustrative purposes **Figure 4-1** presents a representation of both Project generated VMT and boundary VMT. Both metrics are needed for a comprehensive view of a project's VMT effects. The VMT assessment methods and thresholds used for this analysis go beyond the city of Campbell's VMT thresholds due to the unique characteristics of the General Plan.

4.2 Methods of Analysis

The most common method of calculating VMT metrics is through a travel forecasting model. A travel forecasting model uses specialized software and is designed to reflect the interactions between different land use and roadway elements in a large area. The San Mateo City and County Association of Government (C/CAG) and Santa Clara Valley Transportation Authority (VTA) Bi-County transportation

⁸ City of Campbell *VMT Policy to Comply with California Senate Bill 743 (SB 743)*. Available online at: <https://www.campbellca.gov/DocumentCenter/View/17944/-Campbell-VMT-Policy?bidId=>

⁹ This is in contrast with the OPR Technical Advisory recommendation to use Partial VMT for transportation impact analysis (Governor's Office of Planning and Research, *Technical Advisory: On Evaluating Transportation Impacts in CEQA*, pages 15 and 16). Using Partial VMT for Project generated VMT screening may not tell the full story of the project's benefits. For example, mixed-use projects help reduce VMT by shortening vehicle trip lengths or reducing vehicle trips because of the convenience of walking, bicycling, or using transit between project destinations. A comprehensive VMT analysis is a more complete evaluation.



model ("VTA Model") was used to prepare daily VMT and roadway segment forecasts, as well as for use as inputs for the Air Quality, Energy Consumption, and Greenhouse Gas (GHG) analysis. To understand the VMT forecasts and VMT impact analysis, this section defines important technical terms and analysis methods.

4.2.1 VTA Model Documentation

The VTA Model includes the regional roadways and major arterials of the nine-county Bay Area, the Association of Monterey Bay Area Governments (AMBAG) region (Santa Cruz County, Monterey County, and San Benito County), and portions of the San Joaquin (Central) Valley. There are additional transportation network detail and refined transportation analysis zones (TAZs)¹⁰ in San Mateo County and Santa Clara County. The VTA Model land use inputs are based on Association of Bay Area Governments (ABAG) 2017 land use projections (*Plan Bay Area 2040* land use projections), 2010 Census socio-economic data (with some additional refinements in 2019), and a future regional transportation infrastructure consistent with *Plan Bay Area 2040* (July 2017). The VTA Model has a 2040 horizon year.

The TAZ size influences the types of streets vehicle traffic is typically assigned to. For the VTA Model, an arterial or minor arterial is the lowest street level that traffic is assigned to because the TAZ structure in Campbell has moderate detail. The VTA Model has a mode share model that can be used to express changes in mode share.

The future year VTA Model is used to develop forecasts for Cumulative (2040) Conditions and includes projected growth to Year 2040. Planned and funded roadway improvements associated with the *Valley Transportation Plan (VTP) 2040* (adopted in October 2014) are also included. VTP projects near the City of Campbell include:

- BART Silicon Valley: The Santa Clara Extension (VTP ID: T2)
- Vasona Corridor Light Rail Extension (VTP ID: T9)
- SR 85 Express Lanes: US 101 (South San José to Mountain View) (VTP ID: H1)
- SR 17 Southbound/Hamilton Ave. Off-Ramp Widening (VTP ID: H20)

The SR 17 Express Lanes (VTP ID: H16) project is included in the *VTP 2040*; however, it is not included in the Year 2040 VTA Model.

The VTA Model has four time periods to address travel during congested morning and evening peak periods and uncongested mid-day and midnight time periods. During congested times, the average trip length and speed of travel change.

¹⁰ Transportation analysis zones, also referred to as TAZs, are small geographic areas within the VTA Model. As defined by *NCHRP Report 716, Travel Demand Forecasting: Parameters and Techniques*, TRB, 2012, "TAZ boundaries are usually major roadways, jurisdictional borders, and geographic boundaries and are defined by homogeneous land uses to the extent possible."



4.2.1.1 Model Input Adjustments

For the purpose of this VMT analysis, the baseline (2015) VTA Model land use and population inputs were updated for the entire planning area to reflect current (Year 2020) development conditions in the City of Campbell. In addition, the Year 2040 VTA Model was updated to reflect only the land use growth and transportation network adjustments that are approved but not yet constructed in the adopted *City of Campbell General Plan* (2001, revised 2014, revised 2015). For the Cumulative (2040) with Project Conditions scenario, the proposed land use(s) in the Envision Campbell General Plan and Housing Element Update – in this case, the proposed change in housing units and employment with the Project planning areas – are added to the Cumulative (2040) without Project Conditions model for the relevant TAZs comprising the planning areas. The base year model and future year travel model input assumptions are included in **Attachment B**.

Table 4-1 shows the additional land use associated with the Cumulative (2040) with Project Conditions scenario. The proposed Project would provide for an increase of 25 single-family units, 8,799 multi-family units, and 6,194 additional employees within the associated planning areas (refer to the **Project Description** section for more information).

Table 4-1: Proposed Project Land Use Summary

TAZ ¹	Additional Units and Employment		
	Single-Family Units	Multi-Family Units	Total Employment
1	0	0	25
2	0	241	258
3	0	451	277
4	0	651	436
5	1	1031	32
6	0	0	0
7	0	30	24
8	3	80	60
9	0	159	228
10	0	106	244
11	0	662	442
12	9	15	9
13	0	48	34
14	0	24	12
15	0	586	-414
16	0	8	21
17	0	512	-158
18	0	0	0
19	0	0	723
20	0	0	0



Table 4-1: Proposed Project Land Use Summary

TAZ ¹	Additional Units and Employment		
	Single-Family Units	Multi-Family Units	Total Employment
21	0	60	517
22	0	658	453
23	0	0	191
24	2	37	76
25	0	986	117
26	0	243	91
27	0	109	367
28	3	138	148
29	0	121	5
30	0	420	1
31	0	43	0
32	0	627	-360
34	5	237	232
601	0	23	20
602	0	0	0
603	0	0	0
748	0	0	29
796	1	389	38
798	0	30	108
799	0	0	50
896	0	0	0
899	0	72	19
900	0	0	104
907	1	3	87
1490	0	0	1,647
Total	25	8,799	6,194

Notes:

1. TAZ = VTA Model Traffic Analysis Zone.
Fehr & Peers, 2022.

Service population is the sum of the number of employees and residents within the designated geographic area. **Table 4-2** shows the service populations used in the VMT metrics for the City of Campbell and Santa Clara County for the study scenarios.



Table 4-2: Service Populations

Population	Existing Conditions [A] ¹	Cumulative (2040) without Project Conditions [B] ¹	Cumulative (2040) with Project Conditions [C] ¹	Change [C-A=D] ^{1,2}
City of Campbell				
Residents (A)	42,730	46,850	64,930	22,200
Employees (B)	30,570	35,200	36,760	6,190
Service Population (A + B = C)	73,300	82,050	101,690	28,390
Santa Clara County				
Residents (D)	1,852,510	2,546,290	2,561,050	708,540
Employees (E)	1,041,520	1,304,780	1,306,160	264,640
Service Population (D + E = F)	2,894,030	3,851,070	3,867,210	973,180

Notes:

1. Numbers rounded to the nearest 10.
2. Change (Project - Existing) = Cumulative (2040) with Project Conditions column – Existing Conditions column.

Source: Fehr & Peers, 2022.

As shown on **Table 4-2**, the total residential population is forecasted to increase from the existing 42,730 residents to 64,930 people residing in Campbell (an increase of approximately 22,200 residents). In terms of employee population, the proposed Project would accommodate an additional 6,190 employees over the planning year horizon.

4.2.1.2 Including Inter-Regional Travel for VMT Analysis

The OPR *Technical Advisory* cites the importance of not truncating (i.e., ending or omitting a trip outside off the geographic boundary; truncating has the effect of shortening a trip to/from a destination) trip lengths based on travel forecasting model or political boundaries:

Considerations for All Projects. *Lead agencies should not truncate any VMT analysis because of jurisdictional or other boundaries, for example, by failing to count the portion of a trip that falls outside the jurisdiction or by discounting the VMT from a trip that crosses a jurisdictional boundary. CEQA requires environmental analyses to reflect a “good faith effort at full disclosure.” (CEQA Statute & Guidelines, § 15151.) Thus, where methodologies exist that can estimate the full extent of vehicle travel from a project, the lead agency should apply them to do so. Where those VMT effects will grow over time, analyses should consider both a project’s short-term and long-term effects on VMT. (Quote from page 6 of the Technical Advisory: On Evaluating Transportation Impacts in CEQA, December 2018).*

The VTA Model extends beyond the Bay Area regional boundary to the south into the AMBAG region (Santa Cruz County, Monterey County, and San Benito County) and east into San Joaquin County. However, the travel model stops at the Bay Area regional boundary and does not include inter-regional



travel to Mendocino County, Lake County, Yolo County, and Merced County, which shortens the vehicle travel to those counties. This truncation results in a lower total project generated VMT estimate for the region and Santa Clara County and affects baseline regional or county baseline VMT values used to establish VMT thresholds.

The California statewide travel demand model (CSTDm) was used to estimate and forecast trip lengths that occur outside the VTA Model boundary. These trip lengths have been appended to the external stations¹¹ (refer to **Table 4-3**) and are reflected in the VMT estimates and forecasts contained in this analysis.

Table 4-3: External Station Adjustments at Bay Area Regional Boundary

External Station (Connecting County)	Distance (Miles)
SR 1 – Mendocino County	9.4
US 101 – Mendocino County	48.4
SR 29 – Lake County	21.4
I-505 – Yolo County	101.2
SR 113 – Yolo County	12.9
I-80 – Yolo County	39.2
SR 12 – San Joaquin County	No adjustment made to these external station distances because the VTA Model area includes San Joaquin County.
SR 4 – San Joaquin County	
I-205 – San Joaquin County	
SR 152 – Merced County	162.9
SR 25 – San Benito County	No adjustment made to these external station distances because the VTA Model area includes San Benito County.
US 101 – San Benito County	
SR 152 – Santa Cruz County	No adjustment made to these external station distances because the VTA Model area includes Santa Cruz County.
SR 17 – Santa Cruz County	
SR 9 – Santa Cruz County	
SR 1 – Santa Cruz County	

Notes: External station adjustments rounded to nearest tenth of a mile.

Source: California statewide travel demand model (CSTDm) was used to develop the external station adjustments.
Fehr & Peers, 2022.

4.2.2 Project Generated VMT Estimation Method

Project generated VMT is the VMT from all vehicle trips for all trip purposes and types. Project generated VMT per service population is the metric used to evaluate how the city VMT changes (increases or decreases) between the baseline and with Project scenario, considering both VMT increases due to land use growth and VMT changes due to changes in travel behavior. Project generated VMT values include

¹¹ External stations are located on the major transportation routes into and out of the VTA Model boundary. These stations are used to load traffic generated from and/or destined to locations outside of the VTA Model boundary.



VMT on all streets including centroid connectors¹² and travel outside of the VTA Model area. It is calculated by summing the “VMT from” and “VMT to” a specified area, as follows:

$$\text{Project Generated VMT} = (II + IX) + (II + XI) = 2 * II + IX + XI$$

- Internal-internal (II): The full length of all trips made entirely within the geographic area limits.
- Internal-external (IX): The full length of all trips with an origin within the geographic area and destination outside of the area.
- External-internal (XI): The full length of all trips with an origin outside of the geographic area and destination within the area.

The intra-zonal VMT and VMT between traffic analysis zones, or TAZs, that are in the study area cause some double counting, which is an expected result when summing the trip end based VMT. To ensure a VMT rate is expressed properly (i.e., that the numerator and denominator include the generators of both trip ends of the VMT), the proposed Project generated VMT is divided by the service population (residential population and employment population), the generator of both trip ends of the VMT. The VMT estimates are also presented on a per service population basis to account for both the effects of population and/or employment growth and the effects of changes in personal travel behavior. For example, population growth may cause an increase in VMT, while travelers changing their behavior by using different travel modes or decreasing their vehicle trip lengths (such as a higher percentage of Campbell residents working or shopping in Campbell) would cause decreases in VMT.

4.2.3 Project’s Effect on VMT Estimation Method (Using Boundary VMT)

Project’s effect on VMT (also referred to as “boundary VMT”) is the VMT that occurs within a selected geographic boundary (e.g., city, county, or region) by any type of vehicle. Boundary VMT captures all on-road vehicle travel on a roadway network (i.e., VMT on the centroid connectors and all other streets and freeway segments in the travel model within the physical limits of the selected geographic boundary) for any purpose, and includes local trips as well as trips that pass through the area without stopping. The use of boundary VMT is a more complete evaluation of the potential effects of the proposed Project because it captures the combined effect of new VMT, shifting existing VMT to/from other jurisdictions, and/or shifts in existing traffic to alternate travel routes or modes.

The boundary VMT (within Santa Clara County) per service population is used to evaluate the proposed Project’s effect on VMT between the Cumulative (2040) without Project Conditions and Cumulative (2040) with Project Conditions. The boundary VMT is divided by the service population (sum of residential population and employment population) to account for the effects of population and/or employment growth and the effects of changes in personal travel behavior within the specified geographic area between scenarios.

¹² Centroids are points that identify the center of activity within a transportation analysis zone and connect that zone to the transportation network. A centroid connector is a feature of a travel model network that connects the centroid to the network and represents the local streets within a zone.



4.3 Thresholds of Significance

The significance thresholds described in the following sections address:

- Plan Conflicts (i.e., impacts to transit, roadways, bicycle, and pedestrian systems)
- VMT Impacts
- Hazardous Conditions (i.e., safety)
- Emergency Access

These impact criteria are further discussed below.

4.3.1 Plan Conflict

To determine the Project's consistency with relevant transportation programs, plans, ordinances or policies, the following significance thresholds were applied to each respective mode of travel – transit, roadways, bicycle facilities, and pedestrians.

- **Transit System** – The project would create a significant impact related to the transit system if any part of the proposed Project:
 - Disrupts existing transit services or facilities;¹³
 - Interferes with the implementation of a planned transit facility;
 - Creates physical or operational transportation outcomes that conflict with desired conditions expressed in transit policies adopted in Campbell, Santa Clara County, or VTA for their respective facilities in the study area.
- **Roadway System** – The project would create a significant impact related to the roadway system if any part of the proposed Project:
 - Disrupts existing facilities;
 - Interferes with the implementation of a planned vehicle facility;
 - Creates physical or operational transportation outcomes that conflicts with applicable program, plan, ordinance, or policy.
- **Bicycle System** – The project would create a significant impact related to the bicycle system if the any part of the proposed Project:
 - Disrupts existing bicycle programs or facilities;
 - Interferes with planned bicycle facilities;
 - Creates physical or operational transportation outcomes that conflict with applicable bicycle system plans, guidelines, policies, or standards.

¹³ This includes disruptions caused by the Project relative to transit street operations and transit stops/shelters.



- **Pedestrian System** – The project would create a significant impact related to the pedestrian system if any part of the proposed Project:
 - Disrupts existing pedestrian facilities;
 - Interferes with implementation of a planned pedestrian facility;
 - Creates physical or operational transportation outcomes that conflict with applicable pedestrian system plans, guidelines, policies, or standards.

4.3.2 VMT Impacts

The VMT analysis methods utilize the procedures and VMT thresholds of significance in the adopted City of Campbell *VMT Policy to Comply with California Senate Bill 743 (SB 743)*, and further clarified based on discussions with City staff and in the *City of Campbell General Plan and Housing Element Update – VMT Assessment Approach* (February 3, 2022) memorandum (**Attachment C**), which was submitted to City staff to confirm the VMT assessment approach for the proposed Project. While the City of Campbell's *VMT Policy* includes a CEQA threshold of significance for General Plan Amendments, it does not state the VMT metric (Project's effect on VMT using boundary VMT or Project generated VMT), geographic area, or how to assess the cumulative impacts between Cumulative without Project and with Project scenarios. Since the Envision Campbell General Plan and Housing Element Update is proposing to increase the land use supply in the city and would likely have a relatively widespread effect on the total VMT within the City of Campbell, a comprehensive VMT assessment (i.e., VMT including all vehicle trips, vehicle types, and trip purposes without separation by land use) is presented in this report and considers both the Project's direct impacts relative to Project generated VMT per service population, as well as a cumulative analysis, which considers the Project's long-term effect on VMT using boundary VMT per service population. For illustrative purposes **Figure 4-1** presents a representation of both Project generated VMT and boundary VMT. Both metrics are needed for a comprehensive view of a project's VMT effects. The VMT assessment methods and thresholds used for this analysis go beyond the City of Campbell's VMT thresholds due to the unique characteristics of this large land use project. Each analysis is addressed separately below.

4.3.2.1 Project Generated VMT

The VMT impact significance thresholds for determining the Project's direct impact under Cumulative Conditions are as follows:¹⁴

- A significant impact would occur if the total citywide VMT per service population for Cumulative with Projects Conditions would exceed a level 15% below the citywide total VMT per service population baseline rate. The threshold applied in this analysis is 15% below the existing citywide VMT rate of 33.4, which as shown in **Table 4-4**, is 28.4 (Existing Conditions City of Campbell total VMT per service population of $33.4 \times 85\% = 28.4$).

¹⁴ An induced VMT threshold is not presented because the Envision Campbell General Plan and Housing Element Update is not adding roadway capacity.



- A significant impact would occur if the citywide home-based VMT per resident for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate. The threshold applied in this analysis is 15% below the existing citywide VMT rate of 14.3, which as shown in **Table 4-4**, is 12.1 (Existing Conditions City of Campbell home-based VMT per resident of $14.3 \times 85\% = 12.1$).
- A significant impact would occur if the citywide home-based work VMT per employee for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate. The threshold applied in this analysis is 15% below the existing citywide VMT rate of 14.1, which as shown in **Table 4-4**, is 12.0 (Existing Conditions City of Campbell home-based VMT per resident of $14.1 \times 85\% = 12.0$).

Therefore, the Project would cause a significant Project generated VMT impact if:

- The total citywide VMT per service population under Cumulative (2040) with Project Conditions is greater than **28.4**.
- The citywide home-based VMT per resident under Cumulative (2040) with Project Conditions is greater than **12.1**.
- The citywide home-based work VMT per employee under Cumulative (2040) with Project Conditions is greater than **12.0**.



Table 4-4: Project Generated VMT Thresholds Based on Existing Conditions for the City of Campbell

Item	Amount ¹
City of Campbell Total VMT	
Total VMT (A)	2,446,780
Service Population (B) ²	73,300
Total VMT per Service Population (A/B=C)	33.4
Total VMT per Service Population Threshold (C*85%=D)	28.4
City of Campbell Home-Based VMT	
Home-Based VMT (E)	609,550
Resident Population (F)	42,730
Home-Based VMT per Resident (E/F=G)	14.3
Home-Based VMT per Resident Threshold (G*85%=H)	12.1
City of Campbell Home-Based Work VMT	
Home-Based Work VMT (I)	430,900
Employee Population (J)	30,570
Home-Based Work VMT per Employee (I/J=K)	14.1
Home-Based Work VMT per Employee Threshold (K*85%=L)	12.0

Notes:

1. Rounded resident population, employee population, service population and VMT to nearest 10.
2. Service population is defined as the sum of all employees and residents.

Source: Fehr & Peers, 2022.

4.3.2.2 Project's Effect on VMT (Using Boundary VMT)

The Project would result in a significant impact on VMT under Cumulative (2040) Conditions if growth in the plan area increases total boundary countywide VMT per service population compared to Cumulative (2040) without Project Conditions.

The impact threshold for the Project's effect on VMT is the Santa Clara County Boundary VMT per Service Population, or 12.7 (refer to **Table 4-5** for how the 12.7 is calculated). The boundary VMT uses the Santa Clara County boundary VMT to evaluate the Project's effects on VMT because the Project effects are likely to be localized near the City of Campbell and within Santa Clara County.

Therefore, the Project would result in a significant impact on VMT if it causes the cumulative countywide daily boundary VMT per service population to be greater than **12.7**.



Table 4-5: Project's Effect on VMT (Using Boundary VMT) Threshold Based on Cumulative (2040) Conditions for Santa Clara County

Item	Amount ¹
<i>Santa Clara County</i>	
Boundary VMT (A)	49,020,360
Service Population (B) ²	3,851,070
Boundary VMT per Service Population (A/B=C)	12.7
Boundary VMT per Service Population Threshold (C)	12.7

Notes:

1. Rounded resident population, employee population, service population and VMT to nearest 10.
2. Service population is defined as the sum of all employees and residents.

Source: Fehr & Peers, 2022.

4.3.3 Hazard Impact

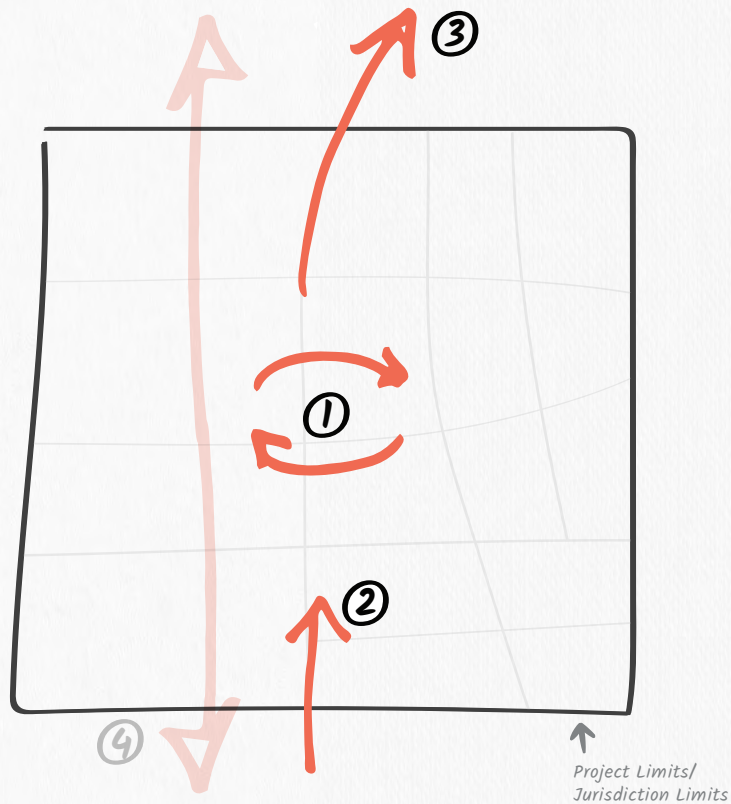
The Project would result in a significant impact regarding hazards if it substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

4.3.4 Emergency Access Impact

Ease of access and travel time are critical for first responders when traveling in emergency vehicles. Obstructions in the roadway, detours, and excessive delays due to congestion are among the factors that can affect emergency response time. A significant impact would occur if the Project results in inadequate emergency access.



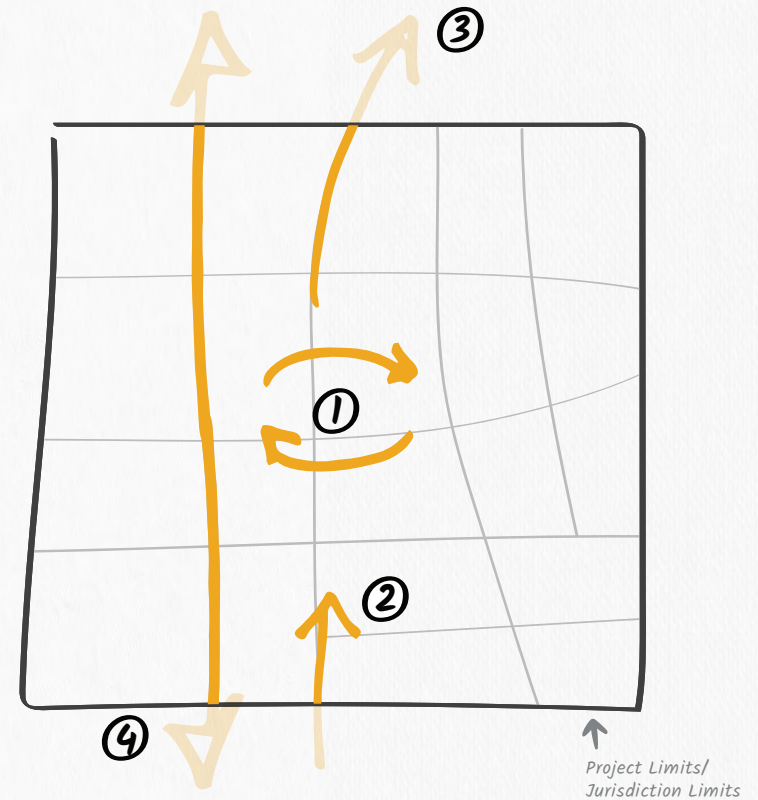
Project Generated VMT



- ① 2x Internal to Internal (2xII) VMT ③ Internal to External (IX) VMT
- ② External to Internal (XI) VMT ④ External to External (XX) VMT

Notes: External to External (XX) trips are excluded from this VMT metric.
Adjustments to project generated VMT made to include the full length of trips that leave the jurisdiction to capture inter-jurisdiction travel.

Project Effect on VMT (Boundary VMT)



- ① Internal to Internal VMT ③ Internal to External (IX) VMT
- ② External to Internal (XI) VMT ④ External to External (XX) VMT

Notes: Boundary VMT is all the VMT within the jurisdictional boundary. Transparent portions of arrows 2, 3 and 4 are not included in the VMT metric.



Figure 4-1
Measuring Vehicle Miles Traveled (VMT)

4.4 Impacts and Mitigation Measures

This section describes the analysis methods, assumptions, and results used to identify potential significant impacts of the proposed Project on the transportation system per the significance criteria described in **Section 4.3**. Transportation/traffic impacts are described and assessed, and mitigation measures are recommended for impacts identified as significant.

4.4.1 Plan Conflict Evaluation

This section provides an overview of the transit, roadway, bicycle, and pedestrian evaluations and identifications of potential impacts.

4.4.1.1 Transit Evaluation

Implementation of the proposed Project will not result in modifications to the transit network that would disrupt existing facilities or services, or interfere with the implementation of planned facilities/services contained in adopted programs, plans, policies, or ordinances. However, the proposed Project would lead to increases in the city's residential and populations, which would increase the demand for transit facilities and services, and would cause additional roadway traffic congestion that may affect several transit corridors by increasing travel times and decreasing headway reliability for transit vehicles. Potential increases in transit vehicle delay are a result of buses operating in mixed-flow lanes with other vehicles.

The VTA operates the bus and light rail transit system in Campbell and in partnership with Campbell and other member agencies will make service changes over time based on the equitable distribution of the following performance measures (VTA's Title VI: System-Wide Service Standards and Policies, OPS-PL-0059; November 2013):

- Vehicle Load
- Vehicle Headways
- On-Time Performance
- Service Availability
- Ridership Productivity

The increase in demand for transit service and transit vehicle delay caused by the proposed Project would be accommodated by existing and planned improvements to the transit system, such as improving access to transit for local residents and employees (e.g., transit stop enhancements, sidewalk widening, etc.), and improving how transit vehicles move in and around the City of Campbell (e.g., new and more frequent bus services, expansion of the VTA system, provision of transit-focused facilities, etc.). This effort to increase or modify transit service capacity and operations would be approved by a publicly appointed decision body (like the VTA board).

The City of Campbell's proposed General Plan includes Goal T-1 to create a complete street network that accommodates all users. Policy T-1.1 identifies the desired policy outcomes of a balanced transportation system in Campbell:



T-1.1 Develop and implement a connected multi-modal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context.

To meet the desired policy outcomes stated in Policy T-1.1, the multimodal improvements would need to address transit ridership trends¹⁵ and include access to transit and access by transit improvements, such as transit stop enhancements, direct bicycle and pedestrian network enhancements to transit stops, and street operational improvements (e.g., signal coordination, transit vehicle preemption, etc.) that enhance transit reliability and travel time. The improvements would be incorporated into a multimodal improvement plan to support the General Plan land use changes.

Further, the City of Campbell's proposed General Plan includes Goal T-2 to support a regional multimodal transportation system that meets regional transportation needs. Policy T-2.1 identifies Campbell's desired policy outcomes of the regional transportation system:

T-2.1 Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell's local transportation system for local users.

To meet the desired policy outcomes stated in Policy T-2.1, the proposed General Plan includes policies and actions to participate in intergovernmental activities and coordinate with the VTA, the MTC, and other member agencies. These coordination efforts would need to address the potential increase in the number of transit users in Campbell and additional roadway congestion resulting from the proposed Project.

Consistent with the *VTP 2040 (2014)*, the existing transit circulation would be modified in the future and adjusted periodically based on VTA's latest transit service plan. The changes to the vehicle circulation system as part of the proposed Project would not be expected to interfere with existing transit facilities. The proposed changes would not conflict with planned transit facilities and services or conflict with adopted transit plans, guidelines, policies, or standards. Additionally, the proposed Project is supportive of the transit use and goals summarized in **Chapter 3**. Therefore, the impact relative to disruption of existing or planned transit facilities or conflicts with transit program, plan, ordinance, or policy would be **less-than-significant**.

4.4.1.1.1 General Plan Minimization Measures

Applicable goals, policies, and actions related to the transit system in the proposed Envision Campbell General Plan and Housing Element Update are listed below.

¹⁵ Santa Clara Valley Transportation Authority. Annual Report 2019. Available online at https://www.vta.org/sites/default/files/2020-04/AnnualReport2019_Accessible.pdf



Land Use Element

- *Goal LU-1: Maintain a well-balanced land use plan in Campbell that provides for a diverse, self-sufficient community that offers a variety of housing types, job opportunities, community facilities, and commercial services.*
 - *Policy LU-1.1: Provide for a full range of land uses within the City that are conveniently located in proximity to transit opportunities, and provide for commercial, public, and quasi-public uses that support and enhance the livability of residential neighborhoods and districts.*
- *Goal LU-2: Ensure that new development is compatible with existing development in order to maintain a high quality of life for Campbell residents.*
 - *Policy LU-2.9: In considering land use change requests, consider factors such as compatibility with the residential surroundings, privacy, noise, and changes in traffic levels on residential streets.*
- *Goal LU-5: Maintain and enhance Downtown Campbell as a vibrant, community-oriented district that serves as the retail, entertainment, civic, and cultural hub of the city.*
 - *Policy LU-5.5: Promote transit-oriented and mixed-use development near the light rail station in Downtown Campbell.*
- *Goal LU-6: Promote effective coordination with regional and local agencies on planning issues.*
 - *Policy LU-6.1: Coordinate with regional and local agencies on planning, transportation, economic development, and sustainability issues to ensure that regional decisions do not disproportionality affect Campbell in such a way as to degrade the fiscal health and quality of life for Campbell residents and businesses.*
 - *Action LU-6.a: Pursue a cooperative collaborative relationship during development of long-range plans and review of development proposals that may impact the City of Campbell. Coordinate with the cities of San José, Saratoga, and Los Gatos to establish mutually-agreed upon principles related to traffic generation, growth, infrastructure, and other relevant topics in order to ensure that planning and development decisions in adjacent jurisdictions do not result in adverse impacts to Campbell. Consider the establishment of Memorandums of Understanding (MOUs) with these cities to provide a formal structure and criteria for collaboration on the review of future projects and plans.*
 - *Action LU-6.c: Continue to monitor the status and progress of San José's efforts to establish Urban Village Plans in areas immediately adjacent to Campbell. Encourage San José to incorporate measures into these plans that reduce cut-through traffic into Campbell and establish phased residential densities and development standards so that future development adjacent to Campbell is compatible with the desired density and urban form of Campbell.*



Transportation Element

- *Goal T-1: Create a Complete Streets network that accommodates all users.*
 - *Policy T-1.1: Develop and implement a connected multimodal transportation network that balances transportation modes, encourages non-automobile travel, and reduces greenhouse gas emissions, while promoting healthier travel alternatives for all users and respecting context.*
 - *Action T-1b: Design roadway space and intersections for a variety of users, including motor vehicles, transit vehicles, bicycles, pedestrians, and future travel modes, when constructing or modifying these facilities.*
 - *Action T-1g: Support community efforts to develop and fund a shuttle system to serve transit needs within the City limits that is linked to and coordinated with other transit services, without the commitment of City funds.*
 - *Action T-1h: Improve pedestrian and bicycle access to bus and light rail stations when evaluating opportunities with new development proposals and capital improvement projects. In cooperation with VTA, evaluate transit-waiting environments to improve convenience and comfort.*
- *Goal T-2: Support a regional multimodal transportation system that meets regional transportation needs.*
 - *Policy T-2.1: Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell's local transportation system for local users.*
 - *Policy T-2.2: Support regional transportation funding measures.*
 - *Action T-2a: Participate in intergovernmental activities related to regional and sub-regional transportation planning to advance the City's interests.*
 - *Action T-2b: Support the efforts of the Santa Clara Valley Transportation Authority (VTA), the Metropolitan Transportation Commission, and other agencies to coordinate transit planning and transit services in the South Bay and the entire Bay Area.*
 - *Action T-2d: Participate in regional initiatives to reduce traffic demand and construct infrastructure improvements to manage regional traffic (for example High Occupancy Vehicle "HOV" lanes and express lanes and freeway information systems) to reduce congestion on Campbell roadways.*
- *Goal T-3: Manage Traffic Demand and Reduce Vehicle Miles Traveled (VMT)*
 - *Policy T-3.3: Provide infrastructure improvements to manage regional traffic and to reduce congestion on area roadways.*
 - *Policy T-3.5: To the extent feasible, strive to maintain weekday AM and PM peak period level of service (LOS) D or better for local signalized intersections. Strive to achieve LOS standards*



- identified in the Santa Clara County Congestion Management Plan (CMP) on intersections in Campbell identified in the CMP.*
- *Policy T-3.6: At the discretion of the City Council or Planning Commission, certain intersections may be allowed to fall below the City's LOS standard established by T-3.5 under the following circumstances:*
 - a. *Where constructing facilities with enough capacity to provide LOS D is found to be unreasonably expensive.*
 - b. *Where conditions are worse than LOS D and caused primarily by traffic from adjacent jurisdictions.*
 - c. *Where maintaining LOS D will be a disincentive to use transit and active transportation modes (i.e., walking and bicycling) or to the implementation of new transportation modes that would reduce vehicle travel. Examples include roadway or intersection widening in areas with substantial pedestrian activity or near major transit centers.*
 - *Goal T-4: Implement Best Transportation Practices in New Developments.*
 - *Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.*
 - *Action T-4a: Require developers to make public improvements related to their project to improve and enhance bicycle, pedestrian, and transit opportunities along the site's frontage consistent with City policy.*
 - *Action T-4c: Orient new development building entrances toward sidewalks and transit stops.*

4.4.1.2 Roadway Evaluation

The goals, policies, and actions cited below focus on modifications to existing street facilities to provide for complete streets facilities to create more pedestrian and bicycle-oriented streets, and ensure the City's transportation network is improved over time to support the buildout of the General Plan. The expected influence on existing and future traffic is likely to be minimal because no through vehicle lanes are proposed to be removed within the proposed Project. Overall, the proposed Project would not conflict with existing or planned roadway facilities because the proposed Project is supporting of additional and improved pedestrian and bicycle facilities with few if any reduction in vehicle lanes. The proposed Project would not be expected to interfere with existing roadway facilities, conflict with planned roadway facilities, or conflict with adopted transportation plans, guidelines, policies, or standards. Therefore, the impact relative to disruption of existing or planned roadways or conflicts with program, plan, ordinance, or policy through the implementation of the proposed Project would be **less-than-significant** on roadway facilities, and no mitigation would be required.

4.4.1.2.1 General Plan Minimization Measures

Applicable goals, policies, and actions related to the roadway system in the proposed Envision Campbell General Plan and Housing Element Update are listed below. Goals, policies, and actions described in the **Transit Evaluation** section also apply to the roadway evaluation.



Transportation Element

- *Goal T-1: Create a Complete Streets network that accommodates all users.*
 - *Policy T-1.3: Ensure that the City's circulation network is improved over time to support buildout of the General Plan.*
 - *Action T-1a: Create a complete streets implementation guide to reflect General Plan complete street policies, including sidewalk standards, bike facility standards, Americans with Disabilities Act (ADA) requirements, lighting standards, and landscaping requirements. The guide shall include updated streetscape standards for the City's image streets: Hamilton Avenue, Bascom Avenue, Winchester Boulevard, and parts of West Campbell Avenue.*
 - *Action T-1i: Prepare a multimodal improvement plan to support buildout of the General Plan, update the City's Capital Improvement Program (CIP) to include, as appropriate, the identified improvements, and create and adopt a multimodal transportation impact fee (TIF) program to provide funding for the remaining improvements.*
- *Goal T-3: Manage Traffic Demand and Reduce Vehicle Miles Traveled (VMT).*
 - *Action T-3c: Work with neighboring communities to coordinate traffic signals on arterials to maintain the movement of people, goods, and services and discourage cut-through traffic in residential neighborhoods.*
 - *Action T-3d: Identify and properly sign truck routes on arterials to regulate truck movements.*
 - *Action T-3e: Consider implementation of traffic calming measures to ensure safe and reasonable speeds in residential neighborhoods, consistent with the City's adopted Neighborhood Traffic Management Program (NTCP), as long as the measures do not impede emergency response, bicycle travel, or hinder the complete streets functionality of the roadway. Methods such as radar speed signs may be used to alert drivers on streets where speeding is prevalent.*
 - *Action T-3f: Facilitate between and within neighborhoods the construction of connected pedestrian and bicycle facilities (e.g. bridges, pathways, sidewalks, and bike lanes) that enhance community livability especially within one-half mile of major activity centers, schools, and parks.*

4.4.1.3 Bicycle Evaluation

To accommodate future growth in the City of Campbell, the proposed Project includes a complete streets network and transportation policies and actions, which are listed below, to accommodate increased bicycle demands generated by the anticipated development. The proposed Project encourages bicycling by supporting the development and implementation of a forthcoming bicycle master plan, which will be prepared to achieve a bicycle network that eliminates gaps where possible and creates a safe, convenient, and low-stress comprehensive community-wide network of on-street and off-street bicycle facilities (Action T-1c and Action T-1d). Commuting by bicycle is supported with a street system that enhances



bicycle connections by shortening bicycle distances and providing a higher quality bicycle network (with lower vehicle speeds and volumes where possible) within the City of Campbell.

Implementation of the proposed Project would not interfere with existing bicycle facilities or conflict with planned bicycle facilities or adopted bicycle system plans, guidelines, policies, or standards. Furthermore, implementation of the proposed Project will create new bicycle facilities consistent with the Envision Campbell General Plan and Housing Element Update and all applicable City guidelines, standards, and specifications, which will have a beneficial effect on bicycle circulation and access. Therefore, the implementation of the proposed Project would be considered a **less-than-significant** impact on bicycle facilities, and no mitigation measures would be required.

4.4.1.3.1 General Plan Minimization Measures

Applicable goals, policies, and actions related to the bicycle system in the proposed Envision Campbell General Plan and Housing Element Update are listed below. Goals, policies, and actions described in the **Transit Evaluation** and **Roadway Evaluation** sections also apply to the bicycle evaluation.

Transportation Element

- *Goal T-1: Create a Complete Streets network that accommodates all users.*
 - *Policy T-1.2: Implement best practices to improve the pedestrian and bicycle environment.*
 - *Action T-1c: Prepare a Bicycle Master Plan to achieve a bike network that eliminates gaps where possible and creates a safe, convenient, low-stress system that connects bicyclists of all levels and abilities to destinations throughout the City.*
 - *Action T-1d: Construct improvement projects identified in the Bicycle Master Plan.*
 - *Action T-1e: Provide adequate public bike parking facilities throughout the City, including all public facilities and trail heads.*
 - *Action T-1j: Seek opportunities to utilize light rail transit and railroad rights-of-way for enhanced bicycle and pedestrian connectivity.*
 - *Action T-1k: Provide continuing education to members of the City's Bicycle and Pedestrian Advisory Committee (BPAC) on Complete Streets best practices and policies.*
- *Goal T-2: Support a regional multimodal transportation system that meets regional transportation needs.*
 - *Policy T-2.1: Participate in transportation planning efforts to create a transportation system that accommodates regional travel and preserves Campbell's local transportation system for local users.*
 - *Action T-2c: Cooperate with the VTA, surrounding communities, and other agencies to establish and maintain regional bicycle and pedestrian facilities including off-road paths and trails utilizing creek, utility, and railroad rights-of-way that are safe and convenient for commuting and recreational use.*



- *Goal T-4: Implement Best Transportation Practices in New Developments.*
 - *Policy T-4.2: Require new developments and redevelopments to use best practices in providing pedestrian and bicycle connections between the sites and existing and planned facilities, including those identified in the Bicycle Master Plan, Pedestrian Master Plan, and other relevant plans and documents.*
 - *Action T-4b: Address the needs of people with disabilities and comply with the requirements of the ADA during the planning and implementation of new developments.*
 - *Action T-4d: Where applicable, provide passenger loading zones and areas for quick deliveries near building entrances.*
 - *Action T-4f: Require new or redevelopment projects to provide logical, safe, and well-designed bicycle and pedestrian connections, with wayfinding signage, onsite between building entrances, parking areas, and walkways, and to existing or planned public right-of-way facilities that minimize public nuisance concerns as part of the Objective Standards update. Connect dead-end streets with pedestrian and bicycle paths in new developments.*
 - *Action T-4g: Require new or redevelopment projects to work with adjacent neighborhoods and jurisdictions to provide logical, safe, and well-designed bicycle and pedestrian connections that minimize public nuisance concerns.*
 - *Action T-4h: Maintain short-term and long-term bicycle parking standards over and above State minimum standards to provide ample bicycle parking in new developments as part of the City's efforts to facilitate multimodal transportation options and reduce vehicle miles traveled.*
 - *Action T-4m: As part of the development review process, the Community Development Department and the Public Works Department shall require applicants to complete and fund the following:*
 - a. *A Local Transportation Analysis (LTA) to ensure that the site plan incorporates City transportation goals, policies, and standards, that identifies the effects of the project on the local transportation system, and identifies improvements to maintain LOS D operations at signalized City-controlled intersections and adopted LOS standards on CMP intersections whenever: 1) the project generates 100 or more net peak hour trips, or 2) generates 50 to 99 net peak hour trips and the affected intersection is experiencing LOS D or worse;*
 - b. *The project's proportional share of the effects on the City's circulation network through payment of fees to be identified through a nexus study;*
 - c. *For local project-related transportation network deficiencies requiring improvements that are not included in an adopted fee program, either complete the necessary improvements or pay a proportional-share of the construction and project costs identified by a nexus study.*



4.4.1.4 Pedestrian Evaluation

To accommodate future growth in the City of Campbell, the proposed Project includes a complete streets network, support for new and improved pedestrian facilities, and transportation policies, as cited above and listed below, to accommodate increased pedestrian demands generated by the anticipated land development. The proposed Project encourages walking by improving pedestrian facilities and connectivity with a safe and continuous pedestrian network to shorten walking distances and improve pedestrian connections to popular local destinations. Implementation of the proposed Project would not interfere with existing pedestrian facilities or conflict with planned pedestrian facilities or adopted pedestrian system plans, guidelines, policies, or standards. Furthermore, implementation of the proposed Project will create new pedestrian facilities and will have a beneficial effect on pedestrian circulation and access. Therefore, the implementation of the proposed Project would be considered a **less-than-significant** impact on pedestrian facilities, and no mitigation measures would be required.

4.4.1.4.1 General Plan Minimization Measures

Applicable goals, policies, and actions related to the pedestrian system in the proposed Envision Campbell General Plan and Housing Element Update are listed below. Goals, policies, and actions described in the **Transit Evaluation**, **Roadway Evaluation** and **Bicycle Evaluation** sections also apply to the pedestrian evaluation.

Transportation Element

- *Goal T-1: Create a Complete Streets network that accommodates all users.*
 - *Policy T-1.2: Implement best practices to improve the pedestrian and bicycle environment.*
 - *Action T-1f: Develop and implement a Pedestrian Master Plan to provide a safe and convenient pedestrian network connecting neighborhoods with destinations throughout the City and that is consistent with the City's ADA Implementation Plan. The Pedestrian Master Plan should include Safe Routes to School policies and procedures and evaluate enhancing Downtown public alleyways for pedestrian use.*
- *Goal T-4: Implement Best Transportation Practices in New Developments.*
 - *Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.*
 - *Action T-4e: Incorporate pedestrian amenities such as plazas, landscaped areas with seating, and pedestrian walkways into new developments.*

4.4.2 Vehicle Miles Traveled (VMT) Analysis

This section presents an analysis of the proposed Project's impacts relative to VMT, including the daily VMT estimates for the VMT analysis. Under Cumulative (2040) with Project Conditions, the Project



generated VMT per service population is used to evaluate the direct effects of the Project, while the boundary VMT in Santa Clara County is used to evaluate the project's effect on VMT.

4.4.2.1 Project Generated VMT

The results of the Project generated VMT analysis is presented in **Table 4-6** on the next page and determined as follows:

- For the Cumulative (2040) with Project Conditions, the total citywide VMT per service population of **34.1** is greater than the applicable VMT threshold of 28.4 and would, therefore, be considered a **significant** impact.
- For the Cumulative (2040) with Project Conditions, the citywide home-based VMT per resident of **14.5** is greater than the applicable VMT threshold of 12.1 and would, therefore, be considered a **significant** impact.
- For the Cumulative (2040) with Project Conditions, the citywide home-based work VMT per employee of **15.5** is greater than the applicable VMT threshold of 12.0 and would, therefore, be considered a **significant** impact.

Implementation of the proposed Envision Campbell General Plan and Housing Element Update would result in excessive total VMT per service population, home-based VMT per resident, and home-based work VMT per employee under Cumulative (2040) with Project Conditions due to population and employment growth planned within the city and would, therefore, be considered a **significant** impact.



Table 4-6: Project Generated VMT for VMT Assessment

Item ¹	Existing Conditions	Cumulative (2040) with Project Conditions
City of Campbell Total VMT		
Total VMT (A)	2,446,780	3,468,760
Service Population (B) ²	73,300	101,690
Total VMT per Service Population (A/B=C)	33.4	34.1
Impact Assessment		
Total VMT per Service Population Threshold (28.4) (Impact Conclusion)		34.1 (20% greater than threshold) (Significant)
City of Campbell Home-Based VMT		
Home-Based VMT (E)	609,550	943,270
Resident Population (F)	42,730	64,930
Home-Based VMT per Resident (E/F=G)	14.3	14.5
Impact Assessment		
Home-Based VMT per Resident Threshold (12.1) (Impact Conclusion)		14.5 (20% greater than threshold) (Significant)
City of Campbell Home-Based Work VMT		
Home-Based Work VMT (I)	430,900	568,470
Employee Population (J)	30,570	36,760
Home-Based Work VMT per Employee (I/J=K)	14.1	15.5
Impact Assessment		
Home-Based Work VMT per Employee Threshold (12.0) (Impact Conclusion)		15.5 (29% greater than threshold) (Significant)

Notes:

1. Rounded resident population, employee population, service population and VMT to nearest 10. Rounded total VMT per service population, home-based VMT per resident, and home-based work VMT per employee to the nearest one-tenth.
2. Service population is defined as the sum of all employees and residents. Refer to **Table 4-2** for breakdown of employees and residents.

Source: Fehr & Peers, 2022.

4.4.2.2 VMT Mitigation

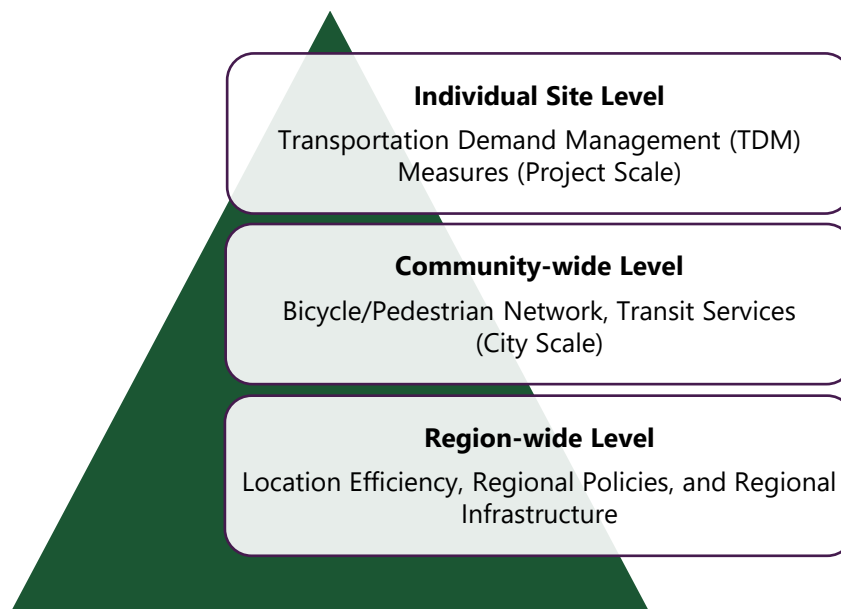
As shown in **Table 4-6**, a 20% reduction in total VMT per service population, a 20% reduction in home-based VMT per resident, and a 29% reduction in home-based work VMT per employee would be required to achieve the City's thresholds. A goal of the proposed Envision Campbell General Plan and Housing Element Update is to manage traffic demand and reduce VMT (Goal T-3). As described below, the City has included several policies and actions in the General Plan to reduce VMT to the greatest extent feasible.

A VMT mitigation program's effectiveness depends on its scale (how much VMT the mitigation acts on) and its ability to reduce VMT in different VMT reduction programs. The biggest effects of VMT mitigation actions (and resultant emissions reductions) derive from statewide or region-wide policies that increase the cost, or reduce the convenience, of using vehicles. Other region-wide actions include improving land



use location efficiency and infrastructure investments that support transit, walking, and bicycling. While there are many VMT mitigation actions that can influence VMT and emissions, individual site level VMT mitigation actions (such as TDM measures) typically have the smallest effect on VMT reductions because they are applied to new VMT generated by new buildings, while region-wide level programs have the greatest effect on VMT reduction. Additionally, the available research indicates that the effectiveness of TDM measures varies substantially depending on the context in which they are applied. TDM is most effective in urban areas where urban character (land use and built environment) and land use mix are most supportive of vehicle trip reduction. TDM programs are less effective in suburban areas where the built environment and transportation network are more dispersed and where modes are typically limited to personal vehicles. **Figure 4-2** presents a conceptual illustration of the relative importance of scale.

Figure 4-2: Transportation-Related GHG Reduction Measures



Due to these individual site level implementation barriers, ad-hoc project-by-project mitigation is less effective at reducing VMT compared with larger scale community-wide level and region-wide VMT mitigation actions. The City of Campbell would require implementation of individual site level, community-wide, and region-wide VMT mitigation actions to reduce VMT. These mitigation actions may be implemented through TDM programs, a transportation management association (TMA) that runs a community-wide VMT mitigation actions, VMT caps, a VMT-based impact fee program, a VMT mitigation bank, a VMT mitigation exchange, in-lieu fee programs, and other land use project conditions to reduce VMT.

The City of Campbell's proposed General Plan includes Goal T-3 to manage traffic demand and reduce VMT. Policy T-3.2 identifies the desired policy outcomes of VMT in Campbell:



T-3.2 Implement VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell.

The proposed Envision Campbell General Plan Update includes Action T-1.i to “[p]repare a multimodal improvement plan to support buildout of the General Plan, update the City’s Capital Improvement Program (CIP) to include, as appropriate, the identified improvements, and create and adopt a multimodal transportation impact fee (TIF) program to provide funding for the remaining improvements.” Additionally, a community-wide multimodal TIF program can be complemented by the emergency of a regional VMT mitigation program (e.g., VMT cap, VMT-based impact fee program, VMT mitigation bank, VMT mitigation exchange); however, the measured effects of these programs (and their ability to reach desired long-term land use outcomes) are largely unknown. Currently, no regional VMT mitigation programs exist in Santa Clara County; however, the VTA is currently evaluating different VMT mitigation program frameworks which may lead to a countywide or sub-regional VMT mitigation program.

In addition, to meet the desired policy outcome stated in Policy T-3.2, the City of Campbell’s proposed General Plan includes Action T-3h, which requires Campbell to “[u]pdate Chapter 10.42 of the Campbell Municipal Code (TDM Ordinance) to include specific thresholds and trigger points for when traffic analyses and TDM measures are required for development projects.” As part of the update, Campbell’s TDM Ordinance will need to provide a plan to reduce the amount of vehicle traffic generated by new and existing development in Campbell by shifting residents, employees, students, and visitors from driving-alone to using transit, carpooling, cycling, and walking modes. To that end, Campbell’s TDM Ordinance will need to be updated to manage and monitor vehicle traffic with the primary performance standards of reducing VMT to achieve the City’s VMT thresholds. To further evaluate the effectiveness of the TDM Ordinance, the monitoring should also observe performance measures of mode share and average vehicle occupancy, which are needed to determine the effectiveness of the TDM Ordinance and help identify additional VMT reducing measures.

The City’s proposed General Plan also includes Action T-3j, which requires Campbell to “[c]reate and adopt a VMT reduction program and adopt a VMT mitigation fee program to provide funding for the improvements identified in the VMT reduction program. The VMT reduction program should include strategies targeting VMT reductions at the site level, community level, and regional level; should be based on emerging best practices; and should leverage and compliment ongoing regional efforts to reduce VMT.” In preparing the VMT reduction program identified under General Plan Action T-3j, the City could consider identifying a menu of built environment and TDM mitigation strategies contained in the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (December 2021)¹⁶ based on how the land use context, and potential land use changes, in Campbell could influence each strategy’s effectiveness. Potential TDM mitigation strategies organized by their relative scale of for implementation (i.e., individual site level, community-wide level, region-wide level) from the CAPCOA *Handbook* that City

¹⁶ California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (December 2021). Available at: https://www.caleemod.com/handbook/full_handbook.html



could take to directly or in partnership with other jurisdictions in Santa Clara County or the Bay Area region include:

Individual Site Level

- Implement Commute Trip Reduction (CTR) Program (Mandatory Implementation and Monitoring): Employer program designed to discourage single-occupancy vehicle trips with mandatory trip reduction requirements, penalties for non-compliance, and regular monitoring and reporting. CTR programs must include a commute trip reduction marketing strategy, employer-provided service, infrastructure, and incentives for alternative modes such as ridesharing, discounted transit passes, end-of-trip bicycle facilities, employer-sponsored vanpool service, and guaranteed ride home program,
- Price Workplace Parking: Price onsite parking at workplaces.
- Implement Employee Parking Cash-Out: Employers provide employees with the option of forgoing their current subsidized/free parking for a cash payment equivalent to or greater than the cost of the parking space.

Community-Wide Level

- Implement On-Street Market Price Public Parking: Price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers.
- Unbundle Residential Parking and Property Cost: Sell or lease parking separately from the housing unit.
- Implement Transit-Supportive Roadway Treatments: Roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability.
- Implement Conventional Carshare Program: Increase carshare access in the community by deploying conventional carshare vehicles, which provide people convenient access to a vehicle for personal or commuting purposes.

Regional-Wide Level

- Increase Residential and Job Density: Increasing density of land uses affect the distance people travel and provide greater options for the mode of travel they choose.
- Extend Transit Network Coverage or Hours: Expand the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service.

When making a VMT impact determination, other available evidence related to VMT trends in California was considered. Specifically, CARB's *2017 Climate Change Scoping Plan Update*¹⁷ and *Draft 2022 Scoping*

¹⁷ California Air Resources Board's *2017 Climate Change Scoping Plan Update: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (January 2019)



*Plan Update*¹⁸, which assumes that all of the regions in the state will meet the GHG reduction targets set in their Regional Transportation Plans and Sustainable Communities Strategies (RTP/SCS), thus far indicates that not all regions are meeting those targets, and vehicular travel in California (at least prior to the COVID-19 pandemic) has been increasing rather than decreasing over the past several years (see CARB's *Improved Program Measurement Would Help California Work More Strategically to Meet Its Climate Change Goals*, February 2021, and CARB's *2018 Progress Report: California's Sustainable Community and Climate Protection Act*, November 2018). Additionally, declining transit ridership trends¹⁹ in Santa Clara County (at least prior to the COVID-19 pandemic) suggest that the supportive policies at all levels may not be effective at increasing transit ridership and decreasing VMT. This is because limited facilities exist that prioritize travel by high occupancy vehicles and many of the vehicles (i.e., private vehicles and public transit) on the roadway in Santa Clara County have limited capacity since roadways are routinely filled up during peak periods by vehicles with poor seat utilization (i.e., most of the vehicle seats are empty). Therefore, public transit in Santa Clara County often experiences poor qualities of experience, which contributes to lower transit demand and higher demand for vehicle use contributing to higher VMT. Further, this VMT analysis does not account for any future increases in the use of TNCs (such as Uber and Lyft) or commercial delivery services, nor does it envision the potential for development of autonomous vehicles or any other emerging transportation innovations. These emerging transportation innovations will alter the effectiveness of VMT mitigation action, some increasing VMT reduction effectiveness while others decreasing VMT reduction effectiveness.

Based on the discussion above, there is growing evidence that demonstrates the challenge of reducing VMT when background conditions are contributing to higher VMT generation rates, suggesting greater action is needed by the state to meet the state's GHG and VMT reduction goals. Without further action by the state to discourage vehicle travel (i.e., increasing the cost of driving and providing provisions for bus services to avoid congestion delays) while reducing the barriers or constraints that prevent more efficient use of vehicles and greater use of transit, walking, and bicycling, VMT trends are unlikely to reverse, regardless of the steps and measures the City implements through its Land Use map and General Plan transportation policies.

In summary, the Envision Campbell General Plan and Housing Element Update includes goals, policies, and actions, such as implementing a multimodal transportation impact fee (TIF) program, updating Campbell's TDM Ordinance, and establishing a new VMT fee and VMT reduction program. These goals, policies, and actions are designed to reduce VMT and would help to reduce the severity of these significant impacts to the greatest extent feasible.

Additionally, the City has prepared a new Land Use Map, which prioritizes notably higher residential densities than those currently allowed in Campbell, provides additional opportunities for more mixed use residential development, and prioritizes development near transit stations. From a land use planning perspective, the City has been very proactive in promoting a land use pattern that provides convenient

¹⁸ California Air Resources Board's *Draft 2022 Scoping Plan Update* (May 2022)

¹⁹ Santa Clara Valley Transportation Authority. Annual Report 2019. Available online at https://www.vta.org/sites/default/files/2020-04/AnnualReport2019_Accessible.pdf



access to transit, places, jobs, services, and housing in close proximity, and establishes residential densities that provide for dense and walkable neighborhoods. These land use strategies represent some of the most effective tools available to Campbell to reduce VMT through sound land use planning.

The proposed Envision Campbell General Plan and Housing Element Update policies, land use forecasts, and targeted areas for growth are the result of an extensive outreach process among staff, policymakers, and the public to arrive at a solution that balances competing concerns about accommodating housing growth, jobs growth, and quality of life. The General Plan goals, policies, and actions will achieve meaningful reductions in VMT generated by land uses within the City. However, as previously discussed, major reductions in VMT would be required to achieve thresholds shown in **Table 4-6**. The City at this time cannot demonstrate that VMT will be reduced to the degree that is needed to meet these thresholds. VMT reduction also depends on several factors such as demographic change, household preferences for housing types and locations, the cost of fuel, and the competitiveness of regional transit relative to driving. Improving regional transit relative to driving relates to congestion along vehicular commute routes that are not under the City's jurisdiction, as well as transit provided by agencies other than the City. Additionally, no county-wide or region-wide VMT mitigation program currently exist.

As described above, the City of Campbell's proposed General Plan includes a comprehensive approach to reducing VMT through the implementation of numerous policies and actions, and through the establishment of a Land Use Map that prioritizes higher density development near transit stations. However, in order to reduce VMT to a less than significant level, the City must rely on additional assistance from regional and state-level agencies to affect major changes in driving patterns and behaviors throughout the greater Bay Area region. The biggest effects of VMT mitigation actions (and resultant emissions reductions) derive from statewide or region-wide policies that increase the cost, or reduce the convenience, of using vehicles. The City of Campbell cannot effectively or practically implement statewide or region-wide policies, other than to be supportive of and complimentary to these efforts in the City's General Plan, which the City has done, as described above. There are no additional feasible mitigation strategies available to the City to reduce this impact to a less than significant level. Therefore, implementation of the proposed Project would result in a VMT impact that would be considered **significant-and-unavoidable**.

4.4.2.3 General Plan Minimization Measures

Applicable goals, policies, and actions designed to reduce VMT in the proposed Envision Campbell General Plan and Housing Element Update are listed below. Goals, policies, and actions described in the **Plan Conflict Evaluation** section also reduce VMT impacts.

Transportation Element

- *Goal T-3: Manage Traffic Demand and Reduce Vehicle Miles Traveled (VMT).*
 - *Policy T-3.1: Continue to use established vehicle miles traveled (VMT) metric(s), evaluation method(s), and significance threshold(s) that comply with state law such as SB 743.*



- *Policy T-3.2: Implement VMT reduction measures, such as Transportation Demand Management (TDM) measures, and other strategies to reduce VMT in Campbell.*
- *Policy T-3.4: Support programmatic Transportation Demand Management (TDM) measures to reduce traffic demand in Campbell. Examples include but are not limited to measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve.*
 - *Action T-3a: Maintain and implement vehicle miles traveled (VMT) metrics, evaluation methods, and significance thresholds consistent with the requirements of state law, such as SB 743. Apply these VMT standards during the CEQA review of future development projects in Campbell.*
 - *Action T-3b: Incentivize high-density transit-oriented developments, consistent with the Land Use Map, near light rail stations.*
 - *Action T-3g: Support and encourage effective programmatic Transportation Demand Management (TDM) measures for private developments consistent with proposed uses. These could include, but are not limited to, measures such as alternative work schedules, subsidized transit passes, and future measures as programs and technologies evolve. Encourage major employers (employers with over 100 employees) to develop shuttle services to transport employees to and from the worksite. Entities may form transportation management associations (TMAs) to pool resources to fund TDM measures.*
 - *Action T-3h: Update Chapter 10.42 of the Campbell Municipal Code (TDM Ordinance) to include specific thresholds and trigger points for when traffic analyses and TDM measures are required for development projects.*
 - *Action T-3i: Advertise ways to travel to and within Campbell via transit, biking, walking, and other modes that reduce traffic. Potential methods of advertisement may include, but are not limited to:*
 - *Information and links on the City's website;*
 - *Wayfinding signs indicating routes and travel times by mode of transit;*
 - *Postings and flyers at public buildings, parks facilities, and transit stops; and*
 - *Other methods and strategies that the City determines will be successful and cost effective.*
 - *Action T-3j: Create and adopt a VMT reduction program and adopt a VMT mitigation fee program to provide funding for the improvements identified in the VMT reduction program. The VMT reduction program should include strategies targeting VMT reductions at the site level, community level, and regional level; should be based on emerging best practices; and should leverage and compliment ongoing regional efforts to reduce VMT.*
- *Goal T-4: Implement Best Transportation Practices in New Developments.*
 - *Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.*



- *Action T-4k: For new businesses with 100 or more full-time employees, require Transportation Demand Management (TDM) related site design measures such as showers and changing facilities, designated carpool and van pool parking, and on-site amenities (e.g. food service, fitness center, ATM). Require TDM reports per the Campbell Municipal Code.*

4.4.2.4 Project's Effect on VMT (Using Boundary VMT)

To evaluate the Project's effect on VMT between the Cumulative (2040) and Cumulative (2040) with Project Conditions, the boundary VMT is divided by the service population (sum of residential population, and employment population). The growth in boundary VMT captures the combined effect of:

- shifting existing VMT due to land use and transportation network changes in Santa Clara County,
- shifts in existing traffic to alternate travel routes or modes, and
- new VMT from additional land use development in Santa Clara County.

The results of the analysis addressing the Project's effect on VMT under Cumulative (2040) and Cumulative (2040) with Project Conditions are presented in **Table 4-7**. Under Cumulative (2040) with Project Conditions, the Santa Clara County boundary VMT per service population of 12.7 does not exceed the applicable VMT threshold of 12.7. The Project effects are likely to be localized near the City of Campbell and would have very little, if any, effects on Santa Clara County boundary VMT per service population. Therefore, the impact of the Project's effect on VMT under Cumulative (2040) with Project Conditions would be ***less-than-significant***.

Table 4-7: Project's Effect on VMT (Using Boundary VMT) for VMT Assessment

Item	Cumulative (2040) without Project Conditions ¹	Cumulative (2040) with Project Conditions ¹
<i>Santa Clara County</i>		
Boundary VMT (A)	49,020,360	49,156,530
Service Population (B) ²	3,851,070	3,867,210
Boundary VMT per Service Population (A/B=C)	12.7	12.7
<i>Impact Assessment</i>		
Boundary VMT per Service Population Threshold (12.7) (Impact Conclusion)		12.7 (Less-Than-Significant)

Notes:

1. Rounded resident population, employee population, service population and VMT to nearest 10. Rounded boundary VMT per service population to the nearest one-tenth.
2. Service population is defined as the sum of all employees and residents. Refer to **Table 4-2** for breakdown of employees and residents.

Source: Fehr & Peers, 2022.



4.4.2.5 Regional Transportation Plan/Sustainable Community Strategy Plan Consistency

The California Environmental Quality Act, Section 15125(d), requires an EIR to discuss inconsistencies between the proposed Project and applicable general and regional plans. The purpose of this section is to discuss the proposed Project's consistency with the local growth forecasts in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as *Plan Bay Area 2040* (July 2017),²⁰ and to provide an analysis of the proposed Project's impacts on the housing and employment projections for the region. The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are the designated metropolitan planning organizations, and as such, are mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality.

As previously discussed, ABAG and MTC adopted an updated plan; *Plan Bay Area 2050* (October, 2021).²¹ While the plan has been adopted, it will take up to three years for the plan's growth forecast to be integrated into MTC's transportation model, after which updates to each county's transportation model will take place. For these reasons, and for purposes of this analysis, *Plan Bay Area 2040* is the regional plan that forms the basis for population, housing, and employment forecasts in this analysis.

Population forecasts for the City of Campbell and surrounding area are provided by ABAG in the *Plan Bay Area Projections 2040* (November 2018) by jurisdiction. **Table 4-8** shows the ABAG household population and employment forecasts for the City of Campbell for years 2020 and 2040.

Table 4-8: City of Campbell Household Population and Employment Growth Forecasts

Forecasts	2020 [A]	2040 [B]	Change [B-A=C]	Percent Change [C/A]
Household Population	43,455	46,840	+3,385	+7.8%
Employment	29,870	32,745	+2,875	+9.6%

Source: *Plan Bay Area 2040 Projections*, November 2018.

The proposed Envision Campbell General Plan and Housing Element Update includes land use designations that could accommodate up to 8,824 housing units by 2040, which is 7,185 more units than currently accommodated under the existing *City of Campbell General Plan* (2001, revised 2014, revised 2015). This allocation of housing units will result in a projected household population increase of 22,203 in 2040. Further, the proposed Project is projected to generate approximately 6,194 employment opportunities by the buildout year. **Table 4-9** identifies the change between Existing Conditions and the

²⁰ Metropolitan Transportation Commission, 2017. *Plan Bay Area 2040*. Available online at <http://2040.planbayarea.org/>.

²¹ Metropolitan Transportation Commission, 2021. *Plan Bay Area 2050*. Available online at <https://www.planbayarea.org/finalplan2050>



proposed Envision Campbell General Plan and Housing Element Update compared to the ABAG household population and employment forecasts in *Plan Bay Area 2040*.

Table 4-9: Envision Campbell General Plan and Housing Element Buildout Comparison to Plan Bay Area 2040 Projections

Forecasts	Envision Campbell General Plan and Housing Element Update		City of Campbell ABAG Plan Bay Area 2040 Projections	
	Existing Conditions ¹	Cumulative (2040) with Project Conditions ¹	2020	2040
Household Population	42,730	64,930	43,455	46,840
Employment Population	30,570	36,760	29,870	32,745

Notes:

1. Household and employment populations rounded to the nearest 10.

Source: Fehr & Peers, 2022.

The proposed Project projected household and employment population will increase by approximately 22,200 residents and 6,190 employees, respectively, compared to what is considered existing conditions. As identified in **Table 4-8**, the ABAG growth forecast for horizon year 2040 projected a household population increase of 3,385 residents and an employment population increase of 2,875 employees in the City of Campbell. Consequently, the Envision Campbell General Plan and Housing Element Update will increase household and employment population by more than what is currently projected by ABAG. Therefore, the impact is **significant-and-unavoidable**. However, the proposed Project includes a Housing Element that was developed primarily in response to the Regional Housing Needs Allocation, or "RHNA", allocated to the City of Campbell to comply with California State planning law. The Housing Element portion of the General Plan addresses the City's obligations and programs for the provision of its fair share of housing in California. The proposed Project would guide future residential growth consistent with Campbell's RHNA obligations and would create opportunities to address the jobs/housing imbalance by providing a range of high-quality housing options and creating opportunities for affordable housing to be constructed.

4.4.3 Hazard Impact Assessment

The proposed Project would have a significant impact relative to hazards if it would substantially increase hazards due to a roadway geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Safety impacts may occur due to changes in the physical or operational conditions of the transportation network. Physical impacts may be related to changes in the land use context along a roadway such that the volume, mix, or speed of traffic was not anticipated as part of the original multimodal transportation network design. To address potential safety impacts, subsequent projects under the Envision Campbell General Plan and Housing Element Update—including any new roadway, bicycle, pedestrian, and transit infrastructure improvements—would be subject to, and designed in accordance with, City standards and specifications, which address potential design hazards including sight distance, driveway placement, and signage and striping. Additionally, any new



transportation facilities, or improvements to such facilities, associated with subsequent projects would be constructed based on industry design standards and best practices consistent with the City's zoning code and building design and inspection requirements. The City's evaluation of projects' access and circulation will incorporate analysis with respect to City standards for vehicular level of service and queueing, as well as for service to pedestrians, bicyclists, and transit users. Therefore, the proposed Project would result in a **less-than-significant** impact to transportation hazards.

4.4.3.1 General Plan Minimization Measures

Applicable goals, policies, and actions related to hazards and safety in the proposed Envision Campbell General Plan and Housing Element Update are listed below. Goals, policies, and actions described in the **Plan Conflict Evaluation** and **Vehicle Miles Traveled (VMT) Analysis** sections also minimize the proposed Project's effects on hazards.

Transportation Element

- *Goal T-4: Implement Best Transportation Practices in New Developments.*
 - *Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.*
 - *Action T-4i: Locate driveways a sufficient distance from intersections. Modify the zoning ordinance to encourage owners of non-single family residential and mixed-use properties to consolidate driveways and enter into access easements to minimize the number of driveways crossing sidewalks.*
 - *Action T-4j: Design parking lots to minimize impacts on the street system by providing adequately sized driveways, sufficient queuing, and efficient circulation.*
- *Goal T-6: Provide well-maintained and safe streets.*
 - *Policy T-6.1: Ensure all City roads are maintained and repaired in a timely fashion.*
 - *Policy T-6.2: Consider all transportation improvements as opportunities to improve safety, access, and mobility for all roadway users.*
 - *Policy T-6.3: Coordinate pedestrian and bicycle facility improvements and "road diet" reconfigurations with pavement improvement projects (e.g. repaving and restriping) to the greatest extent feasible and while taking into consideration potential secondary effects or unintended impacts.*
 - *Policy T-6.4: Maximize the use of grant sources to provide ongoing maintenance, operation, and management of the City's circulation network.*
 - *Action T-6a: Develop and implement a traffic safety plan aimed at reducing roadway collisions to the greatest extent feasible. The traffic safety plan may include, but is not limited to, the use of radar speed signs, more aggressive road safety and speed enforcement, and other measures deemed effective by the City. The traffic safety plan*



should be coordinated with and consistent with the Neighborhood Traffic Calming Program (NTCP) to the greatest extent feasible, and may be integrated into other City plans and programs, as deemed appropriate.

- *Action T-6b: Promote and support Safe Routes to School policies and programs for all schools serving Campbell, including safe and convenient walking and bicycle connections.*
- *Action T-6c: Assess street conditions and prioritize repairs while balancing the needs of the community using input from the City's Pavement Management System.*
- *Action T-6d: Maintain a Pavement Condition Index (PCI) of 70 or better for all streets under Campbell's jurisdiction.*
- *Action T-6e: Where feasible, coordinate pedestrian and bicycle facility improvements and "road diet" reconfigurations with roadway maintenance activities so that they can be implemented in a cost-effective manner.*
- *Action T-6f: Limit unnecessary utility cuts and trenching in the public right of way and promote coordinated installation between multiple utility providers.*
- *Action T-6g: Install, maintain, and repair city-wide street lighting as needed to provide a safe environment, without negatively impacting neighborhood character.*
- *Action T-6h: Street maintenance should include upkeep and regular cleaning of bicycle routes to remove debris and repair poor pavement conditions that discourage bicycle riding.*
- *Action T-6i: Continually seek opportunities to fund maintenance of the circulation network, including the active pursuit by the Public Works Department of a wide range of grant sources overseen by MTC and other agencies.*

4.4.4 Emergency Access Impact Assessment

For this analysis, a significant impact would occur if the proposed Project or an element of the Project would result in inadequate emergency access. There are no specific development projects associated with the Envision Campbell General Plan and Housing Element Update; thus, specific sites developed under the proposed Project cannot be analyzed for adequacy of emergency access at this time. However, since the City maintains the roadway network, emergency access to new development sites proposed under the Project would be subject to review by the City of Campbell (in accordance with industry design standards, including the City of Campbell Standard Specifications (2022)) and responsible emergency service agencies, ensuring the projects would be designed to meet all emergency access and design standards. The City also requires the preparation of construction management plans that minimize temporary obstruction of traffic during site construction.

Additional vehicles associated with new development sites could increase delays for emergency response vehicles during peak commute hours. However, emergency responders maintain response plans which include use of alternate routes, sirens, and other methods to bypass congestion and minimize response times. In addition, California law requires drivers to yield the right-of-way to emergency vehicles and remain stopped until the emergency vehicle passes to ensure the safe and timely passage of emergency vehicles.



Based on the above considerations, adequate emergency access would be provided to new development sites, and the impact would be ***less-than-significant***.

4.4.4.1 General Plan Minimization Measures

Applicable goals, policies, and actions related to emergency access in the proposed Envision Campbell General Plan and Housing Element Update are listed below. Goals, policies, and actions described in the ***Plan Conflict Evaluation, Vehicle Miles Traveled (VMT) Analysis, and Hazard Impact Assessment*** sections also minimize the proposed Project's effects on emergency access.

Transportation Element

- *Goal T-4: Implement Best Transportation Practices in New Developments.*
 - *Policy T-4.1: Require new developments and redevelopments to incorporate design features that support walking, bicycling, ridesharing, ride-hailing, and transit use.*
 - *Action T-4I: Require all new developments to provide adequate emergency access.*



Attachment A: Roadway Segment Counts

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13089 -- English (ENU)

Datasets:

Site: [7] BASCOM S OF HAMILTON
Input A: 1 - North bound. - Lane= 0, Added to totals. (/2.000)
Input B: 3 - South bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=7401 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1093	1181	1379	1008	969	806	510	307	149	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228	283	360	280	249	252	155	98	52	25
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	303	282	347	250	241	198	126	80	36	33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	302	310	321	268	250	189	127	79	34	22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	261	307	351	211	229	168	103	51	28	18

* Wednesday, September 14, 2016=17692, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
98	65	33	43	68	228	478	1170	1650	1010	837	995	1157	1136	1158	1062	1187	1341	1106	972	807	604	323	169	
25	29	6	7	9	45	85	213	402	318	176	213	241	282	266	241	290	347	308	267	213	180	108	55	36
33	16	11	14	13	56	108	271	410	236	227	237	315	278	290	299	294	339	275	243	206	156	75	45	24
22	8	8	15	28	67	136	315	468	217	234	260	310	282	304	260	294	317	270	253	209	144	66	44	23
18	12	8	8	19	60	150	372	371	240	201	286	291	295	299	262	310	339	254	209	181	124	74	26	23

AM Peak 0745 - 0845 (1651), AM PHF=0.88 PM Peak 1700 - 1800 (1341), PM PHF=0.97

* Thursday, September 15, 2016=18507, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
105	89	57	36	62	222	487	1302	1710	1224	906	1053	1229	1164	1136	1205	1212	1365	1113	930	741	599	361	205	
36	22	12	11	9	38	95	199	414	433	228	228	298	313	284	303	308	358	290	254	200	158	110	65	50
24	23	17	6	10	57	96	268	410	281	236	260	309	282	288	305	268	345	293	242	199	183	106	45	36
23	12	19	12	19	62	153	378	463	270	221	265	333	285	333	298	299	316	271	216	180	137	83	51	28
23	32	9	7	25	67	144	458	423	241	222	302	289	285	232	300	338	346	259	218	162	121	63	45	26

AM Peak 0745 - 0845 (1744), AM PHF=0.94 PM Peak 1700 - 1800 (1365), PM PHF=0.95

* Friday, September 16, 2016=6624 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
140	87	66	41	57	229	460	1032	1394	994	965	1084	77	0	-	-	-	-	-	-	-	-	-	-	-
50	26	25	15	6	34	70	207	326	264	264	256	76	0	0	-	-	-	-	-	-	-	-	-	-
36	24	15	4	12	67	111	238	372	251	203	273	1	0	1	-	-	-	-	-	-	-	-	-	-
28	20	9	12	23	62	131	276	386	260	240	300	0	0	-	-	-	-	-	-	-	-	-	-	-
26	18	17	10	16	67	149	312	311	220	259	255	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (1395), AM PHF=0.90

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13090 -- English (ENU)

Datasets:

Site: [7] BASCOM S OF HAMILTON
Input A: 1 - North bound. - Lane= 0, Excluded from totals.
Input B: 3 - South bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=7338 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1031	1267	1428	1300	960	586	423	204	140	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218	283	343	308	275	193	148	64	35	22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	260	328	380	352	242	151	105	54	33	26
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	251	316	381	316	227	132	95	41	44	21
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	303	341	325	324	216	111	76	46	29	15

* Wednesday, September 14, 2016=15849, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
83	57	40	60	80	154	247	588	783	868	903	1054	1057	1035	1035	1134	1302	1565	1343	998	619	435	245	169	
22	16	9	11	15	23	39	99	216	206	202	243	274	274	264	239	302	405	352	280	188	137	78	44	36
26	14	11	16	20	33	61	106	177	199	232	242	267	256	254	280	332	411	372	253	158	122	61	34	26
21	13	7	12	18	25	57	174	214	204	220	250	277	251	264	278	333	363	338	251	152	98	61	50	15
15	14	13	22	28	74	91	210	177	260	250	320	240	255	254	338	335	386	282	215	122	78	45	42	26

AM Peak 1145 - 1245 (1137), AM PHF=0.89 PM Peak 1700 - 1800 (1565), PM PHF=0.95

* Thursday, September 15, 2016=16271, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
103	58	56	45	84	138	286	659	790	838	863	1101	1215	1075	1024	1198	1343	1528	1373	986	611	431	272	199	
36	13	18	7	15	21	45	101	209	209	189	220	314	260	265	279	305	382	421	237	183	128	80	51	37
26	14	14	8	24	27	60	123	200	192	222	243	325	299	222	307	337	393	339	247	164	106	64	59	34
15	13	15	8	14	27	75	173	198	206	208	288	269	222	287	306	343	393	298	256	143	108	70	49	26
26	18	10	23	31	64	107	263	184	231	245	351	308	295	251	307	359	360	316	247	122	90	60	40	32

AM Peak 1130 - 1230 (1278), AM PHF=0.91 PM Peak 1715 - 1815 (1567), PM PHF=0.93

* Friday, September 16, 2016=5341 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
128	70	57	45	88	153	281	651	842	891	935	1138	65	0	-	-	-	-	-	-	-	-	-	-	-
37	14	17	10	19	27	48	122	228	216	198	218	64	0	0	-	-	-	-	-	-	-	-	-	-
34	20	12	7	21	22	67	127	178	217	225	270	1	0	1	-	-	-	-	-	-	-	-	-	-
26	12	16	10	19	28	63	183	210	196	242	292	0	0	-	-	-	-	-	-	-	-	-	-	-
32	24	12	18	30	76	104	220	227	263	270	359	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 1100 - 1200 (1138), AM PHF=0.79

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13135 -- English (ENU)

Datasets:

Site: [21EB] CAMPBELL E OF RAILWAY
Input A: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=3724 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1176	889	593	503	303	174	87		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	271	265	176	166	87	52	32	24	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	163	278	244	151	132	70	41	18	12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	235	328	217	138	119	74	30	21	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	273	299	164	129	87	72	52	16	8

* Wednesday, September 14, 2016=9600, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
62	14	4	4	14	36	107	292	455	389	398	485	589	581	643	758	900	1132	932	583	537	392	201	98	
24	3	0	1	2	5	21	47	106	90	89	112	128	158	149	151	203	267	266	148	173	112	64	32	17
12	5	0	0	4	8	16	64	116	88	111	107	157	141	164	176	232	282	242	154	126	121	55	28	12
18	1	0	0	3	12	24	75	128	106	91	121	151	147	159	196	206	307	228	148	121	79	44	21	17
8	5	4	3	6	11	46	107	106	105	109	146	153	136	171	235	260	278	197	134	117	81	40	17	5

AM Peak 1145 - 1245 (581), AM PHF=0.93 PM Peak 1700 - 1800 (1132), PM PHF=0.92

* Thursday, September 15, 2016=10131, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
51	27	15	6	17	50	108	274	482	378	445	545	607	624	634	814	958	1259	961	637	484	354	268	136	
17	5	7	2	2	5	15	55	101	90	111	104	140	142	152	232	216	292	313	206	147	96	69	47	19
12	8	5	3	1	11	19	57	114	101	93	142	167	152	149	178	210	334	230	168	106	89	87	31	23
17	6	3	1	3	11	27	54	139	94	96	136	127	150	165	189	280	345	232	136	125	93	59	28	22
5	8	0	0	11	24	47	110	129	94	145	163	174	180	169	215	254	290	187	128	107	77	53	31	8

AM Peak 1130 - 1230 (605), AM PHF=0.91 PM Peak 1715 - 1815 (1280), PM PHF=0.93

* Friday, September 16, 2016=3176 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
72	58	17	15	19	31	116	294	471	422	418	579	636	32	1	-	-	-	-	-	-	-	-	-	-
19	16	7	5	6	3	15	59	124	109	99	121	168	31	0	-	-	-	-	-	-	-	-	-	-
23	17	5	3	4	7	17	59	147	78	102	167	132	1	0	-	-	-	-	-	-	-	-	-	-
22	14	1	4	6	5	29	76	101	118	97	132	178	1	0	-	-	-	-	-	-	-	-	-	-
8	11	4	3	3	17	55	100	100	117	121	160	159	0	1	-	-	-	-	-	-	-	-	-	-

AM Peak 1145 - 1245 (637), AM PHF=0.89

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13134 -- English (ENU)

Datasets:

Site: [21WB] CAMPBELL E OF RAILWAY
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=3354 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	612	672	690	568	380	239	133	62	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	129	173	205	186	123	74	44	21	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	153	165	172	154	99	71	32	15	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	160	170	165	114	70	56	22	20	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160	170	165	148	114	88	39	35	7	3

* Wednesday, September 14, 2016=9955, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
24	25	8	7	28	74	262	826	919	645	507	587	601	640	547	602	648	768	700	608	430	302	130	74	
5	6	3	1	5	13	36	155	252	190	135	141	134	187	135	146	160	171	155	166	138	95	41	29	16
8	4	1	1	3	11	60	178	236	171	133	139	156	167	162	152	132	192	203	174	109	83	37	23	7
8	11	1	3	8	23	71	220	218	138	112	157	169	137	120	159	152	198	190	141	97	74	24	10	4
3	4	3	2	12	28	96	274	215	147	128	151	143	149	130	146	205	208	153	128	87	50	28	12	4

AM Peak 0730 - 0830 (981), AM PHF=0.89 PM Peak 1700 - 1800 (768), PM PHF=0.92

* Thursday, September 15, 2016=10474, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
31	22	15	15	19	74	271	836	1064	721	586	605	677	629	623	594	652	733	733	588	448	302	161	81	
16	3	4	6	2	12	40	164	255	256	160	134	153	179	154	156	154	189	197	161	135	95	50	31	11
7	6	3	5	4	16	58	194	268	180	159	144	191	157	154	140	145	171	190	147	119	89	48	19	14
4	5	3	0	6	20	70	211	263	156	126	160	164	133	158	145	168	197	174	130	91	70	37	17	10
4	8	5	5	8	27	103	268	279	129	141	168	169	160	157	153	185	177	173	151	103	49	26	15	16

AM Peak 0815 - 0915 (1065), AM PHF=0.96 PM Peak 1730 - 1830 (760), PM PHF=0.96

* Friday, September 16, 2016=4618 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
51	25	14	14	43	73	233	718	877	611	584	639	682	56	1	-	-	-	-	-	-	-	-	-	-
11	7	8	4	5	12	38	117	287	164	159	133	163	54	0	-	-	-	-	-	-	-	-	-	-
14	7	3	3	11	13	53	175	223	149	143	171	175	2	0	-	-	-	-	-	-	-	-	-	-
10	5	2	4	8	13	42	192	207	156	147	166	170	0	0	-	-	-	-	-	-	-	-	-	-
16	6	1	3	19	35	101	234	160	143	135	170	174	0	1	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (951), AM PHF=0.83

Traffic Data Service -- San Jose, CA

Vehicle Counts

VehicleCount-13116 -- English (ENU)

Datasets:

Site: [10] CAMPBELL W OF 1ST
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: East (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Monday, September 12, 2016 - Total=1063 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148	257	182	200	121	76	47	32	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	70	39	57	31	27	12	8	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	61	57	50	28	24	14	10	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59	67	42	58	30	12	13	7	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	59	44	35	32	13	8	7	7

* Tuesday, September 13, 2016 - Total=3161, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
26	8	2	3	3	23	47	115	213	142	167	175	187	202	201	256	238	290	248	227	173	104	67	44	
8	2	0	1	2	1	6	26	56	26	47	41	38	44	43	71	57	77	83	57	61	30	19	15	6
6	2	2	0	0	6	11	18	54	41	32	41	48	54	56	75	51	57	56	74	36	20	18	12	6
5	2	0	1	1	9	11	24	53	33	38	49	49	57	49	63	69	76	63	50	43	27	21	12	9
7	2	0	1	0	7	19	47	50	42	50	44	52	47	53	47	61	80	46	46	33	27	9	5	5

AM Peak 0800 - 0900 (213), AM PHF=0.95 PM Peak 1715 - 1815 (296), PM PHF=0.89

* Wednesday, September 14, 2016 - Total=3446, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
26	5	0	4	7	14	50	93	187	161	165	205	247	258	235	262	225	325	256	275	203	121	76	46	
6	1	0	0	1	3	8	22	49	34	40	43	47	69	75	60	44	79	66	76	61	39	27	13	7
6	2	0	1	2	3	6	20	47	42	44	51	60	76	51	53	53	97	65	62	57	29	23	22	17
9	1	0	3	1	4	11	21	45	46	31	65	69	58	51	61	57	86	57	68	45	31	10	6	8
5	1	0	0	3	4	25	30	46	39	50	46	71	55	58	88	71	63	68	69	40	22	16	5	2

AM Peak 1145 - 1245 (222), AM PHF=0.80 PM Peak 1645 - 1745 (333), PM PHF=0.86

* Thursday, September 15, 2016 - Total=3618, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
34	14	3	2	11	20	57	94	204	164	159	234	225	243	263	256	282	312	262	246	213	172	114	34	
7	4	1	0	0	2	9	17	47	45	39	49	66	55	60	62	70	84	70	73	63	50	33	6	11
17	4	1	2	3	5	13	25	52	38	35	56	59	56	70	66	74	69	72	61	62	46	33	0	10
8	3	1	0	4	4	12	21	51	39	38	61	52	64	66	61	68	80	64	55	54	43	22	13	13
2	3	0	0	4	9	23	31	54	42	47	68	48	68	67	67	70	79	56	57	34	33	26	15	4

AM Peak 1130 - 1230 (254), AM PHF=0.93 PM Peak 1700 - 1800 (312), PM PHF=0.93

* Friday, September 16, 2016 - Total=92 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
38	26	12	8	8	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
11	5	6	3	3	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
10	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
13	8	1	1	3	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
4	10	4	2	1	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-

AM Peak 0000 - 0100 (38), AM PHF=0.73

Traffic Data Service -- San Jose, CA

Vehicle Counts

VehicleCount-13114 -- English (ENU)

Datasets:

Site: [10] CAMPBELL W OF 1ST
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: West (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Monday, September 12, 2016 - Total=718 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77	167	129	118	96	63	41	27	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	44	28	29	26	23	13	6	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	34	23	28	28	15	11	8	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25	48	39	36	20	16	14	7	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	41	39	25	22	9	3	6	4

* Tuesday, September 13, 2016 - Total=2064, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
16	6	2	3	1	8	29	60	120	98	111	129	135	154	137	133	158	158	163	139	127	90	55	32	
6	1	1	1	0	2	4	11	26	21	33	25	28	33	33	26	38	48	40	44	42	21	22	10	9
5	3	0	0	1	1	8	13	27	22	20	32	40	36	36	29	31	38	39	41	23	30	13	8	3
1	0	1	1	0	1	10	21	28	20	33	33	41	46	29	34	45	37	41	33	31	24	9	8	3
4	2	0	1	0	4	7	15	39	35	25	39	26	39	39	44	44	35	43	21	31	15	11	6	3

AM Peak 1145 - 1245 (148), AM PHF=0.90 PM Peak 1630 - 1730 (175), PM PHF=0.91

* Wednesday, September 14, 2016 - Total=2209, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
18	13	6	1	2	8	29	73	106	97	97	140	146	146	123	136	167	174	193	183	140	100	72	39	
9	4	1	0	1	1	2	11	29	27	18	28	34	40	34	39	28	41	39	49	44	23	26	11	8
3	4	1	0	1	0	11	15	23	23	21	33	39	36	30	34	33	47	61	48	38	33	14	16	9
3	3	2	1	0	5	6	20	30	25	27	37	36	38	34	34	42	38	53	59	32	17	11	6	5
3	2	2	0	0	2	10	27	24	22	31	42	37	32	25	29	64	48	40	27	26	27	21	6	4

AM Peak 1130 - 1230 (152), AM PHF=0.90 PM Peak 1815 - 1915 (203), PM PHF=0.83

* Thursday, September 15, 2016 - Total=2438, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
26	13	5	7	3	5	39	89	133	114	103	139	190	175	141	129	164	189	169	166	143	139	114	43	
8	2	3	4	0	2	2	19	31	29	26	22	36	51	31	32	36	53	45	40	39	42	36	14	9
9	3	0	2	0	1	14	23	37	35	30	34	53	40	37	27	32	39	47	47	34	29	31	0	10
5	5	1	1	2	2	8	19	32	32	24	47	58	45	41	33	41	45	37	35	39	36	25	16	5
4	3	1	0	1	0	15	28	33	18	23	36	43	39	32	37	55	52	40	44	31	32	22	13	6

AM Peak 1145 - 1245 (183), AM PHF=0.79 PM Peak 1215 - 1315 (205), PM PHF=0.88

* Friday, September 16, 2016 - Total=86 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
30	32	11	7	5	1	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
9	7	7	1	1	1	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
10	7	2	4	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
5	9	1	2	4	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-
6	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-

AM Peak 0100 - 0200 (32), AM PHF=0.89

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13113 -- English (ENU)

Datasets:

Site: [9] CIVIC CENTER W OF 1ST
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Monday, September 12, 2016=1784 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	532	428	339	219	144	83	39	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	110	110	61	56	28	15	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	118	111	78	55	39	16	9	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118	150	99	76	42	29	25	10	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	112	114	108	76	61	20	14	5	5

* Tuesday, September 13, 2016=6812, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
23	11	7	9	10	48	153	573	677	395	322	361	409	410	446	473	450	513	462	397	303	195	125	46	
8	2	3	1	1	6	13	90	183	104	75	76	90	103	100	112	99	116	138	115	92	60	37	18	5
7	5	2	0	1	8	37	135	204	120	89	82	111	95	114	127	102	136	114	114	85	51	28	9	5
3	1	1	3	3	16	35	173	118	89	80	98	87	103	112	122	124	124	122	84	54	47	32	11	7
5	3	1	5	5	18	69	176	173	83	79	106	122	109	120	113	126	138	88	85	73	37	29	8	5

AM Peak 0730 - 0830 (736), AM PHF=0.90 PM Peak 1715 - 1815 (536), PM PHF=0.97

* Wednesday, September 14, 2016=7099, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
22	10	7	5	14	45	145	560	653	417	343	412	421	428	424	451	504	626	531	420	298	219	93	56	
5	2	1	1	3	8	19	110	177	118	83	92	100	116	104	110	129	154	144	107	96	69	28	26	11
5	3	2	0	0	7	30	114	165	108	99	102	94	114	118	99	109	160	134	115	67	66	30	12	4
7	5	0	3	5	11	40	147	161	96	72	106	113	95	98	115	113	166	115	102	74	50	18	10	5
5	0	4	1	6	19	57	189	151	96	89	113	114	104	105	128	154	147	138	97	61	36	17	8	5

AM Peak 0745 - 0845 (691), AM PHF=0.91 PM Peak 1645 - 1745 (634), PM PHF=0.95

* Thursday, September 15, 2016=7454, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
25	20	5	6	13	49	163	599	749	474	370	407	468	415	412	448	542	580	561	425	317	219	124	69	
11	8	2	0	1	9	21	104	181	187	97	88	121	99	93	122	139	142	178	124	87	64	35	26	6
4	3	2	3	4	6	37	136	191	106	106	111	144	111	109	99	120	137	138	107	88	77	36	12	12
5	2	1	0	4	14	44	162	189	94	81	91	97	88	113	112	136	167	120	101	67	48	37	18	6
5	7	0	3	4	20	62	198	189	88	88	118	106	118	99	115	148	135	126	94	76	30	16	13	12

AM Peak 0745 - 0845 (758), AM PHF=0.96 PM Peak 1730 - 1830 (617), PM PHF=0.87

* Friday, September 16, 2016=721 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
36	23	14	7	14	50	141	437	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
6	7	6	1	1	6	10	87	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
12	8	5	3	2	12	36	123	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
6	2	3	2	3	11	35	123	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-
12	6	0	1	8	21	61	104	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-

AM Peak 0700 - 0800 (437), AM PHF=0.89

Traffic Data Service -- San Jose, CA

Vehicle Counts

VehicleCount-13130 -- English (ENU)

Datasets:

Site: [19] CURTNER W OF SALERNO
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: East (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016 - Total=2887 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	279	425	448	464	473	305	225	116	100	52	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	78	98	119	118	126	88	69	37	36	16	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	95	107	126	121	74	65	27	27	16	5
-	-	-	-	-	-	-	-	-	-	-	-	-	18	81	132	98	116	112	84	43	32	19	11	9
-	-	-	-	-	-	-	-	-	-	-	-	-	46	65	100	124	104	114	59	48	20	18	9	8

* Wednesday, September 14, 2016 - Total=4412, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
31	14	5	14	4	32	66	163	200	157	155	204	235	238	289	393	437	464	466	336	219	149	88	53	
9	2	1	5	1	7	15	43	51	40	42	54	75	51	70	92	108	107	117	95	69	35	28	16	10
5	4	3	2	0	6	21	49	45	25	37	41	56	61	76	86	107	117	117	96	60	41	24	16	8
9	4	1	5	3	7	13	35	51	49	33	46	51	62	75	106	116	133	118	75	42	37	24	16	6
8	4	0	2	0	12	17	36	53	43	43	63	53	64	68	109	106	107	114	70	48	36	12	5	6

AM Peak 1145 - 1245 (245), AM PHF=0.82 PM Peak 1715 - 1815 (474), PM PHF=0.89

* Thursday, September 15, 2016 - Total=4556, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
30	12	6	5	10	27	72	192	215	164	180	185	290	244	303	388	431	495	437	329	218	162	107	54	
10	3	2	2	2	8	11	38	82	42	45	42	74	59	73	81	110	129	130	117	66	43	32	14	8
8	4	0	1	1	4	20	38	47	37	43	58	77	57	85	110	99	129	113	66	51	43	27	18	10
6	3	1	1	4	5	17	48	44	47	45	37	67	68	76	97	109	135	99	82	52	35	25	9	7
6	2	3	1	3	10	24	68	42	38	47	48	72	60	69	100	113	102	95	64	49	41	23	13	12

AM Peak 1145 - 1245 (266), AM PHF=0.86 PM Peak 1645 - 1745 (506), PM PHF=0.94

* Friday, September 16, 2016 - Total=1075 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
37	18	11	9	15	27	61	162	163	151	180	241	0	0	-	-	-	-	-	-	-	-	-	-	-
8	7	5	1	5	5	6	42	51	36	44	59	0	0	-	-	-	-	-	-	-	-	-	-	-
10	5	2	2	3	7	20	46	28	45	41	53	0	0	-	-	-	-	-	-	-	-	-	-	-
7	3	3	2	4	5	15	32	43	32	45	70	0	0	-	-	-	-	-	-	-	-	-	-	-
12	3	1	4	3	10	20	42	41	38	50	59	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 1100 - 1200 (241), AM PHF=0.86

Traffic Data Service -- San Jose, CA

Vehicle Counts

VehicleCount-13128 -- English (ENU)

Datasets:

Site: [19] CURTNER W OF SALERNO
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: West (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016 - Total=1652 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	230	262	217	244	200	206	124	83	55	31	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	71	56	67	47	62	34	19	11	6	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	79	55	65	46	54	43	13	18	7	2
-	-	-	-	-	-	-	-	-	-	-	-	-	14	61	54	55	58	56	56	26	27	18	10	3
-	-	-	-	-	-	-	-	-	-	-	-	-	54	56	58	51	54	51	34	21	24	8	8	5

* Wednesday, September 14, 2016 - Total=3713, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
16	8	5	11	26	86	207	281	317	247	245	206	255	239	227	215	224	221	205	172	117	99	58	26	
6	3	1	1	3	11	30	77	75	57	77	57	59	53	64	50	59	57	47	57	31	23	17	6	4
2	3	2	2	6	15	47	67	74	62	69	57	70	67	51	51	56	59	62	39	31	25	12	7	4
3	0	2	3	5	25	58	75	90	68	46	48	71	63	52	53	51	50	50	41	30	28	17	12	2
5	2	0	5	12	35	72	62	78	60	53	44	55	56	60	61	58	55	46	35	25	23	12	1	4

AM Peak 0800 - 0900 (317), AM PHF=0.88 PM Peak 1200 - 1300 (255), PM PHF=0.90

* Thursday, September 15, 2016 - Total=3885, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
14	10	11	8	35	70	219	291	299	295	237	228	272	254	222	251	213	244	217	183	135	83	62	32	
4	5	4	1	4	8	36	73	59	82	60	56	69	58	51	68	52	60	55	53	40	21	29	15	5
4	3	0	2	10	12	39	70	80	71	57	48	61	60	53	74	53	74	49	41	26	29	11	3	4
2	1	6	3	11	20	62	61	83	86	59	61	60	79	56	61	56	64	60	49	35	20	10	9	4
4	1	1	2	10	30	82	87	77	56	61	63	82	57	62	48	52	46	53	40	34	13	12	5	4

AM Peak 0815 - 0915 (322), AM PHF=0.97 PM Peak 1245 - 1345 (279), PM PHF=0.85

* Friday, September 16, 2016 - Total=1692 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
17	10	11	6	32	86	223	275	279	276	254	223	0	0	-	-	-	-	-	-	-	-	-	-	
5	3	5	0	4	13	33	59	62	71	77	50	0	0	-	-	-	-	-	-	-	-	-	-	-
4	2	2	1	7	16	51	70	87	51	63	54	0	0	-	-	-	-	-	-	-	-	-	-	-
4	2	1	1	10	24	69	77	70	83	60	64	0	0	-	-	-	-	-	-	-	-	-	-	-
4	3	3	4	11	33	70	69	60	71	54	55	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (295), AM PHF=0.85

Traffic Data Service -- San Jose, CA

Vehicle Counts

VehicleCount-13131 -- English (ENU)

Datasets:

Site: [20] DELL S OF HACIENDA
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: North (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016 - Total=2061 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	209	246	289	368	430	216	127	87	30	44	15	
-	-	-	-	-	-	-	-	-	-	-	-	-	30	66	53	92	134	81	38	25	9	12	5	2
-	-	-	-	-	-	-	-	-	-	-	-	-	62	49	68	67	113	38	37	23	6	12	8	1
-	-	-	-	-	-	-	-	-	-	-	-	-	69	68	83	125	100	47	35	23	6	9	0	0
-	-	-	-	-	-	-	-	-	-	-	-	74	48	63	85	84	83	50	17	16	9	11	2	1

* Wednesday, September 14, 2016 - Total=3348, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	5	31	13	23	14	49	128	129	144	186	260	303	215	254	308	381	394	220	127	76	41	31	12	
2	4	8	1	6	5	4	35	30	38	49	45	86	65	61	70	113	120	66	49	29	12	14	3	4
1	1	5	3	3	5	8	29	28	23	51	55	74	50	59	68	66	109	54	38	23	7	5	2	1
0	0	12	4	8	1	18	29	37	38	39	69	77	53	65	100	114	95	55	19	14	8	6	2	4
1	0	6	5	6	3	19	35	34	45	47	91	66	47	69	70	88	70	45	21	10	14	6	5	0

AM Peak 1145 - 1245 (328), AM PHF=0.90 PM Peak 1630 - 1730 (431), PM PHF=0.90

* Thursday, September 15, 2016 - Total=3394, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	18	13	17	21	24	51	102	140	151	183	275	307	240	252	331	358	384	202	125	69	73	22	27	
4	6	0	6	5	6	3	28	41	38	51	63	92	80	54	83	105	119	73	39	24	29	9	11	4
1	7	2	6	3	6	15	23	22	34	48	50	82	51	66	75	60	95	45	44	21	19	6	7	3
4	1	2	2	8	4	12	26	43	34	40	80	81	59	66	104	110	105	44	22	13	12	4	4	5
0	4	9	3	5	8	21	25	34	45	44	82	52	50	66	69	83	65	40	20	11	13	3	5	1

AM Peak 1145 - 1245 (337), AM PHF=0.92 PM Peak 1630 - 1730 (407), PM PHF=0.86

* Friday, September 16, 2016 - Total=1149 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	6	17	19	29	17	48	107	139	148	159	264	183	0	-	-	-	-	-	-	-	-	-	-	-
4	1	2	4	3	4	2	31	31	32	46	49	89	0	-	-	-	-	-	-	-	-	-	-	-
3	3	1	7	8	5	11	16	37	37	37	64	60	0	-	-	-	-	-	-	-	-	-	-	-
5	1	2	4	10	2	17	28	30	35	47	77	34	0	-	-	-	-	-	-	-	-	-	-	-
1	1	12	4	8	6	18	32	41	44	29	74	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 1115 - 1215 (304), AM PHF=0.85

Traffic Data Service -- San Jose, CA

Vehicle Counts

VehicleCount-13133 -- English (ENU)

Datasets:

Site: [20] DELL S OF HACIENDA
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: South (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016 - Total=1200 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	224	200	191	167	161	89	62	56	18	22	10	
-	-	-	-	-	-	-	-	-	-	-	-	-	49	41	54	37	34	35	26	18	3	3	3	0
-	-	-	-	-	-	-	-	-	-	-	-	-	59	60	45	51	39	16	14	17	7	7	3	1
-	-	-	-	-	-	-	-	-	-	-	-	-	61	49	51	39	40	20	15	13	4	6	2	1
-	-	-	-	-	-	-	-	-	-	-	-	64	55	50	41	40	48	18	7	8	4	6	2	4

* Wednesday, September 14, 2016 - Total=3430, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	19	23	38	60	115	182	327	412	303	218	204	264	282	191	190	174	154	129	60	33	19	17	10	
0	1	5	6	16	20	42	73	120	99	62	54	51	81	55	41	45	41	36	20	7	5	6	4	2
1	6	7	3	7	14	38	67	102	54	54	43	64	76	51	61	38	38	39	14	11	6	3	2	1
1	5	4	8	13	20	35	80	108	73	55	51	64	63	35	48	37	44	22	15	11	3	6	0	2
4	7	7	21	24	61	67	107	82	77	47	56	85	62	50	40	54	31	32	11	4	5	2	4	3

AM Peak 0745 - 0845 (437), AM PHF=0.91 PM Peak 1230 - 1330 (306), PM PHF=0.90

* Thursday, September 15, 2016 - Total=3432, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
8	25	30	33	56	111	184	289	398	301	222	250	250	249	194	200	187	143	108	95	57	17	12	13	
2	4	4	6	8	16	37	76	129	81	58	57	52	74	47	55	51	26	29	41	11	4	3	7	1
1	8	9	1	8	18	42	60	105	73	56	54	58	72	57	43	51	35	23	26	21	6	2	2	2
2	5	8	8	15	18	37	69	89	68	58	75	66	52	52	42	37	41	20	14	16	4	5	3	4
3	8	9	18	25	59	68	84	75	79	50	64	74	51	38	60	48	41	36	14	9	3	2	1	0

AM Peak 0745 - 0845 (407), AM PHF=0.79 PM Peak 1230 - 1330 (286), PM PHF=0.97

* Friday, September 16, 2016 - Total=1927 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
7	24	24	43	47	115	178	304	398	257	195	190	145	0	-	-	-	-	-	-	-	-	-	-	-
1	6	1	6	6	18	34	69	117	75	55	45	57	0	-	-	-	-	-	-	-	-	-	-	-
2	5	5	8	7	14	34	56	90	64	47	51	61	0	-	-	-	-	-	-	-	-	-	-	-
4	4	5	11	12	22	38	83	92	59	46	51	27	0	-	-	-	-	-	-	-	-	-	-	-
0	9	13	18	22	61	72	96	99	59	47	43	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0800 - 0900 (398), AM PHF=0.85

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13092 -- English (ENU)

Datasets:

Site: [6EB] HAMILTON W OF BASCOM
Input A: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=13291 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2063	2318	2494	2259	1494	1067	851	470	278	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	493	511	624	630	409	307	232	120	76	33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	521	628	637	633	392	271	251	151	83	35
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	459	567	619	523	350	259	227	105	64	35
-	-	-	-	-	-	-	-	-	-	-	-	-	-	406	591	613	615	474	344	231	142	95	56	30

* Wednesday, September 14, 2016=27541, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
133	80	59	67	115	264	526	1260	1722	1585	1476	1479	1617	1816	1808	2053	2267	2517	2360	1676	1169	774	473	251	
33	22	15	13	19	46	95	201	402	394	383	364	414	421	453	466	523	640	668	474	330	224	151	68	46
35	20	11	18	28	43	123	296	453	408	355	332	386	467	406	532	536	620	630	482	299	233	121	73	36
35	21	14	19	23	55	122	352	452	390	339	369	410	451	460	470	597	641	556	366	281	183	109	54	37
30	17	20	18	47	121	186	412	416	394	399	416	408	478	489	586	611	617	506	354	260	134	93	57	25

AM Peak 0800 - 0900 (1722), AM PHF=0.95 PM Peak 1730 - 1830 (2556), PM PHF=0.96

* Thursday, September 15, 2016=28445, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
144	77	57	59	87	249	523	1575	2022	1781	1468	1629	1668	1706	1799	2141	2456	2481	2261	1581	1084	791	511	299	
46	24	21	10	16	36	93	199	526	445	362	358	411	394	428	519	616	615	655	454	310	241	145	82	49
36	17	15	10	25	54	118	361	497	423	370	424	435	455	436	548	612	613	610	398	274	214	141	94	49
37	17	11	20	17	53	140	493	509	450	372	390	404	403	461	544	601	641	498	343	243	182	117	66	36
25	20	11	20	30	107	173	522	490	464	365	457	418	454	475	531	628	614	499	388	258	155	108	58	43

AM Peak 0745 - 0845 (2054), AM PHF=0.98 PM Peak 1715 - 1815 (2521), PM PHF=0.96

* Friday, September 16, 2016=8828 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
177	80	49	62	108	249	492	1144	1525	1568	1516	1642	218	2	-	-	-	-	-	-	-	-	-	-	-
49	26	19	18	19	43	89	201	358	358	371	363	218	0	0	-	-	-	-	-	-	-	-	-	-
49	23	10	11	24	33	102	257	417	394	371	409	0	0	-	-	-	-	-	-	-	-	-	-	-
36	13	12	12	26	67	124	336	396	386	413	417	0	2	-	-	-	-	-	-	-	-	-	-	-
43	18	8	23	40	107	178	350	354	430	361	454	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 1100 - 1200 (1642), AM PHF=0.90

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13091 -- English (ENU)

Datasets:

Site: [6WB] HAMILTON W OF BASOM
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=10733 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1407	1778	2019	1754	1405	1051	710	391	220	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	443	516	439	411	287	210	114	66	31
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	484	397	541	445	363	270	209	99	51	38
-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	472	438	476	472	323	251	168	98	57	33
-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	439	501	487	398	308	243	124	80	46	19

* Wednesday, September 14, 2016=28407, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
121	71	45	60	136	467	1162	2380	2384	1802	1659	1656	1762	1744	1687	1674	1759	1974	1793	1435	1140	821	419	263	
31	25	8	7	20	93	165	488	647	500	430	372	447	441	416	427	439	485	483	409	292	261	141	86	40
38	21	11	14	28	95	233	560	569	446	410	391	453	420	435	406	424	504	470	363	276	211	92	76	32
33	11	13	25	40	131	331	680	565	429	413	447	395	432	414	445	412	490	453	319	289	186	98	55	32
19	15	13	14	49	149	434	653	604	428	406	446	467	451	423	397	485	496	388	345	284	164	89	47	30

AM Peak 0730 - 0830 (2548), AM PHF=0.94 PM Peak 1700 - 1800 (1974), PM PHF=0.98

* Thursday, September 15, 2016=28244, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
134	74	61	48	126	429	1145	2215	2180	1756	1670	1774	1858	1727	1901	1787	1723	1927	1692	1392	1049	824	514	245	
40	15	13	6	16	72	171	482	577	469	453	404	486	459	490	470	437	493	482	390	293	236	171	71	48
32	27	10	8	22	98	221	536	553	454	416	402	460	409	509	453	445	494	442	344	274	238	115	48	46
32	15	20	22	37	110	307	572	496	449	410	501	424	419	453	453	410	471	408	345	248	185	131	79	39
30	17	18	12	52	150	446	625	554	385	391	468	488	440	449	412	432	469	360	313	235	166	98	47	28

AM Peak 0730 - 0830 (2326), AM PHF=0.93 PM Peak 1700 - 1800 (1927), PM PHF=0.98

* Friday, September 16, 2016=11830 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
160	61	65	69	126	430	1048	2213	2137	1739	1702	1841	241	1	-	-	-	-	-	-	-	-	-	-	-
48	18	24	12	15	72	157	422	568	441	442	428	241	0	0	-	-	-	-	-	-	-	-	-	-
46	18	12	7	26	83	236	518	566	427	398	449	0	1	-	-	-	-	-	-	-	-	-	-	-
39	16	9	22	41	118	256	657	503	442	413	486	0	1	-	-	-	-	-	-	-	-	-	-	-
28	9	20	28	44	157	400	617	501	430	449	478	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (2407), AM PHF=0.92

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13101 -- English (ENU)

Datasets:

Site: [5] HAMILTON W OF CENTRAL
Input A: 4 - West bound. - Lane= 0, Excluded from totals.
Input B: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=10702 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1783	1799	1877	1639	1299	1007	691	368	241
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	480	411	493	453	342	276	220	104	70
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	431	464	460	401	338	256	182	92	60
-	-	-	-	-	-	-	-	-	-	-	-	-	-	398	436	443	447	416	323	245	151	99	55
-	-	-	-	-	-	-	-	-	-	-	-	-	-	403	438	482	478	370	297	231	138	73	57

* Wednesday, September 14, 2016=23457, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
113	67	46	74	143	349	701	1252	1482	1218	1238	1275	1426	1578	1529	1718	1823	1878	1639	1406	1079	747	442	241	
34	16	7	9	16	53	125	249	387	320	318	322	343	413	385	430	467	459	469	398	314	232	152	77	46
36	15	7	16	29	82	163	307	404	300	301	318	371	393	386	429	418	497	426	395	264	209	119	61	30
20	16	17	30	49	91	177	360	360	293	288	321	309	400	394	401	467	441	391	324	263	163	89	54	24
23	21	15	19	49	124	237	336	332	305	333	316	404	373	364	458	472	482	354	290	238	144	83	50	17

AM Peak 0745 - 0845 (1487), AM PHF=0.92 PM Peak 1630 - 1730 (1894), PM PHF=0.95

* Thursday, September 15, 2016=24200, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
116	77	53	81	128	343	674	1215	1567	1300	1247	1490	1433	1505	1812	1755	1938	1854	1696	1381	1059	738	461	283	
46	25	12	11	25	56	107	242	342	348	320	365	370	362	405	423	482	471	517	374	331	223	137	101	43
30	18	5	18	19	67	155	277	461	292	298	386	319	384	452	429	497	456	405	351	257	180	124	70	45
24	19	16	29	46	104	218	326	393	350	320	377	349	384	475	463	473	460	400	321	219	164	110	50	25
17	15	20	24	39	117	195	371	371	311	310	362	395	376	480	441	487	468	375	335	252	172	91	63	24

AM Peak 0815 - 0915 (1573), AM PHF=0.85 PM Peak 1600 - 1700 (1938), PM PHF=0.97

* Friday, September 16, 2016=8655 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
137	78	47	81	149	318	644	1206	1537	1302	1303	1499	355	2	-	-	-	-	-	-	-	-	-	-	-
43	23	12	18	23	52	132	242	370	291	297	360	354	1	0	-	-	-	-	-	-	-	-	-	-
45	18	14	12	37	68	134	295	469	333	352	368	0	0	-	-	-	-	-	-	-	-	-	-	-
25	22	13	25	36	99	175	332	357	316	354	398	0	2	-	-	-	-	-	-	-	-	-	-	-
24	15	8	27	53	99	204	338	342	363	301	374	1	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0800 - 0900 (1537), AM PHF=0.82

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13100 -- English (ENU)

Datasets:

Site: [5] HAMILTON W OF CENTRAL
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 2 - East bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=11977 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1800	1737	1954	1768	1469	1059	1087	661	443	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	422	389	487	455	414	308	278	183	148	63
-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	471	431	483	425	375	270	318	184	126	63
-	-	-	-	-	-	-	-	-	-	-	-	-	-	344	425	432	531	420	366	210	271	138	91	50
-	-	-	-	-	-	-	-	-	-	-	-	-	-	458	482	485	454	469	316	272	221	156	78	45

* Wednesday, September 14, 2016=26039, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
220	113	62	66	113	220	617	1692	1956	1490	1361	1404	1630	1549	1606	1733	1783	2087	1830	1483	1148	957	547	377	
63	29	17	21	19	41	101	281	522	393	312	300	431	401	431	367	431	540	485	444	304	265	147	134	54
63	35	12	9	27	53	115	423	488	359	337	359	400	366	403	488	422	525	464	371	284	240	151	107	53
50	25	17	18	27	48	141	437	464	356	319	364	392	376	369	434	453	536	460	313	280	238	137	68	42
45	24	16	19	41	79	260	552	483	383	394	381	408	407	404	445	478	487	422	356	281	214	114	68	33

AM Peak 0745 - 0845 (2025), AM PHF=0.92 PM Peak 1700 - 1800 (2087), PM PHF=0.97

* Thursday, September 15, 2016=27392, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
182	90	63	59	74	203	605	1953	2147	1731	1354	1659	1710	1526	1814	1780	1788	1919	1803	1463	1229	1087	724	435	
54	23	18	13	17	32	90	324	585	536	322	356	450	366	446	413	430	479	512	381	336	321	201	140	70
53	22	18	12	15	42	118	452	573	403	353	424	417	400	454	494	473	505	457	343	318	295	174	115	72
42	19	18	18	14	42	151	575	486	413	333	437	406	358	474	434	420	502	415	389	292	258	190	100	47
33	26	9	17	28	88	247	603	503	380	346	442	438	403	441	439	466	434	419	351	284	214	160	81	40

AM Peak 0730 - 0830 (2336), AM PHF=0.97 PM Peak 1715 - 1815 (1952), PM PHF=0.95

* Friday, September 16, 2016=9485 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
228	131	88	71	79	215	594	1620	1729	1471	1336	1538	387	2	-	-	-	-	-	-	-	-	-	-	-
70	38	30	19	11	35	83	270	504	380	348	340	386	1	0	-	-	-	-	-	-	-	-	-	-
72	39	23	18	20	32	126	356	403	355	332	395	0	0	-	-	-	-	-	-	-	-	-	-	-
47	32	17	17	12	60	151	463	429	368	312	366	0	1	-	-	-	-	-	-	-	-	-	-	-
40	23	18	18	36	89	235	532	394	368	345	437	1	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (1901), AM PHF=0.89

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13098 -- English (ENU)

Datasets:

Site: [3] HAMILTON W OF EDEN
Input A: 4 - West bound. - Lane= 0, Excluded from totals.
Input B: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=8308 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1095	1265	1294	1298	1103	867	600	408	253	127	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	235	357	303	324	271	251	174	130	85	33	17
-	-	-	-	-	-	-	-	-	-	-	-	-	73	263	312	348	349	274	215	172	93	48	36	22
-	-	-	-	-	-	-	-	-	-	-	-	-	256	295	319	336	338	274	208	126	97	76	26	11
-	-	-	-	-	-	-	-	-	-	-	-	-	249	303	278	308	288	285	194	129	88	45	32	16

* Wednesday, September 14, 2016=14901, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
66	33	22	37	84	129	322	724	948	731	776	847	905	996	1056	1272	1240	1266	1090	938	608	397	273	146	
17	9	3	5	12	15	62	129	280	183	199	206	223	262	215	340	305	307	310	281	168	120	95	51	30
22	8	4	7	17	27	68	172	248	178	176	207	215	245	283	288	311	287	274	246	153	114	65	40	15
11	6	10	18	20	41	71	201	221	173	199	221	211	273	269	306	328	324	254	222	148	92	69	30	15
16	10	5	7	36	47	122	222	199	198	204	214	257	217	289	339	296	349	252	189	140	72	44	26	9

AM Peak 0745 - 0845 (971), AM PHF=0.87 PM Peak 1545 - 1645 (1283), PM PHF=0.95

* Thursday, September 15, 2016=15430, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
69	44	31	27	73	124	335	686	1062	791	752	941	923	1032	1105	1196	1268	1383	1126	887	684	428	297	173	
30	15	6	2	10	23	58	115	238	214	190	218	239	233	253	280	314	356	294	229	228	120	90	70	22
15	13	9	8	12	18	58	155	330	181	170	240	232	245	275	321	307	310	297	220	149	115	77	40	25
15	5	9	13	19	49	108	177	262	216	197	217	219	267	298	257	314	376	266	212	154	101	71	32	10
9	12	7	4	32	35	112	239	232	182	196	267	234	289	279	339	334	341	269	226	154	93	60	32	12

AM Peak 0745 - 0845 (1069), AM PHF=0.81 PM Peak 1700 - 1800 (1383), PM PHF=0.92

* Friday, September 16, 2016=5274 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
68	37	21	36	76	130	290	690	1024	753	822	923	405	1	-	-	-	-	-	-	-	-	-	-	-
22	13	8	4	13	26	58	131	276	172	223	198	291	0	0	-	-	-	-	-	-	-	-	-	-
25	10	6	3	20	19	60	153	306	180	190	259	113	0	0	-	-	-	-	-	-	-	-	-	-
10	12	6	15	14	49	94	183	231	194	196	231	0	1	-	-	-	-	-	-	-	-	-	-	-
12	2	1	14	29	36	79	224	213	208	214	236	1	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (1035), AM PHF=0.85

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13099 -- English (ENU)

Datasets:

Site: [3] HAMILTON W OF EDEN
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 2 - East bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=7638 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1030	1002	1032	1154	947	861	597	514	326	178	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	265	229	283	276	243	205	178	145	107	66	27
-	-	-	-	-	-	-	-	-	-	-	-	-	20	272	244	226	283	246	232	148	145	84	45	25
-	-	-	-	-	-	-	-	-	-	-	-	-	206	264	266	233	292	214	237	136	120	70	34	20
-	-	-	-	-	-	-	-	-	-	-	-	-	206	230	264	290	303	244	188	135	104	67	33	22

* Wednesday, September 14, 2016=15137, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
94	48	30	41	69	128	341	1167	1214	854	788	871	939	932	948	956	1063	1224	979	859	649	494	289	165	
27	10	8	11	12	27	39	217	336	211	196	203	240	253	232	241	236	294	274	247	186	124	86	52	24
25	10	5	6	17	31	68	306	314	213	223	197	245	205	249	217	266	315	237	232	138	137	67	49	26
20	15	7	11	12	26	90	320	262	222	187	241	244	247	232	265	268	330	249	190	177	116	77	32	24
22	13	10	14	28	45	145	324	302	209	184	231	210	228	236	234	295	286	220	190	149	118	60	33	20

AM Peak 0730 - 0830 (1294), AM PHF=0.96 PM Peak 1645 - 1745 (1233), PM PHF=0.93

* Thursday, September 15, 2016=15739, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
94	47	39	41	56	113	362	1315	1193	921	869	922	972	904	1041	988	1057	1210	1029	857	691	496	332	196	
24	10	12	5	16	22	40	232	337	270	198	205	261	229	257	254	281	291	280	236	190	153	98	61	44
26	10	12	12	11	25	63	309	307	216	228	223	247	222	269	265	281	325	261	203	190	125	78	51	31
24	12	8	12	8	23	103	404	279	225	245	268	218	203	237	236	232	283	243	231	154	126	78	41	20
20	15	7	13	22	43	156	371	271	212	198	226	246	251	279	234	264	313	245	188	158	94	78	44	17

AM Peak 0715 - 0815 (1420), AM PHF=0.88 PM Peak 1700 - 1800 (1210), PM PHF=0.93

* Friday, September 16, 2016=5825 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
112	65	35	38	44	125	379	1076	1015	803	849	909	377	1	-	-	-	-	-	-	-	-	-	-	-
44	21	13	10	7	26	55	180	307	187	228	209	263	0	0	-	-	-	-	-	-	-	-	-	-
31	20	9	7	12	28	59	249	243	191	202	207	114	0	0	-	-	-	-	-	-	-	-	-	-
20	15	4	12	6	31	104	314	227	220	215	252	0	1	-	-	-	-	-	-	-	-	-	-	-
17	9	9	10	20	40	161	334	239	205	204	242	1	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0715 - 0815 (1203), AM PHF=0.90

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13095 -- English (ENU)

Datasets:

Site: [1] HAMILTON W OF PHOENIX
Input A: 4 - West bound. - Lane= 0, Excluded from totals.
Input B: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=6691 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	408	606	789	813	779	849	782	635	468	304	170	91	
-	-	-	-	-	-	-	-	-	-	-	-	2	156	165	197	194	211	186	173	134	102	45	28	20
-	-	-	-	-	-	-	-	-	-	-	-	116	142	153	207	193	226	210	168	114	66	37	22	10
-	-	-	-	-	-	-	-	-	-	-	-	124	177	213	198	219	208	203	157	124	77	54	18	10
-	-	-	-	-	-	-	-	-	-	-	-	167	132	259	212	175	205	184	138	97	59	35	23	6

PM Peak 1430 - 1530 (875), PM PHF=0.84

* Wednesday, September 14, 2016=9632, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
46	16	12	17	50	78	174	428	585	418	445	532	594	685	694	817	811	768	752	660	483	297	181	93	
20	2	2	4	5	15	29	80	204	105	112	107	150	176	142	188	207	171	197	204	125	117	55	32	15
10	4	5	4	13	13	45	81	143	94	109	114	153	159	200	174	227	200	181	164	131	62	51	22	18
10	4	2	3	13	23	57	119	128	101	116	142	142	193	161	212	191	205	196	160	105	60	49	21	12
6	6	3	6	19	28	44	149	111	118	109	170	150	157	192	244	186	193	179	133	122	59	27	19	5

AM Peak 0745 - 0845 (623), AM PHF=0.77 PM Peak 1530 - 1630 (889), PM PHF=0.91

* Thursday, September 15, 2016=10090, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
50	19	5	18	38	85	191	460	610	414	439	600	610	704	751	744	836	847	869	675	496	325	198	110	
15	3	2	4	5	14	39	59	223	101	115	139	158	177	165	190	192	211	248	191	154	118	54	42	19
18	8	0	4	8	18	45	80	159	108	103	138	141	166	152	177	217	217	197	163	123	84	57	26	12
12	3	2	5	9	29	50	133	114	100	128	139	156	178	224	182	206	235	232	166	110	69	55	20	10
5	6	1	5	16	25	57	189	115	106	94	185	156	183	210	195	222	185	192	155	110	54	33	22	5

AM Peak 0730 - 0830 (703), AM PHF=0.79 PM Peak 1645 - 1745 (885), PM PHF=0.94

* Friday, September 16, 2016=3366 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
46	18	15	20	38	101	174	448	605	466	478	637	320	2	1	-	-	-	-	-	-	-	-	-	-
19	5	6	3	6	22	35	80	228	109	107	157	171	1	0	-	-	-	-	-	-	-	-	-	-
12	3	4	2	12	20	49	79	123	117	101	149	149	1	0	-	-	-	-	-	-	-	-	-	-
10	5	3	8	7	26	39	117	137	121	139	153	0	0	0	-	-	-	-	-	-	-	-	-	-
5	5	2	7	13	33	51	173	118	120	132	178	1	0	1	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (660), AM PHF=0.72

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13094 -- English (ENU)

Datasets:

Site: [1] HAMILTON W OF PHOENIX
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 2 - East bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=6416 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	445	648	680	737	723	763	736	629	445	309	211	93	
-	-	-	-	-	-	-	-	-	-	-	-	1	173	159	194	182	163	168	180	122	91	55	22	15
-	-	-	-	-	-	-	-	-	-	-	-	141	160	154	163	170	196	200	155	115	92	53	33	21
-	-	-	-	-	-	-	-	-	-	-	-	136	147	200	204	181	212	192	155	114	83	61	18	10
-	-	-	-	-	-	-	-	-	-	-	-	167	169	168	177	191	194	177	139	96	43	42	21	11

PM Peak 1730 - 1830 (772), PM PHF=0.91

* Wednesday, September 14, 2016=10452, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
57	29	14	19	37	87	235	780	798	636	588	588	703	679	659	647	731	816	699	565	456	329	193	112	
15	6	4	6	5	14	28	145	225	157	142	141	184	174	161	164	177	202	196	158	134	93	52	33	12
21	7	0	1	11	22	42	191	182	172	157	143	179	178	162	158	176	177	171	155	116	73	40	38	19
10	9	5	4	5	17	68	227	208	167	137	161	162	135	171	159	192	237	193	122	97	89	57	26	15
11	7	5	8	17	35	97	218	184	141	152	144	179	193	166	167	186	201	140	131	109	75	45	16	15

AM Peak 0715 - 0815 (860), AM PHF=0.95 PM Peak 1700 - 1800 (816), PM PHF=0.86

* Thursday, September 15, 2016=10952, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
61	30	17	17	38	79	215	847	823	623	565	694	682	636	697	723	732	906	797	608	509	348	186	126	
12	7	5	0	7	10	34	140	260	180	150	142	170	162	179	195	186	237	214	178	155	115	58	42	23
19	5	5	8	11	17	31	212	191	149	135	183	184	175	181	202	192	218	218	116	129	80	54	33	16
15	9	2	3	6	19	56	235	219	156	138	189	152	137	165	158	188	227	191	155	121	81	41	23	15
15	9	5	6	14	33	94	261	153	139	142	182	177	163	173	169	167	224	175	159	104	73	34	29	17

AM Peak 0715 - 0815 (968), AM PHF=0.93 PM Peak 1700 - 1800 (906), PM PHF=0.96

* Friday, September 16, 2016=4070 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
70	36	13	17	30	82	235	739	632	581	602	706	329	1	1	-	-	-	-	-	-	-	-	-	-
23	8	6	6	6	8	24	105	175	151	151	150	181	0	0	-	-	-	-	-	-	-	-	-	-
16	14	2	3	10	21	34	174	158	140	145	176	147	1	0	-	-	-	-	-	-	-	-	-	-
15	7	3	1	6	21	61	243	147	142	153	195	1	0	0	-	-	-	-	-	-	-	-	-	-
17	7	3	7	8	33	116	218	152	148	154	186	0	0	1	-	-	-	-	-	-	-	-	-	-

AM Peak 0715 - 0815 (809), AM PHF=0.83

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13117 -- English (ENU)

Datasets:

Site: [11] ORCHARD CITY W OF 1ST
Input A: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Monday, September 12, 2016=2356 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	532	687	472	310	169	94	61	32	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	121	172	122	111	50	24	29	13	12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113	189	135	71	38	26	11	7	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	183	122	73	42	25	12	5	4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	148	144	93	56	40	19	10	7	1

* Tuesday, September 13, 2016=5340, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
22	10	4	3	8	27	83	167	325	216	204	233	317	305	297	436	558	748	535	363	239	135	79	32	
12	3	2	0	4	1	14	34	77	66	40	55	75	59	67	107	112	177	162	112	66	33	25	12	8
5	2	1	0	1	5	16	33	87	55	56	58	71	82	75	99	145	163	141	102	71	37	18	6	6
4	3	0	3	2	10	19	42	81	52	45	60	81	88	83	115	139	192	124	65	58	31	14	9	8
1	2	1	0	1	11	34	58	81	44	64	61	91	77	72	115	162	217	109	86	45	35	23	5	2

AM Peak 0800 - 0900 (325), AM PHF=0.94 PM Peak 1700 - 1800 (748), PM PHF=0.86

* Wednesday, September 14, 2016=1979, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
23	3	4	2	11	21	85	191	306	234	216	227	301	278	75	0	0	0	0	0	3	0	0	0	
8	0	0	0	2	0	15	35	69	50	60	47	80	84	75	0	0	0	0	0	0	0	0	0	0
6	0	0	1	1	4	17	43	89	62	50	52	83	54	0	0	0	0	0	0	3	0	0	0	0
8	1	0	0	5	10	19	40	79	63	45	63	63	79	0	0	0	0	0	0	0	0	0	0	0
2	2	4	1	3	7	34	74	71	61	62	66	77	62	0	0	0	0	0	0	0	0	0	0	0

AM Peak 0745 - 0845 (310), AM PHF=0.87 PM Peak 1215 - 1315 (305), PM PHF=0.91

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13102 -- English (ENU)

Datasets:

Site: [8NB] SAN TOMAS AQUINO RD S OF VILLARITA
Input A: 1 - North bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=2306 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	402	498	441	397	287	168	80	35	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105	124	121	102	83	42	23	11	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97	130	102	108	74	50	21	11	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63	104	134	106	88	83	45	21	6	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	102	97	111	113	99	47	31	15	7	3

* Wednesday, September 14, 2016=5930, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
17	12	6	4	14	33	109	422	572	290	292	305	417	336	348	421	414	512	436	381	290	185	70	46	
6	5	1	0	1	7	19	71	209	86	78	71	95	85	92	106	114	117	128	94	80	76	33	16	6
6	3	1	0	2	7	24	81	161	80	67	84	92	91	64	108	90	152	111	102	88	42	10	16	6
2	4	2	1	7	7	25	110	111	75	62	61	115	89	72	108	102	108	90	97	58	36	12	10	5
3	0	2	3	4	12	42	160	91	50	86	90	116	71	121	100	110	137	107	88	65	31	15	4	1

AM Peak 0745 - 0845 (640), AM PHF=0.77 PM Peak 1715 - 1815 (524), PM PHF=0.86

* Thursday, September 15, 2016=6078, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
17	11	4	9	9	41	115	483	628	331	290	311	368	281	416	389	386	507	454	409	286	211	81	47	
6	2	2	3	0	5	17	71	188	101	76	72	115	74	92	101	94	112	134	112	94	73	26	14	7
6	0	0	4	2	12	26	91	200	81	76	69	93	66	78	89	84	138	106	95	78	56	19	12	2
5	5	1	1	1	15	30	134	119	77	71	65	77	68	123	99	92	122	105	105	61	50	24	13	3
1	4	1	1	6	9	42	187	123	73	67	106	84	74	124	101	116	135	110	97	54	32	12	8	3

AM Peak 0730 - 0830 (708), AM PHF=0.89 PM Peak 1715 - 1815 (528), PM PHF=0.96

* Friday, September 16, 2016=2450 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
15	8	4	7	15	39	105	414	526	290	295	341	390	3	-	-	-	-	-	-	-	-	-	-	-
7	0	2	3	3	9	19	78	194	66	84	86	101	3	0	-	-	-	-	-	-	-	-	-	-
2	1	0	2	1	12	19	79	136	67	68	83	116	0	0	-	-	-	-	-	-	-	-	-	-
3	5	1	3	3	6	31	112	108	81	71	74	100	0	-	-	-	-	-	-	-	-	-	-	-
3	2	1	0	8	12	37	146	89	76	73	98	74	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (587), AM PHF=0.76

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13103 -- English (ENU)

Datasets:

Site: [8SB] SAN TOMAS AQUINO RD S OF VILLARITA
Input A: 3 - South bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=2548 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	515	633	524	408	215	148	67	40	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	115	154	124	131	56	43	19	13	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125	178	149	106	56	40	21	9	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	125	154	121	85	52	40	15	7	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	121	150	148	130	87	52	25	12	11	1

* Wednesday, September 14, 2016=6096, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
22	8	3	5	20	35	87	399	385	272	291	323	448	416	397	433	540	610	522	418	220	143	65	38	
9	2	1	0	2	6	13	53	87	74	70	71	114	112	88	89	122	151	143	115	66	48	16	13	8
7	1	1	0	4	12	18	74	131	67	75	86	106	93	93	105	127	171	137	113	59	33	14	8	3
5	4	0	3	5	8	16	104	87	55	69	89	104	115	107	117	135	137	122	103	52	27	17	12	3
1	1	1	2	9	9	41	169	81	76	77	78	125	97	109	122	157	152	121	87	43	35	18	5	5

AM Peak 0730 - 0830 (490), AM PHF=0.72 PM Peak 1645 - 1745 (615), PM PHF=0.90

* Thursday, September 15, 2016=6226, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
19	11	1	8	16	34	77	411	365	257	281	404	382	380	394	493	555	650	540	404	273	151	76	47	
8	2	1	2	2	6	19	49	98	70	62	94	97	86	100	118	133	153	129	129	86	52	27	13	8
3	2	0	2	2	9	13	64	96	62	73	93	103	81	100	122	127	167	144	95	65	39	19	11	8
3	4	0	3	2	7	16	122	89	48	75	102	95	108	91	141	123	149	137	88	66	39	22	8	8
5	3	0	1	10	12	29	176	83	79	72	116	87	106	105	113	172	181	131	93	57	22	8	15	0

AM Peak 0730 - 0830 (491), AM PHF=0.70 PM Peak 1700 - 1800 (650), PM PHF=0.90

* Friday, September 16, 2016=2281 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
24	10	7	11	16	41	72	382	345	264	288	400	398	25	-	-	-	-	-	-	-	-	-	-	-
8	1	1	5	2	10	14	45	102	60	78	78	97	24	1	-	-	-	-	-	-	-	-	-	-
8	3	5	2	1	14	8	74	99	62	49	99	112	0	-	-	-	-	-	-	-	-	-	-	-
8	6	1	2	2	4	24	111	68	77	78	119	93	0	-	-	-	-	-	-	-	-	-	-	-
0	0	0	2	11	13	26	153	77	66	83	106	97	1	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (464), AM PHF=0.76

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13093 -- English (ENU)

Datasets:

Site: [2] SAN TOMAS EXPY N OF HAMILTON
Input A: 1 - North bound. - Lane= 0, Added to totals. (/2.000)
Input B: 3 - South bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=10207 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
-	-	-	-	-	-	-	-	-	-	-	-	-	953	1146	1268	1286	1540	1149	969	685	613	387	212
-	-	-	-	-	-	-	-	-	-	-	-	-	234	274	305	278	386	300	256	185	159	101	86
-	-	-	-	-	-	-	-	-	-	-	-	-	231	275	318	302	405	308	257	183	170	115	52
-	-	-	-	-	-	-	-	-	-	-	-	-	233	308	314	370	400	250	238	173	152	94	45
-	-	-	-	-	-	-	-	-	-	-	-	-	256	290	332	337	349	292	219	145	132	78	30

* Wednesday, September 14, 2016=23752, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
92	50	30	47	75	306	1118	2984	2981	2197	1218	1011	1135	1118	1120	1257	1318	1541	1272	975	759	556	357	241	
25	14	5	7	8	37	137	611	710	633	394	273	282	288	262	287	305	397	360	271	200	162	115	98	45
25	14	13	12	18	71	200	818	863	555	309	249	293	273	297	325	325	365	358	255	189	156	88	53	25
20	14	8	10	21	76	359	791	795	590	275	218	279	278	279	339	303	401	286	222	199	130	78	40	19
23	8	4	18	28	122	422	764	614	420	240	272	282	279	283	306	387	379	268	227	171	109	76	50	19

AM Peak 0745 - 0845 (3131), AM PHF=0.91 PM Peak 1645 - 1745 (1549), PM PHF=0.97

* Thursday, September 15, 2016=24290, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
108	56	34	33	70	297	1128	3218	3172	2230	1265	1088	1097	912	1234	1293	1439	1494	1218	948	718	609	402	233	
45	15	14	9	13	49	119	666	800	627	391	255	282	242	309	314	314	347	347	260	208	184	124	91	46
25	10	5	7	14	52	205	815	784	599	315	286	273	230	301	371	385	405	323	252	179	164	93	57	19
19	10	6	7	16	90	364	897	790	547	280	285	276	211	319	303	348	360	262	213	164	138	115	44	28
19	21	9	10	27	107	441	842	798	458	280	263	267	229	306	305	393	383	287	224	168	123	72	41	24

AM Peak 0715 - 0815 (3352), AM PHF=0.93 PM Peak 1645 - 1745 (1504), PM PHF=0.93

* Friday, September 16, 2016=11358 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
117	63	55	34	79	297	1012	2442	2465	1772	1182	1070	772	0	-	-	-	-	-	-	-	-	-	-	-
46	14	16	10	12	48	124	527	697	469	317	253	324	0	-	-	-	-	-	-	-	-	-	-	-
19	14	17	2	18	52	174	626	656	483	299	262	296	0	-	-	-	-	-	-	-	-	-	-	-
28	16	15	12	13	73	320	635	600	445	279	276	153	0	-	-	-	-	-	-	-	-	-	-	-
24	19	7	10	36	125	394	655	513	375	288	280	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (2642), AM PHF=0.95

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13084 -- English (ENU)

Datasets:

Site: [2] SAN TOMAS EXPY N OF HAMILTON
Input A: 1 - North bound. - Lane= 0, Excluded from totals.
Input B: 3 - South bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=16297 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	1040	1485	2246	2615	2669	2561	1652	855	607	374	195	
-	-	-	-	-	-	-	-	-	-	-	-	-	224	326	482	654	669	626	537	264	180	128	56	30
-	-	-	-	-	-	-	-	-	-	-	-	1	272	354	542	611	655	642	421	228	162	109	49	33
-	-	-	-	-	-	-	-	-	-	-	-	195	257	384	603	699	653	673	360	188	139	85	51	26
-	-	-	-	-	-	-	-	-	-	-	-	226	287	422	619	652	693	622	335	175	127	53	40	19

* Wednesday, September 14, 2016=23550, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
108	38	36	40	76	183	369	982	1324	910	806	990	1046	1181	1451	2244	2577	2746	2564	1739	907	660	376	202	
30	10	16	3	12	25	58	149	374	218	199	196	265	296	284	463	628	690	644	504	272	194	124	68	32
33	10	6	10	10	23	73	188	346	227	200	248	253	287	313	529	648	668	607	472	248	146	95	51	29
26	9	5	14	18	51	96	257	319	210	200	246	273	290	367	634	629	680	644	401	202	170	79	44	22
19	9	9	13	36	84	143	388	286	256	207	301	256	309	489	619	673	709	670	362	185	150	79	40	19

AM Peak 0745 - 0845 (1426), AM PHF=0.92 PM Peak 1700 - 1800 (2746), PM PHF=0.97

* Thursday, September 15, 2016=23518, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
102	57	32	32	66	182	378	1031	1322	921	814	929	1089	1038	1633	2219	2612	2778	2455	1737	854	624	376	241	
32	14	6	5	11	20	60	139	391	256	212	205	290	245	353	434	622	641	607	517	237	179	114	73	35
29	18	7	6	13	31	78	191	313	228	209	243	291	242	363	564	649	731	666	444	221	154	94	76	36
22	14	9	13	12	57	93	314	324	210	196	228	236	248	450	627	675	712	583	444	215	137	96	41	26
19	11	10	8	30	75	148	387	295	229	197	254	273	303	467	595	667	695	600	333	182	155	72	51	17

AM Peak 0745 - 0845 (1414), AM PHF=0.90 PM Peak 1700 - 1800 (2778), PM PHF=0.95

* Friday, September 16, 2016=6773 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
114	61	55	38	75	175	386	1018	1309	941	921	973	710	0	-	-	-	-	-	-	-	-	-	-	-
35	15	18	5	8	24	72	135	343	212	234	223	311	0	0	-	-	-	-	-	-	-	-	-	-
36	17	11	6	20	36	77	208	328	237	212	223	264	0	0	-	-	-	-	-	-	-	-	-	-
26	14	10	10	19	44	97	252	329	248	255	246	136	0	0	-	-	-	-	-	-	-	-	-	-
17	15	16	17	28	71	141	424	310	244	221	281	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (1423), AM PHF=0.84

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13119 -- English (ENU)

Datasets:

Site: [13] SAN TOMAS EXPY N OF WINCHESTER
Input A: 1 - North bound. - Lane= 0, Added to totals. (/2.000)
Input B: 3 - South bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=7124 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1434	1619	1293	970	673	529	387	221	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	305	411	309	282	178	139	127	80	25
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	298	366	446	341	271	161	162	98	63	30
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	346	377	404	307	218	176	128	75	43	27
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	349	386	358	337	199	160	100	88	35	18

* Wednesday, September 14, 2016=22726, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
100	65	40	42	70	272	977	2558	2597	1962	1152	1049	1098	1054	1159	1269	1449	1663	1320	1035	680	542	352	227	
25	24	10	9	9	42	127	585	689	561	361	244	257	249	278	297	343	398	356	320	176	159	112	84	35
30	18	9	8	14	50	158	665	650	514	255	259	298	279	301	332	318	432	356	263	186	146	86	50	28
27	15	10	10	15	66	305	674	635	489	273	271	264	255	274	334	366	413	312	213	156	137	80	52	20
18	8	11	15	32	114	388	635	625	399	263	276	280	272	307	306	423	421	296	239	162	100	75	42	26

AM Peak 0715 - 0815 (2662), AM PHF=0.97 PM Peak 1645 - 1745 (1665), PM PHF=0.96

* Thursday, September 15, 2016=23296, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
108	63	48	28	87	246	958	2733	2595	1988	1225	1052	1085	1004	1187	1390	1504	1668	1355	978	758	590	398	252	
35	17	10	5	19	43	97	566	703	561	338	259	279	238	254	341	333	399	381	268	195	168	132	86	38
28	23	11	7	7	40	178	719	645	542	301	253	303	261	316	366	371	443	347	263	188	159	107	66	28
20	7	14	7	27	74	297	726	644	498	287	274	250	266	319	314	435	437	328	211	200	150	83	52	32
26	16	14	9	34	90	387	723	604	388	300	266	254	241	299	370	366	390	299	237	176	114	77	48	23

AM Peak 0715 - 0815 (2870), AM PHF=0.99 PM Peak 1700 - 1800 (1668), PM PHF=0.94

* Friday, September 16, 2016=9737 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
121	69	52	39	88	247	845	2237	2165	1429	1120	1135	192	2	-	-	-	-	-	-	-	-	-	-	-
38	25	14	8	15	38	93	467	606	369	309	264	192	0	0	-	-	-	-	-	-	-	-	-	-
28	19	14	5	15	47	176	571	544	392	263	268	0	0	-	-	-	-	-	-	-	-	-	-	-
32	10	17	13	19	65	227	556	538	314	278	291	0	0	-	-	-	-	-	-	-	-	-	-	-
23	15	7	13	39	97	350	644	477	354	270	314	0	2	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0715 - 0815 (2376), AM PHF=0.92

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13120 -- English (ENU)

Datasets:

Site: [13] SAN TOMAS EXPY N OF WINCHESTER
Input A: 1 - North bound. - Lane= 0, Excluded from totals.
Input B: 3 - South bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=10159 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2292	2405	2041	1456	817	653	318	179
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	612	609	529	424	246	174	90	59
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	422	578	618	541	419	203	175	89	47
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	602	503	611	502	305	182	160	80	40
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	559	600	568	470	309	188	145	60	34

* Wednesday, September 14, 2016=22755, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
98	45	37	46	105	259	534	1147	1546	1051	921	928	1119	1266	1360	2038	2180	2352	2066	1573	912	643	348	188	
28	13	13	9	24	32	91	211	373	256	228	210	257	320	308	420	531	587	488	479	263	178	109	46	22
23	8	9	6	16	52	110	277	446	248	232	232	261	311	339	518	575	639	506	417	251	179	88	61	23
27	16	9	15	28	70	166	282	379	289	238	222	298	324	339	551	510	551	537	307	202	150	88	47	11
20	8	6	16	37	105	168	378	349	259	223	265	304	312	375	550	565	576	535	370	196	137	64	34	20

AM Peak 0745 - 0845 (1575), AM PHF=0.88 PM Peak 1700 - 1800 (2352), PM PHF=0.92

* Thursday, September 15, 2016=22814, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
75	52	38	51	100	261	550	1185	1469	1049	921	977	1094	1186	1589	2116	2239	2170	1970	1602	903	618	393	210	
22	12	8	7	24	27	97	215	426	270	219	216	288	277	349	506	559	504	485	512	283	184	116	61	31
23	17	7	6	20	66	125	242	392	268	260	265	267	313	396	465	570	486	489	404	219	188	100	62	26
11	16	13	19	26	71	154	336	325	258	229	236	262	297	388	548	577	579	507	354	190	116	93	44	29
20	7	10	19	30	98	175	393	327	254	215	260	278	300	457	597	534	602	490	334	212	130	85	43	19

AM Peak 0730 - 0830 (1547), AM PHF=0.91 PM Peak 1545 - 1645 (2302), PM PHF=0.96

* Friday, September 16, 2016=7051 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
105	56	56	54	102	262	518	1147	1506	1093	998	966	188	2	-	-	-	-	-	-	-	-	-	-	-
31	18	14	7	17	33	85	210	379	254	241	226	188	0	0	-	-	-	-	-	-	-	-	-	-
26	18	12	16	24	58	125	257	440	292	236	224	0	0	-	-	-	-	-	-	-	-	-	-	-
29	11	14	16	22	79	135	296	359	287	252	243	0	0	-	-	-	-	-	-	-	-	-	-	-
19	9	16	15	39	93	174	385	329	261	270	273	0	2	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (1563), AM PHF=0.89

Traffic Data Service -- San Jose, CA

Vehicle Counts

VehicleCount-13123 -- English (ENU)

Datasets:

Site: [15] UNION AVE N OF MCGLINCY
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: North (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016 - Total=2623 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	297	366	399	431	423	303	174	120	79	31	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	67	90	92	106	113	77	37	35	28	11	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	73	100	92	105	102	84	45	30	21	8	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	88	83	106	104	106	71	51	34	23	5	7
-	-	-	-	-	-	-	-	-	-	-	-	-	18	69	93	109	116	102	71	41	21	7	7	4

* Wednesday, September 14, 2016 - Total=5809, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
27	13	5	5	14	26	162	542	633	406	281	328	309	394	310	304	386	435	439	326	208	128	84	44	
9	6	4	2	1	0	23	84	161	130	78	70	97	97	66	61	84	100	130	84	67	34	28	16	6
7	1	1	0	4	9	50	133	154	112	60	82	80	98	75	83	100	119	116	92	48	36	24	14	9
7	5	0	1	4	7	34	135	165	83	67	83	75	91	77	77	89	108	93	70	58	29	22	7	3
4	1	0	2	5	10	55	190	153	81	76	93	57	108	92	83	113	108	100	80	35	29	10	7	6

AM Peak 0745 - 0845 (670), AM PHF=0.88 PM Peak 1715 - 1815 (465), PM PHF=0.89

* Thursday, September 15, 2016 - Total=5961, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
24	8	12	5	11	37	154	546	758	419	261	341	376	311	321	361	372	447	385	334	216	151	71	40	
6	5	4	2	2	6	18	87	196	156	79	70	107	85	74	92	89	98	96	90	67	50	25	15	10
9	1	3	2	4	5	32	135	181	99	57	76	105	76	79	73	79	119	95	86	62	31	23	8	5
3	1	5	0	4	7	36	146	191	87	70	76	82	55	85	84	86	106	93	74	39	39	14	11	3
6	1	0	1	1	19	68	178	190	77	55	119	82	95	83	112	118	124	101	84	48	31	9	6	11

AM Peak 0800 - 0900 (758), AM PHF=0.97 PM Peak 1700 - 1800 (447), PM PHF=0.90

* Friday, September 16, 2016 - Total=2867 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
29	16	11	10	13	42	153	479	574	361	313	339	391	136	-	-	-	-	-	-	-	-	-	-	
10	4	3	2	1	6	17	72	162	99	73	64	103	106	0	-	-	-	-	-	-	-	-	-	-
5	4	5	1	3	9	35	107	149	91	64	88	98	30	-	-	-	-	-	-	-	-	-	-	-
3	3	1	3	5	10	28	134	142	73	93	88	93	0	-	-	-	-	-	-	-	-	-	-	-
11	5	2	4	4	17	73	166	121	98	83	99	97	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (619), AM PHF=0.93

Traffic Data Service -- San Jose, CA Vehicle Counts

VehicleCount-13125 -- English (ENU)

Datasets:

Site: [15] UNION AVE N OF MCGLINCY
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: South (bound)
Name: Default Profile
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016 - Total=3332 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	382	462	543	690	459	317	222	129	85	43	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	96	98	138	163	122	119	69	45	27	14	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	96	117	126	199	120	78	56	30	22	12	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	97	126	138	174	118	65	51	24	18	7	6
-	-	-	-	-	-	-	-	-	-	-	-	-	15	93	121	141	154	99	55	46	30	18	10	2

* Wednesday, September 14, 2016 - Total=5775, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
22	8	5	4	23	56	139	268	288	226	231	254	354	386	381	452	577	681	544	317	267	149	94	49	
8	3	2	3	5	9	32	54	93	58	59	65	66	96	92	100	154	179	138	106	79	45	27	19	9
6	3	1	0	5	4	26	61	70	45	65	66	108	98	84	110	123	172	153	82	73	43	24	15	5
6	0	0	0	6	20	30	82	70	72	56	60	85	98	106	121	147	178	146	59	71	27	21	10	11
2	2	2	1	7	23	51	71	55	51	51	63	95	94	99	121	153	152	107	70	44	34	22	5	4

AM Peak 1145 - 1245 (322), AM PHF=0.75 PM Peak 1645 - 1745 (682), PM PHF=0.95

* Thursday, September 15, 2016 - Total=5750, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
29	7	10	6	20	52	155	232	291	220	250	268	307	345	373	454	598	684	512	331	244	190	115	57	
9	1	2	1	3	11	26	47	81	61	59	66	72	84	101	115	132	161	159	95	64	60	30	20	9
5	1	5	2	3	6	30	55	76	49	67	65	73	74	89	98	126	186	119	102	66	39	40	16	7
11	2	2	3	6	13	46	65	67	56	55	71	73	89	90	135	160	181	128	62	59	49	21	10	8
4	3	1	0	8	22	53	65	67	54	69	66	89	98	93	106	180	156	106	72	55	42	24	11	2

AM Peak 0800 - 0900 (291), AM PHF=0.90 PM Peak 1645 - 1745 (708), PM PHF=0.95

* Friday, September 16, 2016 - Total=2028 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
26	21	5	9	15	43	115	259	297	274	234	301	313	116	-	-	-	-	-	-	-	-	-	-	
9	8	2	2	4	6	23	49	81	63	68	78	73	98	0	-	-	-	-	-	-	-	-	-	-
7	7	1	1	1	10	24	76	79	72	63	71	76	18	-	-	-	-	-	-	-	-	-	-	-
8	2	2	3	2	12	37	62	61	70	48	75	84	0	-	-	-	-	-	-	-	-	-	-	-
2	4	0	3	8	15	31	72	76	69	55	77	80	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 1145 - 1245 (310), AM PHF=0.92

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13121 -- English (ENU)

Datasets:

Site: [14NB] WINCHESTER N OF BUDD
Input A: 1 - North bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=5281 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	951	935	1152	752	604	407	247	152	84	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	262	222	289	205	187	133	79	44	20	10
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	258	206	329	229	168	93	73	37	20	15
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	226	261	284	163	142	96	54	39	22	7
-	-	-	-	-	-	-	-	-	-	-	-	-	-	130	206	247	250	155	108	86	42	32	22	13

* Wednesday, September 14, 2016=11719, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
45	23	15	16	30	91	246	565	942	683	615	715	790	803	803	847	879	1078	959	629	446	268	159	78	
10	7	2	2	5	8	31	103	262	177	157	170	222	186	176	197	177	302	270	188	130	62	46	27	14
15	2	6	4	7	20	54	108	225	163	156	182	188	214	183	207	220	280	249	166	120	92	41	22	14
7	5	4	7	1	24	55	123	259	149	146	182	191	184	229	205	237	252	228	137	118	59	44	18	12
13	9	3	3	17	40	106	231	196	194	157	181	190	219	215	240	245	244	212	139	79	55	29	12	6

AM Peak 0745 - 0845 (976), AM PHF=0.93 PM Peak 1645 - 1745 (1079), PM PHF=0.89

* Thursday, September 15, 2016=12566, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
46	31	11	17	34	100	264	638	1260	778	626	843	790	769	888	893	1038	1103	844	627	397	288	173	115	
14	7	5	0	6	15	36	101	322	237	148	175	195	172	200	257	229	277	222	158	131	76	64	38	16
14	12	2	5	4	19	46	118	318	213	159	211	207	187	241	214	259	286	214	166	90	81	44	28	24
12	7	2	5	8	24	66	150	332	176	157	213	195	187	223	196	279	280	197	140	97	80	33	23	17
6	5	2	7	16	43	116	270	288	153	163	244	194	224	225	227	271	261	211	164	80	51	32	26	10

AM Peak 0800 - 0900 (1260), AM PHF=0.95 PM Peak 1645 - 1745 (1114), PM PHF=0.97

* Friday, September 16, 2016=4896 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
67	33	25	17	33	85	246	590	914	649	709	842	686	2	-	-	-	-	-	-	-	-	-	-	-
16	5	10	1	6	11	38	89	269	169	192	199	215	0	0	-	-	-	-	-	-	-	-	-	-
24	10	4	2	5	17	53	123	221	170	168	220	204	0	0	-	-	-	-	-	-	-	-	-	-
17	10	5	7	7	22	59	154	225	146	187	206	215	0	1	-	-	-	-	-	-	-	-	-	-
10	8	6	7	15	35	97	225	200	166	162	218	52	2	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (939), AM PHF=0.87

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13122 -- English (ENU)

Datasets:

Site: [14SB] WINCHESTER N OF BUDD
Input A: 3 - South bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=5123 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	806	848	891	869	645	466	335	175	90	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207	209	213	239	184	120	111	62	31	17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	203	210	222	213	184	128	102	57	32	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	198	217	232	221	156	114	60	28	18	15
-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	199	213	225	196	122	105	63	29	9	3

* Wednesday, September 14, 2016=10951, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
44	33	18	14	38	93	230	571	622	507	541	595	739	747	759	818	817	918	860	670	626	387	211	99	
17	8	8	1	4	13	42	84	169	136	123	123	181	193	196	201	205	250	241	198	213	106	80	34	11
9	10	3	4	12	19	34	103	147	109	167	140	171	195	212	203	188	235	224	167	139	113	54	30	13
15	8	3	5	7	26	63	168	153	123	131	169	197	195	161	212	205	203	201	153	164	95	44	22	16
3	7	4	4	15	36	92	217	153	140	121	164	191	164	191	202	220	231	195	153	111	74	33	14	13

AM Peak 1145 - 1245 (712), AM PHF=0.91 PM Peak 1700 - 1800 (918), PM PHF=0.92

* Thursday, September 15, 2016=11370, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
53	30	17	22	30	81	222	584	614	546	514	653	695	813	908	819	956	1005	875	722	508	372	219	118	
11	7	9	7	3	15	42	83	174	155	116	129	153	188	219	213	251	257	248	187	129	105	66	38	21
13	9	2	2	4	13	45	134	156	139	126	175	167	195	251	192	247	257	200	202	135	109	72	19	23
16	5	2	3	2	21	62	185	136	129	145	172	191	227	240	223	230	265	215	178	130	86	49	28	15
13	9	4	10	21	33	74	183	148	123	128	177	185	203	199	192	229	227	214	156	115	72	33	33	12

AM Peak 0730 - 0830 (697), AM PHF=0.94 PM Peak 1645 - 1745 (1008), PM PHF=0.95

* Friday, September 16, 2016=4197 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
71	44	26	18	36	71	223	589	654	567	590	692	614	4	-	-	-	-	-	-	-	-	-	-	-
21	12	8	3	4	11	45	85	166	133	157	155	188	1	0	-	-	-	-	-	-	-	-	-	-
23	13	7	3	4	15	42	114	195	134	154	161	205	0	0	-	-	-	-	-	-	-	-	-	-
15	7	5	6	12	23	63	180	147	145	136	195	189	0	-	-	-	-	-	-	-	-	-	-	-
12	12	6	6	16	23	74	211	147	156	144	181	32	3	-	-	-	-	-	-	-	-	-	-	-

AM Peak 1130 - 1230 (769), AM PHF=0.94

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13085 -- English (ENU)

Datasets:

Site: [4] WINCHESTER N OF HAMILTON
Input A: 1 - North bound. - Lane= 0, Added to totals. (/2.000)
Input B: 3 - South bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=8135 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	903	1160	1020	1213	1019	820	644	678	429	252	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	61	285	242	289	274	250	197	173	116	86	36
-	-	-	-	-	-	-	-	-	-	-	-	-	-	258	342	236	276	260	211	155	203	106	65	42
-	-	-	-	-	-	-	-	-	-	-	-	-	-	272	271	259	318	254	193	140	166	99	64	28
-	-	-	-	-	-	-	-	-	-	-	-	-	-	313	262	283	330	232	166	152	137	109	37	24

* Wednesday, September 14, 2016=15044, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
130	66	28	34	41	98	343	858	1242	851	769	784	925	957	974	1089	1008	1195	991	907	698	532	321	209	
36	18	7	9	6	12	67	148	338	261	186	162	210	252	243	280	247	297	272	260	171	143	90	76	39
42	22	8	10	10	32	53	181	324	201	189	209	220	247	261	279	235	303	250	245	181	147	90	62	31
28	14	9	6	10	26	81	249	310	169	181	199	247	218	236	234	249	291	257	193	189	143	74	41	18
24	12	4	9	15	28	142	281	270	220	213	215	249	241	235	297	277	304	213	210	158	101	67	31	25

AM Peak 0745 - 0845 (1253), AM PHF=0.93 PM Peak 1700 - 1800 (1195), PM PHF=0.98

* Thursday, September 15, 2016=16253, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
113	67	30	24	30	78	354	1018	1642	1063	771	972	1029	902	1077	1068	1024	1153	967	862	682	640	436	257	
39	24	11	5	5	17	62	150	476	331	182	219	265	255	266	272	264	265	275	237	202	167	128	93	47
31	17	7	6	9	19	69	209	435	245	201	240	243	221	274	279	275	321	248	231	184	172	113	57	33
18	13	9	6	7	15	105	304	387	242	177	244	257	204	295	263	240	284	228	212	147	160	103	60	25
25	13	3	7	9	27	119	356	345	246	211	270	264	223	243	254	245	284	217	183	149	142	93	48	19

AM Peak 0745 - 0845 (1653), AM PHF=0.87 PM Peak 1715 - 1815 (1163), PM PHF=0.91

* Friday, September 16, 2016=5531 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
124	74	52	30	44	109	327	831	1166	811	759	870	336	1	-	-	-	-	-	-	-	-	-	-	-
47	22	16	6	10	18	47	139	362	209	195	180	279	0	0	-	-	-	-	-	-	-	-	-	-
33	20	17	7	11	19	81	171	317	199	189	230	57	1	0	-	-	-	-	-	-	-	-	-	-
25	22	10	3	10	28	89	214	260	197	181	216	1	0	-	-	-	-	-	-	-	-	-	-	-
19	10	9	14	14	45	111	309	228	206	196	245	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (1247), AM PHF=0.86

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13086 -- English (ENU)

Datasets:

Site: [4] WINCHESTER N OF HAMILTON
Input A: 1 - North bound. - Lane= 0, Excluded from totals.
Input B: 3 - South bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=7898 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	978	1068	1161	1253	1157	888	622	400	225	146	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	277	271	318	352	232	181	108	73	50	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	272	250	291	323	298	235	173	133	58	38	26
-	-	-	-	-	-	-	-	-	-	-	-	-	-	299	264	279	323	253	257	155	73	51	32	12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	308	278	321	289	255	165	114	87	44	27	11

* Wednesday, September 14, 2016=14943, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
66	40	20	34	57	202	375	852	920	681	662	781	962	1053	1012	1104	1190	1297	1200	937	647	456	260	141	
18	11	3	5	8	28	56	152	299	170	180	180	221	233	249	283	285	300	351	275	171	161	91	44	26
26	10	4	11	11	42	74	184	247	149	169	162	233	264	262	297	292	326	297	256	146	130	61	35	23
12	9	8	8	19	51	104	239	195	171	161	198	261	286	241	245	302	337	291	197	183	91	62	31	19
11	11	5	10	19	81	142	278	179	192	154	241	248	271	261	280	311	336	262	209	147	75	47	33	18

AM Peak 0730 - 0830 (1062), AM PHF=0.89 PM Peak 1715 - 1815 (1348), PM PHF=0.96

* Thursday, September 15, 2016=15076, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
85	56	26	39	51	183	384	804	1015	650	755	883	952	948	1136	1024	1214	1321	1142	937	638	412	277	148	
26	13	7	11	7	25	75	133	260	172	161	208	253	239	256	284	280	339	332	264	204	124	87	56	35
23	17	4	5	9	34	67	166	332	131	186	213	215	244	283	242	311	337	283	227	155	109	73	39	20
19	15	5	8	18	51	121	225	203	176	203	230	241	251	316	259	289	322	292	213	148	99	59	30	13
18	11	10	15	17	74	121	281	220	171	205	233	243	214	281	240	335	323	236	234	133	80	59	24	13

AM Peak 0730 - 0830 (1097), AM PHF=0.83 PM Peak 1645 - 1745 (1333), PM PHF=0.98

* Friday, September 16, 2016=5269 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
81	45	35	38	69	185	384	867	917	745	694	903	307	1	-	-	-	-	-	-	-	-	-	-	-
35	16	6	11	11	23	72	143	307	193	157	200	259	0	0	-	-	-	-	-	-	-	-	-	-
20	5	9	8	14	47	69	186	271	173	187	239	48	1	0	-	-	-	-	-	-	-	-	-	-
13	15	11	7	17	46	107	250	156	157	160	238	1	0	-	-	-	-	-	-	-	-	-	-	-
13	9	9	12	27	70	136	289	184	222	191	226	0	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (1117), AM PHF=0.91

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13126 -- English (ENU)

Datasets:

Site: [18NB] WINCHESTER N OF PARR
Input A: 1 - North bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=6657 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	729	814	960	836	923	707	629	430	286	228	116	
-	-	-	-	-	-	-	-	-	-	-	-	-	188	196	278	204	248	199	210	126	76	49	34	13
-	-	-	-	-	-	-	-	-	-	-	-	54	192	205	274	227	234	165	158	100	82	50	32	13
-	-	-	-	-	-	-	-	-	-	-	-	186	162	224	204	195	211	169	147	97	69	82	37	12
-	-	-	-	-	-	-	-	-	-	-	-	162	188	190	205	211	231	176	115	108	60	47	14	11

* Wednesday, September 14, 2016=11904, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
49	22	17	13	21	89	251	658	1015	738	764	712	797	808	900	844	842	890	750	630	415	356	212	118	
13	8	1	2	5	11	41	118	254	178	197	181	208	202	220	216	212	246	221	193	128	97	65	41	18
13	4	4	3	7	25	52	151	260	189	185	182	209	188	221	220	181	202	182	153	87	107	45	21	10
12	4	6	6	1	27	60	165	263	174	190	153	183	201	226	220	264	227	182	140	106	70	56	28	12
11	6	6	2	8	26	99	224	238	198	193	197	198	218	234	189	185	215	166	145	94	83	46	28	17

AM Peak 0800 - 0900 (1015), AM PHF=0.96 PM Peak 1400 - 1500 (900), PM PHF=0.96

* Thursday, September 15, 2016=12375, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
57	20	22	23	22	90	247	731	1251	774	705	785	801	798	907	881	882	922	717	639	433	324	234	116	
18	5	9	6	4	13	28	130	334	206	190	179	198	200	217	246	223	265	206	176	133	89	74	39	16
10	6	5	6	5	13	51	142	336	205	171	212	182	211	211	220	227	254	191	162	107	75	54	26	21
12	6	4	7	5	26	70	209	319	192	169	198	217	181	227	224	236	217	146	150	102	84	40	26	10
17	3	4	4	9	38	98	251	262	172	176	197	204	207	253	192	197	186	175	152	93	76	67	25	16

AM Peak 0800 - 0900 (1251), AM PHF=0.93 PM Peak 1630 - 1730 (952), PM PHF=0.90

* Friday, September 16, 2016=4562 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
63	30	27	18	25	82	241	637	855	697	703	789	396	1	-	-	-	-	-	-	-	-	-	-	-
16	5	12	1	5	9	34	98	210	186	158	205	199	0	0	-	-	-	-	-	-	-	-	-	-
21	10	6	2	3	14	53	159	230	172	169	201	183	0	0	-	-	-	-	-	-	-	-	-	-
10	9	4	6	4	29	63	174	234	181	184	187	15	0	-	-	-	-	-	-	-	-	-	-	-
16	6	5	9	13	30	93	207	182	159	192	196	0	1	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0745 - 0845 (881), AM PHF=0.94

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13127 -- English (ENU)

Datasets:

Site: [18SB] WINCHESTER N OF PARR
Input A: 3 - South bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=6190 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	650	804	799	806	1013	792	567	326	241	119	74	
-	-	-	-	-	-	-	-	-	-	-	-	-	129	175	181	167	238	226	167	89	62	29	28	9
-	-	-	-	-	-	-	-	-	-	-	-	-	191	228	200	222	250	192	168	98	77	42	18	10
-	-	-	-	-	-	-	-	-	-	-	-	138	147	209	199	216	291	209	135	72	57	23	15	12
-	-	-	-	-	-	-	-	-	-	-	-	159	184	193	219	202	235	166	98	67	46	25	13	10

* Wednesday, September 14, 2016=11384, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
41	15	11	19	64	169	316	698	902	758	686	685	637	748	695	809	829	1043	814	532	396	277	165	81	
9	5	4	5	7	20	59	133	255	204	183	180	150	189	180	185	200	253	216	151	107	68	58	16	13
10	3	2	5	14	34	65	128	226	185	179	167	146	214	166	184	205	259	235	162	108	83	32	29	10
12	5	3	6	19	45	78	171	216	187	144	174	152	193	170	227	214	275	174	120	103	57	42	21	5
10	2	2	3	24	71	115	267	205	182	180	164	190	153	179	214	211	256	189	100	79	70	34	15	7

AM Peak 0745 - 0845 (964), AM PHF=0.90 PM Peak 1700 - 1800 (1043), PM PHF=0.95

* Thursday, September 15, 2016=11796, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
35	15	26	16	44	178	329	732	884	726	660	655	658	699	834	918	1036	1055	855	512	379	293	169	95	
13	7	1	4	3	23	56	120	239	208	153	141	150	179	212	188	262	248	214	154	116	77	51	25	10
10	3	10	2	8	47	76	152	237	166	174	175	166	179	212	203	233	273	237	131	81	81	43	23	15
5	2	6	5	21	48	91	217	211	180	170	166	172	164	196	244	272	280	211	120	108	66	40	24	10
7	3	9	5	12	60	108	243	197	172	164	173	171	178	214	284	269	255	194	108	75	69	36	23	10

AM Peak 0730 - 0830 (936), AM PHF=0.96 PM Peak 1645 - 1745 (1069), PM PHF=0.96

* Friday, September 16, 2016=4553 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
45	20	18	22	49	156	338	702	849	696	686	633	341	1	-	-	-	-	-	-	-	-	-	-	-
10	6	2	3	8	22	56	134	243	204	188	147	168	1	0	-	-	-	-	-	-	-	-	-	-
15	5	8	8	8	34	71	134	232	158	178	169	169	0	-	-	-	-	-	-	-	-	-	-	-
10	2	6	7	11	43	91	181	172	185	149	155	4	0	-	-	-	-	-	-	-	-	-	-	-
10	7	2	4	22	58	121	253	203	150	173	163	1	0	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0730 - 0830 (909), AM PHF=0.90

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-14326 -- English (ENU)

Datasets:

Site: [16WB] CAMDEN E OF 17 NB ON-RAMP
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: TDS
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 27, 2016=35856, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
150	80	66	58	215	633	1938	3202	3204	3041	2317	2089	2104	1993	2127	2259	1995	2113	1796	1439	1148	873	676	346	
38	28	12	12	39	90	246	811	787	823	642	557	537	499	466	596	480	530	520	388	330	239	208	115	62
40	26	14	14	43	128	360	808	837	792	575	514	541	465	505	612	464	579	424	387	288	247	195	82	58
41	13	19	13	66	183	566	810	778	727	519	519	513	527	576	513	532	533	406	333	259	216	142	78	50
31	14	21	20	68	233	767	773	802	700	581	500	514	503	581	538	521	472	447	333	272	172	132	72	41

AM Peak 0815 - 0915 (3240), AM PHF=0.97 PM Peak 1430 - 1530 (2364), PM PHF=0.97

* Wednesday, September 28, 2016=38165, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
210	128	77	102	267	758	2228	3710	3594	3262	2296	2100	2161	2233	2233	2314	2060	2120	1791	1485	1145	914	622	361	
62	35	18	18	41	126	307	953	924	838	660	499	579	544	582	583	541	560	458	412	310	257	188	113	68
58	36	20	22	55	138	405	949	939	853	612	531	552	525	563	604	500	546	440	372	305	250	151	98	58
50	30	24	27	68	221	629	931	878	832	516	532	540	566	552	572	510	496	430	361	253	203	166	82	48
41	28	15	35	105	274	888	878	853	740	510	539	491	598	537	555	510	519	463	341	278	204	118	69	39

AM Peak 0645 - 0745 (3720), AM PHF=0.98 PM Peak 1500 - 1600 (2314), PM PHF=0.96

* Thursday, September 29, 2016=38449, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
213	122	106	108	259	766	2155	3829	3713	3094	2260	2207	2224	2035	2268	2248	2142	2165	1824	1609	1163	929	644	373	
68	36	28	25	38	119	283	959	935	861	608	514	588	488	553	539	545	550	462	438	282	253	206	123	76
58	32	28	25	59	162	379	986	939	770	552	592	549	518	530	622	541	559	475	408	321	246	165	101	76
48	27	31	30	64	215	632	950	941	760	542	542	565	514	623	522	520	536	438	398	280	245	149	90	58
39	28	19	29	100	271	862	935	899	704	559	559	522	515	562	566	537	521	450	365	281	185	125	59	39

AM Peak 0700 - 0800 (3829), AM PHF=0.97 PM Peak 1430 - 1530 (2346), PM PHF=0.94

* Friday, September 30, 2016=38263, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
248	127	101	103	280	747	1964	3483	3516	2620	2244	2337	2476	2284	2271	2193	2084	2043	1863	1665	1160	1008	904	548	
76	30	21	18	43	114	275	826	867	676	506	618	588	542	523	541	527	512	482	448	329	253	281	177	107
76	32	30	20	62	148	432	923	971	663	575	568	633	570	530	586	520	528	458	444	297	265	236	153	82
58	33	26	30	74	211	518	851	902	605	593	562	613	604	642	520	515	507	474	411	283	231	188	111	68
39	32	24	35	101	275	739	884	778	677	572	590	642	569	577	547	523	497	449	363	251	260	200	108	48

AM Peak 0745 - 0845 (3623), AM PHF=0.93 PM Peak 1200 - 1300 (2476), PM PHF=0.96

* Saturday, October 01, 2016=29441, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
305	200	162	110	135	287	494	999	1569	1946	2080	2153	2350	2087	2061	2029	1988	1820	1644	1455	1100	1002	866	606	
107	59	52	31	18	51	87	180	293	415	541	546	579	523	496	519	497	463	419	399	301	236	243	157	116
82	47	48	27	34	60	97	235	352	461	476	535	588	525	527	527	521	474	417	367	287	264	227	172	118
68	51	36	27	40	75	146	264	425	499	509	519	588	523	537	482	475	456	405	372	237	257	194	142	97
48	43	27	25	44	102	164	320	499	572	556	553	596	516	502	502	496	427	403	317	275	246	203	136	68

AM Peak 1145 - 1245 (2307), AM PHF=0.98 PM Peak 1200 - 1300 (2350), PM PHF=0.99

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-14327 -- English (ENU)

Datasets:

Site: [16EB] CAMDEN E OF 17 SB ON-RAMP
Input A: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: TDS
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Saturday, September 17, 2016=24441, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
310	211	121	106	120	263	413	782	1072	1464	1676	1855	1899	1849	1846	1697	1613	1503	1432	1212	994	841	690	478	
90	61	39	35	25	60	71	136	207	342	399	439	472	493	479	446	376	386	367	312	248	202	188	144	129
87	63	30	26	23	51	80	176	226	368	429	463	475	449	469	416	412	407	343	295	244	236	182	119	102
72	41	26	24	29	56	107	195	303	356	417	499	465	457	440	443	414	339	384	309	287	209	171	111	85
61	47	26	21	43	97	156	275	338	398	432	454	488	450	458	393	411	372	338	297	215	194	150	105	68

AM Peak 1130 - 1230 (1899), AM PHF=0.95 PM Peak 1215 - 1315 (1920), PM PHF=0.97

* Sunday, September 18, 2016=19113, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
384	226	144	91	92	145	219	429	698	1071	1241	1369	1449	1508	1426	1357	1274	1288	1170	1155	920	713	485	262	
129	72	44	22	18	24	39	95	138	216	297	294	366	395	332	351	314	364	295	304	259	223	149	80	36
102	57	33	26	21	30	49	95	157	289	291	368	353	374	371	337	341	320	316	302	245	203	126	66	47
85	46	39	21	25	44	70	99	175	264	317	329	347	358	357	321	302	295	301	282	224	160	116	71	39
68	52	29	23	29	48	62	141	228	303	336	379	383	382	367	349	318	311	259	267	193	128	95	46	28

AM Peak 1145 - 1245 (1445), AM PHF=0.95 PM Peak 1245 - 1345 (1509), PM PHF=0.96

* Monday, September 19, 2016=33624, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
149	82	69	75	163	473	914	1548	2019	1638	1654	1713	1856	1896	2168	2921	3292	3487	2860	1873	1117	814	544	307	
36	23	18	20	22	82	152	325	504	380	452	400	507	475	509	656	842	862	729	543	338	238	180	95	66
47	19	14	19	33	102	217	319	542	386	360	418	458	411	547	736	841	892	795	520	304	203	124	84	47
39	23	8	14	42	122	247	413	511	404	411	430	452	495	524	731	801	910	707	432	252	189	133	59	43
28	17	30	22	67	167	298	492	462	468	431	465	440	516	589	798	808	824	630	379	224	184	108	70	33

AM Peak 0745 - 0845 (2048), AM PHF=0.94 PM Peak 1700 - 1800 (3487), PM PHF=0.96

* Tuesday, September 20, 2016=35206, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
188	95	84	89	176	494	932	1634	1889	1578	1695	1802	1912	1920	2338	3148	3413	3494	3224	2086	1158	867	645	353	
66	24	18	23	24	86	151	339	488	385	443	423	464	450	528	708	875	922	840	680	320	255	203	113	47
47	22	22	23	42	94	184	381	507	417	387	458	492	461	564	786	835	854	844	563	311	226	171	93	46
43	26	25	16	51	139	268	417	438	377	445	412	473	503	566	811	872	858	800	465	255	198	147	73	41
33	23	19	28	60	177	330	497	456	400	420	509	483	506	681	843	832	860	740	378	272	189	124	75	43

AM Peak 1145 - 1245 (1938), AM PHF=0.95 PM Peak 1700 - 1800 (3494), PM PHF=0.95

* Wednesday, September 21, 2016=35916, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
177	79	81	95	179	501	957	1598	1966	1820	1608	1798	2106	2033	2451	3189	3332	3269	3347	2246	1219	941	614	317	
47	26	20	21	30	82	164	357	496	399	429	410	528	475	568	755	791	835	878	704	367	265	191	89	52
46	22	23	18	37	116	209	372	503	442	389	480	522	474	605	756	864	830	869	606	300	267	175	86	47
41	17	21	33	43	126	291	377	491	468	379	438	531	507	620	808	824	813	811	512	282	202	141	70	44
43	14	18	24	70	177	294	493	477	513	412	471	525	578	659	870	854	791	789	425	270	207	108	73	47

AM Peak 1145 - 1245 (2052), AM PHF=0.97 PM Peak 1615 - 1715 (3376), PM PHF=0.98

* Thursday, September 22, 2016=35740, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
189	122	74	83	178	491	948	1588	1873	1739	1605	1810	2022	1997	2490	3190	3435	3342	3175	2135	1301	951	651	355	
52	32	19	18	28	67	152	336	472	423	399	415	461	458	535	787	846	825	857	683	392	277	188	125	64
47	42	13	14	49	99	193	338	482	419	396	410	555	465	605	763	862	861	815	520	331	257	145	76	70
44	18	25	25	43	133	264	435	479	433	399	490	482	504	643	806	881	817	795	489	319	225	174	81	40
47	30	17	28	58	192	339	480	441	465	412	496	525	571	707	835	847	839	709	444	261	193	146	74	42

AM Peak 1130 - 1230 (2001), AM PHF=0.90 PM Peak 1600 - 1700 (3435), PM PHF=0.98

* Friday, September 23, 2016=35119 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
215	108	86	76	176	440	914	1630	1980	1795	1748	1893	2158	1864	2704	3304	3388	3388	2782	1886	1099	1039	-	-	
64	43	22	15	37	69	156	308	486	420	442	440	528	475	608	815	851	821	776	621	321	266	212	-	-
70	31	17	11	44	72	198	364	549	462	412	478	576	466	674	837	827	882	717	481	257	244	204	-	-
40	24	24	27	52	135	242	456	477	410	421	508	520	424	671	833	877	840	698	446	260	258	37	-	-
42	11	23	25	44	164	318	503	470	504	475	468	535	500	752	821	834	845	592	338	261	271	-	-	-

AM Peak 1145 - 1245 (2091), AM PHF=0.91

Traffic Data Service -- Campbell, CA

Event Counts

EventCount-14302 -- English (ENU)

Datasets:

Site: [12EB] CAMPBELL E OF UNION
Input A: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Fremont Speed
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=3414 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	663	849	583	444	384	272	150	72	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	194	147	111	119	80	41	30	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154	201	167	125	86	62	39	10	13
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	169	228	145	100	88	75	29	16	11
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	183	226	125	108	91	56	41	16	6

* Wednesday, September 14, 2016=7875, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
39	15	7	12	27	78	157	346	484	373	340	413	526	488	491	493	642	780	648	491	442	349	169	70	
9	7	0	3	5	6	30	66	138	115	79	92	135	117	119	105	157	189	187	128	115	106	56	17	14
13	5	2	5	6	15	36	73	125	92	84	88	127	124	111	116	144	221	160	126	116	87	39	20	9
11	1	0	2	7	29	47	87	111	89	78	113	137	127	134	121	165	193	154	124	106	79	34	14	12
6	2	5	2	10	28	44	120	111	79	100	121	127	120	128	151	177	177	147	114	106	77	41	19	4

AM Peak 1145 - 1245 (519), AM PHF=0.95 PM Peak 1700 - 1800 (780), PM PHF=0.88

* Thursday, September 15, 2016=8256, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
39	21	16	12	26	81	155	331	516	346	344	485	543	465	535	620	708	864	679	470	372	340	195	98	
14	6	7	4	3	11	28	60	136	79	95	101	145	127	124	168	170	220	189	127	110	97	49	28	18
9	3	3	3	3	10	26	72	128	92	79	126	145	116	141	147	163	232	175	124	96	101	67	23	15
12	6	5	3	7	26	48	82	124	90	81	118	122	119	136	136	204	190	177	115	84	82	48	27	15
4	6	1	2	13	34	54	118	128	86	90	140	132	104	134	169	171	222	139	105	83	61	32	20	8

AM Peak 1145 - 1245 (551), AM PHF=0.95 PM Peak 1700 - 1800 (864), PM PHF=0.93

* Friday, September 16, 2016=8427, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
56	43	25	19	27	73	172	329	434	360	403	494	522	520	533	595	656	726	573	551	404	451	280	185	
18	10	11	6	8	11	27	67	124	98	95	106	138	142	134	146	164	180	155	134	95	106	78	56	40
15	13	6	0	1	18	31	62	116	69	98	136	119	131	142	156	157	209	134	142	99	139	70	51	40
15	12	2	8	8	13	51	84	99	97	98	123	142	116	126	139	175	183	142	153	114	105	70	41	30
8	8	6	5	10	31	64	116	96	97	113	130	124	132	132	155	161	155	142	122	97	102	63	37	22

AM Peak 1145 - 1245 (528), AM PHF=0.93 PM Peak 1645 - 1745 (732), PM PHF=0.88

* Saturday, September 17, 2016=7020, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
131	138	83	24	19	29	53	115	223	380	450	518	481	537	510	486	479	424	470	412	304	347	235	177	
40	30	38	13	1	3	8	19	51	93	118	145	123	132	121	125	128	102	127	108	78	97	64	54	36
40	23	20	4	5	8	13	24	48	71	108	109	144	145	127	131	121	96	120	107	72	81	50	43	32
30	34	14	4	6	4	17	35	54	110	109	134	115	129	133	122	106	111	117	100	82	93	60	45	38
22	51	12	3	7	14	15	38	71	106	116	131	99	132	130	109	125	115	107	99	73	76	62	36	25

AM Peak 1130 - 1230 (531), AM PHF=0.92 PM Peak 1300 - 1400 (537), PM PHF=0.93

* Sunday, September 18, 2016=6039, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
131	111	67	17	19	20	34	100	166	378	448	508	496	455	406	396	359	387	419	414	328	213	107	65	
36	26	26	9	1	4	2	18	30	90	112	125	135	129	89	102	94	95	98	104	86	55	37	20	11
32	28	19	2	9	8	12	23	38	85	123	127	128	132	118	115	89	111	106	94	95	64	28	20	4
38	21	13	2	6	2	14	30	51	83	112	127	126	90	100	94	84	83	110	114	85	55	22	11	11
25	36	10	4	3	6	6	29	47	121	102	130	108	105	100	86	94	99	107	103	63	39	20	14	6

AM Peak 1130 - 1230 (520), AM PHF=0.96 PM Peak 1200 - 1300 (496), PM PHF=0.92

*** Monday, September 19, 2016=7208, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
32	12	9	9	31	67	144	348	464	351	377	421	470	450	464	555	580	728	524	424	334	235	113	71	
11	6	2	2	13	11	26	59	124	94	90	91	120	111	123	138	138	189	134	119	95	75	34	28	9
4	3	5	0	1	12	41	74	113	82	109	107	124	102	107	132	148	201	138	111	89	69	32	19	8
11	2	2	4	7	18	24	92	116	87	90	103	102	107	111	135	168	173	129	103	84	41	25	10	5
6	1	0	3	10	27	53	124	111	89	89	121	125	131	124	151	126	166	125	92	66	51	22	14	5

AM Peak 0745 - 0845 (476), AM PHF=0.96 PM Peak 1700 - 1800 (728), PM PHF=0.91

*** Tuesday, September 20, 2016=7964, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
27	21	11	7	31	62	152	353	458	365	404	454	510	469	444	579	693	835	650	539	383	269	151	100	
9	3	4	2	5	8	27	68	114	103	82	104	127	110	94	146	171	197	208	151	96	76	55	28	10
8	7	3	0	8	10	31	79	104	90	105	119	133	133	125	146	165	216	158	140	101	82	31	37	11
5	5	1	3	3	22	50	87	121	75	102	133	124	129	108	166	187	214	147	127	91	71	30	16	4
5	6	3	2	15	22	44	120	120	98	117	99	127	98	119	121	171	209	139	122	95	41	36	19	8

AM Peak 1130 - 1230 (491), AM PHF=0.92 PM Peak 1715 - 1815 (845), PM PHF=0.98

*** Wednesday, September 21, 2016=7729, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
33	20	20	10	25	80	165	335	486	326	378	425	514	473	471	555	651	832	626	488	303	282	153	84	
10	4	4	2	3	7	25	52	135	90	89	100	142	97	120	135	163	218	199	126	81	76	43	31	13
11	8	5	4	3	12	41	72	125	76	101	95	110	124	114	121	148	222	154	134	83	84	41	18	8
4	4	8	3	14	25	32	96	112	88	108	109	125	118	105	158	162	190	150	118	68	72	35	17	5
8	4	3	1	6	36	68	116	114	72	80	121	137	135	133	142	179	203	125	111	71	51	34	18	9

AM Peak 1145 - 1245 (498), AM PHF=0.88 PM Peak 1700 - 1800 (832), PM PHF=0.94

*** Thursday, September 22, 2016=8002, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
35	28	15	10	31	82	167	343	464	366	384	505	476	482	480	618	629	810	613	519	371	315	172	93	
13	5	8	1	4	6	30	61	111	98	102	120	125	126	112	147	164	207	172	144	121	101	59	24	16
8	10	4	2	4	18	28	79	142	95	99	108	130	125	110	176	160	171	168	152	101	80	43	30	24
5	8	1	3	10	21	54	95	97	83	105	132	122	120	120	152	158	212	122	124	78	76	32	25	18
9	5	2	4	13	37	55	108	114	91	79	146	99	111	138	144	148	220	151	100	72	58	38	14	7

AM Peak 1130 - 1230 (532), AM PHF=0.91 PM Peak 1700 - 1800 (810), PM PHF=0.92

Traffic Data Service -- Campbell, CA

Event Counts

EventCount-14301 -- English (ENU)

Datasets:

Site: [12WB] CAMPBELL E OF UNION
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 0 - Unused or unknown. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: TDS
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Tuesday, September 13, 2016=2786 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	482	564	552	473	329	229	103	57	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113	124	141	151	107	73	37	18	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	112	138	129	123	73	67	22	11	12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	119	151	143	107	65	49	18	18	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	139	151	141	93	84	40	26	10	5

* Wednesday, September 14, 2016=6988, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
31	22	8	11	14	54	146	425	512	372	314	403	424	475	457	461	480	597	582	462	346	220	114	64	
8	5	3	2	4	4	30	78	156	97	84	82	104	126	117	109	120	139	157	122	98	71	33	21	14
12	7	1	1	2	15	28	66	129	84	72	102	103	124	115	110	108	157	162	127	90	63	27	16	6
6	6	1	5	1	9	32	118	123	89	74	114	109	116	108	122	115	159	131	114	78	47	29	13	2
5	4	3	3	7	27	56	163	105	102	84	105	109	110	118	121	137	142	133	100	81	40	25	14	4

AM Peak 0745 - 0845 (570), AM PHF=0.88 PM Peak 1730 - 1830 (620), PM PHF=0.96

* Thursday, September 15, 2016=7304, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
26	25	13	20	16	40	151	393	606	427	379	405	480	453	448	479	542	556	598	485	333	234	128	74	
14	5	1	7	1	5	19	63	166	135	111	83	120	108	112	112	149	129	164	107	92	68	38	29	11
6	3	3	7	3	10	34	71	153	94	86	92	135	123	102	119	129	147	151	138	93	78	31	19	9
2	6	5	2	2	9	50	105	152	93	85	111	94	117	110	119	120	143	142	121	74	55	35	15	7
4	11	4	5	10	16	48	155	136	106	98	120	131	105	125	130	144	138	142	120	74	34	25	11	9

AM Peak 0745 - 0845 (625), AM PHF=0.94 PM Peak 1800 - 1900 (598), PM PHF=0.91

* Friday, September 16, 2016=8301, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
36	24	21	11	22	49	127	412	522	387	390	472	480	462	527	472	526	617	557	440	1133	287	180	153	
11	9	7	4	6	8	24	69	157	92	105	87	108	118	122	120	152	157	157	124	94	81	58	39	24
9	3	4	1	4	9	30	80	129	92	87	126	130	123	129	112	123	132	137	113	355	68	54	38	19
7	7	7	5	3	8	35	96	116	88	105	116	110	129	141	117	124	167	113	116	532	72	35	47	24
9	5	3	1	10	24	38	168	121	115	93	143	133	93	136	124	128	161	152	88	153	67	34	29	24

AM Peak 0745 - 0845 (569), AM PHF=0.85 PM Peak 2000 - 2100 (1133), PM PHF=0.53

* Saturday, September 17, 2016=6416, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
91	58	58	20	17	23	110	141	266	352	405	494	473	509	481	448	417	415	412	380	318	228	186	120	
24	15	22	9	4	3	16	34	43	74	93	119	122	127	124	95	98	99	99	90	69	60	63	29	30
19	13	13	3	2	4	33	32	67	79	101	122	120	120	127	132	101	102	107	111	95	54	49	36	30
24	19	11	4	3	3	25	30	84	104	103	119	123	128	108	94	107	119	109	80	84	64	40	21	26
24	11	12	4	8	13	36	46	73	96	109	134	109	135	122	127	111	97	97	100	70	51	35	34	26

AM Peak 1145 - 1245 (498), AM PHF=0.93 PM Peak 1330 - 1430 (514), PM PHF=0.95

* Sunday, September 18, 2016=5635, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
112	55	35	16	12	19	56	122	279	386	437	425	472	426	371	346	395	374	372	357	271	159	96	47	
30	18	14	4	4	3	7	18	47	91	117	116	132	127	107	80	80	105	97	101	84	54	31	16	10
30	7	9	7	3	5	15	29	69	99	121	97	110	102	79	82	99	88	93	84	69	47	21	16	8
26	15	6	1	2	5	7	29	63	84	82	101	110	108	84	82	112	82	100	98	53	35	28	5	5
26	15	6	4	3	6	28	46	100	112	118	113	120	91	102	103	105	99	83	74	66	23	16	10	4

AM Peak 1145 - 1245 (464), AM PHF=0.88 PM Peak 1200 - 1300 (472), PM PHF=0.89

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13304 -- English (ENU)

Datasets:

Site: [17] POLLARD W OF 85
Input A: 4 - West bound. - Lane= 0, Excluded from totals.
Input B: 2 - East bound. - Lane= 0, Added to totals. (/2.000)
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Sunday, September 18, 2016=3476, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
37	14	12	8	4	13	40	76	147	212	296	300	269	284	271	281	282	246	195	194	123	94	62	20	
16	3	1	5	2	3	6	7	29	39	62	55	71	76	66	62	77	81	49	49	35	31	24	6	4
8	6	3	0	0	1	6	22	35	48	77	82	81	67	78	73	65	60	50	55	36	28	12	4	2
6	3	5	0	0	3	9	21	38	63	66	74	54	62	66	83	64	56	50	49	21	17	17	7	1
8	2	3	3	2	6	19	27	46	63	92	89	64	79	62	63	77	49	46	41	31	18	9	3	3

AM Peak 1115 - 1215 (316), AM PHF=0.89 PM Peak 1515 - 1615 (295), PM PHF=0.89

* Monday, September 19, 2016=6038, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	9	4	5	18	41	106	321	682	337	311	316	343	299	419	732	509	487	397	283	191	122	71	27	
4	3	0	3	4	8	22	36	221	75	90	80	85	71	90	291	103	117	108	71	65	51	31	6	5
2	4	0	0	2	9	14	58	262	93	71	81	91	75	82	183	130	124	112	76	37	28	14	9	6
1	1	2	1	3	10	31	88	106	84	74	71	100	72	93	138	132	112	102	73	45	23	13	10	3
3	1	2	1	9	14	39	139	94	86	77	84	68	81	155	122	145	135	77	64	44	21	13	2	2

AM Peak 0745 - 0845 (728), AM PHF=0.69 PM Peak 1445 - 1545 (766), PM PHF=0.66

* Tuesday, September 20, 2016=6307, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
16	3	3	7	14	45	118	383	666	347	279	294	343	345	424	753	583	570	448	280	185	115	57	33	
5	0	1	2	1	4	29	59	218	71	53	74	75	84	103	283	126	151	122	86	52	47	19	8	4
6	1	0	0	2	9	18	70	252	87	68	66	94	78	81	203	151	144	120	70	39	35	16	11	2
3	2	1	2	2	15	26	88	104	87	80	76	92	86	100	144	157	130	107	73	39	18	14	10	0
2	0	1	3	9	17	45	167	93	103	79	79	83	98	140	124	150	146	100	52	55	15	8	4	3

AM Peak 0745 - 0845 (740), AM PHF=0.74 PM Peak 1445 - 1545 (769), PM PHF=0.68

* Wednesday, September 21, 2016=6929, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
9	9	6	5	16	40	103	323	716	328	325	336	369	410	656	521	637	870	486	344	193	130	66	36	
4	0	0	0	2	5	19	33	211	85	75	84	82	84	294	106	131	248	108	98	44	51	23	9	4
2	4	5	0	6	7	23	57	270	95	88	82	85	92	129	155	127	313	133	106	61	37	15	4	3
0	1	1	4	2	12	24	75	131	68	81	88	110	108	125	136	180	171	135	74	50	22	19	13	1
3	4	0	1	6	16	37	158	105	81	81	83	92	127	109	125	199	139	111	67	38	20	10	10	2

AM Peak 0745 - 0845 (770), AM PHF=0.71 PM Peak 1630 - 1730 (940), PM PHF=0.75

* Thursday, September 22, 2016=6558, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	8	0	4	14	43	100	340	731	384	344	376	383	339	457	786	546	531	468	292	178	128	76	27	
4	3	0	1	4	7	20	53	204	106	96	98	91	78	100	311	114	155	119	99	54	34	30	6	3
3	1	0	0	5	7	18	62	288	103	80	110	103	90	98	187	147	165	126	76	39	41	29	5	2
1	2	0	2	1	14	23	81	140	87	78	88	91	89	118	145	147	108	126	52	45	26	10	9	2
2	2	0	1	4	15	40	145	100	89	91	80	99	82	142	144	138	104	97	65	40	27	8	7	3

AM Peak 0745 - 0845 (776), AM PHF=0.67 PM Peak 1500 - 1600 (786), PM PHF=0.63

* Friday, September 23, 2016=6200, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
10	8	1	3	10	46	106	329	720	304	301	345	339	325	384	823	553	465	390	247	174	150	109	62	
3	3	1	1	1	10	20	56	224	89	77	78	75	86	88	331	137	135	127	61	61	48	42	21	7
2	1	0	0	4	7	22	53	277	70	75	94	85	92	78	173	146	114	76	66	42	29	29	14	3
2	3	0	0	1	13	27	87	113	76	64	92	87	60	85	178	146	123	94	57	33	44	20	13	7
3	1	0	2	4	16	37	134	106	70	86	82	93	88	135	142	125	94	94	63	38	29	19	14	6

AM Peak 0745 - 0845 (747), AM PHF=0.67 PM Peak 1500 - 1600 (823), PM PHF=0.62

* **Saturday, September 24, 2016=4074, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
23	7	10	6	12	12	50	103	187	291	332	326	354	278	309	273	308	284	247	240	139	146	84	57	
7	3	4	1	2	1	7	20	42	79	81	75	87	67	76	65	90	72	59	84	35	45	18	11	12
3	1	5	4	1	2	12	20	41	64	78	83	93	83	79	65	51	61	59	58	36	28	20	18	9
7	1	0	1	3	6	15	25	46	72	83	85	100	61	81	68	92	79	63	50	32	41	17	14	9
6	2	1	0	6	3	16	39	58	77	90	83	75	68	74	76	76	72	66	48	36	33	29	14	6

AM Peak 1145 - 1245 (363), AM PHF=0.91 PM Peak 1200 - 1300 (354), PM PHF=0.89

Traffic Data Service -- San Jose, CA

Event Counts

EventCount-13303 -- English (ENU)

Datasets:

Site: [17] POLLARD W OF 85
Input A: 4 - West bound. - Lane= 0, Added to totals. (/2.000)
Input B: 2 - East bound. - Lane= 0, Excluded from totals.
Data type: Axle sensors - Separate (Count)

Profile:

Name: Default Profile
Scheme: Count events divided by setup divisor
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Sunday, September 18, 2016=3440, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
43	19	15	9	11	14	21	59	169	206	259	252	299	275	287	288	247	240	228	178	143	107	52	23	
13	5	1	2	5	2	5	10	34	50	49	67	63	77	62	68	62	68	64	54	31	29	16	12	4
9	4	6	3	1	4	2	11	49	48	67	63	84	63	83	77	59	56	67	52	34	33	14	4	3
11	7	2	1	4	4	4	18	34	47	65	57	70	65	79	74	67	60	46	38	41	24	12	3	6
10	3	6	3	1	4	10	20	52	62	78	65	82	71	63	69	59	57	51	34	37	21	10	4	1

AM Peak 1145 - 1245 (282), AM PHF=0.84 PM Peak 1215 - 1315 (313), PM PHF=0.93

* Monday, September 19, 2016=6239, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
14	12	8	6	11	38	145	603	748	376	349	313	326	290	536	419	417	483	409	310	202	135	60	34	
4	8	1	1	1	5	25	94	304	120	80	68	94	72	101	157	88	111	123	98	54	40	25	7	6
3	2	0	1	1	11	17	113	185	90	79	83	79	71	128	97	123	140	113	83	53	39	14	9	2
6	1	4	4	4	6	45	149	99	78	107	72	73	60	119	71	108	114	93	76	37	32	12	12	3
1	1	3	0	5	16	58	248	160	88	83	91	80	88	189	95	98	119	81	53	58	25	9	6	4

AM Peak 0730 - 0830 (886), AM PHF=0.73 PM Peak 1415 - 1515 (592), PM PHF=0.78

* Tuesday, September 20, 2016=6387, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
15	4	10	7	15	31	148	623	800	403	344	301	329	322	507	434	440	545	388	306	188	129	62	38	
6	3	3	4	1	1	18	62	349	148	81	70	79	83	103	163	97	137	107	109	56	34	20	12	7
2	0	1	0	1	7	30	131	208	83	95	76	97	79	107	103	123	132	110	86	52	34	19	12	2
3	1	5	3	6	9	38	169	119	82	84	73	78	78	125	87	123	153	92	54	47	27	14	8	7
4	0	1	0	7	14	62	261	125	92	85	82	76	83	172	82	97	123	79	57	33	34	9	6	3

AM Peak 0730 - 0830 (986), AM PHF=0.71 PM Peak 1415 - 1515 (567), PM PHF=0.82

* Wednesday, September 21, 2016=6950, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
19	4	9	8	15	40	139	610	802	425	300	296	345	527	469	710	533	450	471	325	189	161	69	36	
7	0	5	5	1	5	21	75	327	170	69	80	89	110	144	140	168	116	127	89	49	50	17	7	6
2	0	1	1	2	5	25	113	195	94	75	69	95	126	96	217	120	119	126	84	47	44	22	13	7
7	3	1	2	3	7	39	154	114	79	95	78	79	138	112	181	115	100	110	83	36	37	16	9	2
3	1	2	0	9	23	54	269	167	83	62	69	83	154	118	173	131	115	109	71	58	31	14	7	1

AM Peak 0730 - 0830 (944), AM PHF=0.72 PM Peak 1515 - 1615 (738), PM PHF=0.85

* Thursday, September 22, 2016=6968, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
16	4	10	6	15	41	138	662	812	469	373	339	345	297	606	568	568	554	427	273	203	139	73	35	
6	2	1	1	1	7	24	76	339	192	70	87	82	59	110	186	142	134	121	72	64	47	22	19	4
7	0	2	0	5	4	26	134	187	104	109	79	97	69	154	117	139	133	122	75	51	26	13	6	4
2	2	1	3	3	14	31	166	118	80	102	87	104	83	163	140	141	148	83	62	46	38	22	7	6
1	0	6	2	7	16	57	286	170	94	93	86	63	87	180	126	147	139	102	64	42	28	16	3	4

AM Peak 0730 - 0830 (977), AM PHF=0.72 PM Peak 1415 - 1515 (682), PM PHF=0.92

* Friday, September 23, 2016=6147, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
18	7	7	5	19	28	143	523	694	295	297	293	344	316	560	480	474	453	385	304	186	158	105	57	
4	2	2	0	2	4	14	73	326	88	67	65	90	84	111	139	124	123	94	91	41	37	27	14	9
4	3	3	2	5	5	24	101	172	84	70	79	89	72	119	113	117	142	100	67	60	41	28	15	9
6	2	2	2	4	6	50	123	88	72	82	60	85	65	152	120	104	102	112	77	45	43	29	14	5
4	0	0	1	8	13	56	226	109	52	79	89	80	95	179	109	130	87	79	69	40	38	21	14	5

AM Peak 0730 - 0830 (846), AM PHF=0.65 PM Peak 1415 - 1515 (588), PM PHF=0.82

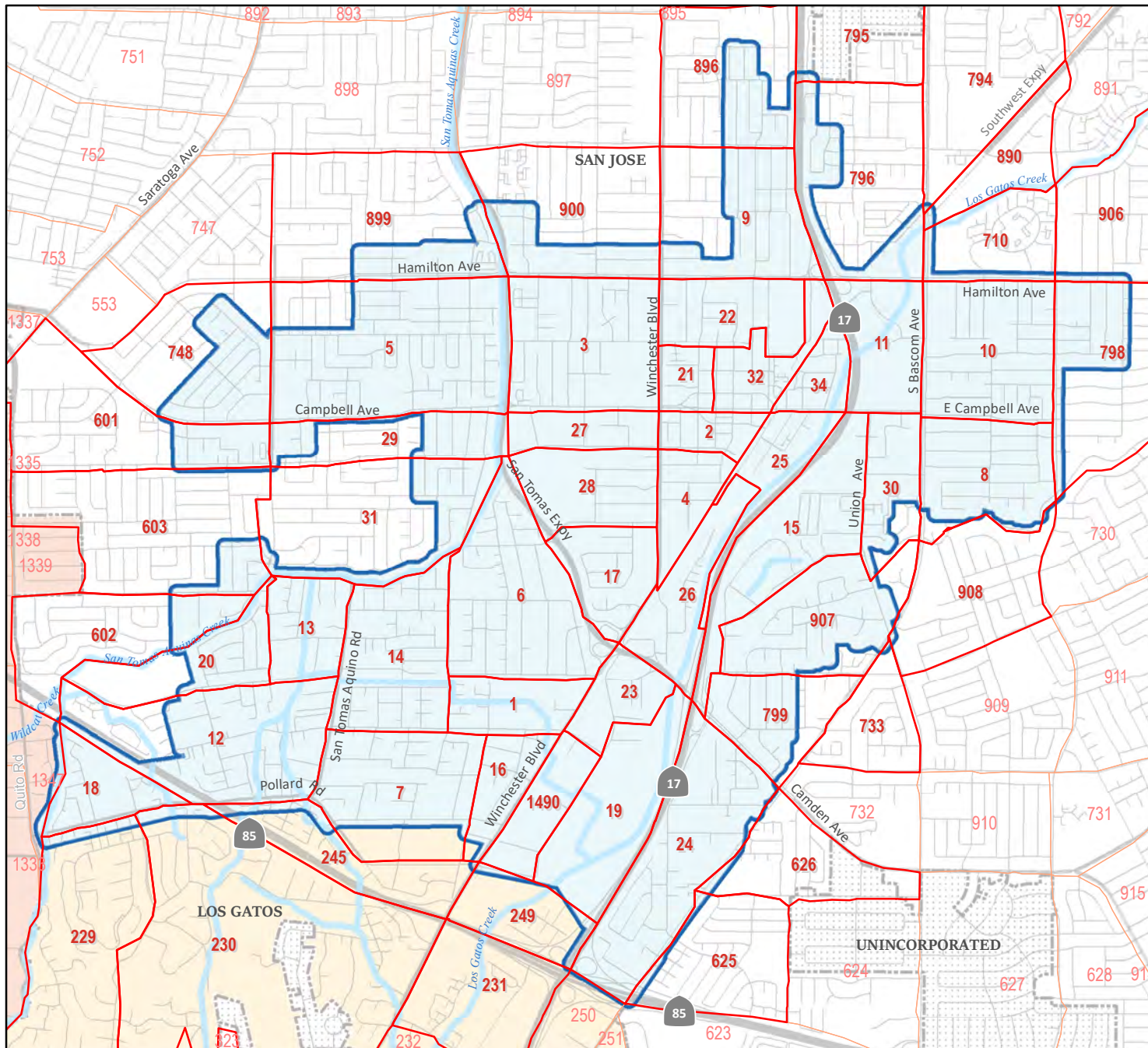
* **Saturday, September 24, 2016=3943, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
28	18	8	10	14	18	27	77	161	269	268	328	333	279	309	305	293	276	254	187	142	161	116	67	
9	5	1	4	1	2	2	15	40	66	50	82	76	74	77	72	79	65	58	53	50	47	33	15	9
9	4	2	2	2	4	1	17	30	65	74	96	91	69	69	75	77	68	59	51	33	46	36	27	14
5	4	0	1	4	5	7	20	34	65	62	74	74	74	68	87	74	70	61	47	18	37	26	10	17
5	5	5	3	7	7	17	26	57	73	82	76	92	63	95	71	63	73	76	37	41	31	21	15	6

AM Peak 1045 - 1145 (334), AM PHF=0.87 PM Peak 1200 - 1300 (333), PM PHF=0.91

Attachment B:

VMT Model Land Use and Population Inputs



CITY OF CAMPBELL GENERAL PLAN UPDATE

VTA TAZ

Legend

 City of Campbell

Surrounding Areas

 Unincorporated Santa Clara County

 SAN JOSE

 LOS GATOS

 SARATOGA

 TAZ Boundaries intersecting with City of Campbell Boundary

 TAZ Boundaries completely outside of City of Campbell

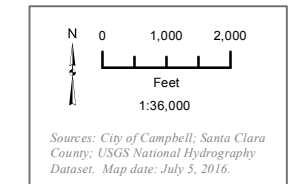


Table B1. VTA Travel Model - City of Campbell Land Use and Population Summary (As Received from VTA July 23, 2020)		
	Existing (2015)	Cumulative (2040)
Total Household	8,447	9,603
Total Population	19,452	22,554
Employed Residents	11,550	11,754
# of Occupied Single Family Dwelling Units	3,658	4,128
# of Occupied Multi Family Dwelling Units	4,789	5,475
Total Employment	17,360	19,105
Retail Employment	3,262	3,616
Service Employment	4,694	5,174
Other Employment	4,222	4,697
Agricultural Employment	189	210
Manufacturing Employment	4,340	4,699
Wholesale Employment	653	709

Notes:

As received model from VTA, dated July 23 2020. As received VTA travel model labels the following as Campbell TAZs: 1, 2, 3, 4, 6, 11, 14, 15, 17, 21, 22, 23, 25, 26, 27, 28, 32, 34. Partial TAZs are not included in the summary

Table B2. VTA Travel Model (2015) - City of Campbell Land Use and Population Inputs (As Received from VTA July 23, 2020)												
TAZ	Total Household	Total Population	Employed Residents	# of Occupied Single Family Dwelling Units	# of Occupied Multi Family Dwelling Units	Total Employment	Retail Employment	Service Employment	Other Employment	Agricultural Employment	Manufacturing Employment	Wholesale Employment
Citywide Total	8,447	19,452	11,550	3,658	4,789	17,360	3,262	4,694	4,222	189	4,340	653
1	569	1,536	927	380	189	506	101	200	203	1	1	0
2	125	254	169	50	75	509	68	278	39	3	107	14
3	772	1,787	931	253	519	950	158	321	311	1	128	31
4	215	439	293	83	132	384	31	109	79	0	139	26
6	775	2,102	1,262	517	258	38	0	13	23	1	1	0
11	130	280	171	46	84	4,757	1,366	1,760	995	0	553	83
14	674	1,821	1,100	447	227	65	11	16	37	1	0	0
15	1,347	2,876	1,764	477	870	3,546	275	543	1,369	167	1,027	165
17	1,007	2,331	1,214	328	679	844	654	9	35	1	117	28
21	244	498	333	105	139	225	14	115	35	0	55	6
22	607	1,237	827	260	347	723	92	304	156	0	152	19
23	3	6	3	1	2	999	62	195	130	3	523	86
25	158	323	216	51	107	1,124	60	164	103	3	731	63
26	540	1,100	738	214	326	994	56	206	127	6	524	75
27	398	920	478	129	269	318	56	81	82	1	78	20
28	512	1,185	617	167	345	190	80	22	43	1	36	8
32	180	367	245	76	104	1,077	148	306	438	0	165	20
34	191	390	262	74	117	111	30	52	17	0	3	9

Notes:

As received VTA travel model labels the following as Campbell TAZs: 1, 2, 3, 4, 6, 11, 14, 15, 17, 21, 22, 23, 25, 26, 27, 28, 32, 34.

Table B3. VTA Travel Model (2040) - City of Campbell Land Use and Population Inputs (As Received from VTA July 23, 2020)												
TAZ	Total Household	Total Population	Employed Residents	# of Occupied Single Family Dwelling Units	# of Occupied Multi Family Dwelling Units	Total Employment	Retail Employment	Service Employment	Other Employment	Agricultural Employment	Manufacturing Employment	Wholesale Employment
Citywide Total	9,603	22,554	11,754	4,128	5,475	19,105	3,616	5,174	4,697	210	4,699	709
1	593	1,646	887	396	197	656	131	259	264	1	1	0
2	165	345	197	67	98	537	72	292	42	3	113	15
3	825	1,963	889	270	555	1,039	173	351	340	1	140	34
4	285	598	342	110	175	405	33	115	83	0	147	27
6	808	2,254	1,210	539	269	49	0	17	30	1	1	0
11	144	317	168	50	94	5,338	1,533	1,974	1,117	0	621	93
14	703	1,954	1,055	466	237	84	14	20	49	1	0	0
15	1,484	3,261	1,733	526	958	3,979	309	609	1,535	187	1,153	186
17	1,076	2,562	1,161	350	726	923	715	10	39	1	128	30
21	323	677	389	139	185	237	15	120	37	0	58	7
22	805	1,686	965	346	459	763	97	321	164	0	161	20
23	4	8	4	1	3	1,054	65	206	137	3	552	91
25	209	440	252	68	141	1,185	63	173	109	3	771	66
26	716	1,500	862	284	432	1,048	59	217	134	7	552	79
27	424	1,009	456	138	286	348	61	89	90	1	85	22
28	547	1,303	590	179	368	207	88	24	46	1	39	9
32	238	499	287	101	137	1,136	156	322	463	0	174	21
34	254	532	307	98	155	117	32	55	18	0	3	9

Notes:
As received VTA travel model labels the following as Campbell TAZs: 1, 2, 3, 4, 6, 11, 14, 15, 17, 21, 22, 23, 25, 26, 27, 28, 32, 34.

Table B4. VTA Travel Model - City of Campbell Land Use and Population Summary (Envision Campbell General Plan and Housing Element Update)			
	Existing	Cumulative (2040)	Cumulative with Project (2040)
Total Household	17,400	19,040	26,224
Total Population	42,726	46,849	64,928
Employed Residents	24,408	26,588	36,347
# of Occupied Single Family Dwelling Units	7,685	7,718	7,710
# of Occupied Multi Family Dwelling Units	9,715	11,322	18,514
Total Employment	30,568	35,201	36,763
Retail Employment	4,599	7,745	7,582
Service Employment	11,819	11,819	13,081
Other Employment	11,968	13,130	13,548
Agricultural Employment	0	0	0
Manufacturing Employment	1,935	2,260	2,304
Wholesale Employment	247	247	247

Source: Fehr & Peers, 2022

Table B5. VTA Travel Model (Existing Conditions) - City of Campbell Land Use and Population Inputs (Envision Campbell General Plan and Housing Element Update)												
TAZ	Total Household	Total Population	Employed Residents	# of Occupied Single Family Dwelling Units	# of Occupied Multi Family Dwelling Units	Total Employment	Retail Employment	Service Employment	Other Employment	Agricultural Employment	Manufacturing Employment	Wholesale Employment
Citywide Total	17,400	42,726	24,408	7,685	9,715	30,568	4,599	11,819	11,968	0	1,935	247
1	612	1,503	997	123	489	259	0	139	120	0	0	0
2	111	273	150	59	52	1,361	0	582	778	0	1	0
3	929	2,281	1,120	411	518	1,440	0	880	560	0	0	0
4	181	444	247	141	40	268	0	140	77	0	51	0
5	2,471	6,068	3,657	1,177	1,294	3,466	1,814	966	686	0	0	0
6	829	2,036	1,350	485	344	40	0	6	0	0	34	0
7	475	1,166	675	427	48	0	0	0	0	0	0	0
8	351	862	415	345	6	272	0	189	83	0	0	0
9	606	1,488	811	380	226	907	0	615	292	0	0	0
10	815	2,001	967	614	201	1,314	783	110	421	0	0	0
11	392	963	516	0	392	5,405	1,248	759	3,398	0	0	0
12	527	1,294	911	508	19	0	0	0	0	0	0	0
13	353	867	608	241	112	27	0	27	0	0	0	0
14	676	1,660	1,103	581	95	15	0	11	4	0	0	0
15	1,302	3,197	1,705	7	1,295	1,757	8	1,310	86	0	315	38
16	147	361	209	83	64	956	0	165	787	0	4	0
17	1,001	2,458	1,207	43	958	806	732	74	0	0	0	0
18	193	474	264	136	57	0	0	0	0	0	0	0
19	0	0	0	0	0	852	0	56	351	0	385	60
20	232	570	400	232	0	0	0	0	0	0	0	0
21	279	685	381	42	237	323	0	90	233	0	0	0
22	507	1,245	691	96	411	1,529	0	971	546	0	12	0
23	1	2	1	1	0	695	0	302	88	0	273	32
24	1,083	2,659	1,561	374	709	924	0	316	522	0	86	0
25	33	81	45	7	26	517	14	315	44	0	87	57
26	488	1,198	667	3	485	738	0	464	161	0	53	60
27	380	933	456	48	332	691	0	524	167	0	0	0
28	484	1,188	583	134	350	154	0	95	59	0	0	0
30	587	1,441	768	5	582	1,607	0	129	1,478	0	0	0
31	271	665	415	271	0	31	0	31	0	0	0	0
32	210	516	286	125	85	1,386	0	1,112	233	0	41	0
34	166	408	228	72	94	230	0	216	14	0	0	0
796	207	508	302	13	194	495	0	110	385	0	0	0
799	166	408	236	166	0	291	0	224	11	0	56	0
907	335	823	475	335	0	287	0	87	43	0	157	0
1490	0	0	0	0	0	1,525	0	804	341	0	380	0

Source: Fehr & Peers, 2022

Table B6. VTA Travel Model (Cumulative (2040) without Project Conditions) - City of Campbell Land Use and Population Inputs
(Envision Campbell General Plan and Housing Element Update)

TAZ	Total Household	Total Population	Employed Residents	# of Occupied Single Family Dwelling Units	# of Occupied Multi Family Dwelling Units	Total Employment	Retail Employment	Service Employment	Other Employment	Agricultural Employment	Manufacturing Employment	Wholesale Employment
Citywide Total	19,040	46,849	26,588	7,718	11,322	35,201	7,745	11,819	13,130	0	2,260	247
1	612	1,506	997	123	489	280	21	139	120	0	0	0
2	237	584	321	59	178	1,601	240	582	778	0	1	0
3	1,039	2,555	1,252	411	628	1,874	425	880	569	0	0	0
4	335	824	457	141	194	672	180	140	301	0	51	0
5	2,574	6,333	3,809	1,178	1,396	3,568	1,888	966	714	0	0	0
6	829	2,040	1,350	485	344	40	0	6	0	0	34	0
7	484	1,191	687	427	57	0	0	0	0	0	0	0
8	354	871	419	348	6	296	24	189	83	0	0	0
9	606	1,491	811	380	226	1,018	94	615	309	0	0	0
10	815	2,005	967	614	201	1,341	798	110	432	0	0	0
11	392	965	516	0	392	5,635	1,469	759	3,406	0	0	0
12	540	1,329	933	512	28	0	0	0	0	0	0	0
13	371	912	638	254	117	27	0	27	0	0	0	0
14	686	1,687	1,119	581	105	20	5	11	4	0	0	0
15	1,329	3,269	1,740	7	1,322	1,847	20	1,310	86	0	393	38
16	155	382	221	83	72	972	16	165	787	0	4	0
17	1,262	3,105	1,521	43	1,219	1,493	1,419	74	0	0	0	0
18	193	475	264	136	57	0	0	0	0	0	0	0
19	0	0	0	0	0	881	0	56	370	0	395	60
20	232	571	400	232	0	0	0	0	0	0	0	0
21	327	805	446	42	285	759	83	90	587	0	0	0
22	656	1,613	893	96	560	1,993	275	971	735	0	12	0
23	1	2	1	1	0	768	0	302	88	0	346	32
24	1,116	2,745	1,608	376	740	987	13	316	561	0	97	0
25	93	229	127	7	86	598	95	315	44	0	87	57
26	627	1,543	857	3	624	807	0	464	161	0	122	60
27	426	1,048	511	48	378	964	40	524	400	0	0	0
28	567	1,394	683	137	430	288	134	95	59	0	0	0
30	658	1,618	861	5	653	1,735	128	129	1,478	0	0	0
31	271	667	415	271	0	31	0	31	0	0	0	0
32	271	666	368	125	146	1,475	82	1,112	240	0	41	0
34	272	669	373	77	195	454	224	216	14	0	0	0
796	208	512	303	14	194	526	31	110	385	0	0	0
799	166	408	236	166	0	329	38	224	11	0	56	0
907	339	834	481	336	3	376	5	87	43	0	242	0
1490	0	0	0	0	0	1,548	0	804	364	0	380	0

Source: Fehr & Peers, 2022

Table B7. VTA Travel Model (Cumulative (2040) with Project Conditions) - City of Campbell Land Use and Population Inputs
(Envision Campbell General Plan and Housing Element Update)

TAZ	Total Household	Total Population	Employed Residents	# of Occupied Single Family Dwelling Units	# of Occupied Multi Family Dwelling Units	Total Employment	Retail Employment	Service Employment	Other Employment	Agricultural Employment	Manufacturing Employment	Wholesale Employment
Citywide Total	26,224	64,928	36,347	7,710	18,514	36,763	7,582	13,081	13,548	0	2,304	247
1	612	1,515	997	123	489	284	25	139	120	0	0	0
2	352	872	476	59	293	1,619	258	582	778	0	1	0
3	1,380	3,417	1,664	411	969	1,821	371	880	570	0	0	0
4	832	2,060	1,134	141	691	704	254	140	259	0	51	0
5	3,719	9,208	5,504	1,178	2,541	3,572	1,889	966	717	0	0	0
6	829	2,053	1,350	485	344	40	0	6	0	0	34	0
7	505	1,250	717	427	78	24	24	0	0	0	0	0
8	434	1,075	514	348	86	332	60	189	83	0	0	0
9	765	1,894	1,024	380	385	1,135	207	615	313	0	0	0
10	951	2,355	1,129	614	337	1,666	962	110	594	0	0	0
11	1,054	2,610	1,386	0	1,054	5,847	1,605	759	3,483	0	0	0
12	551	1,364	952	517	34	9	9	0	0	0	0	0
13	401	992	690	241	160	61	34	27	0	0	0	0
14	700	1,733	1,142	581	119	27	12	11	4	0	0	0
15	1,888	4,674	2,472	7	1,881	1,343	298	599	0	0	408	38
16	155	384	221	83	72	977	21	165	787	0	4	0
17	1,513	3,746	1,824	43	1,470	648	574	74	0	0	0	0
18	193	478	264	136	57	0	0	0	0	0	0	0
19	0	0	0	0	0	1,575	0	768	351	0	397	60
20	232	574	400	232	0	0	0	0	0	0	0	0
21	339	839	463	42	297	840	93	90	657	0	0	0
22	1,165	2,884	1,587	96	1,069	1,982	301	971	698	0	12	0
23	1	2	1	1	0	886	0	406	88	0	360	32
24	1,122	2,779	1,617	376	746	1,000	16	316	569	0	99	0
25	1,019	2,522	1,392	7	1,012	634	1	315	175	0	87	57
26	731	1,810	999	3	728	829	8	464	161	0	136	60
27	489	1,210	587	48	441	1,058	87	524	448	0	0	0
28	625	1,548	753	137	488	302	148	95	59	0	0	0
30	1,007	2,493	1,318	5	1,002	1,608	0	0	1,607	0	0	0
31	314	777	481	271	43	31	0	31	0	0	0	0
32	837	2,072	1,139	125	712	1,026	0	752	233	0	41	0
34	408	1,010	560	77	331	462	232	216	14	0	0	0
796	597	1,478	871	14	583	533	38	110	385	0	0	0
799	166	411	236	166	0	341	50	224	11	0	56	0
907	339	839	481	336	3	374	5	87	43	0	238	0
1490	0	0	0	0	0	3,172	0	2,451	341	0	380	0

Source: Fehr & Peers, 2022

**Attachment C:
City of Campbell General Plan and
Housing Element Update – VMT
Assessment Approach
(February 3, 2022)**

Memorandum

Date: February 3, 2022

To: Ben Ritchie, De Novo Planning Group
Rob Eastwood, Stephen Rose, and Matthew Jue, City of Campbell

From: Charlie Coles and Daniel Rubins, Fehr & Peers

Subject: City of Campbell General Plan and Housing Element Update – VMT Assessment Approach

SJ21-2117

This memorandum presents vehicle miles traveled (VMT) metrics, modeling tools, significance thresholds, and mitigation actions to apply in the evaluation of the City of Campbell General Plan and Housing Element Update (the "Project"). The options and limitations for VMT metrics, modeling tools, significance thresholds, and mitigation actions are described below from a technical transportation planning and engineering perspective with a particular emphasis on addressing the *CEQA Statute & Guidelines* expectations for an environmental impact analysis.¹

To facilitate the conversation, a draft version of this memorandum (dated December 21, 2021) was submitted to City staff and included a preliminary recommendation on the VMT assessment approach for the proposed General Plan and Housing Element Update. Fehr & Peers met with City staff on January 28, 2021 to review the preliminary recommendation and confirm the VMT assessment approach for the proposed Project. This memorandum documents the VMT assessment approach direction we received from City of Campbell staff.

Refer to **Table 1** for a summary of the VMT assessment approach for the proposed Project, which is to evaluate the effects of the proposed Project on the environment with a focus on the cumulative condition.

¹ Typical CEQA practice focuses on environmental effects that occur on a typical weekday, so all references to VMT in this document are intended to mean VMT that occurs on a typical weekday.



Table 1: City of Campbell General Plan and Housing Element Update VMT Assessment Approach Summary

Decisions	City of Campbell Selection
VMT Metrics	Include the following metrics: • Total VMT • Total VMT per service population • Home-Based VMT per Resident • Home-Based Work VMT per Employee • Project's Effect on VMT within Santa Clara County (Boundary VMT)
VMT Modeling Tools	Use the Santa Clara Valley Transportation Authority (VTA)-City/County Association of Governments of San Mateo County (C/CAG) Bi-County Model ("VTA Travel Model")
VMT Impact Significance Thresholds	Cumulative thresholds include: • Project Impact: A significant impact would occur if the total citywide VMT per service population for Cumulative with Project Conditions would exceed a level 15% below the total VMT per service population baseline rate.¹ • Project Impact: A significant impact would occur if the home-based VMT per resident for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate.² • Project Impact: A significant impact would occur if the home-based work VMT per employee for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate.³ • Project Effect: A significant impact would occur if growth in the plan area increases total boundary countywide VMT per service population compared to Cumulative without Project Conditions.⁴ • A significant impact would occur if the project is inconsistent with the Regional Transportation Plan/Sustainable Community Strategy Plan (Plan Bay Area).
VMT Mitigation Actions	Apply VMT reduction measures such as Transportation Demand Management (TDM) with a Transportation Management Association (TMA), City-wide VMT reduction strategies, and regional VMT reduction policies.

Notes:

1. The actual thresholds may need to be refined during the VMT assessment.
2. The baseline VMT rate is the Existing Conditions citywide home-based VMT per resident rate.
3. The baseline VMT rate is the Existing Conditions citywide home-based work VMT per employee rate.
4. This threshold is designed to address the different land use totals between the Cumulative without Project Conditions and the Cumulative with Project Conditions.

Background

Senate Bill (SB) 743 changed how transportation impacts are analyzed under the California Environmental Quality Act (CEQA). The latest *CEQA Statute & Guidelines* specify that VMT is the appropriate metric to evaluate transportation impacts and delay and congestion are no longer applicable under CEQA. In short, SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving.



The City of Campbell recently adopted a *VMT Policy* to comply with California Senate Bill 743 (SB 743).² Campbell's *VMT Policy* includes baseline VMT screening thresholds, which is useful for baseline VMT screening of small to medium size land use projects, VMT thresholds of significances, VMT mitigations of significant impacts, and requirements for preparing a local transportation analysis. This memorandum discusses the options for the VMT metrics, VMT modeling tools, VMT impact significance thresholds, and VMT mitigation actions.

The overall approach is to address the State of California's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) recommendations for considering a project's short-term, long-term, and cumulative effects on VMT. The first reference on page 5 is related to retail projects, and the references on page 6 are for all projects (see excerpts below with most relevant portions highlighted).

Retail Projects. Generally, *lead agencies should analyze the effects of a retail project by assessing the change in total VMT¹¹ because retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns.* (Quote from page 5 of the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018; footnote 11 in this quote is a reference to see Appendix 1 of the OPR Technical Advisory, which discusses evaluation of Total VMT.)

Considerations for All Projects. *Lead agencies should not truncate any VMT analysis because of jurisdictional or other boundaries, for example, by failing to count the portion of a trip that falls outside the jurisdiction or by discounting the VMT from a trip that crosses a jurisdictional boundary. CEQA requires environmental analyses to reflect a "good faith effort at full disclosure." (CEQA Guidelines, § 15151.) Thus, where methodologies exist that can estimate the full extent of vehicle travel from a project, the lead agency should apply them to do so. Where those VMT effects will grow over time, analyses should consider both a project's short-term and long-term effects on VMT.* (Quote from page 6 of the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018).

Cumulative Impacts. *A project's cumulative impacts are based on an assessment of whether the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (Pub. Resources Code, § 21083, subd. (b)(2); see CEQA Guidelines, § 15064, subd. (h)(1).)* (Quote from page 6 of the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018).

² <https://www.ci.campbell.ca.us/DocumentCenter/View/17944/-Campbell-VMT-Policy>



The importance of a complete analysis that considers the project's effect on total VMT reflects the fact that certain types of land use projects can influence the routing of existing trips and the VMT generation of surrounding land uses.

VMT Metrics

VMT can be measured in multiple ways. Thus, the first decision for the City, is deciding which VMT *metrics* to use to express a project's transportation effects. **Table 2** summarizes the common VMT metrics available to the City, which are discussed in more detail below.

Absolute VMT or per Capita VMT

VMT metrics fall into two general categories: absolute VMT and per capita VMT. Absolute VMT is the total value of VMT, while per capita VMT is an efficiency metric that normalizes the absolute VMT based on a population metric so that VMT can be readily compared across projects of varying sizes. For example, if Project A generates 100 daily trips at an average of five miles per trip, the absolute project generated VMT is 500 vehicle miles per day. If that project is a small office employing 25 people, the per capita VMT is 20 vehicle miles per employee (500 VMT / 25 employees = 20 VMT per employee). Similarly, if Project B for example generates 200 daily trips at an average of five miles per trip, the absolute project generated VMT is 1,000 vehicle miles per day. If that project employs 50 people, the per capita VMT is also 20 vehicle miles per employee (1,000 VMT / 50 employees = 20 VMT per employee). Thus, even though Project B is larger and generates more absolute VMT, both example projects generate the same VMT per capita.



Table 2: Summary of Common VMT Metrics

VMT Metric ¹	Definition	Recommended by OPR ²	VMT used for other CEQA Sections?
Total VMT	Daily VMT of all vehicle trips, vehicle types, and trip purposes for all project land uses, presented as a total VMT.	Yes, for land use plans, and discussed in Appendix 1 of the OPR <i>Technical Advisory</i> .	Yes
Total VMT per Service Population^{3,4}	Daily VMT of all vehicle trips, vehicle types, and trip purposes for all project land uses, divided by the sum of residents plus employees in the analysis area generating the VMT.	No, although may be helpful for mixed-use projects and comparing land use scenarios, particularly when using a travel forecasting model.	Yes
Home-Based VMT per Resident (also “VMT per Capita” in Campbell’s VMT Policy)	VMT generated by light-duty vehicles (i.e., private cars and trucks) for all trips that begin or end at a residential land use, divided by residents.	Yes, for residential projects on page 5 and Appendix 1 of OPR <i>Technical Advisory</i> .	No
Home-Based Work VMT per Employee (also “VMT per Employee” in Campbell’s VMT Policy)	VMT by light-duty vehicles only for work trips (that is, trips that have one end at a workplace and one end at a residence), divided by number of employees.	Yes, for office projects on page 6 and Appendix 1 of OPR <i>Technical Advisory</i> .	No
Project’s Effect on VMT within the Boundary of a Specific Area (also “Boundary VMT”)	VMT that occurs within a selected geographic boundary (e.g., City, County, or Region) by any type of vehicle. This captures all vehicle travel on a roadway network for any purpose and includes local trips as well as trips that pass through the area without stopping.	Yes, for retail projects and transportation projects on pages 5, 6 and 23 and Appendix 1 of the OPR <i>Technical Advisory</i> .	Yes

1. Each VMT metric is an option for baseline and/or cumulative impact analysis.
2. With the exception of Total VMT per Service Population, each VMT metric listed in this table is described in the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018). See pages 5, 6, and 23, and Appendix 1 of the OPR *Technical Advisory*.
3. Total VMT is derived from this VMT rate.
4. The total VMT accounting is similar to an origin-destination accounting used for many Climate Action Plans.

Source: Fehr & Peers, 2021.

Total VMT or Partial VMT

Total VMT metrics include all types of VMT, regardless of the trip’s purpose or the type of vehicle. For example, a person makes many trips from their home throughout the day (from home to coffee shop, to office, to lunch, back to office, to grocery store, back home, etc.) and total VMT captures all the trips and their associated trip lengths. Partial VMT refers to the use of only



particular trip purposes and/or vehicle types. For example, partial VMT may only account for the trips and trip lengths associated with a person driving to and from work, and not all the trips in between (to lunch, to grocery store, etc.). The efficiency metrics recommended by OPR for use in analyzing office and residential projects are partial VMT metrics, because they include only light-duty passenger vehicles and only trips for a specific purpose or made by a specific population.

For some, the benefit of partial VMT metrics is that they are relatively easy to understand and visualize. In addition, partial VMT can be particularly useful when evaluating a project that is similar to existing development patterns nearby. Where current conditions lead to VMT-efficient residential or workplace activity, it can be relatively straightforward to conclude that adding similar land uses to those areas would create similar levels of VMT efficiency. One risk of using a partial VMT metric is that one could argue that it is not complete analysis of a project's VMT.

Project Generated VMT or Project's Effect on VMT

VMT metrics can differentiate between project generated VMT and a project's effect on VMT.

- **Project Generated VMT:** The sum of the VMT associated with travel from, to, and within a project site.
- **Project's Effect on VMT (within a selected geographic boundary):** The total vehicle travel within a geographic area boundary, compared between the no project and with project scenarios. The boundary should be selected based on project characteristics such as size and location; this analysis might be done at a citywide, countywide, or regional scale.

In its most basic form, project generated VMT is estimated by multiplying the project's daily trips by the average distance traveled by each vehicle trip. By contrast, the project's effect on VMT evaluates the change in total travel within a defined geographic area boundary before and after the project is built (referred to as boundary VMT in this document).

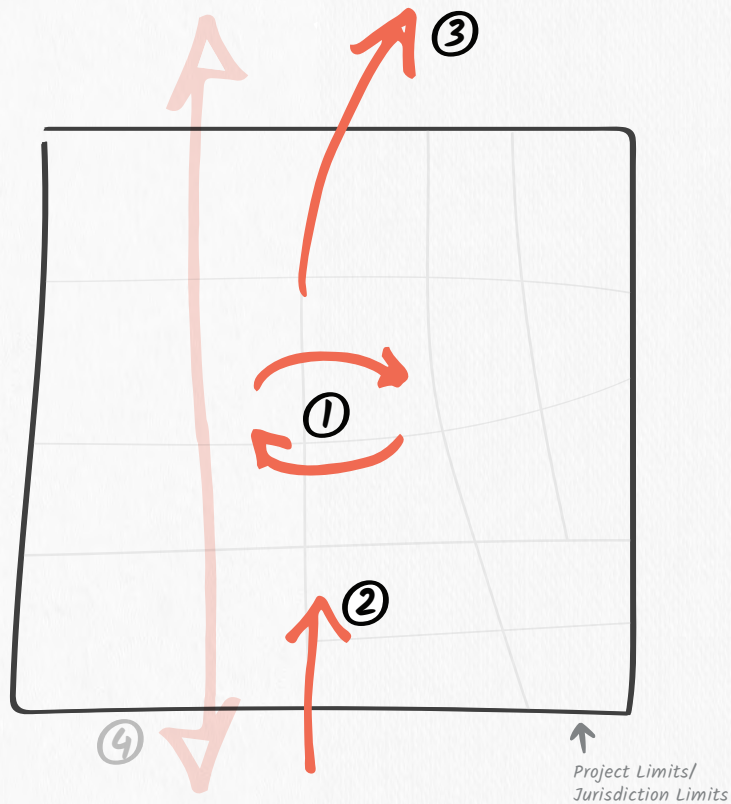
An often-cited example of how a project can affect boundary VMT is the addition of a grocery store in a food desert. Residents of a neighborhood without a grocery store have to travel some distance to do their grocery shopping. Adding a grocery store to the neighborhood will shorten many of those grocery shopping trips and reduce the total VMT to/from the neighborhood. While the new store itself will "generate" many daily trips, in that there will be many cars coming in and out of the store's driveway, it will generally attract those trips *away* from other grocery stores located farther away. Thus, if the boundary VMT in the area served by all the local grocery stores were to be assessed, it is likely that the total VMT in that area will decrease after completion of the new grocery store project, since those trips to the new grocery store are shorter in distance than those to the grocery store in a different neighborhood.



Figure 1 presents a generic representation of both project generated VMT³ and boundary VMT. Both metrics are needed for a comprehensive view of a project's VMT effects.

³ In this instance, project generated VMT refers to total VMT, home-based VMT, and home-based work VMT as a group of VMT metrics.

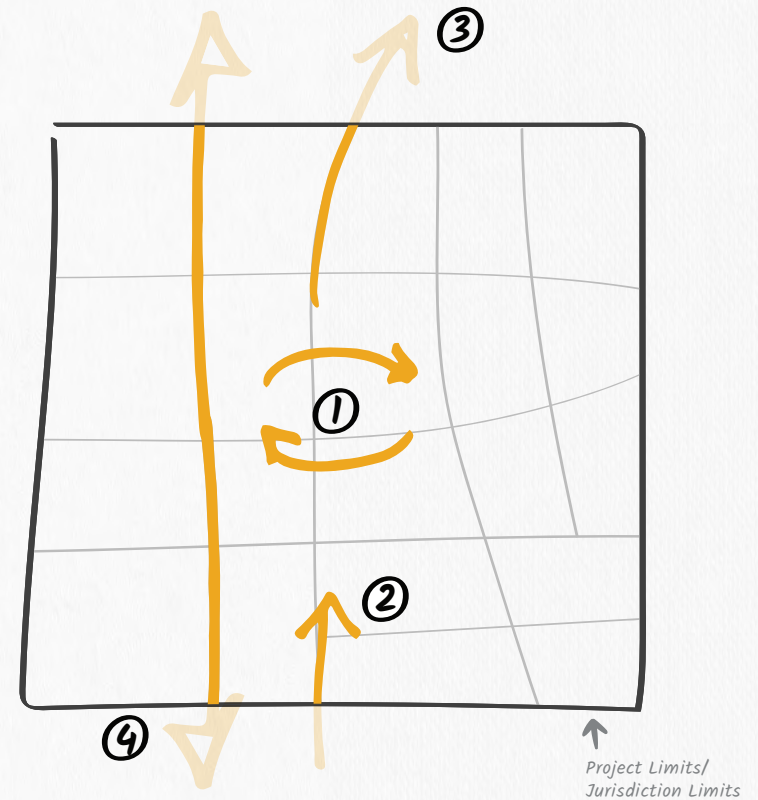
Project Generated VMT



- ① 2x Internal to Internal (2xII) VMT
- ② External to Internal (XI) VMT
- ③ Internal to External (IX) VMT
- ④ External to External (XX) VMT

Notes: External to External (XX) trips (shown as transparent arrow 4) are excluded from this VMT metric. Adjustments to project generated VMT made to include the full length of trips that leave the jurisdiction to capture inter-jurisdiction travel.

Project Effect on VMT (Boundary VMT)



- ① Internal to Internal VMT
- ② External to Internal (XI) VMT
- ③ Internal to External (IX) VMT
- ④ External to External (XX) VMT

Notes: Boundary VMT is all the VMT on the streets within the Project Limits / Jurisdiction Limits. Transparent portions of arrows 2, 3 and 4 are not included in the VMT metric.



Figure 1
Measuring Vehicle Miles Traveled (VMT)



City of Campbell Selection

To present a complete VMT analysis, the City of Campbell has selected the following metrics for evaluation of the General Plan and Housing Element Update:

- Total VMT
- Total VMT per service population
- Home-Based VMT per Resident (also “VMT per Capita” in Campbell’s *VMT Policy*)
- Home-Based Work VMT per Employee (also “VMT per Employee” in Campbell’s *VMT Policy*)
- Project’s Effect on VMT within Santa Clara County (Boundary VMT) (this information will also be used in the air quality, greenhouse gas (GHG), and energy analysis)

These metrics address all the VMT metrics discussed above, including absolute VMT, Per capita VMT, Total VMT, Home-Based VMT, Home-Based Work VMT, in addition to project generated and the project’s effect on VMT.

VMT Modeling Tools

VMT can be calculated using travel forecasting models, GIS tools, spreadsheet tools, or other sketch planning tools. The most common method of calculating the VMT metrics listed in **Table 2** is through a travel forecasting model. A travel forecasting model uses specialized software and is designed to reflect the interactions between different land use and roadway elements in a large area. Using a travel forecasting model has some advantages over sketch planning tools and spreadsheets because a travel model is able to account for both project generated VMT and the project’s effect on total area-wide VMT; spreadsheet tools and most sketch planning tools can only evaluate project generated VMT (and not the project’s effect on VMT). Therefore, we recommend the City use a travel forecasting model for their VMT evaluation. The two travel forecasting models most commonly used to evaluate projects in and around the City are the following:

- Metropolitan Transportation Commission (MTC) Travel Demand Model
- Santa Clara Valley Transportation Authority (VTA)-City/County Association of Governments of San Mateo County (C/CAG) Bi-County Model (VTA Travel Model)⁴

There are other possible tools available, such as a statewide model developed by Caltrans and several sketch planning tools or spreadsheets. The MTC and Caltrans models are intended for very large-scale applications, with the statewide model having a specific focus on the evaluation of

⁴ The VTA requires a model user agreement between Campbell and the VTA, and a fee to use the travel model. We have assumed that the fee to acquire the model has been paid by the City.



interregional travel and freight movements, and thus neither model is appropriate for a local land use project, like the City of Campbell General Plan and Housing Element Update.

An ideal tool for a CEQA VMT analysis is a travel forecasting model that has been appropriately calibrated and validated for local project size and scale, and has trip length data that accounts for trips that extend beyond the model boundary.⁵ In Campbell it is also important for a travel forecasting model to account for travel patterns due to congestion, public transit, non-motorized transit (walking and biking), and transportation demand management policies in different parts of the City.

City of Campbell Selection

Practically speaking, the use of a travel model is desirable for projects large enough to be accurately represented in that travel model. The City of Campbell has selected the VTA Travel Model to use for the purposes of this Project. The VTA Travel Model would likely require some off-model refinements to be fully sensitive to the transportation demand management policies in Campbell.

VMT Impact Significance Thresholds

An impact under CEQA begins with a change to the existing environment, and, therefore, Existing (or Baseline) Conditions must be evaluated. Because VMT will fluctuate with population and employment growth, changes in economic activity, and changes in travel modes including the expansion of new vehicle travel choices (i.e., the emergence of transportation network companies such as Uber and Lyft, autonomous vehicles, etc.), an impact analysis must also take into account the cumulative effects of the proposed project, these changes, and all other projects. Therefore, evaluations of Cumulative Conditions and Cumulative with Project Conditions are needed to identify potential cumulative impacts.

A cumulative VMT threshold should be able to evaluate both the direct, indirect, and cumulative effects of a project on VMT and consider uncertainty of new travel trends. Below is a brief summary of three possible cumulative VMT threshold options:

- **Fair share of Regional VMT Allocation:** Use a regional model to analyze the “project’s effect on VMT” based on RTP/SCS consistency and set threshold that the project should not increase the total project generated regional VMT forecast used to support the RTP/SCS air quality conformity and SB 375 GHG targets.

⁵ The National Cooperative Highway Research Program (NCHRP) Report 765, *Analytical Travel Forecasting Approaches for Project-Level Planning and Design*, Transportation Research Board (TRB) (2014) is a detailed resource with many applicable sections.



- **Baseline and Cumulative VMT Thresholds:** A lead agency can use the same threshold for Baseline and Cumulative Conditions if there is evidence that the VMT efficiency metric is trending downward over time. While it is difficult for a lead agency to determine what level of VMT change is unacceptable when viewed solely through a transportation lens, there are several possible options, depending upon if the City chooses to set a threshold based on local or state policies. Options include the following:
 - Set thresholds based on state goals.
 - Rely on the OPR Technical Advisory suggestion to set thresholds consistent with state goals for air quality, greenhouse gas and energy conservation.
 - OPR 15% below baseline average of a city or region (light-duty vehicles only).
 - Use a threshold adopted or recommended by another public agency consistent with lead agency air quality, GHG reduction, and energy conservation goals.
 - CARB 14.3% below baseline (2018) average of jurisdiction (all vehicles, presuming that MPOs meet SB 375 targets).
 - CARB 16.8% below baseline (2018) average of jurisdiction (light-duty vehicles only, presuming that MPOs meet SB 375 targets).
 - CARB: 25% below baseline (2018) average of jurisdiction (all vehicles, presuming that MPOs do not meet SB 375 targets).
 - Net zero VMT.⁶
 - Set jurisdiction-specific threshold consistent with existing General Plan
 - Set jurisdiction-specific VMT threshold based on substantial evidence
 - Set thresholds based on baseline VMT performance
- **Long-Term Air-Quality and GHG Expectations:** Establish a VMT reduction threshold for Cumulative Conditions consistent with long-term air pollution and GHG reduction expectations.

On July 1, 2021, the City of Campbell adopted a *VMT Policy to Comply with California Senate Bill 743 (SB 743)*⁷ to apply to land use and transportation projects in the City. Campbell's *VMT Policy* includes:

⁶ Caltrans has released guidance on "Transportation Analysis under CEQA (First Edition): Evaluating Transportation Impacts of State Highway System Projects" (September 2020) that recommends that any increase in VMT would constitute a significant impact. This has been referred to as the "Net Zero VMT threshold". Caltrans has thus far signaled that this threshold would be applied only to transportation projects.

⁷ See: <https://www.ci.campbell.ca.us/DocumentCenter/View/17944/-Campbell-VMT-Policy>



- CEQA project screening criteria for small projects, local-serving retail, local-serving public facilities, affordable housing, transit, existing use credit, and transportation projects.
- CEQA thresholds of significance for residential land use development projects, office and retail land use projects, mixed-use and all other project types, changing or adding to existing uses, specific plan or other area plans, General Plan Amendments, and transportation projects.
- Mitigation of significant impacts for projects that have a significant impact on VMT.
- Requirements for preparing a Local Transportation Analysis (LTA).

The following CEQA thresholds of significance in the City of Campbell's *VMT Policy* potentially apply to this project:

- ***Residential Land Use Projects:*** A proposed project exceeding a level of 15 percent below existing Campbell citywide average VMT per capita shall be presumed to cause a significant transportation impact.
- ***Office and Retail Land Use Projects:*** A proposed project exceeding a level of 15 percent below existing Campbell citywide average VMT per employee shall be presumed to cause a significant transportation impact.
- ***Mixed-Use and all other Project Types:*** Each land use within a mixed-use project, and all other project types, shall be evaluated independently by applying the most appropriate threshold of significance from above to each land use type included in the project, given project-specific information.
- ***Specific Plan or Other Area Plans:*** Each land use component will be analyzed independently, applying the significance thresholds listed above for each land use component.
- ***General Plan Amendments:*** An increase in VMT per service population (jobs plus residents) over the current adopted General Plan based on an analysis of 2040 horizon year conditions is a significant transportation impact.
- ***Transportation Projects:*** A net increase in VMT.

Discussion

While the City of Campbell's *VMT Policy* includes a CEQA threshold of significance for General Plan Amendments, it does not state the VMT metric (Project's Effect on VMT or Project Generated VMT as defined above), geographic area, or how to assess the cumulative impacts between Cumulative without Project and with Project scenarios. Because the City of Campbell General Plan and Housing Element Update is proposing to increase the land use supply in the City and would likely have a relatively widespread effect on the total VMT within the City of Campbell, its VMT impact analysis should account for cumulative conditions and the project's effect on citywide VMT.



In describing a threshold, the City is making several methodological decisions:

- **VTM Metric:** Defining the VMT metric(s) to be used in expressing a project's impacts (VMT metrics were described in detail earlier in this memo).
- **Selecting the VMT Reduction to Apply to the VMT Metric:** Once the VMT metric is selected, the next decision is to define a percent reduction in the VMT metric that will be required to avoid triggering a significant impact. As discussed above, the percent reduction could be based on state or existing General Plan long-term expectations for greenhouse gas, air quality, and energy conservation.
- **Selecting the Geographic Area of the VMT Metric:** The final decision is to decide on what geographic area (e.g., City-level, County-level, or Region-level) will be used to define the average value that a project should be compared to.

The VTA Travel Model will be used to prepare baseline (2015) and cumulative (2040) no project VMT estimates. Specifically, the following VMT metrics will be reported for the City-level, County-level, and Region-level for each of the three study scenarios.

- **Total VMT:** Daily VMT of all vehicle trips, vehicle types, and trip purposes for all project land uses, presented as a total VMT.
- **Total VMT per Service Population:** Daily VMT of all vehicle trips, vehicle types, and trip purposes for all project land uses, divided by the sum of residents plus employees in the analysis area generating the VMT.
- **Home-Based VMT per Resident:** Daily VMT generated by light-duty vehicles (i.e., private cars and trucks) for all trips that begin or end at a residential land use, divided by residents.
- **Home-Based Work VMT per Employee:** Daily VMT by light-duty vehicles only for work trips (that is, trips that have one end at a workplace and one end at a residence), divided by number of employees.
- **Project's Effect on VMT within the Boundary of a Specific Area (Boundary VMT):** VMT that occurs within a selected geographic boundary (e.g., city, county, or region) by any type of vehicle. This captures all on-road vehicle travel on a roadway network for any purpose and includes local trips as well as trips that pass through the area without stopping.

In all cases, and consistent with the recommendations in the OPR *Technical Advisory*, adjustments will be applied to account for the distance of travel outside of the model area.

Overall, the evaluation of the project's effect on land use and VMT should use the most appropriate forecasting model and consider all substantial evidence including the California Air Resources Board *2017 Scoping Plan-Identified VMT Reductions and Relationships to State Climate Goals*, CARB, and current research on the long-term effects of transportation network companies



(TNCs), new mobility options, and autonomous vehicles (AVs). Any cumulative VMT forecasting should acknowledge that land use projects and plans typically do not influence regional land use control totals and that modeling scenarios should carefully consider the land use allocation between scenarios and/or the VMT metric used to establish the cumulative VMT threshold.

City of Campbell Selection

The City of Campbell will analyze the Project's effect on land supply and VMT using the VTA Travel Model. The actual thresholds may need to be refined after using the selected VTA Travel Model to prepare and summarize the baseline and cumulative no project VMT estimates listed in the discussion section.

Based on the City of Campbell's *VMT Policy* and the discussion with City staff, cumulative thresholds for the General Plan and Housing Element Update will include the following:

- Project Impact (Total VMT per Service Population threshold similar to Campbell's *VMT Policy* office and residential VMT thresholds): A significant impact would occur if the total citywide VMT per service population for Cumulative with Project Conditions would exceed a level 15% below the total VMT per service population baseline rate.⁸
- Project Impact (Similar to Campbell's *VMT Policy* residential VMT threshold): A significant impact would occur if the home-based VMT per resident for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate.⁹
- Project Impact (Similar to Campbell's *VMT Policy* residential office and retail VMT threshold): A significant impact would occur if the home-based work VMT per employee for Cumulative with Project Conditions would exceed a level of 15% below the citywide baseline VMT rate.¹⁰
- Project Effect (Similar to Campbell's *VMT Policy* for General Plan Amendments): A significant impact would occur if growth in the plan area increases total boundary countywide VMT per service population compared to Cumulative without Project Conditions.¹¹
- A significant impact would occur if the project is inconsistent with the Regional Transportation Plan/Sustainable Community Strategy Plan (Plan Bay Area).

⁸ The actual thresholds may need to be refined during the VMT assessment.

⁹ The baseline VMT rate is the Existing Conditions citywide home-based VMT per resident rate.

¹⁰ The baseline VMT rate is the Existing Conditions citywide home-based work VMT per employee rate.

¹¹ This threshold is designed to address the different land use totals between the Cumulative without Project Conditions and the Cumulative with Project Conditions.



VMT Mitigation Actions

For large area plans such as general plan and housing element updates, mitigation will typically focus on physical design elements related to the ultimate built environment, such as the density and mix of land uses as well as the availability and quality of the transportation network related to transit, walking, and bicycling.

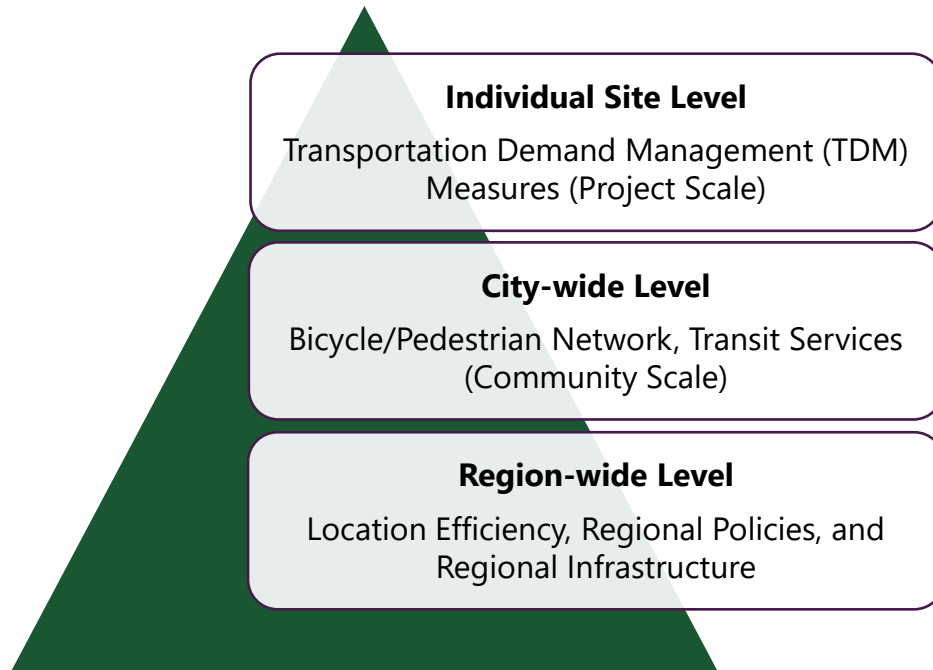
The City of Campbell's *VMT Policy* states the primary methods of mitigating a VMT impact are to:

1. modify the project description in a way that reduces VMT; and/or
2. implement a program designed to reduce VMT, such as multimodal transportation improvements or transportation demand management (TDM) measures.

The available research indicates that the effectiveness of TDM measures varies substantially depending on the context in which they are applied. TDM is most effective in urban areas where urban character (land use and built environment) and land use mix are most supportive of vehicle trip reduction. TDM programs are less effective in suburban areas where the built environment and transportation network are more dispersed and where modes are typically limited to personal vehicles. Additionally, an important consideration for the mitigation effectiveness is the scale for TDM strategy implementation. The biggest effects of TDM strategies on VMT (and resultant emissions) derive from regional policies related to land use location efficiency and infrastructure investments that support transit, walking, and bicycling. While there are many measures that can influence VMT and emissions that relate to site design and building operations, they have smaller effects that are often dependent on final building tenants. **Figure 2** presents a conceptual illustration of the relative importance of scale.



Figure 2: Transportation-Related GHG Reduction Measures



Of these strategies, only a few are likely to be effective in a suburban setting such as Campbell. The City of Campbell could consider identifying a menu of built environment and TDM mitigation strategies contained in the California Air Pollution Control Offices Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (December 2021) based on how the land use context, and potential land use changes, in Campbell could influence each strategy's effectiveness.

City of Campbell Selection

Apply VMT reduction measures such as TDM with a Transportation Management Association (TMA), City-wide strategies, and regional policies (location efficiency, regional land use policies, and regional infrastructure) to reduce VMT on Campbell streets.

Appendix D

Water Supply Assessment



WATER SUPPLY ASSESSMENT

CITY OF CAMPBELL GENERAL PLAN AND HOUSING ELEMENT UPDATE

May 2022

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Attachment

1	CITY OF CAMPBELL GENERAL PLAN AND HOUSING ELEMENT UPDATE – PROPOSED LAND USE MAP
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Established in 1866, San Jose Water (SJW) is one of the largest privately owned water systems in the United States, providing high-quality water and exceptional service to approximately one million residents of Santa Clara County.

BACKGROUND & PURPOSE

This Water Supply Assessment (WSA) was requested on May 5, 2022 by the City of Campbell (City) and is associated with the City of Campbell General Plan and Housing Element Update. Per State Law, the Housing Element update is required to be conducted by local jurisdictions every eight (8) years to provide an updated analysis of the City's regional housing needs assessment (RHNA) which represents the total number of residential units the City must plan to accommodate in the years 2023 to 2031. The City must plan to provide at least 2,977 new housing units over the planning period. Proposed modifications to the City's land use associated with the General Plan and Housing Element updates will result in a growth projections of up to 8,824 new dwelling units, 2,633,721 new non-residential square feet, and 6,194 new jobs. The complete list of proposed land use changes is shown in Attachment 1. The project proposes to include changes to the General Plan Land Use Element and the City's zoning code necessary to implement the Housing Element.

This WSA describes the relationship between existing and future water supplies and presents SJW's ability to provide a diverse water supply to match build-out water demands under both normal and dry years. This supply consists of treated surface water from Valley Water's local and imported supplies, groundwater, local surface water from Saratoga Creek and Los Gatos Creek watersheds, and non-potable recycled water. Based on water supply projections reported in Valley Water's 2020 Urban Water Management Plan,¹ conservation methods currently employed, and SJW's active commitment to these methods, SJW expects to be able to meet the needs of the service area through at least 2045 for average and single-dry years without a call for mandatory water use reductions.² This assumes reserves are at healthy levels at the beginning of the year and that projects and programs identified in Valley Water's Water Supply Master Plan 2040 (WSMP 2040)³ are implemented.

In multiple-dry year periods, there may be up to a 20 percent mandatory call for conservation to meet supply deficits. Valley Water has established a level of service goal to provide 100 percent of annual water demand during non-drought years and 80 percent during drought years, to minimize shortages and mandatory water use reductions during droughts while preventing overinvestment in water supply projects. SJW is committed to actively working with Valley Water in the development of water supply projects and programs. Projects and programs may include additional long-term water conservation savings, water recycling, recharge capacity, stormwater runoff capture, reuse, out of area water banking, and storage.

This WSA is written in response to California Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221); legislation which requires water retailers to demonstrate whether their water supplies are sufficient for certain proposed subdivisions and large development projects subject to the California Environmental Quality Act. SB 610 includes the requirements for detailed water supply assessments and SB 221 includes the requirement for written verification of sufficient water supply based on substantial

¹ <https://www.valleywater.org/your-water/water-supply-planning/urban-water-management-plan>

² San Jose Water 2020 Urban Water Management Plan

³ <https://www.valleywater.org/your-water/water-supply-planning/water-supply-master-plan>

evidence. SB 610 requires that a WSA be prepared by the local water retailer and submitted within 90 days to the requesting agency. SJW's adoption and submittal of this assessment does not create a right or entitlement to water service or impose or expand SJW's obligation to provide water service. The City of Campbell has an independent obligation to assess the sufficiency of water supply for this project. SB 610 provides that the City of Campbell is to determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the proposed project, in addition to existing and planned future uses.

SERVICE AREA & POPULATION

SJW's service area spans 139 square miles, including most of the cities of San José and Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos, and parts of unincorporated Santa Clara County.

The population of SJW's service area, including growth associated with this Plan Area, is shown in the following table. These projections are based on the Association of Bay Area Governments (ABAG) population projections and were included in SJW's 2020 Urban Water Management Plan.

Table 1: Current and Projected SJW Service Area Population

2020	2025	2030	2035	2040	2045
997,817	1,069,633	1,127,593	1,191,337	1,261,145	1,335,044

CLIMATE

Santa Clara County experiences cool, wet winters and warm, dry summers. From 1950-2020, the county received an annual average precipitation total of 23.2 inches. Most precipitation in the region occurs between the months of November and April. Temperature is typically moderate. Maximum monthly average temperatures range from 55.7°F to 83.4°F. Minimum monthly average temperatures range from 37.9°F to 56.6°F. The annual average evapotranspiration rate is 49.6 inches.⁴ Summarized temperature and precipitation data is presented in Chart 1.

⁴ Rainfall and temperature data provided by National Oceanic and Atmospheric Administration. Evapotranspiration data comes from California Irrigation Management Information System (Archived San José Station).

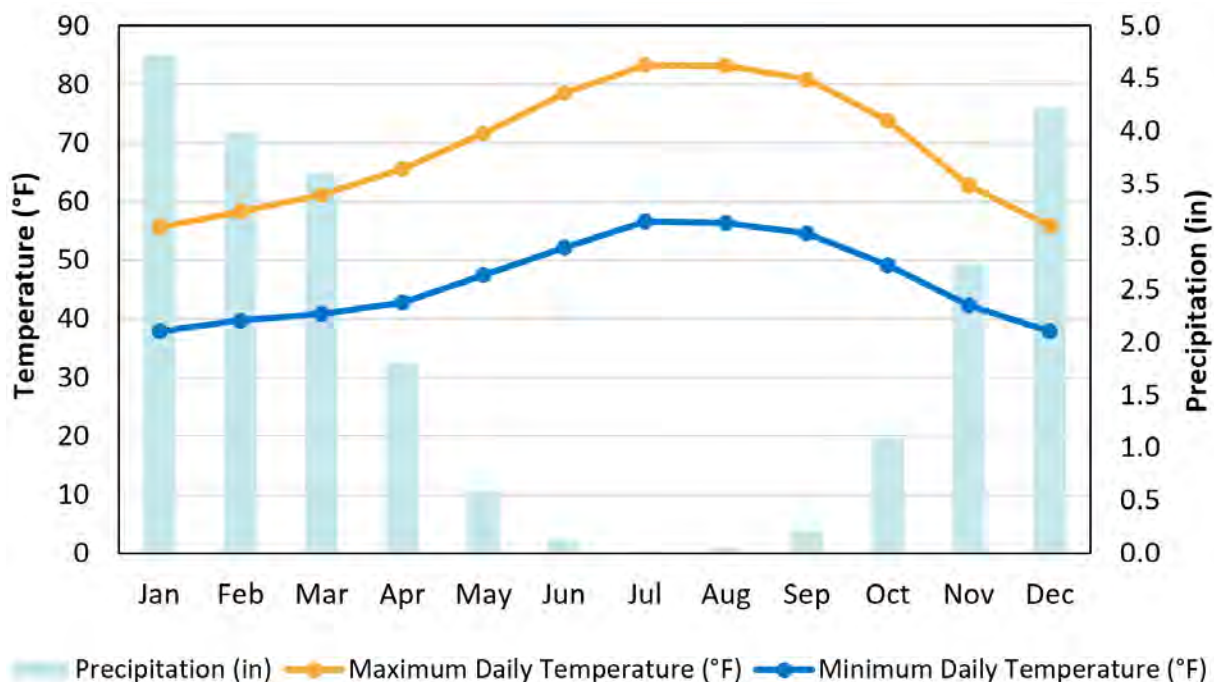


Chart 1: Historical Average Monthly Temperature and Precipitation (1950-2020)

PAST, CURRENT, AND FUTURE SYSTEM WATER USE

The majority of connections to SJW’s distribution system are either residential or commercial. SJW also provides water to industrial, institutional, landscape, and governmental connections. Projections from ABAG analyzing the share of single-family versus multi-family development units within SJW’s service were used to determine single- and multi-family demand split within the residential sector. The resale category represents the small mutual water companies, in which SJW provides a master water service and where the mutual water company is responsible for distributing the water.

SJW has developed demand projections from 2025 to 2045 based on population and per capita usage projections. ABAG census tract population projections were used to estimate population growth. Daily per capita water usage for SJW’s service area in 2020 was 108 gallons per capita per day (gpcd). It was assumed that all developments after 2020 would require high water efficiency fixtures. Therefore, a lower daily per capita water use of 75 gpcd across all water sectors was applied to new population growth after 2020. For the existing 2020 population, it was assumed that the 108 gpcd from 2020 to 2025 would increase slightly by 1 percent per year, based on the rebounds in demand that have been observed following the past drought. Following the start of compliance with State conservation mandates (SB 606 and Assembly Bill 1668) in 2025, per capita water use is expected to decrease. It was assumed that the per capita water use for the existing population would experience a decline of 0.8 percent per year from 2025 to 2045.

SJW’s total demand includes water losses, which are separated into two categories: apparent losses and real losses. Apparent losses include all types of inaccuracies associated with customer metering as well as data handling errors. Real losses are physical water losses from the pressurized system and

the utility's storage tanks, up to the customer meter. These can include lost water through leaks, breaks, and overflows.

Across the last four water loss audits that have been validated and submitted to Department of Water Resources (DWR), SJW water loss is, on average, 7.3 percent of potable water supplied. SJW's distribution system has had consistently low water losses due to SJW's proactive approach to reducing leaks, including investments in acoustic leak detection technology and a water main replacement program that prioritizes pipelines for replacement based on their propensity to leak.

Table 2: Demands for Potable and Non-Potable Water (excluding Recycled Water) (AF/yr)

Customer Type	2020	2025	2030	2035	2040	2045
Single Family	59,497	53,877	53,877	54,187	54,411	54,550
Multi Family	24,744	35,255	35,255	35,308	36,161	36,959
Commercial	14,255	18,073	18,073	18,146	18,364	18,551
Industrial	528	718	718	721	730	737
Institutional / Governmental	5,183	6,607	6,607	6,635	6,715	6,785
Landscape	7,353	7,964	7,964	7,994	8,093	8,176
Sales / Transfers / Exchanges	522	568	568	571	580	586
Other Potable ¹	344	417	417	417	420	424
Water Losses	9,078	9,296	9,296	9,332	9,443	9,541
Total	121,504	132,776	132,776	133,312	134,918	136,308

¹Other potable includes portable meter and unbilled unmetered use. Unbilled unmetered use includes use for construction activities, tank/reservoir cleaning, irrigation at SJW stations, hydrant testing, meter testing, etc.

ESTIMATED PROJECT WATER USE

Total water usage for the City of Campbell General Plan and Housing Element Update is estimated at 14,219,435 gallons per day (gpd), which is equivalent to an annual usage of about 15,928 acre-feet of water. The City has an existing estimated water usage of about 15,059 acre-feet per year based on land use and demand factors as shown in Table 3 below. Therefore, the annual net demand increase in water usage associated with this project is 869 acre-feet and represents a 0.71 percent increase over the system wide 2020 water production of 121,504 acre-feet. The projected water demand for the Project is within normal growth projections for water demand in SJW's system.

Table 3: Total Water Demand Estimated for the Project

Land Use Type	Demand Factor	Unit	Existing Demand (gpd)	Proposed Demand (gpd)
Commercial ^(b)	0.25	gpd/SF	3,140,336	4,385,403
Industrial	0.5	gpd/SF	5,056,663	4,677,691
Office	0.1	gpd/SF	892,437	842,320
Park/Open Space	2000	gpd/AC	617,400	605,660
Residential ^(a)	147.6	gpd/unit	3,737,145	3,708,361
Total			13,443,981	14,219,435

^(a) Residential units assume a demand factor of 60 gallons per capita per day, with 2.46 people per residential unit in Campbell based on estimates from the California Department of Finance -

<https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2021/>.

^(b) Mixed Use areas as defined in Attachment 1 conservatively assumed to be completely Commercial because Commercial water demand is higher than Residential water demand. The final ratio between Residential and Commercial within Mixed Use is unknown at this time but will include both Residential and Commercial growth.

SYSTEM SUPPLIES

This section describes and quantifies the current and projected sources of water available to SJW. A description and quantification of recycled water supplies is also included.

Imported Treated Surface Water – On average, purchased water from Valley Water makes up over half of SJW’s total water supply. This water originates from several sources including Valley Water’s local reservoirs, the State Water Project and the federally funded Central Valley Project San Felipe Division. Water is piped into SJW’s system at various turnouts after it is treated at one of three Valley Water-operated water treatment plants. In 1981, SJW entered into a 70-year master contract with Valley Water for the purchase of treated water. The contract provides for rolling three-year delivery schedules establishing fixed quantities of treated water to be delivered during each period. SJW and Valley Water currently have a three-year treated water contract for fiscal years 2020/2021 – 2022/2023, with contract supplies of 70,723 AF in 2020/2021, 70,723 AF in 2021/2022, and 71,858 AF in 2022/2023. The actual amount of water delivered depends on considerations including hydrologic variability, interruptions in Valley Water facility operations, and water quality.

Groundwater – SJW draws water from the Santa Clara Subbasin, which is part of the larger Santa Clara Valley Basin. The Santa Clara Subbasin consists of unconsolidated alluvial sediments and covers a surface area of 297 square miles in the northern part of Santa Clara County. The subbasin is not adjudicated. Valley Water is responsible for maintaining the subbasin and ensuring the subbasin does not become overdrafted. Aquifers in the subbasin are recharged naturally by rainfall and streams and artificially mainly by recharge ponds operated by Valley Water. Due to different land use and management characteristics, Valley Water further delineates the Santa Clara Subbasin into two groundwater management areas: the Santa Clara Plain and Coyote Valley. SJW draws groundwater from the Santa Clara Plain portion, which covers a surface area of 280 square miles and has an operational storage capacity estimated to be 350,000 AF.

Chart 2 shows groundwater elevation in the Santa Clara Plain since the mid 1930’s using well surface elevation as the datum. Although groundwater levels declined during the recent 2012-2016 drought,

groundwater levels in the Santa Clara Subbasin quickly recovered after the drought due largely to Valley Water’s proactive response and comprehensive water management activities.

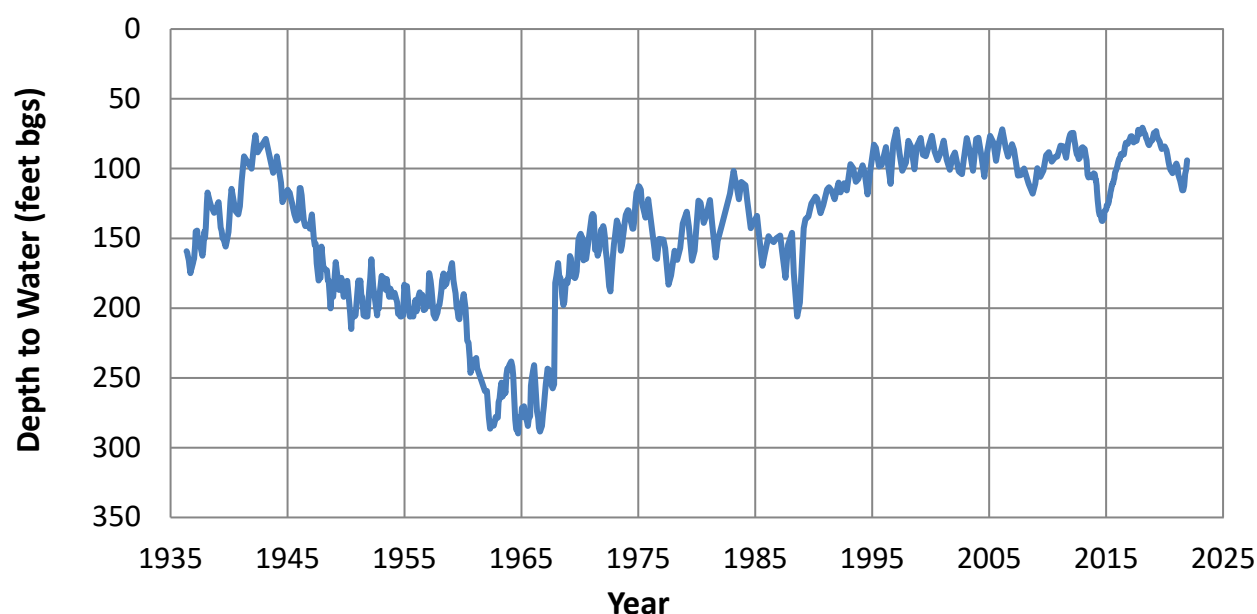


Chart 2: Groundwater Elevation in Santa Clara Subbasin (Well ID: 07S01W25L001)

On average, groundwater from the subbasin accounts for 30 to 40 percent of SJW’s total water supply. The following table shows the groundwater SJW pumped from 2016 to 2020.

Table 4: Amount of Groundwater Pumped by SJW (AF/yr)

Basin Name	2016	2017	2018	2019	2020
Santa Clara Subbasin	32,644	42,194	36,075	32,825	53,276
Groundwater as a percent of total potable water supply	31%	37%	31%	28%	43%

Surface Water – SJW has “pre-1914 water rights” to surface water in Saratoga Creek, Los Gatos Creek, and associated watersheds, totaling approximately 72 million gallons per day, based on capacity of diversion works from Initial Statements of Water Diversion and Use. SJW also filed for licenses in 1947 and was granted license number 4247 in 1956 by SWRCB to draw 1419 AF/year (462 MG/year) from Saratoga Creek, and license number 10933 in 1979 to draw 6,240 AF/year (2,033 MG/year) from Los Gatos Creek.

Recycled Water – South Bay Water Recycling (SBWR) has been serving Silicon Valley communities since 1993 with a sustainable, high-quality recycled water supply. SBWR was created to reduce the environmental impact of freshwater effluent discharge into the salt marshes located at the south end of the San Francisco Bay, and to help protect the California clapper rail and the salt marsh harvest mouse.

In 1997, SJW entered into a Wholesaler-Retailer Agreement with the City of San José to provide recycled water to SJW's existing and new customers nearby SBWR recycled water distribution facilities; whereas, the City of San José is the wholesaler and SJW is the retailer. At the time, the involvement of SJW was largely to assist the City in meeting its wastewater regulatory obligations. In accordance with the terms of this agreement, SJW allowed SBWR to construct recycled water pipelines in its service area, SJW would only own the recycled water meters, while SBWR would own, operate, and maintain the recycled water distribution system.

In 2010, this Wholesaler-Retailer Agreement was amended to allow SJW to construct recycled water infrastructure that would be owned, operated, and maintained by SJW. Then in 2012, this Wholesaler-Retailer Agreement was again amended to allow SJW to construct additional recycled water infrastructure.

Summary of Existing and Planned Sources of Water – SJW and Valley Water have worked to develop a variety of local and imported water supplies to meet demands. As demands increase with the region's growth, and imported water supplies potentially become more restricted, these planned supplies will increase in importance. In particular, groundwater, which has historically been a vital source of supply for SJW, was all the more critical during the recent drought. The following table shows the actual amount of water supplied to SJW's distribution system from each source in 2020 as well as projected amounts until 2045.

Table 5: Current and Projected Water Supplies^(a) (AF/yr)

	2020	2025	2030	2035	2040	2045
Valley Water Treated Water	64,290	76,799	76,713	77,041	78,023	78,877
SJW Groundwater	53,276	48,623	48,568	48,777	49,400	49,937
SJW Surface Water	3,937	7,494	7,494	7,494	7,494	7,494
Recycled Water	2,449	2,731	3,100	3,649	3,661	3,649
Total System Supply	123,952	135,648	135,875	136,961	138,579	139,957

^(a)Projected surface water supply volume held constant at the 10-year production average (2011-2020). Remaining potable demands made up by purchased water and groundwater, based on the 10-year historical average (2011-2020) of distribution between these two sources of supply. Projected recycled water supplies are based on projected recycled water demands.

WATER SUPPLY VULNERABILITY

SJW has identified multiple sources of water for the Project, which would provide a high quality, diverse and redundant source of supply. For added backup, SJW incorporates diesel-fueled generators into its facilities system, which will operate wells and pumps in the event of power outages. Since Valley Water influences on average about 90 percent of SJW's annual water supply, SJW will continue to work with Valley Water to ensure its water supply is reliable, while the impact to the existing Santa Clara Subbasin is minimal.

TRANSFER AND EXCHANGE OPPORTUNITIES

SJW's distribution system has interties with the following retailers: California Water Service Company (Los Altos District), City of San José Municipal Water, City of Santa Clara, City of Sunnyvale, City of Milpitas, and Great Oaks Water. SJW currently has no plans to use these interties for normal system operation as they are exclusively used for potential emergencies.

WATER SUPPLY RELIABILITY

SJW has three sources of potable water supply: purchased water, groundwater, and local surface water. These three sources of supply are constrained in one or more ways, driven by legal, environmental, water quality, climatic, and mechanical conditions. Additionally, there is a potential for interruption of supply caused by catastrophic events.

Purchased Water Supply Reliability – SJW relies on Valley Water for purchased water supplies, which make up over half of SJW's total water supplies. Constraints to purchased water supplies from Valley Water include climate change impacts, reductions in imported water supplies, and threats to infrastructure, as detailed below.

- *Climate Change* – Climate change is anticipated to result in warming temperatures, shrinking snowpack, increasing weather extremes, and prolonged droughts. Valley Water's water supply vulnerabilities to climate change include decreases in the quantity of Delta-conveyed imported water supplies, decreases in the ability to capture and use local surface water supplies due to shifts in the timing and intensity of rainfall and runoff, increases in irrigation and cooling water demands, decreases in water quality, and increases in the severity and duration of droughts.
- *Reductions in Imported Water Supplies* – Valley Water's State Water Project and Central Valley Project water supplies are also subject to a number of additional constraints, including conveyance limitations and regulatory requirements to protect fisheries and water quality in the Delta. Delta-conveyed supplies are also at risk from Delta levee failures due to seismic threats and flooding, sea level rise and climate change, declining populations of protected fish species, and water quality variations (including algal blooms). Many water quality variations are addressed by blending sources and/or switching sources to Valley Water's three water treatment plants. Algae and disinfection byproduct precursors have been especially challenging during recent drought conditions.
- *Threats to Infrastructure* – Valley Water's imported supply infrastructure must travel large distances to reach turnouts. As California is a seismically active state, infrastructure could be damaged and the result would be a disruption to water supply availability. California's water supply infrastructure is also potentially a target for acts of terrorism.

SJW actively worked with Valley Water during the development of their WSMP 2040 to ensure the following principles were considered:

- Promotion of additional sources of local water supply, such as indirect potable reuse, direct potable reuse, desalination, additional conservation, and an expanded recycled water distribution system
- Coordination of operations with all retailers and municipalities to ensure as much surplus water as possible is available for use in dry years
- Pursuit of innovative transfer and banking programs to secure more imported water for use in dry years

Valley Water's previous call for a 30 percent reduction during the 2012-2016 drought highlights that more investments in local water sources are necessary to ensure a reliable source of supply during multiple-dry water years. Valley Water plans short- and long-term investments with the goal of requiring no more than a 20 percent water use reduction from the community during a multi-year drought as outlined in its 2040 Water Supply Master Plan. Valley Water has sources of backup supply outside the County and has always relied on multiple supply sources, such as imported water contracts, to supplement existing long-term resources when necessary.

Groundwater Supply Reliability – Groundwater supplies are often a reliable supply during normal and short-term drought conditions because supplies are local and large aquifer storage capacity means that groundwater supplies will still be available when surface flows become limited. However, groundwater supply availability can become threatened when overdraft occurs and when recharge and inflow decrease. Water quality is another potential constraint of this source of supply. Threats to groundwater supplies are detailed below.

- *Overdraft* – Under extended supply pressures, groundwater basins can enter overdraft conditions, which can have a series of consequences including land subsidence. Threat of overdraft conditions were witnessed in the recent 2012-2016 drought when groundwater levels declined. However, groundwater levels in the Santa Clara Subbasin quickly recovered after the drought due to Valley Water's proactive response.
- *Climate Change* – Climate change could increase the potential for overdraft by increasing demand, reducing other sources of supply, and reducing natural recharge and inflows from surface water and precipitation.
- *Regional Growth* – Population growth could increase demands on groundwater supplies, potentially creating risk of overdraft. Regional growth could also increase the amount of contaminants entering groundwater basins as a result of increased urban runoff or industrial or other activities. Growth can also impact recharge areas by expanding impervious surfaces into areas that would otherwise represent entry points for surface water recharging local aquifers.
- *Aging Infrastructure and High Land Costs* – In 2020, SJW prepared a Groundwater Well Asset Management Plan. Findings from the plan showed that SJW's groundwater well system is vulnerable due to the age of the well infrastructure. Two-thirds of the wells are 50 years or older and were installed with low carbon steel casing using a cable tool drilling method. A low carbon steel casing is susceptible to corrosion and damage in the event of an earthquake. Furthermore, many of SJW's older cable tool drilled wells were installed without sanitary seals

as newer wells are, and as such, are more vulnerable to acting as conduits for downward migration of surface contaminants into the aquifer. Space for replacement wells at SJW's existing groundwater stations is limited, and thus, the majority of future wells will need to be located on new properties. However, favorable sites are limited, as they must meet certain production yield and water quality requirements. Furthermore, land prices in the Bay Area are high and present another challenge for SJW to address its aging well infrastructure.

- *Water Quality* – The presence of per- and polyfluoroalkyl substances (PFAS) in groundwater supplies is prompting interest and concern nationwide. Out of an abundance of caution, SJW has been proactively notifying customers and removing wells from service where PFAS has been detected above the State-defined Notification Levels. SJW is in the process of studying its options for removing PFAS. In addition, because SJW depends on multiple sources of supply that use different disinfectants, maintaining a stable disinfectant residual is problematic when system operations require the blending of chlorinated water with chloraminated water to meet demands. Blending sources, depending on each source's volume and residual concentration, can result in the loss or significant decrease in disinfectant residual levels.

The Santa Clara Subbasin is able to store the largest amount of local reserves and Valley Water, as the groundwater management agency for Santa Clara County, is tasked with maintaining adequate storage in this basin to optimize reliability during extended dry periods. As groundwater is pumped by SJW and other retailers and municipalities in Santa Clara County, Valley Water influences groundwater pumping reductions and thus reliability through financial and management practices to protect groundwater storage and minimize the risk of land subsidence.

Local Surface Water Supply Reliability – Local surface supplies are highly variable depending on hydrologic conditions. In years of limited local surface water supplies, SJW relies more heavily on groundwater. Threats to local surface water supplies are detailed below.

- *Climate Change* – SJW's local surface water supplies are subject to the same climate change impacts as Delta-conveyed supplies and Valley Water's local surface water supplies, which can result in decreased surface water supplies. During heavy rain events, the quantity of surface water that can be conveyed and treated may be limited by the raw water system hydraulics, high turbidity levels, and WTP capacity. Increased weather extremes and changing precipitation patterns as a result of climate change may prevent surface water supplies from being fully utilized during heavy rain events, and may result in lower surface water supplies during other times of the year.
- *Environmental Regulations* – SJW has bypass flow requirements at its surface water reservoirs and intakes. These requirements establish flow rates that must be released past diversion points to preserve downstream habitat. SJW also maintains minimum levels in reservoirs for habitat preservation. These environmental regulations limit the amount of surface water that SJW is able to divert for water supply.
- *Water Quality* – SJW owns approximately 6,000 acres of land in the watersheds and manages these watershed lands to protect water supplies. Contamination of surface water supplies from

upstream activities (animal grazing, residential septic systems, stormwater runoff) is a potential threat, although a low one as there is limited development in the watershed.

- *Aging Infrastructure* – Some of SJW’s raw water infrastructure was constructed in the late 1800s or early 1900s and is in need of renewal to ensure reliability of surface water supplies.

Supply Reliability by Type of Water Year – Valley Water’s Urban Water Management Plan identified average, single-dry, and multiple-dry years for water supply reliability planning. According to Valley Water, these years correspond to:

- **Average Year (1922-2015):** Average supply over the 94 years of 1922-2015.
- **Single-Dry Year (1977):** Within the historic hydrological record, this was the single driest year.
- **Multiple-Dry Years (1988-1992):** The 2012-2016 drought was the most recent multiple dry year period that put severe strain on Valley Water’s supplies. However, because imported water allocations are not currently available for the 2012-2016 drought from DWR’s modeling, Valley Water used the 1988-1992 drought, another severe multiple year drought in the historic hydrological record.

Water supplies presented below are based on Valley Water’s Water Evaluation and Planning system model. According to Valley Water, this model simulates their water supply system comprised of facilities to recharge the county’s groundwater basins, local water systems including the operation of reservoirs and creeks, treatment and distribution facilities, and raw water conveyance systems. The model also accounts for non-Valley Water sources and distribution of water in Santa Clara County such as imported water from San Francisco Public Utilities Commission, recycled water, and local water developed by other agencies.

Table 6: Basis of Water Year Data

Year Type	Base Year	% of Average Supply
Average Year	1922-2015	100%
Single-Dry Year	1977	80%
Multiple-Dry Years 1 st Year	1988	78%
Multiple-Dry Years 2 nd Year	1989	83%
Multiple-Dry Years 3 rd Year	1990	77%
Multiple-Dry Years 4 th Year	1991	78%
Multiple-Dry Years 5 th Year	1992	77%

Average Water Year – The average water year represents average supply over the hydrologic sequence of 1922 through 2015. SJW anticipates adequate supplies for years 2025 to 2045 to meet system demand under average year conditions.

Table 7: Supply and Demand Comparison – Average Water Year (AF/yr)^(a)

	2025	2030	2035	2040	2045
Demand	135,648	135,875	136,961	138,579	139,957
Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957

Demand Met by Conservation	0	0	0	0	0
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^(a)Includes demands associated with the City of Campbell General Plan and Housing Element Update.

Single-Dry Water Year – The single-dry year was the year with the lowest amount of total supply. Table 10 shows that supplies, with the use of reserves, can meet demands during a single-dry year through 2045, assuming reserves are at healthy levels at the start of a year and projects and programs identified in Valley Water’s WSMP 2040 are implemented. If reserves are low at the beginning of a single-dry year, Valley Water may call for water use reductions in combination with using reserves. As later discussed within the Water Demand Management Measures section, SJW has filed with the California Public Utilities Commission (CPUC) water-waste provisions promoting conservation that would go into effect during a drought. These provisions would result in a reduction in anticipated demand due to conservation such that demand equals available water supplies.

Table 8: Supply and Demand Comparison – Single-Dry Water Year (AF/yr) ^(a)

	2025	2030	2035	2040	2045
Demand	135,648	135,875	136,961	138,579	139,957
Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
Demand Met by Conservation	0	0	0	0	0

^(a)Includes demands associated with the City of Campbell General Plan and Housing Element Update.

Multiple-Dry Water Years – The multiple-dry year period used in this analysis assumes a repetition of the hydrology that occurred in 1988 to 1992. During multiple-dry year droughts, a call for up to mandatory 20 percent conservation may be needed. Valley Water will continue to work on reducing multiple-dry year deficits by securing more reliable and/or diverse water supplies.

Valley Water has established a level of service goal of 100 percent during non-drought years and 80 percent during drought years to minimize water rates, and thus there can be up to a 20 percent call for mandatory conservation to meet this deficit (or more short-term conservation until additional water supplies are secured). Over the next 20 – 30 years, Valley Water is pursuing over \$1 billion in water supply projects to meet the 80 percent level of service goal for all drought years.

Table 9: Supply and Demand Comparison – Multiple-Dry Water Years (AF/yr)^{(a)(b)}

		2025	2030	2035	2040	2045
First Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Second Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Third Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Fourth Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0
Fifth Year	Demand	135,648	135,875	136,961	138,579	139,957
	Demand Met by Water Supply	135,648	135,875	136,961	138,579	139,957
	Demand Met by Conservation	0	0	0	0	0

^(a)Includes demands associated with the City of Campbell General Plan and Housing Element Update.

^(b)Table 9 is solely based on SJW's Urban Water Management Plan, which follows State requirements and utilizes Valley Water estimates which may not reflect actual water supply and demand conditions.

Regional Supply Reliability – Valley Water's Ensure Sustainability water supply strategy has three key elements:

1. Secure existing supplies and facilities
2. Optimize the use of existing supplies and facilities
3. Expand water use efficiency efforts

As part of this strategy, Valley Water's WSMP 2040 includes developing at least 24,000 AF/yr of additional recycled water (above and beyond the current target of 33,000 AF/yr of non-potable reuse) by 2040. Developing these local sources and managing demands reduces reliance on imported water supplies. In addition, Valley Water is working with multiple water agencies to investigate regional opportunities for collaboration to enhance water supply reliability, leverage existing infrastructure investments, facilitate water transfers during critical shortages, and improve climate change resiliency. Projects to be considered will include interagency interties and pipelines; treatment plant improvements and expansion; groundwater management and recharge; potable reuse; desalination; and water transfers. This program may result in the addition of future supplies for Valley Water.

WATER DEMAND MANAGEMENT MEASURES

SJW is a signatory of the California Urban Water Conservation Council (CUWCC) and signed the CUWCC Memorandum of Understanding (MOU) in February 2006. The CUWCC is a partnership of water suppliers, environmental groups, and others interested in California water supply who have come together to agree on a set of Best Management Practices (BMPs) for water conservation in the state. Additionally, SJW has its own water-waste provisions that come into effect when there is a water shortage. The CPUC has set forth the rules regarding water waste and water shortages governing investor owned utilities such as SJW. The CPUC rule relating to this is Rule 14.1.⁵ This rule states that when there is a low-level water shortage that prompts a call for voluntary conservation by customers, a list of water-waste provisions goes into effect. Rule 14.1 also has provisions for high-level water shortages when mandatory conservation measures are deemed necessary.

SJW provides a full range of water conservation services to customers. The cornerstone of SJW's conservation programs is the CATCH program. The CATCH program empowers customers to understand and optimize their water use. With this free program, a water efficiency expert will check for customer leaks and recommend critical water and money-saving improvements.

Valley Water offers conservation programs, such as rebates for high efficiency toilets and washing machines. SJW takes advantage of all regional rebate programs and all of Valley Water's rebate programs are offered to SJW customers. Typically, customers are directed to specific rebate programs during the course of a water audit based on a customer's need. Customers can also access rebates directly from retail outlets when purchasing equipment such as high efficiency washing machines. SJW collaborates with Valley Water on public outreach and education including such items as customer bill inserts and conservation campaign advertising.

SJW has also increased the outreach and educational programs on outdoor water use. SJW constructed a water-smart demonstration garden that is open to the public. Customers can visit the garden in person or take a virtual tour on SJW's website. SJW also developed a dedicated water wise landscaping website where customers can access a plant information database that includes hundreds of low water use plants as well as a photographic database of water wise gardens in the San José-Santa Clara County area. The landscaping website and demonstration garden tour is accessible from SJW's homepage.

In addition to these programs, SJW engages in other activities that contribute to the overall goal of reducing water waste, but are not specifically designated as conservation or water management programs. These include SJW's meter calibration and replacement program, corrosion control program, valve exercising program and metering all service connections.

⁵ <https://www.sjwater.com/customer-care/help-information/tariff-book>

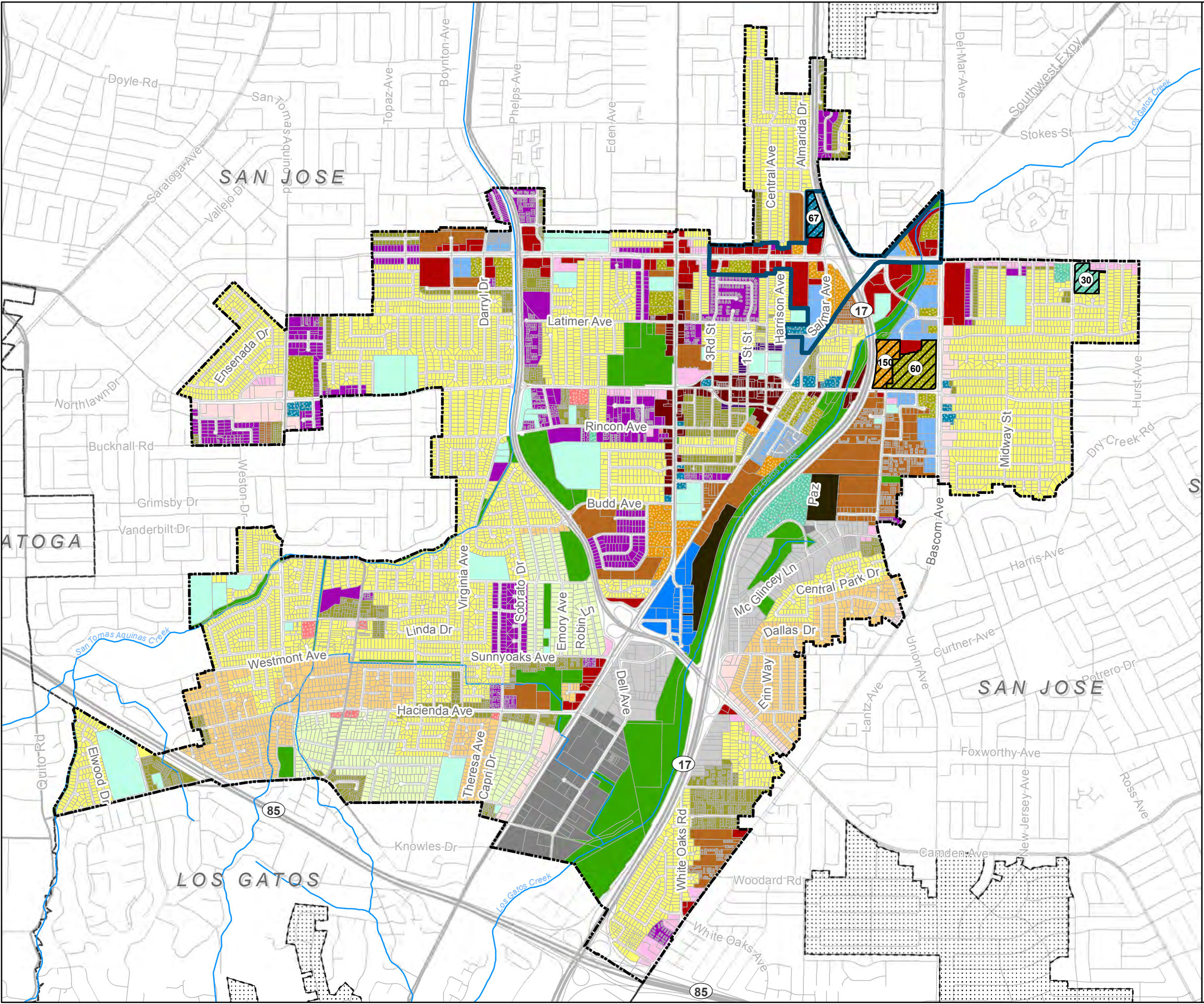
SUMMARY

This Water Supply Assessment represents a comprehensive water supply outlook for the City of Campbell General Plan and Housing Element Update. In summary:

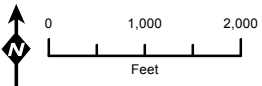
- (1) Total net potable water demand for the Project is estimated at 869 acre-feet per year and represents a 0.71 percent increase in total system usage when compared to SJW's 2020 potable water production. The increased demand is consistent with forecasted demands represented in SJW's 2020 Urban Water Management Plan, which projected a 12.2 percent increase in total system demand between 2020 demand and projected 2045 demand.
- (2) SJW currently has contracts or owns rights to receive water from the following sources:
 1. Groundwater – from the Santa Clara Subbasin
 2. Imported and local surface water – from Valley Water
 3. Local surface water – from Los Gatos Creek, Saratoga Creek, and local watersheds
 4. Recycled water – from South Bay Water Recycling
- (3) SJW works closely with Valley Water to manage its demands and imported water needs. The projected water demand for this development is within previously determined growth projections for water demand in SJW's system.

As described in this WSA and based on Valley Water's water supply plans and Urban Water Management Plan projections, SJW expects to be able to meet the needs of the service area through at least 2045 for average and single-dry years without a call for water use reductions. The impact of this project is not consequential and SJW has the capacity to serve this project through buildout based on current water supply capacity and Valley Water's proposed water supply projects. Valley Water is pursuing water supply solutions to meet the established level of service goal to provide 80 percent of annual water demand for drought years. SJW is committed to working with Valley Water to meet future demands and mitigate shortages. After comparing estimated demand associated with this project to water supplies, based on both the SJW and Valley Water Urban Water Management Plans, SJW has determined that the water quantity needed is within normal growth projections and expects for there to be sufficient water available to serve the Project. However, due to factors that affect water supply and demand projections including climate change, there is no guarantee that the projections provided in Valley Water's Urban Water Management Plan will be met, nor is there a guarantee that the water supply projects and programs identified by Valley Water will be implemented.

Attachment 1.
Proposed Land Use Map



- Planning Areas**
- City of Campbell
 - Other Incorporated Areas
 - Unincorporated Santa Clara County
- Planning Overlays**
- Maximum Unit Count Site-Specific Overlay
 - Hamilton Avenue Specific Plan Overlay
- Residential Uses**
- Low Density Residential (4.5)
 - Low Density Residential (5.5)
 - Low Density Residential (7.5)
 - Low-Medium Density Residential
 - Medium Density Residential
 - Mobile Home Park
 - High Density Residential
- Mixed Uses**
- Central Commercial
 - Commercial/Light Industrial
 - Office/Low-Medium Density Residential
 - Residential/Commercial/Professional Office
 - Neighborhood Mixed Use
 - Medium-High Density Mixed Use
 - High Density Mixed Use
 - Commercial Corridor Mixed Use
 - Transit-Oriented Mixed Use
- Commercial/Office Uses**
- Neighborhood Commercial
 - General Commercial
 - Professional Office
- Industrial Uses**
- Light Industrial
 - Research and Development
- Public/Recreational Uses**
- Institutional
 - Open Space



City of Campbell
General Plan Update
Water Demand Projections

Existing General Plan (data from NOP Table 2)

	Population	Dwelling Units	People/DU	Per Capita Water Demand, gpcd	Annual Water Demand, MG/yr
Existing	42,726	17,400	2.46	108	1,684
New Growth	4,123	1,640	2.51	75	113
Total	46,849	19,040			1,797

Proposed General Plan (data from NOP Table 2)

	Population	Dwelling Units	People/DU	Per Capita Water Demand, gpcd	Annual Water Demand, MG/yr
Existing	42,726	17,400	2.46	108	1,684
New Growth	22,203	8,824	2.52	75	608
Total	64,929	26,224			2,292

27% increase from Existing General Plan
31% increase from ABAG Plan Bay Area 2040

ABAG Plan Bay Area 2040 (basis for SJW 2020 UWMP projections)

	Population	Dwelling Units	People/DU	Per Capita Water Demand, gpcd	Annual Water Demand, MG/yr
Existing (2010)	39,779	16,200	2.46	108	1,568
Growth	6,542	2,600	2.52	75	179
Total (2040)	46,322	18,800			1,747

about 4% of the SJW 2040 potable water demand

Existing and projected Per Capita Water Demand is based on SJW's 2020 UWMP; 108 gpcd for existing is based on 2020 average per capita water use for SJW service area; 75 gpcd for future is based on SJW's projection for all future growth after 2020.