# **APPENDIX D**

Long-Range General Plan Amendment Transportation Analysis







# City of San José 2020 General Plan Amendments

Long Range Transportation Analysis

Prepared for:

City of San José



August 11, 2020







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## **Table of Contents**

1.	Introduction	1
	General Plan Amendment Site Descriptions	
	Analysis Methodology and Impact Criteria	
	Cumulative General Plan Long Range Analysis	
	329 Gifford Avenue (Site-Specific GPA Traffic Analysis)	
6.	276 Woz Way (Site-Specific GPA Traffic Analysis)	42
	Airport/Guadalupe Gardens (Site-Specific GPA Traffic Analysis)	
	Conclusions	

## **List of Tables**

Table 1 Amendmen	Site-Specific Long-Range Transportation Analysis Screening Criteria for Land Use	4
Table 2	Existing General Plan and Proposed GPA Land Uses	
Table 3	Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPAs	
Table 4	MOE Significance Thresholds	2
Table 5	Daily Vehicle Miles Traveled Per Service Population	4
Table 6	Journey-to-Work Mode Share	
Table 7	AM Peak-Hour Vehicle Speeds (mph) for San José Transit Priority Corridors20	6
Table 8	329 Gifford Avenue GPA – Changes in Households, Jobs, and Peak-Hour Trips Due to	
Proposed 6		
Table 9	329 Gifford Avenue GPA – Existing Bus Stops and Headways	
Table 10	329 Gifford Avenue GPA – Daily Vehicle Miles Traveled Per Service Population	
Table 11	329 Gifford Avenue GPA – Journey-to-Work Mode Share4	0
Table 12	329 Gifford Avenue GPA – AM Peak-Hour Vehicle Speeds (mph) for San José Transit	
Priority Cor		1
Table 13	276 Woz Way GPA – Changes in Households, Jobs, and Peak-Hour Trips Due to	
Proposed C		-
Table 14	276 Woz Way GPA – Existing Bus Stops and Headways	
Table 15	276 Woz Way GPA – Daily Vehicle Miles Traveled Per Service Population	
Table 16	276 Woz Way GPA – Journey-to-Work Mode Share	3
Table 17	276 Woz Way GPA – AM Peak-Hour Vehicle Speeds (mph) for San José Transit Priority	
••••••	54	
Table 18	Airport/Guadalupe Gardens GPA – Changes in Households, Jobs, and Peak-Hour Trips	_
•	bosed GPA	-
Table 19	Airport/Guadalupe Gardens GPA – Daily Vehicle Miles Traveled Per Service Population6	
Table 20	Airport/Guadalupe Gardens GPA – Journey-to-Work Mode Share	5
Table 21	Airport/Guadalupe Gardens GPA – AM Peak-Hour Vehicle Speeds (mph) for San José	_
I ransit Pric	rity Corridors6	7

## List of Figures

Figure 1	Proposed GPA Site Locations	3
Figure 2	Location of GPA Site 1: GPT18-009/PDC17-022 (1st/Virginia Mixed-Use and Wheelworks)	
-	11	
Figure 3	Location of GPA Site 2: GP19-012/C19-042 (329 Gifford Avenue)1	2



Location of GPA Site 3: GP20-001/C20-007 (790 Portswood Drive)	13
Location of GPA Site 4: GP19-008/H20-004 (276 Woz Way)	14
Location of GPA Site 5: GP20-002 (1906 Via Reggio Court)	15
Location of GPA Site 6: GP20-003 (1975 Cambrianna Avenue)	16
Location of GPA Site 7: GP18-012 (Airport/Guadalupe Gardens)	17
329 Gifford Avenue GPA – GPA Site Location	
329 Gifford Avenue GPA – Existing Bicycle Facilities	
329 Gifford Avenue GPA – Existing Pedestrian Facilities	35
276 Woz Way GPA – Site Location	43
276 Woz Way GPA – Existing Bicycle Facilities	47
276 Woz Way GPA – Existing Pedestrian Facilities	49
276 Woz Way GPA – Existing Transit Facilities	50
Airport/Guadalupe Gardens GPA – Existing Bicycle Facilities	61
Airport/Guadalupe Gardens GPA – Existing Pedestrian Facilities	62
Airport/Guadalupe Gardens GPA – Existing Transit Facilities	63
	Location of GPA Site 3: GP20-001/C20-007 (790 Portswood Drive) Location of GPA Site 4: GP19-008/H20-004 (276 Woz Way) Location of GPA Site 5: GP20-002 (1906 Via Reggio Court) Location of GPA Site 6: GP20-003 (1975 Cambrianna Avenue) Location of GPA Site 7: GP18-012 (Airport/Guadalupe Gardens) 329 Gifford Avenue GPA – GPA Site Location 329 Gifford Avenue GPA – Existing Bicycle Facilities 329 Gifford Avenue GPA – Existing Pedestrian Facilities 329 Gifford Avenue GPA – Existing Transit Services 276 Woz Way GPA – Site Location 276 Woz Way GPA – Existing Bicycle Facilities 276 Woz Way GPA – Existing Pedestrian Facilities 276 Woz Way GPA – Existing Transit Facilities 276 Woz Way GPA – Existing Transit Facilities Airport/Guadalupe Gardens GPA – Existing Bicycle Facilities Airport/Guadalupe Gardens GPA – Existing Pedestrian Facilities Airport/Guadalupe Gardens GPA – Existing Pedestrian Facilities Airport/Guadalupe Gardens GPA – Existing Transit Facilities

## 1. Introduction

This report presents the results of the long-range traffic impact analysis completed for the proposed City of San José 2020 General Plan Amendments (project). The project consists of amending the current adopted land use designations of the Envision San José 2040 General Plan (GP) for seven sites within the City of San José. The purpose of the General Plan Amendments (GPAs) traffic analysis is to assess the long-range impacts of the amendments on the citywide transportation system. The potential traffic impacts of the project were evaluated in accordance with the guidelines set forth by the City of San José for GPA traffic analysis.

The GPA analysis provides an evaluation of the changed circumstances of future conditions in the currently adopted Envision San José 2040 General Plan due to the proposed 2020 General Plan amendments. The adopted GP identifies long-range planned land uses and transportation system within the City projected to the Year 2040, which is the baseline for the evaluation of transportation impacts of the GPAs. The results of the analysis for the proposed land use adjustments are compared to the results of the adopted GP to determine if the proposed 2020 General Plan amendments would result in any new, or substantially more severe transportation impacts than those impacts that were already analyzed for the adopted GP.

After General Plan amendments to the Land Use/Transportation Diagram become effective, which is generally 30 days after Council approval, these General Plan amendments are incorporated into the updated General Plan Land Use/Transportation Diagram. This process may occur up to four times a year under State law. Therefore, the current General Plan includes all amendments that are currently effective.

The Envision San José 2040 General Plan Land Use/Transportation Diagram designates the type, intensity, and general distribution of planned land uses within San José. Because the 2020 General Plan amendments propose changes to sites' land use designations, this transportation analysis (TA) evaluates the incremental changes from uses and intensities allowed under the sites' current land use designations to the uses and intensities proposed under the proposed General Plan land use designations for each site. The baseline of the current land use designation is used (as opposed to the existing physical condition) because the General Plan EIR and subsequent reviews have already evaluated the potential transportation CEQA impacts of building out the adopted General Plan using an existing condition baseline in 2015. The existing condition baseline was reviewed, analyzed, and updated again as part of this study, and it was determined based on substantial evidence that the proposed 2020 General Plan amendments would not result in any new, or substantially more severe transportation impacts than those impacts that were already analyzed for the General Plan.

Further, the Build-out of the General Plan and related environmental analysis under CEQA assumes development overall in the City will occur at the middle range of the General Plan land use designations or consistent with surrounding development intensities. The reason why the middle or typical range is



used as opposed to the maximum intensities potentially allowed under various General Plan land use designations is because building out under the maximum intensities for all General Plan land designation would exceed the total planned growth capacity allocated in the General Plan, and this maximum amount of build-out does not represent typical development patterns or the average amount of development built on each site. General Plan land use designations allow a wide range of development intensities and types of land uses to accommodate growth; however, development projects are not typically proposed at the maximum densities due to existing development patterns, site and parking constraints, Federal Aviation Administration regulations, maximum allowable height provisions and other development regulations in the San José Municipal Code in Title 20 (Zoning), market conditions, and other factors.

For example, several General Plan land use designations include a maximum intensity for each use allowed under a land use designation, and also allow a mix of land uses. On a site where development is mixed-use, or there is a height limit, or there is a minimum required setback, achieving the maximum allowable intensities for each land use in the development is often physically infeasible. To evaluate the incremental changes of the proposed General Plan land use amendments, average residential and commercial densities for development under these land use designations and in the planning areas of the proposed General Plan amendments for San José are assumed for the current and proposed land use designations on each site. Individual development projects would be required to complete a near term traffic analysis in conjunction with any future development permit applications.

## **Proposed 2020 GPA Site Descriptions**

The project consists of amending the current adopted land use designations of the Envision San José 2040 General Plan (GP) for seven sites within the City of San José (see Figure 1). The GPA sites, described in detailed in the following chapter, include the following:

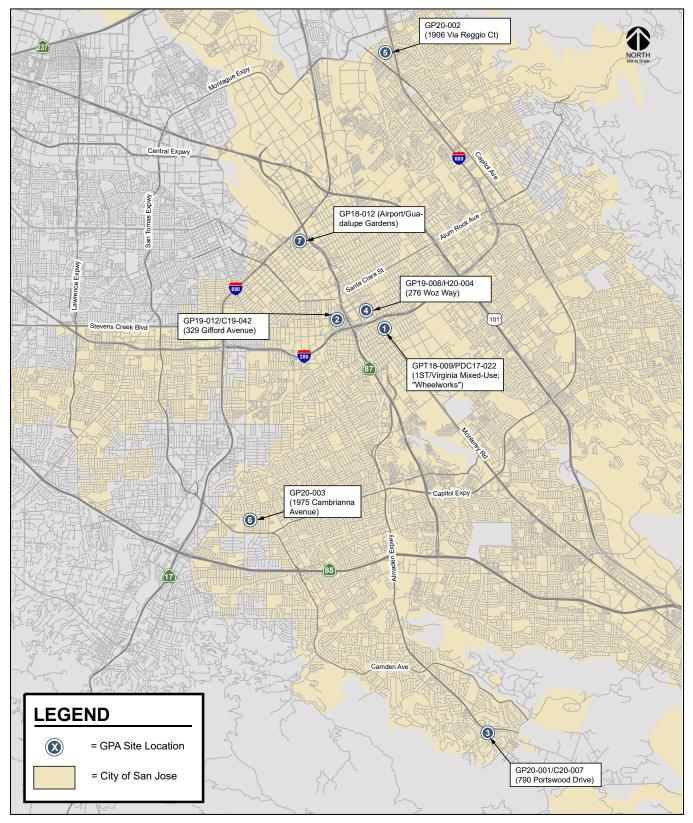
- Site 1 GPT18-009/PDC17-022 (1<sup>ST</sup>/Virginia Mixed-Use; "Wheelworks")
- Site 2 GP19-012/C19-042 (329 Gifford Avenue)
- Site 3 GP20-001/C20-007 (790 Portswood Drive)
- Site 4 GP19-008/H20-004 (276 Woz Way)
- Site 5 GP20-002 (1906 Via Reggio Court)
- Site 6 GP20-003 (1975 Cambrianna Avenue)
- Site 7 GP18-012 (Airport/Guadalupe Gardens)

Each of the proposed land use amendments and resulting changes in households, employment for each of the proposed GPA sites are described in detail within the following chapters.

## **GPA Analysis Exemption**

The City of San José Travel Demand Forecasting (TDF) model, which is described in detail in Chapter 3, was developed to help the City project peak-hour traffic impacts attributable to proposed amendments to the City's General Plan. The model is used to estimate the net change in peak-hour trips that are attributable to a proposed amendment. The City has established peak-hour trip thresholds for GP land use amendments that require a site-specific GPA analysis. It is presumed that amendments that result in trips less than the trip thresholds would not create significant long-term impacts by themselves. The City's trip thresholds for requiring a site-specific GPA traffic analysis are presented in the City of San José *Transportation Analysis Handbook*, April 2018 and are shown in Table 1 below. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José special subareas, a proposed land use amendment that would result in an increase of more than 250 PM peak-hour trips to be generated by the subject site would be required to prepare a site-specific GPA traffic analysis.





### Figure 1 Proposed GPA Site Locations



#### Table 1

Site-Specific Long-Range Transportation Analysis Screening Criteria for Land Use Amendments

	Maximum Allowable PM Peak Hour Vehicle-Trips							
Location of Amendment	Expansion of Residential Use <sup>1</sup>	Conversion from Residential to Non-Residential Use <sup>2</sup>	Conversion from Non-Residential to Residential Use <sup>2</sup>	Expansion of Non-Residential Use <sup>1</sup>				
North San Jose	1,000	0	500	50				
Evergreen	15	600	0	300				
South San Jose	50	600	0	300				
Remainder of City	250	250	250	250				

Notes:

<sup>1</sup> The screening criteria for a proposed expansion of the same land use are measured in net new PM peak hour vehicle trips.

<sup>2</sup> The screening criteria for a proposed land use conversion are measured in total PM peak hour vehicle-trips generated by the proposed use.

Source: City of San Jose *Transportation Analysis Handbook*, April 2018.

All of the seven subject GPA sites are located outside the special subareas, and therefore are subject to the 250 PM peak-hour trip threshold. The proposed land use amendments on three of the seven amendment sites would result in a net increase of more than 250 PM peak-hour trips (See Table 3 in the next chapter) and require a site-specific GPA traffic analysis.

The following GPA site requires a site-specific GPA traffic analysis:

- GP19-012/C19-042 (329 Gifford Avenue)
- P19-008/H20-004 (276 Woz Way)
- GP18-012 (Airport/Guadalupe Gardens)

## Scope of Study

The purpose of the GPAs transportation analysis is to assess the long-range impacts of the proposed amendments on the citywide transportation system. This study includes an evaluation of the cumulative impacts of all seven GPA sites with the proposed land use amendments. The study also provides the required site-specific GPA traffic analysis for the above identified GPA sites. Individual development projects also will be required to complete a near-term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP. The potential traffic impacts of the project were evaluated in accordance with the guidelines set forth by the City of San José for GPA transportation analysis.

The project consists of land use changes to the current adopted GP land uses. The project does not propose any changes to the citywide transportation system. The GPA long-range analysis focuses on the potential changes on the citywide transportation system in the horizon year of the GP (2040) when the GP capacities for housing and jobs are fully developed. The analysis includes evaluation of increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to



travel speeds on transit priority corridors, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same Measures of Effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA. Traffic conditions were evaluated for the following traffic scenarios using the City's TDF model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses (i.e., including the adopted GP Four-Year Review Land Use adjustments and adopted 2019 GP Amendments) is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Cumulative 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendments at all seven proposed GPA sites. Transportation conditions for the Cumulative 2040 GPA conditions were evaluated relative to the currently adopted 2040 GP Conditions to determine any long-range traffic impacts.
- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendments at each of the proposed GPA sites for which a site-specific analysis is required. Transportation conditions for the Proposed 2040 GPA conditions were evaluated relative to the currently adopted 2040 GP Conditions to determine any long-range traffic impacts.

### **Report Organization**

The remainder of this report is divided into the following chapters; Chapter 2 presents a detailed description of each of the proposed GPA sites included in the analysis. Chapter 3 describes analysis methodology, including the City's TDF model, and the MOEs and significance thresholds used in the analysis. Chapter 4 presents the results of the cumulative analysis based on the TDF modeling and citywide MOEs for the proposed GPAs. Chapters 5, 6, and 7 present the site-specific analyses for the 329 Gifford Avenue, 276 Woz Way, Airport/Guadalupe Gardens GPA sites, respectively. Chapter 8 presents the conclusions of the long-range cumulative and site-specific GPA analyses.

## 2. General Plan Amendment Site Descriptions

The proposed project consists of amending land uses currently adopted in the Envision San José 2040 General Plan on seven sites. The amendment sites are described in more detail below along with peakhour trip generation estimates for each of the proposed GPA sites.

### Envision San José 2040 General Plan

The City of San José *Envision San José 2040 General Plan* was adopted in 2011 and was based on planned land uses within the City projected to the Year 2035. Subsequent reviews in 2010, 2011, and 2016 resulted in the currently adopted General Plan, which includes a base year of 2015 and horizon year of the planned land uses to the Year 2040. Thus, the adopted General Plan traffic analysis provides a comprehensive evaluation of the effects of planned land use as identified in the current GP on the citywide transportation system and is used as the baseline from which impacts due to land use amendments such as the proposed project are evaluated.

Land use data consisting of households and employment growth for each of the proposed GPA sites as reflected in the adopted GP and the proposed land use amendments was prepared by the Department of Planning, Building, and Code Enforcement and provided to Hexagon for use in this analysis.

## **Amendment Sites**

The project includes seven proposed GPA sites: GPT18-009/PDC17-022, GP19-012/C19-042, GP20-001/C20-007, GP19-008/H20-004, GP20-002, GP20-003, GP18-012. Each of the proposed GPAs would result in changes to the number of households and jobs on each site when compared to those adopted per the Envision San José 2040 GP for each site. However, the proposed GPAs will not change the total number of jobs and households citywide. The TDF model is used to rebalance the number of jobs and households citywide to maintain the General Plan Goal of 751,650 jobs and 429,350 households.

Table 2 summarizes the land uses and density for each proposed site under the current 2040 GP and the proposed GPAs. Table 3 summarizes the changes in households and jobs for each site and the resulting increases in peak-hour trips. The peak-hour trips for each site were estimated using the City of San José's TDF model. The TDF modeling is described in Chapter 3.



## Table 2

### Existing General Plan and Proposed GPA Land Uses

					Existing Ger	neral Plan	Proposed General Plan Amendment		
Site Number	Project Name	Location	APN	Size (acres)	Land Use	Density	Land Use	Density	
1	GPT18-009/PDC17-022; 1ST/Virginia Mixed-Use; "Wheelworks"	838, 831, 833, 802 S 1st Street	t 472-17-005, -006, -034, - 095	1.19	Mixed-Use Commercial (MCU); Mixed-Use Neighborhood (MUN)	MUC: up to 50 DU/AC; FAR 0.5 to 4.5 MUN: up to 30 DU/AC; FAR 0.25 to 2	Transit Residential	50-250 DU/AC; FAR 2.0 to 12.0	
2	GP19-012/C19-042 (329 Gifford Avenue)	321, 323, 327, 329 Gifford Avenue; 462, 466, 470 W. San Carlos Street	264-20-082, -083, -084, - 085, -086, -087, -088	0.44	Residential Neighborhood	8 DU/AC (match existing neighborhood character); FAR up to 0.7	Downtown	50-800 DU/AC; typical FAR 2.0 to 12.0, max FAR 30.0	
3	GP20-001/C20-007 (790 Portswood Drive)	790 Portswood Drive; 0 Bret Harte Drive	701-48-057; 701-58-048	8.60	Transportation and Utilities	N/A	Residential Neighborhood	8 DU/AC; FAR up to 0.7	
4	GP19-008/H20-004 (276 Woz Way)	Generally bounded by Woz Way, Almaden Boulevard, Reed Street, and Guadalupe River	264-31-037, -038, -039, - 040, -041, -042, -043, -044, - 092, -061, -062, -063, -064, - 065, -066, -067, -107, -108	3.08	Public Quasi Public	100 DU/AC	Downtown	50-800 DU/AC; typical FAR 2.0 to 12.0, max FAR 30.0	
5	GP20-002 (1906 Via Reggio Court)	1906 Via Reggio Court	092-01-018	1.64	Mixed-Use Commercial	up to 50 DU/AC; FAR 0.5 to 4.5	Urban Residential	30-95 DU/AC; FAR 1.0 to 4.0	
6	GP20-003 (1975 Cambrianna Avenue)	1975 Cambrianna Avenue	414-21-062	2.50	Public Quasi Public	N/A	Residential Neighborhood	8 DU/AC; FAR up to 0.7	
7	GP18-012 (Airport/Guadalupe Gardens)	Generally bounded by I- 880, SR 87, Taylor Street, and Coleman Avenue	230-38-104; 230-38-076; 259-02-131; 259-08-102; 259-08-072; 259-08-101	11.60	Open Space Parkland and Habitat	N/A	Neighborhood Community/Commercial (NCC); Combined Industrial/Commercial (CIC)	NCC: 10 acres CIC: 1.6 acres	
	R = floor-to-area ratio; DU = o ity of San Jose Planning Dep		APN = assessor's parcel numbe	er; N/A =	not applicable				

#### Table 3

#### Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPAs

Site		General Plan (Baseline) <sup>1</sup>		General Plan Amendment <sup>2</sup>		Net Land Use Change		Net Peak-Hour Trip Change	
Number	Site Name	тотнн	TEMP	тотнн	TEMP	тотнн	TEMP	AM	PM
1	GPT18-009/PDC17-022; 1ST/Virginia Mixed-Use; "Wheelworks"	491	224	669	236	178	12	102	131
2	GP19-012/C19-042 (329 Gifford Avenue)	578	662	761	1,199	183	537	273	352
3	GP20-001/C20-007(790 Portswood Drive)	1,704	378	1,773	378	69	0	51	56
4	GP19-008/H20-004(276 Woz Way)	29	2,349	0	8,760	-29	6411	1,161	1,932
5	GP20-002(1906 Via Reggio Court)	707	116	771	116	64	0	41	45
6	GP20-003(1975 Cambrianna Avenue)	541	108	561	108	20	0	12	13
7	GP18-012 (Airport/Guadalupe Gardens)	18	138	18	741	0	603	365	576

Notes: TOTHH = total number of households; TEMP = total number of jobs.

<sup>1</sup>Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP).

The buildout of the 2040 GP represents baseline conditions.

<sup>2</sup>Total number of households and jobs as proposed by the GP Amendments.

Outlined indicates GPA that results in an increase in peak hour trips greater than 250 PM trips and requires site-specific GPA traffic analysis.

Source: City of San Jose Planning Department, June 2020.

City of San Jose Travel Forecasting Model runs completed July 2020 by Hexagon Transportation Consultants, Inc.



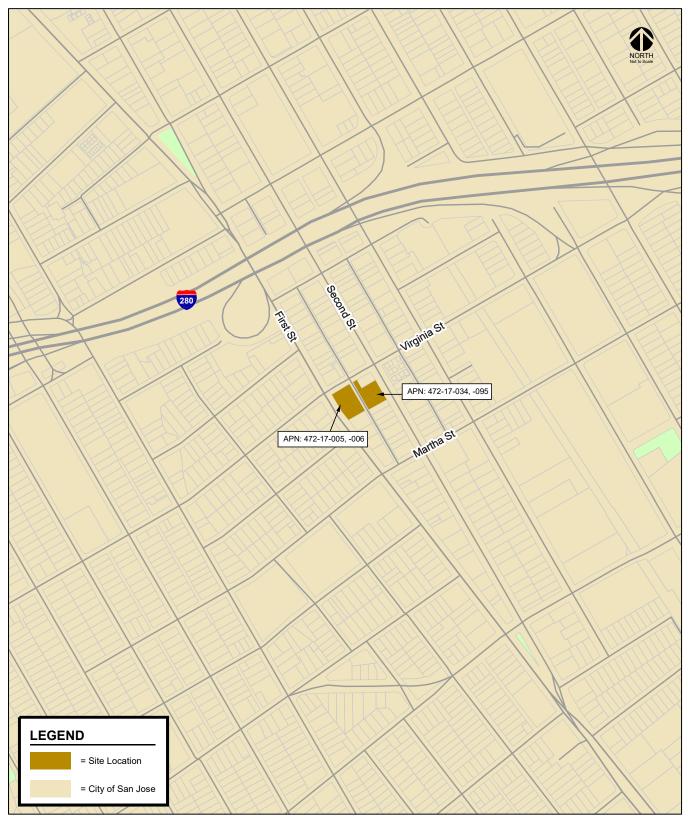
Proposed land use changes for each of the GPA sites are described below.

- Site 1 GPT18-009/PDC17-022 (1<sup>ST</sup>/Virginia Mixed-Use/Wheelworks): The 1.19-acre site is located between First Street and Second Street, just south of Virginia Street. Figure 2 shows the location of the site. The adopted GP land use designation for the site is *Mixed-Use Commercial/Mixed-Use Neighborhood* and the proposed amendment involves changing the adopted land use to *Transit Residential*. The proposed amendment would result in 178 additional households and 12 additional jobs on the site. Based on the TDF modeling results, the proposed amendment would not result in a substantial net increase of peak-hour trips generated by GPT18-009/PDC17-022 and a site-specific GPA traffic analysis is not required.
- Site 2 GP19-012/C19-042 (329 Gifford Avenue): The 0.44-acre site, located at 462-470 W. San Carlos Street and 321-329 Gifford Avenue, is bounded by San Carlos Street to the north, Gifford Avenue to the east, and commercial uses to the west and south. Figure 3 shows the location of the site. The adopted GP land use designation for the site is *Residential Neighborhood*, and the proposed amendment involves changing the adopted land use to *Downtown*. The proposed amendment would result in 183 additional households and 537 additional jobs on the site. Based on the TDF modeling results, the increase in households and jobs would result in a net increase of greater than 250 PM peak-hour trips to the GP19-012/C19-042 site. *Therefore, the preparation of a site-specific GPA traffic analysis for the proposed land use amendment on the GP19-012/C19-042 site is required*.
- Site 3 GP20-001/C20-007 (790 Portswood Drive): The 8.60-acre site is generally located on the vacant parcels north and south of Almaden Expressway at Hampswood Way and Portswood Drive. Figure 4 shows the location of the site. The adopted GP land use designation for the site is *Transportation and Utilities* and the proposed amendment involves changing the adopted land use to *Residential Neighborhood*. The proposed amendment would result in 69 additional households on the site. Based on the TDF modeling results, the proposed amendment would not result in a substantial net increase of peak-hour trips generated by GP20-001/C20-007 and a site-specific GPA traffic analysis is not required.
- Site 4 GP19-008/H20-004 (276 Woz Way): The 3.08-acre site is generally bounded by Woz Way to the north, Almaden Boulevard to the east, Reed Street to the south, and Guadalupe River to the west. Figure 5 shows the location of the site. The adopted GP land use designation for the site is *Public Quasi Public* and the proposed amendment involves changing the adopted land use to *Downtown*. The proposed amendment would result in 29 fewer households and 6,411 additional jobs on the site. Based on the TDF modeling results, the increase in jobs would result in a net increase of greater than 250 PM peak-hour trips to the GP19-008/H20-004 site. *Therefore, the preparation of a site-specific GPA traffic analysis for the proposed land use amendment on the GP19-008/H20-004 site is required.*
- Site 5 GP20-002 (1906 Via Reggio Court): The 1.64-acre site is located on the northwest corner of the intersection of Lakewood Drive and Cropley Avenue. Figure 6 shows the location of the site. The adopted GP land use designation for the site is *Mixed-Use Commercial* and the proposed amendment involves changing the adopted land use to *Urban Residential*. The proposed amendment would result in 64 additional households on the site. Based on the TDF modeling results, the proposed amendment would not result in a substantial net increase of peak-hour trips generated by GP20-002 and a site-specific GPA traffic analysis is not required.
- Site 6 GP20-003 (1975 Cambrianna Avenue): The 2.50-acre site is located on the north side of Cambrianna Avenue and east of Union Avenue. Figure 7 shows the location of the site. The adopted GP land use designation for the site is *Public Quasi Public* and the proposed amendment involves changing the adopted land use to *Residential Neighborhood*. The



proposed amendment would result in 20 additional households on the site. Based on the TDF modeling results, the proposed amendment would not result in a substantial net increase of peak-hour trips generated by GP20-003 and a site-specific GPA traffic analysis is not required.

• Site 7 - GP18-012 (Airport/Guadalupe Gardens): The 11.60-acre site is generally bounded by I-880 to the north, SR 87 to the east, Taylor Street to the south, and Coleman Avenue to the west. Figure 8 shows the location of the site. The adopted GP land use designations for the site include *Open Space Parkland and Habitat* and the proposed amendment involves changing the adopted land uses to *Neighborhood Community or Commercial*. The proposed amendment would result in 603 additional jobs on the site. Based on the TDF modeling results, the increase in households would result in a net increase of greater than 250 PM peak-hour trips to the GP18-012 site. *Therefore, the preparation of a site-specific GPA traffic analysis for the proposed land use amendment on the GP18-012 site is required.* 



### Figure 2 Location of GPA Site 1: GPT18-009/PDC17-022 (1<sup>st</sup>/Virginia Mixed-Use and Wheelworks)



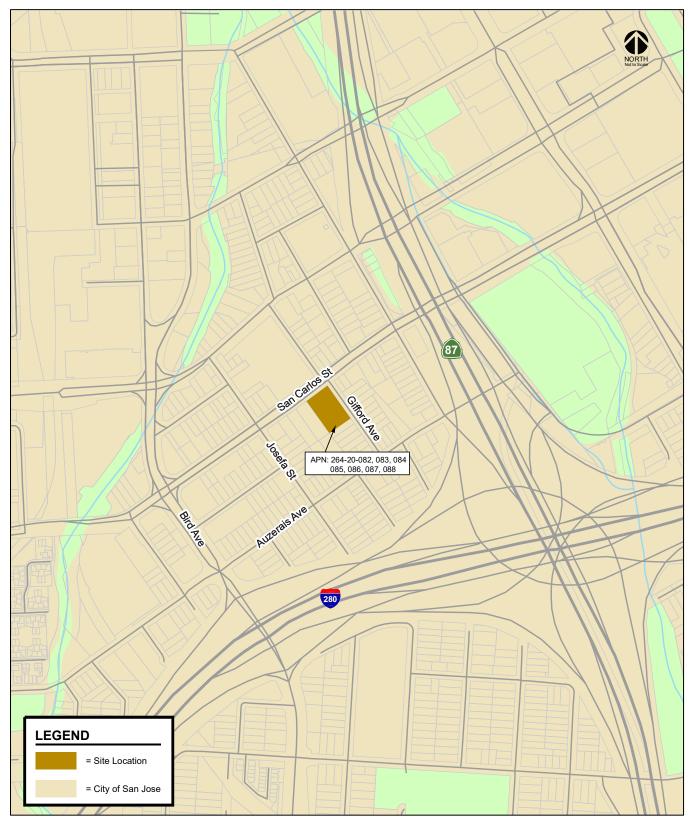
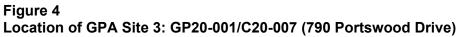
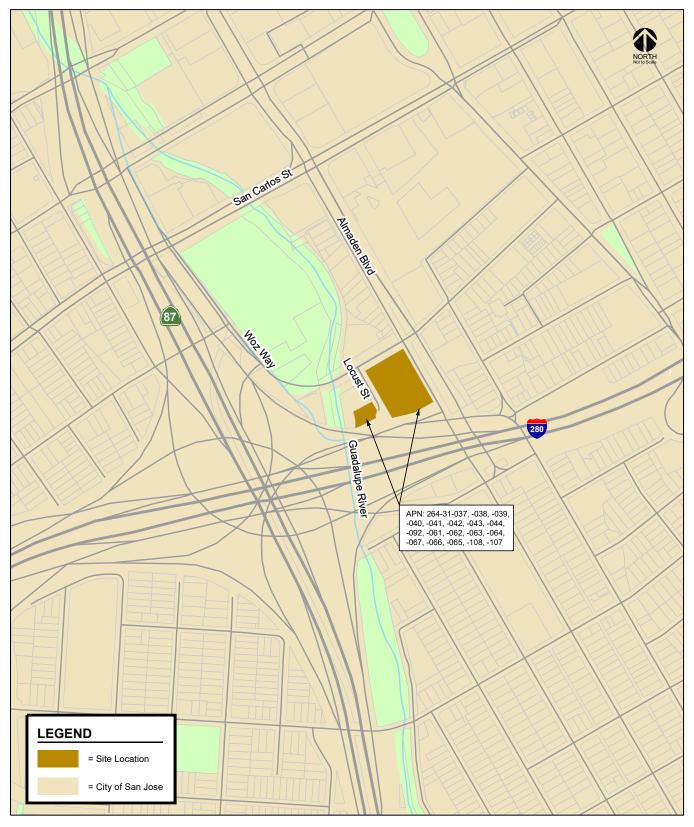


Figure 3 Location of GPA Site 2: GP19-012/C19-042 (329 Gifford Avenue)



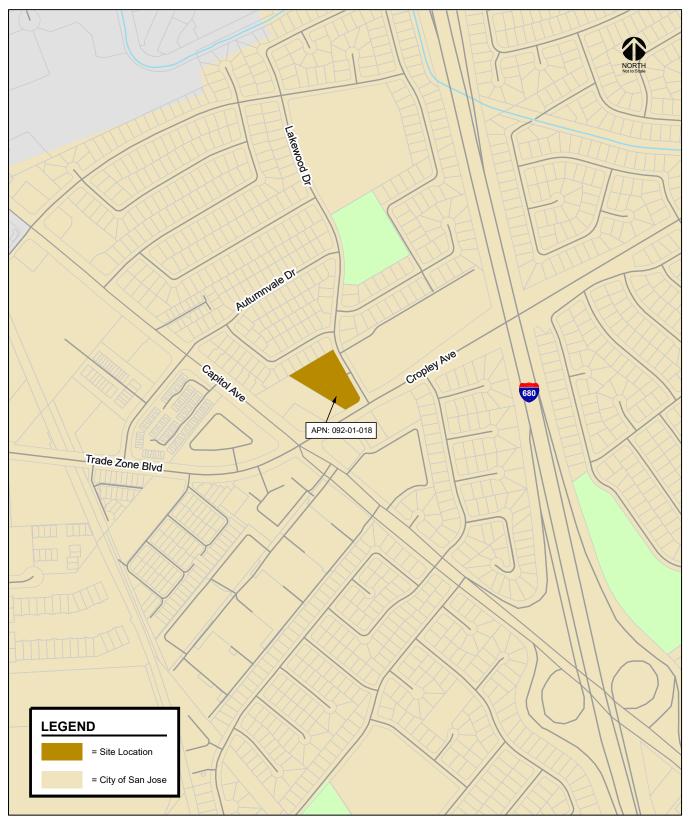






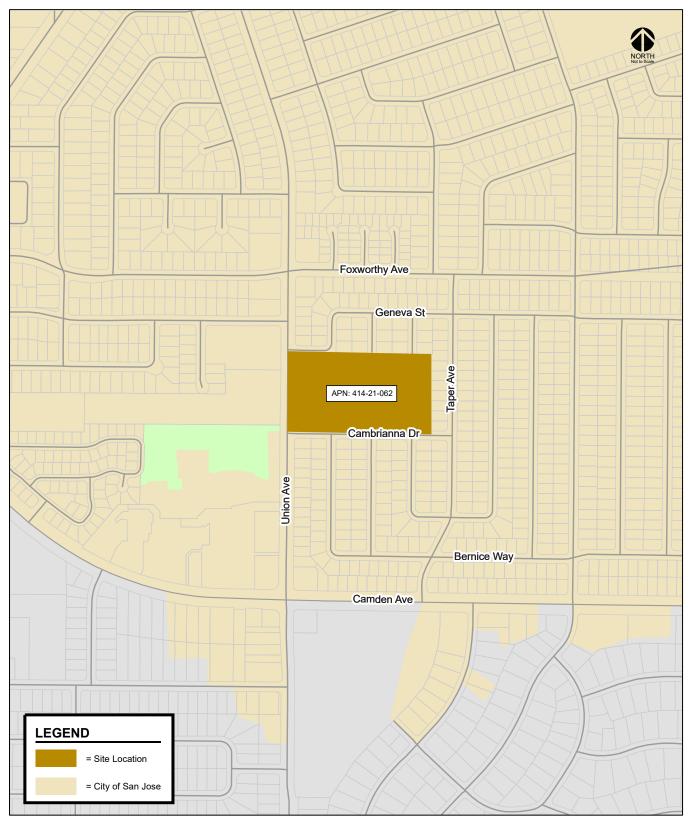
## Figure 5 Location of GPA Site 4: GP19-008/H20-004 (276 Woz Way)





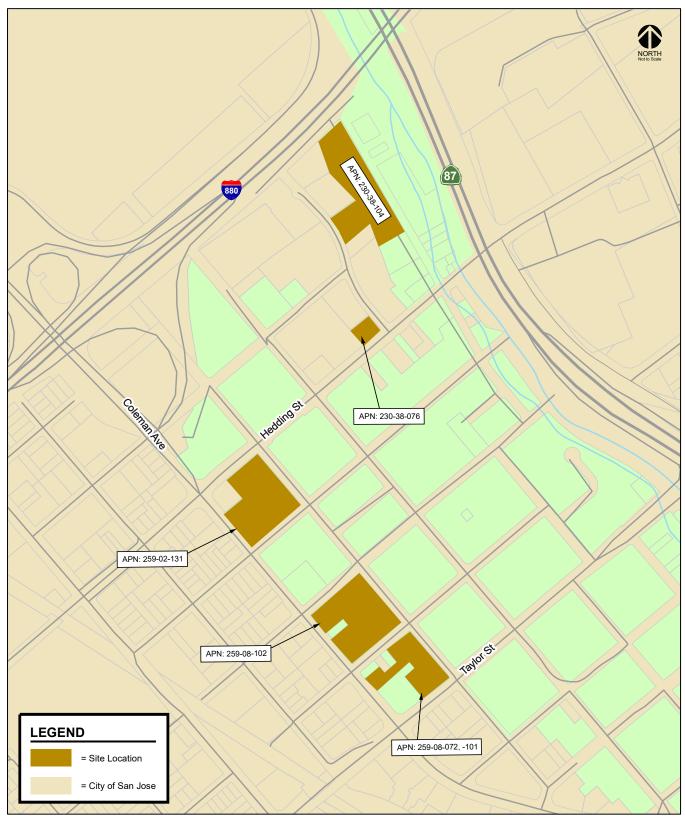
## Figure 6 Location of GPA Site 5: GP20-002 (1906 Via Reggio Court)





#### Figure 7 Location of GPA Site 6: GP20-003 (1975 Cambrianna Avenue)







## 3. Analysis Methodology and Impact Criteria

This chapter describes the travel demand forecasting modeling methodology used for the analysis and the methods used to determine the traffic conditions for the study scenarios described in the previous chapter. It includes descriptions of the measures of effectiveness (MOE) and the applicable impact criteria for GP traffic analysis.

## **Travel Demand Forecasting Model**

The citywide travel demand forecasting (TDF) model was prepared as part of the Envision San José 2040 GP. The TDF model was developed to provide improved citywide travel demand forecasting as part of continued planning efforts to address transportation infrastructure needs and to assist in the update of the City's GP. The model was developed from the VTA's countywide travel demand model, based on Metropolitan Transportation Commission (MTC's) BAYCAST trip-based regional model. The VTA model contains all cities and counties within the model's extents roughly bounded by southern Monterey County, eastern San Joaquin County, northern Sonoma County, and the Pacific Ocean. The San José model is a sub-area model of the VTA model – it maintains the general inputs (roadway network, land use, trip generation rates, etc.), structure, and process as the VTA model, but with refinement within the City of San José. This allows regional travel patterns and behavior to be accounted for in the focused area of San José, which will become more important with the recent legislative requirements associated with greenhouse gas quantification and impacts.

The VTA and San José models both include four elements traditionally associated with models of this kind. These elements include trip generation, trip distribution, mode choice, and traffic assignment.

- **Trip Generation.** Trip generation involves estimating the number of trips that would occur with the proposed GP land uses. The City's TDF model includes trip generation formulas based on the MTC regional travel demand model. Trip generation is estimated based on the type and amount of specific land uses within each travel analysis zone (TAZ). The TDF model produces trip estimates in person trips (as opposed to vehicle trips, which are typically used in near-term traffic analyses).
- **Trip Distribution.** Trip distribution involves distributing the trips to various internal destinations and external gateways. The model pairs trip origins and trip destinations (starting and ending points) for each person trip based on the type of trip (e.g., home-to-work, home-to-school, etc.) and the distance a person is willing to travel for that purpose. The distance a person is willing to travel is determined by a gravity model, which is analogous to Newton's law of gravity. In a gravity model, estimates are made about how many trips occur between two locations where



the interaction between those two locations diminishes with increasing distance, time, and cost between them.

- **Mode Choice.** Mode choice, as assigned by the model, determines which mode of transport a person will choose for each trip, based on the availability of a vehicle, the trip distance, and the trip purpose.
- **Traffic Assignment.** Traffic assignment involves determining which route to take to travel between the trip origin and destination. The model assigns the trips to the roadway network to minimize travel time between the start and end points.

Subsequent trip distribution, assignment, and mode choice iterations are completed by the model to account for roadway congestion. These iterations continue under equilibrium traffic conditions until the optimal trip assignment is reached.

#### Transportation Network and Traffic Analysis Zones (TAZs)

The fundamental structure of the model includes a computer readable representation of the roadway system (highway network) that defines roadway segments (links) identified by end points (nodes). Each roadway link is further represented by key characteristics (link attributes) that describe the length, travel speeds, and vehicular capacity of the roadway segment. Small geographic areas (TAZs) are used to quantify the planned land use activity throughout the City's planning area. The boundaries of these small geographic areas are typically defined by the modeled roadway system, as well as natural and man-made barriers that have an effect on traffic access to the modeled network. Transit systems are represented in the model by transit networks that are also identifiable by links and nodes. Unlike the roadway network, the key link attributes of a transit link are operating speed and headways – elapsed time between successive transit services. Transit stops and "dwelling times" (the time allowed for passengers embarking and disembarking transit vehicles) are described as transit node attributes. Transit networks are further grouped by type of transit (rail versus bus) and operator (VTA bus versus AC Transit bus). Transit accessibility for each TAZ is evaluated by proximity to transit stops or stations, and the connectivity of transit lines to destinations.

The socioeconomic data for each TAZ in the model includes information about the number of households (stratified by household income and structure type), population, average income, population age distribution, and employment (stratified by groupings of Standard Industrial Codes). The worker per household ratios and auto ownership within a TAZ are calculated based on these factors and the types and densities of residences. The model projects trip generation rates and the traffic attributable to residents and resident workers, categorized by trip purposes, using set trip generation formulas that are based on the MTC regional travel demand model. The land use data and roadway network used for the GP base year reflect land use development and roadway projects completed as of approximately mid-2015.

#### **Traffic Assignment**

Travel times within and between TAZs (intra-zonal, inter-zonal and terminal times) are developed from the network being modeled. Travel times within zones (intra-zonal travel times) are derived for each zone based on half its average travel time to the nearest three adjacent zones. Time to walk to and from the trip maker's car (terminal times) are also added. The projected daily trips are distributed using a standard gravity model and friction factors calibrated for the modeling region, which presently consists of 13 counties.

The City of San José TDF model can estimate up to 7 modes of transportation:



- auto drive alone
- auto carpool with two persons
- auto carpool with three+ persons
- rail transit
- bus transit
- bicycle
- walk

Before the traffic is assigned to the roadway networks, time-of-day factors and directionality factors are applied to automobile trips occurring during:

- AM peak hour
- AM 4-hour peak
- PM peak hour
- PM 4-hour peak
- mid-day 6-hour
- mid-night 10-hour periods

The assignment of the trip tables to the roadway network uses a route selection procedure based on minimum travel time paths (as opposed to minimum travel distance paths) between TAZs and is done using a capacity-constrained user equilibrium-seeking process. This capacity constrained traffic assignment process enables the model to reflect diversion of traffic around congested areas of the overall street system. High Occupancy Vehicle (HOV) lanes on freeways, expressways, and on-ramps are specifically dealt with in the model network, with access restricted to auto-shared-ride mode trips only, similar to real world operations of roadway facilities with HOV lanes.

#### Transit Mode Share

Transit use is modeled for peak and non-peak periods based on computed transit levels of services (speeds and wait times). Based on the conditions that influence transit speeds and wait times (such as traffic congestion), transit use numbers are modified to reflect the likelihood of transit use, based on the constraints to the system. This feedback loop is a modern enhancement in the model to address the dynamics of transit ridership related to the expansion or contraction of roadway capacities.

In addition to providing projected peak hour and peak period volumes and ratios comparing projected traffic volume to available roadway capacity (V/C ratios) on each roadway segment, the model provides information on vehicle-miles and vehicle-hours of travel by facility type (freeway, expressways, arterial streets, etc.). These informational reports can be used to compare projected conditions under the adopted GP with the impacts of proposed land use amendments. The City's TDF model is intended for use as a "macro analysis tool" to project probable future conditions. Therefore, the TDF model is best used when comparing alternative future scenarios and is not designed to answer "micro analysis level" operational questions typically address in detailed project-specific transportation analyses (TAs).

## **General Plan Transportation Network**

The GP TDF model includes all major transportation infrastructure identified in the Envision San José 2040 *Land Use/Transportation Diagram*, including planned infrastructure that is not yet built and/or funded.



#### **Measures of Effectiveness**

This analysis addresses the long-range impacts of the proposed GP land use adjustments on the citywide transportation system by applying measures of effectiveness (MOEs) developed for the Envision San José 2040 GP. The results of the analysis for the proposed land use adjustments are compared to the current GP to determine if the proposed adjustments would result in any new or substantially more severe transportation impacts. The long-range analysis includes analysis of the following MOEs:

- Vehicle Miles Traveled (VMT) per Service Population. VMT per service population is a measure of the daily vehicle miles traveled divided by the number of residents and employees within the City of San José. VMT per service population (residents + employees) is used for the analysis as opposed to VMT per capita (residents only), since per service population more accurately captures the effects of land use on VMT. The City not only has residents that travel to and from jobs, but also attracts regional employees. VMT is calculated based on the number of vehicles multiplied by the distance traveled by each vehicle in miles.
- **Journey-to-Work Mode Share (Drive Alone %).** Mode share is the distribution of all daily work trips by travel mode, including the following categories: drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips.
- Average Travel Speeds within the City's Transit Priority Corridors. Average travel speed for all vehicles (transit and non-transit vehicles) in the City's 14 transit corridors is calculated for the AM peak hour based on the segment distance dividing the vehicle travel time. A transit corridor is a segment of roadway identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for Valley Transportation Authority (VTA) light-rail transit (LRT), bus rapid transit (BRT), local buses, and other public transit vehicles. Although transit services are found on other street types throughout the City, transit has the utmost priority on Grand Boulevards.

### Significance Impact Criteria

The City of San José adopted policies and goals in Envision San José 2040 to reduce the drive alone mode share to no more than 40 percent of all daily commute trips, and to reduce the VMT per service population by 40 percent from existing (year 2015) conditions. To meet these goals by the GP horizon year and to satisfy CEQA requirements, the City developed a set of MOEs and associated significance thresholds to evaluate long-range transportation impacts resulting from land use adjustments. Table 4 summarizes the significance thresholds associated with vehicular modes of transportation as defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11) for the evaluation of long-range traffic impacts resulting from proposed land use adjustments and used in this analysis.

In addition to the MOEs described above, the effects of the proposed land use adjustments on transit, bicycle, and pedestrian facilities were evaluated. A significant long-range transportation impact would occur if the adjustments would:

- Disrupt existing, or interfere with, planned transit services or facilities;
- Disrupt existing, or interfere with, planned bicycle facilities;
- Conflict or create inconsistencies with adopted bicycle plans, guidelines, policies, or standards;
- Not provide secure and safe bicycle parking in adequate proportion to anticipated demand;



## Table 4MOE Significance Thresholds

MOE	Citywide Threshold					
VMT/Service Population	Any increase over current 2040 General Plan conditions					
Mode Share (Drive Alone %)	Any increase in journey-to-work drive alone mode share over current 2040 General Plan conditions					
Transit Corridor Travel Speeds	<ul> <li>Decrease in average travel speed on a transit corridor below current 2040 General Plan conditions in the AM peak one-hour period when:</li> <li>1. The average speed drops below 15 mph or decreases by 25% or more, or</li> <li>2. The average speed drops by one mph or more for a transit corridor with average speed below 15 mph under current 2040 General Plan conditions.</li> </ul>					
Source: City of San Jose Transportation Analysis Handbook, April 2018.						

- Disrupt existing, or interfere with, planned pedestrian facilities;
  Not provide accessible pedestrian facilities that meet current ADA best practices; or
- Create inconsistencies with adopted pedestrian plans, guidelines, policies, or standards.

## 4. Cumulative General Plan Long Range Analysis

The long-range cumulative traffic impacts resulting from the proposed 2020 GPAs were determined based on the MOEs significance thresholds for vehicle modes of travel and the impact criteria for transit, bicycle and pedestrian described in Chapter 3. The results of the GPA long-range analysis are described below.

## Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to project daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles.

Since the City of San José not only has residents that travel to and from jobs within the City, but also attracts regional employees, the daily VMT includes some trips traveling outside of the City limits but with origins or destinations within San José. For this reason, the following trip types were included in the VMT calculation:

- Internal-Internal All daily trips are made entirely within the San José City limits.
- One-half of Internal-External One-half of the daily trips with an origin located within the San José City limits and a destination located outside of San José.
- One-half of External-Internal One-half of the daily trips with an origin located outside the San José City limits and a destination located within San José.

Trips that travel through San José to and from other locations (External-External) are not included in the calculation of VMT. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendments is considered a significant impact.

As shown in Table 5, the citywide daily VMT and the VMT per service population would decrease due to the proposed land use amendments when compared to the current GP. This is because (1) the total number of jobs and households would not change citywide as a result of the GPAs (only shifting of households and jobs would occur) and (2) the addition of households to areas with more jobs and transit options. Vehicle trips citywide would be reduced due to the reallocation of jobs and housing within and surrounding the downtown area which provides for greater opportunities for multi-modal travel. The availability of current and planned transit, bicycle, and pedestrian facilities in the area of the



### Table 5

#### **Daily Vehicle Miles Traveled Per Service Population**

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPAs						
Citywide Daily VMT	17,505,088	28,035,508	27,995,252						
Citywide Service Population	1,392,946	2,054,758	2,054,758						
- Total Households	319,870	429,350	429,350						
- Total Residents	1,016,043	1,303,108	1,303,108						
- Total Jobs	376,903	751,650	751,650						
Daily VMT Per Service Population	12.57	13.64	13.62						
Increase in VMT/Service Population over General Plan Conditions			-0.02						
Significant Impact?			Νο						
Notes: 2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP). GPA = General Plan Amendment Service Population = Residents + Jobs									

Source: City of San Jose Travel Forecasting Model runs completed July 2020

by Hexagon Transportation Consultants, Inc.

GPA sites will result in an increase in trips made by transit and other non-vehicular modes. Therefore, cumulatively, the proposed 2020 GPAs would result in a *less than significant* impact on citywide daily VMT per service population.

**Findings:** Compared to the current GP, the proposed land use adjustments would not result in an increase in citywide VMT per service population. Therefore, cumulatively, the proposed 2020 GPAs would result in a *less than significant* impact on citywide daily VMT per service population. It is important to note that the VMT per service population is based on raw model output and does not reflect the implementation of adopted GP policies and goals that would further reduce VMT by increased use of non-auto modes of travel.

## Journey-to-Work Mode Share

The San José GP TDF model was used to calculate citywide journey-to-work mode share percentages. Journey-to-work mode share is the distribution of all daily work trips by travel mode, including drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendments is considered a significant impact.

Table 6 summarizes the citywide journey-to-work mode share analysis results. When compared to the current Envision San José 2040 GP, the percentage of journey-to-work drive alone trips would decrease slightly and the percentage of transit and bike trips would increase slightly as a result of the proposed GPAs. Therefore, cumulatively, the proposed 2020 GPAs would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.



#### Table 6 Journey-to-Work Mode Share

	Base Ye	ar (2015)	204 Genera (Base	al Plan	2040 General Plan Plus GPAs		
Mode	Trips	%	Trips	%	Trips	%	
Drive Alone	753,264	79.69%	1,092,462	71.70%	1,090,766	71.61%	
Carpool 2	85,496	9.04%	137,781	9.04%	137,904	9.05%	
Carpool 3+	28,526	3.02%	54,781	3.60%	54,696	3.59%	
Transit	48,181	5.10%	182,827	12.00%	183,931	12.08%	
Bicycle	14,120	1.49%	26,337	1.73%	26,412	1.73%	
Walk	15,666	1.66%	29,451	1.93%	29,514	1.94%	
Increase in Drive Ald	one Percentage ove	er General P	an Conditions	5		-0.09%	
Significant Impact?						No	
<u>Notes</u> : 2040 General Plan (Ba GPA = General Plan A Source: City of San Jo by Hexagon J	mendment	g Model runs	·		se 2040 Genera	ıl Plan (GP	

**Findings:** The proposed land use adjustments will not result in an increase of drive alone trips when compared to the current GP conditions. Therefore, cumulatively, the proposed 2020 GPAs would result in a *less than significant* impact on citywide journey-to-work mode share.

## **Average Vehicle Speeds in Transit Priority Corridors**

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. A transit corridor is a segment of roadway identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 7 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendments would have minimal effect on the travel speeds in the transit corridors. The TDF model estimates a decrease in travel speeds of 0.1 mph or less (or a change of 0.4% or less) on one corridor due to the proposed GPAs. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, cumulatively, the proposed 2020 GPAs would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

# Table 7 AM Peak-Hour Vehicle Speeds (mph) for San José Transit Priority Corridors

	Base Year 2040 General (2015) (Baseline) (Baseline)		20	2040 General Plan Plus GPAs				
Transit Priority Corridor	Speed (mph)	Speed (mph)	Speed (mph)	% Change <u>(GPplusGPAs - GP)</u> GP	Absolute Change (GPplusGPAs - GP)			
2 <sup>nd</sup> Street from San Carlos Street to St. James Street	16.6	15.3	15.3	0.0%	0.0			
Alum Rock Avenue from Capitol Avenue to US 101	21.3	16.6	16.7	0.6%	0.1			
Camden Avenue from SR 17 to Meridian Avenue	23.1	16.3	16.5	1.2%	0.2			
Capitol Avenue from South Milpitas Boulevard to Capitol Expressway	27.1	22.6	22.6	0.0%	0.0			
Capitol Expressway from Capitol Avenue to Meridian Avenue	33.0	26.7	26.6	-0.4%	-0.1			
East Santa Clara Street from US 101 to Delmas Avenue	20.4	15.3	15.8	3.3%	0.5			
Meridian Avenue from Park Avenue to Blossom Hill Road	24.9	20.0	20.0	0.0%	0.0			
Monterey Road from Keyes Street to Metcalf Road	27.4	19.3	19.4	0.5%	0.1			
North 1 <sup>st</sup> Street from SR 237 to Keyes Street	21.3	13.6	13.8	1.5%	0.2			
San Carlos Street from Bascom Avenue to SR 87	24.8	19.8	20.0	1.0%	0.2			
Stevens Creek Boulevard from Bascom Avenue to Tantau Avenue	24.3	18.8	18.8	0.0%	0.0			
Tasman Drive from Lick Mill Boulevard to McCarthy Boulevard	22.7	13.8	14.0	1.4%	0.2			
The Alameda from Alameda Way to Delmas Avenue	20.5	13.8	14.0	1.4%	0.2			
West San Carlos Street from SR 87 to 2 <sup>nd</sup> Street	20.0	18.8	18.8	0.0%	0.0			

Notes:

2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).

GPA = General Plan Amendment

Source: City of San Jose Travel Forecasting Model runs completed July 2020 by Hexagon Transportation Consultants, Inc.

**Findings:** The proposed land use adjustments would not result in a decrease in travel speeds greater than one mph or 25 percent on any of the 14 transit priority corridors when compared to current GP conditions. Therefore, cumulatively, the proposed 2020 GPAs would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

## Impacts on Transit, Bicycle, and Pedestrian Circulation

#### **Transit Services or Facilities**

Planned transit services and facilities include additional rail service via the future Bay Area Rapid Transit (BART) extension, light rail transit (LRT) extensions, new bus rapid transit (BRT) services, and the proposed California High Speed Rail (HSR) project. The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would result in an adverse effect on existing or planned transit facilities. Therefore, the proposed 2020 GPA's land use



adjustments would not substantially disrupt existing or interfere with planned transit services or facilities.

#### **Bicycle Facilities**

The adopted Envision San José 2040 GP supports the goals outlined in the City's Better Bike Plan 2025 and contains policies to encourage bicycle trips (Policies TR-1.1, TR-1.2, TR-1.4 through TR-1.9, TR 2.1 through TR 2.11, TR-7.1, TN-1.1 through TN-1.5, TN-2.1 through TN-2.7, and TN-3.1 through 3.6; Implementing Actions TR-1.12 thorugh TR-1.15, TR-2.12 through TR-2.21, TR-7.2, TR-7.3, TN-1.6, TN-2.8 through 2.10, and TN-3.7; Performance Measures TN-2.11, TN-2.12). The proposed GPA land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned bicycle facilities. Therefore, the proposed 2020 GPA land use adjustments would not substantially disrupt existing or interfere with planned bicycle facilities; conflict or create inconsistencies with adopted bicycle plans, guidelines, policies, or standards; and provide insecure and unsafe bicycle parking in adequate proportion to anticipated demand.

#### **Pedestrian Facilities**

The adopted Envision San José 2040 GP contains goals and policies (Policies TR-1.1, TR-1.2,TR-1.4 through TR-1.9, TR-2.1 through TR-2.11, TR-7.1, TN-1.1 through TN-1.5, TN-2.1 through TN-2.7, and TN-3.1 through 3.6; Implementing Actions TR-1.12 through TR-1.15, TR-2.12 through TR-2.21, TR-7.2, TR-7.3, TN-1.6, TN-2.8 through 2.10, and TN-3.7; Performance Measures TN-2.11, TN-2.12) to improve pedestrian walking environment, increase pedestrian safety, and create a land use context to support non-motorized travel. The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned pedestrian facilities. Therefore, the proposed 2020 GPAs land use adjustments would not substantially disrupt existing or interfere with planned pedestrian facilities; create inconsistencies with adopted pedestrian plans, guidelines, policies, or standards; and provide accessible pedestrian facilities that would not meet current ADA best practice.

## 5. 329 Gifford Avenue (Site-Specific GPA Traffic Analysis)

This report presents the results of the long-range site-specific transportation analysis for the proposed 329 Gifford Avenue General Plan Amendment (GP19-012/C19-042). The purpose of the General Plan Amendment (GPA) transportation analysis is to assess the long-range impacts of the proposed land use amendment to the 329 Giffford Avenue General Plan site on the citywide transportation system. The potential transportation impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP). In addition, a near term transportation analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP will be required once a development application is submitted to the City.

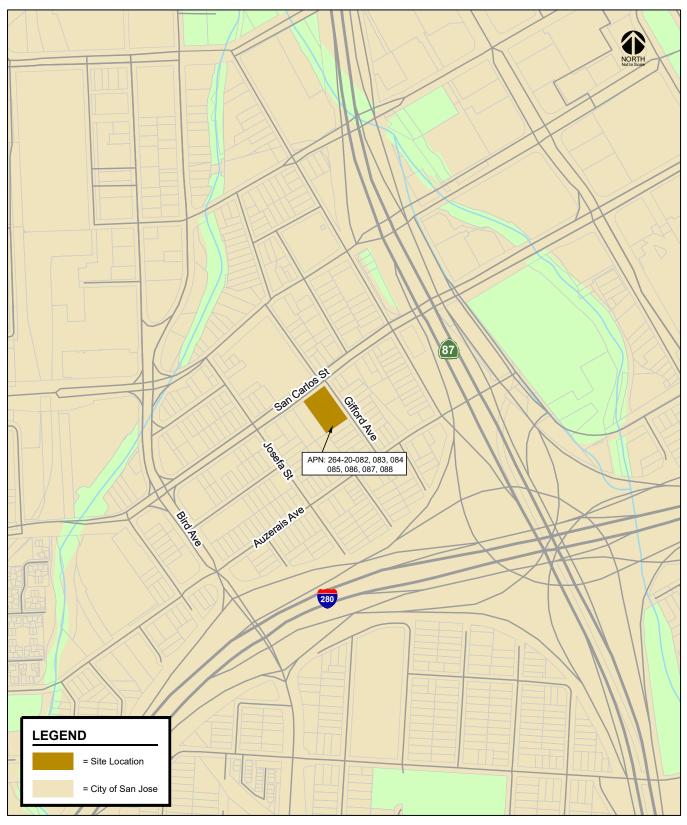
## **General Plan Amendment Site Description**

The project consists of amending the adopted land use designation of the Envision San José 2040 GP for the 0.44-acre site, located at 462-470 W. San Carlos Street and 321-329 Gifford Avenue, is bounded by San Carlos Street to the north, Gifford Avenue to the east, and commercial uses to the west and south. The site is located within the Downtown Growth Area Boundary per the Envision San José 2040 GP. The GPA site location is presented on Figure 9. The adopted GP land use designation for the site is *Residential Neighborhood*, which provides for a density of 8 dwelling units per acre (DU/AC) and a floor area ratio (FAR) of up to 0.7. The proposed amendment involves changing the adopted land use to *Downtown*, which includes a density of 50-800 DU/AC and a max FAR of 30.0. The site is currently occupied by three single-family homes and a used car dealership. The proposed land use change for development of the site would be consistent with the immediate and surrounding land uses.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 PM peak-hour trips to be generated by the subject site due to proposed increases in households or employment would be required to prepare a site-specific GPA traffic analysis. The 329 Gifford Avenue GPA site is not located within the special subareas. According to the TDF modeling results, the proposed amendment at the 329 Gifford Avenue site would result in 183 additional households and 573 additional jobs on the site. The increase in households and jobs would result in an



### Figure 9 329 Gifford Avenue GPA – GPA Site Location



additional 273 AM and 352 PM peak-hour trips at the 329 Gifford Avenue GPA site when compared to the current GP land use designation (see Table 8). Therefore, a site-specific GPA traffic analysis is required for the proposed land use amendment. The GPA does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

#### Table 8

## 329 Gifford Avenue GPA – Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPA

Site		General Plan (Baseline) <sup>1</sup>		General Plan Amendment <sup>2</sup>		Net Land Use Change		Net Peak-Hour Trip Change	
Number	Site Name	тотнн	TEMP	тотнн	TEMP	тотнн	TEMP	AM	РМ
2	GP19-012/C19-042 (329 Gifford Avenue)	578	662	761	1,199	183	537	273	352
<sup>1</sup> Total nur	DTHH = total number of households; TEMP mber of households and jobs under the adop dout of the 2040 GP represents baseline co	ted Envisio			eral Plan (	GP).			
<sup>2</sup> Total number of households and jobs as proposed by the GP Amendments. <b>Outlined</b> indicates GPA that results in an increase in peak hour trips greater than 250 PM trips and requires site-specific GPA traffic analysis. Source: City of San Jose Planning Department, June 2020.									
	City of San Jose Travel Forecasting Model ru		ed July 202	20 by Hexag	jon Transp	ortation Cor	nsultants, In	IC.	

## Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendment for the 329 Gifford Avenue GP site. Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the currently adopted 2040 GP Conditions to determine any long-range traffic impacts.

## **Existing Conditions**

This section describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.



#### Existing Roadway Network

Regional access to the project site is provided by State Route 87 and the Interstate 280/680 freeway. Local site access is provided by Bird Avenue, Montgomery Street, San Carlos Street, Auzerais Avenue, and Gifford Avenue. The freeways and local roadways are described below.

**State Route 87** is primarily a six-lane freeway (four mixed-flow lanes and two HOV lanes) that is aligned in a north-south orientation within the project vicinity. SR 87 begins at its interchange with SR 85 and extends northward, terminating at its junction with US 101. Connections from SR-87 to the project site are provided via partial interchanges at Park Avenue (ramps to and from north), Auzerais Avenue (ramps to south only), and Woz Way (ramp from south only). SR 87 provides access to I-280/I-680 and US-101.

*Interstate 280* connects from US-101 in San Jose to I-80 in San Francisco. It is generally an eight-lane freeway in the vicinity of downtown San Jose. It also has auxiliary lanes between some interchanges. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Connections from I-280 to the project site are provided via its full interchange at Bird Avenue.

**Bird Avenue** is a four-lane north-south roadway, designated as a City Connector Street in the General Plan, that provides access to I-280 via a full interchange. Bird Avenue runs from the Willow Glen Area of San Jose to San Carlos Street, where it transitions into Montgomery Street. Land uses located along Bird Avenue are generally commercial north of the I-280 interchange and residential south of the interchange, with parking provided on both sides of the street in most areas. Bike lanes are provided along both sides of Bird Avenue, south of Virginia Street, while the segment between Virginia Street and San Carlos Street is a designated bike route.

**Montgomery Street** is a north-south roadway that extends between San Carlos Street and Santa Clara Street. Between Santa Clara Street and Park Avenue, Montgomery Street is a two-lane, one-way (southbound), General Plan-designated Grand Boulevard that works as a couplet with Autumn Street. Between Park Avenue and San Carlos Street, it is a two-way Connector Street with three southbound travel lanes, two northbound travel lanes, and bike lanes along both sides of the street. Montgomery Street is lined with commercial and industrial land uses, it includes parking along both sides of the street in most areas, and has a posted speed limit of 35 mph. Access to the project site from Montgomery Street would be provided via its intersection with San Carlos Street.

**San Carlos Street** is a four-lane east-west roadway, designated as a Grand Boulevard in the General Plan, that runs from 4th Street westward to Bascom Avenue, just east of I-880, at which point it transitions into Stevens Creek Boulevard. Land uses located along San Carlos Street are generally commercial and industrial, although some high-density residential developments are planned or under construction. Parking is provided on both sides of the street in most areas. Within the study area, San Carlos Street has a posted speed limit of 35 mph, includes sidewalks along both sides of the street, and has a median island with left-turn pockets. San Carlos Street runs along the southern project site frontage.

*Auzerais Avenue* is an east-west roadway, designated as a Local Connector Street in the General Plan, that extends from Woz Way in Downtown San Jose to Race Street. consists of four lanes between east of Delmas Avenue and two lanes west of Delmas Avenue. The posted speed limit is 25 mph. In the vicinity of the project site, Auzerais Avenue is a designated bike route only with "sharrow" marking and signage; however, there are bike lanes along portions of Auzerais Avenue between Bird Avenue and Sunol Street. Land uses along Auzerais Avenue include both residential and commercial, with parking along both sides of the street in most areas.



*Gifford Avenue* is a north-south roadway that extends from San Fernando Street south to Auzerais Avenue. It consists of one lane in each direction with a posted speed limit of 25 mph in the vicinity of the project. Land uses along Gifford Avenue include both residential and commercial, with parking along both sides of the street in most areas and without on-street bicycle facilities.

#### **Existing Bicycle Facilities**

Class II bicycle facilities (striped bike lanes) are provided along the following roadways within the project area:

- Park Avenue, along the entire length of the street
- Auzerais Avenue, between Sunol Street and the Los Gatos Creek Trail; between the Union Pacific Railroad tracks and Bird Avenue
- Autumn Street, between Santa Clara Street and Park Avenue
- Montgomery Street, between Park Avenue and San Carlos Street
- Bird Avenue, between San Carlos Street and Coe Avenue
- Lincoln Avenue, south of San Carlos Street
- Woz Way, between San Carlos Street and Almaden Avenue
- The Alameda/Santa Clara Street, between Stockton Avenue and Almaden Boulevard

Designated Class III bike routes with "sharrow" or shared-lane pavement markings and signage are provided along the following roadways:

- Auzerais Avenue, all segments east of Race Street without striped bike lanes
- Dupont Street, north of San Carlos Street
- Sunol Street, between San Fernando Street and Auzerais Avenue
- Laurel Grove Lane, between Park Avenue and Cahill Park
- Lincoln Avenue, between San Carlos Street and Park Avenue
- San Carlos Street, east of Woz Way
- Virginia Street, between Drake Street and 3<sup>rd</sup> Street

Class IV bicycle facilities (protected bike lanes) are currently being installed throughout the Downtown Area as part of the Better Bikeways project. Protected bike lanes have been implemented along the following roadways:

- San Fernando Street, between Cahill Street and Tenth Street
- Cahill Street, between San Fernando Street and Santa Clara Street

The existing bicycle facilities are shown on Figure 10.

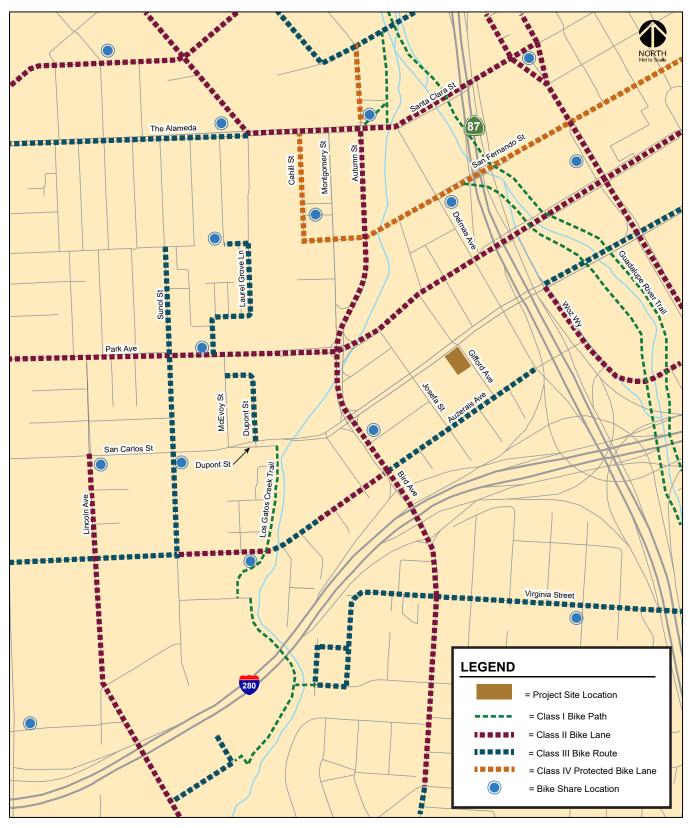
#### Guadalupe River Park Trail

The Guadalupe River multi-use trail system runs through the City of San Jose along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. This trail system can be accessed via a trailhead along San Carlos Street, located approximately 1,500 feet east of the project site.

#### Los Gatos Creek Trail

The Los Gatos Creek Trail begins at Vasona Lake County Park in the south and continues to West San Carlos Street in the north, all alongside Los Gatos Creek. The nearest access point to the Los Gatos Creek Trail is provided via a trailhead at the south end of Dupont Street, south of San Carlos Street, approximately 0.65-mile west of the project site.





# Figure 10 329 Gifford Avenue GPA – Existing Bicycle Facilities

🗌 Hexagon

#### **Bike and Scooter Share Services**

The Bay Wheels (formerly Ford Go Bike) bike share program allows users to rent and return bicycles at various locations. Bike share bikes can be rented and returned at designated docking stations throughout the Downtown area. The nearest bike share stations are located less than 1/3-mile from the project site at the intersection of Bird Avenue/Columbia Avenue and Delmas Avenue/San Fernando Street. In addition, dock-less bike and scooter rentals managed by other micro-mobility services are available throughout the Downtown area. These services provide electric bicycles and scooters with GPS self-locking systems that allow for rental and drop-off anywhere.

### **Existing Pedestrian Facilities**

Pedestrian facilities in the study area (shown in Figure 11) consist of sidewalks along all the surrounding streets, including all project frontages. Crosswalks and pedestrian signal heads are located at all signalized intersections within the project area. The majority of the crosswalks at signalized intersections in the vicinity of the project site consist of high visibility crosswalks and countdown signal heads that enhance pedestrian visibility and safety while crossing the intersections. There are also high visibility crosswalks located at some unsignalized intersections, such as the intersection of Josefa Street with San Carlos Street. Sidewalks in the project area are wide and provide an attractive and continuous pedestrian network between the site and local destinations, such as bus stops along San Carlos Street, the Diridon Transit Center, SAP Center, and the Downtown area east of SR-87.

It should be noted, however, that there are no crosswalks across San Carlos Street at its stopcontrolled intersection with Gifford Avenue. The nearest crosswalks across San Carlos Street are located at the Josefa Street and Delmas Avenue intersections.

ADA compliant ramps are located at most crosswalks in the vicinity of the project site. However, ADA compliant ramps are missing at the following locations in the project vicinity:

- Delmas Avenue and San Carlos Street southeast corner
- Gifford Avenue and Auzerais Avenue northeast corner
- Delmas Avenue and Auzerais Avenue all corners

Overall, the existing sidewalks and pedestrian facilities provide good pedestrian connectivity and safe routes to the surrounding pedestrian destinations.

#### **Existing Transit Services**

Existing transit services in the study area are provided by the Santa Clara Valley Transportation Authority VTA, Caltrain, Altamont Commuter Express (ACE), and Amtrak. The project site is located approximately ½-mile from the Diridon Transit Center located on Cahill Street. Connections between local and regional bus routes, light rail lines, and commuter rail lines are provided within the Diridon Transit Center. Figure 12 shows the existing transit facilities.

#### **Bus Service**

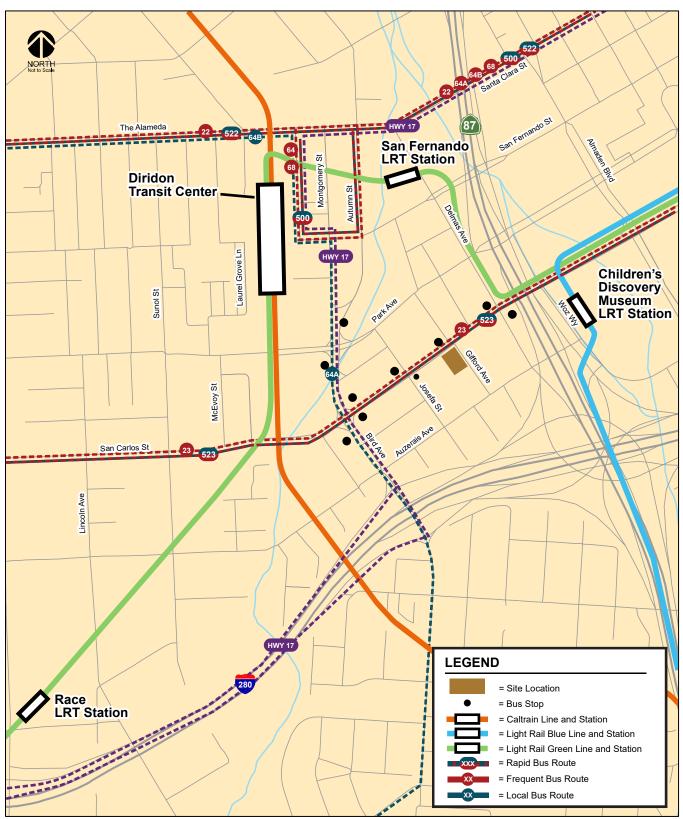
The downtown area is served by many VTA bus routes with high-frequency service. Rapid Bus services provide limited-stop service at frequent intervals (approximately 15 minutes) during daytime. Within the Downtown area, Rapid Routes 522 and 523 run along Santa Clara Street and San Carlos Street, respectively. Additionally, Frequent Bus services provide local service with average headways of 15 minutes during peak commute hours. Express Bus services provide direct service to and from major employment center during peak commute hours only.

# Figure 11 329 Gifford Avenue GPA – Existing Pedestrian Facilities





# Figure 12 329 Gifford Avenue GPA – Existing Transit Services





The bus lines that operate within walking distance of the project site are listed in Table 9, including their route descriptions and commute hour headways. The nearest bus stops are located along San Carlos Street at the intersections of Josefa Street (eastbound), Gifford Avenue (westbound), and Delmas Avenue (westbound), and are served by Frequent Bus Route 23. Although the Gifford Avenue bus stop is located directly across from the north project frontage (along the north side of San Carlos Street), the walking distance is 600 feet due to a lack of a crosswalk across San Carlos Street at Gifford Avenue. Based on walking distance, the Delmas Avenue bus stop would provide closer access to westbound bus service from the project site. Access to the Rapid Route 523 service is provided at bus stops located at the Bird Avenue/San Carlos Street intersection, less than 1,000 feet walking distance from the project site.

### VTA Light Rail Transit (LRT) Service

The Santa Clara Valley Transportation Authority (VTA) currently operates the 42.2-mile VTA light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly from 5:00 AM to 9:00 PM with 30-minute headways.

The San Jose Diridon station is located along the Green LRT line (Winchester-Old Ironsides) and serves as a transfer point to Caltrain, ACE, and Amtrak services.

### **Caltrain Service**

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The project site is located about <sup>3</sup>/<sub>4</sub>-mile from the San Jose Diridon station. The Diridon station provides 581 parking spaces, as well as 16 bike racks, 48 bike lockers, and 27 Bay Wheels bike share docks. Trains stop frequently at the Diridon station between 4:28 AM and 10:30 PM in the northbound direction, and between 6:27 AM and 1:41 AM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

### Altamont Commuter Express Service (ACE)

ACE provides commuter rail service between Stockton, Tracy, Pleasanton, and San Jose during commute hours, Monday through Friday. Service is limited to two westbound trips in the morning and two eastbound trips with headways from 120 minutes to 140 minutes. ACE trains stop at the Diridon Station at 6:32 AM and 8:52 AM in the westbound direction, and at 3:35 PM and 5:35 PM in the eastbound direction.

### Amtrak Service

Amtrak provides daily commuter passenger train service along the 170-mile Capitol Corridor between the Sacramento region and the Bay Area, with stops in San Jose, Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun City, Davis, Sacramento, Roseville, Rocklin, and Auburn. The Capitol Corridor trains stop at the San Jose Diridon Station five times during the weekdays between approximately 6:55 AM and 5:59 PM in the westbound direction. In the eastbound direction, Amtrak stops at the Diridon Station five times during the weekdays between 7:37 AM and 9:05 PM.

### Table 9

Bus Route	Route Description	Nearest Stop	Headway <sup>1</sup>
Frequent Route 22	Palo Alto Transit Center to Eastridge Transit Center	Santa Clara/Cahill	15-20 min
Frequent Route 23	DeAnza College to Alum Rock Transit Center via Stevens Creek	San Carlos/Gifford	15 min
Local Route 64A	McKee & White to Ohlone-Chynoweth Station	Bird/San Carlos	30 min
Local Route 64B	McKee & White to Almaden Expressway & Camden	Diridon Transit Center	60 min
Frequent Route 68	San Jose Diridon Station to Gilroy Transit Center	Diridon Transit Center	20-30 min
Rapid Route 500	San Jose Diridon Station to Downtown San Jose	Diridon Transit Center	10-20 min
Rapid Route 522	Palo Alto Transit Center to Eastridge Transit Center	Santa Clara/Cahill	15-20 min
Rapid Route 523	Berryessa BART to Lockheed Martin via De Anza College	San Carlos/Bird	15 min
Hwy 17 Express (Route 970)	Downtown Santa Cruz / Scotts Valley to Downtown San Jose	Bird/San Carlos	55 - 90 min
<u>Notes</u> : <sup>1</sup> Approximate headways durir	ng peak commute periods.		

# General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed 329 Gifford Avenue site GPA were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

# Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to project daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 10), any increase in VMT per service population over the current GP conditions due to the proposed land use amendment is considered a significant impact.

As shown in Table 10, the citywide daily VMT would decrease slightly and the VMT per service population would remain unchanged with the proposed land use amendment when compared to the current GP. Therefore, the proposed 329 Gifford Avenue GPA would result in a *less than significant* impact on the citywide daily VMT per service population.

# Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Journey to work mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.



# Table 10

# 329 Gifford Avenue GPA – Daily Vehicle Miles Traveled Per Service Population

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,035,508	28,004,625
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.57	13.64	13.63
ncrease in VMT/Service Population over General Plan Conditions			-0.02
Significant Impact?			No
<u>Notes</u> : 2040 General Plan (Baseline) = Buildout GPA = General Plan Amendment	conditions of the adopte	d Envision San Jose 2	040 General Plan (G

Service Population = Residents + Jobs

Source: City of San Jose Travel Forecasting Model runs completed July 2019

by Hexagon Transportation Consultants, Inc.

Table 11 summarizes the citywide journey-to-work mode share analysis results. Compared to the current Envision San José 2040 GP, the percentage of journey-to-work drive alone trips would decrease slightly as a result of the proposed GPA. Therefore, the proposed 329 Gifford Avenue GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

# Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

# Table 11 329 Gifford Avenue GPA – Journey-to-Work Mode Share

	Base Ye	ar (2015)	20⁄ Genera (Base	al Plan	20 Genera Plus	al Plan
Mode	Trips	%	Trips	%	Trips	%
Drive Alone	753,264	79.69%	1,092,462	71.701%	1,092,382	71.695%
Carpool 2	85,496	9.04%	137,781	9.04%	137,803	9.04%
Carpool 3+	28,526	3.02%	54,781	3.60%	54,554	3.58%
Transit	48,181	5.10%	182,827	12.00%	183,178	12.02%
Bicycle	14,120	1.49%	26,337	1.73%	26,277	1.72%
Walk	15,666	1.66%	29,451	1.93%	29,456	1.93%
Increase in Drive Alon	e Percentage ove	r General Pl	an Conditions	;		-0.01%
Significant Impact?						No

GPA = General Plan Amendment

Source: City of San Jose Travel Forecasting Model runs completed July 2020

by Hexagon Transportation Consultants, Inc.

Table 12 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in travel speeds of 0.2 mph or less (or a change of 1.1 % or less) on two corridors due to the proposed 329 Gifford Avenue GPA. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the proposed 329 Gifford Avenue GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

# Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

# Table 12329 Gifford Avenue GPA – AM Peak-Hour Vehicle Speeds (mph) for San José Transit PriorityCorridors

	Base Year (2015)	2040 General Plan (Baseline)		2040 General Plan Plu	is GPA
Transit Priority Corridor	Speed (mph)	Speed (mph)	Speed (mph)	% Change <u>(GPplusGPA - GP)</u> GP	Absolute Change (GPplusGPA - GP)
2 <sup>nd</sup> Street from San Carlos Street to St. James Street	16.6	15.3	15.4	0.7%	0.1
Alum Rock Avenue from Capitol Avenue to US 101	21.3	16.6	16.7	0.6%	0.1
Camden Avenue from SR 17 to Meridian Avenue	23.1	16.3	16.4	0.6%	0.1
Capitol Avenue from South Milpitas Boulevard to Capitol Expressway	27.1	22.6	22.6	0.0%	0.0
Capitol Expressway from Capitol Avenue to Meridian Avenue	33.0	26.7	26.5	-0.7%	-0.2
East Santa Clara Street from US 101 to Delmas Avenue	20.4	15.3	15.4	0.7%	0.1
Meridian Avenue from Park Avenue to Blossom Hill Road	24.9	20.0	20.0	0.0%	0.0
Monterey Road from Keyes Street to Metcalf Road	27.4	19.3	19.5	1.0%	0.2
North 1 <sup>st</sup> Street from SR 237 to Keyes Street	21.3	13.6	13.8	1.5%	0.2
San Carlos Street from Bascom Avenue to SR 87	24.8	19.8	19.9	0.5%	0.1
Stevens Creek Boulevard from Bascom Avenue to Tantau Avenue	24.3	18.8	18.8	0.0%	0.0
Tasman Drive from Lick Mill Boulevard to McCarthy Boulevard	22.7	13.8	13.8	0.0%	0.0
The Alameda from Alameda Way to Delmas Avenue	20.5	13.8	13.9	0.7%	0.1
West San Carlos Street from SR 87 to 2 <sup>nd</sup> Street	20.0	18.8	18.6	-1.1%	-0.2

Notes:

2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).

GPA = General Plan Amendment

Source: City of San Jose Travel Forecasting Model runs completed July 2020 by Hexagon Transportation Consultants, Inc.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the 329 Gifford Avenue GP site develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.

# 6. 276 Woz Way (Site-Specific GPA Traffic Analysis)

This report presents the results of the long-range site-specific transportation analysis for the proposed 276 Woz Way General Plan Amendment (GP19-008/H20-004). The purpose of the General Plan Amendment (GPA) transportation analysis is to assess the long-range impacts of the proposed land use amendment to the 276 Woz Way General Plan site on the citywide transportation system. The potential transportation impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP). In addition, a near term transportation analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP will be required once a development application is submitted to the City.

# **General Plan Amendment Site Description**

The project consists of amending the adopted land use designation of the Envision San José 2040 GP for the approximately 3.08-acre site is generally bounded by Woz Way to the north, Almaden Boulevard to the east, Reed Street to the south, and Guadalupe River to the west. The site is located within the Downtown Growth Area Boundary per the Envision San José 2040 GP. The GPA site location is presented on Figure 13. The adopted GP land use designation for the site is *Public Quasi Public*, which includes a density of 100 dwelling units per acre (DU/AC). The proposed amendment involves changing the adopted land use to *Downtown*, which provides for a density of 50-800 DU/AC and a max FAR of 30.0. The site is currently occupied by single family homes. The proposed land use change for development of the site would be consistent with the immediate and surrounding land uses.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 PM peak-hour trips to be generated by the subject site due to proposed increase in employment would be required to prepare a site-specific GPA traffic analysis. The 276 Woz Way GPA site is not located within the special subareas. According to the TDF modeling results, the proposed amendment at the 276 Woz Way site would result in 29 fewer households and 6,411 additional jobs on the site. The change in households and jobs would result in an additional 1,161 AM and 1,932 PM peak-hour trips at the 276 Woz Way GPA site when compared to the current GP land use designation (see Table 13). Therefore, a site-specific GPA traffic analysis is required for the



# Figure 13 276 Woz Way GPA – Site Location





# Table 13

# 276 Woz Way GPA – Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPA

Site		Genera (Base	al Plan line) <sup>1</sup>	Genera Amenc		Net La Cha			ak-Hour hange
Number	Site Name	тотнн	TEMP	тотнн	TEMP	тотнн	TEMP	AM	PM
4	GP19-008/H20-004(276 Woz Way)	29	2,349	0	8,760	-29	6411	1,161	1,932
<sup>1</sup> Total nui The buil <sup>2</sup> Total nui <b>Outlined</b> Source: C	DTHH = total number of households; TEMP = mber of households and jobs under the adop ldout of the 2040 GP represents baseline cor mber of households and jobs as proposed by indicates GPA that results in an increase in City of San Jose Planning Department, June 2 City of San Jose Travel Forecasting Model ru	ted Envisic aditions. 7 the GP Ar peak hour 2020.	on San José mendments trips greate	e 2040 Gen er than 250 I	PM trips ar	, nd requires :			ic analysis.

proposed land use amendment. The GPA does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

# Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, impacts to travel speeds on transit priority corridors, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendment for the 276 Woz Way GP site. Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the currently adopted 2040 GP Conditions to determine any long-range traffic impacts.

# **Existing Conditions**

This section describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

# Existing Roadway Network

Regional access to the project site is provided by the Interstate 280/680 freeway and State Route 87. Local site access is provided by Almaden Boulevard, San Carlos Street, Woz Way/Balbach Street, and Locust Street. The freeways and local roadways are described below.



**Interstate 280** connects from US-101 in San Jose to I-80 in San Francisco. It is generally an eight-lane freeway in the vicinity of downtown San Jose. It also has auxiliary lanes between some interchanges. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Connections from I-280 to the project site are provided via partial interchanges at First Street (ramps to east only), Fourth Street (ramps to west only), Sixth Street (ramps from west), Seventh Street (ramps from east), Almaden Boulevard (ramps to west), and Vine Street (ramps from west).

**State Route 87** is primarily a six-lane freeway (four mixed-flow lanes and two HOV lanes) that is aligned in a north-south orientation within the project vicinity. SR 87 begins at its interchange with SR 85 and extends northward, terminating at its junction with US 101. Connections from SR-87 to the project site are provided via partial interchanges at Park Avenue (ramps to and from north), Auzerais Avenue (ramps to south only), and Woz Way (ramp from south only).

**Almaden Boulevard** is a north-south arterial with two lanes in each direction between Santa Clara Street and Grant Street and includes bike lanes on both sides of the roadway. North of Santa Clara Street, Almaden Boulevard is a one-lane, southbound-only street providing access from Julian Street. South of Grant Street, Almaden Boulevard transitions to Vine Street. Almaden Boulevard runs along the project's eastern frontage.

**San Carlos Street** is an east-west four-lane street located north of the project site. It extends as West San Carlos Street from 1<sup>st</sup> Street westward to Bascom Avenue where it transitions into Stevens Creek Boulevard. East of 1<sup>st</sup> Street, it extends eastward as East San Carlos Street with a break between 4<sup>th</sup> and 10<sup>th</sup> Streets (at San Jose State University) and terminating at 17<sup>th</sup> Street. In the vicinity of the project site, the VTA light rail tracks run along the middle of the street, separating the eastbound and westbound travel lanes. Access to the project site is provided via Woz Way and Almaden Boulevard.

**Woz Way/Balbach Street** is a two-lane roadway that runs between the SR-87 northbound on-ramps at Park Avenue and Almaden Boulevard. Bike lanes are present on both sides of the street between San Carlos Street and Almaden Boulevard. East of Almaden Boulevard, Woz Way continues as Balbach Street east to Market Street. Woz Way runs along the project's northern frontage.

**Locust Street** is a two-lane roadway that extends southerly from Woz Way and ends at the cul-de-sac, just north of the I-280 westbound on-ramp. Locust Street bisects and provides direct access to the project site.

# **Existing Bicycle Facilities**

Class II bicycle facilities (striped buffered bike lanes) are provided along Almaden Boulevard (along the east project site frontage) and Woz Way (along the north project frontage). Additional Class II bicycle facilities are provided along the following roadways within the project area:

- Almaden Boulevard, between Woz Way and Carlysle Street (including along the east project frontage)
- Almaden Avenue, between Alma Avenue and Grant Street
- Vine Street, between Alma Avenue and Grant Street
- Woz Way, between San Carlos Street and Almaden Avenue (including along the north project frontage)
- Park Avenue, west of Market Street
- Santa Clara Street, between Almaden Boulevard and Stockton Avenue
- San Salvador Street, between Market Street and Fourth Street
- Second Street, south of San Carlos Street
- Third Street, south of Reed Street



- Autumn Street, between Santa Clara Street and San Carlos Street
- Bird Avenue, south of San Carlos Street
- Auzerais Avenue, west of Bird Avenue
- Fourth Street, between Jackson Street and Santa Clara Street; between San Salvador Street and Reed Street

Designated Class III bike routes with "sharrow" or shared-lane pavement markings and signage are provided along the following roadways:

- San Carlos Street, between Woz Way and Fourth Street
- Second Street, between San Carlos Street and Julian Street
- First Street, between San Salvador Street and St. John Street
- Virginia Street, west of Third Street
- Balbach Street, between Almaden Avenue and Market Street
- Auzerais Avenue, between Delmas Avenue and Bird Avenue
- Viola Avenue, between Market Street and Balbach Street
- William Street, between First Street and McLaughlin Avenue

Class IV bicycle facilities (protected bike lanes) are currently being installed throughout the Downtown Area as part of the Better Bikeways project. Protected bike lanes have been implemented along the following roadways:

- San Fernando Street, between Cahill Street and Tenth Street
- Third Street, between St. James Street and Reed Street
- Fourth Street, between Santa Clara Street and San Salvador Street
- San Salvador Street, between Fourth Street and Tenth Street (westbound)
- Cahill Street, between San Fernando Street and Santa Clara Street

The existing bicycle facilities are shown on Figure 14.

#### **Guadalupe River Park Trail**

The Guadalupe River multi-use trail system runs through the City of San Jose along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile Class I bikeway from Curtner Avenue in the south to Alviso in the north. In the vicinity of the project site, the Guadalupe River Trail consists of trails along the west and east banks of the Guadalupe River. The east trail runs along the proposed project's entire west frontage and would be directly accessible from the project site. Additionally, a paseo along the north project frontage connects Almaden Boulevard with the east and west sides of the Guadalupe River Trail via a bridge.

### Bike and Scooter Share Services

The Bay Wheels (formerly Ford Go Bike) bike share program allows users to rent and return bicycles at various locations. Bike share bikes can be rented and returned at designated docking stations throughout the Downtown area. In addition, dockless bike and scooter rentals are available throughout the Downtown area. These services provide electric bicycles and scooters with GPS self-locking systems that allow for rental and drop-off anywhere. A bike share station is located at the northeast corner of the Almaden Boulevard/Woz Way intersection.



# LEGEND = Project Site Location = Class I Bike Path = Class II Bike Lane = Class III Bike Route = Class IV Protected Bike Lane Autumn S = Bike Share Location Montgome Park Ave Uppals No errerererere 280 (\*\*\*\*\*\*\*\* Creek Page | 47

# Figure 14 276 Woz Way GPA – Existing Bicycle Facilities

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# **Existing Pedestrian Facilities**

Pedestrian facilities in the study area (shown in Figure 15) consist of sidewalks along all the surrounding streets, including the project site frontages along Almaden Boulevard and Woz Way. Crosswalks and pedestrian signal heads are located at all signalized intersections within the project area, including the intersections of Almaden Boulevard/Woz Way, Almaden Boulevard/Reed Street, SR 87 off-ramp/Woz Way, and Woz Way/Auzerais Avenue.

ADA compliant ramps are located at all crosswalks at the intersection of Locust Street and Woz Way. However, ADA compliant ramps are missing at the following locations in the project vicinity:

- Almaden Boulevard and Woz Way/Balbach Street northwest, northeast, and southwest corners
- Almaden Boulevard and Reed Street all corners
- Woz Way and Auzerais Avenue all corners
- Woz Way and SR-87 Off-Ramp all corners

As mentioned previously, the east portion of the Guadalupe River Trail is located along the site's west frontage. From the project site, pedestrians may use the Guadalupe River Trail as a cut-through route to San Carlos Street, Park Avenue, San Fernando Street, and Santa Clara Street to the north. A high-visibility crosswalk located along the west leg of the Locust Street/Woz Way intersection provides access to the Guadalupe River Trail south across Woz Way. The Children's Bridge, located north and west of the project site, connects the east and west sides of the Guadalupe River Trail.

Overall, the existing sidewalks and paseos provide good pedestrian connectivity and safe routes to the surrounding pedestrian destinations.

### **Existing Transit Services**

Existing transit services in the study area are provided by the Santa Clara Valley Transportation Authority VTA, Caltrain, Altamont Commuter Express (ACE), and Amtrak. The project site is located approximately 1,500 feet south and west of the Convention Center Light Rail Transit (LRT) Station, 1,300 feet east of the Children's Discovery Museum LRT Station, and approximately 0.8-mile from the Diridon Transit Center located on Cahill Street. Connections between local and regional bus routes, light rail lines, and commuter rail lines are provided within the Diridon Transit Center. Figure 16 shows the existing transit facilities.

#### **Bus Service**

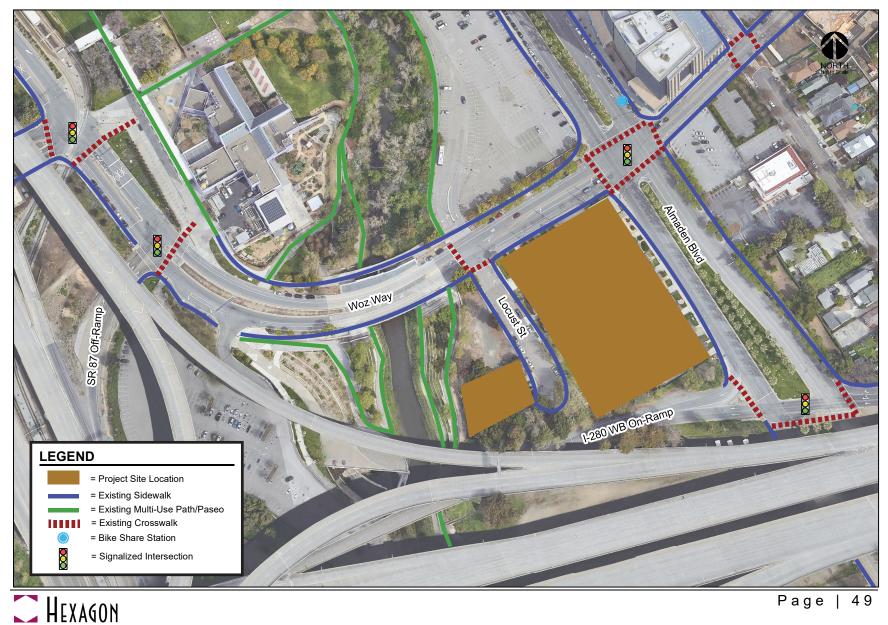
The downtown area is served by many VTA bus routes with high-frequency service. Rapid Bus services provide limited-stop service at frequent intervals (less than 15 minutes) during daytime. Within the Downtown area, Rapid Routes 522 and 523 run along Santa Clara Street and San Carlos Street, respectively. Additionally, Frequent Bus services provide local service with average headways of approximately 15 minutes during peak commute hours. Express Bus services provide direct service to and from major employment centers during peak commute hours only.

The bus lines that operate within walking distance of the project site are listed in Table 14, including their route descriptions and commute hour headways. The nearest bus stops to the project site are located at the San Carlos Street/Woz Way intersection (Route 23) and San Carlos Street/Convention Center intersection (Routes 23 and 523).

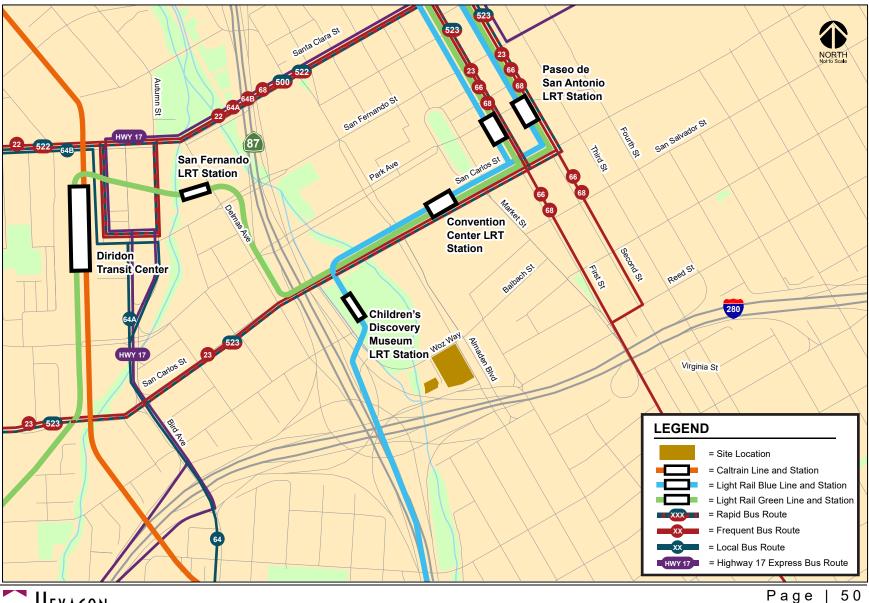
Regional bus services operated by other transit agencies are accessible from bus stops within Downtown San Jose. The Highway 17 Express, a weekday commuter service that runs between San Jose and Santa Cruz via SR-17, runs along Santa Clara Street.



# Figure 15 276 Woz Way GPA – Existing Pedestrian Facilities



### Figure 16 276 Woz Way GPA – Existing Transit Facilities





Bus Route	Route Description	Nearest Stop	Headway
Frequent Route 22	Palo Alto Transit Center to Eastridge Transit Center	Santa Clara/Almaden	15-20 min
Frequent Route 23	DeAnza College to Alum Rock Transit Center via Stevens Creek	San Carlos/Woz	15 min
Local Route 64A	McKee & White to Ohlone-Chynoweth Station	Santa Clara/Almaden	30 min
Local Route 64B	McKee & White to Almaden Expressway & Camden	Santa Clara/Almaden	60 min
Frequent Route 66	North Milpitas to Kaiser San Jose	First/Paseo de San Antonio	20-30 min
Frequent Route 68	San Jose Diridon Station to Gilroy Transit Center	First/Paseo de San Antonio	20-30 min
Frequent Route 72	Downtown San Jose to Senter & Monterey via McLaughlin	First/Santa Clara	30 min
Frequent Route 73	Downtown San Jose to Senter & Monterey via Senter	First/Santa Clara	30 min
Rapid Route 500	San Jose Diridon Station to Downtown San Jose	Santa Clara/Almaden	10-20 min
Rapid Route 522	Palo Alto Transit Center to Eastridge Transit Center	Santa Clara/First	15-20 min
Rapid Route 523	Berryessa BART to Lockheed Martin via De Anza College	San Carlos/Convention Center	15 min
Hwy 17 Express (Route 970)	Downtown Santa Cruz / Scotts Valley to Downtown San Jose	Santa Clara/Almaden	55 - 90 min

# Table 14276 Woz Way GPA – Existing Bus Stops and Headways

Approximate headways during peak commute periods.

### VTA Light Rail Transit (LRT) Service

The Santa Clara Valley Transportation Authority (VTA) currently operates the 42.2-mile VTA light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly from 5:00 AM to 9:00 PM with 30-minute headways.

The Green (Old Ironsides – Winchester) and Blue (Baypointe – Santa Teresa) LRT lines operate along San Carlos Street. The Convention Center LRT station platforms on San Carlos Street are located within walking distance, approximately 1,500 feet, of the project site. The Children's Discovery Museum LRT station located south of the Woz Way/San Carlos Street intersection is served by the Blue LRT line and is located approximately 1,200 feet northwest of the project site. The San Jose Diridon station is located along the Green LRT line and serves as a transfer point to Caltrain, ACE, and Amtrak services.

# Caltrain Service

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The project site is located about <sup>3</sup>/<sub>4</sub>-mile from the San Jose Diridon station. The Diridon station provides 581 parking spaces, as well as 16 bike racks, 48 bike lockers, and 27 Bay Wheels bike share docks. Trains stop frequently at the Diridon station between 4:28 AM and 10:30 PM in the northbound direction, and between 6:27 AM and 1:41 AM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

### Altamont Commuter Express Service (ACE)

ACE provides commuter rail service between Stockton, Tracy, Pleasanton, and San Jose during commute hours, Monday through Friday. Service is limited to two westbound trips in the morning and two eastbound trips with headways from 120 minutes to 140 minutes. ACE trains stop at the Diridon Station at 6:32 AM and 8:52 AM in the westbound direction, and at 3:35 PM and 5:35 PM in the eastbound direction.



### Amtrak Service

Amtrak provides daily commuter passenger train service along the 170-mile Capitol Corridor between the Sacramento region and the Bay Area, with stops in San Jose, Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun City, Davis, Sacramento, Roseville, Rocklin, and Auburn. The Capitol Corridor trains stop at the San Jose Diridon Station five times during the weekdays between approximately 6:55 AM and 5:59 PM in the westbound direction. In the eastbound direction, Amtrak stops at the Diridon Station five times during the weekdays between 7:37 AM and 9:05 PM.

# General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed 276 Woz Way site GPA were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

### **Vehicle Miles Traveled Per Service Population**

The San José GP TDF model was used to project daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendment is considered a significant impact.

As shown in Table 15, the citywide daily VMT would decrease slightly and the VMT per service population would remain unchanged with the proposed land use amendment when compared to the current GP. Therefore, the proposed 276 Woz Way GPA would result in a *less than significant* impact on the citywide daily VMT per service population.

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,035,508	27,983,947
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.57	13.64	13.62
Increase in VMT/Service Population over General Plan Conditions			-0.03
Significant Impact?			No

# Table 15 276 Woz Way GPA – Daily Vehicle Miles Traveled Per Service Population

2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP). GPA = General Plan Amendment

Service Population = Residents + Jobs

Source: City of San Jose Travel Forecasting Model runs completed July 2019 by Hexagon Transportation Consultants, Inc.



### Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Journey-to-work mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.

Table 16 summarizes the citywide journey-to-work mode share analysis results. Compared to the current Envision San José 2040 GP, the percentage of journey-to-work drive alone trips would decrease slightly as a result of the proposed GPA. Therefore, the proposed 276 Woz Way GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

	Base Ye	ar (2015)	204 Genera (Base	al Plan	20/ Genera Plus	al Plan	
Mode	Trips	%	Trips	%	Trips	%	
Drive Alone	753,264	79.69%	1,092,462	71.70%	1,090,262	71.58%	
Carpool 2	85,496	9.04%	137,781	9.04%	137,954	9.06%	
Carpool 3+	28,526	3.02%	54,781	3.60%	54,793	3.60%	
Transit	48,181	5.10%	182,827	12.00%	184,307	12.10%	
Bicycle	14,120	1.49%	26,337	1.73%	26,403	1.73%	
Walk	15,666	1.66%	29,451	1.93%	29,503	1.94%	
ncrease in Drive Alon	e Percentage over Gei	neral Plan Co	nditions			-0.12%	
Significant Impact?						No	
Notes: 2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP). GPA = General Plan Amendment Source: City of San Jose Travel Forecasting Model runs completed July 2020 by Hexagon Transportation Consultants, Inc.							

# Table 16 276 Woz Way GPA – Journey-to-Work Mode Share

# Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), land use

amendments that result in a decrease in average travel speed on a transit corridor in the AM peak onehour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 17 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in travel speeds of 0.1 mph or less (or a change of 0.5% or less) on two corridors due to the proposed 276 Woz Way GPA. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the proposed 276 Woz Way GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

#### Table 17

# 276 Woz Way GPA – AM Peak-Hour Vehicle Speeds (mph) for San José Transit Priority Corridors

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA		ıs GPA
Transit Priority Corridor	Speed (mph)	Speed (mph)	Speed (mph)	% Change <u>(GPplusGPA - GP)</u> GP	Absolute Change (GPplusGPA - GP)
2 <sup>nd</sup> Street	16.6	15.3	15.3	0.0%	0.0
from San Carlos Street to St. James Street Alum Rock Avenue from Capitol Avenue to US 101	21.3	16.6	16.7	0.6%	0.1
Camden Avenue from SR 17 to Meridian Avenue	23.1	16.3	16.5	1.2%	0.2
Capitol Avenue from South Milpitas Boulevard to Capitol Expressway	27.1	22.6	22.7	0.4%	0.1
Capitol Expressway from Capitol Avenue to Meridian Avenue	33.0	26.7	26.6	-0.4%	-0.1
East Santa Clara Street from US 101 to Delmas Avenue	20.4	15.3	15.9	3.9%	0.6
Meridian Avenue from Park Avenue to Blossom Hill Road	24.9	20.0	19.9	-0.5%	-0.1
Monterey Road from Keyes Street to Metcalf Road	27.4	19.3	19.7	2.1%	0.4
North 1 <sup>st</sup> Street from SR 237 to Keyes Street	21.3	13.6	13.8	1.5%	0.2
San Carlos Street from Bascom Avenue to SR 87	24.8	19.8	20.0	1.0%	0.2
Stevens Creek Boulevard from Bascom Avenue to Tantau Avenue	24.3	18.8	18.9	0.5%	0.1
Tasman Drive from Lick Mill Boulevard to McCarthy Boulevard	22.7	13.8	13.8	0.0%	0.0
The Alameda from Alameda Way to Delmas Avenue	20.5	13.8	14.1	2.2%	0.3
West San Carlos Street from SR 87 to 2 <sup>nd</sup> Street	20.0	18.8	18.8	0.0%	0.0

Notes:

2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).

GPA = General Plan Amendment

Source: City of San Jose Travel Forecasting Model runs completed July 2020 by Hexagon Transportation Consultants, Inc.



### Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the 276 Woz Way GP site develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.

# 7. Airport/Guadalupe Gardens (Site-Specific GPA Traffic Analysis)

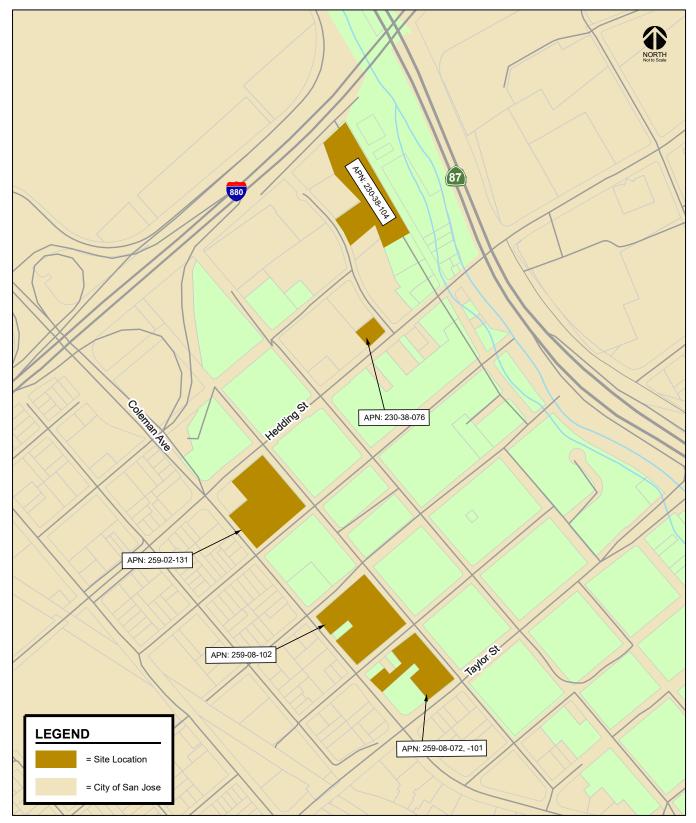
This report presents the results of the long-range site-specific transportation analysis for the proposed Airport/Guadalupe Gardens General Plan Amendment (GP18-012). The purpose of the General Plan Amendment (GPA) transportation analysis is to assess the long-range impacts of the proposed land use amendment to the Airport/Guadalupe Gardens General Plan site on the citywide transportation system. The potential transportation impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP). In addition, a near term transportation analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP will be required once a development application is submitted to the City.

# **General Plan Amendment Site Description**

The project consists of amending the adopted land use designation of the Envision San José 2040 GP for the approximately 11.60-acre site is generally bounded by I-880 to the north, SR 87 to the east, Taylor Street to the south, and Coleman Avenue to the west. The GPA site location is presented on Figure 17. The adopted GP land use designation for the site is *Open Space Parkland and Habitat*. The proposed amendment involves changing the adopted land use to include 10 acres of *Neighborhood Community/Commercial* and 1.6 acres of combined *Industrial/Commercial*. A portion of the site is currently occupied by the Guadalupe Community Garden, and the remaining is vacant. The proposed land use change for development of the site would be consistent with the immediate and surrounding land uses.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 PM peak-hour trips to be generated by the subject site due to the proposed land use amendment would be required to prepare a site-specific GPA traffic analysis. The Airport/Guadalupe Gardens GPA site is not located within the special subareas. According to the TDF modeling results, the proposed amendment at the Airport/Guadalupe Gardens site would result 603 additional jobs on the site. The increase in jobs would result in an additional 365 AM and 576 PM peak-hour trips at the





# Figure 17 Airport/Guadalupe Gardens GPA – Site Location

Airport/Guadalupe Gardens site when compared to the current GP land use designation (see Table 18). Therefore, a site-specific GPA traffic analysis is required for the proposed land use amendment. The GPA does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

### Table 18

# Airport/Guadalupe Gardens GPA – Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPA

Site		Genera (Base		Genera Amenc		Net Lar Cha		Net Pea Trip C	
Numbe	r Site Name	тотнн	TEMP	тотнн	TEMP	тотнн	TEMP	AM	PM
7	GP18-012 (Airport/Guadalupe Gardens)	18	138	18	741	0	603	365	576
<sup>1</sup> Total nu The bu <sup>2</sup> Total nu <b>Outline</b> Source:	OTHH = total number of households; TEMP = umber of households and jobs under the adop ildout of the 2040 GP represents baseline cor umber of households and jobs as proposed by dindicates GPA that results in an increase in City of San Jose Planning Department, June 2 City of San Jose Travel Forecasting Model ru	ted Envision nditions. / the GP Ar peak hour 2020.	on San Jose nendments trips greate	e 2040 Gen er than 250 I	PM trips ar	, nd requires s			c analysis.

# Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, impacts to travel speeds on transit priority corridors, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendment for the Airport/Guadalupe Gardens GP site. Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the currently adopted 2040 GP Conditions to determine any long-range traffic impacts.

# **Existing Conditions**

This section describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.



### Existing Roadway Network

Regional access to the project site is provided by the I-880 freeway and SR 87. Local site access is provided by Hedding Street, Taylor Street, Coleman Avenue, First Street, Spring Street, and Ruff Drive. The freeways and local roadways are described below.

**I-880** is a north/south freeway providing regional access from East Bay cities to San Jose, where it ultimately becomes SR 17 and extends into Santa Cruz. Within the vicinity of the project site, I-880 primarily is a six-lane freeway. Connection from I-880 to the project site is provided via a full interchange at Coleman Avenue.

**SR 87** is primarily a six-lane freeway (four mixed-flow lanes and two HOV lanes) that is aligned in a north-south orientation within the project vicinity. SR 87 begins at its interchange with SR 85 and extends northward, terminating at its junction with US 101. Connection from SR-87 to the project site is provided via a full interchange at Taylor Street.

**Hedding Street** is generally an east-west roadway that extends from I-880 to US 101. Hedding Street generally provides one lane in each direction with buffered bike lanes. Access to the project site from Hedding Street is provided via Ruff Drive and Coleman Avenue.

**Taylor Street** is generally an east-west roadway that extends from The Alameda to US 101. Taylor Street has two lanes in each direction west of First Street and one lane in each direction east of First Street. Taylor Street has striped bike lanes between Walnut Street and First Street. Access to the project site from Taylor Street is provided via Coleman Avenue and Hedding Street.

**Coleman Avenue** is a four- to six-lane arterial that begins at its intersection with De La Cruz Boulevard in Santa Clara and terminates where it becomes North Market Street in San Jose. Coleman Avenue has bicycle lanes on both sides of the street in the project vicinity with the exception of the segment between Taylor Street and Hedding Street. Access to the project site from Coleman Avenue is provided via Hedding Street and Taylor Street.

**First Street** is generally a two- to four-lane north-south roadway in the vicinity of the project site that extends from the north San Jose area through downtown San Jose. The Green and Blue LRT lines run along the middle of First Street from downtown San Jose to Tasman Drive in north San Jose. Access to the project site from First Street is provided via Hedding Street and Taylor Street.

**Spring Street** is a two-lane north-south roadway that bisects the project site and extends northward from Taylor Street and terminates just before I-880. Access to the project site from Spring Street is provided via Taylor Street and Hedding Street.

**Ruff Drive** is a two-lane north-south roadway that begins at Hedding Street and provides direct access to a portion of the project site.

### **Existing Bicycle Facilities**

Class II bicycle facilities are provided along Hedding Street and Taylor Street (along the north project frontage). Additional Class II bicycle facilities are provided along the following roadways within the project area:

- Coleman Avenue, between SR 87 and Taylor Street; north of Hedding Street
- Taylor Street, between Walnut Street and First Street
- Stockton Avenue, between railroad track and The Alameda
- Hedding Street, along the entire length of the street



Designated Class III bike routes with "sharrow" or shared-lane pavement markings and signage are provided along the following roadways:

- San Pedro Street, between Hedding Street and Coleman Avenue
- Mission Street, between Guadalupe Parkway and Seventh Street

The existing bicycle facilities are shown on Figure 18.

### **Guadalupe River Park Trail**

The Guadalupe River multi-use trail system runs through the City of San Jose along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile Class I bikeway from Curtner Avenue in the south to Alviso in the north. This trail system can be accessed via Hedding Street, west of SR 87.

#### Bike Share Services

The Bay Wheels bike share program allows users to rent and return bicycles at various locations. Bike share bikes can be rented and returned at designated docking stations throughout the Downtown area. These services provide electric bicycles with GPS self-locking systems that allow for rental and drop-off anywhere. A bike share station is located approximately ½ of a mile from the project near the Autumn Street/Coleman Avenue intersection.

### **Existing Pedestrian Facilities**

Pedestrian facilities in the study area (shown in Figure 19) consist of sidewalks along all the surrounding streets. Crosswalks and pedestrian signal heads are located at all signalized intersections within the project area, including the intersections of Coleman Avenue/Hedding Street, Coleman Avenue/Taylor Street, and Ruff Drive/Hedding Street.

ADA compliant ramps are located at all crosswalks at the Coleman Avenue/Hedding Street, Spring Street/Hedding Street, Spring Street/Taylor Street, and Walnut Street/Taylor Street. However, ADA compliant ramps are missing at the following locations in the project vicinity:

- Ruff Drive and Hedding Street southwest corner
- Coleman Avenue and Asbury Street southwest corner
- Coleman Avenue and Taylor Street northwest corner

As mentioned previously, pedestrians from the project site may use the Guadalupe River Trail located just west of SR 87 to access destinations between Downtown San Jose and North San Jose.

Sidewalks are missing on the east side of Coleman Avenue north of Hedding Street and on the north side of Hedding Street west of Coleman Avenue.

Overall, the existing sidewalks provide good pedestrian connectivity and safe routes to the surrounding pedestrian destinations.

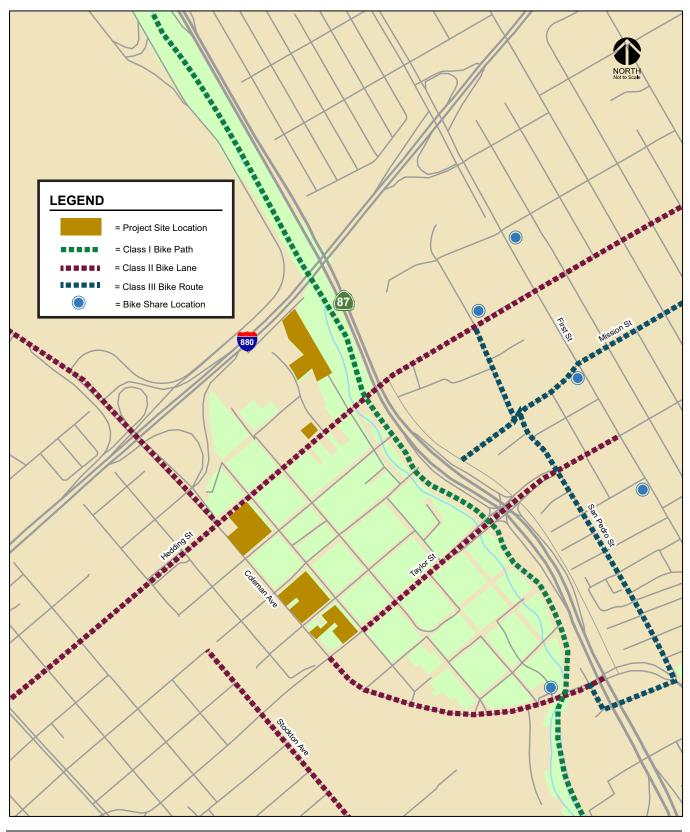
### **Existing Transit Services**

Existing transit services in the study area are provided by the Santa Clara Valley Transportation Authority VTA. The VTA transit services are described below and shown on Figure 20.

#### **Bus Service**

The project area is served by only one Frequent Route 61, which runs from the Sierra Road/Piedmont Road intersection to the Good Samaritan Hospital and operates from 7:15 AM to 9:00 PM on weekdays

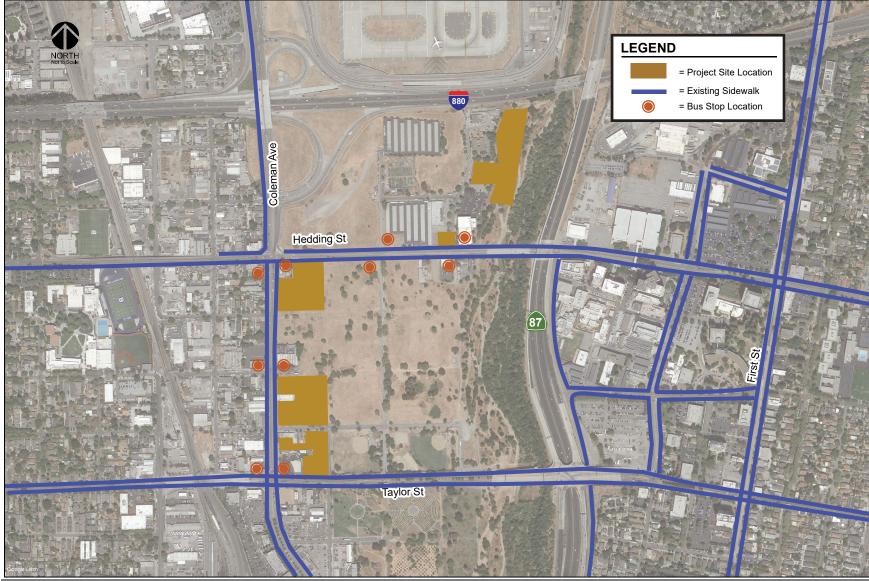




# Figure 18 Airport/Guadalupe Gardens GPA – Existing Bicycle Facilities

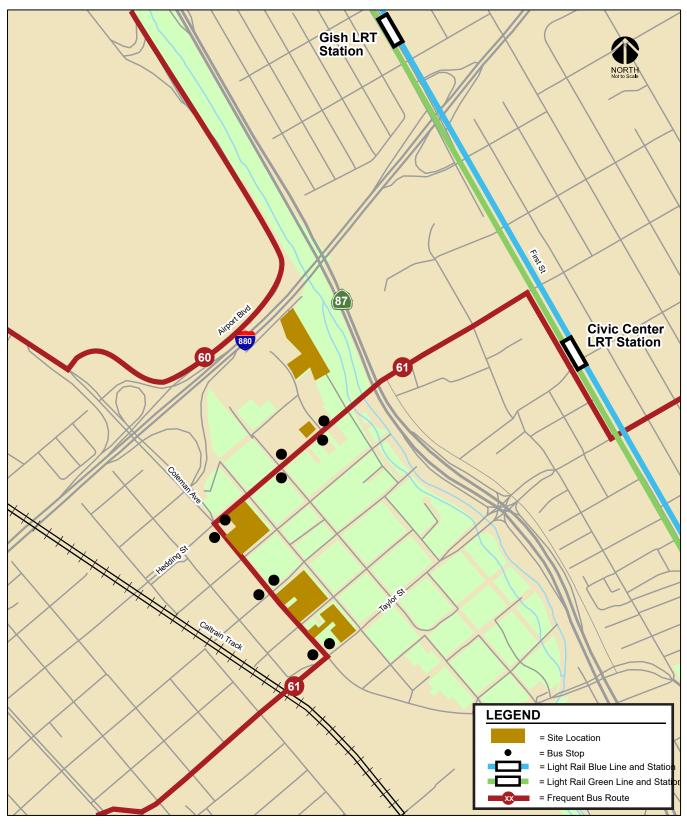


# Figure 19 Airport/Guadalupe Gardens GPA – Existing Pedestrian Facilities



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Page | 62



# Figure 20 Airport/Guadalupe Gardens GPA – Existing Transit Facilities



with 20- to 40-minute headways during the commute period. Frequent Route 61 has bus stops near the project site along Hedding Street and Coleman Avenue.

### VTA Light Rail Transit (LRT) Service

The Santa Clara Valley Transportation Authority (VTA) currently operates the 42.2-mile VTA light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly from 5:00 AM to 9:00 PM with 30-minute headways.

The Green (Old Ironsides to Winchester) and Blue (Baypointe to Santa Teresa) LRT lines operate along First Street in the project vicinity. The project site is located approximately <sup>3</sup>/<sub>4</sub> of a mile west of the Civic Center Light Rail Transit (LRT) Station located along First Street, between Taylor Street and Hedding Street.

# General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed Airport/Guadalupe Gardens site GPA were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

### **Vehicle Miles Traveled Per Service Population**

The San José GP TDF model was used to project daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendment is considered a significant impact.

As shown in Table 19, the citywide daily VMT would decrease slightly and the VMT per service population would remain unchanged with the proposed land use amendment when compared to the current GP. Therefore, the proposed Airport/Guadalupe Gardens would result in a *less than significant* impact on the citywide daily VMT per service population.

#### Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Journey-to-work mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.

Table 20 summarizes the citywide journey-to-work mode share analysis results. Compared to the current Envision San José 2040 GP, the percentage of journey-to-work drive alone trips would decrease slightly as a result of the proposed GPA. Therefore, the proposed Airport/Guadalupe Gardens GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.



### Table 19

# Airport/Guadalupe Gardens GPA – Daily Vehicle Miles Traveled Per Service Population

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,035,508	28,017,620
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.57	13.64	13.64
Increase in VMT/Service Population over General Plan Conditions			-0.01
Significant Impact?			Νο
<u>Notes</u> : 2040 General Plan (Baseline) = Buildout GPA = General Plan Amendment Service Population = Residents + Jobs Source: City of San Jose Travel Forecast by Hexagon Transportation Con	ting Model runs completed		40 General Plan (GP).

### Table 20

### Airport/Guadalupe Gardens GPA – Journey-to-Work Mode Share

	Base Year (2015)		2040 General Plan (Baseline)		2040 General Plan Plus GPA	
Mode	Trips	%	Trips	%	Trips	%
Drive Alone	753,264	79.69%	1,092,462	71.70%	1,091,891	71.66%
Carpool 2	85,496	9.04%	137,781	9.04%	137,903	9.05%
Carpool 3+	28,526	3.02%	54,781	3.60%	54,803	3.60%
Transit	48,181	5.10%	182,827	12.00%	183,201	12.02%
Bicycle	14,120	1.49%	26,337	1.73%	26,393	1.73%
Walk	15,666	1.66%	29,451	1.93%	29,445	1.93%
Increase in Drive Alc	one Percentage ove	er General Pl	an Conditions			-0.04%

# Significant Impact?

No

Notes:

2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP). GPA = General Plan Amendment

Source: City of San Jose Travel Forecasting Model runs completed July 2020

by Hexagon Transportation Consultants, Inc.



# Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments, Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 21 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in travel speeds of 0.2 mph or less (or a change of 0.7% or less) on three corridors due to the proposed Airport/Guadalupe Gardens GPA. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the proposed Airport/Guadalupe Gardens GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

# Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the Airport/Guadalupe Gardens GP site develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.



### Table 21

# Airport/Guadalupe Gardens GPA – AM Peak-Hour Vehicle Speeds (mph) for San José Transit Priority Corridors

	Base Year (2015) Speed (mph)	2040 General Plan (Baseline) Speed (mph)	2040 General Plan Plus GPA			
Transit Priority Corridor			Speed (mph)	% Change <u>(GPplusGPA - GP)</u> GP	Absolute Change (GPplusGPA - GP)	
2 <sup>nd</sup> Street from San Carlos Street to St. James Street	16.6	15.3	15.3	0.0%	0.0	
Alum Rock Avenue from Capitol Avenue to US 101	21.3	16.6	16.6	0.0%	0.0	
Camden Avenue from SR 17 to Meridian Avenue	23.1	16.3	16.4	0.6%	0.1	
Capitol Avenue from South Milpitas Boulevard to Capitol Expressway	27.1	22.6	22.5	-0.4%	-0.1	
Capitol Expressway from Capitol Avenue to Meridian Avenue	33.0	26.7	26.5	-0.7%	-0.2	
East Santa Clara Street from US 101 to Delmas Avenue	20.4	15.3	15.5	1.3%	0.2	
Meridian Avenue from Park Avenue to Blossom Hill Road	24.9	20.0	20.0	0.0%	0.0	
Monterey Road from Keyes Street to Metcalf Road	27.4	19.3	19.4	0.5%	0.1	
North 1 <sup>st</sup> Street from SR 237 to Keyes Street	21.3	13.6	13.7	0.7%	0.1	
San Carlos Street from Bascom Avenue to SR 87	24.8	19.8	19.9	0.5%	0.1	
Stevens Creek Boulevard from Bascom Avenue to Tantau Avenue	24.3	18.8	18.9	0.5%	0.1	
Tasman Drive from Lick Mill Boulevard to McCarthy Boulevard	22.7	13.8	13.8	0.0%	0.0	
The Alameda from Alameda Way to Delmas Avenue	20.5	13.8	14.0	1.4%	0.2	
West San Carlos Street from SR 87 to 2 <sup>nd</sup> Street	20.0	18.8	18.7	-0.5%	-0.1	

Notes:

2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).

GPA = General Plan Amendment

Source: City of San Jose Travel Forecasting Model runs completed July 2020 by Hexagon Transportation Consultants, Inc.

# 6. Conclusions

This report presents the results of the long-range traffic impact analysis for the proposed City of San José 2020 General Plan Amendments (project). The project consists of amending the current adopted land use designations of the Envision San José 2040 GP for seven sites within the City of San José. The purpose of the GPAs traffic analysis is to assess the long-range impacts of the amendments on the citywide transportation system. The analysis includes evaluation of increased vehicle miles traveled, impacts to travel speeds on transit priority corridors, and impacts to pedestrian, bicycle, and transit facilities. Impacts were evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GPA TIA.

This study includes an evaluation of the cumulative impacts of all seven GPA sites. The study also includes the required site-specific GPA traffic analysis for three GPA sites. Individual development projects also will be required to complete a near term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP once a development application is submitted to the City.

# **Cumulative GPA Long-Range Traffic Impacts**

# Vehicle Miles Traveled Per Service Population

When compared to the current GP, the proposed land use adjustments would not result in an increase in citywide VMT per service population. Therefore, cumulatively, the 2020 GPAs would result in a less than significant impact on citywide daily VMT per service population. It is important to note that the VMT per service population is based on raw model output and does not reflect the implementation of adopted GP policies and goals that would further reduce VMT by increased use of non-auto modes of travel.

# Journey-to-Work Mode Share

The proposed land use adjustments will not result in an increase of drive alone trips when compared to the current GP conditions. Therefore, cumulatively, the 2020 GPAs would result in a *less than significant* impact on citywide journey-to-work mode share.

# Average Vehicle Speeds in Transit Priority Corridors

The proposed land use adjustments will not result in a decrease in travel speeds of greater than one mph or 25 percent on any of the 14 transit priority corridors when compared to current GP conditions.



Therefore, cumulatively, the 2020 GPAs would result in a *less than significant* impact on the AM peakhour average vehicle speeds on the transit priority corridors.

# Site-Specific GPA Traffic Analysis

Per GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, a proposed land use amendment that would result in a net increase of more than 250 PM peak-hour trips due to increased households or employment is required to prepare a site-specific GPA traffic analysis, with the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas. All of the seven GPA sites are located outside of the three special subareas and therefore are subject to the 250 PM peak-hour trip threshold. The proposed land use amendments for the following three amendment sites would result in a net increase of more than 250 PM peak-hour trips and require site-specific analyses:

- GP19-012/C19-042 (329 Gifford Avenue)
- P19-008/H20-004 (276 Woz Way)
- GP18-012 (Airport/Guadalupe Gardens)

The results of the analyses show that the additional traffic generated by each of the three individual GPA sites that required site-specific analysis would not cause any additional transportation impacts beyond those identified for the adopted Envision San José 2040 GP. Therefore, each of the individual GPA sites would result in a *less than significant* impact on the citywide roadway system.

# Impacts on Transit, Bicycle, and Pedestrian Circulation

### Transit Services or Facilities

The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would have an adverse effect on existing or planned transit facilities. Therefore, the proposed 2020 GPAs land use adjustments would not substantially disrupt existing or interfere with planned transit services or facilities.

### **Bicycle Facilities**

The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned bicycle facilities. Therefore, the proposed 2020 GPA land use adjustments would not substantially disrupt existing or interfere with planned bicycle facilities; conflict or create inconsistencies with adopted bicycle plans, guidelines, policies, or standards; and provide insecure and unsafe bicycle parking in adequate proportion to anticipated demand.

### **Pedestrian Facilities**

The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned pedestrian facilities. Therefore, the proposed 2020 GPA land use adjustments would not substantially disrupt existing or interfere with planned pedestrian facilities; create inconsistencies with adopted pedestrian plans, guidelines, policies, or standards; and provide accessible pedestrian facilities that would not meet current ADA best practices.

# **Consistency with General Plan Polices**

The City of San José's Transportation Policies contained in the General Plan are intended to do the following:

- 1. Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes; and
- 2. Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Implementation of the General Plan Transportation Policies can help to promote a multi-modal transportation system and stimulate the use of transit, bicycle, and walk as practical modes of transportation in the City, which ultimately will improve operating speeds in the City's 14 transit priority corridors. An enhanced multi-modal transportation system can reduce reliance on the automobile and decreasing the amount of vehicle travel, specifically journey-to-work drive alone trips.

Based on the result of the analysis, the 2020 GPAs are consistent with the City of San José GP transportation policies, as they are projected to increase transit travel, while slightly reducing motor vehicle (drive alone) trips and slightly improving operating speeds along some of the City's 14 transit priority corridors, when compared to the current GP conditions.