# Fehr & Peers

# Memorandum

Subject:	Milpitas Gateway-Main Street Specific Plan: Existing Transportation Conditions, Issues and Opportunities
From:	Ellen Poling and Bruno Lertora, Fehr & Peers
То:	Christine Babla, Ascent Environmental
Date:	May 2, 2022

WC21-3846.00

# Introduction

This memorandum describes transportation conditions in the Gateway-Main Street Specific Plan area. Topics covered include a description of the multi-modal transportation network; traffic operations at key intersections and roadway segments; travel characteristics based on US census data; and potential issues and opportunities that can be addressed in the Specific Plan.

# **Roadway Network**

The roadway system in the Specific Plan area boundary consists of federal highways, state highways, county expressways, arterial roadways, roadways, and local roadways. This section provides an overview of the roadway network within and connecting to the Specific Plan area (refer to **Figure 1**). All figures are attached at the end of this memo.

#### **Federal Highways**

Two federal highways operated and maintained by Caltrans pass through the Specific Plan area including Interstates 680 and 880.

**I-680** connects the City of San Jose to I-80 through Milpitas, Dublin, Walnut Creek, and Fairfield. I-680 is fully grade separated with at least three lanes per direction through Milpitas. A highoccupancy toll lane is present in the southbound direction for most of I-680 in Milpitas. Interchanges with Calaveras Boulevard and Montague Expressway provide direct access to the Specific Plan area.

**I-880** connects the City of San Jose to I-80 through Milpitas, Fremont, Hayward, and Oakland. I-880 is fully grade separated with at least four lanes (one high-occupancy vehicle and three



general purpose) per direction through Milpitas. An interchange with State Route 237/Calaveras Boulevard provides direct access to the Specific Plan area.

#### State Highways

One state highway operated and maintained by Caltrans passes through the Specific Plan area.

**State Route 237** is an east-west highway that connects I-680 to I-880, continuing west to connect to U.S. 101 in Mountain View. SR 237 between I-680 and I-880 is a six-lane arterial roadway (Calaveras Boulevard) which transitions into a fully grade separated highway west of I-880, at the west edge of the Specific Plan area. On the eastern side of the Specific Plan area, SR 237/Calaveras Boulevard is grade-separated due to the presence of the railroad tracks, resulting in a limited connection to Main Street. Local network access is provided at the following intersections and ramps:

- Westbound off-ramp at Main Street
- Eastbound off-ramp at Carlo Street (connecting to Main Street)
- Signalized intersection at Abel Street
- Side-street stop-controlled partial-access intersection at Butler Street (no left turns onto Calaveras allowed)
- Signalized intersection at Serra Way
- Signalized intersection at South Abbott Avenue
- Full-access freeway interchange at I-880

#### **County Expressways**

One expressway operated and maintained by Santa Clara County passes to the south of the Specific Plan area.

**Montague Expressway** is an east-west expressway that connects US-101 and the San Tomas Expressway in San Jose to McCarthy Boulevard, I-880, Great Mall Parkway/East Capitol Avenue, and I-680 in Milpitas. Montague Expressway extends east of I-680 as Landess Road. The expressway provides a key east-west route for the Specific Plan area via its connection to Great Mall Parkway. The speed limit near the Specific Plan area is 45 mph. Existing traffic on the expressway averages 40,000 vehicles per day based on 2016 traffic counts.

#### **Arterial Roadways**

**Abel Street** is a north-south arterial that connects North Milpitas Avenue, West Calaveras Boulevard/SR-237, the Great Mall Parkway, and South Main Street. It extends east of North Milpitas Avenue as Jacklin Road. Existing traffic on the roadway averages 22,000 vehicles per day based on 2016 daily traffic counts.

**Calaveras Boulevard**, also part of SR 237 (see above), is designated as an arterial by the City of Milpitas.



**East Tasman Drive** is an arterial that extends west from I-880 and connects with McCarthy Road before entering San Jose and continuing through Santa Clara and Sunnyvale. It becomes the Great Mall Parkway east of I-880. Existing traffic on the roadway averages 38,000 vehicles per day based on 2016 traffic counts.

**Great Mall Parkway** is an east-west arterial that connects I-880 to South Abel Street, South Main Street, and the Montague Expressway. It extends west of I-880 as East Tasman Drive, and east of Montague Expressway as North Capitol Avenue. Existing traffic on the parkway averages 32,000 vehicles per day based on 2016 traffic counts.

#### **Collector Roadways**

**Serra Way** is a short collector roadway in the historic commercial area that connects West Calaveras Boulevard to South Abel Street and South Main Street. The speed limit is 30 mph. Daily traffic volumes are not available for Serra Way.

**South Main Street** is a collector roadway from Serra Way to South Abel Street just past the Great Mall Parkway. At South Abel Street, it transitions to an arterial roadway and connects to Montague Expressway. The speed limit varies from 30 to 35 mph. Existing traffic on the roadway averages 20,000 vehicles per day based on 2016 traffic counts. Due to the grade separation of South Main Street and Calaveras Boulevard, connections between South Main Street and the larger Specific Plan area network are circuitous; drivers can exit directly from Calaveras Boulevard to Main Street, but must travel via Weller Lane/North Abel Street or via Serra Way to access Calaveras Boulevard.

**North Main Street** is a collector roadway extending north from South Main Street at Serra Way to Weller Court. North of Weller Court the roadway continues as Marylinn Drive. North Main Street provides access to the Milpitas Library, Valley Health Center, and the historic DeVries House.

#### Local Roadways

Other key local roadways in the Specific Plan area include the following:

- East-West Roadways: Weller Lane, Carlo Street, Junipero Drive, Corning Avenue, Sylvia Avenue, Machado Avenue, and Curtis Avenue
- North-South Roadways: South Abbott Drive, Thompson Street, Railroad Avenue, and Hammond Way

#### **Planned Roadway Improvements**

The City of Milpitas Adopted Capital Improvement Program (CIP) 2022-2026 contains several projects relevant to transportation conditions in the Gateway-Main Street Specific Plan area, including the following:

Milpitas Gateway-Main Street Specific Plan May 2, 2022 Page 4 of 17



#### Calaveras Boulevard Widening Project (CIP #4258)

This future street improvement project will replace existing roadway bridges between Milpitas Boulevard and Abel Street. The bridge structures were constructed over 40 years ago, are reaching the end of their design life, and also fail to provide adequate bicycle and pedestrian facilities. The replacement bridge structures will accommodate three travel lanes, a 10-foot sidewalk, and a 6-foot bike lane in each direction. Calaveras Boulevard is a state route, and the City of Milpitas is requesting Caltrans to administer the project. The City would be the local sponsor and provide local funding through impacts fees from development projects.

#### Montague Expressway Widening Project (CIP #4179)

This street improvement project near the Milpitas BART Station provides a fourth through lane in each direction on Montague Expressway at Great Mall Parkway, one westbound lane on Montague Expressway from Pecten Court to the UPRR railroad, and a new bridge over Berryessa Creek. City Council initially accepted the improvements on December 3, 2019, and VTA has completed construction.

# **Traffic Operations**

Level of Service (LOS) is a qualitative measure used to describe roadway operations for different user types, including vehicles, transit riders, bicyclists, and pedestrians. Vehicular LOS is assigned letter grades ranging from "A" (free flow conditions) to "F" (severe congestion). Providing freeflow conditions (LOS A) at all hours of the day requires wide streets, large intersections, substantial right-of-way and considerable funding for maintenance. LOS A or B for vehicles also tends to lead to poor LOS for pedestrians and bicyclists because the wider streets, higher speeds, and longer waiting times to cross makes bicycling and walking less safe and less appealing. Therefore, vehicle LOS should be balanced against mobility needs for pedestrians, bicyclists, and transit users, impacts on existing development, and the cost to construct and maintain the facilities.

The City of Milpitas has adopted the Santa Clara Valley Transportation Authority (VTA) Congestion Management Authority standards for acceptable vehicular traffic operations. While the Congestion Management Authority strives to maintain LOS D or better operations, LOS E is considered to be acceptable. Intersections that have a baseline (1991) LOS F are grandfathered in as LOS F.

Traffic operations were described in the existing conditions report for the recently completed *Milpitas General Plan 2040* (March 9, 2021). As shown in **Table 1**, the intersections within and near the Specific Plan area operated at LOS D or better, with the exception of Abel Street/West Calaveras Boulevard, which operated at LOS E- in the PM peak hour.



#### Table 1: Intersection Levels of Service

Intersection	AM Peak Hour	PM Peak Hour
South Abbott Street/West Calaveras Boulevard	С	С
Serra Way/West Calaveras Boulevard	B+	В
Abel Street/West Calaveras Boulevard	D	E-
I-880 Northbound Ramp – Thompson Street/Great Mall Parkway	D+	D
South Abel Street/Great Mall Parkway	D	D+
South Main Street/Great Mall Parkway	D	D
South Main Street/South Abel Street	В	В
South Main Street – Oakland Road/Montague Expressway	E	F

Source: Milpitas General Plan Update Existing Conditions Report (June 2018); based on traffic counts collected in 2016.

**Table 2** shows the existing conditions report's peak hour roadway volumes as compared to theirhourly capacity, for Abel Street and Great Mall Parkway. The AM peak hour volume onnorthbound North Abel Street west of North Milpitas Boulevard was near the peak hour capacity,and the AM peak hour volume on westbound East Calaveras Boulevard east of North Main Streetwas substantially over-capacity.

#### **Table 2: Roadway Volumes and Capacities**

Segment	Direction	Capacity	Volume AM Peak Hour	Volume AM Peak Hour
N. Abel Street west of N. Milpitas Boulevard	NB	1,750	1,725	914
N. Abel Street west of N. Milpitas Boulevard	SB	1,750	898	1,124
Great Mall Parkway west of Montague Expressway	WB	2,805	1,839	828
Great Mall Parkway west of Montague Expressway	EB	2,805	792	1,955
SR 237/East Calaveras Boulevard east of North Main Street	WB	1,870	2,526	1,401

Source: Milpitas General Plan Update Existing Conditions Report (June 2018); based on traffic counts collected in 2016.

## **Bicycle and Pedestrian Circulation**

The City of Milpitas recently completed a *Trails, Pedestrian and Bicycle Master Plan, Public Draft Plan* (February 2021). The Master Plan presents a comprehensive evaluation of the city's existing



pedestrian and bicycle infrastructure and proposes improvements based on a needs evaluation, prioritization, and feasibility assessment. The Master Plan includes six basic bicycle facility types:

#### Class I – Paved Shared Use Path

- Completely separated from the roadway
- Typically shared with bicyclists and pedestrians
- Comfortable for people of all ages and abilities

#### Class II – Bike Lane

- Dedicated lane for bicycle travel adjacent to traffic and in the right-of-way
- Separated from motor vehicles by a painted white line

#### Class IIB – Buffered Bike Lane

- Dedicated lane for bicycle travel adjacent to traffic and in the right-of-way
- A painted buffer separates bicyclists from motor vehicles to provide additional comfort and operating space

#### Class III – Designated Bike Route

- Signed routes where people bicycling share the lane with motor vehicles
- Often designated with pavement marking, typically only comfortable for confident cyclists

#### Class IIIB – Bike Boulevard

- Calm, local roadways that prioritize bicycle travel through traffic calming features such as traffic diverters and speed humps
- Comfortable for a wide range of ages and abilities

#### Class IV – Cycle Track

• On-street bikeway separated from motor vehicles by a curb, median, planters, or other physical barrier

#### **Existing Bicycle and Pedestrian Facilities**

#### **Bicycle Facilities**

Existing bicycle facilities within and near the Specific Plan area are shown in **Figure 2**. Bike lanes are currently provided on South Main Street between Calaveras Boulevard and Great Mall Parkway, South Abel Street between Corning Avenue and Great Mall Parkway, and Great Mall Parkway along the southern border of the Specific Plan area. Abel Street north of the section with bike lanes is a designated bike route, and Calaveras Boulevard is also a designated bike route.

Milpitas Gateway-Main Street Specific Plan May 2, 2022 Page 7 of 17



There is a shared use path adjacent to Machado Avenue between South Abel Street and Thompson Court.

#### Pedestrian Facilities

Most streets within the Specific Plan area provide sidewalks on both sides, where adjacent active uses are located. Streets with missing sidewalks or sidewalks on only one side include:

- Carlo Street (no south side sidewalk)
- Serra Street (sidewalk gaps on south side)
- Calaveras Boulevard (no south side sidewalk between Carlo Street and Milpitas Boulevard)

Signalized intersections generally provide accessible curb ramps with detectible surfaces, pedestrian countdown signals, and striped crosswalks. In addition, an enhanced crossing with a pedestrian-activated flashing beacon is provided on South Main Street at Tom Evatt Park. However, pedestrian circulation is hampered by long block lengths which reduce protected crossing opportunities, the partial grade separation of Calaveras Boulevard, and high traffic volumes on major streets including Calaveras Boulevard, Abel Street, and Great Mall Parkway, which reduce pedestrian comfort and perceived safety.

#### **Planned Bicycle and Pedestrian Facilities**

The Master Plan's proposed bicycle facilities within and near the Specific Plan area are shown in **Figure 3.** 

Priority bicycle improvements included in the Master Plan that are within or connect to the Specific Plan area include the following, sorted by short-term and long-term priorities (refer to Master Plan Figures 31 and 32 and Tables 25 and 26):

#### Linear Bikeway Improvements

- Abel Street: Class IIB bikeway from Redwood Avenue to Calaveras Boulevard (Short-term)
- Calaveras Boulevard: Class IV Bikeway from McCarthy Boulevard to Evans Road (Long-term)
- South Main Street: Class IIB Bikeway between Calaveras Boulevard and South Abel Street (Long-term)
- Great Mall Parkway: Class IV Bikeway between South McCarthy Boulevard and Montague Expressway (Long-term)

#### Spot Bikeway Improvements

- Main Street/Great Mall Parkway (Short-term)
- Calaveras Boulevard/Main Street (Long-term)

Milpitas Gateway-Main Street Specific Plan May 2, 2022 Page 8 of 17



The Master Plan also describes priority pedestrian and trail improvements, listed below.

#### Priority Pedestrian Improvements

- Abel Street/Serra Way (Short-term)
- Calaveras and Serra Way (Short-term)
- Main Street/Corning Avenue (Short-term)
- Abel Street/Machado Avenue (Short-term)
- Main Street/Curtis Avenue (Short-term)
- Abel Street/Calaveras Boulevard (Long-term)
- Main Street/Great Mall Parkway (Long-term)
- Abel Street/Curtis Avenue (Opportunity)

#### Priority Trail Improvements

- Penitencia Creek, San Andreas Drive to Calaveras Boulevard (Short-term)
- Abel Street, Calaveras Boulevard to Great Mall Parkway (Long-term)
- Trail Access improvements at:
  - Tom Evatt Park at South Abel Street (Short-term)
  - South Abel Street at Great Mall Parkway (Long-term)

## **Transit Service**

The Milpitas Gateway-Main Street Specific Plan area is served by several transit services, including: Santa Clara Valley Transportation Authority (VTA) for travel within Santa Clara County, Alameda-Contra Costa (AC) Transit District for travel to and from Alameda County, Altamont Commuter Express (ACE) for travel to and from the ACE Great America Station in the City of Santa Clara, VTA Light Rail for travel to and from the cities of San Jose and Mountain View, and Bay Area Rapid Transit (BART) which connects Contra Costa, Alameda, San Francisco, San Mateo and Santa Clara counties. **Figure 4** illustrates the existing transit routes and stations. The VTA Light Rail Great Mall station is located on the southern border of the Specific Plan area, at Great Mall Parkway/South Main Street intersection, and the BART Milpitas Station is located three quarters of a mile east of the Light Rail station, at the southeast corner of the intersection of Great Mall Parkway and Montague Expressway.

**Table 3** summarizes the existing hours of operation and headways for routes within andconnecting to the study area. Many of the routes offer convenient connections to the MilpitasBART Station.



	N.		Week	days	Satu	rday	Sunday		
Route	e From To		Operating Hours <sup>1</sup>	Peak Headway	Operating Hours <sup>1</sup>	Headway	Operating Hours <sup>1</sup>	Headway	
VTA									
Route 20	Milpitas Transit Center	Sunnyvale Transit Center	6:20 AM to 7:20 PM	30 minutes		No weeke	end service		
Route 44	Milpitas Transit Center	McCarthy Ranch Shopping Center	6:45 AM to 8:00 PM	30 minutes	8:15 AM to 6:15 PM	60 minutes	9:15 AM to 5:15 PM	60 minutes	
Route 47	Milpitas Transit Center	McCarthy Ranch Shopping Center	7:00 AM to 8:00 PM	30 minutes	7:50 AM to 6:50 PM	60 minutes	8:45 AM to 5:45 PM	60 minutes	
Route 60	Milpitas Transit Center	Winchester Station	5:10 AM to 11:45 PM	15 minutes	5:55 AM to 12:05 AM	30 minutes	5:55 AM to 12:05 AM	30 minutes	
Route 66	North Milpitas	Kaiser San Jose	5:10 AM to 11:00 PM	15 minutes	5:30 AM to 10:40 PM	20 minutes	5:30 AM to 10:20 PM	20 minutes	
Route 70	Milpitas Transit Center	Eastridge Transit Center	5:10 AM to 11:00 PM	15 minutes	5:50 AM to 10:10 PM	20 minutes	6:20 AM to 9:30 PM	30 minutes	
Route 71	Milpitas Transit Center	Eastridge Transit Center	5:25 AM to 9:50 PM	30 minutes	7:20 AM to 8:45 PM	30 minutes	7:10 AM to 7:50 PM	30 minutes	
Route 77	Milpitas Transit Center	Eastridge Transit Center	5:15 AM to 9:30 PM	15 minutes	6:25 AM to 8:50 PM	20 minutes	7:20 AM to 8:00 PM	30 minutes	
Route 104	Milpitas Transit Center	Stanford Research Park	6:10 AM to 7:00 AM – 4:00 PM to 4:30 PM	30 minutes	No weekend service				
AC Transit									
Route 217	Fremont BART	Milpitas Transit Center	7:00 AM to 9:45 PM	30 minutes	7:00 AM to 9:30 PM	30 minutes	7:00 AM to 9:30 PM	30 minutes	
ACE Shuttle	2								
Purple Shuttle	ACE Great America Station	McCarthy Ranch Shopping Center	6:15 AM to 9:20 AM – 3:15 PM to 6:15 PM	60 minutes	No weekend service				

#### Table 3: Existing Transit Services Schedule



			Week	days	Satu	rday	Sunday	
Route	From	То	Operating Hours <sup>1</sup>	Peak Headway	Operating Hours <sup>1</sup>			Headway
Violet Shuttle	ACE Great America Station	North East Medical Services	6:15 AM to 9:20 AM – 3:15 PM to 6:15 PM	60 minutes	No weekend service			
VTA Light Rail								
Orange Line	Mountain View	Alum Rock	5:30 AM to 11:55 PM	20 minutes	6:00 AM to 11:55 PM	30 minutes	6:00 AM to 9:55 PM	30 minutes
BART								
Berryessa– Richmond Line	Berryessa/ North San Jose	Richmond	5:00 AM to 12:00 AM	15 minutes	6:00 AM to 12:00 AM	30 minutes	8:00 AM to 9:00 PM	30 minutes
Berryessa– Daly City Line	Berryessa/ North San Jose	Daly City	5:00 AM to 12:00 AM	15 minutes	6:00 AM to 7:00 PM	30 minutes	No Sunday service	

#### Table 3: Existing Transit Services Schedule

1. Rounded to the nearest five minutes.

Sources: Santa Clara Valley Transportation Authority, AC Transit, and Bay Area Rapid Transit; January 2022.

#### **Other Transit Services**

#### Paratransit

Paratransit, also known as dial-a-ride or door-to-door service, is available for those that are unable to independently use the transit system due to a physical or mental disability. Individuals must be registered and certified as ADA eligible before using the service. Paratransit operators are required by the ADA to service areas within three-quarters of a mile of their respective, public fixed-route service and VTA also offers service for trips within a premium zone extending an additional mile beyond the three-quarter-mile standard zone. VTA Access Paratransit is operated by Outreach & Escort, Inc. and is available only during the regularly scheduled operating hours of the corresponding bus or light rail route. Ride reservations can be scheduled in advance.

#### Park and Ride Lots

Milpitas has two 'park and ride' lots, both located at VTA light rail stations. One is located at the I-880/Milpitas Station on East Tasman Drive and the other is located at the Great Mall/Main Street Station on Great Mall Parkway. Both lots provide bus service in addition to light rail service. Milpitas Gateway-Main Street Specific Plan May 2, 2022 Page 11 of 17



#### **On-Demand Transportation Services**

Taxi service in Milpitas is provided by private operators that serve the greater Santa Clara County area and beyond. Taxi service is available 24 hours a day, seven days a week by calling in a service request. Other ride-hailing applications are also available in Milpitas and provide transportation throughout the Bay Area.

#### **Milpitas On Demand Pilot Program**

The City obtained a Measure B grant from the Valley Transportation Authority to fund a first/last mile micro-transit service to better connect Milpitas residents and employees to regional transit. The proposed service would be demand-responsive, with virtual as opposed to fixed stops. The goal of the program is to offer a more convenient service to Milpitas' commuters, including those not conveniently served today by fixed bus route service, and significant vulnerable/transit-dependent population by supporting and complementing VTA's existing bus and rail services. The proposed 12-month pilot program includes a program performance evaluation component which will allow the operators to adjust service based on ridership data and understand the long-term ridership potential in light of the pandemic and beyond.

# Parking and Curbside Uses

Vehicle parking is provided both on-street and in off-street lots and garages. In addition to residential neighborhood roadways west of South Abel Street, where on-street parking is generally allowed, roadways in the Specific Plan area that generally provide on-street parking include the following:

- South Main Street parking on alternate sides between Serra Way and Great Mall Parkway (allows space for bicycle lanes); limited on-street parking north of Serra Way
- Weller Lane parking on south side only
- Corning Avenue between South Abel Street and South Main Street parking allowed on both sides
- Curtis Avenue parking generally allowed except on north side between South Abel Street and South Main Street
- Thompson Street parking allowed on both sides

The remaining commercial and mixed-use streets that do not provide parking generally have the outside travel lane directly adjacent to the curb, or bicycle lanes adjacent to the curb (South Abel Street between Corning and Great Mall Parkway, and Great Mall Parkway on the southern boundary of the study area). On North Main Street, bus turn-outs are provided at the Milpitas Library (northbound) and Valley Health Center (southbound).

Many commercial and residential sites in the Specific Plan area provide off-street surface parking lots. These include the Serra Center, most developments between South Abel Street and South



Main Street, and developments fronting the east side of South Main Street. Structured parking is provided for several developments on North Main Street north of Serra Way, including the Valley Health Center and the Milpitas Library. The Valley Health Center structure is a county-run facility offering free parking for staff and patients/visitors, with a total capacity of 60 staff spaces and 210 patient/visitor spaces. The Milpitas Library parking facility is also free to the public, and contains approximately 390 spaces; it is open from 8:30 a.m. until 15 minutes past the library's closing time—either 7:15 or 9:15 p.m., depending upon the day.

# **Collision History**

**Figure 5** shows collision data from 2015 – 2019, the last five years of complete data, from the Transportation Injury Mapping System, a database maintained by UC Berkeley's Safe Transportation Research and Education Center. In this five year period, there were 241 collisions in the Specific Plan area. Of these, 11, or 5%, involved bicycles and another 11 involved pedestrians, while the remaining collisions involved only motorized vehicles. There were 11 collisions resulting in someone being killed or severely injured. Of these, 5, or 45%, involved pedestrians, while the remaining involved only vehicles.

Overall, there was no significant change in the number of collisions over time, with the annual number of collisions being between 40 and 50 for each of the five years studied. There were too few collisions in each of the aforementioned sub-categories to extract temporal trends.

73% of all collisions occurred at an intersection, with the remaining collisions occurring midblock. Within the Specific Plan area, the intersections with the most collisions were Abbott Avenue at Calaveras Boulevard, with 35 collisions, and Thompson Street at Great Mall Parkway, with 29 collisions.

The most common causes for collisions were unsafe speeds, which was the cause of 24% of all collisions, and violation of traffic signals and signs, which was the cause of 15% of all collisions. The most common types of collision were broadsides, accounting for 41% of all collisions, and rear ends, accounting for 30% of all collisions.

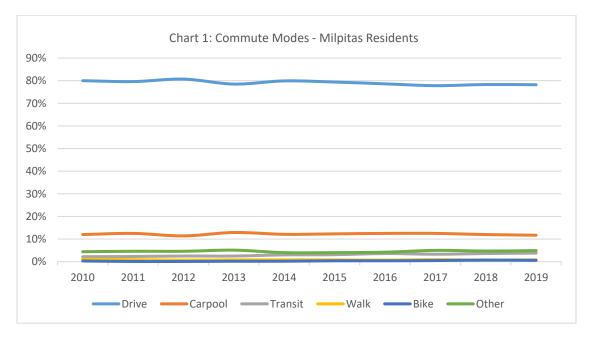
# **Travel Characteristics**

The travel modes of Milpitas residents and employees are discussed below.

#### **Milpitas Residents**

In 2019, approximately 78 percent of Milpitas residents drove alone to work, according to the US Census American Community Survey (refer to **Chart 1**). This share has not changed significantly since 2010. Carpooling accounted for 12 percent of commute trips in 2019 (the most recent year with a complete data set), transit use accounted for 4 percent, and the remaining 6% of trips were made by walking, bicycling, and other modes (while 'other modes' is not defined in the data

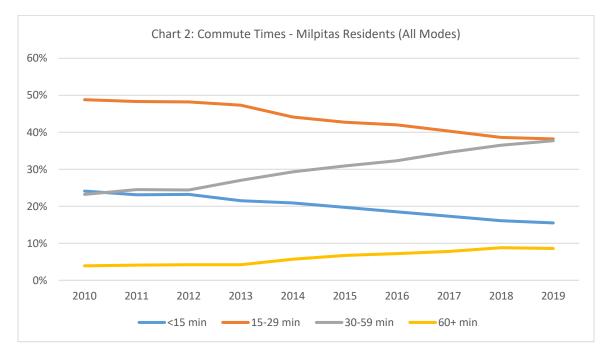




summaries, this is generally understood to encompass telecommuting, skateboards, and scooters).

Source: American Community Survey 5-Year Estimates, Table So801. Other category includes those working from home.

As shown in **Chart 2**, commute times have generally been increasing, with about 9 percent of Milpitas residents travelling an hour or more to work and 38 percent travelling between a half-hour and an hour.

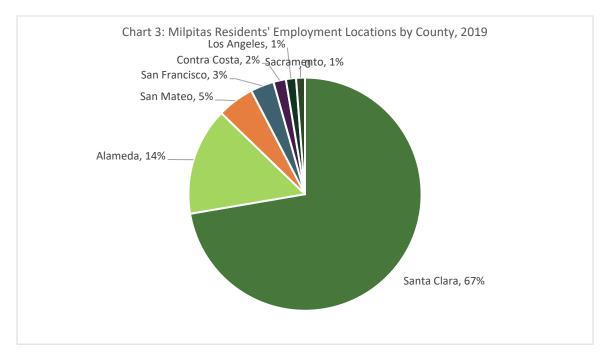


Source: American Community Survey 5-Year Estimates, Table So801.

Milpitas Gateway-Main Street Specific Plan May 2, 2022 Page 14 of 17



**Chart 3** shows that two thirds of Milpitas residents work in Santa Clara County, with Alameda County being the second-highest employment destination at 14 percent. Top Santa Clara County employment cities include San Jose (27 percent), Milpitas (11 percent), Santa Clara (8 percent), Sunnyvale (7 percent), Palo Alto (4 percent) and Mountain View (4 percent) (see **Table 4**).



Source: US Census Bureau, Longitudinal Employer-Household Dynamics.

County	City	2019	2018	2017	2016	2015	2014	2013	2012	2011
Santa Clara		67%	67%	66%	66%	66%	66%	79%	78%	78%
	San Jose	27%	27%	27%	27%	28%	28%	33%	33%	33%
	Milpitas	11%	11%	11%	11%	11%	11%	13%	13%	13%
	Santa Clara	8%	8%	8%	8%	8%	7%	9%	9%	9%
	Sunnyvale	7%	7%	7%	7%	7%	7%	9%	9%	9%
	Palo Alto	4%	4%	4%	4%	4%	4%	5%	4%	4%
	Mountain View	4%	4%	4%	4%	3%	4%	4%	4%	4%
Alameda		14%	14%	14%	14%	15%	14%	15%	15%	15%
	Fremont	8%	7%	8%	8%	8%	8%	8%	9%	9%
Santa Mat	eo	5%	5%	5%	5%	5%	5%	5%	5%	5%
San Franci	sco	3%	3%	3%	3%	3%	3%	0%	0%	0%

#### **Table 4: Milpitas Residents' Employment Locations**

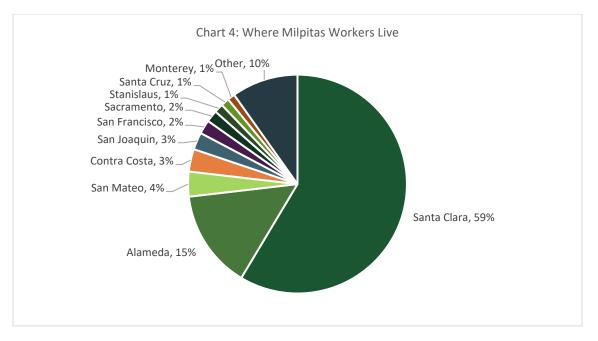
Source: US Census Bureau, Longitudinal Employer-Household Dynamics, 2011-2019.

Milpitas Gateway-Main Street Specific Plan May 2, 2022 Page 15 of 17



#### **Milpitas Employees**

People who work in Milpitas largely reside in Santa Clara County (59 percent), followed by Alameda County (15 percent) and several other Bay Area, central coast and central valley counties (refer to **Chart 4**). The top cities of residence in 2019 were San Jose (33 percent), Milpitas (9 percent), Fremont (6 percent), Sunnyvale (4 percent), and Santa Clara (3 percent), as shown in **Table 5.** 



Source: US Census Bureau, Longitudinal Employer-Household Dynamics.

County	City	2019	2018	2017	2016	2015	2014	2013	2012	2011
Santa Clara		59%	58%	58%	59%	59%	58%	58%	59%	59%
	San Jose	33%	33%	34%	33%	34%	33%	33%	33%	33%
	Milpitas	9%	9%	9%	8%	9%	8%	8%	8%	8%
	Sunnyvale	4%	3%	3%	4%	4%	4%	4%	4%	4%
	Santa Clara	3%	3%	3%	3%	3%	3%	3%	3%	3%
Alameda		15%	15%	15%	15%	16%	16%	15%	16%	15%
	Fremont	6%	6%	6%	6%	7%	6%	7%	7%	7%
Santa Mateo		4%	4%	4%	4%	4%	4%	4%	4%	4%
Contra Costa		3%	3%	3%	3%	3%	3%	3%	3%	3%

#### Table 5: Milpitas Workers' Home Locations

Source: US Census Bureau, Longitudinal Employer-Household Dynamics, 2011-2019.

Milpitas Gateway-Main Street Specific Plan May 2, 2022 Page 16 of 17



# Milpitas Metro Specific Plan

The recently completed *Milpitas Metro Specific Plan* (Public Draft, October 2021) addresses land use, circulation and planning for the area directly south of the Gateway-Main Street Specific Plan area. The Metro Specific Plan envisions the gradual redevelopment of the Great Mall subdistrict, with a grid of new neighborhood streets, connecting through to Curtis Drive and the Gateway-Main Street Specific Plan area via Comet Drive. The Metro Specific Plan includes policies supporting multi-modal circulation, traffic calming, and pedestrian enhancements and potential lane reductions on Great Mall Parkway/Capitol Avenue. These envisioned improvements will better-link the two Specific Plan areas, and the Gateway-Main Street Specific Plan circulation plan should incorporate and build upon the proposals in the Metro Specific Plan.

# **Issues and Opportunities**

The Specific Plan area has several key transportation characteristics which promote multi-modal transportation options for residents, employees and visitors:

- Proximity to Light Rail Orange Line station and Milpitas BART Station just south of the Specific Plan area
- Bus service along Calaveras connecting to the historic downtown (Route 47) and along South Main Street connecting to the Light Rail and BART stations (Routes 66 and Express 104)
- Bicycle lanes on South Main Street, Planned Class I Trail on Abel, South Abel Street (south of Corning) and Great Mall Parkway
- Sidewalks on most streets, with some gaps, and a linear park and trail (Tom Evatt Park) connecting Thompson Street to South Main Street
- High-capacity roadways serving east-west travel (Calaveras Boulevard and Great Mall Parkway) and north-south travel (South Abel Street)
- A relatively pedestrian-scale South Main Street serves all modes of travel in a balanced way that does not elevate vehicle capacity above the needs of pedestrians, bicyclists, and transit users

The following issues present challenges to providing a more connected and comfortable multimodal system:

- East-west connections across the railroad tracks for all travel modes are limited to two high-volume, relatively high-speed roadways – Calaveras Boulevard and Great Mall Parkway, which makes walking and bicycling less comfortable, lengthens those trips, and makes vehicle circulation more circuitous
- East-west connections in general are limited, leading to circuitous travel routes between South Main Street, South Abel Street in particular



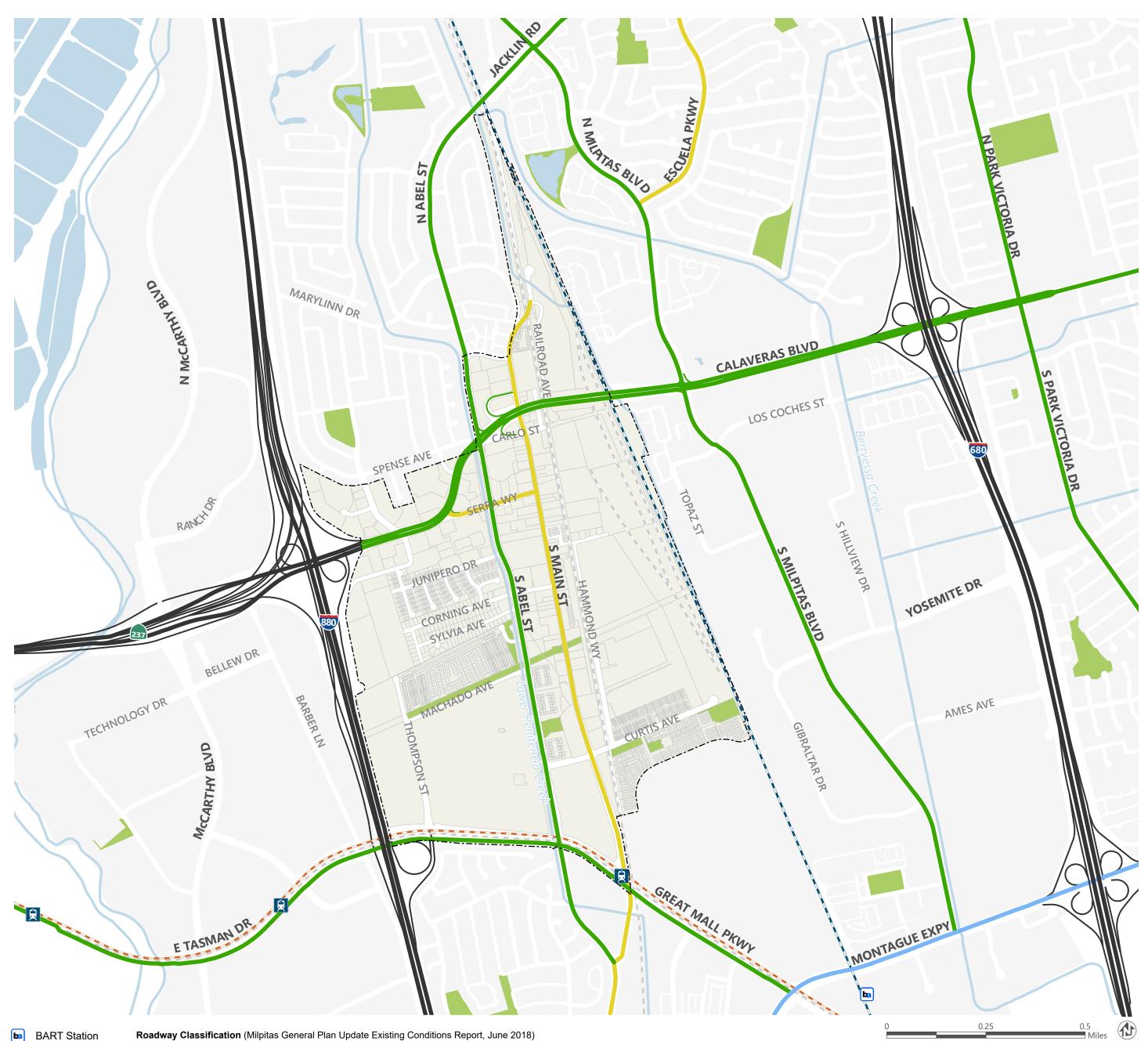
- The roadway network is not fully connected west of South Abel Street between Calaveras Boulevard and Great Mall Parkway, due to the cul-de-sac design of the residential roadways, and the lack of interconnection between different developments
- The connections between Calaveras Boulevard and the Main Street/historic downtown area are circuitous due to the grade separation of the two roadways
- South Main Street blocks are long, with incomplete connections to surrounding areas, frequent curb cuts, and a streetscape design that shifts from more pedestrian and bicycle-oriented to less so as you move south
- The distribution of parking across multiple small lots along South Main Street creates access and circulation challenges, particularly for businesses wishing to expand

The following opportunities should be explored as the Specific Plan is developed:

- Improve network connectivity via:
  - Extension/connection of South Abbott Avenue to Thompson Court
  - Adding connections between South Main Street and South Abel Street, and
  - Providing formal connections between Calaveras Boulevard, South Abbot Avenue, Junipero Drive and South Abel Street with redevelopment or revitalization of the Serra Center
- Provide higher-quality pedestrian and bicycle connections between Main Street and Calaveras Boulevard
- Identify strategies to complete the bicycle and pedestrian projects described in the Trails, Pedestrian and Bicycle Master Plan, particularly to improve crossing opportunities along South Abel Street and across the railroad tracks
- Consider wayfinding measures and micro-mobility services (bike share, e-bike share, scooter share, micro-transit) to better-connect residents, employees, and visitors to key destinations within the Specific Plan area, to the Light Rail Orange Line station and Milpitas BART station, and to other major Milpitas employment and shopping centers

#### Attachments:

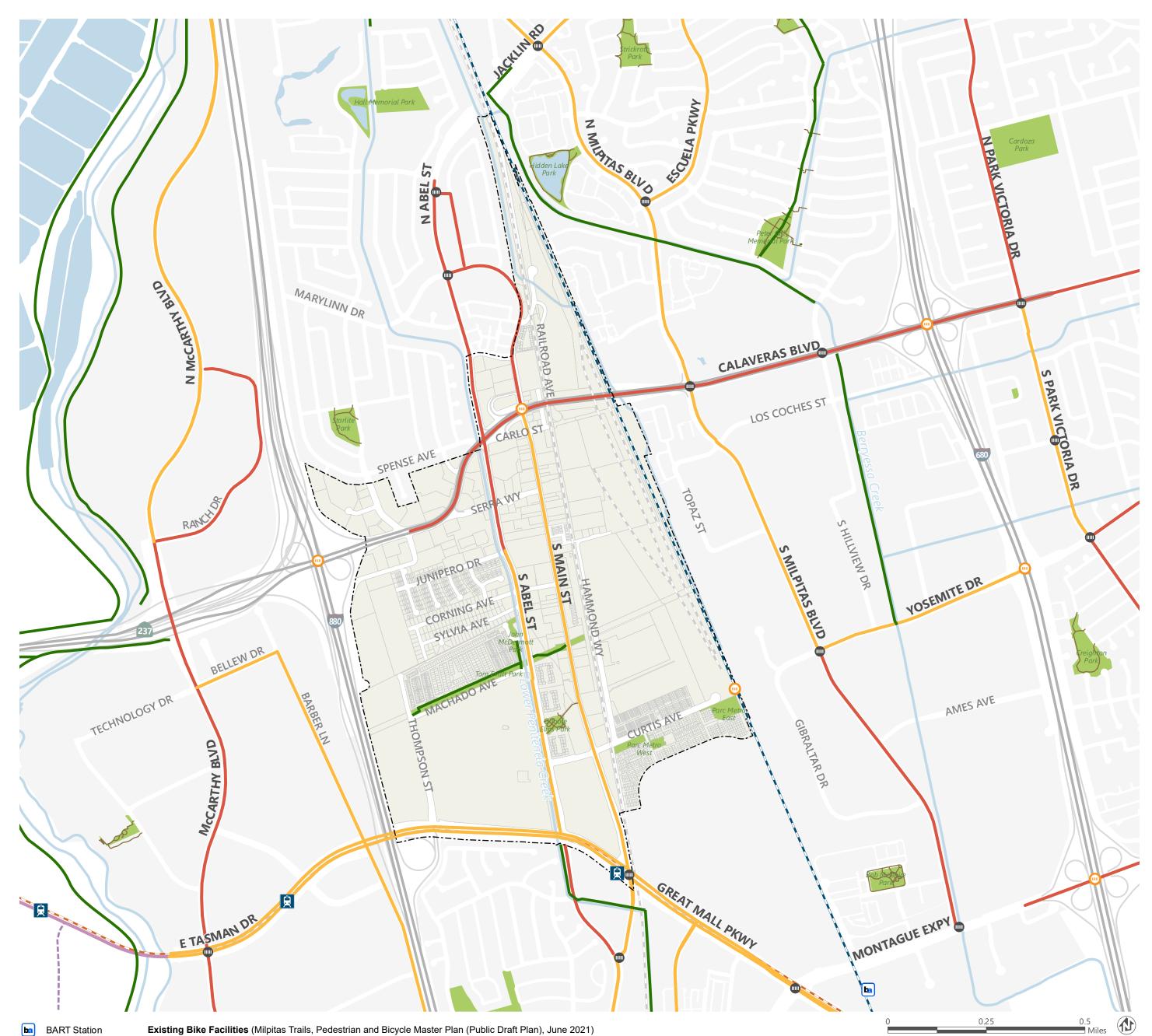
- Figure 1 Roadway Network
- Figure 2 Existing Bicycle Facilities
- Figure 3 Planned Bicycle Facilities
- Figure 4 Transit Routes
- Figure 5 Collisions (2015 2019)



BART Station	Roadway Classification (Milpitas General Plan Update Existing Conditions I
🚊 Light Rail Stop	Collector
Light Rail	Arterial
Railway	Expressway
BART Line	Highway

0.5 Miles 

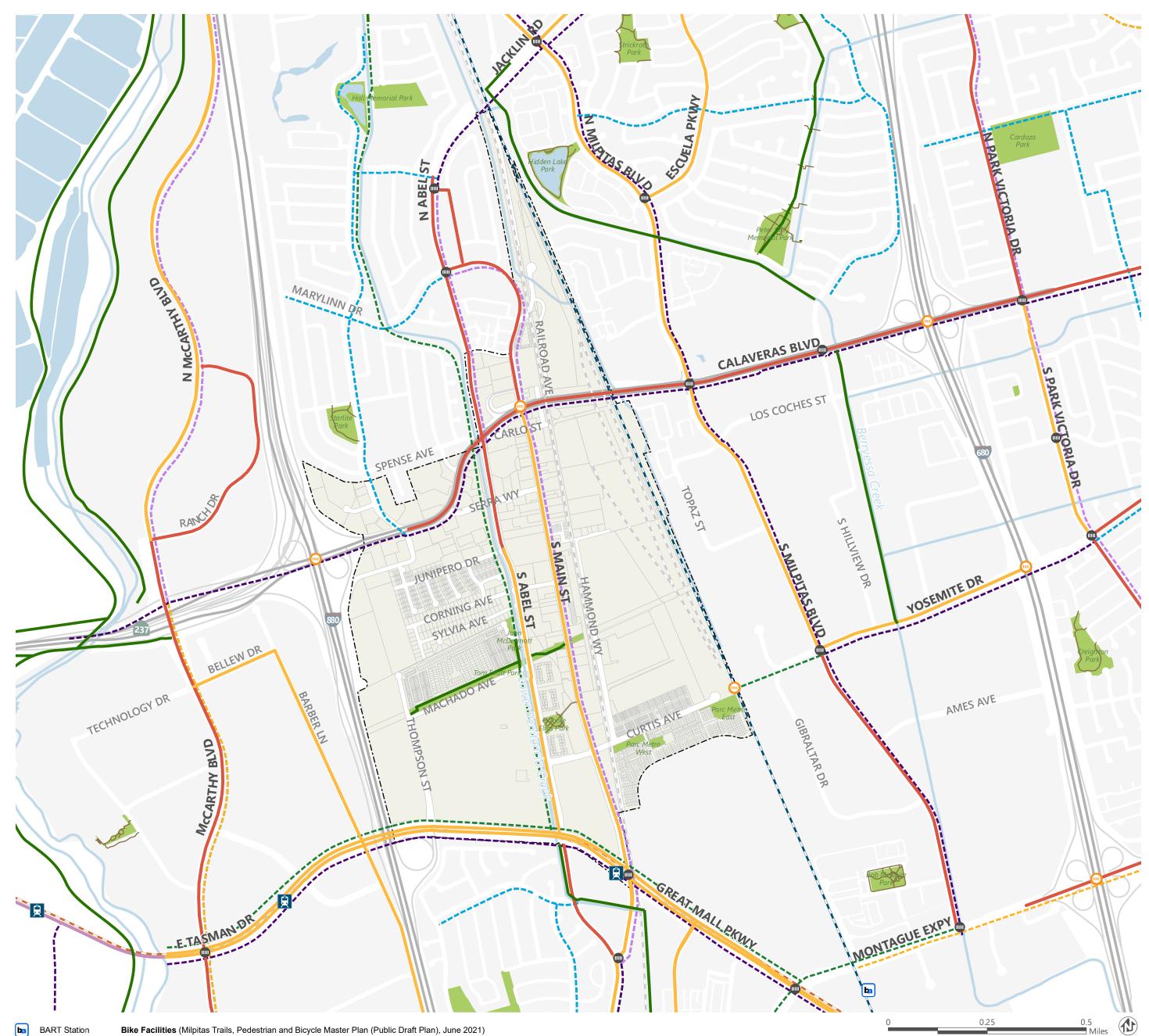
> Figure 1 Roadway Network 2/3/2022 20210060.01 GIS 006



Ä	Light Rail Stop	

- Class I: Paved Shared Use Path
- ---- Light Rail
- Rail Class II: Bike Lane
- BART Line
- Railway Parks
- Class IIB: Buffered Bike Lane
  Class III: Bike Route
  - —— Unpaved Trail

Figure 2 Existing Bikeways



ba BART Station Bike Facilities (Milpitas Trails, Pedestrian and Bicycle Master Plan (Public Draft Plan), June 2021)

Class II: Bike Lane

Class I: Paved Shared Use Path

Class IIB: Buffered Bike Lane

- Light Rail Stop
- Light Rail
- BART Line
- Railway
- - Parks
    - Class III: Bike Route

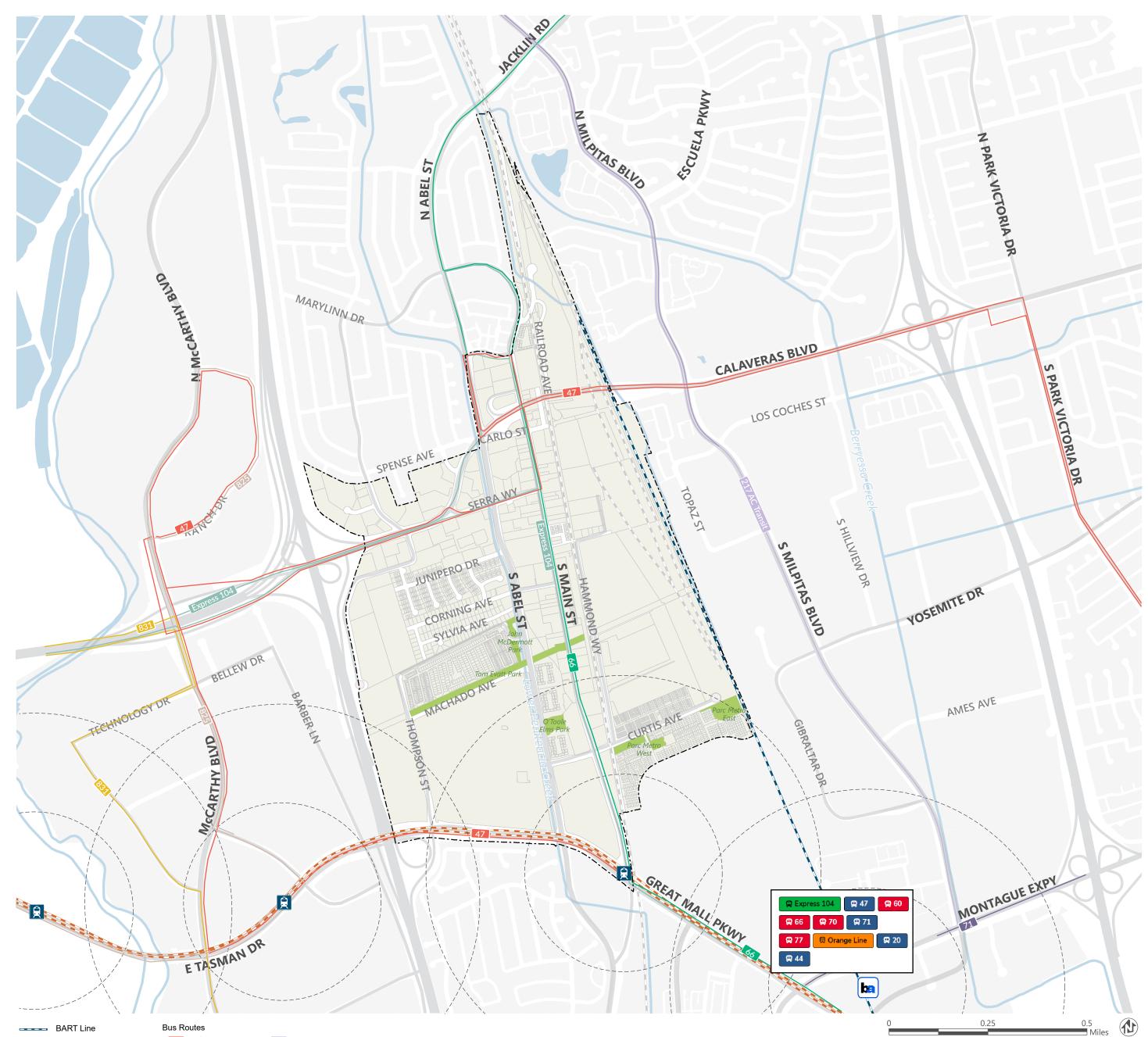
Existing:

- Unpaved Trail
- Planned:
- Bike Lane Connectivity
  - Intersection Connectivity
- ---- Class IIB: Buffered Bike Lane
- --- Class IIIB: Bike Boulevard
- ---- Class IV: Cycle Track

---- Planned Class I

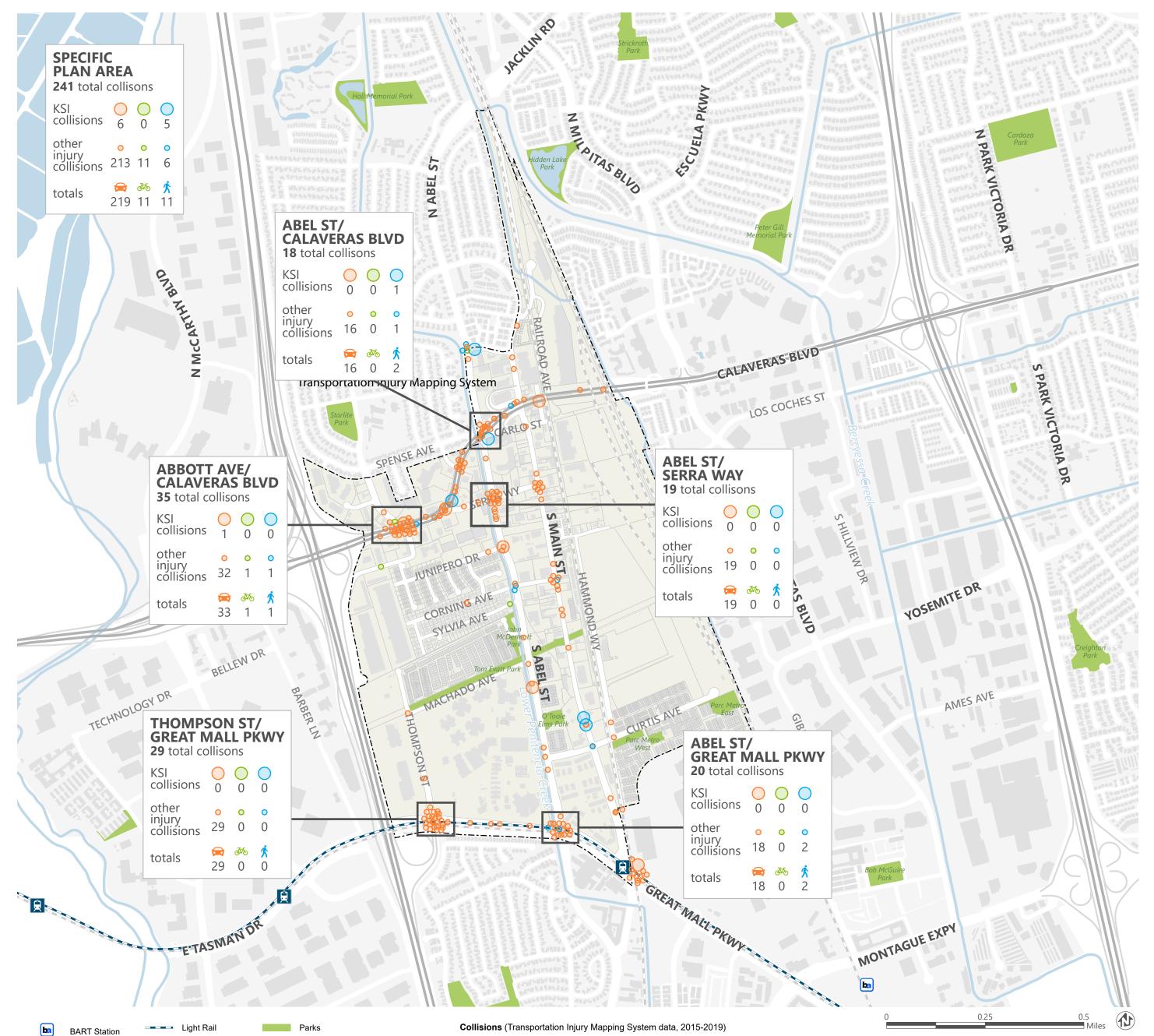
---- Class II: Bike Lane

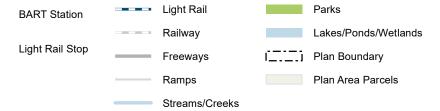
Figure 3 Planned Bikeways



1/4 Mile and 1/2 Mile Radius of Light Rail Stops Figure 4 Transit Routes

2/3/2022 20210060.01 GIS 006





Ŕ

- Collisions (Transportation Injury Mapping System data, 2015-2019) KSI\* Other Injury Collisions С
  - 0 Collisions involving pedestrians
  - Collisions involving bicycles 0

 $\bigcirc$ 

 $\bigcirc$ 

Collisions involving vehicles only 0

\*KSI collisions are those resulting in someone being  $\underline{k}illed$  or  $\underline{s}everely\ \underline{i}njured$ 

Figure 5 Collisions (2015-2019) 1/20/2022 20210060.01 GIS 025