TRANSPORTATION MASTER PLAN

DECEMBER 2024

CITY OF MORGAN HILL

CITY OF MORGAN HILL

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

The City of Morgan Hill has conducted a comprehensive review of its transportation system as part of the completion of its first Transportation Master Plan (TMP) to help address the challenges related to travel within Morgan Hill for daily needs such as work, recreation, school, etc. The TMP will be used to plan for new development and future transportation demands, to improve inter-city travel for all residents, to create opportunities for alternative modes of travel, and to identify funding mechanisms for improvements.

This document provides an overview of how the TMP was developed and its recommendations. The report consists of six chapters that include an introduction of the purpose of the TMP and its objectives. The remaining five chapters present components of the TMP development process in an order consistent with the work effort completed. A brief summary of the TMP process, analyses, and components is provided in this section in a chapter-by-chapter format that follows the report format. Additional detail is provided within each chapter of the report. The technical analysis and supporting materials are available as appendices.

REPORT FORMAT

- **CHAPTER 1** Introduction
- **CHAPTER 2** Vision & Goals
- **CHAPTER 3** Existing & Future Conditions & Needs Assessment
- **CHAPTER 4** Community Engagment
- **CHAPTER 5** Improvement Toolbox
- **CHAPTER 6** Implementation

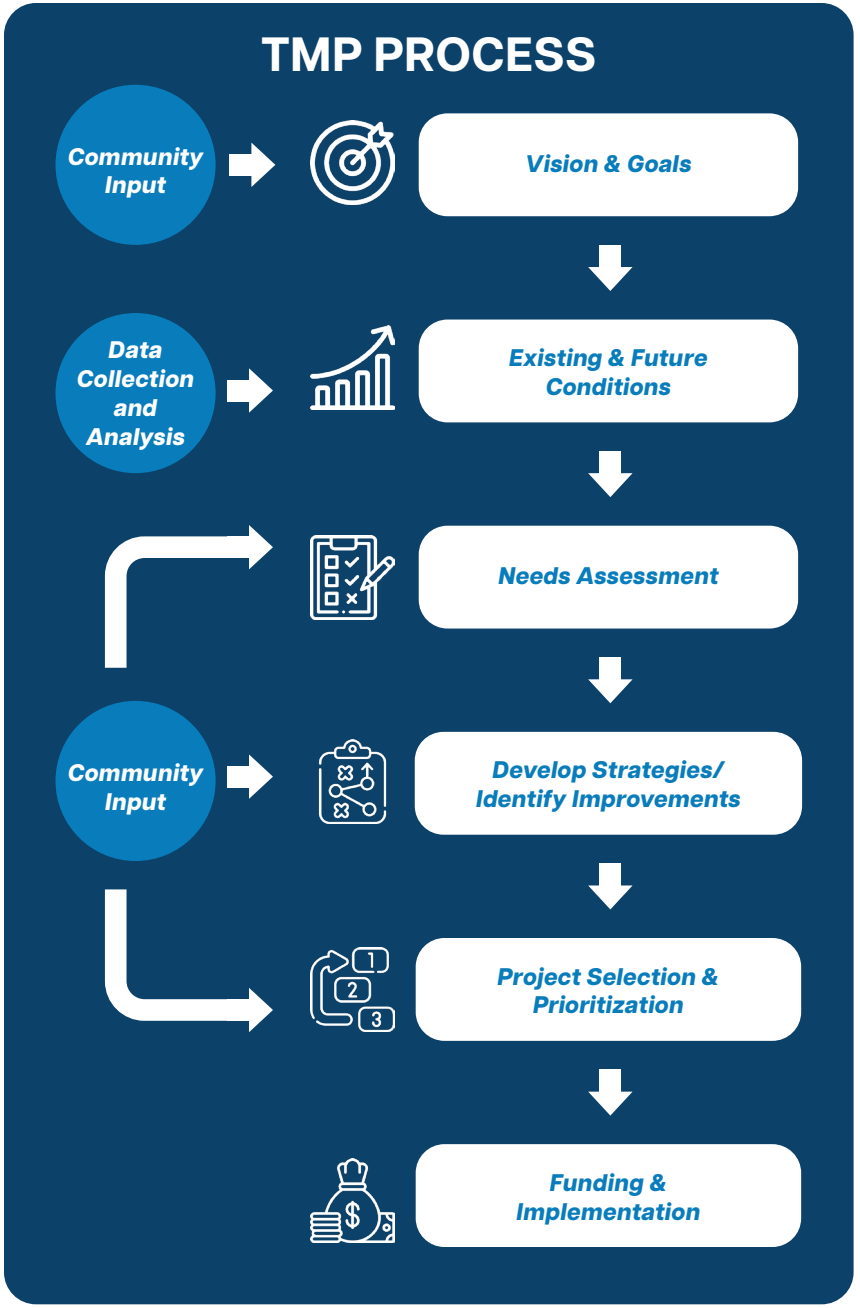
CITY OF MORGAN HILL

INTRODUCTION

The TMP was completed through a 16-month process that included community outreach and engagement, extensive data collection and review, and an assessment of transportation network deficiencies and needs based upon public feedback and technical analyses. The TMP provides an extensive list of transportation improvements and programs that are aimed at improving and enhancing travel for all users of the City's transportation network. Improvement projects were prioritized based on their effectiveness in addressing deficiencies and needs. The prioritized improvements along with programs, actions, and strategies serve as a guide to achieving the City's transportation goals.

TMP OBJECTIVES

- Identify City's Transportation Challenges
- Review Citywide Transportation Policies
- Identify Improvement Opportunities
- Update City's Capital Improvement Program (CIP) and Traffic Impact Fee (TIF)
- Update City Speed Survey
- Provide Guidance for Future General Plan Updates



CITY OF MORGAN HILL

VISION AND GOALS

The TMP utilizes the 2035 General Plan goals as a platform from which the importance of improving transportation options in the City for its residents is the focus. As a result, the guiding vision for the Morgan Hill TMP is;

"To create a safe, connected, and efficient transportation system for all residents and visitors of Morgan Hill"

Four primary goals for the TMP were identified based upon the community outreach effort and were utilized as a guide in the identification of appropriate TMP improvements and programs. The goals were vetted by the stakeholder committee and presented to commissions and council in early Summer 2024.

- The goals emphasize safety for all road users with the intent of reducing traffic fatalities and collisions for all modes of travel.
- Enhancing transportation options for travel within the City via improvements to the City's bicycle & pedestrian network to improve safety, comfort, and connectivity.
- Improving access to regional transit services and local destinations for non-auto trips
- Reducing traffic congestion on City roadways.

GOAL TMP-1: SAFETY

Eliminate traffic fatalities and reduce the number of non-fatal collisions for all modes within the City.

GOAL TMP-2: INCREASED TRANSPORTATION OPTIONS

Provide a range of high-quality and comfortable bikeways, trails, pedestrian facilities, and local transit options to create a safe, connected, balanced, and convenient transportation system for all ages, abilities, and socioeconomic groups.

GOAL TMP-3: ACCESS TO REGIONAL TRANSIT SERVICES AND LOCAL DESTINATIONS

Enhance access to regional transit services and local destinations like Downtown, schools, parks, and services through improved multimodal connections and local transit options that enable more trips to take place without relying on a private vehicle.

GOAL TMP-4: CONGESTION MANAGEMENT

Reduce travel time and improve vehicular throughput on City streets by improving intersection and corridor operations, minimizing the extent of regional cut-through traffic, and encouraging mode shift.

EXISTING/FUTURE CONDITIONS & NEEDS ASSESSMENT

Development of the TMP required an in-depth look at Morgan Hill's existing transportation system, to document current deficiencies and needs, and to identify opportunities for improvements and initiatives that will advance local priorities. Extensive data collection, review of data, and analyses were completed by the consultant team in coordination with City staff for the purpose of identifying current transportation deficiencies and needs. The evaluation included:

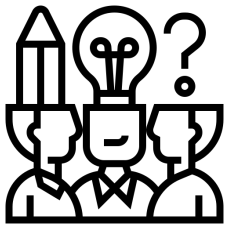
- Collision analysis
- Sidewalk gaps and crossing opportunities assessment
- Bicycle Level of Traffic Stress (LTS) assessment
- Citywide Engineering & Traffic Survey (E&TS)
- Roadway operations Level of Service (LOS) Analysis
- Regional cut-through traffic analysis

CITY OF MORGAN HILL

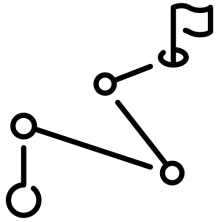
COMMUNITY ENGAGEMENT

As a part of the TMP, extensive outreach to engage Morgan Hill's residents, business owners, and community groups and organizations was conducted to understand their experiences walking, biking, taking transit, and driving in the City, as well as to get input on the type of transportation projects that would improve their quality of life. The community engagement effort included community meetings, on-line surveys, and public meeting to:

- Formation of a stakeholder committee that met 6 times throughout the process
- Two on-line surveys with more than 800 respondents participating
- Three focused City staff meetings
- Two community meetings held at project initiation Fall 2023 and Fall 2024
- 11 focus community focus group meetings led by City staff
- Nine City Council and Commission meetings

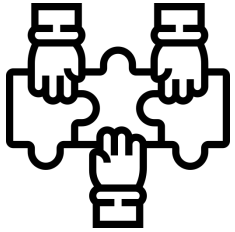


Partner with the community, including, residents, area businesses and stakeholders to gather information and ideas and develop solutions that address multiple interests



Develop updated goals and a Vision for the future of Morgan Hill's multi-modal transportation system

Build consensus around a set of feasible projects that improve circulation and safety for all users and travel modes



Develop partnerships for future funding opportunities and the development of regional transportation services and projects

IMPROVEMENT TOOLBOX

The TMP includes a comprehensive package or "toolbox" of potential improvements designed to address Morgan Hill's diverse transportation needs. This toolbox offers examples of a variety of measures to improve the safety and comfort of people walking, biking, and driving in Morgan Hill. The TMP's toolbox provides the City with the flexibility to implement targeted improvements that align with community priorities and future growth, ensuring a more connected and accessible transportation system in Morgan Hill.

Utilizing feedback via the community outreach effort and analyses which included:

- Identification of Pedestrian Priority Zones
- Bicycle LTS
- Operations LOS
- Street Typologies, and
- Speed Surveys

A comprehensive menu of measures were identified to address the identified transportation deficiencies. The measures were categorized into four general categories based upon their applicability in addressing the various types of deficiencies.

PEDESTRIAN IMPROVEMENT MEASURES


Enhanced Crossings


Pedestrian Refuge Island


Street Trees/ Landscaping

BICYCLE IMPROVEMENT MEASURES


Sidepath


Buffered Bike Lanes


Bike Lane

ROADWAY CONGESTION & DELAY MEASURES

All Way Stop Control

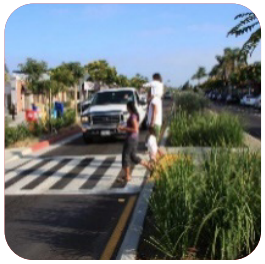
Roundabouts

Signals

TRAFFIC CALMING MEASURES

Radar Speed Feedback Sign

Signing & Striping


Median Island

IMPLEMENTATION

The data review, evaluation findings, and feedback received from community outreach were used to develop a list of transportation projects and programs that are currently in progress or previously identified, as well as new projects and programs that emerged through the Plan development process. The TMP will be used to guide future transportation investments in Morgan Hill.

Developing Project Recommendations

As part of the TMP, gaps and opportunities in the transportation system were compiled based on an analysis of collisions, multimodal deficiencies, traffic operations, speeding issues, and community input. Additionally, previous City plans, County plans, and conditions of approval for new developments were reviewed to ensure consistency in recommendations.

The toolbox of measures were then used along with street typologies to identify specific improvements throughout the City's transportation system. A total of 91 projects were developed as part of the TMP to address gaps and opportunities. Based on their primary characteristics, the list of projects were organized into the following four project categories:

- Pedestrian Improvements
- Bikeway and Trail Network Improvements
- Vehicle Operations Improvements
- Traffic Calming Improvements

Identifying Project Prioritization

To support plan implementation and to effectively target the City's available funding and staff resources toward meeting the TMP's goals, the 91 identified projects were ranked, or prioritized. The prioritization process assessed the benefits of each of the identified transportation improvement projects in their effectiveness in meeting TMP goals, addressing needs, and feasibility based on potential funding for implementation. The following seven categories were used in project evaluation to score and prioritize each project:

- Safety
- Pedestrian Safety, Comfort, and Connectivity
- Bike Safety, Comfort, and Connectivity
- Access to Schools and Local Destinations
- Vehicle Operations
- Local Traffic Calming
- Equity

The evaluation criteria metrics and point generation is provided in Table ES1. Based on the evaluation process, each project was awarded points and ranked into "Tier 1", "Tier 2" and "Other" projects. 21 projects were identified as "Tier 1" projects, as the highest priority local projects. An additional 20 projects were identified as "Tier 2" projects. Focusing on the TMP's high priority projects and seizing opportunities (such as available funding or linking projects to incoming development), the City will advance projects toward implementation. The Tier 1 projects are shown on Figure ES1 and described in Tables ES2 and ES3.

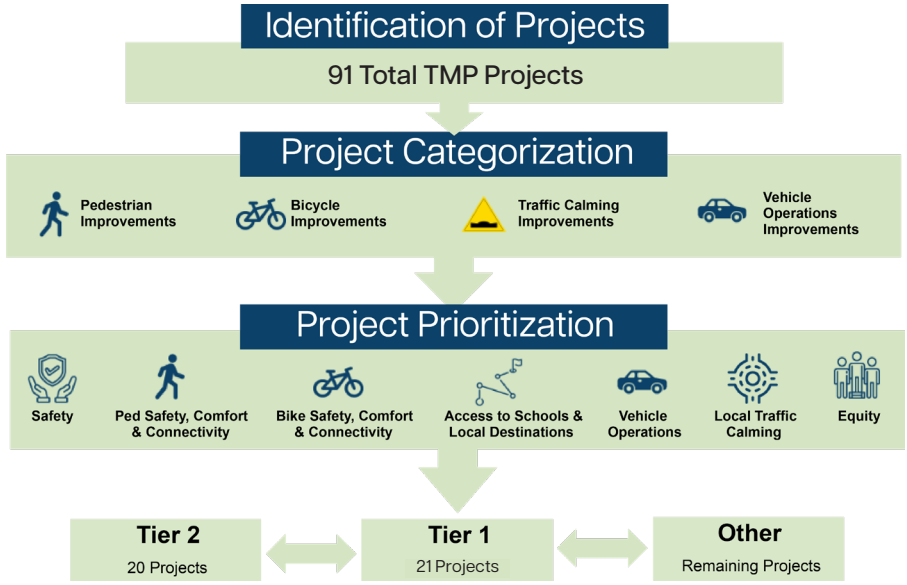


TABLE ES 1: EVALUATION CRITERIA METRICS AND POINTS GENERATION

CATEGORY	MAXIMUM TOTAL POINTS	EVALUATION METRIC
Safety	10	**High Injury Network f(HIN):** Project located along or intersects with a corridor
Pedestrian Safety, Comfort, and Connectivity	8	**Priority Zone:** Project located in pedestrian priority zone (very high, high, medium)
Bike Safety, Comfort, and Connectivity	8	**Bicycle LTS:** Existing bicycle level of traffic stress along project area
Access to Schools and Local Destinations	8	**School Access:** Number of schools located within 0.25 and 0.5 miles of a project **Destination Access:** Project located within 0.25 or 0.5 miles of a destination
Vehicle Operations	5	**Vehicle Operations:** Project improves vehicular operations at intersections or roadway segments.
Local Traffic Calming	5	**Local Traffic Calming:** Project incorporates traffic calming to manage vehicle speeds.
Equity	6	**Equity:** Presence of transportation priority populations in the project area

Figure ES 1 - Proposed Segment and Intersection Improvements

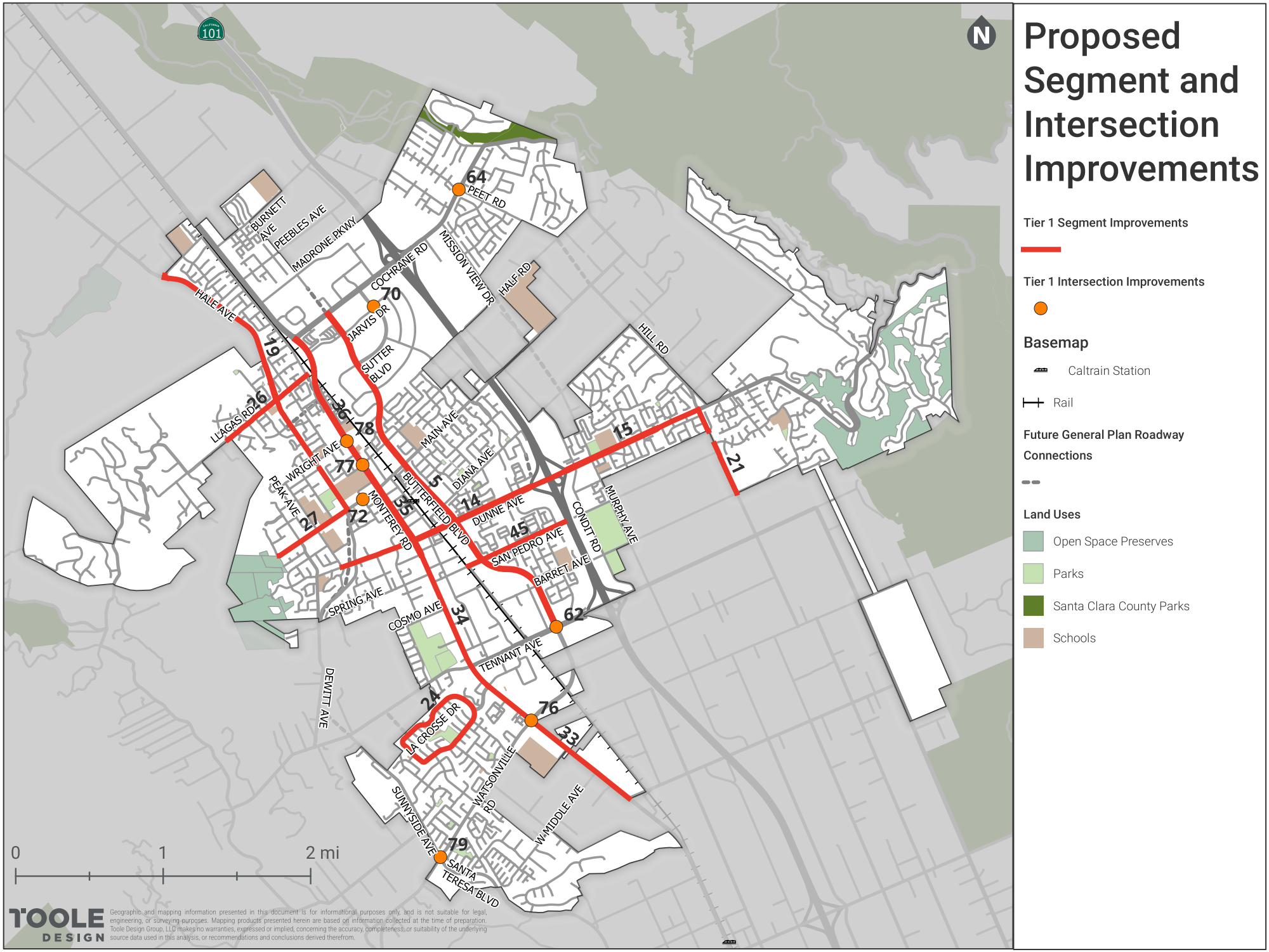


TABLE ES 2: TIER 1 SEGMENT PROJECTS

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
5	Butterfield Boulevard Corridor Improvements *(Butterfield Boulevard between Monterey Road and Cochrane Road)*		- Adaptive Traffic Signal Control along Butterfield Boulevard - Class II bike lanes with buffer where space allows (ROW may not be available) - Fill sidewalk gap - Between Tennant Avenue and Monterey Road - Signing/ striping (narrow lanes, speed limit signs, speed radar signs) - Future extension of Butterfield Boulevard to Madrone Parkway (General Plan Roadway Improvement) - Consider policy change to allow LOS E operations along Butterfield Boulevard between Monterey Road & Cochrane Road for improved pedestrian/bike safety - Curb-extensions, remove right-turn lanes at all signalized intersections - Crossing at Butterfield Boulevard/Jarvis Drive	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
14	Dunne Avenue between Peak Avenue and US 101		- Class II buffered bike lanes between Peak Avenue and US 101 (May require removal of parking spaces) - Improve railroad crossing for bikes/pedestrians - Evaluate crossing opportunities between Butterfield Boulevard and US 101 - Curb extensions at Peak Avenue and Dunne Avenue - Enhance existing crossings and controlled right-turn movements at Dunne Avenue and US 101 Southbound ramps	Low Cost Improvement via Pavement Rehabilitation, Traffic Impact Fee, Improved by Future Development, Alternative Funding Sources Needed, Grant Funding
15	Dunne Avenue between US 101 and Hill Road		- Class II bike lanes with buffer where space allows between US 101 and Hill Road - Add sidewalk - Enhance existing crossings at Dunne Avenue/Condit Road - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Controlled right-turn movements at Dunne Avenue and US 101 Northbound ramps - Improved pedestrian crossing to park at northeast corner, curb extensions, and removal of right turns at Murphy Avenue/ Dunne Avenue - HAWK/RRFB at Dunne Avenue/Tassajara Circle and Dunne Avenue/Pine Way	Low Cost Improvement via Pavement Rehabilitation, Traffic Impact Fee, Improved by Future Development, Alternative Funding Sources Needed, Grant Funding

TABLE ES 2: TIER 1 SEGMENT PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
19	Hale Avenue Corridor Improvements		- Add sidewalk - HAWK Midblock crossing across Hale Avenue at Stoney Creek Way to access bus stops and park. - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Curb extensions at Llagas Road/Hale Avenue intersection	Traffic Impact Fee, Improve with Future Development, Alternative Funding Sources Needed, Grant Funding
21	Hill Road between Dunne Avenue and City Limit		- Add sidewalk - Class II bike lanes with buffer where space allows - Chokers at Hill Road/Sundance Drive - RRFB/HAWK crossing at Hill Road/Sundance Drive providing access to Perc Pond Parks	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehab, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
24	La Crosse Drive		- Curb extensions, crossing improvements in school zone - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Potentially remove or modify tree island in front of school for improved visibility at crosswalk	Alternative Funding Sources Needed
26	Llagas Road Corridor Improvements *(Llagas Road between Llagas Court and Old Monterey Road)*		- Class II bike lanes with buffer where space allows between Llagas Court and Hale Avenue - Re-use excess ROW between Hale Avenue and Old Monterey Road to create a linear park, with a dedicated paved bike path - Curb extensions at Llagas Road/Hale Avenue intersection - RRFB midblock crossing near park (Llagas Road/Llagas Court, Llagas Road/Murphy Spring Drive)	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
27	Main Avenue between John Telfer Drive and Hale Avenue		- Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Class II bike lanes with buffer where space allows (may require removal of parking) - Class III bike boulevard west of Peak Avenue - Add sidewalk - Curb extensions at Peak Avenue/Main Avenue & Dewitt Avenue/Main Avenue	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding

TABLE ES 2: TIER 1 SEGMENT PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
33	Monterey Road between Middle Avenue and Vineyard Boulevard		- Class II bike lanes with buffer where space allows - Add sidewalks - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Median islands - In roadway signs & delineators - Signal coordination with lower speeds - Signal at Monterey Road/Rome Avenue	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
34	Monterey Road between Vineyard Boulevard and Dunne Avenue		- Class II bike lanes with buffer where space allows - Add sidewalks - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - In roadway signs & delineators - Signal coordination with lower speeds - Pursue controlled crossing (HAWK) at location between Ciolino Avenue and Cosmo Avenue - Turn restrictions via median along Monterey Road at San Pedro Avenue - New crosswalk on north approach of Monterey Road/ Cosmo Avenue - Curb-extensions, remove right-turn lanes at all signalized intersections between Vineyard Boulevard and Dunne Avenue	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
35	Monterey Road between Dunne Avenue and Main Avenue		- Signing/striping (speed limit signs, speed radar signs) - Signal coordination with lower speeds - Raised intersections - Improve intersection visibility at 1st street crosswalk next to Veterans memorial - Consider lane reduction to single lane with voter approval in the future	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding

TABLE ES 2: TIER 1 SEGMENT PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
36	Monterey Road between Main Avenue and Cochrane Road		- Class II bike lanes with buffer where space allows - Fill sidewalk gaps - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Median islands - In roadway signs & delineators - Signal coordination with lower speeds - Widen to 4 lanes between Cochrane Road and Old Monterey Road per the General Plan	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
45	San Pedro Avenue between US 101 and Railroad Avenue		- Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Add sidewalk - Class II bike lanes (might require removal of parking) - Improve bike/ped facilities at railroad crossing - RRFB at San Pedro Avenue/San Benito Drive and San Pedro Avenue/San Ramon Drive	Traffic Impact Fees, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding

TABLE ES 3: TIER 1 INTERSECTION PROJECTS

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
62	Butterfield Boulevard/ Tennant Avenue		- Lengthen westbound left turn pocket (interim) - Second westbound left turn at Butterfield Boulevard/ Tennant Avenue (long-term)	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation
64	Peet Road/Cochrane Road		- Roundabout	Traffic Impact Fee
70	Sutter Boulevard/ Jarvis Drive		- Limit Left Turns from Jarvis Drive	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance
72	Del Monte Avenue/ Main Avenue		- Curb Extensions	Alternative Funding Sources Needed

TABLE ES 3: TIER 1 INTERSECTION PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
76	Monterey Road/ Watsonville Road/ Butterfield Boulevard		- Physical improvements to traffic signal configuration along with signal timing adjustment	Low Cost Improvement by City Maintenance
77	Monterey Road/ Central Avenue		- Left-turn restrictions from Central Avenue and enhanced pedestrian crossing across Monterey Road with HAWK/ RRFB signal - Alternative - signal	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
78	Monterey Road/Wright Avenue		- Enhance existing crossing - All four corners of the intersection require improvement to ADA standards. Remove on-street parking within 50-feet of intersection to improve sight lines for pedestrian safety. Major signal modification required due to utilities	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
79	Santa Teresa Boulevard/Sunnyside Avenue/Watsonville Road		- Install signal. Consider 1-lane roundabout with right-turn channelization if ROW can be acquired.	Traffic Impact Fees, Improved by Future Development, Grant Funding

LEGEND:

 Pedestrian Improvements

 Bicycle Improvements

 Vehicle Operations Improvements

 Traffic Calming Improvements

DEFINITIONS:

ROW - Right-of-Way
HAWK - High-Intensity Activated crosswalk signal
RRFB - Rectangular Rapid Flashing Beacon
ADA - American with Disabilities Act

CITY OF MORGAN HILL

CITYWIDE INITIATIVES AND PROGRAMS

In addition to physical improvement projects, the TMP also recommends several City-wide initiatives and policies to improve the City's transportation program. Some of these can be completed using existing City resources, however, most of these would require additional funding and staff resources. These initiatives and programs have been organized into the following categories:

- Education/Marketing
- Safety Programs
- Multimodal Programs
- Funding Sources
- Maintenance

TMP Path Forward ...

The TMP will enable the City to compete for regional, state, and federal grant funds and to prioritize the specific grant funds to pursue. In addition to grants, revenues to complete TMP projects will come from sources such as incoming development transportation impact fees, and the City's capital improvement program. Once funding is allocated, each project would need to go through its own design, outreach and construction phase.

The TMP will remain a living document, updated every 5-10 years to ensure alignment with changing conditions. The City will use performance metrics to evaluate the effectiveness of transportation investments and adjust strategies as needed to ensure the goals of safety, mobility choice, access, and congestion management are consistently met. It will serve also as the foundation for future updates to the City's Transportation Element of the General Plan, ensuring alignment with long-term City goals. This path forward ensures that Morgan Hill's TMP serves as both a guiding framework for future infrastructure development and a responsive, adaptable plan that can meet the City's evolving transportation needs over time.

01

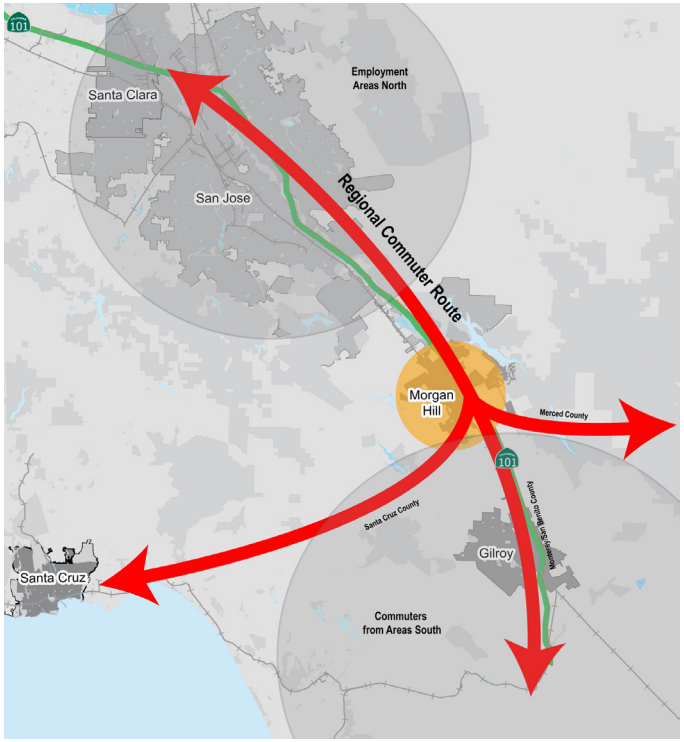
INTRODUCTION

CITY OF MORGAN HILL

Morgan Hill's Transportation Landscape

Located in south Santa Clara County between Gilroy and San Jose, Morgan Hill is a mostly residential city with a small-town character, a vibrant downtown, and abundant access to open space and recreational amenities. The City is bisected by US 101, which extends north through Santa Clara and San Mateo Counties, where most employment centers are located, and south through San Benito County, which is primarily residential.

Morgan Hill experiences significant traffic congestion on City roadways during commute periods due to regional traffic caused by the mismatch between employment and housing land uses within and outside of City limits. During peak morning and evening commute hours, access to and from US 101 and the residential areas of Morgan Hill is hindered by over-saturation of the freeway mainline and associated diverted regional traffic on local roadways. Furthermore the City is served by limited local and regional transit corridors with a low frequency of transit routes.

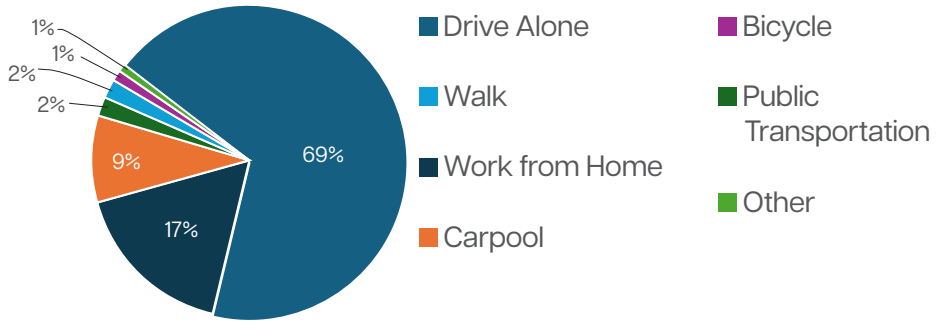


Regional Peak Period Commute Route

In the last few years, Morgan Hill has seen a surge in new housing and industrial development. The City's downtown area has also become a bigger and more robust attraction with additional amenities. By 2050, Morgan Hill is projected to experience significant residential and employment growth. Additionally, residential communities south of Morgan Hill, such as Gilroy and Hollister as well as areas within Monterey and Merced counties, are projected to grow significantly, as is regional employment.

Due to the lack of alternative mobility choices, Morgan Hill is likely to continue facing significant regional and local transportation challenges as the City and the region grow. The current options of transportation in Morgan Hill are - walking, bicycling, public transit/ride-share (MoGo, VTA Paratransit, Senior Center RYDE program), and driving. Per the 2022 American Community Survey 5-year estimates, approximately 69% percent of Morgan Hill commuters drive alone to work and nine percent carpool to work. Walking, bicycling, public transportation, and taxicab/motorcycle/other make up less than five percent of the City's work trip mode share.

COMMUNITY CHARACTERISTICS – MODE SHARE



Source: 2022 American Community Survey 5-year Estimates

While this regional context helps frame the analysis of Morgan Hill's transportation needs, travel within the City presents its own challenges. Traffic congestion on local roadways, intersections that are challenging for pedestrians to cross, and a lack of a fully interconnected bicycle network are among the issues that Morgan Hill residents, workers, and visitors face daily.

PURPOSE OF THE TRANSPORTATION MASTER PLAN (TMP)

The Transportation Master Plan (TMP) is a comprehensive review of the City's transportation system to help address the challenges related to travel within Morgan Hill for daily needs such as work, recreation, school, etc. The TMP will be used to plan for new development and future transportation demands, to improve inter-city travel for all residents, to create opportunities for alternative modes of travel, and to identify funding mechanisms for improvements. This will be done strategically, within the City's limited budget and with limited state and federal funding.

The TMP will address these challenges in a way that is responsive to anticipated demographic changes and growth of the City. The TMP will also guide policy and investment decisions for Morgan Hill's transportation network over the next 5-10 years.

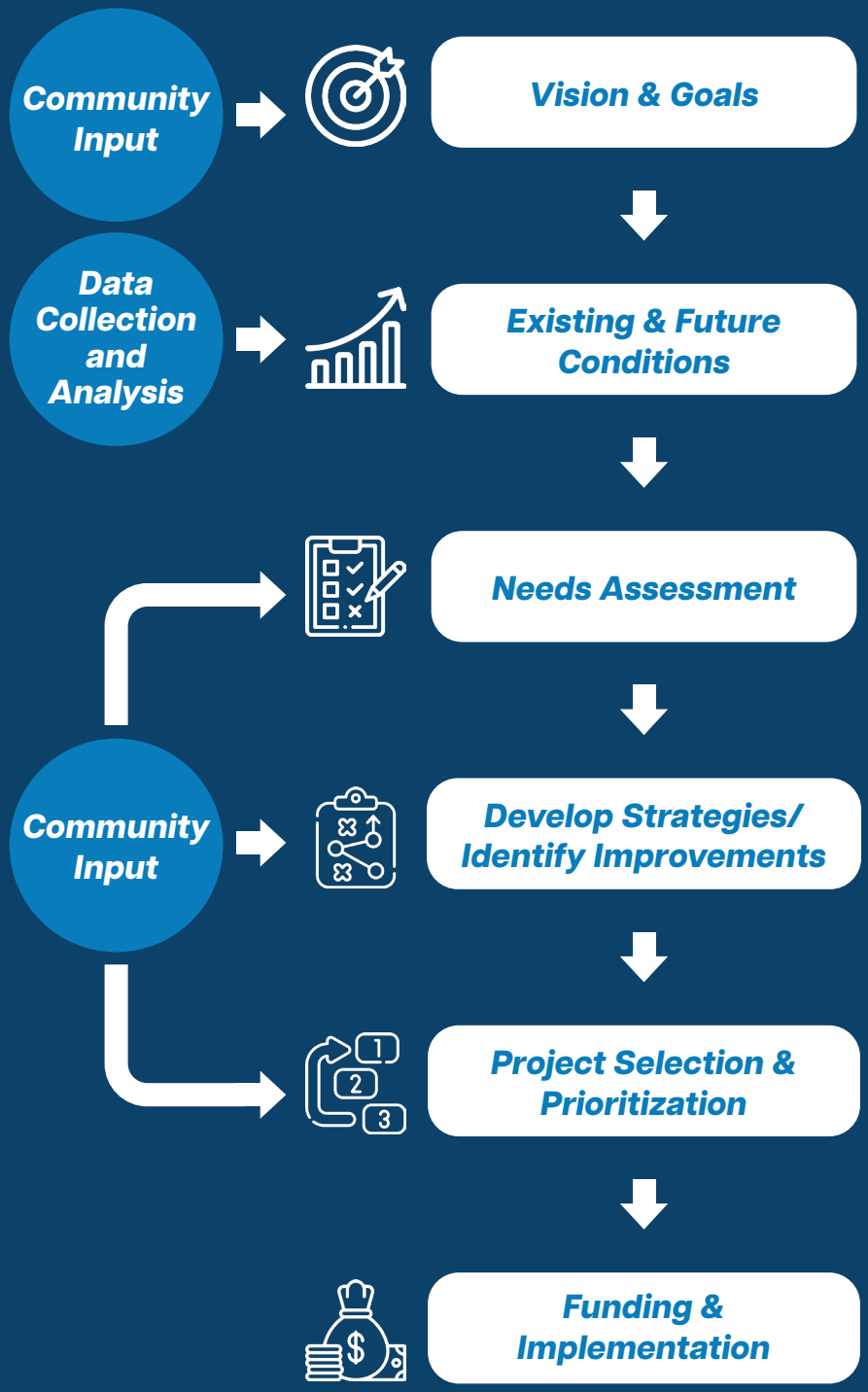
Based on the policies and themes from the Morgan Hill 2035 General Plan and other efforts like the City of Morgan Hill Bikeways, Trails, Parks, and Recreation Master Plan (2017), VTA's Community Based Transportation Plan (2021), City of Morgan Hill Vision Zero Policy (2018), and Morgan Hill Master Street Tree Plan (2019), the TMP sets Morgan Hill on a course of action, identifying projects, priorities, and a strategy for moving forward. It is envisioned that the strategies and actions identified as part of this TMP will be incorporated as part of the City's future General Plan update.

All improvement projects developed as part of the TMP are provided in Appendix A. All technical memorandums associated with analyses conducted for the TMP are provided in Appendix B. All summaries of community outreach meetings conducted as part of the TMP are provided in Appendix C.

TMP OBJECTIVES

- Identify City's Transportation Challenges
- Review Citywide Transportation Policies
- Identify Improvement Opportunities
- Update City's Capital Improvement Program (CIP) and Traffic Impact Fee (TIF)
- Update City Speed Survey
- Provide Guidance for Future General Plan Updates

TMP PROCESS



02

TMP VISION AND GOALS

The vision for the TMP tiers off the goals established in the City's General Plan. The General Plan's overarching goal is to maintain Morgan Hill's family-friendly character and strong sense of community while the City grows and prospers. It contains multiple "Big Ideas" that are relevant to the TMP:

- Offer and improve services, amenities, educational opportunities, and improvements that encourage an active, healthy lifestyle.
- Support and connect all modes of transportation.

RELEVANT TRANSPORTATION GOALS FROM THE CURRENT TRANSPORTATION ELEMENT OF THE 2035 GENERAL PLAN
TR-1: A balanced, safe, and efficient circulation system for all
TR-2: A system designed for a healthy and active community
TR-3: A coordinated, continuous network of streets and roads
TR-4: Emphasis on transportation improvements along major City arterials
TR-6: A safe and efficient transit system
TR-8: A comprehensive bikeway system that safely connects residents and community destinations
TR-9: Expanded pedestrian opportunities

The guiding vision for the Morgan Hill TMP is:

"To create a safe, connected, and efficient transportation system for all residents and visitors of Morgan Hill"

The vision provides a guiding principle for the City to improve and manage the transportation system for different users in the City. Through this TMP effort, the City identifies and prioritizes the types of projects and programs that most enhance transportation safety, connectivity, and access for all modes of travel utilized by residents of Morgan Hill.

TMP Goals

Several goals support the TMP's vision of promoting a safe, connected, and efficient transportation system for all. These goals include enhancing pedestrian, bicycle, and vehicular safety on roadways, increasing multimodal options, improving access to destinations, and managing traffic congestion within the City.

GOAL TMP-1: SAFETY

Eliminate traffic fatalities and reduce the number of non-fatal collisions for all modes within the City.

GOAL TMP-2: INCREASED TRANSPORTATION OPTIONS

Provide a range of high-quality and comfortable bikeways, trails, pedestrian facilities, and local transit options to create a safe, connected, balanced, and convenient transportation system for all ages, abilities, and socioeconomic groups.

GOAL TMP-3: ACCESS TO REGIONAL TRANSIT SERVICES AND LOCAL DESTINATIONS

Enhance access to regional transit services and local destinations like Downtown, schools, parks, and services through improved multimodal connections and local transit options that enable more trips to take place without relying on a private vehicle.

GOAL TMP-4: CONGESTION MANAGEMENT

Reduce travel time and improve vehicular throughput on City streets by improving intersection and corridor operations, minimizing the extent of regional cut-through traffic, and encouraging mode shift.

03

EXISTING CONDITIONS AND NEEDS ASSESSMENT

Overview

Development of the TMP required an in-depth look at Morgan Hill's existing transportation system, to document current deficiencies and needs, and to identify opportunities for improvements and initiatives that will advance local priorities. This section describes the findings from the existing conditions analysis and assessment as they relate to transportation safety and the availability and condition of the current transportation options – walking, bicycling, transit, and driving within the City.

Transportation Safety

Various methods and data were used to assess safety conditions on the roadway system in Morgan Hill, including assessments of relative rates of crash severity in Morgan Hill compared to state and peer communities, and evaluation of locations with high rates of crashes within Morgan Hill. Analyzing safety conditions in Morgan Hill allowed the project team to identify focus areas within the City that could benefit from safety enhancements and improvements, guide improvement project prioritization, and provide background for further analysis as part of the City's Safety Action Plan.

Collison data was utilized to analyze street segments and develop a High Injury Network, or HIN, which identifies the highest concentration of severe and fatal crashes on the roadway system (see Figure 1).

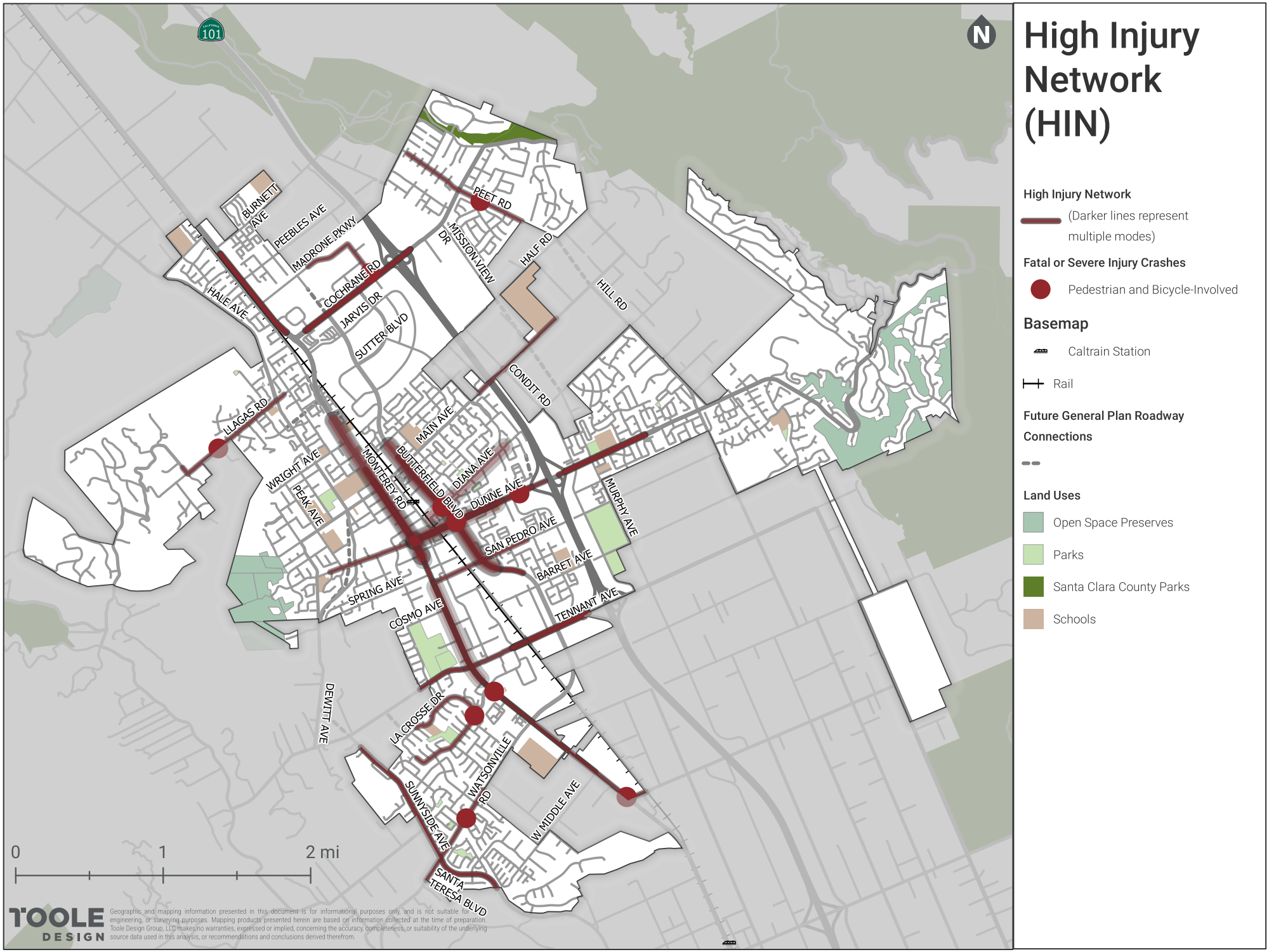
CRASHES SEVERITY SUMMARY

TOTAL CRASHES	FATAL CRASHES (2016 - 2020)			SEVERE CRASHES (2016 - 2020)		
	BIKE	PEDESTRIAN	VEHICLE	BIKE	PEDESTRIAN	VEHICLE
512	0	3	8	2	8	20

Safety Analysis Summary

- Morgan Hill has lower collision rates per capita than neighboring cities and the state overall.
- Compared to neighboring cities, Morgan Hill has a lower share of fatal and injury collisions involving bicyclists and pedestrians (15%) over a 5-year average, but a higher share when compared to the statewide average over the same 5-year period (13%).
- Most collisions over the 5-year data period (2016-2020) occurred along arterial and collector streets in Morgan Hill.
- Arterial and collector streets in Morgan Hill make up a majority of the HIN for all modes – based on locations of severe and fatal crashes – with the HIN for all modes concentrated on the west side of the City where development is more concentrated. Safety improvements should be prioritized in these areas.

Figure 1: High Injury Network (all modes) and Pedestrian and Bicycle Involved Fatal or Severe Injury Crashes



Walking in Morgan Hill

Walking destinations in Morgan Hill are connected by a system of sidewalks and crosswalks. While most major streets have sidewalks, there are just under 16 miles of missing sidewalks or sidewalks with gaps in Morgan Hill, which pose connectivity, safety, and accessibility issues. There are generally frequent opportunities to cross major streets in Morgan Hill particularly surrounding Downtown Morgan Hill. Most intersections along major roads in Morgan Hill are signalized, and a growing number of intersections feature Rectangular Rapid Flashing Beacons (RRFBs) and mid-block crossings, most of which are located near schools.

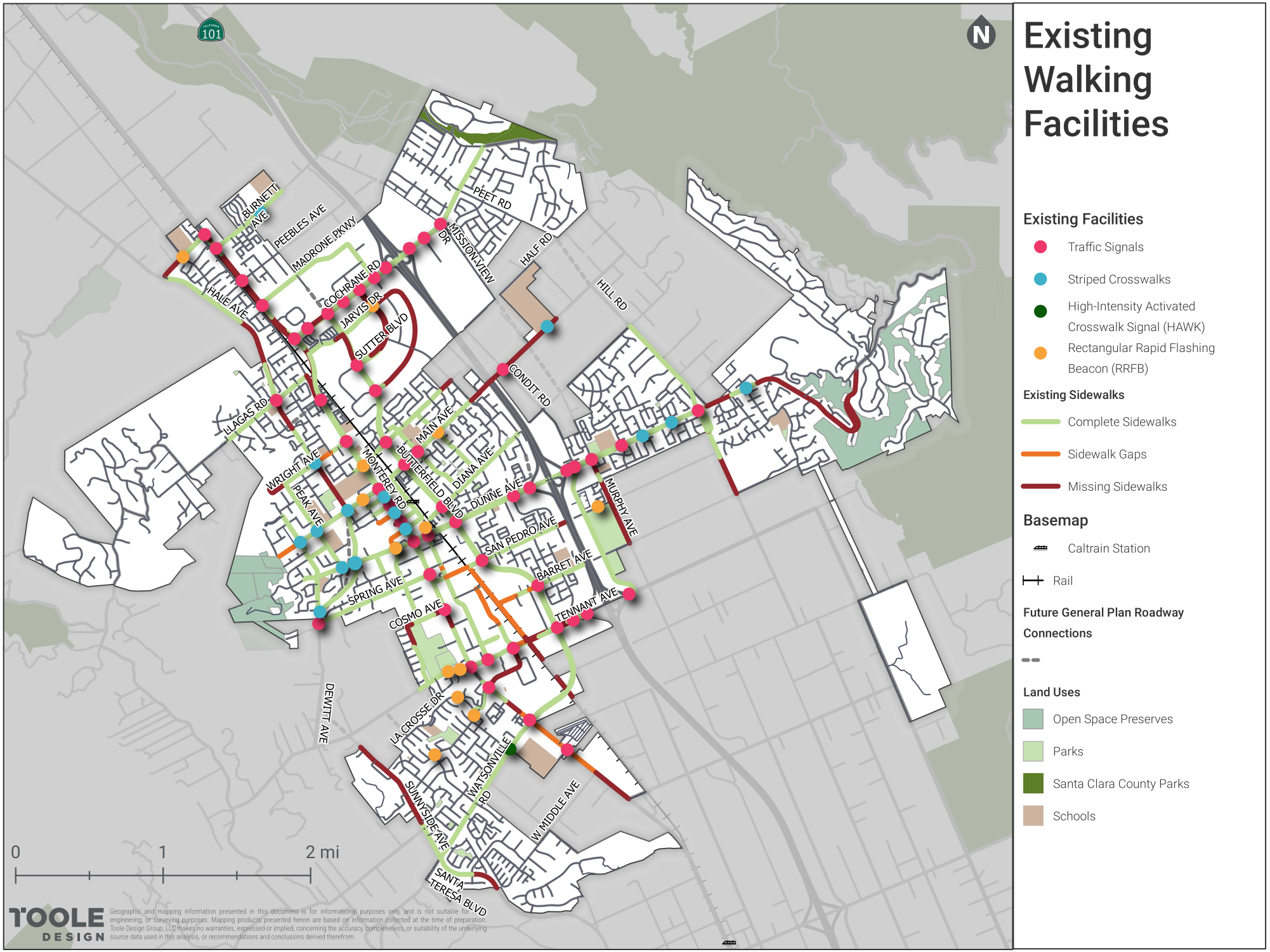
There are opportunities to enhance existing crossings, add new crossings, and close sidewalk gaps in the City. Pedestrian improvements should be prioritized near schools, the City's Downtown area, and near other City destinations like parks, the Caltrain station, bus stops, and public services where a greater amount of pedestrian activity is present.

Existing walking facilities in the City are shown in Figure 2.

KEY ISSUES IDENTIFIED BY THE COMMUNITY ABOUT WALKING IN THE CITY...

- Lack of safe crossings or sidewalks, and distances between destinations and homes.
- Lack of safe crossings over US 101
- Unsafe walking conditions due to high speeding

Figure 2: Existing Walking Facilities



Biking in Morgan Hill

Morgan Hill features a growing network of on-street bikeways and multi-use trails that provide recreational opportunities and transportation connections to destinations across the City. The existing on-street bicycle network includes a mix of dedicated bike lanes and designated bike routes (i.e., shared lanes), while the trail network includes off-street multi-use paved and unpaved walking paths/trail segments.

Past planning efforts in Morgan Hill identified potential bikeway and trail network improvements, some of which have been implemented as part of identified bikeway projects or as part of larger roadway improvement efforts. Currently, many streets in the City have bike lanes.

There are opportunities to improve the bicycle network and provide safe and comfortable on-street bikeway connections across the City by providing a greater separation between vehicle and bicycles especially along arterial streets, providing continuous facilities along roads that pass between the City and County jurisdiction, and providing quality bikeways at the crossings across Highway 101.

Table 1 and Table 2 describe Morgan Hill's existing bikeway and trail network, which is illustrated in Figure 3. Understanding the extent and condition of these networks helps reveal where gaps exist and what improvements can be made to make bicycling safer, better-connected, and more comfortable for Morgan Hill residents of all ages and abilities.

TABLE 1: ON-STREET BIKEWAY FACILITY TYPES

FACILITY TYPE/CLASS	EXAMPLE
Class I: Sidepaths Sidepaths are paved trails typically located at sidewalk level that provide pedestrians and bicyclists physical separation from motor vehicle facilities.	Butterfield Blvd 
Class II: Bike Lane / Buffered Bike Lane A bike lane is a dedicated space within the paved area of a road for bicycle use. A buffered bike lane is an on-street bicycle-only lane with a painted striped buffer that creates additional physical separation between bicycles and the motor vehicle lane.	Main Avenue 
Class III: Bike Route Bike routes are streets that are shared with vehicles and typically feature roadside signs and painted “sharrow” markings to alert motorists that the road is shared with bicyclists.	Depot Street 
Class IV: Separated Bikeway A separated bike lane includes a physical barrier/vertical element (e.g., flexible posts, bollards, planters, parked vehicles, or curbs) between the bike lane and the motor vehicle lane.	Main Avenue 

MULTI-USE TRAILS

The existing multi-use trail network includes approximately 16 miles of off-street trails, with approximately nine miles of paved multi-use trails and approximately seven miles of unpaved walking paths. In addition to recreational uses, some trails also play important roles in the City's transportation system by providing connections to key destinations and filling in network gaps. However, some trails have paved sections that transition to unpaved sections, this inconsistency can cause challenges and difficulties for people, especially for those who lack proper equipment and who have mobility limitations.

Opportunities exist to increase connections between trails on the west and east sides of the City, improve trail access, and pave and enhance trails such as the Madrone Channel to increase their usability.

TABLE 2: MAJOR TRAIL DESCRIPTIONS AND MILEAGE

DETAILS	EXAMPLE IMAGE
Coyote Creek Parkway - Surface Type: Paved - Length: 26.9 miles - Connections: Regional Coyote Creek Trail is a regional trail that covers a total of 18.7 miles from San José to Morgan Hill. The southern portion of the Coyote Creek Trail encompasses the section of trail that is in Morgan Hill and begins at Tully Road and extends southward terminating in Morgan Hill. The Coyote Creek Trail is a paved multi-use trail, allowing hiking, biking, and equestrian use. This trail is managed by the County of Santa Clara Parks and Recreation Department.	

TABLE 2: MAJOR TRAIL DESCRIPTIONS AND MILEAGE (CONT.)

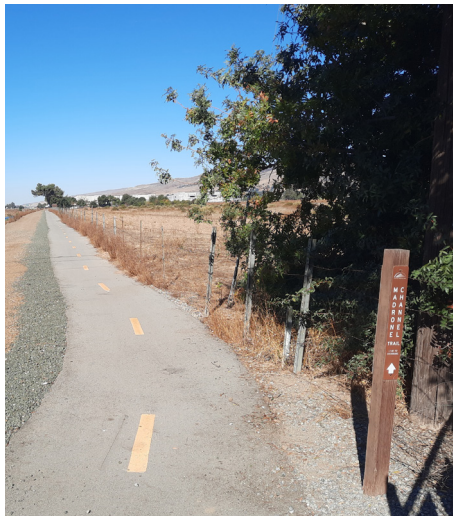
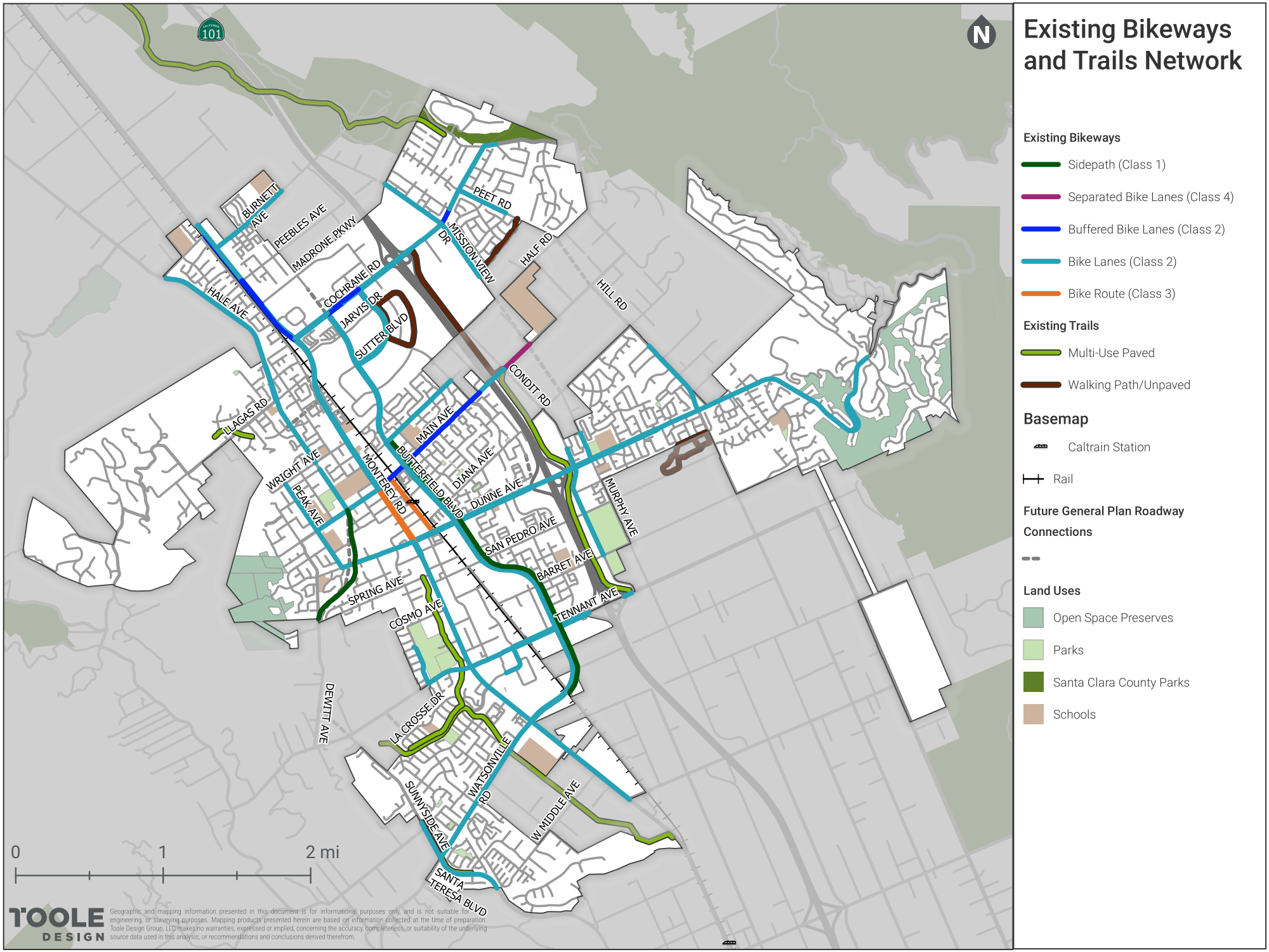
DETAILS	EXAMPLE IMAGE
Madrone Channel Trail - Surface Type: Paved - Length: 3 miles - Connections: Local The Madrone Channel Trail is a paved trail that travels the length of Morgan Hill adjacent to Highway 101, providing three miles of north-south off-street usage for bikes and pedestrians. Sections of the Madrone Channel Trail are narrow, especially if users must pass each other, and are bordered on one side by barbed-wire fencing, and some sections with unpaved surfaces on both sides.	 
West Little Llagas Creek Taril - Surface Type: Paved - Length: 2 miles - Connections: Local West Little Llagas Creek Trail is a paved two-mile long multi-use paved trail that extends from Spring Avenue to Monterey Road at Llagas Creek, and is classified as a locally designated Wildlife Interpretive Corridor, providing a space where the community can view the local environment and wildlife. The trail features interpretive signs and artwork depicting native wildlife and educational information. The trail is a result of an agreement between Valley Water and the City of Morgan Hill.	
San Pedro Ponds Trail - Surface Type: Unpaved - Length: 1 mile - Connections: Local The San Pedro Ponds trail offer a one-mile public trail that navigates the 29-acre groundwater recharge area at Hill Road and San Pedro Avenue. The trail is a result of a joint use agreement between Valley Water and the City of Morgan Hill.	

Figure 3: Existing Bikeways and Trails Network



Bicyclist Level of Comfort Analysis
LEVEL OF TRAFFIC STRESS ANALYSIS

Level of Traffic Stress (LTS) analysis is an evaluation method that quantifies the level of comfort bicyclists feel when riding on roads on a scale from 1 (lowest stress) to 4 (highest stress). LTS values are based on factors such as vehicle travel speed, traffic volume, number of lanes, and the presence of on-street parking. Streets where bicyclists have fewer interactions with vehicles and greater levels of physical separation result in lower stress conditions and are therefore more likely to appeal to a wider range of potential bicyclists. In addition to evaluating existing conditions, LTS analysis can help determine areas within the City of Morgan Hill that could benefit from improved bikeways with greater separation from vehicles.

Figure 4 depicts LTS values for all streets in Morgan Hill; multi-use trails and sidepaths are also included in the LTS analysis and are considered "low stress." While all local (residential) roads are classified as low stress, many major streets are barriers both for people interested in bicycling or crossing these major corridors. Only two major street segments in Morgan Hill with existing bike lanes are classified as low stress:

- Olympic Drive between Edmundson Avenue and Denali Drive
- Main Avenue from Peak Avenue to Depot Street

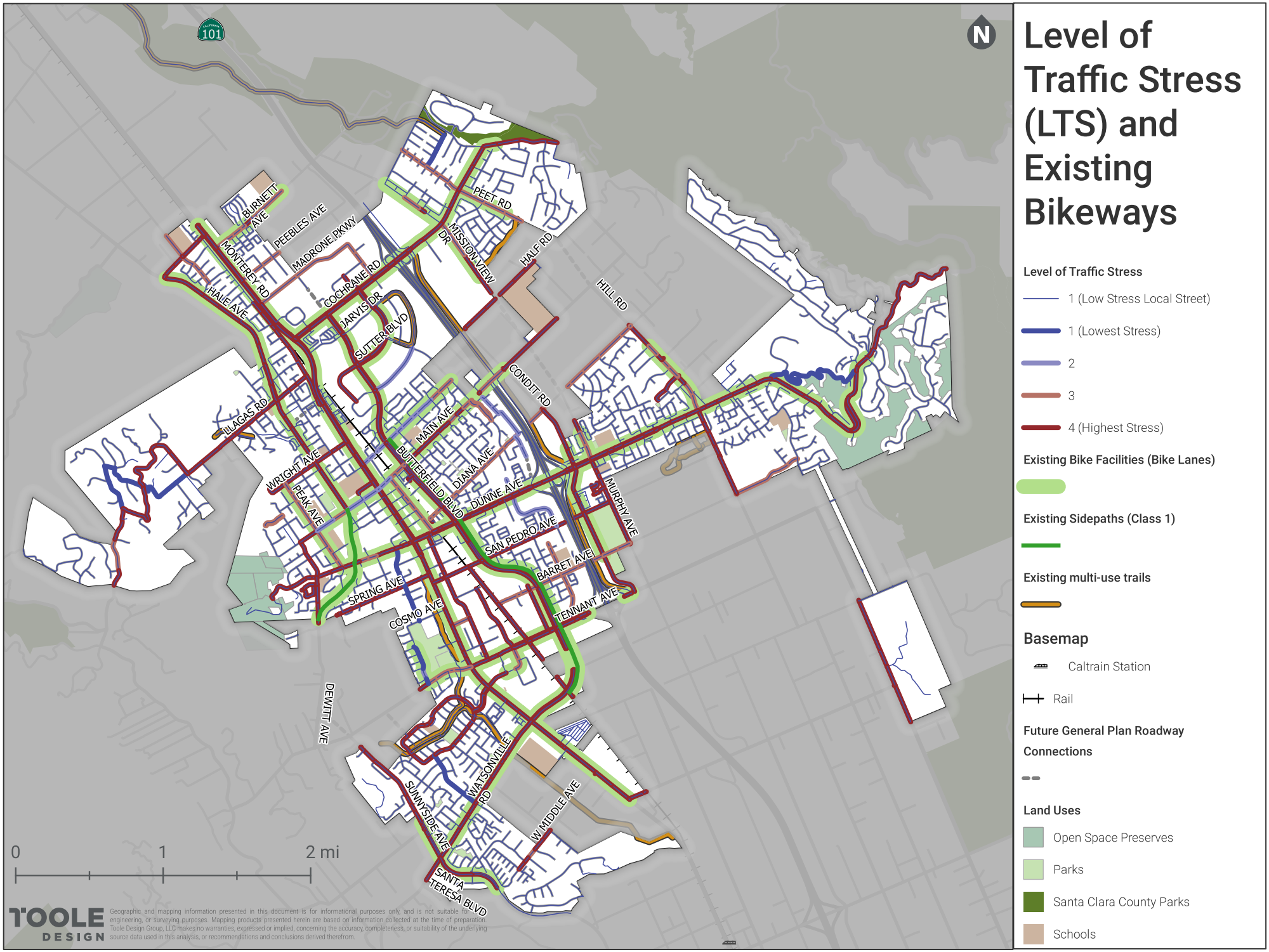
Sidepaths, such as along Butterfield Boulevard and Hale Avenue, and multi-use trails, including the West Little Llagas Creek and Coyote Creek Trails are also considered low stress facilities.

Though many major streets have bikeways, the high speeds and limited physical protection from vehicles means these facilities are high stress and will be appealing only to more confident bicyclists. Existing bikeways with high LTS levels may be considered as candidates for improvements that would provide greater separation from vehicles.

KEY ISSUES IDENTIFIED BY THE COMMUNITY ABOUT BIKING IN THE CITY...

- Feeling unsafe biking, not owning or not feeling comfortable riding a bike, and their destinations being too far from their homes.
- Safer bike routes that are protected from cars.

Figure 4: Bicycle LTS Results for Morgan Hill



Public Transit in Morgan Hill

Existing fixed route transit service in Morgan Hill is limited, particularly on weekends, with regional services focused primarily on commuting trips. Existing transit service is provided by five Valley Transit Authority (VTA) bus routes (rapid, frequent, local, school, and express), Caltrain regional rail service, and MoGo, Morgan Hill's on-demand rideshare service (see Figure 5). These services are intended to address two categories of trip types: regional travel/commuting to San José and other employment areas in Santa Clara County to the north and local travel within the City of Morgan Hill.

REGIONAL SERVICES

Valley Transportation Authority

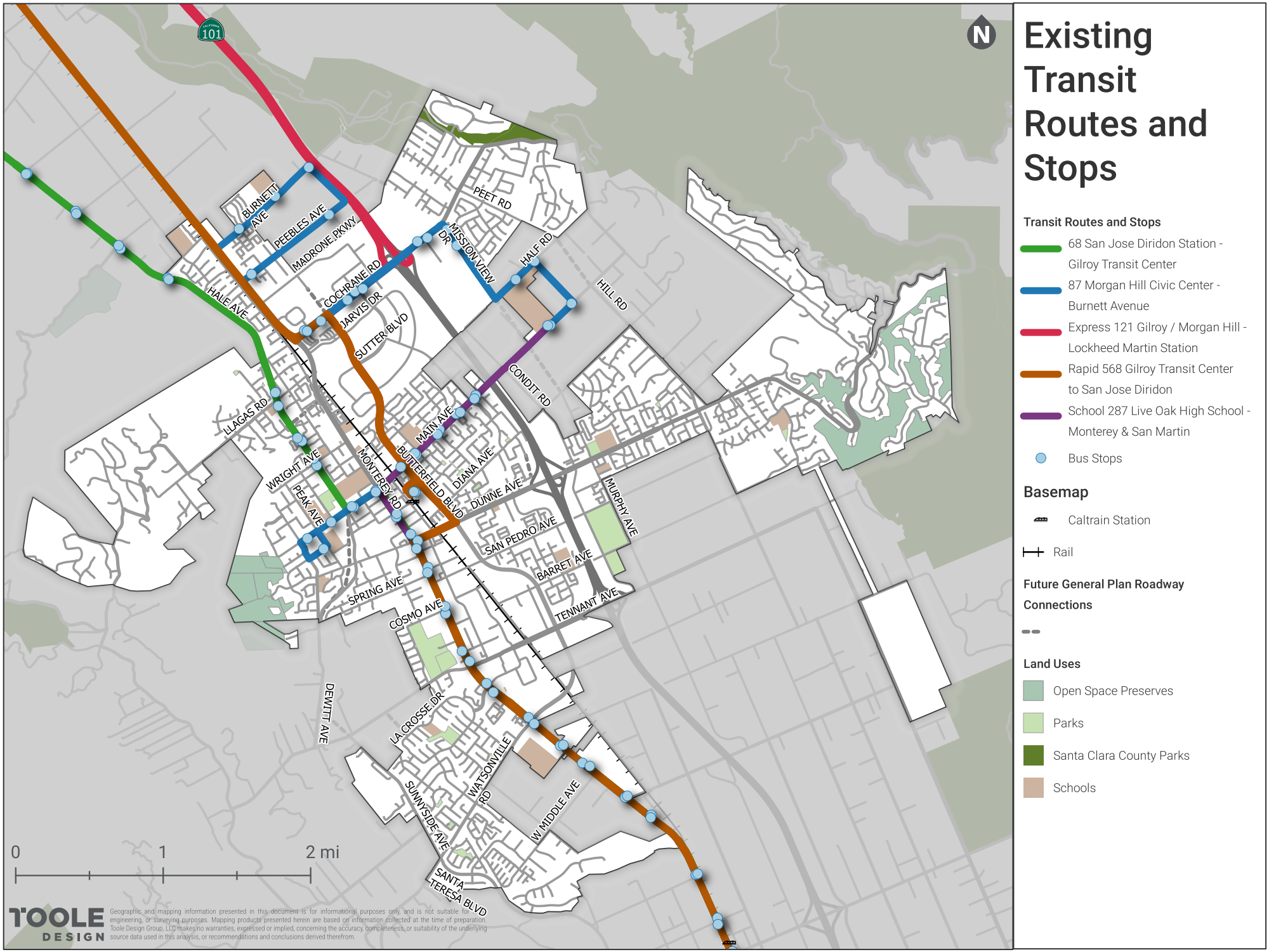
Regional VTA bus transit routes operate every 15 to 30 minutes and provide all-day service between Gilroy and San José, with various stops in Morgan Hill. Routes #68 (Frequent) and #568 (Rapid) are interlined along Monterey Road with the #568 (Rapid) operating at a lower frequency with fewer stops. The level of service for Route #68 (i.e., one bus every 15 minutes) enables Monterey Road to qualify as a high frequency transit corridor, allowing for higher density development and eliminating minimum parking requirements. Route #121 (Express) also has various stops in Morgan Hill and provides commuting service from Gilroy to San José, operating three times in the morning and in the evening.

VTA also operates two lines of fixed route service within the City of Morgan Hill. Route #87 primarily serves the west side of Morgan Hill, from Civic Center to Sobrato High School, while Route #287 primarily serves school students from San Martin Transit Center to Live Oak High School. Both routes operate on weekdays only.

Caltrain

Caltrain serves Morgan Hill with access via rail to Gilroy in the south and San José and San Francisco in the north. Service is oriented around commuting trips, with peak commute direction only trains concentrated during peak periods and no-mid day or weekend service. The Caltrain station is located in Downtown Morgan Hill and features surface parking and pedestrian access from surrounding neighborhoods. Recent Caltrain electrification requires train transfers at Diridon Station in San Jose for northbound travel from South County and southbound travel to South County since new electrified trains cannot operate on tracks south of San Jose.

Figure 5: Existing Transit Routes and Stops in Morgan Hill



LOCAL SERVICES

MoGo

Morgan Hill Quick Ride

MoGo is the City of Morgan Hill's on-demand, grant-funded rideshare service that provides first-and-last-mile connections within the City especially to people without access to vehicles or the ability to drive (i.e., students and seniors). MoGo operates on weekdays from 6:00 am to 9:00 pm and on weekends from 7:00 am to 9:00 pm, offering trips to and from fixed points citywide, such as existing VTA bus stop locations across Morgan Hill, including Downtown, shopping centers, schools, recreational facilities, businesses, and community spaces. Users can book MoGo rides through a mobile app, online, or over the phone. Fares vary depending on age and mobility needs.

The grant-funded program was launched in September 2022 and is funded through 2024. More funding is needed to make MoGo a permanent service and expand operations.

KEY ISSUES IDENTIFIED BY THE COMMUNITY ABOUT TRANSIT IN THE CITY...

- Low frequency of transit, too long to access transit for their intended destination, and transit stop locations not being convenient.
- Lack of connections to their destinations for muti-modal trips

Driving in Morgan Hill

Morgan Hill's roadway network offers essential regional and local roadway connections, with US Highway 101 running north-south bi-secting the City, linking it to the broader region to the north and south.

As regional and local traffic volumes have surged, so has traffic congestion on local roadways, particularly on major corridors like Monterey Road and Butterfield Boulevard during weekday peak commute periods. While some congestion stems from local trips, major regional traffic patterns also contribute to the congestion in Morgan Hill. Highway 101, a vital connection between Morgan Hill and surrounding counties, is a significant commuter route that is regularly congested during weekday commute periods and weekends. Residents have voiced concerns about vehicular circulation challenges, especially with regional cut-through traffic on congested corridors, exacerbated by navigation apps like Waze directing regional commuters onto City streets that run parallel to US 101 and through residential neighborhoods.

In addition to traffic congestion, residents have also voiced concerns about speeding issues in the City and its impact on safety. Several streets in Morgan Hill have very wide travel lanes and excess right-of-way which generally promote greater travel speeds. There are opportunities to utilize the excess right of way for pedestrian and bicycle facilities, develop linear parks, and implement traffic calming improvements that may also help dissuade cut-through traffic and reduce travel speeds.

KEY ISSUES IDENTIFIED BY THE COMMUNITY ABOUT DRIVING IN THE CITY...

- Growing citywide traffic congestion, speeding, and cut-through traffic.

CITY OF MORGAN HILL

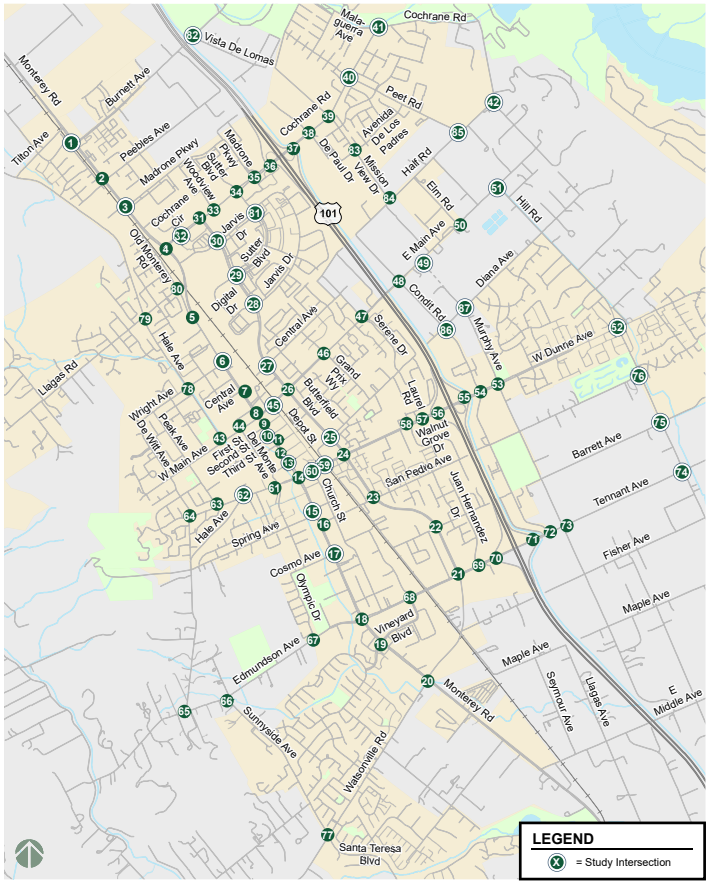
OPERATIONS STUDY FACILITIES

The General Plan utilizes commute peak hour level of service based on average minutes of delay at intersections for the evaluation of intersections and Average Daily Traffic (ADT) for the evaluation of roadway segments within the City.

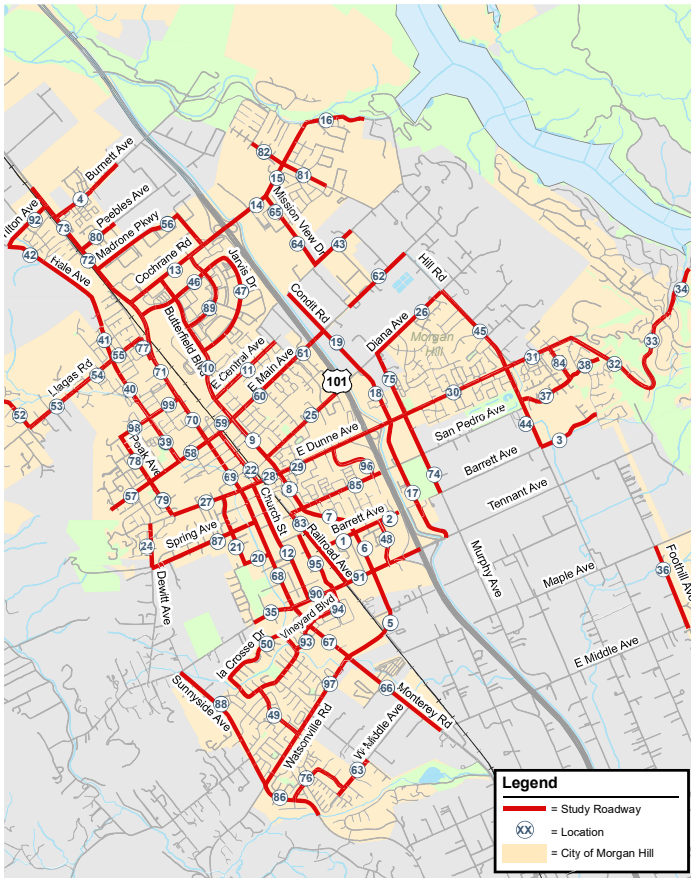
The intent of the operations analysis is to identify locations at which current and/or projected operations warrant a review of potential improvement. Peak-hour operations analysis was completed at 87 intersections and 99 roadway segments throughout the City.

Traffic conditions were evaluated under Year 2023 and Future Year 2050 General Plan Conditions. Year 2050 traffic volume projections were completed by Hexagon using the updated Morgan Hill's General Plan Transportation Demand Forecasting (TDF) Model. Intersections and roadway segments were included in the General Plan.

87 Intersections



99 Roadway segments



CITY OF MORGAN HILL

PEAK HOUR INTERSECTION LEVEL OF SERVICE ANALYSIS

Level of Service (LOS) is a qualitative description of operating conditions of roadway facilities based on seconds of delay at intersections ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays.

GENERAL PLAN LOS STANDARDS

Per the City of Morgan Hill General Plan (Policy TR-3.4), the LOS standard for most intersections and roadway segments in the City is LOS D. In the Downtown area, LOS F is considered acceptable, and at certain intersections, freeway ramps/zones, and segments, LOS E is acceptable.

SIGNALIZED INTERSECTION LEVEL OF SERVICE BASED ON CONTROL DELAY

LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SEC.)
A	up to 10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	Greater than 80.0

UNSIGNALIZED INTERSECTION LEVEL OF SERVICE BASED ON CONTROL DELAY

LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SEC.)
A	up to 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	Greater than 50.0

OPERATIONS RESULTS

The results of the level of service analysis indicate that nearly all intersections currently operate better than the City's minimum standard. However, operations at many intersections will degrade to substandard levels with projected traffic growth.

Substandard Roadway Operations

	2023	2050
Intersections	2	24
Segment	0	10

The operations analysis indicates that 28 percent of the study intersections in Morgan Hill are projected to operate at substandard levels of service under 2050 conditions. The ratio of intersections that are projected to operate poorly is comparable to other similarly sized cities in the Bay Area.

Comparative General Plan Roadway Operations

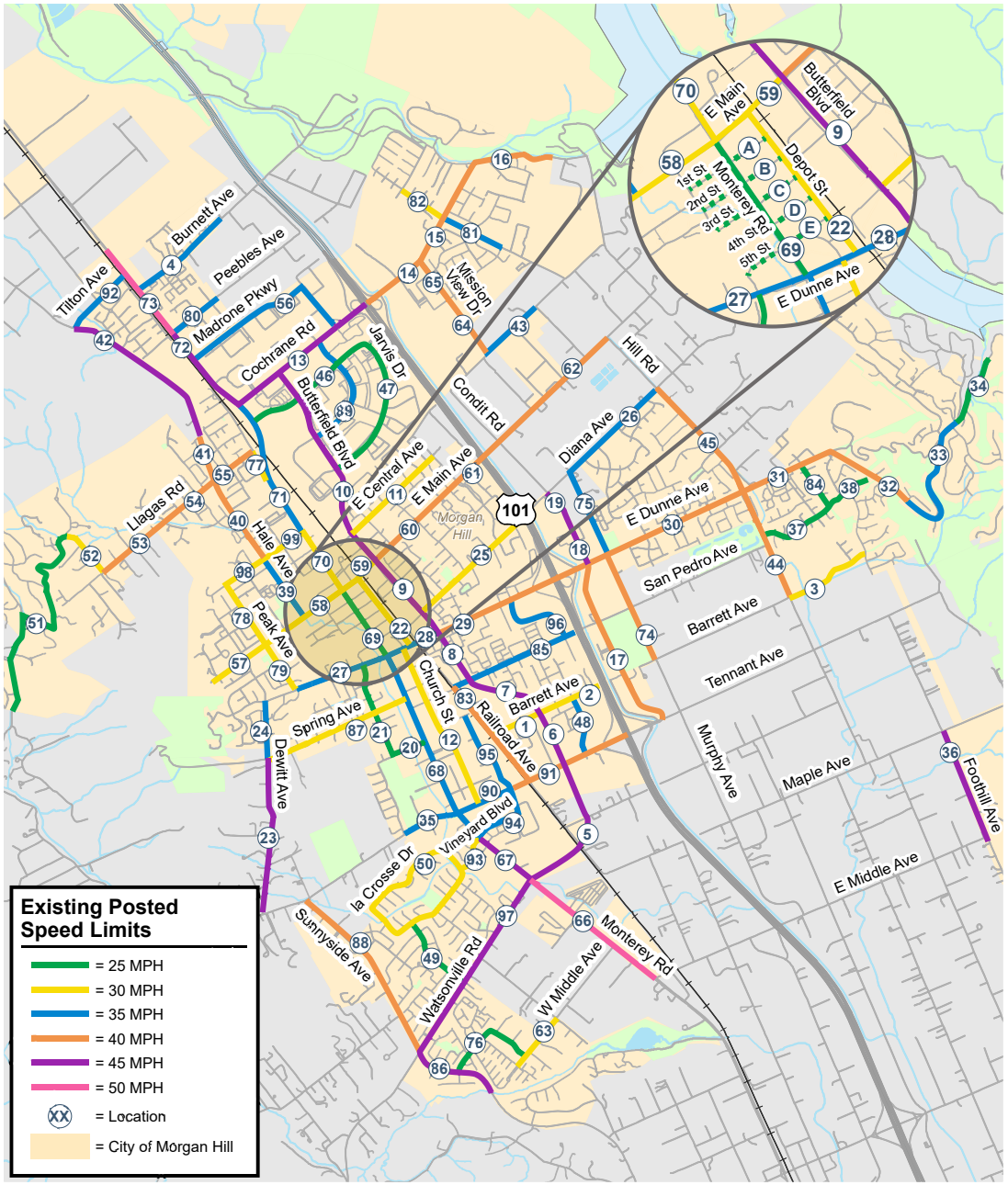
JURISDICTION	% OF INTERSECTIONS OPERATING BELOW STANDARD
Morgan Hill (2050)	28%
Gilroy	38%
Los Gatos	0%
Sunnyvale	30%
Mountain View	19%

CITY OF MORGAN HILL

ENGINEERING AND TRAFFIC SURVEY ANALYSIS

Speeding was identified as a major concern by residents, City staff and officials. An update of the City's 2015 Engineering and Traffic Survey (E&TS) was completed for 99 roadway segments throughout the City. The State of California requires an E&TS to establish speed limits on local streets and to enforce those limits using radar or other speed-measuring devices. The purpose of the E&TS is to develop recommendations for maintaining or modifying the posted speed limits.

Based on the speed data collected, an analysis of the collision rates, and a review of physical and traffic conditions, speeding on City streets is prevelant with speeds on all but five of the 98 segments surveyed exceeding posted speed limits. The E&TS recommended the allowable reduction in the posted speed limit by 5 mph at five locations. The updated E&TS includes individual worksheets for use by City staff and the Police Department for enforcement of speed limits.



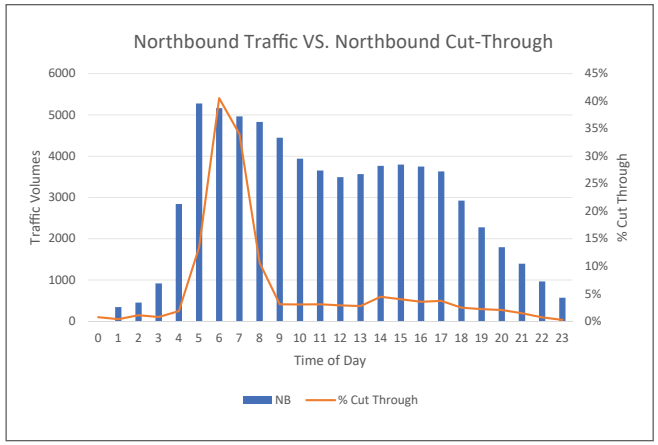
CITY OF MORGAN HILL

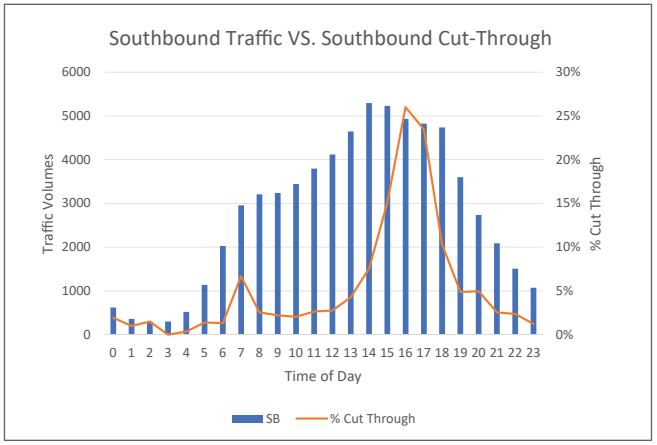
REGIONAL CUT-THROUGH

Community and City staff feedback indicated that cut-through traffic due to congestion on US 101 is a primary transportation concern. An update of a 2019 regional cut-through analysis was completed to 1) estimate the amount of regional cut-through traffic on major roadways within the City, and 2) identify the major cut-through routes. The regional cut-through analysis indicated:

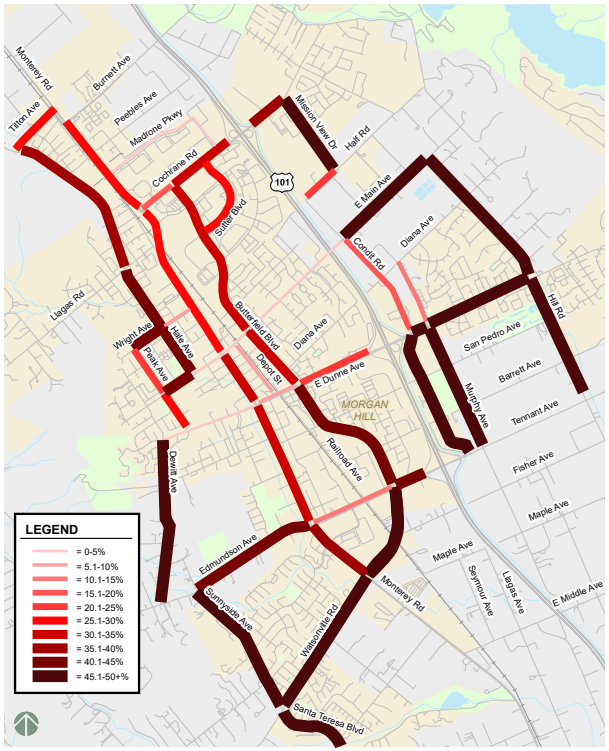
- Regional cut-through traffic on City roadways peaks when US 101 is the most congested, during the peak commute periods.
- AM peak commute period has a higher percent of cut-through traffic when compared to the PM peak commute period.
- Study roadway segments that have a higher percentage of regional cut-through traffic are along Dunne Avenue, Butterfield Boulevard, Wright Avenue, Hale Avenue, Tennant Avenue, and Monterey Road.
- The most utilized route for the regional traffic during commute periods is Butterfield Boulevard and Monterey Road.

US 101 Congestion vs. Percent Cut-Through

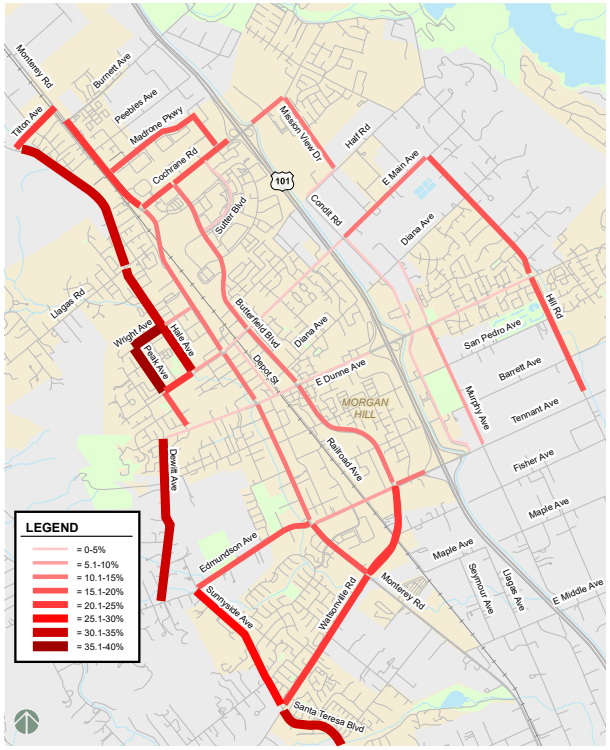




AM Percent Cut-Through



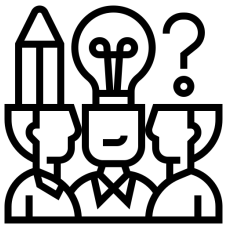
PM Percent Cut-Through



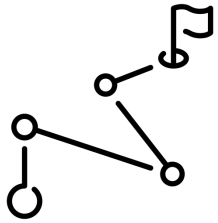
04

COMMUNITY ENGAGEMENT

As a part of this study, extensive outreach to engage Morgan Hill's residents, business owners, and community groups and organizations was conducted to understand their experiences walking, biking, taking transit, and driving in the City, as well as to get input on the type of transportation projects that would improve their quality of life. The goals of the community outreach effort were:

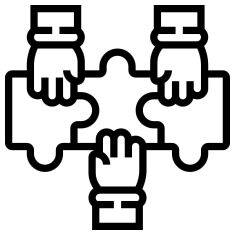


Partner with the community, including, residents, area businesses and stakeholders to gather information and ideas and develop solutions that address multiple interests



Develop updated goals and a Vision for the future of Morgan Hill's multi-modal transportation system

Build consensus around a set of feasible projects that improve circulation and safety for all users and travel modes



Develop partnerships for future funding opportunities and the development of regional transportation services and projects

CITY OF MORGAN HILL

Community Engagement Summary

Project Website

A project web page, hosted on the City's website, provided information about the project and process throughout the study. The web page was updated as project materials were developed for the Community, Stakeholder, and Public Meetings, and other audiences. The website included an online interface to provide an opportunity for the public to comment on the project via the internet. The website also provided an opportunity for members of the public to submit feedback directly to the City's project team through online surveys, and throughout the project process by email and phone.

CITY OF MORGAN HILL

Stakeholder Committee

The Stakeholder Committee was comprised of 20 community members representing diverse interests and organizations in the City. The Stakeholder Committee was provided with regular updates during the project and the Stakeholder Committee workshops allowed for a more in-depth discussion of issues, opportunities, and feasibility for mobility improvements, and to measure public interest and willingness to use alternative modes of travel.

Meeting summaries for each of the Stakeholder Committee meetings are provided in Appendix C.

STAKEHOLDERS

Residents
Chamber of Commerce
Parks and Recreation Commission
Planning Commission
Senior Center Transportation Committee
Valley Transporation Authority
Visit Morgan Hill
Youth Action Council

TABLE 3: STAKEHOLDER COMMITTEE MEETING SUMMARY

MEETING DATES	OVERVIEW OF WORKSHOP ACTIVITIES AND INPUT RECEIVED
September 20th, 2023	• Provided an overview of the need and purpose of the TMP • Received input on transportation priorities • Received input on transportation issues that the public is most concerned with
December 13th, 2023	• Presented community survey results, and regional cut-through traffic analysis • Received input on the implications of the survey and the regional cut-through traffic analysis on the solutions and policies for the TMP
March 27th, 2024	• Provided results of multimodal and traffic operations analysis • Introduced concept of street tyopologies • Conducted an exercise demonstrating the trade-off between modes and amenities • Received suggestions on typologies for Morgan Hill streets
April 17th, 2024	• Received input on the proposed street typologies for the City's roadway network • Received input on the TMP goals • Received input on the TMP prioritization criteria and weighting
July 31st, 2024	• Provided an overview on funding opportunities • Received input on improvement projects based on limited funding opportunities • Received input on citywide programs and initiatives
October 30th, 2024	• Reviewed TMP process • Provided comments on draft TMP plan and identified priority improvements

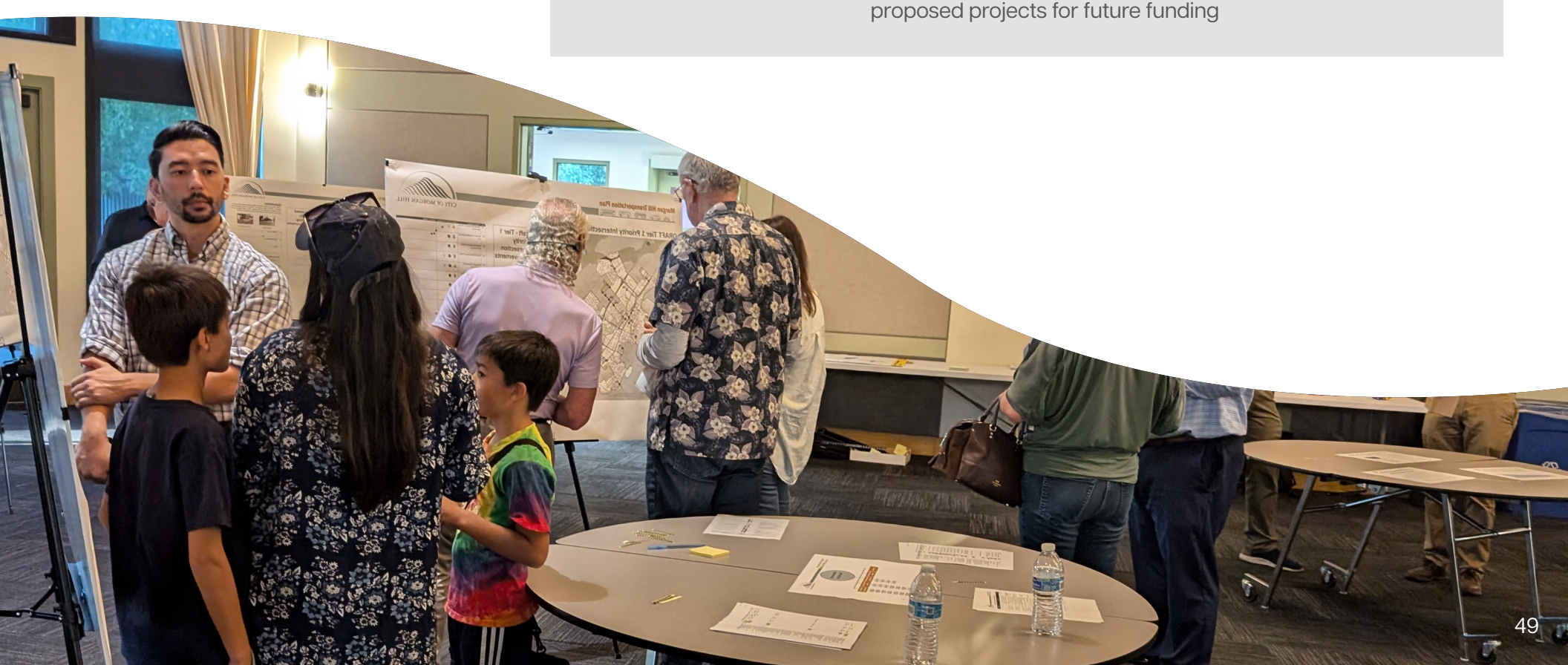
CITY OF MORGAN HILL

Community Workshops

A community workshop was held at the start of the project to gather input on existing conditions and community priorities, and later in the TMP process to provide information about the plan elements and to collect feedback on the list of identified improvement projects and policy recommendations. Both workshops were held in English and Spanish languages and the community was notified using flyers posted in community facilities, social media posts, the project webpage hosted on the City's website, through a press article, and through stakeholder meetings.

TABLE 4: COMMUNITY MEETINGS SUMMARY

MEETING DATES	OVERVIEW OF WORKSHOP ACTIVITIES AND INPUT RECEIVED
November 8th, 2023 *(English Meeting)* November 16th, 2023 *(Spanish Meeting)*	• Provided an overview of the need and purpose of the TMP • Received input on transportation priorities • Received input on transportation issues that the public is most concerned with including the City's safety and speeding hot spots and missing transportation links
August 29th, 2024 *(English and Spanish Meeting)*	• Presented the goals and vision for the TMP along with prioritized improvement locations • Received input on project priorities and improvement alternatives by location, on potential City initiatives and prioritization of proposed projects for future funding



Online Survey

In addition to the Community Workshops, two online surveys were made available to gather feedback from the community. The online surveys were hosted on the project webpage in English and Spanish languages to gather community input on citywide transportation issues. The surveys were notified to the public using flyers posted in community facilities, social media posts, the project webpage hosted on the City's website, through a press article, through focus group meetings, and through community outreach meetings.

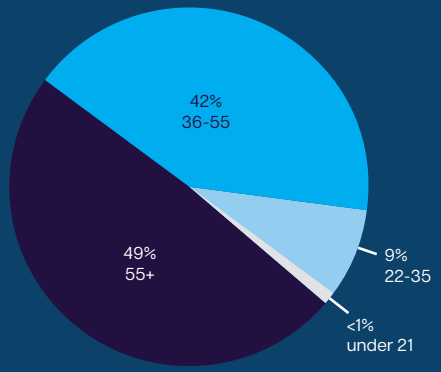
Online Survey #1

The first online community survey was made available during the initial phases of the TMP process from November 3rd, 2023 to November 30th, 2023 to gather community input on citywide transportation issues.

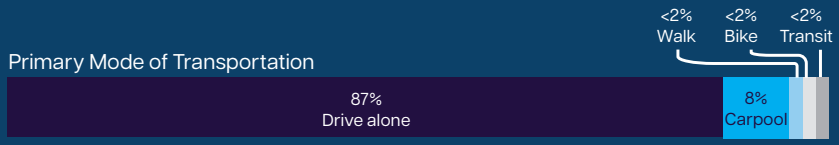
The survey questions focused on the following themes:

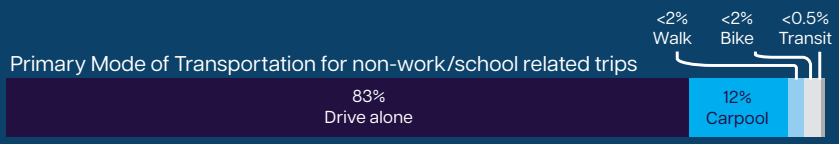
- Respondents' demographic information such as age, location of residence, and employment status
- Travel habits such as commute distance, primary mode of travel for work/school and for non-work/school related activities, and frequency of bicycling, walking, and transit use
- Primary transportation concerns including causes for congestion and speeding in Morgan Hill
- Transportation priorities for citywide improvements
- Gaps in biking, walking, and transit infrastructure

The survey received a total of **521** responses from the community.



39%
travel outside of Morgan Hill to work/school





Age

Demographics

Primary transportation concerns include **traffic congestion, US 101 cut-through traffic, speeding, and walking/biking safety.**

53%
do not currently walk

53%
do not currently bike

91%
do not currently take transit

Per the respondents, the primary focus of the transportation improvements in the City should be to **reduce congestion and expand walking and biking opportunities.** Other focus areas should be **reduction in vehicle speeds, police enforcement, and improved transit opportunities.**

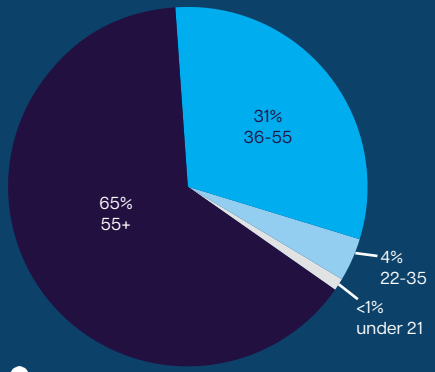
Online Survey #2

The 2nd online survey was made available from September 2nd, 2024 to October 4th, 2024 to gather community input on the types of transportation improvements and programs the community would like the City to prioritize.

The survey questions focused on the following themes:

- Respondents' demographic information such as age, and location of residence
- Preferences regarding bike lanes and safety for bicyclists
- Preferences regarding the use of excess right-of-way along streets
- Preferences regarding the types of improvements that could be implemented along Butterfield Boulevard
- Preferences regarding intersection controls
- Preferences regarding traffic calming devices on residential streets
- Funding priorities
- Citywide initiatives and program priorities

The survey received **303** responses from the community.



Age

Demographics

Preferences regarding bike lanes and safety for bicyclists:

48% support the removal of on-street parking

47% support the implementation of protected intersections along bike/ pedestrian priority corridors

Preferences regarding the use of excess right-of-way along streets:

60% support the use of excess right of way along streets to create linear parks with a multiuse trail.

Preferences regarding the types of improvements that could be implemented along Butterfield Boulevard:

86% support the use of Adaptive Signal Control Technology (ASCT)

57% would support the implementation of protected intersections

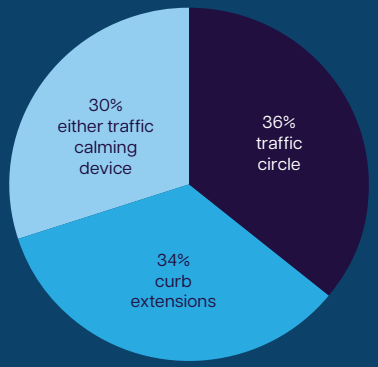
Preferences regarding intersection controls:

55% support the use of a roundabout

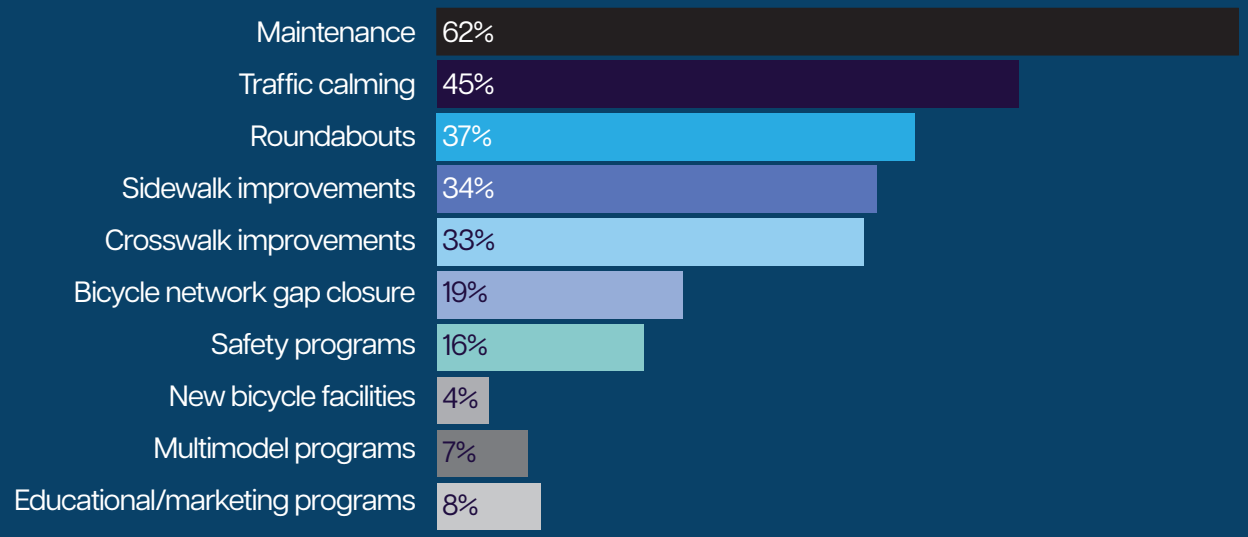
29% support the use of a signal

16% support the use of either intersection control

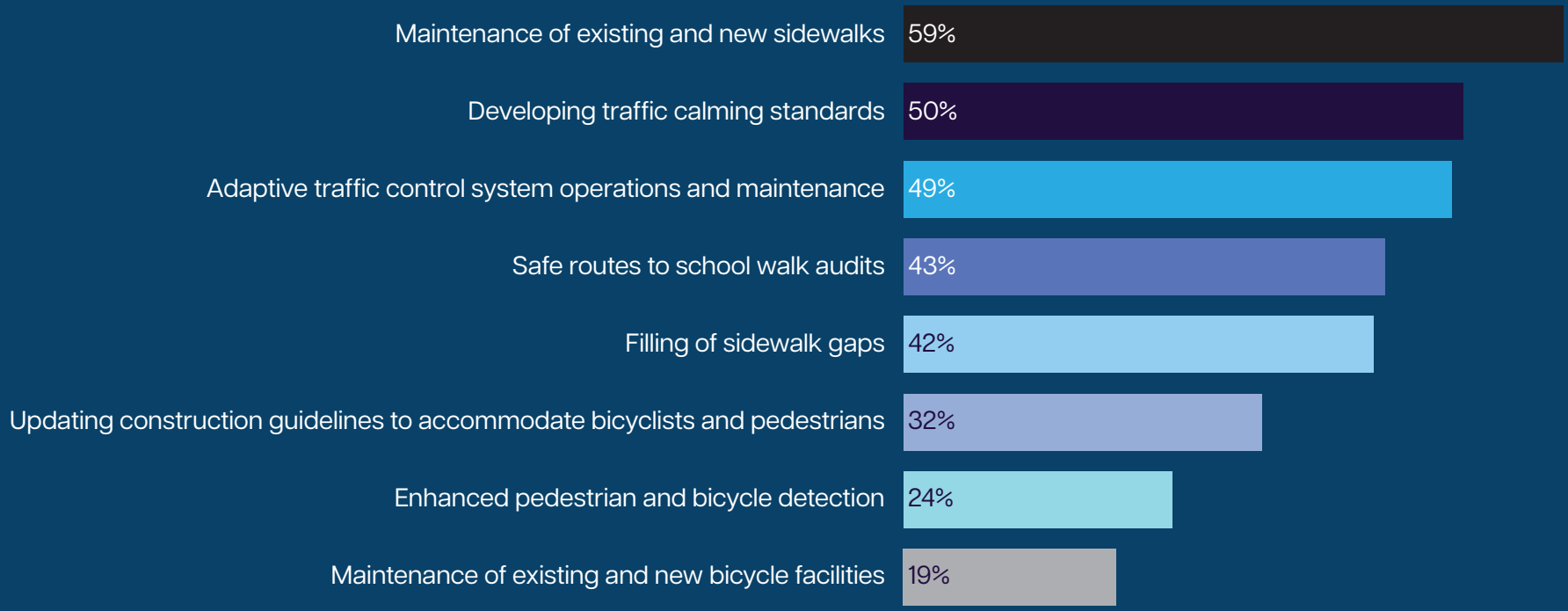
Preferences regarding traffic calming devices on residential streets:



Funding priorities: Top three funding priorities for the community include **maintenance, traffic calming, and roundabouts.**



Citywide initiatives and program priorities: Top five priorities for the community for programs and initiatives include **maintenance of existing and new sidewalks, developing traffic calming standards, adaptive traffic control system operations and maintenance, safe routes to school walk audits, and filling of sidewalk gaps.**



Small Group Meetings

Community Focus Group Meetings

Concurrent with the second on-line survey being out, the City staff conducted 10 small group meetings and attended community meetings with groups that were interested in learning about the TMP and providing input. Two meetings/events were conducted entirely in Spanish and one event had both English and Spanish options. Overall, the City had approximately 110 people participating in the small group meetings.

During the small group outreach, City staff spent extended time going through the online survey #2 questions. They used a participatory presentation process to ask group members their preference on each of the on-line survey questions. In general, responses to the second online survey results were validated by the responses during the small group events and meetings.

Table 5 provides a list of groups/events attended by City staff to gather feedback on the survey questions.

TABLE 5: COMMUNITY FOCUS GROUP MEETINGS SUMMARY

MEETING DATES	OVERVIEW OF WORKSHOP ACTIVITIES AND INPUT RECEIVED
Sidewalk Saturday Event Downtown September 7th, 2024	• Provided overview of TMP • Received their input on the online survey questions
Chamber of Commerce Economic Development Committee September 12th, 2024	
Fiestas Patrias Event at Galvan Park (Spanish) September 15th, 2024	
West Hills Church September 17th, 2024	
Housing Trust Community Meeting (Spanish) September 19th, 2024	
Downtown Association Meeting September 19th, 2024	
Jackson Oaks Clubhouse September 24th, 2024	
Morgan Hill Youth Action Council October 1st, 2024	
Park Place Family Event (English/Spanish) October 18th, 2024	
Morgan Hill Senior Center October 22nd, 2024	

City Staff Focus Group Meetings

City staff serve as the "management" team of the City's public facilities and are the community's contact for issues related to transportation concerns and needs. Therefore, three focus group meetings were held with City Planning staff, Engineering staff, and Transit staff at the start of the project to understand the current and ongoing transportation issues with walking, biking, driving, and taking transit in the City, general land use and development patterns, and constraints and opportunities for improving the transportation system in the City.

TABLE 6: CITY STAFF FOCUS GROUP MEETINGS SUMMARY

MEETING DATES	OVERVIEW OF WORKSHOP ACTIVITIES AND INPUT RECEIVED
Transit Staff Interview August 9th, 2023	• Provided an overview of current and ongoing issues regarding public transit in Morgan Hill including low population density, high length of trips, and few regional transit services in the City • Provided an overview of MoGo transit service, its level of use, and service patterns
Planning Staff Interview August 17th, 2023	• Provided an overview of recent development patterns in Morgan Hill, activity centers and key destinations in the City, and gaps in the transportation system from a multimodal perspective • Provided input that the goals and opportunities for future growth and development in the City should be to make Morgan Hill more walkable and bikeable and to protect the quality of life for residents regardless of commuter traffic
Engineering Staff Interview August 17th, 2023	• Provided an overview of funding available to implement projects like the Capital Improvements Project list, annual pavement improvement project list etc. • Provided input on the challenges the staff is facing in implementing bicycle and pedestrian improvements like lack of maintenance equipment, costs, limited right-of-way etc.

Public Meetings

Public meetings were held with the City Council, Planning Commission, and Parks and Recreation Commission throughout the project to receive input on the project approach and vision, citywide transportation issues, and methods to address identified transportation issues.

TABLE 7: COUNCIL AND COMMISSIONS STUDY SESSIONS SUMMARY

MEETING DATES	OVERVIEW OF WORKSHOP ACTIVITIES AND INPUT RECEIVED
Parks and Recreation Commission November 12th, 2023 City Council November 13th, 2023 Planning Commission December 13th, 2023	• Shared concerns on regional cut-through traffic and requested the TMP evaluate options to mitigate this issue • Robust community outreach should be conducted for the TMP • TMP should look at improving the bicycle and pedestrian network and closing gaps especially around schools and Downtown • TMP should look at potential traffic calming measures to reduce speeds and improve safety
Planning Commission May 14th, 2024	• TMP should set goals and measures of effectiveness for MoGo, for bicycle usage, and Transportation Demand Management (TDM) programs etc. • The TMP should look for additional funding sources to implement project as well as additional staff resources to monitor projects
City Council May 15th, 2024	• The TMP should look at improving corridor operations and safety for major streets in the City like Butterfield Boulevard and Monterey Road • Additional strategies to engage more people where community feedback is missing should be considered
Parks and Recreation Commission May 21st, 2024	• The TMP should look at long-term plan to address regional cut-through traffic • Proposed builders remedy projects in the County near Morgan Hill should be included as part of the traffic operations analysis
Parks and Recreation Commission October 29th, 2024	• Reviewed TMP process • Provided comments on draft TMP plan and identified priority improvements
Planning Commission November 5th, 2024	• Reviewed TMP process • Provided comments on draft TMP plan and identified priority improvements
City Council November 20th, 2024	• Reviewed TMP process • Provided comments on draft TMP plan and identified priority improvements • Provided approval of TMP plan

05

IMPROVEMENTS TOOLBOX

CITY OF MORGAN HILL

Overview

The TMP includes a comprehensive package or "toolbox" of potential improvements designed to address Morgan Hill's diverse transportation needs. This toolbox offers examples of a variety of measures to improve the safety and comfort of people walking, biking, and driving in Morgan Hill. The TMP's toolbox provides the City with the flexibility to implement targeted improvements that align with community priorities and future growth, ensuring a more connected and accessible transportation system in Morgan Hill.

Pedestrian Priority Zones

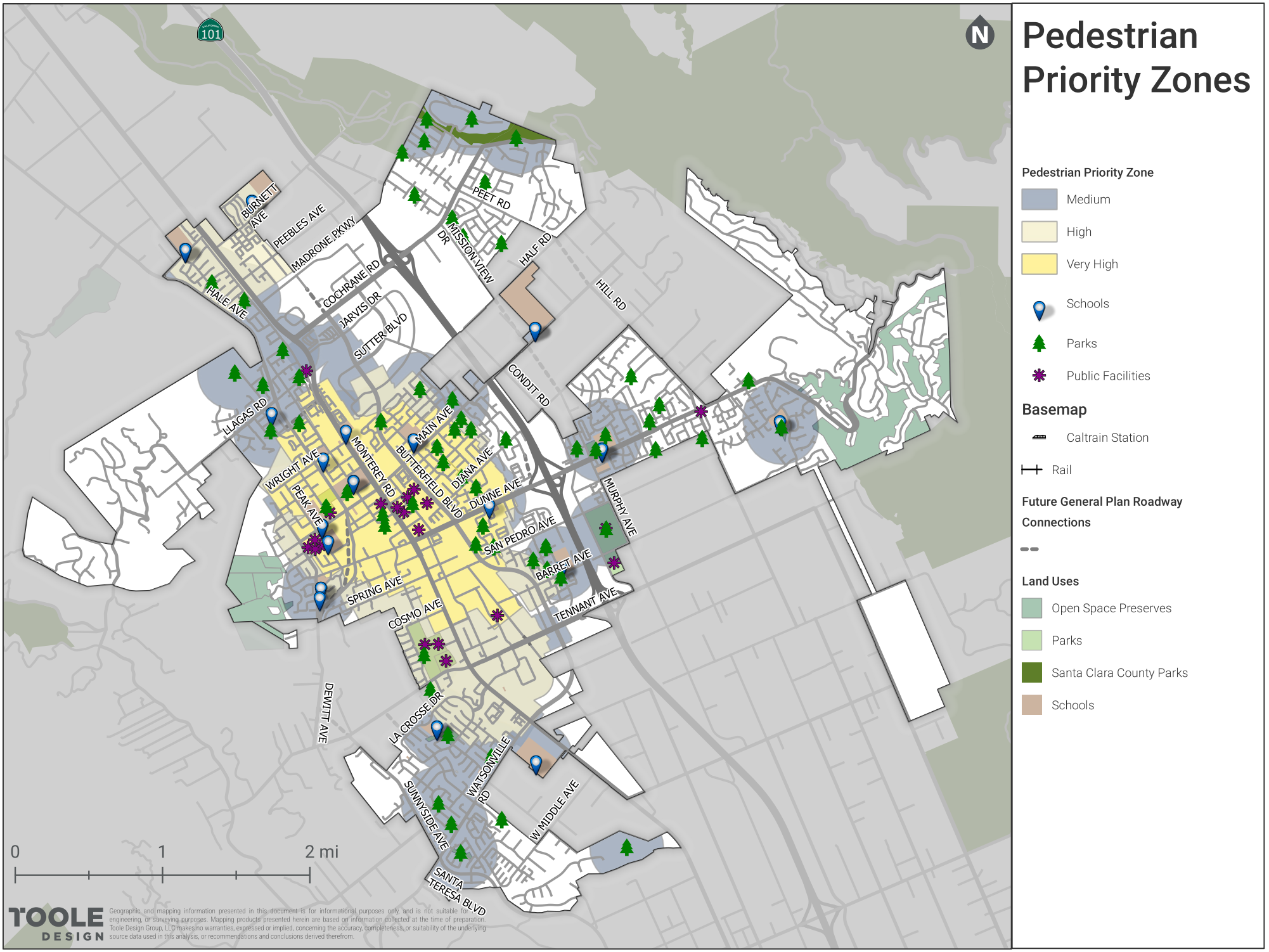
The TMP identifies a series of pedestrian priority zones to indicate areas with higher levels of pedestrian activity and guide pedestrian improvements and project prioritization. Pedestrian priority zones are based around trip generators (i.e., attractors) to estimate potential pedestrian demand. Trip generators include the following categories: healthcare, parks, community resources, commercial, and transportation.

Pedestrian priority zones are concentrated west of Highway 101 and include a majority of the western portion of Morgan Hill, with a "very high" priority zone surrounding Downtown Morgan Hill. "Medium" priority zones are scattered around Morgan Hill and reflect areas with one or a small number of adjacent trip generators, such as parks and schools.

Pedestrian priority zones do not reflect the quality of sidewalks or comfort level of conditions for pedestrians today. Rather, the pedestrian priority zones information can be combined with the assessment of sidewalk gaps and crossing opportunities to identify the need for enhancements and to determine improvement priorities.

The pedestrian priority zones map is shown in Figure 6.

Figure 6: Pedestrian Priority Zones



Street Typologies

PURPOSE AND DEFINITION

The Morgan Hill TMP defines a series of street typologies based on the current and identified planned roles that different streets could play in the Morgan Hill transportation system. Street typology designations are based on existing speeds, average daily traffic (ADT) volumes, and adjacent land uses, and are accompanied by basic design considerations, and include Boulevards, Community Corridors, Main Streets, Neighborhood Streets and Rural Roads.

Streets that carry high traffic volumes and serve regional travel, like Butterfield Boulevard, are classified as Boulevards. Streets that provide access to and from residential areas and serve shorter distance trips, like Hale Avenue, can be classified as Community Corridors. It is important to note that portions of the same corridor, such as Monterey Road, which provides both regional connectivity and serves as Morgan Hill's Main Street through Downtown, can fulfill different functions depending on the segment. More defining characteristics are described below in Table 8.

The street typology designations provide a structure around which recommendations can be organized and are useful for identifying appropriate street elements to include in corridor improvement projects. In particular, the street typologies reflect the need to both support regional travel – a high number of Morgan Hill residents leave the community for work – and building a transportation system at a scale that supports local quality of life and provides opportunities for people to safely walk and bike.

Details on the street typologies can be found in Table 8 and representative cross sections can be found in Figure 8 through Figure 12. Figure 7 contains a map of the street typologies applied to Morgan Hill roads, as well as roads that traverse both City and county jurisdiction. Basic design guidance for the street typologies can be found in Table 9.

APPLICATION OF STREET TYPOLOGIES

Street typologies are applied to all collector and arterial streets in Morgan Hill, as well as a small number of local streets that play important community functions. Local streets are by default considered Neighborhood Streets or Rural Roads. The street typology designations complement functional classification and are based on not just current characteristics but the anticipated or desired role of the roadway as additional growth occurs and/or improvements are completed.

CONNECTION TO ROADWAY DESIGN

General Considerations:

As a principle, all roads in Morgan Hill should support the needs of all potential street users. Street typologies are therefore intended to inform the selection and design of street elements for different roadways and ensure that street elements are appropriate given the roadway characteristics. For example, Boulevards are intended to support higher speed and traffic volumes. Roadway design for these streets should support through traffic and maintain a higher level of access management, while bikeway facilities should be designed to provide a higher level of physical separation by using separated bike lanes with physical barriers between general purpose travel and bicyclists.

Traffic Operations Considerations:

The City of Morgan Hill General Plan policy aspires for traffic operations at LOS D levels for most roads, though City policy indicates that intersections or streets should not be overbuilt in ways that would negatively impact people walking and biking. The street typology approach asserts that the acceptable LOS may vary depending on the street type and the surrounding context. Lower LOS may be appropriate in pedestrian priority zones where there are higher concentrations of destinations and pedestrians are more likely to be present, while corridors that are meant to carry higher levels of traffic should have higher levels of access management and signal coordination to achieve desired operating standards.

Bicycle and Pedestrian Considerations:

Per the Morgan Hill Design Standards, sidewalks are required on all City streets, not classified as rural, while bike lanes are required on most higher-class streets, though the facility type and design vary depending on the street typology and the available right-of-way. For both bikeways and pedestrian facilities, buffers between motor vehicles and people walking and biking are desired where space permits and as speeds increase; buffers are particularly critical in pedestrian priority zones.

TABLE 8: STREET TYPOLOGIES DEFINITIONS AND CONSIDERATIONS

STREET TYPOLOGY	TRAVEL PATTERNS	BIKE AND PEDESTRIAN CONSIDERATIONS	LAND USES
Boulevard	Higher volume streets that connect various parts of a city or region; signal coordination should be a priority; typically carry more than 20,000 vehicles per day	Facilities require greater separation to be comfortable and useful	May include commercial, residential, or recreational amenities along the route; site access should be managed
Community Corridor	Moderate speed and volume streets that primarily serve trips within the City of Morgan Hill; daily traffic volumes range from 5,000 to 25,000 vehicles per day	Accommodates all modes while prioritizing safety, convenience, and comfort of bicyclists and pedestrians	Balances land access and mobility and passes through residential and mixed-use areas
Main Street	Primarily serves trips within the City of Morgan Hill; typical traffic volumes are less than 10,000 vehicles per day	Accommodates all modes while prioritizing safety, convenience, and comfort of bicyclists and pedestrians	Balances land access and mobility and passes through residential and mixed-use areas
Neighborhood Street	Supports short-distance trips and access to residential areas; prioritizes safety, lower vehicle speeds, and traffic volumes; typical traffic volumes are less than 1,000 vehicles per day	Basic facilities should be able to meet the needs of people walking and biking of all ages and abilities	Provides local access to neighborhoods and residential areas
Rural Street	High speed roadways that serve both local traffic and regional trips from outside of city limits to destinations on the edge of the City; traffic volumes are generally 5,000 vehicles per day or less	Bikeways may require greater separation to be comfortable and useful; dedicated pedestrian facilities may only be necessary in some locations	May include both residential and rural/agricultural uses along the route

Figure 7: Street Typologies for Morgan Hill Roads

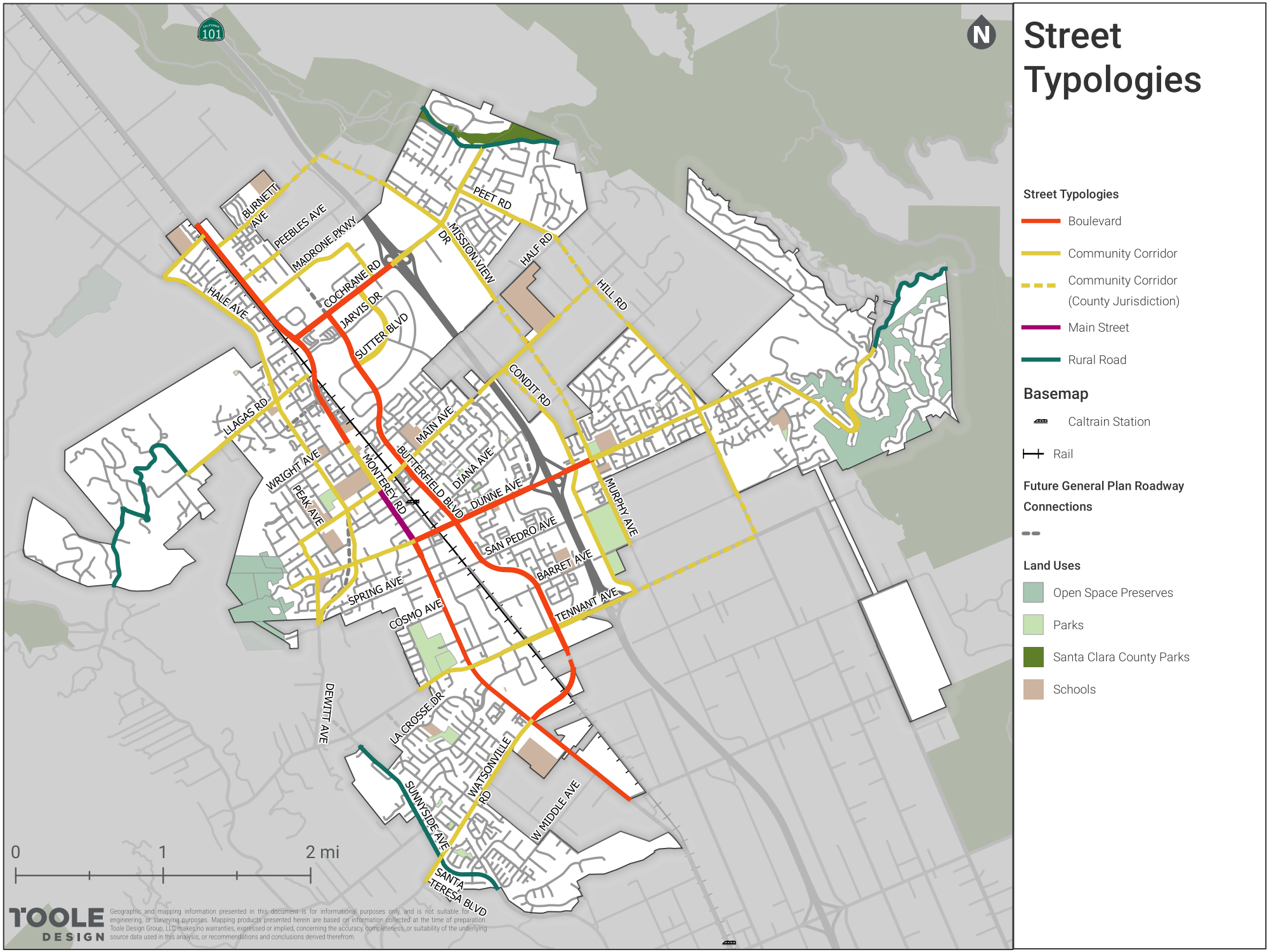


TABLE 9: STREET DESIGN ELEMENTS AND RECOMMENDED WIDTHS BY STREET TYPE

	NEIGHBORHOOD STREET	RURAL ROAD	MAIN STREET *	COMMUNITY CORRIDOR	BOULEVARD
Travel Lanes	2 total (one in each direction)	2 total (one in each direction)	2-3 total (one in each plus a center turn lane)	1-2 in each direction; center turn lane	2 in each direction; median/center turn lane
Travel Lane Width	N/A; center striping not	11-12'	10-11'; narrower widths *strongly encouraged* in pedestrian priority zones	10-11'; narrower widths *strongly encouraged* in pedestrian priority zones	10-11'; narrower widths *preferred* in pedestrian priority zones
On-street Parking	✓	N/A	✓	N/A	N/A
Desired Operating Speeds**	**General:** ≤25 mph **Pedestrian Priority Zone:** 20 mph	**General:** 25-40 mph **Pedestrian Priority Zone:** 25-30 mph	**General:** 25-35 mph **Pedestrian Priority Zone:** 15-25 mph	**General:** 30-35 mph **Pedestrian Priority Zone:** 20-25 mph	**General:** 35-40 mph **Pedestrian Priority Zone:** 25-30 mph
Bikeway Facility Type	Class III Bike Route or Bike Boulevard	Paved shoulders	Class III Bike Route or Bike Boulevard	Class II Bike Lane; buffered bike lane wherever space permits Class IV Separated Bike Lane where speeds exceed 35 MPH	Class IV Separated Bike Lane or Sidepath
Bikeway Facility Width	N/A	N/A	N/A	5-6' lane, 2-3' buffer	8-9' lane, *including buffer/separation; 10-14' sidepaths, plus 2' shoulder or buffer space on each side*
Sidewalk Width	5'	N/A (5-6' paved shoulder)	8-10'	6-8'	6-14'
Landscaping / Buffer Zone	5-6'	N/A	5' on sidewalk, and 12-16' center median	5' on sidewalk, and 12-16' center median	5' on sidewalk, and 12-16' center median
Crossing Spacing	As needed	As needed	**General** = 1/4-mile **Pedestrian Priority Zone** ≤ 1/8-mile	**General** = 1/4-mile **Pedestrian Priority Zone** ≤ 1/8-mile	**General** = 1/4 to 1/2 -mile **Pedestrian Priority Zone** ≤ 1/4 -mile

* The narrowing of Monterey Road through Downtown (i.e., road diet) will require voter approval via a ballot measure.
** Operating speeds are a product of the design and actual conditions along a roadway. Strategies to reduce operating speeds in pedestrian priority zones include narrow or reduced travel lanes, landscaping/street trees, and more frequent crossing opportunities.
^11' outside travel lanes are desired where fixed route transit service is in operation.

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FIGURE 8A: BOULEVARD CROSS SECTION (BOULEVARD WITH BIKE LANE)

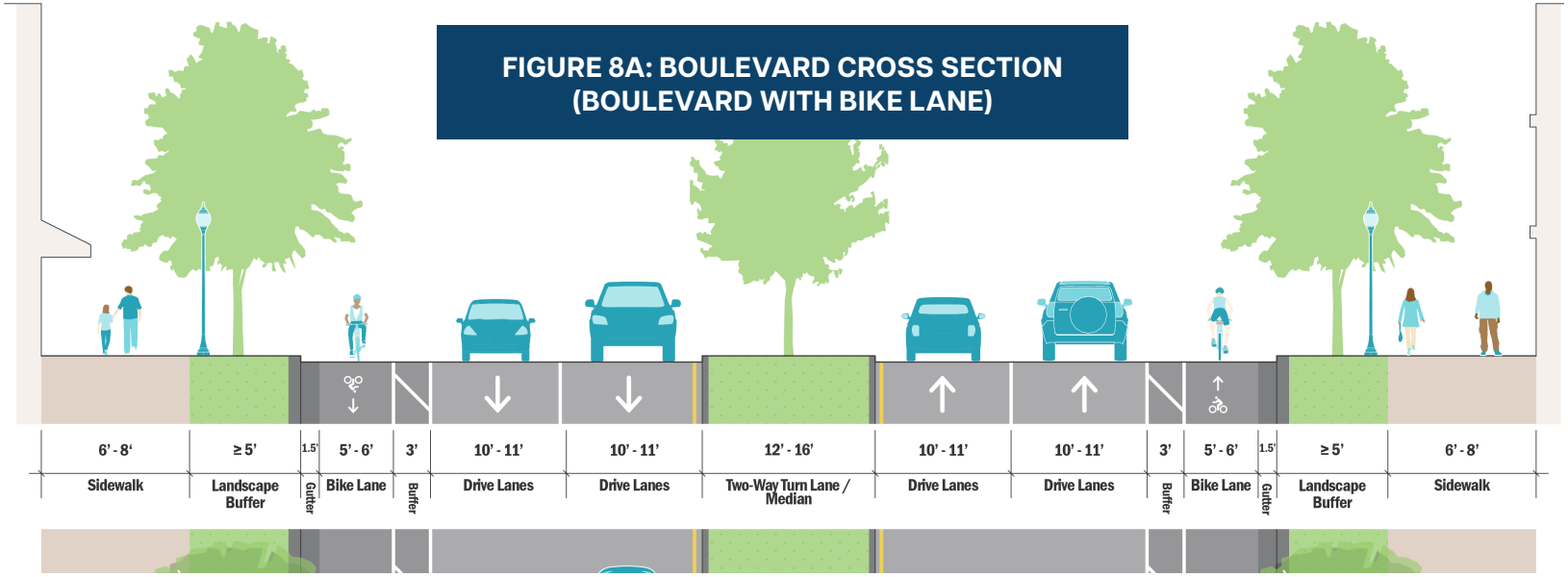


FIGURE 8B: BOULEVARD CROSS SECTION (BOULEVARD WITH SIDEPATH)

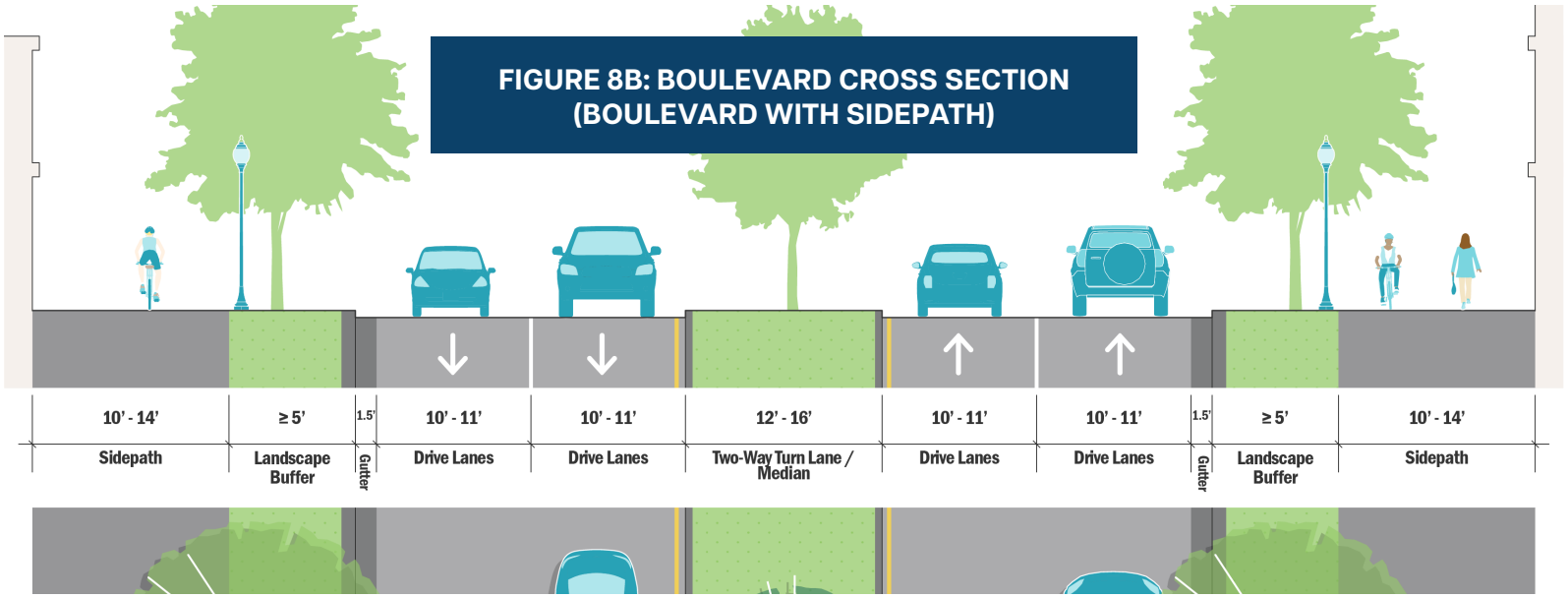


FIGURE 9: COMMUNITY CORRIDOR CROSS SECTION

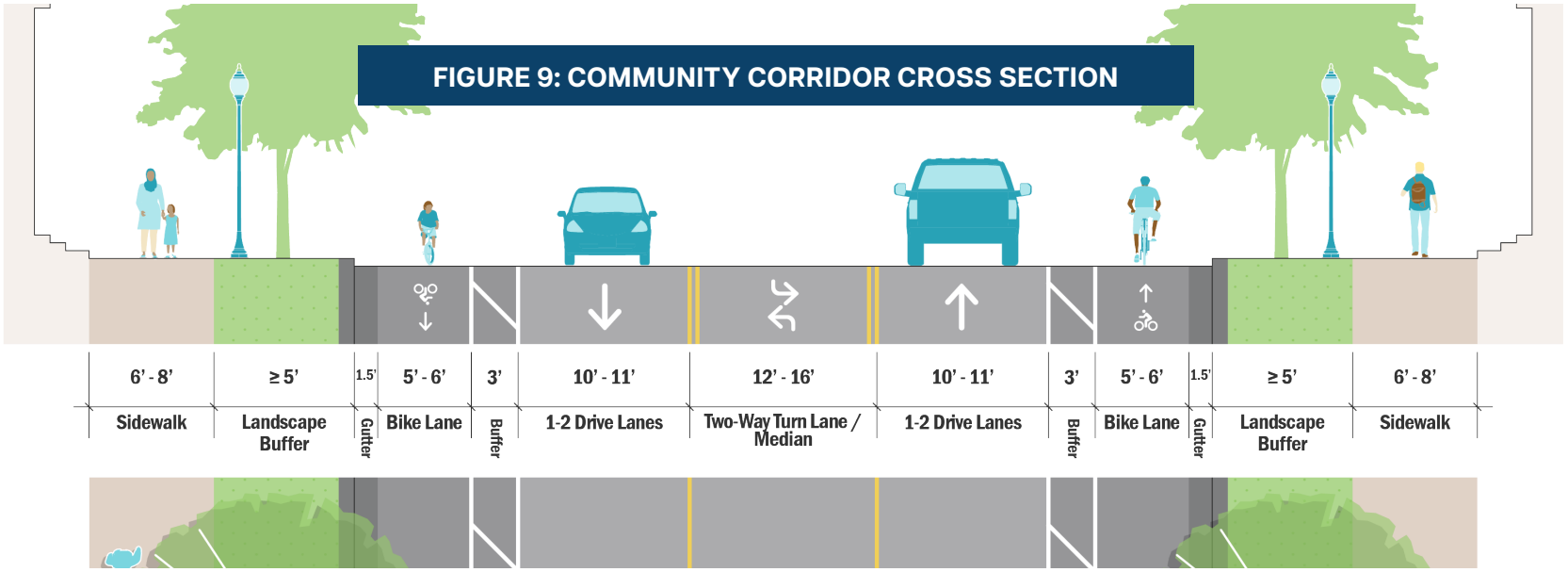
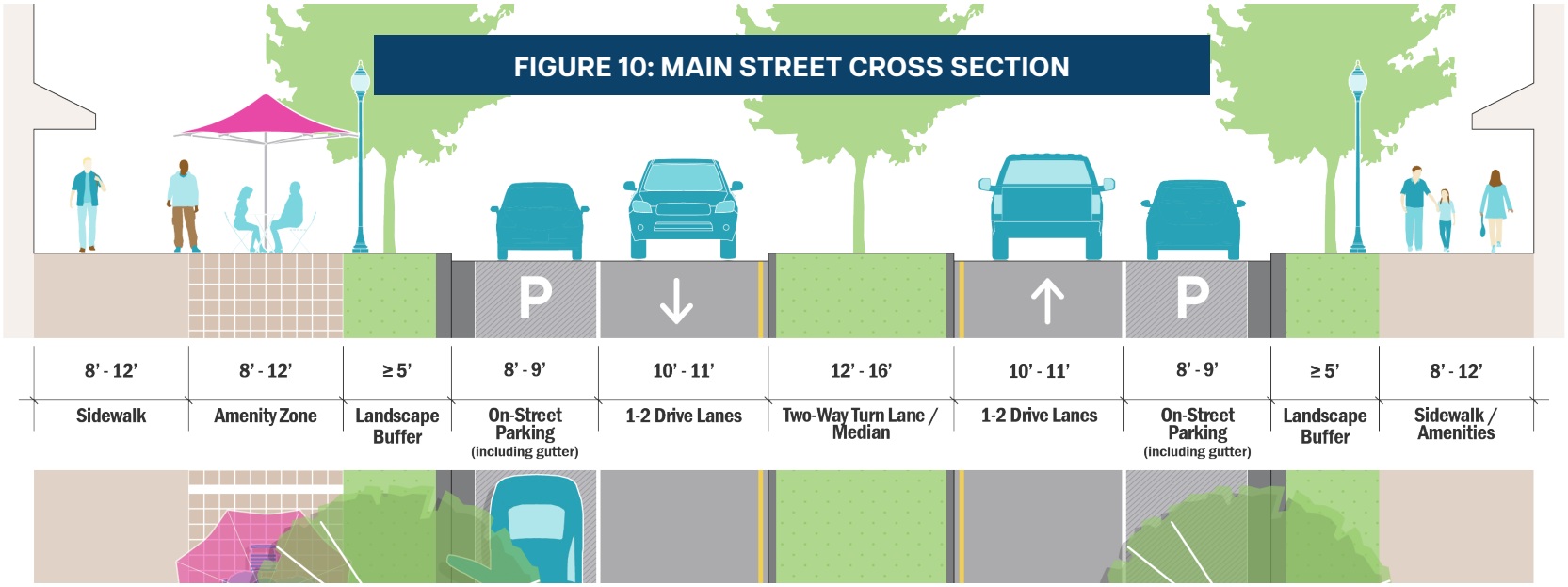


FIGURE 10: MAIN STREET CROSS SECTION



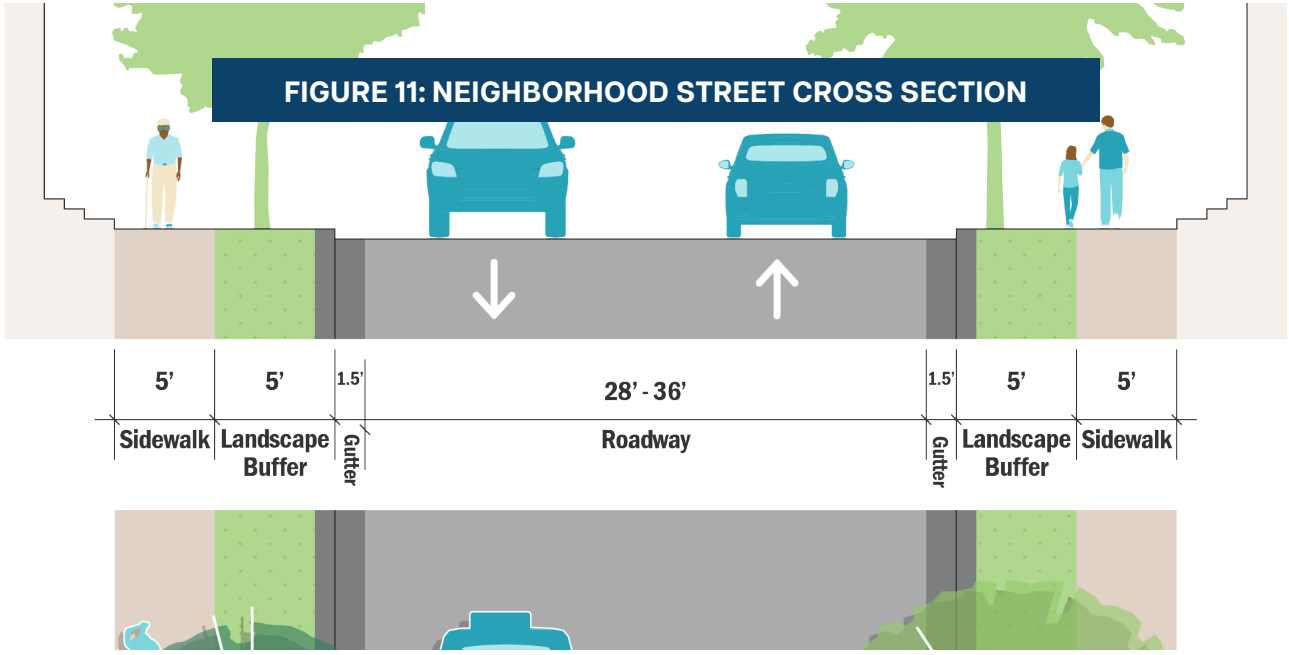


FIGURE 11: NEIGHBORHOOD STREET CROSS SECTION

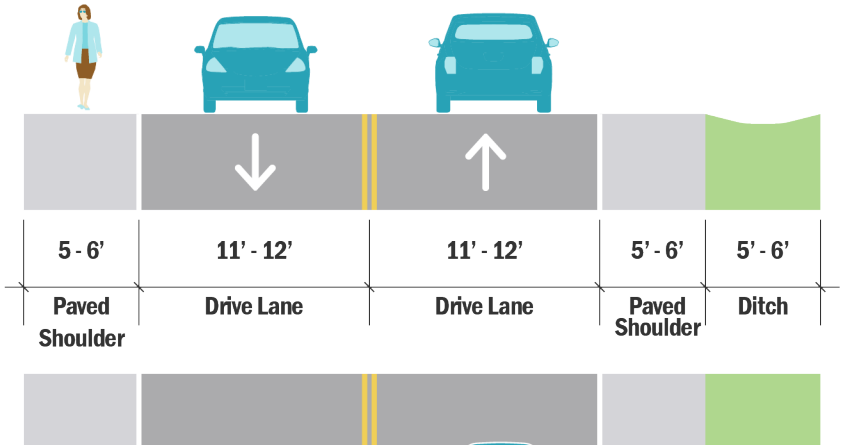


FIGURE 12: RURAL ROAD CROSS SECTION

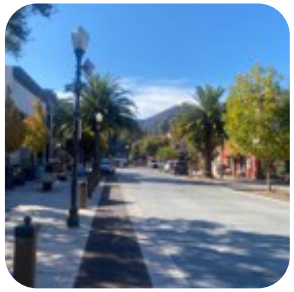
Pedestrian Improvement Measures

Examples of pedestrian improvements that can improve the safety, comfort, and convenience of people who choose to walk include:


Enhanced Crossings


Pedestrian Refuge Island


Street Trees/ Landscaping


Wide Sidewalks


Transit Stop Amentities


Trail Connections

TABLE 10: PEDESTRIAN IMPROVEMENT MEASURES

MEASURE	PURPOSE/ DESCRIPTION	APPLICABLE STREET TYPOLOGIES	COST
Enhanced Crossings	Makes crosswalks and the people using them more visible to vehicles; includes high-visibility crosswalks, lighting, signing, and pavement markings, and may feature pedestrian-activated beacons to notify oncoming vehicles of the presence of pedestrians e.g. High-Intensity Activated crosswalk signal (HAWK) and Rectangular Rapid Flashing Beacon (RRFB).	Boulevard, Community Corridor, Main Street	$$
Pedestrian Refuge Island	Improves safety and comfort for pedestrians by providing pedestrians with protected area in the median and creating the option of waiting before beginning the next stage of crossing	Boulevard, Community Corridor, Main Street	$$
Street Trees/Landscaping	Provides shade, comfort, and a buffer for pedestrians from vehicle traffic, along with traffic calming benefits; can support drainage and water quality through green stormwater infrastructure enhancement	Boulevard, Community Corridor, Main Street, Neighborhood Streets	$$$
Wide Sidewalks	Provides additional space and comfort for pedestrians, and allows for amenities and street furniture	Boulevard, Community Corridor, Main Street	$$
Transit Stop Amenities	Provides comfort, seating, shelter, and wayfinding for individuals waiting for public transit	Boulevard, Community Corridor, Main Street	$$$
Trail Connections	Provide short-distance connections to improve access to local and regional recreational opportunities	Boulevard, Community Corridor, Main Street, Neighborhood Streets, Rural Streets	$$

Bicycle Improvement Measures

Examples of bicycle improvements that can improve the safety, comfort, and convenience of people who choose to bike include:

Sidepath

Buffered Bike Lanes

Bike Lane

Separated Bike Lane

Enhanced Crossing

Protected Intersection

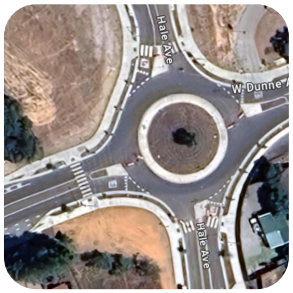
TABLE 11: BICYCLE IMPROVEMENT MEASURES

MEASURE	PURPOSE/ DESCRIPTION	APPLICABLE STREET TYPOLOGIES	COST
Sidepath	Provides sidewalk-level dedicated space for bicycles/pedestrians that is grade-separated from vehicle traffic	Boulevard, Community Corridor	$$$
Buffered Bike Lanes	Provides dedicated space along streets for bicyclists through pavement striping and signage; striped buffers provide additional separation from vehicles	Boulevard, Community Corridor	$
Bike Lane	Provides dedicated lanes for bicyclists along streets through pavement striping and signage	Boulevard, Community Corridor, Main Street	$
Separated Bike Lane	Provides a physical barrier between the bicyclist and traffic lanes using treatments such as a curb, bollards, parked cars, or planters; increase safety and enhance the level of comfort for bicyclists	Boulevard, Community Corridor	$$
Enhanced Crossing	Makes crosswalks and the people using them more visible to vehicles; includes high-visibility crosswalks, lighting, signing, and pavement markings, and may feature pedestrian-activated beacons to notify oncoming vehicles of the presence of pedestrians e.g. High-Intensity Activated crosswalk signal (HAWK) and Rectangular Rapid Flashing Beacon (RRFB).	Boulevard, Community Corridor, Main Street	$$
Protected Intersection	Physically separates bicycles from motor vehicles at intersections to provider high degree of comfort and safety; can reduce likelihood of high-speed vehicle turns, improves sightlines, and reduces the distance and time that bicyclists are exposed to conflicts	Boulevard, Community Corridor, Main Street	$$$

Roadway Congestion and Delay Improvement Measures

Increase in transportation options through active transportation projects, improved multimodal access to local destinations and schools, and participation in Transportation Demand Management (TDM) programs, will help proactively reduce traffic congestion throughout the City. Furthermore, physical improvements at intersections and along corridors can help reduce vehicle congestion and delay. Examples of these improvements include:

All Way Stop Control



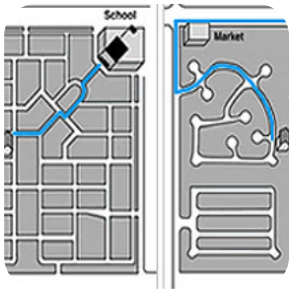
Roundabouts

Signals

Turn Lanes

Signal TIming

Corridor Signal Synchronization



Street Connectivity

Ramp Metering

TABLE 12: ROADWAY CONGESTION AND DELAY IMPROVEMENT MEASURES

MEASURE	PURPOSE/ DESCRIPTION	APPLICABLE STREET TYPOLOGIES	COST
All Way Stop Control	Intersection control which requires vehicles on all the approaches to an intersection to stop. Provides for control of major roadway approaches to allow for minor street access.	Main Street, Neighborhood Street, Rural Street	$

TABLE 12: ROADWAY CONGESTION AND DELAY IMPROVEMENT MEASURES (CONT.)

MEASURE	PURPOSE/ DESCRIPTION	APPLICABLE STREET TYPOLOGIES	COST
Roundabouts	Intersection control that features channelized, curved approaches that reduce vehicle speed and reduce severity of collisions, entry yield control that gives right-of-way to circulating traffic, and counterclockwise flow around a central island that minimizes conflict points. This measure also helps reduce speeds and is applicable for traffic calming.	All	$$$
Signals	Intersection control designed to ensure an orderly flow of traffic, provide an opportunity for pedestrians or vehicles to cross an intersection and help to reduce the number of conflicts between vehicles entering intersections from different directions.	All	$$$
Turn Lanes	Turn lanes help reduce congestion and keep traffic flowing smoothly at intersections by segregating turning vehicles from through traffic.	All	$$
Signal Timing	Adjust signal timing like cycle lengths, phasing etc. to better accommodate volume of traffic and reduce delay at an intersection. *Signal timing can also be adjusted on routes parallel to the freeway to increase delay and reduce regional cut-through traffic.*	All	$
Corridor Signal Synchronization	Involves implementation of coordinated signal timing along roadway corridors to minimize delay and queues for traffic flow on major roadways. May include Intelligent Transportation System (ITS) like Adaptive Traffic Signal Control (ATSC).	Boulevards	$$$
Street Connectivity	A well-connected transportation network reduces the distances traveled to reach destinations, increases the options for routes of travel, and can provide opportunities to expand pedestrian and bicycle facilities.	All	$$$
Ramp Metering	Ramp meters are traffic signals installed on freeway on-ramps to control the rate at which vehicles are permitted to enter the flow of traffic on the freeway. *Ramp metering can be adjusted to increase delays at ramps to dissuade regional cut-through traffic. The City has no control of ramp metering, therefore any adjustment of metering will require Caltrans coordination. Caltrans will have authority over any adjustments.*	Not Applicable to City Streets	$

Traffic Calming Improvements

Traffic calming consists of physical design and other measures put in place on existing roads to reduce vehicle speeds and improve safety for pedestrians and cyclists. Traffic calming measures also consist of closures that obstruct traffic movements in one or more directions, such as median barriers, which are intended to reduce cut-through traffic. These measures can be implemented at an intersection, street, neighborhood, or area-wide level.

Examples of traffic calming improvements that can help reduce speeding and local cut-through traffic include:

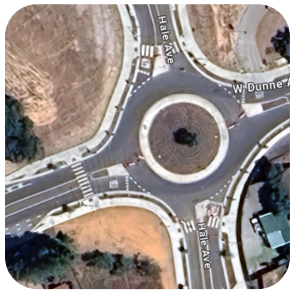
NON- PHYSICAL MEASURES

Radar Speed Feedback Sign

Signing & Striping

PHYSICAL MEASURES - HORIZONTAL DEFLECTION

Traffic Circle



Roundabouts

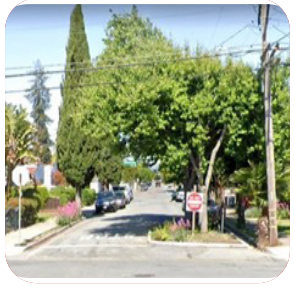
PHYSICAL MEASURES - VERTICAL DEFLECTION

Speed Tables/ Raised Crosswalk

Raised Intersection

PHYSICAL MEASURES - ROUTING RESTRICTION

One-Way Streets



Closures

Divertors

Barriers, Forced-turn Islands

PHYSICAL MEASURES - STREET WIDTH REDUCTION

Median Island

Curb Extension

Chicane

In-Roadway Signs & Delineators

Road Diet

TABLE 13: TRAFFIC CALMING MEASURES

MEASURE	PURPOSE/ DESCRIPTION	APPLICABLE STREET TYPOLOGIES	COST
Radar Speed Feedback Sign	This is a temporary or permanent device that is primarily used to deter speeding by proving real-time feedback to drivers. Can be placed in locations where there is a large presence of pedestrians & bicyclists to slow vehicular traffic.	All	$
Signing & Striping	Installing or upgrading signs and pavement markings on an affected roadway can be a cost-effective measure to reduce speeding. Such improvements include high visibility crosswalks, advisory speed signs and pavement markings, speed activated signs, optical speed bars, transverse rumble strips, narrow lane striping etc. *Turn restrictions can be used to reduce cut-through traffic.*	All	$
Median Island	This is a median placed in the center of a roadway midblock or at entry or exit points to create a narrower travel way and also reduce pedestrian crossing distances.	All	$$
Curb Extension	These are various methods of narrowing the roadway by extending raised curbs into the street. These can be done at street entries and exits, intersections, as well as mid-block locations. The narrower street generally results in reduced traffic speeds and provides pedestrians with shorter crossing distances.	Community Corridor, Main Street, Neighborhood Street	$$
Chicane	Is a series of alternating mid-block curb extensions or islands that narrow the roadway and require vehicles to follow a curving, S-shaped path, discouraging speeding.	Neighborhood Street	$$
Road Diet	Involves converting an existing four-lane undivided roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane (TWLTL). The additional right-of-way can be used for multimodal improvements.	Community Corridor	$$
Traffic Circle	This device is a raised circular island in the middle of a residential neighborhood intersection. Direct straight through movements are obstructed by the raised island causing traffic to move to the right and around the circle. The intersection approaches are normally controlled by yield signs that serve to alert motorists to the need to slow their speed entering the intersection.	Neighborhood Street	$$$

TABLE 13: TRAFFIC CALMING MEASURES (CONT.)

MEASURE	PURPOSE/ DESCRIPTION	APPLICABLE STREET TYPOLOGIES	COST
Speed Tables/Raised Crosswalk	These are speed humps with a long flat section that are generally used at crosswalk locations.	Main Street, Neighborhood Street	$$
Raised Intersection	A raised intersection is a flat, raised area covering an entire intersection with ramps on all approaches. It is essentially a speed table that covers an entire intersection, including the crosswalks.	Main Street	$$$
Barrier, Force-turn Islands	These can be a barrier or raised island along the center of a roadway to prohibit left turns or crossing traffic. *Reduces cut-through traffic on neighborhood streets.*	Neighborhood Street	$$
Divertors	These are barriers placed diagonally across an intersection to force drivers to make a particular turn but not allow other movements. *Reduces cut-through traffic on neighborhood streets.*	Neighborhood Street	$$
Closures	A partial closure is a barrier to traffic in one direction that permits traffic in the opposite direction to proceed. A full closure is a complete barricade or termination of a street. *Reduces cut-through traffic on neighborhood streets.*	Neighborhood Street	$$
One-Way Streets	This is when traffic on a street is regulated to only allow traffic to flow in one direction. Usually this is accomplished through sign placement. *Reduces cut-through traffic on neighborhood streets.*	Neighborhood Street	$$
Roundabout	This device is a raised circular island placed within an unsignalized intersection around which traffic circulates. Direct straight through movements are obstructed by the raised island causing traffic to move to the right and around the circle. The intersection approaches are normally controlled by yield signs that serve to alert motorists to the need to slow their speed entering the intersection.	All	$$
In-Roadway Signs and Delineators	These are vertical elements that can be used along roadways to create a visual narrowing effect, which encourages slower driving.	All	$

Regional Cut-Through Measures

Regional cut-through traffic in Morgan Hill refers to vehicles traveling on the City's streets without having an origin or destination within the City itself. Due to peak-hour congestion on US 101, some regional traffic diverts from the freeway and uses City streets like Butterfield Boulevard and Monterey Road, contributing to local congestion. Cut-through issues have been exacerbated by Waze and other navigation apps which route non-local traffic onto local streets to avoid congestion on highways.

While the TMP does not specify individual projects targeting regional cut-through traffic, it does suggest several potential measures to manage this issue. However, it's important to acknowledge that these measures could increase delays for residents and their visitors which themselves have origins and destinations outside of Morgan Hill.

PHYSICAL MEASURES

- **Signal Timing** – Signal timing on north-south arterial routes parallel to freeway could be adjusted to increase the delay and travel time for through traffic during the peak hours. By increasing the delay and travel time during peak hours, this approach would make using City streets less attractive compared to staying on the freeway. However, it's crucial to balance this with the needs of local residents and businesses, as increased delay could also impact local, or inter-city, travel.

- **Turn restrictions –** Turn restrictions limit access to certain streets during peak hours or at all times. This approach prevents drivers from diverting onto City streets to bypass freeway congestion. Common restrictions include no left-turn/right-turn during peak hours or at all times and local access-only signs to discourage non-local drivers from using residential streets as shortcuts. While turn restrictions can reduce cut-through traffic, they may also inconvenience residents and increase travel time for local trips. Therefore, careful placement and timing of these restrictions, coupled with public outreach and enforcement, are crucial for success. Feedback from the community tended to not be favorable for measures that would inhibit Morgan Hill residents.

- **Ramp metering -** Ramp metering controls the flow of vehicles entering the freeway. Ramp metering helps regulate the rate at which vehicles enter the freeway, smoothing traffic flow and reducing congestion on the mainline. Currently, all on-ramps in the City (US 101/ Cochrane Road interchange, US 101/Dunne Avenue interchange, and US 101/Tennant Avenue interchange) are metered. Increasing metering rates will result in reduced traffic flow onto the freeway at these ramps and will help to reduce freeway congestion caused by vehicles merging simultaneously, encouraging more drivers to stay on the freeway. Metering rate adjustments may also discourage drivers from utilizing local streets to bypass freeway congestion due to the increase in delays to access the freeway at ramps within the City. However, ramp metering can also cause backups on City streets near on-ramps, potentially increasing congestion for local traffic and will result in delays for Morgan Hill residents that also access the freeway. The City has no control of ramp metering, therefore any adjustment of metering will require Caltrans coordination. Caltrans will have authority over any adjustments.

NON-PHYSICAL MEASURES

- **Promote expansion of the regional transit system**– Promoting the expansion of the regional transit system can be a long-term solution to reduce regional cut-through traffic in Morgan Hill. By offering more efficient, reliable, and convenient transit options, regional commuters would be less inclined to use personal vehicles reducing overall congestion.

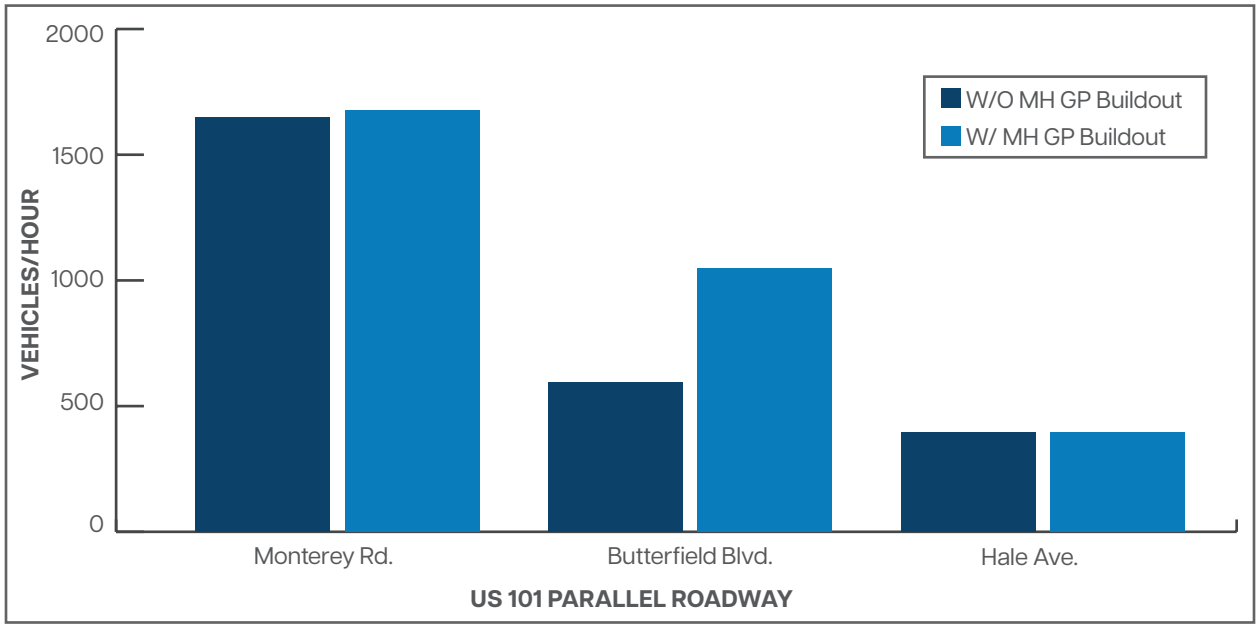
- **Advocate for regional projects like addition of High Occupany Vehicle (HOV) lane on US 101** – The *Valley Transportation Plan 2040* adopted by the Valley Transportation Authority (VTA) in October 2013 identifies widening US 101 to include an express lane in both southbound and northbound directions between Cochrane Road and Masten Avenue in Gilroy to improve travel along the freeway as well as City streets. However, there is no allocated funding nor adopted schedule for the completion of the express lanes. Advocating for the completion of this project would help to improve traffic along US 101 and reduce cut-through traffic on local streets.

CITY OF MORGAN HILL

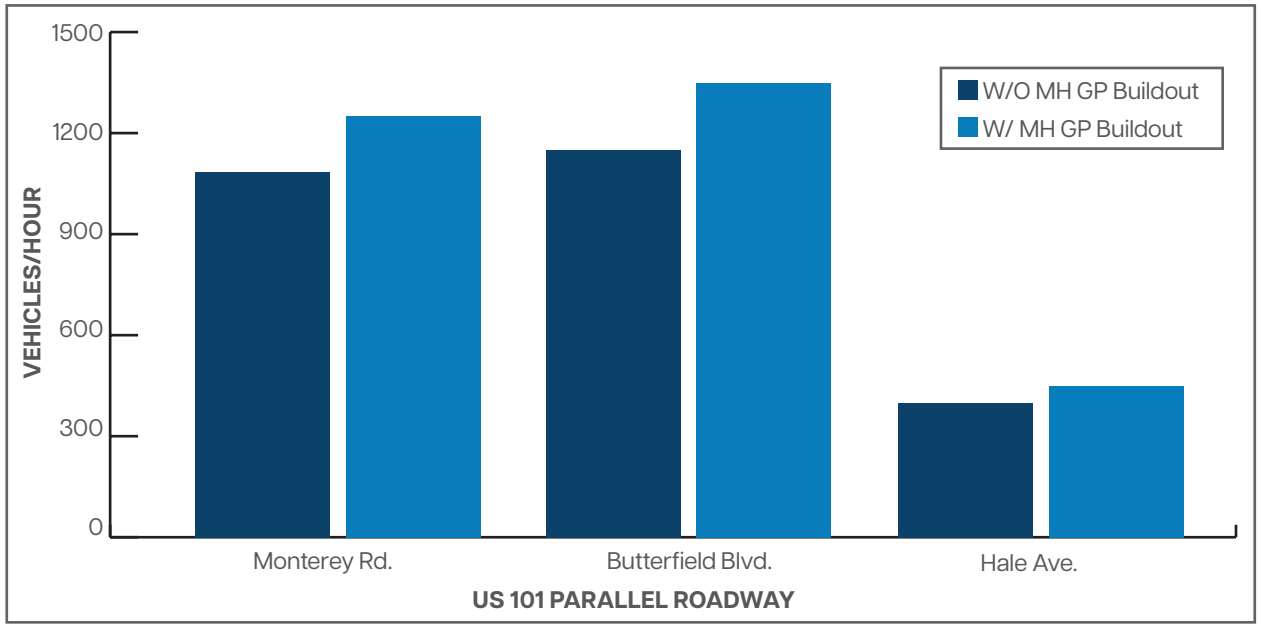
PROJECTED TRAFFIC GROWTH ON CITY STREETS

Morgan Hill has no control over regional growth. Review of projected traffic volumes indicate that traffic growth on City streets would be similar with or without the planned GP growth. Therefore, any roadway capacity on city streets that is made available by limiting growth within Morgan Hill will likely be utilized by regional traffic growth.

AM Peak Hour Traffic Growth



PM Peak Hour Traffic Growth



06

IMPLEMENTATION

Overview

The existing conditions findings and feedback received from community outreach were used to develop the proposed transportation program described in this Chapter. The transportation program is a coordinated series of actions the City will follow to guide future transportation investments in Morgan Hill.

The TMP evaluated a list of transportation projects and programs that are currently in progress or previously identified, as well as new projects and programs that emerged through the Plan development process. Projects were then prioritized based on an evaluation process that determined how the projects improve performance of the transportation system based on the location of the improvement as well as the effectiveness of the improvement. Based on this evaluation process, the TMP identifies "Tier 1" and "Tier 2" ranking projects that represent the community's values to improve mobility in Morgan Hill. Appendix A provides a list of all improvement projects and detailed information on the project prioritization process and results.

Project Categories

The project team reviewed 99 roadway segments and 87 intersections in the City, compiling gaps and opportunities based on an analysis of collisions, multimodal deficiencies, traffic operations, speeding issues, and input from the Stakeholder Committee, City Council, commissions, City staff, and community members. Additionally, the team assessed previous City plans, County plans, and conditions of approval for new developments to ensure consistency in recommendations. Using the improvements toolbox from Chapter 5, 91 projects were developed to address these gaps and opportunities, ensuring alignment with previously identified improvements where applicable. Based on their primary characteristics, the list of projects is organized into the following four project categories:

1. Pedestrian Improvements
2. Bikeway and Trail Network Improvements
3. Vehicle Operations Improvements
4. Traffic Calming Improvements

Category 1: Pedestrian Improvements

The pedestrian improvement projects proposed in this plan intend to create a safer, accessible, connected, and more robust pedestrian network in Morgan Hill. Pedestrian network improvements ensure that people walking can easily and safely reach their destinations. The TMP focuses on crossing improvements as sidewalk enhancements are frequently installed through private development projects. Gaps in the sidewalk network may also be addressed through spot improvements or as part of larger corridor improvements.

Pedestrian improvements recommended in this plan include new pedestrian crossings and existing pedestrian crossings with enhanced features to create higher levels of comfort, more frequent crossing opportunities, and greater connections to and within Pedestrian Priority Zones. Recommended pedestrian crossing improvements in this plan are included as larger projects recommendations (for example, crossing improvements can be included in a Corridor Improvement project recommendation), though enhanced crossings may also be undertaken as discrete projects.

The specific types of improvements recommended in this plan include:

- Crossing treatments and pedestrian crossing improvements
- Curb extensions
- Remove dedicated right-turn lane
- Enhanced crossings likes HAWKs and RRFBs
- Trail crossing improvements
- New crossings
- Protected intersections

See Figure 13 for a complete set of recommended pedestrian crossing improvements.

PROJECT INPUTS

The inputs (i.e., the different components that were analyzed during the planning process) used to develop recommended pedestrian network improvements follow five key steps:

1. Documenting “Existing Conditions” to understand the current conditions in Morgan Hill

2. Reviewing “Previously Proposed Intersection Improvements” from earlier planning documents

3. Conducting an analysis of Pedestrian Priority Zones to assess areas with high concentrations of pedestrian activity

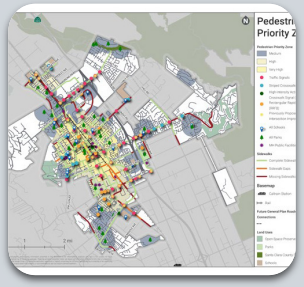
4. Evaluating existing crossing spacing to identify crossing gaps

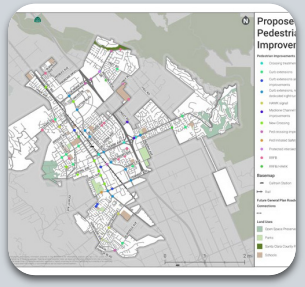
5. Applying “Street Typologies” to guide design. These inputs collectively inform the development of the final “Proposed Pedestrian Network.”

CITY OF MORGAN HILL

PROPOSED PEDESTRIAN IMPROVEMENTS: INPUTS





Existing Conditions

Review of Google aerial and street view imagery to verify and document the existing intersections and crosswalks.

Previously Proposed Intersection Improvements

Mapped previously proposed intersection improvements from the Bikeways, Trails, Parks, and Recreation Master Plan (2017).

Pedestrian Priority Zones

Pedestrian Priority Zones determined based on trip generators (i.e. destinations) to understand areas with the greatest pedestrian trip potential

Crossing Spacing

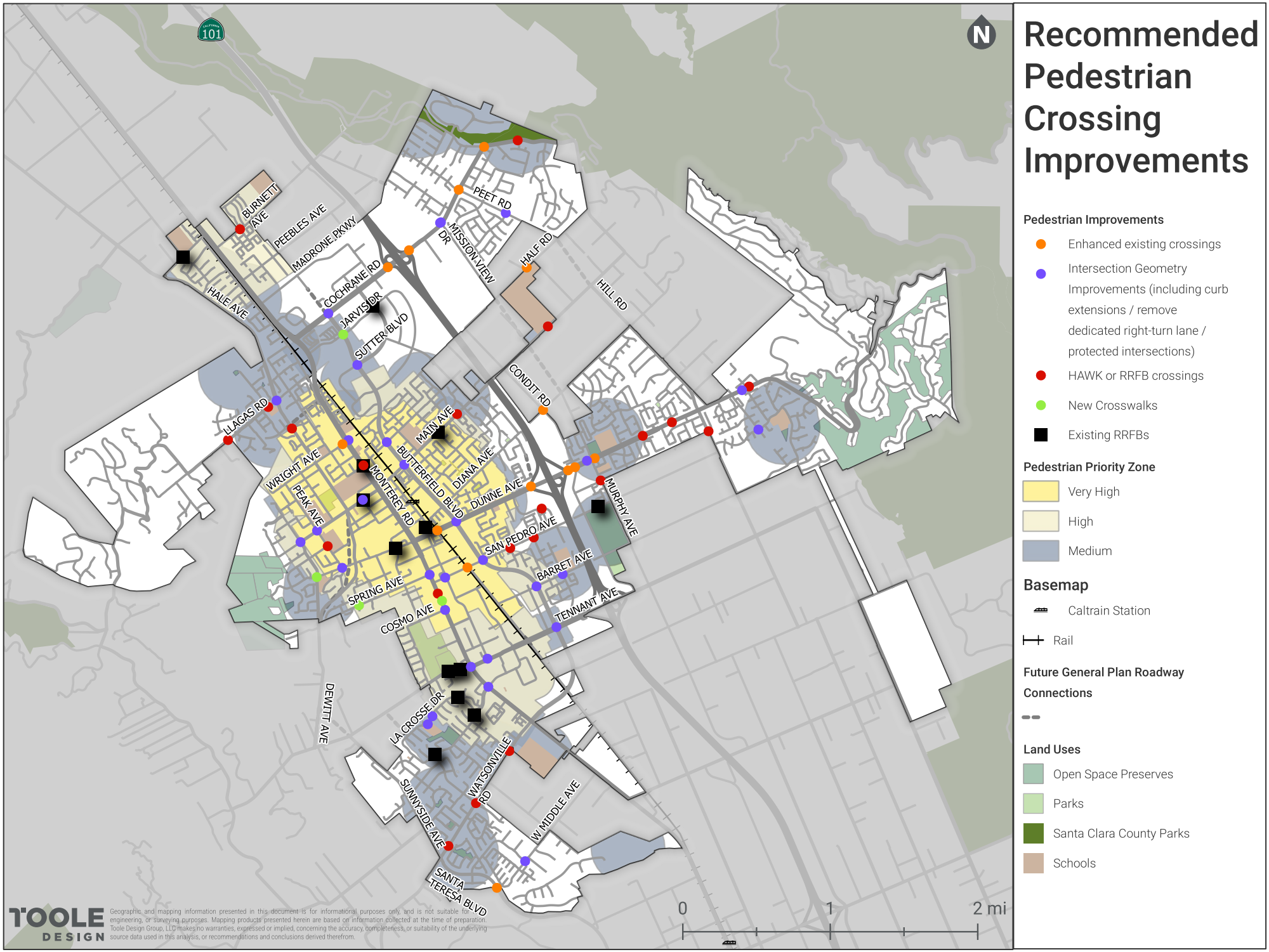
Review of spacing between crossings in areas with high levels of pedestrian activity; gaps of no more than ¼-mile between crossing desired

Street Typologies

Application of street typologies with design guidance

Proposed Crossing Opportunities

Figure 13: Recommended Pedestrian Crossing Improvements



Category 2: Bikeway and Trail Network Improvements

The bikeway projects proposed in this plan intend to create a safer and more comfortable network for riders of all ages and abilities. Where feasible, greater physical separation is recommended between the proposed bike lane and vehicular traffic. Additionally, the proposed network will provide greater connectivity throughout the City, including to schools, parks, and destination centers, and provides greater access between the west and east sides of Morgan Hill.

The specific types of improvements recommended in this plan include:

- Upgrades to existing facilities to create a safer and more comfortable network
  - For example, recommendations include upgrading existing Class II standard bike lanes to Class II buffered bike lanes to increase physical separation from motor vehicles and bicyclists where feasible

- New bikeways to fill network gaps, enhance connectivity and access
  - For example, recommendations include installing high quality Class III bike boulevards on streets without existing bicycle infrastructure

RECOMMENDED BIKEWAY NETWORK

Figure 14 depicts the long-range recommended bikeway and trails network for the City of Morgan Hill. Key improvements include corridor-wide improvements to enhance bicyclist safety such as installing Class II buffered bike lanes along the entirety of Butterfield Boulevard, Dunne Avenue, and Cochrane Road, and along Monterey Road where space permits (and excluding downtown). The recommendations contained in the TMP are consistent with and complement the VTA Bicycle Superhighway Implementation Plan

PROJECT INPUTS

The inputs (i.e., the different components that were analyzed during the planning process) used to develop a recommended bikeway network follow five key steps:

1. Documenting “Existing Conditions” to understand the current conditions in Morgan Hill

2. Reviewing “Previously Proposed Bikeways” from earlier planning documents

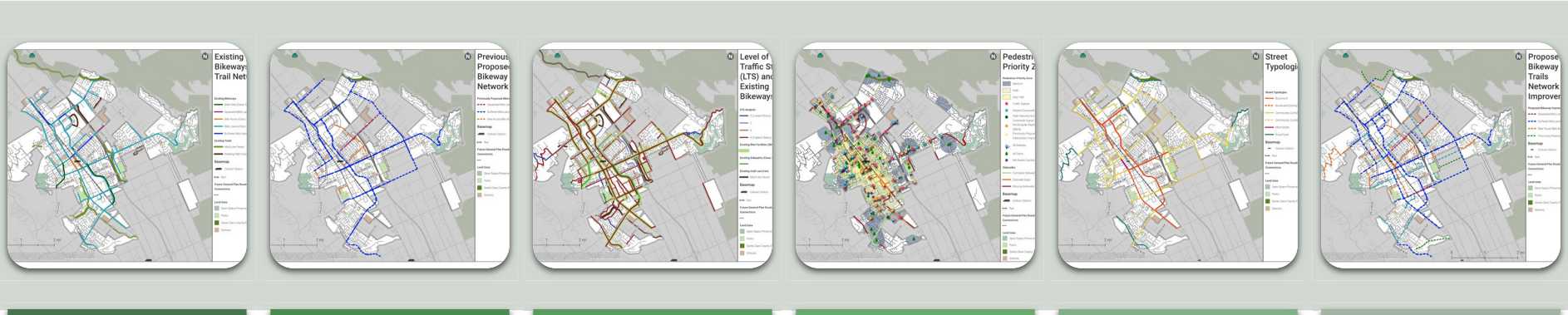
3. Conducting a “Level of Traffic Stress Analysis” to assess the comfortability of existing bikeway

4. Evaluating “Access to Destinations” to identify network gap

5. Applying “Street Typologies” to guide design. These inputs collectively inform the development of the final “Proposed Bikeway Network.”

CITY OF MORGAN HILL

PROPOSED BIKEWAY IMPROVEMENTS: INPUTS



Existing Conditions

Existing conditons data and Google aerial and street view imagery used to verify and document the existing bikeway network.

Previously Proposed Bikeways

Review of previously proposed facilities from the Bikeways, Trails, Parks, and Recreation Master Plan (2017).

LTS Analysis

Level of Traffic Stress (LTS) scores analyzed to identify high-stress existing bikeways that could benefit from greater separation from vehicular traffic.

Access to Destinations

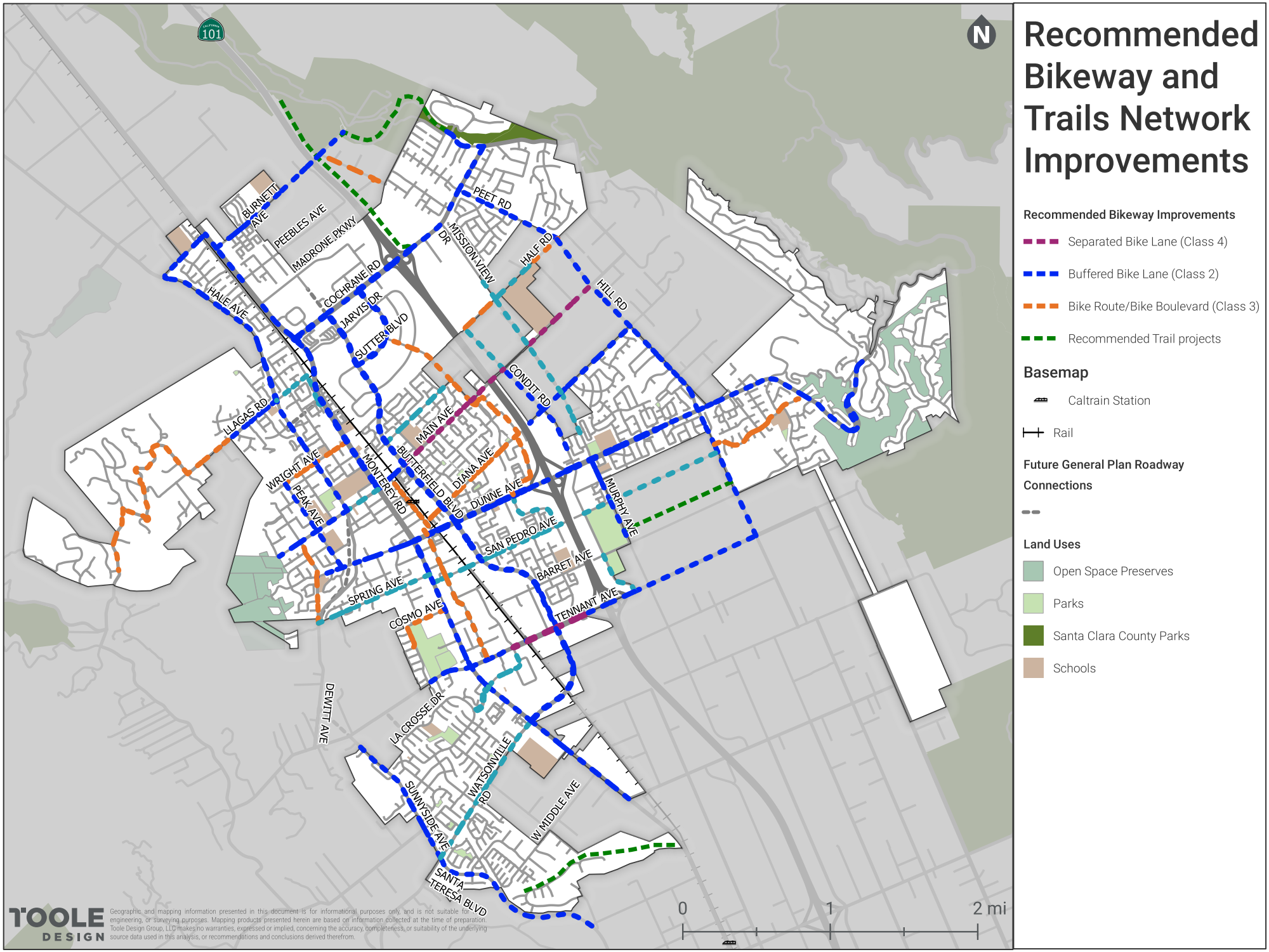
Evaluation of connection to local and regional destinations, including gaps in the bikeway network

Street Typologies

Application of street typologies with design guidance

Proposed Bikeway Network

Figure 14: Recommended Bikeway and Trails Network Improvements



Category 3: Vehicle Operations Improvements

Areas with high commercial and employment activity, such as Downtown, and major streets that serve regional commuters, like Butterfield Boulevard, experience greater-than-average levels of peak period congestion. In addition to the multimodal improvements identified, enhancements to directly reduce vehicle congestion and delay will improve the overall experience for all users. Enhancements may range from traffic flow improvements such as signal coordination and turn restrictions to allow for more efficient travel along a corridor, to major intersection treatments to meet the needs of the City's planned growth while providing safe opportunities for alternative modes of travel within the City.

The specific types of improvements recommended in this plan include:

- Adjustments of existing signal phasing and timing to serve peak demand travel.
    - For example, recommendations include enhanced signal coordination along a corridor to improve traffic flow during peak commute periods

- New intersection control to improve intersection safety and operations and serve future demand
    - For example, recommendations include installing a new traffic signal or roundabout to facilitate access to primary roadways from minor street and/or improve overall intersection operations.

Figure 15 depicts the locations of recommended intersection operations improvements.

RECOMMENDED INTERSECTION OPERATIONS IMPROVEMENTS

The identification of improvements considered the effectiveness in improving operations and right-of-way restrictions. Key improvements include traffic signals or roundabouts where projected traffic volumes will warrant controlled travel through the intersection such as Santa Teresa Boulevard/Watsonville Road and Peet Avenue/Cochrane Road for improved operations and safety. As well as consideration of LOS policy adjustments to provide for improved pedestrian and bicycle travel through intersections including those along the Butterfield Boulevard corridor.

The evaluation of roadway segment capacity indicated that the current capacity of all roadways evaluated would be adequate to meet future demand, with the exception of Monterey Road between Wright Avenue and Cochrane Road, without the additional roadway capacity planned as part of the General Plan.

It should be noted that the TMP includes additional improvements at intersections that were not projected to operate below City operating standards for the purpose of improving pedestrian and bicyclist safety and travel thoughout the City.

PROJECT INPUTS

The evaluation process that was used to develop traffic operations projects is outlined below:

1. Documenting "Existing Conditions" to understand the current traffic conditions in Morgan Hill.

2. Update the City's General Plan Travel Demand Forecasting (TDF) Model to develop projections of traffic volumes that align with recent development and the planned GP land use growth.

3. Complete peak hour intersection level of service analysis at intersections and review segment capacity to meet daily traffic volume.

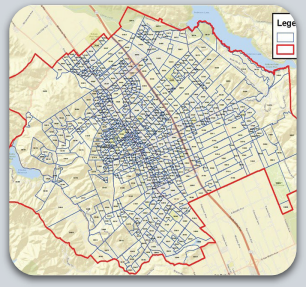
4. Complete peak hour signal warrant analysis at unsignalized intersections.

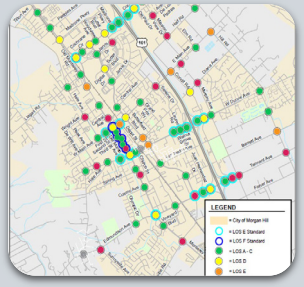
5. Review adequacy of current roadway capacities to serve projected traffic growth.

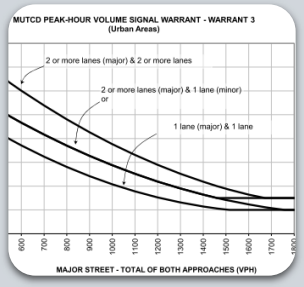
6. Identifying improvements at locations where the current and projected peak hour intersection operating conditions do not meet the City's General Plan operating standards or warrant control.

CITY OF MORGAN HILL

PROPOSED VEHICLE OPERATIONS IMPROVEMENTS: INPUTS







Existing Conditions

Review of intersection and segment counts, geometry, signal timing, and phasing

Update GP Travel Demand Forecasting (TDF) Model

Develop projections of traffic volumes that align with recent development and the planned GP land use growth

Operations Analysis

Complete peak hour intersection LOS and review segment capacity to meet daily traffic volumes

Signal Warrant Analysis

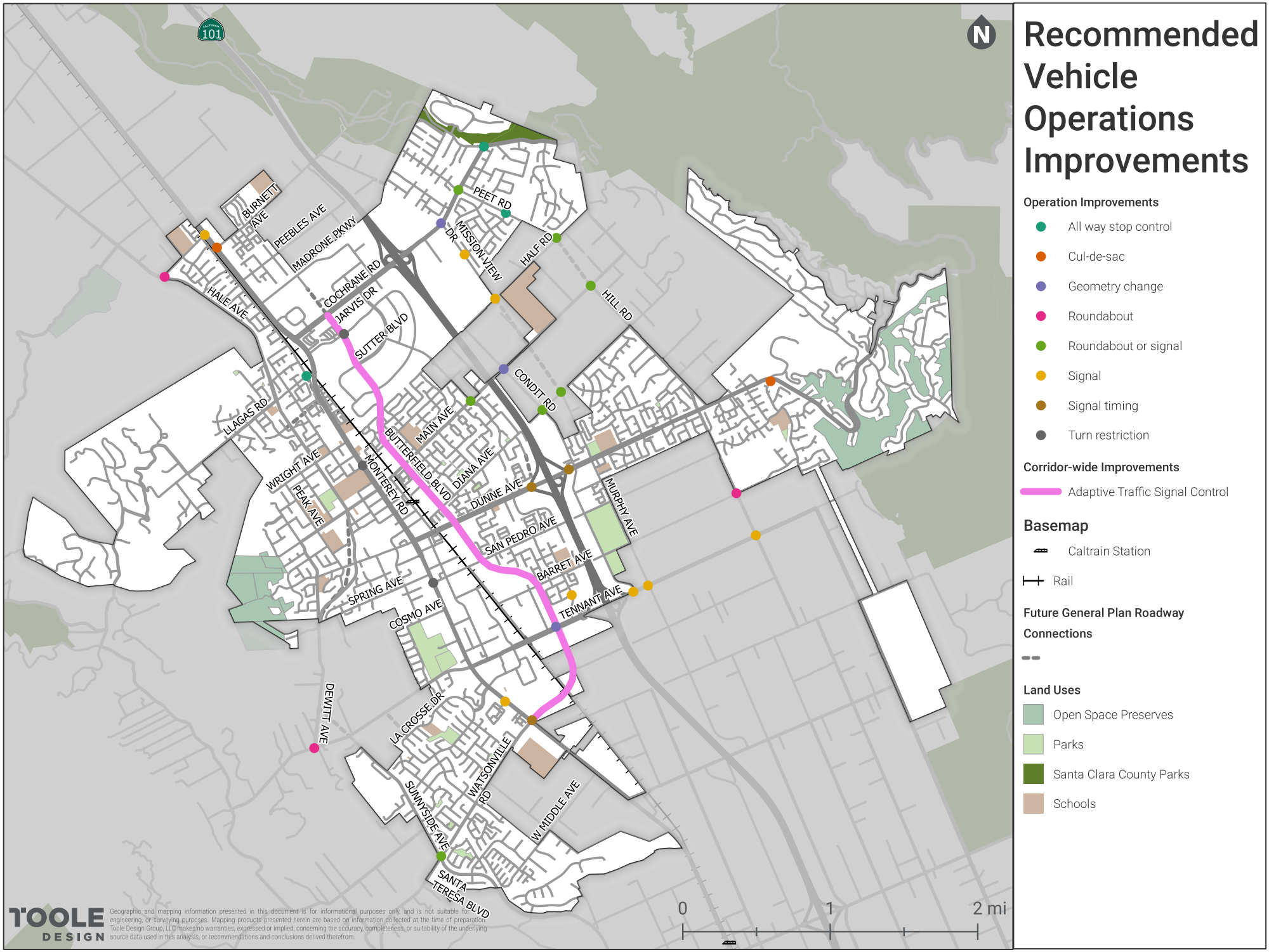
Complete peak hour signal warrant analysis at unsignalized intersections

Roadway Capacity Review

Review adequacy of current roadway capacity to serve projected traffic growth

Proposed Operations Improvements

Figure 15: Recommended Vehicle Operations Improvements



Category 4: Traffic Calming Improvements

The intent of traffic calming projects proposed in this plan is to manage vehicular speeds along corridors in the City near destinations like schools, Downtown, and parks, and generally where speeding issues were observed to create a safer network for all users of the street.

The specific types of improvements recommended in this plan include:

- Non-Physical Improvements: include educational programs, police enforcement, speed feedback signs, additional signage (stop signs and turn-prohibition signs excluded), and additional pavement striping. These measures do not disturb normal traffic operations or emergency operations and target only those that are speeding and/or cutting-through. These measures are easy to implement, relatively inexpensive, less intrusive, and have few negative effects.
- Physical Improvements: include traffic circles/roundabouts, physical lane narrowing/shifting measures (i.e. bulbouts, chokers, road diets), and physical movement-restriction measures (i.e. turn-prohibition). Intelligent Transportation System (ITS) measures like signal synchronization for slower speeds along non-local streets have also been recommended. Unlike non-physical measures, physical measures inconvenience all vehicles. Physical measures are difficult to implement, relatively expensive, can be very intrusive, and have varying negative effects.

Locations where specific physical improvements are proposed have been shown on Figure 16.

RECOMMENDED TRAFFIC CALMING PROJECTS

Where feasible, it is generally recommended that lanes be narrowed to 10-feet. Other non-physical measures like installing speed signs to inform drivers of the speeds that should be maintained on the roadway and radar speed feedback signs to deter speeding by proving real-time feedback have been recommended on all streets where speeding issues were observed. Key physical improvements proposed include signal synchronization for slower speeds along Monterey Road, road diet along Monterey Road (voter approval required), roundabout at Hale Avenue and Tilton Avenue, and curb extensions and traffic circles at several intersections along local streets. The study also proposes median islands and raised intersections if feasible. The exact location for these improvements would require additional analysis.

PROJECT INPUTS

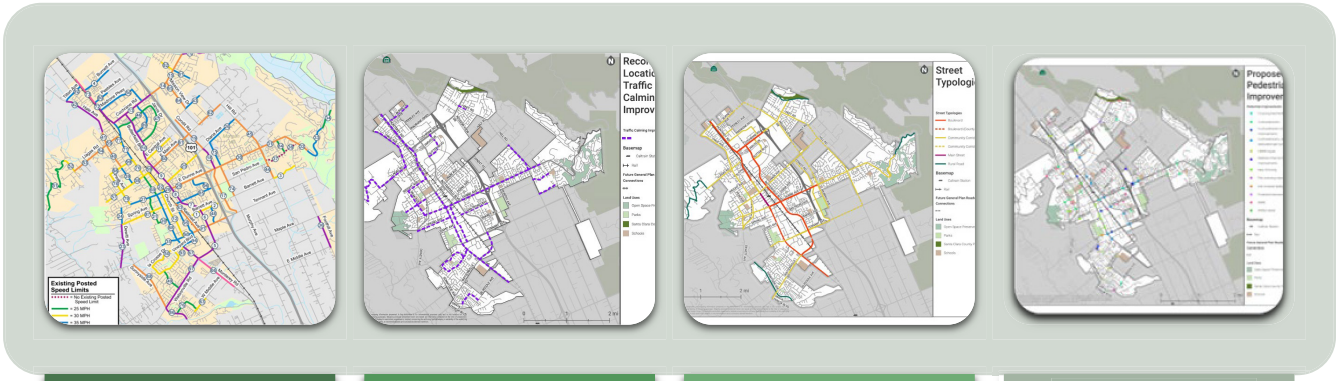
The different components that were analyzed during the planning process used to develop traffic calming projects are outlined below:

1. Documenting “Existing Conditions” to understand the current conditions in Morgan Hill.
2. Identifying locations where the 85th percentile speed exceeds the existing speed limit by 5 mph.
3. Applying “Street Typologies” to identify the types of traffic calming improvements that could be feasible e.g. Raised intersections were only considered on a Main Street; Curb extensions were only considered on Community Corridors, Main Streets, and Neighborhood Streets.

It is important to note that proposed traffic calming improvements would require further analysis for feasibility and coordination with emergency services to ensure a balanced approach between reduction in speeds and effect on emergency response times.

CITY OF MORGAN HILL

PROPOSED TRAFFIC CALMING IMPROVEMENTS: INPUTS



Existing Conditions

Collect speed data on street segments

Identify Speeding Issues

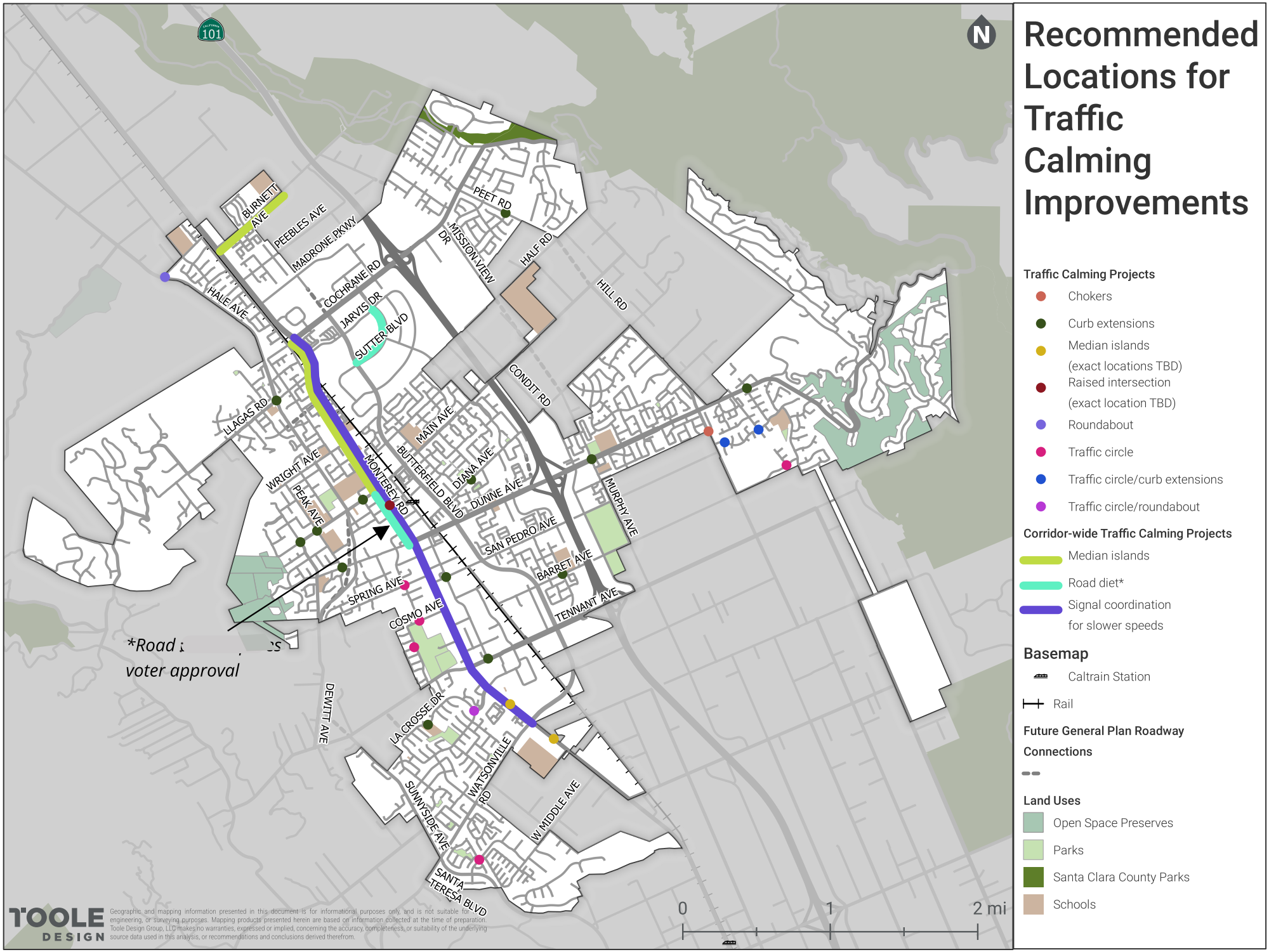
Identify locations where the 85th percentile speed exceeds the existing speed limit by 5mph

Street Typologies

Apply "Street Typologies" to identify the types of traffic calming improvements that could be feasible

Proposed Traffic Calming Improvements

Figure 16: Recommended Locations for Physical Traffic Calming Improvements



CITY OF MORGAN HILL

Project Evaluation and Prioritization Process

BACKGROUND

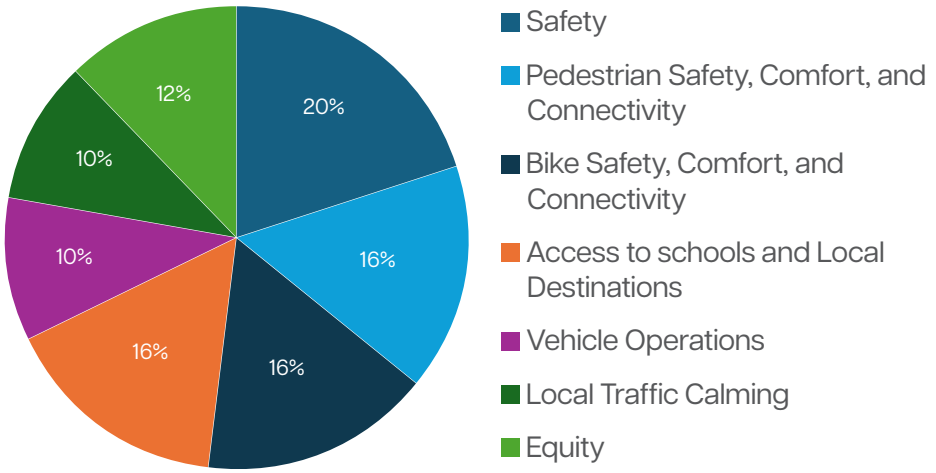
Purpose

To support plan implementation, the TMP includes an evaluation process that was used to assess the benefits of proposed transportation improvement projects. This section describes the seven categories and 11 criteria used in project evaluation and explains the methodology used to score and prioritize individual projects.

The evaluation criteria are connected to the overall goals of the TMP and utilize tools and maps that were developed for the TMP as well as publicly available datasets. Input was gathered from the Stakeholder Committee, Parks & Recreation Commission, Planning Commission, and City Council on the development of the criteria and their weighting.

See the chart below for the general evaluation categories and their share of available points, and Table 14 for a detailed summary of the evaluation criteria. All projects were evaluated using the same criteria, regardless of project type, and were assigned a priority tier from 1 (very high) to 3 (medium).

SHARE OF POINTS BY EVALUATION CATEGORY



Project Selection Considerations

The evaluation criteria applied in the Morgan Hill TMP reflect the benefits associated with a particular project. While the final evaluation score and priority tier level assigned to projects are intended to inform decision-making, it is important to note that projects may not always be implemented based on their priority ranking or category, and other factors are considered as part of project selection, including staffing, financial resources, and technical feasibility.

PROJECT EVALUATION PROCESS: CRITERIA AND METHODOLOGY

This section describes the criteria and evaluation process for each of the seven categories used for evaluating projects for the Morgan Hill TMP. See Table 14 for a summary of evaluation categories, individual criteria, and the application and distribution of points.

SAFETY

Overview

The safety evaluation category includes two factors that reflect the overall conditions along the project area, the High Injury Network, and recurring safety concerns, including Severe and Fatal Crashes. These factors should be addressed through changes to roadway geometry or infrastructure that supports the needs of vulnerable roadway users, including bicyclists and pedestrians.

Criterion Definition: High Injury Network

The High Injury Network (HIN) – developed specifically for the TMP – indicates roadways with the highest concentrations of severe crashes and can be used to prioritize overall roadway improvements. Points are awarded based on whether all, or a portion of, the project area is located along an HIN corridor.

Reference data: *HIN map created for the Morgan Hill TMP.*

Criterion Definition: Severe and Fatal Crashes

Points are awarded based on the number of recorded severe and fatal crashes along the project corridor for the most recent 5-year period for which crash data is available. Data from a parallel route within 0.25 miles is used if the project is located along a local road or a paved trail. A radius of 0.25 miles is used for intersection improvement projects.

Reference data: *CalTrans crash inventory data. The TMP uses data from 2016-2020; future applications of the evaluation process should use the most recent five years for which data is available.*

PEDESTRIAN SAFETY, COMFORT, AND CONNECTIVITY

Overview

This evaluation category is based on two metrics that collectively address locations with the greatest pedestrian-related needs, based on the presence of pedestrian generators (Priority Zone) and the quality of the pedestrian infrastructure (Facility Needs).

Criterion Definition: Priority Zone

Pedestrian Priority Zones are areas in Morgan Hill with high concentrations of destinations and pedestrian generators and reflect locations where pedestrians are most likely to be present. High quality pedestrian facilities and more frequent crossings are desired in these locations. Points in this criterion are awarded based on the most common Pedestrian Priority Zone designation along the corridor (i.e., medium, high, or very high).

Reference data: *Pedestrian Priority Zones map for the Morgan Hill TMP.*

Criterion Definition: Facility Needs

Complete sidewalk facilities and frequent crossing opportunities are critical for creating safe and well-connected pedestrian networks. Points in this criterion are awarded based on whether a project completes a gap in the sidewalk network or implements a new or enhanced pedestrian crossing. Points may also be awarded for projects that enhance safety for pedestrians through traffic signal modifications and/or technology upgrades.

Reference data: *Pedestrian conditions map in the Morgan Hill TMP. Location conditions should also be evaluated as part of project scoping. Should use the most recent five years for which data is available.*

BIKE SAFETY, COMFORT, AND CONNECTIVITY

Overview

This evaluation category considers a combination of factors, including existing conditions and proposed improvements. The highest scoring projects combine a high level of need based on both factors, as measured by bicycle level of traffic stress for the project location, and new or enhanced bikeways that will improve conditions for users.

Criterion Definition: Bicycle LTS

Bicycle level of traffic stress (LTS) is a tool for assessing the level of comfort (or discomfort) experienced by people bicycling along a street, and is based on factors such as posted speeds, traffic volumes, presence and width of bikeways, presence of on-street parking, and other factors. Bicycle LTS can be used to identify the potential for improvements along a corridor, and points are awarded based on the weighted average score along the project area. High stress streets (LTS 3 or 4) generate more points than lower stress streets (LTS 1 or 2).

Reference data: *Segment-level GIS data developed for the Morgan Hill TMP.*

Criterion Definition: Bikeway Improvements

Projects receive points based on whether bikeway improvements are included along all or part of the project area. Projects may be comprised of a standalone bikeway or trail improvement, or a larger roadway project that includes new bikeways or improvements to existing bikeways, such as upgrading a standard bike lane to buffered bike lanes, or adding some form of physical separation to an existing buffered bike lane to create a protected bike lane.

Reference data: *Existing and proposed bikeways and trails network in the Morgan Hill TMP; the Morgan Hill Bikeways and Trails Master Plan.*

ACCESS TO SCHOOLS AND LOCAL DESTINATIONS

Overview

The Morgan Hill TMP emphasizes improving local quality of life by increasing transportation options and creating greater access to local destinations. This category considers the benefits of projects in terms of improved access to key sites around Morgan Hill, and includes separate criteria for schools and general destinations. Project scores are compared to each other and divided into quartiles, with the highest scoring quartiles receiving the most points.

Criterion Definition: School Access

Points are awarded based on the number of schools – including public and private elementary, middle, and high schools – within 0.25 and 0.5 miles of the corridor. Project scores are normalized by project length (i.e., number of schools per mile) and weighted so that schools within a 0.25-mile radius of the project area are considered twice as valuable as schools within 0.5 miles.

Criterion Definition: Destination Access

Points are awarded based on the number of destinations within 0.25 and 0.5 miles of the project corridor or project intersection. Project scores are normalized by project length (i.e., number of destinations per mile) and weighted so that destinations within a 0.25-mile radius of the project area are considered twice as valuable as destinations within 0.5 miles. Eligible destinations include parks, grocery stores, shopping centers, pharmacies, medical facilities, major transit stops, and community facilities such as community centers and libraries.

Reference data: *Inventory of schools and destinations compiled for the Morgan Hill TMP.*

VEHICLE OPERATIONS

Overview

Improving vehicle operations can help manage congestion, create travel time savings, and reduce emissions. This category of improvements is critical given the commuting dynamics for Morgan Hill residents and high rates of vehicle ownership in the community.

Criterion Definition: Vehicle Operations

Points are awarded to projects that are likely to result in a reduction in delay or traffic congestion in the immediate vicinity or close proximity of a project. Vehicle operations improvements include physical changes to a roadway, including intersection improvements or the extension of existing roadways, as well as investments in Intelligent Transportation Systems, signal timing upgrades, and other technology that can be deployed to improve roadway performance.

Reference data: *Peak hour intersection level of service, signal warrants, and roadway capacity analysis*

LOCAL TRAFFIC CALMING

Overview

Managing speed on Morgan Hill roads and discouraging cut through traffic on local and collector streets are major community priorities identified in the TMP. This category awards points to projects that incorporate various traffic calming treatments.

Criterion Definition: Local Traffic Calming

Maximum points in this criterion are awarded to projects that calm traffic through **physical measures** such as roundabouts and curb extensions. Points are also awarded for **non-physical measures** that encourage slower speeds, such as narrower travel lanes, speed limit signs, and speed radar signs.

Reference data: *Project characteristics*

EQUITY

Overview

Transportation investments can address equity-related concerns by prioritizing projects that are likely to benefit historically marginalized groups or populations through improved safety and increased transportation options. Equity is considered in the Morgan Hill TMP through the Caltrans Transportation Equity Index (EQI), which assigns a score of 1 to 100 for each census tract. Census tracts receiving scores in the 65th percentile or above are considered disadvantaged communities.

Criterion Definition: Equity

Points are awarded based on the average disadvantaged communities index score for all census tracts that intersect or are within a radius of 0.1 miles of the project area. Higher points are awarded to projects with a greater overall average score.

Reference data: *Caltrans Transportation Equity Index (EQI)*

TABLE 14: EVALUATION CRITERIA METRICS AND POINTS GENERATION

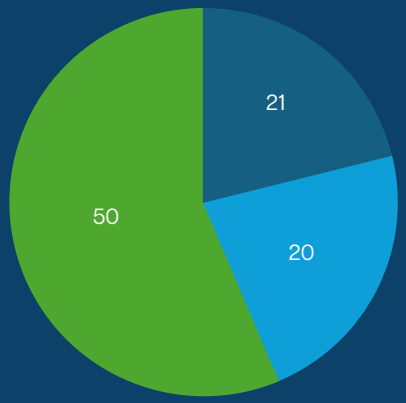
CATEGORY	MAXIMUM TOTAL POINTS	MAXIMUM POINTS BY METRIC	EVALUATION METRIC	POINTS GENERATION
Safety	10	5	**High Injury Network (HIN):** Project located along or intersects with a corridor	**5 points:** Project is primarily or completely along HIN **3 points:** Project is partially along HIN **2 points:** Project intersects with multiple HIN corridors **1 point:** Project intersects with single HIN
		5	**Severe and Fatal Crashes:** Presence of fatal crash(es) in project area	**5 points:** Multiple fatal crashes **4 points:** 1 fatal crash and ≥1 severe crash **3 points:** 1 fatal crash **2 points:** Multiple severe crashes **1 point:** 1 severe crash within 0.25 miles
Pedestrian Safety, Comfort, and Connectivity	8	4	**Priority Zone:** Project located in pedestrian priority zone (very high, high, medium)	**4 points:** Very high **3 points:** High **2 points:** Medium
		4	**Facility Needs:** Project improves conditions for pedestrians along project area.	**4 points:** New/enhanced crossings; new/enhanced sidewalks **2 points:** Signal upgrades that allow for pedestrian safety enhancements (e.g., LPIs)
Bike Safety, Comfort, and Connectivity	8	4	**Bicycle LTS:** Existing bicycle level of traffic stress along project area	**4 points:** Average LTS >3.5 **3 points:** Average LTS = 2.51-3.5 **2 points:** Average LTS = 1.51-2.5 **1 points:** Average LTS = 1.01-1.5 **0 points:** Average LTS = 1
		4	**Bikeway Improvements:** Presence of new or enhanced bikeway(s) along the project area	**4 points:** Proposed bikeway improvement along the majority of the project area **2 points:** Proposed bikeway improvement along <1/2 of project area **0 points:** No proposed bikeway improvement

TABLE 14: EVALUATION CRITERIA METRICS AND POINTS GENERATION (CONT.)

CATEGORY	MAXIMUM TOTAL POINTS	MAXIMUM POINTS BY METRIC	EVALUATION METRIC	POINTS GENERATION
Access to Schools and Local Destinations	8	4	**School Access:** Number of schools located within 0.25 or 0.5 miles of a project	**4 points:** Schools per mile for project area in the highest quartile **3 points:** Schools per mile for project area in the third quartile **2 points:** Schools per mile for project area in the second quartile **1 point:** Schools per mile for project area in the lowest quartile
		4	**Destination Access:** Project located within 0.25 or 0.5 miles of a destination	**4 points:** Destinations per mile for project area in the highest quartile **3 points:** Destinations per mile for project area in the third quartile **2 points:** Destinations per mile for project area in the second quartile **1 point:** Destinations per mile for project area in the lowest quartile
Vehicle Operations	5	5	**Vehicle Operations:** Project improves vehicular operations at intersections or roadway segments.	**5 points:** Will result in reduction of delay or congestion at the project location **3 points:** Will result in reduction of delay or congestion in project proximity
Local Traffic Calming	5	5	**Local Traffic Calming:** Project incorporates traffic calming to manage vehicle speeds.	**5 points:** Physical Measures **2 points:** Non-physical measures
Equity	6	6	**Equity:** Presence of transportation priority populations in the project area	**6 points:** 85-100 score on EQI **5 points:** 70-85 score on EQI **4 points:** 60-70 score on EQI **3 points**: 50-60 score on EQI **2 points:** 40-50 score on EQI **1 point:** 30-40 score on EQI **0 points:** <30 score on EQI

CITY OF MORGAN HILL

Based on this evaluation process, each project was awarded points and ranked into "Tier 1", "Tier 2" and "Other" projects that represent the community's priorities to improve mobility in Morgan Hill. The projects that are located wholly in the County and would be led by a partner agency were not included as a part of the prioritization process and were categorized as "Other" projects.



Prioritized Projects

Updating the citywide, multimodal Transportation Impact Fee (TIF) program to incorporate the Plan's high priority projects and programs would generate more funding for their implementation. TIF programs assess fees on new development to fund transportation projects needed to support growth in the City. Morgan Hill's TIF program could generate funding for Tier 1 projects and select Tier 2 projects.

Funding for the identified Tier 1 and 2 prioritized improvements could be generated by Morgan Hill's TIF program. These projects should be prioritized as they address immediate needs to enhance safety, improve multimodal connectivity, and alleviate congestion, which are essential for accommodating growth and achieving the city's long-term mobility goals.

Tables 15 and 16 provide improvement details for the Tier 1 segment and intersection projects, including potential funding sources for each project.

For each of the Tier 1 segment projects, a planning level conceptual has been developed to show the proposed improvements on the priority segments (Figures 19-29). The planning level conceptual shows whether the priority segment is on the High Injury Network, in a pedestrian priority area, or near a school. It also shows the proposed street typology of the segment and the locations of proposed improvements.

Appendix A provides a list of all improvement projects and detailed information on the project prioritization process and results.

Figure 17 - Proposed Segment Improvements

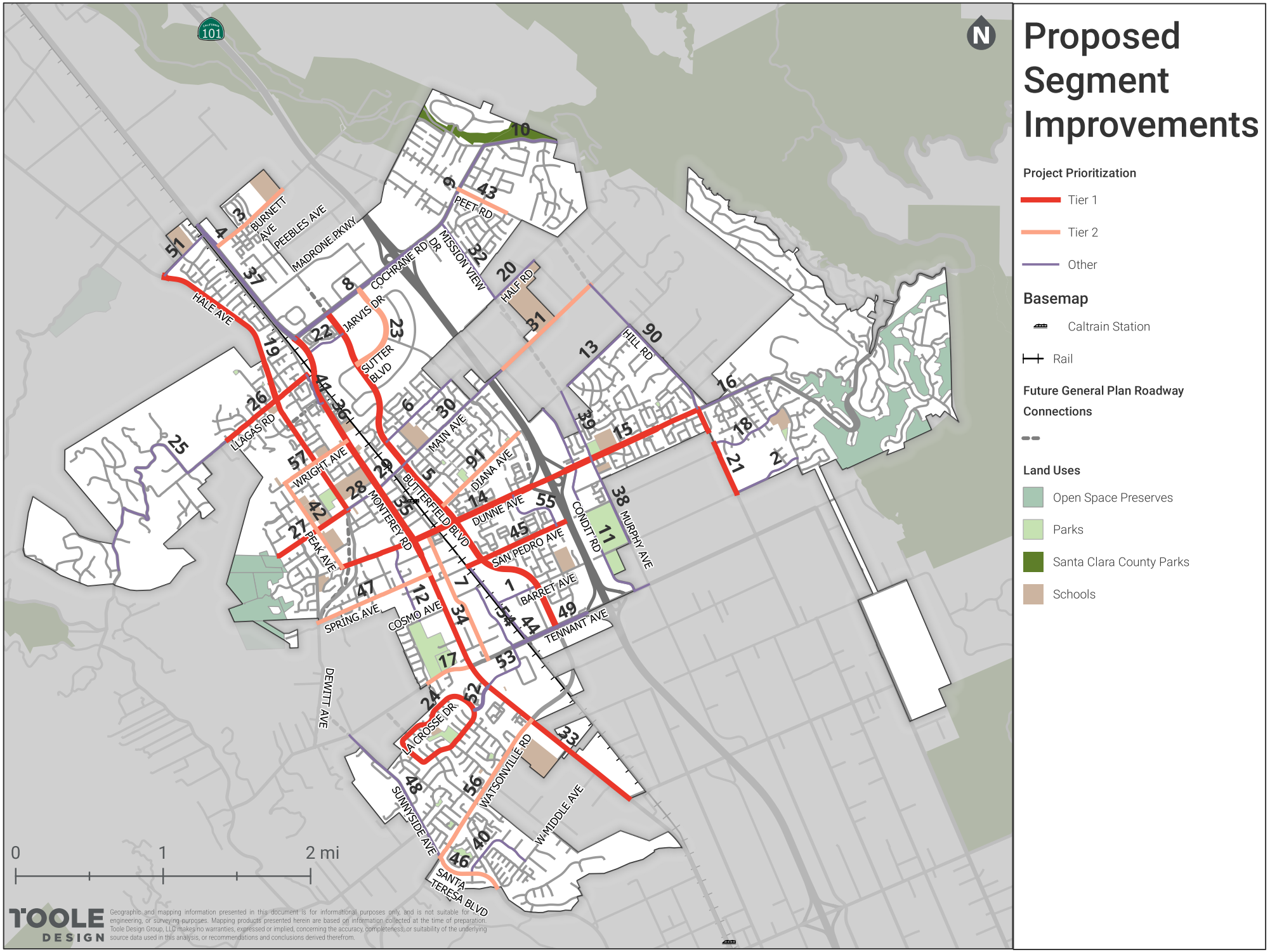


Figure 18 - Proposed Intersection Improvements

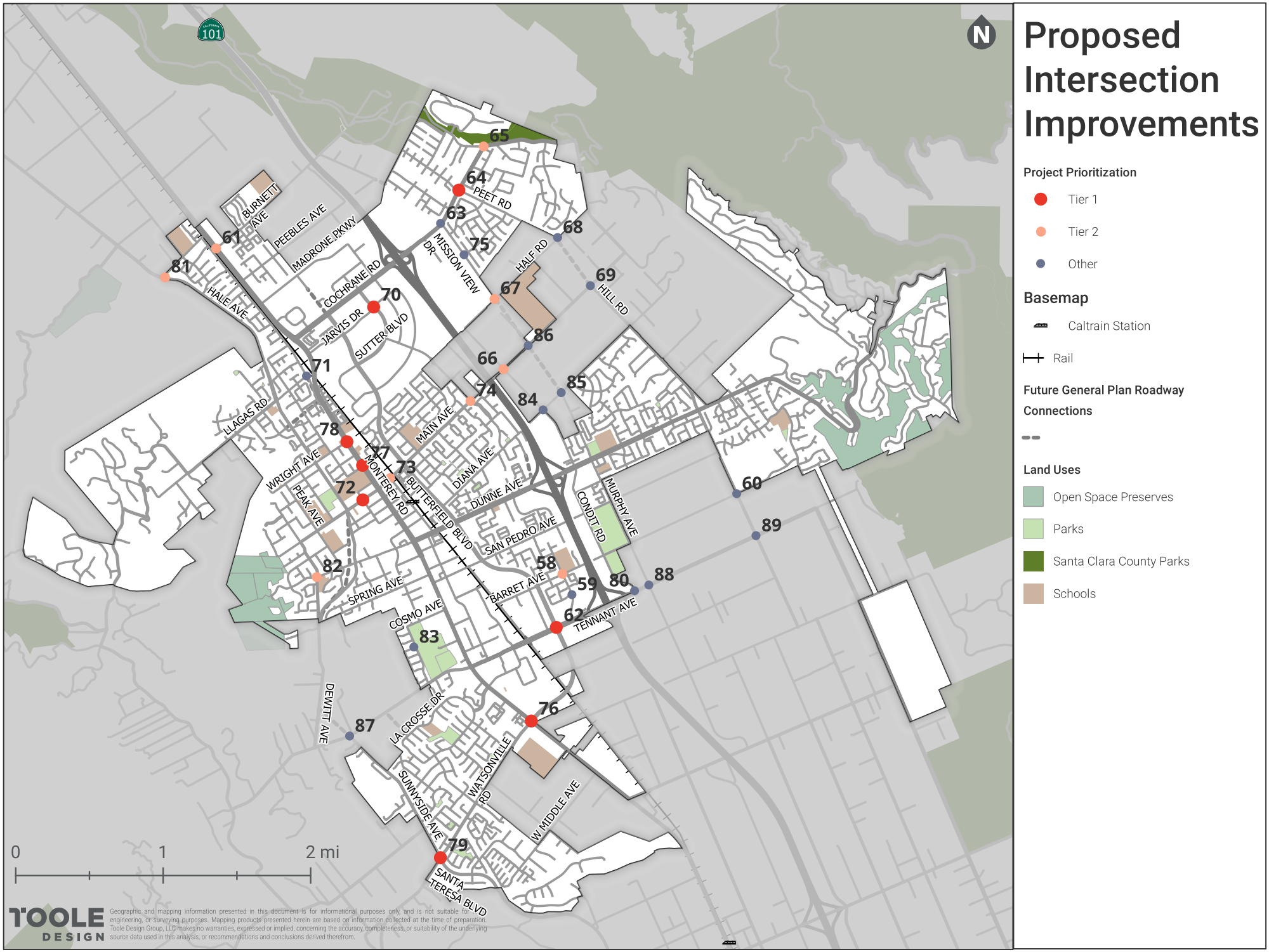


TABLE 15: TIER 1 SEGMENT PROJECTS

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
5	Butterfield Boulevard Corridor Improvements *(Butterfield Boulevard between Monterey Road and Cochrane Road)*		- Adaptive Traffic Signal Control along Butterfield Boulevard - Class II bike lanes with buffer where space allows (ROW may not be available) - Fill sidewalk gap - Between Tennant Avenue and Monterey Road - Signing/ striping (narrow lanes, speed limit signs, speed radar signs) - Future extension of Butterfield Boulevard to Madrone Parkway (General Plan Roadway Improvement) - Consider policy change to allow LOS E operations along Butterfield Boulevard between Monterey Road & Cochrane Road for improved pedestrian/bike safety - Curb-extensions, remove right-turn lanes at all signalized intersections - Crossing at Butterfield Boulevard/Jarvis Drive	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
14	Dunne Avenue between Peak Avenue and US 101		- Class II buffered bike lanes between Peak Avenue and US 101 (May require removal of parking spaces) - Improve railroad crossing for bikes/pedestrians - Evaluate crossing opportunities between Butterfield Boulevard and US 101 - Curb extensions at Peak Avenue and Dunne Avenue - Enhance existing crossings and controlled right-turn movements at Dunne Avenue and US 101 Southbound ramps	Low Cost Improvement via Pavement Rehabilitation, Traffic Impact Fee, Improved by Future Development, Alternative Funding Sources Needed, Grant Funding
15	Dunne Avenue between US 101 and Hill Road		- Class II bike lanes with buffer where space allows between US 101 and Hill Road - Add sidewalk - Enhance existing crossings at Dunne Avenue/Condit Road - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Controlled right-turn movements at Dunne Avenue and US 101 Northbound ramps - Improved pedestrian crossing to park at northeast corner, curb extensions, and removal of right turns at Murphy Avenue/ Dunne Avenue - HAWK/RRFB at Dunne Avenue/Tassajara Circle and Dunne Avenue/Pine Way	Low Cost Improvement via Pavement Rehabilitation, Traffic Impact Fee, Improved by Future Development, Alternative Funding Sources Needed, Grant Funding

TABLE 15: TIER 1 SEGMENT PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
19	Hale Avenue Corridor Improvements		- Add sidewalk - HAWK Midblock crossing across Hale Avenue at Stoney Creek Way to access bus stops and park. - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Curb extensions at Llagas Road/Hale Avenue intersection	Traffic Impact Fee, Improve with Future Development, Alternative Funding Sources Needed, Grant Funding
21	Hill Road between Dunne Avenue and City Limit		- Add sidewalk - Class II bike lanes with buffer where space allows - Chokers at Hill Road/Sundance Drive - RRFB/HAWK crossing at Hill Road/Sundance Drive providing access to Perc Pond Parks	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehab, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
24	La Crosse Drive		- Curb extensions, crossing improvements in school zone - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Potentially remove or modify tree island in front of school for improved visibility at crosswalk	Alternative Funding Sources Needed
26	Llagas Road Corridor Improvements *(Llagas Road between Llagas Court and Old Monterey Road)*		- Class II bike lanes with buffer where space allows between Llagas Court and Hale Avenue - Re-use excess ROW between Hale Avenue and Old Monterey Road to create a linear park, with a dedicated paved bike path - Curb extensions at Llagas Road/Hale Avenue intersection - RRFB midblock crossing near park (Llagas Road/Llagas Court, Llagas Road/Murphy Spring Drive)	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
27	Main Avenue between John Telfer Drive and Hale Avenue		- Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Class II bike lanes with buffer where space allows (may require removal of parking) - Class III bike boulevard west of Peak Avenue - Add sidewalk - Curb extensions at Peak Avenue/Main Avenue & Dewitt Avenue/Main Avenue	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding

TABLE 15: TIER 1 SEGMENT PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
33	Monterey Road between Middle Avenue and Vineyard Boulevard		- Class II bike lanes with buffer where space allows - Add sidewalks - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Median islands - In roadway signs & delineators - Signal coordination with lower speeds - Signal at Monterey Road/Rome Avenue	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
34	Monterey Road between Vineyard Boulevard and Dunne Avenue		- Class II bike lanes with buffer where space allows - Add sidewalks - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - In roadway signs & delineators - Signal coordination with lower speeds - Pursue controlled crossing (HAWK) at location between Ciolino Avenue and Cosmo Avenue - Turn restrictions via median along Monterey Road at San Pedro Avenue - New crosswalk on north approach of Monterey Road/ Cosmo Avenue - Curb-extensions, remove right-turn lanes at all signalized intersections between Vineyard Boulevard and Dunne Avenue	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
35	Monterey Road between Dunne Avenue and Main Avenue		- Signing/striping (speed limit signs, speed radar signs) - Signal coordination with lower speeds - Raised intersections - Improve intersection visibility at 1st street crosswalk next to Veterans memorial - Consider lane reduction to single lane with voter approval in the future	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding

TABLE 15: TIER 1 SEGMENT PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
36	Monterey Road between Main Avenue and Cochrane Road		- Class II bike lanes with buffer where space allows - Fill sidewalk gaps - Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Median islands - In roadway signs & delineators - Signal coordination with lower speeds - Widen to 4 lanes between Cochrane Road and Old Monterey Road per the General Plan	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
45	San Pedro Avenue between US 101 and Railroad Avenue		- Signing/striping (narrow lanes, speed limit signs, speed radar signs) - Add sidewalk - Class II bike lanes (might require removal of parking) - Improve bike/ped facilities at railroad crossing - RRFB at San Pedro Avenue/San Benito Drive and San Pedro Avenue/San Ramon Drive	Traffic Impact Fees, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding

TABLE 16: TIER 1 INTERSECTION PROJECTS

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
62	Butterfield Boulevard/ Tennant Avenue		- Lengthen westbound left turn pocket (interim) - Second westbound left turn at Butterfield Boulevard/ Tennant Avenue (long-term)	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation
64	Peet Road/Cochrane Road		- Roundabout	Traffic Impact Fee
70	Sutter Boulevard/ Jarvis Drive		- Limit Left Turns from Jarvis Drive	Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance
72	Del Monte Avenue/ Main Avenue		- Curb Extensions	Alternative Funding Sources Needed

TABLE 16: TIER 1 INTERSECTION PROJECTS (CONT.)

ID	PROJECT NAME /LOCATION	IMPROVEMENT STRATEGIES	IMPROVEMENTS DESCRIPTION	FUNDING SOURCES
76	Monterey Road/ Watsonville Road/ Butterfield Boulevard		- Physical improvements to traffic signal configuration along with signal timing adjustment	Low Cost Improvement by City Maintenance
77	Monterey Road/ Central Avenue		- Left-turn restrictions from Central Avenue and enhanced pedestrian crossing across Monterey Road with HAWK/ RRFB signal - Alternative - signal	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
78	Monterey Road/Wright Avenue		- Enhance existing crossing - All four corners of the intersection require improvement to ADA standards. Remove on-street parking within 50-feet of intersection to improve sight lines for pedestrian safety. Major signal modification required due to utilities	Traffic Impact Fees, Improved by Future Development, Low Cost Improvement via Pavement Rehabilitation, Low Cost Improvement by City Maintenance, Alternative Funding Sources Needed, Grant Funding
79	Santa Teresa Boulevard/Sunnyside Avenue/Watsonville Road		- Install signal. Consider 1-lane roundabout with right-turn channelization if ROW can be acquired.	Traffic Impact Fees, Improved by Future Development, Grant Funding

Note: Any future changes to Monterey Road should consider design techniques that manage the needs of transit users, bicyclists, and pedestrians, and minimize conflicts to the greatest extent possible.

LEGEND:

- Pedestrian Improvements
- Bicycle Improvements
- Vehicle Operations Improvements
- Traffic Calming Improvements

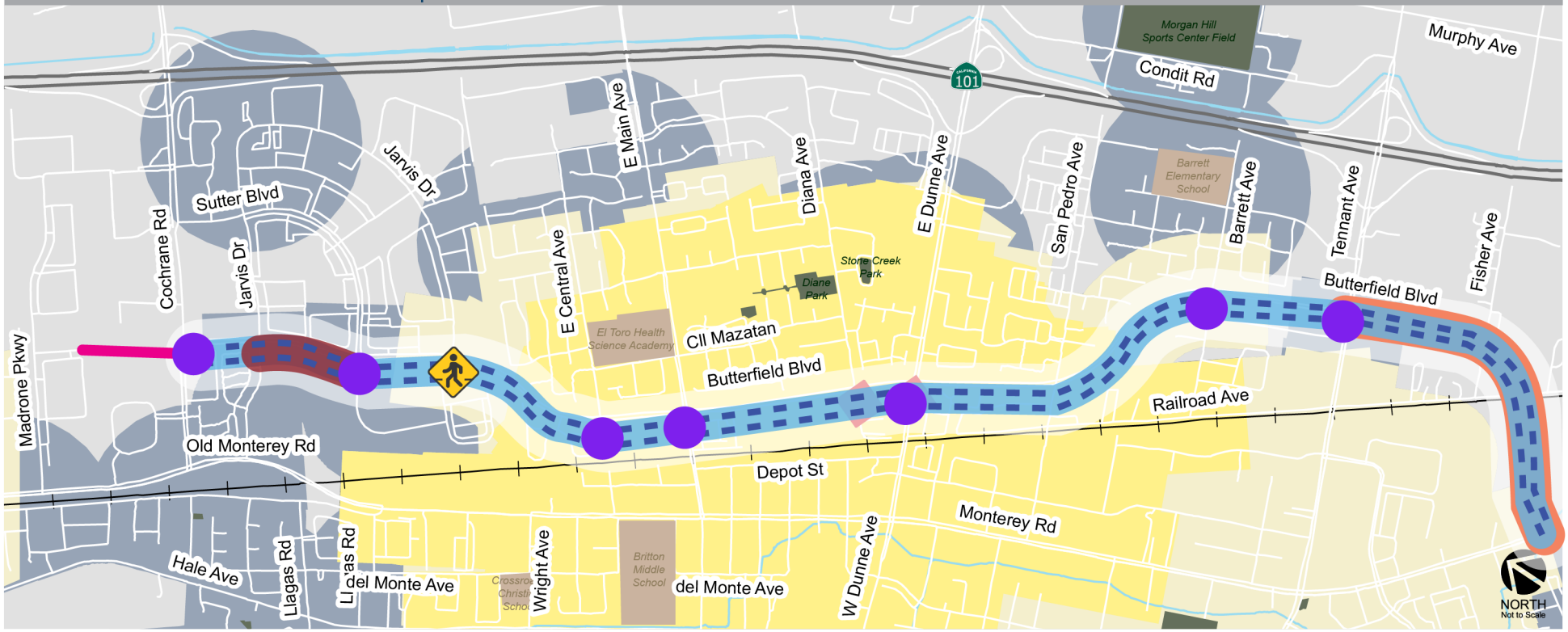
DEFINITIONS:

ROW - Right-of-Way
HAWK - High-Intensity Activated crosswalk signal
RRFB - Rectangular Rapid Flashing Beacon
ADA - American with Disabilities Act

Figure 19: Tier 1 Conceptual Butterfield Boulevard Corridor Improvements

Tier 1 Segment Projects Improvement Examples

5 - Butterfield Boulevard Corridor Improvements



- Project Area
- Class II Buffered Bike Lane
- Future extension
- Adaptive Signal Control
- Traffic Calming Improvements
- Fill Sidewalk Gaps
- Curb Extensions, Remove Right-Turn Lanes (Protected Intersection)
- Pedestrian and Bicycle-Involved Fatal or Severe Injury
- New Crosswalk

Street Typography	Blvd	High Injury Network	√	Pedestrian Priority Area	Very High	Proximity to Schools	√

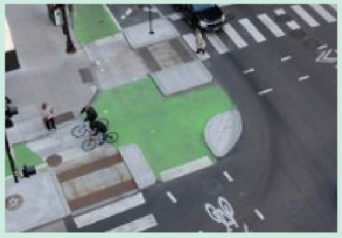
Blvd is Boulevard

TRAFFIC CALMING ENHANCMENTS

SIGNING/STRIPING

BIKE/PEDESTRIAN SAFETY ENHANCEMENT

PROTECTED INTERSECTION



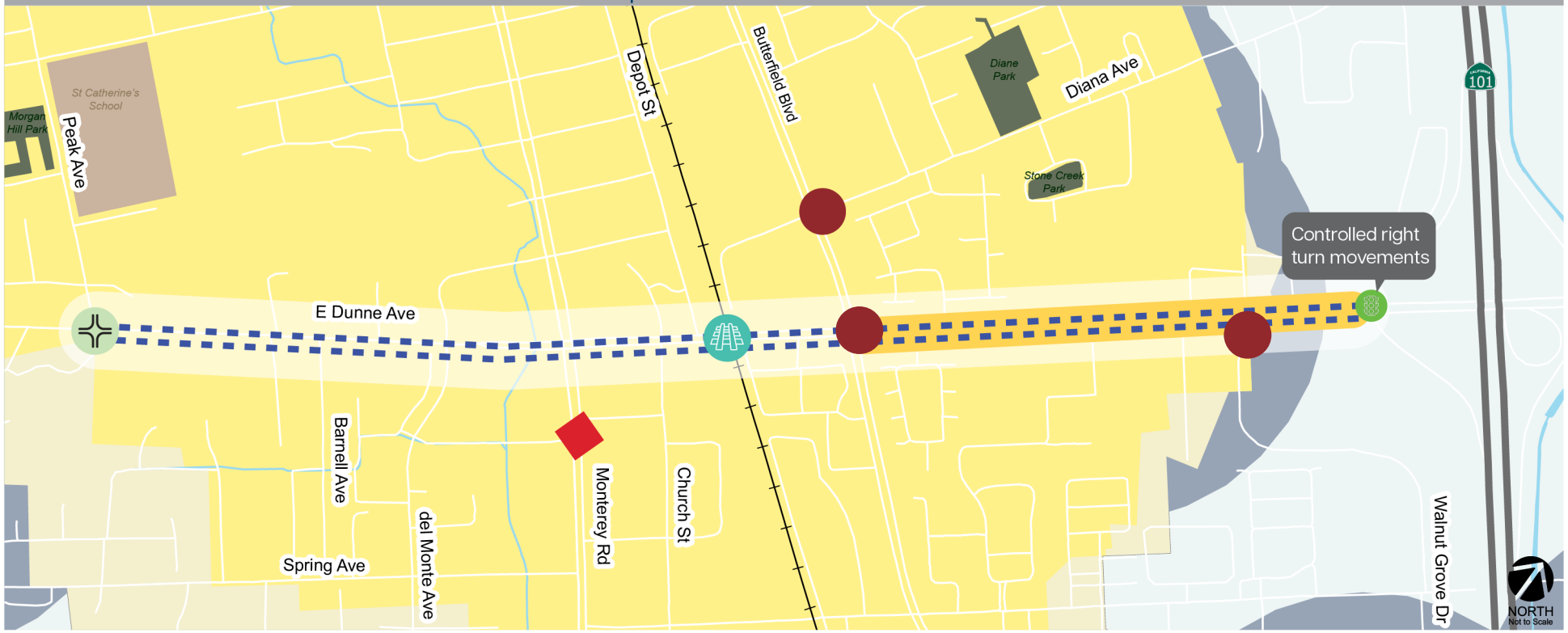
PEDESTRIAN PRIORITY ZONE:

- Medium
- High
- Very High

Figure 20: Tier 1 Conceptual Dunne Avenue between Peak Avenue & US-101 Improvements

Tier 1 Segment Projects Improvement Examples

14 - Dunne Avenue between Peak Ave and US-101 Ramp



Project Area

Class II Buffered Bike Lanes

Evaluate Crossing Opportunities

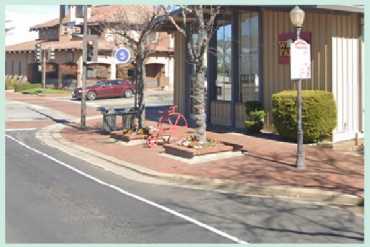
Vehicle Fatal or Severe Injury

Pedestrian and Bicycle-Involved Fatal or Severe Injury

Street Typography	CC/Blvd	High Injury Network	✓	Pedestrian Priority Area	Very High	Proximity to Schools	✓

CC is Community Corridor, Blvd is Boulevard

CURB EXTENSIONS



Curb extensions at Peak Avenue and Dunne Avenue.

RAILROAD CROSSING

Improve railroad crossing for bikes and pedestrians.

PEDESTRIAN PRIORITY ZONE:

- Medium
- High
- Very High

Figure 21: Tier 1 Conceptual Dunne Avenue between US-101 & Hill Road Improvements

Tier 1 Segment Projects Improvement Examples

15 - Dunne Avenue between US 101 and Hill Road

Project Area

Class II Buffered Bike Lanes

Traffic Calming Improvements

Enhanced Existing Crossing

HAWK or RRFB Crossing

Curb-extensions

Street Typography	CC/Blvd	High Injury Network	✓	Pedestrian Priority Area	Medium	Proximity to Schools	✓

CC is Community Corridor, Blvd is Boulevard

TRAFFIC CALMING ENHANCMENTS

CURB EXTENSIONS

ROADWAY SIGNS AND DELINEATORS

BIKE/PEDESTRIAN SAFETY ENHANCEMENT

ENHANCED EXISTING CROSSING

RRFB CROSSING

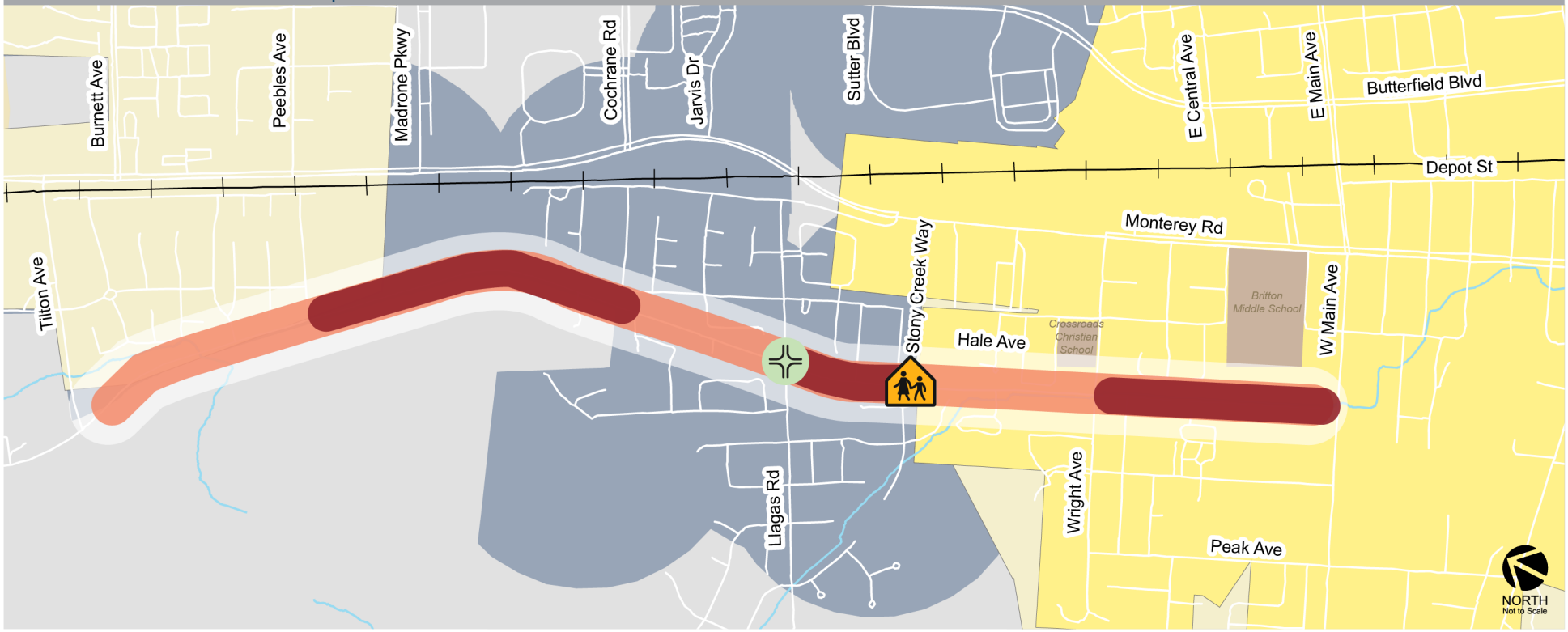
PEDESTRIAN PRIORITY ZONE:

Medium High Very High

Figure 22: Tier 1 Conceptual Hale Avenue Corridor Improvements

Tier 1 Segment Projects Improvement Examples

19 - Hale Avenue Corridor Improvements



Project Area

Traffic Calming Projects

Fill Sidewalk Gaps

HAWK Crossing

Curb Extension

Street Typography	CC	High Injury Network	X	Pedestrian Priority Area	Very High to Medium	Proximity to Schools	✓

CC is Community Corridor

TRAFFIC CALMING ENHANCMENTS

SIGNING/STRIPING

CURB EXTENSIONS

BIKE/PEDESTRIAN SAFETY ENHANCEMENT

HAWK CROSSING

PEDESTRIAN PRIORITY ZONE:

Medium

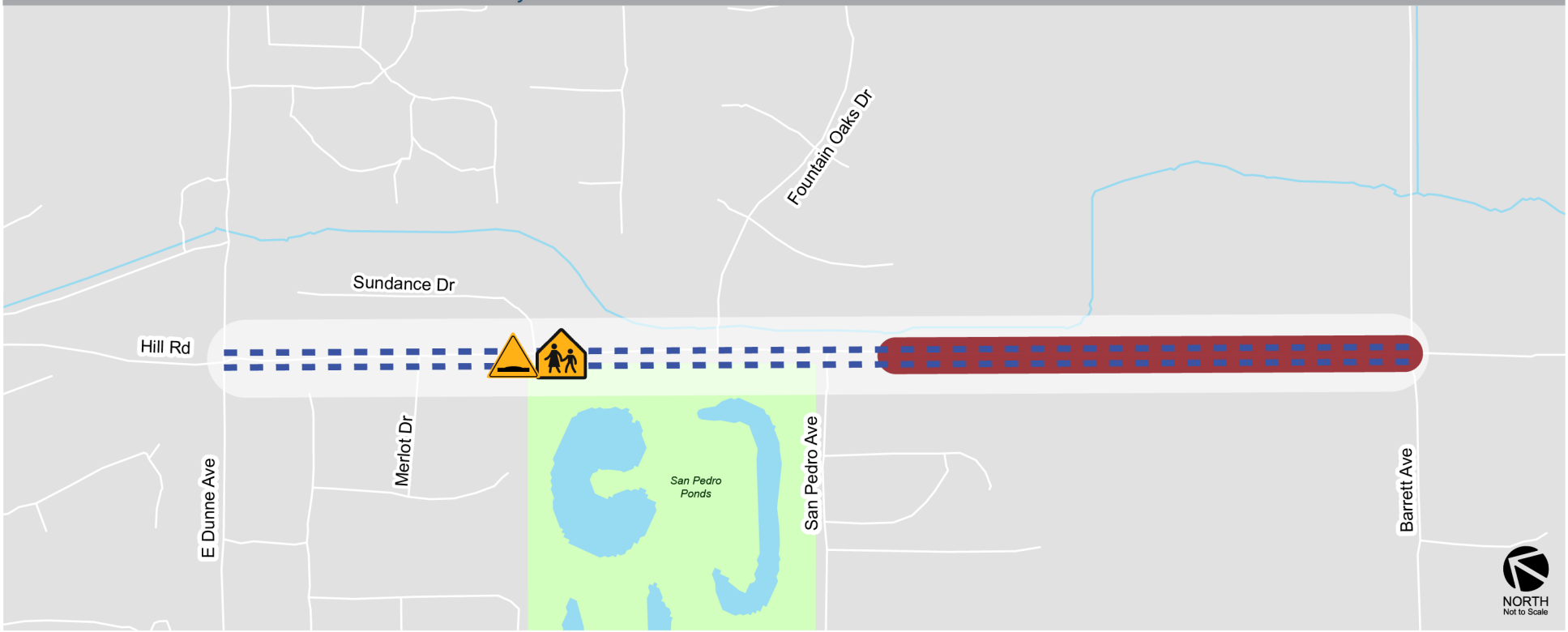
High

Very High

Figure 23: Tier 1 Conceptual Hill Road between Dunne Avenue and City Limit

Tier 1 Segment Projects Improvement Examples

21 - Hill Road between Dunne Avenue and City Limit



Project Area

Class II Bike Lane

Fill Sidewalk Gaps

RRFB Crossing

Chokers

Street Typography	CC	High Injury Network	X	Pedestrian Priority Area	None	Proximity to Schools	X

CC is Community Corridor

BIKE/PEDESTRIAN SAFETY ENHANCEMENT

CHOKERS

RRFB/ HAWK CROSSING

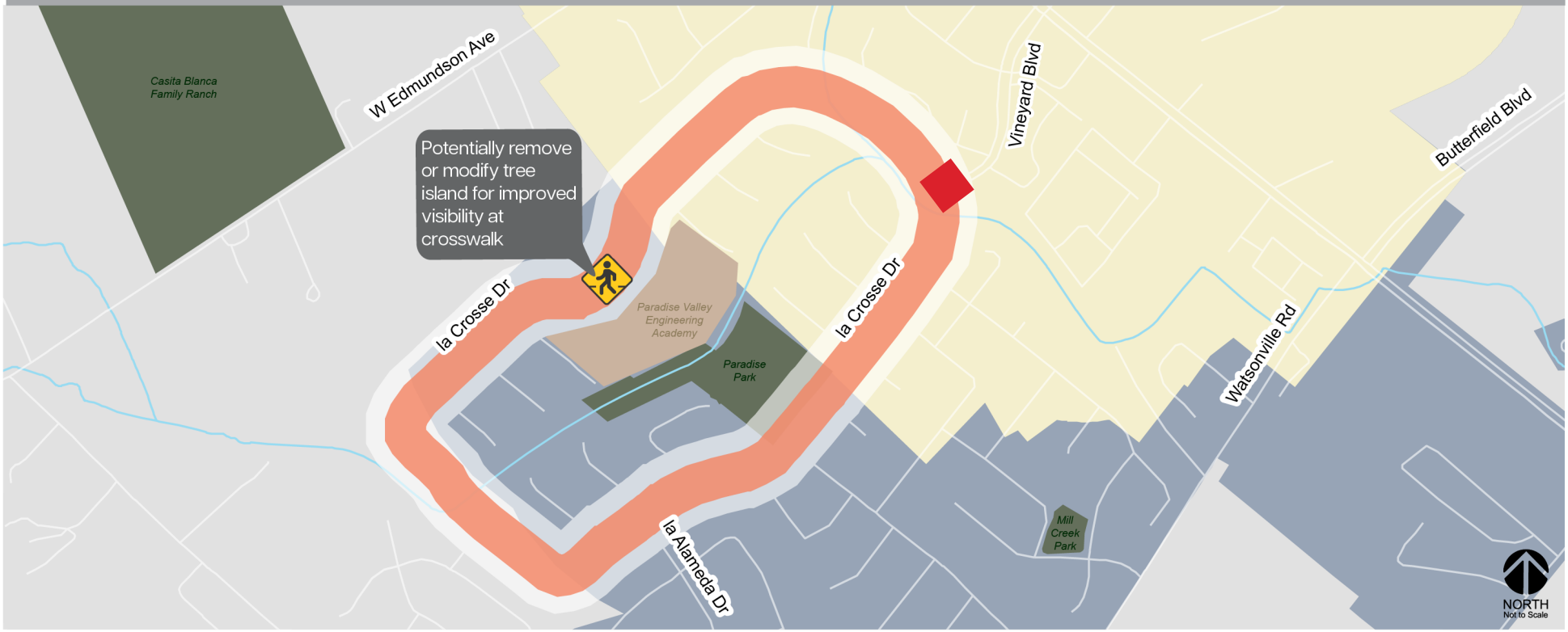
PEDESTRIAN PRIORITY ZONE:

- Medium
- High
- Very High

Figure 24: Tier 1 Conceptual La Cross Drive Improvements

Tier 1 Segment Projects Improvement Examples

24 - La Crosse Drive



Project Area

Traffic Calming Improvements

Enhanced Existing Crossing

Pedestrian and Bicycle-Involved Fatal or Severe Injury

Street Typography	Neighborhood Street	High Injury Network	√	Pedestrian Priority Area	High/ Medium	Proximity to Schools	√

TRAFFIC CALMING ENHANCMENTS

CROSSING IMPROVEMENTS

CURB EXTENSION

SIGNING/STRIPING

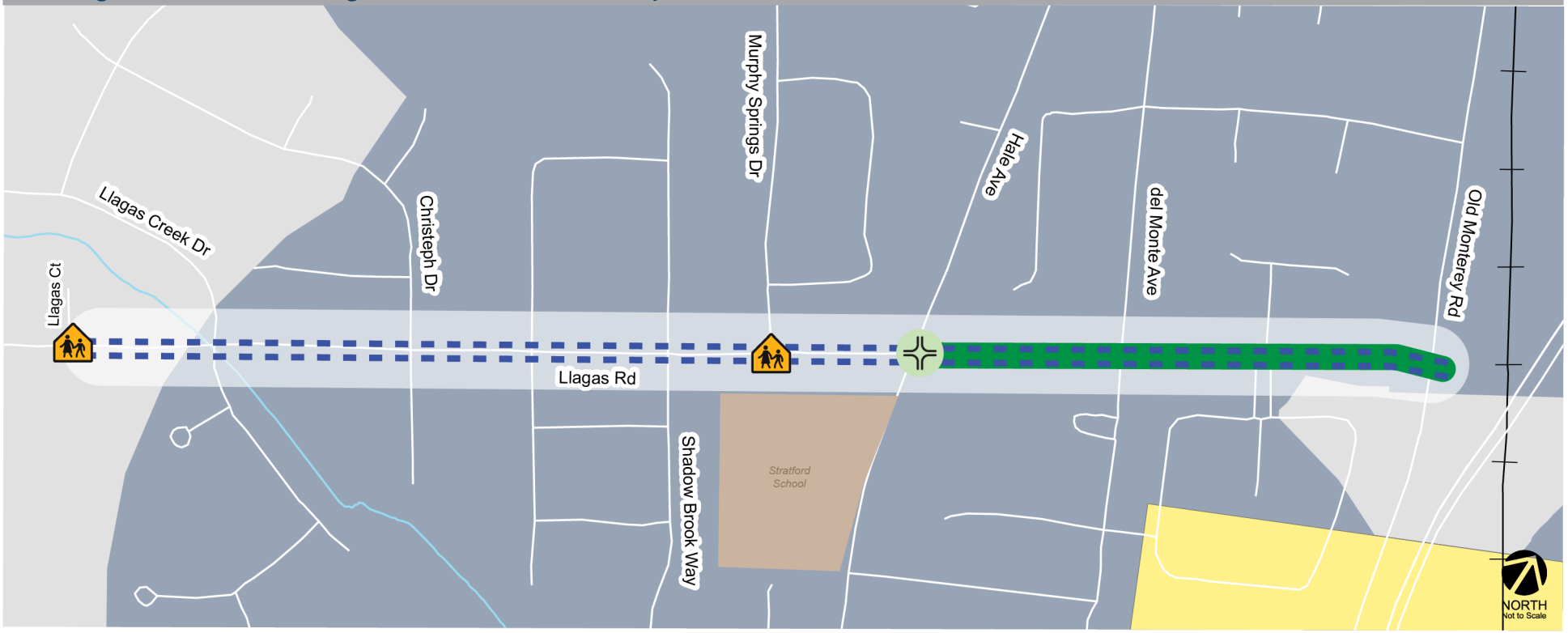
PEDESTRIAN PRIORITY ZONE:

- Medium
- High
- Very High

Figure 25: Tier 1 Conceptual Llagas Road between Llagas Court and Old Monterey Road

Tier 1 Segment Projects Improvement Examples

26 - Llagas Road between Llagas Court and Old Monterey Road



Project Area

Class II Buffered Bike Lanes

Re-use excess ROW between to create a linear park, with a dedicated paved bike path

RRFB Crossing

Curb Extension

Street Typography	CC	High Injury Network	√	Pedestrian Priority Area	Medium	Proximity to Schools	√

CC is Community Corridor

TRAFFIC CALMING ENHANCMENTS

CURB EXTENSIONS

BIKE/PEDESTRIAN SAFETY ENHANCEMENT

RRFB CROSSING

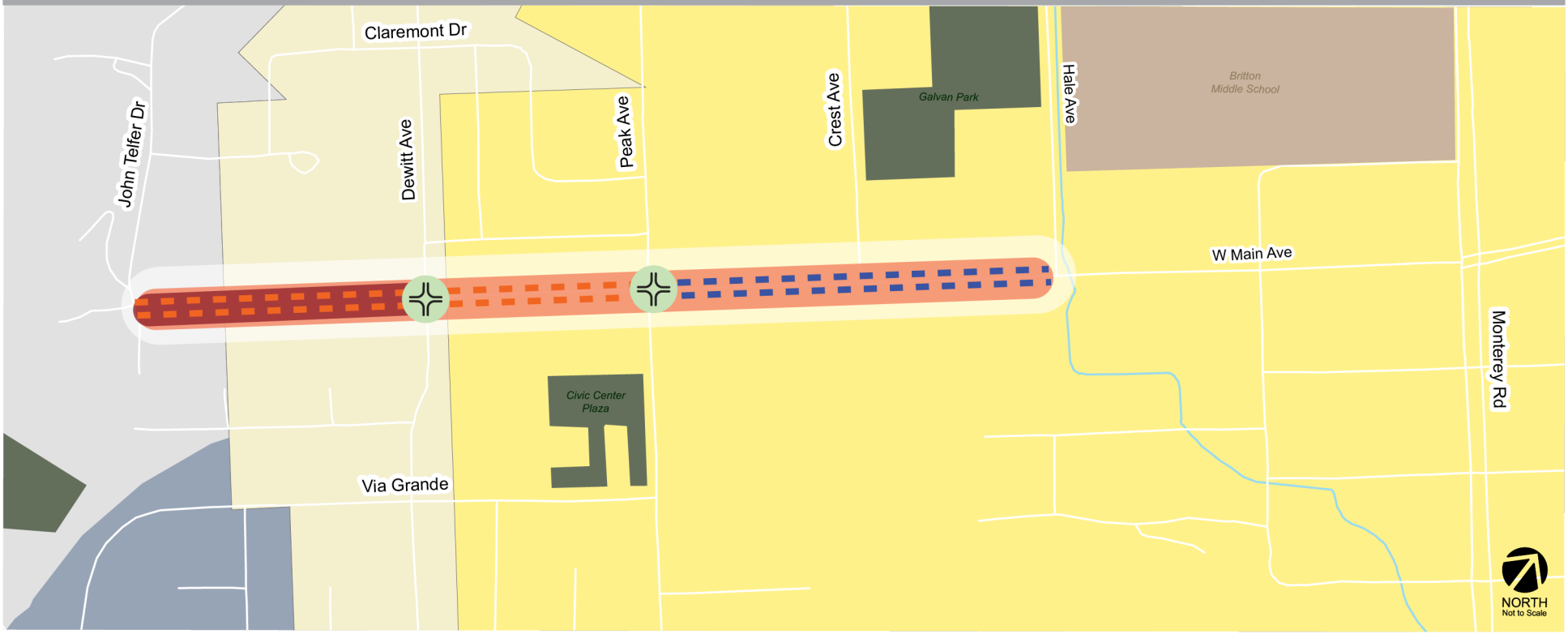
PEDESTRIAN PRIORITY ZONE:

- Medium
- High
- Very High

Figure 26: Tier 1 Conceptual Main Ave between John Telfer Drive & Hale Avenue Improvements

Tier 1 Segment Projects Improvement Examples

27 - Main Avenue between John Telfer Drive and Hale Avenue



Project Area

Class II Buffered Bike Lane

Class III Bike Route

Traffic Calming Improvements

Fill Sidewalk Gaps

Curb Extension

Street Typography	CC	High Injury Network	X	Pedestrian Priority Area	Very High	Proximity to Schools	√

CC is Community Corridor

TRAFFIC CALMING ENHANCMENTS

SIGNING/STRIPING

CURB EXTENSIONS

PEDESTRIAN PRIORITY ZONE:

Medium

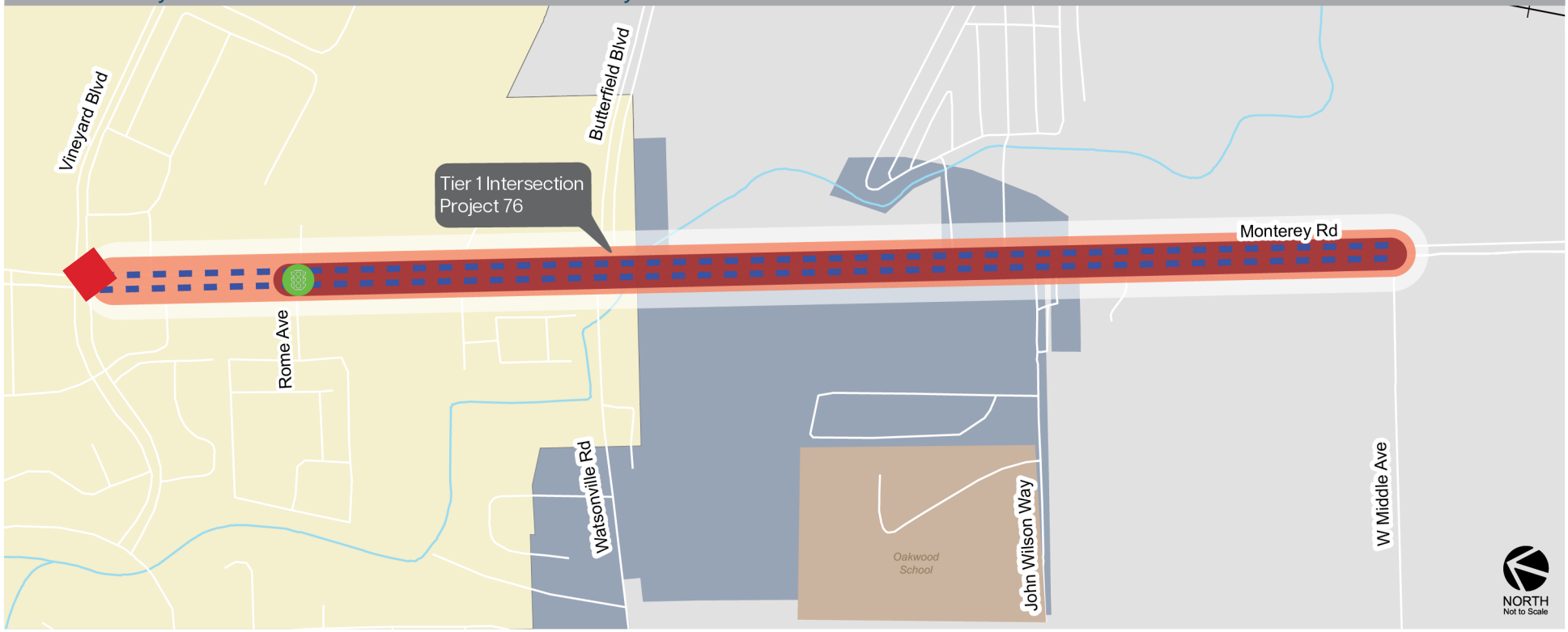
High

Very High

Figure 27: Tier 1 Conceptual Monterey Road between Middle Avenue & Vineyard Boulevard Improvements

Tier 1 Segment Projects Improvement Examples

33 - Monterey Road between Middle Avenue and Vineyard Boulevard



- Project Area
- Class II Buffered Bike Lane
- Traffic Calming Projects
- Fill Sidewalk Gaps
- New Signal
- Pedestrian and Bicycle-Involved Fatal or Severe Injury

Street Typography	Blvd	High Injury Network	✓	Pedestrian Priority Area	High/ Medium	Proximity to Schools	✓

Blvd is Boulevard

TRAFFIC CALMING ENHANCMENTS

MEDIAN ISLANDS

ROADWAY SIGNS & DELINEATORS

SIGNING/STRIPING

SIGNAL COORDINATION FOR LOWER SPEED

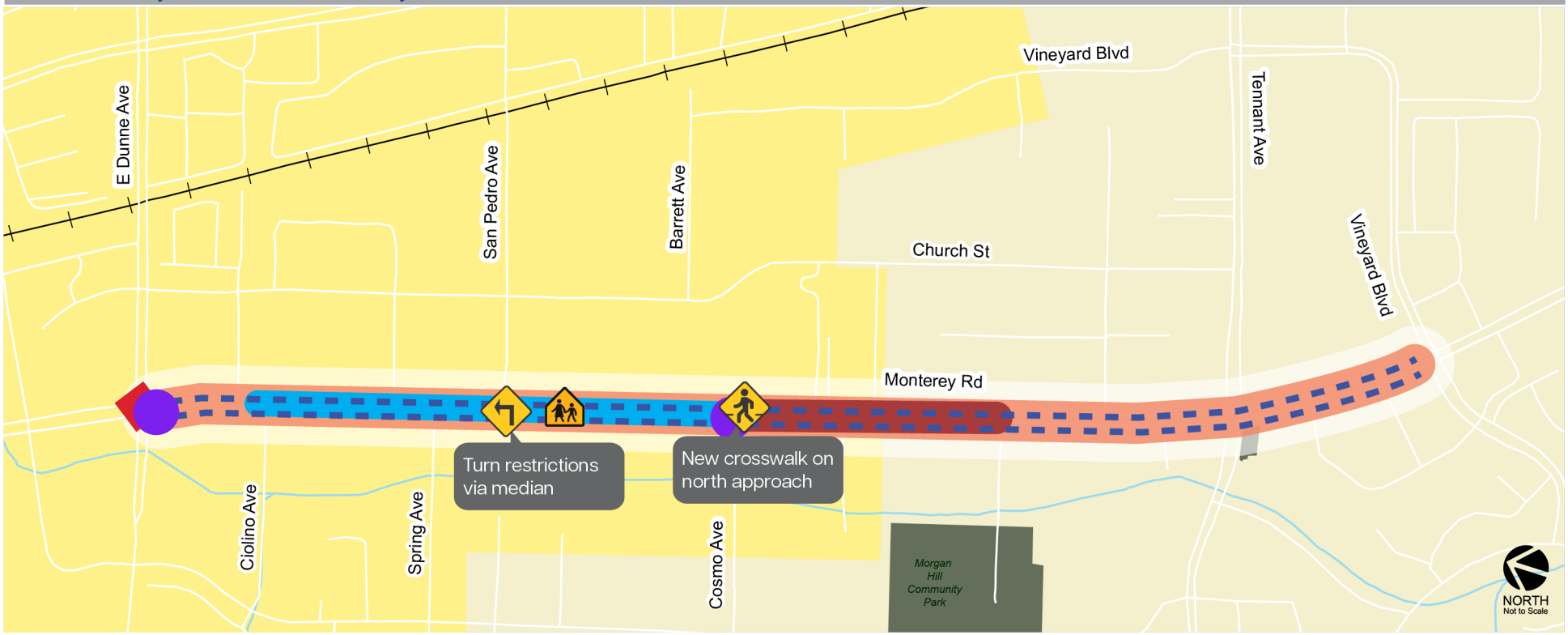
PEDESTRIAN PRIORITY ZONE:

Medium | High | Very High

Figure 28: Tier 1 Conceptual Monterey Road between Vineyard Boulevard & Dunne Avenue Improvements

Tier 1 Segment Projects Improvement Examples

34 - Monterey Road between Vineyard Boulevard and Dunne Avenue



Project Area

Class II Buffered Bike Lane

Traffic Calming Projects

Fill Sidewalk Gaps

Pursue controlled crossing (HAWK)

Pedestrian and Bicycle-Involved Fatal or Severe Injury

Curb-extensions, remove right-turn lanes (protected intersection)

HAWK Crossings

Street Typography	Blvd	High Injury Network	✓	Pedestrian Priority Area	Very High	Proximity to Schools	X

Blvd is Boulevard

TRAFFIC CALMING ENHANCMENTS

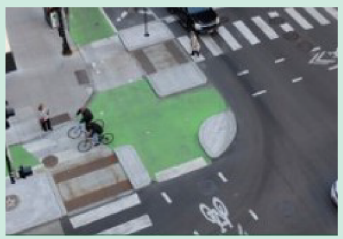
ROADWAY SIGNS & DELINEATORS

SIGNAL COORDINATION FOR LOWER SPEED

BIKE/PEDESTRIAN SAFETY ENHANCEMENT

HAWK CROSSING

PROTECTED INTERSECTION



PEDESTRIAN PRIORITY ZONE:

Medium

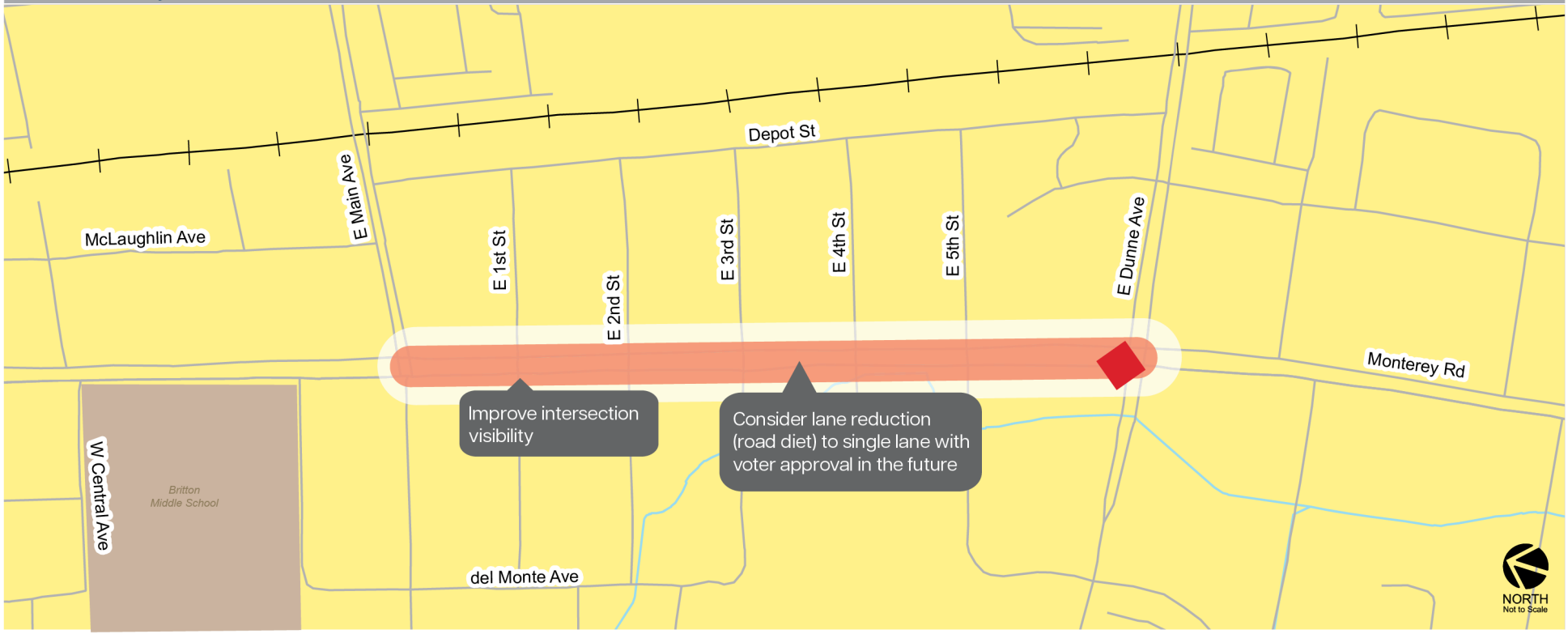
High

Very High

Figure 29: Tier 1 Conceptual Monterey Road between Dunne Avenue & Main Avenue Improvements

Tier 1 Segment Projects Improvement Examples

35 - Monterey Road between Dunne Avenue and Main Avenue



Project Area

Traffic Calming Projects

Pedestrian and Bicycle-Involved Fatal or Severe Injury

Street Typography	Main Street	High Injury Network	√	Pedestrian Priority Area	Very High	Proximity to Schools	√

TRAFFIC CALMING ENHANCMENTS

RAISED INTERSECTION

SIGNING/STRIPING

SIGNAL COORDINATION FOR LOWER SPEED

ROAD DIET

PEDESTRIAN PRIORITY ZONE:

Medium | High | Very High

Figure 30: Tier 1 Conceptual Monterey Road between Cochrane Road & E Main Avenue Improvements

Tier 1 Segment Projects Improvement Examples

36 - Monterey Rd between Cochrane Rd and E Main Ave

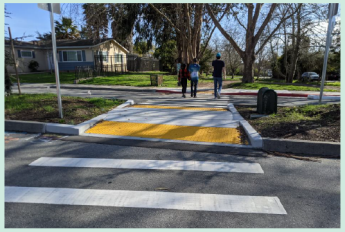
- Project Area
- Class II Buffered Bike Lanes
- Fill Sidewalk Gaps
- Traffic calming improvements
- Widen to 4 lanes per the General Plan
- Pedestrian and Bicycle-Involved Fatal or Severe Injury

Street Typography	CC/Blvd	High Injury Network	✓	Pedestrian Priority Area	Very High	Proximity to Schools	✓

CC is Community Corridor, Blvd is Boulevard

TRAFFIC CALMING ENHANCMENTS

MEDIAN ISLANDS



ROADWAY SIGNS & DELINEATORS

SIGNING/STRIPING

SIGNAL COORDINATIONS FOR LOWER SPEED

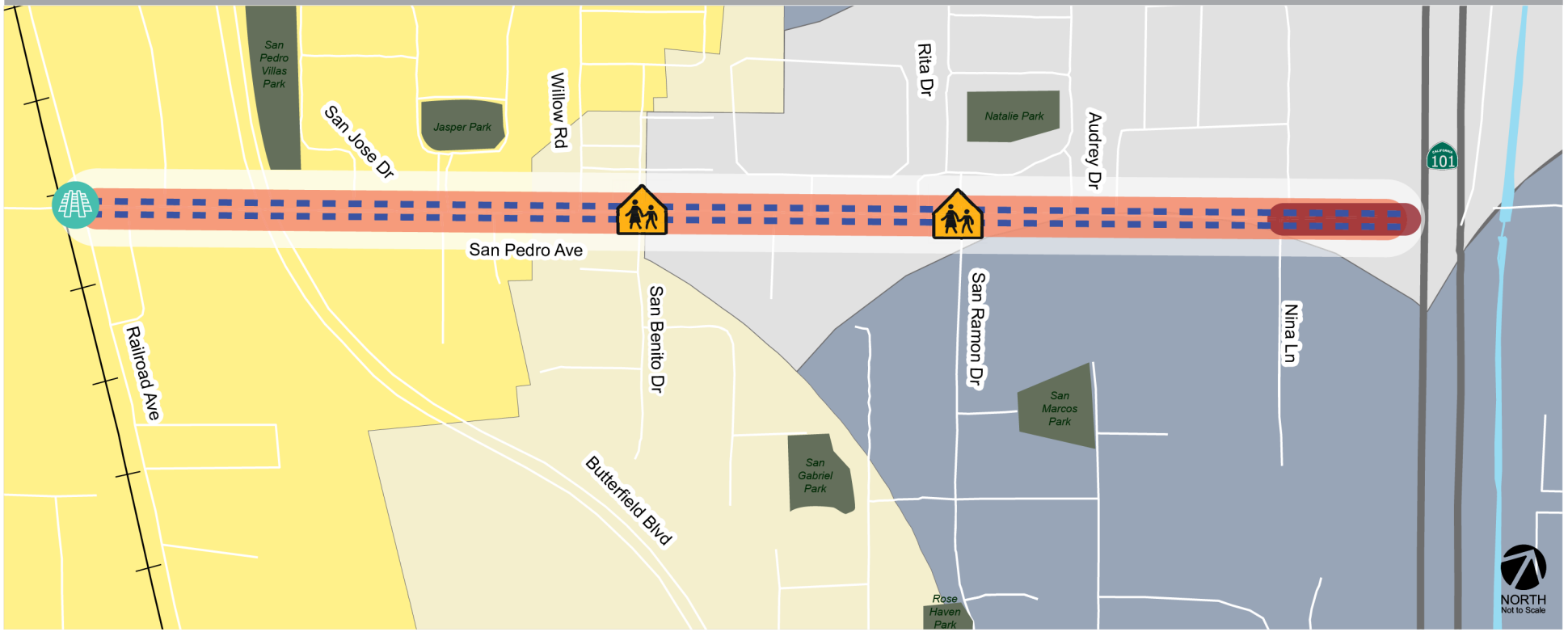
PEDESTRIAN PRIORITY ZONE:

Medium | High | Very High

Figure 31: Tier 1 Conceptual San Pedro Avenue between US 101 & Railroad Avenue Improvements

Tier 1 Segment Projects Improvement Examples

45 - San Pedro Avenue between US 101 and Railroad Avenue



Project Area

Class II Bike Lane

Traffic Calming Projects

Fill Sidewalk Gaps

RRFB crossings

Street Typography	Neighborhood Street	High Injury Network	√	Pedestrian Priority Area	Very High to Medium	Proximity to Schools	X

TRAFFIC CALMING ENHANCMENTS

SIGNING/STRIPING

RAILROAD CROSSING

BIKE/PEDESTRIAN SAFETY ENHANCEMENT

RRFB CROSSING

PEDESTRIAN PRIORITY ZONE:

Medium | High | Very High

City-wide Initiatives and Programs

In addition to physical improvement projects, the TMP also recommends several City-wide initiatives and policies to improve the City's transportation program. Some of these can be completed using existing City resources, however, most of these would require additional funding and staff resources. These initiatives and programs have been organized into the following categories:

- Education/Marketing
- Safety Programs
- Multimodal Programs
- Funding Sources
- Maintenance

The program details under each initiative and additional resources needed for implementation are described in Table 17 below.
The top five City-wide initiatives and programs that received the most support from the community based on the online survey are:

- • #32 Maintenance of existing and new sidewalks (60%)
- • #10/#11 Develop Speed Management Plan/ Develop neighborhood traffic calming program (50%)
- • #17 Adaptive Traffic Control System operations and maintenance (50%)
- • #8 Safe Routes to School Walk Audits (43%)
- • #22 Program to fill sidewalk gaps (42%)

TABLE 17: CITYWIDE INTIATIVES AND PROGRAMS

	CITYWIDE INITIATIVE/POLICY	PROGRAM DETAILS	COMPLETE WITH EXISTING RESOURCES	ADDITIONAL RESOURCES NEEDED FOR IMPLEMENTATION
		EDUCATION & MARKETING		
1	Improve communication of Transportation Programs	Develop strategies to effectively communicate citywide transportation initiatives and programs.	No	Additional Staff
		Regularly include updates of transportation initiatives and programs in the citywide newsletter.	Partial	
2	Develop educational materials for bike/ped/ vehicle safety	In coordination with the Police Department, develop educational material and marketing campaigns for the following: - Speed reduction - Pedestrian/Bicycle/Vehicle safety programming	Yes	
		Provide informational materials on the new California Assembly Bill (AB) 413, "daylighting" Law. Daylighting bans cars and trucks from stopping, standing, or parking within 20 feet of the approach side of crosswalks.	Yes	
3	Develop educational materials for driver education	Develop community educational and marketing programs to encourage the use of non-auto modes of travel to local destinations and schools.	Yes	
4	Develop materials to promote TDM efforts to Businesses	Work in conjunction with the economic development team of News/Blog – *Choose Morgan Hill* to promote TDM efforts to existing businesses.	Partial	Additional Staff

TABLE 17: CITYWIDE INTIATIVES AND PROGRAMS (CONT.)

#	CITYWIDE INITIATIVE/POLICY	PROGRAM DETAILS	COMPLETE WITH EXISTING RESOURCES	ADDITIONAL RESOURCES NEEDED FOR IMPLEMENTATION
5	Develop materials to promote transportation options to tourists	Work in conjunction with the economic development team of News/Blog - *Visit Morgan Hill* promoting how bike friendly, walkable and Caltrain accessible, the City is to tourists.	Partial	Additional Staff
6	Detail alternative transportation options on City's webpage/ social media	Create a comprehensive employee oriented commuting section on the City's existing webpage and social media detailing Caltrain schedules, bike routes, pedestrian paths, and other transit options. Include available maps, schedules, and tips for using each mode of transport.	Partial	Additional Staff
7	Develop educational materials for maintenance by property owners	Educate property owners about keeping site lines clear, shrubs trimmed, tree roots from lifting sidewalk pavement.	Partial	Additional Staff
		SAFETY PROGRAMS		
8	Safe Routes to School Walk Audits	Conduct a full review of existing traffic control devices in the vicinity of all schools as part of an Safe Routes to School (SRTS)plan to ensure conformity with California Manual on Traffic Control Devices (MUTCD) standards. Complete school area safety assessments to identify pedestrian/bicycle safety improvements.	No	Additional Staff
9	Develop a Comprehensive Safety Plan	Apply SS4A grant funds to develop a comprehensive safety plan for the City.	Yes	
10	Develop Speed Management Plan	Develop a speed management plan in accordance with Safe Sytems Approach and Vision Zero that identifies target speeds for different street types in the city and speed reduction countermeasures to achieve them.	Partial	Additional Staff
11	Develop neighborhood traffic calming program	Develop a neighborhood traffic calming program or guidelines with threshold criteria to make resident requests for traffic calming more streamlined.	Partial	Additional Staff
12	Speed Radar Enforcement	Advocate and/or install automated speed radar enforcement when allowed by law		Additional Staff and Funding
13	Street lighting	Conduct a citywide audit to map existing street lighting, determine areas with insufficient lighting, and upgrade to standard level of lighting.	No	Additional Staff and Funding

TABLE 17: CITYWIDE INTIATIVES AND PROGRAMS (CONT.)

#	CITYWIDE INITIATIVE/POLICY	PROGRAM DETAILS	COMPLETE WITH EXISTING RESOURCES	ADDITIONAL RESOURCES NEEDED FOR IMPLEMENTATION
		MULTIMODAL PROGRAMS		
14	Update Design Guidelines for New Development	Require frontage design of all future development to construct or plan for future ped/bike/and transit improvements.	Yes	
		Require inclusion of secure bicycle parking for all future development.		
		Require inclusion of Electric Vehicle (EV) charging spaces per CalGreen requirements for all future development.		
15	Update Construction Guidelines to accommodate bicyclists and pedestrians	Create guidelines involving VTA and PGE for the temporary accommodations for bicyclists and pedestrians along construction sites when sidewalks and other travel ways must be closed for construction.	Partial	Additional Staff
16	Enhanced Pedestrian and Bicycle Detection	Consistent with California Assembly Bill (AB) 2264, all new or existing traffic signal modifications to incorporate leading pedestrian interval, and shall include the installation, activation, and maintenance of an accessible pedestrian signal and detector that complies with sections 4E.08 to 4E.13 of the California Manual on Uniform Traffic Control Devices in effect on December 31, 2022. Consider any advancements in technology regarding signal modifications and pedestrian controls.	Partial	Additional Staff
		Provide enhanced bicycle detection guidelines on priority bike routes in the City.		
17	Adaptive Traffic Control System (ATCS) Operations and Maintenance	Adaptive Traffic Control System O&M to better serve residents and guests traveling throughout the city. Adaptive signaling utilizes real-time data at signalized intersections rather than conventional pre-programmed, daily signal timing schedules.	No	Additional Staff and Funding
18	Create Complete Street Design Guidelines	Build on the bicycle and pedestrian improvements and street typology concepts developed in TMP to determine intersection design and corridor design standards for bike/ped priority corridors in the City potentially part of a City of Morgan Hill complete streets guideline.	Partial	Additional Staff

TABLE 17: CITYWIDE INTIATIVES AND PROGRAMS (CONT.)

#	CITYWIDE INITIATIVE/POLICY	PROGRAM DETAILS	COMPLETE WITH EXISTING RESOURCES	ADDITIONAL RESOURCES NEEDED FOR IMPLEMENTATION
19	Update Transportation Analysis Policy and Guidelines	Implement VMT policy consistent with Senate Bill 743.	Yes	
		Revise City Transportation Policy to allow offsetting improvement of transit, pedestrian, and bicycle facilities in the proximate areas of intersections adversely affected by traffic generated by future development.	Partial	Additional Staff
		Consider revising the City Transportation Policy to incorporate multi-modal criteria such as Bicycle Level of Service and Pedestrian Level of Service.	Partial	Additional Staff
20	Develop a TDM policy and program	Revise City Transportation Policy to require implementation of Transportation Demand Management (TDM) measures as part of all future development.	Yes	
		Consider establishment of a Transportation Management Association (TMA) as option for funding multi-modal improvements.	Partial	Additional Staff
		Participate in regional TDM programs to reduce overall traffic volume by encouraging a shift in travel modes.	Yes	
21	Develop a Transportation Monitoring Program	Collect and monitor data related to collisions, VMT, pedestrian counts, bicycle counts, MoGo ridership, mode share, vehicle congestion, and speed. If feasible, collect data before and after implementation of improvements.	No	Additional Staff
22	Program to fill sidewalk gaps	Develop a program to fill sidewalk gaps along existing uses and prioritize gaps near parks and other public destinations.	No	Additional Staff
23	Enhance Older Adults Transportation Services coordinated through the Senior Center	Expand existing RYDE Volunteer Driver Program through the Senior Center.	Partial	Additional Staff
		Partner with VTA, Sourcewise, non-profit and private transportation partners to provide rides for older adults with limited transportation options.		
24	Add EV Chargers	Add EV chargers throughout the City in existing and future public parking facilities.	Yes	
25	Implement Bikeshare	Explore option to implement bike share programs	No	Additional funding
		FUNDING		
26	Develop a Multi-modal/ VMT Impact Fee	Fee to provide funding to improve bicycle and pedestrian facilities in the City.	Partial	Additional Staff
		Fee to provide funding to maintain and expand MoGo services in focused service areas based on ridership demand.		

TABLE 17: CITYWIDE INTIATIVES AND PROGRAMS (CONT.)

#	CITYWIDE INITIATIVE/POLICY	PROGRAM DETAILS	COMPLETE WITH EXISTING RESOURCES	ADDITIONAL RESOURCES NEEDED FOR IMPLEMENTATION
27	MoGo Transit Program	Pursue permanent funding for MoGo Transit Program or alternate programs.	Yes	City has the resources to pursue funding, but funding opportunities are limited. Funding of the program from the City would require very significant resources.
28	Ballot Measure	Consider a ballot measure as an option to fund multimodal transportation improvements in the City.	No	Community Support
		MAINTENANCE		
29	Pavement Rehabilitation	Pavement rehabilitation to minimize noise and vehicular damage. Use as an opportunity to improve roadway safety through striping modifications and other improvements.	Yes	
30	Landscape Maintenance	Increase sight lines with landscape maintenance (tree/shrub trimming and/or removal). Minimize future landscaping that potentially blocks pedestrians and bicyclists from driver's sight lines.	Yes	
31	Maintenance of existing and new bike facilities	Conduct regular maintenance and street cleaning of bikeways. Procure a street cleaner to clean protected bike lanes. Regular maintenance and cleaning of paved trails.	Partial	Additional Funding for a specialized sweeper and its operation
32	Maintenance of existing and new sidewalks	Conduct regular cleaning and maintenance of sidewalks in the City. Repair broken sidewalks.	Limited	Additional funding
		OTHER		
33	Create new policies in General Plan based on TMP	All goals, strategies, actions identified in the TMP should be adopted as policies in the Circulation Element update.	Yes	
34	Create new policies in updates of the Vision Zero Plan based on TMP	All goals, strategies, actions identified in the TMP should be adopted as policies in future updates of the City's Vision Zero Plan.	Partial	Additional Staff

TMP Strategies and Actions

To advance Morgan Hill's transportation program, the City should take several implementation actions to ensure the City's vision for its transportation future comes to fruition. Each TMP goal has several targeted strategies and actions associated with it that have been developed based on community input and an assessment of the existing transportation system. These comprehensive strategies and actions aim to create a safer, more connected, and efficient transportation system for all users in Morgan Hill. It is envisioned that the strategies and actions identified as part of this TMP will be incorporated as part of the City's future update to the Transportation Element of the General Plan.

GOAL TMP-1: SAFETY

ELIMINATE TRAFFIC FATALITIES AND REDUCE THE NUMBER OF NON-FATAL COLLISIONS FOR ALL MODES WITHIN THE CITY.

STRATEGIES & ACTIONS

TMP-1.1: Apply road design techniques that reduce excess speeding and accommodate the needs of all road users.
TMP-1.2: Prioritize projects that are likely to reduce collisions along the City's High Injury Network.
TMP-1.3: Apply strategies identified in Vision Zero Morgan Hill.
TMP-1.4: Utilize grant funding for pedestrian, bicycle, and vehicle safety educational programming.
TMP-1.5: Pursue grant funding to implement focused and effective speed reduction marketing campaigns in coordination with Police Department.
TMP-1.6: Provide increasing levels of traffic enforcement through the Police Department.
TMP-1.7: Decrease emergency response times through the implementation of technology.

GOAL TMP-2: INCREASED TRANSPORTATION OPTIONS

PROVIDE A RANGE OF HIGH-QUALITY AND COMFORTABLE BIKEWAYS, TRAILS, PEDESTRIAN FACILITIES, AND LOCAL TRANSIT OPTIONS TO CREATE A SAFE, CONNECTED, BALANCED, AND CONVENIENT TRANSPORTATION SYSTEM FOR ALL AGES, ABILITIES, AND SOCIOECONOMIC GROUPS.

STRATEGIES & ACTIONS

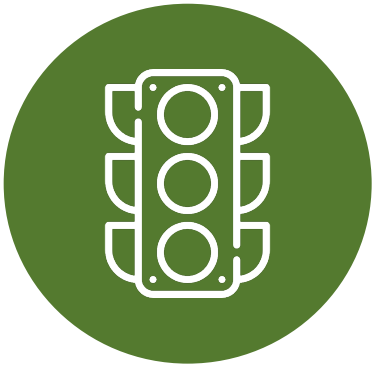
TMP-2.1: Apply multimodal street design to create high-comfort and low-stress walking and biking facilities and accommodate other forms of micromobility (e.g., e-bikes).
TMP-2.2: Create well-connected networks of bikeways and trails that allow for travel across the City of Morgan Hill.
TMP-2.3: Improve connections between the local bicycle network and regional bicycle network.
TMP-2.4: Identify and secure long-term funding for the VTA and/or the City to provide local transit service, including MoGo.
TMP-2.5: Advocate for VTA to provide additional bicycle facilities and close network gaps in Morgan Hill's sphere of influence in the VTA Countywide Bike Plan.

GOAL TMP-3: ACCESS TO REGIONAL TRANSIT SERVICES AND LOCAL DESTINATIONS

ENHANCE ACCESS TO REGIONAL TRANSIT SERVICES AND LOCAL DESTINATIONS LIKE DOWNTOWN, SCHOOLS, PARKS, AND SERVICES THROUGH IMPROVED MULTIMODAL CONNECTIONS AND LOCAL TRANSIT OPTIONS THAT ENABLE MORE TRIPS TO TAKE PLACE WITHOUT RELYING ON A PRIVATE VEHICLE.

STRATEGIES & ACTIONS

TMP-3.1: Invest in complete sidewalks and frequent crossings in pedestrian priority zones.
TMP-3.2: Improve first mile/last mile connections to the Morgan Hill Caltrain station and local bus stops.
TMP-3.3: Prioritize pedestrian and bicycle improvements on roadways identified as ped/bike priority corridors.
TMP-3.4: Improve access and safety to trailheads.
TMP-3.5: Proactively encourage the use of non-auto modes of travel to local destinations and schools via community educational and marketing programs.
TMP-3.6: Complete school area safety assessments to identify pedestrian/bicycle safety improvements.



GOAL TMP-4: CONGESTION MANAGEMENT

REDUCE TRAVEL TIME AND IMPROVE VEHICULAR THROUGHPUT ON CITY STREETS BY IMPROVING INTERSECTION AND CORRIDOR OPERATIONS, MINIMIZING THE EXTENT OF REGIONAL CUT-THROUGH TRAFFIC, AND ENCOURAGING MODE SHIFT.

STRATEGIES & ACTIONS

TMP-4.1: Identify and procure funding for increased congestion management resources and driver education within the City.
TMP-4.2: Apply feasible physical intersection improvements or signal timing improvements and equipment upgrades to reduce delay along City streets.
TMP-4.3: Implement traffic calming measures to discourage speeding and reduce cut-through traffic.
TMP-4.4: Design vehicular access on all future roadways to minimize adverse traffic operations and conflicts with pedestrians and bicyclists.
TMP-4.5: Ensure the design of all new streets planned as part of the General Plan network and that link new development to existing roadways include bike/ped facilities.
TMP-4.6: Participate in regional TDM programs to reduce overall traffic volume by encouraging a shift in travel modes.
TMP-4.7: Advocate and lead efforts for the expansion of toll/Express/HOV lanes on Highway 101 to reduce congestion management services.
TMP-4.8: Implement VMT policies designed to reduce the number of vehicles on City roadways (including last mile transit service options such as MoGo).
TMP-4.9: Advocate and identify opportunities to support increases in regional transit services, including regional bus service, rail service, and other.
TMP-4.10: Coordinate with Santa Clara County on implementing roadway improvements within Morgan Hill's sphere of influence.

Recommended General Plan Modifications

The City's overall transportation network and connectivity to meet the needs of all system users was considered in the evaluation, assessment of needs, and identification of improvements completed as part of the TMP. As such, the TMP will serve as a guiding document for future updates of the City's General Plan and its Transportation Element which similarly identify goals, policies, and actions aimed at making the existing road network efficient and user-friendly, implementing strategies to ensure safe and appropriate operation of the transportation system, solving existing traffic and parking problems, and expanding transit and non-motorized travel opportunities.

The TMP recommends the following adjustments to the goals, policies, and actions currently included in the City's General Plan:

Policy TR-3.4 – Consider the incorporation of multimodal variables along with vehicular operations standards for roadways and intersections to improve safety for all road users and promote non-vehicular travel in the City. Adjustments may include:

- Reduce minimum operating LOS standard along corridors that have or are planned to provide bicycle lanes or paths and located within pedestrian priority zones.
- Incorporate multimodal levels of service and/or level of traffic stress metrics to identify inadequacies in pedestrian and bicycle facilities. This would serve to align minimum LOS standards with Policy TR-1.3 and 2.1 which emphasize safety and a balanced transportation system for all road users.

Any change in LOS standards will need a policy change requiring City Council approval.

Policy TR-3.5 – Consider the incorporation of trip reduction measures, such as Transportation Demand Management (TDM) measures, that effectively reduce additional traffic demand on the roadway system by encouraging non-auto-based travel and provide opportunities for use of alternative modes of travel as an alternative to vehicular capacity improvement. Further expansion of vehicular capacity on the roadway system must consider its adverse effects on local travel by drivers, pedestrians and bicyclists in their potential to increase regional cut through traffic on City streets.

Action TR-3.D – Update the City's Traffic Impact Analysis guidelines to reflect required Vehicle-Miles-Traveled (VMT) metrics per state legislation (Senate Bill 743). The current LOS standards should remain and serve as a supplement to the required VMT analysis. Potential mitigation for impact to VMT and roadway facilities should include trip reduction strategies per recommended adjustments of Policy TR-3.5.

Action TR-3.G – Revise to include use of the TMP to guide the identification of prioritized roadway improvements.

TR-3.13: Unsignalized Intersection Monitoring. Revise to include all intersections within Pedestrian Priority Zones.

TR-6.8: Transit for Changing Needs. Revise to include MoGo or other alternative last mile service and community transportation services.

TR-8.14: Bikeways Master Plan. Consider removing policy. TMP should be used to identify planned bike facilities within the City since it is more comprehensive and includes facilities of the Bikeways Master Plan.

TR-8.11: Multi-Jurisdictional Bikeway Alignments. Revise to include coordination with Valley Water and private property owners for the continued improvement of the Madrone Channel and its access points.

TR-9.4: Coordination with Pedestrian Planning. Revise to include use of the identified Pedestrian Priority Zones per the TMP to guide the identification of pedestrian improvements.

TR-9.10: Sidewalk Connectivity. Revise to include use of the identified Pedestrian Priority Zones per the TMP to guide the identification of pedestrian improvements.

Funding & Implementation

The Morgan Hill TMP establishes a clear vision for the City's transportation network, guiding investment priorities and project implementation. However, completing these projects requires addressing several unique challenges:

KEY CONSIDERATIONS FOR TMP PROJECT IMPLEMENTATION:

Funding Opportunities:

- Identify federal, state, regional, and county funding sources, including competitive grants that align with the projects
- Assess the portion of project costs that should be covered by new development (residential, commercial, or industrial) through impact fees or other funding mechanisms like the Transportation Impact Fee (TIF)

Interagency Involvement:

- Collaborate with key stakeholders such as Caltrans, Santa Clara County, the Valley Transportation Authority (VTA), and other regional agencies to ensure project coordination and compliance

Community Engagement:

- Seek input from Morgan Hill residents to understand their needs and concerns
- Involve the community in planning and design through public meetings, surveys, and workshops, ensuring that the TMP reflects local priorities

Project Status:

- Assess the current planning and design progress of each project to determine its readiness for implementation

Unique Challenges:

- Address complex issues such as right-of-way acquisition, utility relocation, environmental clearance, and regulatory approvals

Potential to Gain Efficiencies and Leverage Non-City Resources:

- Look for opportunities to integrate projects with other infrastructure work, development projects, or regional transportation initiatives to maximize efficiency
- Consider options for funding the expansion of transit opportunities such as rideshare for Morgan Hill senior residents

City Resources:

- Evaluate the City's staffing and resource capacity to implement each project

Need for Ongoing Funding:

- Plan for long-term funding to ensure the sustainability of operations, maintenance, and potential upgrades for infrastructure once the projects are completed

CITY OF MORGAN HILL

PROJECT PHASING:

Once initiated, transportation infrastructure projects in Morgan Hill may take several years to complete. Some portions of projects could be completed in the short-term through roadway rehabilitations and pavement rehabilitation programs, quick build projects, and safety improvements while some improvements are long term improvements that would be completed as new development gets built. The City advances projects toward implementation as part of its annual Capital Improvement Program (CIP). Projects from the TMP are added to the CIP based on priority, readiness, and the availability of resources (staff and funding). The CIP is revised annually to reflect progress and changing priorities.

HOW WILL THE TMP PROJECTS BE FUNDED?

The TMP projects in Morgan Hill will be funded through various sources, including:

Transportation Impact Fee (TIF):

- The City will rely on funds from its TIF, updated to assign proportional costs to new developments based on their projected impacts on the transportation network, particularly during peak traffic hours

Improved by Future Development:

- The City will rely on future development to make bicycle, pedestrian and transit improvements to their site's frontage as well as make vehicle operations and/or traffic calming improvements in the vicinity of the project site if the project would result in adverse effect to operations or increase local cut-through traffic.

Low Cost Improvement via Pavement Rehabilitation:

- The City will incorporate low-cost improvements into pavement rehabilitation projects to significantly enhance transportation infrastructure without major capital investment. Improvements like signing and striping markings, curb extensions, curb ramps, bike lanes, etc. can be efficiently implemented during routine pavement resurfacing or rehabilitation, maximizing the benefit of scheduled maintenance while improving safety, mobility, and accessibility.

Low Cost Improvement by City Maintenance:

- The City will utilize maintenance operations as an opportunity to introduce low-cost improvements that enhance safety, accessibility, and multimodal transportation without requiring major capital investments. Improvements like adding wayfinding signage upgrades, high visibility crosswalks, improving sight lines by trimming vegetation, signal timing adjustments etc. will be integrated into routine maintenance tasks, optimizing existing resources to create immediate benefits for the community.

Grant Funding:

- **County**: Funds from Santa Clara County's Measures A and B, which provide revenue for local transportation projects and for education and encouragement programs on alternative modes.
- **State**: Transportation Development Act (TDA) funds for transit, bicycle, and pedestrian projects.
- **Federal/State/County Grants**: Competitive grants like the Safe Streets and Roads for All (SS4A), and other federal grants like US 101 Expansion Planning Funding.

Potential Future Funding Sources

Funds required to implement the transportation projects and programs outlined in the TMP will outpace resources currently available. Opportunities for new funding include:

VEHICLE MILES TRAVELED (VMT) MITIGATION UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

- Leveraging VMT mitigation fees under the CEQA for new developments. This can generate revenue to fund transportation projects that reduce VMT, such as public transit improvements, bike lanes, and pedestrian infrastructure.

REDISTRIBUTION OF GENERAL FUND DISCRETIONARY FUNDS:

- Reallocating discretionary funds from the City's General Fund to transportation projects. However, this option may be limited without significant cuts to other City services or programs without reductions or freezes in funding levels for other City services and programs

NEW REVENUE SOURCES:

- Generating new revenue streams through voter-approved taxes, fees, or bonds. These could be dedicated to transportation infrastructure improvements, ensuring long-term, sustainable funding

- Continue to actively pursue competitive grant opportunities at the federal, state, regional, and local levels. Programs such as the Highway Safety Improvement Program (HSIP), Active Transportation Program, and One Bay Area Grant (OBAG) offer substantial opportunities for transportation project funding.

- As new or increased General Fund Revenues are obtained, consideration of dedication of these funds to transportation priorities should be considered by the City Council.

POTENTIAL FUNDING SOURCES

- Active Transportation Program
- Highway Safety Improvement Program
- One Bay Area Grant (OBAG) Cycle 4
- Office of Traffic Safety Grants
- Affordable Housing and Sustainable Communities Program
- Urban Greening
- Local Streets and Road Maintenance and Rehabilitation
- RAISE Grant
- Sustainable Transportation Equity Project
- Transformative Climate Communities
- Safe Streets and Roads for All (SS4A)
- Clean California Local Grant Program

Tracking TMP Investments:

Morgan Hill's TMP will serve as a living document, updated generally every 5-10 years to reflect changing conditions and ensure alignment with the City's goals of safety, mobility choice, sustainability, and congestion management. The City will use performance metrics to evaluate the effectiveness of its investments and adjust strategies as needed to ensure ongoing success.

PERFORMANCE METRICS:

The following metrics can be utilized to gauge the implementation of the plan. Most can be tracked annually, however, due to funding constraints data such as traffic counts may occur at longer intervals. City staff shall strive to develop an annual implementation report for the TMP and report out on performance metrics as existing resources allow.

GOAL TMP-1: SAFETY

- Vehicular, pedestrian and bicycle killed and severe injury (KSI) collision data
- Number of projects implemented on the High Injury Network
- Number of grants received to support safety improvements and programs
- Number of traffic citations issued
- Total average response times by emergency personnel
  Morgan Hill Fire Department

GOAL TMP-2: INCREASED TRANSPORTATION OPTIONS

- Miles of multi-use path added
- Miles of bike lanes, buffered bike lanes, separated bike lanes added
- Number of bicycle and pedestrian improvements completed in Morgan Hill's Sphere of Influence
- Amount of grant funding received to support local transit service
- Availability and frequency of last mile transit service
- Last mile transit service ridership numbers
- Service frequency of Caltrain and VTA regional service
- VTA regional bus ridership numbers
- Caltrain ridership numbers

GOAL TMP-3: ACCESS TO REGIONAL TRANSIT SERVICES AND LOCAL DESTINATIONS

- Feet of sidewalk gaps filled throughout the City and in pedestrian priority zones
- Number of ADA ramps replaced/added throughout the City and in pedestrian priority zones
- Number of multimodal improvements made proximate to a transit stop
- Number of multimodal improvements made along ped/bike priority corridors
- Number of trailheads improved
- Number of articles posted on transportation related programs like safety, driver education, maintenance etc. annually in City newsletters and subsequently number of hits on the City's transportation webpage
- Number of safety/multimodal improvements made within half mile of a school

GOAL TMP-4: CONGESTION MANAGEMENT

- Intersection and segment level of service
- Citywide Traffic Counts
- Regional cut through traffic analysis every 5 years
- Speed Surveys conducted every 7 years or sooner
- Number of grants received to support driver education