City of
Morgan Hill

STATION AREA MASTER PLAN

DRAFT FINAL

September 2017

CITY OF MORGAN HILL

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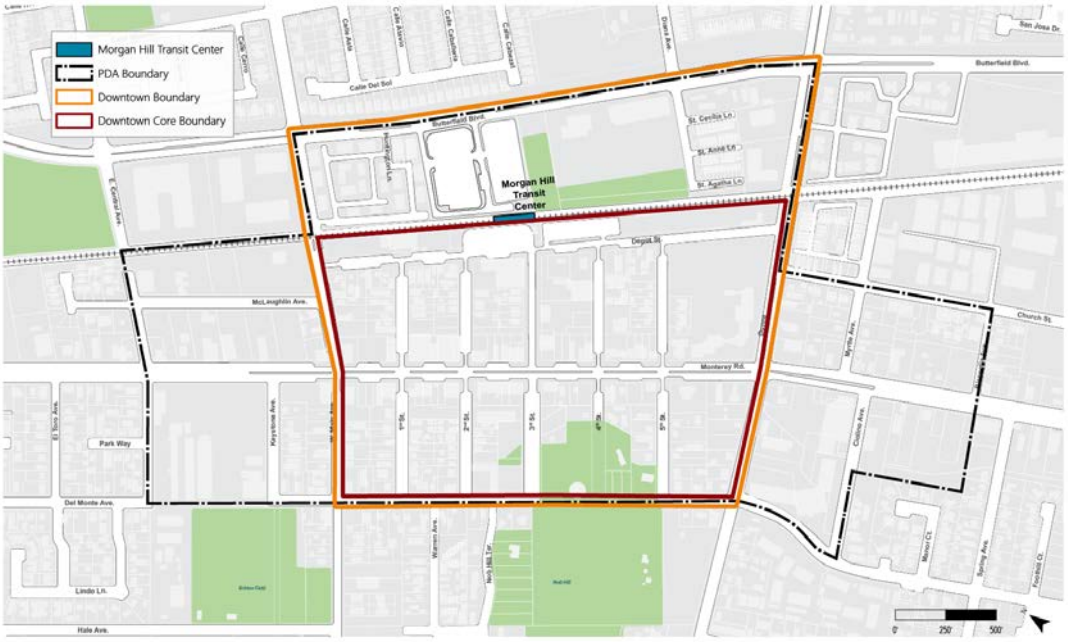
EXECUTIVE SUMMARY

Today the Morgan Hill Transit Center serves as the South County Connection for all Major Transportation. This includes the inter - county Monterey Salinas Transit (MST) Caltrain, and intra county VTA Express and local services such as local park and ride sharing, and private commuter bus services.

The Morgan Hill Transit Center was formed when the Santa Clara County Transportation District (SCCTD) adopted the San Jose to Gilroy Caltrain Extension project in 1989. The original plan had the station located at the south end of Morgan Hill's downtown at the northeast intersection of the railroad tracks and East Dunne Avenue. In April of 1991, the former Morgan Hill Redevelopment Agency (MHRDA) requested SCCTD to consider the relocation of the proposed station, and center it within the Downtown. The request included an offer to assist in funding the undertaking as a joint project through acquisition of a park and ride site and paying for the construction of Butterfield in between Main Avenue and Dunne Avenue. This allows access to the Transit Center from Downtown and Butterflied. The station includes a spacious loading area with three shade shelters, and a designated waiting area for passengers with disabilities that may need boarding assistance.



Morgan Hill Station Area Plan boundary

The park and ride lot includes 465 stalls that serve the station, public bus services, and private bus/shuttle transit services.

In 2008, the City designated 180 acres of land in the Transit Center and Downtown as a Priority Development Area (PDA) under Plan Bay Area. Plan Bay Area is a state-mandated, integrated long-range transportation, land-use and housing plan and PDA's include locally identified infill development opportunity areas and multi-modal transportation improvements to create complete and connected communities through transit-oriented development.

In 2009, the City adopted the Downtown Specific Plan and Final Environmental Impact Report (FEIR) in support of the principals of the PDA. In 2016, the City of Morgan Hill received a grant from Santa Clara Valley Transpiration Authority (VTA) to prepare a Station Area Master Plan for the PDA intended to highlight future improvements and amenities required to support growing and anticipated transportation uses and patronage and further strengthen the implementation of the City's goals for a pleasant and efficient multi-modal transportation system in the Downtown. The PDA boundary in Morgan Hill overlays the downtown boundary, but extends further north to Central Avenue and further south to Bisceglia Avenue.

This Plan is consistent with the Bay Area's 2040 Draft Plan and SPUR's 2017 report titles "Rethinking the Corporate Campus" in that it provides tools to further enhance multi-modal transit within the PDA, which encourages housing and employment development in and around the PDA, and is in alignment with the City's streamlined residential permitting process within the Downtown Core. It also provides guidelines that shape the walkable downtown experience.

Station Area Master Plan Purpose and Context

The Station Area Master Plan summarizes the existing transportation services and is focused on strengthening our Transit Center by identifying considerations and opportunities for future transit needs and further improvement of multi-modal connectivity.

The transportation, planning, and design tools presented throughout the Station Area Master Plan are intended to build upon and update the Multi-Modal Circulation and Streetscapes Chapter within the Downtown Specific plan and support City staff, elected officials, transit providers, Morgan Hill residents, business, and property owners, as well as other stakeholders in their continuing efforts to improve the quality of the multi-modal transportation environment throughout the PDA and the Downtown. All tools and recommendations are to be understood as supplemental to already adopted plans, policies, and initiatives applicable in the area including those provided by the Morgan Hill 2035 General Plan, the 2009 Downtown Specific Plan, the 2008 Bikeways Master Plan, the Downtown Placemaking Strategy and the Public Works Department's Standard Street Sections.

Examples of boards displayed at the Downtown Summit

The Morgan Hill community participated in the development of this Plan through a Downtown Summit that included a community survey and open house that related to the Station Area Master Plan. Eighty-five percent of survey respondents said they felt "very comfortable" walking around within Downtown, indicating that by encouraging a "park once and walk" environment and by providing pleasing streetscapes as well as well-lit

parking facilities and sidewalks, the City is already doing much to encourage walking within Downtown.

Among community members' suggestions for future pedestrian and bicycle improvements were improved pedestrian crossings, particularly at high-traffic intersections such as Monterey Road at 1st Street and Depot Street at 2nd Street; wider sidewalks, primarily near restaurants to accommodate both people walking and outside café seating; additional separated mixed-use trails; and additional small shops to visit. Suggested improvements for bicycles included green bike lanes, bike share stations and additional bicycle parking.

The Station Area Master Plan summarizes what is existing, provides transit and design improvement/management tools, and provides recommendations in preparation for future transit needs. The Plan is organized into three main chapters:

Chapter 1: Transportation Context
Chapter 2: Streetscape and Placemaking Toolkit
Chapter 3: Priority Improvements

Chapter 1: Transportation Context

This chapter presents the existing transportation services and facilities in the Station Area, identifies already planned improvements, and discusses how to plan for and design better rail and transit service, bicycle and pedestrian circulation, street connectivity, parking, and emerging technologies to enhance mobility to the Transit Center and throughout the Downtown for all members of the community.

Rail Service – This section of the chapter discusses the existing level of Caltrain service and station facilities at the Morgan Hill Transit Center. The provided information includes a ridership analysis, which concludes that based on the numbers of passengers per train, population and employment per station, and population and employment densities per station, the Morgan Hill Transit Center ranks in the middle of all Caltrain stations and therefore can embark on a public outreach program to attract the projected additional Caltrain riders. An important component to expand services at the Transit Center is the park in ride lot. The lot provides access to the station with current occupancies above 85%, which prevents parking overflow onto nearby residential neighborhoods, and provides a central location for all transit services including public and private bus/shuttle service.

Additional topics covered in this part of the chapter include, the potential extension of Capitol Corridor passenger rail service from Santa Clara County to Salinas (as proposed by the Transportation Agency for Monterey County); the current status of alignment considerations for High Speed Rail; freight rail, and safety quiet zone goals for at-grade rail crossings in Morgan Hill.

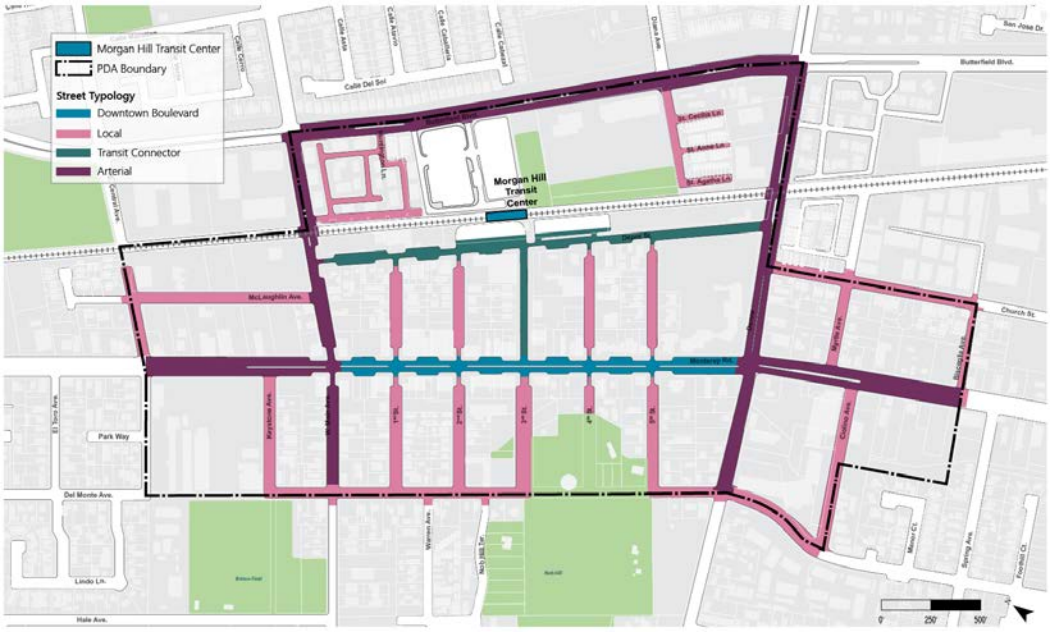
Public and Private Bus Transit Service – This part of the chapter discusses the public bus service provided in the City of Morgan Hill by the Valley Transportation Authority (VTA) and Monterey Salinas Transit (MST) and how potential future service reductions by VTA can be balanced by exploring service models that are more compatible with a city's development patterns. In addition, this section includes information on the services provided by private bus transit and shuttle operators and transportation options associated with rideshare services.

Parking – The section of the chapter that discusses parking includes a summary of information on the parking supply and demand within the Downtown Specific Plan area (based on information from the 2016 "Morgan Hill Downtown Parking Conditions Study") and concludes that, even after currently known development projects have been completed there will be a sufficient amount of parking in the Downtown. However, parking shortages may occur localized along some streets and in some parking lots based upon placement and private ownership. Chapter 3 provides recommendations when Downtown parking supply is fully utilized, achieving 85% or higher parking occupancy rate.

Roadways – The chapter's discussion of roadways introduces a typology for all streets located in the Station Area in order to link each street to the multi-modal street design recommendations and suggested considerations for further improvements included in Chapters 1 and 2. The Plan distinguishes the following four street types: *Downtown Boulevard, Local Street, Arterial Street, and Transit Connector*. Each street type is illustrated with a typical cross section that describes how pedestrians, bicyclists, and vehicles (including transit) are accommodated within the public right of way.

- **Downtown Boulevard** – Monterey Road between Main and Dunne Avenues is the main business corridor in Downtown and a primary pedestrian route.
- **Local Street** – First, Second, Fourth, and Fifth Streets are two-lane roadways with residential and small business frontages. They primarily provide access to their adjacent land uses for vehicles, bicyclists, and pedestrians alike.

- **Arterial Street** – Dunne Avenue, Main Avenue, and Butterfield Boulevard as well as the portions of Monterey Road beyond Main and Dunne Avenues, are wider streets with faster moving traffic that border on and lead to the Downtown area.
- **Transit Connector** – Third Street and Depot Street are downtown-serving streets each with a unique configuration and function. Third Street serves as the main pedestrian connection between the Morgan Hill Transit Center and Downtown. Depot Street connects Main Avenue and Dunne Avenue to the Morgan Hill Transit Center.



Downtown Morgan Hill street typology

In addition to the street typology, the roadway section of the chapter discusses topics such as signals and intersection operations, curb extensions, traffic calming, wayfinding, collisions, and planned improvements as well as roadway system gaps.

Pedestrian and Bicycle Networks – The discussion of the Station Area's pedestrian and bicycle networks includes descriptions of existing and planned facilities, including sidewalks and crosswalks and bicycle lanes and routes. The discussion also identifies conditions that require improvements such as sidewalk and bike lane gaps.

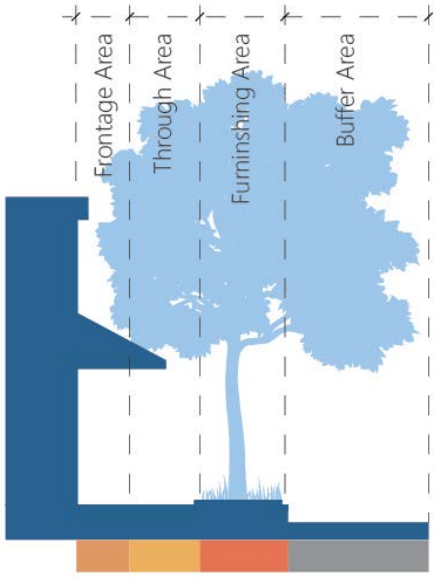
Toolboxes – Throughout all sections of the chapter, toolboxes are provided in the context of the items above with the aim to describe tools available to the City to further improve transportation services and facilities in the Station Area. Provided toolboxes include the following:

- Rail Service Toolbox
- Public Bus Service Toolbox
- Private Rideshare and Bus Service Toolbox
- Parking Toolbox
- Roadway Toolbox
- Pedestrian Toolbox
- Bicycle Toolbox

Chapter 2: Streetscape and Placemaking Toolkit

This chapter first provides an overview of gains made with respect to open space, streetscape, and placemaking in the Downtown area under a variety of City initiatives and programs, including the Downtown Placemaking Strategy (approved by the City Council in 2014), the Complete Streets Pilot Project for Monterey Road, the Creative Placemaking Mini Grant Program, and the Gateway Art project.

The second half of Chapter 2 focuses on the design of the pedestrian realm of streets in the Station Area and utilizes the street typology introduced in Chapter 1 (Transportation Context) to provide tools for organizing improvements in the pedestrian realm and strategies for further enhancing the quality of the pedestrian experience. For this purpose, the pedestrian realm of each street type is further divided into specific subareas: the Frontage Area, Through Area, Furnishing Area, and the sidewalk-adjacent Buffer Area (see Chapter 2 for a more detailed description of each of these pedestrian realm areas).



Pedestrian realm design areas

The provided tools and recommended design considerations aim to clarify which pedestrian realm improvements belong where in the sidewalk, further enhance the identity of Downtown, and improve accessibility and walkability for visitors, residents, and employees alike.

The chapter concludes with public space and placemaking tools that make creative use of sidewalk-adjacent underutilized buffer areas (e.g. parking lanes) by accommodating flexible public open spaces, such as temporary parklets or permanent improvements like parklets installed for the long-term or landscaped bulb-outs. Pedestrian-scale lighting is discussed as well.

Chapter 3: Priority Improvements

This chapter summarizes gaps within the transportation system and identifies improvements to achieve an increase in multi-modal connectivity, safety, and comfort for pedestrians, bicyclists, bus and rail passengers in the Downtown and areas surrounding the Morgan Hill Transit Center, with an emphasis on improving pedestrian and bicycle connections as well as other priorities identified with City staff.

Specifically discussed are recommendations for:

- Sidewalk gap closures
- Pedestrian improvements at signalized and unsignalized crossings and intersections
- Potential striping modifications to accommodate bicycles at the intersection of Monterey Road and Main Avenue and the intersection of Monterey Road and Dunne Avenue
- Considerations for the coordination of improvements to transit services and facilities operation at the Morgan Hill Transit Center
- Roadway improvements at the intersections of Depot Street and Church Street with Dunne Avenue and the intersections of McLaughlin Avenue and Depot Street with Main Avenue
- Recommendations for short-term parking improvements to help alleviate localized peak hour parking shortages

Chapter 3 concludes with a prioritization of the recommendations for improvements discussed in greater detail throughout the chapter. The table of prioritized projects (see below) distinguishes three tiers, with Tier 1 including improvements that could be implemented immediately or in the near term (1 to 2 years), Tier 2 including improvements that could be implemented in the mid-term (2 to 5 years), and Tier 3 including long-term improvements (implemented in 5+ years).

Table of Prioritized Improvements				
Improvement	**Tier 1**	**Tier 2**	**Tier 3**	**Comments**
Pedestrian Improvements				
Close sidewalk gap on Depot Street		X		Timing dependent on development of adjacent lot
Conduct before and after studies of in-pavement flashers on Monterey Road at Third Street	X			Data needed to select appropriate treatments at other locations such as Monterey/First and Monterey/Fifth
Create uncontrolled pedestrian crossing policy	X			
Enhancement to railroad crossings consistent with Quiet Zone Goals		X		Quiet Zone pedestrian crossing enhancements should be revisited once the CHSR Authority chooses a preferred alignment.
Conduct a study to identify appropriate pedestrian crossing treatments on Main Avenue at Depot Street/McLaughlin Avenue	X			To be conducted as part of the Depot Street study. Pedestrian counts and other data would be needed
Bicycle Improvements				
Install bicycle improvements at Monterey Road and Main Avenue	X			See Figure 3-4
Install bicycle improvements at Monterey Road and Dunne Avenue	X			See Figure 3-5
Evaluate on-street parking on Depot Street – consider prohibiting parking in select locations		X		To be considered as part of the Depot Street study.
Close bicycle lane gap on Depot Street		X		Timing dependent on development of adjacent lot

Table of Prioritized Improvements				
Improvement	**Tier 1**	**Tier 2**	**Tier 3**	**Comments**
Add second stripe to bicycle lanes on Dunne Avenue, Main Avenue, Depot Street, and Monterey Road		X		This will reduce incidence of parked vehicles encroaching into bicycle lanes
Add green paint to transition zones with new bicycle lane installations		X		This will better alert drivers of bicyclists and delineate their travel paths
Install buffered bicycle lanes on Monterey Road between Main Avenue and Dunne Avenue			X	Dependent on completion of Hale Avenue extension
Transit Improvements				
Work with Caltrain to adjust schedules	X			
Work with Caltrain and VTA to maintain track crossing with double tracking project		X		Dependent on timing of preferred alignment chosen by CHSR Authority and the double tracking project
Create public outreach program to increase Caltrain riders	X			
Work with TAMC to extend station platform	X			City currently working with TAMC
Explore a community shuttle bus program or increased TNC service	X			
Roadway Improvements				
Conduct Depot Street Study	X			The study would address future role of Depot Street, considering future parking facilities, and pedestrian crossings at Main and Dunne
Study realignment of Depot Street with Church Street		X		To be conducted in conjunction with redevelopment of Hale Lumberyard site and Depot Street study

Table of Prioritized Improvements				
Improvement	**Tier 1**	**Tier 2**	**Tier 3**	**Comments**
Parking Improvements				
Enforce two-hour parking limits	X			To free up prime spaces for customers
Extend time limits in parking garage	X			To allow long-term parking
Implement parking marketing and wayfinding program	X			To increase utilization of parking garage
Work with businesses on a valet parking program		X		To alleviate localized parking shortages
Reinstate parking in-lieu fees		X		To provide funding for parking improvements
Work with VTA to retain public park in ride lot for the Transit Center	X			
Reserve options for future parking locations in the north Downtown area and conduct study		X		See Figure 3-7

City staff will further modify the list based on input from City planning commissioners and City Council members.

INTRODUCTION

The City of Morgan Hill is centered on the major north-south transportation corridor U.S. Highway 101, approximately 12 miles south of San Jose, 10 miles north of Gilroy, and 15 miles inland from the Pacific Coast. Downtown Morgan Hill consists of 18 blocks and approximately 110 acres of land bounded by Main Avenue, Butterflied Boulevard, Dunne Avenue, and Del Monte Avenue. In 2007, an update to the City's existing Downtown Plan was initiated to refine land use and development objectives within the Downtown Core. The Downtown Core is strategically developed along Monterey Road and generally defined by Main Avenue, the Union Pacific Railroad tracks, Dunne Avenue, and Del Monte Avenue.

In 2008, the City designated 180 acres of land in its Downtown as a Priority Development Area (PDA) under Plan Bay Area. Plan Bay Area is a state-mandated, integrated long-range transportation, land-use and housing plan and PDA's include locally identified infill development opportunity areas and multi-modal transportation improvements to create complete and connected communities through transit-oriented development. The PDA boundary in Morgan Hill overlays the downtown boundary, but extends further north to Central Avenue, and further south to Bisceglia Avenue (See Figure I-1).

Morgan Hill's City Council adopted the updated Downtown Specific Plan in 2009 and it continues to provide the overall vision and specific goals for the development of the Downtown today. The plan also includes design guidelines that define the desired design character of new development in the Downtown.

In 2016, the City received a grant from Santa Clara Valley Transpiration Authority (VTA) to prepare a Station Area Master Plan intended to further strengthen the implementation of the City's goals for a pleasant and efficient multi-modal transportation system in the Downtown that is also supportive of access to transit services focused on Morgan Hill's Transit Center.

Station Area Master Plan Purpose and Context

As the South County Connection for all major transportation including the inter-county Monterey Salinas Transit (MST) Caltrian, and intra-county VTA Express and local services, it is very important to support by understanding the existing services, how to enhance those services, and how to plan for future transit needs. The Station Area Master Plan takes stock of the existing transportation context, provides tools to enhance current transit services

and future transit needs. The Plan also identifies considerations and opportunities for the further improvement of multi-modal connectivity and access to the Transit Center. Therefore, some of the tools and recommendations that identify specific transit, pedestrian, bicycle, and streetscape improvements to further increase multi-modal connectivity and comfort of travel for pedestrians, bicyclists, bus riders and rail passengers in the Downtown and area surrounding the Morgan Hill Caltrain station. (See Figure I-1.)

The planning and design tools and recommendations for improvements presented throughout the Station Area Master Plan are intended to support City staff, elected officials, transit providers, Morgan Hill residents, business, and property owners, as well as other stakeholders in their continuing efforts to implement improvements to the multi-modal transportation environment throughout the PDA and the Downtown. This may occur through the direct implementation of improvements recommended in this Plan as part of on-going capital improvement and routine street maintenance projects (e.g. repaving projects) undertaken by the City, through the use of grant or other funding sources to construct improvements or to develop detailed construction plans or undertake needed further studies.

All tools and recommendations are to be understood as supplemental to and compatible with already adopted plans, policies, and initiatives applicable in the area including those provided by the Morgan Hill 2035 General Plan, the 2009 Downtown Specific Plan, the 2008 Bikeways Master Plan, the Downtown Placemaking Strategy and the Public Works Department's Standard Street Sections. While following the existing guidance and standards provided in these documents, careful consideration should be given to the Station Area Master Plan's planning and design tools and recommendations when advancing new planning or capital improvement projects that shape the multi-modal transportation system and public realm of streets and in the Station Area Master Plan area.

Development projects on private properties in the Downtown will continue to be primarily guided by the Downtown Specific Plan, applicable zoning requirements, and other guidance documents that have been previously adopted by the City of Morgan Hill. However, where private investment can be leveraged to contribute to the City's overarching multi-modal transportation and urban design goals outlined in the City's General Plan and Downtown Specific Plan, these improvements should be developed under consideration of the tools and recommendations included in the Station Area Master Plan.

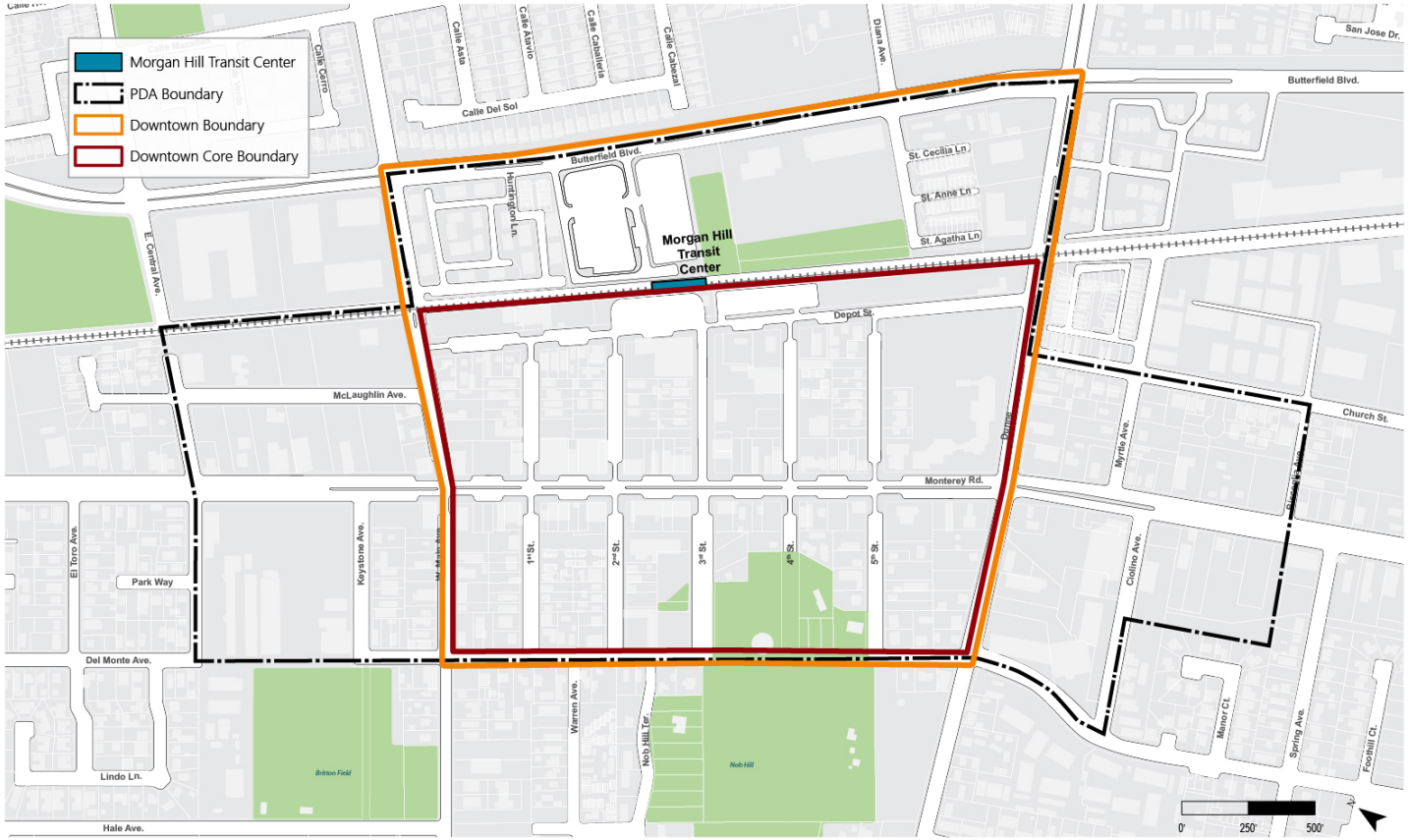
The Station Area Master Plan is organized into three main chapters:

Chapter 1: Transportation Context – This chapter presents the existing transportation services and facilities in the Station Area, identifies already planned improvements, and discusses how to plan for and design better bus and rail transit service, bicycle and pedestrian circulation, street connectivity, parking, and emerging technologies to enhance mobility to the Transit Center and throughout the Downtown for all members of the community.

Chapter 2: Streetscape and Placemaking Toolkit – This chapter describes the different types of streets near the Transit Center and throughout Downtown Morgan Hill. The Chapter provides tools for enhancing the pedestrian realm within the public rights of way of Downtown streets and includes improvements to increase clarity on location of pedestrian realm improvements improve Downtown identiy, and support walkability through wayfinding for visitors, residents, and employees alike. The chapter also presents public space and placemaking tools that provide opportunities for private business to expand their square footage into the sidewalk and parallel parking stalls by accommodating flexible public open spaces, such as temporary parklets or permanent improvements like parklets installed for the long-term or landscaped bulb-outs. Pedestrian-scale lighting is discussed as well.

Chapter 3: Priority Improvements – This chapter summarizes gaps within the transportation system and identifies improvements to achieve an increase in multi-modal connectivity, safety, and comfort for pedestrians, bicyclists, and rail passengers to the Transit Center and within the Downtown with an emphasis on supporting the existing Transit Center, enhancing transit services, and plan for future transit needs. In addition, the chapter includes improving pedestrian and bicycle connections as well as other priorities identified with City staff.

Figure I-1: Morgan Hill Station Area Plan Area



Community Participation

The Morgan Hill community participated in the development of this Plan through a Downtown Summit that included a community survey and open house that related to the Station Area Master Plan.

Downtown Visioning Summit

On June 30th, 2016, the City of Morgan Hill conducted a Downtown Visioning Summit. This event brought together private investors actively investing in the Downtown, as well as public leaders, to start an open discussion about a Vision for Downtown Morgan Hill. The goal was to engage the community as well as spark interest and ideas from the audience on the future of Downtown Morgan Hill. Over 150 people attended either the afternoon or evening sessions, between which optional walking tours and a hosted reception were held.

The event included two panels of speakers – one made up of the developers of current downtown projects, and another discussing the City's ongoing public realm investments, including parks and trails, public art, streetscapes and pedestrian and bicycle infrastructure.

Open House and Survey

Following the panels, an open house portion of the Downtown Summit engaged many summit participants in contributing their opinions about various topics related to transportation and urban design. During the open house, community members talked with the Station Area Master Plan team, provided feedback on post-its on a range of topical boards, and completed an online preference survey on transportation-related topics in Downtown Morgan Hill. The survey was also made available to the public at large on the City's website. Two-thirds of the 39 total survey respondents were Morgan Hill residents, with the remainder including visitors, employees and business owners. Dining, festivals and shopping were identified by respondents as the top three activities for visits to Downtown. (See Figure I-2.)

Eighty-five percent of survey respondents said they felt "very comfortable" walking around within Downtown, indicating that by encouraging a "park once and walk" environment and by providing pleasing streetscapes as well as well-lit parking facilities and sidewalks, the City is already doing much to encourage walking within Downtown. However, about 85% of respondents indicated they typically drove to Downtown, primarily due to distance, but in some cases also due to their not feeling comfortable with the current level of pedestrian and bicycle conditions between their homes and the Downtown.

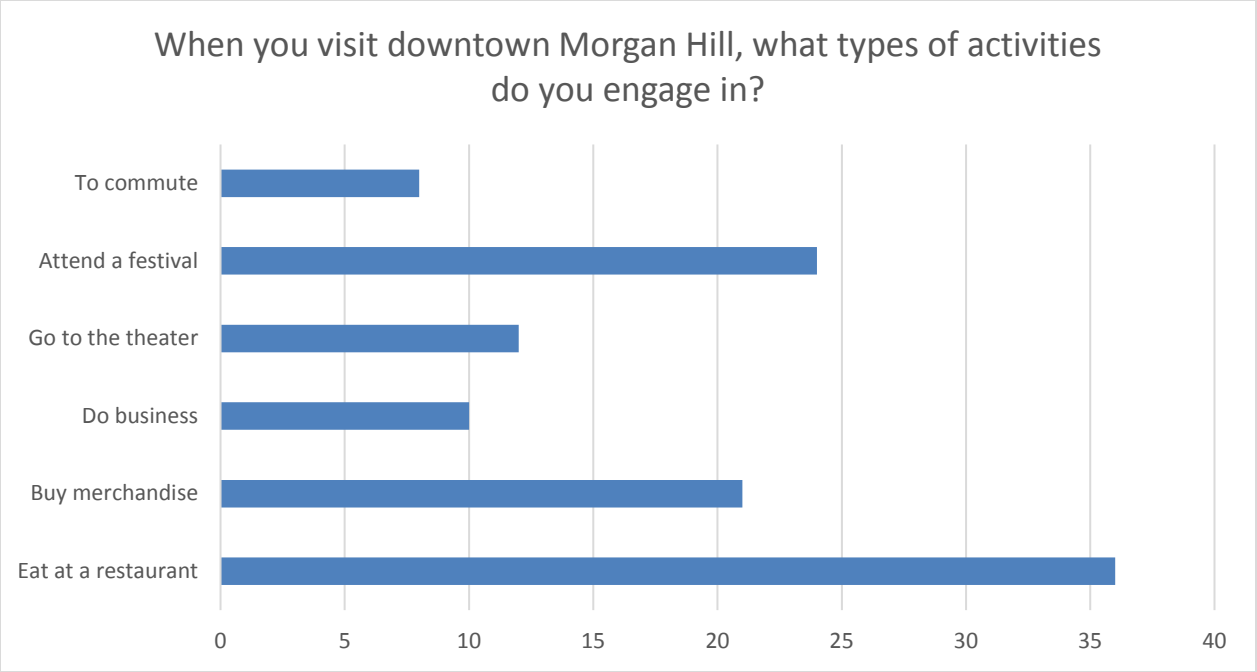


Figure I-2: Survey results for activities engaged in Downtown

Among community members' suggestions for further pedestrian and bicycle improvements were improved pedestrian crossings, particularly at high-traffic intersections such as Monterey Road at 1st Street and Depot Street at 2nd Street; wider sidewalks, primarily near restaurants to accommodate both people walking and outside café seating; additional separated mixed-use trails; and additional small shops to visit. Suggested improvements for bicycles included green bike lanes, bike share stations and additional bicycle parking.

1. TRANSPORTATION CONTEXT

This chapter presents the existing transportation services and facilities in the Station Area, identifies already planned improvements, and discusses how to plan for and design better rail and bus transit service, bicycle and pedestrian circulation, street connectivity, parking, and emerging technologies to enhance mobility to the Transit Center and throughout the Downtown for all members of the community. Throughout the chapter, toolboxes are provided at the end of each subject that describe tools available to the City to further improve transportation services and facilities in the Station Area.

The City of Morgan Hill has a very diverse and growing community with equally diverse transportation needs. The Downtown and Priority Development Area (PDA) are supported by a variety of transportation facilities and services that provide circulation and access for residents, business owners, employees, business customers and patrons as well as visitors. The Morgan Hill Transit Center is the basis for the PDA designation under Plan Bay Area and provides consistency with the 2040 Draft Plan (Plan Bay Area), which in turn makes it and the access to it the focal point of the following discussion of the transportation context for the Station Area Master Plan area.

In supporting the needs of the community and providing consistency with Plan Bay Area, the City streamlined the permitting process for housing within the Downtown boundary, and provides development standards that can achieve a variety of residential units within the PDA. Recently approved residential projects within the PDA boundary include a range of unit sizes from approximately 600 square feet to 1,600± square feet, affordable units varying from low income to moderate affordability, rental and ownership, and assisted living apartments as shown in Figure 1-1 .

Figure 1-1: Recently Approved PDA Residential Development near Transit Services

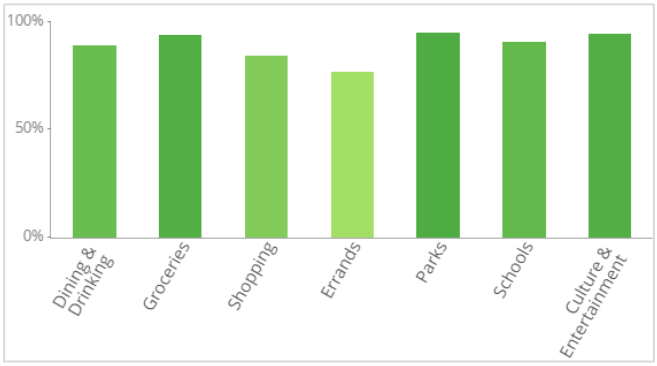
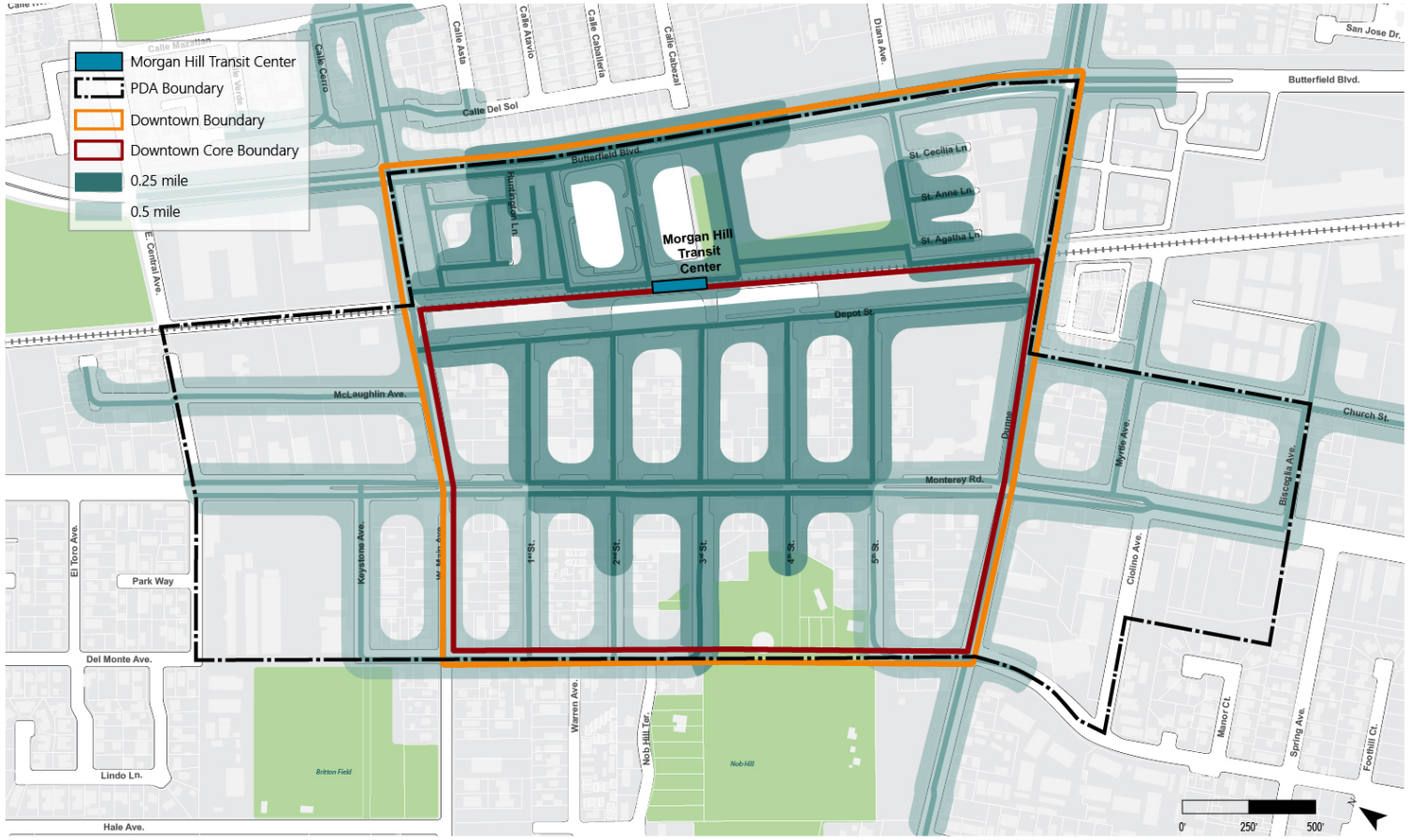


Figure 1-2: The walk score for Monterey Road at the intersection of 3rd Street and Monterey Road is based on the above categories.

Downtown Morgan Hill is aligned with SPUR[1] in that it locates jobs and housing near transit within a walkable downtown. Based on widely accepted best practices in the field of transit-oriented development and SPUR's 2017 report titled "Rethinking the Corporate Campus", experts in the field of transportation planning use the limit of an acceptable walking distance between a quarter-mile to a half-mile from public transit stop or parking area to their destination as a design guideline. Most of Morgan Hill's Downtown and PDA area is within a half-mile walking distance of the station (about a 10-minute walk), and the Downtown Core is within a quarter-mile or 5-minute walk, as shown in Figure 1-3. SPUR uses the Walk Score methodology (www.walkscore.com/methodology) to evaluate the walkability of downtowns by giving them a score between 0-100 based on walkable access to personal services, shopping, schools, etc. Downtown Morgan Hill has a walkability score of 86, which is considered very walkable. (See Figure 1-2.) Downtown Morgan Hill's Transit Score, which evaluates how well an area Is served by transit, is 42 or "some transit" at this time. This plan provides tools to further improve transportation services and facilities within the Station Area as Morgan Hill grows.

[1] The San Francisco Bay Area Planning and Urban Research Association (SPUR) is a member-supported nonprofit organization with offices in San Francisco, San Jose and Oakland that has an independent and holistic approach to solve urban issues.

Figure 1-3: Pedestrian Walk Sheds around the Morgan Hill Transit Center



Morgan Hill Transit Center

There is a single set of railroad tracks, owned by Union Pacific Railroad (UPRR), that traverse Morgan Hill in the north and southbound direction. UPRR operates freight service along these tracks. Caltrain and Amtrak operate passenger rail service on these same tracks through use agreements with UPRR. The Morgan Hill Transit Center is located adjacent to these tracks in Downtown Morgan Hill. In addition to being a Caltrain station, it is also a major stop for buses serving Morgan Hill, Therefore it operates as the South County Connection for all Major Transportation services.

The Center was formed when the Santa Clara County Transportation District (SCCTD) adopted the San Jose to Gilroy Caltrain Extension project in 1989. The original plan had the station located at the south end of Morgan Hill's downtown at the northeast corner of the intersection of the railroad tracks and East Dunne Avenue. In April of 1991, the former Morgan Hill Redevelopment Agency (MHRDA) requested SCCTD (now Santa Clara Valley Transportation Authority (VTA)) to consider the relocation of the proposed station, and center it within the Downtown. The request included an offer to assist in funding the undertaking as a joint project through acquisition of a park and ride site and paying for the construction of Butterfield Boulevard between Main Avenue and Dunne Avenue to allow to access to the park and ride site from both Downtown and Butterfield Boulevard.

Station Facilities

The Morgan Hill Transit Center includes the Caltrain station, City/VTA park and ride lot, and the bus stop facility within the parking lot. The Caltrain platform and loading area is on the east side of the tracks, adjacent to the City/VTA park-and-ride lot. The platform area features a spacious loading area for passengers with three shade shelters. The station provides two ticket machines, one Clipper Card reader, and designated waiting areas for passengers with disabilities who would need boarding assistance. There are 15 bike lockers and a bicycle rack that can accommodate 12 bikes. Pedestrians can cross the tracks at-grade to get from the east side platform and City/VTA park and ride lot to the west side and the Downtown.

The City constructed the station building on the west side of the tracks in 1994. It is intended to be a visual landmark to indicate the station stop. Due to its location on the

west side of the tracks, the building is not utilized for ticketing purposes and has been repurposed for commercial use.

There are three parking areas near the station: The main Transit Center serving parking lot is the City/VTA park and ride lot on the east side located off of Butterfield Boulevard. There are two public lots on the west side of the tracks off of Depot Street that mainly serve the neighboring restaurants and retail, but provide access to the Transit Center. These two public lots have a total of 101 vehicle parking spaces and eight U-shaped bicycle racks that accommodate one to two bicycles each.

Currently, there are 465 parking spaces for vehicles at the City/VTA lot. The lot serves as a park-and-ride lot for both public and private bus transit services, as well as Caltrain, and typically reaches parking occupancies near 75% of capacity on weekdays. A bus passenger loading and unloading area for public buses is located in the center of the lot. Private shuttles use the loading/unloading area near the tracks.

Redevelopment Considerations

In 1994 the City of Morgan Hill Redevelopment Agency (RDA) entered into a cooperative agreement with Santa Clara County Transit District (now VTA) for development of the VTA Transit Center parking lot. In 2011, Governor Jerry Brown dissolved Redevelopment Agencies statewide, and established a process to liquidate their assets to the benefit of the taxing entities in respective counties. This process is managed by the Morgan Hill Oversight Board. The VTA (59%) and RDA (41%) have joint ownership of interests on the property and plan to keep the lot as a park-and-ride lot. The agreement provides VTA the first right of refusal to purchase the 41% interest should the RDA, now Morgan Hill Successor Agency, be required to sell the site. As discussed, this lot is heavily used and provides a central location for all transit services, which creates the Morgan Hill Transit Center. And as the major South County Connection for all Major Transportation services, it very important to support the Transit Center, and plan for the future growth of transit needs.

Should the Oversight Board require the sale of the property, the property would get redeveloped for housing. There are no plans for redevelopment of the lot at this time, however an appraisal of the property has been completed. Should redevelopment occur, VTA has a long-term obligation to Caltrain to provide 233 parking spaces that they would have to replace. Therefore, a condition of development would be to provide replacement public transit parking within or near the new development.

Rail Service

The Morgan Hill Transit Center is a station for Caltrain passenger rail service. Caltrain plus future passenger rail service provided by the Capitol Corridor extension, high speed rail, and freight rail are discussed below.

Caltrain

Caltrain provides frequent daily passenger rail service between San Jose and San Francisco. (See Figure 1-4.) Limited service currently extends to Morgan Hill and Gilroy during peak commute hours with three northbound trains in the AM peak period (between 6:20 and 7:20 am) and three southbound trains in the PM peak period (between 5:10 and 7:30 pm) with 20- to 90-minute headways. Caltrain has an agreement with UPRR to use up to five slots. With the current train schedule, they are only using three. Caltrain is discussing if there is a need to add a fourth peak period train with Union Pacific Railroad and potentially adjust the train departure times to better meet Morgan Hill's passenger demand.

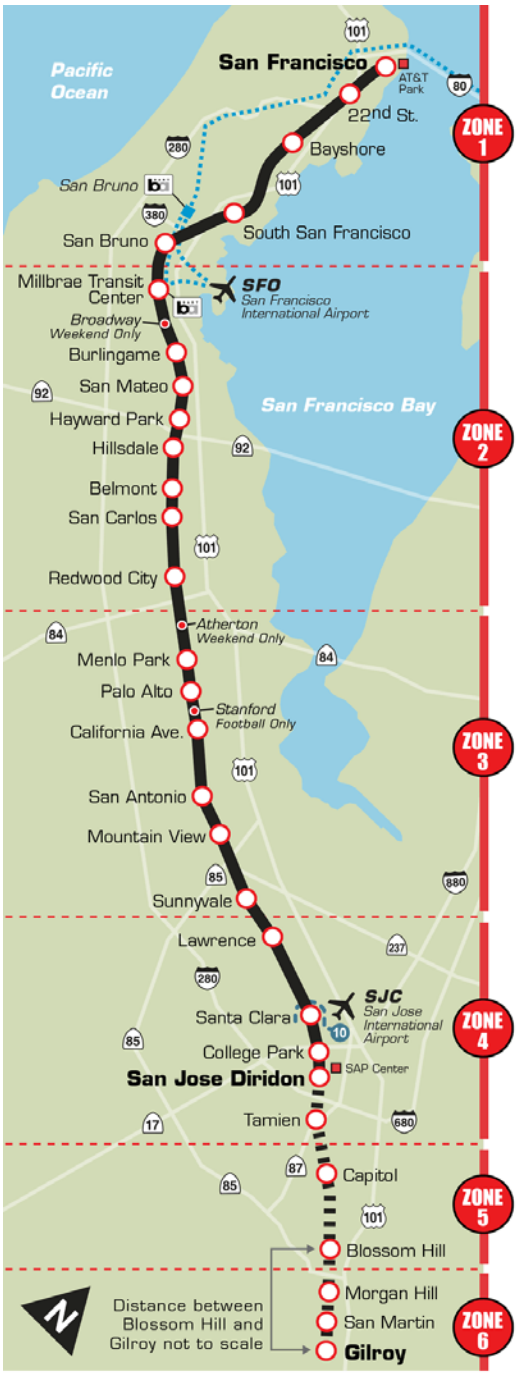


Figure 1-4: Caltrain system map

Existing Ridership

Based on the *Caltrain 2015 Annual Passenger Count Key Findings* and 2016 passenger count data, the average number of weekday passenger boardings at the Morgan Hill station has increased over 70% in five years from 106 in 2011 to 183 in 2016. (See Figure 1-5.) The number of weekday passenger boardings by station in 2016 is presented in Appendix 1-B.

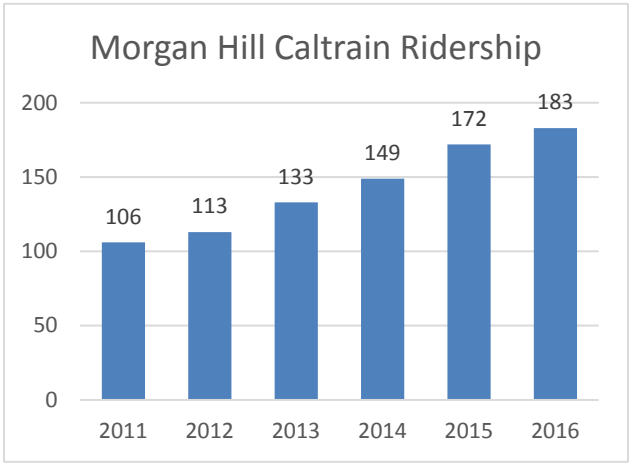


Figure 1-5: Average number of weekday passenger boardings at the Morgan Hill Caltrain Station

Based on the number of daily boardings, Morgan Hill is currently ranked 24th out of the 29 stations. The highest ranked station is San Francisco with 14,769 daily boardings followed by Palo Alto with 7,424 daily boardings. San Jose Diridon Station has 4,712 daily boardings. Gilroy and San Martin stations have 178 and 77 daily boardings, respectively.

However, this assessment does not take into consideration the number of opportunities (numbers of trains) a rider can board. For example, Morgan Hill is served by six weekday trains while San Jose Diridon and San Francisco stations are served by 91 weekday trains. The effects of train frequencies, population and employment data, and Morgan Hill work place locations on train ridership are discussed in the following section.

Ridership Analysis

As part of this Station Area Master Plan, a ridership analysis prepared by Fehr & Peers (presented in Appendix 1-C and summarized below) was conducted to evaluate and compare Caltrain ridership at the Morgan Hill station with other Caltrain stations to assess the potential for increased Caltrain ridership and service. The analysis used Caltrain 2016 passenger data, Caltrain schedules, Association of Bay Area Governments (ABAG) population and employment data, and mobile device data to evaluate the following:

- Number of boarding passengers per train at each station on an average weekday
- Population and employment (and densities) per station

- Proportion of Morgan Hill morning worker trip destinations near Caltrain stations

Passengers per Train

Caltrain provided passenger boarding data for each station from surveys conducted in February 2016. The totals were then divided by the number of trains serving each station, to account for increased Caltrain service generating increased ridership. Stations south of the Tamien station, including Morgan Hill, are served by six trains each weekday, while San Jose Diridon and San Francisco stations are served by 91 weekday trains. The San Francisco station has the highest boardings per train with 162. Morgan Hill is in the middle with 31 boardings per train.

Population and Employment Data

Association of Bay Area Governments (ABAG) is a regional planning agency created by local governments to meet their planning and research needs and provides land use data. ABAG data (population and employment) from *Projections 2013* and the numbers of Caltrain stations were used to estimate population and employment per station for cities on the Caltrain corridor. San Jose and San Francisco have the highest population and employment figures per station, while Morgan Hill is in the middle. The geographic size of each city was used to estimate average population and employment densities per station in each city. The results of this analysis also show Morgan Hill in the middle of the ranking.

Morgan Hill Work Place Locations

Mobile device data was used to identify the probable work locations of people traveling out of Morgan Hill during the morning peak period on an average weekday. The percentage of locations near each Caltrain station was then used to estimate potential new Caltrain riders. The results are:

- 7% of the workplace locations are within a half-mile of a station
- 18% of the workplace locations are within one-mile of a station

These results were combined with American Communities Survey data on the number of residents who work outside of Morgan Hill to estimate potential new Caltrain riders. This analysis found that the potential number of people traveling from Morgan Hill and working in areas near Caltrain stations are:

- Within a half-mile: 880 people

- Within one-mile: 2,260 people

People with work locations within a half-mile are more likely to be potential Caltrain riders as they can reach their destination by walking from the station. People with work locations between a half-mile and one mile are less likely because they would need a bicycle, bus, shuttle, or TNC (i.e. Uber or Lyft) to reach their destination. The number of potential Caltrain riders was estimated as 15% of those within a half-mile of a station and 5% of those between a half-mile and one mile. This shows a potential Caltrain ridership increase of 200 people (200 new average weekday boardings). These percentages are based on studies used to estimate ridership at other Caltrain stations.

Conclusions

Based on the numbers of passengers per train, population and employment per station, and population and employment densities per station, Morgan Hill ranks in the middle of all Caltrain stations. (See Figure 1-6.) Morgan Hill can embark on a public outreach program to attract the projected additional Caltrain riders. Part of the outreach effort could be to determine the optimal train departure and arrival times to maximize ridership.

Morgan Hill could also enlist Gilroy and San Martin in their efforts for increased Caltrain service. Similar analyses could be conducted to estimate the potential added ridership of those communities as more riders would create a more compelling case for added service.

Figure 1-6: Morgan Hill Caltrain station platform

Caltrain Modernization Project

The Caltrain Modernization Project (environmental clearance completed in January 2015) will electrify Caltrain to increase train frequencies and therefore the capacity of the system. It will have minimal impact on Morgan Hill since the electrification will end at a point

approximately two miles south of Tamien Station in San Jose (approximately 18.5 miles north of Morgan Hill), at the end of the Caltrain right-of-way. It will not affect the tracks owned by UPRR between Tamien and Morgan Hill.

Double Tracking

There is one railroad track owned by UPRR South of San Jose. The Santa Clara Valley Transportation Authority (VTA) in Valley Transportation Plan 2040 (VTP 2040), the Long Range Transportation Plan for Santa Clara County, has a project (T14) to provide funding to double track portions of the Caltrain line between San Jose and Gilroy. Double tracking would allow passenger trains to bypass freight trains and decrease travel times. The project is currently on hold until the California High Speed Rail Authority completes the EIR/EIS for the San Jose to Merced project and identifies a preferred alignment. This project may gain additional importance should recent announcements of Google and Adobe expansions near San Jose's Diridon Station create new pressure to provide daytime shuttle services to Gilroy, to serve the southern county employees seeking alternate transportation services to Diridon Station.

Capitol Corridor Extension to Salinas

The Transportation Agency for Monterey County (TAMC) is proposing to extend passenger rail service from Santa Clara County to Salinas. (See Figure 1-7.) It would not be an extension of Caltrain, but rather an extension of the Capitol Corridor intercity passenger rail service that is operated by Amtrak between Auburn and Sacramento to San Jose. As proposed, initially it would operate with two northbound trains in the morning and two southbound trains in the evening on weekdays, expanding to up to six trains in each direction if future demand is high enough. The platform at the Morgan Hill Transit Center would need to be lengthened and canopied ticket stations would need to be added to accommodate this service.

Figure 1-7: System map of existing and proposed Capitol Corridor passenger train service

This project is currently being designed (75% plans have been completed) and is seeking funding. Train operations are being coordinated with Union Pacific Rail Road, who owns the tracks.

High Speed Rail

The California High Speed Rail Authority (CHSRA) will provide high speed passenger rail service between San Francisco and Los Angeles. Service is currently planned to commence in 2029. The closest station would be in Gilroy.

Morgan Hill City Council formally adopted the position that the HSR alignment should be completely within the U.S. Highway 101 corridor/right-of-way. CHSRA is not considering this alternative route at the time of the writing of this report.

CHSRA is considering two alternative alignments through Morgan Hill:

- **Embankment Downtown Alignment** – The HSR tracks would be on an embankment and run parallel to the UPRR tracks through the Downtown. Main Avenue and Dunne Avenue would be depressed to go under the tracks (both HSR and Caltrain/UPRR) known as grade separated. Depot Street and Church Street intersections would also be grade separated, partially depressing Depot Street and Church Street, or realigned to maintain their connections to Main Avenue and Dunne Avenue, or cul-de saced impacting Downtown circulation. Driveways to nearby properties would either be regraded or removed and alternative access would need to be provided to properties for circulation and life safety
- **Elevated West Side of U.S. Highway 101 Alignment to Gilroy Station** - The HSR tracks would be elevated and run parallel to U.S. Highway 101 on the west side of the freeway and bypass the Downtown. For this alignment, the rail will be located far from Main Avenue and Dunne Avenue, therefore the crossings of the Caltrain/UPRR tracks would remain at-grade.

The alignments are being refined and will be evaluated through the environmental clearance process currently underway. A preferred alternative would be selected when the Draft EIR is circulated.

Hexagon Transportation Consultants, Inc. conducted an analysis of the land use, transportation, and construction impacts of HSR for the City of Morgan Hill. It is included in Appendix 1-D.

Freight Rail

Union Pacific Rail Road (UPRR) owns the railroad tracks that go through the Downtown and operates rail freight services. Freight trains have varying lengths and travel at various days of the week and times of the day – there is no set schedule. Caltrain has an agreement with UPRR to use the tracks for passenger rail service. UPRR is considering adding a second set of tracks to increase rail capacity. (VTA is providing some funding as part of VTP project T14). Added train service due to the increased capacity will increase vehicular, transit, bicycle and pedestrian delays on Main Avenue and Dunne Avenue at the at-grade crossings.

Enhanced Crossings and Quiet Zone Goals

The PDA, Plan Bay Area Draft 2035 and SPUR's 2017 "Rethinking the Corporate Campus" encourage building housing and development near transportation because it provides benefits for both the transit services and the user do to convenient access to services. However, frequent horn blowing at rail crossings could discourage business or residents from wanting to work/live near the Transit Center.

There are three public grade crossings within Downtown Morgan Hill where Federal regulations require rail vehicles to sound their warning horns for 15 to 20 seconds as they approach the crossing; the Morgan Hill Transit Center Pedestrian crossing, the East Main Avenue crossing, and the East Dunne Avenue crossing between Monterey Road and Butterfield Boulevard. The PDA and Downtown Specific Plan encourages a mix of uses within the Downtown including residential. The railroad warning horns can be disruptive to nearby residents and businesses, especially during evening and weekend hours. A solution for track crossings that run through dense, mixed-use areas that include residential uses is the establishment of an enhanced safety Quiet Zone. A Quiet Zone is a section of railroad line at least one-half mile in length that contains one or more grade crossings with enhanced safety improvements, where horns are not routinely sounded. There are two types of quiet zones that are applicable to Downtown Morgan Hill:

- Partial Quiet Zone – where horns are silenced for only a portion of the day, typically between 10 pm and 7 am
- Full Quiet Zone – where horns are silenced 24 hours a day

The ability to avoid sounding the horn in a Quiet Zone is made possible if sufficient safety enhancements are made to the signal system and roadway.[2] They typically involve pedestrian and vehicle upgrades to the grade crossing equipment (flashing lights and gates, constant warning time devices, power on indicators, four-quadrant gate systems and alternative safety measures (such as photo enforcement) and roadway upgrades (channelization, medians, signing, and often ADA upgrades to sidewalks).

Based on information provided by the Federal Railroad Administration (FRA), because the absence of routine horn sounding increases the risk of a crossing collision, the public agency that desires to establish a Quiet Zone is required to mitigate this additional risk. Therefore, a public agency seeking to establish a Quiet Zone is required to finance the cost of engineering, construction, maintenance, and replacement of all of the required supplementary or alternative safety measures, in addition to accepting potential legal and liability considerations.

To establish a Quiet Zone in the Downtown area, the City of Morgan Hill would need to contact the Union Pacific Railroad and enter into a preliminary engineering and a Quiet Zone warning devices agreement. The FRA flowcharts showing the processes to create a Quite Zone using Supplemental Safety Measures (SSMs)[3] or Alternative Safety Measures (ASMs)[4] are contained in Appendix 1-E.

In January of 2017, the City Council approved a contract to research the enhancements that may be required if the City was going to move forward with establishing a Quiet Zone. Staff provided the Council with a report, which included potential safety enhancements with associated costs at their June 7, 2017 meeting. The Council received the report and put the project on hold until the CHSRA identifies the preferred alignment through Morgan Hill.

[2] The federal regulations which require train horns to be sounded, and which govern the establishment of quiet zones can be found on the Federal Railroad Administration's website at: http://www.fra.dot.gov/Page/P0104

[3] SSMs include four-quadrant gates, medians or channelization devices, one-way street closures, permanent closures

[4] ASMs include Modified SSMs (non-complying medians, three-quadrant gates), Engineered ASMs (geometric improvements), and Non-Engineered ASMs (programmed enforcement, photo enforcement, education, etc.)

Rail Service Toolbox

Railroad tracks and railroad service to Morgan Hill are owned and operated by other agencies. Therefore, Morgan Hill would need to collaborate with those agencies to increase rail service to the Downtown. Rail service improvement tools include:

- Working with Caltrain to improve service to Morgan Hill through adjusting train arrival and departure times, adding more commute period trains, establishing daytime north/south train shuttle services between Gilroy and Tamien Station allowing commuters to connect with Bullet Services to northern employment centers, adding commute period trains in the non-peak direction, adding midday and evening trains, and adding weekend service.
- Coordinating efforts with Gilroy and San Martin to support increased Caltrain service.
- Coordinating with TAMC regarding station improvements to extend the platform of the existing station and support funding for rail service to South County.
- Continuing to work with the CHSRA to ensure that the selected high speed rail alignment supports the City's goals to stay within the U.S. Highway 101 corridor and minimizes impacts to the community.
- Continue the railroad crossing enhancements consistent with quiet zones to support transit services by encouraging development near the Transit Center.
- Maintaining the at-grade pedestrian rail crossing at the station and working with Caltrain and UPRR to add state-of-the art safety features. If an at-grade crossing becomes infeasible in the future, replacing it with a well-designed under or over crossing.
- The CHSRA is scheduled to identify their preferred alignment in the first quarter of 2018. Depending on the alignment chosen, the city can determine if they should move forward with the safety enhancements to achieve quiet zones at that time.

Public and Private Bus Service

This section discusses public and private bus service in Downtown and serving the Morgan Hill Transit Center. Public bus service is provided by both the Santa Clara Valley Transportation Authority (VTA) and Monterey Salinas Transit (MST) (See Figure 1-8). Private bus service is provided by shuttles that transport employees to high-tech companies

located in Silicon Valley. Boarding and deboarding of shuttles as well as VTA and MST buses occurs at the park-and-ride lot at the Morgan Hill Transit Center, which is located adjacent to the Caltrain station. The role of rideshare service providers, such as Chariot, Uber, and Lyft, and other transit services, are also discussed in this section.

Figure 1-8: Bus Route Map

Bus Routes

City of Morgan Hill

Public Bus Service – VTA

The Santa Clara Valley Transportation Authority (VTA) operates bus service, park-in-ride lots, and paratransit service in all jurisdictions within Santa Clara County, including Morgan Hill.

The main bus transfer facility for all VTA lines in Morgan Hill is located in the park-in-ride lot at the Morgan Hill Transit Center.

Existing Service

The VTA bus routes serving the Station Area (See Figure 1-9) include the following[5]:

Figure 1-9: VTA bus routes serving the Station Area

- **Express Route 168**, an express bus route, provides service during weekday peak commute periods between the Gilroy Transit Center and the San Jose Diridon Transit Center. In Downtown Morgan Hill, it operates along Butterfield Boulevard and Dunne Avenue, and serves the Morgan Hill Transit Center. Route 168 operates with approximately 30-minute headways between 6:00 to 8:00 am and 4:30 to 6:30 pm. Destinations and travel times for Route 168 are:
    - San Jose Convention Center: 37 minutes
    - San Jose Diridon Station: 47 minutes
    - Gilroy Transit Center: 25 minutes
- **Express Route 121**, an express bus route, provides service during weekday peak commute periods between the Gilroy Transit Center and the Lockheed Martin Transit Center. In Downtown Morgan Hill, it operates along Butterfield Boulevard

[5] The VTA initiated service on Express Route 185 in April 2017 while this report was being prepared. It operates during weekday commute periods between the Gilroy Transit Center and Mountain View and stops at the Morgan Hill Transit Center. It has three northbound buses in the morning on headways of 40 to 50 minutes and three southbound buses in the evening on 60-minute headways.

and Dunne Avenue, and serves the Morgan Hill Transit Center. Route 121 operates with 15- to 40-minute headways between 5:00 to 8:15 am, and with 15- to 50-minute headways between 4:00 to 7:15 pm. Destinations and travel times for Route 121 are:

  - Gilroy Caltrain/Greyhound Station: 26 minutes
  - San Martin Caltrain Station and Park & Ride Lot: 12 minutes
  - Lockheed Martin Transit Center: 70 minutes

- **Community Bus Route 16**, a local community bus, provides limited weekday service between the Morgan Hill Civic Center and Burnett Avenue and serves Live Oak and Sobrato High Schools. In Downtown Morgan Hill, it operates along Main Avenue and serves four stops – two eastbound stops and two westbound. It stops at the bus terminus located on the north side Main Avenue just east of Hale Avenue. The transit center also serves as a park-and-ride lot and has 50 spaces, four bicycle lockers, and two bicycle racks. VTA is reviewing the bus terminus as a potential surplus site and may sell the site for redevelopment in the future. Route 16 currently operates with approximately 60-minute headways between 6:30 to 9:00 am and 2:00 to 5:00 pm.

  Destinations and travel times[6] for Route 16 are:

  - Morgan Hill Civic Center: 9 minutes
  - Main and Hale Bus Terminus: 4 minutes
  - Live Oak High School: 4 minutes
  - Sobrato High School: 20 minutes

The long 60-minute headways for these relatively short trips limit the utility of this route. The VTA within the Draft Next Network plan (described below) is reclassifying the route as a School Tripper, and reducing the service times to school start and end hours.

- **Local Route 68**, a regional bus route, provides service between the Gilroy Transit Center and the San Jose Diridon Transit Center. In Downtown Morgan Hill, it operates along Monterey Road and Main Avenue, and serves four stops – two northbound stops and two southbound stops. Route 68 operates on weekdays

[6] The closest stop to Morgan Hill Transit Center is Main & Calle Mazatan (9-minute walk). This stop is not included as a timepoint on VTA's schedule; therefore, these are approximate travel times between stations that do not include the 9-minute walking time.

and weekends with 15- to 60-minute headways between 4:00 am and 1:30 am. Destinations and travel times[7] for Route 68 are:

- Gilroy Transit Center: 30 minutes
- Santa Teresa Light Rail Station: 28 minutes
- Capitol Caltrain Station: 63 minutes
- Santa Clara Light Rail Stations (Downtown San Jose): 78 minutes
- San Jose Diridon Station: 84 minutes

The numbers of passengers boarding and disembarking VTA buses at the stops in and near the Transit Center are presented in Table 1-1. Approximately 100 passengers board and disembark buses at the Main and Hale park-n-ride lot each weekday. The stops at the Morgan Hill Transit Center and the stops on Monterey Road near Dunne Avenue have relatively consistent daily passenger counts throughout the week ranging from 40 to 130 daily passengers.

Table 1-1: VTA Bus Stop Passenger Counts (October 2015)

Bus Travel Dir.	Street Name	Cross Street	Stop Loc.[1]	Weekday		Saturday		Sunday	
				Ons	Offs	Ons	Offs	Ons	Offs
S	Monterey Road	Dunne Avenue	FS	62	54	44	36	38	34
N	Monterey Road	Dunne Avenue	FS	36	23	28	25	20	23
S	Monterey Road	Third Street	FS	26	12	8	17	8	14
N	Monterey Road	Third Street	NS	3	10	6	5	5	4
W	Main Avenue	Monterey Road	FS	17	33	24	25	20	23
E	Main Avenue	Monterey Road	NS	18	20	10	29	12	22
W	Morgan Hill Transit Center Park-n-Ride Lot			47	45	63	40	50	29

[7] The closest stop to Morgan Hill Transit Center is Monterey & 3rd (5-minute walk). This stop is not included as a timepoint on VTA's schedule; therefore, these are approximate travel times between stations that do not include the walking 5-minute time.

Table 1-1: VTA Bus Stop Passenger Counts (October 2015)									
E	Morgan Hill Transit Center Park-n-Ride Lot			69	63	43	36	39	37
W	Main Avenue	Butterfield Boulevard	FS	0	1	0	0	0	0
E	Main Avenue	Monterey Road	FS	11	1	0	0	0	0
W	Main and Hale Park-n-Ride Lot			114	1	0	0	5	0
E	Main and Hale Park-n-Ride Lot			0	92	0	0	0	0

Notes:
1. Stop Location: FS = Far Side of intersection NS = Near Side

Access Paratransit

VTA also provides a paratransit service, called Access, to individuals with physical, visual, or cognitive disabilities who cannot use its local bus or light rail transit services. This door-to-door service is provided when and where VTA local bus and light rail service is available using contracted sedan, accessible van, and taxi companies. However, service times vary and can be quite a long wait.

Planned Service Changes

The Transit Ridership Improvement Program is an agency-wide effort by VTA to increase ridership and make public transit faster, more frequent, and more useful for Santa Clara County travelers. One of the efforts included in the program is the Next Network. VTA will modify the bus service to connect to the new Milpitas and Berryessa BART stations, scheduled to open in Fall of 2017. A concurrent effort is being undertaken to address VTA's declining ridership and low farebox recovery ratio through other routing adjustments. Jarrett Walker and Associates assessed VTA's current services and created three network design concepts that address ridership and coverage goals. VTA obtained community input on three network design concepts and transit network design priorities and is currently seeking input to refine the draft network concept prior to consideration by the VTA's Board of Directors in April 2017. The goal of this plan is to focus service on ridership and more frequent trips versus coverage. This plan may reduce bus services and/or reclassify routes in Morgan Hill. Route 68 is proposed to have service on 15 to 30-minute headways and Route 16 would be reclassified to serve school trips only and would retain its 60-minute headways. The Next Network Plan was approved by the VTA's Board of Directors in May 2017.

VTA is working on a Core Connectivity Study to help fill in the gap from a decrease or discontinuance of transit services. The Core Connectivity Study will explore service models that are more compatible with each City's development patterns. Models may include partially contributing to city shuttle programs and partially subsidizing first and last mile trips via on-demand services (i.e., Uber, Lyft, etc.). Recommendations of the Core Connectivity Study will be considered by VTA's Board of Directors in Summer or Fall of 2017. Refer to the Public Bus Service toolbox and Recommended Improvements Chapter within this document for recommended steps the city can make in an effort to work with VTA on best service models for Morgan Hill.

Public Bus Service - MST

Monterey Salinas Transit (MST) operates bus service primarily in Monterey County, and provides express bus service to Morgan Hill and San Jose. There is one MST route in the Station Area:

- **MST Route 55** provides bus service between the San Jose Diridon Transit Center and the Monterey Transit Plaza. In Downtown Morgan Hill, it operates along Dunne Avenue and Butterfield Boulevard, and serves the Morgan Hill Transit Center. MST Route 55 operates 7 days a week with two trips in the morning and two trips in the afternoon each day. Destinations and travel times for Route 55 are:
    - Monterey Transit Plaza: 80 minutes
    - Gilroy Caltrain Station: 17 minutes
    - San Jose Diridon Station: 45 minutes

Public Bus Service Toolbox

As with passenger rail service in Morgan Hill, public bus service is provided by other agencies. Therefore, Morgan Hill would need to collaborate with those agencies to increase bus service. Bus service improvement tools include:

- Working with VTA on the Core Connectivity Study to identify the appropriate services for Morgan Hill and improve service levels in Morgan Hill.
- Working with VTA to provide subsidized Transportation Network Companies (TNCs) rides (described below) to provide low-cost transportation to transit-captive individuals (individuals who do not own or have access to a car).

- Working with MST to improve service levels in Morgan Hill.
- Adding enhancements to bus shelters (benches, lighting, weather protection, etc.) to provide comfortable environments for bus passengers while they wait.

Private Shuttles

The Morgan Hill Transit Center park-and-ride lot serves not only VTA and MST buses, but also private buses operated by technology companies such as Apple, Facebook, and Amazon. (See Figure 1-10.) The lot includes 465 parking spaces for vehicles and 15 bicycle lockers and typically reaches parking occupancies above 85% of capacity on weekdays. During the 1-hour period from 7:00 to 8:00 am on Tuesday, July 5, 2016 five private shuttles were observed picking up passengers. Among the five private shuttles, three were Apple shuttles, one was an Amazon shuttle, and one was a Facebook shuttle. On May 1 through May 3, 2017, between the hours of 6:00 and 7:30 am, Apple shuttles arrived every 25 minutes and had approximately 60+ passengers total, Facebook shuttles came about every 20 minutes and had roughly 7+ passengers per bus, and one Amazon shuttle came and had approximately 7+ passengers.

Figure 1-10: Private buses in VTA's park and ride lot

Private Rideshare and Bus Services

Transportation Network Companies (TNCs) use online-enabled platforms to connect passengers with drivers using their personal, non-commercial, vehicles. TNCs include on-demand services such as Uber and Lyft, their carpooling divisions of UberPool and Lyft Line, and Scoop Technologies - another carpool service. Due to a limited supply of drivers in the south county, it currently can be difficult to find rides using these types of services in Morgan Hill. In the future, however, these types of services may become more prevalent.

Other communities are using TNC services to support more traditional bus service. The Livermore-Amador Valley Transit Authority (LAVTA) has entered into agreements with Lyft and Uber to provide service to customers in low density areas where it is not feasible to operate fixed-route bus service and in areas where their buses cannot operate. The cities of Foster City and San Mateo have partnered with Scoop Technologies to provide subsidized carpool trips to anyone who works or lives in either community.

Private Rideshare and Bus Service Toolbox

Transportation Network Companies and private bus service offer flexible transportation alternatives to Morgan Hill, especially for individuals who do not own or have access to a vehicle. Some related tools include:

- Working with TNCs to develop a campaign to increase the supply of drivers, possibly attracting those who currently volunteer as drivers for charities such as Meals on Wheels, to increase the supply of TNC vehicles and services.
- Working with VTA to provide subsidized TNC rides to areas without frequent transit service.
- Explore opportunities with private shuttle companies to provide additional services in Morgan Hill.

Parking

This section provides information on the parking supply and demand within the Downtown Specific Plan area based on information from the "Morgan Hill Downtown Parking Conditions Study", prepared by Hexagon Transportation Consultants, Inc. and dated February 26, 2016 and current development proposals.

Parking Supply

The acceptable walking distance limit standard from parking locations to destinations is within a quarter-mile to a half-mile. This standard is used throughout the United States and has been a standard in California for all types of urban environments since the late 1980's. Figure 1-11 demonstrates these walking distances from public and commercial privately-owned parking lots to the center (Monterey Road and Third Street) of Morgan Hill's Downtown core. The map clarifies that there is access to parking within an acceptable walking distance (within a quarter mile) situated throughout Downtown. This map also

helps highlight where potential future parking could be located. Refer to the Recommended Improvements Chapter of this plan for more information on sustainable parking within the Downtown.

The parking supply in the Downtown Morgan Hill Specific Plan boundary comprises on-street parking spaces and public and private off-street parking spaces (spaces in lots or parking structures). After the construction of current developments, there will be 2,575 parking spaces in Downtown Morgan Hill, as shown in 1-2[8] and illustrated on Figure 1-12. This figure also includes the block numbers used in the table. Among these spaces, 911 are in private lots, 1,238 are in public lots (including the 271-space parking structure), and 426 are on-street spaces. Within the Downtown Core (not including the spaces on Block 16 in the VTA and Courthouse lots) there are 1,837 spaces with 638 in private lots, 773 in public lots, and 426 on-street spaces.

Most of the on-street spaces have no time limits. Spaces on the block faces on Monterey Road between Main Avenue and Third Street and some spaces on Main Avenue, First Street, and Second Street have two-hour time limits. All the spaces in the new parking structure have a three-hour time limit.

Table 1-2: Downtown Parking Supply Summary[1]

Block#	Off-Street			On-Street	Total	
	Private	Public	Total	Total	Public	By Block
Downtown Core						
1	88	0	88	28	28	116
2	15	0	15	38	38	53
3	179	50	229	23	73	252
4	24	271	295	38	309	333
5	38	24	62	40	64	102
6	0	240	240	42	282	282
7	51	74	125	28	102	153
8	0	40	40	0	40	40
9	72	21	93	42	63	135
10	43	41	84	43	84	127
11	43	12	55	38	50	93

[8] This is Table 1 from the Hexagon study that has been updated to show changes in the parking supply based on development proposals.

Table 1-2: Downtown Parking Supply Summary[1]						
12	23	0	23	19	19	42
13	12	0	12	15	15	27
14	50	0	50	32	32	82
Subtotal	*638*	*773*	*1,411*	*426*	*1,199*	*1,837*
VTA and Courthouse Parking						
16	273	465	738	0	465	738
Total	**911**	**1,238**	**2,149**	**426**	**1,664**	**2,575**

Notes:

[1] For more detail, see Table F-1 in the Appendix 1-F

Parking Supply Rates and In-Lieu Fee

The Downtown Specific Plan, adopted in 2009, includes required parking rates for new development within the Commercial Business District (CBD) and the Downtown High-Density Residential (D-R4) zones. Those rates are as follows:

Downtown Parking Rates		
Retail	Office	Residential
2.8 spaces / 1,000 s.f.	4.0 spaces / 1,000 f.g.	1.0 space per unit < 600 s.f. 1.5 spaces per unit >600, < 1,350 s.f. 2.0 spaces per unit > 1,350 s.f.

All the other zones within the Downtown are to follow the parking requirements within the Zoning Ordinance in the Municipal Code.

To assist and encourage redevelopment within the Downtown, a resolution was passed on June 5, 2013 to allow for a parking-in-lieu fee for all non-residential projects, and exempts non-office commercial uses from all parking requirements (including the in-lieu-fee). This standard is valid as long as the parking surplus remains within the scope of the Downtown Specific Plan and/or parking demand does not exceed an 85% occupancy rate.

Figure 1-11: Walking Distances from Parking Facilities to the Center of Downtown (located at Monterey and Third)

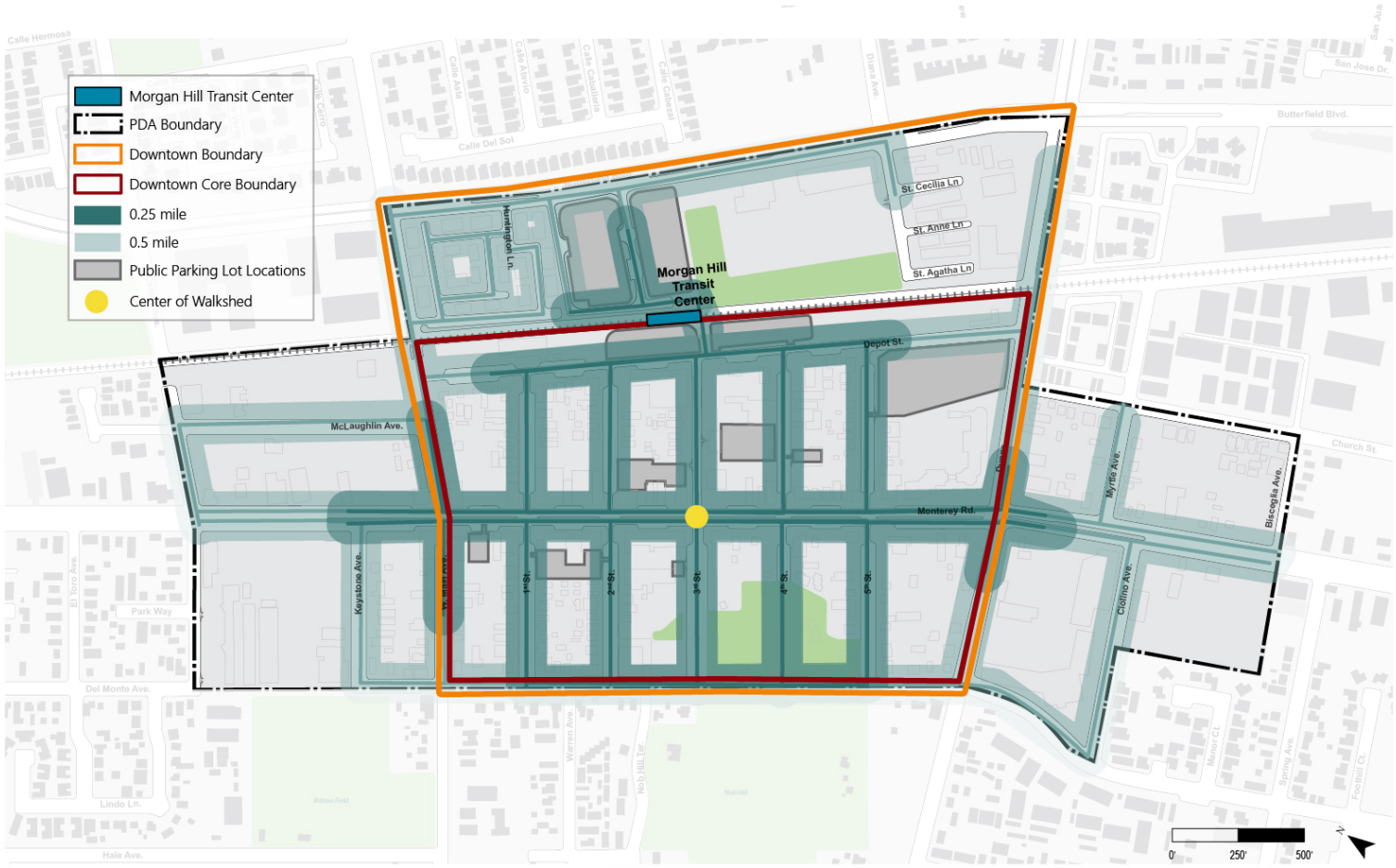
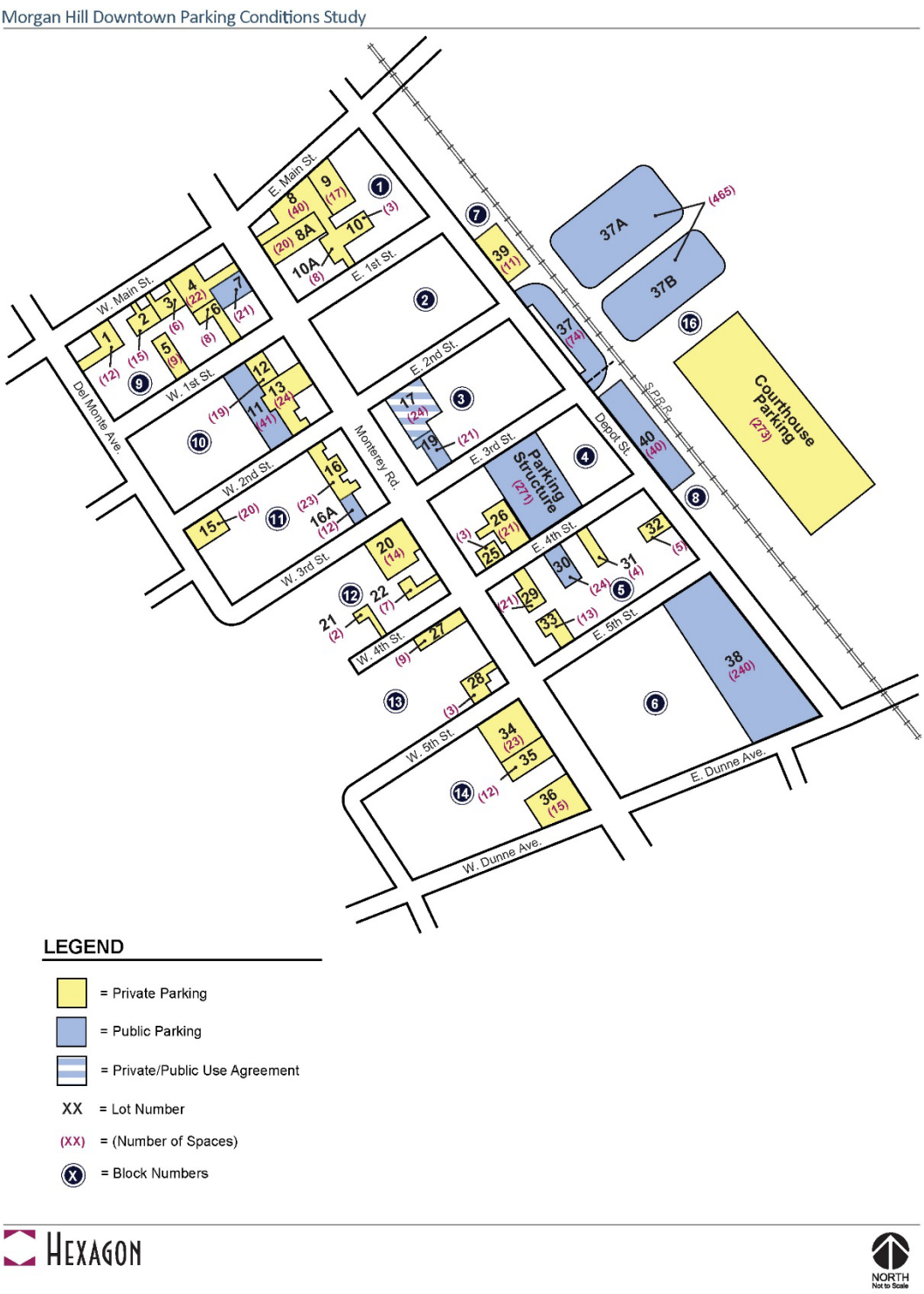


Figure 1-12: Downtown Parking Facilities



Accessible Parking

The California Accessibility Regulations, within Chapter 11 of the California Building Code, govern the accessible parking standards on private and public parking lots. Every lot, private or public, is required to have a minimum of one accessible parking space. The requirements are as follows: one parking space per every 25 spaces up to 100 (e.g., 4 accessible spaces are required for a 100-space parking lot), one accessible parking space per every 50 spaces after 100 up to 200 spaces, and one accessible space per every 100 spaces after 200 up to 1,000 spaces.

Within the Downtown Specific Plan boundary, there are a total of 42 parking lots, 12 are public lots and 30 are private, with a total of 75 accessible spaces dispersed throughout the Downtown. The City parking lots comply with current standards for the number of accessible spaces. Some of the older, private parking lots do not in that they were constructed prior to accessibility requirements. The non-conforming lots are the older smaller lots that mainly front onto side streets and are dispersed throughout the Downtown. However, the total number of accessible parking spaces compared to the total supply of parking presents a net excess of 4 accessible parking spaces.

The State of California does not require on-street accessible parking spaces (See Figure 1-13) and currently there are no on-street accessible parking spaces within the Downtown. The City has shown an interest in increasing the number of accessible parking spaces or adding on-street accessible spaces along Monterey Road. Depending on the level of accessibility on-street parallel parking may require a full redesign of the sidewalk and street to meet the required slope access to the sidewalk. The incorporation of permanent on-street parallel parking could be studied when the City revisits the Monterey Road lane reduction (one northbound lane and one southbound lane) between Main Avenue and Dunne Avenue. If there is a demand for accessible parking within the Downtown, there are other immediate options to consider, while studying permanent facilities. These include:

Figure 1-13: On-street accessible parking spaces

1. Temporary accessible parking (see Figure 1-14) for special events where the amount of the accessible parking spaces needed could exceed the ones available in all public and private parking lots; or
2. Provide accessible parking drop off location(s) immediately adjacent to Monterey Road which could serve as a dual purpose (valet opportunity) while keeping on-street parallel parking intact.

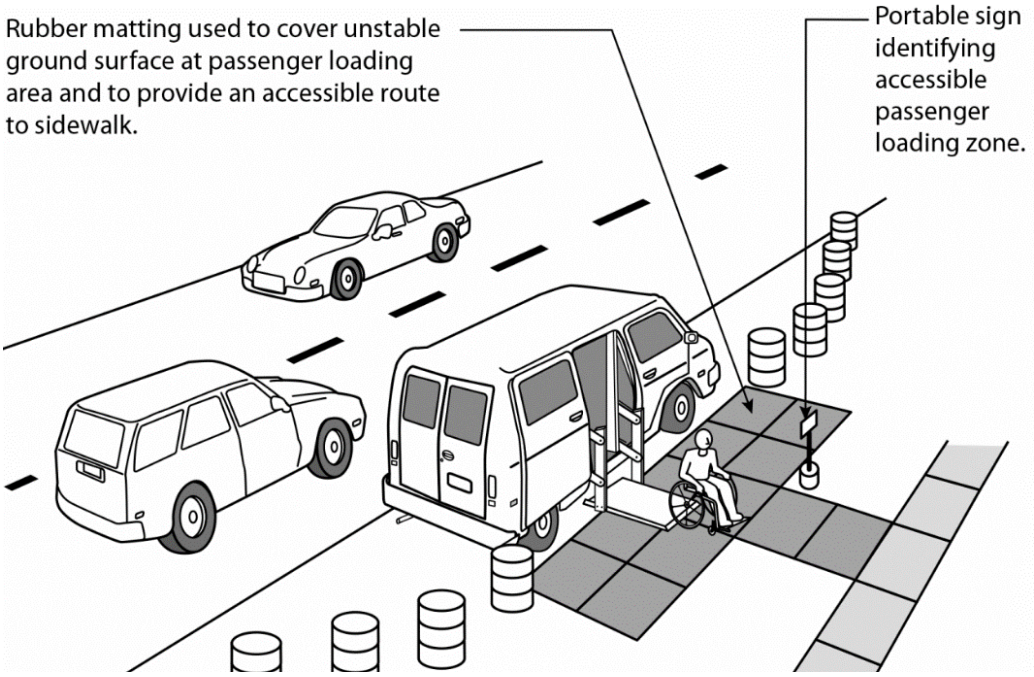


Figure 1-14: Illustration of temporary passenger loading zone (Source: ADA National Network, A Planning Guide for Making Temporary Events Accessible to People With Disabilities, 2015)

Parking Demand

Existing Parking Demand

Parking demand in Downtown Morgan Hill varies depending on time of day and day of the week with the peak demand occurring on Friday evenings. Based on the Hexagon study, on Friday evenings 39% of the spaces are occupied (66% of the on-street spaces and 33% of the off-street spaces, not including the parking structure[9] or the County Courthouse lot). Parking areas are considered to be "full" when the parking occupancy reaches 85%, based on an industry-accepted rule-of-thumb. Therefore, even at peak times there is excess parking in the Downtown.

The 271-stall parking structure has a relatively low parking demand. Based on site visits conducted at 1:30 pm and 8:30 pm on a weekday in the Fall of 2016, only 30 to 45 vehicles were parked at the structure. The VTA lot has 465 spaces with 330 to 335 parked vehicles during the day and 33 to 45 parked vehicles during the evening on a weekday. The high weekday parking demand is due to its use as a park-and-ride lots for Caltrain, VTA and MST buses, and shuttles to private companies.

Conclusions

In general, parking demand in Downtown Morgan Hill is currently below the parking supply. Parking shortages can occur along Monterey Road and East and West Fifth Streets and in parking lots within close proximity to Monterey Road in-between Second and Third Streets (east and west) and the lot on West Fifth Street. During the Friday evening peak demand period, street parking that is "full" includes the west side of Monterey Road between Main Avenue and Fourth Street and both sides of Fifth Street west of Monterey Road. The lots that are full during this time period are Lots 7, 10/10A, 11, 16/16A, 17, 19, 21, 26, 27 and 28.

If the Transit Center's City/VTA lot is redeveloped for purposes other than parking, the 330 to 335 vehicles parked during the day would be displaced to the surrounding neighborhoods and downtown parking facilities. This would likely increase the percentage of occupied parking spaces within the Downtown over the 85% threshold. Keeping the

[9] The parking structure was not yet open during the surveys.

VTA park and ride lot as its intended use is critical to support the future growth of the Transit Center and the success of Downtown Morgan Hill.

Future Parking Demand

Hexagon Transportation Consultants considered the added parking demand based on development applications on file with the City at the time of the parking study. Those developments included Barley Place (16 dwelling units, 2,500 square feet (sf) of retail space, and 3,500 sf of restaurant space), Monterey and Third (12,000 sf of retail space), Granada Hotel (17,000 sf of market and restaurant space, a 60-room hotel with 200-person capacity event space, and remodeled Granada theater with 290 seats), and Depot Station (28 townhomes and 5,500 sf of commercial space). More recent developments include Edes Gallery and Restaurant (10,000 sf of art gallery, wine bar and restaurant space), Sunsweet with 83 apartments, 6,800 sf of retail space, and 1,200 sf of office space), 4th Street Wine Bar (3,500 sf of restaurant space and 7,800 sf patio/bocce courts in Phase 2). The parking supplies provided by these developments are included in Table 1-2. Their parking demands were estimated as part of this plan.

Some of these developments will accommodate their parking demands by the parking spaces that they are providing, and others will employ onsite as well as valet parking services. Some of the developments are exempt from providing parking on-site and others will not be providing sufficient parking to accommodate their peak demands[10]. Table F-2 in Appendix 1-F presents the number parking spaces provided by each development, the peak parking demand generated by each development during the peak parking period - Friday evenings, and the projected increase in demand for public spaces which is 248 spaces.

Conclusions

According to the 2016 Hexagon Study, the peak parking demand for publicly owned spaces is 781 spaces with 648 in the Downtown Core. As a result of new development, the demand in the core is projected to increase to 896 spaces. There are 1,199 public spaces so the peak occupancy on Friday evenings is projected to be 75% when there is an event at the Granada Hotel. The occupancy rate is much lower when spaces in the VTA and Courthouse lots are included. Therefore, there will be a sufficient amount of parking in the Downtown

[10] Developments using public parking include Leal Vineyard, Depot Station, Sunsweet, Monterey and Third, 4th Street Wine Bar, Barley Place, and Edes Gallery.

after the completion of the future development projects identified above. See the Recommended Improvements chapter for future parking solutions once the Downtown achieves an 85% or higher parking occupancy rate.

Parking Enforcement

As Downtown continues to grow, the amount of readily available parking will decrease, and to help patrons, visitors, and residents find the available parking spaces, it is important to have a parking strategy. A good parking strategy should encourage parking turnover and get the right people in the right parking spaces. For example, the two hour parking zones have been created to ensure there are available parking spaces throughout the day for visitors and patrons along the main street of Downtown (primarily located on Monterey Road between Main Avenue and Third Street). The on-street parking demand in the two-hour spaces show these spaces to be fully occupied during the peak hours of the day. Enforcing the time limits would free up these spaces and redirect patrons, business owners, and employees planning to stay longer than a quick two-hour trip to park within the public parking lots.

Another parking strategy is to work with the downtown businesses and owners to identify logical unified valet parking stations. This would allow patrons visiting any business the opportunity to drop their vehicle off at one location, and pick their car up at any of the valet stations downtown. This option could go one step further and offer free valet parking for downtown employees to help free up parking spaces in prime downtown locations.

Parking Toolbox

Recommendations to alleviate locational parking shortages from the 2016 Hexagon study and other parking management tools are:

- Conducting a marketing campaign to advertise locations of available parking, such as the parking garage
- Monitoring the parking supply and demand on a regular basis by conducting studies to assess changes in parking characteristics
- Introducing resident parking permits may alleviate some parking needs for downtown residents on residential side streets

- Encouraging residents to use their off-street parking spaces/garages for vehicle parking, and not for other types of storage, by organizing neighborhood clean-out days with free hauling service
- Enforcing existing time limits along two-hour parking zones
- Expanding the area of the two-hour parking zone south along Monterey Road to ensure that the prime parking spaces are not used by employees or other long-term parkers
- Installing parking meters on downtown streets to encourage more turnover as well as serve as enforcement for time limits. Money collected from the meters could go into a parking benefit district.
- Increasing or removing the parking time limits in the parking garage to encourage long-term parking to be located there
- Creating private-public partnerships to allow public parking in private lots during weekday evenings, on weekends, and during special events
- Working with property owners to improve the lighting and pavement conditions of private parking lots
- Working with private property owners and business to identify appropriate locations for a unified valet parking system
- Coordinating with businesses and designating appropriate dual valet and accessible parking drop-off areas on public streets for businesses that offer these services
- Working with private property owners to bring non-conforming parking lots into compliance with accessible parking spaces when lots redeveloped or building permits are required for improvements
- Improving parking wayfinding signage and installing signs (at facility entrances or at gateways to the Downtown) that indicate the number of available spaces in large public parking facilities
- Reinstating an in-lieu fee for all types of new development or creating a parking benefit district for all redevelopment within Downtown as a funding program for future public parking facilities. Refer to Recommended Improvements Chapter of this Plan.
- Creating a Parking Benefits District (PBD) which would ensure all revenue generated by parking meters, residential parking permits, or new development

will be used directly for improvements to the Downtown PDA future parking needs

- Identifying locations for new public parking lots or structures to increase the supply when demand exceeds the practical capacity (85 percent of supply). Refer to Recommended Improvements Chapter of this Plan

Car Share and Autonomous Vehicles

Car Share

Car share is a model of car rental where people rent cars for short periods of time, often by the hour. They are attractive to customers who make only occasional use of a vehicle, such as those who commute to work by transit, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day (e.g. a pick-up truck for moving a large piece of furniture). While there are no car sharing companies currently serving Morgan Hill, other parts of Santa Clara County and much of the Bay Area are served by Zipcar, and Oakland and San Francisco are served by Getaround. The factors that can make a particular location attractive to a car sharing company include proximity to public transit and other alternative transportation modes, high population/housing density, low automobile ownership, an affluent population, difficult parking, a mix of land uses, and a local partner/champion(s), such as government, transit agency, property owners, or developers. In the future, more of these factors may be present in Morgan Hill and create greater opportunities for car sharing. This could reduce the need for privately-owned vehicles and reduce the number of parking spaces needed to store them.

Autonomous Vehicles

Many companies are currently developing automated and autonomous vehicle technologies. Initial technologies include automatic braking, collision avoidance, and driver assisted parking with the goal of ultimately creating fully autonomous or driverless vehicles. The use of autonomous vehicles is likely to increase in future decades, after this technology has matured and is in more widespread use, and liability and security issues have been satisfactorily addressed. Autonomous vehicles have the potential to facilitate or improve business models of mobility as a service, including carsharing, e-hailing, ride hailing services, real-time ridesharing, etc. all contributing to reduce the need for private car ownership.

One of the biggest anticipated effects of autonomous vehicles will be reduced parking demand and therefore the need for fewer parking spaces, as the vehicles will be on the roadway system constantly moving passengers or goods instead of being parked. Therefore, the need for future parking supplies should be monitored to understand how autonomous vehicles affect parking demand and new parking facilities should be designed as flexible spaces to accommodate other uses when not needed for parking vehicles.

Roadways

This section describes major roadways in the Station Area, a typology for the streets in the area, operating conditions of key roadway segments and intersections, traffic calming devices and wayfinding, and planned improvements. The roadway locations are shown on Figure 1-21.

Roadway Descriptions

Figure 1-15: Monterey Road

Monterey Road, the main boulevard through Downtown Morgan Hill, is a four-lane, divided arterial roadway with separate left-turn lanes at intersections and on-street parking. (See Figure 1-15.) The speed limit on Monterey Road is 25 miles per hour (mph) between Main Avenue and Dunne Avenue in Downtown and 35 mph outside of the Downtown.

Figure 1-16: Main Avenue

Main Avenue is a two-lane roadway that extends east from Dewitt Avenue at the west end to Hill Road on the east side of the city and forms the northern boundary of the Downtown area. (See Figure 1-16.) The roadway is posted at 30 mph. Left-turn pockets are provided only at its intersection with Depot Street in the Downtown.

Figure 1-17: Dunne Avenue

Dunne Avenue, east of Monterey Road, is a four-lane, divided arterial that extends eastward from this intersection, through a partial-cloverleaf interchange at U.S. Highway 101, and up into the eastern foothills. (See Figure 1-17.) Dunne Avenue, west of Monterey Road, narrows to a two-lane, undivided roadway and extends westward past the intersection of Peak Avenue and up into the western foothills. The roadway is posted at 35 mph and is signalized at intersections with major cross streets. Dunne Avenue forms the southern boundary of the Downtown area.

Figure 1-18: Butterfield Boulevard

Butterfield Boulevard is a four-lane, divided arterial that extends northward from Tennant Avenue to Cochrane Road and acts as a downtown bypass route for north-south through traffic. (See Figure 1-18.) Butterfield Boulevard forms the eastern boundary of the Downtown area and is a primary north-south roadway within the city. The street is posted at 45 mph and includes signalized intersections at major cross streets. Left-turn pockets are provided at its intersection with Main Avenue. Butterfield Boulevard also provides access to VTA's park-and-ride lot at the Morgan Hill Transit Center.

Depot Street is a two-lane, north-south roadway east of Monterey Road that extends south from Main Avenue to Dunne Avenue. The roadway is posted at 30 mph. Stop signs are provided along Depot Street at its intersection with Third Street, Main Avenue, and Dunne Avenue. It has sidewalks and bike lanes along most of its length.

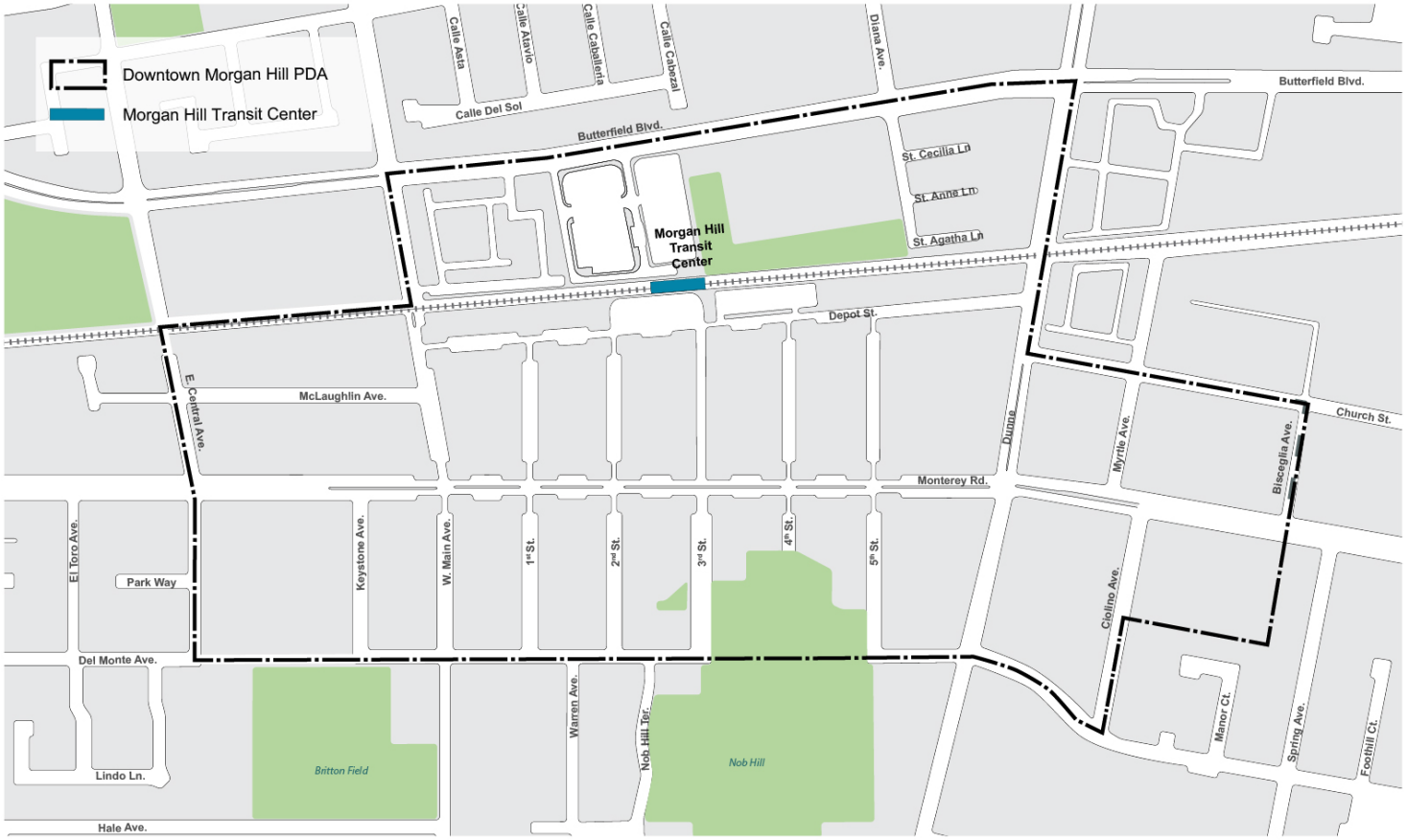
Figure 1-19: Del Monte Avenue

Del Monte Avenue is a two-lane, north-south discontinuous roadway west of Monterey Road. It forms the western boundary of the Downtown area. (See Figure 1-19.)

Figure 1-20: Third Street

Third Street is a two-lane, east-west roadway south of Second Street. (See Figure 1-20.) This street extends east from Del Monte Avenue to Monterey Road and continues east to Depot Street, where access to the Morgan Hill Transit Center and parking area is provided. The segment between Monterey Road and Depot Street is designed as a shared use street with wide sidewalks to support pedestrian travel and narrow lanes to slow vehicle traffic. The intersection of Third Street and Monterey Road has a center landscaped median preventing eastbound and westbound through traffic. There is a one-lane bridge over West Little Llagas Creek between Monterey Road and Del Monte Avenue.

Figure 1-21: Existing Roadway System



Existing Roadway System

City of Morgan Hill

cd+a COMMUNITY DESIGN + ARCHITECTURE

FEHR PEERS

Street Typology

In order to link the multi-modal street design recommendations and suggested considerations for further improvements included in Chapters 2 and 3 with all streets located in the Station Area, this Plan categorizes the area's streets into the following four street types: Downtown Boulevard, Local Street, Arterial Street, and Transit Connector, as shown on Figure 1-23.

Each of these street types includes areas on either side of the roadway that are designed to accommodate the travel of pedestrians to and from the Transit Center and between the many destinations in the Downtown, including to and from existing parking facilities. In addition to walking, the pedestrian realm accommodates other pedestrian-related activities and streetscape elements, such as café and other seating, window shopping along retail frontages, bicycle parking, wayfinding signage, and street trees and landscaped planter strips that buffer pedestrians on sidewalks from moving traffic. While Chapter 2 focuses in greater detail on improvements in the pedestrian realm, Chapter 1 includes typical cross sections for each street type that, among accommodations made for other modes, indicate the space available for further pedestrian realm improvements along Downtown streets. The cross sections distinguish between different areas within the pedestrian realm, including the Frontage Area, Through Area, Furnishing Area, and the sidewalk-adjacent Buffer Area (see Chapter 2 for a more detailed description of each of these pedestrian realm areas).

Downtown Boulevard – Monterey Road between Main and Dunne Avenues is the main business corridor in Downtown and a primary pedestrian route. The abutting commercial land uses, 12-foot wide sidewalks, landscaped median, and abundant street furniture create a pedestrian-friendly main street or boulevard ambiance unique to Downtown. (See Figure 1-24 for the existing cross-section.) In the future, the City of Morgan Hill may consider converting the outside vehicle lanes into buffered bike lanes to achieve consistency with the Bikeways, Trails, Parks and Recreation Master Plan. The cross-section of this alternative is shown on Figure 1-25.

Local Street – First, Second, Fourth, and Fifth Streets are two-lane roadways with residential and small business frontages. They primarily provide access to their adjacent land uses for vehicles, bicyclists, and pedestrians alike. (See Figure 1-26.)

Arterial Street – Dunne Avenue, Main Avenue, and Butterfield Boulevard as well as the portions of Monterey Road beyond Main and Dunne Avenues, are wider streets with faster

moving traffic that border on and lead to the Downtown area. Their purpose is to accommodate vehicle traffic between the Downtown and other sections of Morgan Hill. Pedestrian and bicycle rider comfort and safety along these arterials mainly depends on the buffer that is provided between bicycle lanes and sidewalks and fast-moving vehicle traffic in the travel lanes. (See Figure 1-27.)

Transit Connector – Third Street and Depot Street are downtown-serving streets. Both have a unique configuration and function distinct from other street types in the Station Area. Third Street is configured as a "Shared Street"[11] and serves as the main pedestrian connection between the Morgan Hill Transit Center and Downtown. (See Figure 1-22.) It is also recognized as a pedestrian priority street given its unique curb-less right-of-way.

Figure 1-22: Shared Street between Morgan Hill Transit Center and Downtown. Source: Google Streetview

Depot Street provides direct access to the Morgan Hill Transit Center and connects Main Avenue to Dunne Avenue. While the street provides vehicle access to the parking lots and drop off area at the Transit Center, it is also a major pedestrian transit access corridor throughout most of its length, with sidewalks and curb bulbouts at intersections that shorten pedestrian crossing distances. In addition, Depot Street has bike lanes throughout most of its length creating a north-south bicycle facility in the Downtown. The cross-section is shown on Figure 1-28.

[11] A Shared Street is a street where the boundaries between people walking, cycling, and driving are eased or eliminated, resulting in a slower and otherwise less vehicle-dominated environment that is more engaging and active with street life. Shared streets typically have no curbs and are a single horizontal surface, sometimes using textured and colored paving, landscape, benches, light poles, and other street furniture to indicate where different users have preference.

An alternative cross-section that increases the number of on-street parking spaces is shown on Figure 1-29. The drawback of this configuration is that vehicular and bicycle traffic is restricted to one direction. Since there is no parallel roadway to accommodate the other direction, bicycle and vehicular circulation and access would be reduced. Implementing this alternative cross section would require further study of Depot Street's role and design as a major, downtown-serving transit access street (Transit Connector).

Figure 1-23: Downtown Morgan Hill Street Typology

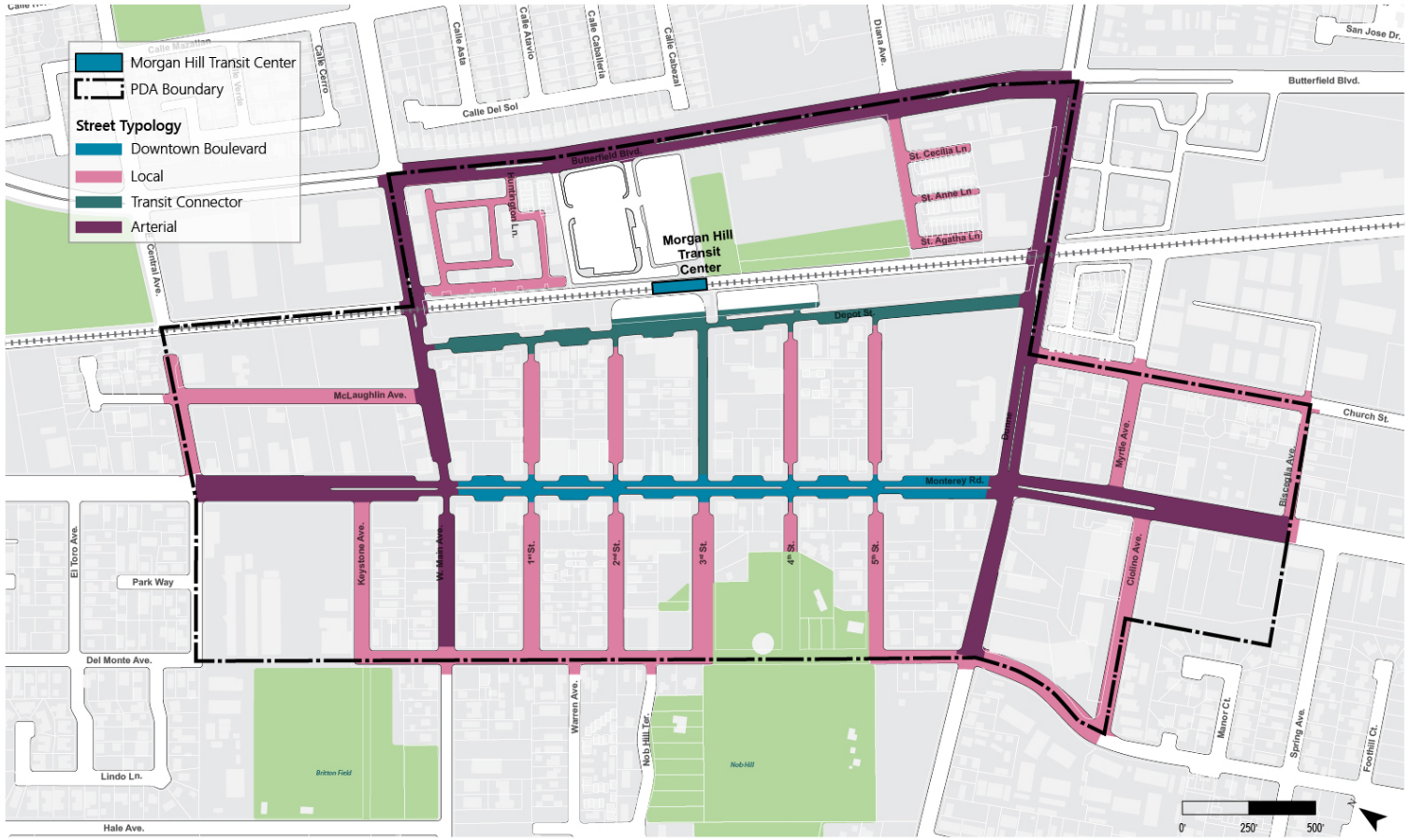


Figure 1-24: Downtown Boulevard Street – Typical Section (Example One)

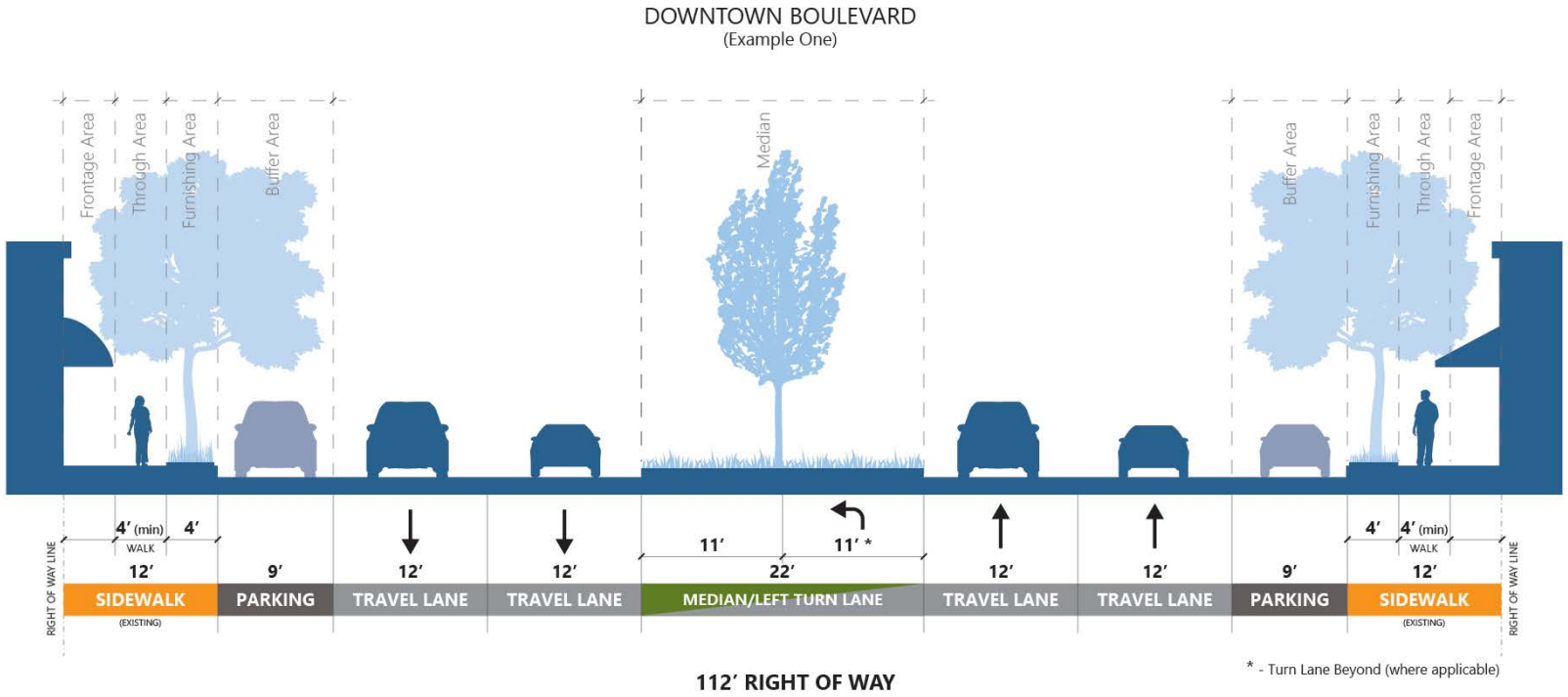


Figure 1-25: Downtown Boulevard Street – Typical Section (Example Two)

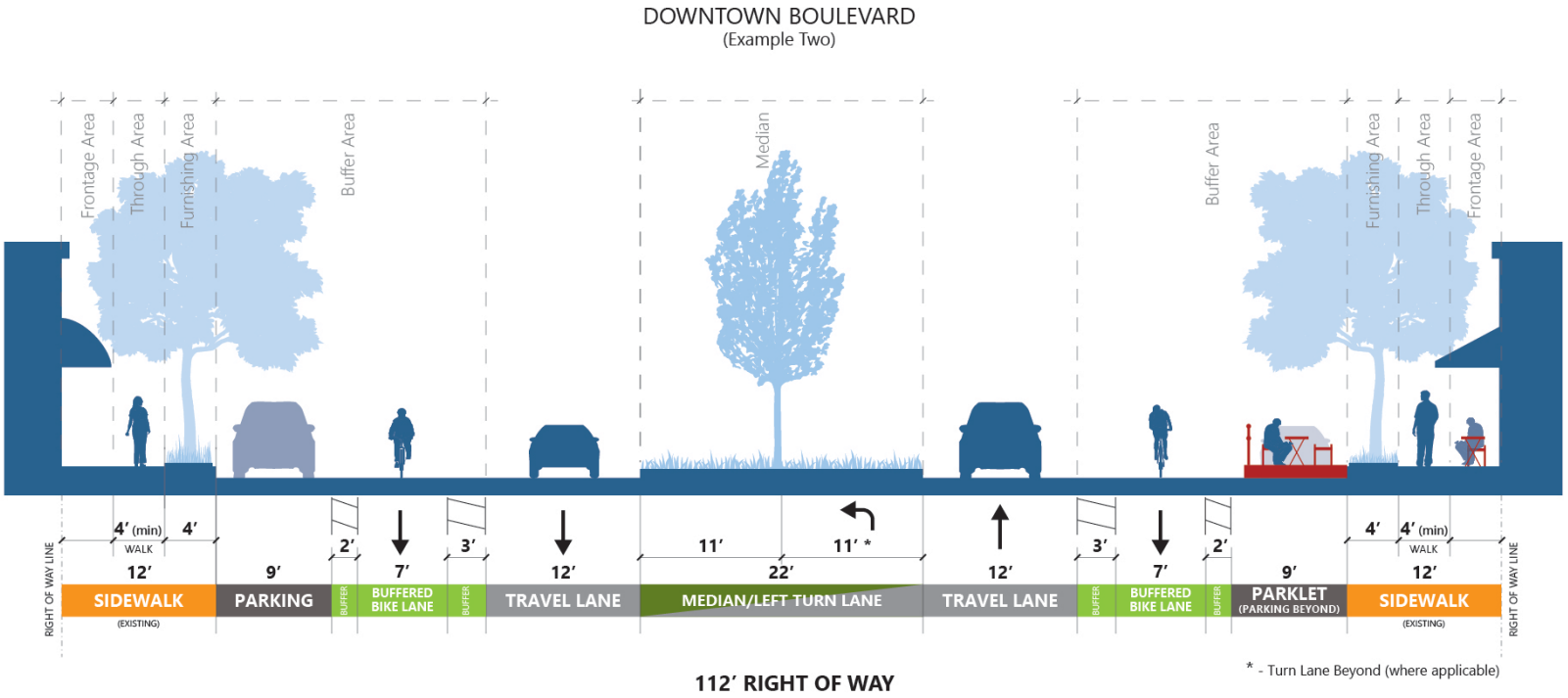


Figure 1-26: Local Street – Typical Section

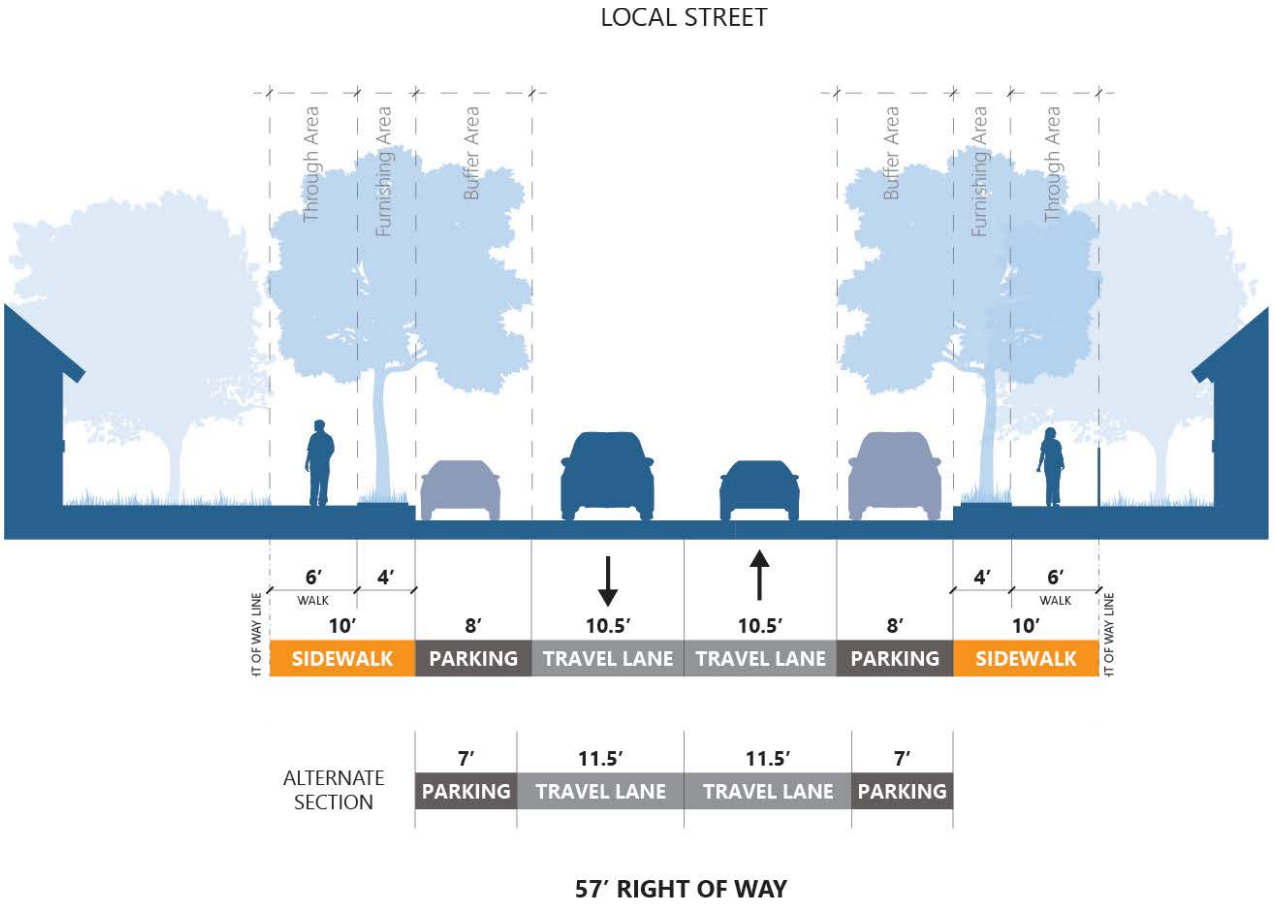


Figure 1-27: Arterial Street – Typical Section

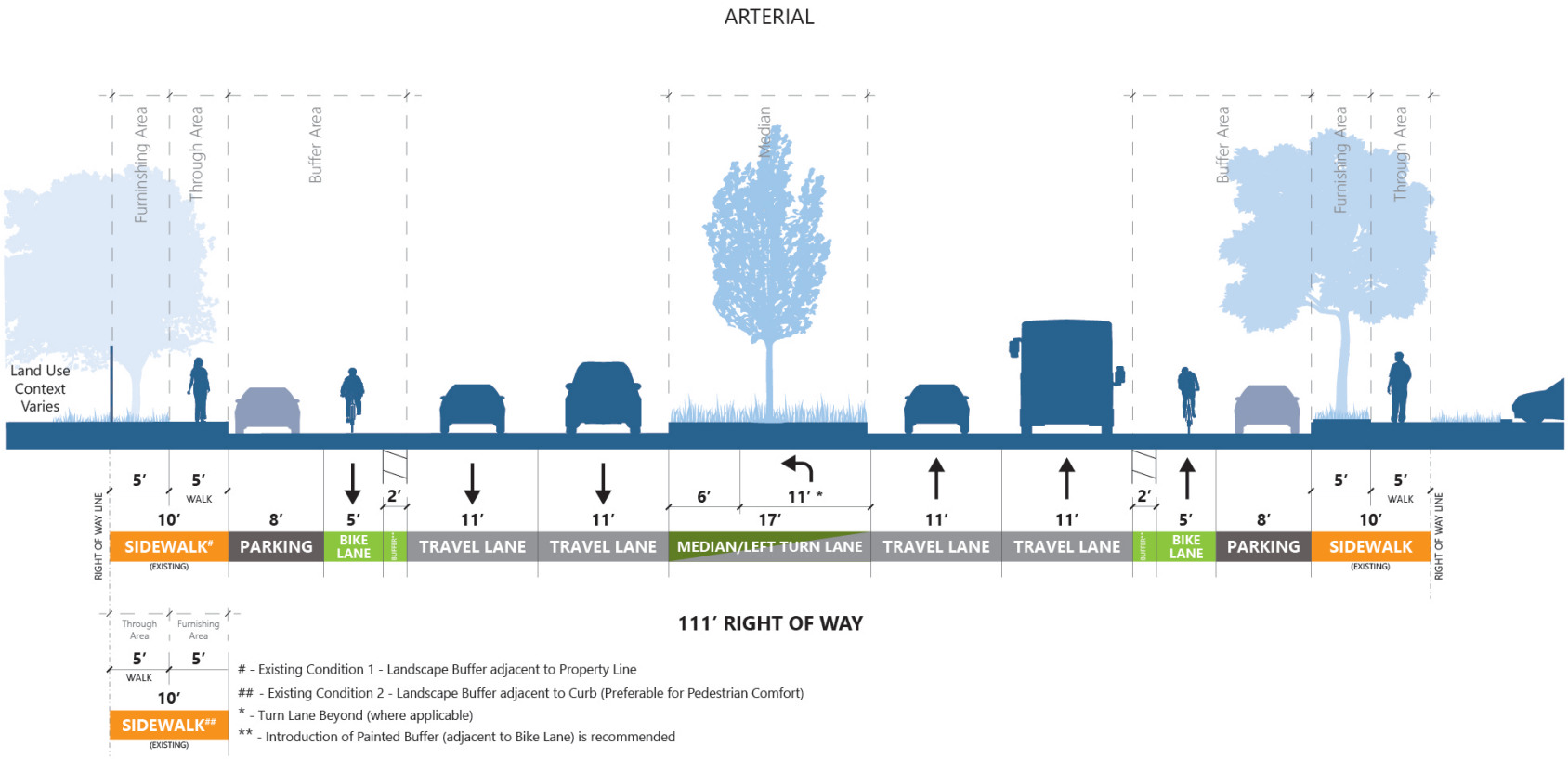


Figure 1-28: Transit Connector Street – Typical Section

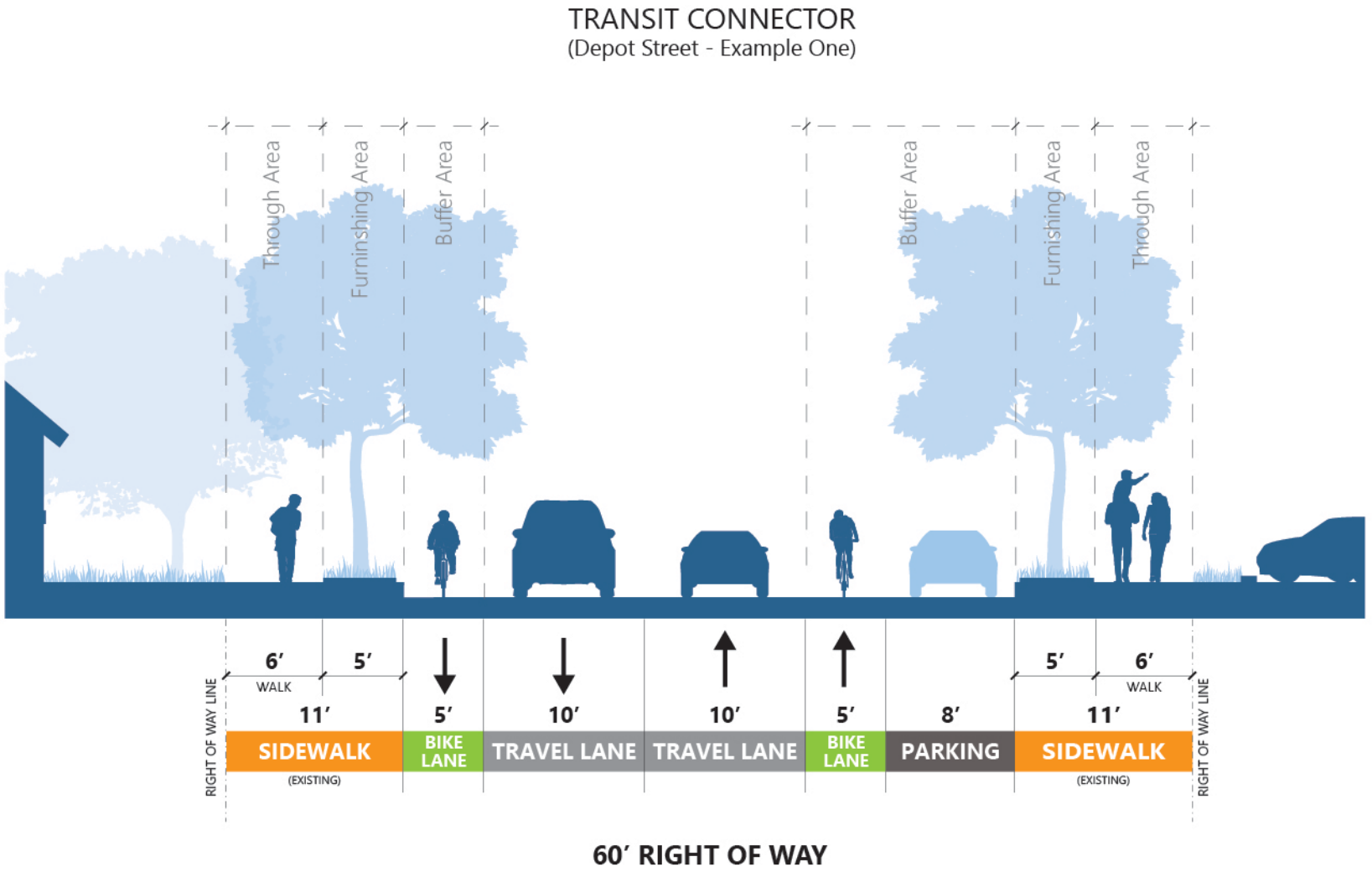
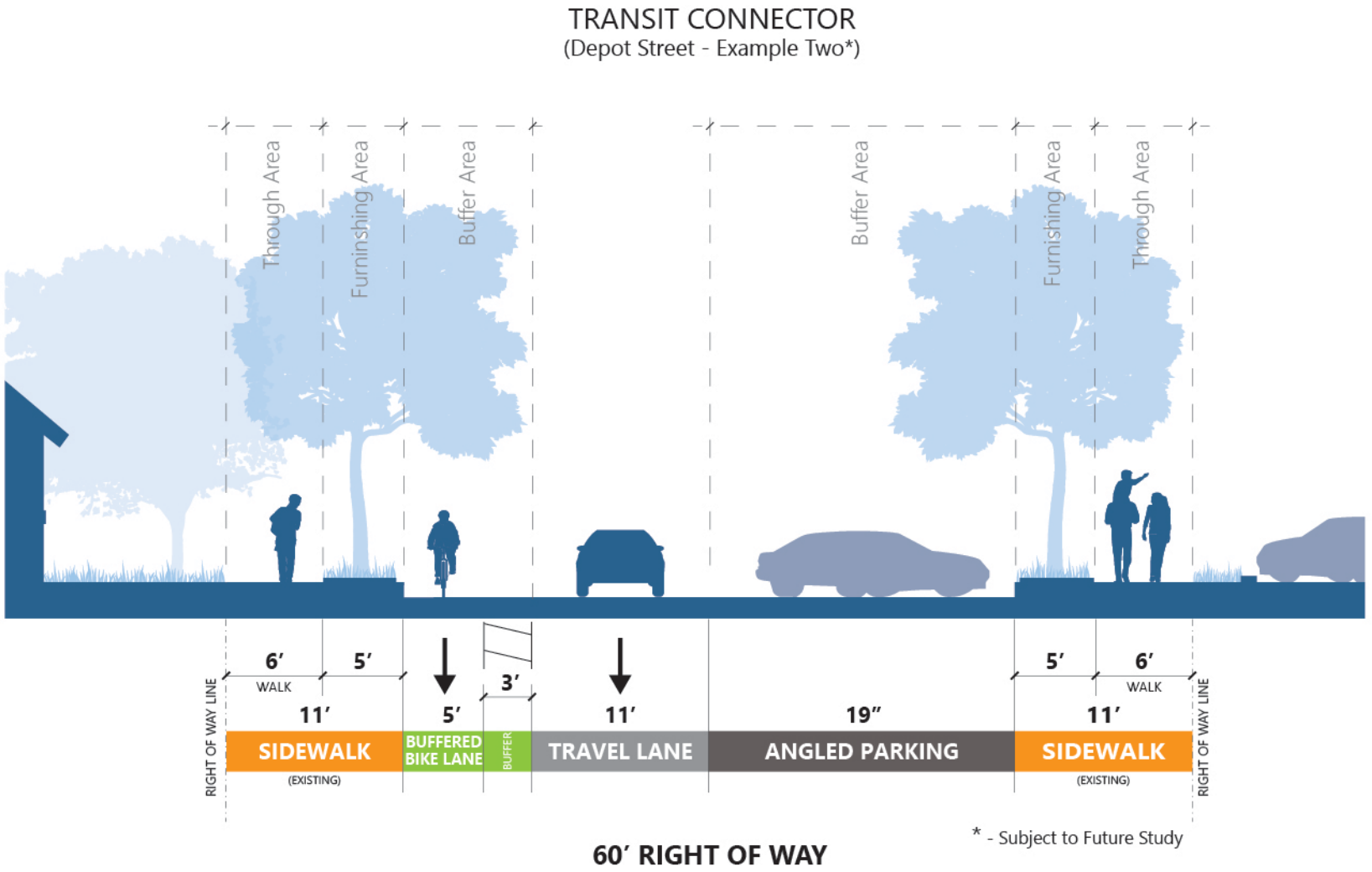


Figure 1-29: Transit Connector Street – Typical Section (One-Way Alternative)



Signals

Traffic and pedestrian signals are provided at the intersections of Monterey Road with Main Avenue, Second Street, and Dunne Avenue. Controlled pedestrian crossings are provided at these locations. New traffic signals will be installed at the intersection of Monterey Road and Fourth Street in late Summer / early Fall of 2017. The signal will provide controlled pedestrian crossing of Monterey Road near the parking structure enhancing its accessibility.

Traffic Volumes and Roadway Operations

The following table (Table 1-3) presents the existing and projected future daily two-way roadway segment traffic volumes and levels of service (LOS) for roadways in the Station Area from the DEIR for City's 2035 General Plan. LOS is a qualitative description of roadway operations with LOS A representing conditions with little to no congestion and LOS F representing conditions where the roadway is over capacity for several hours of the day. These roadways are operating at LOS C (which represents a sufficient operating level) and LOS D (which represents stable operations).

Table 1-3: Existing and Projected Future (2035) Roadway Segment Daily Volumes and Levels of Service

Roadway Segment	Roadway Type	Existing		Future (2035)	
		ADT	LOS	ADT	LOS
Monterey Road between Third and Fourth Streets	4-lane divided arterial	11,800	C	13,500	C
Butterfield Boulevard between Main and Diane Avenues	4-lane divided arterial	21,700	D	26,900	D
Dunne Avenue between Depot Street and Butterfield Boulevard	4-lane divided arterial	18,800	C	19,800	D

Intersection Operations

The following table (Table 1-4) presents the existing and future intersection levels of service for the AM and PM peak commute hours from the General Plan FEIR. (Intersection LOS descriptions are included in Appendix 1-G.) Main Avenue and Monterey Road is the most congested intersection in the Station Area; most intersections are operating at sufficient

levels (LOS A, B, C, or D). Under 2035 conditions, the Main Avenue and Monterey Road intersection is projected to operate at LOS F during the AM peak hour representing overcapacity conditions. The stop-sign controlled approach at the intersection of Monterey Road and Fifth Street is also projected to operate at LOS F. The LOS standard for these intersections, and other intersections on Monterey Road between Main Avenue and Fifth Street and on Depot Street between First Street and Fifth Street, is LOS F. The LOS standard for the intersections of Main Avenue and Depot Street, Dunne Avenue and Monterey Road, Dunne Avenue and Church Street, and Dunne Avenue and Depot Street is LOS E. LOS E and F standards represent the City's recognition of the congested operations occurring during peak commute periods in lieu of roadway widenings or other intersection improvements. This has been balanced with the fact that this may have negative impacts to pedestrians and the goal of creating a pedestrian-friendly environment. However, the planned expansion of the City's north/south roadway network with construction of Hale Avenue is expected to alleviate some of the through traffic currently traveling on Monterey through downtown and improve the LOS at these intersections. Other intersections in the Station Area have a LOS D operating standard.

Table 1-4: Existing and Projected Future (2035) Intersection Peak Hour Levels of Service

Intersection Name	Traffic Control	Peak Hour	Existing		Future (2035)	
			Delay	LOS	Delay	LOS
Main Ave and Del Monte St	Side-Street Stop	AM PM	14 20	B C	15 20	B C
Main Ave and Monterey Rd	Signal	AM PM	24 42	C D	97 50	F D
Main Ave and Depot St	Side-Street Stop	AM PM	13 16	B C	20 22	C C
Main Ave and Butterfield Blvd	Signal	AM PM	24 30	C C	27 37	C D
First St and Monterey Rd	Side-Street Stop	AM PM	11 15	B B	12 11	B B
Second St and Monterey Rd	Signal	AM PM	11 13	B B	11 14	B B
Third St and Monterey Rd	Side-Street Stop	AM PM	12 17	B C	11 12	B B
Fourth St and Monterey Rd	Side-Street Stop	AM PM	17 17	C C	15 25	C D
Fifth St and Monterey Rd	Side-Street Stop	AM PM	18 33	C D	48 68	E F

Table 1-4: Existing and Projected Future (2035) Intersection Peak Hour Levels of Service						
Intersection Name	**Traffic Control**	**Peak Hour**	**Existing**		**Future (2035)**	
			Delay	**LOS**	**Delay**	**LOS**
Dunne Ave and Del Monte St	Side-Street Stop	AM PM	13 16	B C	32 28	D D
Dunne Ave and Monterey Rd	Signal	AM PM	24 33	C C	26 38	C D
Dunne Ave and Church St	Signal	AM PM	17 19	B B	18 19	B B
Dunne Ave and Depot St	Side-Street Stop	AM PM	10 12	A B	closed	closed
Dunne Ave and Butterfield Blvd	Signal	AM PM	33 32	C C	36 34	D C

Traffic Calming and Wayfinding

The City of Morgan Hill has implemented several design treatments and policies to encourage traffic to move at a slow speed and to enhance the overall walkability and pedestrian environment in the Downtown. These measures include:

- Installing gateway signage or artwork for Downtown with directional signage to help divert through traffic to Butterfield Boulevard as a bypass
- Setting the speed limit on Monterey Road to 25 mph
- Constructing raised medians on Monterey Road
- Installing curb extensions at intersections along Monterey Road and Depot Street
- Installing decorative pavement at crosswalks on Monterey Road and Depot Street
- Adding Yield to Pedestrian signs and Pedestrian Crossing signs
- Installing speed cushions on Monterey Road
- Creating narrow vehicle lanes on Third Street and Monterey Road

Collisions

Collision data for the Downtown area was obtained from the City of Morgan Hill for the time period from January 2013 through July 2016. An analysis of this data is presented in Appendix 1-H. There were four collisions involving pedestrians (one of them was a

pedestrian/bicycle collision) and one collision with a vehicle and a bicycle in the 3½ year period. The location with the highest number of collisions is the intersection of Monterey Road and Third Street, including a pedestrian-involved collision that was a fatality. The City installed in-pavement flashers to alert drivers of crossing pedestrians at this location.

Planned Improvements

The planned roadway improvements in the Downtown area are shown on Figure 1-30. The Circulation Element of the City of Morgan Hill's General Plan designates Main Avenue as a two-lane roadway with the segment between Depot Street and Butterfield Boulevard planned for four lanes under the city's planned 2035 improvements. The right-of-way is available. Another General Plan improvement includes widening Dunne Avenue to four lanes between Monterey Road and Del Monte Avenue.

Hale Avenue, one block away from Downtown, is planned for an extension to connect to Dewitt Avenue to provide a west-side bypass to Monterey Road. It is currently being designed and the next phase will be right-of-way acquisition.

The 2035 General Plan Transportation Element proposes Depot Street be realigned to connect to Church Street to the south. This could be done in conjunction with development on the Hale Lumber Yard site.

New traffic signals will be installed at the intersection of Monterey Road and Fourth Street in in late Summer / early Fall of 2017.

VTA's Valley Transportation Plan (VTP) 2040 has two freeway/roadway projects that will affect the Station Area:

- New Express Lanes on U.S. Highway 101 between Cochrane Road and SR 25 (Projects H8, H9, and H10)
- Extension of Hale Avenue improvements from Main Avenue to DeWitt Avenue to include two vehicle lanes, bicycle lanes, sidewalks, and signal upgrades (Project R10)

Figure 1-30: Planned Roadway Improvements

Planned Roadway Improvements

City of Morgan Hill

Roadway System Gaps

The gaps in the roadway system include the two-lane segment of Main Avenue east of Monterey Road where four are planned, the off-set intersections of Depot Street and Church Street with Dunne Avenue, and the extension of Hale Avenue to Dewitt Avenue.

The current design of Depot Street does not accommodate all users or allow it to function as a downtown-serving Transit Connector. The street has offset intersections at Church Street and Dunne Avenue, with parallel parking on alternating sides, and undersized bicycle lanes denoted with a single stripe. Depot Street should be studied for possible improvements as a complete street, emphasizing its importance of the multi-modal connecter through Downtown. The study should include the realignment of Depot Street at the Church Street and Dunne Avenue intersections, bicycle lane connections and widths, landscaped walkways, appropriate vehicular lane widths, and an enhanced multi-modal intersection at Main Avenue. Since the amount of vehicle parking on Depot Street is a concern, the possibility of a one-way road with angled parking could be considered. (See Figure 1-29.)

Roadway Toolbox

Tools to improve the roadway system are:

- Building planned improvements such as the extension of Hale Avenue to Dewitt Avenue that will provide another bypass route for Monterey Road.
- Working with the VTA to expedite construction of the Express lanes on U.S. Highway 101 to alleviate through traffic on Monterey Road.
- Reconsidering the road diet on Monterey Road between Main Avenue and Dunne Avenue once the Hale Avenue extension is constructed.
- Optimizing traffic signal timing.
- Reducing traffic demand through transportation demand management (TDM) measures and programs.
- Studying Depot Street as a complete street, emphasizing the importance of the multi-modal connecter through Downtown.

Pedestrian Facilities

The Station Area is very walkable (see Figure 1-31) because it is flat terrain and contains numerous pedestrian facilities. The various types of pedestrian facilities include sidewalks, shared use paths, curb ramps, crosswalks, curb extensions, and pedestrian signals at signalized intersections.

Sidewalks

Most of the streets in the Station Area have continuous sidewalks on both sides of the street. On-street parking shields pedestrians on the sidewalks from moving vehicles in the streets. The wide sidewalks on Monterey Road accommodate larger pedestrian volumes generated by the adjoining stores and restaurants and provide space for outdoor seating. The segment of Third Street between Monterey Road and Depot Street is designed as a shared use street with wide sidewalks to support pedestrian travel and narrow lanes to slow vehicle traffic. Sidewalk gaps only exist on the east side of Depot Street between Fifth Street and Dunne Avenue, on the hilly portions of Del Monte Avenue between Second and Third Streets, and on Third Street west of West Little Llagas Creek. The Depot Street gap may be closed with the future redevelopment of the lumber yard site. Some portions of the sidewalk on the south side of Main Avenue near the railroad tracks are unfinished and the gaps are closed with asphalt paths.

Figure 1-31: Sidewalks in the Morgan Hill Station Area

Crosswalks

Crosswalks are available at all intersections in the Downtown area and at most intersections in the Morgan Hill PDA. The unique pavement design of the crosswalk on Monterey Road at Dunne Avenue (see Figure 1-32) acts as a gateway to the Downtown.

Crosswalks are missing on at least one of the legs for the following intersections: McLaughlin Avenue and Main Avenue, Depot Street and Main Avenue, Second Street and Del Monte Avenue, Bisceglia Avenue and Monterey Road, and Ciolino Avenue and Monterey Road.

Figure 1-32: Crosswalk with a unique pavement design at Monterey Road and Dunne Avenue

Crosswalks at the unsignalized intersection of Monterey Road and Third Street are created with brick pavers. (See Figure 1-33.) The City installed in-pavement flashers on Third Street that will be pedestrian activated to notify drivers of crossing pedestrians. After they are installed, the city will review their effectiveness and determine whether they should be installed at other locations in the Downtown (for example at First Street and Fifth Street) or whether other measures and crossing devices would be more appropriate.

Figure 1-33: Crosswalk with brick pavers and in-pavement flashers installed at unsignalized intersections

Curb Extensions

All intersections along Monterey Road and Depot Street between Main Avenue and Fifth Street provide curb extensions. (See Figure 1-34.) Benefits of curb extensions include shortened pedestrian crossings and traffic speed reductions.

Figure 1-34: Curb Extensions along Monterey Road between Main Avenue and Fifth Street

Planned Improvements

In addition to the in-pavement flashers, other planned improvements are new traffic signals at the intersection of Monterey Road and Fourth Street, including pedestrian signals, and two paths or trails. The "Hill Top Trail" will be a pedestrian trail connecting Third Street to Fifth Street at Del Monte Avenue. This planned trail will provide a walking/running path near the Downtown area. A shared-use trail is planned for West Little Llagas Creek extending from its current terminus at Spring Avenue north to the intersection of Main Avenue and Hale Avenue. There are right-of-way constraints for this path and no funding has yet been identified, therefore, this is a far-term project.

Pedestrian Toolbox

The streetscape toolbox includes features that create a safe and comfortable pedestrian environment. Other pedestrian tools include:

- Closing sidewalk gaps
- Enhancing unsignalized crossings with a combination of the following treatments:
    - Pedestrian refuge islands
    - Staggered pedestrian refuge islands
    - Advanced limit lines
    - High-visibility crosswalk striping
    - Pedestrian crossing signs

  - Lighted treatments such as in pavement flashers
- Enhancing signalized crossings with:
  - Further increased crossing times
  - Pedestrian scramble phases
  - Curb extensions
  - Advanced limit lines
  - High-visibility crosswalk striping

Bicycle Network

Bicycle facilities (see Figure 1-35) in the Downtown area comprise bicycle lanes, bicycle routes, and shared use paths. Under California Law, bicyclists are allowed to use all roadways unless posted otherwise. Therefore, all roadways in the Station Area are open for cycling.

Existing Bicycle Facilities

A shared use path is provided along Butterfield Boulevard. Bicycle lanes are provided on Main Avenue (not continuous), Dunne Avenue, Butterfield Boulevard, Depot Street, and Monterey Road north and south of the Downtown area.

Monterey Road between Dunne Avenue and Main Avenue is designated as a bicycle route to connect the discontinuous bicycle lane segments. Green-backed shared-use arrows ("sharrows") have been added along Monterey Road to raise drivers' awareness to share the roadway with cyclists. Other gaps in the bicycle lane network occur on eastbound Main Avenue between Monterey Road and Depot Street, and at the approaches to the intersections of Monterey Road and Main Avenue and at Monterey Road and Dunne Avenue.

In several locations, bike lanes are denoted with a single stripe creating a wide outside lane that is also used for parallel parking. Without a second stripe denoting the space for the bicycle lane, vehicles at times park away from the curb and encroach into the bicycle lane. Or for example, on Depot Street, the bicycle lane and parallel parking area is denoted with

a single stripe; however, if a car is parked near the curb, there is only two to three feet available for the bicycle lane. A bicycle lane should have a minimum width of five feet.

Figure 1-35: Bicycle facilities in Downtown area

Planned Improvements

The City of Morgan Hill Bikeways Master Plan Update was prepared in 2008. It identified planned shared-use paths, bicycle lanes, bicycle routes, and bicycle routes with shoulder striping to improve the bicycle network. Planned facilities in and near the Downtown area include:

- Shared-use path along West Little Llagas Creek south from Del Monte Avenue[12]
- Bicycle lanes on Main Avenue east of Butterfield Boulevard
- Bicycle route on Church Street
- Bicycle boulevard on Diana Avenue

The City recently updated and combined the bikeways and trails plan to be the new Bikeways, Trails, Parks, and Recreation Master Plan. The plan was, adopted in July 19, 2017. Other potential improvements include:

- A shared use path on the eastside of the Caltrain tracks between Diana Avenue and the station
- Buffered bicycle lanes on Monterey Road

[12] Valley Transportation Plan 2040 (VTP 2040), the Long Range Transportation Plan for Santa Clara County prepared by the Valley Transportation Authority includes a shard–use path along West Little Llagas Creek between Main Avenue and Spring Avenue as Project B88.

- Buffered bicycle lanes on Main Avenue and Dunne Avenue
- Multi-modal intersection improvements at Butterfield Boulevard/Main Avenue, Butterfield Boulevard/Dunne Avenue, Monterey Road/Main Avenue, Monterey Road/Dunne Avenue, and Hale Avenue/Main Avenue

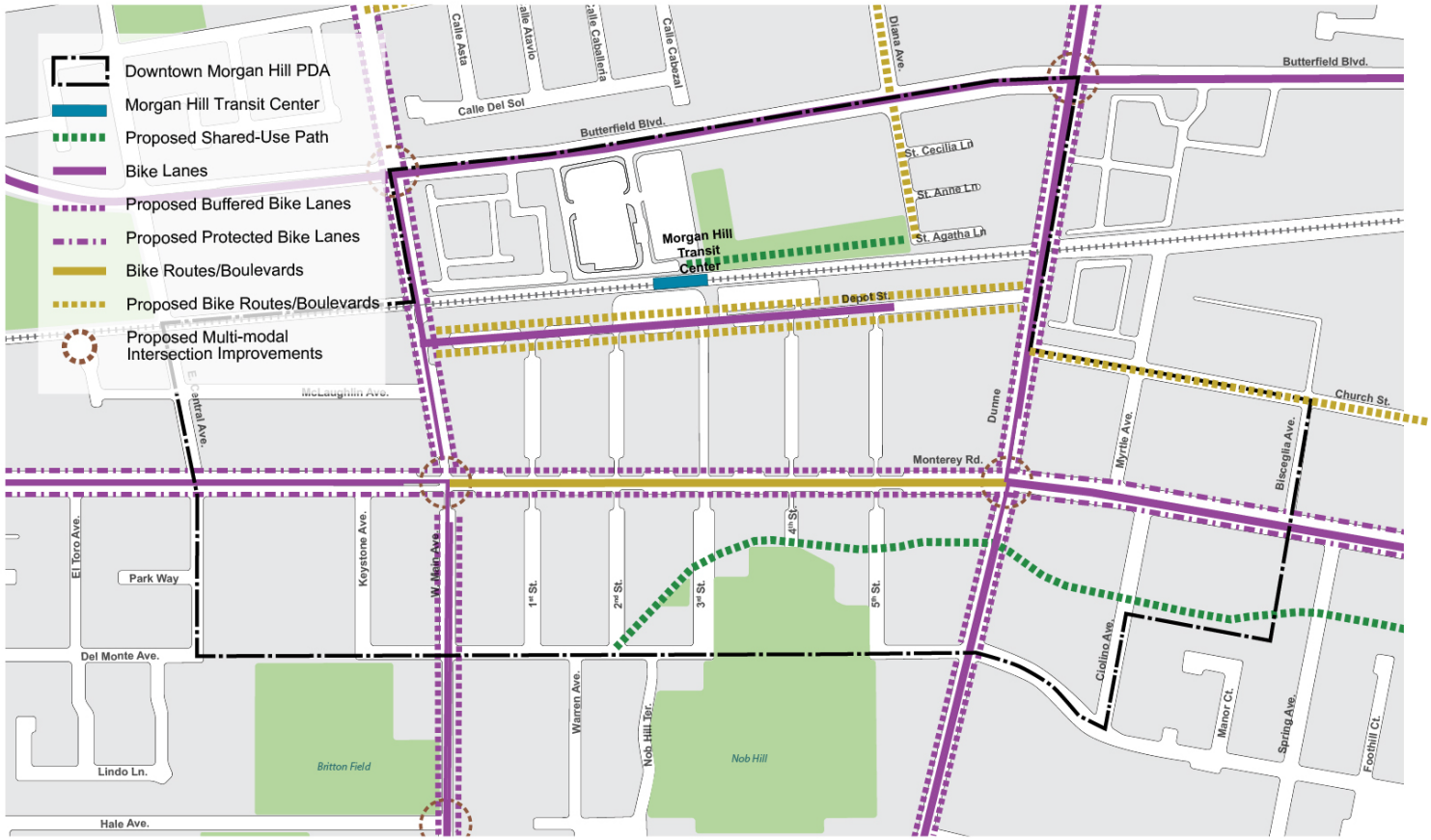
Valley Transportation Plan 2040 includes adding bicycle lanes on Main Avenue between Butterfield Boulevard to Condit Road, just outside of the Station Area (Project B86). The existing and planned bicycle facilities are shown on Figure 1-36.

Bicycle Toolbox

Bicycle tools primarily include closing gaps in the bicycle system and upgrading bicycle facilities where feasible:

- Continually updating the City's bicycle master plan to incorporate best practices and to be eligible for grant funding
- As part of the Depot Street Study, plan for appropriate bicycle lane widths
- Using best practices regarding bicycle lane striping on intersection approaches
- Adding a second stripe to existing bicycle lanes to better delineate space for cyclists, possibly during roadway repaving projects
- Adding planned bicycle lanes
- Constructing planned shared-use paths
- Adding buffered bicycle lanes to Monterey Road between Main Avenue and Dunne Avenue as part of a road diet
- Adding bicycle racks throughout the Downtown to support cycling as an access mode for business customers
- Adding bicycle lockers at strategic locations throughout the Downtown to support cycling as an access mode for employees
- Ensuring signalized intersections have bicycle detection
- Adding bicycle sharing, a form of bicycle rental with a fleet of shared bicycles in pods at key locations in the city (e.g., Transit Center, Community and Cultural Center, City Hall, Community Recreation Center, etc.)

Figure 1-36: Map of Existing and Planned Bicycle Facilities



Existing and Planned Bicycle Facilities

City of Morgan Hill

2. STREETSCAPES AND PLACEMAKING

Figure 2-1: Example of an enhanced crosswalk in a walkable, urban, family-oriented environment

The City of Morgan Hill has made many investments in its Downtown and continues to make improvements aimed at making Downtown "the most walkable, bike-friendly, urban, family-oriented, and transit oriented neighborhood in Morgan Hill." The City's placemaking strategy meets established goals for the Downtown and creates an inviting, interesting, active, and unique place for Morgan Hill residents and visitors. The strategy includes new Downtown park spaces and trails, a variety of public art and placemaking amenities, the undergrounding of overhead wires along the side streets, new street lights, enhanced pedestrian crossings on Monterey Road, Main Avenue, and Dunne Avenue, beautification improvements to the Monterey Road median, and sidewalk repairs.

The first section of this chapter highlights past and current achievements of the Downtown Placemaking Strategy, which includes advancements in the areas of public open space, complete streets, and public art. With these ongoing programs and strategies in mind, the second half of the chapter presents a framework for organizing and locating future streetscape and other public realm improvements within the public right of way of the Downtown's streets. This framework informed the street section examples provided in Chapter 2.

Downtown Placemaking Strategy

In 2014, the City Council approved a Downtown Placemaking Strategy, which included funds for art, lights, features, and wayfinding to enhance public spaces. The strategy provided direction for the investment of former Redevelopment Agency bond proceeds in the Downtown area and identified public works parks and utility improvements intended to set a framework to help transform Downtown into an interesting, vital, prosperous, and sustainable destination. These included the construction of the new parking structure and

plaza with a robust art component, undergrounding of electrical lines, upgrades to some sewer and water facilities, and the creation of three parks, and other streetscape improvements, such as in-pavement flashers at crosswalks, new traffic signals at the intersection of Monterey Road and Fourth Street that include pedestrian signals, and improved street lighting at all intersections.

Open Space

The Placemaking Strategy includes three new park areas. The first Downtown Creek Park, will be located on the City-owned open space off West Third Street, on the west side of Monterey Road. The second Nob Hill Trail Park, will be located on the hilltop between West Third Street and West Fifth Street at Del Monte Avenue. The third, Railroad Park, will be on the east side of the Monterey Road, utilizing a portion of the parking adjacent to the railroad tracks on Depot Street, at East Third Street, next to the train station. Creation of the park areas on opposite sides of the Downtown reinforces the east-west spine that will inspire the active village envisioned in the Specific Plan and encourage visitors to travel to and through the Downtown when visiting the park spaces. The Downtown parks and trails were designed through a single process that will incorporated multiple elements between these locations. While passive park elements were discussed during the planning process, many active park features have been included that encourage propel to visit and move to and around the Downtown.

The "Nob Hill Trail Park" includes a pedestrian trail connecting West Third Street to West Fifth Street at Del Monte Avenue. This planned trail will provide a walking/running path near the Downtown area. A shared-use trail is planned to be included with the proposed Hale Avenue Extension project between Spring Avenue and the intersection of West Main Avenue and Hale Avenue. This project is proposed to be completed by 2017.

Pop-Up Park

As part of the Placemaking Strategy, in May 2015 a temporary pop-up park was created on a future development site on Monterey Road near Third Street. (See Figure 2-2.) The temporary "pop-up park" was intended to

Figure 2-2: Temporary "pop-up park" on Monterey Road near Third Street

create a family gathering space and showcase many of the mini-grant art projects. The park was covered in green AstroTurf surrounded by a low wall on which children and adults could make drawings or leave messages in chalk. It included foam construction toys for children to play, as well as several chairs and artistic benches artistically made of former propane tanks. A large mural on the wall of the liquor store building showed the vibrant bicycle spirit of Morgan Hill. A larger-than-life ceramic sculpture of grapes and a bottle of vino on the wall revealed the wine-making heritage of the South Valley. For fun photo ops, the park contained a huge Adirondack chair that make people posing on it seem tiny. A bike hub provided a hydration station and fix-it station.

Figure 2-3: Relocated "pop-up park" at Second Street and Monterey Road

As the site became ready for development, the Downtown Pop-up Park relocated on June 10, 2016. The new location at the intersection of Second Street and Monterey Road is also a future development site. (See Figure 2-3.) Located one block away from the first Pop-up Park, this new, temporary pop-up park incorporates all the attractions from the first pop-up park, including the propane tank benches, tables and chairs, and the giant Adirondack chair, as well as additional amenities. The Pop-up Park is a fun family gathering space, including bike racks, a park area with turf, mature orchard trees in giant planters, evening lighting, a kids' corner with multiple chalk boards, an urban kids' library and a donated baby grand piano hand-painted by a local artist. Many of the elements of this temporary park were donated and will be reused in future parks and plazas in Downtown.

Complete Streets Pilot Project

In response to the community's request for a less noisy, safer, more bike and pedestrian friendly Downtown, in 2014 the City Council authorized a six-month pilot complete street program for Monterey Road. The consultant, Alta Planning + Design, worked with the City, hosted meetings with the stakeholders and implemented a "tactical urbanism demonstration" (consisting of a weekend trial of two alternative street configurations) to

develop a recommendation on a pilot program to test road narrowing through the Downtown as a traffic calming measure. The Council approved the pilot program in the context of complete streets, without limiting the program to a lane reduction.

From February to August 2015, Monterey Road was narrowed from Main Avenue to Dunne Avenue to one lane in each direction. To re-purpose the number two lane, a buffered bicycle lane was created. (See Figure 2-4.) This change to Monterey Road was implemented to determine whether a lane reduction would:

Figure 2-4: Monterey Road narrowed to one lane in each direction. The second lane is repurposed as a buffered bicycle lane

- Improve livability and economic vitality
- Enhance pedestrian environment
- Safely accommodate bicyclists
- Reduce noise and air pollution
- Create an attractive, thriving and vibrant community gathering place
- Foster a safe and inviting experience for all
- Preserve mobility for those accessing businesses, schools, services, transit and other key destinations.

A mid-pilot comparison in May 2015 revealed no safety concerns or hazards resulting from the Complete Street pilot program. All safety performance measures, such as emergency response time, motor vehicle speed, reported safety concerns, and the number of collisions decreased or witnessed little to no change. The average number of bicyclists along Monterey Road increased by 116% during the first half of the pilot. The number of bicyclists under 18 riding through Downtown increased by 16%, and among that group, the number riding their bicycles on the sidewalk decreased by 37%. Between the pre-pilot and the mid-pilot data collection periods, the volume of motor vehicles on Monterey Road decreased by 14%, while the volume of motor vehicles on Butterfield Boulevard increased by 9%.

Parallel routes to Monterey Road also experienced relatively small increases in motor vehicle volumes, most significantly Wright Avenue, but the volumes remain below each roadway's carrying capacity.

On Wednesday, August 5, 2015 a full report was provided to the City Council on the Complete Street Pilot project. Approximately 45 community members and business owners spoke both for and against the pilot configuration. Although the pilot program had shown successful results in making Downtown the most walkable, bike-friendly, urban, family-oriented, and transit oriented neighborhood in Morgan Hill, after significant conversation and deliberation, the City Council decided to return to four lanes on Monterey Road (two lanes in each direction) and expressed interest to return to the issue of potential lane reductions on Monterey Road after the construction of the Hale Road connection has been completed. Furthermore, at this time, the City Council asked Staff to implement further traffic calming measures in the Downtown, including:

- Reducing the width of the travel lane to reduce the driver field of view and reduce speeding;
- Studying signal timing at the intersection of Monterey Road and Main Avenue and potential conversion of the outside westbound travel lane to a shared through/right-turn lane and evaluating northbound and southbound left-turn movement operations;
- Adding advance yield bars, green pavement markings, rectangular rapid flashing beacons, decorated crosswalks, and other safety enhancements;
- Adding bicycle racks and bicycle corrals in Downtown, particularly along Monterey Road and Third Street;
- Exploring other improvements to signal timing at key intersections to improve flow of traffic;
- Continuing to monitor business health through State Department of Revenue Quarterly Sales Tax Receipt Data;
- Directing staff to continue to pursue funding opportunities, including grants, for the construction of Hale Avenue;
- Directing staff to develop and implement a strategy to increase the State Transportation Improvement Program priority of funding for the widening of Interstate 101;
- Going back to the enhanced four lane configuration; and,

- Other potential measures to help slow down traffic, and allow bikes and pedestrians to co-exist with vehicles in the Downtown.

Enhanced Crosswalks

Crosswalks are available at all intersections in the Downtown area and at most intersections in the larger Morgan Hill PDA (See Chapter 2.) The unique pavement design of the crosswalk on Monterey Road at Dunne Avenue acts as a gateway to the Downtown. (See Figure 2-5.)

Crosswalks at the unsignalized intersection of Monterey Road and Third Street are created with brick pavers. (See Figure 2-6.)

Figure 2-5: Crosswalk with a unique pavement design at Monterey Road and Dunne Avenue

Figure 2-6: Crosswalk with brick pavers and in-pavement flashers installed at unsignalized intersections

Public Art

Public Art has played an instrumental role in shaping Morgan Hill. Throughout the community there are unique art pieces and sculptures that are embedded in the City's rich quality of life. From the "Waiting for the Train," "Liberty," and "Story Time" sculptures and murals, along with the "Sister City Treasures" collection, public art has helped define Morgan Hill's sense of place as it celebrates the City's history.

The 2009 Downtown Specific Plan, aimed to make Downtown "a place where residents from all segments of the community can live, work, meet, shop, dine participate in public celebrations and share in the richness of Morgan Hill's community life." The Downtown Specific Plan recommended the implementation of a Public Art Program to encourage public art throughout the Downtown area.

A Creative Placemaking Symposium was held on September 19, 2014 in which over 200 community residents participated in a conversation regarding the streetscape projects, efforts and strategies to make Downtown a more vibrant destination. Furthermore, a Creative Placemaking Mini Grant Program produced temporary and permanent art projects to enhance Downtown with visual art, landscape, design and other placemaking projects. Twelve art and placemaking projects were approved by the City Council on January 21, 2015 and many of them were installed in 2015.

Gateway Art Project

The gateway art project in the front of the Community and Cultural Center, a gateway to Downtown, was a collaborative effort between the City of Morgan Hill, the El Toro Cultural and Arts Committee, the Morgan Hill Library, and the Library Culture and Arts Commission. An active community engagement process involved the community and invited feedback early in the process.

The jury selected artist Blessing Hancock from Tucson, Arizona to develop the gateway art project. (See Figure 2-7.) The artist created an illuminated sculpture entitled "Encompass" to serve as an icon for the City and highlight the community's interest in sports, recreation and cycling. The frame is made of painted stainless-steel tubing while the infill is made of painted, recycled or new bicycle wheels.

Figure 2-7: "Encompass" – Gateway art project by artist Blessing Hancock

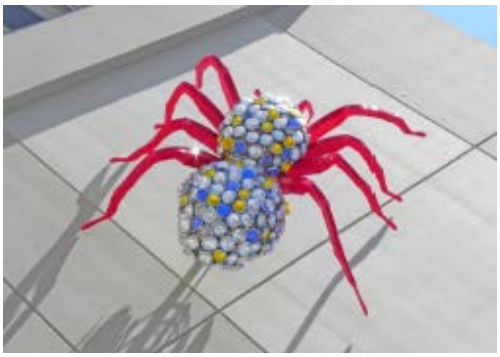


Figure 2-8: "Tarantula" by Gordon Huether at the City's new parking garage

Tarantula Sculpture at New Parking Garage

For the City's new parking structure, in 2015 artist Gordon Huether created a sculpture called "Tarantula". (See Figure 2-8.) The annual migration of tarantulas, which are native to Santa Clara County, is celebrated in Morgan Hill at Henry Coe State Park each October with the 'Tarantula Festival'. Huether's installation subverts the tarantula's fearsome

presence by reimagining it as an amusing, three-dimensional arachnid crawling up the façade of the Parking Structure's Fourth Street entrance. The installation is composed of hundreds of LED charged vintage automobile headlights for the spider's body and is adjoined by eight vibrantly red powder-coated steel outstretched legs.

Utility Box Art Project

Utility box art programs have expanded in recent years across many cities in the United States. These programs have enabled cities to use the blank slates that traffic utility boxes offer to increase public art, deter graffiti, and encourage local artists and residents to contribute to the beautification of their cities.

As part of the Placemaking Strategy, the Morgan Hill Economic Development Team initiated a pilot utility box art program in 2016. The City of Morgan Hill currently has over forty traffic utility boxes, with three located within Downtown along Monterey Road between Main Avenue and East Dunne Avenue, and a fourth signalized intersection planned at the intersection of Monterey Road and Fourth Street.

When the Downtown Pop-up Park was relocated from Monterey Road and Third Street to its present location at Monterey Road and Second Street, a local artist was commissioned to paint the traffic utility box on the nearby sidewalk to increase public artwork and beautify the streetscape. The result was an ornate-style cat painting that added a unique art piece to the public art portfolio. The City's LCAC will be advancing the Utility Box Art throughout the Downtown and City with the anticipation for the project to be a multi-year community project.

Pedestrian Realm Design Areas

The pedestrian realm is the portion of a street where people walk, occupy public space, and interact with adjacent businesses. Particularly in a pedestrian-oriented downtown, different portions of the street and sidewalk serve different functions and need to be designed with those functions in mind. The pedestrian realm falls within the public right-of-way and can be understood as 'slices" or sections of a sidewalk, extending from the front property line to the curb and beyond. In keeping with their distinct functions, these pedestrian realm areas may include different elements of street furniture or other amenities. For the purpose of the Pedestrian Realm Improvements Toolkit discussed below, the following areas are distinguished

Frontage Area

The Frontage Area is the space between the property line and the edge of the Pedestrian Through Area. (See Figure 2-9.) On streets with first floor retail or commercial uses fronting onto the sidewalk, this area may include the display of merchandise, café or other seating provided by adjacent businesses, and shop displays. Another function of the Frontage Area is to accommodate pedestrians' keeping a "shy distance" from adjacent building façades, and the space needed to enter and exit through building doors. Frontage areas on commercial streets are typically 1 to 3 feet wide with 3 feet being the minimum needed to accommodate café seating with a small table and two chairs oriented parallel to the building façade. The Downtown Specific Plan design guidelines require barriers if sidewalk dining spaces next to buildings are more

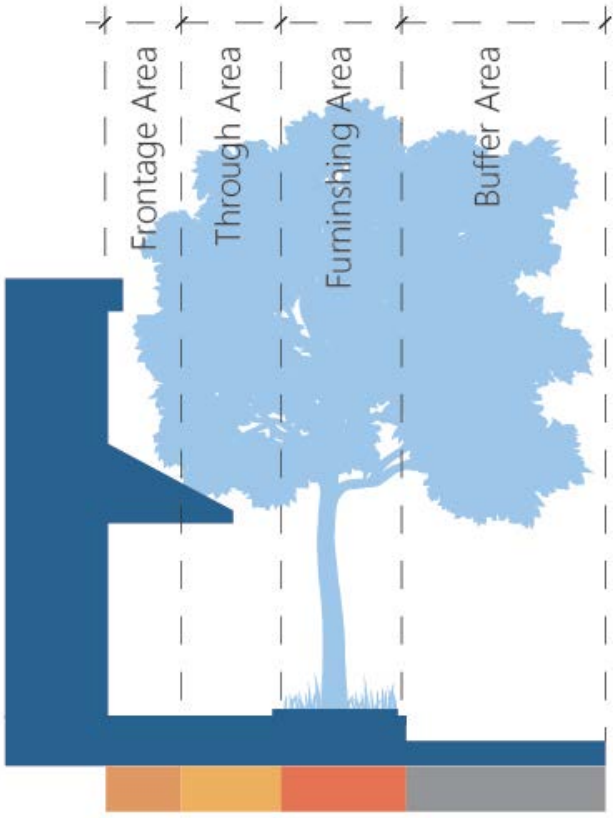


Figure 2-9: Pedestrian realm design areas

than 3 feet wide (DG-Q3.) Along non-commercial, residential streets, these frontage functions are typically minimal or occur on adjacent private properties. The latter allows for the edge of the Pedestrian Through Zone (See below) to be located directly adjacent to the property line and, for example, a landscaped front yard or building setback.

Pedestrian Through Area

The Pedestrian Through Area (Through Area) is the space designated for pedestrian travel along the street. It is typically 5 or more feet wide, with a minimum width of 4 feet as per the California Building Code's Title 24 requirements for sidewalks in California and the Morgan Hill's Public Works Department preference for 5 feet clear. This space should be clear of obstructions and barriers to insure the necessary space for pedestrian traffic and wheelchair travel. Along streets where pedestrian traffic is heavier, the Through Area will be wider, whereas streets with few pedestrians may have narrower Through Areas down to the minimums discussed above.

Furnishing Area

The Furnishing Area is the space near the curb designated for pedestrian realm amenities, which may include street trees and other landscaping, café and other seating, wayfinding signage, and light fixtures, and other potential amenities. The Downtown Specific Plan design guidelines specify that fixtures and street furniture in this area must be between 1 and 3 feet from the face of curb (DG-R1.) For streets with a greater amount of traffic, particularly along major commercial streets, the Furnishing Area amenities will vary more as they accommodate and complement a diverse range of adjacent uses and user needs. Lastly, the Furnishing Area represents a significant opportunity for placemaking along a corridor when coordinated and "branded" appropriately. For example, the use of a carefully selected range of color- and style-coordinated furnishings and signage can create a strong sense of place for a corridor, corridor segment or entire district.

Buffer Area

The Buffer Area is the space between the curb and the vehicle travel-way. In the Downtown area, this space is typically used for on-street parking spaces. In some locations, the Buffer Area may include bicycle lanes outside of the parking lane or bicycle lanes protected by the parking lane. While traditionally the Buffer Area is considered a portion of the travel-way, the space within the buffer area occupied by parking, where appropriate, can also

serve as an opportunity for pedestrian realm improvements, such as parklets. (See Figures on Page 2-27.)

Pedestrian Realm Improvements Toolkit

The goal of this Pedestrian Realm Improvement Toolkit is to produce a memorable and attractive public realm in the Downtown area that provides consistency, complements the surrounding built environment, and encourages connectivity throughout the area. The City may employ different combinations of tools along various corridors in the Downtown area based on their respective street typology to accomplish this goal (See Chapter 2 for street typology examples.)

The following sections are organized by pedestrian realm area (i.e. Frontage, Furnishing and Buffer areas) and each include descriptions for specific improvements applicable within those areas. The descriptions are accompanied by tables that organize the relationship between the toolkit improvements by street typology. In general, many of the Toolkit improvements apply to several street typologies; however, their application and purpose will vary.

Toolkit for Frontage Area Improvements

The Frontage Area is located within the first three feet or so from the property line or building face. For retail and commercial uses, activities and elements located in this area may include the display of merchandise, seating, shop displays, and potted landscaping. Café Seating is an example of a great tool to utilize within this area. (See Figure 2-10.)

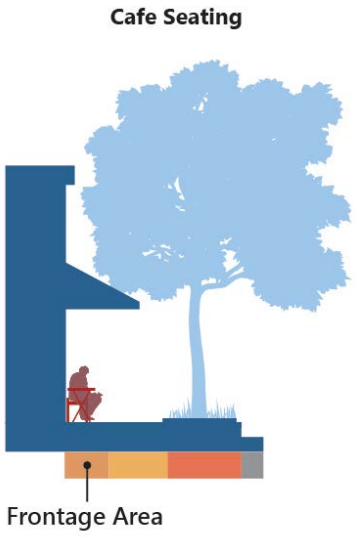


Figure 2-10: Cafe seating in frontage area

Tool: Café Seating

Many restaurants in Downtown Morgan Hill have café seating on the adjacent sidewalks, particularly along Monterey Road. (See Figure 2-11.) The Downtown Specific Plan encourages café seating on Monterey Road and Third Street, and on side streets where restaurants or similar uses are developed.

Café seating, whether located in the Frontage Area or, alternatively, in the Furnishing Areas, is intended to complement the adjacent business and provide additional seating in an outdoor environment. Similarly, café seating promotes pedestrian activity and drives business as it showcases activity otherwise hidden behind storefronts. It is critically important to maintain the minimum and desired width dimensions of the adjacent Through Area for pedestrians traveling along and past the seating area.

Figure 2-11: Example of cafe seating along Monterey Road with seating located in both the Frontage and Furnishing Areas

If space permits, café/restaurant seating should be prioritized to the Furnishing Area (described below) before placing café seating in the Frontage Area. The Downtown Specific Plan design guidelines require barriers if sidewalk dining spaces in the Frontage Area next to buildings are more than 3 feet deep (DG-Q3.)

Toolkit for Furnishing Area Improvements

The Furnishing Area, located between the Through Area and the curb, presents an ideal opportunity to work in tandem with adjacent buildings or landscaping on private property to spatially frame the pedestrian realm of the sidewalk and create a sense of place and community identity. The City of Morgan Hill has already made many Furnishing Area improvements to beautify Downtown streets, including "chandelier lights" and "twinkle lights" in and between street trees, as well as improvements to help visitors find their way, such as pedestrian wayfinding signage and directional signs to parking facilities. The following are a few tools to take into consideration when making further improvements within the Furnishing Area:

A. Street Furniture Standards and Palette

B. Wayfinding Signage

C. Pedestrian Lighting

A. : Street Furniture Standards and Palette

The Downtown area has a variety of already established street furniture palettes that create a unique sense of place along each corridor in Downtown – particularly, Monterey Road, Third Street and Depot Street. Table 2-1 provides descriptions of the street furniture, light fixtures, and other features that are included in the different palettes for each of the streets.

The City may also wish to consider the following additional recommendations to improve visual cohesion and create a stronger Downtown identity.

- **Material Consistency** – Selecting street furniture with a coordinated color and materials scheme increases visual cohesion. Currently, benches throughout the Downtown use stone, wood, and metal in various ways. In order to increase visual cohesion between the two Transit Connector Streets – Third and Depot Streets, in the short term, the stone benches along Depot Street could be retrofitted with wood slats – made of a vandal resistant wood variety. If desired, in the long term, all benches could be replaced with a model that is made of a consistent material that is durable, attractive and can be maintained cost effectively.
- **Maintenance, cost and procurement** – Street furniture selection should consider ease of long-term maintenance and procurement costs. By maintaining a consistent color scheme and paint system across a range of furnishings within the same palette and consistency in the materials that are used, painted surfaces and broken parts can be more easily maintained or replaced. Finally, procuring and deploying a consistent set of street furniture along streets in the same typology category can result in cost savings due to quantity discounts.

Table 2-1: Street Furniture Palettes					
	Monterey Road	**Third Street**	**Depot Street**	**Main and Dunne Streets**	**Other Downtown Streets**
Street Type	***Boulevard***	***Transit Connector***	***Transit Connector***	***Arterial***	***Local***
Benches	Traditional style, architectural bronze color, benches	Concrete blocks; natural,-carved wood benches; modern wood and metal benches	Concrete blocks	None	None
Streetlights	Traditional style, architectural bronze color, single acorn lights	Traditional-style, architectural bronze color, single acorn lights	Traditional-style, architectural bronze color, single acorn lights	Cobra heads	Cobra heads
Trash Receptacles	Circular, traditional-style, grey metal trash receptacles	Circular, modern metal trash receptacles	Square, tan concrete planters	None	None
Planters/ Landscape	Street trees with 1-foot high brick planters	Street trees with tree grates; bioretention planters with drought tolerant landscaping; corrugated metal and wood-framed, planters	Street trees with landscaping buffer	Street trees and intermittent grass buffer	Street trees and intermittent grass buffer
Other	Traditional metal bollards	Wood and metal-capped bollards	Traditional metal bollards		

B. : Wayfinding Signage

The City has installed vehicular wayfinding signs to identify nearby parking facilities. The City has also installed whimsical wayfinding signs showing directions and distances to local destinations.

Vehicular wayfinding - Now that the Third Street parking garage has been completed, providing an additional 271 parking spaces, the City is adding additional directional signs to identify all Downtown parking lots as drivers approach them, as shown at right. (See Figure 2-12.) Rather than directing visitors to the new parking structure as a first choice, the City has chosen to identify each individual parking facility, large and small, with a consistent type of sign. Thus, visitors can look for parking in the lot that is closest to their destination, and then find their way to other nearby parking facilities if the nearest lot is full.

Figure 2-12: Vehicular Wayfinding Sign - Parking

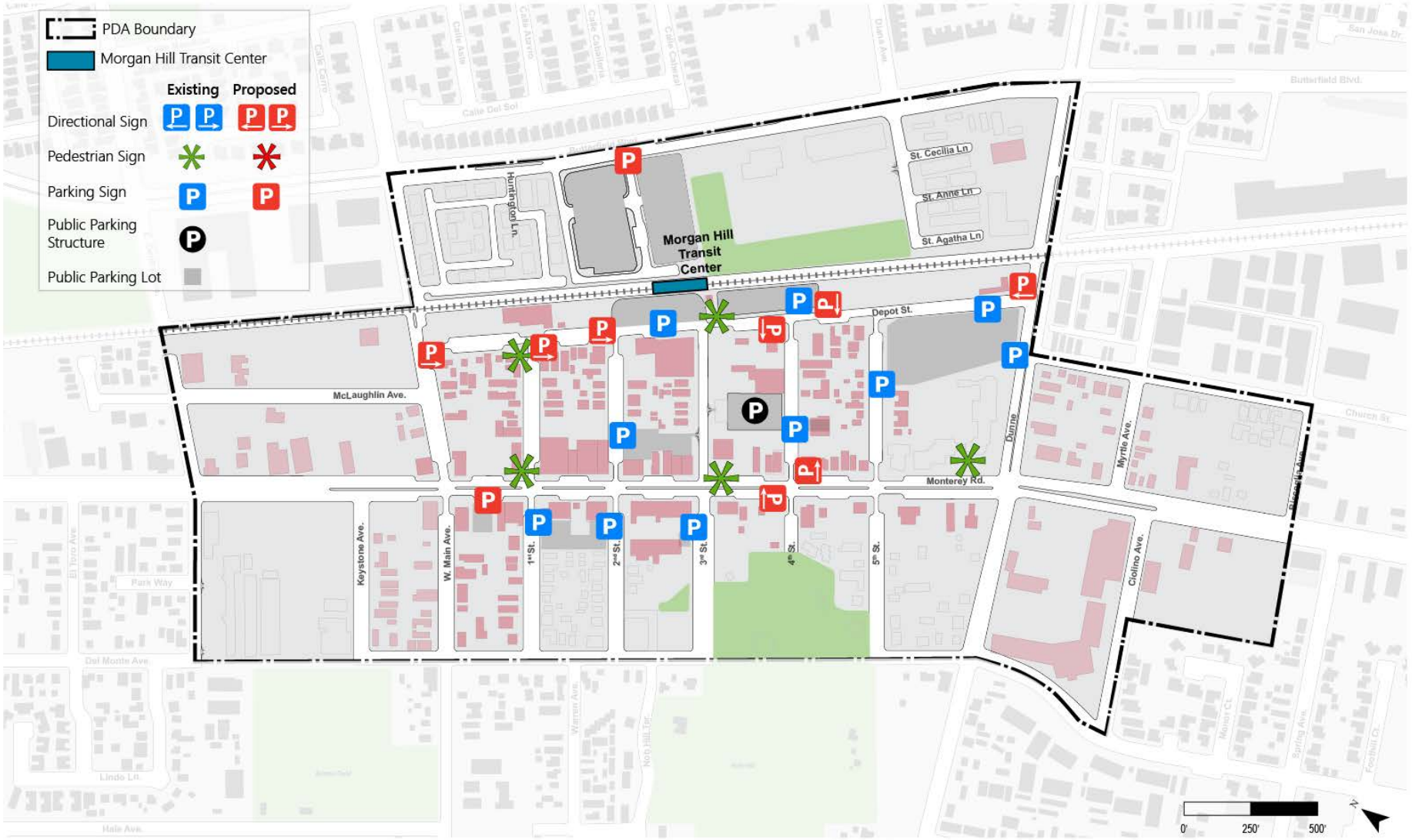
Pedestrian wayfinding – The City, with contribution of creative names for Downtown destinations generated by Morgan Hill's Youth Action Council (YAC), has designed and installed whimsical pedestrian wayfinding signs as shown in the photo on this page. (See Figure 2-13.)

Figure 2-13: Pedestrian Wayfinding Sign Pole

To help implement a "park once" strategy, the City could consider locating additional pedestrian wayfinding maps outside the entrances of major parking facilities, like the one located within the parking structure. The maps would help visitors and residents locate local businesses in and around the Downtown area, a function that could be further enhanced by providing suggested walking

routes and walking times to key destinations. The indication of walking times, for example: Granada Theater, 3-minute walk, would help visitors to better understand the distances between destinations and potentially entice them to walk to new destinations with the confidence of understanding the time need for walking to it. Existing and proposed parking related vehicular wayfinding signage locations are shown in Figure 2-14.

Figure 2-14: Vehicular Wayfinding Signage



C. : Pedestrian Lighting

Morgan Hill upgraded its pedestrian-scale lighting in 2015 to a 10-foot tall, LED, acorn-style light fixture (See Figure 2-15) along streets that fall into the Boulevard, Local and Transit Connector street typologies. The fixtures are spaced at an average of 50 to 75 feet apart. Along Arterials and Local Streets, the City uses 30-foot tall cobra head lights. (See Figure 2-16.)

As an additional measure along Arterial streets, the City could consider replacing existing cobra-head lighting fixtures with fixtures that combine both roadway and pedestrian-scale fixture heads in one fixture. Such fixtures are available in contemporary (See Figure 2-18) and traditional (See Figure 2-17) styles. Dual-headed fixtures may also be appropriate in the larger City-owned off-street parking lots.

Figure 2-15. Pedestrian acorn-style light fixture

Figure 2-16: Roadway cobra head light fixture

Figure 2-17: Traditional design of a combined roadway ano pedestrian-scale light fixture

Figure 2-18: Contemporary design of a combined roadway and pedestrian-scale light fixture

Table 2-2 below describes how Furnishing Area improvements can be located along streets in the Downtown street typology categories.

Table 2-2: Furnishing Area Improvements

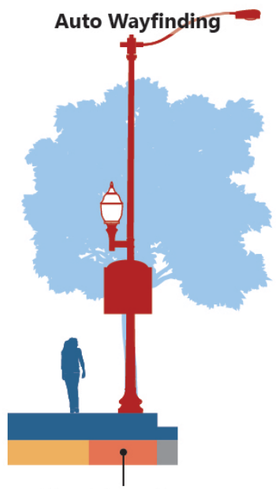
Street Typology	Auto Wayfinding  Furnishing Area	Pedestrian Wayfinding  Furnishing Area	Street Lights  Furnishing Area
Arterial	Opportunity to guide vehicular traffic to larger parking areas. Establishes Downtown identity.		Replace cobra-head lights with vehicular and pedestrian-level dual lighting. Encourages walking within and to Downtown.
Transit Connector		Identify transit resources and encourage transit ridership; may provide additional information about walking distances and destinations.	Increases perceptions of safety along key walking routes to and from transit.
Local			Implementation encouraged
Boulevard		Establishes Downtown identity; may identify local landmarks and points of interest.	Use “chandelier” and “twinkle” lights to create a sense of place. Establishes Downtown identity; complements existing businesses.

Table 2-2: Furnishing Area Improvements

Street Typology	Street Trees	Planters	Benches	Bicycle Parking
				
Arterial	Buffers pedestrians from vehicular traffic Increases comfort for those walking to and from surrounding neighborhoods.	Buffers pedestrians from vehicular traffic. Increases comfort for those walking to and from surrounding neighborhoods.	Provides opportunity for pedestrian to rest along walking routes to and from Downtown.	
Transit Connector	Implementation encouraged			Complements transit services with multi-modal consideration. Secure bike parking options are also encouraged.
Local	Implementation encouraged.			Bicycle parking should be provided near eating and drinking establishments.
Boulevard	Establishes Downtown identity. Implementation encouraged.	Establishes Downtown identity; complements existing businesses.	Establishes Downtown identity; complements existing businesses. Where wide enough can accommodate café/restaurant seating.	Encourages business patrons and Downtown visitors to bicycle to Downtown destinations.
	Coordinate palettes with other street typologies in Downtown.			

Toolkit for Buffer Area Improvements

Today, the Buffer Area along streets in Downtown Morgan Hill typically consists of a parking lane used for parallel parking. The parked cars act as a buffer between moving cars and people walking on sidewalks. At Downtown intersections, the City has constructed bulb-outs in the Buffer Area that visually narrow the street, shorten pedestrian crossing distances, and help to calm traffic. In the future, the City could also consider using portions of the Buffer Area used for parking as a more flexible space that complements and improves the adjacent pedestrian realm while freeing up sidewalk space to accommodate higher levels of pedestrian traffic or activities. Suggested strategies and improvements for Buffer Areas include the following:

A. Planted Bulb-outs at Intersections
B. Parklets
C. Temporary Parklets

A. : Planted Bulb-outs at Intersections

As part of its Placemaking Strategy, the City has installed bulb-outs at Monterey Road intersections. As further improvements to Monterey Road are considered, the City could contemplate further extending bulb-outs at intersections all the way to the edge of the travel lane. Doing so would further enhance the bulb-out's contribution to traffic calming and increase the reduction in pedestrian crossing distances.

Bioretention planters, which the City has already installed in the Buffer Area along the walkway next to the new parking garage, provide a benefit to the environment by filtering pollutants from stormwater runoff in the street and ease the strain on local stormwater infrastructure by slowing down the peak of runoff volumes that flow to the local stormsewer system. The City could also consider installing green infrastructure elements, such as bioretention planters, in retrofitted existing planted bulb-outs or potential new bulb-outs.

Figure 2-19: Example of planted bulb-out between parking spaces

The City could furthermore consider installing planted bulb-outs between parking spaces along Local streets (See Figure 2-19.) Not only will this increase the amount of planting in Downtown, it may also serve as a traffic calming measure by narrowing the apparent width of the street. The application of this tool needs to be in balance with the amount of on-street parking needed in the area.

B. Tool : Parklets

Many cities have begun improving the pedestrian realm along commercial streets by adding pedestrian amenities located on "Parklets". Parklets provide new and attractive pedestrian amenities on platform-like structures placed in the Buffer Area. Parklets typically occupy the space of one or several on-street parking spaces. Parklets may be temporary (e.g. single-day) or long-term (e.g. year-long) installations that complement adjacent businesses with (additional) café seating, space for bicycle parking, and/or a small-scale, park-like space for the enjoyment of Downtown visitors. Given their flexible nature, they can also serve as opportunities for public art or simply as sidewalk extensions (See Figure 2-20 to Figure 2-22.)

Figure 2-20: Example of bicycle parking with seating parklet

In general, parklet programs work best when combined with a comprehensive wayfinding and parking management strategy. The City could consider encouraging drivers to use the Fourth Street Garage and larger surface parking lots to free up some on-

street parking spaces for flexible, business supporting uses where these are requested or supported by local business owners.

Figure 2-21: Example of sidewalk extension parklet

Figure 2-22: Example of cafe seating parklet

C. : Temporary Parklets

The City of Morgan Hill has participated in the world-wide movement for "PARK(ing) Day", a single-day festival where local businesses and community members can sponsor temporary parklets to showcase creative opportunities and gain support for a more long-term parklet program.

Figure 2-23: Examples of temporary parklets

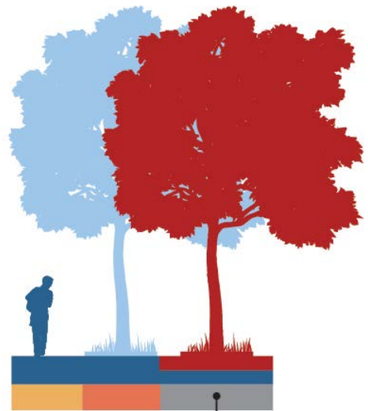
As part of the Complete Streets Work Program, the City plans to develop policy guidelines for parklets in an effort to streamline the process and encourage parklet development and investment. These parklets are intended to activate the pedestrian pathways, enhance the pedestrian experience and slow down traffic along Monterey Road (See Figure 2-23.)

To advance that initiative, the City may consider the following strategies:

- **Preliminary program pilot period** – some cities have implemented a pilot period for their parklet program and selected a small number of pilot parklet locations to implement new parklets. The implementation of pilot parklets has allowed these cities to identify and correct potential challenges or barriers to an effective implementation of a long-term parklet program.
- **Temporary and long term parklet permits** – some cities allow for varying permit lengths for parklets. For example, an adjacent business may request a single-day permit for a parklet. Later that business may request a permit for a more permanent installation for a summer or year-long permit. In some instances, cities recommend applicants apply for single-day permits first as a type of proof-of-concept, prior to allowing for long-term installations.

Table 2-3 describes how Buffer Area improvements can be located along streets in the Downtown street typology categories.

Table 2-3: Buffer Area Improvements

Street Typology	Cafe Seating 	Bicycle Corral 	Sidewalk Extension 	Tree Well 
Arterial				
Transit Connector		Complements transit amenities and encourages multi-modal travel.	Provides additional through space for pedestrian travel where high-volumes are expected and encouraged.	Provides additional through space for pedestrian travel where high volumes are expected and encouraged.
Local				Visually narrows street and calms vehicular traffic, slowing speeds.
Boulevard	Complements existing businesses and provides additional through space for pedestrian travel.	Provides additional bicycle parking for business patrons and Downtown visitors. Encourages bicycling to Downtown destinations.		

3. RECOMMENDED IMPROVEMENTS

This chapter summarizes previously identified gaps within the existing transportation system in the Station Area and identifies specific improvements aimed at achieving an increase in multi-modal connectivity for pedestrians, bicyclists, and rail passengers in the Downtown and areas surrounding the Morgan Hill Transit Center, with an emphasis on improving pedestrian and bicycle connections.

Transportation System

The map in Figure 3-1 presents an overview of the existing transportation facilities and existing connectivity gaps. Figure 3-2 presents a summary map of the most relevant near-term planned and proposed improvements[1]. Together these maps are used as the starting point to identify focus areas where improvements are needed.

Transit Facilities and Operations

Caltrain service is currently limited to three northbound trains during the weekday morning commute period and three southbound trains during the evening commute period. This limited train service does not provide a substantive commute mode, resulting in vehicle traffic on Monterey Road and US Highway 101, and does not accommodate travel in the non-peak direction (e.g., southbound in the morning and northbound the evening).

Only two bus routes provide local bus service to Downtown Morgan Hill (VTA Routes 16 and 68) resulting in limited bus service to Morgan Hill residents, employees, and visitors. In addition, VTA is considering reducing bus service throughout Santa Clara County, including Morgan Hill, as part of the Next Network plan.

Transit Improvements

The City of Morgan Hill does not operate transit service and therefore relies on Caltrain, VTA, and MST to provide passenger rail and bus service in the Station Area.

[1] "Planned" improvements are those that are included in adopted plans. "Proposed" improvements are those included in plans that have not yet been adopted, such as the Parks, Trail, and Bicycle Master Plan that is currently underway.

The City should continue to work with Caltrain to improve passenger rail service, including possible changes in train arrival and departure times to better meet the needs of existing and future train riders. Also, the City should continue to pursue methods to generate more train riders, which will encourage Caltrain to possibly expand service. These methods may include a public outreach program to current residents and increasing the amount and intensity of development near the station. In addition, the City should continue to work with Caltrain and VTA to maintain a pedestrian track crossing at the station (either at-grade or as a well-designed wide, well-lit, and safe under/overcrossing) with the future double tracking project.

Finally, the City should continue to work with TAMC to extend the station platform to accommodate the future Capitol Corridor extension to Salinas and could work with Union Pacific Railroad to enter into a preliminary engineering and quiet zone warning devices agreement.

In January 2017, VTA released its Draft Next Network plan, which included modifications and proposed elimination of bus services in Morgan Hill. As a response to this plan, the City could explore a community-based shuttle program. To begin such a program, the City could start with public outreach to identify the need for services and types of services the community would like to see in their City. Examples of different types of services include affordable first/last mile options, standard shuttle bus routes that go to major city destinations, senior services, etc. The exploration would include optional funding sources such as grants including Core Connectivity Measure B funds from VTA, clean-air and congestion reduction funds, and potential partnerships with local and transit operating companies.

Once the appropriate services for Morgan Hill are identified, a city-specific transit service would close the gap in existing VTA bus service and better serve the community as a whole.

Pedestrian Facilities

The Station Area Master Plan prioritizes creating a pedestrian-friendly environment throughout the Downtown, including slowing traffic on Monterey Road within the Downtown core and further enhancing pedestrian connections across it. This section will cover sidewalks, signalized crossings, and un-signalized crossings.

Sidewalk Gaps

Downtown Morgan Hill has continuous pedestrian facilities (sidewalks) throughout most of its area. Sidewalk gaps exist on the east side of Depot Street between Fifth Street and Dunne Avenue, on the hilly portion of Del Monte Avenue south of Second Street, on Third Street west of Llagas Creek, and on portions of Fourth and Fifth Streets west of Monterey Road. Closing these gaps would improve pedestrian circulation (See Figure 3-1).

Sidewalk Gap Closures

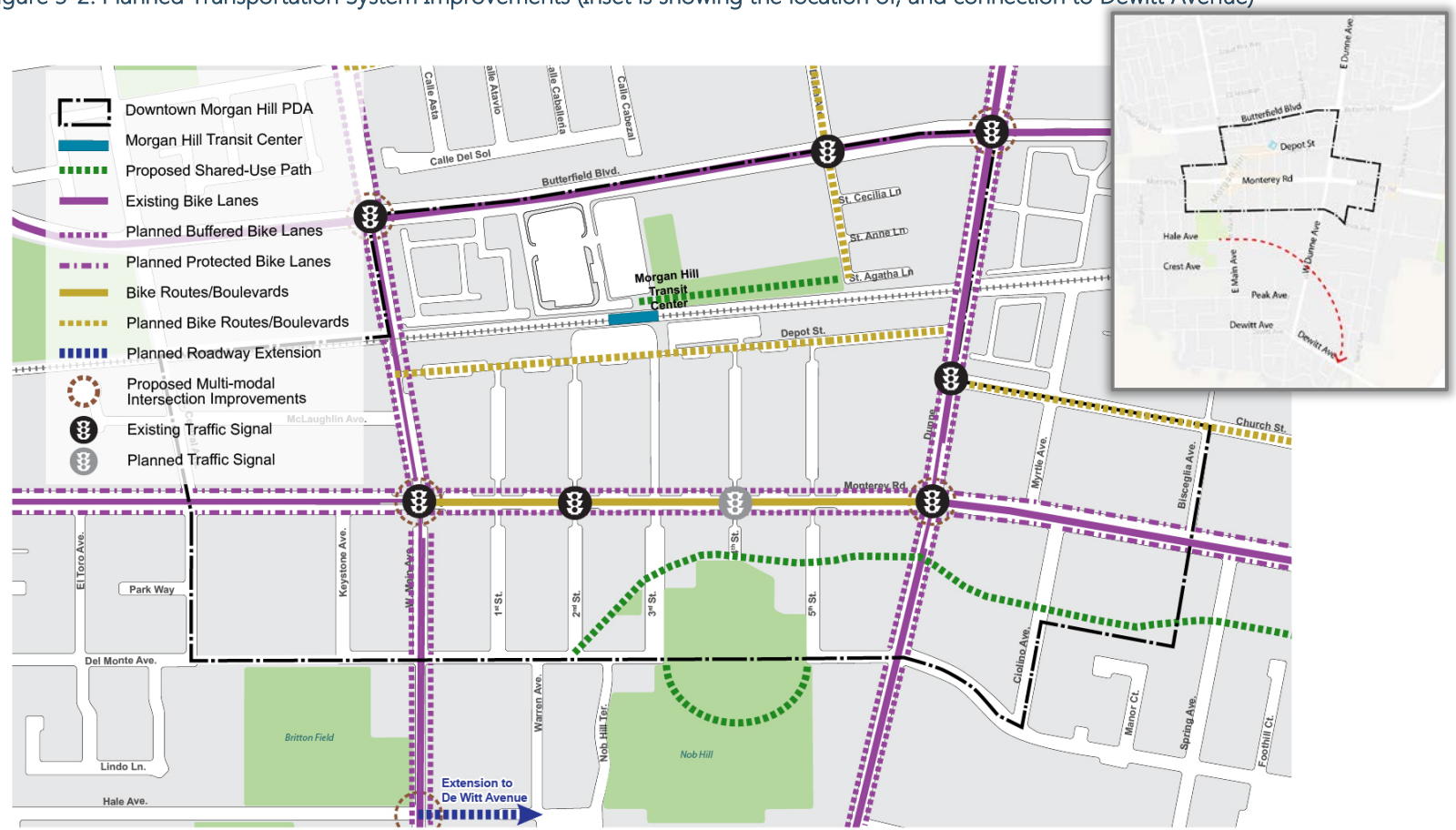
The sidewalk gap on Depot Street will likely be closed when the adjacent property (the Hale Lumberyard site) redevelops. The City could consider installing the sidewalks prior to redevelopment of the property, however uncertainty over the future site design may require the subsequent removal and replacement of this interim sidewalk when a final site plan for the development is established. A multi-use path connecting to the Nob Hill Trail is planned to be constructed by Fall of 2017 and will provide a pedestrian connection on the west side of Del Monte Road and the south side of Third Street.

Figure 3-1: Gaps in Existing Transportation System

Gaps in Existing Transportation System

City of Morgan Hill

Figure 3-2: Planned Transportation System Improvements (Inset is showing the location of, and connection to Dewitt Avenue)



Planned Transportation System Improvements

City of Morgan Hill

Signalized Intersection Crossings

Traffic signals are provided on Monterey Road at Main Avenue, Second Street, and Dunne Avenue. Signal installation is currently under construction at the intersection of Fourth Street and Monterey Road. Traffic signals control traffic and include pedestrian signals that further improve safety for crossing pedestrians compared to unsignalized crossing locations. The new traffic signal at Fourth Street will also improve pedestrian access to the Downtown parking garage.

Unsignalized Intersection Crossings

Currently, movable yield signs, pedestrian flags, brick pavers in the crosswalks, crosswalk striping, and side-street stop signs are provided at the intersections on Monterey Road at First Street, Third Street, and Fifth Street to support pedestrian crossing activities. The City installed in-pavement flashers to further enhance safety on Monterey Road at Third Street. In-pavement flashers are triggered by pedestrians and lights in the pavement start flashing on and off to alert drivers of crossing pedestrians. The City will use their experience with the in-pavement flashers to determine whether they should be installed at other locations or whether alternative control devices are needed.

Unmarked Crossings at Unsignalized Intersections

Pedestrians have been observed walking across Main Avenue near Depot Street, an unmarked crossing. Previous studies have identified this location of the installation of a traffic signal. However, there are concerns with regard to the spacing of a potential signal relative to the adjacent signalized intersections along Main Avenue at Butterfield Boulevard and Monterey Road as well as potential operational/congestion issues along Main Avenue if a signal is installed. While there are other treatments that may provide a solution, such as a roundabout treatment, a study is needed that evaluates the number of pedestrians, the roadway crossing width, and the traffic volumes as well as speeds on Main Avenue in order to determine treatment options may be appropriate.

Unsignalized Intersection Improvements

The already installed in-pavement flashers at the intersection of Monterey Road and Third Street offer the City an excellent opportunity to evaluate the effectiveness of this type of safety enhancement to alert motorists of pedestrians crossing Monterey Road. The City could conduct before and after studies that would include traffic counts, pedestrian and bicycle counts, collision statistics, and observations of driver yielding behavior during various times (e.g., around noon on a weekday, on a Friday evening, during the farmer's market, on a cloudy day, etc.) and include incidences when the driver in one lane stops and the driver in the adjacent lanes does not. This type of situation is referred to as a "double threat". The results can be used to determine whether the flashers are successful at modifying driver behavior or whether more robust measures, such as rectangular rapid flashing beacons (RRFBs) are needed. (See Figure 3-3). Keeping in mind, when the City revisits the reduction of Monterey Road from four to two lanes (one northbound and one southbound lane) between Main Street and Dunne Avenue, traffic may be slower within the Downtown core, and the double threat to pedestrians may be resolved.

Figure 3-3: Example of rectangular rapid flashing beacons (RRFBs)

The Main Avenue and Depot Street intersection is an unsignalized intersection that should be studied as part of an overall study of Depot Street's role and design as a major, downtown-serving transit access street (Transit Connector).

Unsignalized / Uncontrolled Pedestrian Intersection Crossing Policy

The City could create a policy for unsignalized or uncontrolled pedestrian crossings that would identify the appropriate signing, striping, and crossing devices for different situations so that consistent installations are provided in the Downtown. This policy would apply to the intersections with missing crosswalks: McLaughlin Avenue and Main Avenue, Depot Street and Main Avenue, Second Street and Del Monte Avenue, Bisceglia Avenue and Monterey Road, and Ciolino Avenue and Monterey Road.

Bicycle Facilities

There are gaps in the bicycle lanes on approaches to the intersections of Main Avenue/Monterey Road and Dunne Avenue/Monterey Road. This condition is confusing to both bicyclists and drivers and creates an uncertainty about where bicyclists should travel where gaps exist on these approaches.

There are no bicycle lanes on Monterey Road between Main Avenue and Fifth Street; sharrows (share arrows) are provided to alert drivers of the potential presence of bicyclists and to indicate to bicyclists where they should ride on the roadway. Other portions of Monterey Road both north and south of the Downtown have bicycle lanes. The City could consider enhancing their safety by introducing a 2-foot painted buffer between the bicycle lane and adjacent travel lane. (See Figure 1-25.) This can be accomplished by reducing the width of the existing 12-foot travel lanes to 11 feet. Buffered bicycle lanes are planned on Monterey Road throughout the Downtown to support bicycle travel, as recommended in the City's bicycle, trails, and park master plan.

There are bicycle lanes on Depot Street north of Fifth Street with a gap in this facility between Fifth Street and Dunne Avenue. In some constrained sections, the bicycle lane along Depot Street is combined with on-street parking. There are a few locations where the combined parking and bicycle lane is too narrow to accommodate both. Resolving these constrains should be considered as part of the suggested further study of a future design for Depot Street as a street that provides an important access to transit function for all modes.

Many bicycle lanes within Morgan Hill (such as on Depot Street, parts of Main Avenue and Dunne Avenue east of Depot Street) are indicated with a single stripe. This practice could result in parked vehicles encroaching into the bicycle lane space. The City could consider changing its approach to striping bicycle lanes by always including limit lines along both edges of the bicycle lane.

Bicycle Intersection Improvements

Potential striping modifications to accommodate bicycles at the intersection of Monterey Road and Main Avenue are shown on Figure 3-4. Potential improvements to accommodate bicycles at the intersection of Monterey Road and Dunne Avenue are shown on Figure 3-5. These figures illustrate the striping modifications to enhance bicycle safety and comfort by

adding a second stripe to delineate the extents of the bicycle lanes, and green paint to clarify transition zones at the intersections.

Depot Street

The bicycle lane gap on Depot Street between Fifth Street and Dunne Avenue should be closed in concert with redevelopment of the adjacent property (Hale Lumberyard site). On-street parking should be prohibited in areas where the combined bicycle lane/parking lane is too narrow to create a continuous bicycle facility. (Only a few spaces would need to be removed.) A right-side stripe would help delineate the parking area from the bicycle lane as well. Alternatively, the City could consider this when conducting a design study for Depot Street and determine the best complete streets design at that time. Retaining the on-street spaces by converting Depot Street to a bicycle boulevard and removing the bicycle lanes would downgrade the existing bicycle facility.

Figure 3-4: Bicycle Improvements at Monterey Road and Main Avenue

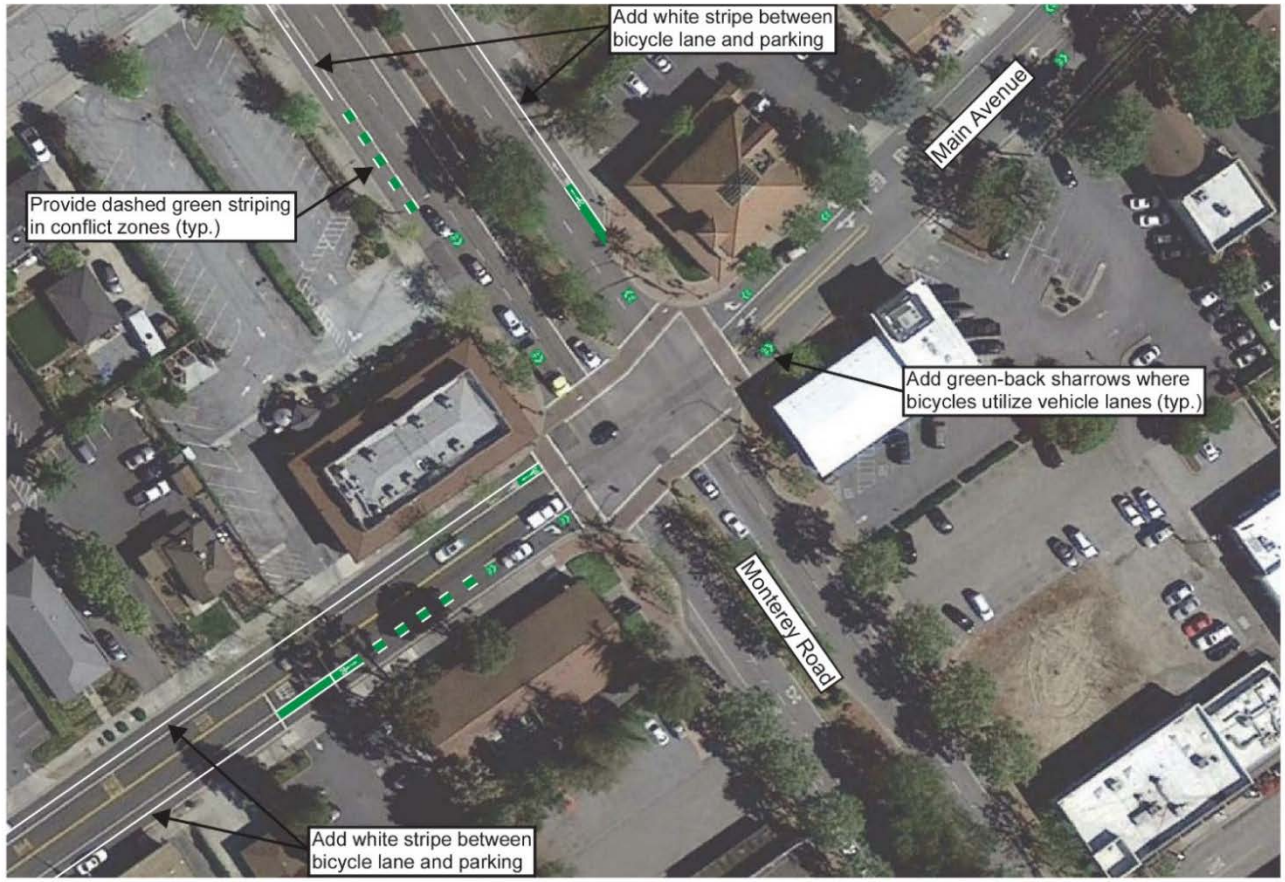
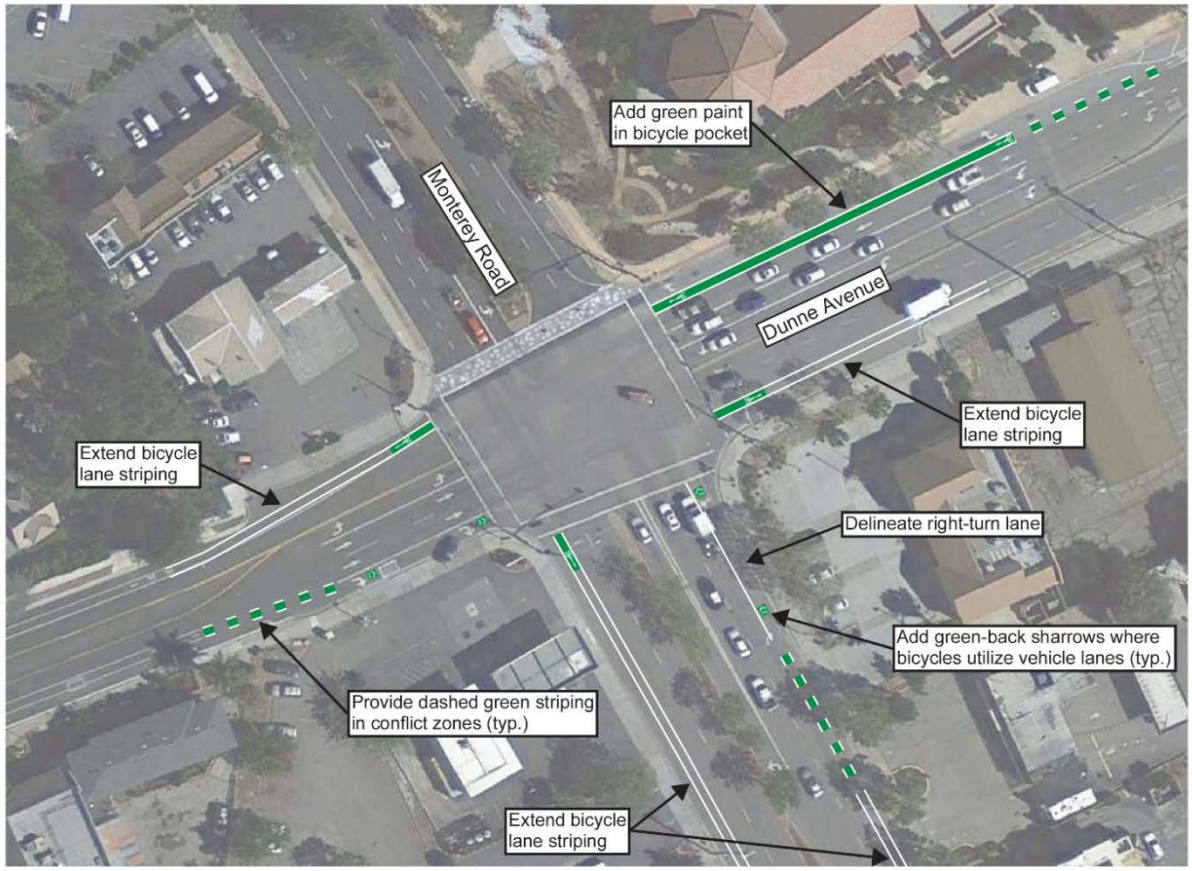


Figure 3-5: Bicycle Improvements at Monterey Road and Dunne Avenue



Bike Improvements at Monterey Road and Dunne Avenue

City of Morgan Hill

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Bicycle Facility Striping

A right-side stripe should be added to bicycle lanes on Dunne Avenue (east of the railroad tracks), on portions of Main Avenue, and on Monterey Road north and south of the Downtown area to discourage parked vehicles from encroaching into them. In addition, green paint should be added in transitions zones with hatching to delineate where vehicles should cross the bicycle lanes. These treatments are illustrated in Figure 3-4 and Figure 3-5.

Bicycle Lanes on Monterey between Main and Dunne Avenues

Bicycle lanes are provided on Monterey Road to the north and south of the Downtown but not between Main Avenue and Dunne Avenue. Bicycle lanes can be added to this Downtown core segment by implementing a "road diet" and converting the outside vehicle lanes to buffered bicycle lanes, as the City experimented with in early 2015. The road diet reduced vehicle volumes and speeds on Monterey Road while bicycle traffic increased. The existing and projected traffic volumes on Monterey Road are below capacity and therefore support the road diet design. However, the city may wait to reconsider the road diet, completion of the bicycle lanes, and a complete streets treatment on Monterey Road in the Downtown until after the Hale Avenue extension is completed.

Roadway System

The intersections of Depot Street/Dunne Avenue and Church Street/Dunne Avenue are off-set, creating circuitous travel paths for vehicles traveling north and south on these roadways within the Downtown. A future study of Depot Street should include an interim design option and a future design option (once the Hale Lumber site develops) for this intersection.

The gap in Hale Avenue is the missing piece in a west side bypass route for through traffic traveling north and south on Monterey Road. Closing this gap, along with the Butterfield Boulevard bypass, would support a road diet that would provide buffered bicycle lanes on Monterey Road.

Roadway Improvements

The City has considered realigning Depot Street to intersect Dunne Avenue opposite Church Street as shown on Figure 3-6. The realignment and connection to Church Street

should be studied in conjunction with the redevelopment of the Hale Lumberyard site as the realignment would directly affect that property. The intersection at Main Avenue and Depot Street has been discussed, and should be assessed as part of a design study for Depot Street where the City can first identify the best design to support Depot Street as a Transit Connector and its role regarding Downtown circulation.

Figure 3-6: Potential Depot Street Realignment

Parking

As summarized in the Transportation Context chapter of this Plan, currently parking in the Downtown is available at all times. However, during peak times of the day, many of the on-street spaces and several of the parking lots are fully occupied resulting in localized shortages. These localized shortages will be exacerbated with future planned development in the Station Area.

In addition, the potential redevelopment of the VTA lot may further reduce the number of available parking spaces available to transit riders in the future because the lot is currently used as a park-and-ride lot for VTA bus riders, Caltrain riders, and private shuttles. Alternative parking locations for these users will be needed when the lot redevelops.

Parking Improvements and Future Sustainable Supply

The following are recommended parking improvements that could be implemented immediately and will help alleviate the localized peak hour parking shortages:

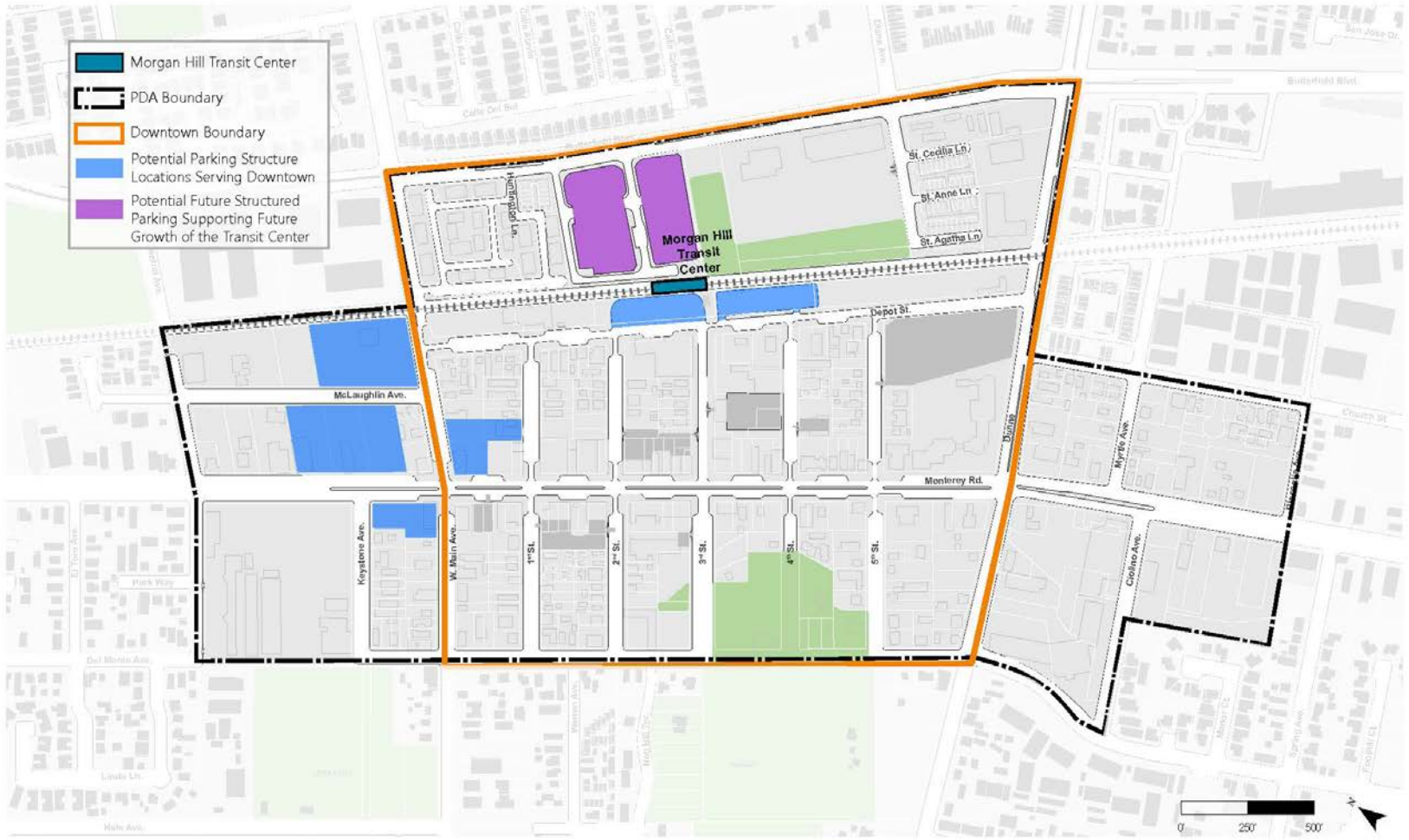
- Enforcing the two-hour time limits for on-street parking spaces, as these are the most popular parking areas. In order to increase the community's acceptance of the time-limit enforcement, the City could initially issue warning tickets that identify alternative locations with longer parking limits, such as the new parking garage.
- Increasing the time limit for all spaces in the parking garage to 8 or 10 hours (or removing the time limit all together) would encourage long-term parkers to park there instead of in the on-street spaces located in high demand areas.
- Assisting Downtown businesses in coordinating a valet parking program. Larger business-owned parking lots where businesses are closed in the evenings and on weekends are ideal valet parking opportunities. Some options near Downtown include the courthouse parking lot or the business center lots on the northwest corner of the intersection of Butterfield Boulevard and Main Avenue.
- Implementing a parking marketing and wayfinding plan to increase use of the parking structure. (The new traffic signal at Monterey Road and Fourth Street will make it much easier for pedestrians to cross Monterey Road to destination on the west side.)
- Continue working with the coordinators of major events (i.e. Fourth of July Parade, Mushroom Mardi Gras, Christmas Parade, etc.) to ensure that event staging and set up does not conflict with access to the parking garage.

Although the Transit Center and Downtown currently has a sufficient overall amount of parking, it is important to plan for potential future parking requirements. The following is a list of considerations intended to secure a sustainable amount of parking for the Downtown.

- As transit services improve, more parking may be necessary to support the additional transit riders. The City should work with VTA and explore possible grants to create a parking structure at the current joint City/VTA park and ride lot.
- In 2012 a memorandum was prepared by Fehr & Peers that included a multi-modal access and circulation review for a new parking structure on the existing Depot Street parking lots. An illustration of the parking structure prepared by Watry Design, Inc. may be used as a potential solution for additional parking serving downtown. (See Appendix 1-A). This memorandum was created prior to the construction of the new public park locating in the southern lot, however a structure can still be designed to incorporate the new public park if desired.
- Investigating the potential for adding parking spaces on Depot Street by converting the street to a one-way street with angled on-street parking as part of a future Depot Street Design Study,
- Reserving options for future parking garage locations in the northern Downtown area. This can be done by creating a parking district by adopting a zoning amendment requiring a Planned Development to ensure future public parking is incorporated when the properties are redeveloped. New parking garages or lots should be within a quarter mile walking distance to Downtown, and be located in areas where localized parking is over 85% occupied. See Figure 3-7 for potential future parking structure locations.
- Shared parking and consolidated parking (parking garages) are preferred in urban downtown areas where real estate is optimal for commercial, office, and multifamily residential uses. As paying for these types of facilities could be rather costly, there are a financing options listed below:
    - A parking in-lieu fee could be reinstated for all new construction within the PDA that does not provide enough on-site parking per the Municipal Code standards in order to provide a funding source for future parking facilities.
    - If long term parklets within on street parking spaces are considered as an opportunity for restaurants/cafés to expand their outdoor square footage, the City could

collect a monthly rental fee for that space and those fees would go to a future parking fund.

Figure 3-7: Potential Future Parking Facility Locations



Prioritized Improvements

The Transportation Context Chapter contains improvement tools for each travel mode with a variety of improvements that the City could implement to enhance Station Area access and circulation. A preliminary set of improvements was selected based on the existing transportation system gaps. The improvements were prioritized into tiers, with Tier 1 including improvements to be implemented immediately or in the near term (1 to 2 years), Tier 2 including improvements to be implemented in the mid-term (2 to 5 years), and Tier 3 including long-term improvements (implemented in 5+ years). The results are presented in Table 3-1. *City staff will modify the list based on input from City planning commissioners and City Council members.*

Table 3-1: Prioritized Improvements

Improvement	Tier 1	Tier 2	Tier 3	Comments
Pedestrian Improvements				
Close sidewalk gap on Depot Street		X		Timing dependent on development of adjacent lot
Conduct before and after studies of in-pavement flashers on Monterey Road at Third Street	X			Data needed to select appropriate treatments at other locations such as Monterey/First and Monterey/Fifth
Create uncontrolled pedestrian crossing policy	X			
Enhancement to railroad crossings consistent with Quiet Zone Goals		X		Quiet Zone pedestrian crossing enhancements should be revisited once the CHSR Authority chooses a preferred alignment.
Conduct a study to identify appropriate pedestrian crossing treatments on Main Avenue at Depot Street/McLaughlin Avenue	X			To be conducted as part of the Depot Street study. Pedestrian counts and other data would be needed
Bicycle Improvements				

Table 3-1: Prioritized Improvements				
Improvement	**Tier 1**	**Tier 2**	**Tier 3**	**Comments**
Install bicycle improvements at Monterey Road and Main Avenue	X			See Figure 3-4
Install bicycle improvements at Monterey Road and Dunne Avenue	X			See Figure 3-5
Evaluate on-street parking on Depot Street – consider prohibiting parking in select locations		X		To be considered as part of the Depot Street study.
Close bicycle lane gap on Depot Street		X		Timing dependent on development of adjacent lot
Add second stripe to bicycle lanes on Dunne Avenue, Main Avenue, Depot Street, and Monterey Road		X		This will reduce incidence of parked vehicles encroaching into bicycle lanes
Add green paint to transition zones with new bicycle lane installations		X		This will better alert drivers of bicyclists and delineate their travel paths
Install buffered bicycle lanes on Monterey Road between Main Avenue and Dunne Avenue			X	Dependent on completion of Hale Avenue extension
Transit Improvements				
Work with Caltrain to adjust schedules	X			
Work with Caltrain and VTA to maintain track crossing with double tracking project		X		Dependent on timing of preferred alignment chosen by CHRS Authority and the double tracking project
Create public outreach program to increase Caltrain riders	X			
Work with TAMC to extend station platform	X			City currently working with TAMC
Explore a community shuttle bus program or increased TNC service	X			

Table 3-1: Prioritized Improvements				
Improvement	**Tier 1**	**Tier 2**	**Tier 3**	**Comments**
Roadway Improvements				
Conduct Depot Street Study	X			The study would address future role of Depot Street, considering future parking facilities, and pedestrian crossings at Main and Dunne
Study realignment of Depot Street with Church Street		X		To be conducted in conjunction with redevelopment of Hale Lumberyard site and Depot Street study
Parking Improvements				
Enforce two-hour parking limits	X			To free up prime spaces for customers
Extend time limits in parking garage	X			To allow long-term parking
Implement parking marketing and wayfinding program	X			To increase utilization of parking garage
Work with businesses on a valet parking program		X		To alleviate localized parking shortages
Reinstate parking in-lieu fees		X		To provide funding for parking improvements
Work with VTA to retain public park and ride lot for the Transit Center	X			
Reserve options for future parking locations in the north Downtown area and conduct study		X		See Figure 3-7