

MAY 2017

MOUNTAIN VIEW TRANSIT CENTER

MASTER PLAN

Executive Summary

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Table of Contents

EXECUTIVE SUMMARY	I
INTRODUCTION.....	1
CASTRO STREET GRADE CROSSING.....	5
CALTRAIN STATION IMPROVEMENTS	7
PEDESTRIAN AND BICYCLE FACILITIES	8
BUSES, SHUTTLES, ON-DEMAND VEHICLES, AND PICK-UP/DROP-OFF	11
AUTOMOBILE PARKING	13
CENTENNIAL PLAZA.....	14
OFF-SITE IMPROVEMENTS.....	15
JOINT DEVELOPMENT	15
ITEMS FOR FURTHER REFINEMENT	17
COST AND PHASING OF MASTER PLAN ELEMENTS	18
NEXT STEPS.....	19



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Introduction

The Mountain View Transit Center (MVTC) is a gateway to Downtown Mountain View, providing access to the regional transportation network for the city's residents and a key transfer point for employees in Mountain View and the greater Silicon Valley area. It accommodates over 10,000 distinct trips per typical weekday, with services including Caltrain, Santa Clara Valley Transportation Authority (VTA) light rail and bus routes, and private company shuttles. The existing transit center configuration is depicted in Figure 1. Employment growth in Mountain View and surrounding cities has been paralleled by growth in Caltrain service. The existing transit facility and the adjacent Castro Street at-grade rail crossing have been overloaded by demand for use of the facility. In coming decades, use of the facility is expected to double, to over 20,000 distinct trips per weekday. Improving the Transit Center's facilities, and access to and from them, offers a unique opportunity for Mountain View to enhance mobility for its residents and support the growth of sustainable – i.e., non-single-occupant auto -- transportation modes.

The City embarked on the Transit Center Master Plan to establish a vision that not only expands and integrates the various transportation elements, but creates a landmark facility that supports a thriving greater Downtown now and for the foreseeable future. Providing for continued growth in transit services, flexibility to handle the fast-paced evolution of transportation and mobility trends, establishing a future configuration for the north end of Castro Street, and guidance for leveraging investment in transit-oriented development are key ingredients. The Master Plan is not a final, definitive blueprint for the facility. However, it is a major step in the process of discussion and evaluation with residents, transit center users, the landowner Caltrain, a major transit services provider (and potential funding partner) VTA, and the local real estate development community. It establishes direction for the larger-scale issues that need to be addressed to support future funding and more detailed planning, design, and negotiations among the stakeholders.

The Master Plan process began in December 2015 and had two phases. The first focused on identifying a community-supported, safe, and effective reconfiguration for Castro Street where it currently crosses the Caltrain tracks. The existing at-grade rail crossing results in significant congestion and delays for vehicles. It also presents a barrier for hundreds of pedestrians and bicyclists attempting to access the Transit Center, Downtown Mountain View, Moffett Boulevard, and points north. To address this problem, the Master Plan recommends re-directing Castro Street to Evelyn Avenue, connecting to Shoreline Boulevard. This configuration is similar to conditions at other peninsula downtowns, including Burlingame, San Carlos, and Sunnyvale. This plan also provides a grade-separated pedestrian and bicycle undercrossing of the rail tracks and Central Expressway, and a more direct and seamless connection for these travel modes to Moffett Boulevard, neighborhoods and employment centers to the north, the Transit Center, and Downtown.

The second phase focused on identifying the transit-, pedestrian-, and bicycle-supportive facilities needed to serve continued growth in Transit

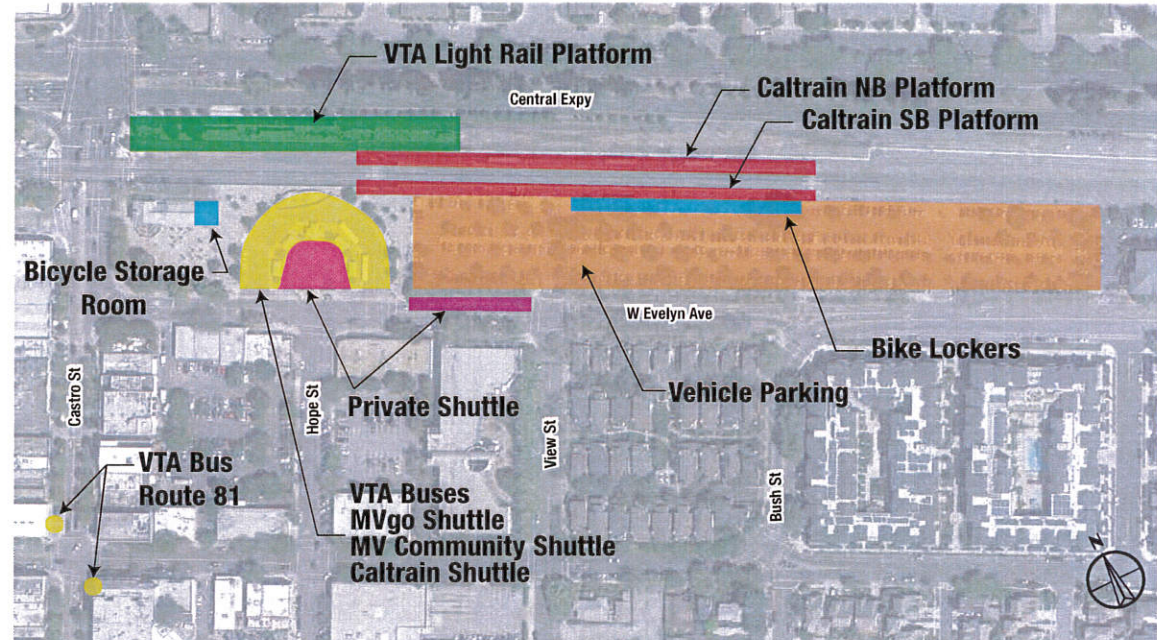


Figure 1 - Existing Mountain View Transit Center Site

Center use. These include high-quality bike parking, pedestrian and bicycle pathways, enlarged bus facilities, public spaces, transit-supportive retail, and lengthened rail platforms. The Master Plan also preserves opportunities to adapt to future transportation needs. The Transit Center is envisioned as a hub of activity for Mountain View, serving as the nexus of mobility for the City and an active public place integrated into thriving Downtown Mountain View. It will both expand the reach of Downtown Mountain View and support the growth of its existing and new businesses by improving local and regional access and connectivity.

Both phases of the Master Plan included extensive outreach and coordination with major stakeholders, including Mountain View businesses, local residents, Caltrain, VTA, the County of Santa Clara Roads and Airports, and the Mountain View Transportation Management Association. The project included three community open houses, a number of updates to local business groups, four City Council Study Sessions, updates to the bicycle and pedestrian

advisory committee, and numerous meetings with transit and roadway stakeholders. Input was incorporated into the Master Plan to provide a community asset that is effective for all users and the local community.

This Executive Summary summarizes the various components of the Master Plan. Master Plan elements were based on a detailed understanding of existing Transit Center conditions, projections of future Transit Center needs, and extensive community and stakeholder input. While major Transit Center, Castro Street, and Central Expressway components are identified and described in detail in this document, other components will need to be further explored in future design development, stakeholder involvement, and community decision-making. These components are also identified, and all components will need to undergo some level of refinement with further design, environmental analysis, and stakeholder input.



Plan Summary

Table 1 is a comparison of the Existing Transit Center and the Master Plan concept. The Transit Center Master Plan increases intermodal transportation facilities, public spaces, parking supply, and provides development opportunities (subject to final land use plans and developer proposals).

Figure 2 depicts the existing modes of access of Caltrain riders accessing and egressing the Mountain View Transit Center. As shown in the figure, there is a wide distribution in mode of access between auto, bicycle, pedestrian, and bus/shuttle modes.

Figure 3 is the Mountain View Transit Center Master Plan Concept.

Figure 4 is a cross-section depiction of the Mountain View Transit Center Master Plan Concept.

Table 1 - Comparison of the Existing Transit Center and the Master Plan Concept

ELEMENT	Existing Station	Master Plan Concept
Plaza	17,000 Sq Ft	40,000 Sq Ft
Bus, Shuttle and Pick-up/Drop-off Curb	800 Ft	2,800 Ft
Vehicle Parking Spaces	340	650-700
Development Opportunity Space	-	TBD
Caltrain Platform Length	600'	700'
Bicycle Parking Spaces	116	800

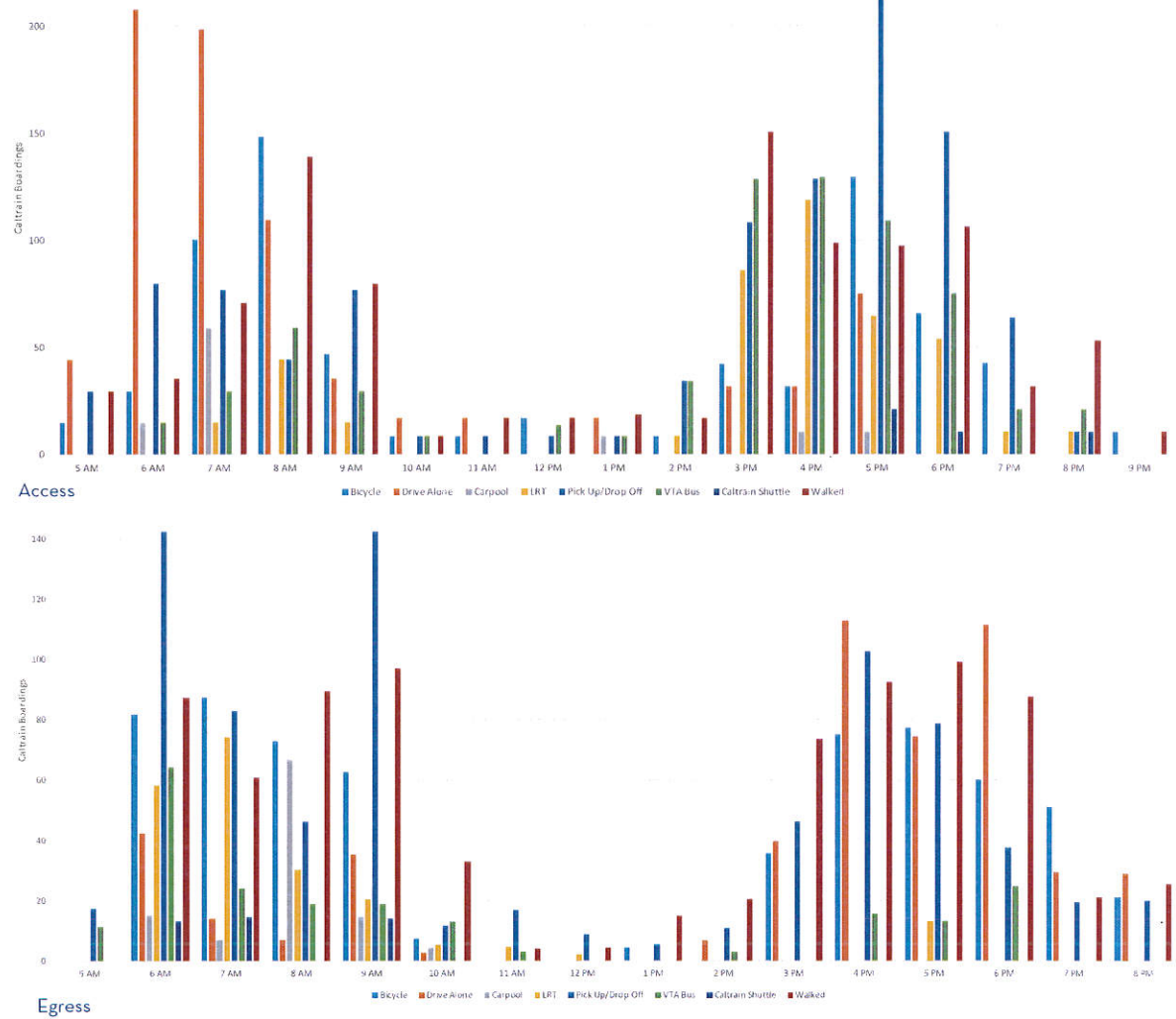


Figure 2: Weekday Access/Egress Mode of Caltrain Boardings at MVTC

MOUNTAIN VIEW TRANSIT CENTER MASTER PLAN

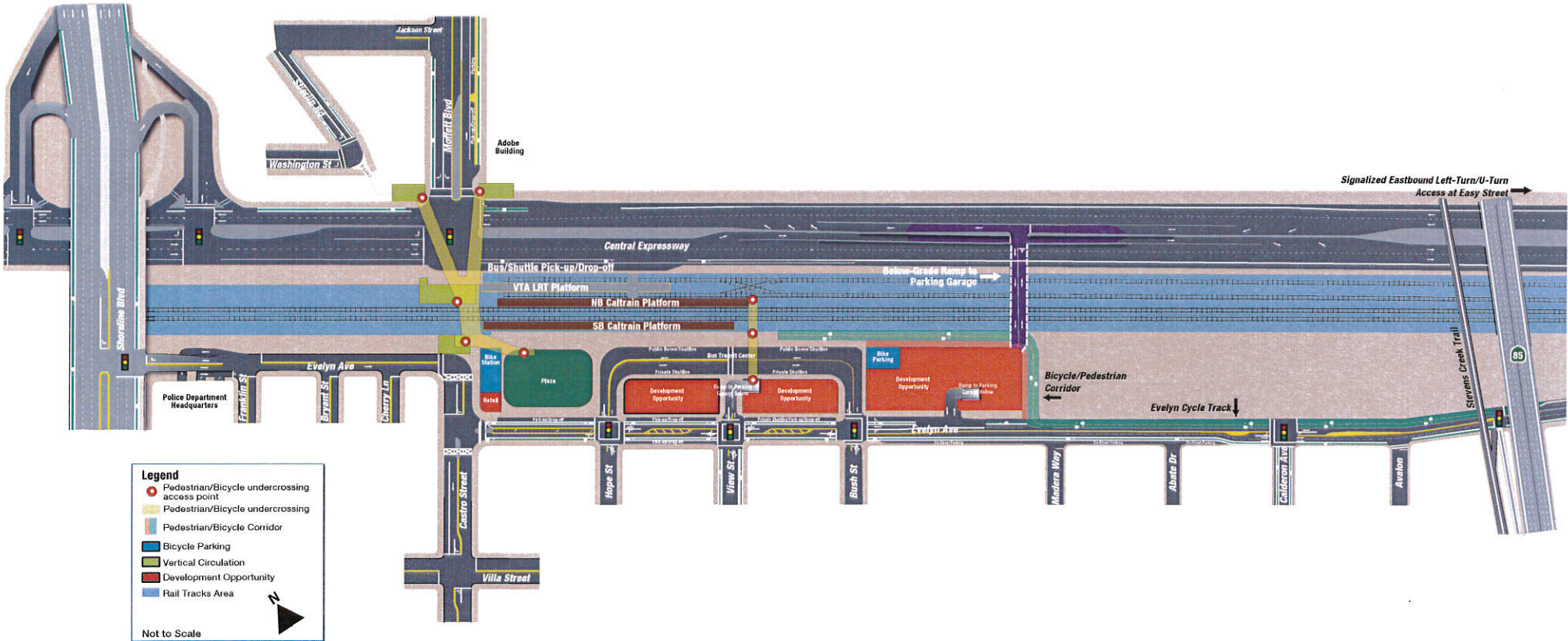


Figure 3 - Mountain View Transit Center Master Plan Concept

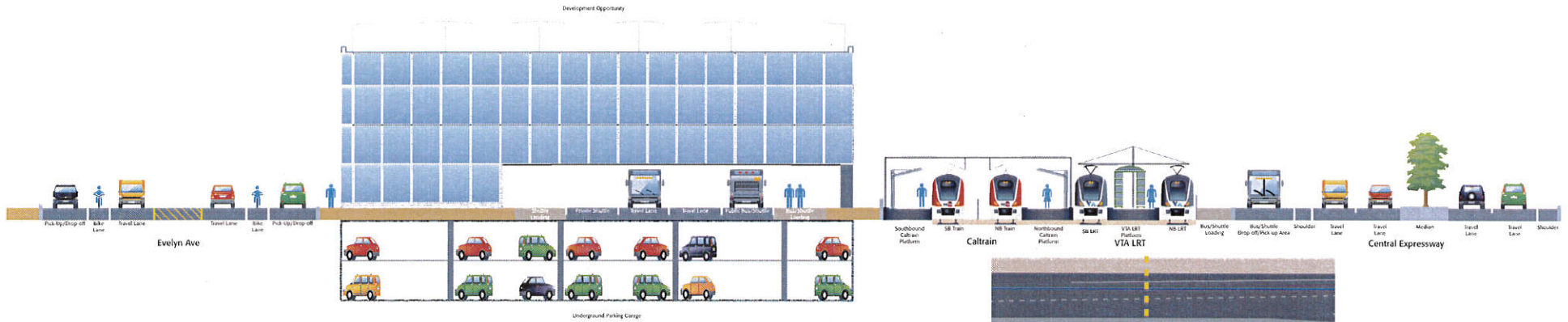


Figure 4 - Mountain View Transit Center Master Plan Concept Cross-Section



Castro Street Grade Crossing

Planned doubling of peak hour rail crossings of Castro Street with Caltrain electrification and High-Speed Rail will further limit vehicle access across the current track crossing, while increasing barriers to pedestrian and bicycle movements. Castro Street's role in providing auto access to Downtown Mountain View has diminished over the years. Traffic volumes in the evening peak hour are down 15 percent from early 2000 highs, and are currently at their lowest levels in at least 15 years, even with the current thriving activity in Downtown. Based on traffic data collection performed for the Master Plan, Castro Street serves as the entry point to Downtown for only 13 to 16 percent of autos (weekday and weekend, respectively). Emergency services avoid the Central Expressway and Castro Street/Moffett Boulevard intersection due to congestion and unpredictability associated with the train crossings. These data points point to a reduced role for Castro Street in serving as an access point to Downtown Mountain View.

The Master Plan process evaluated several grade-separation alternatives for Castro Street, including lowering the grade of Castro Street, lowering the grade both of Castro Street and Central Expressway, and lowering the grade of the rail tracks, as well re-directing Castro Street to Evelyn Avenue and connecting to Shoreline Boulevard. Lowering Castro Street was evaluated in detail. It would require multi-year closure of the 100 Block of Castro Street for construction, and the ultimate reconfiguration would significantly diminish the character of the pedestrian environment and the desirability of outdoor eating spaces along Castro Street. Due to engineering constraints, significant costs, and the significant and extended local disruption associated with changing the profile of Castro Street or the rail tracks, re-directing Castro Street vehicle traffic and closing the grade crossing to vehicles was identified as the preferred alternative by the community and the City Council.

The recommended Master Plan Concept includes the following key, circulation-related elements:

- **Re-Direct Castro Street at West Evelyn Avenue** – and modify the Evelyn Avenue/Castro Street intersection to allow for left-turns from southbound Castro to eastbound Evelyn Avenue and from northbound Castro to westbound Evelyn Avenue. This will re-connect Evelyn Avenue as an east-west through-street, reducing reliance on Villa Street, and allows the portion of Castro Street adjacent to the Transit Center to be more pedestrian-oriented. (see Figure 5 - Plan view of intersection of Shoreline Blvd/West Evelyn and Castro/Evelyn)
- **Provide a vehicle ramp from West Evelyn to Shoreline Boulevard** – creating a new partially signalized intersection with direct access to Evelyn Avenue from Shoreline Boulevard and from Evelyn Avenue to northbound Shoreline Boulevard. This would also create a route linking Central Expressway to the Transit Center and Downtown via Shoreline Boulevard. Castro traffic currently crossing to Moffett Boulevard or the Expressway would be re-routed to Shoreline via the new ramp and some would experience a slight detour. The ramp would be

designed to maintain current access to the Police-Fire Administration Building and the on-street parking along West Evelyn Avenue. (see Figure 5 - Plan view of intersection of Shoreline Blvd/West Evelyn and Castro/Evelyn)

- **Install pedestrian and bicycle undercrossings** – between the northwest and northeast corners of the Moffett Boulevard/Central Expressway intersection and the Transit Center and Downtown. Currently there are over 300 pedestrian and bicycle at-grade crossings in the peak hour, and new undercrossings would pass beneath both Central Expressway and the rail lines, avoiding these significant barriers, improving safety, and reducing travel time. The undercrossings will include separate two-way bicycle and pedestrian facilities in a well-lit, 25-foot wide space. Ramps, stairs, and/or elevators will be provided at each access point, with all stairs fitted with bike channels. Elevators will be provided only where space constraints make ramps infeasible. (see Figure 7 - Depiction of Ped and Bike Undercrossing Beneath Central and Rail Tracks and Figure 8 - Example Rendering of Pedestrian and Bicycle Undercrossing)
- **Enhance the Moffett Boulevard/Central Expressway intersection** – Intersection movements would no longer be pre-empted by each arriving or passing train and north-south volumes would be reduced, greatly improving flow on Central Expressway, lessening auto delay through the intersection, and allowing roadway space to be re-dedicated to other travel modes. Reduced traffic volumes would also allow improved pedestrian crossings and bike lanes along Moffett Boulevard. (see Figure 6 - Plan View of Intersection of Moffett Blvd/Central Expy)
- **Leverage the area vacated by the existing Castro Street grade-crossing** – to improve and enlarge adjacent public spaces, including Centennial Plaza and transit-supportive facilities such as bikeways and expanded rail transfer and pedestrian circulation and waiting areas. These improvements are described in more detail later in the Summary. (see Figure 9 - Rendering example of Vertical Circulation Plaza providing access from undercrossing to VTA LRT and Caltrain platforms)

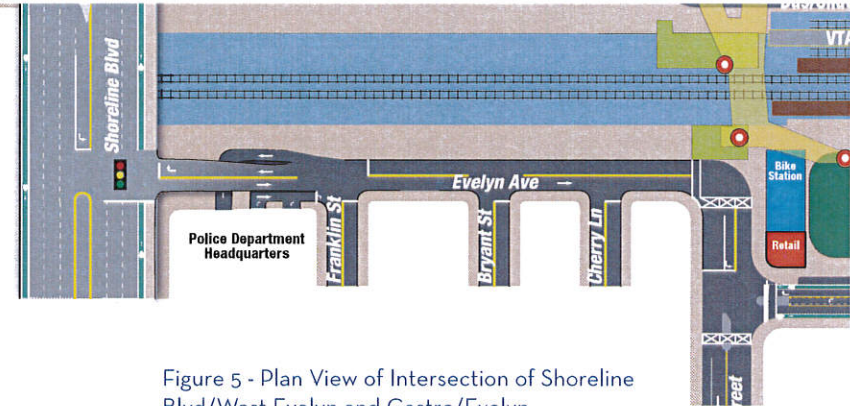


Figure 5 - Plan View of Intersection of Shoreline Blvd/West Evelyn and Castro/Evelyn

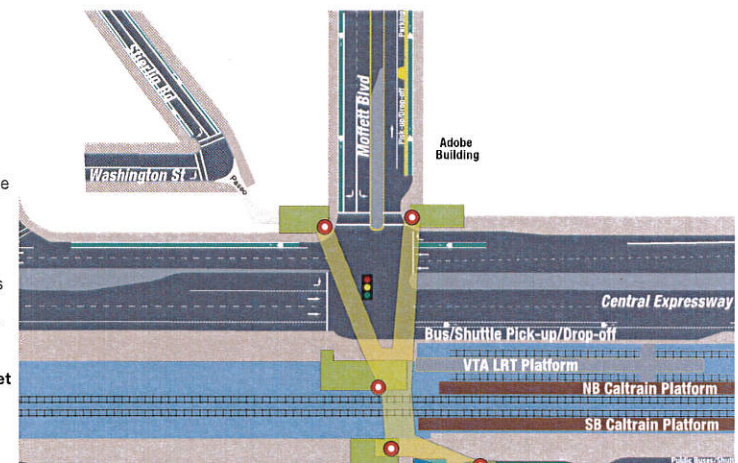


Figure 6 - Plan View of Intersection of Moffett Blvd/Central Expy

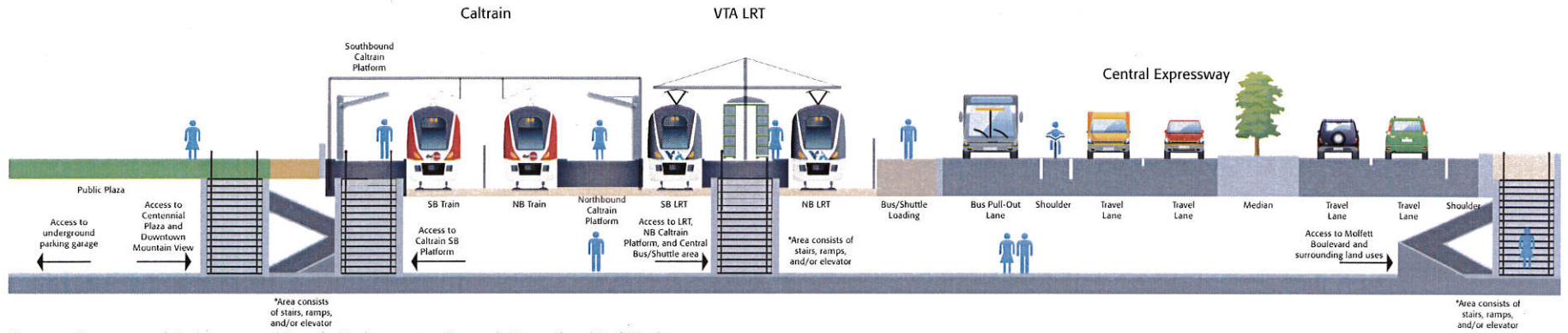


Figure 7 - Depiction of Pedestrian and Bicycle Undercrossing Beneath Central and Rail Tracks

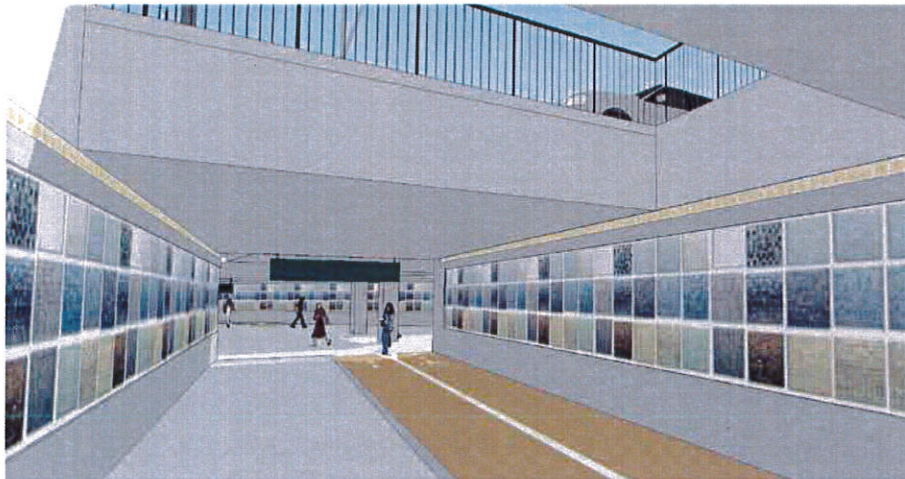


Figure 8 - Rendering example of Pedestrian and Bicycle Undercrossing



Figure 9 - Rendering example of Vertical Circulation Plaza providing access from undercrossing to VTA LRT and Caltrain platforms.

Caltrain Station Improvements

Today, the Caltrain station sees over 4,000 weekday daily boardings, making Mountain View the third busiest station in the entire regional system. Caltrain is currently undertaking a project to electrify the line to improve capacity, reliability, and travel time, allowing for more and longer trains along the line. Additional service and longer trains require additional platform capacity at each station, and the Master Plan incorporates the following improvements:

- **Lengthen the northbound and southbound platforms** – by 100 feet to a total 700-foot length, meeting current Caltrain standards.
- **Widen Caltrain platforms** – where feasible, consistent with the current 20-foot platform width standards. The current platform is sub-standard, creating congestion and capacity issues. Widening may be limited in places along the northbound platform by the existing light-rail catenary poles and the grade difference between the light rail and Caltrain trackways.
- **Shift both platforms west** – to align with Castro Street, providing direct connectivity to Downtown and the pedestrian undercrossing beneath Central Expressway and the tracks. This shift will also provide a primary entrance point to the station at the foot of Castro Street. (see Figure 10 - *Depiction of Lengthened Caltrain Platforms and Shift to West, Closer to Castro*)
- **Eliminate all at-grade track crossings for pedestrians** – to be replaced by undercrossings at both ends of the platform. Safety will be further improved with the addition of a fence to prevent any crossings of the trackway. The west undercrossing would link to the Central Expressway undercrossing noted above.

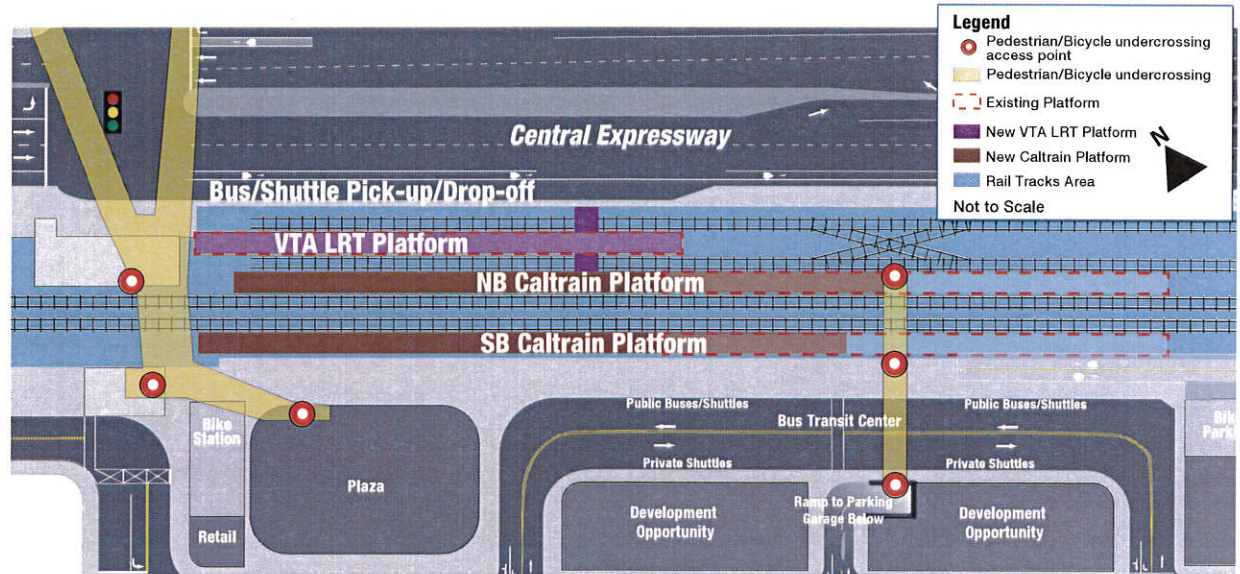


Figure 10 - Depiction of Lengthened Caltrain Platforms and Shift to West, Closer to Castro



Figure 11 - Rendering example of Caltrain Platform access



Pedestrian and Bicycle Facilities

Only approximately 20 percent of Transit Center users arrive via a private automobile. Approximately half of the Caltrain riders alighting the train at the Mountain View Station in the PM peak depart via bicycle or on foot. The share of trips associated with the private automobile is expected to continue to drop in the coming years as Mountain View enhances its citywide bicycle and pedestrian infrastructure. However, constraining the use of alternatives modes, bike parking is severely constrained at the Transit Center, with all Caltrain bike lockers and bike racks full. Riders currently attach bikes to poles, trees, and other available vertical objects throughout the area. With the number of Caltrain bike patrons surging and on-train bike capacity constrained, adequate bike parking facilities at the Transit Center are paramount. The Master Plan includes a number of efforts to improve pedestrian and bicycle access to and through the Transit Center area. These include:

- **Provide bicycle and pedestrian undercrossings** – of Central Expressway and the rail tracks (see previous section). Undercrossings and vertical circulation will directly connect Transit Center uses, Downtown Mountain View, the Moffett Boulevard area, the Stierlin Road bike corridor, and Central Expressway bike facilities. The Central undercrossing will be 25-feet wide to allow for separated bicycle and pedestrian facilities. (see **Figure 14 - MVTC Final Concept - Bicycle and Pedestrian Facilities**)
- **Create a trackside bicycle and pedestrian corridor** – extending from a Caltrain undercrossing at the east end of the platforms to Evelyn Avenue at the far eastern end of the Transit Center site. The corridor will not have any conflicting traffic movements, allowing for a continuous and uninterrupted flow of bicycles from the proposed Evelyn Avenue Cycle Track (see below) to the transit facilities. The corridor will consist of a 14-foot two-way bicycle path, separated via a 2-foot buffer from a 10-foot pedestrian pathway. (see **Figure 12 - Cross-Section of Bicycle/Pedestrian Corridor**)
- **Incorporate a Cycle Track along Evelyn Avenue** – a two-way cycle track along the north side of Evelyn from the eastern end of the Transit Center to the Stevens Creek Trail. One westbound traffic lane will be converted to the cycle track, with enhanced bicycle and pedestrian crossings at the SR-85 ramp intersection. (see **Figure 13 - Graphic Rendering of Protected Bike Lane Configuration**)
- **Extend Evelyn Avenue bike lanes to Castro Street** – The existing bike lanes end at Hope Street, and will be continued to Castro Street so that bicyclists have the option to: a) stay on Evelyn Avenue to connect to Downtown and/or the Central Expressway bicycle and pedestrian undercrossing, or; b) shift to the trackside bicycle and pedestrian corridor. Along the edge of the Caltrain platform, the trackside corridor would become a mixing zone to allow pedestrians access to and from the bus transit area, making on-street bike lanes more desirable for through-travel and connection to the Central Expressway undercrossing.

- **Provide two major bike parking facilities** – one at either end of the Transit Center site. At the west end, a BikeStation would be incorporated into an enlarged Centennial Plaza. BikeStations provide additional bike-related services, such as staffed and secure valet parking, repair tools, and/or bike-supportive retail space. Valet parking not only provides a higher level of service to riders, but also allows for maximizing parking efficiency for bicycles. Similar BikeStations have been implemented in San Francisco, Berkeley, and Oakland, and are planned for additional Caltrain- and BART-line locations. The east end parking facility located along the bicycle/pedestrian corridor near the platforms, would be unstaffed with secured key-card access, a much more efficient approach than locker configurations. An estimated need for 8,000 square feet of on-site bike parking is accommodated in the Master Plan. This will support nearly 800 bikes, compared to 116 bike lockers and various rack space provided today. (see **Figure 14 - MVTC Final Concept - Bicycle and Pedestrian Facilities**)
- **Accommodate potential future BikeShare facilities** – MVTC was previously the site of a Bay Area BikeShare kiosk and rack with 23 bicycles. That regional program has since been modified and there are no longer any BikeShare sites in the City of Mountain View. However, the Master Plan would preserve space for a bikeshare station if the program returns in the future.

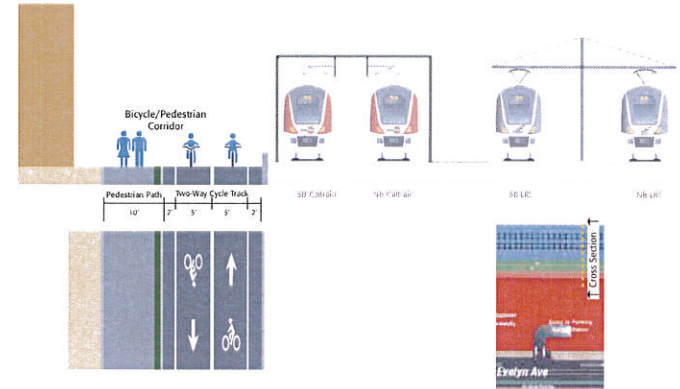


Figure 12 - Cross-Section of Bicycle/Pedestrian Corridor



Example Bike Station Facility



Figure 13 - Graphic Rendering of Protected Bike Lane Configuration

MOUNTAIN VIEW TRANSIT CENTER MASTER PLAN

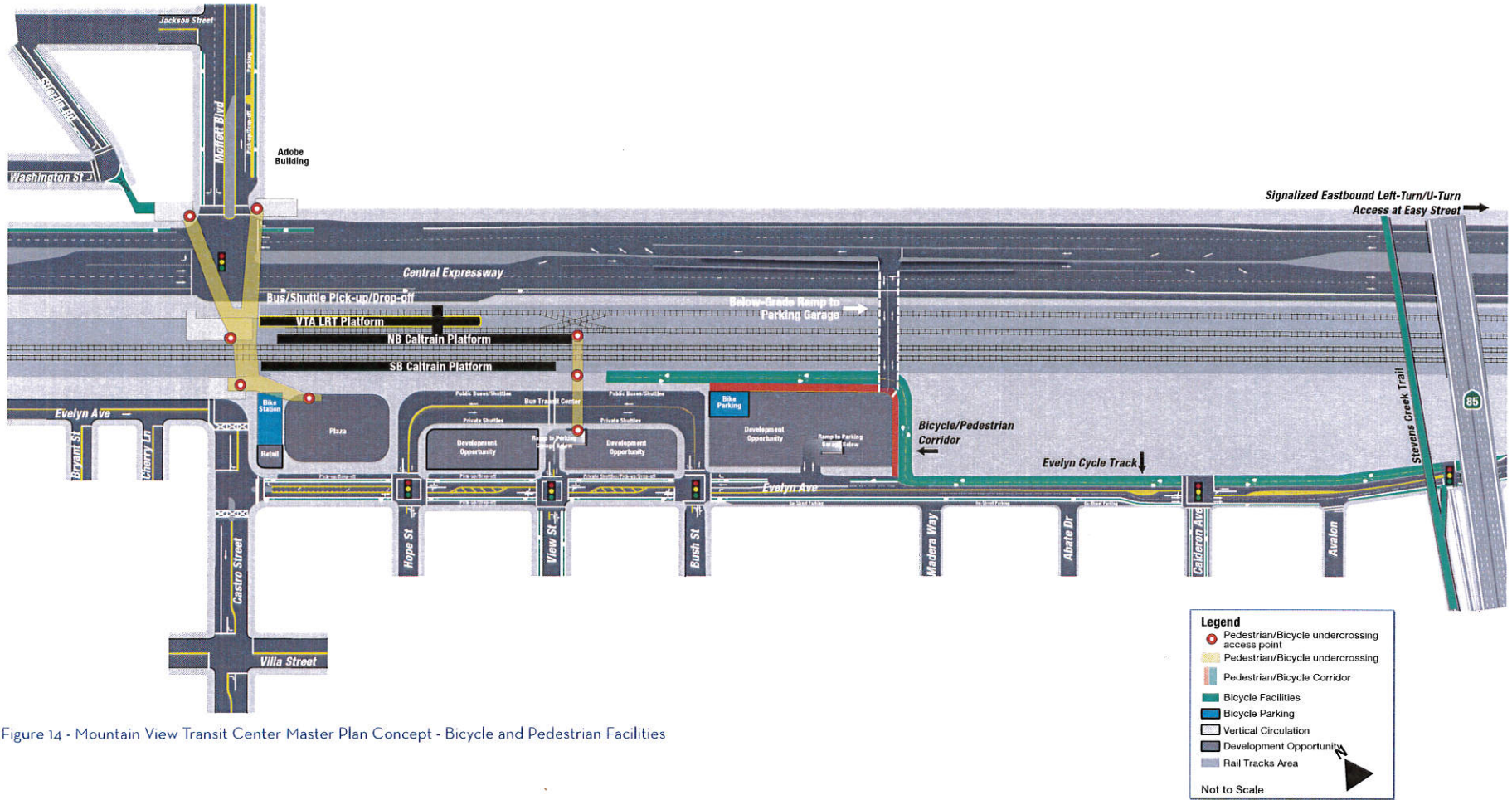


Figure 14 - Mountain View Transit Center Master Plan Concept - Bicycle and Pedestrian Facilities



Figure 15 shows pedestrian and bicycle paths to the Caltrain and light rail platforms from transit center facilities, Downtown Mountain View, and nearby uses.

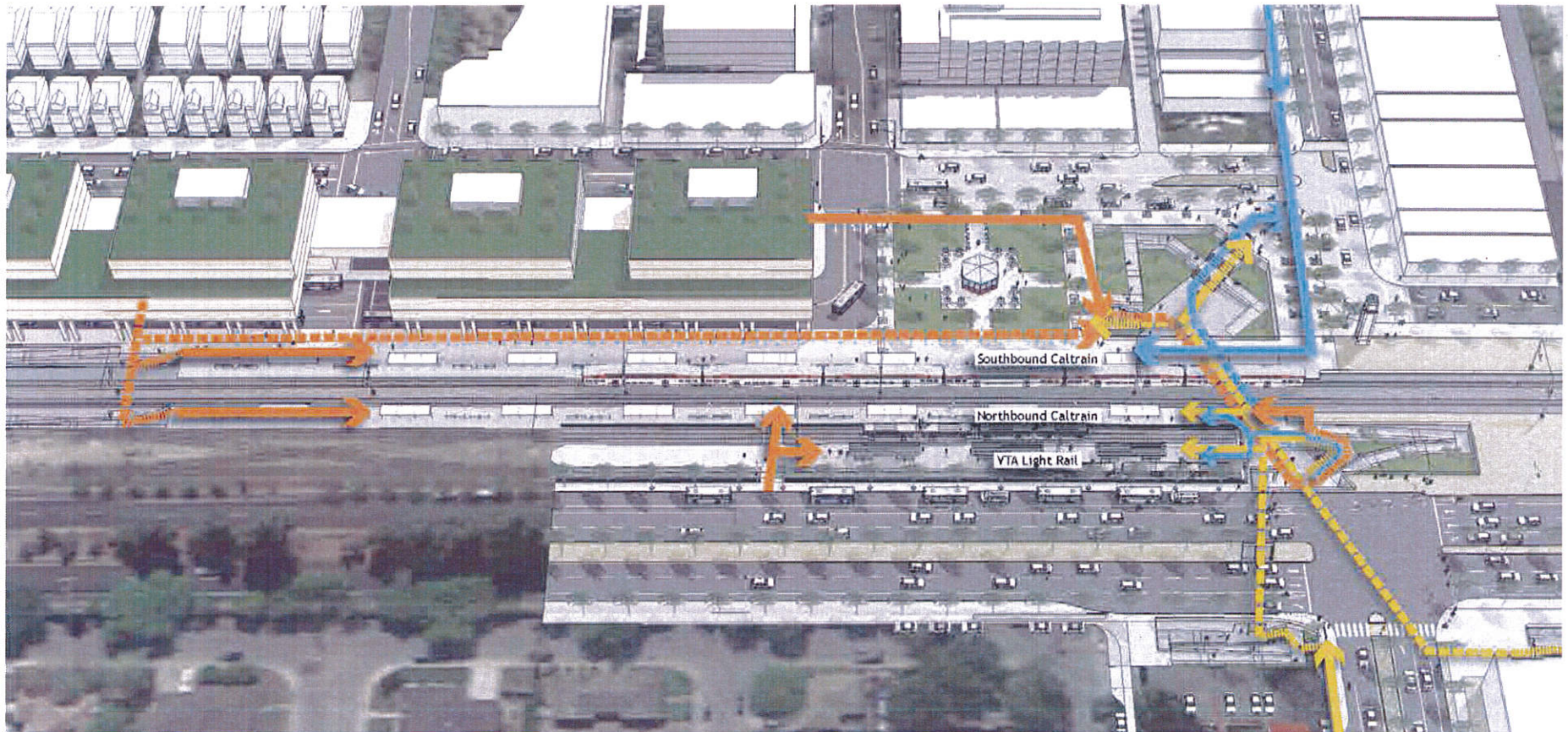


Figure 15 - Graphic Rendering Examples of Bicycle and Pedestrian Circulation

Buses, Shuttles, On-Demand Vehicles, and Pick-Up/Drop-off

One of the primary issues at the existing Transit Center is the lack of facilities to support recent changes in mobility services. The rise in shuttle activity at the Transit Center, both publicly- and privately-operated, has left the Transit Center strained in the peak periods. There are currently 109 public shuttle bus trips and at least 148 private shuttle bus trips to/from the Transit Center each weekday. This number is only expected to increase over time as both area employment and transit use continues to grow. A key component of the Master Plan is space for shuttles to berth and safely and efficiently pick-up and drop-off passengers. The swift rise of on-demand Transportation Network Companies (TNCs, e.g. Uber and Lyft) has also strained the Transit Center. There is currently no specified pick-up/drop-off area for these autos. As a result, they circulate through the parking lot, increasing congestion and conflicting with other vehicle movements. Providing a dedicated space for pick-up/drop-off activities is a critical component of the Master Plan.

Transit Center-specific elements included in the Master Plan are:

- **An enlarged linear bus transit facility** – with flexible curb space adjacent to the Caltrain platform. The bus transit facility would be accessed via signalized intersections at Evelyn Avenue/Hope Street and Evelyn Avenue/Bush Street. Approximately 1,200 linear feet of off-street bus and shuttle space will be provided in this area, with the curb space flexible to allow for assignment based on evolving needs. Proposed Master Plan modifications to the Castro Street/Evelyn Avenue intersection allows buses and shuttles access to the Transit Center via Evelyn Avenue and Castro Street, reducing use of Hope and Villa Streets. The bus transit center will include shelters, wayfinding, and bus information signage. Connecting bicyclists and pedestrians would have direct access to the southbound Caltrain platform, and undercrossing access to the northbound Caltrain platform and Moffett Boulevard. (see Figure 16– Mountain View Transit Center Master Plan Concept - bus, shuttle, and pick-up/drop-off).
- **A bus and shuttle pullout along Central Expressway** - to provide convenient pick-up and drop-off without entering Downtown Mountain View. It is anticipated that shuttle routes to and from the north, particularly from the North Bayshore area, will utilize up to 500 feet of curb space. Approximately 40 percent of existing private shuttles and one or more MVgo routes are estimated to have more efficient route alignments using this Central Expressway pick-up/drop-off area.

The location for this pullout included in the Master Plan is located just east of the Moffett Boulevard intersection, adjacent to the Central Expressway shoulder and existing bike facility. VTA buses currently stage in this area for events at Levi's Stadium, blocking the shoulder and bike through-access. Lane widths and the median along Central Expressway would be narrowed and eastbound traffic lanes shifted

to accommodate the space needed for the bus/shuttle pullout, bike lane, and frontage area sidewalk. Bus and shuttle patrons would access the Transit Center and Caltrain platforms via the Central Expressway undercrossing and/or an at-grade crossing at the light rail tracks. In order to enhance circulation with the pullout, a new signalized turn opportunity for eastbound Central Expressway bus traffic (either via left-turn at Easy Street or a new signalized u-turn) is needed.

An alternative concept, retained pending further analysis, provides the pick-up/drop-off curb space just west of the Moffett Boulevard/Central Expressway intersection, separated by a traffic island from Central Expressway with an exit at the Moffett/Central Expressway traffic signal. County Roads and Airports staff has expressed concern that the exit would add to intersection volumes, replacing some of the traffic movements eliminated by re-directing Castro Street to Evelyn Avenue. In addition, this location is within Caltrain right-of-way and would require additional coordination and approval.

- **Pick-up/drop-off facilities** – Pullout space would be provided along the north side of Evelyn Avenue between Castro Street and Bush Street, and along the south side of Evelyn Avenue between Hope Street and View Street. Together, these areas would provide approximately 880 linear feet of pick-up/drop-off curb space. Portions of this space may be designated for use by taxis and TNCs, pending future demands. As pick-up/drop-off demands evolve over time, with continued growth of TNCs and the roll-out of autonomous vehicles, this curb space will allow the Transit Center to adapt to future needs. A curbside management plan, including signage, enforcement, and technology solutions, will need to be developed closer to implementation to allocate space in the most effective way. This may include identifying and/or signing designated pick-up or drop-off spaces for TNCs and taxis.

An additional option considered for curbside pick-up/drop-off space is on Moffett Boulevard in front of the Adobe Building. This location would allow some vehicles to avoid entering Downtown, with the Transit Center accessed via the bicycle and pedestrian undercrossing. Further investigation of impacts is needed to assess the viability of this option. (see Figure 16– Mountain View Transit Center Master Plan Concept - bus, shuttle, and pick-up/drop-off).



Source: MercuryNews.com



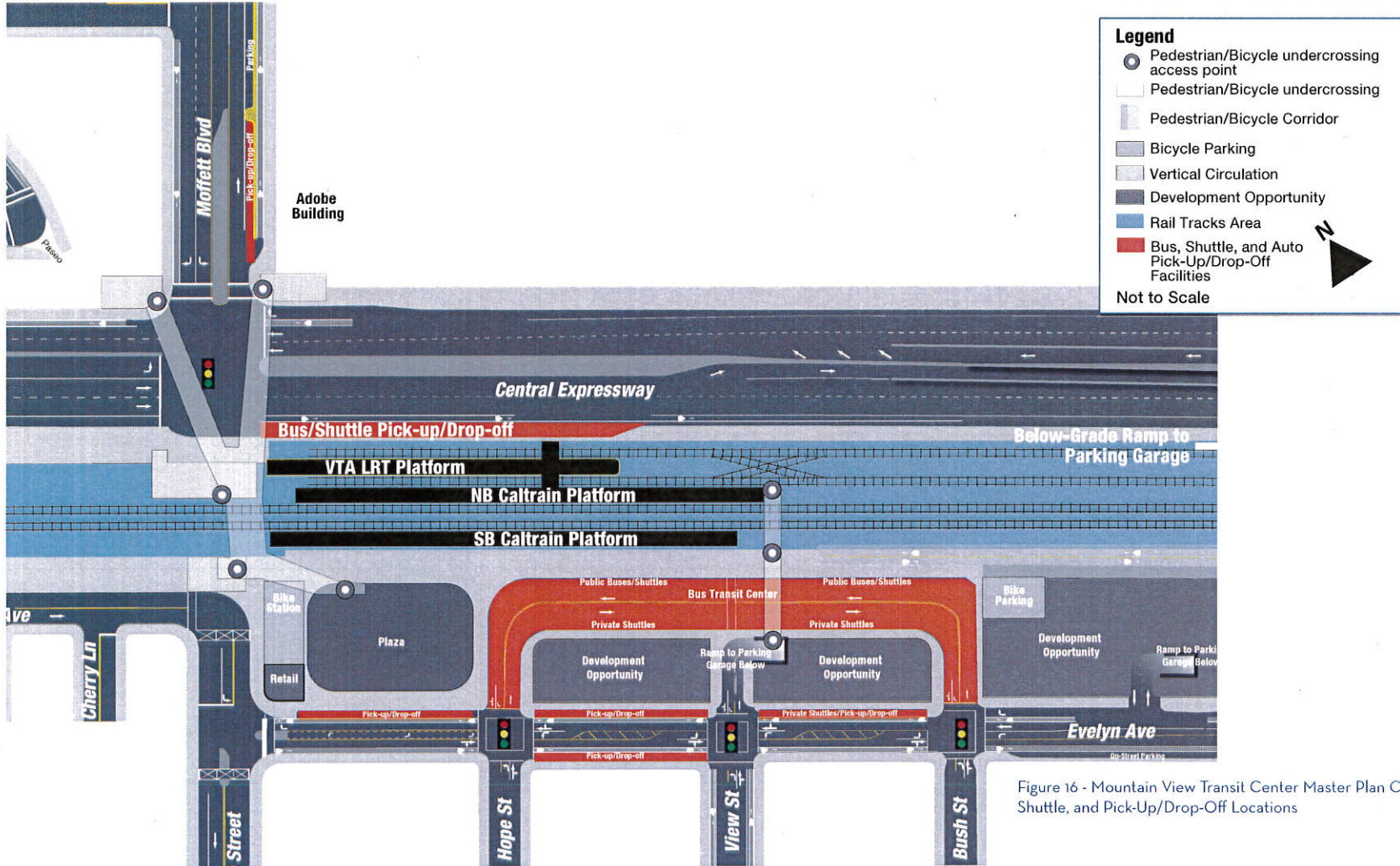


Figure 16 - Mountain View Transit Center Master Plan Concept - Bus, Shuttle, and Pick-Up/Drop-Off Locations

Automobile Parking

Parking demand currently far exceeds capacity at the Transit Center. The existing surface parking lot fills up shortly after 7 AM each morning, resulting in commute parking on nearby streets, including adjacent residential neighborhoods. It is estimated that current demand exceeds supply by roughly 200 vehicles each weekday. With the growth in alternative transportation options, future growth in parking demand may be curtailed. However, in order to reduce spillover parking impacts, the Master Plan includes additional on-site parking to serve existing Caltrain parkers. Downtown Mountain View also has parking challenges, as current surface parking lots are converted to new development and parking garages reach capacity. The Transit Center's proximity to Downtown - and the different peak demand periods for transit users and Downtown visitors - create an opportunity to provide parking shared by both types of users. Master Plan-recommended parking facilities include:

- **650 to 700-space underground parking garage** - This two-level, below-ground facility would encompass the entire Transit Center site east of the plaza area. The garage would include access points at a new signalized intersection at View Street and another access point to the east along Evelyn Avenue. The garage would provide approximately 550 spaces for weekday daytime use by Caltrain riders, with the remainder of the spaces available all-day for Downtown Mountain View uses. A future agreement with Caltrain would delineate provisions for shared use and responsibilities for operations and maintenance. Depending on the future proposed joint development plans (see subsequent section), the parking facility could provide for sharing with development needs. (see **Figure 17 - Graphic Representation of Below-Ground Garage Location**)
- **Underground garage connection to Central Expressway** - A ramp down to the garage would be considered in the median of Central Expressway, extending beneath the eastbound lanes of Central Expressway, the light rail tracks, and the Caltrain tracks. The underground access would connect sub-level 2 of the garage with both directions of travel on the Expressway. This access to the garage that would reduce the impact of parking-bound autos on Downtown Mountain View streets and intersections and could also benefit future joint development plans. (see **Figure 18 - Rendering of Garage Access from Central Expressway Median**)

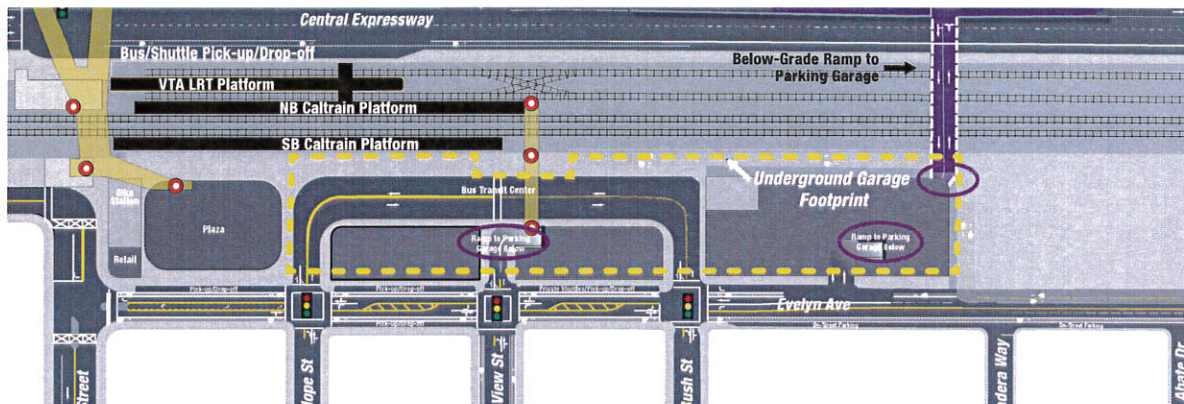


Figure 17 -Graphic Representation of Below-Ground Garage Location



Figure 18 -Rendering of Garage Access from Central Expressway Median



Centennial Plaza

Centennial Plaza currently contains approximately 17,000 square feet of public space, including ornamental paving, fixed bench seating, movable tables and chairs, and landscaping. It is bordered by the 4,400-square foot replica Depot whistle-stop building on the north, and plaza paving surrounding the VTA bus transit center to the east. The Depot building contains a small bike storage room, transit operator break facilities, and a wine purveyor. Centennial Plaza is considered by the community as an attractive space, but significantly under-utilized, despite its location between the busy Castro Street commercial district and the Transit Center.

In most public spaces, pedestrian use and activity is a function of context; e.g., active uses adjacent or within help create an active public space. By contrast, Centennial Plaza is somewhat cut off from existing activity along Castro Street, with planters along the perimeter limiting access into the space from adjacent streets. The Depot building does not provide the type or magnitude of uses needed to generate ongoing pedestrian activity. Traffic congestion at the adjacent Castro/Evelyn/Central Expressway intersection limits access and diminishes the appeal of the space. In general, the space does not currently provide a lively landmark that adds to the vitality of Downtown and the Transit Center.

The Master Plan recommends several potential elements for renovating Centennial Plaza as a Downtown gateway, including:

- Incorporating additional retail and commercial space, including a BikeStation (see previous section)
- Linking the space to new transit-oriented development adjacent to the east

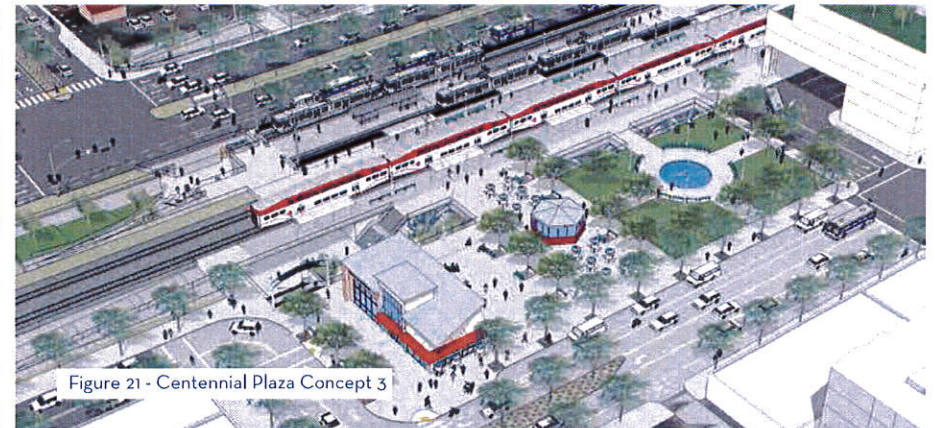
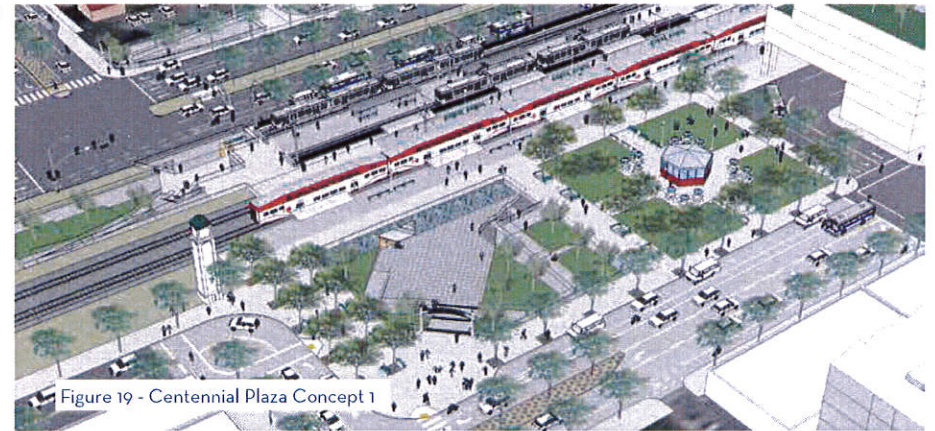
- Integrating connections to bicycle and pedestrian undercrossings
- Opening the perimeter to Castro Street and Evelyn Avenue
- Including additional amenities, and potentially increasing the space up to 40,000 square feet
- Providing public restrooms in addition to existing VTA operator restrooms and break area

- Providing a lower-level concourse that would connect the undercrossing, platforms, and plaza area, which may include retail and bike parking spaces.

(Several concepts for Centennial Plaza developed as part of this Master Plan are depicted in Figures 19-21)

The ultimate configuration of Centennial Plaza will need to reflect extensive community input and an in-depth design process beyond that conducted for the Transit Center Master Plan. However, initial design concepts explored by the Master Plan may warrant future consideration, including:

- Retaining the existing replica Depot building in its current location
- Relocating the existing Depot building to align with Castro Street to extend the Castro Street retail frontage to the site
- Replacing the existing Depot building with a more functional commercial building and/or additional public open space



Off-Site Improvements

The Transit Center improvements described above include various related improvements to surrounding streets to improve bicycle, pedestrian, and auto circulation. The need for off-site improvements was based on a detailed simulation and technical analysis of auto, bicycle, and pedestrian circulation with the Master Plan elements. It considers projected needs under both near-term and long-term (Year 2040) conditions. Off-site improvements included to support multi-modal circulation with the Master Plan elements include:

- New traffic signal at Evelyn Avenue/View Street
- Modified traffic signals at Evelyn Avenue/Hope Street and Evelyn/Bush Street
- Improved/relocated pedestrian crossings at Castro Street and Evelyn Avenue to improve connectivity to the Transit Center
- Modifications to the Franklin Street/Evelyn Avenue intersection to facilitate movements to/from the Evelyn Avenue ramp to Shoreline Boulevard
- New traffic signal for northbound traffic at Shoreline Boulevard/Evelyn Avenue, and modifications to the planned Shoreline Boulevard bike path to cross the intersection in a safe manner.
- Intersection improvements (may include signalization) at Villa Street/Franklin Street to mitigate impacts from redistribution of Castro Street traffic
- Reducing westbound Evelyn Avenue from two lanes to one lane between the SR 85 southbound on-ramp and Bush Street to provide for a two-way cycle track connection to the Stevens Creek Trail
- A new half-signal at Central Expressway/Easy Street, or mid-block along Central Expressway to provide routing options for bus/shuttle vehicles departing the Central Expressway pick-up/drop-off area.

Joint Development

The Mountain View Transit Center site is one of the more desirable development opportunities in Silicon Valley, with unmatched transit options, a single ownership, and proximity to a thriving Downtown Mountain View and attractive nearby neighborhoods. Transit-oriented development on the site could provide several benefits to the community and the implementation of the overall Master Plan vision, including:

- Transit-accessible employment space in traffic-congested Silicon Valley and/or residential areas
- Retail to expand and support the offerings of Downtown Mountain View
- Additional residential and/or employment population to fuel the Castro Street commercial district
- Opportunity for model sustainable development(s) given public land ownership
- Additional transit ridership, benefiting transit operations and funding
- Revenue opportunity to help fund Master Plan components

The Master Plan concept would preserve an at-grade footprint of approximately 70,000 square feet for transit-oriented development, with larger floor areas at upper levels extending over transit facilities such as the bus transit center, parking, and possibly even portions of the rail alignment (see **Figure 22 Mountain View Transit Center Master Plan Concept - Transit Oriented Development Opportunities**).

While the Master Plan includes initial concept ideas for joint development, future study and partnership with the development community will be required to assess the viability of these and other potential approaches. Considerations include the type, density, character, and height of development. As the primary land owner of the Transit center site, close coordination with Caltrain will be required throughout the project. The proposed Transit Center parking garage includes parking for Caltrain and Downtown patrons, and joint development would likely require additional parking below-grade or in an above-ground structure, as well as potential shared parking with the Transit Center. These are among the considerations that need to be examined subsequent to the Transit Center Master Plan as the joint development planning process goes forward.



Examples of recent transit-oriented developments in the Bay Area

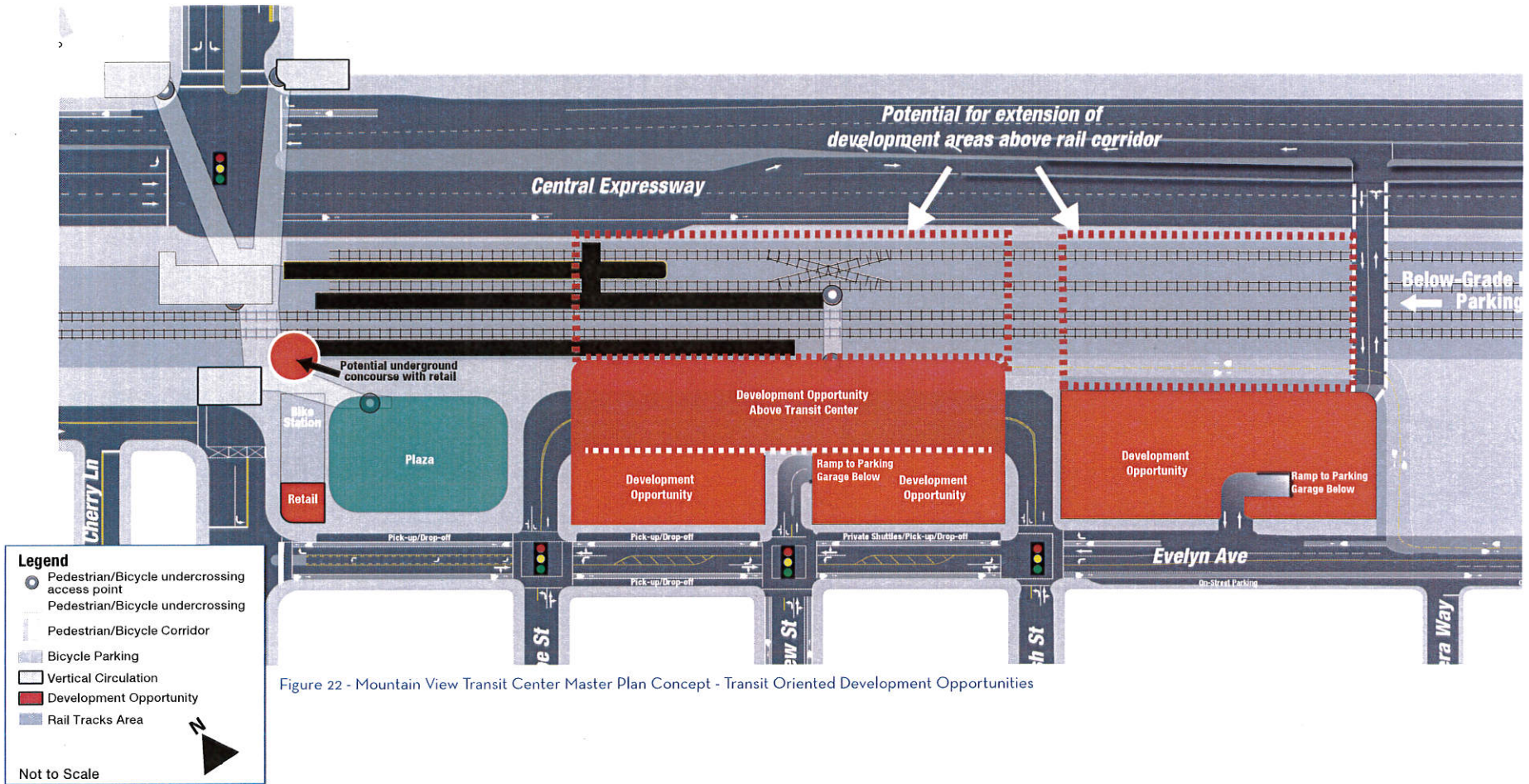


Figure 22 - Mountain View Transit Center Master Plan Concept - Transit Oriented Development Opportunities

Items for Further Refinement

The Master Plan establishes a vision for the overall configuration of the Transit Center and the space and sizing requirements of Transit Center facilities. There are additional, more detailed Transit Center items that will need community input, engineering development, and/or coordination with other entities in future project phases. In summary, these items include:

- Caltrain platform height** – Caltrain plans to transition to level boarding in the future. Existing platforms are 8 inches above top-of-rail and require a step up to board the train car. New train cars will allow for level boarding at a platform height of 25 inches above top-of-rail. High-speed rail is also planning for level boarding, but with a platform height of 45 to 51 inches above top-of-rail. To maintain flexibility, Caltrain is procuring vehicles that can achieve level boarding at both 25 inch and 51 inch heights, using separate door sets. The need to raise the platform height at the Transit Center to 25 inches may arise in coordination with future improvements along the Caltrain system. The timing is not known at this time, and further coordination with Caltrain will be required. In addition, further design development and coordination with both Caltrans and VTA will be required to identify final platform configurations.
- Joint development opportunity sites** – One of the first steps after adoption of the Transit Center Master Plan will be to engage the development community to identify opportunities for the site. Input on the feasibility of building above transit facilities, and the types and density of uses may refine the areas identified for joint development. Assessment of the financial feasibility of transit-oriented retail spaces may refine the configuration of Centennial Plaza and adjoining undercrossing facilities. (see Figure 22 - Mountain View Transit Center Master Plan Concept - Transit Oriented Development Opportunities)
- Centennial Plaza configuration** – Additional community input, concept development, and design development is needed to select and refine a plaza configuration. This should proceed in conjunction with joint development studies to provide a fully integrated and active public space.
- Parking supply** – Approximately 650 to 700 parking spaces in two underground levels are a component of the Master Plan and additional parking is likely to be needed to support joint development. The amount of that parking will be dependent on the type and scale of that joint development and City parking requirements. Coordination with potential developers will be required to assess and refine parking supply and configuration.
- Central Expressway pick-up/drop-off** – The Master Plan recommends a bus and shuttle pick-up/drop-off area along Central Expressway. Further technical analysis and coordination with County staff will be required to identify the optimal configuration and related access improvements along Central Expressway.
- Vertical circulation** - Design development of vertical circulation elements, including stairs, ramps, and elevators, will refine space requirements and the configuration of these elements. The design of vertical circulation elements will in turn affect adjacent public spaces, station platforms, and among other things, parking configuration at the Historic Adobe Building.
- Farmer's Market** - Just under two acres of the existing Caltrain surface parking lot is used on Sundays for the Mountain View Farmer's Market; the exception is when the 49ers have a home game at Levi's Stadium and parking lot is in use. With the elimination of surface parking per the Master Plan, the Farmer's Market will need to be relocated. An appropriate site will need to be identified, which could include a portion of the Transit Center site, use of adjacent streets, or an off-site location.
- High-Speed Rail** – California High-Speed Rail is planned to pass through the MVTC site, and the Master Plan effort coordinated with California High-Speed Rail Authority (CHSRA) staff to assess potential impacts on the Transit Center. Neither a high-speed rail stop nor passing tracks are currently planned for Mountain View. If the need for additional rail tracks is identified in the future, it will likely require that the VTA light rail tracks be raised or lowered. This would have significant effects on platform configurations and access as proposed in the Master Plan. It is also unknown at this time if the high-speed rail project will construct safety measures, such as screens or doors at platform edges, to protect waiting passengers from high-speed trains passing through. Ongoing coordination with CHSRA staff will be needed to identify any effects on the Master Plan from CHSRA plans.



Figure 23 - Rendering Example of Evelyn Looking East From Castro, with a Potential TOD Massing



Cost and Phasing of Master Plan Elements

The estimated costs of the individual master plan elements are summarized in Table 2. The Master Plan elements collectively are estimated to cost \$182.2 Million in current year dollars. Note that this estimate is based on a conceptual level of design and will undergo significant further refinement as elements are designed and an implementation time-frame is determined.

The implementation of the Master Plan is dependent on funding availability and coordination with potential joint development opportunities. The Plan preserves flexibility in the configuration of on-site elements to allow for a well-integrated site that maximizes its potential. However, certain elements of the Master Plan would be immediately beneficial to Transit Center users and are independent of potential joint development opportunities. These elements, including re-directing Castro Street to Evelyn Avenue and connecting to Shoreline Boulevard, the pedestrian and bicycle undercrossing, and Caltrain platform improvements, could proceed on a faster time-frame without significantly impacting continued operation of the existing Transit Center. With that consideration, these improvements are defined as Phase 1 of the Master Plan.

Improvements to the Plaza could occur along with Phase 1 along with joint development, or on a separate timeline. As a result, plaza improvements are considered Phase 2 of the project.

Phase 3 would include the remainder of the site improvements, which may require coordination with potential development interests. Phase 3 will include modifying the existing bus transit center and surface parking areas since those may be integrated with development. Phases 1 through 3 could all proceed simultaneously or staggered, depending on future coordination amongst project stakeholders and joint development interest. Estimated project costs by element and phase are depicted in **Table 2 - Project Cost Identified by Phase**.

The phasing of all Transit Center elements will require careful construction staging to avoid impacting the function of the Transit Center. Temporary off-site parking facilities, constructing the new bus transit facility in stages to minimize impacts to existing operations, and providing the pick-up/drop-off curb early in the construction process may lessen the impact of construction on transit use and connectivity. Construction staging will need to be considered in greater detail in future design stages of the project.

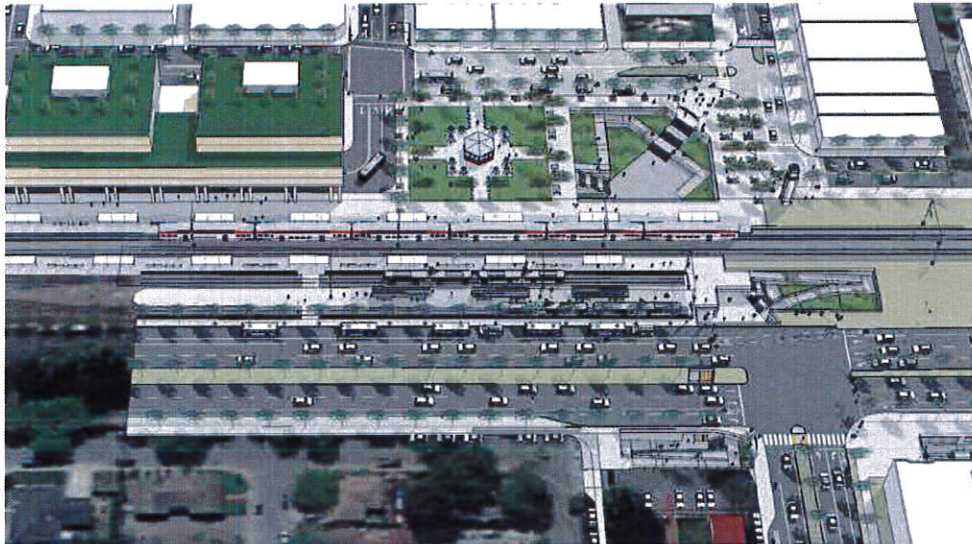


Figure 24 - Rendering Perspective Looking South at the Mountain View Transit Center Master Plan

Table 2 - Project Cost Identified by Phase

Cost Element	Est. Cost Phase 1 (Millions)	Est. Cost Phase 2 (Millions)	Est. Cost Phase 3 (Millions)	Total (Millions)
Grade Separation Project - Evelyn ramp to Shoreline and street modifications	\$4.8	-	-	\$4.8
Bike/Ped Undercrossings and Platform Modifications - lengthening & widening; under-crossings and vertical circulation	\$30.6	\$4.7	\$5.8	\$40.8
Bus and Shuttle Boarding Areas; Pick-up & Drop-off Areas; Other Surface Improvements	\$9.2	\$0.8	\$17.8	\$27.7
Parking Garage (above grade structure/ under ground parking)	-	-	\$69.6	\$69.6
Ramp from Central Expressway to Parking Garage	-	-	\$28.7	\$28.7
Plaza Modifications / Expansion	-	\$4.7	\$1.6	\$6.4
Bike Station; Secure bike parking; Restrooms	-	\$2.3	\$1.9	\$4.2
Total - Entire Concept (Millions)	\$44.6	\$12.2	\$125.4	\$182.2

Phase 1 - Grade Separation and Caltrain Station enhancements, including pedestrian and bicycle undercrossings

Phase 2 - Centennial Plaza and associated bike and pedestrian facilities

Phase 3 - Bus/shuttle facilities, parking and joint development

Next Steps

As noted in the Cost and Phasing discussion above, different elements of the Master Plan may require different design processes and may be implemented on different time-frames.

For the Castro Street modifications, Evelyn Avenue ramp, pedestrian undercrossings, and Caltrain platform improvements, the next steps will be completion of preliminary engineering and environmental analyses. This will require close partnership and likely formal agreements with Caltrain regarding design and construction elements.

For the joint development opportunity sites and related Transit Center facilities, next steps will require further coordination and development of a joint agreement with Caltrain as the landowner. The agreement will need to cover project oversight, decision-making roles and responsibilities, financial participation, and revenue sharing. Further evaluation and coordination with the development community will be required to understand development opportunities including height, use, density, and parking requirements, urban design components, and financial viability. This may include soliciting proposals from developers for public-private partnership(s) as needed to implement the transit components of the Master Plan, including finalizing the site design.

The Centennial Plaza design and selected improvements could proceed along with Castro Street modification and/or joint development planning, or as a standalone effort, provided there is close coordination. It will entail community input, an urban design process, evaluation of retail opportunities and viability, and identification of potential public amenities such as restrooms, visitor information facilities, public art, water features, etc.

The City of Mountain View will continue to engage key stakeholders, including Caltrain, VTA, County Roads and Airports, local businesses, and local residents throughout this process to refine and implement the Master Plan.



