



DATE: June 22, 2016

CATEGORY: New Business

DEPT.: Public Works

TITLE: **Mountain View Transit Center
Master Plan – Preferred Grade-
Separation Plan for the Castro Street
Rail Crossing**

RECOMMENDATION

Approve Grade-Separation Alternative 4: Reroute Castro Street at Evelyn Avenue, as the preferred grade-separation plan for the Castro Street rail crossing and proceed with the Transit Center Master Plan.

BACKGROUND

The 2013 Shoreline Regional Park Community Transportation Study, the 2014 North Bayshore Precise Plan, and the 2014 Shoreline Boulevard Corridor Transportation Study (Corridor Study) identified transportation improvement strategies to respond to anticipated increases in employment and development in North Bayshore. A key element of each of these studies/plans is the expected increase in usage of the Mountain View Transit Center (Transit Center), including higher use of Caltrain, light rail, and connecting shuttles. Other employment areas in the City identified in the 2030 General Plan also envision a greater reliance on, and demand for, transit services at the Transit Center.

Transit Center Master Plan

One of the Corridor Study recommendations, approved by the Council in November 2014, called for the development of a comprehensive Master Plan for the Caltrain Station and Transit Center. At a March 3, 2015 Study Session, Council directed that the master planning effort be conducted in two phases, including:

1. Evaluation and recommendations regarding Castro Street and/or Central Expressway grade-separation options, including the possible closure of Castro Street to vehicular traffic at the rail tracks.

2. A preferred plan for improved transportation facilities, including platform expansion, bus and shuttle loading areas, pedestrian and bicycle access, bicycle storage, flexibility to accommodate new/emerging transportation technologies in the future, and other facilities.

This approach to the development of the Master Plan was discussed and confirmed by the City Council at its November 10, 2015 Regular Meeting when it approved the scope of work and a professional services agreement with Kimley-Horn and Associates to lead the Master Plan effort.

Phase I of the project began in December 2015. Community outreach was initiated and the team worked with City staff to develop a preliminary set of alternatives for City Council review and comment.

An initial set of four grade-separation alternatives was developed for the City Council's consideration at a March 22, 2016 Study Session and for community discussion during initial community outreach efforts. These alternatives were:

- Alternative 1: Lower Castro Street and Moffett Boulevard.
- Alternative 2: Lower Castro Street/Moffett Boulevard and Central Expressway.
- Alternative 3: Central Expressway Median Ramps. (A variation of Alternative 1 that adds median ramps on Central Expressway to allow turning movements to/from Central Expressway to Castro Street and Moffett Boulevard.)
- Alternative 4: Reroute Castro Street at Evelyn Avenue.

The consultant team also investigated options for raising or lowering the rail tracks to reduce the impacts to Castro Street and Moffett Boulevard inherent in the grade-separation alternatives above. These options are constrained by the height or depth clearance requirements to avoid conflicts with the Shoreline Boulevard overcrossing to the west and Stevens Creek to the east, as well as Caltrain requirements setting the maximum allowable change in track grade at 1 percent. Raising or lowering the tracks was deemed not to be feasible and has not been evaluated further since the March 22, 2016 Study Session.

At the conclusion of its March 22 Study Session, the City Council directed staff to further evaluate two grade-separation alternatives:

- Alternative 1: Lower Castro Street and Moffett Boulevard.
- Alternative 4: Reroute Castro Street at Evelyn Avenue.

Based on the direction provided by Council at that Study Session, as well as the input received from initial community outreach efforts, the consulting team and City staff have continued to refine and further evaluate Alternatives 1 and 4 as well as a Base (No-Build) Alternative. These alternatives are presented so Council can select a preferred grade-separation alternative for further development during the second phase of Transit Center Master Plan development.

Community Outreach

This first phase of the Transit Center Master Plan project has included the following community outreach activities:

- Project Website—A project website (<http://www.mountainviewtransitcenter.com/>) provides information and updates regarding the Master Plan project. More than 210 individuals are now signed up as stakeholders to receive news and event notifications from the project website. The City, through social media outlets, has disseminated additional information regarding the project.
- Business Outreach—To date, the Downtown Committee has received three presentations regarding the Transit Center Master Plan project (December 2015, and February and May 2016). Two targeted outreach meetings focusing on Castro Street businesses closest to the Transit Center were also held in February and May. At the second business community meeting in May, the approximately 12 meeting participants were asked to indicate their preferred grade-separation alternative. There was no clear preferred alternative. Some participants supported a No-Build option, but other participants indicated that if they had to choose between the two grade-separation alternatives under consideration, they would prefer Alternative 4: Reroute Castro Street at Evelyn Avenue.

Staff has also visited businesses along both Castro Street and Moffett Boulevard, providing them with information about the Master Plan project and how they can become involved in the project. About 65 businesses have been added to the project's stakeholder contact lists and are regularly provided project information.

- Community Meetings—The first community meeting for the Transit Center Master Plan project was held on February 25. The goal of the meeting was to introduce the project to the community and solicit ideas and input regarding the project goals and objectives and the initial alternatives for modifying the current rail grade crossing at Castro Street.

A second meeting was held on May 10, 2016. Approximately 50 people attended each event. At the May 10 community meeting, participants were asked to vote for their preferred grade-separation alternative. Of the 27 votes cast, Alternative 1 received three (3) votes, Alternative 4 registered 20 votes, the No-Build Alternative received two (2) votes, and single votes for lowering the rail tracks and in support of both Alternatives 1 and 4. A full description of the comments received at the May 10 community meeting is provided in Attachment 1.

- Partner Agency Discussions—Three rounds of discussions were held with other stakeholder agencies with current or planned future operations at/nearby the Transit Center, including: Caltrain, the California High-Speed Rail Authority (CHSRA), the Santa Clara Valley Transportation Authority (VTA), and the Santa Clara County Roads and Airports Department (which is responsible for Central Expressway).

Existing and Future Conditions

The Transit Center is a key local and regional intermodal transportation facility serving nearly 4,300 boarding Caltrain riders, and an additional 1,300 VTA light rail riders each weekday. An additional 1,000 daily riders are served by other transportation services at the Transit Center, including: VTA buses, Caltrain shuttles, Transportation Management Association (TMA) MVgo shuttles, private employer shuttles, and the Mountain View Community Shuttle. These usage figures far exceed the 1,000 riders expected during the three-hour morning peak period at the Transit Center when its final design was approved in 1997.

Traffic access into the downtown (as measured by recent traffic counts at primary entry points) is well distributed, as shown in Figures 1 and 2. While Castro Street/Moffett Boulevard is an important access point into the downtown, it accounts for less than 15 percent of the incoming traffic. Frequent railroad gate blockages limit the flow of traffic through this access point.

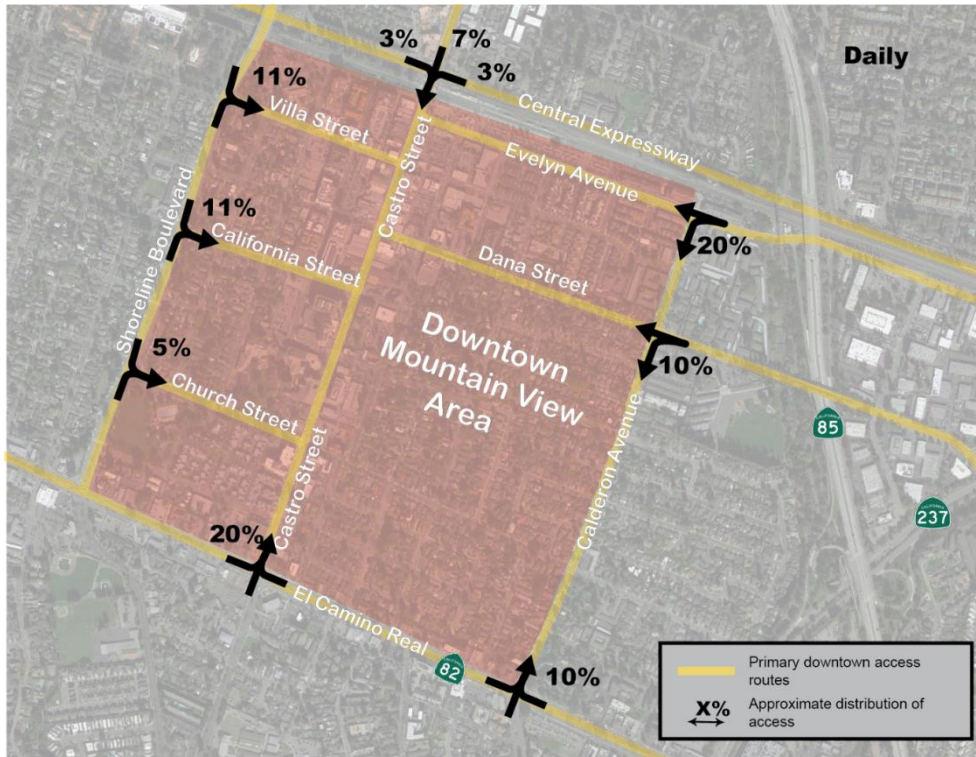


Figure 1 – Traffic Access into Downtown Mountain View (Daily)

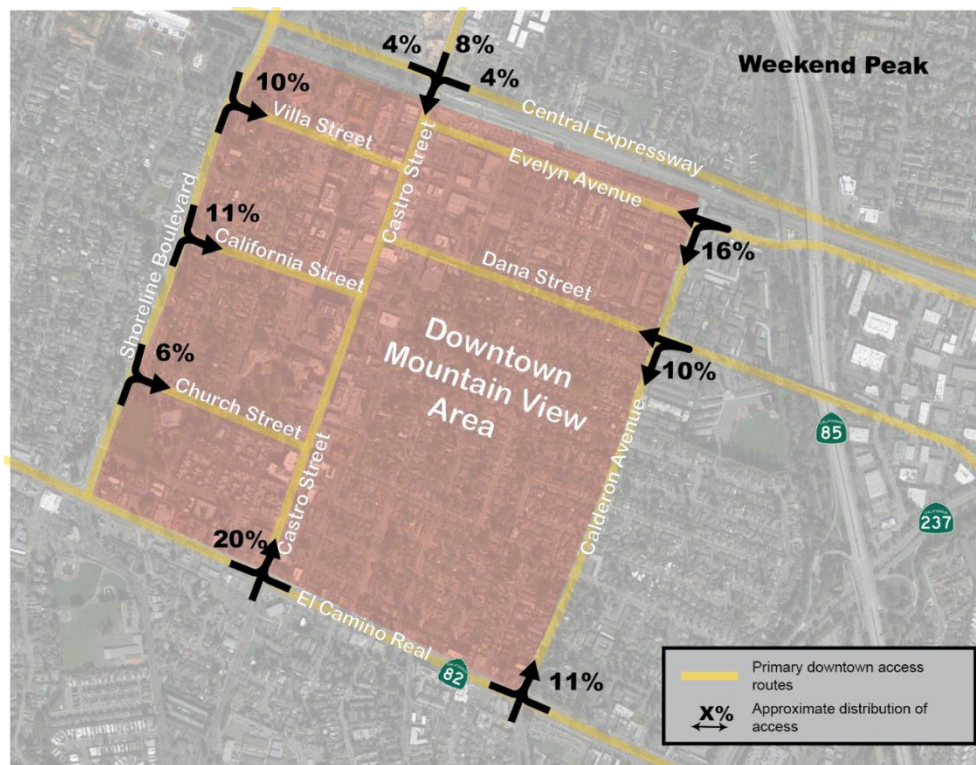


Figure 2 – Traffic Access into Downtown Mountain View (Weekend)

Despite increases in economic activity, population, and parking demand downtown, daily traffic volumes on Castro Street have declined over the past 10 years, as drivers have switched to alternate routes due in part to delays and congestion at the rail tracks (Figure 3).

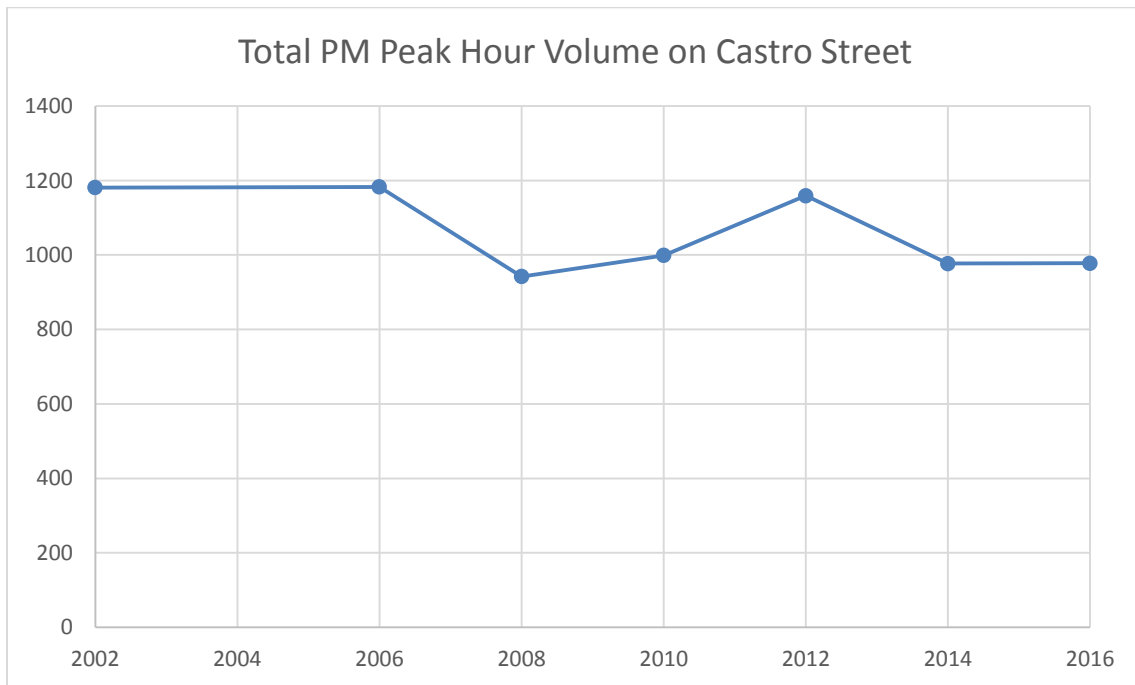


Figure 3 – Historic Traffic Volumes on Castro Street

The need to develop a Master Plan for the Transit Center and Caltrain Station is particularly timely given a number of significant issues that will affect the operation of the Transit Center and Caltrain Station in the near future. These include the need to:

- Accommodate the expected growth in train service and station usage. It is expected that the number of trains and station usage will more than double over the next 10+ years due to expanded Caltrain, VTA Light Rail, and CHSRA service (see Table 1).
- Relieve delays for pedestrians, bicyclists, and vehicles at the railroad crossing on Castro Street. Railroad gate blockages in peak hours are expected to increase from every 6.5 minutes to every 3.5 minutes with expanded Caltrain and CHSRA service. During nonpeak hours, gate blockages will increase from the current 10-minute interval to every 5 to 6 minutes.

- Improve safety and access for pedestrians and bicyclists. Pedestrian and bicycle activity is expected to be two to three times greater than today.
- Support the economic vitality and future growth of downtown Mountain View by maintaining adequate access for customers and employees.
- Facilitate traffic circulation in and through the downtown by effectively utilizing the downtown street grid while protecting against traffic diversion into nearby neighborhoods.

Table 1 – Mountain View Transit Center and Caltrain Station

	Today		Future Estimate (including HSR)	
	3-Hour Peak	All Day	3-Hour Peak	All Day
More Trains (Both Directions)				
All Trains	27	92	50	150+
Trains Stopping	22	80	30+	100+
More Riders (Caltrain and Light Rail)				
Boarding Riders	2,200	5,750	5,000	14,000
Station Activity (Ons and Offs)	4,500	12,000	10,000	30,000
More Crossing Gate Delays				
Number of Gates Down Per Hour	9	6	17	10
Minutes Between Gate Closures	6.7	10	3.6	6
More Traffic				
Conditions at Castro Street and Central Expressway	Level of Service D		Level of Service F	

ANALYSIS

Grade Separation Concepts/Alternatives

Based on the input received during initial community outreach efforts and the direction provided by the City Council at its March 22 Study Session, the project team has focused on further developing and refining Alternative 1 and Alternative 4. A base (No-Build) Alternative has also been included in the evaluation. Refined descriptions of the alternatives is provided below.

No-Build Alternative:

As its name implies, no physical or operational changes to the Castro Street/Moffett Boulevard intersection with the rail crossing and Central Express are proposed under this alternative to improve current or anticipated future conditions for pedestrians, bicyclists, and/or vehicles traveling in/around the area.

If no changes are made, conditions in the area will continue to degrade over the next 10 years. As was noted previously, the number of trains and passengers using the Transit Center and Caltrain Station is expected to more than double in the next 10 years. Pedestrians, bicyclists, and vehicles in the area will be inconvenienced by more frequent rail gate blockages (every 3.5 minutes during peak periods) at the Castro Street crossing impeding/delaying their travel in/through the area. These congested conditions may encourage motorists to avoid the downtown area altogether and/or result in increased traffic diversion on nearby streets as frustrated motorists look for alternative routes to avoid the congestion.

Alternative 1: Lower Castro Street and Moffett Boulevard

Under this alternative (Figures 4 through 7), the rail tracks would remain at grade and Castro Street and Moffett Boulevard would be depressed (as much as 20' at the deepest point) under both the railroad and Central Expressway between Villa and Jackson Streets. Traffic on Castro Street and Moffett Boulevard would not be delayed by Central Expressway and/or rail traffic. Traffic flow on Central Expressway would improve.

There would be no direct traffic connection between Central Expressway and Castro Street. Limited connections between Moffett Boulevard and Central Expressway would be maintained with an at-grade frontage road. This alternative would also improve east/west traffic flow by adding a new connection for Evelyn Avenue across Castro Street.

Vehicle access would be maintained into downtown from Moffett Boulevard and provide some access from Central Expressway to businesses on Moffett Boulevard. Access to Castro Street from Central Expressway would be provided through other routes, primarily Shoreline Boulevard.

For businesses along the first block of Castro Street, this alternative would maintain at-grade sidewalks and outside dining areas, but the two sides of the street would be separated by the underpass.

This alternative would also maintain continuous, grade-separated sidewalks and bike lanes along the depressed roadway and develop a pedestrian/bicycle tunnel connection to the Transit Center.

Construction impacts on downtown businesses and traffic would be significant, particularly along the 100 block of Castro Street. Construction on Castro Street, north of Villa Street, would last for more than two years and the total construction duration is estimated at three years.

The estimated cost for Alternative 1 is \$105 million to \$120 million.

Additional information regarding Alternative 1 is provided in Attachment 2.

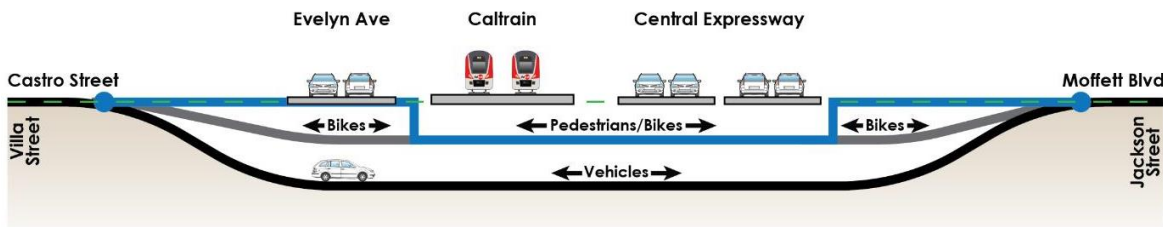


Figure 4 – Alternative 1: Lower Castro Street and Moffett Boulevard



Figure 5 – Alternative 1: View of Castro Street/Central Expressway Intersection



Figure 6 – Alternative 1: View of Castro Street Looking North



Figure 7 – Alternative 1: View of Castro Street Sidewalk Area Looking North

Since the March 22, 2016 Study Session, additional refinements to this alternative in terms of the pedestrian and bicycle components have been developed as shown in Figures 8 and 9. These proposed facilities include continuous bike lanes and pedestrian walkways under the tracks and Central Expressway, as well as a connection from the Transit Center under the Expressway.

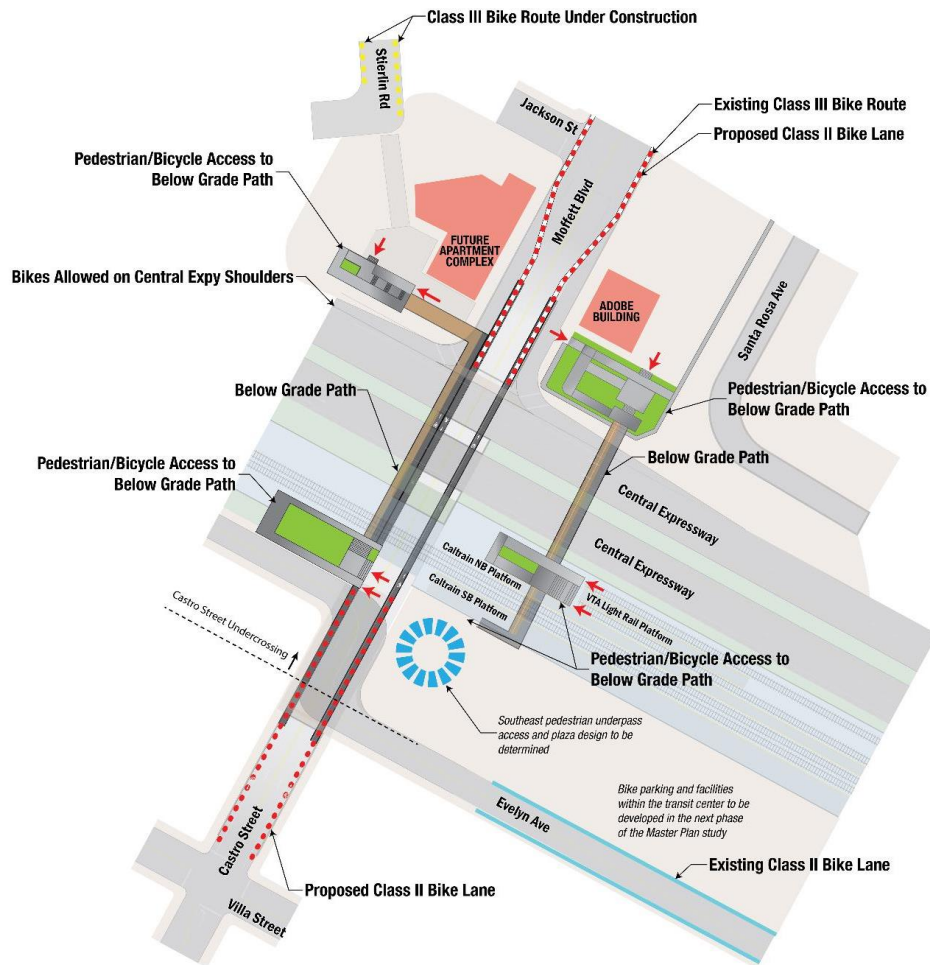


Figure 8 – Alternative 1: Pedestrian and Bicycle Plan



Figure 9 – Alternative 1: View of Castro Street Undercrossing

Alternative 4: Reroute Castro Street at Evelyn Avenue

For this alternative (Figures 10 and 11), rail tracks would remain at grade and Castro Street is rerouted at West Evelyn Avenue. Moffett Boulevard would still intersect with Central Expressway with all current movements, but there would be no connection to Castro Street. Pedestrians and bicyclists would be provided a high-quality undercrossing of the railroad and Central Expressway.

The intersection of Castro Street and Evelyn Avenue would be reconfigured to provide all turning movements. Traffic volumes on Castro Street are expected to decrease with this alternative and traffic on some east/west streets is expected to increase. To help accommodate diverted traffic, a new ramp would be constructed to connect Evelyn Avenue to Shoreline Boulevard (see Figure 12).

This alternative would have a lower cost (\$40 million to \$45 million) than Alternative 1 and fewer construction impacts to businesses on Castro Street and Moffett Boulevard (i.e., little to no construction activity along Castro Street south of Evelyn Avenue, with a total anticipated construction period estimate of approximately 1.5 years). Existing sidewalks, dining areas, and access would not change. The potential traffic diversion impacts are discussed later in this report.

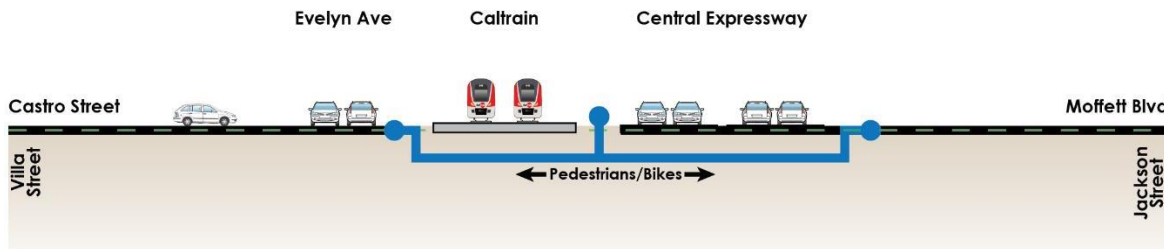


Figure 10— Alternative 4: Reroute Castro Street at Evelyn Avenue



Figure 11 – Alternative 4: View of Castro Street/
Central Expressway Intersection

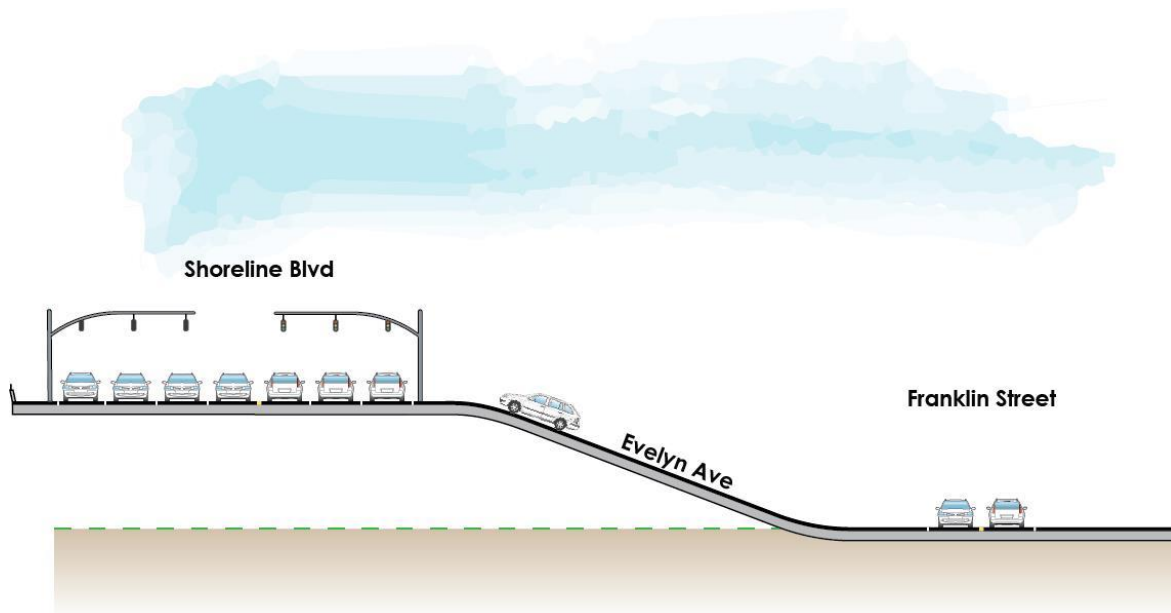


Figure 12 – Alternative 4: Shoreline Boulevard Ramp Connector

Since the March 22, 2016 Study Session, additional refinements to this alternative in terms of the pedestrian and bicycle components have also been developed as shown in Figure 13. These proposed facilities include a bike and pedestrian tunnel under the tracks and Central Expressway that would include a connection to the Stierlin Road bike corridor.

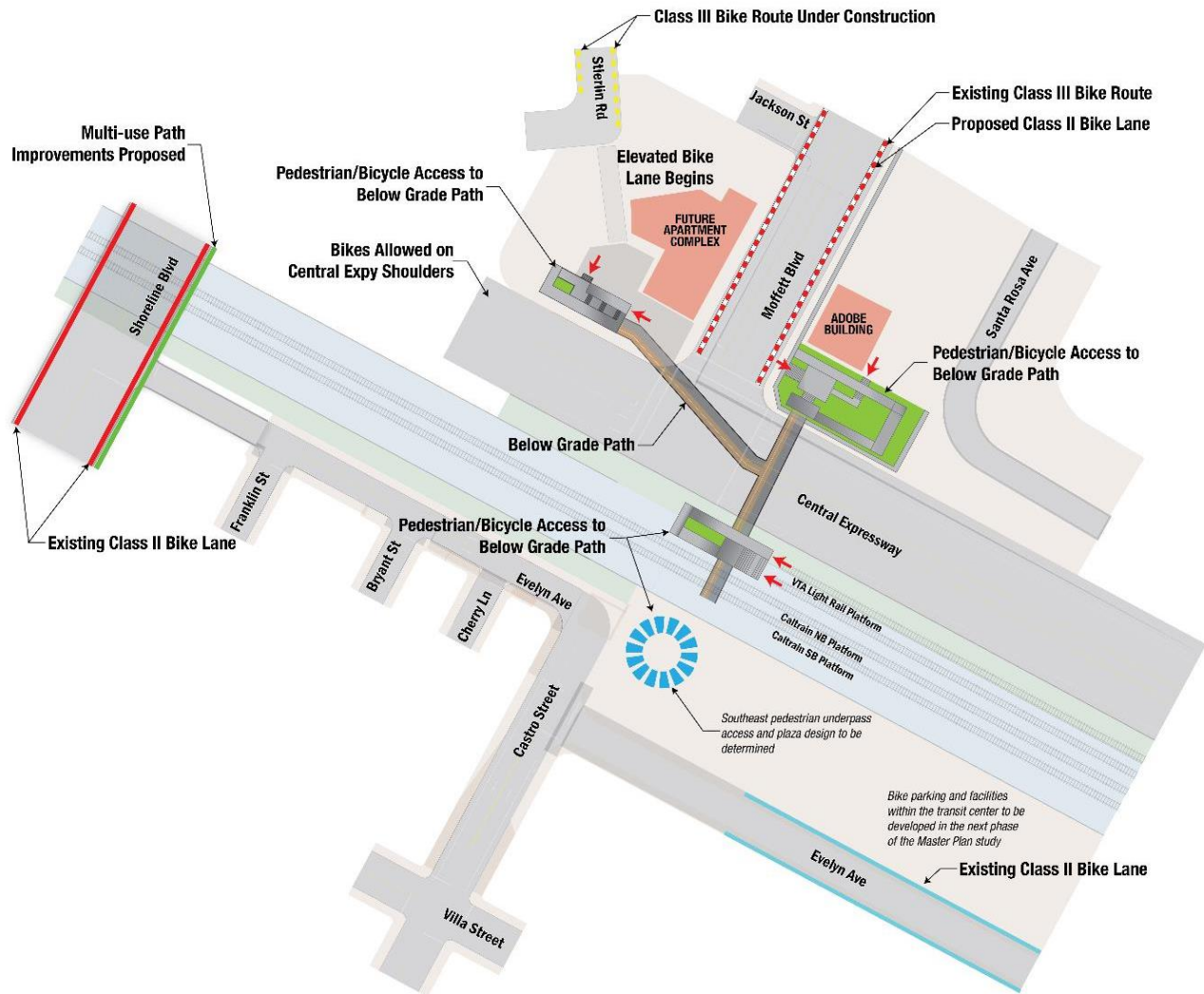


Figure 13 – Alternative 4: Pedestrian and Bicycle Plan

It should be noted that there are important design issues related to the pedestrian/bicycle facilities, specifically in regard to Americans with Disabilities Act considerations that will need to be further addressed/refined as design of the facilities continues. The inclusion of ADA-compliant ramps will take substantial space and may conflict with other facilities (e.g., the loss of some parking spaces at the Adobe Building). Alternative off-site parking locations may need to be pursued. The installation of an elevator

would reduce the amount of space needed, but would likely introduce new/greater operations and maintenance requirements. Renderings of the proposed tunnels are provided in Figures 14 and 15.



Figure 14 – Tunnel Portal Near Adobe Building



Figure 15 – Tunnel Rendering

Evaluation of Grade-Separation Alternatives

Both quantitative and qualitative measures were used to evaluate the three grade-separation alternatives described above. A summary of the evaluation is provided in Figure 16.

Criteria	No Build	Alternative 1 (Castro/Moffett Underpass)	Alternative 4 (Re-routing of Castro Traffic)
Bicycle and Pedestrian Circulation	○ At-grade pedestrian crossings of Central Expressway and the rail tracks plus minimal bicycle facilities limit north-south connectivity. Results in both delays to pedestrians and safety hazards due to jaywalking activity.	● Includes on-street bike lanes on Castro/Moffett underpass to facilitate north-south connectivity. Includes grade-separated pedestrian and bicycle undercrossing providing access between transit center/downtown and both Stierlin and Moffett areas.	● Includes bicycle and pedestrian undercrossing providing access between transit center/downtown and both Stierlin and Moffett areas to eliminate delays and significantly enhance safety.
Transit Access & Operations	○ Access from transit center to Moffett is provided; however, there are significant delays due to grade crossing. Routing from Moffett to transit center requires out-of-direction travel. Transit center access for bicycles and pedestrians is constrained due to at-grade rail crossing, Central Expressway, and congestion on Castro.	● Grade separation eliminates significant delay for north-south transit services crossing tracks. Transit routes will no longer have access to the Transit Center via the Castro/Evelyn intersection. Significantly improves pedestrian and bicycle access to transit center by eliminating several barriers.	● Requires a shift of all north-south transit services to Shoreline. Access between Shoreline and transit center is greatly improved with Evelyn ramp and ability to cross Castro at Evelyn. Significantly improves pedestrian and bicycle access to transit center by eliminating several barriers.
Traffic	● Maintains Castro Street/Moffett Boulevard connection to downtown, but will see increased delay with more frequent train service planned. Traffic volumes on Castro have been steadily decreasing for years as vehicles find alternate ways to access downtown.	● Results in a small decrease in local delay (approximately 2% reduction), but with some increased congestion on Villa. Minor increase in traffic on neighborhood/ local streets. Travel time between Moffett area and downtown significantly reduced due to grade separation.	● Results in small increase in local delay (approximately 2%) and some increased congestion on Villa (less than Alternative 1). Minor increase in traffic on neighborhood/ local streets. Travel time into downtown increases due to the closing of the grade crossing; however, the provision of the Evelyn Avenue ramp would minimize impacts to travel times.
Safety	○ At-grade crossing and frequent signal pre-emption results in conflicts, congestion and delays for vehicles, bicyclists and pedestrians.	● Fully grade-separated bicycle and pedestrian paths improve safety by eliminating conflict points with vehicles and trains.	● Fully grade-separated bicycle and pedestrian paths improve safety by eliminating conflict points with vehicles and trains.
Integration with Downtown Mountain View	● Maintains existing vehicle, bicycle, and pedestrian connections to the downtown. No impact to business frontages.	● Ramping for Castro Street undercrossing would require a trench with retaining walls between Villa Street and Evelyn Street. Would require some loss of frontage width on both sides of the 100 block of Castro. Would eliminate train horn noise.	● Retains downtown streetscape and business frontages. Some reduced traffic volumes on Castro Street by up to 200 vehicles per hour. Would eliminate train horn noise. Enhances bicycle and pedestrian connections into downtown.
Construction Impact	● No construction activity.	○ Excavation for grade separation ramping would require the closure of Castro Street north of Villa and Evelyn between Cherry and Blossom for approximately 2 to 2.5 years during construction. Total construction duration estimated at approximately 3 years.	● Construction of Evelyn Avenue ramp would require some loss of parking and modified access to Police HQ. Little to no construction activity along Castro south of Evelyn. Total construction duration estimated at approximately 1.5 years.
Cost	Not applicable.	Estimated project cost of \$105 Million - \$120 Million.	Estimated project cost of \$40 Million - \$45 Million.

Performance/Benefit Ratings

○ ● ●
 Low Medium High

Figure 16 – Evaluation Summary

The project team also evaluated in greater detail the traffic impacts of Alternatives 1 and 4, including:

- Level of Service (LOS), including the projected declining future conditions at Castro Street/Moffett Boulevard/Central Expressway under existing conditions with increased future gate closures.
- Change in delay and travel time.
- Diversion in traffic away from Castro Street and impact of additional traffic on Shoreline Boulevard and connecting streets.

Using the travel demand model, the consultant team estimated how the vehicle trips would be diverted away from Castro Street based on the restrictions to traffic to or across Central Expressway with Alternatives 1 and 4. The estimated diversion (percent increase and decrease in traffic) is shown in Figures 17 and 18. The diversion is fairly significant, but is well-distributed.

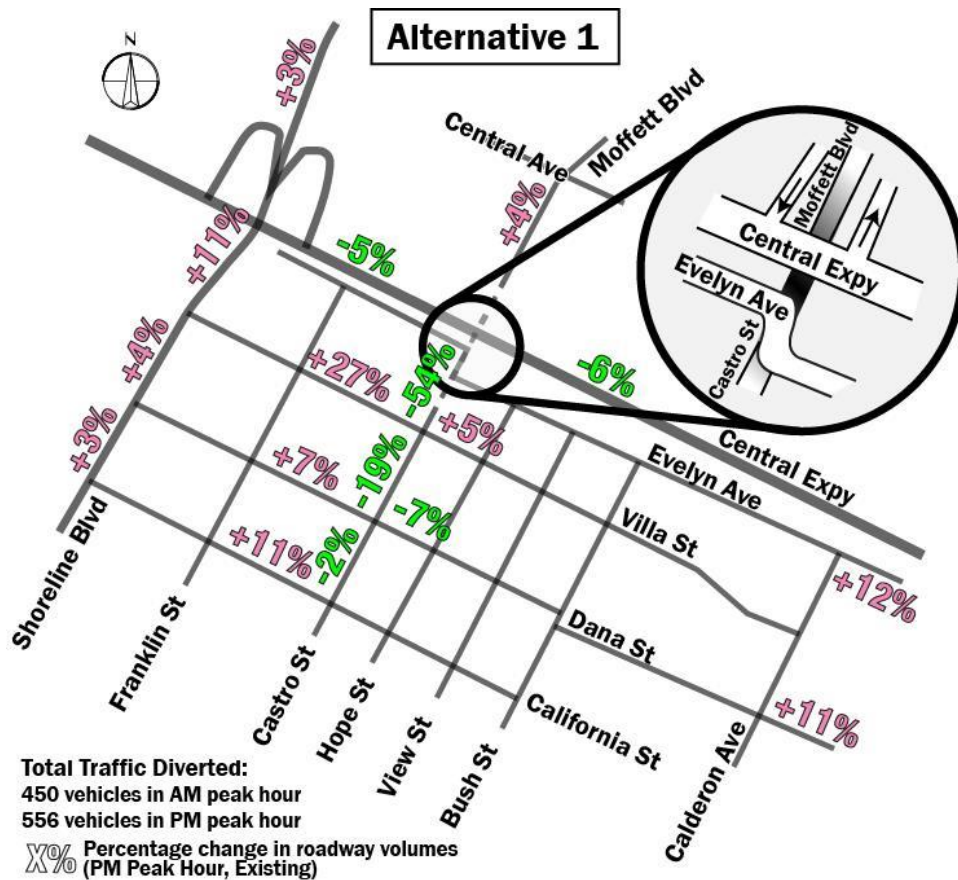


Figure 17 – Traffic Diversion (Alternative 1)

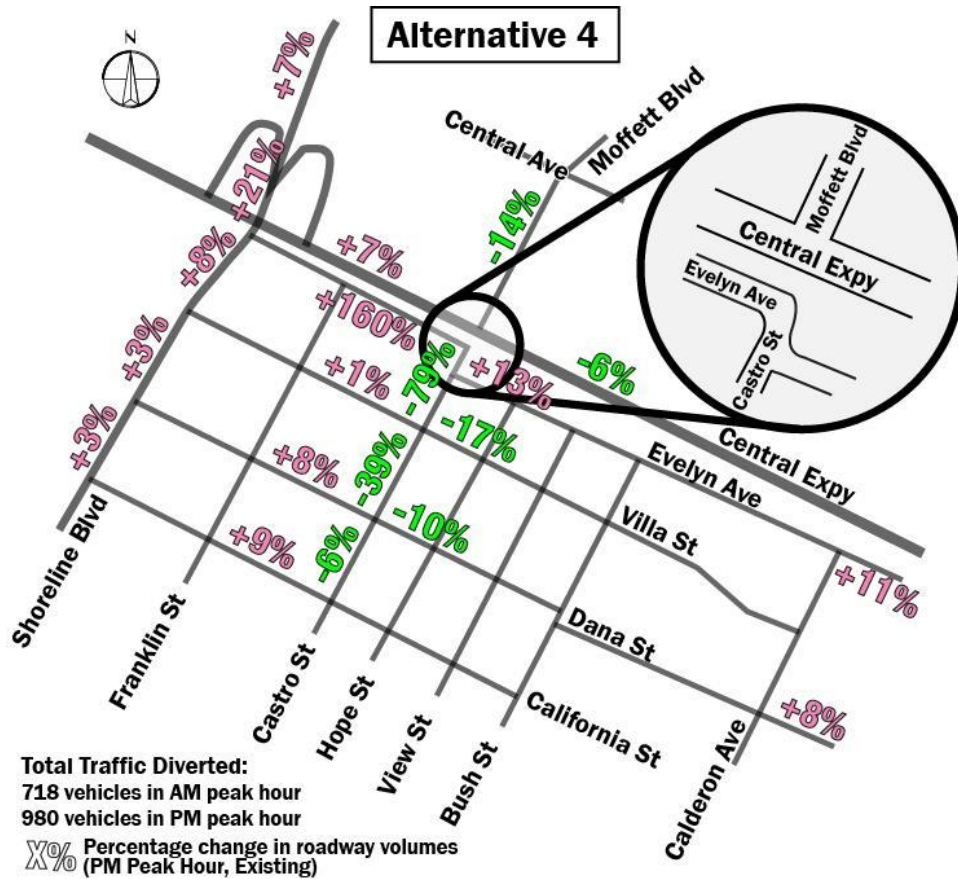


Figure 18 – Traffic Diversion (Alternative 4)

With the diversion of traffic, the LOS analysis (shown in Attachment 3) showed improvement from LOS E/F to LOS A/B at Castro Street/Moffett Boulevard/Central Expressway. Other downtown intersections, for the most part, remained at LOS A/B. The analysis projected declines in LOS levels at a few intersections—the LOS at Villa/Franklin Streets intersection is expected to decline from LOS D to E or F under Alternatives 1 and 4, respectively, and the LOS at Villa/Bryant Streets is expected to decline from LOS C to D under Alternative 1 during the peak afternoon period. Signalizing intersections could mitigate these impacts.

In terms of travel time, Alternative 1 does well at improving flow on Castro Street. Alternative 4 results in about two minutes of delay in the northbound direction, but the model is projecting limited benefit in the southbound direction. Shoreline Boulevard loses time, but only about 30 seconds.

For total delay, Alternative 1 shows a 2.3 percent improvement while staff projects a 2.3 percent increase in delay with Alternative 4.

Other Considerations

During community and other outreach efforts, additional issues/concerns regarding Alternatives 1 and 4 were raised. These issues are described below to provide the Council with additional information as it evaluates grade-separation alternatives.

- 2030 General Plan

The 2030 General Plan envisions Moffett Boulevard as an important gateway to Mountain View's downtown with enhanced accessibility across the Central Expressway corridor, particularly for pedestrians and bicyclists.

Consistent with the General Plan's vision for the Moffett Boulevard change area, Alternative 1 maintains vehicle access into and out of the downtown via Moffett Boulevard while also providing improved bicycle and pedestrian accessibility with a grade-separated pedestrian and bicycle undercrossing of the rail tracks and Central Expressway connecting the downtown and Mountain View Transit Center users to both Moffett Boulevard and new/improved bicycle and pedestrian facilities along Stierlin Road.

Alternative 4 also supports the General Plan's vision for Moffett Boulevard by providing grade-separated bicycle and pedestrian connections either above or under the rail tracks and Central Expressway to enhance accessibility across the Central Expressway corridor. However, this alternative, because of the rerouting of Castro Street, will require a shift of north/south vehicular traffic to Shoreline Boulevard, making it a less vehicle-focused gateway into the downtown than Alternative 1.

- Emergency Response

Concerns were raised during the second community meeting regarding the potential for increased Fire and/or Police Department response times as a result of moving forward with either Alternative 1 or 4.

Based on input received from both the Fire and Police Departments, there should be no significant impact on emergency response times with either of the two grade-separation alternatives because:

- Both departments already avoid the Castro Street/Moffett Boulevard intersection with the rail tracks and Central Expressway for emergency

- response purposes because of existing congestion and long gate down times at the intersection.
- The proposed downtown street grids for each of the alternatives maintain access/response routes for both departments for incidents within the downtown area.
 - Both departments currently have emergency response resources stationed and/or operating throughout the City to meet response time standards, minimizing the need to rely on the Castro Street/Moffett Boulevard intersection as an emergency response route.
- Evelyn Avenue Ramp to Shoreline Boulevard

Alternative 4's proposed construction and operation of a ramp to connect Evelyn Avenue to Shoreline Boulevard will likely require the closure of one of the three Evelyn Avenue entrances into the Police/Fire Administration Building and adjustments to vehicle circulation and usage patterns in the lot. Additional design work will be required to accommodate these changes, but they are not considered to be significant issues if Alternative 4 is selected as the preferred grade-separation alternative.

The project team has also reviewed whether the construction and operation of a ramp from Evelyn Avenue to Shoreline Boulevard will require the City to abandon and redrill Well 22 (located on Evelyn Avenue) at an estimated cost of \$1.5 million to \$2.0 million. Based on input received so far, it appears that the well can continue operating at its current location.

Business Impacts

As a part of this first phase of the Transit Center master planning process, the City retained Strategic Economics, a real estate and urban and regional economic consulting firm, to conduct an analysis of the potential impacts (construction-related and permanent) of the rail grade-separation alternatives under evaluation on businesses located on Castro Street and Moffett Boulevard, propose strategies for mitigating construction impacts, and sustaining and enhancing Castro Street's and Moffett Boulevard's vitality.

Among Strategic Economics' findings were:

- Castro Street is a thriving retail and restaurant district that benefits from an inviting pedestrian environment, the availability of nearby parking, and attractive outdoor dining.
- Retail and restaurant sales on Castro Street are driven primarily by foot traffic from customers who park nearby, rather than drive-by vehicle traffic.
- These two characteristics suggest that Castro Street is in a strong position to weather construction impacts.
- Moffett Boulevard has a different retail character and market than Castro Street and will likely require different mitigation strategies to minimize construction-related impacts.

Strategic Economics recommended the City plan proactively to mitigate construction impacts on businesses and design the grade-separation project to support the long-term success of retail on both Castro Street and Moffett Boulevard. More specifically, Strategic Economics recommended the following strategies be employed as the City continues with the selection, design, and construction planning for its preferred grade-separation alternative:

- Develop a plan for mitigating short-term, construction impacts. The mitigation plan should draw upon Best Practices, reflect business input, and include: significant and continued business outreach; the careful selection of a contractor that will be responsive to the needs of the businesses; the phasing of construction to maintain visibility, circulation, and access to parking as much as possible while minimizing disruption during business hours; and a marketing and promotions strategy to let customers know that Castro Street and Moffett Boulevard businesses are open during construction.
- Design the grade-separation project to preserve and enhance Castro Street's pedestrian amenities, outdoor dining, and access to parking.
- Maintain convenient access to parking and easy identification of available parking. The Strategic Economics analysis emphasized that easily accessible parking within walking distance of businesses is a critical component to Castro Street's current and future success as a pedestrian-oriented retail and restaurant destination.
- Enhance pedestrian and bicycle connectivity across the rail tracks. Strategic Economics suggested that enhancing pedestrian and bicycle connectivity across

the rail tracks and Central Expressway could help to offset any potential reduction in vehicle traffic on Castro Street and help support increased sales activity on the 100 block of Moffett Boulevard.

Strategic Economics' report is provided in Attachment 4.

FISCAL IMPACT

Funding for Project 16-41, Transit Center Master Plan, was approved by the City Council as part of the City's Fiscal Year 2015-16 Capital Improvement Program with \$1 million. There is no additional cost directly associated with the selection of a preferred grade-separation alternative for the Castro Street rail crossing.

The estimated cost for Alternative 4 is approximately \$40 million to \$45 million. The actual amount of funding the City may contribute to the cost of the grade-separation improvements will depend on the potential for rail grade separation funding from the proposed 2016 Santa Clara County transportation sales tax measure, cost-sharing opportunities with other governmental agencies, the availability of grant funding, as well as developers' willingness to contribute funding as a community benefit.

CONCLUSION/NEXT STEPS

Staff recommends the City Council approve Grade Separation Alternative 4 – Rerouting Castro Street at Evelyn Avenue as the preferred grade separation plan for the Castro Street rail crossing based on its performance against the evaluation criteria presented in Figure 15, specifically:

- Less extensive construction impacts.
- Better retention of the downtown streetscape and business frontages, particularly in the 100 block of Castro Street.
- Acceptable level of traffic diversion and appropriate mitigation strategies.
- Significantly lower construction costs, as compared to Alternative 1.

If approved by the City Council as the preferred grade separation concept, Alternative 4 will be used as the foundation for the second phase of the Transit Center Master Plan project—the development of a plan for improved Transit Center facilities—to be presented to the City Council in early 2017. A discussion with the City Council to confirm the key issues and elements to be addressed in Phase 2 will be scheduled for the fall of 2016.

ALTERNATIVES

1. Approve Alternative 4, with modifications, as directed by the City Council.
2. Approve Alternative 1—Lower Castro Street and Moffett Boulevard as the preferred grade-separation plan for the Castro Street rail crossing.
3. Approve a No-Build Alternative as the preferred grade-separation plan for the Castro Street rail crossing.
4. Take no action on a preferred grade-separation plan for the Castro Street rail crossing.
5. Provide other direction to staff.

PUBLIC NOTICING

In addition to the City's standard agenda posting requirements, notices were distributed to the more than 200 persons who have signed up on the project website for updates and information, business and/or community meeting participants, the more than 200 property owners on Castro Street and Moffett Boulevard between Villa and Jackson Streets and on Evelyn Avenue between State Route 85 and Shoreline Boulevard, the Old Mountain View and other nearby City neighborhood associations, VTA, Caltrain, the TMA, Santa Clara County Roads and Airport Department, Central Business Association, Mountain View Chamber of Commerce, the B/PAC, and other interested parties.

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LF/7/CAM/901-06-22-16CR-E-1

- Attachments:
1. Public Comment Summary – May 10, 2016 Community Meeting
 2. Fact Sheets – Alternatives 1 and 4
 3. Level of Service Analysis
 4. Strategic Economics Report