CITY OF MOUNTAIN VIEW

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June 30, 2010

Mr. Robert Doty
California High-Speed Rail Authority
925 L Street, Suite 1425
Sacramento, CA 95814

COMMENTS ON THE PRELIMINARY ALTERNATIVES ANALYSIS REPORT

Dear Mr. Doty:

This letter transmits, on behalf of the City Council, the City of Mountain View's comments on the Preliminary Alternatives Analysis Report (AA) for the High-Speed Rail (HSR) project. In addition to these comments, enclosed are completed Exercise 1 and Exercise 2 from the Context-Sensitive Solutions Toolkit. These comments were approved by the Mountain View City Council on June 22, 2010.

We are pleased to have the opportunity to comment on the Preliminary Alternatives Analysis Report and have worked collaboratively with your staff on understanding the proposed project and its implications for our City. We hope our comments will be helpful in identifying the best solutions for our City and the corridor as a whole. We wish to be quite clear about our very significant concerns regarding the High-Speed Rail project and its possible impacts on Mountain View.

The Mountain View City Council, staff and many of our residents carefully considered the alternatives in the Preliminary Alternatives Analysis. Many residents attended community meetings, Council committee meetings and City Council meetings and sent letters and e-mail expressing opinions and concerns about the HSR project and the alternatives. Based on the information available, the dominant opinion in our community and the opinion of our City Council is that the open/covered trench is the preferred alternative in the City of Mountain View. The negative impacts of the project, such as visual and noise/vibration impacts, are greatly reduced with the trench compared with the at-grade and aerial viaduct. The open/covered trench is also preferable when measured against larger community values, such as avoiding further division of our community with the rail corridor.

The at-grade and aerial viaduct alternatives compound many of the negative impacts of the existing rail corridor. The existing rails already create a visual and physical barrier to travel in our community, and elevating the tracks (aerial viaduct) and/or doubling

the width of the corridor (at-grade alternative) only compounds the problem. For these and other reasons outlined in this letter, the City has serious concerns about these alternatives and considers them far less favorable than the open/covered trench. In addition to our comments about the Preliminary Alternatives Analysis, this letter provides context about the Mountain View community that will be useful to the Authority while reviewing our comments.

Mountain View is a very compact city (12 square miles in area) of some 73,000 residents—one of the most densely populated cities on the Peninsula. Our Caltrain station is the second most frequently used station on the Peninsula and forms part of an intermodal transit center which includes bus and light rail services. In the slightly more than a century since it was founded, Mountain View has grown organically along what is today the Caltrain right-of-way. In recent decades, working with our residents, we have developed, and are continuing to develop, transit-oriented housing along the right-of-way. As part of the current update of our General Plan, a very well-attended visioning exercise focused on a walkable, green, pedestrian-friendly town with strong cross-town (east-west) connections. I am happy to say that today Mountain View is a thriving, financially stable community with a vibrant downtown and very desirable residential neighborhoods—all strung along the Caltrain right-of-way.

As noted, the rail corridor bisects our City, with a depth of some two miles in each direction before the City limits are reached. Clearly, any changes along the tracks will have a lasting and very significant impact on our City—and most particularly a project as enormous in both its size and its challenges as the High-Speed Rail.

We urge the California High-Speed Rail Authority (CHSRA) to consider our comments, continue to interact with City staff and the Council, and work with us to find mutually agreeable solutions to the many challenges presented by this project.

GENERAL COMMENTS ON THE PRELIMINARY ALTERNATIVES ANALYSIS DOCUMENT

Limited Information

We note that the City is being requested to comment on the Preliminary Alternatives Analysis Report (AA) with, at best, very limited information about noise and vibration, aesthetics, constructability, requirements for an HSR station and many other topics. This information is critical for the City and the community to make informed comments. Once this information is provided, we may have reason to change our current assessments of the benefits and impacts of the different options.

VTA Light Rail System

The AA does not adequately address the Valley Transportation Authority (VTA) light rail tracks between Castro Street and east of Whisman Road (approximately Station 21+55), the Downtown Mountain View light rail station or the Evelyn Avenue Station (approximately Station 21+40). While the light rail system is acknowledged periodically throughout the document, the right-of-way discussions, cross sections and other critical elements of the AA do not address the right-of-way and other needs of the light rail system. Light rail adds both track and station to the corridor at a critical location in downtown Mountain View. The City and community cannot adequately review the High-Speed Rail alternatives without information about how the HSR project will integrate with the existing light rail system.

The City of Mountain View and VTA both made substantial investments to bring light rail to downtown Mountain View, and the light rail is an important component of Mountain View's Downtown Transit Center. The CHSRA must coordinate closely with both the City of Mountain View and VTA to avoid negatively impacting this rail system.

Loss of a Traffic Lane on Central Expressway

The Preliminary AA mentions loss of a traffic lane on Central Expressway to gain the necessary right-of-way for the proposed HSR improvements. Central Expressway is a major regional arterial roadway under the jurisdiction of the County of Santa Clara. In the absence of a detailed analysis that shows that traffic and other impacts can be mitigated without significantly degrading service levels or forcing commute traffic onto neighborhood streets (including cost estimates for the mitigation measures), the City has serious concerns about the loss of a lane on Central Expressway. In addition to providing such an analysis, the CHSRA must coordinate such proposals with all affected jurisdictions, including the County and affected cities.

Noise and Vibration

The City is concerned about the noise and vibration impacts of all alternatives. This concern has been raised repeatedly by the community. More information is needed about the expected noise impacts of the various alternatives so this impact can be understood by the City and our residents. The City is also concerned that the noise studies and models present actual conditions that will exist after the project is built. Once the system is operating, mitigating for noise will be very difficult, so an accurate assessment of noise impacts is essential at this early stage to design effective mitigation measures.

Vertical Alignment Grades

The Preliminary AA (Page B-1) shows the maximum vertical alignment grade of 1.0 percent for shared Caltrain/freight tracks. This assumption is extremely limiting when trying to transition between vertical alignment types. A less restrictive maximum grade would provide much more design flexibility. The City would like to know: (1) What is the basis for this maximum grade?; (2) What do other rail operators use as a maximum grade when rapid changes in elevation are required?; (3) What is the process for getting approval for a greater maximum grade if conditions warrant?

Mountain View HSR Station

The Preliminary AA states that the current Mountain View Caltrain station is being considered by the CHSRA as a potential HSR station (Page S-1). The City would like to know what assumptions were made in the AA regarding a HSR station in Mountain View and how those assumptions affect the Preliminary AA. For instance, are the grades shown on the profiles different because of a possible HSR station downtown? Are there limitations on vertical alignments or other design parameters due to the possibility that there will be a station in downtown Mountain View?

Train Operations Assumptions and Integration of HSR and Caltrain

On Page 4-1, the Preliminary AA states: "At this time the HST Phase 1 Operating Plan and the Caltrain Draft 2025 service plan timetable have not been fully integrated into a single operating plan for the entire Peninsula Corridor, though a conceptual operations analysis of the northern end of the Corridor has been prepared to evaluate the San Francisco terminal options (see Appendix K)." Service assumptions of up to 12 HSR trains per hour in 2035 and 10 Caltrain trains per hour in 2025 are also shown on Page 4-1.

It is clear that plans for integration of HSR and Caltrain are still being developed. Integration of HSR and Caltrain service and the service levels of each are fundamental to development of the HSR system and affect such basic assumptions as the need for four tracks throughout the corridor and the right-of-way required for the project.

The CHSRA must keep local communities, including the City of Mountain View, informed about changing assumptions and provide the opportunity to review and provide comments on revised information, including design alternatives. The HSR project will have a lasting and significant impact on our community, and up-to-date information is vital for the City to provide information to and gain input from our residents and to provide meaningful input to the CHSRA.

Mitigation of Impacts

The CHSRA has stated at several meetings and in numerous documents that local funding will be available to cover a portion of the cost of the HSR system. The City of Mountain View, like other local agencies, is facing severe economic challenges, and funding a portion of the HSR project is not something that Mountain View has budgeted. Under CEQA, the burden of cost and implementation of mitigation measures for project impacts is borne by the project proponent. The financial responsibility for project mitigation measures should be borne by the CHSRA, not the City of Mountain View or other local agencies.

Downtown and the Downtown Transit Center

All of the alternatives included in the Preliminary AA have a significant effect on downtown Mountain View and the Downtown Transit Center. Downtown Mountain View is thriving and vibrant, with historic homes and businesses mixed with newer high-density and mixed-use developments. The City has made a significant investment over the past 15 years in the light rail system, the Transit Center, the train depot building and Evelyn Avenue. All of these improvements have been very successful, and the City is concerned about negative impacts that a project of this size could have on these facilities and the downtown in general. Some examples of concerns related to the downtown and the Downtown Transit Center include:

- The Downtown Transit Center includes a heavily used Caltrain station (the second busiest on the Peninsula), a light rail station, a VTA bus hub and increasing private shuttle bus use for the North Bayshore business district (which includes powerhouses such as Google and Microsoft). Much of the traffic generated by the Transit Center leaves the downtown by way of Evelyn Avenue and Castro Street. Negative impacts on the Transit Center are not acceptable. In addition, the City supports increased use of alternative transportation, so these uses must be protected, at a minimum, and improved, if possible, with the HSR project.

- Mountain View's downtown is a successful and thriving pedestrian-friendly environment. The rail tracks are separated by no more than a residential street from residences and businesses with large windows opening onto the street (part of Mountain View's preferred design aesthetic). The arrival of a massive rail project in this intimate and vibrant environment will certainly have a major impact. The short- and long-term economic impacts of the construction and operation of the HSR project on business and property owners must be thoroughly studied by the CHSRA, and the CHSRA must continue to keep the City and downtown community involved in the project.

- The Castro Street crossing of the rail corridor is the primary access into the downtown from the north. Castro Street is a very busy roadway, with up to 17,000 cars crossing the rail corridor every day to access Central Expressway and Moffett Boulevard. This intersection is critical to the downtown community, including businesses on Castro Street, and provides an important link between the downtown and southern part of the City and Moffett Boulevard and the northern part of the City. This intersection is crossed by many existing and, hopefully, future transit vehicles, including public transit and private shuttles. While analyzing the impacts of the project, the Authority must thoroughly study the impacts of the alternatives on this intersection.

Avoid Dividing the Community

During the City's 2008 General Plan Visioning process, over 800 individuals provided input on defining Community Values and a Vision for Mountain View. Participants noted that physical barriers exist between residential neighborhoods, employment centers and transit stations, resulting in impeded access to transit and limiting *Connectivity* (identified as one of six Community Values). Finding opportunities to improve connections to downtown, across the railroad tracks and across Central Expressway, was seen as a way to boost connections between otherwise adjacent residential areas. The City feels that this project presents a unique opportunity to reduce the effect of this visual and physically dividing feature in our City. Design goals of the HSR project must include avoiding further division of the community with the rail corridor and finding opportunities to improve connectivity across and along the corridor (pedestrian/bike bridges over the right-of-way and/or pedestrian/bike trails along the corridor would be attractive options).

Constructability

The AA provides very limited information about construction impacts associated with the HSR project. Evaluation of construction impacts appears to be limited to availability of right-of-way and opportunity to secure temporary construction easements (TCEs). The degree of impact is rated "low" for each alternative. While the City recognizes that avoiding any impacts to the local community during construction of a project of this magnitude is unrealistic, the CHSRA must perform a thorough analysis of construction-related impacts and needed mitigations.

Many of the businesses in Mountain View that are close to the rail corridor are small and privately owned (rather than chains) and unable to withstand a prolonged period of business decline due to traffic disruption or other construction-related impacts. Similarly, many Mountain View residents live near the corridor and would be impacted during construction. While most of the City's comments focus on the final built condi-

tion of the project, we are also concerned about the short- and long-term impacts of construction of any of the alternatives and expect to be able to work with the CHSRA to minimize construction-related impacts to our community.

Lighting

More information is needed to assess impacts associated with lighting. The aerial viaduct, at-grade, and open/covered trench may have very different impacts associated with lighting, depending on the level and nature of lighting required for the project. We again stress the fact that both residences and businesses in Mountain View face the corridor and could, therefore, be significantly impacted.

Trees

More information about tree removals is also required to assess the alternatives. The many mature trees along the corridor characterize the right-of-way in Mountain View. They are an important biological resource, provide necessary visual screening, clean the air and mitigate heat-island effects. An assessment of tree removals for the construction of both temporary and permanent improvements is essential.

COMMENTS ABOUT THE ENVIRONMENTAL REVIEW/DESIGN PROCESS

HSR Schedule

With the anticipated release of a Draft Environmental Impact Report (Draft EIR) in December 2010 and the limited information provided about the project to date, the City is concerned about having enough information in time to make informed comments to the CHSRA. Review of documents by the City and the community and outreach take a considerable amount of time and resources, so we encourage the CHSRA to provide as much information as possible and provide local communities ample time to evaluate the impacts of the HSR and provide feedback to the CHSRA. The City is opposed to the CHSRA making critical decisions before the City and its residents have had the opportunity to analyze all the relevant data and provide critical input.

"Stitching" the Corridor Together

In preparing our comments on the Draft AA, the City has been focused on the impacts of the HSR project on our community and on providing information to and getting feedback from our residents. We have not formally engaged our neighboring cities (Palo Alto and Sunnyvale) nor other agencies with a significant stake in the rail corridor (County of Santa Clara, VTA, Caltrans). We do not know the CHSRA's plan to "stitch" together the feedback from adjacent cities and affected agencies. Such coordination is

critical for a successful project. The City would like to hear from the CHSRA the plan for this coordination as we look forward to participating.

Tunnel Alternative

The AA does not include a tunnel alternative in Mountain View but does include this alternative in neighboring Palo Alto. For the sake of equity between communities and ease of "stitching" the corridor together, this alternative should also be considered in Mountain View.

COMMENTS ABOUT THE ALTERNATIVES

Based on the City's own analysis and the substantial feedback from residents and business owners, the open/covered trench alternative is clearly the most favorable based on the information available to date. The trench alternative minimizes most of the negative impacts of the project compared with the at-grade and aerial viaduct alternatives, particularly noise, visual impacts and division of the community.

The aerial viaduct is the least favorable alternative based on the limited information available. The City received substantial negative feedback about the aerial alternative, particularly regarding visual and noise impacts. Such a massive structure bisecting the City through both residential and commercial neighborhoods would be clearly out of character with the community. We stress again the compactness of Mountain View. Such a massive structure would dominate much of the City and likely have negative impacts on property values.

The at-grade alternative, while creating fewer negative visual and noise impacts than the aerial viaduct, makes the existing rail corridor wider, increasing its dividing effect on the community. This alternative would also create significant traffic flow issues in the downtown.

Aerial Viaduct (Including HSR, Caltrain and Freight)

1. The City recognizes some benefits associated with the aerial viaduct, including minimal impacts on existing infrastructure (underground utilities, roadways, creeks, etc.), separating rail from at-grade pedestrian and vehicle crossings, and possible use of the area under the structure.

2. The City has significant concerns about the impact of elevating a source of noise and vibration. The existing Caltrain/freight system is already a significant noise source. Elevating the rail system would allow the sound to travel further and

negatively impact a larger portion of the community. Much of the corridor in Mountain View is residential or includes other sensitive noise receptors.

The City received many comments from residents about noise and vibration, reflecting a high degree of concern in the community.

Based on the information provided in the AA, the City cannot ascertain the full impact of any of the alternatives in terms of noise and vibration. The City recognizes that electrification of Caltrain and elimination of train horns at at-grade road crossings would reduce rail noise. However, there would still be diesel-powered freight and many more trains than are on the corridor today. The City requests more information about anticipated noise and vibration impacts of each of the alternatives.

3. The elevated option has the greatest negative visual impact on the community. While very little information about the detailed design of an elevated structure was available in the AA, enough was provided to indicate that the size and scale of the structure required to elevate the HSR/Caltrain/freight rails is akin to an elevated freeway structure bisecting the City and would dramatically change the view along the entire corridor. Many buildings close to the corridor in Mountain View are one-, two- and three-story residential structures, and the aerial viaduct is not in keeping with the scale of these buildings. We expect that such a structure would have significant negative impacts on property values in a broad swath of our City—a corridor much broader than the rail corridor itself.

4. More information is needed to assess the shading/shadow impacts of the elevated structure. The City of Mountain View is concerned about the shading/shadow impacts on the residences and trees along the corridor—another factor that would likely negatively affect property values.

5. The aerial viaduct requires removal of the existing San Antonio Road and Shoreline Boulevard overpasses over Caltrain and Central Expressway. These are very busy roadways, carrying approximately 45,000 and 35,000 vehicles per day, respectively. The City made a significant investment in elevating Shoreline Boulevard to relieve congestion at the intersection of Shoreline Boulevard and Central Expressway, and the potential traffic impacts associated with restoring these interchanges to at-grade intersections are of great concern. If this option is carried forward for further consideration, these impacts and how/whether they could be mitigated (including cost and who would bear it) must be thoroughly studied.

6. Development of the area under the structure is limited by structural columns and lack of light. Landscaping opportunities are limited or nonexistent. Based on the limited information available, the City sees few potential development opportunities under the structure. In most cases, such environments seem to be used mainly for parking and show signs of blight—which clearly is unacceptable. It also is not clear if portions would have to be fenced, how the area would be maintained (trash, graffiti, etc.) and who would fund such long-term maintenance. If this option is carried forward for further consideration, the City requests more information about these opportunities.

At-Grade HSR/Caltrain/Freight

1. The at-grade alternative leaves existing stations at Castro Street and San Antonio Road at grade, which is beneficial to rail users.

2. The existing at-grade rail system is already a significant barrier in the community, especially to bicyclists and pedestrians. While grade separations are proposed at Castro Street and Rengstorff Avenue, adding two additional tracks and security fencing for HSR increases the effect of dividing the community. The City's goal is to improve the connection between neighborhoods separated by the rail corridor; Mountain View is especially interested in improving the connection between downtown and Moffett Boulevard (which leads to the NASA/Ames campus) and between Rengstorff Park (one of two community parks where the Community Center, Senior Center, and Teen Center are located) and the many residents on the opposite side of the corridor.

3. The at-grade solution forces vehicles, pedestrians and bicyclists crossing the rail corridor to go above or below grade, which would negatively impact the pedestrian- and bicycle-friendly environment the City is working hard to maintain and enhance. An additional concern is that grade separations would interrupt the existing roadway network near the corridor. An example of particular concern is Castro Street, where an undercrossing would separate existing businesses from the street and disconnect Castro Street from Evelyn Avenue, creating a major problem, given that many public transit customers use Evelyn Avenue and Castro Street to leave the downtown. Approximately 4,000 vehicles per day use the Evelyn Avenue/Castro Street intersection; many of them are shuttle buses. If this intersection were cut off with a grade separation, these vehicles would have to use neighborhood streets that are not accustomed to such traffic. Such impacts must be carefully studied and mitigated.

4. There is not sufficient right-of-way to construct this alternative, particularly south of Castro Street. Accommodating HSR, Caltrain/freight, light rail, a Caltrain

station and a light rail station downtown would affect Mountain View's Downtown Transit Center, the City's train depot building, existing Caltrain/light rail parking, existing privately owned commercial buildings, Evelyn Avenue and Central Expressway. This is a critical area of the City and appears to be the most constrained. The CHSRA must work closely with the City and all affected stakeholders while analyzing this alternative. Options such as vertical stacking of rail facilities may be required.

5. The overhead electrification system would create a negative visual impact. The City would like more information about the options for the electrification system.

Open Trench/Covered Trench

1. The trench option significantly reduces the visual and noise impacts of the project.

2. Placing the rail system below grade greatly reduces the division in the community that is created by the rail corridor. Pedestrians, bicyclists and vehicles can travel across the corridor without going above or below grade. This is a significant benefit, particularly for pedestrians.

3. This option allows for possible vertical stacking of the light rail system over HSR, which helps alleviate the right-of-way constraint south of Castro Street.

4. Caltrain stations are below grade in this alternative, so careful consideration must be given to making below-grade facilities safe, accessible and inviting.

5. The below-grade alternative is shown very deep (approximately 45') below Permanente Creek. The City would like more information about the need to go this deep.

6. A covered HSR trench provides an opportunity for a pedestrian/bike path or other beneficial uses along the corridor—a result that would help the City achieve its goals of connectivity and nontraditional forms of transit. The City would like to work with the CHSRA to explore opportunities for such uses (an example that has been mentioned is a trail connecting the downtown with Rengstorff Park and the Community Center).

7. An alternative showing an at-grade system from Sunnyvale to Stevens Creek transitioning to a below-grade alternative at Castro Street is not shown in the AA. The City would like to know if this alternative is feasible.

8. Enclosed with this letter are renderings prepared for the City of a partially covered trench alternative at Castro Street and at Rengstorff Avenue. The rendering shows the HSR tracks covered to provide a linear greenway between Castro Street/ downtown and at Rengstorff Avenue. This greenway could provide an off-street, alternative transportation route between downtown and the Downtown Transit Center on the south and one of the City's community parks, the Community Center, the Senior Center and one of the City's most densely populated neighborhoods on the north. The City would like to explore this and other ideas with the Authority to provide community benefits along with the HSR project.

Thank you again for the opportunity to comment on the AA. We look forward to continuing to work with the CHSRA towards mutually acceptable solutions to the many challenges posed by the High-Speed Rail project. If you have any questions about Mountain View's comments, please contact Mike Fuller, Public Works Director, at (650) 903-6311.

Sincerely,

Ronit Bryant

Ronit Bryant
Mayor

RB/MAF/2/PWK
905-05-19-10L-E^

Enclosures:
1. CSS Toolkit Exercise 1
2. CSS Toolkit Exercise 2
3. Renderings of Trench Alternative at Castro Street and Rengstorff Avenue

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City Council

CM, PWD, CDD, DPWD, BISM, PM—Kim

EXERCISE 1 - MAPPING COMMUNITY CONTEXT

San Francisco to San Jose on the Caltrain Corridor

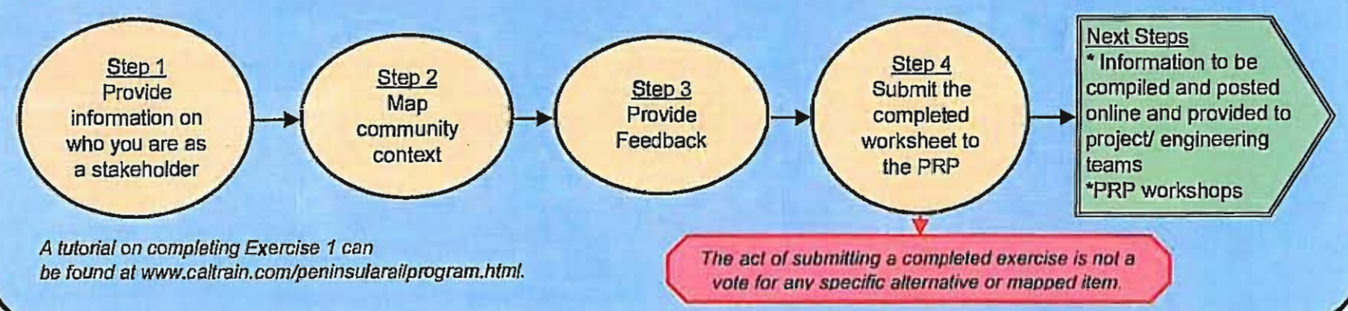
Context Sensitive Solutions (CSS) "Toolkit"

This Exercise is part of a broader CSS toolkit of public engagement activities. It is a mechanism for communities and stakeholder groups to engage in dialogue and have their ideas and concerns communicated to the city representatives and project team regarding the project throughout the preliminary engineering/environmental process. The toolkit will provide each community and stakeholder group a foundation for an accessible, consistent, unified and equitable community engagement approach along the corridor.

The toolkit includes *(1) Reference Documents* that provide contextual and technical information and *(2) Exercises* designed to facilitate stakeholder input and feedback on the project design to the project team. References will aid in broader understanding of the project context and completion of the exercises. Because the exercises are technical in nature, participants are welcome to select any combination of references and/or exercises which suit their particular interest.

Exercise 1 - Mapping Community Context

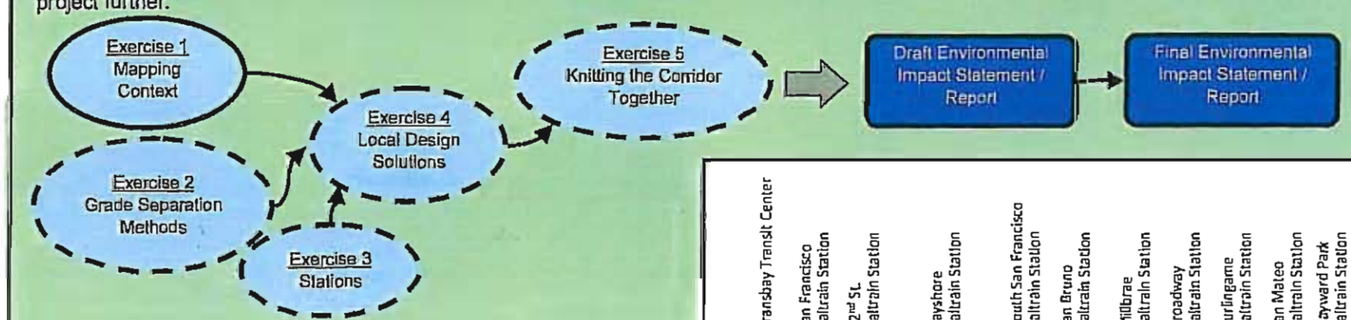
Exercise 1 is the first of five exercises and is focused on enabling participants to identify and locate specific issues and opportunites along the corridor that must be considered with the design of high-speed train project alternatives. This exercise can be completed individually or with a group.

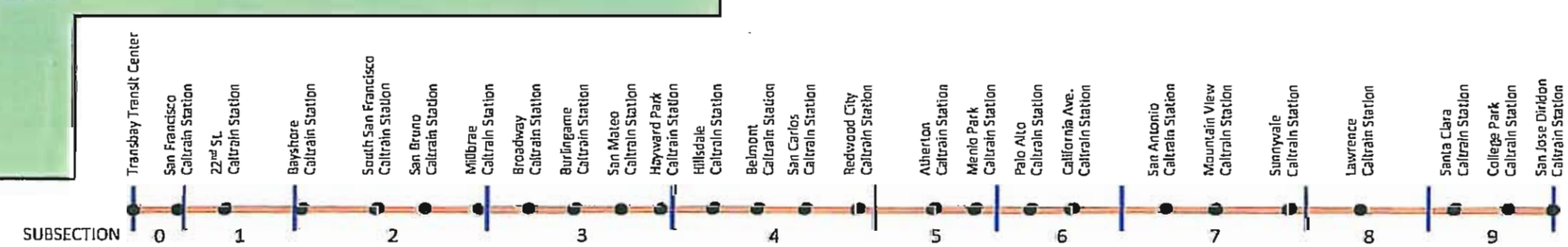


A tutorial on completing Exercise 1 can be found at www.caltrain.com/peninsularailprogram.html.

Next Steps

The feedback obtained from the Exercises will be compiled for each subsection and the summary of responses will be made available online. Responses will not be tallied or weighted, nor will frequencies be recorded. When comments are in conflict, all will be recorded in the summary document. City representatives and project/engineering team members will use the summary documents as references in developing the project further.





Begin Exercise 1 Here

Step 1. Getting started.

Worksheets have been developed for each subsection of the rail corridor (see diagram at the bottom of the page). Ensure that you have selected the correct worksheet for your subsection(s) of interest.

If this worksheet reflects the analysis of a single individual, select "Individual". If this worksheet reflects the consensus of a group of stakeholders, select "Stakeholder Group" and note who the group is.

In addition, identify the sub-subsection (i.e. a, b, etc.) of interest to you and the stakeholder type that best represents who you are.

Was this worksheet completed by:

By an individual ☐
By a stakeholder group? ☒
Group name: City of Mountain View

Date completed: May 19, 2010

Provide additional details

City/County: City of Mountain View

How far is your home/property/neighborhood from the Caltrain right of way?

Within 300 feet ☒
300 ft to 1/2 mile ☐
over 1/2 mile ☐

Which stakeholder group(s) do you belong to?

Resident	☐	Environment	☐
Business	☐	Transit/Transportation	☐
Labor	☐	Freight	☐
Caltrain/HST rider	☐	Regulatory/Funding	☐
Other (please state)	Local Agency		

Step 2. Map community context.
Review the following list of design considerations and map the location of any identified items by placing the respective symbol on the provided right of way maps (via drawing by hand or copy-and-paste within excel). The maps provided in this worksheet are to be used for the purpose of collecting community context only.

At the bottom of each page, provide some additional descriptions on the items located on the maps. Any additional descriptions you may provide will be helpful in ensuring that the project team fully understands the identified items.

Design Considerations

1. Noise and Vibration. City staff is providing input on the location of sensitive receptors in their respective cities. Please email PRP@caltrain.com to request the sensitive receptors information. You can also indicate any locations that are particularly sensitive to noise (i.e. day cares, hospitals, etc).

2. Visual Character. Can you locate where and how a project alternative could substantially affect the visual character, scenic, park, natural or historic resources of your area?

3. Safety. Can you identify and locate any specific areas requiring attention to vehicular, pedestrian or bicycle safety along the rail right of way or at street crossings?

4. Station Accessibility. Can you identify and locate opportunities to enhance pedestrian, bicycle and vehicular access to and from a Caltrain station to nearby residential neighborhoods, commercial areas or the downtown in your area?

5. Connectivity. Can you identify and locate opportunities to enhance east/west pedestrian, bicycle and vehicular connectivity, including connecting neighborhoods to park, school, shopping and community resources?

6. Community Design. Please describe the land use and community design vision for your sub section along the right of way. What are your communities key goals for future change? What transit-oriented development policies and guidelines do you have for your station area? Does your community front or back onto the corridor?

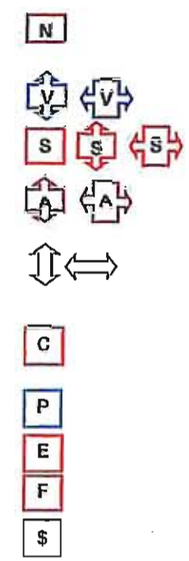
7. Adjacent Properties and Streets. Please identify properties and land uses that adjoin the right of way that could be impacted by the project alternatives.

8. Equity. Please identify and locate any minority and low-income communities and locally owned businesses that could be affected by alignment alternatives.

9. Freight Operations. Please identify freight customers along the right of way in your subsection.

10. Economic Vitality. Identify and locate where rail transit access to local employment, commercial centers and downtown needs to be maintained or enhanced for your sub-section.

Symbols

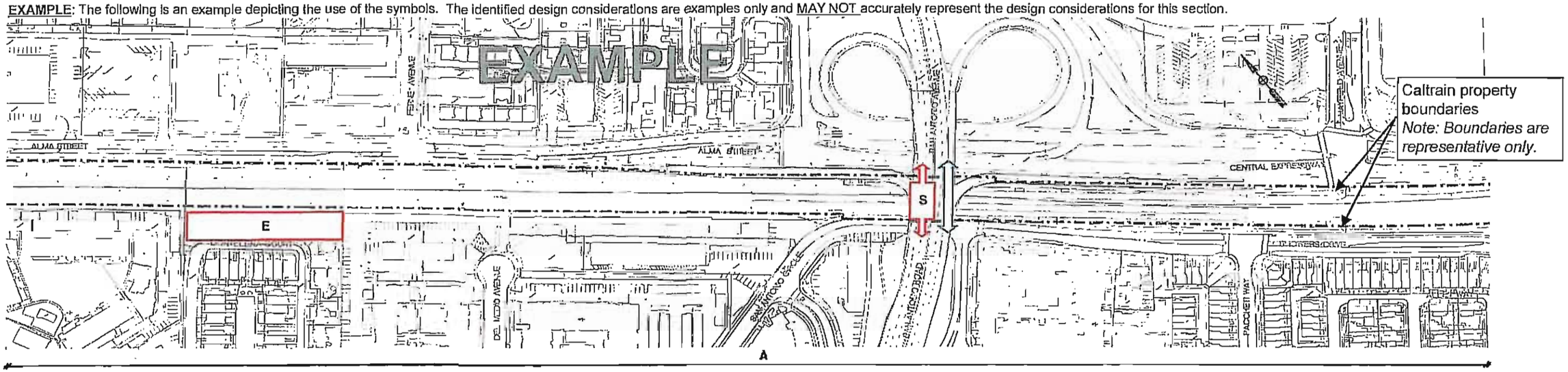


These symbols can be copied and pasted directly onto the right of way maps in excel. Resize and rotate as necessary.

-OR-

Draw the symbols on the maps if you are preparing the worksheet by hand.

EXAMPLE: The following is an example depicting the use of the symbols. The identified design considerations are examples only and MAY NOT accurately represent the design considerations for this section.

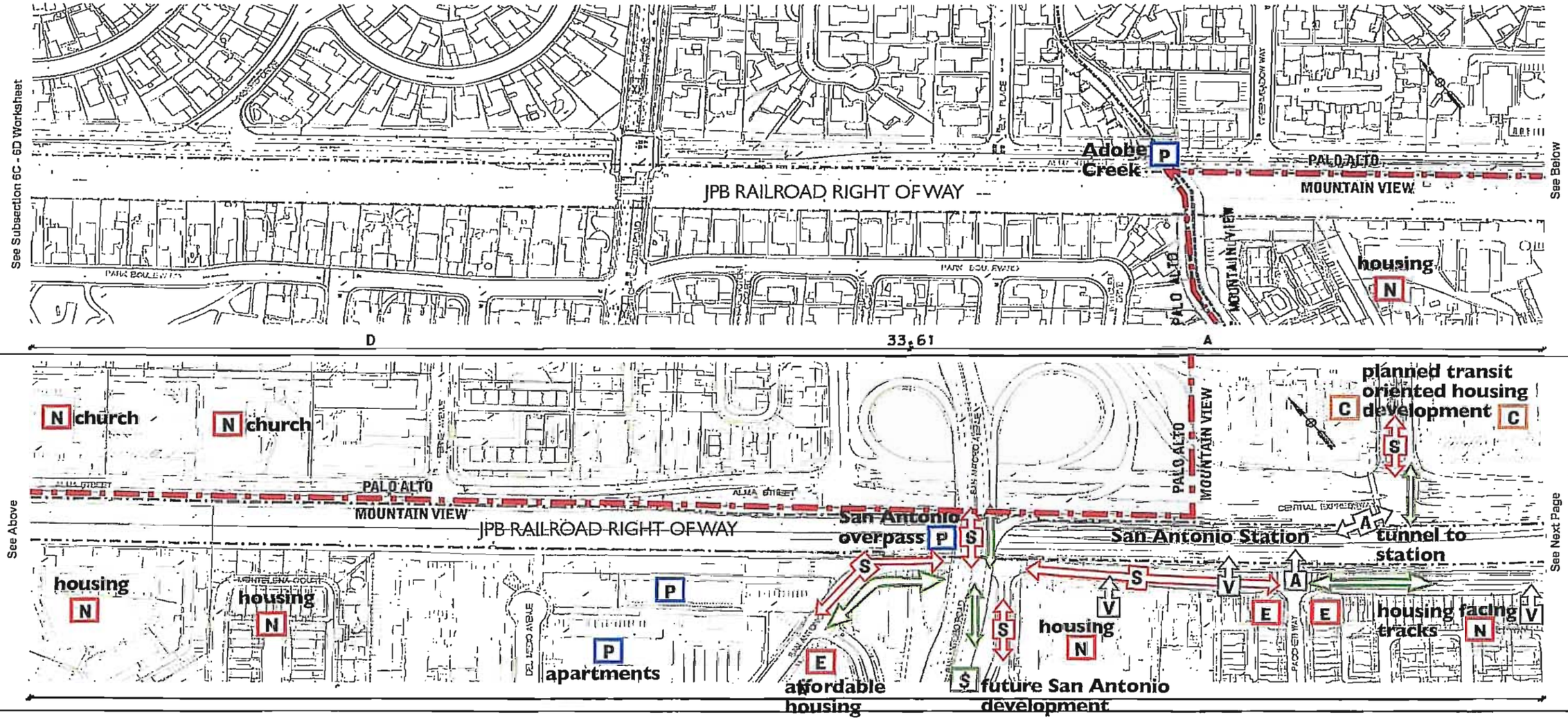


100 0 100 200

NOTE: CALTRAIN RIGHT OF WAY BOUNDARIES ARE REPRESENTATIVE ONLY.

Provide descriptions of items drawn and identified in the above maps.
E: Minority businesses. Minimize impact.
S at Rengstorff: Improve safety for crossings as crossing is used by nearby schools and businesses.
Maintain cross connectivity at Rengstorff.
Provide east side access to the San Antonio platform.

EXAMPLE



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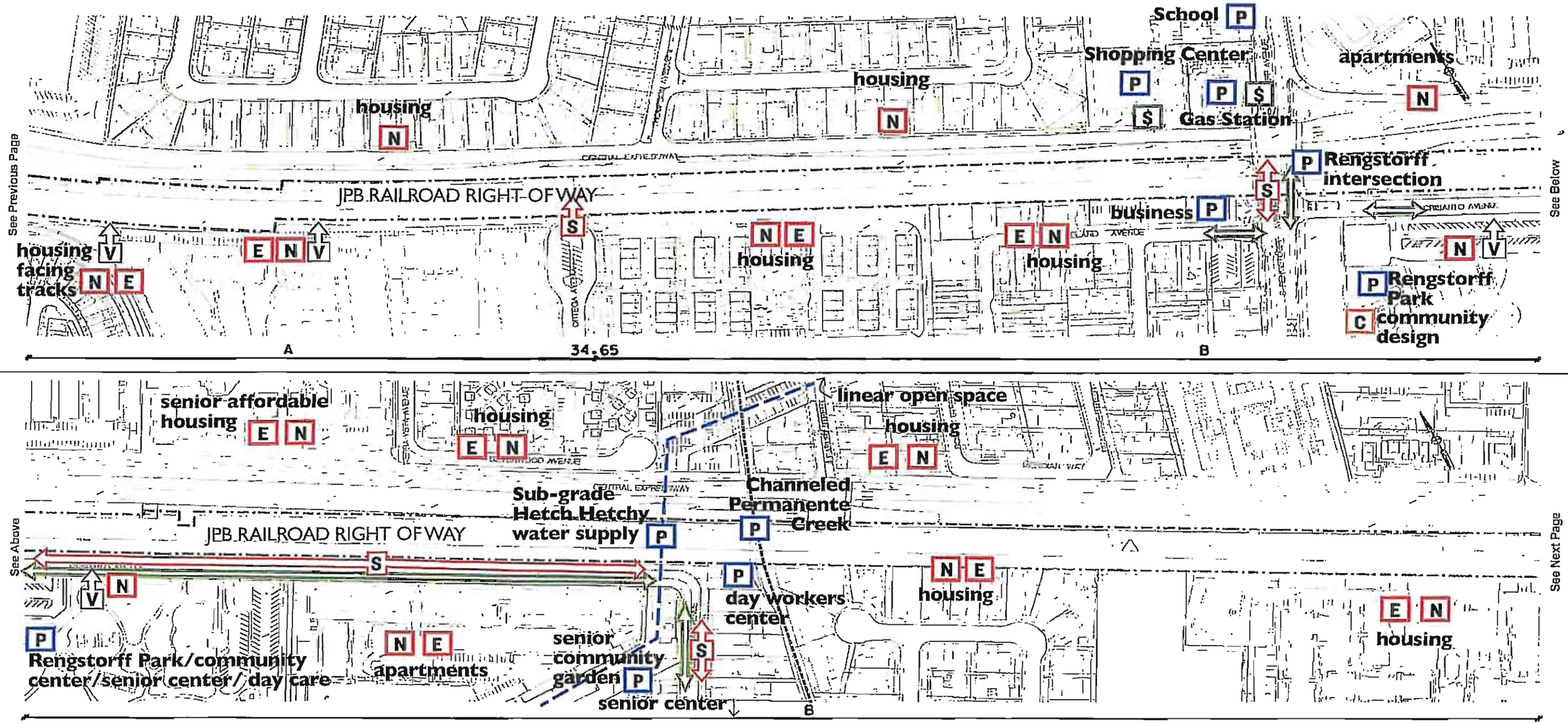
Provide descriptions of items drawn and identified in the above maps.

- Maintain safety, station accessibility & connectivity to existing performing arts & future development of San Antonio & shopping center; existing neighbors along Showers Drive & Central Expressway.
- Maintain pedestrian/bicycle access tunnel at San Antonio Station. An extension of the pedestrian/bicycle underpass under Central Expressway to connect to new housing and neighborhood is planned.

NOTE: CALTRAIN RIGHT OF WAY BOUNDARIES ARE REPRESENTATIVE ONLY.

LEGEND SYMBOLS

Noise and Vibration N	Station Accessibility A	Adjacent Properties & Streets P
Visual Character V	Connectivity	Equity E
Safety S	Community Design C	Economic Vitality $



100 0 100 200

Provide descriptions of items drawn and identified in the above maps.

- Safety and connectivity to Rengstorff Park, senior center, senior gardens and day workers' center.
- Conflicts with Permanente Creek culvert and PUC Hetch Hetchy waterpipes.
- Improve safety and connectivity at rail/Rengstorff/Central Expressway intersection.

NOTE: CALTRAIN RIGHT OF WAY BOUNDARIES ARE REPRESENTATIVE ONLY.

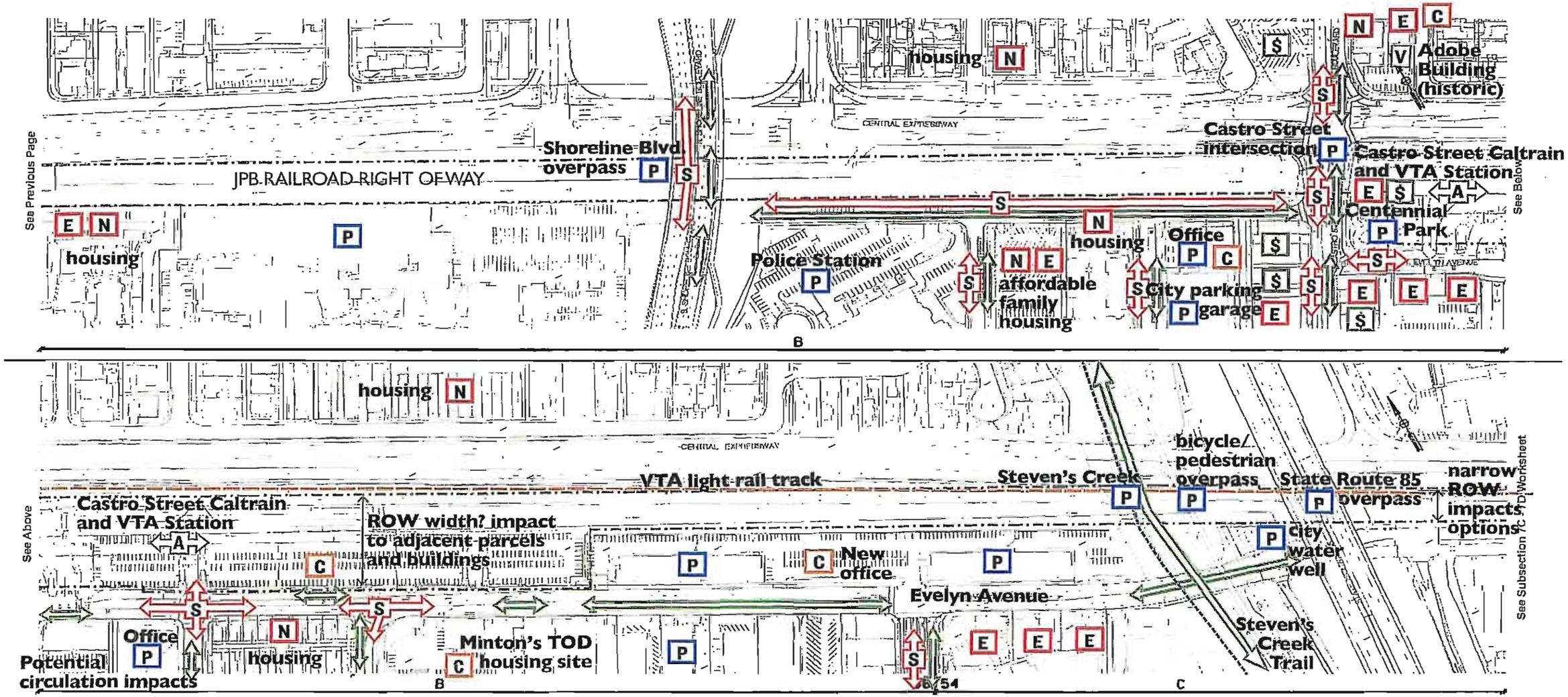
MOUNTAIN VIEW HIGH SPEED RAIL | **CHSRA/PRP CSS TOOLKIT EXERCISE I**

MOUNTAIN VIEW, CA | MAY 2010 | CITY OF MOUNTAIN VIEW, CA

LEGEND SYMBOLS

Noise and Vibration	N	Station Accessibility	A	Adjacent Properties & Streets	P
Visual Character	V	Connectivity		Equity	E
Safety	S	Community Design	C	Economic Vitality	$

VAN METER WILLIAMS POLLACK LLP



100 0 100 200

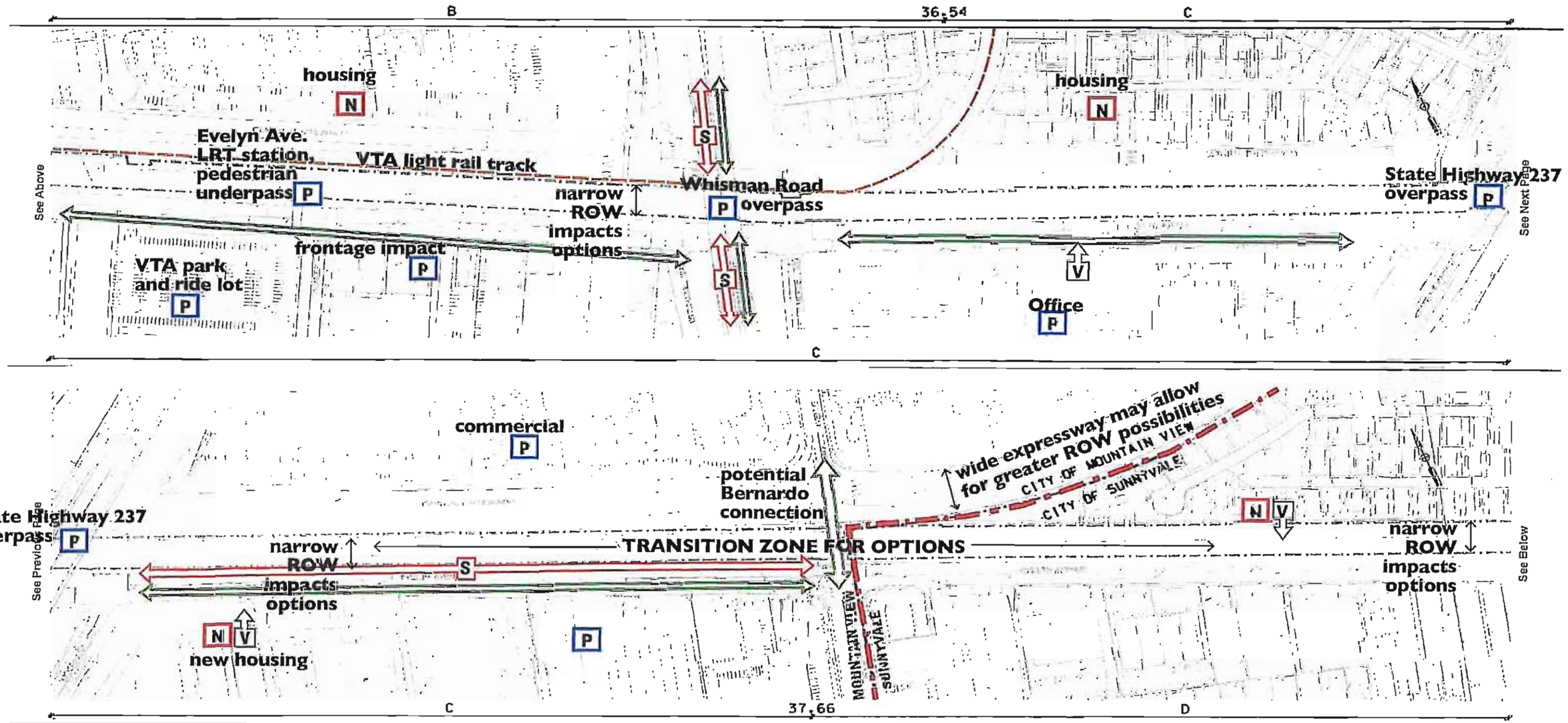
NOTE: CALTRAIN RIGHT OF WAY BOUNDARIES ARE REPRESENTATIVE ONLY.

Provide descriptions of items drawn and identified in the above maps.

- Better access to and from Caltrain/Light Rail. Historic downtown/Castro Street- visual character, safety, local businesses, maintain accessibility and connectivity.
- Community has a Downtown Precise Plan and an Evelyn Ave. Corridor Precise Plan for this area .
- Major physical impacts to streets, roads and adjacent properties. Major visual impacts, especially from Castro Street. Major connectivity impacts - station area as well as city circulation.
- Major economic vitality impacts, potentially to adjacent properties.
- Maintain the amount of existing parking at Castro Station, opportunity for parking structure.

LEGEND SYMBOLS

Noise and Vibration	N	Station Accessibility	A	Adjacent Properties & Streets	P
Visual Character	V	Connectivity		Equity	E
Safety	S	Community Design	C	Economic Vitality	$



100 0 100 200

Provide descriptions of items drawn and identified in the above maps.

- Maintain safety and connectivity on Whisman, required.
- How will VTA light rail station/pedestrian underpass integrate with HSR at grade?
- Bernardo - not currently connected over Central Expressway - possible improvement (bike/pedestrian or vehicle).

NOTE: CALTRAIN RIGHT OF WAY BOUNDARIES ARE REPRESENTATIVE ONLY.

LEGEND SYMBOLS

Noise and Vibration	N	Station Accessibility	A	Adjacent Properties & Streets	P
Visual Character	V	Connectivity		Equity	E
Safety	S	Community Design	C	Economic Vitality	$

Ref No: CSS5_002_Exercise2_GradeSepMethods
Date: 3/31/10

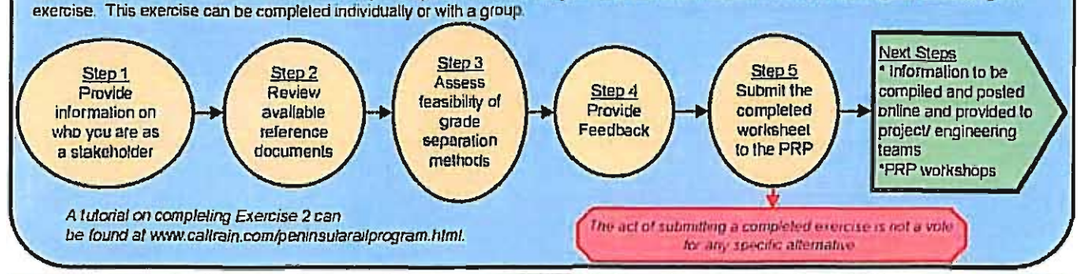
EXERCISE 2 - GRADE SEPARATION METHODS

San Francisco to San Jose on the Caltrain Corridor

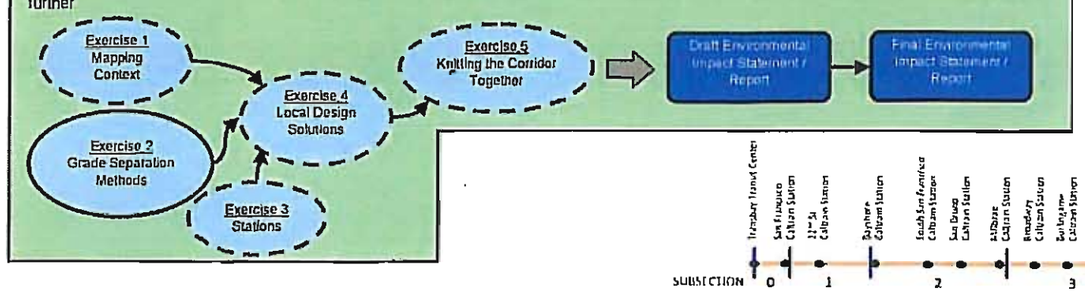
Context Sensitive Solutions (CSS) "Toolkit"
This Exercise is part of a broader CSS toolkit of public engagement activities. It is a mechanism for communities and stakeholder groups to engage in dialogue and have their ideas and concerns communicated to the city representatives and project team regarding the project throughout the preliminary engineering/environmental process. The toolkit will provide each community and stakeholder group a foundation for an accessible, consistent, unified and equitable community engagement approach along the corridor.

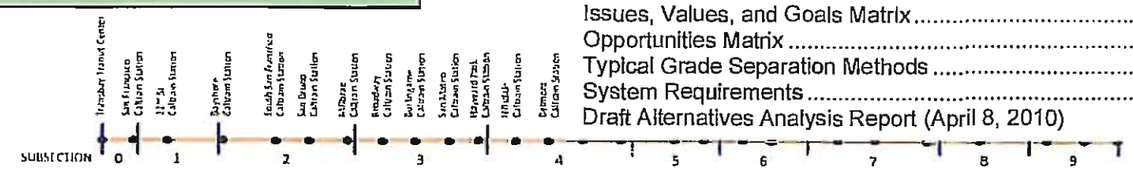
The toolkit includes (1) *Reference Documents* that provide contextual and technical information and (2) *Exercises* designed to facilitate stakeholder input and feedback on the project design to the project team. References will aid in broader understanding of the project context and completion of the exercises. Because the exercises are technical in nature, participants are welcome to select any combination of references and/or exercises which suit their particular interest.

Exercise 2 - Feasibility Assessment of Typical Grade Separation Methods
Exercise 2 is the second of five exercises and is focused on assessing the feasibility of the typical methods for grade separating railroad tracks from roadways (i.e. aerial, trench, etc). This exercise is geared toward the Technical Working Group to assist cities in the preparation of their formal comments on the Draft Alternatives Analysis Report. However, the general public is not restricted from completing and submitting this exercise. This exercise can be completed individually or with a group.



Next Steps
The feedback obtained from the Exercises will be compiled for each subsection and the summary of responses will be made available online. Responses will not be tallied or weighted, nor will frequencies be recorded. When comments are in conflict, all will be recorded in the summary document. City representatives and project/engineering team members will use the summary documents as references in developing the project further.





Peninsula Rail Program
Context Sensitive Solutions

BEGIN EXERCISE 2 HERE

Step 1. Getting started.
If this worksheet reflects the analysis of a single individual, select "Individual." If this worksheet reflects the consensus of a group of stakeholders, select "Stakeholder Group" and note who the group is.

In addition, identify the sub-subsection (i.e. a, b, etc.) of interest to you and the stakeholder type that best represents who you are.

Was this worksheet completed by:
By an individual ☐
By a stakeholder group? ☒
Group name: City of Mountain View

Date completed: 5/19/10

Provide additional details
Subsection (i.e. 1A, 2B) 7A-7D
City/County: Mountain View/Santa Clara County
How far is your home/property/neighborhood from the Caltrain right of way?
Within 300 feet ☐
300 ft to 1/2 mile ☐
over 1/2 mile ☐

Which stakeholder group(s) do you belong to?

Resident	☐	Environment	☐
Business	☐	Transit/Transportation	☐
Labor	☐	Freight	☐
Caltrain/HST rider	☐	Regulatory/Funding	☐
Other (please state)	City of Mountain View		

Step 2. Review available reference documents.
Please review the available reference documents to support project understanding and foster participation. Identify the documents that were reviewed to complete this exercise. This is important so the project team can understand the background used in your assessment and to determine what additional information will be required.

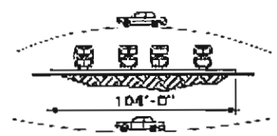
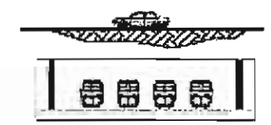
Reference Documents - Check if Ref Doc was used in evaluation
Issues, Values, and Goals Matrix ..... ☒
Opportunities Matrix ..... ☒
Typical Grade Separation Methods ..... ☒
System Requirements ..... ☒
Draft Alternatives Analysis Report (April 8, 2010) ☒

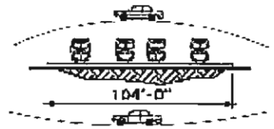
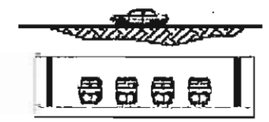
Step 3. Conduct Preliminary Assessment of the Feasibility of the Typical Grade Separation Methods. At the top of the table, circle the grade separation methods that are being considered for additional study in your subsection or sub-subsection of interest. Grade separation methods being considered can be found in the Alternatives Analysis Exhibits or in the Draft Alternatives Analysis Report (anticipated release date of April 8, 2010). Both can be found on the California High-Speed Rail Authority's webpage, under the San Francisco to San Jose Section in the Library, at: http://www.cahighspeedrail.ca.gov.

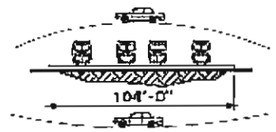
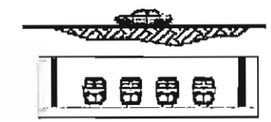
For each circled grade separation method, conduct an assessment of whether it meets or does not meet the goals for all stakeholders for each of the categories. You can answer:
(Y) Yes, the method meets all/most goals
(N) No, the method does not meet goals
(I) Additional information is needed, or
(N/A) The specific category is not applicable.

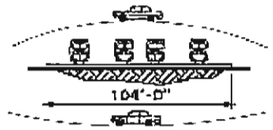
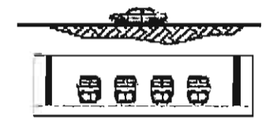
For the project team to understand your assessment, please provide the reason why you reached that conclusion and the information that you are basing your conclusion on in the table cell for each grade separation method. In making your assessment, give attention to:
(1) varying impacts of the different grade separation methods
(2) systemwide requirements that may impact grade separation method, and
(3) the extent to which stakeholder goals can be met.

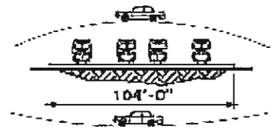
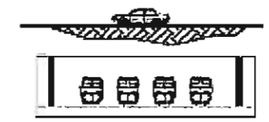
For hybrid options that are applicable for your subsection (for example elevated high speed train and at-grade Caltrain), use the last column and identify the hybrid option being assessed.

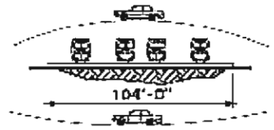
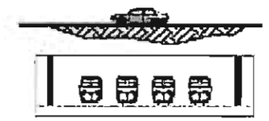
Stakeholder Categories **(Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)**	**Aerial Viaduct** 	**At-Grade** 	**Open Trench** 	**Closed Trench (Cut-and-Cover)** 	**Hybrid (Caltrain and HST on different vertical options)**
Noise & Vibrations - Do not exceed current levels of train-related noise and vibrations. - Minimize noise impact to sensitive receptors (hospitals, senior homes, daycare centers, etc)	I –The City is concerned about the potential impacts of noise and vibration at different locations within the HSR corridor. Additional studies are needed to provide noise and vibration information at different locations and intervals throughout the City.	I –The City is concerned about the potential impacts of noise and vibration at different locations within the HSR corridor. Additional studies are needed to provide noise and vibration information at different locations and intervals throughout the City.	I –The City is concerned about the potential impacts of noise and vibration at different locations within the HSR corridor. Additional studies are needed to provide noise and vibration information at different locations and intervals throughout the City.	I –The City is concerned about the potential impacts of noise and vibration at different locations within the HSR corridor. Additional studies are needed to provide noise and vibration information at different locations and intervals throughout the City.	I –The City is concerned about the potential impacts of noise and vibration at different locations within the HSR corridor. Additional studies are needed to provide noise and vibration information at different locations and intervals throughout the City.
Corresponding Categories in Draft Alternatives Analysis Report: Natural Environment	Aerial is the least preferred option in that it provides the most noise and only provides less vibration than the at grade option.	The at grade option provides only less noise than the aerial option and creates the most vibration.	The open trench provides the second best option in that it provides less noise and vibration than the aerial and at-grade options.	The closed trench is the best option in that it will provide both the least noise and least vibration.	Please see responses for the aforementioned options.

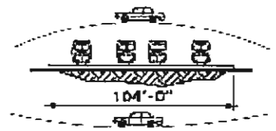
Stakeholder Categories (Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)	Aerial Viaduct 	At-Grade 	Open Trench 	Closed Trench (Cut-and-Cover) 	Hybrid (Caltrain and HST on different vertical options)
Visual Experience - Structure does not visually divide community more than it is divided today. - Structure does not block scenic views/vistas, consistent with local planning efforts. - Design/aesthetic of structure respects community scale and character and is compatible with local development plans for adjacent sites. Corresponding Categories in Draft Alternatives Analysis Report: Natural Environment	N — The aerial structure visually divides the community more than it is divided today, blocks scenic views and vistas, and is not compatible with the scale and character nor with development plans for much of the community along the corridor in Mountain View. N - The aerial option creates the most visual impact to the community and adjacent properties.	Y/N – The at-grade option visally divides the community by increasing the width of the at-grade rail corridor. An overpass structure would divide the community and would be out of character with the community and would block scenic views and vistas. Y - An underpass would not block scenic view and vistas and would not visually divide the community. Y/N – The underpass structure will not block scenic views/vistas, however, it isn't consistent with local planning efforts N- An underpass structure would diminish the visual experience for people crossing the corridor, particularly pedestrians.	Y - The open trench structure does not block scenic views/vistas. Y/N- The open trench option is less visible and therefore divides the community less and better respects community scale and character better than aerial or at-grade options. This appears to be the second best option as long as landscaping is properly maintained (not creating an eyesore) and limited opportunities for graffiti/vandalism within the open trench.	Y – The design of the closed trench respects community scale and character and is compatible with local development plans for adjacent sites. This idea is consistent with the theme of having more "green space" and connectivity and which would allow a connection between Castro Street and Rengstorff Park along/over the Caltrain ROW. This option does not block scenic views/vistas, consistent with local planning efforts. This is the best option consistent with the City goals of providing opportunities for new open spaces or other planned land uses and promoting connectivity.	Please see aforementioned comments.
Rider Experience - Passengers can see where they are, experience "sense of place." - For passenger comfort, corridor has minimal grade changes (minimize roller coaster effect) - Promote convenient, reliable local transportation connections to final destination	Y- The aerial option provides the best visual rider experience, and provides a "sense of place." This option promotes convenient, reliable local transportation connections to final destination.	Y- The at-grade option provides a sense of where they are, however, not as well as the aerial option I - Promotes convenient, reliable local transportation connections to final destination Y – Stations would be at-grade, which is more convenient than other options for riders.	N - The open trench option does not allow opportunities for passengers to see where they are and experience a "sense of place." I - Promotes convenient, reliable local transportation connections to final destination The open trench option is better than the cut and cover design in that it will not be completely covered.	N - The closed trench option does not allow opportunities for passengers to see where they are and experience a "sense of place." Y - Promote convenient, reliable local transportation connections to final destination The cut and cover option is the least preferred option from a rider experience standpoint.	N – If a number of vertical options are provided, the rider may experience a "roller coaster" effect. Limiting the number of transitioning between vertical options not only within the Mountain View corridor but throughout the entire project is preferred.

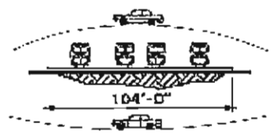
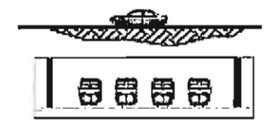
Stakeholder Categories (Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)	Aerial Viaduct 	At-Grade 	Open Trench 	Closed Trench (Cut-and-Cover) 	Hybrid (Caltrain and HST on different vertical options)
Safety - Reduce potential collisions with vehicles/pedestrians/bicycles at crossings. - Restrict pedestrian access to railroad, discourage trespassing. - In an emergency, passengers can quickly evacuate, fire and police can access train. - Design of structure minimizes/discourages criminal activity. - Provide safety measures for adjacent community and residences from possible derailment. Corresponding Categories in Draft Alternatives Analysis Report: Natural Environment	Y – Provides least opportunity for collisions with vehicles/pedestrians/ bicycles. Also provides least opportunity for trespassing. N- This design would be difficult for emergencies where passengers need to evacuate, where fire and police access the structure. I – Can reduce potential collisions with vehicles/pedestrians/bicycles at crossings, however, may require converting existing overcrossings at San Antonio and Shoreline to be at grade with Central Expressway. This could reduce safety for ped/bike crossing at Central Expressway and also increase traffic delays. N – Provides opportunity for criminal activity with opportunities for concealment and graffiti. N – Safety must be provided to vehicles, pedestrians and bicyclists underneath the aerial tracks (Possible fencing, additional lighting). I – Need information to provide safety measures for adjacent community and residences from possible derailment.	Y – Grade separations would reduce potential collisions with vehicles/pedestrians/bicycles at crossings. I – Need information to provide safety measures for adjacent community and residences from possible derailment. I – Restricting pedestrian access to railroad and discourage trespassing more difficult than aerial option. Y- At-grade design is best for emergencies where passengers need to evacuate, where fire and police can access the structure. N – Safety must be provided to vehicles, pedestrians and bicyclists underneath the at grade tracks at undercrossings. The at grade option provides the best opportunity in terms of safety for riders, but not necessarily for vehicles and pedestrians.	Y – Grade separations would reduce potential collisions with vehicles/pedestrians/bicycles at crossings. I – Restricting pedestrian access to railroad and discourage trespassing more difficult than aerial option. Y – Provides safety measures for adjacent community and residences by confining any possible derailment. N- This design would be difficult for emergencies where passengers need to evacuate, where fire and police can access the structure, albeit easier than the closed trench option.	Y - Reduces potential collisions with vehicles/pedestrians/bicycles at crossings; restricts pedestrian access to railroad, discourages trespassing; provides safety measures for adjacent community and residences by confining any possible derailment. Design of structure minimizes/discourages criminal activity. N - This design would be difficult for emergencies where passengers need to evacuate, where fire and police can access the structure. The closed trench option provides the best opportunity in terms of safety for adjacent properties, but not necessarily for riders.	

Stakeholder Categories (Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)	Aerial Viaduct 	At-Grade 	Open Trench 	Closed Trench (Cut-and-Cover) 	Hybrid (Caltrain and HST on different vertical options)
Service & Stations - Provides Caltrain with grade-separated right-of-way. - Minimal reconstruction/relocation of existing Caltrain stations - Caltrain and Valley Transportation Authority (VTA) Light Rail must be able to maintain service during construction with few temporary structures. - Minimize traffic and parking impacts associated with High Speed Rail. (Improve circulation. maintain or improve parking impacts) - Improve Caltrain, VTA bus and VTA Light Rail station amenities @ Mountain View Station. - Improve Caltrain and VTA Bus amenities @ San Antonio Station Corresponding Categories in the Environmental documents: Alignment and Station Performance; Constructability	Y – Caltrain will be provided with grade separation which eliminates crossing conflicts that improve train and vehicular traffic level of service (LOS) I – Further information must be provided to show how the aerial option will transition with the existing Caltrain station at San Antonio. I – Further information must be provided to indicate how existing Caltrain and VTA Light Rail services be maintained/improved and coexist with HSR from Downtown Mountain View Caltrain station to Sunnyvale during and after construction.	Y – Caltrain will be provided with grade separation which eliminates crossing conflicts that improve train and vehicular traffic level of service (LOS) I – Further information must be provided to indicate how existing Caltrain and VTA Light Rail services be maintained/improved and coexist with HSR from Downtown Mountain View Caltrain station to Sunnyvale during and after construction. With the at grade option at Castro/Moffett/Central Expressway, the City envisions pedestrian friendly bridges to be installed over Castro Street, Central Expressway and Moffett Boulevard to provide access to stations and downtown.	Y – Caltrain will be provided with grade separation which eliminates crossing conflicts that improve train and vehicular traffic level of service (LOS) I – Further information must be provided to indicate how existing Caltrain and VTA Light Rail services be maintained/improved and will coexist with HSR from Downtown Mountain View Caltrain station to Sunnyvale during and after construction. With the open trench option at Castro/Moffett/Central Expressway, the City envisions a stronger gateway with landmark corner building and a better connection with the Moffett Boulevard corridor.	Y – Caltrain will be provided with grade separation which eliminates crossing conflicts that improve train and vehicular traffic level of service (LOS) I – Further information must be provided to indicate how existing Caltrain and VTA Light Rail services be maintained/improved and coexist with HSR from Downtown Mountain View Caltrain station to Sunnyvale during and after construction. With the closed trench option at Castro/Moffett/Central Expressway, the City envisions a stronger gateway with landmark corner building and a better connection with the Moffett Boulevard corridor.	Y – Caltrain will be provided with grade separation which eliminates crossing conflicts that improve train and vehicular traffic level of service (LOS) Please see aforementioned vertical options.

Stakeholder Categories (Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)	Aerial Viaduct 	At-Grade 	Open Trench 	Closed Trench (Cut-and-Cover) 	Hybrid (Caltrain and HST on different vertical options)
Cross Connectivity: Vehicle, Pedestrian, Bicycle - Provide improved north-south connectivity for vehicles, pedestrians and bicyclists @ Castro Street/Moffett Boulevard/Central Expressway and @ Rengstorff Avenue. - Provide a greenway connection between Castro Street and Rengstorff Park. Corresponding Categories in Draft Alternatives Analysis Report: Constructability; Community	I - The aerial option provides improved north-south connectivity for vehicles, pedestrians and bicyclists @ Castro Street/Moffett Boulevard/Central Expressway and @ Rengstorff Avenue while promoting opportunities for additional green space and other land uses. Would require converting existing overcrossings at San Antonio and Shoreline to be at grade with Central Expressway, increasing traffic delays and creating at-grade crossing with Central Expressway for vehicles, pedestrians, and bikes.	Y/N – Provides grade separations for north-south connectivity for vehicles/bikes/pedestrians, but causes vehicle/bikes/pedestrians to have to change grade (overcrossing or undercrossing) to cross rail. N- At downtown, the at-grade option can eliminate direct vehicular and bicycle access from both intersections of W. Evelyn Avenue and Castro Street. N- At Rengstorff and Central Expressway, direct at-grade access to a portion of Rengstorff Park will be eliminated. Also, access to the commercial center and apartments to the north must be reconfigured. The access to Mi Pueblo Market and some residences to the south will be eliminated.	Y - The open trench design allows the potential to improve north-south connectivity for vehicles/bikes/ pedestrians by allowing vehicles/bikes/pedestrians to cross over rail while remaining at grade. Y – If partially covered, the open trench can provide an opportunity to provide a pedestrian friendly "greenway" between Rengstorff Park and Castro Street along the corridor.	Y -The closed trench option provides the best north-south connectivity for vehicles, pedestrians and bicyclists. Y – The closed trench can provide an opportunity to provide a pedestrian and bike friendly "greenway" between Rengstorff Park and Castro Street along and over the Caltrain ROW. The closed trench is the best option and is consistent with the City goals of providing opportunities for new open spaces or other planned land uses along with providing connectivity.	
Land Use - Be consistent with local Land Use Plans and community vision, design of structure respects adjacent land uses. - Provide opportunity for new open spaces or other planned land uses - Promotes north-south vehicular, pedestrian and bicycle connectivity Corresponding Categories in Draft Alternatives Analysis Report: Land Use; Environmental Resources	N – Aerial structure does not respect adjacent land uses and is not consistent with local land use plans and community vision. I – Provides opportunity for new open spaces or other land uses, but more information is needed about opportunities for development under and around the structure. Y - Promotes north-south vehicular, pedestrian and bicycle connectivity.	N – A wider at-grade rail corridor is not consistent with local land use plans or community vision. N- The at grade option does not provide opportunities for new open spaces or other planned land uses Y/N – Promotes north-south vehicular, pedestrian and bicycle connectivity but forces vehicles, pedestrians and bicycles to go above or below grade to cross rail corridor.	Y – Consistent with local Land Use Plans and community vision, design of structure respects adjacent land uses, Promotes north-south vehicular, pedestrian and bicycle connectivity Y -Provides opportunity for new open spaces or other planned land uses such as an opportunity to connect Rengstorff Park and Castro Street with a greenway.	Y – Consistent with local Land Use Plans and community vision, design of structure respects adjacent land uses, Promotes north-south vehicular, pedestrian and bicycle connectivity Y -Provides opportunity for new open spaces or other planned land uses such as an opportunity to connect Rengstorff Park and Castro Street with a greenway.	

Stakeholder Categories (Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)	Aerial Viaduct 	At-Grade 	Open Trench 	Closed Trench (Cut-and-Cover) 	Hybrid (Caltrain and HST on different vertical options)
Adjacent Properties - Minimize residential/business displacements. - Design of structure adds value to community, minimizes reduction in property values. - Project should consider impacts to soil (erosion) and foundations or structures along the right-of-way. - Utilize prefabricated structures which can be installed in a shorter time frame to reduce construction period. Corresponding Categories in Draft Alternatives Analysis Report: Community	Y – Minimizes residential/business displacements. N - The size and the scale of the proposed structure are not compatible with the adjacent properties, which could adversely affect property values. I - The City is interested in knowing the time necessary for prep work (traffic control, erosion control, excavations) and ultimate construction completion since it will affect adjacent properties and downtown businesses. Also, the City is interested in necessary setback requirements needed for adjacent properties for this option.	N – At downtown, this option could eliminate some businesses' direct connection to Moffett Boulevard and Castro Street. N – Existing right-of-way will not accommodate at-grade option, so business displacements may occur. N – Grade separation structures would affect access to properties, parking, and circulation and would likely not add value to the community. N – At Rengstorff Avenue, business displacements could occur with grade separation. I - The City is interested in knowing the time necessary for prep work (traffic control, erosion control, excavations) and ultimate construction completion since it will affect adjacent properties and downtown businesses. Also, the City is interested in necessary setback requirements needed for adjacent properties for this option.	Y – With vertical stacking of Light Rail, business displacements would likely not occur. Y - Placing Caltrain below grade would minimize reduction in property values. The City is interested in knowing the time necessary for prep work (traffic control, erosion control, excavations) and ultimate construction completion since it will affect adjacent properties and downtown businesses. Also, the City is interested in necessary setback requirements needed for adjacent properties for this option.	Y – With vertical stacking of Light Rail, business displacements would likely not occur. Y - Placing Caltrain below grade would minimize reduction in property values. The City is interested in knowing the time necessary for prep work (traffic control, erosion control, excavations) and ultimate construction completion since it will affect adjacent properties and downtown businesses. Also, the City is interested in necessary setback requirements needed for adjacent properties for this option.	The City is interested in knowing the time necessary for prep work (traffic control, erosion control, excavations) and ultimate construction completion since it will affect adjacent properties and downtown businesses. Also, the City is interested in necessary setback requirements needed for adjacent properties for the hybrid options.

Stakeholder Categories (Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)	Aerial Viaduct 	At-Grade 	Open Trench 	Closed Trench (Cut-and-Cover) 	Hybrid (Caltrain and HST on different vertical options)
Constructability - Construction of structure requires fewer temporary structures (track or stations) - Structure can be prefabricated/installed in shorter time frame to reduce construction period Corresponding Categories in Draft Alternatives Analysis Report: Constructability	I – More information is needed to assess constructability.	I – More information is needed to assess constructability.	I – More information is needed to assess constructability.	I – More information is needed to assess constructability.	
Freight Operations - Maintain access to freight rail customers. - Ensure freight can use the corridor to meet future demand. Corresponding Categories in Draft Alternatives Analysis Report: Constructability	Y – All alternatives appear to maintain access to freight customers and ensure future use of the corridor to meet future demand.	Y – All alternatives appear to maintain access to freight customers and ensure future use of the corridor to meet future demand.	Y – All alternatives appear to maintain access to freight customers and ensure future use of the corridor to meet future demand.	Y – All alternatives appear to maintain access to freight customers and ensure future use of the corridor to meet future demand.	
Rail Operations - Provide ability for enhanced Caltrain and commuter rail service - Maximize Caltrain and HST capacity through sharing infrastructure (tracks, etc.) - Allows VTA Lightrail riders opportunity to use the enhanced Caltrain/ HSR service. Corresponding Categories in the Draft Alternatives Analysis Report: Constructability; Alignment and Station Performance Objectives	Y - Provides ability for enhanced Caltrain and commuter rail service Y - Maximizes Caltrain and HST capacity through sharing infrastructure (tracks, etc.) Y - Allows VTA Lightrail riders opportunity to use the enhanced Caltrain/ HSR service.	Y - Provides ability for enhanced Caltrain and commuter rail service - Maximizes Caltrain and HST capacity through sharing infrastructure (tracks, etc.) - Allows VTA Lightrail riders opportunity to use the enhanced Caltrain/ HSR service.	Y - Provides ability for enhanced Caltrain and commuter rail service - Maximizes Caltrain and HST capacity through sharing infrastructure (tracks, etc.) - Allows VTA Lightrail riders opportunity to use the enhanced Caltrain/ HSR service.	Y -Provides ability for enhanced Caltrain and commuter rail service - Maximizes Caltrain and HST capacity through sharing infrastructure (tracks, etc.) - Allows VTA Lightrail riders opportunity to use the enhanced Caltrain/ HSR service.	

Stakeholder Categories (Example Goals are provided for each category. Additional Goals may apply. Refer to Issues, Values, and Goals Matrix.)	Aerial Viaduct 	At-Grade 	Open Trench 	Closed Trench (Cut-and-Cover) 	Hybrid (Caltrain and HST on different vertical options)
Equity - Do not disproportionately impact lower-income/ minority neighborhoods and locally-owned businesses. - Distribute project benefits as equitably as possible throughout corridor Corresponding Categories in Draft Alternatives Analysis Report: Community	Regardless of the vertical alignment, the project is adjacent to 6 lower income census tracts.	Regardless of the vertical alignment, the project is adjacent to 6 lower income census tracts.	Regardless of the vertical alignment, the project is adjacent to 6 lower income census tracts.	Regardless of the vertical alignment, the project is adjacent to 6 lower income census tracts.	Regardless of the vertical alignment, the project is adjacent to 6 lower income census tracts.
Economics/Financial Feasibility - Maintain existing parking levels to local downtown (Castro Street) and business centers - Capital cost, relative to benefits/achieving goals, is superior to other alternatives - Operational cost (escalator/elevator maintenance, lighting, etc.), relative to benefits/achieving goals, is superior to other alternatives - Minimize impacts on downtown businesses and tax revenues - Maintain, help improve access, visibility, connections to downtown and business centers Corresponding Categories in Draft Alternatives Analysis Report: Alignment and Station Performance and Objectives; Constructability	Y – Parking can be provided underneath the aerial viaduct option for local downtown (Castro Street) and other business centers to increase parking availability for both residential and commercial areas. N – Does not minimize impacts on downtown businesses, or maintain visibility for downtown businesses. I – The City did not perform analysis of operational and capital costs relative to benefits.	N- Along the 100 block of Castro and portions of Moffett Boulevard, on street parking will be eliminated. Additional parking maybe required in the downtown area with this option. Y/N – Access is improved by grade separating rail from vehicles/pedestrians/bicycles, but diminished because vehicles/pedestrians/bicycles must go above or below grade to cross rail. I – The City did not perform analysis of operational and capital costs relative to benefits.	Y – Maintains existing parking levels, visibility and connection to downtown businesses. Y – Access is improved by grade separating vehicles/pedestrians/bicycles from rail and allowing vehicles/pedestrians/bicycles to cross rail while remaining at grade. I – The City did not perform analysis of operational and capital costs relative to benefits.	Y – Maintains existing parking levels, visibility and connection to downtown businesses. Y – Access is improved by grade separating vehicles/pedestrians/bicycles from rail and allowing vehicles/pedestrians/bicycles to cross rail while remaining at grade. I – The City did not perform analysis of operational and capital costs relative to benefits.	

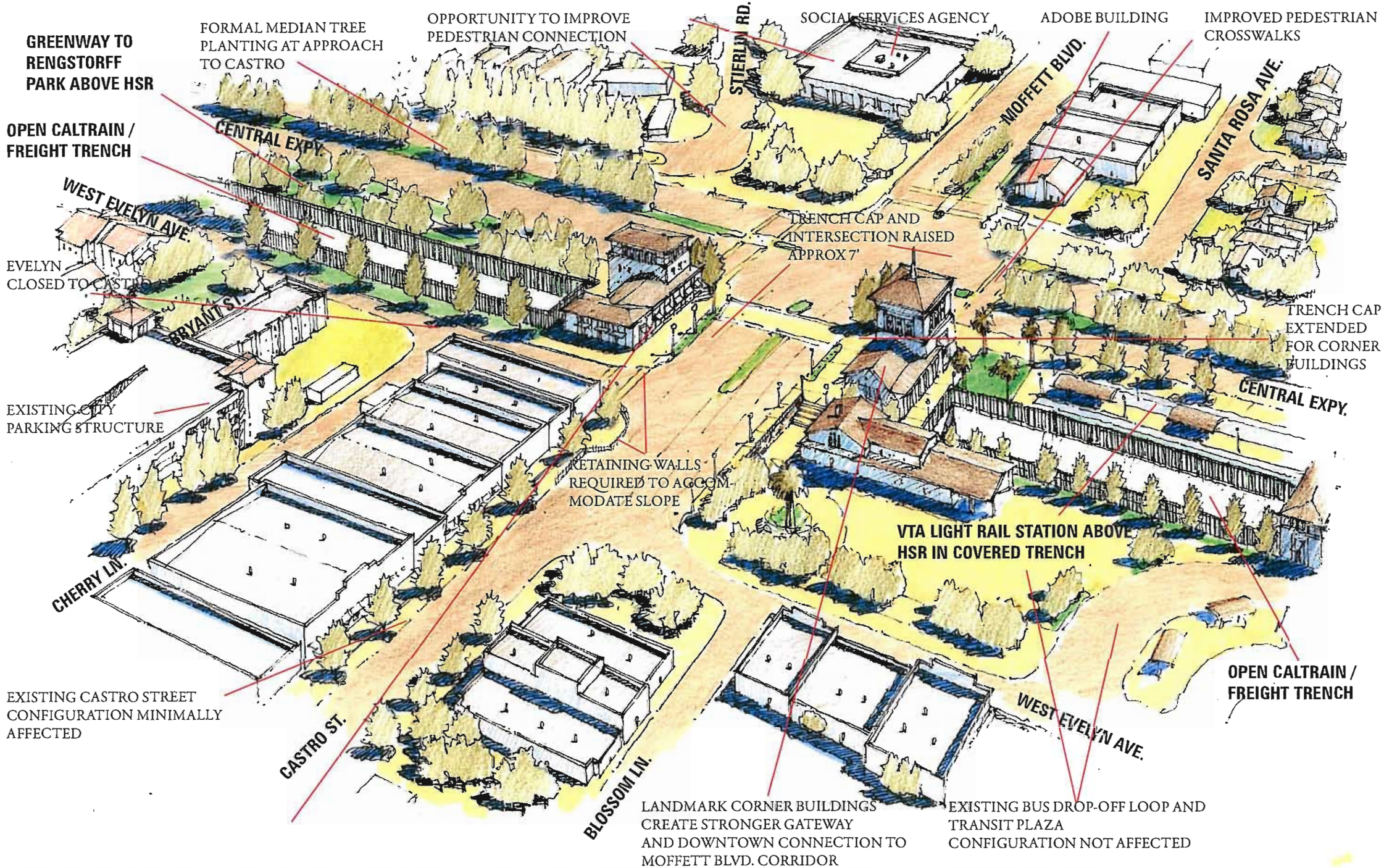
Step 4: Provide feedback.
After completing this worksheet, what has changed in your understanding of the grade separation methods? What new understanding do you have on benefits/impacts of the grade separation options?

This worksheet did not so much help us understand the grade separation methods as help document the impacts of the various methods.

Please provide feedback on the effectiveness of Exercise 2. How has this activity been of use to you?
Your feedback will assist in the development of future assessment exercises as the project progresses.

Step 5: Submit the completed exercise to the PRP. Submit your completed worksheet to PRP@caltrain.com or mail them to Peninsula Rail Program, 799 Seventh St., San Francisco, CA 94107. Your input will be communicated to the Technical Working Group and Policymaker Working Group and will allow other stakeholders to view the information that applies to the same or adjacent subsections.

The feedback obtained from the Exercises will be compiled for each subsection and the summary of responses will be made available online at http://www.caltrain.com/peninsularailprogram.html. The act of submitting a completed exercise is not a vote for any specific alternative or mapped item. Responses will not be tallied or weighted, nor will frequencies be recorded. When comments are in conflict, all will be recorded in the summary document. City representatives and project/engineering team members will use the summary documents as references in developing the project further.

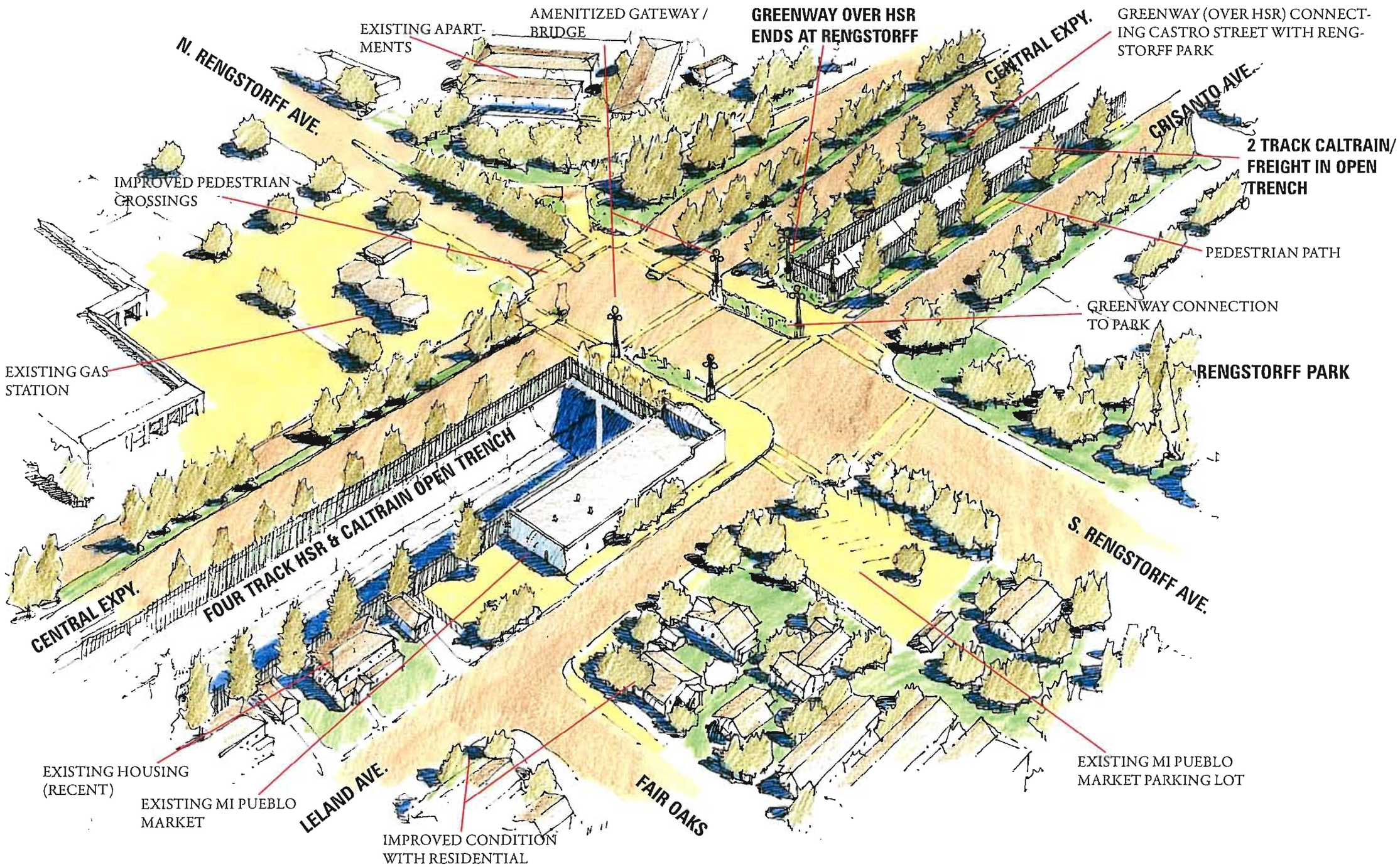


City of Mountain View - High Speed Rail Analysis

Castro St. Trench Alternative

Date May 10, 2010

FTS


N. RENGSTORFF AVE.
EXISTING APARTMENTS
AMENITIZED GATEWAY / BRIDGE
GREENWAY OVER HSR ENDS AT RENGSTORFF
CENTRAL EXPY.
GREENWAY (OVER HSR) CONNECTING CASTRO STREET WITH RENGSTORFF PARK
CRISANTO AVE.
2 TRACK CALTRAIN/ FREIGHT IN OPEN TRENCH
IMPROVED PEDESTRIAN CROSSINGS
PEDESTRIAN PATH
GREENWAY CONNECTION TO PARK
EXISTING GAS STATION
RENGSTORFF PARK
FOUR TRACK HSR & CALTRAIN OPEN TRENCH
CENTRAL EXPY.
S. RENGSTORFF AVE.
EXISTING HOUSING (RECENT)
EXISTING MI PUEBLO MARKET
LELAND AVE.
FAIR OAKS
IMPROVED CONDITION WITH RESIDENTIAL
EXISTING MI PUEBLO MARKET PARKING LOT