Final Site Evaluation Technical Memorandum

Coachella Rail Station Feasibility Study

March 2025

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Abbreviations and Acronyms

ADA	Americans with Disabilities Act
CalEPA	California Environmental Protection Agency
CEQA	California Environmental Quality Act
City	City of Coachella
CV	Coachella Valley
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
LUST	Leaking Underground Storage Tank
NEPA	National Environmental Policy Act
RCTC	Riverside County Transportation Commission
ROW	Right-of-Way
SDP	Service Development Plan
TAC	Technical Advisory Committee
TIMS	Transportation Injury Mapping System
TOD	Transit-Oriented Development

1 Introduction

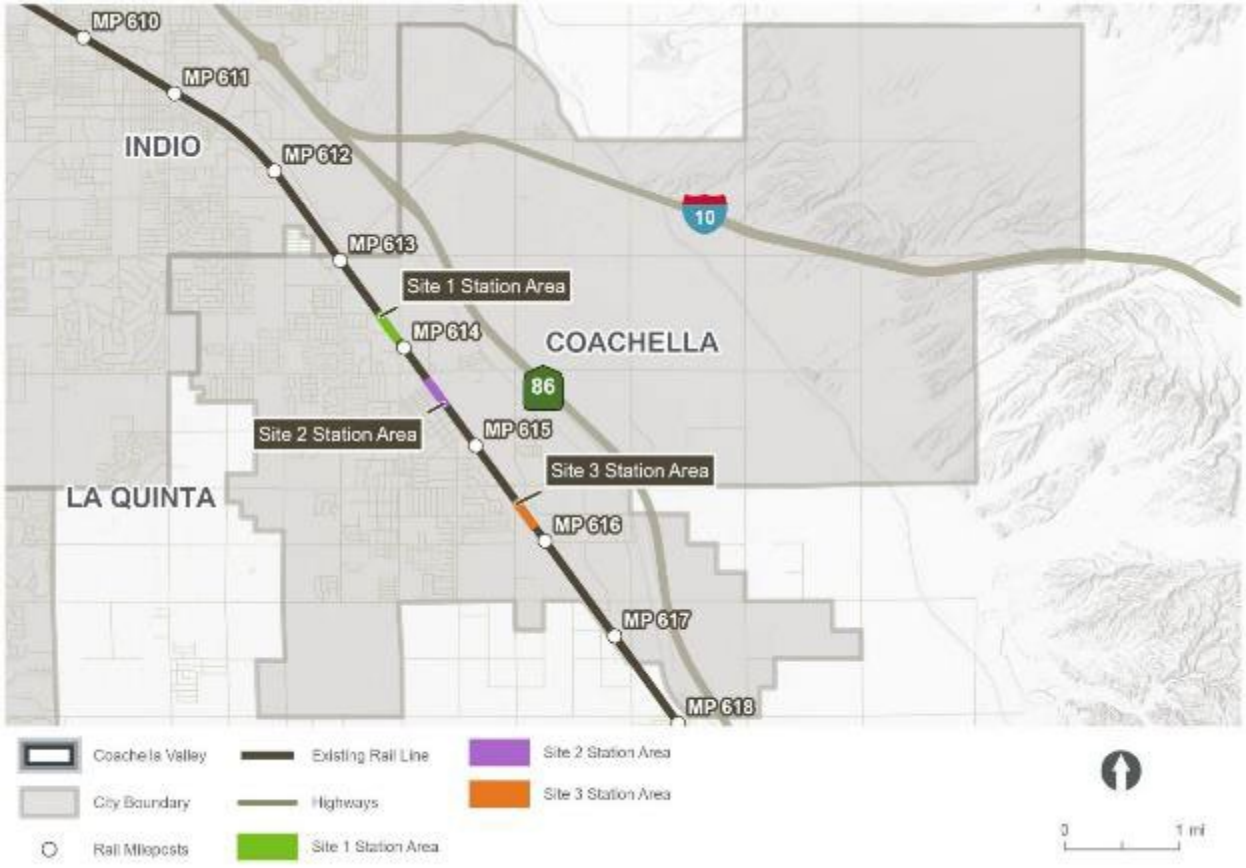
The Coachella Rail Station Feasibility Study will identify the City of Coachella's (City) preferred site for the terminal station of the proposed Coachella Valley Rail service. The final selection of the preferred alternative and final station locations will be determined in the National Environmental Policy Act/ California Environmental Quality Act (NEPA/CEQA) Coachella Valley Rail Tier II/Project Environmental Document, which is being led by the Riverside County Transportation Commission (RCTC) under the oversight of the Federal Railroad Administration and California Department of Transportation Division of Rail. The analysis and information in this study and that of other cities who have conducted similar studies will help determine the final selection of the preferred alternative during the formal NEPA/CEQA process conducted by the parties identified above. Federal and state environmental laws and procedures will be followed. Additionally, location and number of tracks for Coachella Valley (CV) Rail are subject to negotiations and agreements with the host railroad, which to date have not been completed. This study contains assumptions and suggests sites and design features that may change based on detailed technical studies in the NEPA/CEQA process and negotiations with the host railroad. This feasibility study does not commit the City to the approval or construction of any particular station location. Furthermore, until and unless further study, design, and information regarding the potential station locations are developed, there is not yet enough information available to conduct meaningful environmental review. Accordingly, the City's preparation and acceptance of this feasibility study does not constitute an approval of any action that might constitute a "project" or an "action" under CEQA or NEPA.

Several potential sites were screened, and three viable sites were carried forward for further evaluation, as documented in the Existing Conditions Memo. For each viable site, conceptual station footprints and track alignments have been developed based on applicable design criteria and the site constraints, and high-level station access plans have been developed. These form the basis for evaluating and comparing the costs and benefits of the alternative sites. Evaluation criteria were identified in coordination with the City, RCTC, and the technical advisory committee (TAC), and each site was scored against each criterion.

As shown in Figure 1, the following three sites were evaluated:

- Site 1 is located north of Avenue 50 across Grapefruit Boulevard from the Gateway Center shopping mall.
- Site 2 is located at the north end of Pueblo Viejo, between 2nd Street and 5th Street.
- Site 3 is located south of Avenue 52 near Tyler Street and is surrounded by vacant land.

Figure 1. Potential Station Sites



2 Evaluation Criteria and Data Sources

2.1 Development of the Criteria

The proposed passenger rail station in Coachella should both reflect the needs and desires of the community and meet certain requirements for optimal operation. The project team engaged with a TAC to discuss study goals, evaluation criteria, and proposed site selection, and held a community workshop for community members to learn about the study, discuss the site selection process, and gather feedback to shape the future of the Coachella Rail Station. The TAC included representatives from the City, RCTC, the Cabazon Band of Cahuilla Indians, the Coachella Valley Water District, Anthony Vineyards, the Coachella Valley Association of Governments, SunLine Transit Agency, Inland Congregations United for Change, Peter Rabbit Farms, and the Coachella Valley Housing Coalition. The project team then worked with RCTC and City staff to finalize evaluation criteria to assess each site, integrating feedback from the TAC and community as well as incorporating technical requirements based on the Coachella Valley Rail Service Development Plan (SDP) and local existing conditions.

The TAC provided input on what the rail station role should be, potential goals of the station and its effects on the surrounding area, and their preliminary thoughts on the three proposed sites. The TAC generally agreed that:

- The station should serve as town center, promoting economic development and city pride.
- The station should increase accessibility for low-income communities.
- The station should promote better environmental health for the community.
- The station should promote more regional connectivity to other CV communities.

A public workshop was held on November 21, 2024, at the Coachella Branch Library from 5 p.m. to 7 p.m. The public workshop was an open house format and gathered community input on a variety of topics related to the study, including examples of stations, land use and circulation, study goals, evaluation factors, rail corridor characteristics, and potential locations. The project team asked participants to select their top three study goals from a list of 10 goals by placing a dot next to their selections. In addition, an online survey was available for four weeks after the workshop. Table 1 shows the combined results of the in-person exercise and online survey.

Table 1. Goal Prioritization from Community Workshop

Study Goal	Responses
Provide More Transportation Choices	56
Economic Development	39
Reduce Driving/Emissions	39
Quality of Life	38
Equitable Access	24
Multimodal Connectivity	15
Sustainability	12
Housing and Transit-Oriented Design	12
Maintain Rail Systems Performance	10
Minimize Rail Impacts	6

The project team and City staff also considered the technical requirements and local existing conditions, as documented in the Existing Conditions Memo, when developing evaluation criteria. This included consideration of rail and station operations, multimodal connectivity including connection to SunLine bus services, site-specific environmental factors, and alignment with existing City plans for land use, equity, and environmental justice.

2.2 Criteria Chosen

The project team worked with City staff to integrate the factors above along with technical requirements and developed a final list of evaluation criteria. The criteria considered included project-specific requirements for rail and station operations, environmental constraints, local area and community impacts, and costs. The selected criteria categories are:

- Rail engineering feasibility;
- Station element feasibility;
- Land use/development compatibility;
- Environmental constraints;

- Accessibility/ connectivity;
- Equity and environmental justice;
- Ridership potential; and
- Costs.

Within each criteria category are specific criteria factors that can be measured and assigned a score. Table 2 shows the list of criteria factors, the method of evaluation, and the source of data to measure the criteria.

Table 2. Evaluation Criteria Methodology and Data Sources

Evaluation Factor	Methodology	Data Source
Rail Engineering Feasibility		
Physical constraints	Ability of site to accommodate track and platform components (including potential for windblown sand)	Conceptual station layouts
Operational constraints	Impacts to mainline operations	Existing/future conditions (proximity to signals, special trackwork, etc.)
Flexibility in layover site options	Number of layover site options compatible with site	Conceptual station and layover site layouts
Station Element Feasibility		
Station Building	Approximately 500 square feet minimum	Conceptual station layouts
Parking	At least 32 parking spaces + 2 Americans with Disabilities Act (ADA) spaces and potential for expansion	Conceptual station layouts
Bus Bays	At least 2 bus bays	Conceptual station layouts
Pick-up/Drop-off	Approximately 200 feet of linear curb minimum, at least 8 short-term spaces, or a combination thereof	Conceptual station layouts
Land Use/Development Compatibility		
Consistency with plans and policies	Station site compatibility with Coachella General Plan, zoning, or other local area plans	Existing City plans
Potential for transit-oriented development	Within approximately ½ mile of station site, ability of zoning and other development codes to support housing and mixed-use development; availability of land for development	Existing City plans
Economic development potential	Ability of zoning, local development codes, and nearby uses to support growth of local economy including professional, retail, entertainment, or hospitality uses	Longitudinal Employer-Household Dynamics employment data, Esri Community Analyst

Evaluation Factor	Methodology	Data Source
Environmental Constraints		
Biological resources	Relation to conservation area and wildlife corridor or biological linkage area	Existing environmental resource databases
Cultural resources	Sensitivity level for historic and paleontological resources, to include archaeological and tribal	Existing environmental resource databases
Hazardous materials	Proximity to hazardous materials sites	Existing environmental resource databases
Geotechnical conditions	Liquefaction risk	Seismic Hazard Maps
Noise/vibration	Assess surrounding land use for presence of possible sensitive noise receptors	City's zoning map and Google Earth
Flooding	Location within a flood hazard zone	FEMA maps
Accessibility/Connectivity		
Pedestrian connectivity	Within approximately ½ mile, walk distances, availability of existing and planned sidewalks, safety statistics for the last 5 years	Walkshed maps, Transportation Injury Mapping System (TIMS)
Bicycle connectivity	Within approximately ½ mile, bicycle access options, availability of existing and planned bicycle infrastructure, safety statistics for the last 5 years	Google Earth, TIMS
Transit connectivity	Within approximately ½ mile, proximity and number of transit stops and routes, frequency of service, ability to add or modify transit options	SunLine route data
Auto connectivity	Ease of access from major thoroughfares, safety statistics for the last 5 years within 1 mile	Google Earth, TIMS
Crossing potential	Ability to improve overall connectivity to the east side of the city by providing a new grade-separated crossing	Conceptual station layouts, existing roadway network
Equity and Environmental Justice		
Station area demographics	Ability of station site to serve disadvantaged communities, as well as communities with a higher need for public transportation (comparison of CalEnviroScreen, poverty, age data)	Census Bureau data, CalEnviroScreen
Community and business impacts	Number and types of properties potentially impacted by station and track construction	Rail infrastructure drawings
Ridership Potential		
Existing/planned population/ employment	Forecast population and employment within ½ mile	Projections based on planned land use

Evaluation Factor	Methodology	Data Source
Key generators	Number of major trip generators/attractors within ½ mile (e.g., large shopping centers, manufacturing plants, recreation facilities, transit centers, hospitals)	Esri Community Analyst
Costs		
Capital	Rough order of magnitude related to major cost drivers: track construction, station elements construction, overcrossing construction, demolitions, and roadway construction (if applicable)	Conceptual station layouts
Maintenance	Identify potential major cost drivers, such as type and amount of infrastructure to maintain	Conceptual station layouts
ROW/land acquisition	Rough order of magnitude cost for property acquisition	Conceptual station layouts, comparable sales prices

Each criteria factor was individually evaluated and assigned a relative score, as shown in Table 3.

Table 3. Evaluation Criteria Ranking System

Worse	←→	Neutral	←→	Better

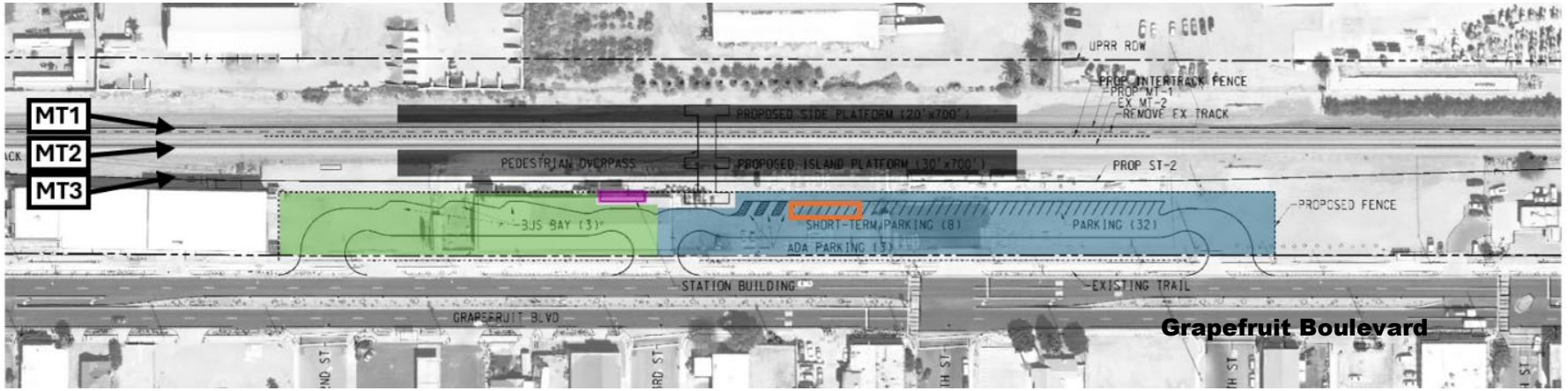
3 Station Conceptual Plans

To evaluate station element feasibility, the project team developed test-fit conceptual drawings to demonstrate the feasible inclusion of a station building, parking, bus bays, and pick-up/drop-off facilities at each station site. Union Pacific Railroad has indicated that stations should have platform edges on all main tracks. In a three-track configuration, the most cost-effective way to achieve this is one center platform and one side platform. For the purposes of assessing feasibility at this stage, it was assumed that access across the tracks to each platform would be provided with a pedestrian bridge.

These drawings are not intended as final designs but serve as proof-of-concept that required station elements can be accommodated at each station site. See Figure 2, Figure 3, and Figure 4. The design of the station site for the City-preferred alternative will be further developed in a later stage of this project.

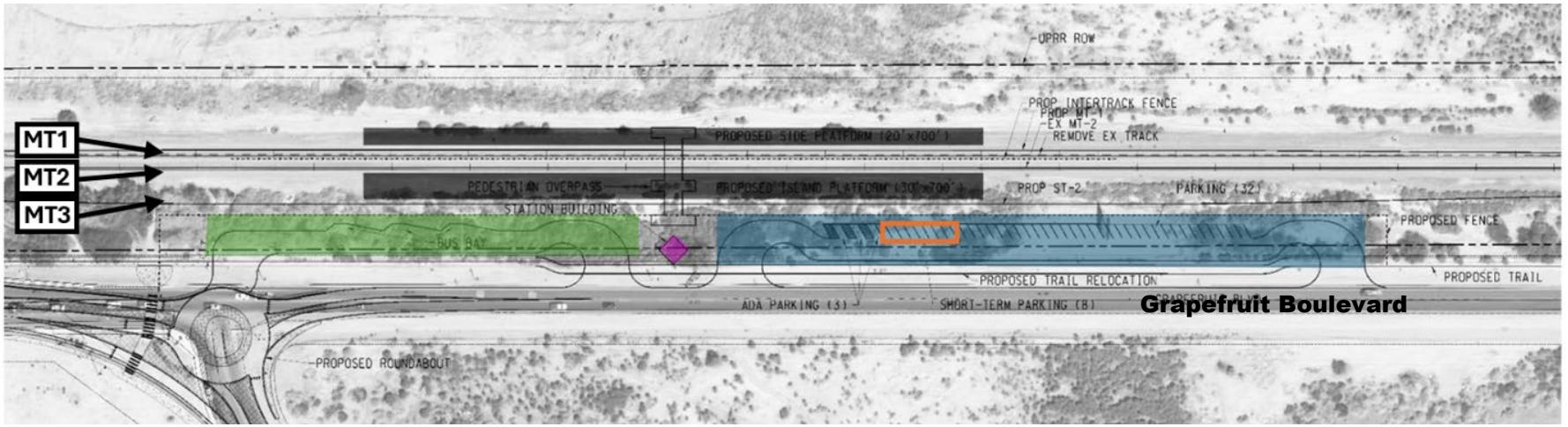
Figure 2. Site 1 (Gateway Center) Conceptual Station Plan

Figure 3. Site 2 (Pueblo Viejo) Conceptual Station Plan



Platforms
Station Building
Bus Bays
Parking
Pick-up/Drop-Off

Figure 4. Site 3 (Tyler Street) Conceptual Station Plan



Platforms
Station Building
Bus Bays
Parking
Pick-up/Drop-Off

3.1 Site 1: Gateway Center Station

The conceptual plan for Site 1 (Gateway Center), shown in Figure 2, includes a center platform between the eastern track (Main Track 1) and central track (Main Track 2), with a side platform adjacent to the new third main track (Main Track 3). Main Track 1 would be shifted to accommodate the new center platform and Main Track 2 would remain in place and operational during construction. This configuration differs from the other two sites due to the physical constraints on the amount of land available on the west side of the site, approximately 75 feet between the existing track edge and Grapefruit Boulevard (whereas Sites 2 and 3 have between 100 and 125 feet of land). Bus transfer facilities are provided as bus pullouts on Grapefruit Boulevard, with space for three buses northbound and, utilizing the existing infrastructure, one bus southbound. Parking is organized in a linear, diagonal orientation, extending northwest from the site. The station building is located opposite the entrance to Gateway Center shopping center, adjacent to a pedestrian bridge used to access the platforms. New high-visibility crosswalks provide pedestrian access to the site. A future phase of the Connect Coachella Project Class I Bikeway will run parallel to Grapefruit Boulevard, be shifted east around the bus pullouts, and run between the parking lot and Grapefruit Boulevard.

3.2 Site 2: Pueblo Viejo Station

The conceptual plan for Site 2 (Pueblo Viejo), shown in Figure 3, includes a center platform between Main Tracks 2 and 3, with a side platform on the east side of Main Track 1. Main Track 1 would be shifted to accommodate an intertrack fence and Main Track 2 would remain in place and operational during construction. The platforms would be accessed via a centrally located pedestrian bridge, roughly aligned with 3rd Street. The site is located on the northern side of Pueblo Viejo to provide sufficient clearance to an existing control point and universal crossover farther south (near 9th Street).[1] A bus loop with three bus bays is provided to the north of the pedestrian bridge and a parking lot is located to the south. The station building is adjacent to the pedestrian bridge. An existing high-visibility crosswalk at 4th Street provides pedestrian access. The existing Connect Coachella Project Class I Bikeway, which runs parallel to Grapefruit Boulevard, will remain with new crossings across station access driveways for the bus bays and parking lot.

3.3 Site 3: Tyler Street Station

The conceptual plan for Site 3 (Tyler Street), shown in Figure 4, includes a center platform between Main Tracks 2 and 3, with a side platform on the east side of Main Track 1. Main Track 1 would be shifted to accommodate an intertrack fence and Main Track 2 would remain in place and operational during construction. The platforms are accessed via a centrally located pedestrian bridge, which is positioned between a bus loop with three bus bays to the north and a parking lot to the south. The station building is in front of the pedestrian bridge. A new high-visibility crosswalk at the proposed Tyler Street roundabout provides pedestrian access. A future phase of the Connect Coachella Project

[1] A control point is location where railroad signals control whether a train can proceed from one segment of track to the next. A crossover is a connection that allows a train to move from track to another. A universal crossover is a pair of crossovers that allows trains in both directions to move.

Class I Bikeway will run parallel to Grapefruit Boulevard and be shifted west around the parking lot and station building, before continuing north next to the bus bays and Grapefruit Boulevard.

4 Evaluation Results

4.1 Rail Engineering Feasibility

4.1.1 Physical Constraints

All three sites have sufficient space to accommodate the proposed third main track, a new center platform, a new side platform, and a pedestrian bridge. The strip of land between the existing tracks and Grapefruit Boulevard is narrowest for Site 1, and this provides limited room to accommodate additional station elements or further expansion, as described further in Section 4.2.

The only existing station in the Coachella Valley is in a remote area of Palm Springs and experiences frequent problems due to windblown sand. Sand blown onto and covering tracks, switches, and platforms can present operational challenges and safety concerns for passengers disembarking trains. Coachella does not have the unique geography of the Palm Springs station location, which experiences particularly high winds and is surrounded by undeveloped desert. Site 1 has evidence of windblown sand on vacant land on the east side of the railroad. Site 2 is surrounded by developed land that is unlikely to contribute to windblown sand issues. Site 3 has vacant land on both sides that could be sources of windblown sand.

4.1.2 Operational Constraints

All sites carried forward from the initial screening would be located on tangent track and an appropriate distance from existing signal equipment. Sites 1 and 2 have an existing crossover between the station and proposed layover facility near Tyler St, allowing trains to travel easily between any platform and the facility. Without a crossover between Site 3 and the proposed facility, trains would need to travel the opposite direction to the crossover, then change direction, occupying the mainline for several minutes. This operational impact could be mitigated by adding a control point and new crossovers to provide direct access to the facility, which would increase project cost. Alternatively, if the layover facility were placed north of the crossover at potential location east of the tracks near Harrison Street, trains from Site 3 would only need to change direction once.

4.1.3 Flexibility in Layover Site Options

The preferred layover facility site is on the west side of the tracks south of Tyler Street. For Sites 1 and 2, trains would be able to access this site from all station tracks using the existing universal crossover (and proposed extensions to the new third main track). This facility has the potential to be expanded beyond a single track by realigning Grapefruit Boulevard between Tyler Street and existing uses north of Avenue 54. Placement of the facility on the east side of tracks south of Avenue 52 is feasible, but it is likely that most trains would need to move across all three tracks from the new third main track, which will likely be the primary track for passenger operations.

Placement of the facility in the preferred location west of the tracks and south of Avenue 52 is feasible for Site 3 but would need to be shifted further south compared to Sites 1 and 2 to provide sufficient distance between the station and facility. This would not provide sufficient length to realign Grapefruit Boulevard in order to accommodate a facility larger than a single track. Furthermore, the preferred layover site would only be directly accessible from Site 3 via the third main track unless a new control point and new crossovers are also constructed. If Site 3 is selected, placement of the facility on the east side of the railroad is possible but would need to be either north of the station on the vacant site east of Site 1 or further south of the station with construction of an additional control point and new crossovers.

4.1.4 Summary

The results of the evaluation for rail engineering feasibility are shown in Table 4.

Table 4. Rail Engineering Feasibility Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Physical Constraints	◑	●	●	All sites can accommodate a third track and platform edges on all tracks. Site 1 leaves very limited room to meet the other minimum criteria, with no room for expansion.
Operational Constraints	●	●	◑	All sites support planned intercity operations. Depending on placement of the layover facility, Site 3 may have more complex movement between the station and facility.
Flexibility in Layover Site Options	●	●	◑	Sites 1 and 2 are north of the existing crossover, allowing trains from any platform edge to enter a maintenance/layover facility south of Avenue 52. Accessing the maintenance/layover facility from 2 of the 3 platform edges at Site 3 will require additional crossovers and signals, or the maintenance/layover facility would need to be placed north of the existing crossover.
Overall	◑	●	○	

4.2 Station Element Feasibility

The passenger rail station in Coachella will need to be fit for purpose to serve future passengers boarding and alighting intercity trains. In addition to accommodating track and platforms, the site selected must be able to fit additional elements to serve passengers, including a station building and accommodations for access by multiple travel modes. Minimum requirements were developed based on the Coachella Valley Rail Service Development Plan. These represent basic elements necessary for the station and do not preclude provision of larger or additional amenities. The ability to accommodate expansion beyond the minimum requirements was also considered in the evaluation.

4.2.1 Station Building

The size of the station building is assumed to be approximately 500 square feet for evaluation purposes. The Coachella Valley Rail SDP identified the Coachella Station as being a "Category 3: Caretaker" station as classified by Amtrak. A Category 3 Caretaker Station typically serves between 20,000 and 100,000 annual passengers and is typical of small cities and towns. Caretaker services are usually provided by the local community or state agency, including janitorial and maintenance services. This station type is not regularly staffed and includes self-service ticketing machines. The size of the waiting area and ticketing area was calculated following the Amtrak Station Program and Planning Guide. Two ADA restrooms were added, and the resulting total square footage was rounded to the nearest 10 square feet for an approximation of size (Table 5).

Table 5. Station Building Sizing

Station Element	Square Feet
Seated Passenger Area	192.7
Standing Passenger Area	96.4
Ticketing Area	104
ADA Single Bathrooms (2)	100
Total	**493.1**

Each station site has sufficient space to include a Station Building of this size within the rail right-of-way (ROW).

4.2.2 Parking

The Coachella Valley Rail SDP initially identified a need for 22 parking spaces at Coachella Station. However, upon updates to the service plan and an increase in the proposed number of daily trains, the number of required parking spaces has been increased to 32 general parking spaces and 2 ADA spaces.

All three sites have sufficient space to accommodate the proposed minimum number of parking spaces. However, the strip of land between the existing tracks and Grapefruit Boulevard is narrowest for Site 1, which provides limited room to accommodate parking, necessitating a long, narrow parking lot that includes parallel spaces to meet this requirement.

4.2.3 Bus Bays

The Coachella Valley Rail SDP initially identified a need for up to three bus bays at Coachella Station. In consultation with RCTC and the City of Coachella, the number of bus bays required has been revised to two.

Station Sites 2 and 3 can accommodate full bus loops with space for three bus bays in a sawtooth design. Due to the limitations of Site 1, a bus loop with bus bays could not be accommodated, so instead, bus pullouts off northbound Grapefruit Boulevard are shown, and the station also utilizes the existing southbound bus pullout across the street.

4.2.4 Pick-up/Drop-off

The Coachella Valley Rail SDP initially identified a need for eight short-term parking spaces for Kiss-and-Ride, taxis, and transportation network companies. A pick-up/drop/off facility that can accommodate eight vehicles will be proposed, as either separate short-term parking spaces, linear curb of approximately 200 feet (25 feet per vehicle), or a combination thereof.

All station sites can accommodate eight short-term parking spaces within the parking lot, between the ADA spaces and long-term parking stalls. However, due to the limitations of Site 1, this accommodation creates a long, narrow parking lot and longer walking distances for passengers to the platforms. None of the sites is large enough to accommodate a fully separated Pick-Up/Drop-Off loop or curb space.

4.2.5 Summary

Table 6 shows the results of the evaluation for station element feasibility.

Table 6. Station Element Feasibility Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Station Building	●	●	●	All sites can fit a 500-square foot building.
Parking	◑	●	●	Site 1 is most constrained for possible parking expansion within the ROW. Sites 1 and 3 have vacant land on the east side that could be used for additional parking. Site 2 could potentially share parking with the Community Resilience Center on the east side.
Bus Bays	●	◑	◑	Bus bays cannot be accommodated on Site 1 due to the limited land; bus pullouts are provided instead. Bus bays can be accommodated on Sites 2 and 3.
Pick-up/ Drop-off	◑	●	●	All sites can accommodate pick-up and drop-off space within the ROW, but Site 1 constraints result in longer walking distances for passengers.
Overall	◑	●	●	

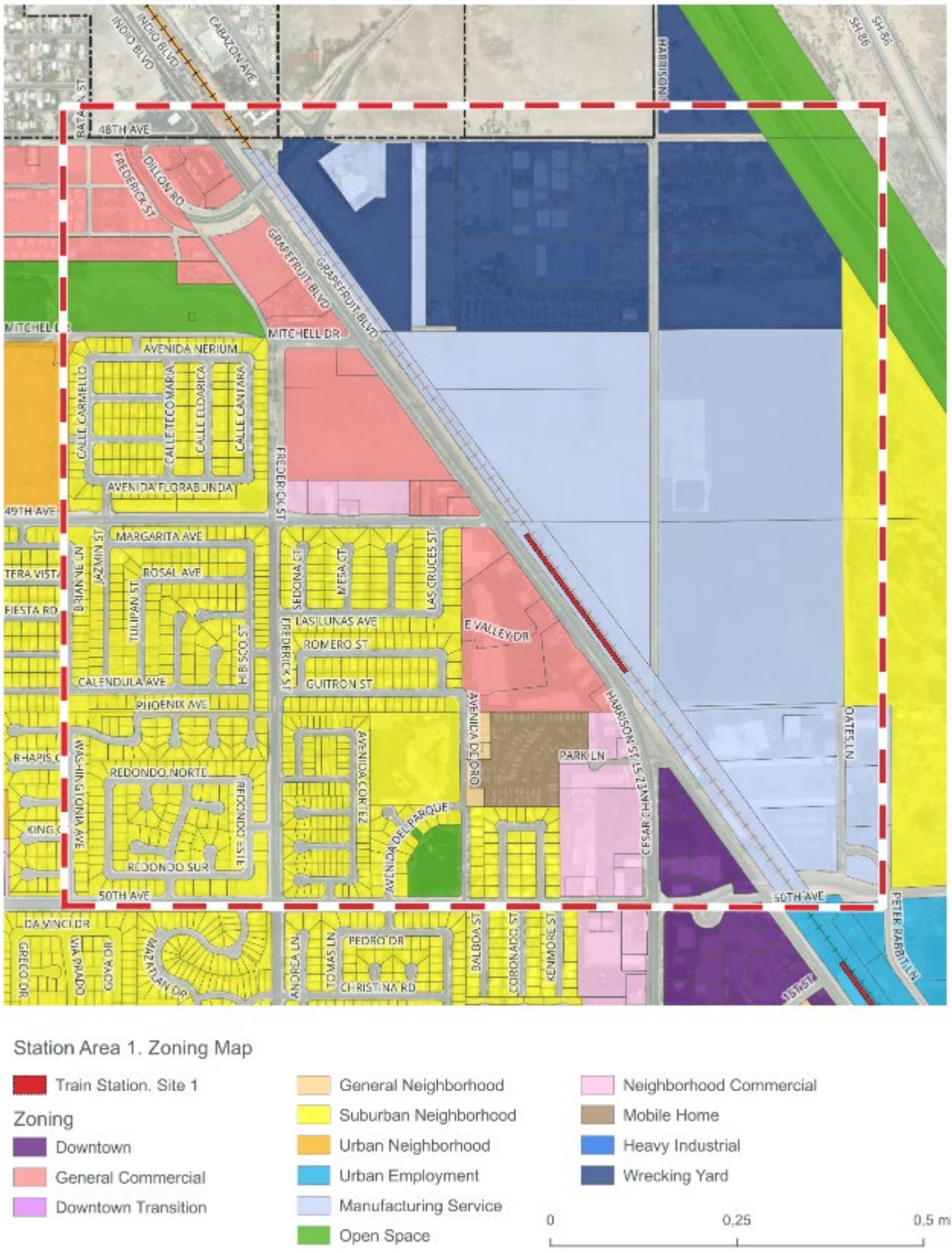
4.3 Land Use/Development Compatibility

4.3.1 Consistency with Plans and Policies

Compatibility of each site with the City's plans and policies was assessed by analyzing land use designations around each site in Coachella's General Plan. Site 1 has little potential for transit-oriented development (TOD) under current land use/zoning designations, as shown in Figure 5. Much of the

area is designated for industrial use and is currently occupied by a date orchard. Site 2 has significant potential for TOD under current land use/zoning designations (Figure 6), which support both residential and commercial development. For Site 3, TOD potential under current land use/zoning lies only on the periphery of the half-mile radius from the station site, as shown in Figure 7, with the immediate station area designated for heavy industrial or general commercial uses. These uses are compatible with a layover facility, but industrial uses are not ideal for a vibrant station area.

Figure 5. Site 1 Land Use



Station Area 1. Zoning Map

Train Station. Site 1

Zoning

- Downtown
- General Commercial
- Downtown Transition
- General Neighborhood
- Suburban Neighborhood
- Urban Neighborhood
- Urban Employment
- Manufacturing Service
- Open Space
- Neighborhood Commercial
- Mobile Home
- Heavy Industrial
- Wrecking Yard

0 0,25 0,5 m

Figure 6. Site 2 Land Use

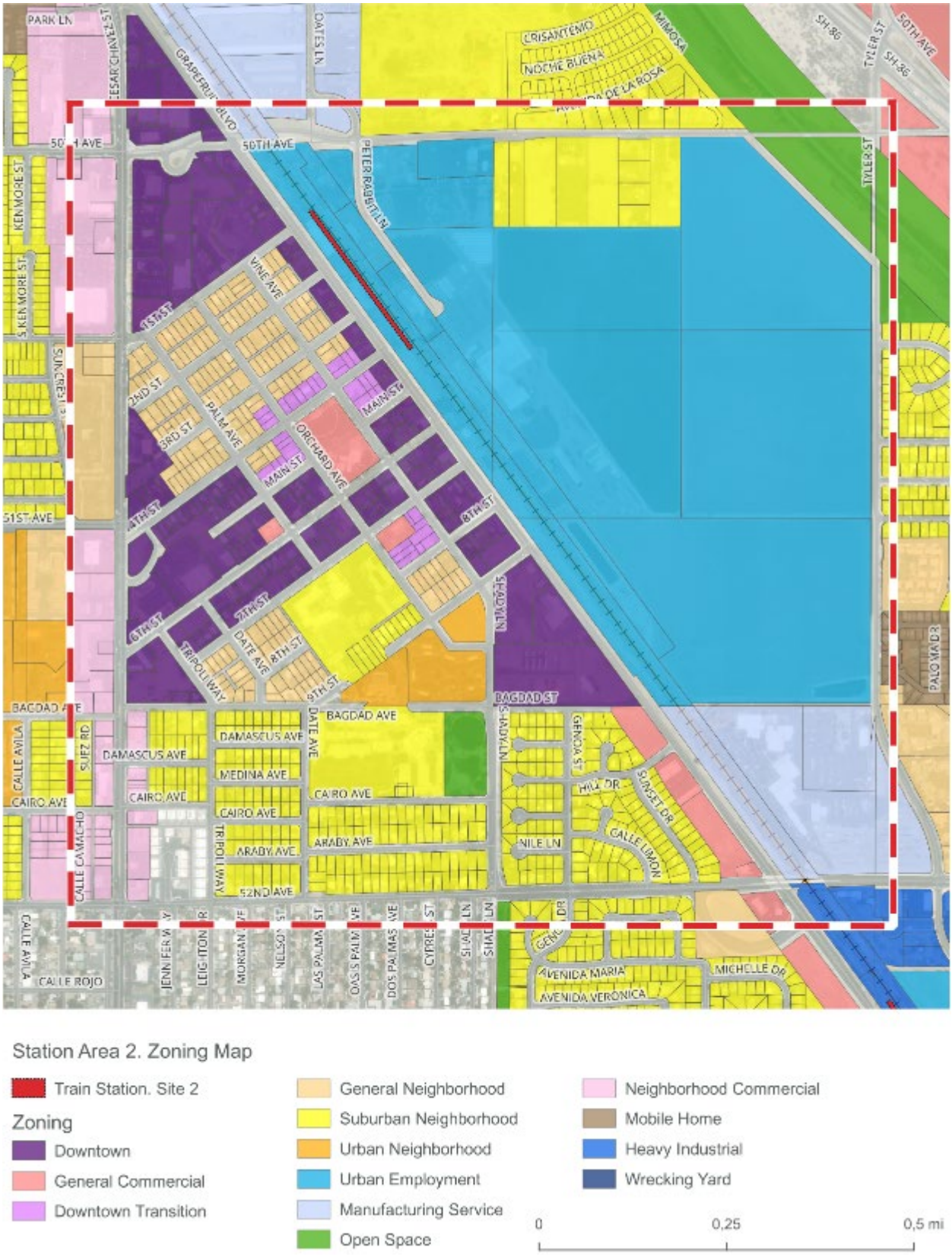
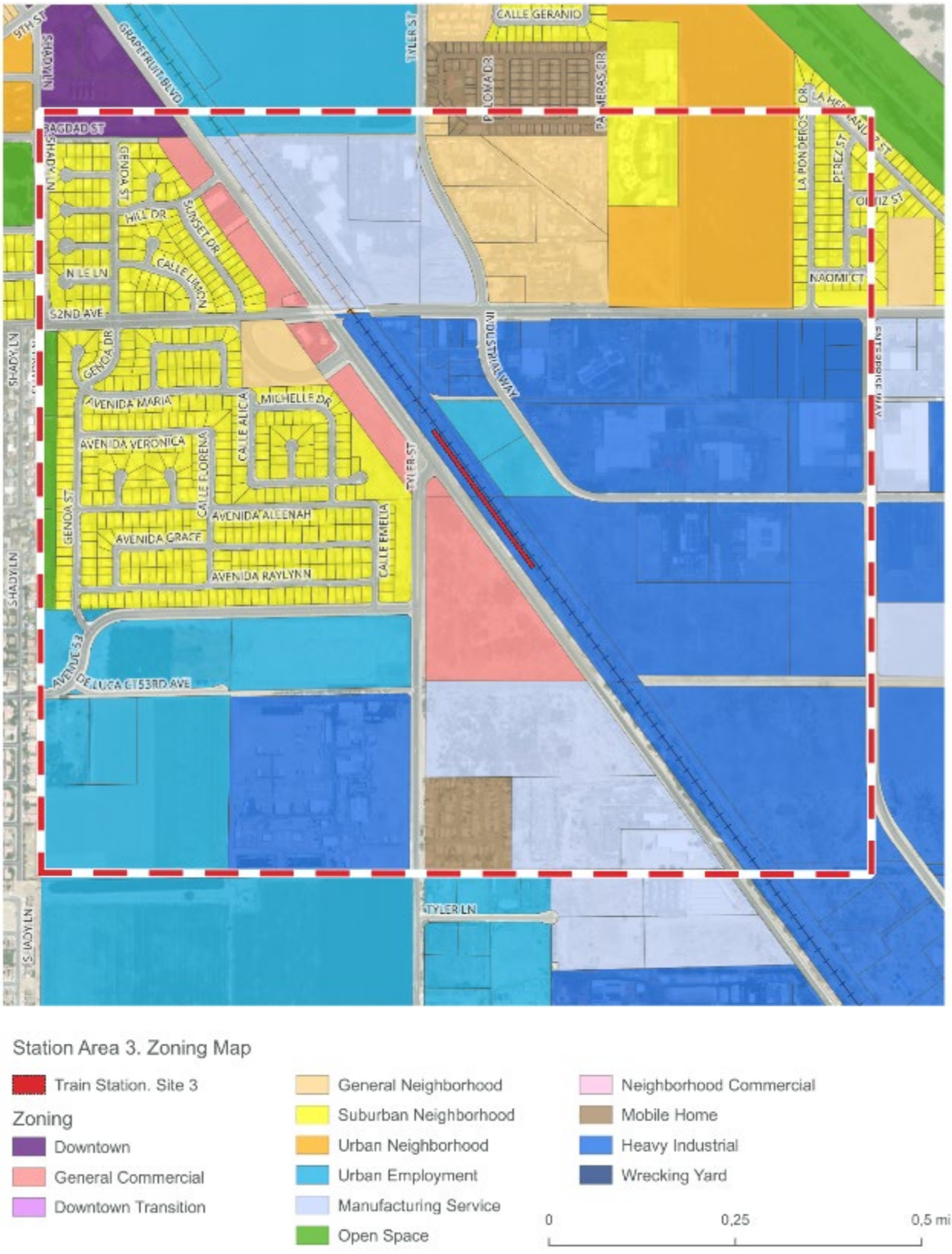


Figure 7. Site 3 Land Use



4.3.2 Potential for Transit-Oriented Development

TOD potential was assessed for each site considering the existing uses in the area and planned land use designations. Nearby strip commercial centers on the west side of Site 1 are not likely to redevelop and the potential growth area immediately east of the railroad is designated for industrial use. Vacant property designated general commercial does not provide for residential use. The Pueblo Viejo Revitalization Plan provides for mixed-use around Site 2, and the General Plan provides for mixed-use in the growth area immediately east of the railroad. The majority of vacant developable land around Site 3 is designated for industrial use, with some land designated for general commercial, neither of which allow for residential use. Urban Employment and Urban Neighborhood districts have the potential to accommodate high-density housing but are on the periphery of the half-mile radius from the station site. Land around Sites 1 and 3 could potentially be rezoned to be more supportive of TOD, but this would be an additional step that would likely not be needed for TOD around Site 2 and would create two competing downtown areas rather than one focal point for investment.

4.3.3 Economic Development Potential

To determine the economic development potential ratings for each site, local zoning data were analyzed. Commercial zoning areas were mapped and quantified within a quarter-mile radius of each station site. The total percentage of commercial zones was calculated for each site based on square footage, as shown in Table 7, and ratings were assigned on a scale from “Worse” to “Better.” Site 1 Gateway and Site 2 Pueblo Viejo received a “Better” rating due to their higher percentages of zoned commercial areas. In contrast, Tyler Street received a “Worse” rating based on its lower percentage of commercial zoning.

Table 7. General Commercial Zoning within a Quarter Mile

Site	Proportion of Commercial Zone	Rating
Site 1: Gateway	19%	**Better**
Site 2: Pueblo Viejo	16%	**Better**
Site 3: Tyler Street	4%	**Worse**

Source: Lisa Wise Consulting

4.3.4 Summary

Table 8 shows the results of the evaluation for land use/development.

Table 8. Land Use and Development Compatibility Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Consistency with Plans and Policies	◑	●	○	Site 1 has little potential for TOD under current land use designations. Site 2 is consistent with the City's General Plan. Site 3 has some TOD potential.
Potential for Transit-Oriented Development	◑	●	○	Commercial uses around Site 1 are unlikely to redevelop and land to the east is zoned industrial. The Pueblo Viejo Revitalization Plan supports mixed-use development around Site 2. Most vacant land around Site 3 is zoned industrial, but some designations support residential or mixed use.
Economic Development Potential	●	●	○	Sites 1 and 2 have a higher share of commercial zoning in the surrounding ¼ mile.
Overall	◑	●	○	

4.4 Environmental Constraints

4.4.1 Biological Resources

The potential for biological resources was determined based upon proximity to a Coachella Valley Multiple Species Habitat Conservation Plan conservation area.[2] None of the three sites are located within or adjacent to a conservation area associated with the Coachella Valley Multiple Species Habitat Conservation Plan. None of the three sites function as a wildlife corridor or biological linkage area.

4.4.2 Cultural Resources

Cultural resources potential was evaluated for the three sites using information from the City's 2015 General Plan Environmental Impact Report (EIR). Historic resources, as defined by the City's General Plan EIR, are standing structures of historic or aesthetic significance that are generally 50 years of age or older, or resources listed in or eligible for listing in registers of historic resources. Historic resources considered for protection in California tend to focus on architectural sites dating from the Spanish Period (1529–1822) through the early years of the Depression (1929–1930). Site 1 and Site 3 were identified as having a medium sensitivity for historic resources. Site 2 was identified as having a potentially high sensitivity level for historic resources. Site 2 is located within the historic core of the city, where historic structures have been previously identified.

[2] Coachella Valley Association of Governments, Coachella Valley Multiple Species Habitat Conservation Plan Open Data Portal, https://mshcp-cvag.hub.arcgis.com/. Accessed October 16, 2024.

Paleontological resources, as identified by the City's General Plan EIR, include fossil remains and represent a limited, nonrenewable, and impact-sensitive scientific and educational resource. The three sites were identified as having an undetermined sensitivity level for paleontological resources.

Archaeological resources, as defined by the City's General Plan EIR, pertain to places where human activity has measurably altered the earth or left deposits of physical remains, and may be either prehistoric-era (before European contact) or historic-era (after European contact) in origin. Such places in California are typically associated with either Native American or Euro-American occupation of the area. The entire City of Coachella can be considered sensitive for archaeological resources. Additionally, Site 1 is identified by the County of Riverside as being noncontiguous to the west and south of tribal land.[3]

4.4.3 Hazardous Materials

Hazardous materials were evaluated by reviewing databases of hazardous materials facilities/sites compiled pursuant to Government Code Section 65962.5.[4] None of the three sites is located on a facility/site that is included on a list of hazardous materials facilities/sites compiled pursuant to Government Code Section 65962.5. However, Site 2 is adjacent to a Leaking Underground Storage Tank (LUST) Cleanup Site located at 85509 Grapefruit Boulevard. The LUST Cleanup Site is identified by the State Water Resource Control Board as "Open – Eligible for Closure" as of October 22, 2024. The "Open – Eligible for Closure" designation indicates corrective action at the site has been determined to be completed and any remaining petroleum constituents from the release are considered to be low threat to human health, safety, and the environment; the case is going through the process of being closed.[5]

4.4.4 Geotechnical Conditions

Geotechnical conditions for the three sites were evaluated using fault information from the California Department of Conservation and geotechnical conditions presented in the City's General Plan EIR.[6, 7] Geotechnical conditions at the three sites are somewhat similar due to relative proximity of the sites to each other (all within approximately 4 miles of one another). The three sites are each located within 2 to 2.5 miles west of the San Andreas Fault. Site 3 is located the farthest from the San Andreas Fault at approximately 2.5 miles away. The three sites have a similar, high level of liquefaction susceptibility. Each site has a low potential for landslides due to lack of slope. None of the sites is within an Alquist-Priolo Fault Zone.

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[3] County of Riverside, Map My County, https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public. Accessed December 18, 2024.

[4] California Environmental Protection Agency, Cortese List Data Resources, https://calepa.ca.gov/sitecleanup/corteselist/. Accessed October 16, 2024.

[5] State Water Resources Control Board, Project Status Definitions, https://geotracker.waterboards.ca.gov/GeoTrackerStatusDefinitions.pdf. Accessed December 18, 2024.

[6] California Department of Conservation, EQ Zapp: California Earthquake Hazards Zone Application, https://www.conservation.ca.gov/cgs/geohazards/eq-zapp. Accessed October 15, 2024.

[7] City of Coachella, General Plan Update Final EIR, February 2015.

4.4.5 Noise and Vibration

The potential for noise/vibration impacts were evaluated by assessing the presence of possible sensitive noise receivers, such as residences, hospitals, and schools, in the vicinity through assessing the surrounding land uses. Land uses were identified utilizing the City's Official Zoning Map and through review of Google Earth imagery.[8]

Site 1 is primarily surrounded by vacant lands designated for industrial uses to the east and commercial uses to the west, with primarily single-family residential uses beyond. Site 1 is located within a quarter-mile northeast of Cesar Chavez Elementary School. Site 2 has primarily agricultural lands to the east, and a mix of commercial and residential land uses to the west. Site 2 is located approximately 0.3 mile northeast of Palm View Elementary School and Coachella Valley Adult School. Site 3 has lands primarily designated for heavy industrial uses to the east and general commercial used to the west with residential uses beyond. Site 3 is not within a 0.25 mile of any schools. All three sites are within a quarter mile of existing residential uses, which are considered a sensitive noise-receiver.

4.4.6 Flooding

Flooding risk was assessed using the Federal Emergency Management Agency (FEMA) National Flood Hazard Zones.[9] None of the sites is mapped within FEMA flood hazard zones. In addition, field observations found vegetation within the existing ROW, which indicates the presence of water and suggests that the railroad currently has some drainage challenges, particularly at Site 3. However, these are assumed to be mitigated by planned drainage improvements by the City along Grapefruit Boulevard, which will create similar conditions across all three sites.

4.4.7 Summary

Table 9 shows the results of the evaluation for environmental factors.

[8] City of Coachella, City of Coachella Official Zoning Map, July 2023.

[9] Federal Emergency Management Agency, National Flood Hazard Layer Viewer. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed January 6, 2025.

Table 9. Environmental Constraints Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Biological Resources	○	○	○	None of the sites is located within or adjacent to a conservation area associated with the Coachella Valley Multiple Species Habitat Conservation Plan.
Cultural Resources	◑	◑	○	Site 1 and Site 3 were identified as having a medium sensitivity for historic resources. Site 2 was identified as having a potentially high sensitivity level for historic resources, because it is located within the historic core of the city, where historic structures have been previously identified. The entire city can be considered sensitive for archaeological resources and Site 1, in particular, is adjacent to tribal land.
Hazardous Materials	○	○	○	None of the sites is identified on a hazardous materials site database.
Geotechnical Conditions	○	○	○	Geotechnical conditions are similar amongst the sites.
Noise/ Vibration	◑	◑	●	Site 1 and Site 2 are located near potential sensitive noise receivers (school/educational center).
Flooding	○	○	○	None of the sites is mapped within FEMA flood hazard zones. The railroad currently has some drainage challenges, particularly in Site 3, but these are assumed to be mitigated by planned improvements by the City, which will create similar conditions across all three sites.
Overall	◑	◑	○	

4.5 Accessibility/Connectivity

Accessibility and connectivity criteria include Pedestrian Connectivity, Bicycle Connectivity, Transit Connectivity, Auto Connectivity, and Crossing Potential. The project team analyzed several factors related to each criterion including current conditions, potential for changes to existing systems, and station layout plans.

4.5.1 Pedestrian Connectivity

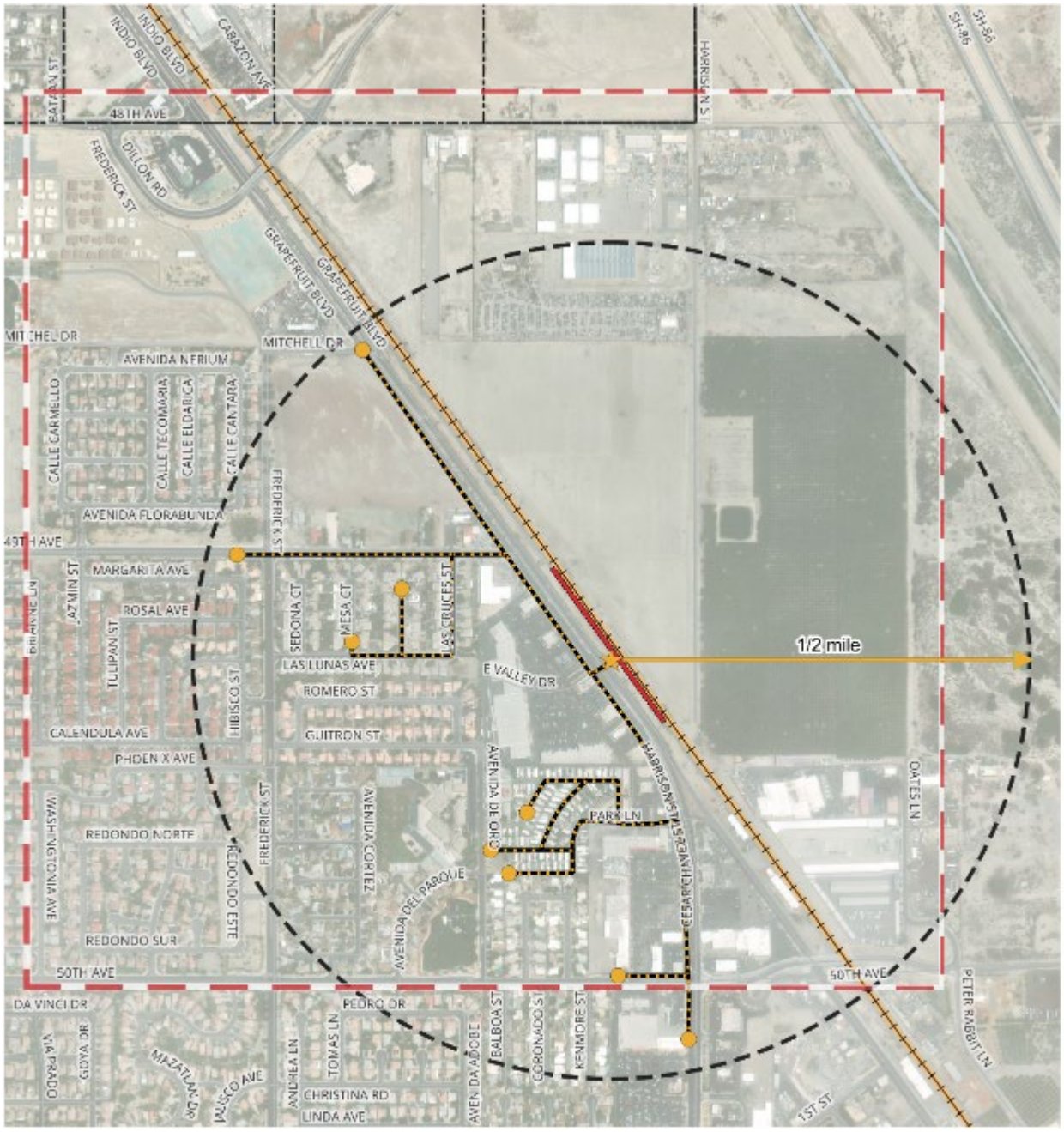
For Pedestrian Connectivity, the project team looked at current pedestrian facilities including sidewalks and crosswalks, traffic safety statistics for crashes involving pedestrians, and the number of origins and destinations within a half-mile walking distance from the proposed station sites. This analysis included a desktop survey of sidewalks and identification of trip attractors/generators, as well as reviewing the total walkable area as shown in the half-mile walkshed maps included in the existing

conditions report. The team analyzed safety statistics from the Transportation Injury Mapping System (TIMS) for the latest five years available (July 2019 through June 2024) within a half-mile radius of each station site.

Site 1 has lower pedestrian connectivity due to the presence of the shopping center, which limits the amount of area around it easily accessible by a pedestrian, and the highest incidence of crashes involving pedestrians (8). Site 2 has the best overall pedestrian connectivity due to the Old Town street grid of the neighborhood to the west but had the second highest incidence of crashes involving pedestrians (4). However, these safety statistics may be attributable to the density of the street network in the area. Site 3 has the lowest overall pedestrian connectivity due to a lack of destinations within a half mile and an overall lack of development near the site. The site had the lowest incidence of crashes involving pedestrians (1); however, these safety statistics are likely due to the minimal number of streets present within a half-mile radius.

Figure 8 through Figure 10 show the existing half-mile walking routes currently possible from the stations.

Figure 8. One-Half-Mile Walking Distance from Station Site 1



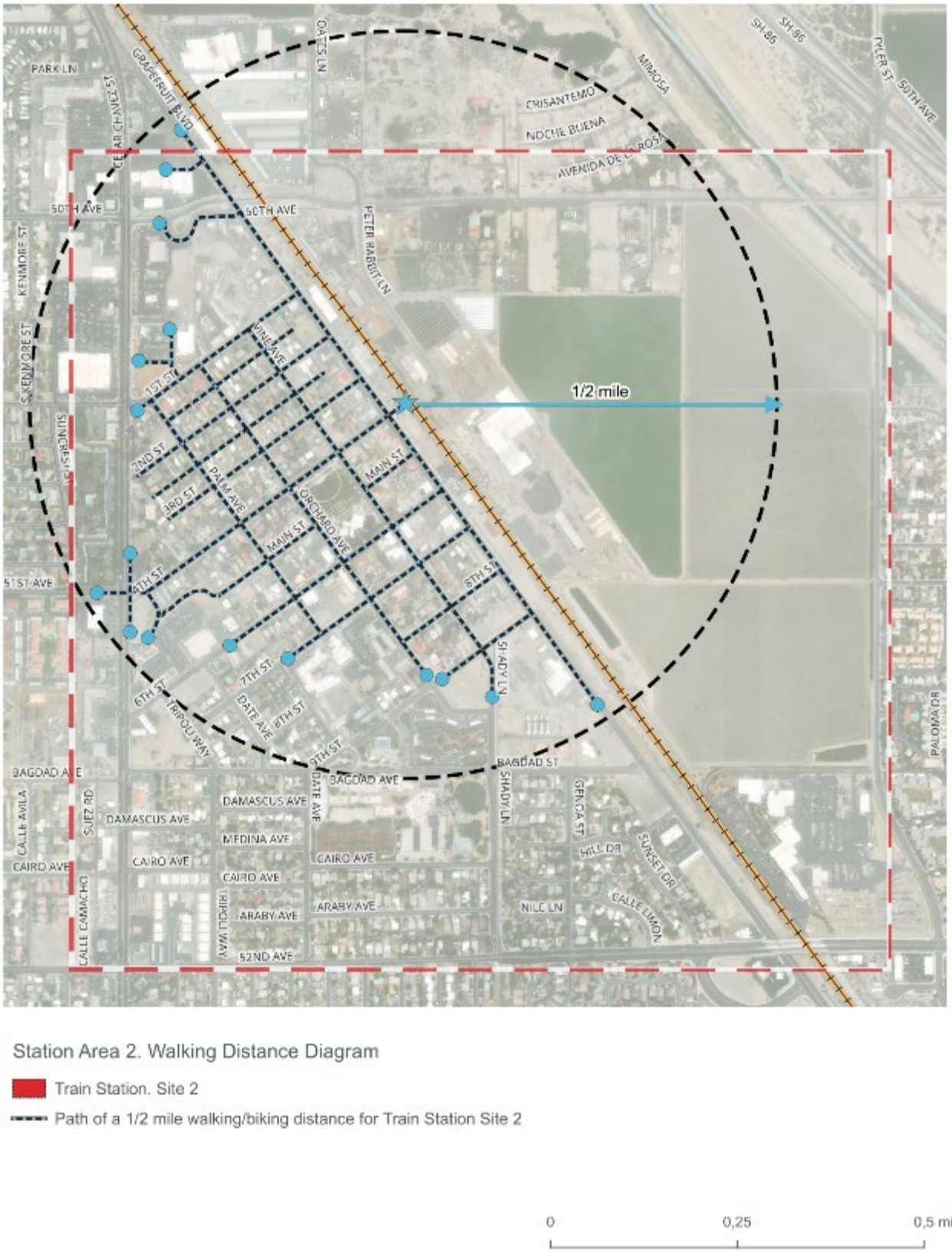
Station Area 1. Walking Distance Diagram

Train Station. Site 1

Path of a 1/2 mile walking/biking distance for Train Station Site 1

0 0,25 0,5 mi

Figure 9. One-Half-Mile Walking Distance from Station Site 2



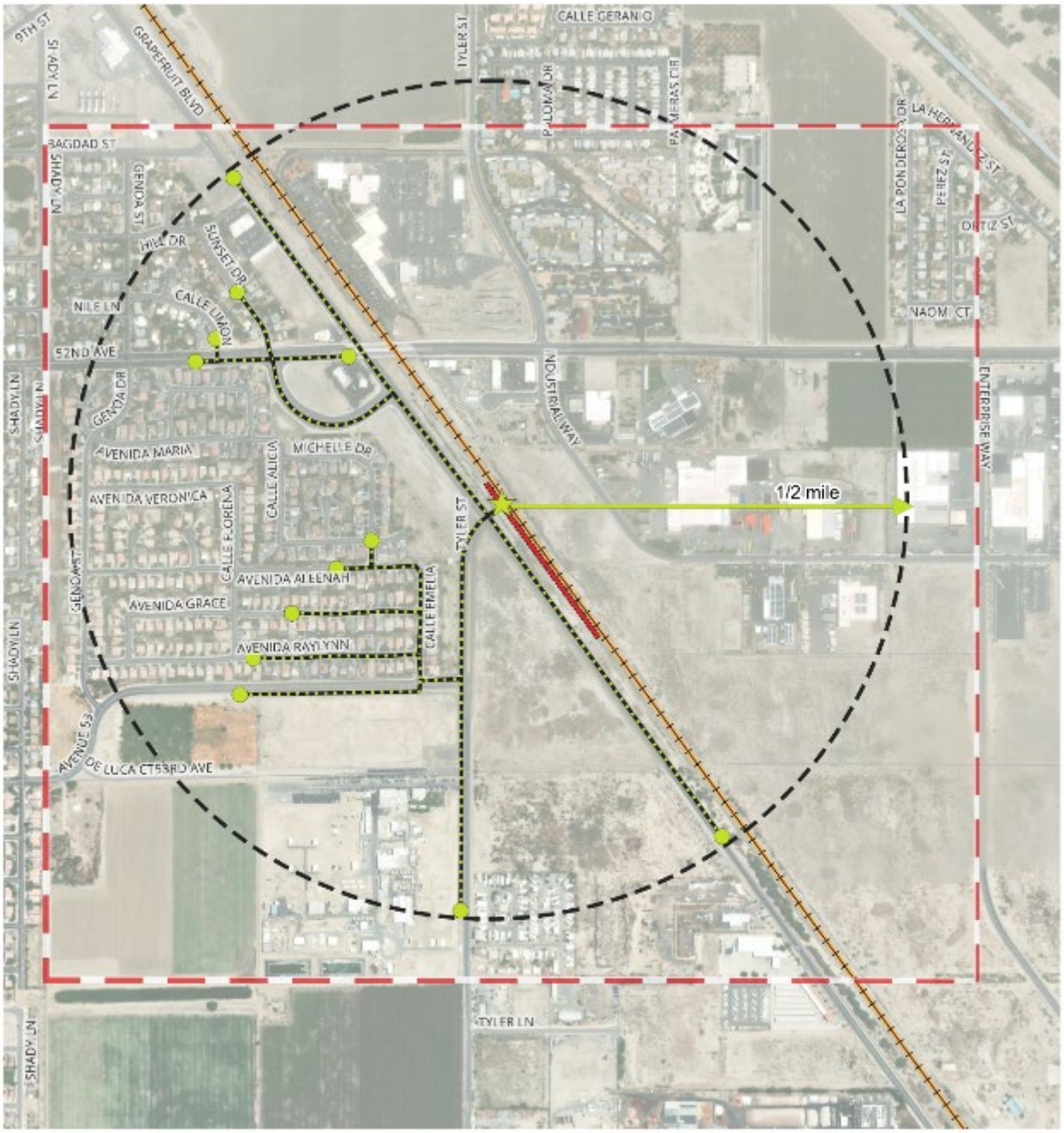
Station Area 2. Walking Distance Diagram

Train Station. Site 2

Path of a 1/2 mile walking/biking distance for Train Station Site 2

0 0,25 0,5 mi

Figure 10. One-Half-Mile Walking Distance from Station Site 3



Station Area 3. Walking Distance Diagram

Train Station. Site 3

Path of a 1/2 mile walking/biking distance for Train Station Site 3

0 0,25 0,5 mi

4.5.2 Bicycle Connectivity

For Bicycle Connectivity, the project team looked at current and planned bicycle facilities as well as traffic safety statistics for crashes involving bicyclists. This analysis included a desktop survey of bicycle facilities and TIMS data within a half-mile radius of each station site.

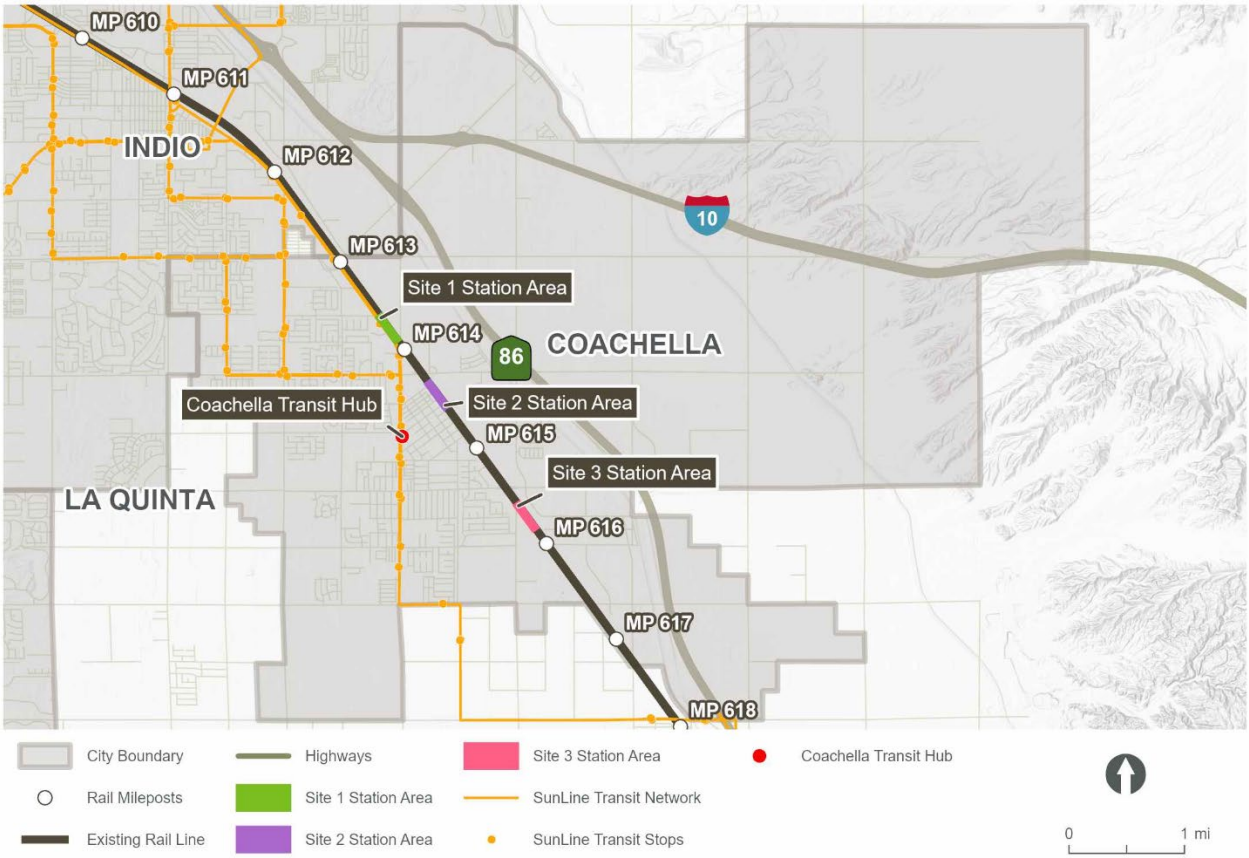
All station sites will be served directly by the Connect Coachella Project, a Class I Bike Lane parallel to Highway 111/Grapefruit Boulevard on the eastern side of the roadway. Site 2 has the highest level of bicycle connectivity with existing bike facilities in the area but also has the highest incidence of crashes involving cyclists (8). Site 1 has some bike infrastructure nearby, but large roads and heavy traffic make biking somewhat difficult in the area, and Site 1 has the second highest incidence of crashes involving cyclists (6). Site 3 has little bike infrastructure and had the lowest incidence of crashes involving cyclists (1), likely due to a lack of bike activity in the area.

4.5.3 Transit Connectivity

For Transit Connectivity, the project team looked at several factors based on existing transit service and potential for rerouting transit services in the future. These factors included existing bus stop proximity, number of existing routes nearby, the frequency of existing services, and the feasibility of modifications to existing routes to serve each station site.

As shown in Figure 11, Site 1 is the only one with existing bus service adjacent to the site (Line 1EV), but rerouting other routes would be circuitous, and the limited space available between Grapefruit Boulevard and the railroad tracks limits the provision of bus facilities. Site 2 is less than half a mile from the Coachella Transit Hub at 4th Street and Cesar Chavez Street, which serves three different SunLine routes (Lines 1EV, 6, and 8), and potentially rerouting some or all these routes to serve the station directly would not add substantial cost. Site 3 is the farthest from any existing transit and would require an extensive mid-route rerouting of Route 8 and/or an extension of Route 1EV of over a mile in each direction.

Figure 11. Existing Transit Service in Coachella (Placeholder)



4.5.4 Auto Connectivity

For Auto Connectivity, the project team calculated distances from Highway 86, north-south arterials (excluding Grapefruit Boulevard), and east-west arterials, as well as analyzed overall crash data from TIMS within a one-mile radius of each station site.

Site 1 is the closest to major arterials and Highway 86 and has the second highest incidence of overall crashes within one mile (130), but access would be difficult due to the presence of the non-standard Y-intersection at Grapefruit Boulevard and Cesar Chavez Street nearby and the limited space available between Grapefruit Boulevard and the railroad tracks, making parking access difficult. Site 2 is the second closest to major arterials and provides convenient access to two east-west arterials via Grapefruit Boulevard. The site had the highest incidence of overall crashes within one mile (154), but this is likely due to the density of the street network in the area. Site 3 is the farthest from Highway 86 and north-south arterials. The site had the lowest incidence of overall crashes within one mile (57), but this is likely due to the minimal number of streets present in the area.

4.5.5 Crossing Potential

For Crossing Potential, the project team analyzed the suitability of land on the east side of the railroad tracks for potential future development, as well as existing and planned development and facilities.

Sites 1 and 3 have limited potential for development on the east side of the railroad tracks, with predominantly industrial land uses present and, in the case of Site 3, minimal undeveloped land. Site 2 has the best potential for development on the east side of the railroad tracks, with City plans to provide municipal services to the area and the future Community Resilience Center on Peter Rabbit Lane.

4.5.6 Summary

Table 10 shows the results of the accessibility and connectivity evaluation.

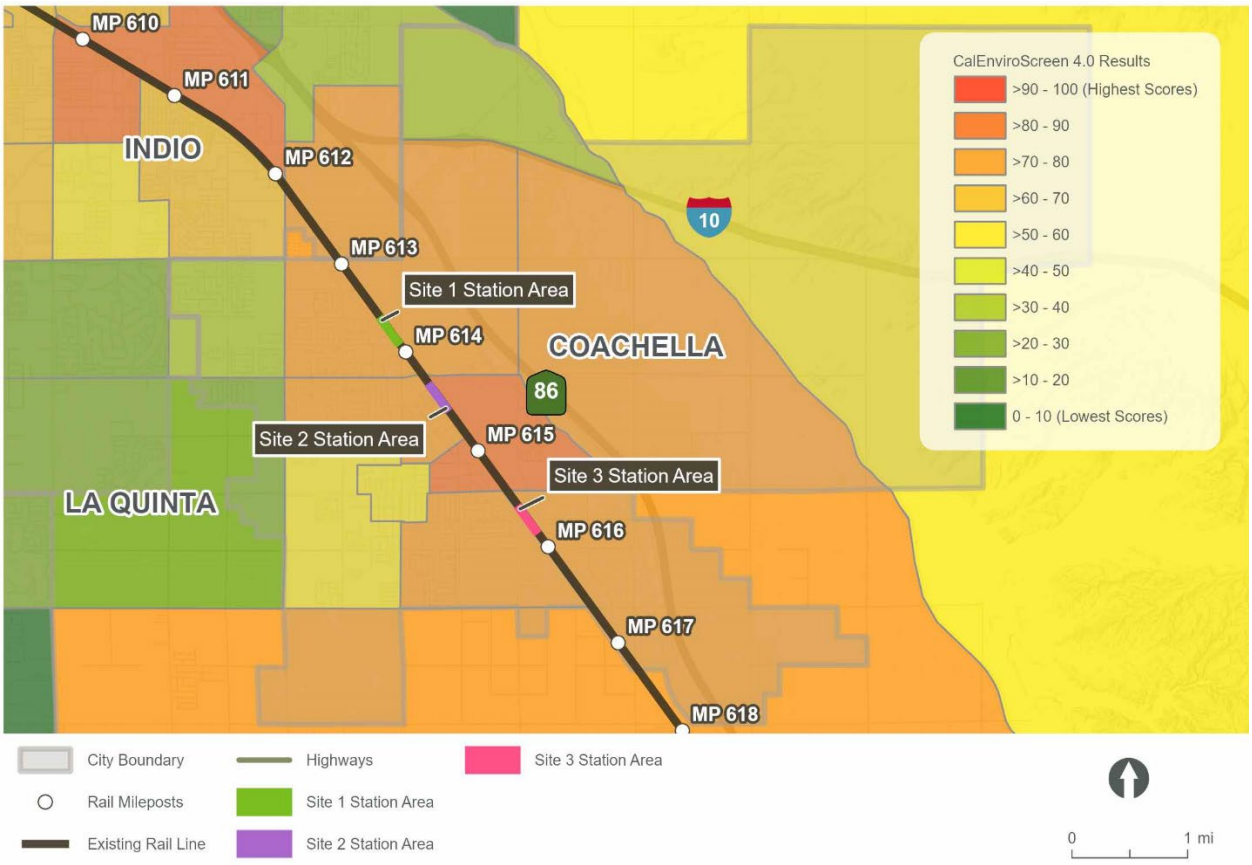
Table 10. Accessibility Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Pedestrian Connectivity	◑	●	◑	Site 1 is walkable to several retail centers but does not have direct routes to the residential neighborhoods behind them. The street grid and mix of uses in Pueblo Viejo are highly conducive to walking to Site 2. Site 3 has very little within walking distance.
Bicycle Connectivity	◑	●	○	All sites will have north-south bicycle access via Grapefruit Boulevard. Site 1 has bicycle access to Cesar Chavez Street. Site 2 is bikeable from most of the city. Site 3 has the least development within cycling distance.
Transit Connectivity	◑	○	●	Site 1 has existing transit service from SunLine's primary East Valley Route (1EV). Site 2 has an 1EV stop ⅓ mile away, and service could be rerouted to the station. Site 3 has no bus routes nearby and extending existing routes to the station would be more disruptive than for Site 2.
Auto Connectivity	◑	●	◑	All sites will have north-south auto access via Grapefruit Boulevard and are close to an east-west arterial. Access to Site 1 presents challenges due to non-standard intersections. Site 3 is farthest from the Cesar Chavez Street.
Crossing Potential	○	●	○	Sites 1 and 3 have minimal development on the east side to the railroad to connect to and would not have strong street connections. Site 2 could connect Pueblo Viejo to the future Community Resilience Center as well as other uses via Peter Rabbit Lane.
Overall	◑	●	◑	

4.6 Equity and Environmental Justice

Social equity and environmental justice factors were evaluated utilizing CalEnviroScreen 4.0 data for the Census tract associated with each potential site.[10] Figure 12 shows the percentile scores of Census tracts surrounding the railroad within Coachella. CalEnviroScreen 4.0 uses environmental, health, and socioeconomic information to produce scores for every Census tract in the state to identify California communities that are most affected by pollution.[11] An area with a high score is one that experiences a much higher pollution burden than areas with low scores. The data from Census tract with the higher CalEnviroScreen 4.0 score have been utilized for this analysis.

Figure 12. CalEnviroScreen Percentiles by Census Tract (Placeholder)



Each site is within a community characterized as a Senate Bill 535 Disadvantaged Community.[12] The California Environmental Protection Agency (CalEPA) defines a Disadvantaged Community based on several criteria, including geographic, socioeconomic, public health, and environmental hazard factors.

[10] California Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0 Data, https://oehha.ca.gov/calenviroscreen/maps-data/download-data. October 2021.

[11] California Office of Environmental Health Hazard Assessment, About CalEnviroScreen, https://oehha.ca.gov/calenviroscreen/about-calenviroscreen#:~:text=CalEnviroScreen%20uses%20environmental%2C%20health%2C%20and,than%20areas%20with%20low%20scores. Accessed October 23, 2024.

[12] California Office of Environmental Health Hazard Assessment, SB 535 Disadvantaged Communities, https://oehha.ca.gov/calenviroscreen/sb535. Accessed October 28, 2024.

Specifically, CalEPA identifies Disadvantaged Communities as areas that fall into one of the following categories: 1) Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0; 2) Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps but receiving the highest 5 percent of cumulative pollution burden scores; 3) Census tracts identified in the 2017 designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0; or 4) Lands under the control of federally recognized Tribe.

4.6.1 Station Area Demographics

CalEnviroScreen 4.0 Scores

Site 2 has the highest CalEnviroScreen 4.0 score of 48.71 out of 100, with a percentile score of 86.38, indicating this score is higher than 85 to 90 percent of other Census tracts within the state. Site 3 has the lowest CalEnviroScreen 4.0 score of 37.72 out of 100, with a percentile score of 71.65.

Population

Site 1 has the highest population count at 6,818. Site 3 has the lowest population count at 4,381.

Age

Site 1 has the greatest percentage of residents between the ages of 10 and 64 at 80.8 percent. Site 3 has the lowest percentage of residents between the ages of 10 and 64 at 75 percent. Site 2 has the highest percentage of elderly residents, above the age of 64, at 11.94 percent. Site 1 has the lowest percentage of elderly population at 8.13 percent.

Education

Site 2 has the highest percentage of residents over the age of 25 with less than a high school education at 60.8 percent. Site 1 has the lowest percentage in this category with 41.8 percent of the population over 25 with less than a high school education.

Poverty Level

Site 2 has the highest percentage of the population living two times below the federal poverty level at 63.7 percent. Site 1 has the lowest percentage of the population living two times below the federal poverty level at 48.8 percent.

4.6.2 Potential for Community and Business Impacts

Several businesses operate in the strip of land between the existing tracks and Grapefruit Boulevard from approximately Cesar Chavez Street to 9th Street. The Coachella Valley Rail program has the potential to impact all these businesses through construction of a third main track, which would likely pass through central Coachella to reach the layover facility regardless of which station site is selected. For all three sites, the third main track would likely pass through central Coachella to reach the preferred layover facility location. This would impact two structures north of Avenue 50, the Coachella

Container Park, and five businesses between Avenue 50 and 8th Street. For Sites 1 and 3, businesses in the ROW in the Pueblo Viejo area may be able to continue operating in the reduced footprint between Grapefruit and the new 3rd main, but Site 2 would entirely displace one business between 2nd and 5th Streets.

4.6.3 Summary

Table 11 shows the results of the evaluation for equity and environmental justice.

Table 11. Equity and Environmental Justice Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Station Area Demographics	◑	●	◑	All sites are identified as disadvantaged communities. Site 2 has the highest CalEnviroScreen 4.0 score and highest percentage of population living below twice the federal poverty level.
Community and Business Impacts	○	◑	○	All businesses within the ROW will likely be impacted by the construction of the third main track, regardless of station site. For Sites 1 and 3, businesses in the ROW in the Pueblo Viejo area may be able to continue operating in the reduced footprint between Grapefruit Boulevard and the new third main. For Site 2, the spaces needed for the platform and track flare would impact two existing structures. Sites 1 and 3 have no buildings directly conflicting with the station elements.
Overall	◑	◑	◑	

4.7 Ridership Potential

4.7.1 Existing and projected Population and Employment

The number of residents and workers expected to be within the areas surrounding each potential station site, shown in Table 12, was estimated based on planned land use and intensity. Underlying calculations are attached in Appendix A. The number of people expected to be present in area around Site 2 is about double that in the areas surrounding Sites 1 and 3, and the likelihood of ridership in urban places like Pueblo Viejo is greater than in low-density suburban neighborhoods and industrial areas.

Table 12. Projected Residents and Employment by Station Area

Site	Population	Employment
Site 1: Gateway	3,845	4,170
Site 2: Pueblo Viejo	15,737	7,910
Site 3: Tyler Street	8,380	3,661

4.7.2 Key Generators

To evaluate key trip generators, the number of businesses within a half-mile radius of each station site was analyzed. Data was sourced from Esri Community Analysis. Each site was then assigned a rating on a scale from "Worse" to "Better." As shown in Table 13, Site 2 Pueblo Viejo received a "Better" rating due to its higher number of trip generators. Site 1 Gateway was rated "Better," while Tyler Street received a "Worse" rating.

Table 13. Key Generators within a Half Mile

Site	Number of Businesses	Rating
Site 1: Gateway	164	**Better**
Site 2: Pueblo Viejo	191	**Better**
Site 3: Tyler Street	36	**Worse**

Source: Esri Community Analysis

4.7.3 Summary

Table 14 shows the results for ridership potential.

Table 14. Ridership Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Planned Population/ Employment	◑	●	◑	Based on planned land uses, the number of people expected to be present in the area around Site 2 is about double that around Sites 1 and 3. The likelihood of ridership in urban places is also greater than in low-density suburban neighborhoods and industrial areas.
Key Generators	●	●	○	Sites 1 and 2 have a larger number of businesses in the surrounding half mile.
Overall	○	●	○	

4.8 Costs

4.8.1 Capital

The elements of the station and layover facility would be similar across all sites, but access to the layover facility for Site 3 would require additional infrastructure compared to Sites 1 and 2. If the layover facility option on the west side of the tracks is chosen, it would need to be placed slightly farther south for Station Site 3, increasing the length of track construction. Additionally, if direct access from all three tracks is needed, a new control point and two additional crossovers would be required. If the facility is placed on the east side south of Avenue 52, the additional control point and crossovers would likely be required given that passenger service is likely to primarily be focused on the third main track on the west side of the ROW. Alternatively, an east side facility could be placed north of the existing crossover on vacant land near Harrison Street, but this would require an additional turnout and acquisition of land outside the existing ROW.

4.8.2 Maintenance

Station and layover facility elements would be similar at each site, without differences in ongoing maintenance needs. As described above, Site 3 would increase the infrastructure investment required to provide access to the layover facility, creating additional track length and crossovers that would need to be maintained on an ongoing basis to support rail service.

4.8.3 Right-of-Way

All sites are narrow, but Site 1 is severely limited by the available space between Grapefruit Boulevard and the tracks and may require acquisition of land outside the ROW to accommodate station access features. As described in Section (4.6.2), construction of the third main track would impact several businesses regardless of site selection, and Site 2 would require entire displacement of an existing business within the railroad ROW. The City owns a parcel east of Site 2, which will be used for the future Community Resilience Center and could potentially provide cost efficiency if the station is expanded outside the ROW. Site 3 is vacant within the ROW and adjacent parcels are also vacant.

4.8.4 Summary

Table 15 shows the results of the evaluation for station costs.

Table 15. Cost Evaluation Results

Evaluation Factor	Site 1 Rating	Site 2 Rating	Site 3 Rating	Justification
Capital	○	○	◑	Station and layover facility elements would be similar across all sites. Site 3 would require placement of the layover facility slightly farther south, increasing the length of new track required. In addition, Site 3 would likely need new cross-overs between the layover facility and the station.
Maintenance	○	○	◑	As noted above, Site 3 would require additional track length and crossovers that would need to be maintained.
ROW/Land Acquisition	●	◑	●	The ROW at Site 1 is narrow, requiring elements such as bus pullouts to be placed outside the rail ROW. All sites will likely impact businesses within the ROW through construction of a third main track, with Site 2 entirely displacing one existing business. Site 3 is vacant and surrounded by vacant land.
Overall	◑	○	◑	

5 Site Evaluation Summary

5.1 Summary Matrix

Table 16 summarizes the scores for each evaluation category and the overall score of each site.

Table 16. Summary Scoring Matrix

Category	Site 1 Rating	Site 2 Rating	Site 3 Rating
Rail Engineering Feasibility			
Station Element Feasibility			
Land Use/Development Compatibility			
Environmental Constraints			
Accessibility/Connectivity			
Equity and Environmental Justice			
Ridership Potential			
Costs			
Overall			

Worse	←→	Neutral	←→	Better

5.2 Gateway Center Station Site

Site 1, near Gateway Center, can accommodate the new track and platforms required for a station, and does not present challenges for train operations. However, the ROW at this site is very narrow, and it may not be possible to provide the necessary parking, bus access, and station building between the tracks and Grapefruit Boulevard, and further expansion would be severely limited. Nearby tribal land presents a potential environmental constraint for cultural resources and a nearby school is a potential sensitive receptor for noise. Existing development on the west side of the railroad is not transit oriented and unlikely to redevelop, while vacant land on the east side is zoned industrial. The station would be located near an existing transit stop and be located near several major arterials but has less pedestrian and bicycle connectivity than Site 2. As a result of lower connectivity and less intense and fewer transit-oriented uses, this site is expected to have lower ridership potential than Site 2.

5.3 Pueblo Viejo Station Site

Site 2 in Pueblo Viejo presents the fewest engineering constraints and can accommodate all station elements. The existing and planned land use around this site is most compatible with a rail station, and the existing street grid within Pueblo Viejo is supportive of multimodal access to the station. The General Plan recognizes the benefits that a rail station could bring to Pueblo Viejo and includes a goal establishing a combined bus and rail transportation center in the existing downtown area.

The location within the historic downtown presents the potential to encounter historic resources and a nearby school is a potential sensitive receptor for noise.

5.4 Tyler Street Station Site

Site 3 near Tyler Street is operationally feasible but would require the most infrastructure investment. The surrounding area is largely vacant, and the street network provides limited connectivity to key destinations. While vacant land is a potential opportunity for new development, land around the station is largely zoned for industrial uses. Based on limited existing and planned development around the site, this station site is expected to have lower ridership potential than Site 2.

6 Recommended Site

Site 2, Pueblo Viejo, would support the City's existing downtown area in Pueblo Viejo while also facilitating economic development on the east side of the railroad. Existing uses and future development provide a market to attract ridership. This presents the most potential benefits and fewest engineering constraints and is therefore recommended as the City's preferred site to be carried forward in subsequent phases of this study, which will develop station area plans and preliminary station design plans.

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Appendix A. Population and Employment Estimates

Appendix A: Population and Employment Estimates Based on General Plan Land Use

Station Area 1

	Gross Acres	Net/ Gross	Net Acres	FAR	S.F.	S.F./Job	Jobs
DT	25.00						
U-E	28.00						
DT Comm 50%	12.50	0.80	10.00	1.25	544,500	1,000	545
U-E Comm 50%	14.00	0.70	9.80	1.25	533,610	1,000	534
							1,078
M-W: Wrecking Yard	81.50	0.80	65.20	0.03	85,203	2,000	43
M-S: Manufacturing Service	186.50	0.80	149.20	0.35	2,274,703	600	3,791
C-G: General Commercial			54.00	0.30	705,672	1,000	706
C-N: Neighborhood Commercial			27.00	0.28	329,314	1,000	329
							4,869

				DUA	DU	Res/DU	Residents
DT Res 50%	12.50	0.80	12.50	40.00	500	2.50	1,250
U-E Res 50%	14.00	0.70	9.80	40.00	392	2.50	980
							2,230
S-N: Suburban Neighborhood West			78.00	7.00	546	2.75	1,502
S-N: Suburban Neighborhood East	157.00	0.75	117.75	7.00	824	2.75	2,267
General Neighborhood			1.75	12.00	21	2.75	58
R-MH: Mobile Home			10.00	12.00	120	2.25	270
							4,096

Total Residents	**6,326**
Total Jobs	**5,947**
Total	**12,273**

Station Area 2

	Gross Acres	Net/ Gross	Net Acres	FAR	S.F.	S.F./Job	Jobs
C-N: Neighorhood Commercial			43.00	0.28	524,462	1,000	524
G-C: General Commercial			25.50	0.30	333,234	1,000	333
M-S: Manufacturing Service	48.00	0.80	38.40	0.35	585,446	600	976
							1,833
DT-PV + TR			94.00				
U-E	242.00						
DT Comm 50%			47.00	1.25	2,559,150	1,000	2,559
U-E Comm 50%	121.00	0.70	84.70	1.25	4,611,915	1,000	4,612
							7,171
				DUA	**DU**	**Res/DU**	**Res**
DT Res 50%			47.00	40.00	1,880	2.50	4,700
U-E Res 50%	121.00	0.70	84.70	40.00	3,388	2.50	8,470
							13,170
S-N: Suburban Neighborhood West			60.00	7.00	420	2.75	1,155
S-N: Suburban Neighborhood East	100.00	0.75	75.00	7.00	525	2.75	1,444
R-MH: Mobile Home			10.00	12.00	120	2.25	270
G-N: General Neighborhood			48.00	12.00	576	2.75	1,584
U-N: Urban Neighborhood			32.50	30.00	975	2.75	2,681
							7,134
Total Jobs							**9,005**
Total Residents							**20,304**
Total							**29,309**

Station Area 3

	Gross Acres	Net/ Gross	Net Acres	FAR	S.F.	S.F./Job	Jobs
U-E: Urban Employment Comm 50%	57.00	0.85	48.45	1.25	2,638,103	1,000	2,638
M-H: Heavy Industrial			230.00	0.03	300,564	2,000	150
M-S: Manufacturing Service			76.00	0.35	1,158,696	600	1,931
C-G: General Commercial			32.00	0.30	418,176	1,000	418
							5,138

				DUA	DU	Res/DU	Residents
U-E: Urban Employment Res 50%	57.00	0.75	42.75	40.00	1,710	2.5	4,275
U-N: Urban Neighborhood	50.00	0.75	37.50	30.00	1,125	2.75	3,094
G-N: General Neighborhood			34.00	12.00	408	2.75	1,122
S-N: Suburban Neighborhood			135.00	7.00	945	2.75	2,599
R-MH			28.00	12.00	336	2.25	756
							11,846

Total Jobs	**5,138**
Total Residents	**11,846**
Total	**16,983**