



## TRANSIT CORRIDOR ALTERNATIVES ANALYSIS ANALYSIS FRAMEWORK

The Transit Corridor Alternatives Analysis: Watsonville/Pajaro to Santa Cruz (TCAA), will use a triple-bottom line, performance-based planning approach for evaluating future investment decisions. The Triple Bottom Line Approach is a consistent analysis tool applied by the Santa Cruz County Regional Transportation Commission to identify and prioritize transportation policies, program, and projects in the County. An alternatives analysis will be performed to examine the performance of various transit options for the rail right-of-way and how well they advance the goals of the project. The following describes the analysis framework designed to evaluate the performance benefits of the alternatives in this planning process. The TCAA will identify a Locally-Preferred Alternative that best meets the Economy, Environment and Social Equity needs of the County.

### Triple Bottom Line Approach to Alternatives Analysis



This Analysis Framework will build from the Triple Bottom Line goals of Economy, Environment and Social Equity. A two phase approach will be used as described:

1. Phase 1: Initial high-level screening using the screening criteria to narrow the universe of alternatives to a smaller set of alternatives for detailed analysis.
2. Phase 2: More detailed and data-driven alternatives analysis using the performance measures, designed to differentiate performance benefits between the smaller set of alternatives and support the identification of the Locally-Preferred Alternative.

The following tables present the proposed Economic, Environmental, Social Equity and Other Goals that supports the Triple Bottom Line Approach with descriptions of supporting Evaluation Metrics, Phase 1 Screening Criteria and Phase 2 Performance Measures.



# SUPPORTS ECONOMY

Goals	Evaluation Metric	Description	Phase 1 Screening (A=Most Desirable B=Moderately Desirable C=Least Desirable)	Phase 2 Performance Measure
Fiscally feasible	Capital cost	How does capital cost compare to other projects?	A, B, C	Capital Cost Capital Cost/Rider Capital Cost/Passenger Mile
	O&M costs	Is project relatively more expensive to maintain and operate?	A, B, C	O&M Costs O&M Cost/Rider O&M Cost/Passenger Mile
	Funding	How much funding will likely be available?	A, B, C	% funding likely from existing sources % funding likely from future sources
Results in a well-integrated transportation system supporting economic vitality	Transit Oriented Development	Will the project increase development along the corridor?	A, B, C	A, B, C
	Jobs	Will project support job growth – near term through construction, longer term through O&M activity?	A, B, C	A, B, C
	Freight and other rail businesses	What is the impact on freight rail operators, shippers and other rail businesses including Santa Cruz Big Trees and Pacific Railway?	A, B, C	Freight Rail Volume A, B, C Big Trees access to Boardwalk A, B, C Big Trees access to Pajaro A, B, C
	Transportation corridor utilization and preservation	What is the level of risk that the corridor will not remain continuous? Will alternative best utilize rail corridor and preserve future options?	A, B, C	Risk Level A, B, C





# SUPPORTS EQUITY

Goals	Evaluation Metric	Description	Phase 1 Screening (A=Most Desirable B=Moderately Desirable C=Least Desirable)	Phase 2 Performance Measure
Promotes active Transportation	Active transportation	Does project include features that support active transportation and promotes health?	A, B, C	<ul style="list-style-type: none"> <li>- Bicycle capacity on transit/every 30 minutes during peak period</li> <li>-Ability for level boarding for bicyclists</li> <li>- Effects on MBSST and California Coastal Trail</li> </ul>
Supports safer transportation for all modes	Safety	Does project support public safety including safety for trail users?	A, B, C	<ul style="list-style-type: none"> <li>-Annual Collisions by mode</li> <li>-Total Annual Collisions</li> <li>-Annual Cost of Collisions</li> </ul>
Provides accessible and equitable transportation system that is responsive to the needs of all users	Access	Does project provide universal access to all ages, abilities, and income and minimize the cost to rider?	A, B, C	<ul style="list-style-type: none"> <li>- Location relative to transportation disadvantaged populations</li> <li>- Transit passenger capacity miles traveled</li> <li>- Transit Fare</li> <li>- Mobility device capacity on transit every 30 minutes during peak period</li> <li>-Independent accessibility for all ages and abilities including level boarding</li> </ul>
Offers reliable and efficient transportation choices that serve the most people	Travel time	Does project improve transportation travel time during peak periods?	A, B, C	<ul style="list-style-type: none"> <li>- Transit travel time during peak periods</li> <li>- Auto travel time on Hwy 1</li> <li>- Impacts at grade crossings</li> <li>- Regional connectivity</li> </ul>
	Reliability	Does project improve transportation reliability?	A, B, C	Travel time reliability during peak periods





# SUPPORTS ENVIRONMENT

Goal	Evaluation Metric	Description	Phase 1 Screening (A=Most Desirable B=Moderately Desirable C=Least Desirable)	Phase 2 Performance Measure
Promotes a healthier environment	Transit ridership	Will project substantially increase transit ridership for commute and recreational trips and for students, residents and visitors ?	A, B, C	Transit ridership (local, regional, weekday, weekend, corridor, countywide) - Transit capacity/peak period
	Emissions reduction	Does project support the goal of minimizing emissions? How long will the project take to implement?	A, B, C	- Auto vehicle miles traveled - Greenhouse gas emissions (total and per passenger mile) - Length of time to implement - Criteria pollutants
	Climate adaptation	Can the project resiliently adapt to climate change?	A, B, C	A, B, C
	Biological, visual, noise, and vibration	Are there effects of the project on biological resources, visual, noise and vibration?	A, B, C	A, B, C
	Energy usage	Does project support the goal of minimizing energy usage?	A, B, C	A, B, C



# OTHER GOALS

Goal	Evaluation Metric	Description	Phase 1 Screening (A=Most Desirable B=Moderately Desirable C=Least Desirable)	Phase 2 Performance Measures
Addresses project-specific concerns	Technical feasibility	Is project technically feasible?	Yes/No	
	Consistent with other planning	Is project consistent with other local, state and federal planning efforts?	A, B, C	A, B, C
	Consistent with regulatory requirements	Is project consistent with local, state, and federal regulatory requirements?	A, B, C	A, B, C
	Integration	Does project integrate into existing multimodal transportation infrastructure?	A, B, C	A, B, C
	Ability to Adapt to New Technology	Does the project have ability to adapt to future technology?	A, B, C	A, B, C
	Right-of-way	How easily can project be integrated into existing right-of-way?	A, B, C	% of corridor where additional right of way is required