



CONNECT NORTHERN CALIFORNIA




Initial Metrics for Evaluating Concepts

June 2023

DRAFT-DELIBERATIVE









Strategic Case Metrics

Objective		GOAL A Transform the Passenger Experience	
		Metric	Description
 A1: Improved service	Rail travel time savings 	Measures average potential time savings	
	Possible one-seat rides	Measures the reduction in transfers required for rail travel in the megaregion	
	Crowding reduction	Measures the change in standee crowding	
 A2: Network Performance	Reliability	Measures change in reliability / punctuality of the rail services	
	Flexibility to meet future growth	Measures additional capacity available to accommodate growth	
	Expected recovery time from incidents	Measures ability to quickly resume services following an incident	
	Ability to maintain infrastructure	Measures the ability to maintain existing and new infrastructure	
	System redundancy during closure of Transbay Crossing and other events	Measures how much of the service is operable following an event	



Equity Metric




Strategic Case Metrics

Objective		GOAL A Transform the Passenger Experience	
		Metric	Description
 A3: Build ridership	Potential new riders 	Measures the increase in total rail ridership and transbay ridership	
	Rail and transit mode share	Measures relative attractiveness of different modes by measuring changes to mode shares	
	Vehicle Miles Travelled (VMT) reduction	Measures reduction in traffic and other traffic related externalities	
 B1: Enhance Connectivity		GOAL B Promote Equity and Livability	
		Station access 	Measures the first/last mile accessibility of stations
		Jobs accessible 	Measures changes in job accessibility by rail
		Access to important community resources 	Measures changes in accessibility for non-work destinations (health, education, recreation, etc.)



Equity Metric




Strategic Case Metrics

Objective		GOAL B Promote Equity and Livability	
		Metric	Description
 <p>B2: Improve safety, health & air quality</p>	Megaregional pollutant levels	Measures impact of reduced VMT on criteria air pollution	
	Auto-involved crashes	Measures impact of reduced VMT on road safety	
 <p>B3: Advance equity & community Stability and displacement</p>	Advance equity and protect against community instability and displacement	Compilation of all the equity metrics (see )	

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Strategic Case Metrics

Objective		GOAL C Support economic opportunity and global competitiveness	
		Metric	Description
 <p>C1: Improve access to opportunity & employment</p>	Jobs accessible to new service	Measures jobs located near stations with new rail service	
	Business access to potential employees	Measures changes in access by rail to the labor market for employers	
 <p>D1: Increase climate change resilience</p>	GOAL D Advance environmental stewardship and protection		
	Viability under different sea level rise inundation scenarios	Measures exposure of infrastructure to sea level rise	
 <p>D2: Reduce greenhouse gas emissions</p>	Greenhouse gas (GHG) emissions	Measures changes in GHG emissions from vehicles	

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 Equity Metric


Economic Case & Financial Case Metrics

Objective

What is the economic benefit to the megaregion?

Metric	Description
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Monetized user benefits	Measures monetized travel time benefits
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Monetized external benefits 	Measures monetized air pollution benefits, safety benefits, and greenhouse gas benefits
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Cost effectiveness	Relative comparison of benefits and costs
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Economic Case Metrics



Financial Case Metrics


What are the financial implications?

Capital costs	Measures cost to build
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Equity Metric

Deliverability Case Risks

Objective	How can the project be delivered and what are the key risks?	
	Metric	Description
 Deliverability Case Metrics	Engineering and construction risk	Measures potential risk associated with construction of the project
	Operations during construction risk	Measures potential risks associated with operations during construction
	Equitable land use – displacement risk	Assesses risk of indirect displacement around new or existing stations
	Equitable land use – land use policies	Assesses risk of not being able to develop transit-supportive land uses around a new or existing station
	Environmental risk	Identifies major potential environmental concerns with project concepts

