

Measure	Performance Metric	Built	Future No Build	Change	Increase or Decrease
Congestion Reduction	Change in Daily Vehicle Miles Traveled	119,634	135,757	-16,124	Decrease
	Person Hours of Travel Time Saved			-2,357,015	Decrease
System Reliability	Peak Period Travel Time Reliability Index	NA	NA	NA	NA
	Level of Transit Delay	NA	NA	NA	NA
Safety	Number of Serious Injures	4.7	5.4	-0.7	Decrease
	Number of Fatalities	0.0	0.0	0.0	No Change
	Rate of Serious Injuries per 100 Million VMT	3,900	3,978	-77.8	Decrease
	Rates of Fatalities per 100 Million VMT	0.0	0.0	0.0	No Change
Economic Development	Jobs Created	884	0	884	Increase
Air Quality	- Carbon Monoxide (CO)	-47	0	-47	Decrease
	- Carbon Dioxide (CO ₂)	-45,204	0	-45,204	Decrease
	- Nitrogen Oxides (NO _x)	-25	0	-25	Decrease
	- Particulate Matter PM ₁₀	-1	0	-1	Decrease
	- Particulate Matter PM _{2.5}	-1	0	-1	Decrease
	- Sulphur Dioxides (SO _x)	0	0	0	No change
	- Volatile Organic Compounds (VOC)	-1	0	-1	Decrease
Cost Effectiveness	Benefit Cost Ratio	1.34	0	1.34	NA

Metric Name:	Change in Daily Vehicle Miles Traveled
Source Data:	Cal B/C CorridorI v8.1
Base Numbers & Calculation for "No Build" Estimate	
<p>Traffic Volume multiply by impacted length for ramps and mainline for No-Build</p> <ul style="list-style-type: none"> - SB Off to Ave 280: 9,107 (Vehicles) multiply by (1,501 ft divided by 5,280) (impacted length) = 2,589 - SB On from Ave 280: 8,714 (Vehicles) multiply by (1,246 ft divided by 5,280) (impacted length) = 2,056 - NB Off to Ave 280: 8,714 (Vehicles) multiply by (1,278 ft divided by 5,280) (impacted length) = 2,109 - NB On from Ave 280: 9,107 (Vehicles) multiply by (1,832 ft divided by 5,280) (impacted length) = 3,160 - NB Mainline: 48,874 (Vehicles) multiply by (6,928 ft divided by 5,280) (impacted length) = 64,129 - SB Mainline: 47,034 (Vehicles) multiply by (6,928 ft divided by 5,280) (impacted length) = 61,714 <p>- Total VMT = 2,589 (SB Off) plus 2,056 (SB On) plus 2,109 (NB Off) plus 3,160 (NB On) plus 64,129 (NB Mainline) plus 61,714 (SB Mainline) = 135,757</p>	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
<p>Traffic Volume multiply by impacted length for ramps and mainline for Build</p> <ul style="list-style-type: none"> - SB Off to Ave 280: 9,107 (Vehicles) multiply by (1,661 ft divided by 5,280) (impacted length) = 2,865 - SB On from Ave 280: 8,714 (Vehicles) multiply by (1,270 ft divided by 5,280) (impacted length) = 2,096 - NB Off to Ave 280: 8,714 (Vehicles) multiply by (1,257 ft divided by 5,280) (impacted length) = 2,075 - NB On from Ave 280: 9,107 (Vehicles) multiply by (1,510 ft divided by 5,280) (impacted length) = 2,604 - NB Mainline: 43,207 (Vehicles) multiply by (6,928 ft divided by 5,280) (impacted length) = 56,693 - SB Mainline: 40,622 (Vehicles) multiply by (6,928 ft divided by 5,280) (impacted length) = 53,301 <p>- Total VMT = 2,865 (SB Off) plus 2,096 (SB On) plus 2,075 (NB Off) plus 2,604 (NB On) plus 56,693 (NB Mainline) plus 53,301 (SB Mainline) = 119,634</p>	
Change	
<p>- 119,634 (Build) minus 135,757 (No Build) = -16,123 (reduction in VMT)</p>	

Metric Name:	Number of Fatalities & Number of Serious Injuries
Source Data:	Cal B/C CorridorI v8.1
Base Numbers & Calculation for "No Build" Estimate	
<ul style="list-style-type: none"> - TSAR 01/01/2017 to 12/31/2021 (5 years): Total Number of Serious Injuries: 27 - TSAR 01/01/2017 to 12/31/2021 (5 years): Total Number of Fatalities: 0 - Avg. Number of Serious Injuries = 27 divided by 5 = 5.4 - Avg. Number of Fatalities = 0 divided by 5 = 0 	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
<ul style="list-style-type: none"> - Statewide Basis Avg. Injury Crash Rate: 4 Way Stop Intersection - Rural: 32.7% - Statewide Basis Avg. Fatal Crash Rate: 4 Way Stop Intersection - Rural: 0.8% - Statewide Basis Avg. Injury Crash Rate: Roundabout - Rural: 19.1% - Statewide Basis Avg. Fatal Crash Rate: Roundabout - Rural: 0.8% <p>5.4 (# of Inj.) multiply by [100% minus (32.7% (Inj. Crash Rate - 4 Way Stop) minus 19.1% (Inj. Crash Rate - Roundabout))] = 4.7</p> <p>0.0 (# of Fatal) multiply by [100% minus (0.8% (Fatal Crash Rate - 4 Way Stop) minus 0.8% (Fatal Crash Rate - Roundabout))] = 0.0</p>	
Change	
<ul style="list-style-type: none"> - Injuries: 4.7 (Build) minus 5.4 (No Build) = -0.7 (reduction in Serious Injuries) - Fatalies: 0.0 (Build) minus 0.0 (No Build) = -0.0 (no change in Fatalities) 	

Metric Name:	Rate of Fatalities & Rate of Serious Injuries
Source Data:	Cal B/C CorridorI v8.1
Base Numbers & Calculation for "No Build" Estimate	
<ul style="list-style-type: none"> - Daily Vehicle Miles Travel (VMT): 135,757 - Avg. Number of Serious Injuries: 5.4 - Avg. Number of Fatalities: 0.0 <p>5.4 (# of Inj.) divided by 135,757 (VMT) multiply by 100,000,000 = 3,978 0.0 (# of Fatalities) divided by 135,757 (VMT) multiply by 100,000,000 = 0.0</p>	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
<ul style="list-style-type: none"> - Daily Vehicle Miles Travel (VMT): 119,634 - Avg. Number of Serious Injuries: 4.7 - Avg. Number of Fatalities: 0.0 <p>4.7 (# of Inj.) divided by 119,634 (VMT) multiply by 100,000,000 = 3,900 0.0 (# of Fatalities) divided by 119,634 (VMT) multiply by 100,000,000 = 0.0</p>	
Change	
<ul style="list-style-type: none"> - Injuries: 3,978 (Build) minus 3,900 (No Build) = -78 (Reduction in Rate of Serious Injuries) - Fatalies: 0.0 (Build) minus 0.0 (No Build) = -0.0 (No Change in Rate of Fatalies) 	

Metric Name:	Job Created
Source Data:	Cal B/C CorridorI v8.1
Base Numbers & Calculation for "No Build" Estimate	
- NA	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
Project Cost multiply by 0.000013 jobs per dollar - \$38,027,000 multiply by 0.000013 = 884 Jobs	
Change	
- 884 Jobs created	