Trade Corridor Enhancement Program Cycle 3 Guidelines Development Workshop

Wednesday, February 16, 2022

Agenda

- CEQA/NEPA Follow-up
- Performance Metrics Guidebook Overview
- Walkthrough of Metrics in the Guidebook

CEQA/NEPA Follow-up

Guidelines Language

12. California Environmental Quality Act (CEQA) Requirements and National Environmental Policy Act

Design, right of way, and construction capital costs will only be programmed if the project has completed a project level environmental process in accordance with the California Environmental Quality Act (CEQA), within six months of program adoption.

If the project requires National Environmental Policy Act (NEPA) compliance, then design, right of way, and construction capital costs will only be programmed if the project has completed a project level environmental process in accordance with the NEPA, within six months of program adoption.

If these requirements are not met, the project will be deleted from the program.

Guidebook Overview

Guidebook Development Process

- Workgroup process.
- 14 meetings over 7 months.
- About 45 experts from Caltrans and regional agencies.
- Subject matter experts reviewed metrics on a flow basis.
- A consultant helped put the work into one document.
- This guidebook is a working document that will continue to change, and hopefully improve, over time.

Guidebook Purpose

- A tool to help applicants calculate the required metrics.
- Provide additional consistency:
  - Whether information from year 1 or 20 of the project is required
  - Whether the requirement is for a daily or annual number
  - Where only the “change” should be reported
- It is up to the applicant to choose how to calculate each metric.

Evaluation Criteria & Metrics

The TCEP evaluation criteria is not the same thing as the performance metrics. The evaluation criteria is based primarily on statute.

The performance metrics (for TCEP) can be considered as a subcategory of evaluation criteria.

The applicant must provide narrative information for all evaluation criteria.

The applicant should also provide quantitative information for evaluation criteria. If the evaluation criteria is also a performance metric, then the performance metric provides the quantitative information.

Metrics Included

- VMT (SCCP/LPP/ATP)
- Person Hours of Travel Time Saved (SCCP/LPP/ATP))
- Change in Daily Vehicle Hours of Delay (TCEP)
- Change in Daily Truck Hours of Delay (TCEP)
- Change in Truck Volume (TCEP)
- Change in Rail Volume (TCEP)
- Peak Period Travel Time Reliability Index (SCCP/LPP)
- Truck Travel Time Reliability Index (TCEP)
- Air Quality (All)
- Cost Effectiveness - BCR (All)
- Velocity Freight (TCEP)
- Safety (fatalities & serious injuries) (All)
- Jobs Created (All)
- Transit schedule adherence (SCCP/LPP/ATP)

- The Commission plans to include Accessibility, Equity, Climate Change, and Public Health in the application form as qualitative requests for information.

Metrics

	Program				Project Type				
Metric	ATP	SCCP/ LPP	TCEP	All	Local Road	HWY Road	Transit	Rail	Port
Change in Daily Vehicle Miles Travelled	X	X			X	X	X		
Person Hours of Travel Time Saved		X			X	X	X		
Peak Period Travel Time Reliability Index		X				X			
Level of Transit Delay		X					X		
Change in Daily Vehicle Hours of Delay			X		X	X			
Change in Daily Truck Hours of Delay			X		X	X			X
Change in Truck Volume (# of Trucks)			X		X	X			X
Change in Rail Volume			X					X	
Truck Travel Time Reliability Index			X			X			
Velocity			X		X	X		X	X
Number of Fatalities and Number of Serious Injuries	X	X	X	X	X	X	X		X
Rates of Fatalities and Rate of Serious Injuries	X	X	X	X	X	X	X		X
Air Quality	X	X	X	X	X	X	X	X	X
Cost Effectiveness (Benefit Cost Ratio)	X	X	X	X	X	X	X	X	X
Jobs Created	X	X	X	X	X	X	X	X	X

General Guidance

Metric	Required For	Average Annual or Daily	Year 20 or Most Current Available	Performance Metrics Columns Required
Change in Daily Vehicle Miles Travelled	SCCP/LPP/ATP	Daily	Year 20	"No Build"/ "Build" /Change
Person Hours of Travel Time Saved	SCCP/LPP	Daily	Year 20	Change
Peak Period Travel Time Reliability Index	SCCP/LPP (highway only)	Average Daily	Most Current Data Available	"No Build"
Level of Transit Delay	SCCP/LPP (transit bus or rail only)	Average Daily	Most Current Available	"No Build"/ "Build"/ Change
Change in Daily Vehicle Hours of Delay	TCEP (Required for highways, roads, and ports, not required for rail, not for transit)	Average Annual	Year 20	"No Build"/ "Build"/ Change
Change in Daily Truck Hours of Delay – Cal B/C Sketch Model	TCEP (Required for highways, roads, and ports, not required for rail, not for transit)	Average Annual	Year 20	"No Build"/ "Build"/ Change
Change in Truck Volume (# of Trucks)	TCEP (Highway, road and port projects only)	Annual Average	Year 20	"No Build"/ "Build"/ Change

Metric	Required For	Average Annual or Daily	Year 20 or Most Current Available	Performance Metrics Columns Required
Change in Rail Volume	TCEP (Rail projects only)	Annual Average	Year 20	"No Build"/ "Build"/ Change
Truck Travel Time Reliability Index	TCEP (Highway projects only)	Average Daily	Most current available	"No Build"
Velocity	TCEP (Highway and road projects. Rail and port projects only if information is available)	Average Annual	Year 20	"No Build"/ "Build"/ "Change"
Number of Fatalities and Number of Serious Injuries	All Projects (except freight rail and sea port)	Average Annual	Most Current Available	"No Build"/ "Build"/ "Change"
Rate of Fatalities and Rate of Serious Injuries	All Projects (except freight rail and sea port)	Average Annual	Most Current Available	"No Build"/ "Build"/ "Change"
Air Quality	All Projects	Average Annual	Looks at average from year 1 through year 20	"Change"
Cost Effectiveness	All Projects	N/A	N/A	"Change"
Job Created	All Projects	N/A	N/A	"Build"

Required Back-Up Information

Metric Name:	*Example:* Daily Vehicle Hours of Delay
Source Data:	*List source(s) of information used in calculations* *Example:* Cal B/C Sketch model
Base Numbers & Calculation for "No Build" Estimate	
Include the starting numbers used, and the calculation used to develop the "No Build" number. If "No Build" is not required for metric, put "N/A" for "Not Applicable." *Example:* • Travel Time tab cell C118: Year 20 No Build Average Volume: 2,070,981 • Travel Time tab cell I118: Year 20 No Build Average Travel Time: 0.01 • Speed limit travel time = 0.4 (impacted length) divided by 65 (speed limit) = 0.006 • 0.01 (No Build average travel time) minus 0.006 (speed limit average travel time) = 0.004 • 2,070,981 (No Build average volume) multiply by 0.004 = 8,284 • 8,284/ 365 (days) = 23	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
Include the starting numbers used, and the calculation used to develop the "No Build" number. Include any trends or assumptions used. Explain how the impact of the "Build" number was estimated. If "Build" is not required for metric, put "N/A" for "Not Applicable." *Example:* • Travel Time tab cell D118: Year 20 Build Average Volume: 2,080,000 • Travel Time tab cell J118: Year 20 Build Average Travel Time: 0.009 • Speed limit travel time = 0.4 (impacted length)/ 65 (speed limit) = 0.006 • 0.009 (No Build average travel time) - 0.006 (speed limit average travel time) = 0.003 • 2,080,000 (Build average volume) multiply by 0.003 = 6,240 • 6,240/ 365 (days) = 17	
Change	
Include the subtraction used to get to the change number here. *Example:*	

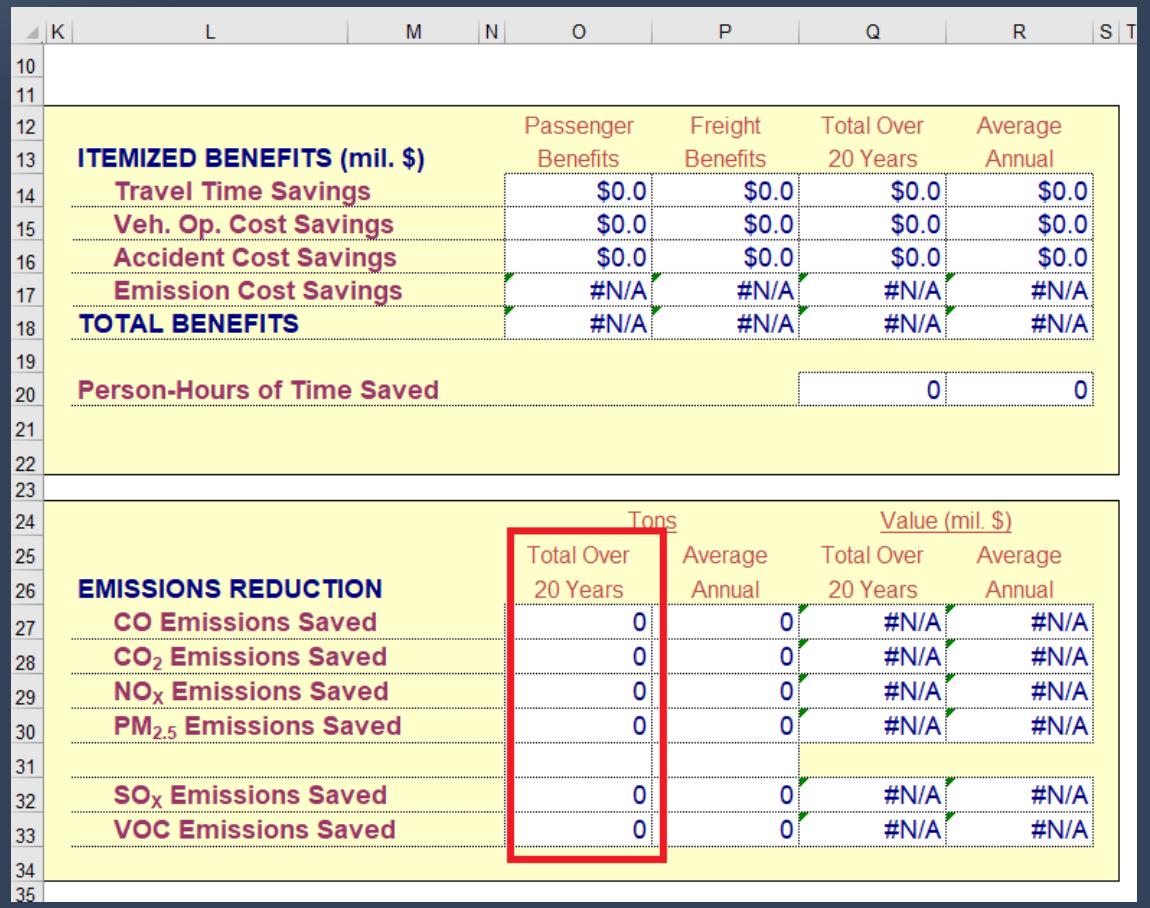
All Program Metrics

Metric	Generalized Formula	Source(s) in Guidebook
Air quality	change in tons of particulates	Cal B/C Sketch model
Benefit cost ratio	total benefits / total costs	Cal B/C Sketch model
Safety	fatalities & serious injuries over 5 years / 5 and # / VMT / 5 * 1 million	Cal B/C Sketch model Caltrans collision data Caltrans safety guidance CHP SWITRS data
Jobs created	.000013 * total project cost	Federal formula

Examples Only

- Please note: THE FOLLOWING EXAMPLES ARE NOT THE STEP BY STEP CALCULATIONS FROM THE GUIDELINES.
- It would take too much time to walk through all of the steps for each calculation, so I included some of the steps to give you a general understanding of the calculation and how the guidebook works. For the complete calculation, please see the guidelines.

Air Quality – Cal B/C "Results" Tab



ITEMIZED BENEFITS (mil. $)	Passenger Benefits	Freight Benefits	Total Over 20 Years	Average Annual
Travel Time Savings	$0.0	$0.0	$0.0	$0.0
Veh. Op. Cost Savings	$0.0	$0.0	$0.0	$0.0
Accident Cost Savings	$0.0	$0.0	$0.0	$0.0
Emission Cost Savings	#N/A	#N/A	#N/A	#N/A
TOTAL BENEFITS	#N/A	#N/A	#N/A	#N/A
Person-Hours of Time Saved			0	0

	Tons		Value (mil. $)	
EMISSIONS REDUCTION	Total Over 20 Years	Average Annual	Total Over 20 Years	Average Annual
CO Emissions Saved	0	0	#N/A	#N/A
CO_2 Emissions Saved	0	0	#N/A	#N/A
NO_X Emissions Saved	0	0	#N/A	#N/A
$PM_{2.5}$ Emissions Saved	0	0	#N/A	#N/A
SO_X Emissions Saved	0	0	#N/A	#N/A
VOC Emissions Saved	0	0	#N/A	#N/A

Air Quality – Cal B/C "Emissions Reduction" Tab

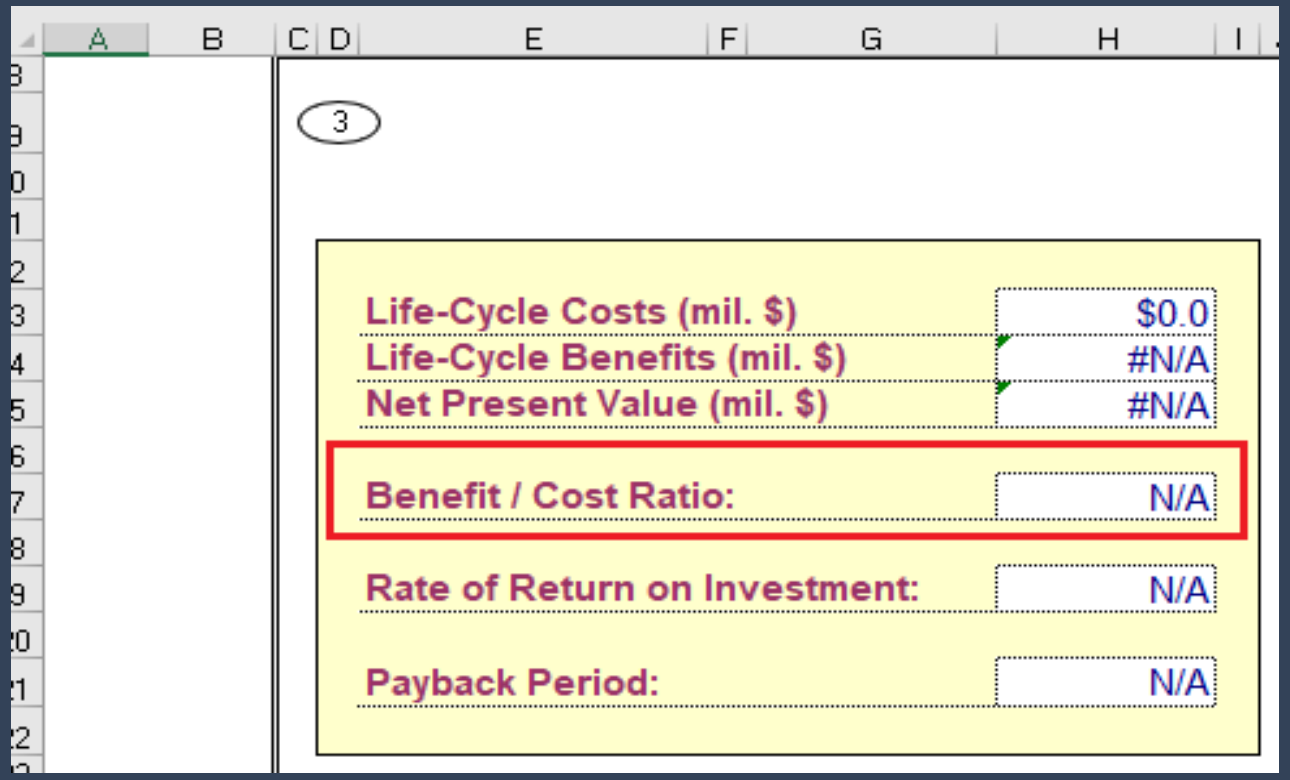
	TOTAL VMT (veh-miles/yr)		RUNNING EMISSIONS ($/yr)		STARTING EMISSIONS ($/yr)			
	No Build	Build	No Build	Build	No Build	Build	Constant Dollars	Present Value
0	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
0	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

	TONS EMISSIONS SAVED (tons/yr)							DOLLARS EMISSIONS SAVED (PV $/yr)					
	CO	CO_2	NO_x	PM_{10}	SO_x	VOC	$PM_{2.5}$	CO	CO_2	NO_x	PM_{10}	SO_x	VOC
0	0	0	0	0	0	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
0	0	0	0	0	0	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

33	**Project Open**												
34	1	$0	$0	$0	#N/A								
35	2	$0	$0	$0	#N/A								
36	3	$0	$0	$0	#N/A								
37	4	$0	$0	$0	#N/A								
38	5	$0	$0	$0	#N/A								
39	6	$0	$0	$0	#N/A								
40	7	$0	$0	$0	#N/A								
41	8	$0	$0	$0	#N/A								
42	9	$0	$0	$0	#N/A								
43	10	$0	$0	$0	#N/A								
44	11	$0	$0	$0	#N/A								
45	12	$0	$0	$0	#N/A								
46	13	$0	$0	$0	#N/A								
47	14	$0	$0	$0	#N/A								
48	15	$0	$0	$0	#N/A								
49	16	$0	$0	$0	#N/A								
50	17	$0	$0	$0	#N/A								
51	18	$0	$0	$0	#N/A								
52	19	$0	$0	$0	#N/A								
53	20	$0	$0	$0	#N/A								
54													
55	**Total**	$0	$0	$0	#N/A	$0	$0	$0	$0	$0	$0	$0	
56													
57	0 Person-Hours of Time Saved												
58													
59	tons	$ PV				tons	$ PV				tons	$ PV	
60	0	#N/A	CO Saved					CO Saved					CO Saved
61	0	#N/A	CO_2 Saved					CO_2 Saved					CO_2 Saved
62	0	#N/A	NO_x Saved					NO_x Saved					NO_x Saved
63	0	#N/A	PM_{10} Saved					PM_{10} Saved					PM_{10} Saved
64	0		$PM_{2.5}$ Saved					$PM_{2.5}$ Saved					$PM_{2.5}$ Saved
65	0	#N/A	SO_x Saved					SO_x Saved					SO_x Saved
66	0	#N/A	VOC Saved					VOC Saved					VOC Saved

Benefit Cost Ratio

- Total Benefits/Total Costs
- Cal B/C model captures the total user benefits in constant dollars for travel time savings, vehicle operating cost savings, accident reductions, and vehicle emission reductions.
- If you want to add more benefits, you will need to provide a separate calculation.



Safety – Accident Rates

- 1) Fatalities & serious injuries over 5 years / 5
- 2) # / VMT / 5 * 1 million
- For safety, you find the accident and fatality rate for the build scenario.
- You must find the rate group in Caltrans' 2018 Traffic Collision Data document.

10/6/2020

BASIC AVERAGE CRASH RATE TABLE FOR HIGHWAYS

RATE GROUP	BASE RATE	+ ADT FACTOR	PCT FAT	PCT INJ	PCT F+I	HIGHWAY TYPE	TERRAIN OR ADT	DESIGN SPEED	AREA	CRASH COSTS ($1,000) F+I	CRASH COSTS ($1,000) ALL
H 01	0.78	0.29900 /	2.5	40.2	42.7	CONVENTIONAL 2 LANES OR LESS	FLAT	<=55	RURAL	806.8	349.4
H 02	0.70	0.00000	3.2	38.9	42.1	CONVENTIONAL 2 LANES OR LESS	FLAT	>55	RURAL	1001.4	426.6
H 03	1.14	0.72800 /	2.6	44.3	46.9	CONVENTIONAL 2 LANES OR LESS	ROLL	<=55	RURAL	772.1	366.7
H 04	0.65	0.47100 /	3.5	41.5	45.0	CONVENTIONAL 2 LANES OR LESS	ROLL	>55	RURAL	1021.1	464.2
H 05	1.57	0.42100 /	2.6	47.0	49.6	CONVENTIONAL 2 LANES OR LESS	MTN	<=55	RURAL	738.5	370.6
H 06	0.91	0.47600 /	2.8	42.3	45.1	CONVENTIONAL 2 LANES OR LESS	MTN	>55	RURAL	846.2	386.3
H 07	1.60	0.00000	1.0	38.3	39.3	CONVENTIONAL 2 LANES OR LESS		<45	SUBURBAN	417.1	170.6
H 08	1.32	0.00000	1.7	44.3	46.0	CONVENTIONAL 2 LANES OR LESS		45-55	SUBURBAN	538.5	253.7

Safety Collision Reduction Factors

- You can estimate accident rate reductions using some Caltrans reduction factor information or other information.
- On the right is an example of the information in the guidebook.

Collision Reduction Factors for Highway Safety Projects *(from the 2017 State Highway Safety Improvement Program Guidelines)*

Type of Improvement	Average Collision Reduction	Years (Life)	Minimum Collision Experience
New Signals	Up to 20%	15	5 or more last year
Modified Signals	Up to 20% (1)	15	5 or more last year
Flashing Beacons	Up to 20%	10	

Left-Turn Channelization:

Type of Improvement	Average Collision Reduction	Years (Life)	Minimum Collision Experience
Signalization w/o LT Phase	Up to 15% (2)	20/10*	4 or more last 3 years
Signalization with LT Phase	Up to 35% (2)	20/10*	4 or more last 3 years
Non-signalized Intersection	Up to 35% (2)	20/10*	4 or more last 3 years
Two-Way Left-Turn Lanes	Up to 25% (2)	20/10*	4 or more last 3 years
Enhanced Lighting	Up to 15% (3)	15	4 or more night collisions last 3 years
Curve Improvement	Up to 50% (2)	20	4 or more last 3 years
Rumble Strip	Up to 50% (4)	10	4 or more last 3 years, Base Rate of 0.01
Super Elevation Improvement	Up to 50% (4)	20/10*	4 or more last 3 years, Base Rate of 0.01
Truck Escape Ramp	Up to 75% (5)	20	4 or more last 3 years, Base Rate of 0.01

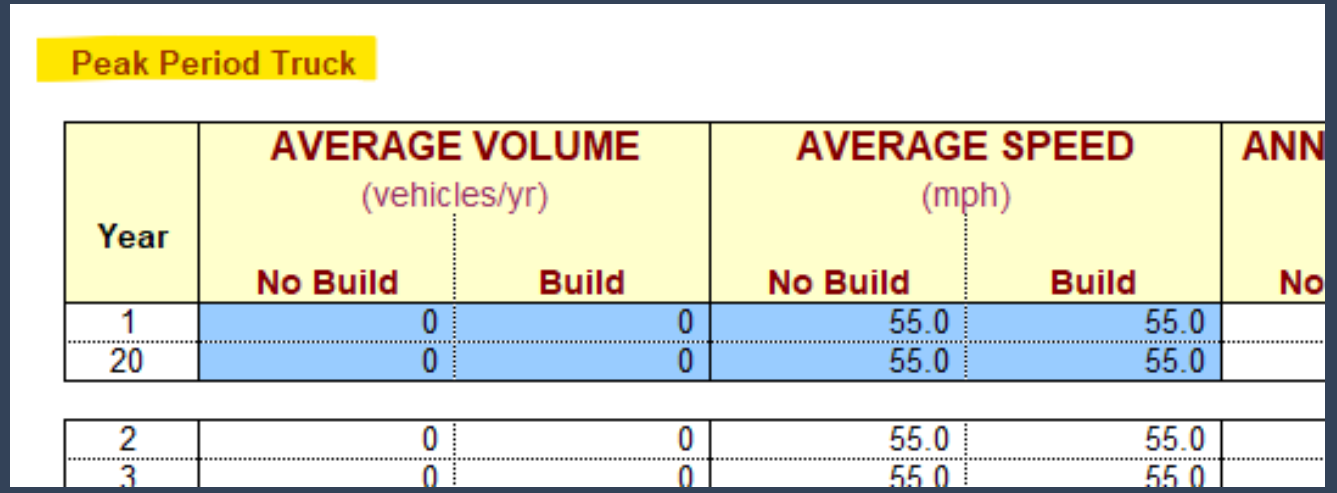
TCEP Metrics

Metric	Generalized Formula	Source(s) in Guidebook
Change in DVHD	Vehicle volumes * travel time – free flow time / 365	Cal B/C Sketch model Local speed limit
Change in daily truck hours of delay	Same as above specific to trucks	Cal B/C Sketch model Local speed limit
Change in truck volume	AADTT change or vehicle volume X truck %	Caltrans Traffic Ops data Cal B/C Sketch model
Change in rail volume	Change in volume of rail cars or trains	Rail companies, port info, or State Rail Plan estimates
Truck travel time reliability	95th percentile TT / 50th Percentile TT	State reliability data/Excel spreadsheet
Velocity	Speed X distance	Cal B/C Sketch model

Daily Vehicle/Truck Hours of Delay

- Vehicle volumes * travel time – free flow time / 365 – calculate this for no build and build.
- This information can be found in the Travel Time Tab – under “Highway Benefits”

It is the same calculation for trucks, you just look in a different place in the model.



Peak Period Truck

Year	AVERAGE VOLUME (vehicles/yr)		AVERAGE SPEED (mph)		ANN
	No Build	Build	No Build	Build	No
1	0	0	55.0	55.0	
20	0	0	55.0	55.0	
2	0	0	55.0	55.0	
3	0	0	55.0	55.0	

Truck Volume - AADTT

- AADTT change or vehicle volume X truck % change

Truck Traffic: Annual Average Daily Truck Traffic

For truck traffic on California State Highways.

2020-AADT Truck (XLSX) | 2019-AADT Truck (XLSX) | 2018-AADT Truck (XLSX) | 2017-AADT Truck (XLSX) | 2016-AADT Truck (XLSX)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
RTE	RTE_SFX	DIST	CNTY	POSTMILE_PFX	POSTMILE	POSTMILE_SFX	LEG	DESCRIPTION	VEHICLE_AADT_TOTAL	TRUCK_AADT_TOTAL	TRK_PERCENT_TOT	TRK_2_AXLE	TRK_3_AXLE	TRK_4_AXLE	TRK_5_AXLE	TRK_2_AXLE_PCT	TRK_3_AXLE_PCT	TRK_4_AXLE_PCT	TRK_5_AXLE_PCT
001		12	ORA	R	0.129		A	DANA POINT, JCT. RTE. 5	38250	2379	6.22	807	1,126	319	128	33.93	47.32	13.39	5.36
001		12	ORA	R	0.780		A	DANA POINT, DOHENY PARK ROAD	38900	1894	4.87	643	896	254	102	33.93	47.32	13.39	5.36
001		12	ORA		9.418		B	LAGUNA BEACH, JCT. RTE. 133 NORTH	38800	675	1.74	264	310	62	39	39.08	45.98	9.20	5.75
001		12	ORA		9.418		A	LAGUNA BEACH, JCT. RTE. 133 NORTH	38800	675	1.74	264	310	62	39	39.08	45.98	9.20	5.75
001		12	ORA		19.797		B	NEWPORT BEACH, JCT. RTE. 55, NEWPORT BOULEVARD	49600	565	1.14	435	78	26	26	76.92	13.85	4.62	4.62
001		12	ORA		19.797		A	NEWPORT BEACH, JCT. RTE. 55, NEWPORT BOULEVARD	49600	397	0.80	273	62	12	50	68.75	15.63	3.13	12.50
001		12	ORA		21.549		B	SANTA ANA RIVER BRIDGE	38800	272	0.70	187	43	9	34	68.75	15.63	3.13	12.50

Using a Percent to Trend

Calculation	AADT avg	*plus*	AADT avg	*multiply by*	Growth Percentage	= AADT number for Future year
Year 2	156300	*plus product of*	156,300	*multiply by*	2%	Year 2 number =159,426
Year 3	159,426	*plus product of*	159,426	*multiply by*	2%	Year 3 base year number
Year 4	Year 3 base year number	*plus product of*	Year 3 base year number	*multiply by*	2%	Year 4 base year number
Year 5	Year 4 base	*Plus*	Year 4 base year number	*multiply by*	2%	Year 5 base year number

Rail Volume – Train Volume Tables from Rail Plan

- Change in volume of rail cars or trains

Table 18: Adjustment Factors to 2013 California State Rail Plan Freight Train Volume Estimates by Rail Corridor and Rail Service Type, 2013 and 2040

Rail Corridor Location	Origin-Destination-Railroad Combinations of Freight Flows through Rail Corridor	Base Year Freight Train Volumes Adjustment Factor (2013 to 2007 ratio)		Forecast Year Freight Train Volumes Adjustment Factor (2040 to 2007 ratio)	
		CL	IM	CL	IM
Rail segments east of Oakland, north of San Jose, west of Sacramento and west of Stockton	Originating or terminating by any railroad in San Francisco Bay Area	0.75	0.70	1.23	2.26
Rail segments east of LA, north of Orange, south of Barstow and west of Colton	Originating or terminating by any railroad in Southern California	0.85	0.99	1.38	2.15
Rail segments between Sacramento and Barstow and Sacramento and Los Angeles	(a) Originating or terminating by BNSF in San Francisco Bay Area or Northern California and headed to or coming from anywhere except Pacific northwestern parts of U.S., (b) Originating or terminating by UP in San Francisco Bay Area or Northern California and headed to or coming from Southern California or southwestern and southeastern parts of U.S., (c) Originating or terminating by any railroad in Central Valley, (d) Originating or terminating by any railroad in Southern California and headed to or coming from Pacific northwestern parts of U.S., (e) Through CA.	1.00	1.02	1.62	2.68
Rail segments east of Sacramento	(a) Originating or terminating by UP in San Francisco Bay Area or Northern California and headed to or coming from none of the following: Pacific northwestern parts of U.S. or southwestern and southeastern parts of U.S. or Southern California; (b) Originating or terminating by UP in Central Valley or Southern California and headed to or coming from one of the following states: ID, MT or WY.	0.94	0.97	1.50	3.60
Rail segments north of Sacramento	(a) Originating or terminating by any railroad in San Francisco Bay Area or Central Valley or Southern California and headed to or coming from: Pacific northwestern parts of U.S.; (b) Originating or terminating by any railroad in Northern California; (c)	0.70	0.95	1.02	2.63

Reliability

- 95th percentile TT / 50th Percentile TT

		Travel Time		
TMC	Period	50th Percentile	95th Percentile	TTTR
102+04102	4–8 Weekdays	49.9	56.6	1.13
102+04102	Overnight	39.8	51.1	1.28
102+04102	Weekend	41.3	44.4	1.08
102+04103	6–10 Weekdays	20.2	42.6	2.11
102+04103	10–4 Weekdays	20.2	72.4	3.58
102+04103	4–8 Weekdays	61.3	108.4	1.77
102+04103	Overnight	18.4	26.0	1.41
102+04103	Weekend	19.4	24.4	1.26

Example:

6 to 10 am:

95th percentile, 150.0 = 1.49 TTTR
50th percentile, 101.0

9.1.1.9 To complete the Truck Travel Time Reliability Index calculation, review each of the 5 time periods for each segment and find the maximum TTTR value.

Reliable Segment 5 Time Period Example:

Segment (Designated by a Travel Time Code)	TTTR_AMP (6am-10am) 1.07	TTTR_MIDD (10am-4pm) 1.14	TTTR_PMP (4pm-8pm) 1.24	TTTR_WE (6am-8pm) 1.4	TTTR_OVN (8pm-6am) 1.09	**MAX TTTR = 1.4**

6:00 a.m. – 10:00 a.m.	weekdays
10:00 a.m. – 4:00 p.m.	weekdays
4:00 p.m. – 8:00 p.m.	weekdays
8:00 p.m. – 6:00 a.m.	every day
6:00 a.m. – 8:00 p.m.	weekends

Velocity

- Speed X distance

1B

HIGHWAY DESIGN AND TRAFFIC DATA

Highway Design		No Build	Build
Roadway Type (Fwy, Exp, Conv Hwy)		F	F
Number of General Traffic Lanes			
Number of HOV/HOT Lanes			
HOV Restriction (2 or 3)			
Exclusive ROW for Buses (y/n)		N	
Highway Free-Flow Speed			0
Ramp Design Speed (if aux. lane/off-ramp proj.)		35	35
Length (in miles)	Highway Segment		0.0
	Impacted Length	0.0	0.0

AVERAGE SPEED (mph)	
No Build	Build
55.0	55.0
55.0	55.0

SCCP/LPP Metrics

Metric	Generalized Formula	Source(s) in Guidebook
Person hours of travel time saved	travel time * person trips	Cal B/C Sketch model
Peak period travel time reliability	80th percentile TT / 50th Percentile TT	State reliability data/Excel spreadsheet
Level of transit delay	median number of minutes late	GTFS-RT
Change in daily VMT	Various formulas	Travel demand models NCST calculator Cal B/C Sketch model Traffic Ops data

Questions

Thank You

More Information

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