

Table Packet for Roadway Projects

Category I: Safety/ System Productivity

Safety:

Determine the multiplier

Table A

Multiplier Tables

Please check applicable project box and circle the corresponding multiplier

<input type="checkbox"/> Highway or Arterial Projects – based on accident data							
TYPE	CA AVG.	Accidents per Million Vehicle Miles*					
Freeways	0.69	<0.52	0.52-0.59	0.60-0.68	0.69-0.77	0.78-0.86	>0.86
Expwys – 2 lane	0.89	<0.68	0.68-0.79	0.80-0.90	0.91-1.00	1.01-1.11	>1.11
Expwys – multi lane	1.00	<0.75	0.75-0.87	0.88-1.00	1.01-1.13	1.14-1.25	>1.25
Conventional – 2 lane	1.69	<1.27	1.27-1.47	1.48-1.68	1.69-1.90	1.91-2.11	>2.11
Conventional – multi lane	2.72	<2.04	2.04-2.37	2.38-2.71	2.72-3.06	3.07-3.40	>3.40
Multiplier		0.0	0.2	0.4	0.6	0.8	1.0

Number of Accidents due to problem to be remedied by project: _____

Source: _____

* To compute accidents per million vehicle miles, use the formula below:

$$\frac{\text{Average Number of Accidents per year over last 3 years} \times 1,000,000}{\text{Average Daily Traffic (Veh/Day/Yr)} \times 365 \times \text{length of project in miles}}$$

OR

Table B

<input type="checkbox"/> Roadway Intersection Projects							
No. of Accidents over past 3 years	0-4	5-9	10-19	20-35	36-54	55-75	>75
Multiplier	0.0	0.1	0.2	0.4	0.6	0.8	1.0
<i>If the project qualifies as a pro-active safety project, apply an 0.7 multiplier to the Category II.1 Safety score (page 20)</i>							

Number of Accidents due to problem to be remedied by project: _____

Source: _____

Determine the impact value for Safety

Table C

Impact Value Table

The value characterizes the safety impact of the project. Impact values are listed by mode.

Impact Value—If project scores in more than one column, use only the higher impact value

Highway or Arterial Projects (circ'e all that apply)

High Impact = 18 points *	Medium Impact = 12 points *	Low Impact = 4 points *
HOV enforcement areas	Widenings	New interchanges
Grade Separations	Auxiliary lanes	Other (specify and attach written justification)
Geometric improvements, shoulders, curve correctins	Turn pockets	
Median barriers	Signal interconnection	
Conversion to freeway	Interchange modifications	
New, warranted signals	Other (specify and attach written justification)	
Other (specify and attach written justification):	Other (specify and attach written justification):	

* Project evaluation teams may raise or lower the impact value by 1 or 2 points, depending on how well the project solves the problem as compared to other similar projects.

System Productivity:
Table D

Choose only one

A. Freight. The ability to move and deliver freight is an important goal for the regional transportation system. This element gives a higher score to the types of projects that facilitate freight movement and delivery in ways that are not captured in other criteria.

Subcategory II.3 A. 1: Mobility/ Delivery

Projects which improve the movement of freight on a truck route:

Check applicable direct benefits. If the project has none of these features, skip this section.

<input type="checkbox"/>	Project results in the improved ability to sustain high speed operation on trunkline highways during early evening and early morning hours.
<input type="checkbox"/>	Project results in the improved ability of the street and highway system to deliver a consistent and reliable level of service that enables trucking companies to maintain schedule during the shoulder of the peak period and midday hours.
<input type="checkbox"/>	Project improves the ability to park conveniently, and non-intrusively, for timely pick-up and delivery.

If the project has at least one of the above features as a direct benefit, calculate the score by filling out the section below:

Highway Truck Volumes (circle only one)

Greater than or Equal to	Less than	Project Score in this element
0%	5%	0 points
5%	6%	2 points
6%	7%	4 points
7%	8%	6 points
8%	9%	8 points
9%	10%	10 points
10%	11%	12 points
11%	12%	14 points
12%	13%	16 points
13%	14%	18 points
14%	—	20 points

Enter Subcategory II.3 A. 1 points here

OR
Table E

Arterial Truck Volumes (Circle only one)

Greater than 3,000 Trucks/Lane/Day	20 points
Greater than 2,000 Trucks/Lane/Day	10 points
Greater than 1,000 Trucks/Lane/Day	5 points

OR Enter Subcategory II.3 A. 1 points here

System productivity (Cont.)

OR

Table F

Projects which specifically contribute to the operating stability of the transportation system, by strengthening traffic operations, are rewarded in the this element. The project gets 10 points if it is entirely a system operations project, and 5 points if the project is only partially a system operations project.

Circle only one

Traffic Efficiency (quantifiable over 1% improvements):	Points
Flow: (e.g., signalization, Traffic Operations System)	entire = 10 points portion = 5 points
Remove interruptions: (e.g., Freeway Service Patrol, SAFE)	entire = 10 points portion = 5 points

Enter Subcategory II.3 B. 2 points here

Category II: Congestion Relief

Determine the multiplier

Table G

Multiplier Table

Please check applicable project boxes and circle corresponding multiplier

Roadway Elements

Peak Average Level of Service (LOS) based on adopted CMA methodology (*circle one*)

LOS	F	E	D	C	B	A
Multiplier	1.0	0.8	0.6	0.2	0.1	0.0

How was LOS determined?

Floating Car

Volume/Capacity (V/C) Ratio (please show calculations):

Other: _____

Congestion Relief (Cont.)

Determine the impact value

Table H

Impact Value Table

Impact Value – If project scores in more than one column, use only the higher impact value

Roadway Elements (circle all that apply)

High Impact = 28 points*	Medium Impact = 22 points *	Low Impact = 14 points *
High Occupancy Vehicles (HOV) lanes	Auxiliary lanes	New local interchanges
Interchange that upgrades to Freeway Standards	Turn pockets or other intersection improvements	Gap closure that only moves bottleneck condition
Gap Closure with systemwide benefit	Park and Ride lots	
Signal Interconnect (8 or more)	Signal interconnect – less than 8	Roadway rehab/resurfacing
Traffic Operations System (TOS)	Ramp metering	Other (specify and attach written justification)
Roadway/resurfacing on transit route: greater than 30 buses/hour on peak period	New warranted signal where none exists	
Other (specify and attach written justification)	Roadway/resurfacing on transit route: greater than 10 buses/hour on peak period	
	Truck layover parking	
	Freight signal/turn lanes	
	Other (specify and attach written justification)	

* Project evaluation teams may raise or lower the impact value by 1 or 2 points, depending on how well the project solves the problem as compared to other similar projects. Being included in a CMA deficiency plan would normally add 2 points to a project's impact value.

Category III: Strategic Expansion

Determine the multiplier

Table I

Multiplier Table

III.1 Roadway Strategic Expansion Projects

Average Daily Traffic (ADT)	Level of Service (LOS) F	LOS E	LOS D	LOS C	LOS B
> 50,000	1	0.9	0.6	0.4	0.1
> 30,000 – 50,000	0.8	0.6	0.4	0.2	0.1
10,000 – 30,000	0.6	0.4	0.2	0.1	-0-
Multiplier (circle)					

Cite sources of ADT and LOS: _____

Strategic Expansion (cont.)

Determine the impact value

Table J

Impact Value Table

Impact Values are additive – circle all that apply

Impact Value	
HOV Lanes:	10 points (improve travel speeds)
Mixed flow capacity, including arterials:	10points (improve travel speeds or accessibility)
Supporting features:	(Max. of 10)
Ramp Metering	2 point
OR	OR
Ramp Metering with HOV Bypass	5 points
Park-and-Ride Lots	2 points (carpooling)
Bus Facilities	5 points
Bicycle Facilities	5 points
Pedestrian Facilities	5 points

*Enter Sum of Project Impact Points here
(Max. of 30 points)*