Evaluation Measures

Background

- General indicators of overall system:
  - Mobility Performance, i.e. travel time
  - Mode Choice
  - Travel volume
- Not specific to corridor or project.
- Useful for overall comparison of LRTP Alternatives

Evaluation Measures

Vehicle Miles Traveled (VMT) & Vehicle Hours Traveled (VHT)

	Measures	2005	2035 E+C	2035 LRTP	2005-2035 E+C Change	2005-2035 LRTP Change	2035 E+C - 2035 LRTP Change
1.0	**Performance Measures**						
1.1	Total VMT (daily)	10,673,559	16,660,440	16,934,762	56%	59%	2%
1.2	Total VHT (daily)	234,968	441,051	386,106	88%	64%	-12%

- VMT and VHT will dramatically increase in the Existing-plus-Committed (E+C) scenario.
- VHT growth outpaces VMT growth.

- VMT growth persists with the implementation of the 2030 LRTP network.
- VHT growth is greatly reduced with the implementation of the 2030 LRTP network

Evaluation Measures

Average Travel Time

	Measures	2005	2035 E+C	2035 LRTP	2005-2035 E+C Change	2005-2035 LRTP Change	2035 E+C - 2035 LRTP Change
1.0	**Performance Measures**						
1.5	Average Travel Time - All Trips (min.)	15	17	16	14%	8%	-5%
1.6	Average Travel Time - Work Trips (min.)	19	26	22	32%	16%	-12%
1.7	Peak Average Travel Time - All Trips (min.)	17	20	18	23%	11%	-10%

- Average Travel Time increases, and most significantly for work trips and peak trips in the E+C scenario.

- The 2030 LRTP scenario reduces the Average Travel Time growth for all trip types, especially work trips and peak trips.

Evaluation Measures

Congestion

	Measures	2005	2035 E+C	2035 LRTP	2005-2035 E+C Change	2005-2035 LRTP Change	2035 E+C - 2035 LRTP Change
1.0	**Performance Measures**						
1.9	Percent of VMT Congested - All Day						
1.91	- Freeway	2.30%	7.10%	2.50%	209%	9%	-65%
1.92	- Arterial	1.90%	9.20%	2.60%	384%	37%	-72%
1.9.3	- All Facilities	1.80%	7.30%	2.50%	306%	39%	-66%
1.10	Percent of VMT Congested - Peak						
1.10.1	- Freeway	4.10%	11.10%	4.20%	171%	2%	-62%
1.10.2	- Arterial	3.10%	14.10%	3.30%	355%	6%	-77%
1.10.3	- All Facilities	3.00%	11.50%	3.90%	283%	30%	-66%

- The percent of VMT in congestion increases about two-fold to four-fold for all road types in the E+C scenario.

- The implementation of the 2030 LRTP network greatly reduces congestion growth.

- Arterial Congestion growth is greatest, while freeway is the least.

Evaluation Measures

Mode Share – All Trips and Peak Trips

	Measures	2005	2035 E+C	2035 LRTP	2005-2035 E+C Change	2005-2035 LRTP Change	2035 E+C - 2035 LRTP Change
1.0	**Performance Measures**						
2.1	Percent Mode Choice - All Trips						
2.1.1	- Drive alone (single occupant vehicle -SOV)	54.0%	54.6%	54.2%	1%	0%	-1%
2.1.2	- Carpool (Share ride)	36.6%	36.7%	36.2%	0%	-1%	-1%
2.1.3	- Bus	2.4%	1.8%	2.5%	-23%	4%	36%
2.1.4	- Rail	0.0%	0.0%	0.3%	N/A	N/A	N/A
2.1.5	- Non-motorized (Bike and Walk)	7.1%	6.9%	6.8%	-3%	-4%	-1%

- For Mode Choice, the travel model is fairly insensitive to changes in population and employment, and network (E+C and 2030 LRTP scenarios)

- Transit Mode Choice decreases in the E+C scenario because most population and employment increases occur in areas that currently do not have transit service.

- Transit Mode Choice increases only moderately with the implementation of the bus and rail transit in the 2030 LRTP network.