

APM Appendix 9A

APPLICABILITY OF ANALYSIS PERFORMANCE MEASURES BY PLAN OR PROJECT TYPE

Performance measures are identified in the scoping process by the project team. The matrix below is provided as a general guide to aid in the consideration of potential transportation analysis performance measures by plan or project type – RTP, TSP, MMA, Facility Plan, Development Review, and NEPA/project development. Performance measures most likely to be applicable are identified as best practice or recommended, while others are identified as potentially useful as either as a supplemental measure or for screening purposes. Refer to APM Chapter 9 for further guidance. Plan and project types are shown in order of increasing level of detail going from left to right.

Performance Measure	RTP	TSP	Designated MMA	Facility Plan	Development Review	NEPA/Project Development
Mobility						
Volume to Capacity Ratio		●		●	●	●
Demand to Capacity Ratio	●	○		◐		◐
Average Daily Traffic to Capacity Ratio (ADT/C)	●	●		◐		◐
Percent Change in Volume	○	○		◐	◐	◐
Vehicle-Miles of Travel (VMT)	●	○				○

- Best practice or recommended measure
- Supplemental measure
- ◐ Screening measure

Performance Measure	RTP	TSP	Designated MMA	Facility Plan	Development Review	NEPA/Project Development
Person-Miles Traveled (PMT)	●	○				
Throughput				●	○	●
Duration of Congestion		●		●		○
Queue Length		●	●	●	●	●
Travel Time	○	○		●		●
Average Delay				●	○	●
Total Delay (Vehicle Hours of Delay)				○		●
Travel Time Reliability						
Travel Time Index (TTI)				●		●
Level of Service (LOS)						
Motorized Vehicle Level of Service		●		●	●	●
Multimodal Level of Service (MMLOS)			○	●	●	●

- Best practice or recommended measure
- Supplemental measure
- ◐ Screening measure

Performance Measure	RTP	TSP	Designated MMA	Facility Plan	Development Review	NEPA/Project Development
Truck Level of Service Index		○		●		●
Accessibility						
Accessibility for Motorized Vehicles, Pedestrians and Bicyclists	●	○	○	◐		◐
Accessibility for Transit Riders	●	○	○	◐		◐
Safety						
Crash Rate	◐	◐	●	◐	◐	◐
Safety Priority Index System (SPIS)	◐	◐	●	◐	◐	◐
Change in Crash Frequency Using Crash Modification Factors (CMFs) or Crash Reduction Factors (CRFs)	○	●	○	○	○	○
Excess Proportions of Specific Crash Types	◐	◐	○	◐	◐	◐

- Best practice or recommended measure
- Supplemental measure
- ◐ Screening measure

Performance Measure	RTP	TSP	Designated MMA	Facility Plan	Development Review	NEPA/Project Development
Expected or Predicted Crash Frequency				●	●	●
Conflicts		○	○	●	●	●
Access Spacing			○	●	●	●
Functional Area			○	○	○	●
Other Multimodal Performance Measures						
Mode Share	●	●	○			
Transit Service Miles per Capita	●	○				
Infrastructure						
Network Connectivity and System Completeness	●	●	○	○		○
Out of Direction Travel		○		●	●	●
Intersection Density	●	●				
Bicycle or Pedestrian Level of Traffic Stress	●	●	●	○	○	○

- Best practice or recommended measure
- Supplemental measure
- ◐ Screening measure