

CMP PERFORMANCE MEASURE METHODOLOGIES

Appendix A

CMP Performance Measure Methodologies

Corridor Performance Measures

Performance Measure	Methodology	Data Source
Transportation + housing costs as a percentage of median income along CMP corridors	▶ Interpolate H+T Index block groups to a 0.5 mile corridor buffers and provide average along each corridor.	▶ H+T Index
Existing and forecasted employment density along CMP corridors	 Existing: Interpolate SRTC TAZ-level base year employment to 0.5 mile corridor buffers and calculate the average number of jobs per square mile along each corridor. Forecast: Interpolate SRTC TAZ-level forecast employment to 0.5 mile corridor buffers and calculate the average number jobs per square mile along each corridor. 	► SRTC
Existing and forecasted population density along CMP corridors	 Existing: Interpolate SRTC TAZ-level base year population to 0.5 mile corridor buffers and calculate average number of people per square mile along each corridor. Forecast: Interpolate SRTC TAZ-level forecast employment to 0.5 mile corridor buffers and calculate the average number of people per square mile along each corridor. 	► SRTC
Freight tonnage on CMP corridors	▶ Conflate WSDOT FGTS network with CMP network and calculate average freight tonnage on each corridor.	► WSDOT
Level of Travel Time Reliability (LOTTR) averages and peaks on CMP corridors	 Calculate corridor average and maximum LOTTR by direction along each corridor during peak periods (7–9 AM, 4–6 PM) using annual data exported from NPMRDS dashboards. Corridor average LOTTR calculated by weighting TMC segments by directional vehicle miles traveled (VMT). 	► NPMRDS
Annual Peak Hours of Excessive Delay (PHED) on CMP Corridors	▶ Calculate the total annual PHED (based on a 3–7 PM peak period) per centerline mile, by direction and in total, along each corridor using data exported from NPMRDS dashboards.	► NPMRDS
Existing and forecasted Travel Time Index (TTI) averages and peaks on CMP corridors	► Calculate average and maximum TTI by direction along each corridor during peak periods (7–9 AM, 4–6 PM) using the latest April travel times from NPMRDS raw probe data.	► NPMRDS
Transit performance on CMP corridors	▶ STA provided bus frequency and access along each corridor during peak periods (6–8 AM, 4–6 PM).	► STA
Transit reliability factor	▶ Provided by STA Bus Route Scheduler.	► STA



Corridor Performance Measures

Performance Measure	Methodology	Data Source
Percent of households along CMP corridor that are within 0.5 mile of a transit stop	▶ Calculate the percent of households within 0.5 miles of STA transit stops along each corridor by interpolating OFM's SAEP block-level household estimates to 0.5 mile buffers around transit stops and 0.5 mile buffers around each corridor and dividing the transit stop buffer totals by the corridor buffer totals for each corridor.	► STA (Transit) ► OFM (Households)
Crash rate per million VMT on CMP corridors	► Calculated using the following formula: [5-Year Rolling Average # of Crashes ÷ (VMT: AADT × Centerline Miles)] × 1,000,000.	► WSDOT (Crashes) ► HPMS (Mileage)
Equivalent Property Damage Only (EPDO) crash rate per million VMT on CMP corridors	 Calculated using the same formula as the crash rate, but using equivalent property damage only (EPDO) crashes to calculate the 5-year rolling average. EPDO crashes calculated using the following formula: (Fatal/Serious Injury Crash × 76.8) + (Evident/Possible Injury Crashes ×8.4) + (Property Damage Only Crashes × 1.0) 	▶ WSDOT (crashes)▶ HPMS (mileage)
Crash Severity Index (SI) on CMP corridors	► Calculated as: Total EPDO Crashes ÷ Total Crashes	► WSDOT

Regional Performance Measures

Performance Measure	Methodology	Data Source
Attendance at CMP working group meetings, committees & public meetings	► Calculate total annual attendance at CMP, SRTC Board, and committee meetings.	► SRTC
SRTC call for projects expenditures on CMP projects vs. all projects	► Compare funding programmed for projects in the TIP with SRTC-managed funds that are located on the CMP network and incorporate CMP strategies relative to funding programmed in the TIP for all projects with SRTC-managed funds on an annual basis.	► SRTC
Total regional miles of bike network	► Calculate total mileage of the SRTC Regional Priority Bicycle Network by facility type.	► SRTC
Incidence clearance on I-90	► Calculated using WSDOT PeMS (Performance Measurement System) Data (for I-90 only).	► WSDOT

