Synopsis of NCHRP Performance Measures Pilot Test

Organization: Colorado Department of Transportation (CDOT)

Description of transportation network managed by volunteer organization:

The Colorado Department of Transportation is responsible for a 9,156 mile highway system, including 3,714 bridges. Each year, this system handles over 26.1 billion vehicle miles of travel. CDOT maintenance forces take care of the highway system, plowing snow and repairing pavement. But CDOT is more than roads and bridges. The Division of Aeronautics supports aviation interests statewide, including grants to help improve local airports. CDOT’s Transit Unit provides assistance to numerous transit systems in the state. And the Office of Transportation Safety helps local law enforcement agencies with special funds to apprehend drunk drivers and increase use of safety belts.

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Performance measures that CDOT proposes to collect to pilot test:

- Extent of Congestion (Spatial)
- Extent of Congestion (Temporal)
- Throughput (person)
- Throughput (vehicle)
- Travel Time (facility)

Brief description of the pilot test:

Traditionally, the identification of congested corridors has been done using Volume/Capacity (V/C) ratio. This measure does not seem to accurately depict congestion problems nor is it a measure that is easily understood by the traveling public and decision makers. Travel time and delay seems to be a more accurate performance measure to demonstrate congestion problems.

CDOT has begun using travel time delay and this year has expanded the statewide travel time data to include all congested state highway corridors where v/c >= 0.85 (see map on next page). Basically the following data items will be collected; link travel times, traffic volume counts and transit ridership information. From this data several measures will be collected for each facility including the ones listed above.
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Travel Time Corridors 2007

CDOT Highway

Description: Travel Time corridors for 2007
Cartographer: David Reeves
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