



## Mobility Performance Measures

### Integrating Travel-Time Reliability and Safety into the Long-Range Transportation Plan

#### Purpose

Transportation planning traditionally has considered capacity expansion, demand management, and transit improvements. However, planners are now being asked to take a more comprehensive view of transportation in their communities by including travel-time reliability and safety projects. Reliability – and the operations projects that can improve it such as incident management, ramp metering, and advanced signal operations – is being recognized as a major component of how travelers experience the transportation system. As a result, the Strategic Highway Research Program 2 (SHRP 2), a Federal research effort mandated by Congress, developed several products to assist planners in assessing reliability.

Methods for identifying travel-time reliability and safety deficiencies and to predict the impact that improvements would have on reliability and safety performance measures were developed. The work was conducted in partnership with the Hillsborough County Metropolitan Planning Organization (MPO) in Tampa, Florida.

#### Results

To be consistent with the MPO's current planning procedures, a tool was developed to be used in conjunction with their travel demand forecasting model. This tool was based on reliability prediction procedures from SHRP 2 Project C11 and safety prediction procedures from the *Highway Safety Manual*. Benefits were measured in terms of improved reliability (using measures from Project C11) and fatal, injury, property damage, bicycle, and pedestrian crashes. As a result, the MPO was able to provide information to citizens and elected officials about the measurable benefits of financial scenarios that prioritize safety and reliability investments. .

#### Applicability to Mobility Performance Measures (MPM) Program and FDOT

The MPM Program coordinates performance management throughout Florida. By using the same measures and procedures at all stages of project development – initial planning through final design – more efficient project delivery is achieved.



#### Next Steps

The MPM Program will refine the tool and provide assistance to other Florida planning organizations who wish to use it.