



Florida Department of Transportation Research

Synthesis of Research on Value of Time and Value of Reliability

BD549-46

The expression *time is money* can be applied in transportation to the monetary value people place on their time. Reliability is understood as the consistency or predictability of travel times. Drivers value reliability because it allows them to make better use of their time.

For the last 40 years, a vast body of research has been developed on the value of time (VOT) and the value of reliability (VOR). However, the studies vary in the methods and approaches for calculating VOT and VOR, so the results do not provide consistent estimates and guidelines.

Researchers from the National Center for Transit Research at the University of South Florida have compiled current and past VOT and VOR research into one report, attempting to reconcile the differences in results and clarifying the complex issues of analyzing VOT and VOR.

One of the main challenges in measuring VOT and VOR has been the lack of empirical data. This report provides a comprehensive summary of research and the most cited empirical estimates to serve as a reference for transportation planners and decision makers.

Based on the literature, the report recommends that value of personal travel time be set at 50 percent of the prevailing wage rate and suggests the use of range measurement to assess reliability.

For example, using the difference between the 95th and 50th percentiles of a given origin-destination (OD) pair provides a basic measure of a trip's reliability. This measure can



Traffic on the Interstate in Tampa, Fla.

be divided by the mean or median trip time to produce a normalized, dimension free, measure of reliability.

Additionally, practitioners frequently need to assign a value to transportation reliability, comparable to the value of travel time. For normal circumstances, the report recommends that reliability be assigned a value of between 80 percent and 100 percent of the value of time. If the recommended measures are used, it is important to remember that a higher quantity of *reliability* reflects a less desirable state, just like a higher value for travel time reflects less desirable conditions, all other factors being equal.

Research continues with recent efforts focused on establishing a unified approach to the study of VOT and VOR. This study should be useful to practitioners and analysts dealing with issues of the value of time and the value of reliability. It may be particularly useful in the development of road pricing and congestion pricing policies and programs.