

Beyond the Value of Travel Time: Examining the Effects of Shipper Logistics Cost Savings on Economic Investment Decisions Involving Freight Systems

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Assessments of the benefits of freight infrastructure investments traditionally rely on monetizing the value of congestion reduction/capacity enhancement, safety, emissions reductions and savings in operations and maintenance. However, for freight investments, it is not necessarily appropriate to assume that the value of travel time, or the reduction in fuel consumption and labor accruing to system operators, adequately monetizes the value of these infrastructure improvements for shippers and logistics providers. In fact, there are a number of fixed and variable cost factors associated with industrial production and supply chain operations that are affected by changes in both travel time reductions and reliability improvements in highway and rail systems that can significantly change the “calculus” of benefit-cost analysis when it is applied to investments that affect freight movement. This paper will describe the outcomes of several interview-based assessments of the effects of reliability and travel time savings on shippers and businesses in two metropolitan areas. A quantitative analysis based on a survey of shipper logistics cost savings will describe a case study of key shipper cost factors that are affected by freight infrastructure improvements, and will provide an assessment of the influence of these savings on a typical benefit-cost assessment of plan-level investment alternatives.