

# The Cost of Transporting People in New Jersey, Phase 1

Principal Investigators: Dr. Kaan Ozbay, Rutgers University, Dr. Joseph Berechman, City University of New York

This project is concerned with the assessment of the generalized costs of passenger transportation in New Jersey and the application of these cost estimates to policy decisions. The first objective was to develop a generic cost model that estimates the generalized economic costs of various modes of passenger transportation. The second objective was to use the model to analyze policy decisions concerning different modes of passenger transportation. It is important to use the concept of social marginal cost that incorporates users' and external costs in measuring the cost of transporting people in a particular area. It is also important to develop a "dynamic" cost model that represents the relationship between the various cost categories for different modal mixes as they change over time.

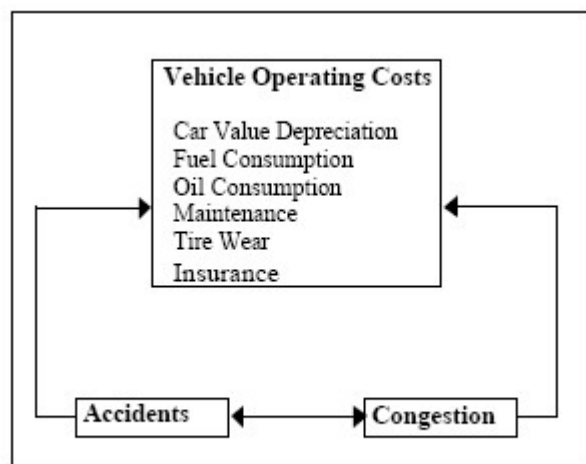
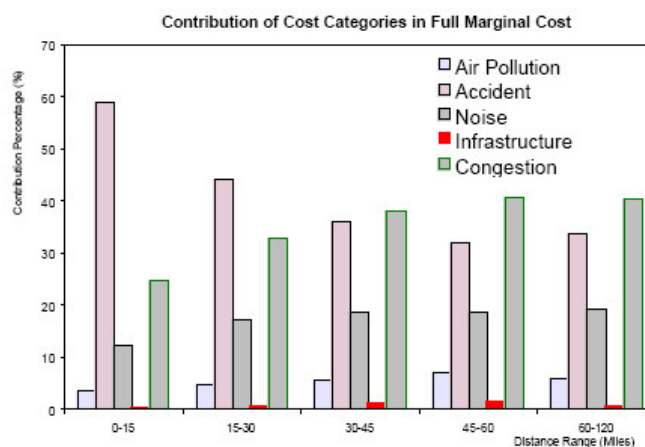


Figure 1 User Costs



The model is capable of adjusting its parameters based on the possible changes in the modal mix. The "dynamic" aspect of the model allows policy makers to change the modal mixes and determine the prevailing costs for different combinations of modal mixes.

The model is able to express the additional cost of transporting another unit of users and express the effects of the modal mix change by automatically recalibrating its parameters to take into account changes in demand and behavior.

Sponsors: New Jersey Department of Transportation  
U.S. Department of Transportation

Completion Date: 2000

