

International Comparisons of the Relationships of Measures of National Transportation Systems to National Economic, Social and Environmental Indicators

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There is a wide range of comparative international data on economic, social, and environmental measures, but this has not been systematically compiled for the transportation research profession or systematically related to transportation system measures. This paper will provide comparative international information on industrialized nations in terms of economic, social, environmental, safety, and other measures, and will also summarize the relevant transportation measures in these areas. The paper will then attempt to summarize the extent to which transportation performance or transportation measures are key components of overall economic performance, income equity, safety and mortality, energy use, environmental measures, and international trade including balances of payments. This integration of transport and general measures will be done directly wherever possible, such as the contributions of transportation fatalities to overall national fatalities and to premature mortality rates or to energy or emissions measures, or to impacts on trade balances. The focus of this paper will be on making and summarizing estimates of the direct comparisons between overall measures and transportation's contributions to these measures. When the more direct comparisons of data cannot provide the contributions of transportation, available research findings will be summarized on the relationships of transportation to economic, social and environmental outcomes.

For this paper, information will be assembled for the major industrial nations on the overall measures, on transportation measures, and on transportation's contributions towards these measures. Major data sources will include the United States Statistical Abstract International Chapter, and international data sources such as OECD, the International Road Transport Forum, and the EU. Research results to be referenced and summarized will include the published results of international and national forums and conferences.