



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



3 5556 025 737 727

Indexed by PAIS

***JOURNAL OF THE
TRANSPORTATION
RESEARCH FORUM***

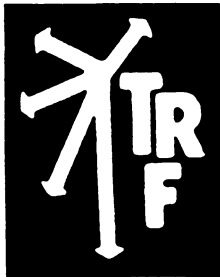
Volume 35 Number 2

1995

TRANSPORTATION LIBRARY

MAY 20 1996

NORTHWESTERN UNIVERSITY



TRANSPORTATION RESEARCH FORUM

The Economics of Transport

Edited by Herbert Mohring

2 vols. Brookfield, VT:

Edward Elgar Publishing Limited, Gower House, 1994.

In the past forty years, the field of transportation economics has generated a large body of research on a wide variety of topics. In this two volume collection, Herbert Mohring has attempted to identify the articles having the greatest impact on the field over this time period. In so doing he has collected 41 articles published primarily in economics journals between the years of 1952 and 1990. Mohring has written an introduction that highlights the major issues in transportation economics and notes the contribution of each article to our understanding of these issues. The introduction is excellent in that it briefly provides the reader with some context for understanding the problems to be addressed.

The papers cover the areas of transport demand, transport supply, investment and pricing policies, urban transport and regulation/deregulation. This collection of articles is an excellent vehicle for teaching a Ph.D. or Masters seminar in the area of transportation economics, although the cost of the book would probably be prohibitive for many graduate students. The volume is also invaluable as a reference work to someone in the field. The articles contained in this volume are frequently cited in current transportation research.

The very nature of this book lends itself to second guessing the author's choices for inclusion. I will for the most part refrain from such an exercise in this review, except to note a couple of articles that have appeared since this book was published that might have qualified for inclusion in this collection. The papers are too numerous to examine individually, so in the remainder of this review I will try to give the reader some idea of the various topics covered. The papers are organized into nine separate sections.

The first section contains what Mohring refers to as two seminal articles in the field: "Equilibrium" by Beckman, McGuire and Winsten (1956) and "The Theory and Measurement of Private and Social Cost of Highway Congestion" by Walters (1961). Both demonstrate the uses of microeconomic theory in the analysis of transportation issues. Also in this section is the excellent survey article on transportation economics by Clifford Winston, published in the *Journal of Economic Literature* in 1985.

The second section includes articles on transport demand. The articles included examine the role of both customer characteristics (i.e. value of time, etc.) and mode characteristics in determining transport demand. This section also includes a survey article on qualitative choice models by Takeshi Amemiya published in the *Journal of Economic Literature* in 1981. A potentially useful addition to this volume that appeared after the book went to press is "Concepts of Price Elasticities of Demand and Recent Empirical Estimates: An Interpretive Survey" by Tae Oum, William Waters and Jong-Say Yong (1992).

Sections three, four and five examine various transportation supply issues. The articles included cover the topics of user supplied inputs (i.e. travel time) and how these inputs are impacted by congestion. The issues of economies of scale in road construction and cost function measurement of economies of scale are also addressed. One issue not covered by any of the articles in these sections that has generated much research in recent years is the topic of productivity measurement.

Section six examines how to set prices optimally in the transport sector. Mohring lays out the typical starting point for this topic in his introduction: if marginal cost pricing is practiced for all traffic on a road network and the network is subject to constant returns to scale, then revenues will cover the capital costs of the road network. Many of the papers in this section examine what happens when the basic conditions outlined in this statement are not feasible for some

Journal of the Transportation Research Forum
Volume 35, Number 2, 1995.

reason (i.e. economies of scale exist or marginal cost pricing is not practiced). Papers in this section also deal with the appropriate price to charge in situations where there is a peak load problem.

Section seven covers taxi and bus transportation. The issues addressed by articles in this section are concerned with the impact of service quality on customer demand. As with many of the articles in this volume, these papers focus on what the impact of regulatory decisions in transport sectors (such as restrictions on entry into the taxicab market) have on service, price, and the suppliers of the service.

Section eight deals with the interaction of transportation networks and urban development. In particular the papers address the impact of transportation infrastructure decisions on land values and how the inefficient pricing of transportation services may distort decisions on the expansion of transportation networks.

The final section is a collection of articles examining the problems of regulation and deregulation in the transport sector. Of the eleven articles in this section, nine address the topic of airline regulation/deregulation. These include pieces published prior to deregulation that illustrate the economic costs of regulation, as well as several articles describing the problems that continue to persist in the deregulated market place. This section includes a lengthy article by Levine (1987) that does an excellent job of summarizing the market imperfections that still exist in the deregulated airline environment. Safety issues are also addressed in this section, focusing on the impact of air safety on financial performance and the impact of financial performance on airline safety.

Overall, this is an impressive collection of articles. The articles do not represent the most recent work in these areas, but rather the most important work that has appeared in the past forty years. Virtually all of these articles originally appeared in economic journals aimed at professional economists. As a result, the collection will be of more interest to economists specializing in transportation issues than to

transportation practitioners. That is not to say that there are not many articles in the collection that are accessible to the practitioner. For anyone getting started in transportation economics this is an excellent introduction to the wide range of issues and techniques in the field.

REFERENCES

- Amemyia, Takeshi. "Qualitative Response Models: A Survey", *Journal of Economic Literature*, December 1981, Vol. XIX, No. 4, pp. 1483-1536.
- Beckman, Martin, McGuire, C. B. and Winsten, Christopher B. "Equilibrium" in *Studies in the Economics of Transportation*, New Haven: Yale University Press, 1956, Chapter 3, pp. 59-79.
- Levine, Michael. "Airline Competition in Deregulated Markets: Theory, Firm Strategy, and Public Policy," *Yale Journal on Regulation*, 1987, Vol. 4, pp. 393-494.
- Oum, T.H., Waters II, W.G. and Yong, J.S., "Concepts of Price Elasticities of Transport Demand and Recent Empirical Estimates", *Journal of Transport Economics and Policy*, May 1992, Vol. XXVI, No. 2, pp. 139-154.
- Walters, A. A. "The Theory and Measurement of Private and Social Cost of Highway Congestion", *Econometrica*, October, 1961, 29 (4), pp. 676-699.
- Winston, Clifford, "Conceptual Developments in the Economics of Transportation: An Interpretive Survey," *Journal of Economic Literature*, March 1985, XXIII, No. 1, pp. 57-94.
- Robert Windle
University of Maryland
College Park, MD