



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.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Proceedings of the Transportation Research Forum

TRANSPORTATION LIBRARY

APR 11 1991

NORTHWESTERN UNIVERSITY

Volume 5

1990



**32nd TRF Annual Forum
Long Beach, California
October 10-12, 1990**

**TRAN
HE
11
A512p
32nd
1990**

Proceedings of the Transportation Research Forum

Volume 5

1990



TRANSPORTATION LIBRARY

APR 1991

NORTHWESTERN UNIVERSITY

**32nd TRF Annual Forum
Long Beach, California
October 10-12, 1990**

TRAN
HE
11
A512p
32nd
1999

Copyright
1990
The Transportation Research Forum
All Rights Reserved

Published and Distributed by
Transportation Research Forum
1600 Wilson Boulevard, Suite 905
Arlington, Virginia 22209
(703 525-1191 FAX: (703) 276-8196

Acknowledgements

The Transportation Research Forum acknowledges and thanks the following Sponsors of the 1990 TRF Annual Forum in Long Beach, CA.

**CSL Intermodal
Hunt Valley, MD**

**Regular Common Carrier Conference
Alexandria, VA**

**United Parcel Service Foundation
Washington, DC**

Special gratitude is extended to the United Parcel Service (UPS) Foundation, whose grant helped fund a number of sessions at the 1990 TRF Annual Meeting in Long Beach as well as other TRF activities. TRF is indebted to Douglas T. Smalls, Vice President of UPS, for personally attending the Awards Ceremony and presenting several of the awards for the best research papers.

George W. Wilson

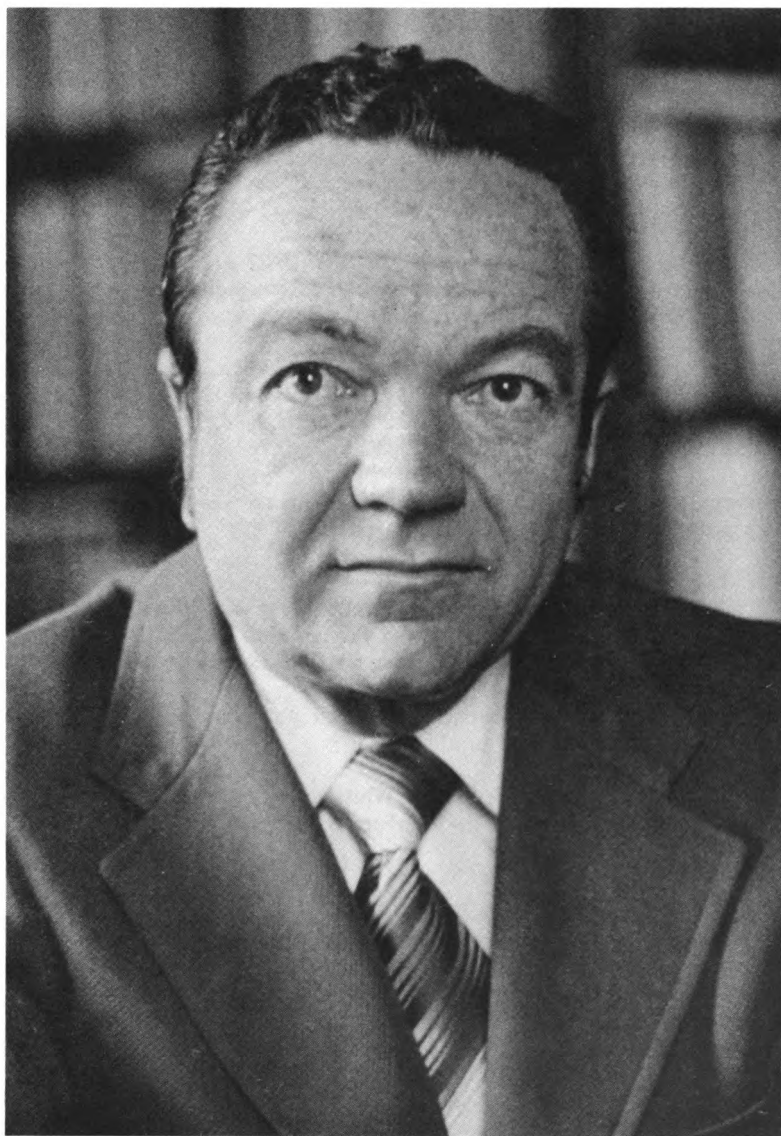
1990 TRF Distinguished Transportation Researcher

The award was made by Thomas N. Harvey, 1989 President of TRF and Chairman of the Awards Committee. Frederick J. Beier, 1990 President of TRF, and Clinton V. Oster, 1990 President of the TRF Aviation Chapter, spoke of the contributions to transportation made by Professor Wilson, and of their personal experiences with him over many years. Robert L. Banks accepted the award on George's behalf.

George W. Wilson is currently Professor of Economics in the School of Business at Indiana University. He also serves as Director of the Transportation Research Center at that institution. Professor Wilson was President of TRF in 1969. He has been advisor to the governments of the United States, Canada, Taiwan, Malaysia, El Salvador, and Costa Rica, as well as many private organizations and transportation consulting firms.

Professor Wilson has a long and distinguished career in transportation, as a teacher, researcher, scholar, administrator, and critical thinker. He has influenced several generations of graduate students and through them their students and colleagues. He has had a profound influence on transportation economics as a writer, a speaker and a practitioner. He has functions not only as an academic, but also as an advisor to business managers, governments and public administrators, both domestic and foreign.

George W. Wilson has impressed his colleagues, students and fellow administrators with the same good humor and good sense. His writings, particularly his books, convey all of this and more.



George W. Wilson

Herbert O. Whitten Service Award

Presentation Remarks by Fred Beier, TRF President
October 11, 1990

As I expressed in my President's Report to TRF yesterday morning, TRF depends upon the active participation of its members. TRF's small size and diverse interests put more emphasis upon participation than most other organizations.

Fortunately, there appear from time to time individuals who represent the pinnacle of this model of participation. These people are so committed to the goals of TRF that they continue to participate, contribute, question, push, pull, and influence people well beyond their elected terms.

It is in recognition of these people that the TRF Council at its July meeting established an award to be given to individuals who have demonstrated outstanding service toward helping TRF achieve its objectives.

- The award will be made periodically when outstanding members are identified, and it includes an honorary life membership in TRF
- The award is named the Herbert O. Whitten Award
- The first recipient is, appropriately, Herbert O. Whitten

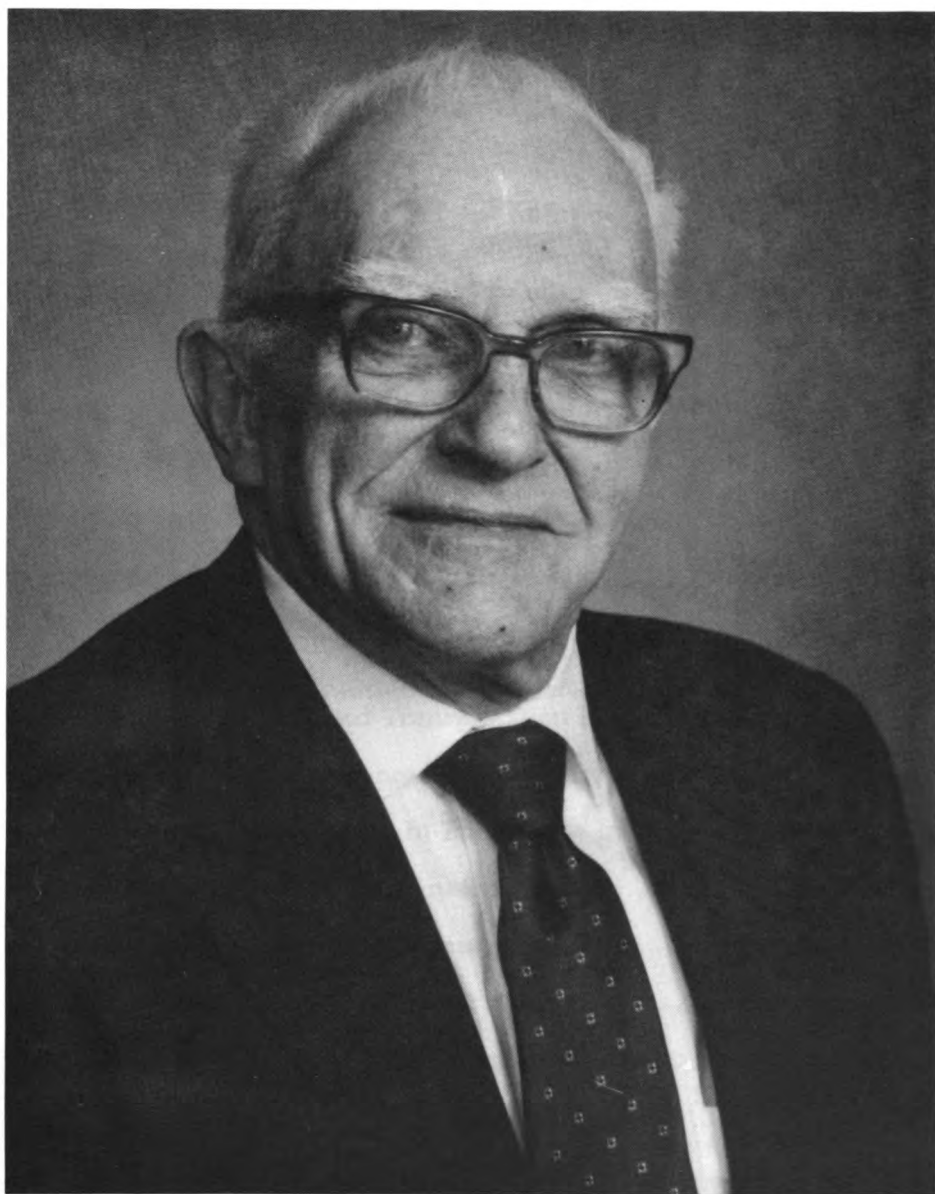
Everyone associated with TRF for even a brief time recognizes Herb Whitten. His efforts have profoundly affected this organization:

- Herb was one of the founders of TRF
- Herb was the first president of TRF, and he served as president a total of five years, the first time in 1958 and the last time in 1963-64
- Herb was instrumental in establishing the TRF Foundation, TRF Book Club, and other TRF activities
- Herb is a frequent participant at council and chapter meetings, and he has influenced every TRF president

I am proud to present the Herbert O. Whitten Award to the first recipient – to the person for whom the award is named – Herbert O. Whitten.

Biographical Notes

Herbert O. Whitten received a B.A. degree from Carthage College, Wisconsin (then located in Illinois) and an M.B.A. degree from Harvard Business School, and he pursued post graduate studies at the University of Michigan, George Washington University, and American University. From 1937 to 1953, he worked in the public utility industry on pricing and costing systems. He applied his knowledge in these areas to the rail industry while he was employed by the Chesapeake & Ohio Railway Company from 1953 to 1965. Not long after joining the C&O, he headed a special task force of the Traffic Executives Association--Eastern Railroads on pricing systems responsive to intermodal competition. Starting in the early 1960s, Mr. Whitten did original research in commodity and geographic codification, and rate and tariff computerization. Since then, he has been an independent consultant as president of his own firm, Herbert O. Whitten & Associates, advising several government agencies, carriers and carrier associations, and shippers.



Herbert O. Whitten

Table of Contents

Foreword	i
Acknowledgements	iii
George W. Wilson, 1990 TRF Distinguished Transportation Researcher	iv
Herbert O. Whitten Service Award	vi
Table of Contents	ix
1990 Awards For Best Papers	1
Welcoming Remarks Presenters	6
Keynote Address	7
Luncheon Speeches	8
UPS Foundation Forum Session: Mini-Conference On Transportation Data and Transportation Data Systems	10
The Business Case For Advanced Train Control Systems	12
Airline Hubs and Competition In The Airline Industry	13
Financing U.S. Highways: Alternative Futures	14
Ports: Competition and Labor Issues	15
Pipelines	17
The Routing and Timing of Rail Operations	19
Trucking Competition	20
Air Transportation Safety	22
International Shipping	24
Improving Urban Transportation	25
Airline Deregulation: Multi-National Experience	26

Table of Contents (Cont'd)

Trucking Undercharge Claims After The Maislin Supreme Court Decision Court Case	28
The Domestic Container Challenge	29
Ridesharing, Urban Traffic Planning, And New Transit Technology	29
Roads	31
International Transportation Data: Their Sources and Some Applications in the U.S. and Canada ..	32
The Use of Graphics-Based Software in Transportation	34
Surface Transportation Policy in the 1990s	34
Spatial Equilibrium and Agriculture	36
Marketing Freight Transportation	38
International Transportation Data Systems: European and Other Data Systems	39
Management Support Software in Transportation	41
Train Scheduling	41
Safety and Other Transportation Issues	44
Computerized Scheduling of Equipment	46
Should There Be A Federal Center To Coordinate Collection and Distribution of Transportation Data?	48
Emerging Information Technologies In The Aviation Industry ..	48
Investment Planning: Airports and Other Transportation Facilities	49
Transportation Rates and Agriculture	50
Short Line Railroads	51

Table of Contents (Cont'd)

PC Database, Software and Telecommunications Advances	53
Domestic and International Airline Competition	54
Management Tools To Improve Revenues and Lower Costs	56
Transportation and Rural Economic Development In America: Future Research Challenges	58
Effects of Partial Rail Deregulation	59
Railroad Competitiveness	60
The Impact of the U.S.-Canada Free Trade Act	60
Hazardous Materials Transportation: Issues and Trends	62
Ship Design and Operation	62
The Economics of Heavier Axle Loads For Rail Freight Traffic .	64
Book Reviews on Truck and Rail Deregulation	64
Concentration In The Airline Industry	66
Intermodal Container Transfer Facilities: New Rail Links With Ports, and Prospects For The 1990s ..	69
Transportation Issues In Canada and Australia	71
TRF Student Paper Contest	73
Student Paper Awards	74
1990 Annual Forum Registrants	117
TRF National Council	131
Purposes and Activities of TRF	135
Call For Papers	137
List of Participants	139