



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.*

PROCEEDINGS —

Fifteenth Annual Meeting

Theme:

“Transportation in Focus”

October 10-11-12, 1974

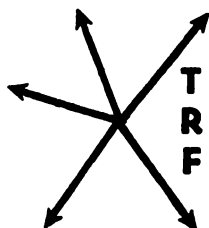
Fairmont Hotel

San Francisco, California



Volume XV • Number 1

1974



THE UNIVERSITY
OF MICHIGAN
NOV - 5 1974
ENGINEERING

TRANSPORTATION RESEARCH FORUM

How to Determine the Optimum Railroad Route Structure?

by Herbert E. Bixler*

THE QUESTION MARK on the title is indicative of the difference between this submission and the customary TRF paper. This offering presents no original research, offers no major breakthrough, in fact has no answers. The purpose is rather to raise questions and ask the audience for the answers. The very expression "route structure," commonly used before and by the CAB, is unfamiliar to the world of the ICC and railroading because we're conditioned to a route structure (and derivative tariff routes) firmly based on private ownership of real estate and tracks. Nevertheless there has recently been a spate of writing in the trade press about the most desirable route structure for United States railroads, whether the expression is used or not. Those of us on the panel have all broken out in print, the infamous Rock Island case induced an Administrative Law Judge to present a plan, Spence Miller of the Maine Central has offered his AT&T structure, and perhaps most important of all, the current (as this is written) deliberations of the United States Railway Association established by Public Law 93-236 is producing a route structure for Official Territory. Like it or not, we clearly are entering an era where route structures will be established by legal and legislative action, and this action should be guided by the most enlightened expert opinion.

Accordingly some of us who have grappled with the problem are presenting to you, the audience at the TRF annual meeting of 1974, the questions which have arisen as we tackled the problem. It is our hope that you will have seen this list of questions before the meeting and come ready with all the answers. In any case we shall attempt at the meeting to draw on your experience and expertise to provide answers which will be useful to those charged with the new and unaccustomed responsibility of determining the optimum route structure.

The questions seem to fall into the following categories: (1) Can a national interest, distinct from a regional or local interest, be defined? (2) Is intramodal competition desirable or wasteful? (3) What is the optimum extent of a sys-

tem? (4) What can we learn from experience in other countries? . . . other modes? Some of the questions which occur to us in each of these categories are listed here. You will undoubtedly add to the questions as well as provide answers.

I. Can National and Regional Interest Be Separately Defined?

A. What criteria are significant?

1. Size of urban areas to be linked?

2. Distance?

3. Production of essential commodities for widespread distribution? a. What's essential? b. How widespread?

4. Historic traffic flows?

5. Potential traffic flows?

6. Potential diversion from other modes?

7. Environmental and energy-use considerations?

8. Should special attention be given to — a. Canadian and Mexican connections? b. Ports? c. Defense considerations? d. Utilities?

B. How should we deal with Canadian-owned roads in the U.S.?

C. Should possible joint use for high-speed passenger service influence the choice of routes?

D. How should we choose between existing duplicate routes?

E. Will the same criteria govern for future construction?

II. Is There Need For Intramodal Competition?

A. If not, what is the remedy for an aggrieved shipper?

B. If so,

1. Do two competitors suffice?

2. Do the benefits of competition balance the inefficiencies of duplication?

3. Can competitive access to terminal areas and private sidings best be achieved by reciprocal switching, independent terminal lines, or other means?

4. Is it necessary to preserve existing routes permitting choice of junctions or should shippers' choice of routing be restricted to one or the other road for maximum line haul?

III. What Is the Optimum Extent of a System?

A. Is there a limit to manageable size?

B. What size would permit the optimum amount of traffic to move as a single-line haul?

C. Is there a trade-off between length and lateral coverage?

*Transportation Consultant, Jeffrey Center, New Hampshire

1. Are two nation-wide systems conceivable?

2. If more than two, can each provide coverage of important areas?

3. Would two ubiquitous competitors in each territory provide satisfactory interterritorial service?

IV. What Can We Learn from Other Countries and Other Modes?

A. Europe and Japan. Is there a correlation between publicly-owned monopoly and a combination of good passenger service and inefficient freight service?

B. Canada. Is the success of Canada's railroads due to —

1. Route structure providing competitive ubiquity?

2. Dual public-private ownership?

3. Superior regulatory policy?

C. Motor Carriers

1. Do route structure restrictions serve the public interest?

2. Does the provision of publicly-financed highways so change the nature

of competition as to make the example inapplicable to railroads?

D. Air carriers — Could the railroad route structure be established in a manner similar to that of the air carriers if rights-of-way were nationally owned? Would there be any benefit?

V. What Investments are Necessary?

A. Upgraded main lines to create interstate systems?

B. New Yards within interstate system?

C. Consolidated yards in metropolitan areas?

D. More or better TOFC/COFC terminals?

VI. How Promote High-Quality Rail Service?

A. Facilitate intra- and intermodal cooperation (e.g. run-through trains and TOFC)

B. Reduce the number of rail companies?

C. Change the rate structure?

D. Allocate routes as in the aviation industry?