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The Interstate Commerce Commission's Public Use Waybill File: Concerns For Mis-Interpretation*

by K. Eric Wolfe**

INTRODUCTION

In the years since the Stagger's Act partially deregulated the railroad industry, much attention has been focused on railroad rate changes. (Refer to Babcock (1981), Babcock et. al. (1985), Chow (1986), Fuller et. al. (1983, 1987), and MacDonald (1987)) In many of these analyses, the Interstate Commerce Commission's (ICC) Public Use Waybill Sample (Sample) has been employed. While significant changes occurred in the Sample in 1986 with respect to the reported revenue field, these events have not been generally reflected in recent literature (see Fuller et. al. 1990).¹ The purpose of this commentary is to update earlier documentation on the Sample (Wolfe 1986) and clarify how recent changes have affected rate analyses which employ Public Use Sample data collected since 1986.

The ICC states: "The waybill sample is a source of reliable and comprehensive information on rail carload freight traffic flows and characteristics."² Although the Sample is employed in a variety of planning studies, regulatory oversight is the prime purpose behind its collection. Both the Cost Recovery Percentage, required under Section 202 of the Stagger's Act, and the output measure employed in the productivity adjustment to the Rail Cost Adjustment Factor (required under Ex Parte 290 (Sub-No. 7)) are calculated from the Sample.

Within regulatory proceedings, while the ICC has repeatedly allowed access to confidential Sample data, they have made it clear that the data's confidentiality must be maintained. For example, the ICC has written:

"Since 1978, the Director of the Office of Transportation (OTA) has been delegated authority to grant or deny access to waybills and statistics reported under orders of the Commission. 49 C.F.R. 1011.7(f) and 43 Fed. Reg. 7438 (1978). OTA has established a policy for handling waybill requests under which access to waybill data, when granted, is qualified

and restrictions are imposed to preserve the confidentiality of proprietary waybill data. 48 Fed. Reg. 40328 (1983).³

More Specifically, OTA's policy limits use of the Waybill Master file (Master File), or total sample, to the Commission and other Federal agencies. Transportation consulting firms may also use data from the master file for the sole purpose of preparing verified statements in formal ICC proceedings.⁴

While the ICC established a "Public Use" file from the Master Waybill Sample tape, they re-affirmed the necessity to retain any and all information which is confidential:

"Finally, a Public Use File has been established which contains non-confidential waybill data and is available to anyone, and may be published, or released without prior Commission approval."⁵

Moreover, the ICC recognizes the potential damage which may result from the simple identification of shippers and/or railroads:

"Railroads and shippers, however, consider the data to be commercially sensitive, and thus not subject to public release. Also the Commission's statutory authority for collection of data does not require that information so obtained be made public. 49 U.S.C. 11910; see AAR v. United States, 371 Supp. 114, 116 (D.D.C. 1974).

Release of waybill data could arguably cause a rail carrier substantial competitive harm by release of commercially sensitive data regarding: originating and terminating freight stations, names of railroads participating in the movements, significant customers, and rates. The Interstate Commerce Act specifically protects shippers from such potential harm by prohibiting any common carrier, from disclosing traffic information from that carrier, from disclosing traffic information or...[where] that information may be used to the detriment of the shipper or consignee or may disclose improperly, to a competitor the

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business transactions of the shipper or consignee. 49 U.S.C. 11910(a)(1).⁸

1986 CHANGES IN THE PUBLIC USE WAYBILL

Prior to 1986, the ICC's Public Use Waybill Tape contained all records which were in the Master Waybill File. Confidentiality was achieved through omission of railroad and routing identification, aggregated STC codes, and origin-destination pairs aggregated to the state level. Despite these aggregations, it was shown that specific shippers and railroads could be identified. Additionally, comparison of the identified movements reported revenues and known tariffs could further result in the disclosure of specific contract revenues.

To close this breach of confidentiality, the Commission in Ex Parte 385 (Sub-No. 2) modified the data elements contained in the Public Use Tape. Using the 3-FSAC rule, waybills not meeting this test would have no geographic identification at either the origin and/or destination. Due to this restriction, less than 70 percent of all waybills in recent Public Use Waybill files have had origins and/or destinations listed.

Furthermore, beginning in 1986, waybills with unique combinations of railroads and origin-destination pairs were also removed entirely from the Public Use tape as were discreet identifications of ordinance movements. These deletions account for approximately 200 waybills per year. Estimated short-line distances were also rounded to the nearest 10 miles to obscure individual carrier routes.

TECHNIQUE TO MASK CONTRACT REVENUES

Responding to railroad industry concerns regarding the potential release of sensitive contract rate information at a time when the ICC desired continued accuracy in revenue related data, led the Commission to alter its method of data collection. Beginning with the 1986 Sample, railroads were allowed to disguise their contract revenues by factoring them by a scalar value at the three digit STCC level.⁹ For example, if the actual contract revenue for a shipment of STCC 011 was \$1,000, this railroad might report revenues of \$1,100 in the Sample. This carrier would also provide the ICC with a table indicating that all commodities with a "calculated rate flag" transported under STCC 011 would have their revenues overstated by 10 percent.

Such revenue factoring may be higher or lower than the actual contract revenue. These contract revenue factor tables are highly confidential - known only between the reporting railroad and the ICC. Moreover, this data is utilized by the ICC only for internal analyses. These factored values are never provided to the Sample contractor. An example of such a table is depicted below:

**HYPOTHETICAL TABLE OF
CALCULATED RATE
EXPANSION FACTORS**

<u>STCC</u>	<u>FACTOR</u>
011	1.10
012	1.05
013	0.85
091	1.30
101	1.24
111	1.34
.	.
.	.
.	.
480	1.15
493	1.07
496	1.12
500	0.93

Values for this table must be submitted to the ICC annually - even if the factors do not change.

CONCLUSIONS

In essence, the calculated rate flag method of data security allows railroads which report their waybill samples under the Machine-Readable-Input (MRI) format to mask contract revenues. At the same time, this method allows the ICC to internally utilize the most accurate contract rate data available in its calculation of the Cost Recovery Percentage (CRP) and the Productivity Adjustment Factor to the Rail Cost Adjustment Factor (RCAF).

As a result, revenue data derived from Public Use files since 1986, are generally overstated due to use of this confidentiality mechanism. Coupled with rounded mileages, revenue per ton-mile figures for the period 1986 to date are not strictly comparable with those obtained from the period 1982-1985.¹¹

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ENDNOTES

* The views expressed in this paper are solely those of the author and may not reflect the views of the Association of American Railroads or its members.

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1. Fuller made use of 1983 to 1988 data (p. 267).
2. ICC, Ex Parte 385 (Sub-No. 3) p. 1. Service date, January 31, 1990.
3. Ex Parte 385 (Sub-No. 2), Service date January 8, 1986.
4. Ibid pp 2-3.
5. Ibid, p 3.
6. Ibid, p 4.
7. The 3 FSAC rule requires that for an origin and/or destination to appear on the Public Use File that at least three separate freight stations be listed (within the BEA) for one railroad. This number expands to four separate freight stations if two railroads serve the BEA, and five if three serve it, etc.
8. Due to Department of Defense requirements, only the first two digits of the Standard Transportation Commodity Code (STCC) are provided in the Public Use Waybill tape.
9. Movements which are so unique as to easily identify the shipper and railroad are excluded from the Public Use Sample. The one-time movement of a petroleum cracking tower from a fabricator to a refinery site could constitute such a unique movement.
10. The same procedure applies to linehaul, miscellaneous, and transit revenues.
11. The Sample's collection methodology was substantially altered in July of 1981. Data from before that time tended to exclude multiple car movements. Refer to Wolfe (1986).