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311073

March 27, 2026

Director
Office of Economics
Surface Transportation Board

ENTERED
Office of Chief Counsel
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Part of
Public Record

Dear Director,

I respectfully request access to the Confidential Carload Waybill Sample pursuant to 49 C.F.R. § 1244.9(c) as an “Other User” for academic research purposes. This request is submitted by Xiaodong Du, Professor, Department of Agricultural and Applied Economics, University of Wisconsin-Madison, a faculty member at a nonprofit educational institution engaged in economic research.

1. Purpose of the Research

The requested Waybill data will be used for a research project titled *“Infrastructure, Market Power, and U.S. Agricultural Competitiveness: Evidence from Rail and Barge Transportation.”*

This project examines how rail carriers’ pricing behavior and market power interact with inland waterway infrastructure to shape the cost and efficiency of transporting U.S. grain exports. The analysis focuses on major grain commodities—corn, soybeans, and wheat—and studies how disruptions in inland waterway transportation, particularly low-water events on the Mississippi River system, affect rail pricing, shipment patterns, and agricultural producer welfare.

The research combines structural modeling with reduced-form empirical analysis to quantify intermodal competition between rail and barge transportation. In particular, the project estimates a structural model of route choice and pricing behavior across export corridors, such as rail shipments to the Pacific Northwest and barge shipments to the Gulf, and evaluates how hydrologic shocks and infrastructure constraints affect transportation costs and export competitiveness.

This work will support preparation of a proposal to the USDA Agriculture and Food Research Initiative (AFRI), Economics, Markets, and Trade program area, and will be continued if funding is awarded.

2. Specific Data Requested

We request access to the Confidential Carload Waybill Sample for the years **1996–2025 (inclusive)** for shipments of corn, soybeans, and wheat.

The requested data include the following categories of variables:

- *Shipment characteristics*: full 7-digit STCC commodity codes; shipment tons and carloads; equipment type (e.g., covered hopper); shipment type (single car, multiple car,



unit train); and interline movement indicators.

- *Geographic information:* origin and destination locations at the most detailed available level (e.g., 7-digit station codes, county, and state identifiers); routing information, including interchange locations where available; and mileage or routing distance.
- *Pricing and carrier information:* shipment revenue and revenue per ton-mile; carrier identifiers and interline partners; and revenue allocation across carriers where available.
- *Temporal information:* shipment year and quarter, or month if available.
- *Sampling information:* sampling weights and strata identifiers.

The specific variable names and formats will be verified using the STB Waybill data dictionary. This request is intended to include all variables necessary to construct shipment-level prices, quantities, routing distances, and origin–destination markets.

3. Justification for Need

Access to the confidential Waybill data is essential for the proposed research for the following reasons.

- (i) *Measurement of rail prices and market power.* The project estimates a structural model of rail pricing under intermodal competition. Public-use Waybill data contain masked and coarsened revenue measures, which introduce measurement error in price per ton and obscure contract pricing behavior. Confidential data provide accurate shipment-level revenue and routing information necessary to estimate marginal costs, markups, and conduct parameters.
- (ii) *Definition of transportation markets and intermodal competition.* The analysis requires defining origin–destination markets and measuring competition between rail and barge transportation. Public-use data aggregate shipments to BEA economic areas and suppress routing detail, preventing precise identification of export corridors and waterway access. Confidential data allow accurate mapping of shipments to export gateways, such as the Pacific Northwest versus the Gulf, construction of origin-specific exposure to barge competition, and identification of modal substitution patterns.
- (iii) *Identification of grain-specific corridors.* The project focuses on grain commodities, including corn (STCC 0113200), soybeans (0114400), and wheat (0113500). Confidential data are required to identify these commodities at full STCC resolution and to construct corridor-level shipment flows linking inland production regions to export terminals and domestic markets.
- (iv) *Improved statistical precision.* Current estimates using public data are economically meaningful but imprecise due to measurement noise and aggregation. Confidential data reduce measurement error, improve identification of demand and supply parameters, and strengthen instrumental-variable estimation by better aligning shipment flows with exogenous shocks such as precipitation and river conditions.



- (v) *Analysis of export supply chains.* Export-oriented grain shipments are governed by coordinated logistics linking inland transport to port terminals. Confidential data enable identification of export-bound shipments, analysis of route-specific pricing behavior, and measurement of delivered costs to export gateways, which are critical for evaluating U.S. export competitiveness.

The requested data will be used solely for academic research and not for commercial, consulting, or litigation purposes.

4. Data Security and Confidentiality

The data will be stored and analyzed on secure, access-controlled servers maintained by the Department of Agricultural and Applied Economics (AAE) at the University of Wisconsin–Madison, in compliance with 49 C.F.R. § 1244.9(e). Access will be limited to authorized project personnel: Xiaodong Du, Department of Agricultural and Applied Economics, University of Wisconsin–Madison. No disaggregated or identifiable information will be disclosed. All published results will be reported only in aggregated form and will conform to STB disclosure standards. At the conclusion of the project, the data will be securely destroyed, and certification of destruction will be provided to the Board.

5. Duration of Access

We request authorization for an initial one-year access period, with the expectation of renewal as needed. The anticipated project period is July 2026–June 2027.

6. Contact Information

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Thank you for considering this request. Please let me know if any additional information would be helpful.

Sincerely,

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