September 2020 Expires: 9/30/20

# SUPPORTING STATEMENT PART B FOR REQUEST OF OMB APPROVAL UNDER THE PAPERWORK REDUCTION ACT AND 5 C.F.R. § 1320

The Surface Transportation Board (STB or Board) requests a modification to, and three-year extension of, approval for the Board's collection of the Waybill Sample. The Board's Waybill Sample collection requirements are codified at 49 C.F.R. § 1244.

A waybill is a document that is generated for a rail shipment that includes the following information: the originating and terminating freight stations, the railroads participating in the movement, railroad interchange points, the number of cars, the car initial and number, the movement weight in hundredweight, the commodity, and the freight revenue. The Board collects a sample of these waybills and aggregates them into a collection known as the Waybill Sample. The Waybill Sample is the Board's principal source of information about freight rail shipments terminating in the United States. The Board uses the waybill sample data in rulemakings and adjudications, and for projects, analyses, and studies. Other federal agencies use the Waybill Sample as part of their information base, and states use the Waybill Sample as a major source of information for developing state transportation plans. The Waybill Sample is also used by local government agencies, the transportation industry (including transportation consulting firms, railroad associations, and freight car builders), shippers, shipper associations, research organizations, universities, and others with traffic data needs.

# B. Collections of Information Employing Statistical Methods.

1. Respondent Universe and Sample. (Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, state and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.)

#### a. Potential respondent universe:

The potential respondent universe consists of all freight railroads subject to the Interstate Commerce Act. To be part of the sample, a railroad must have terminated at least 4,500 revenue carloads (carloads carrying freight for shippers rather than empty carloads terminating before their next load, e.g., moving to repair yards) on its lines in any of the three preceding years, or must have

terminated at least 5% of the revenue carloads terminating in any state in any of the three preceding years. See 49 C.F.R. § 1244.2(a). Subject railroads must file waybill sample information either quarterly or monthly under 49 C.F.R. § 1244.5(a), and may either sample their own waybills or have a contractor conduct their sampling. As a result, there are currently four categories of respondents: (1) five railroads that conduct their own sampling and that report monthly, quarterly, and annually; (2) three railroads that conduct their own sampling and that report quarterly and annually; (3) two railroads that have a contractor sample their waybills and that report monthly, quarterly, and annually; and (4) 43 railroads that have a contractor sample their waybills and that report quarterly and annually.

#### b. Sampling/respondent selection methods:

Subject railroads file waybill sample information in an electronic file containing specified information from a sample of waybills (formerly called the computerized system). The waybill sampling rates are established by regulation at 49 C.F.R. § 1244.4. Table 1 below shows the waybill sample rates based on the changes made in Ex Parte 385 (Sub-No. 8).

**Table 1: Carload/Intermodal Sampling Rates** 

Number of Carloads on Waybill	Sample Rate
1 to 2	1/5 waybills
3 to 15	1/5 waybills
16 to 60	1/4 waybills
61 to 100	1/3 waybills
101 and over	1/2 waybills
Number of Intermodal Trailer or	
Container Units (TCUs) on Waybill	Sample Rate
1 to 2	1/40 waybills
3 and over	1/5 waybills

## c. Expected response rates:

Respondents maintain waybills as part of their day-to-day operations, and waybill reporting has been a regulatory obligation since 1946. Accordingly, the expected response rate is high. All Class I (i.e., large) railroads submit waybill sample information. Staff estimates that nearly 100% of all other railroads that meet the required thresholds stated above submit waybill sample information each year.

#### d. Actual response rate during the last reported annual collection:

In 2018, all seven Class I railroads submitted waybill sample information, representing a 100% response rate among Class I railroads, and accounting for the vast majority of sampled waybills. The Board also received waybill sample data

from 46 Class II (medium-sized) and Class III (small) railroads for calendar year 2018, representing all of the railroads self-identifying as meeting the thresholds to submit waybills.

# 2. Describe the procedures for the collection of information including:

# a. Statistical methodology for stratification and sample selection:

The Interstate Commerce Commission (ICC), the Board's predecessor agency, first began collecting a continuous sample of carload waybills from railroads terminating shipments in 1946. The sample was designed to yield approximately one percent of the total carloads terminated by railroads subject to the reporting rules.

The ICC revised the sampling process in 1981 to improve the quality of the sample study results. The revisions included a "stratified" sample, i.e., one with higher sampling rates for waybills from shipments with larger numbers of carloads. The decision to use stratified sampling for collecting the waybill data was based on the frequency distribution of the number of carloads per waybill. The ICC believed that stratifying by carloads and sampling a higher percentage of large shipments would ensure that large shipments were properly represented in the Waybill Sample. The stratified sample was designed to generate improved estimates of traffic characteristics in the rail industry such as total freight tonnage, total revenue, and average revenue per car. In 2020, the STB separated the sampling rates for carload traffic and intermodal traffic, and increased some of the sampling rates. The current strata definitions and sampling rates are shown in Table 1 above.

Currently, the Waybill Sample captures approximately 2.7% of the total number of waybills issued and approximately 15% of the total number of carloads moved by freight railroads in the United States. Starting in 2021, the Waybill Sample is expected to capture approximately 8.5% of the total number of waybills issued and approximately 20% of the total number of carloads and intermodal units moved by freight railroads in the United States.

#### b. Estimation procedure:

The Board has not needed to develop a separate estimation procedure for freight rail shipments terminating in the United States because it receives waybills from respondents and uses the waybill sampling rates established by regulation. See 49 C.F.R. § 1244.4. Those rates are listed in Table 1 above. The procedure for sampling waybill records is also described in Statement 81-1.

# c. Degree of accuracy needed for the purpose described in the justification:

The waybill sample data are used for a wide variety of analyses both by the Board

and other stakeholders, including federal agencies, state agencies, rail carriers and shippers, and policy researchers. Accordingly, there is no single statistical formula that can be used to determine a required degree of accuracy for every potential application. The waybill provides the Board and its stakeholders with a rich dataset regarding rail freight traffic flows in the United States and is adequate for that purpose. Periodically, the Board reviews the waybill to consider changes to the sampling or collection procedures to ensure that the Waybill Sample presents an accurate reflection of national freight rail movements.

#### d. Unusual problems requiring specialized sampling procedures:

Commodities can be billed differently in the ordinary course of business and methods of billing can change over time. For example, coal traffic tends to move in very large trains containing 75 or more carloads that are represented by a single waybill. Chemical traffic, on the other hand, tends to move in single-car shipments that are individually billed. Intermodal traffic tends to be billed individually for each intermodal container or trailer. The Board considers traffic patterns to ensure that the Waybill Sample contains a proper representation of all types of traffic.

## e. Frequency of data collection:

The Board's regulations at 49 CFR § 1244.5 require monthly or quarterly submissions of waybill data from subject railroads. The Waybill Sample is produced by the Board annually, in Confidential and Public Use versions. Because the Waybill Sample is an annual report, periodic (less frequent than annual) data collection is not appropriate.

3. Describe methods used to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

Subject railroads are required to respond under 49 CFR § 1244, and the Board has not experienced issues with compliance in recent years. The contractor that processes the Waybill Sample works to ensure that reporting railroads provide the data on a timely basis.

4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.

There are no tests of procedures or methods currently underway.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

The STB's Office of Economics collects the Waybill Sample. The Director of the Office of Economics is William Brennan, and the staff contact is Pedro Ramirez, who may be reached at (202-245-0333) or emailed at <a href="Pedro.Ramirez@stb.gov">Pedro.Ramirez@stb.gov</a>. Questions also may be emailed to Board staff at Economic.Data@stb.gov.