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October 22, 2014
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October 22, 2014

VIA E-FILING

Cynthia T. Brown,
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, S.W.
Washington, DC 20423-0001

Re: Docket No. EP 724 (Sub-No. 3), United States Rail Service Issues – Data Collection

Dear Ms. Brown:

Norfolk Southern submits the enclosed filing in response to the Board's request for data in Docket No. EP 724 (Sub - No. 3). Such submission does not constitute a concession that the filing is required and does not operate as a waiver of any of Norfolk Southern's rights and remedies at law. As requested, the data is accompanied by explanations of Norfolk Southern's methodology for deriving the data, including explanations of the extent to which the data cannot be presented in the manner requested due to the way in which Norfolk Southern operates its business, collects its data or otherwise.

Respectfully submitted,

David L. Coleman

Enclosure

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating Weekly System Average Train Speed #1

"System-Average Train Speed by Train Type for the Reporting Week (MPH)"

- Data is sourced from Norfolk Southern's Transportation Data Warehouse.
- Metric leverages a current report process that is currently being sent weekly to the AAR.
  - Data retrieval for calculation is done weekly and stored into history.
  - Data is calculated by pulling the total train miles and train transit segment move days by train type.
  - Formula for the speed is the **total miles/segment move days/24** to get MPH
    - Calculated speeds in excess of 80 MPH are not included because such speeds are indicative of incorrect data.
  - The data is grouped by the train type
- The following train types were used for this metric:
  - Intermodal
  - Grain
  - Coal Unit
  - Automotive Unit (Multilevel)
  - Crude Oil Unit
  - Ethanol Unit
  - Manifest (General Merchandise)
  - All Other
    - Scrubber Stone (Empty and Loaded)
    - Unit Bulk
- Results formatted to show the category and train speed for the previous Friday Week End date.
- Date range is Friday weekending date. This was changed to be consistent with all other historically produced AAR metrics.

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating Weekly Average Terminal Dwell #2

"Weekly Average Terminal Dwell Time Measured in Hours Excluding Cars on Run Through Trains"

- Data is sourced from Norfolk Southern's Transportation Data Warehouse.
- Metric leverages a current report process that is currently being sent weekly to the AAR.
    - Data retrieval for calculation is done daily and stored into history.
    - Arriving and Departing train cannot be the same for the equipment (Run through exclusion)
    - Excludes locomotives, EOTs, MOW equipment, Containers, Trailers, coal trains, and mine shifters, and bad ordered shipments.
    - Metric is calculated by aggregating the total dwell and total railcars by railcar type and location by day
- Using the results from the current AAR process, an additional query is used that calculates the average dwell by using the formula total cars divided by total dwell and formats the results based on all locations rolled up by previous Friday Week End Date.

"Weekly Average Terminal Dwell Time Measured in Hours for 10 Largest Terminals in Terms of Railcar Capacity"

- Data is sourced from Norfolk Southern's Transportation Data Warehouse.
- Metric leverages a current report process that is currently being sent weekly to the AAR.
    - Data retrieval for calculation is done daily and stored into history.
    - Arriving and Departing train cannot be the same for the equipment (Run through exclusion)
    - Excludes locomotives, EOTs, MOW equipment, Containers, Trailers, coal trains, and mine shifters, and bad ordered shipments.
    - Metric is calculated by aggregating the total dwell and total railcars by railcar type and location by day
- Top ten 10 largest terminals (by railcars handled) as defined by Norfolk Southern Terminal Operations.
- Using the results from the current AAR process, an additional query is used that calculates the average dwell by using the formula total cars divided by total dwell and formats the results based on the top ten defined locations rolled up by previous Friday Week End Date.
    - Date range is Friday weekending date. This was changed to be consistent with all other historically produced AAR metrics.

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology Total Cars On Line by Car Type # 3

"Total cars on line by the following car types for the reporting week:
a. Box
b. Covered hopper
c. Gondola
d. Intermodal
e. Multilevel (Automotive)
f. Open hopper
g. Tank
h. Other
i. Total."

- Norfolk Southern will use the weekly "RPM Cars On Line" as reported by Railinc for the Railroad Performance Measures (RPM) website http://www.railroadpm.org/Performance%20Reports/NS.aspx. Utilizing this data ensures we maintain consistency in publically reported Cars On Line information.
- Railinc has agreed to provide the RPM website with this information on Sunday for NS availability on Tuesday of each week for the previous Saturday to Friday.
- Date range is Friday weekending date. This was changed to be consistent with all other historically produced AAR metrics.
- Railinc developed the specific "RPM Cars On Line" report which is derived from car counting (and locating) programs already in use by the industry and is overseen by several industry committees to ensure consistency and accuracy. The definition of the Cars On Line is as stated below on the website:

> Cars On Line is the average of the daily on-line inventory of freight cars. Articulated cars are counted as a single unit. Cars on private tracks (e.g., at a customer's facility) are counted on the last railroad on which they were located. Maintenance of way cars are excluded.

Cars on Line figures are reported by car type for the following car types:

Car Type	AAR Mechanical Designation
Box	A, B or R
Covered Hopper	C
Gondola	E or G
Intermodal	P, Q or S
Multilevel	V
Open Hopper	H, J or K
Tank	T
Other	L or F

and by car ownership:

Owner Type	Description
System Car	Owned by the railroad on which it is located
Foreign RR	Owned by a railroad other than the one on which it is located
Private	Owned by a non-railroad (i.e., has a car initial that ends in "X") and not leased to a railroad

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating Unit Train Shipments Origin Dwell Hours # 4

"Weekly average dwell time at origin for unit train shipments sorted by grain, coal, automotive, crude oil, ethanol, and all other unit trains. (Dwell time refers to the time period from billing and release of a unit train at origin until actual movement by the carrier.)"

- A query will be run each Monday morning to pull data from Norfolk Southern's Transportation Data Warehouse for the previous Saturday to Friday.
- All loaded shipments that travel in the NS Unit Train network and originate on NS served locations will be included.
    - NS currently doesn't originate any Crude Oil shipments. All NS Crude Oil shipments are interchange received traffic.
- NS Unit Trains in the network are defined as:
    - Coal: CE (empty coal unit train) and CL (loaded coal unit train) train types
    - Grain: LDGR (Loaded grain unit train) and EMGR (empty grain unit train) train types
    - Crude Oil: UP (petroleum unit train) train types
    - Ethanol: UF (fuel unit train) train types
    - Other Units: UNIT (unit train) train type
- NS automotive traffic, both auto parts and vehicle shipments, are not operated in defined unit train service. Shipments move in trains that may or may not be combined with other traffic and trains may carry multiple defined blocks. Therefore automotive traffic is not included as a Unit Train type.
- Records included must have a waybill release reported event prior to the first NS train movement event. Shipments released or billed subsequent to the first movement event are excluded.
- Unit Train shipments will be identified for their respective shipment commodity groups using the shipment waybill STCC code.
- Each commodity group reported metric will reflect the aggregated total number shipments divided by the total number of dwell hours to calculate the Average Origin Dwell Hours.
- Date range is Friday weekending date. This was changed to be consistent with all other historically produced AAR metrics.

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Weekly Total Number of Trains Held Short of Destination or Scheduled Interchange #5

"The weekly total number of trains held short of destination or scheduled interchange for longer than six hours sorted by train type (intermodal, grain unit, coal unit, automotive unit, crude oil unit, ethanol unit, other unit, and all other) and by cause (crew, locomotive power, track maintenance, mechanical issue, or other (explain)."

- A query will be run each Monday morning to pull data from Norfolk Southern's Transportation Data Warehouse for the previous Saturday to Friday.
- Dataset includes trains that terminated for the reported week (i.e. trains reached their final destination or scheduled interchange). Trains still operating that have not completed their schedule will not be reported until the following week when the data is available.
- Road train types measured are: Coal, General Merchandise, Grain, Intermodal, Intermodal Premium, Multilevel, Triple Crown, Unit Fuel, Unit Petroleum, Unit Scrubber Stone, and Unit Other.
- All trains that encounter an unscheduled delay of more than six hours at a single location (other than origin) will be included. Each such train will be counted only once, even if a similar delay is encountered at more than one location.
- Trains annulled or terminated short of final destination due to traffic volume or train combinations for operational purposes are excluded.
- Date range is Friday weekending date. This was changed to be consistent with all other historically produced AAR metrics.
- The "Other-Tranportation" category of causes for held trains includes, among other things, causes such as trains loading ahead, weighing, correcting imbalances and overloads, dispatching issues, customs inspections, etc.

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating Weekly Total of Cars in Service That Have Not Moved # 6

"The weekly total number of loaded and empty cars, stated separately, in revenue service that have not moved in (a) more than 120 hours; and (b) more than 48 hours but less than or equal to 120 hours, sorted by the following classifications (intermodal, grain, coal, crude oil, automotive, ethanol, or all other). For purposes of this item, "moved" refers to making a train movement (departure) or a spot or pull from a customer location."

- A query will be run daily to pull data from Norfolk Southern's Transportation Data Warehouse for the previous day.
- All railcars (not individual containers or trailers) in line haul service will be included. The following shipments are excluded:
    - Shipments of company material
    - Railcars in stored status
    - Cars available for placement but not ordered in by customer
- Only equipment that are on line of road (except those denoted as being in storage) and equipment released by the customer to be pulled will be extracted.
- Grain, coal, crude oil, automotive (loads), ethanol will be identified for their respective shipment commodity groups using the shipment waybill STCC code. Intermodal and automotive (empty) will be identified using the AAR car type.
- At the end of the seven day weekly period, the seven individual extractions will be aggregated and duplicates will be eliminated (i.e. loads by waybill and empties by car ID).
- Date range is Friday weekending date. This was changed to be consistent with all other historically produced AAR metrics.

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating Total Number of Grain Cars Loaded and Billed # 7

"The weekly total number of grain cars loaded and billed, reported by State, aggregated for the following Standard Transportation Commodity Codes (STCCs): 01131 (barley), 01132 (corn), 01133 (oats), 01135 (rye), 01136 (sorghum grains), 01137 (wheat), 01139 (grain, not elsewhere classified), 01144 (soybeans), 01341 (beans, dry), 01342 (peas, dry), and 01343 (cowpeas, lentils, or lupines). "Total grain cars loaded and billed" ~~includes cars in shuttle service; dedicated train service; reservation, lottery, open and other ordering systems; and, private cars. Additionally, please separately report the total cars loaded and billed in shuttle service (or dedicated train service) versus total cars loaded and billed in all other ordering systems,~~ including private cars."

- A query will be run each Monday morning to pull data from Norfolk Southern's Traffic History table for the previous Saturday to Friday. (Traffic History is the official source for revenue carloads as it relates to the revenue billing. Utilizing this table ensures that we maintain consistency in publically reported carload information)
- This query includes only loaded revenue shipments waybilled within the previous Saturday to Friday with Standard Transportation Commodity Codes (STCCs) beginning with: 01131 (barley), 01132 (corn), 01133 (oats), 01135 (rye), 01136 (sorghum grains), 01137 (wheat), 01139 (grain, not elsewhere classified), 01144 (soybeans), 01341 (beans, dry), 01342 (peas, dry), and 01343 (cowpeas, lentils, or lupines) where NS is listed as the origin road.
- The following statement does not apply to Norfolk Southern; as we do not handle grain traffic in the manner described. *"includes cars in shuttle service; dedicated train service; reservation, lottery, open and other ordering systems; and, private cars. Additionally, please separately report the total cars loaded and billed in shuttle service (or dedicated train service) versus total cars loaded and billed in all other ordering systems,"*
- Date range is Friday weekending date. This was changed to be consistent with all other historically produced AAR metrics.

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating the aggregated STCCs in total number of grain cars loaded and billed by State # 8

"For the aggregated STCCs in Item 7, report by State the following:
a. the running total number (week over week) of outstanding car orders (a car order equals one car); b. average number of days late for all outstanding grain car orders; c. the total number of new car orders received during the past week; d. the total number of car orders filled during the past week; and e. the number of orders cancelled, respectively, by shipper and railroad during the past week.."

8. For the aggregated STCCs in Item 7, report by State the following:

a. the running total number (week over week) of outstanding car orders (a car order equals one car);

Approximately 90% of agriculture shipments move in multiple car shipments generally ranging from 50 to 100 cars; some of these move as trains, or may be combined with other multicar units for all or part of the movement. NS manages railcars it controls and does not receive car requests for these shipments. Instead, NS allocates its available cars to a various service (export grain, export meal, domestic processors, poultry feeders, etc.), based on expectations for demand. Railcars may be reallocated or move between services as demand shifts. The remaining traffic operates in the Merchandise Network and is requested each week.

b. average number of days late for all outstanding grain car orders;

As noted above, since NS manages railcars it controls by service, cycling between locations and moving between services as demand changes, there is not a scheduled day for loading. For single car shipments, cars are requested by day of week but equipment allocations are provided on a weekly basis and orders from the prior week do not carry forward. Based on NS' car ordering processes this data cannot be provided.

C. the total number of new car orders received during the past week;

Again, since NS manages railcars for multiple car shipments by service type, not specific customer orders, 90% of the shipments do not qualify.

d. the total number of car orders filled during the past week; and

Due to several system incompatibilities, order fill rates cannot be calculated without manually reconciling each shipment.

e. the number of orders cancelled, respectively, by shipper and railroad during the past week.

Due to several system incompatibilities, order fill rates cannot be calculated without manually reconciling each shipment.

In lieu of the requested information, NS can provide the following for each week (Monday – Sunday):

- NS's calculation of the number of cars needed to meet agriculture grain shipment demand (includes loaded and empty component)
- Cars available for agriculture shipments (includes loaded and empty component)
- Cars surplus/(deficit) plan
- Cars loaded
- NS's calculation of the number of cars needed to meet agriculture grain shipment demand the previous week (includes loaded and empty component)
- Cars available for agriculture shipments during previous week (includes loaded and empty component)
- Cars surplus/(deficit) plan during previous week
- Cars loaded
- Difference in cars calculated for assignment to agricultural grain shipments from previous week

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating Plan Vs Performance for Grain Shuttles # 9

"Plan versus performance for grain shuttle (or dedicated grain train) round trips, by region, updated to reflect the previous four weeks."

- "Plan versus performance for grain shuttle" is not relevant, because Norfolk Southern does not offer grain shuttle or dedicated grain train service.

Norfolk Southern Railway Company

Surface Transportation Board
Docket No. EP 724 (Sub-No. 3)
Methodology for Calculating Coal Metric # 10

"Average daily coal unit train loadings versus plan for the reporting week by coal production region."

- A query will be run each week to pull data from Norfolk Southern's Commodity Transportation Management System (CTMS) for the previous Saturday to Friday.
- Only includes shipments from an origin coal basin served by NS where the number of cars requested is greater than fifty (50).
- The number shown in the "Loadings Plan" column represents the number of trains that had originally scheduled load dates within the reporting period, divided by seven to show an average daily number for the week. These trains may have received revised loading dates one or more times before being loaded, or may have been canceled for any number of reasons and never loaded.
- The number shown in the "Loadings Average" column represents the number of trains that actually loaded within the reporting period, divided by seven to show an average daily number for the week. These trains may have had originally scheduled load dates before, during or after the reporting period.

NORFOLK SOUTHERN RAILWAY COMPANY

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad:	Year: 2014	Reporting Week:	Date Week Began:	10/11/2014
			Date Week Ended:	10/17/2014

1. System-Average Train Speed by Train Type for the Reporting Week (MPH)	
Intermodal	22.93
Grain unit	17.64
Coal unit	15.58
Automotive unit	19.67
Crude oil unit	14.76
Ethanol unit	18.29
Manifest	18.07
All Other	14.14

2. Weekly Average Terminal Dwell Time Measured in Hours Excluding Cars on Run Through Trains	
System Average	29.1

2. Weekly Average Terminal Dwell Time Measured in Hours for 10 Largest Terminals In Terms Of Railcar Capacity	
ALLENTOWN	29.6
BELLEVUE	53.0
BIRMINGHAM	31.9
CHATTANOOGA	37.3
CONWAY	63.6
DECATUR	27.5
ELKHART	42.1
KNOXVILLE	34.3
LINWOOD	24.6
MACON	33.0

3. Total Cars On Line by Car Type for the Reporting Week	
Box	15,931
Covered hopper	49,118
Gondola	18,039
Intermodal	9,679
Multilevel (automotive)	10,052
Open hopper	41,406
Tank	38,047
Other	10,542
Total	192,814

4. Weekly Average Dwell Time at Origin for Unit Train Shipments Measured in Hours	
Grain	72.47
Coal	10.11
Automotive	n/a
Crude Oil	n/a
Ethanol	44.17
All Other Unit Trains	36.12

5. Weekly Total Number of Trains Held Short of Destination or Scheduled Interchange for Longer than 6 Hours by Train Type and Cause							
Train Type	Cause						
	Crew	Locomotive power	Track maintenance	Mechanical Issue	Other		Total
					Number	Briefly Explain Cause	
Intermodal	26	0	1	0	35	Other-Transportation	62
Grain unit	8	0	0	0	2	Other-Transportation	10
Coal unit	47	1	0	2	22	Other-Transportation	72
Automotive unit	17	0	1	0	24	Other-Transportation	42
Crude oil unit	27	0	0	0	4	Other-Transportation	31
Ethanol unit	4	0	0	0	1	Other-Transportation	5
Other unit	7	0	0	0	6	Other-Transportation	13
All other trains	80	3	10	7	178	Other-Transportation	278
Total	216	4	12	9	272		513

6. Weekly Total Number of Loaded and Empty Cars in Revenue Service That Have Not Moved In:				
	Greater Than 120 Hours		Greater Than 48 but Less than or Equal to 120 Hours	
	Loaded	Empty	Loaded	Empty
Intermodal	19	6	156	0
Grain	90	0	1,048	6
Coal	1,168	3	1,138	0
Crude Oil	68	18	195	48
Ethanol	23	10	149	34
Automotive	4	6	85	25
All Other	1,652	635	5,385	1,062

NORFOLK SOUTHERN RAILWAY COMPANY

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad:	Year: 2014	Reporting Week:	Date Week Began:	10/11/2014
			Date Week Ended:	10/17/2014

7. Weekly total grain cars loaded and billed, reported by State, aggregated for the following Standard Transportation Commodity Codes (STCCs): 01131 (barley), 01132 (corn), 01133 (oats), 01135 (rye), 01136 (sorghum grains), 01137 (wheat), 01139 (grain, not elsewhere classified), 01144 (soybeans), 01341 (beans, dry), 01342 (peas, dry), and 01343 (cowpeas, lentils, or lupines). "Total grain cars loaded and billed" includes cars in shuttle service; dedicated train service; reservation, lottery, open and other ordering systems; and, private cars. Additionally, please separately report the total cars loaded and billed in shuttle service (or dedicated train service) versus total cars loaded and billed in all other ordering systems, including private cars.

Instruction: Please enter "0" if no data is being reported for a field.

State	Total Grain Cars Loaded and Billed For All Ordering Systems	Total Grain Cars Loaded and Billed For Shuttle / Dedicated Train Service Ordering Systems	Total Grain Cars Loaded and Billed For Ordering Systems Other Than Shuttle / Dedicated Train Service
AL	12	n/a	n/a
AR	0	n/a	n/a
AZ	0	n/a	n/a
CA	0	n/a	n/a
CO	0	n/a	n/a
CT	0	n/a	n/a
DE	1	n/a	n/a
FL	0	n/a	n/a
GA	11	n/a	n/a
ID	0	n/a	n/a
IL	0	n/a	n/a
IN	1,204	n/a	n/a
IA	974	n/a	n/a
KS	0	n/a	n/a
KY	0	n/a	n/a
LA	0	n/a	n/a
ME	0	n/a	n/a
MD	33	n/a	n/a
MA	0	n/a	n/a
MI	249	n/a	n/a
MN	0	n/a	n/a
MS	215	n/a	n/a
MO	0	n/a	n/a
MT	0	n/a	n/a
NE	21	n/a	n/a
NV	0	n/a	n/a
NH	0	n/a	n/a
NJ	0	n/a	n/a
NM	3	n/a	n/a
NY	0	n/a	n/a
NC	0	n/a	n/a
ND	0	n/a	n/a
OH	458	n/a	n/a
OK	0	n/a	n/a
OR	0	n/a	n/a
PA	37	n/a	n/a
RI	0	n/a	n/a
SC	3	n/a	n/a
SD	0	n/a	n/a
TN	2	n/a	n/a
TX	0	n/a	n/a
UT	0	n/a	n/a
VT	28	n/a	n/a
VA	0	n/a	n/a
WA	0	n/a	n/a
WV	0	n/a	n/a
WI	0	n/a	n/a
WY	0	n/a	n/a
Total	3,251	0	0

NORFOLK SOUTHERN RAILWAY COMPANY

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad:	Year: 2014	Reporting Week:	Date Week Began:	10/14/2014
			Date Week Ended:	10/20/2014

8. Alternative NS Grain Data (See Description of Methodology)

NS's calculation of the number of cars needed -to meet agriculture grain shipment demand (includes loaded and empty component)	**5329**
Cars available for agriculture shipments (includes loaded and empty component)	**4384**
Cars surplus/(deficit) plan	**-945**
Cars loaded	**1676**
NS's calculation of the number of cars needed-to meet agriculture grain shipment demand the previous week (includes loaded and empty component)	**5304**
Cars available for agriculture shipments during previous week (includes loaded and empty component)	**4338**
Cars surplus/(deficit) plan during previous week	**-966**
Cars loaded	**1597**
Difference in cars calculated for assignment to agricultural grain shipments from previous week	**46**

NORFOLK SOUTHERN RAILWAY COMPANY

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad:	Year: 2014	Reporting Week:	Date Week Began:	10/11/2014
			Date Week Ended:	10/17/2014

10. Average Daily Coal Unit Train Loadings vs. Plan for the Reporting Week By Coal Production Region

Region	Loadings Plan	Loadings Average
Illinois Basin	6.1	5.3
Northern Appalachia	9.4	8.4
Central Appalachia	9.9	8.0
Southern Appalachia	0.3	0.3