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March 29, 2017

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

**Re: STB Ex Parte No. 724 (Sub-No. 4), United States Rail Service Issues—Performance
Data Reporting**

Dear Ms. Brown:

Enclosed for electronic filing in the above captioned proceeding is the Weekly Report of BNSF in response to the Board's Order of November 30, 2016. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jill K. Mulligan".

Jill K. Mulligan

**BEFORE THE
SURFACE TRANSPORTATION BOARD**

STB EX PARTE NO. 724 (Sub-No. 4)

UNITED STATES RAIL SERVICE ISSUES—PERFORMANCE DATA REPORTING

**METHODOLOGICAL REPORT OF
BNSF RAILWAY COMPANY**

Pursuant to 49 C.F.R. § 1250.1, BNSF Railway Company (“BNSF”) provides the following overview of methodology used to generate the modified weekly reporting implemented by the Board’s November 30, 2016 Order in the above referenced sub-docket. The Final Rule outlined in the Board’s Order and implemented at 49 C.F.R. Part 1250 contained updated requirements for weekly reporting by individual Class I railroads on service performance metrics for that railroad’s network. Covered parties are required to submit their first weekly report of data responsive to the Board’s requests on March 29, 2017.¹ The Final Rule also required that each Class I provide, as an accompaniment to its initial weekly report under the new requirements: (i) an explanation of the methodology for deriving the data contained therein, and (ii) the definition of unit train used for reporting purposes. Accordingly, BNSF provides the following information about the methodology employed to generate the data included with BNSF’s initial performance data report that is being simultaneously electronically

¹ The Board’s November 30, 2016 Order required that the initial report under the new requirements be submitted on February 8, 2017. In response to the January 20, 2017 Memorandum for the Heads of Executive Departments and Agencies from Reince Priebus, Chief of Staff to President Trump, the Board extended the date for the submission of initial reports to March 29, 2017.

submitted to the Office of Public Assistance, Government Affairs and Compliance in the above referenced sub-docket:

- **Data Element No. 1—Train Speed:** Weekly system-average train speed by train type (intermodal, grain unit, coal unit, automotive unit, crude oil unit, ethanol unit, manifest, all system)

Data Element No. 1 reflects data that is currently provided by the Class I railroads through the AAR's public Weekly Performance Reports, available on the AAR website at <http://www.railroadpm.org/>. Average speed is calculated by dividing train-miles by total hours operated, excluding yard and local trains, passenger trains, maintenance of way trains, and terminal time. Consistent with 49 C.F.R. § 1250.2(a)(1), BNSF has included the two additional categories of "Crude oil unit" and "Ethanol unit" that are not separately isolated in the AAR Weekly Performance Report.

- **Data Element No. 2—Terminal Dwell Time:** Weekly average terminal dwell time for the system and ten largest terminals by railcar capacity.

Data Element No. 2 also reflects data that is currently provided through the AAR's public Weekly Performance Reports. Consistent with 49 C.F.R. § 1250.2(a)(2), terminal dwell in BNSF's new STB report, as well as the AAR report, has been measured as the average time a car resides at the specified terminal location expressed in hours, beginning with a customer release, received interchange, or train arrival event and ending with customer placement (actual or constructive), delivered or offered in interchange, or train departure event. Cars that move through a terminal on a run-through train are excluded, as are stored, bad ordered, and maintenance of way cars. Please note that the AAR report covers additional terminals while the STB has only asked for the ten largest terminals in terms of railcar capacity.

- **Data Element No. 3—Cars Online:** Weekly total cars on line by car type (box, covered hopper, gondola, intermodal, multilevel (automotive), open hopper, tank, other, total)

Data Element No. 3 also reflects data that is currently provided through the AAR's public Weekly Performance Reports. BNSF has populated the new STB spreadsheet with the average of the daily on-line inventory of freight cars. Articulated cars are counted as a single unit, while 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 also excluded.

- **Data Element No. 4—Dwell Time at Origin for Unit Trains:** Weekly average dwell time at origin for loaded unit trains by type (grain, coal, automotive, crude oil, ethanol and all other unit trains)

BNSF has populated the new STB spreadsheet with data extracted from existing internal reports identifying the time between release of a loaded unit train by a customer at origin and the departure of the train from the facility, which is consistent with the Board's definition of dwell time in the Order. The data is sorted by the individual unit train categories identified by the STB; "All Other Unit Trains" includes remaining categories of unit train shipments, including rock, sand, taconite and government unit trains. BNSF has also isolated non-origin interchange dwell and empty units from the weekly reporting.

- **Data Element No. 5—Trains Holding:** Weekly average trains holding per day by train type (intermodal, grain unit, coal unit, automotive unit, crude oil unit, ethanol unit, other unit, and manifest) and by cause (crew, locomotive power and other)

BNSF has populated the new STB spreadsheet with data extracted from a different internal source using the snapshot approach required by 49 C.F.R. § 1250.2(a)(5), e.g., running a daily same-time snapshot of trains held and calculating the daily average for the week by adding up the number of trains holding from each daily snapshot and then divided that number by 7. As BNSF has explained in prior submissions and the Board recognized in its November 30th Order, this Data Element captures trains held at a point on BNSF's network for numerous reasons entirely separate from railroad performance, including trains that are held as part of their routine

operating plan, informed by the needs of shippers, receivers and/or connecting carriers. In addition, BNSF causation flags of “crew,” “locomotive power” and “other” will continue to be applied manually by dispatchers and other operating personnel based on information available to them. As explained in prior submissions, delay on a single train can be the result of several causes, but the dispatcher or operator may not be fully aware of all contributing causes and, in any event, manually selects only a single cause code, which becomes the only cause subsequently reflected in BNSF’s weekly spreadsheet.

- **Data Element No. 6—Cars Held:** Weekly average loaded and empty cars in normal movement and billed to an origin and destination that have not moved in more than 48 hours, by type (intermodal, grain, coal, crude oil, automotive, ethanol, fertilizer, and all other)

BNSF has populated the new STB spreadsheet using the snapshot approach required in 49 C.F.R. § 1250.2(a)(6), by running a daily same-time snapshot of all loaded and empty cars being used in commercial service (excluding cars that have been placed in storage, constructively placed or bad ordered, and cars being used in railroad service such as ballast and other maintenance of way trains) and calculating the daily average for the week. In populating the fertilizer metric, BNSF has used the following fifteen fertilizer Standard Transportation Commodity Codes (STCCs), which includes the STCC added in the Board’s March 7, 2017 decision: 2871236, 2871235, 2871238, 2819454, 2812534, 2818426, 2819815, 2818170, 2871315, 2818142, 2818146, 2871244, 2819173, 2871313, and 2871451). As in prior reporting, cars have been counted by reference to the underlying rail equipment without accounting for how many individual units may be carried on a single piece of rail equipment. For example, an intermodal railcar will count as a single car even though it may carry multiple units (e.g., containers) at various points along the route. As with Data Element No. 5, BNSF has calculated

the daily average for the week by adding up the number of qualifying cars holding from each daily snapshot and then divided that number by 7. It should also be noted that just because a car has been held at a point on the BNSF network for more than 48 hours does not mean that the car will not be delivered in a timely manner or even within the initial service plan—many cars are held in terminals and other locations on our network as part of the service design for the movement or for the convenience of a shipper or receiver. As with Data Element No. 5, potentially significant numbers of delays that are not linked to BNSF’s own service performance will be captured as BNSF delays in the data reported pursuant to 49 C.F.R. § 1250.2(a)(6).

- **Data Element No. 7—Grain Cars Loaded and Billed:** Weekly total number of grain cars loaded and billed, reported by State, aggregated for identified grain STCCs, identifying totals in shuttle service versus total cars loaded in all other ordering systems

As in prior weekly reporting, BNSF has populated the STB spreadsheet with total loaded and billed cars for the STB Grain Commodities by state in a manner consistent with the way BNSF reports number of cars loaded in the CS54 data submitted weekly to the AAR for public reporting. Total loaded and billed cars includes cars in shuttle service, dedicated train service, reservation, lottery, open and other ordering systems, and private cars with active waybills.

- **Data Element No. 8—Grain Cars Orders:** Weekly and by state, for railroad-owned and leased cars: (a) running total of car orders placed; (b) running total of orders filled; (c) for unfilled orders, number of orders that are 1-10 days past due and 11+ days past due, as measured for when the car was due for placement under the railroad’s governing tariff

BNSF has collected the data responsive to 49 C.F.R. § 1250.2(a)(8) in a manner consistent with our prior reporting and our communications to our customers. To identify the running total of orders placed, we report the total number of new car orders placed during the week-long reporting period. The running total of orders filled is the number of that have been placed for loading over the seven day period. As previously explained, under BNSF’s

governing tariffs, a pending car order is classified as past due when the shipment is more than three days past the shipper's want date (hereinafter, the "conversion date"). Any order with a want date that is more than three days old is considered a "Past Due" and any shipment that is Past Due on the Sunday during the current reporting period is allocated either into the 1-10 Day column or the 11+ Day column, depending on its age. As with our prior report, past due orders originating in Canada are excluded.

- **Data Element No. 9—Coal Loadings:** Weekly average coal unit train or car loadings versus plan for the week by coal production region

While 49 C.F.R. § 1250.2(a)(9) provides the option of moving from train counts to car counts, BNSF continues to populate the STB spreadsheet with the average daily loadings for the week of coal unit *trains* for the covered week out of the Powder River Basin (PRB). BNSF has maintained an "Other" category to capture actual train loadings in North Dakota and New Mexico. BNSF has also provided a target for average daily loadings for the week for the same period for the PRB and for "Other."

- **Data Element No. 10—Shuttle Turns:** Average grain shuttle turns per month for system and by region versus the plan.

BNSF will continue to provide shuttle trips-per-month (TPM) figures for the overall system and for the five destination regions as reported to our customers, but on a monthly basis covering the prior previous calendar month. BNSF's first report under 49 C.F.R. § 1250.2(a)(10) will be included in the weekly report to be filed April 5, 2017.

- **Data Element No. 11—Originated Carloads by Commodity Group:** Weekly carloads originated and received in interchange for 23 commodity groups

BNSF has populated the STB spreadsheet with total weekly carloads originated and total weekly carloads received in interchange in a manner consistent with BNSF reporting to the AAR for the weekly CS54 data, and covering the twenty-two historical commodity categories

contained therein (11.i). In addition, BNSF has included a separate report (11.ii) of fertilizer cars originated and received for the fifteen STCCs identified by the Board. Consistent with the Board's Order, BNSF has not modified the data in the existing 22 categories to isolate fertilizer shipments covered by the standalone fertilizer metric; accordingly, fertilizer shipments may show up in both metric 11.i and 11.ii in the same weekly report.

- **Definition of Unit Train:** BNSF has maintained in the new STB spreadsheet our historic train-symbol approach to identifying unit trains, which is used consistently in our company communications and tools used by our customers, the formal reporting we have been providing the Board since the October 8, 2014 decision implementing temporary reporting requirements, and the informal reporting we provided before that. To provide unit train specific metrics across the various STB reporting requirements, BNSF identifies unit trains by specific train symbols that reflect the specific service offerings available to our customers. For example, coal unit trains are identified by the letter at the start of the train symbol—C for loaded unit trains and E for empty unit trains. BNSF does not include intermodal trains in unit train reporting.

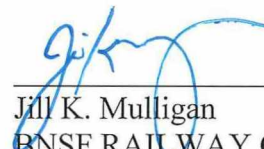
- **Reporting Week and Timing:** The Final Rule defines the reporting week as 12:01AM Saturday to 11:59PM Friday for Data Element Nos. 1 through 9 with data being presented in the report due the following Wednesday. For Data Element No. 11, the data is also included in the weekly Wednesday report, but is measured from 12:01AM Sunday to 11:59PM Saturday. The monthly data required by Data Element No. 10 is to be submitted on the first weekly report of each month, covering the previous calendar month. BNSF notes there will occasions where, because of how the reporting day falls in relation to the end of the prior month, BNSF will not be

in a position to report the monthly data until the second report in a month because of a lag in obtaining the complete data set after the month's close.

Conclusion

Consistent with the Board's Final Rule, BNSF will discontinue other weekly service performance reports to the STB and will provide the weekly report outlined in 49 C.F.R. Part 1250 on an ongoing basis according to the methodology described here. BNSF will also provide an update to the Board in the event that BNSF changes the methodology used to generate the weekly report or changes the definition used to identify unit train traffic.

Respectfully submitted,



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Fort Worth, Texas 76131

March 29, 2017

EP 724 (Sub-No. 4) - U.S. Rail Service Issues - Performance Data Reporting

Railroad: BNSF	Year: 2017	OMB Control No. 2140-XXXX	Expiration Date: 12/2019
Reporting Week:		Date Week Began:	3/18/2017
		Date Week Ended:	3/24/2017

1. Average Train Speed by Train Type and Overall System Average Train Speed reported in Miles per Hour (MPH)

Intermodal	32.7
Grain unit	20.5
Coal unit	24.1
Automotive unit	24.9
Crude oil unit	22.2
Ethanol unit	21.5
Manifest	21.2
System	24.8

2. Weekly Average Terminal Dwell Time Excluding Cars on Run-Through Trains Measured in Hours for 10 Largest Terminals and Overall System in Terms of Railcars Processed

Terminal	Terminal Dwell Time
Barstow, CA	46.5
Denver, CO	35.1
Fort Worth, TX	25.0
Galesburg, IL	33.9
Kansas City, KS	32.7
Lincoln, NE	32.6
Memphis, TN	18.9
Northtown, MN	34.2
Pasco, WA	32.6
Tulsa, OK	27.5
System	27.9

3. Weekly Average Cars On Line by Car Type

Box	12,142
Covered hopper	76,007
Gondola	8,684
Intermodal	17,554
Multilevel (automotive)	9,595
Open hopper	54,534
Tank	54,331
Other	10,451
Total	243,298

4. Weekly Average Dwell Time at Origin for Unit Train Shipments Measured in Hours

Grain unit	11.1
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Coal unit	2.4
Automotive unit	33.8
Crude Oil unit	5.2
Ethanol unit	7.1
All Other Unit Trains	12.4

5. Weekly Average Number of Trains Holding Per Day by Train Type and Cause

Train Type	Cause			Total
	Crew	Locomotive power	Other	
Intermodal	.6	.9	4.4	5.9
Grain unit	2.6	.4	3.6	6.6
Coal unit	2.9	.3	2.4	5.6
Automotive unit	.4	.0	2.1	2.5
Crude oil unit	.3	.0	.4	.7
Ethanol unit	.1	.0	.9	1.0
Other unit	.4	.0	1.7	2.1
Manifest	3.7	1.7	9.9	15.3
Total	11.0	3.3	25.4	39.7

6. Weekly Average Number of Loaded and Empty Cars in Revenue Service That Have Not Moved 48 Hours Or Greater

	Loaded	Empty
Intermodal	108.1	885.4
Grain	571.4	560.3
Coal	90.2	444.0
Crude Oil	19.2	52.0
Automotive	315.3	295.4
Ethanol	122.7	196.6
Fertilizer	94.2	113.7
All Other	2,347.7	3,491.0

EP 724 (Sub-No. 4) - U.S. Rail Service Issues - Performance Data Reporting

Railroad: BNSF	Year: 2017	Reporting Week:	Expiration Date: 12/2019
		Date Week Began: Date Week Ended:	3/18/2017 3/24/2017

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	0		
AR	6		6
AZ	0		
CA	2		2
CO	255	219	36
CT	0		
DE	0		
FL	0		
GA	0		
IA	790	441	349
ID	30		30
IL	115	114	1
IN	0		
KS	561	446	115
KY	0		
LA	0		
MA	0		
MD	0		
ME	0		
MI	0		
MN	1,192	1,132	60
MO	228	228	0
MS	0		
MT	1,540	1,245	295
NC	0		
ND	2,847	2,260	587
NE	1,671	1,015	656
NH	0		
NJ	0		
NM	1		1

NV	0		
NY	0		
OH	0		
OK	216	216	
OR	0		
PA	0		
RI	0		
SC	0		
SD	940	669	271
TN	0		
TX	121		121
UT	0		
VA	0		
VT	0		
WA	670	440	230
WI	87		87
WV	0		
WY	20		20
Total	11,292	8,425	2,867

EP 724 (Sub-No. 4) - U.S. Rail Service Issues - Performance Data Reporting

Railroad: BNSF	Year: 2017	Reporting Week:	Expiration Date: 12/2019
		3/18/2017 3/24/2017	3/18/2017 3/24/2017

8. For the aggregated STCs in Request No. 7, report by State the following: (a) the running total number of orders placed; (b) the running total of orders filled; and (c) for orders which have not been filled, the number of orders that are 1-10 days past due and 11+ days past due.

State	a. Running Total Number of Orders Placed	b. Running Total of Orders Filled	c. Unfilled Orders	
			Number of Orders That Are 1-10 Days Past Due	Number of Orders That Are 11+ Days Past Due
AL				
AR				
AZ				
CA	7	6	1	
CO		131		
CT				
DE				
FL				
GA				
IA	2	41		
ID				
IL				
IN				
KS	1	140	110	
KY				
LA				
MA				
MD				
ME				
MI				
MN	8	87	134	
MO		4	24	
MS				
MT	47	276	98	
NC				
ND	240	574	420	
NE	110	396	49	
NH				
NJ				
NM	1	4		
NV				
NY				
OH				
OK				

OR					
PA					
RI					
SC					
SD		151		220	
TN					
TX	3	110			
UT		3			
VA					
VT					
WA	2	103		27	
WI	24	94			
WV					
WY		20		24	
TOTAL	445	2,140		1,107	0

EP 724 (Sub-No. 4) - U.S. Rail Service Issues - Performance Data Reporting

			OMB Control No. 2140-XXXX	Expiration Date: 12/2019
Railroad: BNSF	Year: 2017	Reporting Week:	Date Week Began:	3/18/2017
			Date Week Ended:	3/24/2017

9. Weekly Average Coal Unit Train Loadings or Carloadings versus Planned Loadings by Coal Production Region		
Region	Loadings Plan	Loadings Average
Powder River Basin	40.0	36.7
Other	3.0	2.9
If "Loadings Plan" data is not being reported, please insert "NR" in the appropriate column and briefly explain the reason in the space provided below:		

10. Average Grain Shuttle Turns per Month By Region And System versus Planned Turns Per Month (Applicable to Class I Carriers Operating a Grain Shuttle Program)		
Region (Please Specify Destination Region)	Average Turns	Planned Turns
System		
CA		
Gulf		
Mexico		
PNW		
West TX		
System		

EP 724 (Sub-No. 4) - U.S. Rail Service Issues - Performance Data Reporting

		OMB Control No. 2140-XXXX		Expiration Date: 12/2019	
Railroad: BNSF	Year: 2017	Reporting Week:	Date Week Began:	3/18/2017	
			Date Week Ended:	3/24/2017	

11. i. Weekly Originated and Received Carloads by 22 Commodity Categories

Railroad	Commodity Group	Commodity Group Code	Originated	Received
BNSF	Chemicals	A	7,166	2,212
BNSF	Coal	B	34,031	58
BNSF	Coke	C	597	47
BNSF	Crushed Stone, Sand and Gravel	D	4,861	1,521
BNSF	Farm Products except Grain	E	525	35
BNSF	Food and Kindred Products	F	2,564	674
BNSF	Grain Mill Products	G	3,013	648
BNSF	Grain	H	11,823	89
BNSF	Iron and Steel Scrap	I	620	71
BNSF	Lumber and Wood Products	J	989	688
BNSF	Metallic Ores	K	3,077	19
BNSF	Metals	L	1,211	610
BNSF	Motor Vehicles and Equipment	M	1,856	3,815
BNSF	Non Metallic Minerals	N	346	82
BNSF	Petroleum Products	O	5,965	1,357
BNSF	Primary Forest Products	P	46	4
BNSF	Pulp, Paper and Allied Products	Q	734	697
BNSF	Stone, Clay and Glass Products	R	1,708	393
BNSF	Waste and Scrap Materials	S	288	58
BNSF	All Other	T	2,667	1,157
BNSF	Containers	U	81,802	6,142
BNSF	Trailers	V	9,921	410

11. ii. Weekly Originated and Received Carloads of Fertilizer (STCC Codes: 2871236, 2871235, 2871238, 2819454, 2812534, 2818426, 2819815, 2818170, 2871315, 2818142, 2818146, 2871244, 2819173, and 2871451)

Railroad	Commodity Group	Commodity Group Code	Originated	Received
BNSF	Fertilizer	A	672	1,764