EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Began:	12/17/2016
			Date Week Ended:	12/23/2016

1. System-Average Train Speed by Train Type for the Reporting Week (MPH)	
Intermodal	32.4
Grain unit	23.2
Coal unit	25.9
Automotive unit	26.4
Crude oil unit	26.8
Ethanol unit	21.5
Manifest	23.4
All Other	21.2

Methodology: **AAR train speed measure. Calculated by dividing train-miles by total hours from origin to destination, less intermediate terminal time. Excludes the following train categories: yard, local, passenger, foreign, and maintenance of way.**

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	
1 Chicago (Proviso), IL	33.0
2 Fort Worth, TX	29.5
3 Houston (Englewood), TX	35.2
4 Livonia, LA	31.8
5 North Little Rock, AR	26.8
6 North Platte East, NE	30.9
7 North Platte West, NE	38.7
8 Pine Bluff, AR	28.5
9 Roseville, CA	32.8
10 West Colton, CA	34.3

Methodology: **AAR terminal dwell measure. Average hours a car resides at the specified terminal location. Begins with train arrival, customer release, or interchange receipt. Ends with train departure, customer placement (actual or constructive), interchange offering or delivery. Excludes cars that move through a terminal on run-through trains. Also excludes stored cars, bad ordered cars, and maintenance of way cars.**

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Began:	12/17/2016
			Date Week Ended:	12/23/2016

3. Total Cars On Line by Car Type for the Reporting Week

Box	22,844
Covered hopper	110,011
Gondola	10,830
Intermodal	14,342
Multilevel (automotive)	12,481
Open hopper	40,508
Tank	68,833
Other	13,663
Total	293,512

Methodology: AAR cars on line measure. Calculated by AAR using Railinc data. Average daily inventory of all freight cars in revenue fleet regardless of location or status. Includes cars located on shortline railroads, cars delivered to customer facilities and stored cars. Excludes maintenance of way cars. Articulated cars are counted as a single unit.

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

Grain	31.2
Coal	8.0
Automotive	17.7
Crude Oil	24.2
Ethanol	37.2
All Other Unit Trains	21.4

Methodology: Measured at origin, from customer release to train departure. Release time is based on the last cut of five or more cars. Includes trains transporting both loaded and empty freight cars. Excludes trains received in interchange from another railroad and intermodal trains.

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						Total
	Crew	Locomotive power	Track maintenance	Mechanical Issue	Other		
					Number	Briefly Explain Cause	
Intermodal	1	0	0	0	0	Customer, Foreign Road, Incidents/Weather, Other	1
Grain unit	1	3	0	16	0		20
Coal unit	1	0	2	7	1		11
Automotive unit	1	0	0	0	1		2
Crude oil unit	0	0	0	0	0		0
Ethanol unit	0	3	0	2	1		6
Other unit	3	6	0	12	1		22
All other trains	3	11	1	12	1		28
Total	10	23	3	49	5		90

Methodology: Cumulative weekly number, based on daily snapshots of active trains held for more than six consecutive hours. No train is counted more than once each week. Excludes yard and local trains.

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	59	10	971	67
Grain	104	84	435	421
Coal	258	410	350	248
Crude Oil	8	19	23	33
Ethanol	8	14	122	378
Automotive	19	33	792	556
All Other	1,657	1,746	10,392	9,308

Methodology: Cumulative weekly number, based on daily snapshots of freight cars in revenue service that have not moved for 48+ hours. Begins with pull from customer facility or interchange receipt, and ends with car placement at customer facility or interchange delivery. Excludes cars in hold status (constructively placed, stored, bad order, offered in interchange, etc.). Excludes empty cars not billed to a specific consignee, non-revenue car movements, and cars billed to Union Pacific Railroad. Excludes cars with no events reported during the past 28 days. Articulated cars are counted as a single unit. No car is counted more than once each week per car cycle.

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Began:	12/17/2016
			Date Week Ended:	12/23/2016

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
AZ	50	0	50
AR	0	0	0
CA	90	0	90
CO	120	0	120
ID	978	305	673
IL	446	295	151
IA	979	875	104
KS	1,760	1,519	241
LA	0	0	0
MN	462	110	352
MO	135	0	135
MT	13	0	13
NE	2,265	1,586	679
NV	0	0	0
NM	0	0	0
OK	148	106	42
OR	31	0	31
TN	0	0	0
TX	131	0	131
UT	10	0	10
WA	9	0	9
WI	38	0	38
WY	0	0	0
Total	**7,665**	**4,796**	**2,869**

Methodology: **Number of grain cars loaded and billed each week by state and type of train service. A carload is counted when the loaded car is released by UP's customer or received in interchange from another railroad. State is based on UP origin. Shuttle / dedicated train service includes cars moving on grain shuttle trains. Other than shuttle / dedicated train service includes all other cars moving on unit grain trains or manifest service.**

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Began:	12/17/2016
			Date Week Ended:	12/23/2016

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

State	a. Running Total Number of Outstanding Car Orders	b. Average Number of Days Late For All Outstanding Grain Car Orders	c. Number of New Car Orders	d. Number of Car Orders Filled	e.1. Number of Orders Canceled By Shipper	e.2. Number of Orders Canceled By Railroad
AZ	50	0	160	16	0	0
AR	7	0	15	9	0	0
CA	0	0	2	3	0	0
CO	117	0	66	52	0	0
ID	66	0	146	131	0	0
IL	1	0	10	9	0	0
IA	0	0	0	1	0	0
KS	355	1	569	110	0	0
LA	0	0	0	0	0	0
MN	26	0	28	76	0	0
MO	7	0	115	28	0	0
MT	9	0	48	28	0	0
NE	232	0	439	249	0	0
NV	0	0	0	0	0	0
NM	0	0	0	0	0	0
OK	176	4	0	141	0	0
OR	6	0	3	22	0	0
TN	0	0	0	0	0	0
TX	9	0	107	16	0	0
UT	0	0	20	3	0	0
WA	18	1	22	20	0	0
WI	0	0	204	1	0	0
WY	0	0	10	0	0	0
TOTAL	**1,079**	**1**	**1,964**	**915**	**0**	**0**

Methodology:

Per the tariff, Union Pacific accepts grain orders for half-month periods. Outstanding orders include unfilled guaranteed orders from prior half-month periods plus all unfilled guaranteed orders for the current half. Average number of days late for outstanding orders: For any outstanding orders from prior half-month periods, we calculate the number of days past the end of the half that the cars were ordered for. New car orders are requests received during the reporting period for the next half-month period and beyond. Car orders filled are the number of empty cars delivered to customers for loading during the reporting period. For offline customers, orders are filled when cars are delivered or offered in interchange to the connecting carrier. The data in columns a and b is calculated from a snapshot of outstanding car orders taken every Monday. The data in columns c, d, and e is based on a reporting period that spans Sunday through Saturday. This metric excludes cars in UP's shuttle train program because those cars are controlled by the shuttle operator.

EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Began:	12/17/2016
			Date Week Ended:	12/23/2016

9. Plan vs. Performance For Grain Shuttle (Or Dedicated Grain Train) Round Trips, By Region, Updated To Reflect The Previous Four Weeks

Region (Please Specify Destination Region)	Trip Performance Previous Four Weeks
AR/TX	3.5
CA/AZ	3.0
Gulf	2.9
Mexico	2.0
PNW	6.6
Other Domestic	5.9

Methodology: **Average trips per shuttle set per month = 720 hours per month / (Average loaded cycle hours + Average empty cycle hours). A loaded cycle is measured from loaded release to empty release. An empty cycle is measured from empty release to loaded release. The average cycle times are calculated for all cycles that closed during the 4-week reporting period. Measure includes routine inspection and preventative maintenance.**

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

Region	Loadings Average Current Week
Powder River Basin	17.3
Illinois Basin	0.4
Uinta Basin	4.7

Methodology: **Average daily count of loaded coal trains released by the mines.**