

# EP 724 - US RAIL SERVICE ISSUES - DATA COLLECTION

Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Began:	12/24/2016
			Date Week Ended:	12/30/2016

1. System-Average Train Speed by Train Type for the Reporting Week (MPH)	
Intermodal	33.7
Grain unit	23.9
Coal unit	27.2
Automotive unit	27.9
Crude oil unit	22.3
Ethanol unit	24.7
Manifest	24.0
All Other	22.7

2. Weekly Average Terminal Dwell Time Measured in Hours Excluding Cars on Run Through Trains	
System Average	41.6

2. Weekly Average Terminal Dwell Time Measured in Hours for 10 Largest Terminals In Terms Of Railcar Capacity	
1 Chicago (Proviso), IL	50.8
2 Fort Worth, TX	39.9
3 Houston (Englewood), TX	49.2
4 Livonia, LA	47.2
5 North Little Rock, AR	49.7
6 North Platte East, NE	49.1
7 North Platte West, NE	50.1
8 Pine Bluff, AR	51.3
9 Roseville, CA	63.1
10 West Colton, CA	52.8

**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.

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**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.

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3. Total Cars On Line by Car Type for the Reporting Week	
Box	22,900
Covered hopper	110,608
Gondola	11,086
Intermodal	14,232
Multilevel (automotive)	12,842
Open hopper	40,470
Tank	69,074
Other	13,886
<b>Total</b>	<b>295,098</b>

**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	29.3
Coal	7.4
Automotive	26.3
Crude Oil	15.3
Ethanol	40.9
All Other Unit Trains	25.4

**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	46	2	0	20	0	68	
Grain unit	38	3	1	18	1	61	
Coal unit	31	3	2	31	0	67	
Automotive unit	21	0	0	18	0	39	
Crude oil unit	5	1	0	3	0	9	
Ethanol unit	21	6	0	16	0	43	
Other unit	49	1	0	87	0	137	
All other trains	0	0	0	1	0	1	
<b>Total</b>	<b>211</b>	<b>16</b>	<b>3</b>	<b>194</b>	<b>1</b>	<b>425</b>	

**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	98	18	1,255	126
Grain	115	253	1,642	1,170
Coal	444	432	1,181	240
Crude Oil	22	16	17	36
Ethanol	26	37	492	894
Automotive	124	132	3,247	1,093
All Other	3,268	3,264	27,191	23,266

**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.

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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	9	0	9
AR	0	0	0
CA	15	0	15
CO	158	108	50
ID	797	100	697
IL	190	0	190
IA	765	655	110
KS	1,196	974	222
LA	0	0	0
MN	616	217	399
MO	23	0	23
MT	34	0	34
NE	1,281	975	306
NV	0	0	0
NM	0	0	0
OK	331	203	128
OR	10	0	10
TN	0	0	0
TX	121	110	11
UT	3	0	3
WA	125	0	125
WI	236	184	52
WY	0	0	0
<b>Total</b>	<b>5,910</b>	<b>3,526</b>	<b>2,384</b>

**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.

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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	194	0	0	16	0	0
AR	14	1	0	3	0	0
CA	2	0	0	0	0	0
CO	166	1	12	20	0	0
ID	144	0	33	69	0	0
IL	10	0	0	1	0	0
IA	0	0	10	0	0	0
KS	879	2	0	151	0	0
LA	0	0	0	0	0	0
MN	37	0	2	38	0	0
MO	119	0	0	0	0	0
MT	32	1	0	8	0	0
NE	678	1	80	127	0	0
NV	0	0	0	0	0	0
NM	0	0	0	0	0	0
OK	286	5	110	1	0	0
OR	8	1	0	2	0	0
TN	0	0	0	0	0	0
TX	107	0	0	13	0	0
UT	15	0	5	2	0	0
WA	17	0	0	21	0	0
WI	173	0	0	0	0	0
WY	5	0	0	0	0	0
<b>TOTAL</b>	<b>2,886</b>	<b>1</b>	<b>252</b>	<b>472</b>	<b>0</b>	<b>0</b>

**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.

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### 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	3.2
CA/AZ	2.5
Gulf	3.0
Mexico	1.9
PNW	5.6
Other Domestic	7.9

**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	16.7
Illinois Basin	0.4
Uinta Basin	3.9

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