Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Began: Date Week Ended:	12/3/2016 12/9/2016
1. System-Average Train Spee Reporting Wee			Date week Elided.	12/3/2010
Intermodal	32.8	Methodology:	AAR train speed measu	re. Calculated by dividing train-miles by tot
Grain unit	22.9		hours from origin to de	stination, less intermediate terminal time.
Coal unit	27.1	1		train categories: yard, local, passenger,
Automotive unit	26.0	1	foreign, and maintenan	
Crude oil unit	24.7	1	<b>U</b> / 11 11 11 11 11 11 11 11 11 11 11 11 1	
Ethanol unit	21.9	1		
Manifest	23.3			242257
All Other	20.8	1		
2. Weekly Average Terminal D Hours Excluding Cars on F				ENTERED Office of Proceedings December 14, 2016
				Office of Proceedings
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit	Run Through Trains 28.7 Dwell Time Measured in als In Terms Of Railcar Y			Office of Proceedings December 14, 2016 Part of Public Record
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL	Run Through Trains 28.7 Well Time Measured in als In Terms Of Railcar Y 30.6	Methodology:		Office of Proceedings December 14, 2016 Part of Public Record
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL 2 Fort Worth, TX	Run Through Trains 28.7 Well Time Measured in als In Terms Of Railcar y <u>30.6</u> 35.0	Methodology:	specified terminal locat	Office of Proceedings December 14, 2016 Part of Public Record
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL 2 Fort Worth, TX 3 Houston (Englewood), TX	Run Through Trains 28.7 Well Time Measured in als In Terms Of Railcar y 30.6 35.0 35.2	Methodology:	specified terminal locat release, or interchange	Office of Proceedings December 14, 2016 Part of Public Record asure. Average hours a car resides at the tion. Begins with train arrival, customer receipt. Ends with train departure, customer
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL 2 Fort Worth, TX 3 Houston (Englewood), TX 4 Livonia, LA	Run Through Trains 28.7 Well Time Measured in als In Terms Of Railcar y 30.6 35.0 35.2 36.5	Methodology:	specified terminal locat release, or interchange placement (actual or co	Office of Proceedings December 14, 2016 Part of Public Record asure. Average hours a car resides at the tion. Begins with train arrival, customer receipt. Ends with train departure, custome onstructive), interchange offering or delivery
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL 2 Fort Worth, TX 3 Houston (Englewood), TX 4 Livonia, LA 5 North Little Rock, AR	Run Through Trains 28.7 Dwell Time Measured in als In Terms Of Railcar y 30.6 35.0 35.2 36.5 28.0	Methodology:	specified terminal locat release, or interchange placement (actual or co Excludes cars that mov	Office of Proceedings December 14, 2016 Part of Public Record asure. Average hours a car resides at the tion. Begins with train arrival, customer receipt. Ends with train departure, custome onstructive), interchange offering or delivery ve through a terminal on run-through trains
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL 2 Fort Worth, TX 3 Houston (Englewood), TX 4 Livonia, LA 5 North Little Rock, AR 6 North Platte East, NE	Run Through Trains 28.7 Well Time Measured in als In Terms Of Railcar y 30.6 35.0 35.2 36.5 28.0 27.1	Methodology:	specified terminal locat release, or interchange placement (actual or co Excludes cars that mov Also excludes stored ca	Office of Proceedings December 14, 2016 Part of Public Record asure. Average hours a car resides at the tion. Begins with train arrival, customer receipt. Ends with train departure, custom onstructive), interchange offering or delivery ve through a terminal on run-through trains
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL 2 Fort Worth, TX 3 Houston (Englewood), TX 4 Livonia, LA 5 North Little Rock, AR 6 North Platte East, NE 7 North Platte West, NE	Run Through Trains 28.7 Well Time Measured in als In Terms Of Railcar y 30.6 35.0 35.2 36.5 28.0 27.1 31.2	Methodology:	specified terminal locat release, or interchange placement (actual or co Excludes cars that mov	Office of Proceedings December 14, 2016 Part of Public Record asure. Average hours a car resides at the tion. Begins with train arrival, customer receipt. Ends with train departure, customer
Hours Excluding Cars on F System Average 2. Weekly Average Terminal D Hours for 10 Largest Termina Capacit 1 Chicago (Proviso), IL 2 Fort Worth, TX 3 Houston (Englewood), TX 4 Livonia, LA 5 North Little Rock, AR 6 North Platte East, NE	Run Through Trains 28.7 Well Time Measured in als In Terms Of Railcar y 30.6 35.0 35.2 36.5 28.0 27.1	Methodology:	specified terminal locat release, or interchange placement (actual or co Excludes cars that mov Also excludes stored ca	Office of Proceedings December 14, 2016 Part of Public Record asure. Average hours a car resides at the tion. Begins with train arrival, customer receipt. Ends with train departure, custom onstructive), interchange offering or delivery ve through a terminal on run-through trains

			Date Week Began:	12/3/2016		
Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Ended:	12/9/2016		
3. Total Cars On Line by Ca	r Type for the Reporting		-	· · · · · · · · · · · · · · · · · · ·		
Wee	k					
Box	23,218	Methodology:	AAR cars on line meas	sure. Calculated by AAR using Railinc data. Average daily inventory of all freight cars in revenue		
Covered hopper	109,854		regardless of location or status. Includes cars located on shortline railroads, cars delivered to customer facilities and cars. Excludes maintenance of way cars. Articulated cars are counted as a single unit.			
Gondola	10,710					
Intermodal	14,469					
Multilevel (automotive)	12,622					
Open hopper	40,364					
Tank	69,295					
Other	13,684					
Total	294,216					
4. Weekly Average Dwel	I Time at Origin for Unit					
Train Shipments Me	easured in Hours					
Grain	22.1	Methodology:	Measured at origin, from	om customer release to train departure. Release time is based on the last cut of five or more cars.		
Coal	5.7		Includes trains transpo	orting both loaded and empty freight cars. Excludes trains received in interchange from another		
Automotive	19.6		railroad and intermoda	al trains.		
Crude Oil	14.0					

	5. Weekly Total Number of Trains Held Short of Destination or Scheduled Interchange for Longer than 6 Hours by Train Type and Cause						
				Cause			
Train Type	Crew	Locomotive power	Track maintenance	intenance Mechanical Issue	Other		Total
	Crew	Locomotive power	Track maintenance		Number	Briefly Explain Cause	Total
Intermodal	1	1	1	0	3		6
Grain unit	2	2	0	0	19		23
Coal unit	3	3	0	0	28	1	34
Automotive unit	1	0	0	0	4	Customer, Fereign Bood	5
Crude oil unit	0	0	0	0	0	Customer, Foreign Road, Incidents/Weather, Other	0
Ethanol unit	0	0	0	0	3		3
Other unit	0	2	1	0	11		14
All other trains	4	1	0	1	32		38
Total	11	9	2	1	100		123

Methodology:

Ethanol

All Other Unit Trains

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.

	Greater Tha	n 120 Hours	Greater Than 48 but Less than or Equal to 120 Hours	
	Loaded	Empty	Loaded	Empty
Intermodal	19	12	447	49
Grain	46	64	583	553
Coal	112	30	1,163	339
Crude Oil	4	4	19	23
Ethanol	12	29	314	194
Automotive	53	69	729	725
All Other	1,257	1,494	10,774	8,548

12.3

15.0

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.

Dellare I. Halen Deelf	No	Barratian West	Date Week Began:	12/3/20
Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Ended:	12/9/201
01136 (sorghum grains), 0113 billed" includes cars in shuttl in shuttle service (or dedicate		pybeans), 01341 (beans, dry), 01342 (peas, dry), and 01343 and other ordering systems; and, private cars. Additiona	): 01131 (barley), 01132 (corn), 01133 (oats), 01135 (rye), (cowpeas, lentils, or lupines). "Total grain cars loaded and Ily, please separately report the total cars loaded and billed	
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	52	0	52	
AR	1	0	1	
CA	96	0	96	
CO	265	105	160	
ID	1,705	726	979	
IL	156	0	156	
IA	884	749	135	
KS	1,692	1,201	491	
LA	0	0	0	
MN	324	109	215	
MO	138	0	138	
MT	15	0	15	
NE	2,072	1,836	236	
NV	0	0	0	
NM	0	0	0	
ОК	250	108	142	
OR	2	0	2	
TN	0	0	0	
ТХ	18	0	18	
UT	14	0	14	
WA	1	0	1	
WI	189	181	8	
WY	5	0	5	
Total	7,879	5,015	2,864	
	÷	÷	· · · · · · · · · · · · · · · · · · ·	

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.

Railroad: Union Pacific	Year: 2016	Penerting Week	Date Week Began:	12/3/2016
Railload. Officit Facilic	fear: 2016	Reporting Week:	Date Week Ended:	12/9/2016

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	18	0	0	50	0	0
AR	0	0	17	2	0	0
CA	0	0	42	78	0	0
CO	66	0	183	15	0	0
ID	79	0	189	123	0	0
IL	0	0	10	0	0	0
IA	0	0	0	2	0	0
KS	324	9	509	156	0	0
LA	0	0	0	0	0	0
MN	12	1	139	64	0	0
MO	7	0	134	122	0	0
MT	16	0	37	14	0	0
NE	424	0	263	97	0	0
NV	0	0	0	0	0	0
NM	0	0	0	0	0	0
OK	385	3	28	42	0	0
OR	0	0	43	26	0	0
TN	0	0	0	0	0	0
ТХ	0	0	32	0	0	0
UT	6	0	5	6	0	0
WA	14	0	19	11	0	0
WI	105	0	239	7	0	0
WY	0	0	0	5	0	0
TOTAL	1,456	3	1,889	820	0	0

#### Methodology:

Per the tariff, Union Pacific accepts grain orders for half-month periods. <u>Outstanding orders</u> include unfilled guaranteed orders from prior half-month periods plus all unfilled guaranteed orders for the current half. <u>Average number of days late for outstanding orders</u>: 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. <u>New car orders are requests received during the reporting period for the next half-month period and beyond</u>. <u>Car orders filled</u> 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.

Railroad: Union Pacific	Noor: 2016	Deperting Week	Date Week Began:	12/3/2016
Railroad: Union Pacific	Year: 2016	Reporting Week:	Date Week Ended:	12/9/2016
	or Grain Shuttle (Or Dedicate ated To Reflect The Previou		, Ву	
(Please Specify )		formance Four Weeks		
AR/TX 3.3			-	
CA/AZ		2.9		
Gulf		2.9		
Mexico	2.0			
PNW		6.8		
Other Domestic		10.1		

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	18.7		
Illinois Basin 0.3			
Uinta Basin	5.4		

Methodology: Average daily

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