# COMMUTER RAIL SYSTEM ON-TIME PERFORMANCE REPORT August 2015



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This report presents an analysis of the August 2015 train delays as reported for Metra's eleven commuter rail lines. On-time is defined, for this analysis, as those regularly scheduled trains arriving at their last station stop less than six minutes behind schedule. Trains that are six minutes or more behind schedule, including annulled trains (trains that do not complete their scheduled runs), are regarded as late. "Extra" trains (trains added to handle special events but not shown in the regularly published timetables) are excluded from on-time performance calculations unless shown in special-event schedules that include all intermediate station stop times and are distributed publicly via Metra's website or on paper flyers. Cancelled (not annulled) trains and non-revenue trains are also excluded from on-time performance calculations.

### **On-Time Performance Tables**

Table 1 presents the number of train delays by rail line and service period. During August 2015, Metra operated 17,231 scheduled trains, including scheduled "extras", if any. 631 of these trains were delayed (late or annulled), representing an on-time performance rate of 96.3%. Table 2 lists on-time percentages by line for each month and year since 2010.

Table 3 lists each train that was on time for less than 85% of its weekday runs in August 2015, in order of line, train, and dates delayed. The codes in the 'Delay Code' column of Table 3 are defined in Table 4 and shown sorted by delay-cause category and carrier designation in Table 5. Effective January 1, 2012, and January 1, 2014, Metra is using an expanded set of delay codes, to provide more detail about the cause of and responsibility for each train delay.

Table 6.a shows the frequency of train delays by delay-cause control and by line during August 2015. Of the 631 delays systemwide in August 2015, all but 275 (44%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous three Augusts, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in August 2015, 48 fewer delays than the average over the previous three Augusts were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 5,749 delays in 2015, all but 2,342 (41%) were beyond Metra's control.

Table 7 provides a daily listing of the number of delays by line and branch for August 2015.

Table 8.a shows the frequency of train delays by delay-cause category and by line during August 2015. Table 8.b shows the average frequencies over the previous five Augusts, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 631 delays systemwide in August 2015, 277 less than the average over the previous five Augusts. Table 9.a shows delays from the beginning of the year through August 2015. Table 9.b shows the average frequencies from the beginning of the year through August of each of the previous five years, and Table 9.c shows the differences between Table 9.a and Table 9.b. Tables 10.a and 10.b display the systemwide frequency of train delays by cause and by month, for 2015 and 2014 respectively, and Table 10.c shows the difference between the two. From January through August of 2015, a total of 5,749 trains were delayed, compared to 9,246 trains delayed in the same eight months of 2014.

As of January 2015, Tables 8 through 10 are enhanced to show the total numbers of primary and secondary train delays for freight interference, signal/switch, non-locomotive, and locomotive delays. Also, delays by cause are now separated into 'Metra/PSA' and 'Foreign' designations, where applicable. 'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of

Service Agreement partners (BNSF and UP) in commuter rail operation. 'Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations. See Table 5 for a detailed breakdown of delay codes by cause category and carrier designation.

Table 11 shows, by line and month, all train delays caused by freight operations over the past 24 months. In August 2015 freight operations delayed 89 trains systemwide, compared to 153 a year earlier. Tables 12.a and 12.b display the frequency of lift-deployment train delays by line and month, for 2015 and 2014 respectively. A total of 10 trains were delayed by lift deployment in August 2015.

A review of August 2015 late trains by duration of delay is shown in Table 13. The range with the greatest number of delays was, as usual, six-to-ten minutes, accounting for 48.7% of all late trains. Table 14 shows that the average length of delay was 16.0 minutes in August 2015. It should be noted that these averages relate only to reportable delays (i.e., trains late by six minutes or more).

# **Changes in On-Time Performance Reporting Calculations** (effective with the May 2011 On-Time Performance Report)

### "Extra" Trains

"Extra" trains (trains added to handle special events but not shown in the regularly published schedules) are excluded from on-time performance calculations, except for those "extra" trains whose special-event schedules include all intermediate station stop times and are distributed publicly via Metra's website or on paper flyers. Prior to May 2011, all "extra" trains were included in the count of all trains for the purpose of calculating on-time performance and were always reported as on-time.

Intermediate station departure times and final station arrival times for some "extra" trains are either unknown (departures of some "extra" trains are held until after the completion of the respective special event) or not published. On-time performance for these two types of "extra" trains cannot be calculated, as arrival times are not known ahead of time; these trains are therefore excluded from on-time performance calculations. However, on-time performance can be calculated for "extra" trains that have full published schedules.

## Temporary Schedules and Notices, for Construction and Special Events

Planned construction projects or special events can adversely affect on-time performance. Metra occasionally publishes full temporary schedules, which supersede the standard published schedules, to inform riders of possible delays or modifications to regular service. Metra also may publish informational notices to accompany temporary schedules. On-time performance is calculated using the temporary schedules and any accompanying notices.

(Prior to May 2011, some trains affected by planned construction work arrived at their last station stops six minutes or more late, but were counted as on-time because a construction time allowance was deducted from the actual delay time. This allowance, typically five or ten minutes (but occasionally more) depending on the nature of the scheduled work, was assigned in advance to all off-peak and reverse-peak trains that might be affected by a particular project, but never to peak period/peak direction trains. For such trains, the assigned construction allowance was added onto the scheduled arrival time at the destination station for the purpose of calculating the total minutes of delay.)

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TABLE 1: SCHEDULED AND DELAYED TRAINS, AND ON-TIME PERFORMANCE BY SERVICE PERIOD AND LINE August 2015

				W	eekday	S					Scheduled         Late         On-Time         Scheduled         Late         O           155         11         92.9%         102         2           230         18         92.2%         102         3           150         1         99.3%            240         14         94.2%         100         1						Total	
	]	Peak*		Off	f-Peak*	*		Total		Sa	turday	s	Sunday	s & Ho	lidays			
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled					Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time
BNSF	1,134	39	96.6%	840	51	93.9%	1,974	90	95.4%	155	11	92.9%	102	2	98.0%	2,231	103	95.4%
Elec -ML	945	4	99.6%	714	15	97.9%	1,659	19	98.9%	230	18	92.2%	102	3	97.1%	1,991	40	98.0%
-BI	294	4	98.6%	483	1	99.8%	777	5	99.4%	150	1	99.3%				927	6	99.4%
-SC	<u>357</u>	<u>2</u>	99.4%	<u>777</u>	<u>16</u>	97.9%	<u>1,134</u>	<u>18</u>	98.4%	<u>240</u>	<u>14</u>	94.2%	<u>100</u>	<u>1</u>	99.0%	<u>1,474</u>	<u>33</u>	97.8%
Subtotal	1,596	10	99.4%	1,974	32	98.4%	3,570	42	98.8%	620	33	94.7%	202	4	98.0%	4,392	79	98.2%
Heritage	126	18	85.7%				126	18	85.7%							126	18	85.7%
Milw -N	525	20	96.2%	735	30	95.9%	1,260	50	96.0%	125	5	96.0%	105	21	80.0%	1,490	76	94.9%
-W	<u>567</u>	<u>20</u>	96.5%	<u>651</u>	<u>21</u>	96.8%	1,218	<u>41</u>	96.6%	<u>125</u>	<u>4</u>	96.8%	<u>96</u>	<u>1</u>	99.0%	<u>1,439</u>	<u>46</u>	96.8%
Subtotal	1,092	40	96.3%	1,386	51	96.3%	2,478	91	96.3%	250	9	96.4%	201	22	89.1%	2,929	122	95.8%
NCS	231	13	94.4%	231	21	90.9%	462	34	92.6%							462	34	92.6%
RI	756	22	97.1%	693	24	96.5%	1,449	46	96.8%	161	3	98.1%	141	3	97.9%	1,751	52	97.0%
sws	231	14	93.9%	399	25	93.7%	630	39	93.8%	30	2	93.3%				660	41	93.8%
UP -N	630	13	97.9%	820	18	97.8%	1,450	31	97.9%	137	27	80.3%	95	11	88.4%	1,682	69	95.9%
-NW	693	18	97.4%	672	19	97.2%	1,365	37	97.3%	123	9	92.7%	77	8	89.6%	1,565	54	96.5%
- <b>W</b>	<u>567</u>	<u>20</u>	96.5%	<u>672</u>	<u>27</u>	96.0%	<u>1,239</u>	<u>47</u>	96.2%	<u>102</u>	<u>6</u>	94.1%	<u>92</u>	<u>6</u>	93.5%		<u>59</u>	95.9%
Subtotal	1,890	51	97.3%	2,164	64	97.0%	4,054	115	97.2%	362	42	88.4%	264	25	90.5%	4,680	182	96.1%
SYSTEM	7,056	207	97.1%	7,687	268	96.5%	14,743	475	96.8%	1,578	100	93.7%	910	56	93.8%	17,231	631	96.3%

<sup>\*</sup>Includes peak direction trains operating during weekday peak periods. \*\*Includes all other weekday trains.

Delays data for most recent month is final (09/14/15) version from TOPS.

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TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

													JAN-	
LINE YEAR	JAN	<b>FEB</b>	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AUG	AVG
														•
BNSF 2010	97.8	97.4	96.4	95.7	95.2	89.0	94.7	94.6	96.7	94.8	94.7	96.2	95.1%	95.2%
2011	96.2	89.6	97.4	96.9	93.0	93.0	83.3	92.3	90.4	92.8	94.0	95.4	92.8%	92.9%
2012	94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	95.4%	96.0%
2013	95.8	93.9	94.6	93.3	96.0	88.5	95.2	97.1	97.2	94.0	95.8	92.2	94.4%	94.5%
2014	78.6	84.6	95.6	92.0	82.2	82.0	94.1	91.4	94.1	92.2	95.2	94.1	87.6%	89.7%
2015	90.9	90.1	96.8	97.5	96.6	92.4	93.0	95.4					94.1%	94.1%
2010-2014 average	92.5	92.6	95.8	95.3	92.8	88.9	92.5	93.9	95.3	94.1	94.9	95.3	93.1%	93.7%
El4-:- 2010	07.7	00.1	00.4	07.0	00.2	05.5	07.6	00.0	00.0	00.2	07.0	07.5	07.70	07.00/
Electric 2010 2011	97.7 98.6	98.1 95.1	98.4 98.1	97.9 97.7	98.3 97.7	95.5 95.1	97.6 94.6	98.0 96.6	98.0 97.0	98.2 94.4	97.8 97.2	97.5 98.7	97.7% 96.7%	97.8% 96.8%
2011	93.7	98.4	98.1 97.9	98.7	98.0	93.1	94.0	90.0	97.0	96.6	97.2	98.7	90.7%	97.3%
2012	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.3	97.3	96.9	97.0	97.3%	97.3%
2013	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	97.0%	97.5%
2015	96.3	95.4	98.4	98.4	98.3	97.7	96.5	98.2	70.7	70.4	76.0	76.7	97.4%	97.4%
2010-2014 average		97.2	98.1	98.2	98.1	96.6	95.7	97.4	97.7	97.0	97.5	98.0	97.2%	97.3%
2010 2011 4 1014	70.0	, <u>_</u>	70.1	70.2	7011	70.0	,,,,		<i></i>	,,,,	,,,,	70.0	> / · · = / · ·	>71.070
Heritage 2010	92.5	93.3	89.1	91.7	85.0	83.3	87.3	89.4	84.1	90.5	92.9	84.1	88.9%	88.5%
2011	92.1	77.2	94.2	96.0	98.4	89.4	73.3	92.0	84.1	78.6	80.8	75.4	89.4%	86.2%
2012	95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	95.5%	95.6%
2013	97.0	99.2	94.4	97.7	94.7	92.5	97.7	99.2	97.5	96.4	98.3	92.1	96.6%	96.4%
2014	79.5	75.8	88.1	93.2	92.1	94.4	94.7	93.7	92.1	97.8	96.5	98.5	89.0%	91.4%
2015	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7					90.1%	90.1%
2010-2014 average	91.2	89.2	92.1	95.4	93.7	90.3	89.2	94.0	91.0	91.9	92.1	89.3	91.9%	91.6%
Milw - N 2010	96.1	96.4	94.2	94.5	88.4	91.6	93.5	93.7	98.4	93.1	94.8	96.6	93.5%	94.3%
2011	92.9	85.3	95.7	95.5	89.2	84.4	78.3	87.6	92.3	88.1	91.9	93.9	88.7%	89.6%
2012	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	93.1%	93.8%
2013	95.5	92.4 81.9	94.1	95.7	95.3	89.6	92.8	93.6 95.2	94.4	93.3	95.7	87.5	93.7%	93.3%
2014 2015	73.1 91.8	87.9	89.5 93.5	97.9 95.1	95.1 95.4	91.1 94.8	96.0 97.1	93.2 94.9	95.5	96.2	95.4	93.5	90.0% 93.9%	91.7% 93.9%
2010-2014 average		90.5	93.5	95.1	92.3	90.0	89.2	92.6	95.0	93.2	94.6	93.4	93.9%	93.9%
2010-2014 average	70.5	70.5	75.5	75.0	72.3	70.0	67.2	72.0	75.0	73.2	74.0	73.4	71.070	72.070
Milw - W 2010	96.0	95.9	97.3	97.9	95.7	93.9	95.6	96.3	97.4	94.8	95.1	95.9	96.1%	96.0%
2011	96.0	87.2	97.4	95.2	95.1	88.0	84.4	92.5	95.6	98.0	89.1	96.5	92.1%	93.0%
2012	94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	95.3%	94.7%
2013	96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	94.2%	94.2%
2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	92.3%	93.5%
2015	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8					95.7%	95.7%
2010-2014 average	e 93.5	91.6	95.6	96.8	96.0	92.1	92.2	93.9	94.4	95.7	94.0	95.2	94.0%	94.3%
NCS 2010		94.5	92.3	91.1	96.8	90.1	90.9	94.0	95.9	92.6	93.9	90.3	93.2%	93.2%
2011		88.3	93.5	90.9	92.9	88.8	87.3	92.1	93.1	93.5	83.7	92.4	91.2%	
2012	94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	91.7%	92.4%
2013		87.5	93.7	90.9	94.0	92.7	93.6	95.0	92.5	93.1	90.0	87.4	92.9%	92.2%
2014		81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	87.9%	89.9%
2015		82.5	92.6	94.8	95.7	94.8	96.0	92.6	04.5	02.9	01.4	01.2	93.0%	93.0%
2010-2014 average	e 91.5	89.2	92.5	90.9	93.5	91.1	89.8	92.3	94.5	92.8	91.4	91.3	91.4%	91.7%

TABLE 2 (continued): ON-TIME PERFORMANCE BY LINE/BRANCH

														JAN-	
LINE Y	EAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AUG	AVG
·															
RI	2010	95.4	96.7	97.6	97.1	97.4	94.3	96.8	96.6	95.7	96.6	96.4	95.5	96.5%	96.3%
	2011	97.8	89.5	97.7	96.0	95.6	88.8	83.4	94.0	94.8	96.9	96.6	96.5	93.0%	94.0%
	2012	94.3	96.8	94.8	96.1	95.8	94.1	92.9	93.7	96.8	95.6	97.1	96.4	94.8%	95.3%
	2013	96.5	98.1	97.9	94.0	95.5	91.5	93.6	95.5	98.3	96.5	91.7	94.0	95.3%	95.3%
	2014	82.5	83.4	93.4	95.3	95.7	92.5	95.1	97.2	96.6	97.3	97.9	98.6	91.9%	93.8%
	2015	97.4	95.3	98.9	98.7	97.8	97.4	94.2	97.0					97.1%	97.1%
2010-2014 av	erage	93.2	93.0	96.3	95.7	96.0	92.2	92.4	95.4	96.4	96.6	95.9	96.2	94.3%	95.0%
SWS	2010	94.6	93.4	96.9	97.2	94.6	89.6	90.5	94.4	96.6	96.2	94.3	91.4	93.9%	94.2%
	2011	95.1	89.7	96.2	95.3	94.0	85.1	88.9	90.3	91.3	92.4	92.8	94.1	91.9%	92.1%
	2012	94.2	96.6	94.8	95.3	95.8	93.2	95.3	94.5	93.8	94.3	93.7	96.3	94.9%	94.8%
	2013	94.7	97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	96.0%	95.6%
	2014	83.0	92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	92.3%	92.6%
	2015	94.7	89.7	95.6	96.1	96.3	91.1	92.4	93.8					93.7%	93.7%
2010-2014 av	erage	92.3	93.8	95.8	96.1	94.5	90.3	93.4	94.2	94.6	94.6	92.9	93.8	93.8%	93.9%
	2010	93.9	96.8	96.5	97.2	94.3	91.6	94.6	92.5	94.5	97.5	94.7	96.2	94.7%	95.0%
	2011	96.4	86.7	94.9	95.5	95.8	91.5	85.1	90.6	91.8	91.6	94.2	96.5	92.2%	92.6%
	2012	94.6	98.4	97.9	98.1	95.1	95.1	95.9	95.1	96.3	97.3	96.6	95.8	96.3%	96.4%
	2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9	97.0	96.5	96.9	98.0	96.3%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	96.1%	96.7%
	2015	98.6	95.6	98.3	97.1	97.7	98.2	97.0	95.9					97.3%	97.3%
2010-2014 av	erage	94.9	94.4	96.9	97.0	95.8	93.6	93.9	94.2	95.4	96.1	96.0	97.0	95.1%	95.4%
	2010	96.7	97.2	97.3	97.7	96.1	96.7	96.1	94.9	97.6	96.4	95.4	96.8	96.6%	96.6%
	2011	97.0	89.4	97.9	97.3	94.6	93.4	91.2	93.3	95.1	97.6	95.8	95.0	94.4%	94.9%
	2012	95.9	98.6	96.4	98.9	95.9	96.0	94.8	96.7	97.8	94.2	94.6	96.6	96.6%	96.3%
	2013	96.3	97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	94.4%	94.6%
	2014	86.6	91.1	96.3	98.6	95.6	95.2	94.7	97.4	98.3	95.0	97.1	96.2	94.5%	95.2%
	2015	96.0	91.6	97.6	96.3	96.9	96.8	94.1	96.5					95.8%	95.8%
2010-2014 av	erage	94.4	94.8	96.8	97.5	95.1	94.1	94.2	95.2	97.0	95.5	95.5	95.8	95.3%	95.5%
															1
	2010	96.6	96.7	97.9	95.9	94.6	91.0	90.1	94.1	95.2	95.9	94.8	91.9	94.6%	94.5%
	2011	93.5	87.3	93.8	94.5	93.3	89.0	85.9	89.3	90.8	91.6	92.0	89.4	90.9%	90.9%
	2012	93.1	97.1	95.2	95.5	95.6	92.4	93.8	94.3	97.2	97.2	96.0	96.4	94.6%	95.3%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	94.4%	94.5%
	2014	85.9	90.9	94.4	96.7	96.4	94.8	96.4	94.3	96.7	94.6	95.9	96.2	93.7%	94.4%
	2015	93.9	91.1	96.1	96.3	97.5	93.9	93.9	95.9	05.0	05.3	04.5	00.1	94.8%	
2010-2014 av	erage	93.1	93.7	95.6	95.4	94.7	91.3	92.3	93.0	95.3	95.2	94.5	93.1	93.6%	93.9%
GERGEOTE :	0040	0.6.5	0.5.0	05.0	0.5 =	05.5	00.0	05.0	0.5.	0.5.0	0.5.5	05.5	05-	0.5	0.7.0
	2010	96.5	96.9	97.0	96.7	95.5	92.9	95.0	95.4	96.8	96.2	95.7	95.7	95.7%	95.9%
	2011	96.4	89.8	96.8	96.2	94.8	91.1	87.3	92.7	93.8	93.7	94.0	95.6	93.2%	93.6%
	2012	94.3	97.4	96.1	97.2	96.3	94.7	94.0	95.2	96.2	95.9	95.8	96.9	95.7%	95.8%
	2013	96.8	96.1	96.7	95.7	95.9	92.4	94.0	95.2	96.4	95.9	95.1	93.8	95.4%	95.4%
	2014	85.6	89.3	94.9	96.8	94.5	93.1	95.6	95.7	96.8	95.9	96.9	96.5	93.2%	94.3%
	2015	94.9	92.5	97.0	97.2	97.2	95.8	95.3	96.3	06.0	05.5	05.5	05.7	95.8%	95.8%
2010-2014 av	erage	93.9	94.0	96.3	96.5	95.4	92.8	93.2	94.9	96.0	95.5	95.5	95.7	94.6%	95.0%

Delays data for most recent month is final (09/14/15) version from TOPS.

P:\ONTIME\report\[Delays&TrainsByServPeriod.xls\]OTPbyLine&Month 9/14/2015

'2010-2014 average' calculated by summing the delays over the five years, summing the trains run over the five years, and calculating their ratio.

Due to changes in calculation methodology, on-time performance figures from May 2011 onward are not exactly comparable to prior months' figures.

# TABLE 3: LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME August 2015

Line	Train	Date	Late		Delay Explanation
BNSF	1250	Tue, Aug 04	31	VF	TRAIN STOPPED OUTSIDE OF CUS IN UDE- NO CHARGE LIGHT
819	% OT	Thu, Aug 13	14	KD1	WORKING AROUND 1228
		Tue, Aug 18	7	R1	FOLLOWING 1248
		Mon, Aug 24	7	R	METX 186 WOULD NOT LOAD AT LISLE ENGINEER DUMPED AIR AND RESET
BNSF	1252	Tue, Aug 04	18	VF1	BLOCKED BY 1250
819	% OT	Thu, Aug 13	9	KD1	WORKING AROUND 1228
		Tue, Aug 18	10	C	10 MPH AT LISLE
		Mon, Aug 24	0	E1	1242S EQUIPMENT NOT REPAIRED USED 1211S EQUIPMENT, DEPARTED 17" LATE
BNSF	1293	Mon, Aug 03	13	C	MOW WORKING MT1 HIGHLANDS/ 1293 WORKED MIDDLE FROM LAGRANGE-HIGHLANDS
769	% OT	Tue, Aug 04	8	CC	MOW WORKING @ BERWYN MT1/ MOW WORKING @ FAIRVIEW MT3
		Fri, Aug 14	7	IW	SLOW PASSENGER UNLOADING WEATHER
		Thu, Aug 20	24	JM	PASSENGER MEDICAL EMERGENCY @ CICERO
		Fri, Aug 21	8	I	PASSENGER HANDLING
BNSF	1296	Tue, Aug 04	10	CC	HOLDING FOR THE H BRCKCK1 04A @ DGM ON MT1 DUE TO MOW WORKING MT3
769	% OT	Fri, Aug 07	7	CA	SCHEDULED TRACK WORK CP HARRISON
		Tue, Aug 11	17	G	BOX 2S PROSPECT AVE TO HIGHLAND AVE DUE TO TRACK INDICATION MT HIGHLANDS
		Thu, Aug 20	7	JM1	PASSENGER MEDICAL EMERGENCY 1293
		Mon, Aug 31	25	CM	TRACK INDICATION
BNSF	1298	Mon, Aug 03	27	GF	H NTWBRC1 01 TAKING SWITCH ON HAND BRC/ 1298 LAP BACK MT3-MT1 @ CICERO
769	% OT	Tue, Aug 04	10	CC	MOW WORKING @ FAIRVIEW AVE
		Thu, Aug 06	14	AM	AMTRAK 6 BLOCKING ROUTE INTO CUS CAUSING 14 MINUTE DELAY TO 1298
		Mon, Aug 17	13	IW	FLASH FLOOD WARNING MP 0-15/SEVERE WEATHER PASSENGER HANDLING ISSUES
		Tue, Aug 18	18	KW	S SEACHC1 10A 5 MINUTE DELAY DROPPING OFF PILOT @ EOLA/ WORKING N SIDE FAIRVIEW- HINSDALE DUE TO DOWNED POWER LINES @ CLARENDON HILLS
BNSF	1299	Mon, Aug 03	25	GF1	DELAYED DEPARTURE DUE TO LATE ARRIVAL OF EQUIPMENT/ H NTWBRC1 01
719	% OT	Tue, Aug 04	12	K	CAR STRUCK ON TRACKS @ GARFIELD AVE MP 16.83
		Thu, Aug 06	22	AM1	LATE FLIP DUE TO AMTRAK 6 BLOCKING ROUTE INTO CUS
		Fri, Aug 14	7	I	PASSENGER HANDLING
		Mon, Aug 17	21	IW	LATE ARRIVAL OF EQUIPMENT/ WEATHER RELATED/ FLASH FLOOD WARNING MP 0-15
		Tue, Aug 18	16	D1	LATE ARRIVAL OF EQUIPMENT/ SSEACHC1 10A DROPPING OFF PILOT @ EOLA/ WORKING N SIDE FAIRVIEW-HINSDALE DUE TO DOWNED POWER LINES NEAR CLARENDON
НС	917	Wed, Aug 05	7	D	M XO36 WAITING FOR UP ISCG-04 129C TO CLEAR
769	% OT	Mon, Aug 10	9	D	7M CP BRIGHTON WAITING FOR YPREL 5000FT TO CLEAR& 7M CP CANAL WAITING FOR VBLUKCK110 7200FT TO CLEAR
		Tue, Aug 11	9	D	13M XO47 WAITING FOR LOCAL JOB L545 TO RUN AROUND TRAIN AND CLEAR INTO GLEN YARD
		Tue, Aug 18	17	D	24M CP BRIGHTON WAITING FOR ZLAAH 6400FT
		Wed, Aug 19	8	RF	2M CP CERMAK STOP SIGNALà2M CP BRIGHTON STOP SIGNALà2M CORWITH STOP SIGNAL
НС	919	Tue, Aug 18	7	D1	10M FOLLOWING AMTRAK 305, FREIGHT AHEAD
719	% OT	Wed, Aug 19	122	E	89M SUMMIT ENGINE 108 WILL NOT LOAD, HAD TO BE PUSHED TO JOLIET BY 921
		Thu, Aug 20	10	AM	6M ROOSEVELT STOP SIGNALà10M FOLLOWING AMTRAK 303
		Mon, Aug 24	8	GF	11M CP CANAL TO JUSTICE RESTRICTED SPEED
		Tue, Aug 25	7	RF	4M CORWITH FOLLOWING AMTRAK 305à5M XO36 UNABLE TO REACH UP DISPR FOR LINE UP
		Wed, Aug 26	9	RF	7M CORWITH STOP SIGNAL WAITING FOR CN 4M 529A PARKVIEW LANE
НС	921	Fri, Aug 07	27	W	921 RAN TO LEMONT ACCT GAS LEAK à34M XO47 AMTK 21 BACKING UP à12M CP CANAL FOR X TRAFFIC (IHB THOUGHT 921 WAS EMPTY ACCT CN MAINS CLOSED) à
819	% OT	Mon, Aug 17	7	DE	DELAYED 22M (626P/644P) @ BRIGHTON ACCT X-TRAFFIC STOPPED IN PLANT WITH ENGINE PROBLEMS (ZLACNYC, BN7222)
		Tue, Aug 18	10	RF	6M CORWITH STOP SIGNAL BNSF WAITING FOR INSTRUCTIONS FROM CNà2M LEMOYNE SPEED RESTRICTIONà2M LAMBERT XO ?
		Wed, Aug 19	75	E1	13M CP BRIGHTON WAITING FOR TIE GANG TRAVELING THRU TO CLEAR PLANTà30M FLAGING 47 XO AND TYING ONTO 921 TO SHOVE TO JOLIET

# TABLE 3 (continued): LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME August 2015

T in a			Minutes	Delay	
Line	Train Da	ate	Late	Code	Delay Explanation
MW	2254	Fri, Aug 14	8	JM	8" MEDICAL EMERGENCY.
76%	6 OT	Wed, Aug 19	9	U1	9" LATE TURN FROM #2249, BIG TIMBER
l		Mon, Aug 24	10	DE1	10" LATE TURN FROM #2249, BIG TIMBER.
l		Fri, Aug 28	17	J	20" PD REMOVED UNRULY & COMBATATIVE MALE PASSENGER, BENSENVILLE.
l		Mon, Aug 31	11	D1	10" LATE TURN FROM #2249, BIG TIMBER
MW	2255	Fri, Aug 07	7	G	11" SIGNAL PROBLEMS.
81%	6 OT	Fri, Aug 14	20	JM1	15" LATE TURN FROM #2254, CUS; MEDICAL EMERGENCY, GALEWOOD.
l		Fri, Aug 28	17	J1	15" LATE TURN FROM #2254, CUS.
l		Mon, Aug 31	6	D1	7" LATE TURN FROM #2254, CUS.
NCS	114	Tue, Aug 04	32	D	12" FREIGHT, ROUND LAKE BEACH; TALKED BY STOP SIGNAL, GRAYSLAKE; RESTRICTING SIGNAL, MP42.4; 529 A'S; STOP SIGNAL, DEVAL.
81%	6 OT	Thu, Aug 20	12	D	7" FREIGHT, ANTIOCH; 11" FREIGHT, DEVAL.
		Fri, Aug 21	9	D	7" FREIGHT, GRAYSLAKE; RESTRICTED SPEED, HANDON PK-B6.
l		Fri, Aug 28	15	D	10" N/B FREIGHT, LAKE VILLA; 6" STOP SIGNAL, DEVAL.
NCS	119	Fri, Aug 14	10	D	15" WAIT ON CN FREIGHT, LOMOND.
81%	6 OT	Fri, Aug 21	14	K1	14" WAIT FOR #120 & FREIGHT.
l		Mon, Aug 24	19	K1	20" LATE TURN FROM #118, CUS.
		Fri, Aug 28	9	G	11" SIGNAL FAILURE, STOP SIGNAL RESTRICTED SPEED, METRA XING.
RI	422	Thu, Aug 06	6	RO	5M DELAY AT BI WAITING FOR SIGNAL.
81%	6 OT	Mon, Aug 10	36	E1	LOST 30M AT MIDLOTHIAN ASSISTING RI420 WHO HAD A ENGINE FAILURE
		Mon, Aug 17	17	Н	DELAYED 20M AT JOLIET WITH MECHANICAL ISSUES WITH ENGINE 408
		Wed, Aug 19	15	JM	17"DOWN DEPARTING WAITING ON EMERGENCY PERSONNEL ACCOUNT OF MEDICAL EMERGENCY
RI	530	Wed, Aug 05	11	KD	10" 35TH ST, LOST HEP. 16TH ST, C7656 STOPPED A/C METRA 1277.
	6 OT	Thu, Aug 06	7	RN	DEPART JOLIET 3M LATE AND 3M DELAY ACCT MAIN LINE CREW CHANGE @ RICHARDS ST (ENGINEER RELIEVED ACCT PERSONAL EMERGENCY
l		Fri, Aug 07	14	I1	7M DOWN DEPARTING JOLIET, LATE TURN OFF OF RI525. 3" BEV SUB, RUNNING WITH 9 CAR CONSIST.
l		Tue, Aug 18	15	KW1	DEPARTED 15M LATE DUE TO LATE ARRIVAL OF RI525
SWS	806	Wed, Aug 05	6	D1	6M ASHBURN MEETING SWS803, 2M SLOW ORDER BRC
81%	6 OT	Wed, Aug 12	6	D1	4M DELAY ASHBURN, MEETING SWS803, 2M SLOW ORDER BRC, 4M CP21ST. HELD FOR SWS805
		Mon, Aug 17	6	C1	5M DELAY ASHBURN MEETING SWS803, 2M ACCT BRC SLOW ORDER, 5M 21ST ACCT MEETING SWS805, 2M JACKSON ACCT FREIGHT TRAIN
l		Tue, Aug 18	14	RF	CSX X-TRAFFIC WEST YARDING AT 59TH ST WITH 14000'
SWS	840	Thu, Aug 13	20	K1	16M ASHBURN $\blacksquare$ ACCT. WAITING ON LATE SWS837 DELAYED ON CUS DEPARTURE 18M AND 25M AT FOREST HILL $_{\dot{b}}$
81%	6 OT	Mon, Aug 24	7	D	13M ASHBURN, 858/911P, WAITING FOR Y130, CSXT 2540, 6700', TO CLEAR.
l		Tue, Aug 25	7	D1	DEPARTED 179TH 7M LATE ACCT LATE TURN FROM 833
l		Thu, Aug 27	11	D1	DEPARTED 179TH 13M LATE ACCT LATE TURN FROM 833
UPN	356	Fri, Aug 07	10	I	10" HEAVY/SLOW ENTRAINING, WAUKEGAN-HIGHLAND PARK; SLOW DETRAINING, RAVINIA PARK(CONCERT); OPEARTE RESTRICTED SPEED BRIDGE WAS STRUCK
81%	6 OT	Wed, Aug 19	15	G1	30" LATE TURN FROM #335, KENOSHA; ADA, ENROUTE.
		Fri, Aug 21	9	CC	9" 20MPH SPEED RESTRICTION, MP48-49
		Wed, Aug 26	10	UF1	10" LATE ARRIVAL OF #335, KENOSHA.
UPNW	652	Fri, Aug 14	7	I	12" HEAVY/SLOW ENTRAINING, ALL STOPS.
	6 OT	Tue, Aug 18	7	R	12" STUDENT ENGINEER; TRAIN MEETS & HEAVY ENTRAINING, ENROUTE.
		Thu, Aug 20	20	GF1	25" FLAGGED DUE TO TRACK CIRCUIT ON CN INT, CN BARRINGTON.
		Fri, Aug 21	9	I	14" DEBRIEFING BY MOP, CRYSTAL LAKE; HEAVY ENTRAINING/DETRAINING CUBS GAME, ENROUTE.
UPNW	658	Tue, Aug 04	11	L	11" WAIT FOR LOCAL PD TO SEARCH FOR FEMALE SEEN ON THE TRACKS, ARLINGTON PARK.
	6 OT	Tue, Aug 11	9	I1	9" LATE TURN FROM #625, HARVARD.
01/		Thu, Aug 20	12	GF1	12" LATE ARRIVAL OF #625, HARVAED.
		Tue, Aug 25	122	M1	122" #651 STRUCK PEDESTRIAN @ EMERSON ST, MT PROSPECT, STOPPED, ARLINGTON HEIGHTS.

TABLE 3 (continued): LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME August 2015

			Minutes	Delay	
Line	Train D		Late		Delay Explanation
UPW	49	Tue, Aug 04	10	GM	10" NO SIGNAL, VALE; XH PROCEDURES, YORK RD; SLOW ENTRAINING/ DETRAINING, LOMBARD.
769	% OT	Tue, Aug 18	11	D1	11" TRAIN CONTROL FOLLOWING #47.
		Thu, Aug 20	9	G	9" TRESPASSER IN AREA, HARDING AVE; TRAIN CONTROL DUE TO #1 SWITCH X/O OUT OF CORRESPONDENCE @ VALE, WESTERN-KILBOURN; SLOW ENTRAINING,
		Wed, Aug 26	13	D1	13" #47 AHEAD, ENROUTE
		Mon, Aug 31	7	I	7" METX 153 NOT GOING PAST 70MPH, ENROUTE; HEAVY ENTRAINING, LOMBARD.
UPW	56	Tue, Aug 11	10	I	10" HEAVY/SLOW ENTRAINING CUBS GAME, ENROUTE; SLOW ENTRAINING, LOADING PASSENGERS AT THE XINGS, VILLA PARK & ELMHURST
819	% OT	Fri, Aug 14	8	D	5" STOPPED FOR M34841-13, WASHINGTON ST.
		Tue, Aug 18	15	D	15" FOLLOW ITAG23-17 GOING INTO PROVISO; OPERATE CENTER TRACK, VILLA PARK & ELMHURST; ADA, LOMBARD.
		Fri, Aug 28	30	CC	30" HELD FOR SIGNALAT TURNER DUE TO W/B #39 & 41 BEHIND HIM, WORK TRAIN WWCWCB ON TK1 & IGASAHX ON TK2, UNIVERSITY & GRACE.
UPW	62	Fri, Aug 14	10	L	10" LOMBARD POLICE SEARCH FOR TRESPASSER ON TRACKS, GLEN ELLYN.
819	% OT	Tue, Aug 18	20	D	20" LATE DEPARTING DUE TO LPJ04-15 GOING WEST TK2, ELBURN.
		Thu, Aug 20	10	D	10" CNAWF-18 AHEAD, OAK PARK-KEDZIE.
		Mon, Aug 24	7	KD	7" TRAIN STRUCK DEBRIS, CAUSING TRAIN CONTROL TO WORK IMPROPER-LY, CUS OUT ATC @ WINFIELD & OPERATE ON DISPACTCHER'S BLOCKS, MP34.2.

Data is final (09/14/15) version from TOPS.

TABLE 4: DELAY INCIDENT CODES AND DEFINITIONS

rimary	Co- Secondary	des Primary Annulled	Definition	Delay Class	Responsibility
A	A1	XA	Passenger Train Interference	Transportation	Controllable
AA	AA1	XAA	Rule 9.9 Delayed in Block/Rule 6.30	Transportation	Controllable
AD	AD1	XAD	Non-Revenue Passenger Train Interference	Transportation	Controllable
AM	AM1	XAM	Amtrak Caused Delay	Transportation	Controllable
AS	AS1	XAS	NICTD Train Interference	Transportation	Controllable
AW	AW1	XAW	Pass. Train Interference, Weather	Transportation	Uncontrollable
В	B1	XB	Human Error, Eng. Dept.	Engineering	Controllable
BA	BA1	XBA	Amtrak Engineering Human Error	Engineering	Controllable
C	C1	XC	Unscheduled Track Work	Engineering	Controllable
CA	CA1	XCA	Amtrak Engineering	Engineering	Semi-controllabl
CC	CC1	XCC	Scheduled Track Work	Engineering	Controllable
CF	CF1	XCF	Engineering Equipment Malfunction	Engineering	Controllable
CG	CG1	XCG	Scheduled Signal Work	Engineering	Controllable
CH	CH1	XCH	Contractor Failure	Engineering	Controllable
CO	CO1	XCO	Scheduled Wire Work	Engineering	Controllable
CM	CM1	XCM	Switch Malfunction (Track Dept.)	Engineering	Controllable
CW	CW1	XCW	M of W Work, Weather	Engineering	Uncontrollable
D	D1	XD	Freight Train Interference	Transportation	Semi-controllabl
DD	DD1	XDD	Freight Dispatcher/Opr/Freight Train Error	Transportation	Controllable
DE DE	DE1	XDE	Freight Mechanical Malfunction	Transportation	Semi-controllabl
DE DM	DM1	XDM	Freight-Accident/Incident	Incidental	Uncontrollable
			•		
DR DW	DR1	XDR XDW	Freight-Human Error Freight Train Interference, Weather	Transportation Transportation	Semi-controllable
	DW1	XDW	· · · · · · · · · · · · · · · · · · ·	Transportation  Machanical	Uncontrollable
E	E1	XE	Locomotive Malfunction	Mechanical	Controllable
EA	EA1	XEA	Amtrak Locomotive/Car Malfunction	Mechanical	Uncontrollable
EW	EW1	XEW	Locomotive Malfunction, Weather	Mechanical	Uncontrollable
EZ	EZ1	XEZ	ETMS Malfunction on Locomotive	Mechanical	Controllable
F	F1	XF	Cab Car/Trailer/MU Malfunction	Mechanical	Controllable
FS	FS1	XFS	NICTD MU Malfunction	Mechanical	Uncontrollable
FW	FW1	XFW	Cab Car/TRL/MU Malfunction, Weather	Mechanical	Uncontrollable
FZ	FZ1	XFZ	ETMS Malfunction on Cab Car	Mechanical	Controllable
G	G1	XG	Signal/Switch Malfunction (Signal Dept.)	Engineering	Controllable
GA	GA1	XGA	Signal/Switch Failure Amtrak (Signal Dept.)	Engineering	Semi-controllab
GF	GF1	XGF	Signal/Switch Foreign Line	Engineering	Semi-controllab
GM	GM1	XGM	Gate Crossing Malfunction	Engineering	Controllable
GT	GT1	XGT	Telecom Failure	Engineering	Controllable
GW	GW1	XGW	Signal/Switch Malfunction Weather (Signal Dept.)	Engineering	Uncontrollable
GX	GX1	XGX	Broken Gate Crossing	Engineering	Uncontrollable
GZ	GZ1	XGZ	ETMS Signal Malfunction	Engineering	Controllable
Н	H1	XH	Human Error, Mechanical Department	Mechanical	Controllable
HS	HS1	XHS	Human Error, NICTD Mechanical Dept.	Mechanical	Controllable
I	I1	XI	Passenger Handling, Running Time	Ridership	Uncontrollable
IB	IB1	XIB	Passenger Handling, Bicycle	Ridership	Uncontrollable
IW	IW1	XIW	Passenger Handling, Weather	Ridership	Uncontrollable
J	J1	XJ	Passenger Problems/Removal	Incidental	Uncontrollable
JA	JA1	XJA	Amtrak Passenger Problems/Removal	Incidental	Uncontrollable
JM	JM1	XJM	Passenger Medical Emergency	Incidental	Uncontrollable
K	K1	XK	Obstruction On Tracks	Incidental	Uncontrollable
KD	KD1	XKD	Train Struck Debris	Incidental	Uncontrollable
KP	KP1	XKP	Suspicious Package(s)/Person(s)/Activity	Incidental	Uncontrollable
KW	KW1	XKW	Obstruction On Tracks, Weather	Incidental	Uncontrollable
I I	Ll	XL	Unauthorized People On Tracks/Near Miss	Incidental	Uncontrollable
M	M1	XM	Right of Way Accident/Misc.	Incidental	Uncontrollable
			•		
MW N	MW1 N1	XMW XN	Right of Way Accident/Misc., Weather	Incidental Incidental	Uncontrollable Uncontrollable
			Electricity Utility Failure Electricity Utility Failure, Weather		
NW	NW1	XNW		Incidental	Uncontrollable
OW	01	XO	AC/DC System Failure	Engineering	Controllable
OW	OW1	XOW	AC/DC System Failure, Weather	Engineering	Uncontrollable
Q	Q1	XQ	Late Issuance of Track Warrant	Transportation	Controllable
R	R1	XR	Human Error, Transportation	Transportation	Controllable
RA	RA1	XRA	Human Error, Amtrak Transportation	Transportation	Controllable
RD	RD1	XRD	Human Error, Metra Dispatcher	Transportation	Controllable
RF	RF1	XRF	Freight Dispatcher/Opr/Non-Freight Train Error	Transportation	Controllable
RL	RL1	XRL	Human Error, Job Action/Employee No Show (CMS Error)		Controllable
RN	RN1	XRN	1 1	Transportation	Controllable
RO	RO1	XRO	Human Error, Tower Operator	Transportation	Controllable
RS	RS1	XRS	Human Error, NICTD Transportation	Transportation	Controllable
RW	RW1	XRW	Train Crew Issues, Weather	Transportation	Uncontrollable
RZ	RZ1	XRZ	ETMS Train Crew Error	Transportation	Controllable
S	S1	XS	Operational (Efficiency) Testing	Transportation	Uncontrollable
T	T1	XT	Property Vandalism	Incidental	Uncontrollable
	U1	XU	Accessibility Related (ADA)	Ridership	Uncontrollable
	UF1	XUF	ADA Lift Failure	Mechanical	Controllable
U	U1 1				Uncontrollable
U UF		VIIII			
U UF UW	UW1	XUW	Accessibility, Weather Leasemetics Problem Penerted, Nothing Found	Ridership	
U UF UW VE	UW1 VE1	XVE	Locomotive Problem Reported, Nothing Found	Incidental	Controllable
U UF UW	UW1				

Effective January 1, 2014 Revised February 3 & March 12, 2014

TABLE 5: DELAY INCIDENT CODES SORTED BY CAUSE CATEGORY & CARRIER DESIGNATION

METRA/PSA DELAY CODES	METRA/PSA DELAY CODES (continued)	FOREIGN CARRIER DELAY CODES
CATEGORY	CATEGORY	CATEGORY
Codes	Codes	Codes
Pri. Sec. Ann. Definition	Pri. Sec. Ann. Definition	Pri. Sec. Ann. Definition
1 Passenger Train Interference	13 Human Error	1 Passenger Train Interference
A A1 XA Passenger Train Interference	B B1 XB Human Error, Eng. Dept.	AM AM1 XAM Amtrak Caused Delay
AA AA1 XAA Rule 9.9 Delayed in Block/Rule 6.30	H H1 XH Human Error, Mechanical Department	AS AS1 XAS NICTD Train Interference
AD AD1 XAD Non-Revenue Passenger Train Interference	R R1 XR Human Error, Transportation	2 & 3 Freight Interference - Peak & Off-Peak
4 Accident	RD RD1 XRD Human Error, Metra Dispatcher	D D1 XD Freight Train Interference
M M1 XM Right of Way Accident/Misc.	RL RL1 XRL Human Error, Job Action/Employee No Show (CMS Error)	DD DD1 XDD Freight Dispatcher/Opr/Freight Train Error
5 Passenger Loading	RN RN1 XRN Human Error, Job Action/Employee No Show (Non-CMS)	DE DE1 XDE Freight Mechanical Malfunction
I II XI Passenger Handling, Running Time	RO RO1 XRO Human Error, Tower Operator	DR DR1 XDR Freight-Human Error
IB IB1 XIB Passenger Handling, Bicycle	RZ RZ1 XRZ ETMS Train Crew Error	4 Accident
6 Lift Deployment	14 Sick, Injured, Unruly Passenger	DM DM1 XDM Freight-Accident/Incident
U U1 XU Accessibility Related (ADA)	J J1 XJ Passenger Problems/Removal	8 Signal/Switch Failure
UF UF1 XUF ADA Lift Failure	JM JM1 XJM Passenger Medical Emergency	GA GA1 XGA Signal/Switch Failure Amtrak (Signal Dept.)
7 Obstruction/Debris	15 Weather	GF GF1 XGF Signal/Switch Foreign Line
K K1 XK Obstruction On Tracks	AW AW1 XAW Pass. Train Interference, Weather	9 Track Work
KD KD1 XKD Train Struck Debris	CW CW1 XCW M of W Work, Weather	CA CA1 XCA Amtrak Engineering
KP KP1 XKP Suspicious Package(s)/Person(s)/Activity	EW EW1 XEW Locomotive Malfunction, Weather	11 Non-Locomotive Equipment Failure
8 Signal/Switch Failure	FW FW1 XFW Cab Car/TRL/MU Malfunction, Weather	FS FS1 XFS NICTD MU Malfunction
CM CM1 XCM Switch Malfunction (Track Dept.)	GW GW1 XGW Signal/Switch Malfunction Weather (Signal Dept.)	12 Locomotive Failure
G G1 XG Signal/Switch Malfunction (Signal Dept.)	IW IW1 XIW Passenger Handling, Weather	EA EA1 XEA Amtrak Locomotive/Car Malfunction
GM GM1 XGM Gate Crossing Malfunction	KW KW1 XKW Obstruction On Tracks, Weather	13 Human Error
GT GT1 XGT Telecom Failure	MW MW1XMW Right of Way Accident/Misc., Weather	BA BA1 XBA Amtrak Engineering Human Error
GX GX1 XGX Broken Gate Crossing	NW NW1 XNW Electricity Utility Failure, Weather	HS HS1 XHS Human Error, NICTD Mechanical Dept.
GZ GZ1 XGZ ETMS Signal Malfunction	OW OW1 XOW AC/DC System Failure, Weather	RA RA1 XRA Human Error, Amtrak Transportation
VG VG1 XVG Broken Gate Crossing Reported, Nothing Found	RW RW1 XRW Train Crew Issues, Weather	RF RF1 XRF Freight Dispatcher/Opr/Non-Freight Train Error
9 Track Work	UW UW1 XUW Accessibility, Weather	RS RS1 XRS Human Error, NICTD Transportation
C C1 XC Unscheduled Track Work	16 Other	14 Sick, Injured, Unruly Passenger
CC CC1 XCC Scheduled Track Work	L L1 XL Unauthorized People On Tracks/Near Miss	JA JA1 XJA Amtrak Passenger Problems/Removal
CF CF1 XCF Engineering Equipment Malfunction	N N1 XN Electricity Utility Failure	15 Weather
CG CG1 XCG Scheduled Signal Work	Q Q1 XQ Late Issuance of Track Warrant	DW DW1 XDW Freight Train Interference, Weather
CH CH1 XCH Contractor Failure	S S1 XS Operational (Efficiency) Testing	
10 Catenary Failure	T T1 XT Property Vandalism	
CO CO1 XCO Scheduled Wire Work	VE VE1 XVE Locomotive Problem Reported, Nothing Found	
O O1 XO AC/DC System Failure	VF VF1 XVF Cab Car Problem Reported, Nothing Found	
11 Non-Locomotive Equipment Failure	W W1 XW Gas Leak	
F F1 XF Cab Car/Trailer/MU Malfunction		
FZ FZ1 XFZ ETMS Malfunction on Cab Car		
12 Locomotive Failure		
E E1 XE Locomotive Malfunction		
EZ EZ1 XEZ ETMS Malfunction on Locomotive		
Effective January 1 2014 Payisad February 2 2015		IL

Effective January 1, 2014

Revised February 2, 2015

'Metra/PSA' refers to delays that either directly affect or are directly attributable to Metra or its Purchase of Service Agreement partners (BNSF and Union Pacific) on Metra or PSA-controlled rail lines or trains in commuter operation.

'Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

# TABLES 6.a, 6.b, 6.c, & 6.d: FREQUENCY OF TRAIN DELAYS BY CONTROL AND LINE August 2015

			Electric			Mi	lw				Uı	nion Pacif	ïc		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	52	22	3	24	8	28	26	15	27	11	29	16	14	275	44%
Semi-controllable	25	0	0	0	9	7	5	13	4	19	0	5	25	112	18%
Uncontrollable	26	18	3	9	1	41	15	6	21	11	40	33	20	244	39%
TOTAL TRAINS DELAYED	103	40	6	33	18	76	46	34	52	41	69	54	59	631	100%

# **August - Average Over Previous Three Years: 2012-2014**

			Electric			Mi	lw				Ur	nion Paci	fic		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	49.0	31.0	8.0	21.0	0.7	43.0	38.3	16.0	27.3	11.0	25.0	23.0	29.7	323.0	40%
Semi-controllable	19.0	0.0	0.3	0.0	3.7	14.0	16.0	15.0	5.0	16.7	0.7	4.7	19.0	114.0	14%
Uncontrollable	63.7	37.7	5.0	13.3	0.7	36.0	39.7	8.3	44.3	3.3	43.7	37.3	41.7	374.7	46%
TOTAL TRAINS DELAYED	131.7	68.7	13.3	34.3	5.0	93.0	94.0	39.3	76.7	31.0	69.3	65.0	90.3	811.7	100%

# **August 2015 Divergence From August Average Over Previous Three Years**

		Electric				M	ilw				Uı	nion Paci	fic		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	3.0	-9.0	-5.0	3.0	7.3	-15.0	-12.3	-1.0	-0.3	0.0	4.0	-7.0	-15.7	-48.0	27%
Semi-controllable	6.0	0.0	-0.3	0.0	5.3	-7.0	-11.0	-2.0	-1.0	2.3	-0.7	0.3	6.0	-2.0	1%
Uncontrollable	-37.7	-19.7	-2.0	-4.3	0.3	5.0	-24.7	-2.3	-23.3	7.7	-3.7	-4.3	-21.7	-130.7	72%
TOTAL TRAINS DELAYED	-28.7	-28.7	-7.3	-1.3	13.0	-17.0	-48.0	-5.3	-24.7	10.0	-0.3	-11.0	-31.3	-180.7	100%

## January-August 2015

			Electric			Mi	lw				Ur	nion Pacif	ïc		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	462	220	47	110	45	340	212	110	194	102	154	173	173	2,342	41%
Semi-controllable	142	0	0	0	47	122	64	111	31	177	14	66	199	973	17%
Uncontrollable	446	336	85	102	10	265	222	43	167	56	192	290	220	2,434	42%
TOTAL TRAINS DELAYED	1,050	556	132	212	102	727	498	264	392	335	360	529	592	5,749	100%

Data for current month is final (09/14/15) version from TOPS.

P:\ONTIME\report\[DelaysByControl.xls]LastMonthRespByLine

TABLE 7: NUMBER OF DELAYS BY DATE August 2015

WEEL	KDAY	3	4	5	6	7	10		12			17	18	19	20	21	24	25	26		28	31	TOTAL
		Мо	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Мо	Tu	We	Th	Fr	Мо	
BNSF		3	24	2	2	1	0	2	0	8	5	8	9	1	5	5	3	0	1	0	1	10	90
Elec -N	ML	0	0	0	0	1	2	1	0	2	3	2	1	0	0	2	1	0	0	0	2	2	19
	BI	0	0	0	1	0	0	1	0	1	0	0	0	1	0	0	1	0	0	0	0	0	5
-8	SC	1	0	0	0	2	0	0	0	3	0	3	0	0	2	0	2	0	0	1	1	3	18
Heritag	ge	1	0	1	0	1	1	1	0	0	0	1	3	3	1	0	2	2	1	0	0	0	18
Milw -N	N	1	2	0	1	0	2	1	2	0	3	5	0	2	0	23	0	0	0	1	6	1	50
7-	W	1	1	0	1	2	0	0	0	0	4	0	1	19	1	0	2	0	0	1	2	6	41
NCS		0	1	0	1	0	1	0	0	0	4	0	1	11	1	4	5	0	0	0	3	2	34
RI		1	9	2	3	3	9	1	5	0	2	4	5	1	0	0	0	0	0	1	0	0	46
sws		1	1	2	1	2	0	0	1	11	0	2	2	0	3	2	1	4	1	3	1	1	39
UP -N	N	0	0	1	0	3	0	1	0	0	5	0	0	7	1	1	0	1	6	2	2	1	31
1-	NW	0	2	0	0	0	1	2	1	0	1	0	9	1	7	2	0	10	0	0	0	1	37
-7	W	<u>1</u>	<u>2</u>	<u>0</u>	<u>4</u>	<u>3</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>6</u>	<u>3</u>	<u>0</u>	<u>8</u>	0	<u>2</u>	0	<u>3</u>	<u>2</u>	<u>5</u>	<u>1</u>	<u>4</u>	<u>2</u>	<u>47</u>
SYSTE	EM	10	42	8	14	18	16	11	9	31	30	25	39	46	23	39	20	19	14	10	22	29	475
											-												
SATU	JRDAY	1	8	15	22	29	T	TOT	AL			SUN	NDA	Y/F	IOI	<u>ID</u>	AY	2	9	16	23	30	TOTAL
BNSF		3	2	1	2	3			11			BN	ISF					0	2	0	0	0	2
Elec -N	ML	2	7	5	2	2			18			Ele	ec	-ML				2	1	0	0	0	3
<b>-J</b>	BI	0	0	1	0	0			1					-BI				-	-	-	-	-	0
-8	SC	1	0	1	11	1			14					-SC				0	0	0	0	1	1
Heritag	ge	-	-	-	-	-			-			He	rita	ge				-	-	-	-	-	0
Milw -N	N	2	0	0	2	1			5			Mi	ilw	-N				8	5	8	0	0	21
	W	4	0	0	0	0			4					-W				0	1	0	0	0	1
NCS		-	-	-	-	-			-			N(	CS					-	-	-	-	-	0
RI		1	0	2	0	0			3			RI						1	0	2	0	0	3
sws		0	0	1	1	0			2			SV	VS					-	-	-	-	-	0
UP -N	N	4	9	5	4	5			27			UF	•	-N				4	2	1	2	2	11
	NW	2	3	3	1	0			9					-NW	,			2	0	4	0	2	8
	X X 7	1	_	1	_				_									1	0	2	Λ		
-7	vv	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	0			<u>6</u>					-W				<u>1</u>	0	<u>3</u>	0	<u>2</u>	<u>6</u>

Data is final (09/14/15) version from TOPS.

TABLE 8.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

August 2015

			Electric	- 0	ust 201	Mil	w				Un	ion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - TOTAL	13	0	0	0	8	7	5	11	4	17	0	0	24	89
Freight Interference - Peak	0	0	0	0	8	1	0	2	2	7	0	0	11	31
Primary	0	0	0	0	7	1	0	2	2	4	0	0	3	19
Secondary	0	0	0	0	1	0	0	0	0	3	0	0	8	12
Freight Interference - Off-Peak	13	0	0	0	0	6	5	9	2	10	0	0	13	58
Primary	8	0	0	0	0	4	1	7	2	7	0	0	13	42
Secondary	5	0	0	0	0	2	4	2	0	3	0	0	0	16
Signal/Switch Failure - TOTAL	13	2	1	0	1	7	22	15	2	2	8	6	8	87
Signal/Switch Failure - Metra/PSA	5	2	1	0	0	7	22	13	2	0	8	1	7	68
Primary	4	2	1	0	0	2	7	8	2	0	3 5	0	3 4	32
Secondary	1	0	0		0	5	15	5	0	0	_	1		36
Signal/Switch Failure - Foreign	8	0	0	0	1	0	0	2	0	2	0	5	1	19
Primary Secondary	4	0	0	0	1 0	0	0	2 0	0	2	0	1 4	1 0	11 8
Mechanical Failure - TOTAL	9	1	0	2	2	8	1	0	19	1	5	11	3	62
Mechanical Failure - 101AL  Mechanical Failure - Metra/PSA	9	1	0	2	2	8	1	0	19	1	5	11	3	62
	2	1	0	2	0	2	0	0	0	0	1	11	2	11
Non-Locomotive Equipment Failure - Metra/PSA  Primary	1	0	0	0	0	2 1	0	0	0	0	1	0	1	4
Secondary	1	1	0	2	0	1	0	0	0	0	0	1	1	7
Locomotive Failure - Metra/PSA	7	0	0	0	2	6	1	0	19	1	4	10	1	51
Primary	3	0	0	0	1	4	1	0	5	1	3	3	1	22
Secondary	4	0	0	0	1	2	0	0	14	0	1	7	0	29
Mechanical Failure - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Train Interference - TOTAL	3	0	1	1	2	1	0	0	1	1	0	0	0	10
Passenger Train Interference - Metra/PSA	0	0	1	1	0	1	0	0	1	0	0	0	0	4
Passenger Train Interference - Foreign	3	0	0	0	2	0	0	0	0	1	0	0	0	6
Accident - TOTAL	0	0	0	0	0	0	0	0	0	0	2	10	1	13
Accident - Metra/PSA	0	0	0	0	0	0	0	0	0	0	2	10	1	13
Accident - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Work - TOTAL	27	9	1	15	0	4	0	2	1	4	10	2	4	79
Track Work - Metra/PSA	21	9	1	15	0	4	0	2	1	4	10	2	4	73
Track Work - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Human Error - TOTAL	8	2	0	4	4	7	2	0	4	4	4	2	0	41
Human Error - Metra/PSA	7	2	0	4	0	4	1	0	4	1	4	2	0	29
Human Error - Foreign	1	0	0	0	4	3	1	0	0	3	0	0	0	12
Sick, Injured, Unruly Passenger - TOTAL	3	7	1	2	0	4	4	0	1	0	2	3	1	28
Sick, Injured, Unruly Passenger - Metra/PSA	3	7	1	2	0	4	4	0	1	0	2	3	1	28
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	6	2	0	0	0	8	0	0	6	0	0	0	0	22
Weather - Metra/PSA	6	2	0	0	0	8	0	0	6	0	0	0	0	22
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	6	7	0	4	0	6	4	0	9	0	34	18	13	101
Lift Deployment - TOTAL	1	0	0	0	0	0	3	0	1	0	2	1	2	101
Obstruction/Debris - TOTAL	10	1	1	3	0	23	4	6	1	11	0	0	1	61
Catenary Failure - TOTAL	0	8	0	1	0	0	0	0	0	0	0	0	0	9
Other - TOTAL	4	1	1	1	1	1	1	0	3	1	2	1	2	19
Outer TOTAL	7	1	1	1	1	1	1	U	3	1	2	1	2	1)
TOTAL TRAINS DELAYED	103	40	6	33	18	76	46	34	52	41	69	54	59	631
Total Metra/PSA Delays	72	40	6	33	3	66	40	21	48	18	69	49	34	499
Total Foreign Carrier Delays	31	0	0	0	15	10	6	13	4	23	09	5	25	132
Total Foreign Carrier Delays	51	U	U	U	13	10	U	13	+	23	U	J	43	132

Data for current month is final (09/14/15) version from TOPS.

<sup>&#</sup>x27;Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

'Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 8.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

**August - Average Over Previous Five Years: 2010-2014** 

			Electric			Mi	ilw				Uı	nion Paci	ific	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - TOTAL	19.8	0.0	0.2	0.0	4.0	16.8	15.6	14.0	7.0	20.8	0.4	2.6	21.8	123.0
Freight Interference - Peak	6.2	0.0	0.2	0.0	4.0	3.2	2.8	5.0	1.8	7.0	0.2	0.2	3.8	34.4
Primary	4.6	0.0	0.0	0.0	3.8	2.2	1.8	2.6	1.0	4.6	0.2	0.2	1.2	22.2
Secondary	1.6	0.0	0.2	0.0	0.2	1.0	1.0	2.4	0.8	2.4	0.0	0.0	2.6	12.2
Freight Interference - Off-Peak	13.6	0.0	0.0	0.0	0.0	13.6	12.8	9.0	5.2	13.8	0.2	2.4	18.0	88.6
Primary	11.0	0.0	0.0	0.0	0.0	10.0	8.4	8.0	5.0	9.0	0.2	2.4	14.6	68.6
Secondary	2.6	0.0	0.0	0.0	0.0	3.6	4.4	1.0	0.2	4.8	0.0	0.0	3.4	20.0
Signal/Switch Failure - TOTAL	10.4	8.2	2.8	4.4	1.4	19.4	10.8	9.0	8.0	7.8	3.0	7.8	9.2	102.2
Signal/Switch Failure - Metra/PSA	8.0	8.2	2.8	4.4	0.2	18.2	10.4	8.2	7.6	4.6	3.0	7.2	9.0	91.8
Primary	7.6	6.6	2.2	2.4	0.2	11.0	7.4	5.2	6.4	3.6	2.0	3.8	5.0	63.4
Secondary	0.4	1.6	0.6	2.0	0.0	7.2	3.0	3.0	1.2	1.0	1.0	3.4	4.0	28.4
Signal/Switch Failure - Foreign	2.4	0.0	0.0	0.0	1.2	1.2	0.4	0.8	0.4	3.2	0.0	0.6	0.2	10.4
Primary	1.6	0.0	0.0	0.0	1.2	1.0	0.4	0.4	0.4	1.6	0.0	0.4	0.2	7.2
Secondary	0.8	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	1.6	0.0	0.2	0.0	3.2
Mechanical Failure - TOTAL	9.0	7.2	3.6	2.2	0.0	13.8	8.2	1.8	7.8	1.6	8.4	5.0	4.4	73.0
Mechanical Failure - Metra/PSA	9.0	7.2	3.6	2.2	0.0	13.8	8.2	1.8	7.8	1.6	8.4	5.0	4.4	73.0
Non-Locomotive Equipment Failure - Metra/PSA	1.2	7.2	3.6	2.2	0.0	1.6	1.4	0.2	1.6	0.0	1.6	0.6	2.6	23.8
Primary	0.8	2.0	1.0	0.4	0.0	0.2	1.0	0.0	1.2	0.0	1.2	0.2	1.0	9.0
Secondary	0.4	5.2	2.6	1.8	0.0	1.4	0.4	0.2	0.4	0.0	0.4	0.4	1.6	14.8
Locomotive Failure - Metra/PSA	7.8	0.0	0.0	0.0	0.0	12.2	6.8	1.6	6.2	1.6	6.8	4.4	1.8	49.2
Primary Secondary	3.6 4.2	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	3.0 9.2	3.2 3.6	0.4 1.2	3.2 3.0	1.0 0.6	2.6 4.2	1.2 3.2	0.8 1.0	19.0 30.2
1														
Mechanical Failure - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passenger Train Interference - TOTAL	2.2	2.6	0.4	0.8	1.0	8.8	3.0	1.4	1.6	0.0	1.6	0.8	2.0	26.2
Passenger Train Interference - Metra/PSA	0.4	0.8	0.4	0.6	0.4	6.2	2.2	1.4	1.0	0.0	1.6	0.8	1.6	17.4
Passenger Train Interference - Foreign	1.8	1.8	0.0	0.2	0.6	2.6	0.8	0.0	0.6	0.0	0.0	0.0	0.4	8.8
Accident - TOTAL	7.2	0.8	0.0	0.2	0.2	4.2	1.8	1.8	3.0	0.0	0.2	10.2	6.6	36.2
Accident - Metra/PSA	7.2	0.8	0.0	0.2	0.2	4.2	1.8	1.8	3.0	0.0	0.2	10.2	6.6	36.2
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Work - TOTAL	26.2	6.8	0.8	7.0	0.0	6.2	11.4	2.4	8.2	1.6	13.6	7.2	7.6	99.0
Track Work - Metra/PSA	26.0	6.8	0.8	7.0	0.0	6.2	11.4	2.4	8.2	1.6	13.6	7.2	7.6	98.8
Track Work - Foreign	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Human Error - TOTAL	12.6	2.4	1.2	1.6	0.6	6.6	6.4	1.8	4.6	5.0	4.0	5.8	8.2	60.8
Human Error - Metra/PSA	9.6	2.4	1.0	1.6	0.0	6.0	4.8	1.0	4.4	0.4	3.8	4.0	6.2	45.2
Human Error - Foreign	3.0	0.0	0.2	0.0	0.6	0.6	1.6	0.8	0.2	4.6	0.2	1.8	2.0	15.6
Sick, Injured, Unruly Passenger - TOTAL	2.6	7.8	1.6	2.2	0.0	3.6	2.0	0.6	2.8	0.0	7.6	4.6	4.8	40.2
Sick, Injured, Unruly Passenger - Metra/PSA	2.6	7.8	1.6	2.2	0.0	3.6	2.0	0.6	2.8	0.0	7.6	4.6	4.8	40.2
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	12.6	4.4	0.4	0.2	0.8	3.0	8.0	3.0	4.8	0.6	10.0	9.2	5.8	62.8
Weather - Metra/PSA	12.6	4.4	0.4	0.2	0.8	3.0	8.0	3.0	4.2	0.6	10.0	9.2	5.8	62.2
Weather - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.6
Passenger Loading - TOTAL	18.2	21.6	3.8	6.8	0.0	24.4	13.2	0.4	17.8	0.2	43.4	17.6	20.4	187.8
Lift Deployment - TOTAL	7.4	0.6	0.0	0.8	0.0	3.8	3.4	0.6	8.0	0.4	5.4	2.0	4.0	36.4
Obstruction/Debris - TOTAL	9.4	1.2	0.2	3.4	0.0	1.2	2.2	0.0	3.0	0.4	2.0	3.6	1.6	28.2
Catenary Failure - TOTAL	0.0	5.8	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
Other - TOTAL	2.4	1.2	0.0	1.0	0.0	1.8	3.6	0.6	1.6	1.6	1.8	1.2	7.4	24.2
TOTAL TRAINS DELAYED	140.0	70.6	16.6	31.4	8.0	113.6	89.6	37.4	78.2	40.0	101.4	77.6	103.8	908.2
Total Metra/PSA Delays	112.8	68.8	16.2	31.2	1.6	92.4	71.2	21.8	69.4	11.4	100.8	72.6	79.4	749.6
Total Foreign Carrier Delays	27.2	1.8	0.4	0.2	6.4	21.2	18.4	15.6	8.8	28.6	0.6	5.0	24.4	158.6

Data for latest month is final (09/23/14) version from TOPS.

<sup>&#</sup>x27;Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

# TABLE 8.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

**August 2015 Divergence From August Average Over Previous Five Years** 

			Electric			Mi					Ur	nion Paci	fic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - TOTAL	-6.8	0.0	-0.2	0.0	4.0	-9.8	-10.6	-3.0	-3.0	-3.8	-0.4	-2.6	2.2	-34.0
Freight Interference - Peak	-6.2	0.0	-0.2	0.0	4.0	-2.2	-2.8	-3.0	0.2	0.0	-0.2	-0.2	7.2	-3.4
Primary	-4.6	0.0	0.0	0.0	3.2	-1.2	-1.8	-0.6	1.0	-0.6	-0.2	-0.2	1.8	-3.2
Secondary	-1.6	0.0	-0.2	0.0	0.8	-1.0	-1.0	-2.4	-0.8	0.6	0.0	0.0	5.4	-0.2
Freight Interference - Off-Peak	-0.6	0.0	0.0	0.0	0.0	-7.6	-7.8	0.0	-3.2	-3.8	-0.2	-2.4	-5.0	-30.6
Primary	-3.0	0.0	0.0	0.0	0.0	-6.0	-7.4	-1.0	-3.0	-2.0	-0.2	-2.4	-1.6	-26.6
Secondary	2.4	0.0	0.0	0.0	0.0	-1.6	-0.4	1.0	-0.2	-1.8	0.0	0.0	-3.4	-4.0
Signal/Switch Failure - TOTAL	2.6	-6.2	-1.8	-4.4	-0.4	-12.4	11.2	6.0	-6.0	-5.8	5.0	-1.8	-1.2	-15.2
Signal/Switch Failure - Metra/PSA	-3.0	-6.2	-1.8	-4.4	-0.2	-11.2	11.6	4.8	-5.6	-4.6	5.0	-6.2	-2.0	-23.8
Primary	-3.6	-4.6	-1.2	-2.4	-0.2	-9.0	-0.4	2.8	-4.4	-3.6	1.0	-3.8	-2.0	-31.4
Secondary	0.6	-1.6	-0.6	-2.0	0.0	-2.2	12.0	2.0	-1.2	-1.0	4.0	-2.4	0.0	7.6
Signal/Switch Failure - Foreign	5.6	0.0	0.0	0.0	-0.2	-1.2	-0.4	1.2	-0.4	-1.2	0.0	4.4	0.8	8.6
Primary	2.4 3.2	0.0	0.0	0.0	-0.2	-1.0 -0.2	-0.4 0.0	1.6	-0.4 0.0	0.4	0.0	0.6	0.8	3.8
Secondary		0.0			0.0			-0.4		-1.6	0.0	3.8	0.0	4.8
Mechanical Failure - TOTAL	0.0	-6.2	-3.6	-0.2	2.0	-5.8	-7.2	-1.8	11.2	-0.6	-3.4	6.0	-1.4	-11.0
Mechanical Failure - Metra/PSA	0.0	-6.2	-3.6	-0.2	2.0	-5.8	-7.2	-1.8	11.2	-0.6	-3.4	6.0	-1.4	-11.0
Non-Locomotive Equipment Failure - Metra/PSA	0.8	-6.2 -2.0	-3.6 -1.0	-0.2 -0.4	0.0	0.4 0.8	-1.4	-0.2 0.0	-1.6 -1.2	0.0	-0.6 -0.2	0.4 -0.2	-0.6 0.0	-12.8
Primary Secondary	0.2	-2.0 -4.2	-1.0 -2.6	0.2	0.0	-0.4	-1.0 -0.4	-0.2	-1.2 -0.4	0.0	-0.2 -0.4	-0.2 0.6	-0.6	-5.0 -7.8
Locomotive Failure - Metra/PSA	-0.8	0.0	0.0	0.0	2.0	-6.2	-5.8	-1.6	12.8	-0.6	-2.8	5.6	-0.8	1.8
Primary	-0.8 -0.6	0.0	0.0	0.0	1.0	1.0	-3.8 -2.2	-1.0 -0.4	12.8	-0.6	-2.8 0.4	3.6 1.8	0.2	3.0
Secondary	-0.2	0.0	0.0	0.0	1.0	-7.2	-3.6	-1.2	11.0	-0.6	-3.2	3.8	-1.0	-1.2
Mechanical Failure - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passenger Train Interference - TOTAL	0.8	-2.6	0.6	0.2	1.0	-7.8	-3.0	-1.4	-0.6	1.0	-1.6	-0.8	-2.0	-16.2
Passenger Train Interference - Metra/PSA	-0.4	-0.8	0.6	0.4	-0.4	-5.2	-2.2	-1.4	0.0	0.0	-1.6	-0.8	-1.6	-13.4
Passenger Train Interference - Foreign	1.2	-1.8	0.0	-0.2	1.4	-2.6	-0.8	0.0	-0.6	1.0	0.0	0.0	-0.4	-2.8
Accident - TOTAL	-7.2	-0.8	0.0	-0.2	-0.2	-4.2	-1.8	-1.8	-3.0	0.0	1.8	-0.2	-5.6	-23.2
Accident - Metra/PSA	-7.2	-0.8	0.0	-0.2	-0.2	-4.2	-1.8	-1.8	-3.0	0.0	1.8	-0.2	-5.6	-23.2
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Track Work - TOTAL	0.8	2.2	0.2	8.0	0.0	-2.2	-11.4	-0.4	-7.2	2.4	-3.6	-5.2	-3.6	-20.0
Track Work - Metra/PSA	-5.0	2.2	0.2	8.0	0.0	-2.2	-11.4	-0.4	-7.2	2.4	-3.6	-5.2	-3.6	-25.8
Track Work - Foreign	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
Human Error - TOTAL	-4.6	-0.4	-1.2	2.4	3.4	0.4	-4.4	-1.8	-0.6	-1.0	0.0	-3.8	-8.2	-19.8
Human Error - Metra/PSA	-2.6	-0.4	-1.0	2.4	0.0	-2.0	-3.8	-1.0	-0.4	0.6	0.2	-2.0	-6.2	-16.2
Human Error - Foreign	-2.0	0.0	-0.2	0.0	3.4	2.4	-0.6	-0.8	-0.2	-1.6	-0.2	-1.8	-2.0	-3.6
Sick, Injured, Unruly Passenger - TOTAL	0.4	-0.8	-0.6	-0.2	0.0	0.4	2.0	-0.6	-1.8	0.0	-5.6	-1.6	-3.8	-12.2
Sick, Injured, Unruly Passenger - Metra/PSA	0.4	-0.8	-0.6	-0.2	0.0	0.4	2.0	-0.6	-1.8	0.0	-5.6	-1.6	-3.8	-12.2
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	-6.6	-2.4	-0.4	-0.2	-0.8	5.0	-8.0	-3.0	1.2	-0.6	-10.0	-9.2	-5.8	-40.8
Weather - Metra/PSA	-6.6	-2.4	-0.4	-0.2	-0.8	5.0	-8.0	-3.0	1.8	-0.6	-10.0	-9.2	-5.8	-40.2
Weather - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	0.0	-0.6
Passenger Loading - TOTAL	-12.2	-14.6	-3.8	-2.8	0.0	-18.4	-9.2	-0.4	-8.8	-0.2	-9.4	0.4	-7.4	-86.8
Lift Deployment - TOTAL	-6.4	-0.6	0.0	-0.8	0.0	-3.8	-0.4	-0.4	-7.0	-0.4	-3.4	-1.0	-2.0	-26.4
Obstruction/Debris - TOTAL	0.6	-0.2	0.8	-0.4	0.0	21.8	1.8	6.0	-2.0	10.6	-2.0	-3.6	-0.6	32.8
Catenary Failure - TOTAL	0.0	2.2	-1.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Other - TOTAL	1.6	-0.2	1.0	0.2	1.0	-0.8	-2.6	-0.6	1.4	-0.6	0.0	-0.2	-5.4	-5.2
TOTAL	1.0	0.2	1.0	0.0	1.0	0.0	2.0	0.0	1.7	0.0	0.2	0.2	Э.Т	3.2
TOTAL TRAINS DELAYED	-37.0	-30.6	-10.6	1.6	10.0	-37.6	-43.6	-3.4	-26.2	1.0	-32.4	-23.6	-44.8	-277.2
Total Metra/PSA Delays	-40.8	-28.8	-10.2	1.8	1.4	-26.4	-31.2	-0.8	-21.4	6.6	-31.8	-23.6	-45.4	-250.6
Total Foreign Carrier Delays	3.8	-1.8	-0.4	-0.2	8.6	-11.2	-12.4	-2.6	-4.8	-5.6	-0.6	0.0	0.6	-26.6

Data for current month is final (09/14/15) version from TOPS.

'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

'Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 9.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

January - August 2015

			Electric			Mil	w				Un	ion Pacifi	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	w	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - TOTAL	112	0	0	0	33	108	55	93	33	130	14	59	197	834
Freight Interference - Peak	36	0	0	0	33	30	10	42	6	46	5	34	53	295
Primary	21	0	0	0	32	20	4	31	6	28	2	17	27	188
Secondary	15	0	0	0	1	10	6	11	0	18	3	17	26	107
Freight Interference - Off-Peak	76	0	0	0	0	78	45	51	27	84	9	25	144	539
Primary	57	0	0	0	0	49	33	41	26	62	5	21	120	414
Secondary	19	0	0	0	0	29	12	10	1	22	4	4	24	125
Signal/Switch Failure - TOTAL	117	51	19	19	15	97	89	65	37	57	25	21	62	674
Signal/Switch Failure - Metra/PSA	83	51	19	19	1	83	80	46	36	12	25	14	60	529
Primary Secondary	53 30	30 21	13 6	15 4	1 0	45 38	42 38	28 18	29 7	6	15 10	6 8	30 30	313 216
Signal/Switch Failure - Foreign	34	0	0	0	14	14	9	19	1	45	0	7	2	145
Primary	25	0	0	0	14 13	8	5	19	1	43 27	0	2	2	92
Secondary	9	0	0	0	13	6	4	10	0	18	0	5	0	53
Mechanical Failure - TOTAL	90	60	8	5	5	120	57	14	81	25	37	60	35	597
Mechanical Failure - Metra/PSA	89	54	5	4	5	101	57	14	81	25	37	60	35	567
Non-Locomotive Equipment Failure - Metra/PSA	15	54	5	4	1	13	22	1	16	5	5	16	10	167
Primary	5	10	0	1	1	6	6	1	6	3	3	6	8	56
Secondary	10	44	5	3	0	7	16	0	10	2	2	10	2	111
Locomotive Failure - Metra/PSA	74	0	0	0	4	88	35	13	65	20	32	44	25	400
Primary	20	0	0	0	3	24	15	2	26	10	16	12	10	138
Secondary	54	0	0	0	1	64	20	11	39	10	16	32	15	262
Mechanical Failure - Foreign	1	6	3	1	0	19	0	0	0	0	0	0	0	30
Passenger Train Interference - TOTAL	17	9	2	3	10	25	3	11	2	20	1	1	6	110
Passenger Train Interference - Metra/PSA	2	5	1	3	1	11	2	11	2	7	1	1	6	53
Passenger Train Interference - Foreign	15	4	1	0	9	14	1	0	0	13	0	0	0	57
Accident - TOTAL	65	34	11	14	0	30	55	5	3	0	27	50	11	305
Accident - Metra/PSA	65	34	11	14	0	27	53	5	1	0	27	50	10	297
Accident - Foreign	0	0	0	0	0	3	2	0	2	0	0	0	1	8
Track Work - TOTAL	163	27	6	29	5	52	18	12	30	15	28	28	16	429
Track Work - Metra/PSA	131	27	6	29	5	52	18	12	30	9	28	28	16	391
Track Work - Foreign	32	0	0	0	0	0	0	0	0	6	0	0	0	38
Human Error - TOTAL	76	28	5	19	24	74	42	25	35	24	55	57	43	507
Human Error - Metra/PSA	61	28	5	19	5	58	33	15	34	7	28	23	14	330
Human Error - Foreign	15	0	0	0	19	16	9	10	1	17	27	34	29	177
Sick, Injured, Unruly Passenger - TOTAL	23	50	8	3	2	28	24	2	12	3	14	31	19	219
Sick, Injured, Unruly Passenger - Metra/PSA	23	50	8	3	2	28	24	2	12	3	14	31	19	219
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	178	156	44	30	5	72	67	19	57	18	55	77	80	858
Weather - Metra/PSA	177	156	44	30	5	61	66	19	57	17	55	77	78	842
Weather - Foreign	1	0	0	0	0	11	1	0	0	1	0	0	2	16
Passenger Loading - TOTAL	38	63	7	13	0	52	28	3	68	4	72	70	53	471
Lift Deployment - TOTAL	33	3	0	0	0	18	24	0	9	1	8	14	25	135
Obstruction/Debris - TOTAL	79	17	7	31	2	43	31	11	11	22	16	39	27	336
Catenary Failure - TOTAL	0	44	9	34	0	0	0	0	0	0	0	0	0	87
Other - TOTAL	59	14	6	12	1	8	5	4	14	16	8	22	18	187
TOTAL TRAINS DELAYED	1,050	556	132	212	102	727	498	264	392	335	360	529	592	5,749
Total Metra/PSA Delays	840	546	128	211	27	542	421	142	355	123	319	429	361	4,444
Total Foreign Carrier Delays	210	10	4	1	75	185	77	122	37	212	41	100	231	1,305
	210	10	-		13	103	- , ,	122	31	212	7.1	100	201	1,505

Data for current month is final (09/14/15) version from TOPS.

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<sup>&#</sup>x27;Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

<sup>&#</sup>x27;Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 9.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

January - August - Average Over Previous Five Years: 2010-2014

CAISE CATEGORY    SNSPIM   NE.   BI   NC.   BIR   NC.   BIR   NC.   BIR   NC.   NC.   SIR   NS.   N.   NV.   NV.   NS.				Electric			M	ilw				U	nion Paci	fic	
Freight Interference - Peak   66.6   0.0   0.2   0.0   0.3   0.4   0.0   0.2   0.0	CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Primary   1.5	Freight Interference - TOTAL	157.4	0.2	0.4	0.0	31.4	124.0	108.4	117.6	53.6	125.4	14.4	39.0	165.0	936.8
Secondary   1	Freight Interference - Peak	66.6	0.0	0.2	0.0	31.4	21.0	22.0	47.8	15.0	36.8	4.0	17.0	33.8	295.6
Freight Interference - Off-Peak   90,8   0.2   0.2   0.0															
Primary   Secondary   17.0	Secondary											2.2			
Secondary   12				~											
Signal/Switch Failure - TOTAL   47,0   63.6   22.0   22.0   19.6   19.6   17.0   65.8   74.6   79.8   42.8   58.8   82.2   994.8															
Signal/Switch Failure - Metra/PSA   10.5   6.3   21.8   22.0   12.6   176.8   100.4   53.0   71.0   37.0   42.2   55.6   79.2   83.88   Primary Secondary   24.6   100.0   4.6   6.0   0.2   20.0   0.															
Primary Secondary   270   510   512   512   516   512   516   512   518   517   518   517   518   517   518   517   518   5	č														
Secondary   144															
Signal/Switch Failure - Foreign															
Primary   Secondary   128.2   32.8   17.0   17.0   34.6   20.0   0.0   0.0   17.0   34.5   17.0   34.5   17.0   20.2   38.8   0.0   2.2   0.0   38.	<u> </u>														
Secondary   4															
Mechanical Failure - TOTAL   128,2   32,8   17,2   13,6   2.2   104,8   65,4   24,8   77,2   17,2   62,4   56,6   40,0   642,4   Mechanical Failure - MetraPSA   26,6   31,4   16,8   13,6   0.6   12,2   13,2   3,2   14,8   6,4   15,6   10,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   17,0   13,6   13,															
Mechanical Failure - Metra/PSA   127.2   31.4   17.0   13.6   2.2   104.2   65.2   24.8   76.8   17.2   62.4   56.6   39.8   638.4     Non-Locomotive Equipment Failure - Metra/PSA   26.6   31.4   16.8   13.6   0.6   12.2   13.2   3.2   14.8   6.4   15.6   10.0   13.6   178.0     Primary   26.0   11.8   60.0   0.0	-														
Non-Locomotive Equipment Failure - Metrat/PSA   266   31.4   16.8   13.6   0.6   12.2   13.2   13.2   13.2   13.2   13.2   13.2   14.8   6.4   11.6   17.8															
Primary Secondary   96															
Locomotive Failure - Metra/PSA   10.6   0.0	* *														
Primary Secondary   28.2   0.0   0.2   0.0   0.4   0.88   35.0   15.0   38.8   5.8   30.8   34.0   15.8   34.8															
Primary Secondary   28.2   0.0   0.2   0.0   0.4   0.88   35.0   15.0   38.8   5.8   30.8   34.0   15.8   34.8	Locomotive Failure - Metra/PSA	100.6	0.0	0.2	0.0	16	92.0	52.0	21.6	62.0	10.8	46.8	46.6	26.2	460 4
Mechanical Failure - Foreign   1.0   1.4   0.2   0.0   0.0   0.6   0.2   0.0   0.4   0.0   0.0   0.0   0.2   4.0															
Passenger Train Interference - TOTAL   15.0   13.0   4.0   6.4   4.4   71.6   15.2   10.4   15.8   6.4   12.4   9.4   13.8   197.8							68.8	33.0							
Passenger Train Interference - TOTAL	Mechanical Failure - Foreign	1.0	1.4	0.2	0.0	0.0	0.6	0.2	0.0	0.4	0.0	0.0	0.0	0.2	4.0
Passenger Train Interference - Metra/PSA   1.4   5.4   3.4   5.4   0.6   4.8   12.2   10.0   10.8   1.2   12.4   9.0   13.2   12.9   12.8	<u> </u>	15.0	13.0	4.0	6.4	4.4	71.6	15.2	10.4	15.8	6.4		9.4	13.8	
Passenger Train Interference - Foreign   13.6   7.6   0.6   1.0   3.8   26.8   3.0   0.4   5.0   5.2   0.0   0.4   0.6   68.0		1.4	5.4	3.4	5.4	0.6	44.8	12.2	10.0	10.8	1.2	12.4	9.0	13.2	129.8
Accident - TOTAL															
Accident - Metra/PSA															
Accident - Foreign   15.2   0.0   0.0   0.0   0.0   0.2   0.6   1.2   1.6   0.8   0.0	Accident - Metra/PSA	78.8	11.6	4.8	7.4	0.6	39.4	33.6	11.8	35.6	8.0	26.8	57.6	33.6	349.6
Track Work - TOTAL Track Work - TOTAL Track Work - Metra/PSA Track Work - Foreign Track Work - Foreign Track Work - Metra/PSA Track Work - Foreign Track Work - Metra/PSA Track Work - Metra/PSA Track Work - Metra/PSA Track Work - Metra/PSA Track Work - Foreign Track Work - Metra/PSA															
Track Work - Metra/PSA Track Work - Foreign  168.4  44.2  13.4  35.0  2.4  69.0  48.4  15.6  52.8  8.8  63.2  33.6  54.0  608.8  Track Work - Foreign  4.8  0.0  0.0  0.0  0.0  0.0  0.0  0.0	ĕ														
Track Work - Foreign         4.8         0.0         0.0         0.0         0.0         0.2         0.2         0.0         0.0         0.0         6.0           Human Error - TOTAL         114.2         33.4         10.2         15.0         10.0         56.2         36.8         18.0         43.4         30.0         42.8         36.4         39.4         485.8           Human Error - Metra/PSA         81.2         30.6         9.8         14.0         2.0         34.8         25.2         7.6         42.4         6.6         36.4         25.8         27.2         343.6           Human Error - Metra/PSA         81.2         30.6         9.8         14.0         2.0         34.8         25.2         7.6         42.4         6.6         36.4         25.8         27.2         343.6           Human Error - Metra/PSA         25.8         5.50         8.8         19.4         0.4         20.4         25.8         25.6         3.4         38.8         28.6         28.2         283.6           Sick, Injured, Unruly Passenger - Metra/PSA         25.8         55.0         8.8         19.4         0.4         20.4         25.8         2.8         25.2         3.4         38.8															
Human Error - TOTAL Human Error - Metra/PSA Human Erro						-									
Human Error - Metra/PSA Human Error - Metra/PSA Human Error - Foreign 33.0 2.8 0.4 1.0 8.0 2.1 4.1 1.6 10.4 1.0 2.0 34.8 25.2 7.6 42.4 6.6 36.4 25.8 27.2 343.6 44.2 23.4 6.4 10.6 11.2 142.2 142.2 23.4 23.4 23.6 23.4 23.8 23.6 23.4 23.8 23.6 23.6 24.2 24.2 24.2 24.3 25.8 25.6 25.6 25.6 25.8 25.6 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.6 25.8 25.8 25.6 25.8 25.8 25.8 25.8 25.8 25.8 25.8 25.8	<u> </u>														
Human Error - Foreign 33.0 2.8 0.4 1.0 8.0 21.4 11.6 10.4 1.0 23.4 6.4 10.6 12.2 142.2 Sick, Injured, Unruly Passenger - TOTAL 26.4 55.0 8.8 19.4 0.4 20.4 25.8 2.8 25.6 3.4 38.8 28.6 28.2 283.6 Sick, Injured, Unruly Passenger - Metra/PSA 25.8 55.0 8.8 19.4 0.4 20.4 25.8 2.8 25.2 3.4 38.8 28.6 28.2 282.6 Sick, Injured, Unruly Passenger - Foreign 0.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0															
Sick, Injured, Unruly Passenger - TOTAL         26.4         55.0         8.8         19.4         0.4         20.4         25.8         2.8         25.6         3.4         38.8         28.6         28.2         283.6           Sick, Injured, Unruly Passenger - Metra/PSA         25.8         55.0         8.8         19.4         0.4         20.4         25.8         25.2         3.4         38.8         28.6         28.2         282.6           Sick, Injured, Unruly Passenger - Foreign         0.6         0.0         0															
Sick, Injured, Unruly Passenger - Metra/PSA         25.8         55.0         8.8         19.4         0.4         20.4         25.8         25.2         3.4         38.8         28.6         28.2         282.6           Sick, Injured, Unruly Passenger - Foreign         0.6         0.0<	ĕ														
Sick, Injured, Unruly Passenger - Foreign         0.6         0.0															
Weather - TOTAL         192.6         105.4         26.0         38.8         8.4         125.4         100.2         42.0         122.6         27.0         116.6         119.8         97.4         1,122.2           Weather - Metra/PSA         191.6         105.4         26.0         38.8         8.0         124.4         99.6         41.6         121.8         25.4         116.6         119.4         97.2         1,115.8           Weather - Foreign         1.0         0.0         0.0         0.0         0.4         1.0         0.6         0.4         0.8         1.6         0.0         0.4         0.2         6.4           Passenger Loading - TOTAL         87.0         128.4         24.8         54.2         0.2         96.0         64.2         2.0         141.4         1.4         166.6         85.0         78.8         930.0           Lift Deployment - TOTAL         25.8         1.2         0.0         1.4         0.0         22.0         27.4         2.0         49.8         1.0         22.4         12.8         25.8         191.6           Obstruction/Debris - TOTAL         43.0         16.2         4.4         21.6         2.2         19.4         22.6         4.0<															
Weather - Metra/PSA         191.6         105.4         26.0         38.8         8.0         124.4         99.6         41.6         121.8         25.4         116.6         119.4         97.2         1,115.8           Weather - Foreign         1.0         0.0         0.0         0.4         1.0         0.6         0.4         0.8         1.6         0.0         0.4         0.2         6.4           Passenger Loading - TOTAL         87.0         128.4         24.8         54.2         0.2         96.0         64.2         2.0         141.4         1.4         166.6         85.0         78.8         930.0           Lift Deployment - TOTAL         25.8         1.2         0.0         1.4         0.0         22.0         27.4         2.0         49.8         1.0         22.4         12.8         25.8         191.6           Obstruction/Debris - TOTAL         43.0         16.2         4.4         21.6         2.2         19.4         22.6         4.0         29.0         10.8         25.6         34.6         32.6         266.0           Catenary Failure - TOTAL         25.8         21.8         4.0         10.6         0.8         19.2         18.4         4.2         21.6 </td <td>, , , , ,</td> <td></td>	, , , , ,														
Weather - Foreign         1.0         0.0         0.0         0.0         0.4         1.0         0.6         0.4         0.8         1.6         0.0         0.4         0.2         6.4           Passenger Loading - TOTAL         87.0         128.4         24.8         54.2         0.2         96.0         64.2         2.0         141.4         1.4         166.6         85.0         78.8         930.0           Lift Deployment - TOTAL         25.8         1.2         0.0         1.4         0.0         22.0         27.4         2.0         49.8         1.0         22.4         12.8         25.8         191.6           Obstruction/Debris - TOTAL         43.0         16.2         4.4         21.6         2.2         19.4         22.6         4.0         29.0         10.8         25.6         34.6         32.6         266.0           Catenary Failure - TOTAL         0.0         36.4         8.6         12.2         0.0															, ,
Passenger Loading - TOTAL Lift Deployment - TOTAL 25.8 1.2 0.0 1.4 0.0 22.0 27.4 2.0 49.8 1.0 22.4 12.8 25.8 191.6 Obstruction/Debris - TOTAL Catenary Failure - TOTAL Other - TOTAL  1,229.6 1,229.6 1,220.6 1,44 21.6 2.2 19.4 21.6 2.2 19.4 22.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0															
Lift Deployment - TOTAL  25.8  1.2  0.0  1.4  0.0  22.0  27.4  2.0  49.8  1.0  22.4  12.8  25.8  191.6  Obstruction/Debris - TOTAL  A3.0  16.2  4.4  21.6  2.2  19.4  22.6  4.0  29.0  10.8  25.6  34.6  32.6  266.0  Catenary Failure - TOTAL  Other - TOTAL  Other - TOTAL  TOTAL TRAINS DELAYED  1,229.6  563.2  148.6  257.6  258.6  257.6  82.8  967.8  684.8  323.2  743.8  329.8  661.2  589.0  727.4  7,308.8  701.8  7308.8															
Obstruction/Debris - TOTAL       43.0       16.2       4.4       21.6       2.2       19.4       22.6       4.0       29.0       10.8       25.6       34.6       32.6       266.0         Catenary Failure - TOTAL       0.0       36.4       8.6       12.2       0.0	5 5														
Catenary Failure - TOTAL       0.0       36.4       8.6       12.2       0.0       <	* *														
Other - TOTAL       25.8       21.8       4.0       10.6       0.8       19.2       18.4       4.2       21.6       10.4       26.4       16.6       35.6       215.4         TOTAL TRAINS DELAYED       1,229.6       563.2       148.6       257.6       82.8       967.8       684.8       323.2       743.8       329.8       661.2       589.0       727.4       7,308.8         Total Metra/PSA Delays       959.6       551.2       146.8       255.6       32.0       770.4       543.0       179.4       678.2       131.2       639.8       535.4       545.2       5,967.8							-,								
TOTAL TRAINS DELAYED         1,229.6         563.2         148.6         257.6         82.8         967.8         684.8         323.2         743.8         329.8         661.2         589.0         727.4         7,308.8           Total Metra/PSA Delays         959.6         551.2         146.8         255.6         32.0         770.4         543.0         179.4         678.2         131.2         639.8         535.4         545.2         5,967.8	· · · · · · · · · · · · · · · · · · ·														
Total Metra/PSA Delays 959.6 551.2 146.8 255.6 32.0 770.4 543.0 179.4 678.2 131.2 639.8 535.4 545.2 5,967.8	Ouici - TOTAL	23.8	21.8	4.0	10.0	0.8	19.2	16.4	4.2	21.0	10.4	20.4	10.0	33.0	213.4
	TOTAL TRAINS DELAYED	1,229.6	563.2	148.6	257.6	82.8	967.8	684.8	323.2	743.8	329.8	661.2	589.0	727.4	7,308.8
· · · · · · · · · · · · · · · · · · ·	Total Metra/PSA Delays	959.6	551.2	146.8	255.6	32.0	770.4	543.0	179.4	678.2	131.2	639.8	535.4	545.2	5,967.8
	Total Foreign Carrier Delays	270.0	12.0	1.8	2.0	50.8	197.4	141.8	143.8	65.6	198.6	21.4	53.6	182.2	1,341.0

Data for latest month is final (09/23/14) version from TOPS.

 $<sup>{\</sup>it 'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.}$ 

Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 9.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

January - August 2015 Divergence From January - August Average Over Previous Five Years

, ,	2015 1		Electric			Mi		Ī			III	nion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - TOTAL	-45.4	-0.2	-0.4	0.0	1.6	-16.0	-53.4	-24.6	-20.6	4.6	-0.4	20.0	32.0	-102.8
Freight Interference - Peak	-30.6	0.0	-0.2	0.0	1.6	9.0	-12.0	-5.8	-9.0	9.2	1.0	17.0	19.2	-0.6
Primary	-24.6	0.0	0.0	0.0	2.2	6.0	-11.6	-2.8	-2.2	-2.4	0.2	8.0	9.6	-17.6
Secondary	-6.0	0.0	-0.2	0.0	-0.6	3.0	-0.4	-3.0	-6.8	11.6	0.8	9.0	9.6	17.0
Freight Interference - Off-Peak	-14.8	-0.2	-0.2	0.0	0.0	-25.0	-41.4	-18.8	-11.6	-4.6	-1.4	3.0	12.8	-102.2
Primary	-21.6	0.0	0.0	0.0	0.0	-24.6	-29.0	-18.2	-8.4	-7.0	-2.2	2.6	10.8	-97.6
Secondary	6.8	-0.2	-0.2	0.0	0.0	-0.4	-12.4	-0.6	-3.2	2.4	0.8	0.4	2.0	-4.6
Signal/Switch Failure - TOTAL	-30.0	-12.6	-3.0	-3.0	-4.6	-102.6	-28.0	-0.8	-37.6	-22.8	-17.8	-37.8	-20.2	-320.8
Signal/Switch Failure - Metra/PSA	-20.6	-12.6	-2.8	-3.0	-11.6	-93.8	-20.4	-7.0	-35.0	-25.0	-17.2	-41.6	-19.2	-309.8
Primary	-26.0	-23.6	-4.2	-1.0	-11.4	-53.8	-23.0	-3.4	-25.4	-20.4	-7.2	-21.6	-13.8	-234.8
Secondary	5.4	11.0	1.4	-2.0	-0.2	-40.0	2.6	-3.6	-9.6	-4.6	-10.0	-20.0	-5.4	-75.0
Signal/Switch Failure - Foreign	-9.4	0.0	-0.2	0.0	7.0	-8.8	-7.6	6.2	-2.6	2.2	-0.6	3.8	-1.0	-11.0
Primary	-13.8	0.0	0.0	0.0	6.6	-7.8	-8.2	1.6	-1.0	-1.8	-0.6	0.0	-1.0	-26.0
Secondary	4.4	0.0	-0.2	0.0	0.4	-1.0	0.6	4.6	-1.6	4.0	0.0	3.8	0.0	15.0
Mechanical Failure - TOTAL	-38.2	27.2	-9.2	-8.6	2.8	15.2	-8.4	-10.8	3.8	7.8	-25.4	3.4	-5.0	-45.4
Mechanical Failure - Metra/PSA	-38.2	22.6	-12.0	-9.6	2.8	-3.2	-8.2	-10.8	4.2	7.8	-25.4	3.4	-4.8	-71.4
Non-Locomotive Equipment Failure - Metra/PSA	-11.6	22.6	-11.8	-9.6	0.4	0.8	8.8	-2.2	1.2	-1.4	-10.6	6.0	-3.6	-11.0
Primary	-4.6	-1.8	-6.0	-3.6	0.6	2.0	-0.4	-0.2	-3.6	0.6	-2.4	2.2	0.8	-16.4
Secondary	-7.0	24.4	-5.8	-6.0	-0.2	-1.2	9.2	-2.0	4.8	-2.0	-8.2	3.8	-4.4	5.4
Locomotive Failure - Metra/PSA	-26.6	0.0	-0.2	0.0	2.4	-4.0	-17.0	-8.6	3.0	9.2	-14.8	-2.6	-1.2	-60.4
Primary Secondary	-8.2 -18.4	0.0 0.0	-0.2 0.0	0.0 0.0	1.8 0.6	0.8 -4.8	-4.0 -13.0	-4.6 -4.0	2.8 0.2	5.0 4.2	0.0 -14.8	-0.6 -2.0	-0.4 -0.8	-7.6 -52.8
-	0.0	4.6	2.8	1.0	0.0	18.4	-0.2	0.0	-0.4	0.0	0.0	0.0	-0.2	26.0
Mechanical Failure - Foreign	2.0	-4.0	-2.0	-3.4		-46.6	-12.2					-8.4		
Passenger Train Interference - TOTAL			-2.4	-3.4	5.6	-33.8		0.6	-13.8	13.6	-11.4	-8.4	-7.8 -7.2	-87.8 -76.8
Passenger Train Interference - Metra/PSA	0.6	-0.4			0.4		-10.2	1.0	-8.8	5.8	-11.4			
Passenger Train Interference - Foreign	1.4	-3.6	0.4	-1.0	5.2	-12.8	-2.0	-0.4	-5.0	7.8	0.0	-0.4	-0.6	-11.0
Accident - TOTAL	-29.0	22.4	6.2	6.6	-0.8	-10.0	20.2	-8.4	-33.4	-8.0	0.2	-7.6	-23.6	-65.2
Accident - Metra/PSA	-13.8	22.4	6.2	6.6	-0.6	-12.4	19.4	-6.8	-34.6	-8.0	0.2	-7.6	-23.6	-52.6
Accident - Foreign	-15.2	0.0	0.0	0.0	-0.2	2.4	0.8	-1.6	1.2	0.0	0.0	0.0	0.0	-12.6
Track Work - TOTAL	-10.2	-17.2	-7.4	-6.0	2.6	-17.2	-30.6	-4.2	-22.8	6.0	-35.2	-5.6	-38.0	-185.8
Track Work - Metra/PSA	-37.4	-17.2	-7.4	-6.0	2.6	-17.0	-30.4	-3.6	-22.8	0.2	-35.2	-5.6	-38.0	-217.8
Track Work - Foreign	27.2	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.6	0.0	5.8	0.0	0.0	0.0	32.0
Human Error - TOTAL	-38.2	-5.4	-5.2	4.0	14.0	17.8	5.2	7.0	-8.4	-6.0	12.2	20.6	3.6	21.2
Human Error - Metra/PSA	-20.2	-2.6	-4.8	5.0	3.0	23.2	7.8	7.4	-8.4	0.4	-8.4	-2.8	-13.2	-13.6
Human Error - Foreign	-18.0	-2.8	-0.4	-1.0	11.0	-5.4	-2.6	-0.4	0.0	-6.4	20.6	23.4	16.8	34.8
Sick, Injured, Unruly Passenger - TOTAL	-3.4	-5.0	-0.8	-16.4	1.6	7.6	-1.8	-0.8	-13.6	-0.4	-24.8	2.4	-9.2	-64.6
Sick, Injured, Unruly Passenger - Metra/PSA	-2.8	-5.0	-0.8	-16.4	1.6	7.6	-1.8	-0.8	-13.2	-0.4	-24.8	2.4	-9.2	-63.6
Sick, Injured, Unruly Passenger - Foreign	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	-1.0
Weather - TOTAL	-14.6	50.6	18.0	-8.8	-3.4	-53.4	-33.2	-23.0	-65.6	-9.0	-61.6	-42.8	-17.4	-264.2
Weather - Metra/PSA	-14.6	50.6	18.0	-8.8	-3.0	-63.4	-33.6	-22.6	-64.8	-8.4	-61.6	-42.4	-19.2	-273.8
Weather - Foreign	0.0	0.0	0.0	0.0	-0.4	10.0	0.4	-0.4	-0.8	-0.6	0.0	-0.4	1.8	9.6
Passenger Loading - TOTAL	-49.0	-65.4	-17.8	-41.2	-0.2	-44.0	-36.2	1.0	-73.4	2.6	-94.6	-15.0	-25.8	-459.0
Lift Deployment - TOTAL	7.2	1.8	0.0	-1.4	0.0	-4.0	-3.4	-2.0	-40.8	0.0	-14.4	1.2	-0.8	-56.6
Obstruction/Debris - TOTAL	36.0	0.8	2.6	9.4	-0.2	23.6	8.4	7.0	-18.0	11.2	-9.6	4.4	-5.6	70.0
Catenary Failure - TOTAL	0.0	7.6	0.4	21.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	29.6
Other - TOTAL	33.2	-7.8	2.0	1.4	0.2	-11.2	-13.4	-0.2	-7.6	5.6	-18.4	5.4	-17.6	-28.4
TOTAL TRAINS DELAYED	-179.6	-7.2	-16.6	-45.6	19.2	-240.8	-186.8	-59.2	-351.8	5.2	-301.2	-60.0	-135.4	-1,559.8
Total Metra/PSA Delays	-119.6	-5.2	-18.8	-44.6	-5.0	-228.4	-122.0	-37.4	-323.2	-8.2	-320.8	-106.4	-184.2	-1,523.8
Total Foreign Carrier Delays	-60.0	-2.0	2.2	-1.0	24.2	-12.4	-64.8	-21.8	-28.6	13.4	19.6	46.4	48.8	-36.0
Total Totalgii Carrier Delays	00.0	2.0	2.2	1.0	21.2	12.7	01.0	21.0	20.0	15.7	17.0	10.1	-10.0	50.0

Data for current month is final (09/14/15) version from TOPS.

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<sup>&#</sup>x27;Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

<sup>&#</sup>x27;Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 10.a: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH

2015

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	Aug
Freight Interference - TOTAL	122	158	113	87	59	90	116	89					834	14.5%
Freight Interference - Peak	35	48	42	36	23	42	38	31					295	5.1%
Primary	24	33	24	24	13	25	26	19					188	3.3%
Secondary	11	15	18	12	10	17	12	12					107	1.9%
Freight Interference - Off-Peak	87	110	71	51	36	48	78	58					539	9.4%
Primary Secondary	63 24	86 24	59 12	42 9	28 8	38 10	56 22	42 16					414 125	7.2% 2.2%
Signal/Switch Failure - TOTAL	93	126	35	69	69	79	116	87					674	11.7%
Signal/Switch Failure - Metra/PSA	73	83	28	53	54	67	103	68					529	9.2%
Primary	38	54	25	29	30	42	63	32					313	5.4%
Secondary	35	29	3	24	24	25	40	36					216	3.8%
Signal/Switch Failure - Foreign	20	43	7	16	15	12	13	19					145	2.5%
Primary	17	23	5	12	7	6	11	11					92	1.6%
Secondary	3	20	2	4	8	6	2	8					53	0.9%
Mechanical Failure - TOTAL	82	102	69	66	51	100	65	62					597	10.4%
Mechanical Failure - Metra/PSA	71	93	69	56	51	100	65	62					567	9.9%
Non-Locomotive Equipment Failure - Metra/PSA	27	19	22	17	8	35	28	11					167	2.9%
Primary Secondary	10 17	6 13	10 12	7 10	6 2	4 31	9 19	4 7					56 111	1.0% 1.9%
	44	74	47	39	43		37							
Locomotive Failure - Metra/PSA  Primary	44 16	74 25	47	39 17	43 15	65 14	31 15	51 22					400 138	7.0% 2.4%
Secondary	28	49	33	22	28	51	22	29					262	4.6%
Mechanical Failure - Foreign	11	9	0	10	0	0	0	0					30	0.5%
Passenger Train Interference - TOTAL	13	19	6	7	16	27	12	10					110	1.9%
Passenger Train Interference - Metra/PSA	6	14	5	4	4	15	1	4					53	0.9%
Passenger Train Interference - Foreign	7	5	1	3	12	12	11	6					57	1.0%
Accident - TOTAL	29	35	60	60	20	59	29	13					305	5.3%
Accident - Metra/PSA	28	34	60	60	18	59	25	13					297	5.2%
Accident - Foreign	1	1	0	0	2	0	4	0					8	0.1%
Track Work - TOTAL	38	50	19	52	57	49	85	79					429	7.5%
Track Work - Metra/PSA	38	32	19	52	57	49	71	73					391	6.8%
Track Work - Foreign	0	18	0	0	0	0	14	6					38	0.7%
Human Error - TOTAL	32	67	103	31	40	45	148	41					507	8.8%
Human Error - Metra/PSA	24	45	90	17	28	40	57	29					330	5.7%
Human Error - Foreign	8	22	13	14	12	5	91	12					177	3.1%
Sick, Injured, Unruly Passenger - TOTAL	21	25	20	29	24	36	36	28					219	3.8%
Sick, Injured, Unruly Passenger - Metra/PSA	21	25	20	29	24	36	36	28					219	3.8%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0					0	0.0%
Weather - TOTAL	335	395	17	10	3	59	17	22					858	14.9%
Weather - Metra/PSA	333	381	17	10	3	59	17	22					842	14.6%
Weather - Foreign	2	14	0	0	0	0	0	0					16	0.3%
Passenger Loading - TOTAL	20	21	42	21	44	98	124	101					471	8.2%
Lift Deployment - TOTAL	22	23	20	9	9	24	18	10					135	2.3%
Obstruction/Debris - TOTAL	31	71	8	34	48	49	34	61					336	5.8%
Catenary Failure - TOTAL	4	34	10	0	3	4	23	9					87	1.5%
Other - TOTAL	23	59	10	10	19	16	31	19					187	3.3%
TOTAL TRAINS DELAYED	865	1,185	532	485	462	735	854	631					5,749	100.0%
Total Metra/PSA Delays	694	915	398	355	362	616	605	499					4,444	77.3%
Total Foreign Carrier Delays	171	270	134	130	100	119	249	132					1,305	22.7%

Data for current month is final (09/14/15) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 10.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	- Aug
Freight Interference - TOTAL	207	249	159	140	177	191	137	153	100	167	80	75	1,413	15.3%
Freight Interference - Peak	103	92	60	52	87	66	34	43	25	54	30	22	537	5.8%
Primary	88	53	30	27	62	45	21	20	22	23	21	15	346	3.7%
Secondary	15	39	30	25	25	21	13	23	3	31	9	7	191	2.1%
Freight Interference - Off-Peak	104	157	99	88	90	125	103	110	75	113	50	53	876	9.5%
Primary Secondary	72 32	110 47	70 29	68 20	71 19	87 38	80 23	76 34	57 18	84 29	35 15	45 8	634 242	6.9%
*														2.6%
Signal/Switch Failure - TOTAL	190	181	112	47	121	155	87	66	89	82	69	69	959	10.4%
Signal/Switch Failure - Metra/PSA	150 79	144 83	98 44	44 28	89 57	145 77	68 35	50 27	56 37	68 44	45 25	57 33	788 430	8.5% 4.7%
Secondary	79	61	54	26 16	32	68	33	23	19	24	20	24	358	3.9%
Signal/Switch Failure - Foreign	40	37	14	3	32	10	19	16	33	14	24	12	171	1.8%
Primary	24	20	12	2	21	7	11	10	13	10	19	7	107	1.3%
Secondary	16	17	2	1	11	3	8	6	20	4	5	5	64	0.7%
Mechanical Failure - TOTAL	189	174	128	48	113	109	98	51	62	141	56	74	910	9.8%
Mechanical Failure - Metra/PSA	188	169	128	46	107	109	98	51	58	141	56	70	896	9.7%
Non-Locomotive Equipment Failure - Metra/PSA	92	48	38	15	15	33	43	19	28	25	29	18	303	3.3%
Primary	29	19	9	8	7	13	12	11	9	8	13	9	108	1.2%
Secondary	63	29	29	7	8	20	31	8	19	17	16	9	195	2.1%
Locomotive Failure - Metra/PSA	96	121	90	31	92	76	55	32	30	116	27	52	593	6.4%
Primary	25 71	33	28	12 19	17 75	24 52	19	16	13 17	30	12	23 29	174	1.9%
Secondary		88	62				36	16		86	15		419	4.5%
Mechanical Failure - Foreign	1	5	0	2	6	0	0	0	4	0	0	4	14	0.2%
Passenger Train Interference - TOTAL	38	58	22	8	6	14	9	9	7	18	10	46	164	1.8%
Passenger Train Interference - Metra/PSA	29	45	15	5	4	6	5	5	3	11	6	26	114	1.2%
Passenger Train Interference - Foreign	9	13	7	3	2	8	4	4	4	7	4	20	50	0.5%
Accident - TOTAL	116	117	39	11	81	42	39	87	10	24	35	84	532	5.8%
Accident - Metra/PSA	88	75	29	10	80 1	33	27	87 0	9	20	28 7	67	429	4.6%
Accident - Foreign	28 42	33	10 37	1	•	237	12 58		1	72		17 54	739	1.1%
Track Work - TOTAL	42	33	37	78 78	208 208		58 58	46 46	61 59		56 56	54 54	739	8.0%
Track Work - Metra/PSA Track Work - Foreign	0	0	0	/8 0	208	237	58 0	46	2	72 0	0	0	0	8.0% 0.0%
Human Error - TOTAL	96	84	53	81	46	72	75	39	59	63	23	44	546	5.9%
Human Error - Metra/PSA	64	53	22	63	34	45	73 55	28	39	34	12	7	364	3.9%
Human Error - Foreign	32	33	31	18	12	43 27	20	20 11	20	29	11	37	182	2.0%
Sick, Injured, Unruly Passenger - TOTAL	27	38	31	23	36	38	39	25	24	31	20	34	257	2.8%
Sick, Injured, Unruly Passenger - 101AL Sick, Injured, Unruly Passenger - Metra/PSA	-	38	31	20	36	38	39	25	24	31	20	34	254	2.7%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	3	0	0	0	0	0	0	0	0	3	0.0%
Weather - TOTAL	1,431	487	123	6	36	67	25	88	32	57	22	2	2,263	24.5%
Weather - Metra/PSA	1,427	483	123	6	36	67	25	88	32	57	22	2	2,255	24.5%
Weather - Foreign	1,427	463	0	0	0	0	0	0	0	0	0	0	2,233	0.1%
Passenger Loading - TOTAL	30	75	89	29	47	145	134	101	16	14	16	64	650	7.0%
Lift Deployment - TOTAL	28	41	13	10	11	19	11	38	13	6	8	16	171	1.8%
Obstruction/Debris - TOTAL	85	88	32	44	23	49	36	10	35	66	57	25	367	4.0%
Catenary Failure - TOTAL	0	32	9	3	5	5	14	2	0	0	2	0	70	0.8%
Other - TOTAL	31	45	32	21	27	19	11	19	25	6	32	16	205	2.2%
Omer TOTAL	- 31	73	32	21	21	19	11	19	23	U	32	10	203	2.2/0
TOTAL TRAINS DELAYED	2,510	1,702	879	549	937	1,162	773	734	533	747	486	603	9,246	100.0%
Total Metra/PSA Delays	2,189	1,321	658	379	707	917	581	550	369	526	360	438	7,302	79.0%
Total Foreign Carrier Delays	321	381	221	170	230	245	192	184	164	221	126	165	1,944	21.0%

Data for latest month is final (01/20/15) version from TOPS.

09/14/2015

'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 10.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

2015 Divergence From 2014

Secondary   4   24   27   27   27   27   27   27	CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	Aug
Primary	Freight Interference - TOTAL	-85	-91	-46	-53	-118	-101	-21	-64					-579	-0.8%
Secondary   4   24   27   27   27   27   27   27	Freight Interference - Peak	-68	-44	-18	-16	-64	-24	4	-12					-242	-0.7%
Freight Interference - Off-Peak   -17		-64													-0.5%
Primary   S	Secondary	-4	-24	-12	-13	-15	-4	-1	-11					-84	-0.2%
Secondary   Seco		-17		-28											-0.1%
Signal/Switch Failure - TOTAL   -97   -55   -77   22   -52   -76   29   21   -285   1.4%							-								0.3%
Signal Switch Failure - Metra/PSA         .77         .61         .70         .9         .55         .78         .35         18         .259         0.7%         .61         .70         .9         .55         .78         .35         .18         .259         0.7%         .70         .9         .9         .9         .9         .9         .27         .27         .33         .28         .5         .117         .00         .44         .49         .9         .10         .27         .33         .27         .30         .27         .30         .47         .2         .6         .3         .26         .07         .33         .47         .2         .6         .3         .2         .6         .3         .2         .33         .11         .23         .3         .9         .33         .11         .33         .0         .9         .33         .11         .33         .0         .8         .2         .9         .33         .11         .33         .3         .0         .8         .4         .2         .9         .33         .11         .33         .3         .5         .2         .9         .18         .4         .9         .33         .11         .3	*														
Primary   41   3-9   3-9   1   37   38   28   5   3   42   20   5   5   42   20   6   7   7   3   3   3   3   3   3   3   3	C														
Secondary   Secondary   Secondary   Secondary   Signal Switch Failure - Foreign   Company   Signal Switch Failure - Foreign   Company   Signal Switch Failure - Foreign   Company   Signal Switch Failure - Metra/PSA   Company   Company	S														
Signal/Switch Failure - Foreign									-						
Primary   73   3   77   70   74   73   3   75   70   74   74   74   74   74   74   74	*														
Secondary   1-3   3   0   3   3   3   0   3   3   3								-						-	
Mechanical Failure - TOTAL         -107         -72         -59         18         -62         -9         -33         11         -313         0.5%           Mechanical Failure - Metra/PSA         -117         -76         -59         10         -56         -9         -33         11         -329         0.2%           Non-Locomotive Equipment Failure - Metra/PSA         -65         -29         -16         2         -7         2         -15         -8         -136         0.4%         -0.46         -0.46         -16         -17         -3         -1         -1         -1         -9         -3         -7         -1         -3         -2         -3         -7         -3         -7         -33         -0         -1         -33         -1         -3         -1         -9         -3         -7         -1         -8         -6         -2         -3         -7         -1         -8         -2         -2         -8         -8         -2         -1         -4         -9         -1         -1         11         11         12         -9         -8         -8         -9         -9         -8         -4         -9         -9         -4         -1															
Mechanical Failure - Metra/PSA	*														
Non-Locomotive Equipment Failure - Metra/PSA															
Primary							-								
Locomotive Failure - Metra/PSA	* *														
Locomotive Failure - Metra/PSA															
Primary Secondary   3-9   8-9   3-	*														
Mechanical Failure - Foreign   10   4   0   8   6   0   0   0   0   16   0.49     Passenger Train Interference - TOTAL   2-5   3-9   -16   -1   10   13   3   1   5-5   4   0.19     Passenger Train Interference - Metra/PSA   2-3   -31   -10   -1   0   0   9   -4   -1   -10   -61   -0.39     Passenger Train Interference - Foreign   -2   -8   -6   0   10   4   7   2   7   0.59     Accident - TOTAL   8-7   -82   21   49   -61   17   -10   -74   -227   0.49     Accident - Metra/PSA   -60   -41   31   50   -62   26   -2   -74   -132   0.59     Accident - Foreign   -27   -41   -10   -1   1   -9   -8   0   -95   -1.09     Track Work - Metra/PSA   -4   -1   -18   -26   -151   -188   27   33   -310   -0.59     Accident - Foreign   0   18   0   0   0   14   6   -33   -310   -0.59     Human Error - TOTAL   -64   -17   50   -50   -6   -27   73   2   -39   2.99     Human Error - Metra/PSA   -40   -8   68   -46   -6   -5   2   1   -10   -74   -10   -74   -10   -74     Human Error - Foreign   0   0   0   0   0   0   0   0   0		-		-											
Mechanical Failure - Foreign															
Passenger Train Interference - TOTAL	-														
Passenger Train Interference - Metra/PSA   -23   -31   -10   -1   0   9   -4   -1   7   2   7   0.5%														-	
Passenger Train Interference - Foreign   -2   -8   -6   0   10   4   7   2   7   0.5%     Accident - TOTAL   -87   -82   21   49   -61   17   -10   -74   -10   -74   -132   0.5%     Accident - Foreign   -27   -41   -10   -1   1   -9   -8   0   -95   -1.0%     Accident - Foreign   -27   -41   -10   -1   1   -9   -8   0   -95   -1.0%     Accident - Foreign   -27   -41   -10   -1   1   -9   -8   0   -95   -1.0%     Track Work - TOTAL   -4   17   -18   -26   -151   -188   27   33   -310   -0.5%     Track Work - Metra/PSA   -4   -1   -18   -26   -151   -188   27   33   -348   -1.348   -1.35     Track Work - Foreign   0   18   0   0   0   0   14   6   -38   0.7%     Human Error - TOTAL   -64   -17   50   -50   -6   -27   73   2   -39   2.9%     Human Error - Foreign   -24   -9   -18   -4   0   -22   71   1   -5   -348   1.8%     Human Error - Foreign   -24   -9   -18   -4   0   -22   71   1   -5   -348   1.0%     Sick, Injured, Unruly Passenger - Metra/PSA   -6   -13   -11   6   -12   -2   -3   3   -33   -38   1.0%     Sick, Injured, Unruly Passenger - Foreign   0   0   0   0   0   0   0   0   -3   0.0%     Weather - TOTAL   -1,096   -92   -106   4   -33   -8   -8   -66   -1,405   -9.6%     Weather - Foreign   -2   10   0   0   0   0   0   0   0   0	č	_		-			-		•					_	
Accident - TOTAL		-		-		-									
Accident - Metra/PSA															
Accident - Foreign														-	
Track Work - TOTAL				-			-								
Track Work - Metra/PSA	Ę						_								
Track Work - Foreign				-											
Human Error - TOTAL															
Human Error - Metra/PSA	Ę			-											
Human Error - Foreign         -24         -9         -18         -4         0         -22         71         1         -5         1.1%           Sick, Injured, Unruly Passenger - TOTAL         -6         -13         -11         6         -12         -2         -3         3         -38         1.0%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -10         6         -2         -8         -6         -6         -18         -3         -8         -8         -66         -6         -14         -1							-								
Sick, Injured, Unruly Passenger - TOTAL         -6         -13         -11         6         -12         -2         -3         3         -38         1.0%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Metra/PSA         -6         -10         -6         -18         -6         0		-					-							_	
Sick, Injured, Unruly Passenger - Metra/PSA         -6         -13         -11         9         -12         -2         -3         3         -35         1.1%           Sick, Injured, Unruly Passenger - Foreign         0	Č														
Sick, Injured, Unruly Passenger - Foreign         0         0         0         -3         0	, , , , ,	-													
Weather - TOTAL         -1,096         -92         -106         4         -33         -8         -8         -66         -1,405         -9,6%           Weather - Metra/PSA         -1,094         -102         -106         4         -33         -8         -8         -66         -1,413         -9,7%           Weather - Foreign         -2         10         0         0         0         0         0         0         0         8         0,2%           Passenger Loading - TOTAL         -10         -54         -47         -8         -3         -47         -10         0         -179         1,2%           Lift Deployment - TOTAL         -6         -18         7         -1         -2         5         7         -28         -36         0.5%           Obstruction/Debris - TOTAL         -54         -17         -24         -10         25         0         -2         51         -31         1.9%           Catenary Failure - TOTAL         4         2         1         -3         -2         -1         9         7         17         0.8%           Other - TOTAL         -8         14         -22         -11         -8         -3         20 </td <td></td>															
Weather - Metra/PSA         -1,094         -102         -106         4         -33         -8         -8         -66         -1,413         -9.7%           Weather - Foreign         -2         10         0         0         0         0         0         0         0         8         0.2%           Passenger Loading - TOTAL         -10         -54         -47         -8         -3         -47         -10         0         -179         1.2%           Lift Deployment - TOTAL         -6         -18         7         -1         -2         5         7         -28         -36         0.5%           Obstruction/Debris - TOTAL         -54         -17         -24         -10         25         0         -2         51         -31         1.9%           Catenary Failure - TOTAL         4         2         1         -3         -2         -1         9         7         17         0.8%           Other - TOTAL         -8         14         -22         -11         -8         -3         20         0         -18         1.0%           TOTAL TRAINS DELAYED         -1,645         -517         -347         -64         -475         -427	, , , ,			-											
Weather - Foreign         -2         10         0		-												,	
Passenger Loading - TOTAL Lift Deployment - TOTAL -6 -18 7 -1 -2 5 7 -28 Obstruction/Debris - TOTAL -6 -18 7 -1 -2 5 7 -28 Obstruction/Debris - TOTAL -54 -17 -24 -10 25 0 -2 51 Catenary Failure - TOTAL -8 14 2 1 -3 -2 -1 9 7 Other - TOTAL -8 14 -22 -11 -8 -3 20 0  TOTAL TRAINS DELAYED -1,645 -517 -347 -64 -475 -427 81 -103  -3,497  Total Metra/PSA Delays -1,495 -406 -260 -24 -345 -301 24 -51 -179 1.2% -100 0 -179 1.2% -36 0.5% -36 0.5% -36 0.5% -38 1.9% -38 1.9% -38 1.9% -38 1.9% -38 1.9% -38 1.9% -38 1.9% -38 1.9% -38 1.9% -38 1.9% -3,497 -3,497		-												,	-9.7%
Lift Deployment - TOTAL	,														0.2%
Obstruction/Debris - TOTAL       -54       -17       -24       -10       25       0       -2       51       -31       1.9%         Catenary Failure - TOTAL       4       2       1       -3       -2       -1       9       7       17       0.8%         Other - TOTAL       -8       14       -22       -11       -8       -3       20       0       -18       1.0%         TOTAL TRAINS DELAYED       -1,645       -517       -347       -64       -475       -427       81       -103       -3,497         Total Metra/PSA Delays       -1,495       -406       -260       -24       -345       -301       24       -51       -2,858	Passenger Loading - TOTAL	_													
Catenary Failure - TOTAL       4       2       1       -3       -2       -1       9       7       17       0.8%         Other - TOTAL       -8       14       -22       -11       -8       -3       20       0       0       -18       1.0%         TOTAL TRAINS DELAYED       -1,645       -517       -347       -64       -475       -427       81       -103       -3,497         Total Metra/PSA Delays       -1,495       -406       -260       -24       -345       -301       24       -51       -2,858	Lift Deployment - TOTAL				-										
Other - TOTAL       -8       14       -22       -11       -8       -3       20       0       -18       1.0%         TOTAL TRAINS DELAYED       -1,645       -517       -347       -64       -475       -427       81       -103       -3,497         Total Metra/PSA Delays       -1,495       -406       -260       -24       -345       -301       24       -51       -2,858	Obstruction/Debris - TOTAL	_		-24			0							_	1.9%
TOTAL TRAINS DELAYED         -1,645         -517         -347         -64         -475         -427         81         -103         -3,497           Total Metra/PSA Delays         -1,495         -406         -260         -24         -345         -301         24         -51         -2,858	Catenary Failure - TOTAL													17	0.8%
Total Metra/PSA Delays -1,495 -406 -260 -24 -345 -301 24 -51 -2,858	Other - TOTAL	-8	14	-22	-11	-8	-3	20	0					-18	1.0%
	TOTAL TRAINS DELAYED	-1,645	-517	-347	-64	-475	-427	81	-103					-3,497	
	Total Metra/PSA Delays	-1,495	-406	-260	-24	-345	-301	24	-51					-2,858	
TUBLE DELIVER 1 - 1.50 - 11 - 6/1 - 40 - 150 - 170   5/ - 5/   1 - 6.39	Total Foreign Carrier Delays	-150	-111	-87	-40	-130	-126	57	-52					-639	

Data for current month is final (09/14/15) version from TOPS.

 $P: \label{eq:contine} P: \label{eq:contine$ 

<sup>&#</sup>x27;Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

TABLE 11: FREIGHT DELAYS between September 2013 and August 2015

		]	Electric			Mil					Un	ion Pacif	ic	
	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Sep-13	9	0	0	0	2	11	19	8	2	4	0	6	10	71
Oct-13	22	0	0	0	4	13	18	14	5	11	0	10	11	108
Nov-13	28	0	0	0	1	8	22	15	22	21	0	4	25	146
Dec-13	59	0	0	0	6	15	25	15	7	12	4	23	31	197
Jan-14	86	0	0	0	9	28	16	16	8	30	0	3	11	207
Feb-14	69	0	0	0	9	40	35	32	15	15	6	11	17	249
Mar-14	27	0	0	0	9	26	23	28	2	11	4	5	24	159
Apr-14	48	0	0	0	1	4	19	13	14	16	2	3	20	140
May-14	61	0	0	0	5	25	31	20	3	19	1	2	10	177
Jun-14	48	0	0	0	2	12	38	17	9	30	1	13	21	191
Jul-14	18	0	0	0	1	24	19	16	12	23	0	5	19	137
Aug-14	26	0	0	0	3	12	24	25	4	17	0	4	38	153
Total	501	0	0	0	52	218	289	219	103	209	18	89	237	1,935
Sep-14	24	0	0	0	5	5	22	8	0	24	5	0	7	100
Oct-14	68	0	0	0	0	10	19	20	3	16	4	11	16	167
Nov-14	13	0	0	0	2	12	14	5	1	25	0	1	7	80
Dec-14	11	0	0	0	2	11	20	6	2	6	0	3	14	75
Jan-15	13	0	0	0	3	29	17	11	3	16	0	3	27	122
Feb-15	5	0	0	0	4	31	14	26	2	19	5	13	39	158
Mar-15	18	0	0	0	3	3	12	12	3	16	5	7	34	113
Apr-15	8	0	0	0	6	11	4	13	4	12	4	9	16	87
May-15	20	0	0	0	4	5	2	8	2	9	0	3	6	59
Jun-15	12	0	0	0	4	11	1	9	3	24	0	6	20	90
Jul-15	23	0	0	0	1	11	0	3	12	17	0	18	31	116
Aug-15	13	0	0	0	8	7	5	11	4	17	0	0	24	89
Total	228	0	0	0	42	146	130	132	39	201	23	74	241	1,256

Data for current month is final (09/14/15) version from TOPS.

 $P: \label{eq:problem} P: \label{eq:problem$ 

TABLES 12.a & 12.b: FREQUENCY OF LIFT-DEPLOYMENT TRAIN DELAYS BY LINE & MONTH  $2015\,$ 

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift Delays YTD	% of All Delays YTD
BNSF	6	7	8	1	1	2	7	1					33	3.14%
Electric ML	0	0	0	0	0	1	2	0					3	0.54%
Electric BI	0	0	0	0	0	0	0	0					0	0.00%
Electric SC	0	0	0	0	0	0	0	0					0	0.00%
HER	0	0	0	0	0	0	0	0					0	0.00%
Milw N	4	9	0	1	2	2	0	0					18	2.48%
Milw W	4	1	1	1	1	11	2	3					24	4.82%
NCS	0	0	0	0	0	0	0	0					0	0.00%
RI	0	1	1	0	1	0	5	1					9	2.30%
SWS	0	0	0	0	1	0	0	0					1	0.30%
UP N	0	0	0	1	2	1	2	2					8	2.22%
UP NW	5	0	1	3	1	3	0	1					14	2.65%
UP W	3	5	9	2	0	4	0	2					25	4.22%
Total Lift Delays	22	23	20	9	9	24	18	10					135	2.35%
ALL DELAYS	·		`		`			·			·			5,749

Data for current month is final (09/14/15) version from TOPS.

2014

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift Delays All Year	% of All Delays All Year
BNSF	4	2	2	3	2	1	0	22	2	1	0	2	41	1.50%
Electric ML	0	0	0	0	0	0	0	3	0	0	0	0	3	0.42%
Electric BI	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Electric SC	0	0	0	0	0	0	0	1	0	0	0	0	1	0.29%
HER	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Milw N	5	10	2	0	4	2	0	1	2	1	2	4	33	2.25%
Milw W	8	5	5	1	1	9	5	2	4	1	1	5	47	4.25%
NCS	0	3	0	0	0	0	0	2	0	0	0	0	5	0.88%
RI	3	6	2	3	3	4	3	2	0	0	3	1	30	2.48%
SWS	0	0	0	0	0	0	1	1	0	0	1	0	3	0.51%
UP N	0	1	1	1	0	0	0	0	0	0	1	0	4	0.60%
UP NW	3	6	0	1	1	1	0	1	2	1	0	2	18	2.00%
UP W	5	8	1	1	0	2	2	3	3	2	0	2	29	3.04%
Total Lift Delays	28	41	13	10	11	19	11	38	13	6	8	16	214	1.84%
ALL DELAYS														11,615

 $P: \label{lem:linear_loss} P: \label{linear_loss} P: \label{linear$ 

09/14/2015

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION August 2015

Minutes	BNSF		Electric		Her	r   Milwaukee		NCS   RI		SWS		UP		System
5,2111111		ML	BI	SC		N	W	-,			N	NW	W	~J~~~
Peak *														
6-10	17	3	3	2	13	5	7	3	11	10	7	7	16	104
11-15	9	0	1	0	1	4	1	2	3	2	3	5	4	35
16-20	6	0	0	0	1	1	2	5	4	1	1	0	0	21
21+	6	1	0	0	3	8	8	3	3	1	2	5	0	40
Annulled	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>7</u>
Sub-Total	39	4	4	2	18	20	20	13	22	14	13	18	20	207
Off-Peak **														
6-10	24	23	2	20	0	20	14	12	16	10	28	12	22	203
11-15	11	5	0	2	0	15	5	5	7	5	14	11	10	90
16-20	14	6	0	3	0	4	4	1	3	3	3	5	4	50
21+	14	2	0	6	0	13	3	3	3	9	11	6	3	73
Annulled	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>8</u>
Sub-Total	64	36	2	31	0	56	26	21	30	27	56	36	39	424
August 201	5 Total													
6-10	41	26	5	22	13	25	21	15	27	20	35	19	38	307
11-15	20	5	1	2	1	19	6	7	10	7	17	16	14	125
16-20	20	6	0	3	1	5	6	6	7	4	4	5	4	71
21+	20	3	0	6	3	21	11	6	6	10	13	11	3	113
Annulled	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>15</u>
TOTAL	103	40	6	33	18	76	46	34	52	41	69	54	59	631
2015 Year-														
6-10	478	241	71	100	48	294	197	129	229	181	136	175	252	2,531
11-15	240	109	28	25	26	166	104	60	73	63	72	133	153	1,252
16-20	116	64	15	19	10	85	61	24	31	29	30	76	65	625
21+	181	127	15	49	16	148	110	43	40	60	90	131	109	1,119
Annulled	<u>35</u>	<u>15</u>	<u>3</u>	<u>19</u>	<u>2</u>	<u>34</u>	<u>26</u>	<u>8</u>	<u>19</u>	<u>2</u>	<u>32</u>	<u>14</u>	<u>13</u>	<u>222</u>
TOTAL	1,050	556	132	212	102	727	498	264	392	335	360	529	592	5,749
		PER	CENT	COMP	OSITIC	ON OF I	DELAY	SBYR	ANGE	OF DU	RATIO	N		
	DNGE					3.70		NIGG	-	GTTIG			<del></del>	G .
Minutes	BNSF	ML	Electric BI	SC	Her	Milwa N	W W	NCS	RI	SWS	N	UP NW	W	System
August 201	5 Total	•	•		•	•	•	•	•	•		•		
6-10	39.8%	65.0%	83.3%	66.7%	72.2%	32.9%	45.7%	44.1%	51.9%	48.8%	50.7%	35.2%	64.4%	48.7%
11-15	19.4%	12.5%	16.7%	6.1%	5.6%	25.0%	13.0%	20.6%	19.2%	17.1%	24.6%	29.6%	23.7%	19.8%
16-20	19.4%	15.0%	0.0%	9.1%	5.6%	6.6%	13.0%	17.6%	13.5%	9.8%	5.8%	9.3%	6.8%	11.3%
21+	19.4%	7.5%	0.0%	18.2%	16.7%	27.6%	23.9%	17.6%	11.5%	24.4%	18.8%	20.4%	5.1%	17.9%
Annulled	1.9%	0.0%	0.0%	0.0%	0.0%	7.9%	4.3%	0.0%	3.8%	0.0%	0.0%	5.6%	0.0%	2.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2015 Year-to-Date Delays By Duration														
6-10	45.5%	43.3%	53.8%	47.2%	47.1%	40.4%	39.6%	48.9%	58.4%	54.0%	37.8%	33.1%	42.6%	44.0%
11-15	22.9%	19.6%	21.2%	11.8%	25.5%	22.8%	20.9%	22.7%	18.6%	18.8%	20.0%	25.1%	25.8%	21.8%
16-20	11.0%	11.5%	11.4%	9.0%	9.8%	11.7%	12.2%	9.1%	7.9%	8.7%	8.3%	14.4%	11.0%	10.9%
21+	17.2%	22.8%	11.4%	23.1%	15.7%	20.4%	22.1%	16.3%	10.2%	17.9%	25.0%	24.8%	18.4%	19.5%
Annulled	3.3%	2.7%	2.3%	9.0%	2.0%	4.7%	5.2%	3.0%	4.8%	0.6%	8.9%	2.6%	2.2%	3.9%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

\*Includes peak direction trains operating during weekday peak periods. \*\*Includes all other weekday and weekend trains.

Data for most recent month is final (09/14/15) version from TOPS.

9/14/2015

TABLE 14: AVERAGE LENGTH OF DELAY BY SERVICE PERIOD, IN MINUTES

	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
August 2015														
Peak *	14.9	12.3	8.5	7.0	20.1	23.1	23.1	19.5	12.2	9.8	14.2	37.1	8.9	17.5
Off-Peak **	15.0	10.6	10.0	14.5		17.3	12.2	13.8	12.4	18.3	16.4	24.0	12.1	15.3
All	15.0	10.8	9.0	14.1	20.1	18.8	16.7	16.0	12.3	15.4	15.9	28.4	11.0	16.0
2015 Year-1	to-Date													
Peak *	14.8	21.3	13.0	19.5	15.9	18.3	17.8	14.7	12.4	13.1	23.7	23.2	15.3	17.3
Off-Peak **	17.0	13.4	12.2	16.7		19.0	17.8	15.7	11.9	14.7	18.0	22.7	17.2	16.9
All	15.8	17.2	12.6	17.4	15.9	18.8	17.8	15.2	12.0	14.2	19.8	22.9	16.5	17.1

Data for most recent month is final (09/14/15) version from TOPS.

9/14/2015

Excludes annulled trains, which do not have delay times.

\*Includes peak direction trains operating during weekday peak periods. \*\*Includes all other weekday and weekend trains.