

COMMUTER RAIL SYSTEM
ON-TIME PERFORMANCE REPORT

August 2017



COMMUTER RAIL ON-TIME PERFORMANCE

August 2017

This report presents an analysis of the August 2017 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 2017, Metra operated 18,295 scheduled trains, including scheduled "extras", if any. 727 of these trains were delayed (late or annulled), representing an on-time performance rate of 96.0%. Table 2 lists on-time percentages by line for each month and year since 2012.

Table 3 lists each train that was on time for less than 85% of its weekday runs in August 2017, 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, January 1, 2014, and July 1, 2016, 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 2017. Of the 727 delays systemwide in August 2017, all but 338 (46%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Augusts, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in August 2017, 15 more delays than the average over the previous five Augusts were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 5,241 delays in 2017, all but 2,517 (48%) were beyond Metra's control.

Table 7 provides a daily listing of the number of delays by line and branch for August 2017.

Table 8.a shows the frequency of train delays by delay-cause category and by line during August 2017. 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 727 delays systemwide in August 2017, 42 less than the average over the previous five Augusts. Table 9.a shows delays from the beginning of the year through August 2017. 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 2017 and 2016 respectively, and Table 10.c shows the difference between the two. From January through August of 2017, a total of 5,241 trains were delayed, compared to 5,386 trains delayed in the same eight months of 2016.

In Tables 8 through 10, delays by cause are 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 2017 freight operations delayed 74 trains systemwide, compared to 108 a year earlier. Tables 12.a and 12.b display the frequency of lift-deployment train delays by line and month, for 2017 and 2016 respectively. A total of 23 trains were delayed by lift deployment in August 2017.

A review of August 2017 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 50.6% of all late trains. Table 14 shows that the average length of delay was 16.8 minutes in August 2017. 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

“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.

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.

TABLE 1: SCHEDULED AND DELAYED TRAINS, AND ON-TIME PERFORMANCE BY SERVICE PERIOD AND LINE
August 2017

	Weekdays									Weekends						Total		
	Peak*			Off-Peak**			Total			Saturdays			Sundays & Holidays			Trains Scheduled	Trains Late	Percent On-Time
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time			
BNSF	1,242	65	94.8%	929	62	93.3%	2,171	127	94.2%	128	4	96.9%	84	3	96.4%	2,383	134	94.4%
Elec -ML	1,035	5	99.5%	782	18	97.7%	1,817	23	98.7%	184	2	98.9%	82	8	90.2%	2,083	33	98.4%
-BI	322	4	98.8%	529	2	99.6%	851	6	99.3%	120	0	100.0%		--		971	6	99.4%
-SC	<u>391</u>	<u>0</u>	100.0%	<u>851</u>	<u>8</u>	99.1%	<u>1,242</u>	<u>8</u>	99.4%	<u>192</u>	<u>18</u>	90.6%	<u>80</u>	<u>2</u>	97.5%	<u>1,514</u>	<u>28</u>	98.2%
Subtotal	1,748	9	99.5%	2,162	28	98.7%	3,910	37	99.1%	496	20	96.0%	162	10	93.8%	4,568	67	98.5%
Heritage	138	3	97.8%	23	1	95.7%	161	4	97.5%	--			--			161	4	97.5%
Milw -N	575	22	96.2%	805	64	92.0%	1,380	86	93.8%	98	17	82.7%	82	4	95.1%	1,560	107	93.1%
-W	<u>621</u>	<u>17</u>	97.3%	<u>713</u>	<u>24</u>	96.6%	<u>1,334</u>	<u>41</u>	96.9%	<u>98</u>	<u>6</u>	93.9%	<u>74</u>	<u>8</u>	89.2%	<u>1,506</u>	<u>55</u>	96.3%
Subtotal	1,196	39	96.7%	1,518	88	94.2%	2,714	127	95.3%	196	23	88.3%	156	12	92.3%	3,066	162	94.7%
NCS	253	6	97.6%	253	4	98.4%	506	10	98.0%	--			--			506	10	98.0%
RI	828	40	95.2%	876	41	95.3%	1,704	81	95.2%	129	8	93.8%	113	5	95.6%	1,946	94	95.2%
SWS	253	14	94.5%	437	27	93.8%	690	41	94.1%	24	0	100.0%	--			714	41	94.3%
UP -N	690	11	98.4%	899	8	99.1%	1,589	19	98.8%	110	13	88.2%	78	8	89.7%	1,777	40	97.7%
-NW	759	39	94.9%	738	28	96.2%	1,497	67	95.5%	100	12	88.0%	62	10	83.9%	1,659	89	94.6%
-W	<u>621</u>	<u>39</u>	93.7%	<u>738</u>	<u>41</u>	94.4%	<u>1,359</u>	<u>80</u>	94.1%	<u>82</u>	<u>4</u>	95.1%	<u>74</u>	<u>2</u>	97.3%	<u>1,515</u>	<u>86</u>	94.3%
Subtotal	2,070	89	95.7%	2,375	77	96.8%	4,445	166	96.3%	292	29	90.1%	214	20	90.7%	4,951	215	95.7%
SYSTEM	7,728	265	96.6%	8,573	328	96.2%	16,301	593	96.4%	1,265	84	93.4%	729	50	93.1%	18,295	727	96.0%

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

Delays data for most recent month is final (09/18/17) version from TOPS.

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TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-AUG	AVG
BNSF	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	95.8	93.6	93.5	97.4	94.1%	94.4%
	2016	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	94.0%	94.0%
	2017	95.9	95.6	96.2	96.3	95.4	93.7	96.2	94.4					95.5%	95.5%
	2012-2016 average	90.5	92.0	95.6	95.6	93.2	89.7	94.2	93.9	95.2	94.4	95.0	95.1	93.1%	93.7%
Electric	2012	93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	97.3%	97.3%
	2013	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	97.3%	97.2%
	2014	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	97.9	97.8	97.8	99.0	97.4%	97.6%
	2016	98.0	98.6	98.8	98.9	98.9	96.5	97.9	98.5	97.1	98.6	97.7	97.7	98.3%	98.1%
	2017	95.6	98.9	98.3	98.9	98.7	97.1	98.7	98.5					98.1%	98.1%
	2012-2016 average	95.9	97.4	98.3	98.5	98.3	97.4	96.1	97.8	97.7	97.7	97.6	98.1	97.5%	97.6%
Heritage	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	86.5	98.5	85.0	90.9	90.1%	90.2%
	2016	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	93.9%	94.2%
	2017	93.9	94.3	96.9	96.4	94.2	89.0	90.7	97.5					94.2%	94.2%
	2012-2016 average	90.7	91.5	94.3	95.1	93.3	92.7	92.7	93.9	93.7	97.1	93.5	93.9	93.0%	93.6%
Milw - N	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	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	93.7%	93.3%
	2014	73.1	81.9	89.5	97.9	95.1	91.1	96.0	95.2	95.5	96.2	95.4	93.5	90.0%	91.7%
	2015	91.8	87.9	93.5	95.1	95.4	94.8	97.1	94.9	95.6	97.9	97.0	96.8	93.9%	94.9%
	2016	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	94.4%	94.6%
	2017	95.3	95.6	96.5	96.1	95.9	93.4	88.4	93.1					94.3%	94.3%
	2012-2016 average	90.1	90.6	93.4	96.2	94.4	92.3	93.2	93.9	94.7	95.9	95.7	93.4	93.0%	93.7%
Milw - W	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	97.8	99.0	98.2	96.5	95.7%	96.4%
	2016	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.4%	94.9%
	2017	96.9	95.2	95.2	95.6	97.5	95.8	96.3	96.3					96.1%	96.1%
	2012-2016 average	92.7	92.7	94.4	96.9	96.2	93.5	94.0	94.6	94.8	96.4	96.0	94.7	94.4%	94.7%
NCS	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	95.0	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	76.0	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	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	93.0%	93.8%
	2016	92.3	95.5	91.7	93.3	94.4	96.3	95.0	96.4	96.1	95.5	95.2	92.6	94.4%	94.5%
	2017	92.6	91.6	95.1	95.2	95.5	95.7	94.8	98.0					94.9%	94.9%
	2012-2016 average	90.4	88.3	92.2	92.1	93.6	93.6	92.3	93.0	95.0	94.0	94.2	92.1	92.0%	92.6%

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

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-AUG	AVG
RI	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	96.3	97.3	97.1	97.4	97.1%	97.1%
	2016	92.6	96.2	95.8	96.5	97.9	96.2	93.5	96.3	96.0	98.2	97.9	95.3	95.6%	96.1%
	2017	95.2	97.1	97.8	98.0	94.6	96.0	95.3	95.2					96.2%	96.2%
	2012-2016 average	92.6	94.0	96.2	96.1	96.5	94.4	93.9	96.0	96.8	97.0	96.4	96.3	95.0%	95.5%
SWS	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	97.6	96.8	96.0	94.4	93.7%	94.5%
	2016	95.6	97.2	97.8	95.6	91.9	95.3	94.1	93.3	91.6	97.4	96.6	96.2	95.1%	95.2%
	2017	96.2	94.1	96.4	97.3	92.8	97.1	97.1	94.3					95.6%	95.6%
	2012-2016 average	92.4	94.6	95.8	95.9	94.4	92.7	94.7	94.7	94.9	95.7	94.0	94.9	94.4%	94.6%
UP - N	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	98.2	97.0	97.6	98.4	97.3%	97.5%
	2016	96.9	98.6	97.1	98.3	98.3	98.2	97.0	96.0	98.1	99.1	98.0	98.1	97.6%	97.8%
	2017	95.6	99.0	98.3	97.0	97.3	97.3	95.6	97.7					97.3%	97.3%
	2012-2016 average	95.9	96.4	97.7	97.6	97.0	96.4	96.7	96.0	97.4	97.4	97.4	97.7	96.7%	97.0%
UP - NW	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	96.1	97.5	96.7	97.5	95.8%	96.2%
	2016	97.0	98.1	97.8	98.1	96.0	96.6	94.9	96.8	96.9	96.5	93.2	93.4	96.9%	96.3%
	2017	96.2	97.4	98.1	93.7	97.2	93.3	92.2	94.6					95.4%	95.4%
	2012-2016 average	94.3	95.5	96.8	97.4	95.5	94.8	94.5	96.2	97.1	95.6	95.2	95.6	95.6%	95.7%
UP - W	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	96.0	96.1	97.3	96.8	94.8%	95.4%
	2016	97.8	93.4	97.2	96.7	90.1	94.4	96.6	96.0	96.2	95.6	94.0	92.9	95.3%	95.1%
	2017	95.0	96.5	96.1	92.9	93.8	92.4	94.8	94.3					94.5%	94.5%
	2012-2016 average	93.4	93.7	96.0	95.9	94.6	93.0	95.1	94.7	96.5	96.0	95.4	94.7	94.6%	94.9%
SYSTEM excluding South Shore	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	96.8	97.0	96.8	97.5	95.8%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.1%	96.1%
	2017	95.6	96.9	97.2	96.6	96.5	95.3	95.5	96.0					96.2%	96.2%
	2012-2016 average	93.4	94.4	96.3	96.9	96.0	94.3	94.9	95.6	96.4	96.4	96.2	96.0	95.2%	95.6%

Delays data for most recent month is final (09/18/17) version from TOPS.

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'2012-2016 average' calculated by summing the delays over the five years, summing the trains run over the five years, and calculating their ratio.

**TABLE 3: LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME
August 2017**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
BNSF	1233 83% OT	Wed, Aug 09	10	C	DELAYED WAITING ON 1268 DUE TO WORK TRAIN ON MT1 NAPERVILLE
		Fri, Aug 11	7	D	FREIGHT CONGESTION @ CICERO
		Tue, Aug 22	12	CA	WORKING AROUND AMTRAK TRACK WORK, HELD FOR 1266 AS A RESULT
		Tue, Aug 29	12	C	MOW REPAIRING 10MPH FORM A WEST NAP
BNSF	1241 83% OT	Wed, Aug 02	8	DE	WORKING AROUND QSSECHC129 WITH LOCOMOTIVE ISSUE
		Tue, Aug 08	12	GT	TMDS FAILURE ON THE CHICAGO SUB
		Fri, Aug 18	23	VF1	TRAPPED BEHIND 1239 WITH ADA LIFT FAILURE.
		Mon, Aug 28	20	K	BRIDGE STRIKE KOSTNER MP6.4
BNSF	1242 83% OT	Tue, Aug 08	6	AM	WAITING FOR A391 TO DEPART
		Wed, Aug 09	10	ZC	PROBLEMS INITIALIZING PTC
		Thu, Aug 10	8	ZC	M/U GIVEN TO DS AT DEPARTURE TIME
		Fri, Aug 25	20	GA	ARINC FAILURE
BNSF	1259 83% OT	Thu, Aug 03	9	DD	WORKING AROUND THE ZPTLCHC901 AT LISLE, DS ERROR.
		Fri, Aug 04	12	E	METX 114 UNABLE TO MAKE TRACK SPEED
		Mon, Aug 14	17	E1	SWS825 METX 211 FAILURE AT CP TAYLOR MT0
		Mon, Aug 28	13	G	TRACK INDICATION MT1 LED TO 6 BOX 2S LAVERGNE TO BERWYN
BNSF	1293 74% OT	Thu, Aug 03	8	I	HEAVY PASSENGER HANDLING ACCOUNT LOLLAPALOOZA AND RAIN
		Fri, Aug 04	10	I	HEAVY PASSENGER HANDLIG ACCOUNT LOLLAPALOOZA.
		Wed, Aug 09	6	U	MULTIPLE ADA'S ENROUTE.
		Mon, Aug 14	9	I	HEAVY PASSENGER HANDLING ACCOUNT OPERA AND MUSIC FESTIVAL @ MILLINEUM PARK
		Wed, Aug 16	9	KP	SUSPICIOUS PACKAGE @ RT. 59
		Thu, Aug 17	6	I	HEAVY PASSENGER UNLOADING
BNSF	1299 83% OT	Wed, Aug 02	10	II	LATE FLIP FRO, 1298
		Mon, Aug 07	12	K	BRIDGE STRIKE
		Tue, Aug 15	21	CA	DELAYED DUE TO ARRIVAL OF AMTK 392 22 MINUTES / AMTRAK SCHEDULED TRACK CONSTRUCTION
		Fri, Aug 25	10	CA1	LATE TURN FROM 1298
MN	2121 78% OT	Wed, Aug 02	9	U	5" EACH ADA'S, FOREST GLEN-LAKE COOK & LIBERTYVILLE-INGLESIDE; 4" MEETING E/B TRAINS
		Fri, Aug 04	10	VF	5" SENSITIVE EDGE CAR 7405; 2" HOLD FOR #2140, DEERFIELD; 8" ADA HAD TO MOVE TO SECOND ADA CAR, LIBERTYVILLE
		Fri, Aug 11	6	U	2" MEET AMTRAK, GLENVIEW; 6" LOADING/UNLOADING THE SAME ADA, LIBERTYVILLE(WANTED TO GO TO CHICAGO)
		Thu, Aug 17	10	G	SIGNAL PROBLEMS
		Tue, Aug 29	7	CC	2" COPYING RADIO BULLETIN, EN ROUTE; 3" 3 DIFFERENT SPEED RESTRICTIONS; 3" FOLLOWING TRAIN AHEAD, LAKE FOREST-RONDOUT
MN	2125 78% OT	Thu, Aug 10	7	D	STOP SIGNAL CN FREIGHT
		Fri, Aug 11	6	U1	8" MEET #2146, RONDOUT
		Wed, Aug 16	12	G	14" TRACK CIRCUIT BETWEEN MILWAUKEE AVE & PRAIRIE CROSSING
		Thu, Aug 17	8	D	12" CN X-TRAFFIC
		Tue, Aug 29	11	D	11" X-TRAFFIC, CN XING
MN	2128 70% OT	Tue, Aug 01	7	A	7" WAITING ON #2107 TO CLEAR, GRAYSLAKE; ADA, FOX LAKE-CUS; 2" LATE TURN FROM #2103; SLOW/HEAVY PASSENGER LOADING
		Thu, Aug 03	10	I	3" LATE TURN FROM #2103, FOX LAKE; WAIT ON DISPATCHER FOR MOVEMENT AUTHORITY; 7" HEAVY/SLOW PASSENGER LOADING; 3" ADA, GRAYSLAK-LAKE FO
		Fri, Aug 04	8	I	8" HEAVY/SLOW PASSENGER LOADING
		Wed, Aug 09	7	G1	6" LATE TURN FROM #2103; 2" ITEM 2, MAIN ST; 3" SWITCH PROBLEMS, A-2
		Fri, Aug 11	7	CC	7" TRACK CONSTRUCTION; 2 ADA'S
		Wed, Aug 30	9	I	1" LATE ARRIVING PASSENGERS, FOX LAKE; 2" COPY ITEM 2 @ GREENWOOD AVE, LIBERTYVILLE; 8" SLOW PASSENGER LOADING; 2" COPY CANCELLATION,
		Thu, Aug 31	11	S	4" LATE TURN FROM #2103, FOX LAKE; 2" DARK SIGNAL WEST END GRAYSLAKE(EFFICIENCY TEST); 2" SLOW PSGR LOADING, NORTHBROOK & LK COOK RD; 2"
MN	2140 70% OT	Wed, Aug 02	8	I	8" HEAVY PASSENGER LOADING
		Thu, Aug 03	8	I	8" HEAVY PASSENGER LOADING
		Fri, Aug 04	8	I	8" HEAVY PASSENGER LOADING
		Wed, Aug 09	7	A	2" STOP SIGNAL, CN; 3" PASSENGER LOADING; 3" STOP SIGNAL, A-2
		Fri, Aug 11	10	I	14" SLOW PASSENGER LOADING, EN ROUTE
		Mon, Aug 14	11	U	14" DELAY EN ROUTE, SLOW PASSENGER LOADING AND ADA'S
		Wed, Aug 16	9	G	12" SIGNAL PROBLEM, RONDOUT
MN	2155 61% OT	Wed, Aug 02	11	D1	11" WAIT FOR #2160, RONDOUT
		Thu, Aug 03	19	I	20" HEAVY PASSENGER LOADING/UNLOADING
		Fri, Aug 04	9	I	8" PASSENGER LOADING/UNLOADING3
		Mon, Aug 07	12	GF	12" STOPPED @ RONDOUT, CREW NOT AWARE WHY, TRYING TO CONTACT C&M DISP
		Tue, Aug 15	31	EA1	29" LATE TURN FROM #2158
		Fri, Aug 25	12	D1	10" WAIT ON #2160, RONDOUT
		Mon, Aug 28	11	C	11" WAIT ON #2160, RONDOUT SLOW ORDERS
		Wed, Aug 30	6	A	5" X-TRAFFIC, MAYFAIR
		Thu, Aug 31	8	I	12" X-TRAFFIC, MAYFAAIR & PASSENGER LOADING/UNLOADING(BEARS GAME)

**TABLE 3 (continued): LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME
August 2017**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
MN	2157 83% OT	Thu, Aug 03	38	I	28" PASSENGER LOADING/UNLOADING; 10" LATE DEPARTING CUS
		Fri, Aug 04	46	I	14" LATE DEPART PASSENGER LOADING; 32" UNLOADING PASSENGERS
		Mon, Aug 14	15	KP	SPEED RESTRICTION DUE TO POSSIBLE PEDESTRIAN/BODY NEAR TRACKS POLICE PRESENCE
		Mon, Aug 28	15	D	15" FREIGHT(WSOR) INTERFERENCE
MN	2158 83% OT	Thu, Aug 03	6	I	6" WAITING ON #2149 & PASSENGER LOADING
		Fri, Aug 04	8	I	8" WAIT ON #2149; PASSENGER LOADING
		Tue, Aug 15	32	EA	12" STOP SIGNAL, CN XING; 24" PICKING UP PASSENGERS FROM DISABLED AMTRAK 342
		Mon, Aug 21	8	A	8" WAITING ON #2149
MN	2160 83% OT	Wed, Aug 02	10	D1	11" LATE TURN FROM #2153, FOX LAKE
		Fri, Aug 11	13	RO	6" LATE TURN FROM #2160; 6" X-TRAFFIC, MAYFAIR
		Tue, Aug 15	7	EA1	7" LATE DEPARTING, FOX LAKE; 8" X/O 2-1 MAYFAIR-GRAYLAND ACCT STALLED AMTRAK
		Fri, Aug 25	10	D	7" LATE TURN FROM #2153; 5" FREIGHT, CN XING
MW	2255 83% OT	Thu, Aug 03	17	J	10" WAIT FOR AMTRAK PD FOR INTOXICATED PUGNACIOUS YOUNG MAN, CUS; PASSENGER LOADING/UNLOADING
		Fri, Aug 04	20	II	14" LATE TURN FROM #2249; 10" PASSENGER LOADING/UNLOADING
		Fri, Aug 11	8	II	5" LATE TURN FROM #2254, CUS
		Fri, Aug 25	6	I	4" LATE DEPARTING, CUS
RI	509 83% OT	Wed, Aug 02	7	G	8 MIN AT 14TH THROUGH CP PERSHING , TK CIRCUIT TK2 WEST
		Fri, Aug 11	6	CC	3M LATE DEPARTING LSS ACCOUNT WAIT FOR LOCO 418 ; 3M LATE FOR SPEED REDUCTION THROUGH FORM B204
		Fri, Aug 18	6	CC	2M B.I WAITING ON SIGNAL @ GROVE ST, 3M MIDLO WAITING ON INB RI510 TO CLEAR/1M MP18.75 35MPH THRU FORM B LIMITS
		Thu, Aug 24	9	D	10M B.I. WAITING ON SIGNAL FOR IAIS TO CLEAR
RI	531 83% OT	Tue, Aug 01	6	J	6MIN POLICE ACTIVITY BRAINARD KIDS PLAYING NEAR TRACKS
		Wed, Aug 02	6	U	ACCOMODATING ADA LSS TO 111TH, RUNNING WITH 9 CARS ON THE SUB.
		Mon, Aug 07	16	J	16MIN @ HICKORY CREEK POLICE ACTIVITY
		Wed, Aug 30	28	JM1	DEPARTED 25M LATE ACCT. LATE TURN FROM RI530.
RI	619 78% OT	Tue, Aug 01	36	H1	25M @ BRIDGE B DUE TO LATE ARRIVAL OF DH6192 WHOM HAD TO SHOVE DH 6712 INTO DEPOT #4.
		Thu, Aug 03	33	H1	34M DUE TO LATE TURN AND POWER ISSUES
		Wed, Aug 09	6	A	5M AT GRESHAM WAITING ON THE RI424. 2M AT 99TH WAITING ON THE RI622
		Thu, Aug 10	11	G1	4M AT GRESHAM WAITING ON THE RI 424. 3M AT CP 15.6 WAITING ON RI 617 TO YARD. 4M FOR ITEM #1S AT VERMONT ST AND GROVE ST
		Fri, Aug 25	37	E	DEPARTED LSS 31' LATE TURN / ADDITIONAL 8' AT BRIDGE B ENGINE PROBLEMS
SWS	827 83% OT	Mon, Aug 14	12	E1	DEPART CUS 16" ACCT. CONGESTION AND LATE FLIP OF SWS#834.
		Fri, Aug 18	18	L	3M CP518 FOR NSBC04 W/4704FT CLEARING; 20M MP18.8 INJURED BICYCLIST/ TRESSPASSER ON CAL-SAG BRIDGE. (PALOS PD REQUESTED TRAFFIC STOPPED.)
		Mon, Aug 21	0	XE	MECHANICAL ISSUES ENG 187
		Thu, Aug 31	9	E1	DEPART CUS 3" LATE; MOTIVE POWER ISSUES ENG 211 NOT MAKING TRACK SPEED. ; 4" CP RIDGE FOR CSX Q135 CSXT3203 W/11469FT.
SWS	836 83% OT	Wed, Aug 02	8	D	13M CP518 FOR SWS#831 AND NS BC32 9536FT. HEADROOM MOVE FROM 55TH ST YARD.
		Thu, Aug 03	6	D	4M ASHBURN RED SIGNAL; 10M FOREST HILL FOR CSX R138-03 CSXT322 12604FT.
		Mon, Aug 14	12	D	12M FOREST HILL FOR CSX Q138 KCS4771 W/ 13162FT PULLING OUT OF YARD. 4M CP 518 FOR NS BC28 YARDING NS23K AT 55TH ST.
		Thu, Aug 17	11	D	7M FOREST HILL FOR CSX Q138 BNSF7643 W/7726FT; 9M CP518 FOR NSBC31 AND MEET SWS#831.
UPW	54 78% OT	Tue, Aug 08	10	CC1	7" LATE TURN FROM #35; WAIT @ KRESS FOR #37 ACCT TRACK CONSTRUCTION @ MP26.75-28
		Thu, Aug 10	12	CC1	10" LATE TURN FROM #35; SLOW PASSENGER LOADING, WHEATON, GLEN ELLYN, ELMHURST, OAK PARK & KEDZIE; ADA
		Mon, Aug 28	16	GX	16" 2 XG ORDERS, MP12.7 & 13.75; SLOW PASSENGER LOADING, GENEVA, LOMBARD & VILLA PARK
		Tue, Aug 29	16	J	16" WAIT FOR LOCAL PD TO REMOVE UNRULY PASSENGER, GLEN ELLYN; 20MPH, MP40-38.5
		Wed, Aug 30	0	E1	ANULLED @ GENEVA HEAD END POWER ISSUES W/METX 165
UPW	55 83% OT	Wed, Aug 09	10	KD1	10" FOLLOWING #53
		Tue, Aug 22	10	E1	10" FOLLOWING #53 OUT OF CPT DUE TO TRAIN CONTROL NOT RESET ON METX148
		Wed, Aug 23	10	JM1	10" RAN TRAIN CONTROL BEHIND #53
		Thu, Aug 31	10	D	10" U76171-29 @ CN WEST CHICAGO
UPW	60 74% OT	Tue, Aug 01	11	DE1	11" FOLLOWING #58 DUE TO LATE ARRIVAL OF #39
		Wed, Aug 02	17	B	12" LATE TURN FROM #59
		Thu, Aug 03	12	KP1	12" LATE TURN FROM #58
		Wed, Aug 09	11	RD	11" NO SIGNAL, PROVO JCT DIS FORGOT TO CLEAR SIGNAL; STOP @ WESTERN WAIT FOR FLAGGING INSTRUCTIONS SIGNAL ISSUES(BROKEN CABLE ON PLANT)
		Tue, Aug 22	7	E1	7" LATE TURN FROM #59
		Thu, Aug 24	16	D1	16" RAN ON TRAIN CONTROL FOLLOWING #58 FROM PARK

Data is final (09/18/17) version from TOPS.

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TABLE 4: DELAY INCIDENT CODES AND DEFINITIONS

Codes						Codes					
Primary	Secondary	Annulled	Definition	Delay Class	Responsibility	Primary	Secondary	Annulled	Definition	Delay Class	Responsibility
A	A1	XA	Passenger Train Interference	Transportation	Controllable	L	L1	XL	Unauthorized People On Tracks/Near Miss	Incidental	Uncontrollable
AA	AA1	XAA	Rule 9.9 Delayed in Block/Rule 6.30	Transportation	Controllable	M	M1	XM	Right of Way Accident/Misc.	Incidental	Uncontrollable
AD	AD1	XAD	Non-Revenue Passenger Train Interference	Transportation	Controllable	MW	MW1	XMW	Right of Way Accident/Misc., Weather	Incidental	Uncontrollable
AM	AM1	XAM	Amtrak Caused Delay	Transportation	Controllable	N	N1	XN	Electricity Utility Failure	Incidental	Uncontrollable
AS	AS1	XAS	NICTD Train Interference	Transportation	Controllable	NW	NW1	XNW	Electricity Utility Failure, Weather	Incidental	Uncontrollable
AW	AW1	XAW	Pass. Train Interference, Weather	Transportation	Uncontrollable	O	O1	XO	AC/DC System Failure	Engineering	Controllable
B	B1	XB	Human Error, Eng. Dept.	Engineering	Controllable	OW	OW1	XOW	AC/DC System Failure, Weather	Engineering	Uncontrollable
BA	BA1	XBA	Amtrak Engineering Human Error	Engineering	Controllable	Q	Q1	XQ	Late Issuance of Track Warrant	Transportation	Controllable
C	C1	XC	Unscheduled Track Work	Engineering	Controllable	R	R1	XR	Human Error, Transportation	Transportation	Controllable
CA	CA1	XCA	Amtrak Engineering	Engineering	Semi-controllable	RA	RA1	XRA	Human Error, Amtrak Transportation	Transportation	Controllable
CC	CC1	XCC	Scheduled Track Work	Engineering	Controllable	RD	RD1	XRD	Human Error, Metra Dispatcher	Transportation	Controllable
CF	CF1	XCF	Engineering Equipment Malfunction	Engineering	Controllable	RF	RF1	XRF	Freight Dispatcher/Opr/Non-Freight Train Error	Transportation	Controllable
CG	CG1	XCG	Scheduled Signal Work	Engineering	Controllable	RL	RL1	XRL	Human Error, Job Action/Employee No Show (CMS Error)	Transportation	Controllable
CH	CH1	XCH	Contractor Failure	Engineering	Controllable	RN	RN1	XRN	Human Error, Job Action/Employee No Show (Non-CMS)	Transportation	Controllable
CO	CO1	XCO	Scheduled Wire Work	Engineering	Controllable	RO	RO1	XRO	Human Error, Tower Operator	Transportation	Controllable
CM	CM1	XCM	Switch Malfunction (Track Dept.)	Engineering	Controllable	RS	RS1	XRS	Human Error, NICTD Transportation	Transportation	Controllable
CW	CW1	XCW	M of W Work, Weather	Engineering	Uncontrollable	RW	RW1	XRW	Train Crew Issues, Weather	Transportation	Uncontrollable
D	D1	XD	Freight Train Interference	Transportation	Semi-controllable	RZ	RZ1	XRZ	ETMS Train Crew Error [obsolete 2015]	Transportation	Controllable
DD	DD1	XDD	Freight Dispatcher/Opr/Freight Train Error	Transportation	Controllable	S	S1	XS	Operational (Efficiency) Testing	Transportation	Uncontrollable
DE	DE1	XDE	Freight Mechanical Malfunction	Transportation	Semi-controllable	T	T1	XT	Property Vandalism	Incidental	Uncontrollable
DM	DM1	XDM	Freight-Accident/Incident	Incidental	Uncontrollable	U	U1	XU	Accessibility Related (ADA)	Ridership	Uncontrollable
DR	DR1	XDR	Freight-Human Error	Transportation	Semi-controllable	UF	UF1	XUF	ADA Lift Failure	Mechanical	Controllable
DW	DW1	XDW	Freight Train Interference, Weather	Transportation	Uncontrollable	UW	UW1	XUW	Accessibility, Weather	Ridership	Uncontrollable
E	E1	XE	Locomotive Malfunction	Mechanical	Controllable	VE	VE1	XVE	Locomotive Problem Reported, Nothing Found	Incidental	Controllable
EA	EA1	XEA	Amtrak Locomotive/Car Malfunction	Mechanical	Uncontrollable	VF	VF1	XVF	Cab Car Problem Reported, Nothing Found	Incidental	Controllable
EW	EW1	XEW	Locomotive Malfunction, Weather	Mechanical	Uncontrollable	VG	VG1	XVG	Broken Gate Crossing Reported, Nothing Found	Incidental	Uncontrollable
EZ	EZ1	XEZ	ETMS Malfunction on Locomotive [obsolete 2015]	Mechanical	Controllable	W	W1	XW	Gas Leak	Incidental	Uncontrollable
F	F1	XF	Cab Car/Trailer/MU Malfunction	Mechanical	Controllable	YB	YB1	XYB	Derailment - Human Error, Engineering	Engineering	Controllable
FS	FS1	XFS	NICTD MU Malfunction	Mechanical	Uncontrollable	YC	YC1	XYC	Derailment - Engineering	Engineering	Controllable
FW	FW1	XFW	Cab Car/TRL/MU Malfunction, Weather	Mechanical	Uncontrollable	YE	YE1	XYE	Derailment - Mechanical	Mechanical	Controllable
FZ	FZ1	XFZ	ETMS Malfunction on Cab Car [obsolete 2015]	Mechanical	Controllable	YF	YF1	XYF	Derailment - Accident, Foreign Line	Incidental	Uncontrollable
G	G1	XG	Signal/Switch Malfunction (Signal Dept.)	Engineering	Controllable	YH	YH1	XYH	Derailment - Human Error, Mechanical	Mechanical	Controllable
GA	GA1	XGA	Signal/Switch Failure Amtrak (Signal Dept.)	Engineering	Semi-controllable	YM	YM1	XYM	Derailment - Accident	Incidental	Uncontrollable
GF	GF1	XGF	Signal/Switch Foreign Line	Engineering	Semi-controllable	YR	YR1	XYR	Derailment - Human Error, Transportation	Transportation	Controllable
GM	GM1	XGM	Gate Crossing Malfunction	Engineering	Controllable	YW	YW1	XYW	Derailment Accident, Weather	Incidental	Uncontrollable
GT	GT1	XGT	Telecom Failure	Engineering	Controllable	ZA	ZA1	XZA	PTC Amtrak Train (On-Board)	Mechanical	Uncontrollable
GW	GW1	XGW	Signal/Switch Malfunction Weather (Signal Dept.)	Engineering	Uncontrollable	ZB	ZB1	XZB	PTC Human Error, Engineering Dept.	Engineering	Controllable
GX	GX1	XGX	Broken Gate Crossing	Engineering	Uncontrollable	ZC	ZC1	XZC	PTC Construction/Maintenance	Engineering	Controllable
GZ	GZ1	XGZ	ETMS Signal Malfunction [obsolete 2015]	Engineering	Controllable	ZD	ZD1	XZD	PTC Freight Train (On-Board)	Transportation	Semi-controllable
H	H1	XH	Human Error, Mechanical Department	Mechanical	Controllable	ZE	ZE1	XZE	PTC Malfunction Locomotive	Mechanical	Controllable
HS	HS1	XHS	Human Error, NICTD Mechanical Dept.	Mechanical	Controllable	ZF	ZF1	XZF	PTC Malfunction Coach	Mechanical	Controllable
I	I1	XI	Passenger Handling, Running Time	Ridership	Uncontrollable	ZG	ZG1	XZG	PTC Wayside	Engineering	Controllable
IB	IB1	XIB	Passenger Handling, Bicycle	Ridership	Uncontrollable	ZH	ZH1	XZH	PTC Human Error, Mechanical	Mechanical	Controllable
IW	IW1	XIW	Passenger Handling, Weather	Ridership	Uncontrollable	ZN	ZN1	XZN	PTC Foreign Line (Non-Train)	Engineering	Semi-controllable
J	J1	XJ	Passenger Problems/Removal	Incidental	Uncontrollable	ZP	ZP1	XZP	PTC Dispatcher	Transportation	Controllable
JA	JA1	XJA	Amtrak Passenger Problems/Removal	Incidental	Uncontrollable	ZR	ZR1	XZR	PTC Human Error, Transportation	Transportation	Controllable
JM	JM1	XJM	Passenger Medical Emergency	Incidental	Uncontrollable	ZS	ZS1	XZS	PTC NICTD MU Train (On-Board)	Mechanical	Uncontrollable
K	K1	XK	Obstruction On Tracks	Incidental	Uncontrollable	ZT	ZT1	XZT	PTC Back Office	Engineering	Controllable
KD	KD1	XKD	Train Struck Debris	Incidental	Uncontrollable	ZW	ZW1	XZW	PTC Weather	Engineering	Uncontrollable
KP	KP1	XKP	Suspicious Package(s)/Person(s)/Activity	Incidental	Uncontrollable						
KW	KW1	XKW	Obstruction On Tracks, Weather	Incidental	Uncontrollable						

Effective July 1, 2016 Revised July 19, 2016

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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 Codes				CATEGORY Codes				CATEGORY 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
YC	YC1	XYC	Derailment - Engineering	RN	RN1	XRN	Human Error, Job Action/Employee No Show (Non-CMS)	DE	DE1	XDE	Freight Mechanical Malfunction
YE	YE1	XYE	Derailment - Mechanical	RO	RO1	XRO	Human Error, Tower Operator	DR	DR1	XDR	Freight-Human Error
YM	YM1	XYM	Derailment - Accident	RZ	RZ1	XRZ	ETMS Train Crew Error [obsolete 2015]	ZD	ZD1	XZD	PTC Freight Train (On-Board)
5 Passenger Loading				YB	YB1	XYB	Derailment - Human Error, Engineering	4 Accident			
I	I1	XI	Passenger Handling, Running Time	YH	YH1	XYH	Derailment - Human Error, Mechanical	DM	DM1	XDM	Freight-Accident/Incident
IB	IB1	XIB	Passenger Handling, Bicycle	YR	YR1	XYR	Derailment - Human Error, Transportation	YF	YF1	XYF	Derailment - Accident, Foreign Line
6 Lift Deployment				ZB	ZB1	XZB	PTC Human Error, Engineering Dept.	8 Signal/Switch Failure			
U	U1	XU	Accessibility Related (ADA)	ZH	ZH1	XZH	PTC Human Error, Mechanical	GA	GA1	XGA	Signal/Switch Failure Amtrak (Signal Dept.)
UF	UF1	XUF	ADA Lift Failure	ZP	ZP1	XZP	PTC Dispatcher	GF	GF1	XGF	Signal/Switch Foreign Line
7 Obstruction/Debris				ZR	ZR1	XZR	PTC Human Error, Transportation	ZN	ZN1	XZN	PTC Foreign Line (Non-Train)
K	K1	XK	Obstruction On Tracks	14 Sick, Injured, Unruly Passenger				9 Track Work			
KD	KD1	XKD	Train Struck Debris	J	J1	XJ	Passenger Problems/Removal	CA	CA1	XCA	Amtrak Engineering
KP	KP1	XKP	Suspicious Package(s)/Person(s)/Activity	JM	JM1	XJM	Passenger Medical Emergency	11 Non-Locomotive Equipment Failure			
8 Signal/Switch Failure				15 Weather				FS	FS1	XFS	NICTD MU Malfunction
CM	CM1	XCM	Switch Malfunction (Track Dept.)	AW	AW1	XAW	Pass. Train Interference, Weather	ZS	ZS1	XZS	PTC NICTD MU Train (On-Board)
G	G1	XG	Signal/Switch Malfunction (Signal Dept.)	CW	CW1	XCW	M of W Work, Weather	12 Locomotive Failure			
GM	GM1	XGM	Gate Crossing Malfunction	EW	EW1	XEW	Locomotive Malfunction, Weather	EA	EA1	XEA	Amtrak Locomotive/Car Malfunction
GT	GT1	XGT	Telecom Failure	FW	FW1	XFW	Cab Car/TRL/MU Malfunction, Weather	ZA	ZA1	XZA	PTC Amtrak Train (On-Board)
GX	GX1	XGX	Broken Gate Crossing	GW	GW1	XGW	Signal/Switch Malfunction Weather (Signal Dept.)	13 Human Error			
GZ	GZ1	XGZ	ETMS Signal Malfunction [obsolete 2015]	IW	IW1	XIW	Passenger Handling, Weather	BA	BA1	XBA	Amtrak Engineering Human Error
VG	VG1	XVG	Broken Gate Crossing Reported, Nothing Found	KW	KW1	XKW	Obstruction On Tracks, Weather	HS	HS1	XHS	Human Error, NICTD Mechanical Dept.
ZG	ZG1	XZG	PTC Wayside	MW	MW1	XMW	Right of Way Accident/Misc., Weather	RA	RA1	XRA	Human Error, Amtrak Transportation
ZT	ZT1	XZT	PTC Back Office	NW	NW1	XNW	Electricity Utility Failure, Weather	RF	RF1	XRF	Freight Dispatcher/Opr/Non-Freight Train Error
9 Track Work				OW	OW1	XOW	AC/DC System Failure, Weather	RS	RS1	XRS	Human Error, NICTD Transportation
C	C1	XC	Unscheduled Track Work	RW	RW1	XRW	Train Crew Issues, Weather	14 Sick, Injured, Unruly Passenger			
CC	CC1	XCC	Scheduled Track Work	UW	UW1	XUW	Accessibility, Weather	JA	JA1	XJA	Amtrak Passenger Problems/Removal
CF	CF1	XCF	Engineering Equipment Malfunction	YW	YW1	XYW	Derailment Accident, Weather	15 Weather			
CG	CG1	XCG	Scheduled Signal Work	ZW	ZW1	XZW	PTC Weather	DW	DW1	XDW	Freight Train Interference, Weather
CH	CH1	XCH	Contractor Failure	16 Other							
ZC	ZC1	XZC	PTC Construction/Maintenance	L	L1	XL	Unauthorized People On Tracks/Near Miss				
10 Catenary Failure				N	N1	XN	Electricity Utility Failure				
CO	CO1	XCO	Scheduled Wire Work	Q	Q1	XQ	Late Issuance of Track Warrant				
O	O1	XO	AC/DC System Failure	S	S1	XS	Operational (Efficiency) Testing				
11 Non-Locomotive Equipment Failure				T	T1	XT	Property Vandalism				
F	F1	XF	Cab Car/Trailer/MU Malfunction	VE	VE1	XVE	Locomotive Problem Reported, Nothing Found				
FZ	FZ1	XFZ	ETMS Malfunction on Cab Car [obsolete 2015]	VF	VF1	XVF	Cab Car Problem Reported, Nothing Found				
ZF	ZF1	XZF	PTC Malfunction Coach	W	W1	XW	Gas Leak				
12 Locomotive Failure											
E	E1	XE	Locomotive Malfunction								
EZ	EZ1	XEZ	ETMS Malfunction on Locomotive [obsolete 2015]								
ZE	ZE1	XZE	PTC Malfunction Locomotive								

Effective July 1, 2016

Revised July 19, 2016

'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 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	77	23	5	15	1	36	25	4	61	14	17	24	36	338	46%
Semi-controllable	23	0	0	0	3	20	8	6	6	23	0	4	11	104	14%
Uncontrollable	34	10	1	13	0	51	22	0	27	4	23	61	39	285	39%
TOTAL TRAINS DELAYED	134	33	6	28	4	107	55	10	94	41	40	89	86	727	100%

August - Average Over Previous Five Years: 2012-2016

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	54.6	30.4	6.8	20.0	2.8	41.6	34.0	14.8	30.4	12.6	26.2	21.4	27.6	323.2	42%
Semi-controllable	32.8	0.0	0.2	0.0	5.0	12.6	11.8	12.4	4.4	15.2	0.6	4.2	19.4	118.6	15%
Uncontrollable	52.8	27.6	3.6	10.6	0.6	38.2	34.2	6.8	35.8	8.6	42.8	34.8	31.2	327.6	43%
TOTAL TRAINS DELAYED	140.2	58.0	10.6	30.6	8.4	92.4	80.0	34.0	70.6	36.4	69.6	60.4	78.2	769.4	100%

August 2017 Divergence From August Average Over Previous Five Years

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	22.4	-7.4	-1.8	-5.0	-1.8	-5.6	-9.0	-10.8	30.6	1.4	-9.2	2.6	8.4	14.8	-35%
Semi-controllable	-9.8	0.0	-0.2	0.0	-2.0	7.4	-3.8	-6.4	1.6	7.8	-0.6	-0.2	-8.4	-14.6	34%
Uncontrollable	-18.8	-17.6	-2.6	2.4	-0.6	12.8	-12.2	-6.8	-8.8	-4.6	-19.8	26.2	7.8	-42.6	100%
TOTAL TRAINS DELAYED	-6.2	-25.0	-4.6	-2.6	-4.4	14.6	-25.0	-24.0	23.4	4.6	-29.6	28.6	7.8	-42.4	100%

January-August 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	453	206	94	111	31	319	203	56	331	103	200	164	246	2,517	48%
Semi-controllable	56	0	1	0	25	101	63	95	49	101	13	38	149	691	13%
Uncontrollable	298	132	39	82	14	254	178	42	190	29	158	378	239	2,033	39%
TOTAL TRAINS DELAYED	807	338	134	193	70	674	444	193	570	233	371	580	634	5,241	100%

Data for current month is final (09/18/17) version from TOPS.

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09/19/2017

TABLE 7: NUMBER OF DELAYS BY DATE
August 2017

WEEKDAY	1	2	3	4	7	8	9	10	11	14	15	16	17	18	21	22	23	24	25	28	29	30	31	TOTAL
	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	
BNSF	0	2	14	10	5	11	4	2	1	5	3	6	1	8	11	1	2	1	16	19	3	2	0	127
Elec -ML	3	2	1	6	0	0	1	0	0	2	0	0	2	0	0	0	1	2	0	1	2	0	0	23
-BI	3	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	6
-SC	0	2	2	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Heritage	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	4
Milw -N	1	6	10	12	3	1	5	1	6	2	3	8	2	1	4	0	0	0	10	3	2	2	4	86
-W	2	3	2	3	0	3	1	1	1	0	0	0	0	1	0	9	0	2	8	2	0	0	3	41
NCS	0	0	1	1	1	1	0	0	0	0	0	1	0	0	0	3	0	0	2	0	0	0	0	10
RI	4	17	9	5	2	5	2	2	1	2	0	0	0	1	1	2	0	1	9	12	2	2	2	81
SWS	0	2	4	0	4	0	0	1	0	7	1	1	1	4	3	0	1	2	3	0	0	1	6	41
UP -N	1	0	0	0	3	0	0	6	0	0	0	0	0	1	2	2	0	0	3	0	0	1	0	19
-NW	6	0	2	0	1	0	0	34	3	1	3	2	2	4	3	0	0	0	0	2	2	2	0	67
-W	<u>5</u>	<u>3</u>	<u>12</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>7</u>	<u>11</u>	<u>5</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>3</u>	<u>6</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>80</u>
SYSTEM	25	38	57	40	19	26	21	58	17	20	15	19	8	24	28	23	5	10	52	40	14	15	19	593

SATURDAY	5	12	19	26	TOTAL	SUNDAY/HOLIDAY	6	13	20	27	TOTAL
BNSF	2	2	0	0	4	BNSF	2	1	0	0	3
Elec -ML	0	1	0	1	2	Elec -ML	6	0	2	0	8
-BI	0	0	0	0	0	-BI	-	-	-	-	0
-SC	0	0	14	4	18	-SC	0	0	2	0	2
Heritage	-	-	-	-	-	Heritage	-	-	-	-	0
Milw -N	4	3	7	3	17	Milw -N	2	1	0	1	4
-W	0	0	6	0	6	-W	1	0	5	2	8
NCS	-	-	-	-	-	NCS	-	-	-	-	0
RI	2	3	2	1	8	RI	0	2	2	1	5
SWS	0	0	0	0	0	SWS	-	-	-	-	0
UP -N	4	3	0	6	13	UP -N	1	3	2	2	8
-NW	1	5	3	3	12	-NW	3	6	0	1	10
-W	<u>1</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>4</u>	-W	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>2</u>
SYSTEM	14	20	32	18	84	SYSTEM	16	14	13	7	50

Data is final (09/18/17) version from TOPS.

TABLE 8.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
August 2017

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	10	0	0	0	3	11	2	4	6	22	0	5	11	74
Freight Interference - Peak	4	0	0	0	2	4	1	1	1	7	0	4	4	28
Primary	4	0	0	0	2	4	1	1	0	6	0	2	2	22
Secondary	0	0	0	0	0	0	0	0	1	1	0	2	2	6
Freight Interference - Off-Peak	6	0	0	0	1	7	1	3	5	15	0	1	7	46
Primary	6	0	0	0	0	3	1	3	5	12	0	1	4	35
Secondary	0	0	0	0	1	4	0	0	0	3	0	0	3	11
Signal/Switch Failure - TOTAL	47	9	3	0	1	24	18	5	8	4	0	6	7	132
Signal/Switch Failure - Metra/PSA	36	9	3	0	0	15	12	3	8	1	0	5	7	99
Primary	29	5	3	0	0	11	8	3	4	0	0	4	5	72
Secondary	7	4	0	0	0	4	4	0	4	1	0	1	2	27
Signal/Switch Failure - Foreign	11	0	0	0	1	9	6	2	0	3	0	1	0	33
Primary	9	0	0	0	1	8	6	2	0	3	0	1	0	30
Secondary	2	0	0	0	0	1	0	0	0	0	0	0	0	3
Mechanical Failure - TOTAL	13	0	0	0	0	5	3	0	31	9	2	13	9	85
Mechanical Failure - Metra/PSA	9	0	0	0	0	2	3	0	31	9	2	13	9	78
Non-Locomotive Equipment Failure - Metra/PSA	4	0	0	0	0	1	0	0	1	0	0	11	4	21
Primary	1	0	0	0	0	0	0	0	1	0	0	5	3	10
Secondary	3	0	0	0	0	1	0	0	0	0	0	6	1	11
Locomotive Failure - Metra/PSA	5	0	0	0	0	1	3	0	30	9	2	2	5	57
Primary	1	0	0	0	0	0	3	0	8	1	2	1	1	17
Secondary	4	0	0	0	0	1	0	0	22	8	0	1	4	40
Mechanical Failure - Foreign	4	0	0	0	0	3	0	0	0	0	0	0	0	7
Passenger Train Interference - TOTAL	4	0	0	0	0	7	1	0	2	0	0	0	0	14
Passenger Train Interference - Metra/PSA	0	0	0	0	0	7	1	0	2	0	0	0	0	10
Passenger Train Interference - Foreign	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Accident - TOTAL	0	0	0	0	0	0	0	0	0	0	7	30	6	43
Accident - Metra/PSA	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Accident - Foreign	0	0	0	0	0	0	0	0	0	0	6	30	6	42
Track Work - TOTAL	15	10	1	13	0	9	7	0	11	0	10	2	8	86
Track Work - Metra/PSA	9	10	1	13	0	9	7	0	11	0	10	2	8	80
Track Work - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Human Error - TOTAL	5	4	1	2	0	3	1	0	8	1	3	2	12	42
Human Error - Metra/PSA	1	4	1	2	0	3	1	0	7	1	3	2	12	37
Human Error - Foreign	4	0	0	0	0	0	0	0	1	0	0	0	0	5
Sick, Injured, Unruly Passenger - TOTAL	2	0	0	2	0	3	2	0	7	0	4	2	8	30
Sick, Injured, Unruly Passenger - Metra/PSA	2	0	0	2	0	3	2	0	7	0	4	2	8	30
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Weather - Metra/PSA	0	0	0	0	0	0	0	0	1	0	0	1	0	2
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	9	7	0	1	0	31	15	0	11	0	11	17	10	112
Lift Deployment - TOTAL	1	0	0	0	0	10	4	0	3	0	2	2	1	23
Obstruction/Debris - TOTAL	18	3	0	8	0	1	0	0	3	3	0	5	11	52
Catenary Failure - TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other - TOTAL	10	0	1	2	0	3	2	1	3	2	1	4	3	32
TOTAL TRAINS DELAYED	134	33	6	28	4	107	55	10	94	41	40	89	86	727
Total Metra/PSA Delays	95	33	6	28	0	84	47	4	87	16	34	53	69	556
Total Foreign Carrier Delays	39	0	0	0	4	23	8	6	7	25	6	36	17	171

Data for current month is final (09/18/17) 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 8.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
August - Average Over Previous Five Years: 2012-2016

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	25.0	0.0	0.2	0.0	3.0	11.4	11.4	11.2	4.0	11.2	0.6	2.6	19.0	99.6
Freight Interference - Peak	8.4	0.0	0.2	0.0	3.0	1.6	2.2	3.6	1.6	4.0	0.2	0.2	5.8	30.8
<i>Primary</i>	4.4	0.0	0.0	0.0	2.8	1.0	2.0	2.2	1.2	2.6	0.2	0.2	2.0	18.6
<i>Secondary</i>	4.0	0.0	0.2	0.0	0.2	0.6	0.2	1.4	0.4	1.4	0.0	0.0	3.8	12.2
Freight Interference - Off-Peak	16.6	0.0	0.0	0.0	0.0	9.8	9.2	7.6	2.4	7.2	0.4	2.4	13.2	68.8
<i>Primary</i>	13.0	0.0	0.0	0.0	0.0	7.4	5.2	7.0	2.4	5.0	0.4	2.4	10.8	53.6
<i>Secondary</i>	3.6	0.0	0.0	0.0	0.0	2.4	4.0	0.6	0.0	2.2	0.0	0.0	2.4	15.2
Signal/Switch Failure - TOTAL	10.4	4.4	1.8	3.0	2.2	15.6	15.0	8.4	6.0	5.8	3.6	7.8	7.6	91.6
Signal/Switch Failure - Metra/PSA	6.8	4.4	1.8	3.0	0.0	14.4	14.6	7.2	5.6	1.8	3.6	6.2	7.2	76.6
<i>Primary</i>	6.2	3.4	1.6	1.6	0.0	6.4	8.4	4.0	5.4	1.6	1.8	2.4	3.2	46.0
<i>Secondary</i>	0.6	1.0	0.2	1.4	0.0	8.0	6.2	3.2	0.2	0.2	1.8	3.8	4.0	30.6
Signal/Switch Failure - Foreign	3.6	0.0	0.0	0.0	2.2	1.2	0.4	1.2	0.4	4.0	0.0	1.6	0.4	15.0
<i>Primary</i>	1.6	0.0	0.0	0.0	2.2	1.0	0.4	0.8	0.4	2.4	0.0	0.6	0.4	9.8
<i>Secondary</i>	2.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	1.6	0.0	1.0	0.0	5.2
Mechanical Failure - TOTAL	7.0	7.2	1.6	1.6	0.6	10.8	5.6	1.6	8.2	1.8	9.4	6.8	7.4	69.6
Mechanical Failure - Metra/PSA	7.0	7.2	1.6	1.6	0.6	10.8	5.6	1.6	8.2	1.8	9.4	6.8	7.4	69.6
Non-Locomotive Equipment Failure - Metra/PSA	0.6	7.2	1.6	1.6	0.0	1.0	1.6	0.2	0.4	0.0	1.8	1.0	4.4	21.4
<i>Primary</i>	0.4	1.6	0.4	0.2	0.0	0.6	1.2	0.0	0.2	0.0	1.4	0.4	1.8	8.2
<i>Secondary</i>	0.2	5.6	1.2	1.4	0.0	0.4	0.4	0.2	0.2	0.0	0.4	0.6	2.6	13.2
Locomotive Failure - Metra/PSA	6.4	0.0	0.0	0.0	0.6	9.8	4.0	1.4	7.8	1.8	7.6	5.8	3.0	48.2
<i>Primary</i>	3.2	0.0	0.0	0.0	0.4	3.0	2.2	0.4	3.2	0.8	3.0	2.0	1.0	19.2
<i>Secondary</i>	3.2	0.0	0.0	0.0	0.2	6.8	1.8	1.0	4.6	1.0	4.6	3.8	2.0	29.0
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	0.6	0.2	0.6	0.8	4.8	2.4	1.6	0.6	1.2	0.4	0.4	1.0	16.8
Passenger Train Interference - Metra/PSA	0.0	0.4	0.2	0.4	0.4	3.2	1.6	1.4	0.4	0.0	0.4	0.4	1.0	9.8
Passenger Train Interference - Foreign	2.2	0.2	0.0	0.2	0.4	1.6	0.8	0.2	0.2	1.2	0.0	0.0	0.0	7.0
Accident - TOTAL	13.6	0.8	0.0	0.2	0.2	4.6	0.4	0.6	3.2	1.6	1.8	5.8	3.2	36.0
Accident - Metra/PSA	13.6	0.8	0.0	0.2	0.2	4.6	0.0	0.6	3.2	1.6	1.8	5.8	3.2	35.6
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Track Work - TOTAL	26.8	7.6	0.4	10.4	0.0	3.8	3.0	2.4	8.8	2.4	8.2	5.0	6.2	85.0
Track Work - Metra/PSA	19.6	7.6	0.4	10.4	0.0	3.8	3.0	2.4	8.8	2.4	8.2	5.0	6.2	77.8
Track Work - Foreign	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2
Human Error - TOTAL	9.0	2.6	1.0	2.0	1.2	7.4	7.4	2.0	6.2	4.4	3.0	2.8	5.4	54.4
Human Error - Metra/PSA	7.0	2.6	1.0	2.0	0.0	5.8	6.0	1.6	6.0	1.0	3.0	2.0	4.6	42.6
Human Error - Foreign	2.0	0.0	0.0	0.0	1.2	1.6	1.4	0.4	0.2	3.4	0.0	0.8	0.8	11.8
Sick, Injured, Unruly Passenger - TOTAL	2.2	7.2	1.6	2.2	0.0	6.4	3.8	0.6	2.2	0.2	5.6	3.0	2.2	37.2
Sick, Injured, Unruly Passenger - Metra/PSA	2.2	7.2	1.6	2.2	0.0	6.4	3.8	0.6	2.2	0.2	5.6	3.0	2.2	37.2
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	13.4	3.2	0.2	0.2	0.2	4.0	8.8	3.2	4.0	0.6	10.0	5.6	6.4	59.8
Weather - Metra/PSA	13.4	3.2	0.2	0.2	0.2	4.0	8.8	3.2	4.0	0.6	10.0	5.6	6.4	59.8
Weather - 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 Loading - TOTAL	9.8	14.0	1.2	5.6	0.0	13.0	12.4	0.2	16.6	0.2	20.8	14.2	11.8	119.8
Lift Deployment - TOTAL	6.4	0.6	0.0	0.4	0.0	2.6	2.2	0.6	4.4	0.2	2.2	1.4	2.2	23.2
Obstruction/Debris - TOTAL	11.0	0.8	0.4	1.8	0.0	7.0	3.8	1.2	3.4	4.6	2.4	2.8	1.2	40.4
Catenary Failure - TOTAL	0.0	7.4	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0
Other - TOTAL	3.4	1.6	0.2	0.8	0.2	1.0	3.8	0.4	3.0	2.2	1.6	2.2	4.6	25.0
TOTAL TRAINS DELAYED	140.2	58.0	10.6	30.6	8.4	92.4	80.0	34.0	70.6	36.4	69.6	60.4	78.2	769.4
Total Metra/PSA Delays	100.2	57.8	10.4	30.4	1.6	76.6	65.6	21.0	65.8	16.6	69.0	55.4	58.0	628.4
Total Foreign Carrier Delays	40.0	0.2	0.2	0.2	6.8	15.8	14.4	13.0	4.8	19.8	0.6	5.0	20.2	141.0

Data for latest month is final (09/22/16) 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 8.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
August 2017 Divergence From August Average Over Previous Five Years

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	-15.0	0.0	-0.2	0.0	0.0	-0.4	-9.4	-7.2	2.0	10.8	-0.6	2.4	-8.0	-25.6
Freight Interference - Peak	-4.4	0.0	-0.2	0.0	-1.0	2.4	-1.2	-2.6	-0.6	3.0	-0.2	3.8	-1.8	-2.8
<i>Primary</i>	-0.4	0.0	0.0	0.0	-0.8	3.0	-1.0	-1.2	-1.2	3.4	-0.2	1.8	0.0	3.4
<i>Secondary</i>	-4.0	0.0	-0.2	0.0	-0.2	-0.6	-0.2	-1.4	0.6	-0.4	0.0	2.0	-1.8	-6.2
Freight Interference - Off-Peak	-10.6	0.0	0.0	0.0	1.0	-2.8	-8.2	-4.6	2.6	7.8	-0.4	-1.4	-6.2	-22.8
<i>Primary</i>	-7.0	0.0	0.0	0.0	0.0	-4.4	-4.2	-4.0	2.6	7.0	-0.4	-1.4	-6.8	-18.6
<i>Secondary</i>	-3.6	0.0	0.0	0.0	1.0	1.6	-4.0	-0.6	0.0	0.8	0.0	0.0	0.6	-4.2
Signal/Switch Failure - TOTAL	36.6	4.6	1.2	-3.0	-1.2	8.4	3.0	-3.4	2.0	-1.8	-3.6	-1.8	-0.6	40.4
Signal/Switch Failure - Metra/PSA	29.2	4.6	1.2	-3.0	0.0	0.6	-2.6	-4.2	2.4	-0.8	-3.6	-1.2	-0.2	22.4
<i>Primary</i>	22.8	1.6	1.4	-1.6	0.0	4.6	-0.4	-1.0	-1.4	-1.6	-1.8	1.6	1.8	26.0
<i>Secondary</i>	6.4	3.0	-0.2	-1.4	0.0	-4.0	-2.2	-3.2	3.8	0.8	-1.8	-2.8	-2.0	-3.6
Signal/Switch Failure - Foreign	7.4	0.0	0.0	0.0	-1.2	7.8	5.6	0.8	-0.4	-1.0	0.0	-0.6	-0.4	18.0
<i>Primary</i>	7.4	0.0	0.0	0.0	-1.2	7.0	5.6	1.2	-0.4	0.6	0.0	0.4	-0.4	20.2
<i>Secondary</i>	0.0	0.0	0.0	0.0	0.0	0.8	0.0	-0.4	0.0	-1.6	0.0	-1.0	0.0	-2.2
Mechanical Failure - TOTAL	6.0	-7.2	-1.6	-1.6	-0.6	-5.8	-2.6	-1.6	22.8	7.2	-7.4	6.2	1.6	15.4
Mechanical Failure - Metra/PSA	2.0	-7.2	-1.6	-1.6	-0.6	-8.8	-2.6	-1.6	22.8	7.2	-7.4	6.2	1.6	8.4
Non-Locomotive Equipment Failure - Metra/PSA	3.4	-7.2	-1.6	-1.6	0.0	0.0	-1.6	-0.2	0.6	0.0	-1.8	10.0	-0.4	-0.4
<i>Primary</i>	0.6	-1.6	-0.4	-0.2	0.0	-0.6	-1.2	0.0	0.8	0.0	-1.4	4.6	1.2	1.8
<i>Secondary</i>	2.8	-5.6	-1.2	-1.4	0.0	0.6	-0.4	-0.2	-0.2	0.0	-0.4	5.4	-1.6	-2.2
Locomotive Failure - Metra/PSA	-1.4	0.0	0.0	0.0	-0.6	-8.8	-1.0	-1.4	22.2	7.2	-5.6	-3.8	2.0	8.8
<i>Primary</i>	-2.2	0.0	0.0	0.0	-0.4	-3.0	0.8	-0.4	4.8	0.2	-1.0	-1.0	0.0	-2.2
<i>Secondary</i>	0.8	0.0	0.0	0.0	-0.2	-5.8	-1.8	-1.0	17.4	7.0	-4.6	-2.8	2.0	11.0
Mechanical Failure - Foreign	4.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Passenger Train Interference - TOTAL	1.8	-0.6	-0.2	-0.6	-0.8	2.2	-1.4	-1.6	1.4	-1.2	-0.4	-0.4	-1.0	-2.8
Passenger Train Interference - Metra/PSA	0.0	-0.4	-0.2	-0.4	-0.4	3.8	-0.6	-1.4	1.6	0.0	-0.4	-0.4	-1.0	0.2
Passenger Train Interference - Foreign	1.8	-0.2	0.0	-0.2	-0.4	-1.6	-0.8	-0.2	-0.2	-1.2	0.0	0.0	0.0	-3.0
Accident - TOTAL	-13.6	-0.8	0.0	-0.2	-0.2	-4.6	-0.4	-0.6	-3.2	-1.6	5.2	24.2	2.8	7.0
Accident - Metra/PSA	-13.6	-0.8	0.0	-0.2	-0.2	-4.6	0.0	-0.6	-3.2	-1.6	-0.8	-5.8	-3.2	-34.6
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	6.0	30.0	6.0	41.6
Track Work - TOTAL	-11.8	2.4	0.6	2.6	0.0	5.2	4.0	-2.4	2.2	-2.4	1.8	-3.0	1.8	1.0
Track Work - Metra/PSA	-10.6	2.4	0.6	2.6	0.0	5.2	4.0	-2.4	2.2	-2.4	1.8	-3.0	1.8	2.2
Track Work - Foreign	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2
Human Error - TOTAL	-4.0	1.4	0.0	0.0	-1.2	-4.4	-6.4	-2.0	1.8	-3.4	0.0	-0.8	6.6	-12.4
Human Error - Metra/PSA	-6.0	1.4	0.0	0.0	0.0	-2.8	-5.0	-1.6	1.0	0.0	0.0	0.0	7.4	-5.6
Human Error - Foreign	2.0	0.0	0.0	0.0	-1.2	-1.6	-1.4	-0.4	0.8	-3.4	0.0	-0.8	-0.8	-6.8
Sick, Injured, Unruly Passenger - TOTAL	-0.2	-7.2	-1.6	-0.2	0.0	-3.4	-1.8	-0.6	4.8	-0.2	-1.6	-1.0	5.8	-7.2
Sick, Injured, Unruly Passenger - Metra/PSA	-0.2	-7.2	-1.6	-0.2	0.0	-3.4	-1.8	-0.6	4.8	-0.2	-1.6	-1.0	5.8	-7.2
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	-13.4	-3.2	-0.2	-0.2	-0.2	-4.0	-8.8	-3.2	-3.0	-0.6	-10.0	-4.6	-6.4	-57.8
Weather - Metra/PSA	-13.4	-3.2	-0.2	-0.2	-0.2	-4.0	-8.8	-3.2	-3.0	-0.6	-10.0	-4.6	-6.4	-57.8
Weather - 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 Loading - TOTAL	-0.8	-7.0	-1.2	-4.6	0.0	18.0	2.6	-0.2	-5.6	-0.2	-9.8	2.8	-1.8	-7.8
Lift Deployment - TOTAL	-5.4	-0.6	0.0	-0.4	0.0	7.4	1.8	-0.6	-1.4	-0.2	-0.2	0.6	-1.2	-0.2
Obstruction/Debris - TOTAL	7.0	2.2	-0.4	6.2	0.0	-6.0	-3.8	-1.2	-0.4	-1.6	-2.4	2.2	9.8	11.6
Catenary Failure - TOTAL	0.0	-7.4	-1.8	-1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11.0
Other - TOTAL	6.6	-1.6	0.8	1.2	-0.2	2.0	-1.8	0.6	0.0	-0.2	-0.6	1.8	-1.6	7.0
TOTAL TRAINS DELAYED	-6.2	-25.0	-4.6	-2.6	-4.4	14.6	-25.0	-24.0	23.4	4.6	-29.6	28.6	7.8	-42.4
Total Metra/PSA Delays	-5.2	-24.8	-4.4	-2.4	-1.6	7.4	-18.6	-17.0	21.2	-0.6	-35.0	-2.4	11.0	-72.4
Total Foreign Carrier Delays	-1.0	-0.2	-0.2	-0.2	-2.8	7.2	-6.4	-7.0	2.2	5.2	5.4	31.0	-3.2	30.0

Data for current month is final (09/18/17) 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 9.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
January - August 2017

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	51	0	1	0	21	67	35	70	49	86	14	38	144	576
Freight Interference - Peak	19	0	1	0	17	12	9	26	8	23	4	17	60	196
Primary	17	0	0	0	14	9	9	20	5	19	2	8	28	131
Secondary	2	0	1	0	3	3	0	6	3	4	2	9	32	65
Freight Interference - Off-Peak	32	0	0	0	4	55	26	44	41	63	10	21	84	380
Primary	29	0	0	0	3	34	20	39	32	45	6	16	59	283
Secondary	3	0	0	0	1	21	6	5	9	18	4	5	25	97
Signal/Switch Failure - TOTAL	117	68	35	39	9	113	83	40	46	42	20	28	60	700
Signal/Switch Failure - Metra/PSA	89	68	35	39	0	77	54	15	46	19	20	25	52	539
Primary	62	46	30	27	0	55	39	12	36	12	12	13	27	371
Secondary	27	22	5	12	0	22	15	3	10	7	8	12	25	168
Signal/Switch Failure - Foreign	28	0	0	0	9	36	29	25	0	23	0	3	8	161
Primary	18	0	0	0	6	14	21	13	0	16	0	3	7	98
Secondary	10	0	0	0	3	22	8	12	0	7	0	0	1	63
Mechanical Failure - TOTAL	96	14	2	5	4	70	51	13	156	22	79	52	53	617
Mechanical Failure - Metra/PSA	90	9	2	5	3	60	51	13	156	22	79	52	53	595
Non-Locomotive Equipment Failure - Metra/PSA	34	9	2	5	1	5	8	3	9	5	8	23	28	140
Primary	13	2	1	2	1	3	4	1	6	2	3	10	14	62
Secondary	21	7	1	3	0	2	4	2	3	3	5	13	14	78
Locomotive Failure - Metra/PSA	56	0	0	0	2	55	43	10	147	17	71	29	25	455
Primary	23	0	0	0	2	22	21	6	50	4	19	13	8	168
Secondary	33	0	0	0	0	33	22	4	97	13	52	16	17	287
Mechanical Failure - Foreign	6	5	0	0	1	10	0	0	0	0	0	0	0	22
Passenger Train Interference - TOTAL	11	1	3	4	8	21	1	5	4	15	0	0	3	76
Passenger Train Interference - Metra/PSA	0	0	3	1	0	18	1	5	4	0	0	0	2	34
Passenger Train Interference - Foreign	11	1	0	3	8	3	0	0	0	15	0	0	1	42
Accident - TOTAL	79	28	11	21	0	3	32	7	25	3	36	143	16	404
Accident - Metra/PSA	76	28	11	21	0	3	29	7	20	0	30	110	1	336
Accident - Foreign	3	0	0	0	0	0	3	0	5	3	6	33	15	68
Track Work - TOTAL	86	76	29	44	1	61	22	2	64	12	47	50	64	558
Track Work - Metra/PSA	80	76	29	44	1	61	22	2	64	12	47	50	64	552
Track Work - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Human Error - TOTAL	128	25	13	8	14	91	64	16	50	21	48	34	65	577
Human Error - Metra/PSA	55	23	13	8	1	60	41	3	48	5	45	28	48	378
Human Error - Foreign	73	2	0	0	13	31	23	13	2	16	3	6	17	199
Sick, Injured, Unruly Passenger - TOTAL	24	35	4	11	0	26	29	3	24	0	19	29	50	254
Sick, Injured, Unruly Passenger - Metra/PSA	18	35	4	11	0	26	29	3	24	0	19	29	50	248
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	52	22	8	15	4	85	43	12	31	1	28	18	7	326
Weather - Metra/PSA	52	22	8	15	4	84	43	12	31	1	28	18	7	325
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	25	31	6	9	0	50	31	1	36	0	48	90	58	385
Lift Deployment - TOTAL	14	4	0	1	0	47	10	1	24	0	12	18	21	152
Obstruction/Debris - TOTAL	89	23	13	25	8	30	23	18	39	21	6	48	63	406
Catenary Failure - TOTAL	0	5	2	6	0	0	0	0	0	0	0	0	0	13
Other - TOTAL	35	6	7	5	1	10	20	5	22	10	14	32	30	197
TOTAL TRAINS DELAYED	807	338	134	193	70	674	444	193	570	233	371	580	634	5,241
Total Metra/PSA Delays	623	330	133	190	18	526	354	85	514	90	348	500	449	4,160
Total Foreign Carrier Delays	184	8	1	3	52	148	90	108	56	143	23	80	185	1,081

Data for current month is final (09/18/17) 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 9.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
January - August - Average Over Previous Five Years: 2012-2016

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	162.8	0.0	0.2	0.0	22.8	107.8	104.0	96.6	47.2	98.0	9.8	41.8	138.0	829.0
Freight Interference - Peak	64.2	0.0	0.2	0.0	22.2	22.4	21.8	37.2	13.0	31.8	2.0	19.2	34.8	268.8
<i>Primary</i>	40.6	0.0	0.0	0.0	21.2	15.4	14.2	26.0	8.4	23.8	1.0	10.4	16.8	177.8
<i>Secondary</i>	23.6	0.0	0.2	0.0	1.0	7.0	7.6	11.2	4.6	8.0	1.0	8.8	18.0	91.0
Freight Interference - Off-Peak	98.6	0.0	0.0	0.0	0.6	85.4	82.2	59.4	34.2	66.2	7.8	22.6	103.2	560.2
<i>Primary</i>	82.2	0.0	0.0	0.0	0.6	59.0	55.4	50.8	30.0	50.8	5.0	18.4	82.2	434.4
<i>Secondary</i>	16.4	0.0	0.0	0.0	0.0	26.4	26.8	8.6	4.2	15.4	2.8	4.2	21.0	125.8
Signal/Switch Failure - TOTAL	168.4	55.4	22.2	21.0	15.2	168.6	107.2	70.8	64.2	73.0	26.6	51.0	83.2	926.8
Signal/Switch Failure - Metra/PSA	100.6	55.4	22.0	21.0	1.8	140.6	90.8	47.4	60.4	15.8	26.0	45.0	79.6	706.4
<i>Primary</i>	73.2	39.0	16.4	15.4	1.6	65.8	52.0	26.0	44.0	11.2	13.4	17.2	28.6	403.8
<i>Secondary</i>	27.4	16.4	5.6	5.6	0.2	74.8	38.8	21.4	16.4	4.6	12.6	27.8	51.0	302.6
Signal/Switch Failure - Foreign	67.8	0.0	0.2	0.0	13.4	28.0	16.4	23.4	3.8	57.2	0.6	6.0	3.6	220.4
<i>Primary</i>	52.6	0.0	0.0	0.0	12.2	18.4	11.6	13.2	2.2	35.8	0.6	2.8	3.6	153.0
<i>Secondary</i>	15.2	0.0	0.2	0.0	1.2	9.6	4.8	10.2	1.6	21.4	0.0	3.2	0.0	67.4
Mechanical Failure - TOTAL	121.8	31.8	10.0	7.6	4.6	100.8	68.8	23.6	98.0	19.4	59.0	62.2	52.0	659.6
Mechanical Failure - Metra/PSA	121.4	29.0	9.2	7.4	4.6	96.4	68.6	23.6	97.6	19.4	59.0	62.2	51.8	650.2
Non-Locomotive Equipment Failure - Metra/PSA	29.4	29.0	9.2	7.4	1.2	12.0	14.2	3.8	12.6	6.6	13.0	11.2	20.4	170.0
<i>Primary</i>	11.0	10.2	3.8	3.6	0.8	4.0	7.0	1.4	5.4	2.6	5.6	4.4	9.6	69.4
<i>Secondary</i>	18.4	18.8	5.4	3.8	0.4	8.0	7.2	2.4	7.2	4.0	7.4	6.8	10.8	100.6
Locomotive Failure - Metra/PSA	92.0	0.0	0.0	0.0	3.4	84.4	54.4	19.8	85.0	12.8	46.0	51.0	31.4	480.2
<i>Primary</i>	28.4	0.0	0.0	0.0	2.6	21.8	20.6	5.8	27.0	6.0	16.8	14.8	12.0	155.8
<i>Secondary</i>	63.6	0.0	0.0	0.0	0.8	62.6	33.8	14.0	58.0	6.8	29.2	36.2	19.4	324.4
Mechanical Failure - Foreign	0.4	2.8	0.8	0.2	0.0	4.4	0.2	0.0	0.4	0.0	0.0	0.0	0.2	9.4
Passenger Train Interference - TOTAL	12.0	8.0	2.2	4.4	4.8	47.2	10.6	11.8	10.6	9.8	1.4	3.4	9.2	135.4
Passenger Train Interference - Metra/PSA	0.8	3.2	1.0	2.8	0.6	31.6	8.8	11.6	7.2	2.2	1.4	3.2	8.8	83.2
Passenger Train Interference - Foreign	11.2	4.8	1.2	1.6	4.2	15.6	1.8	0.2	3.4	7.6	0.0	0.2	0.4	52.2
Accident - TOTAL	93.4	16.6	5.4	7.8	1.0	43.2	42.2	14.8	30.4	8.8	25.4	55.8	27.0	371.8
Accident - Metra/PSA	77.4	16.6	5.4	7.8	0.8	40.2	40.2	12.2	29.2	7.8	25.4	55.2	25.6	343.8
Accident - Foreign	16.0	0.0	0.0	0.0	0.2	3.0	2.0	2.6	1.2	1.0	0.0	0.6	1.4	28.0
Track Work - TOTAL	182.4	42.0	14.8	42.6	2.8	50.4	24.8	15.8	53.2	8.6	47.6	32.8	45.4	563.2
Track Work - Metra/PSA	169.0	42.0	14.8	42.6	2.8	50.2	24.0	15.0	53.2	7.2	47.6	32.8	45.4	546.6
Track Work - Foreign	13.4	0.0	0.0	0.0	0.0	0.2	0.8	0.8	0.0	1.4	0.0	0.0	0.0	16.6
Human Error - TOTAL	108.0	36.2	11.8	19.4	12.2	60.6	39.2	17.2	47.4	27.0	34.6	36.8	32.8	483.2
Human Error - Metra/PSA	78.0	33.6	11.6	18.6	2.6	39.2	27.2	9.2	47.2	6.2	26.6	24.0	19.8	343.8
Human Error - Foreign	30.0	2.6	0.2	0.8	9.6	21.4	12.0	8.0	0.2	20.8	8.0	12.8	13.0	139.4
Sick, Injured, Unruly Passenger - TOTAL	23.2	48.6	9.0	13.6	1.0	26.4	28.2	3.2	22.6	3.8	27.8	31.2	23.2	261.8
Sick, Injured, Unruly Passenger - Metra/PSA	22.4	48.6	9.0	13.6	1.0	26.4	28.2	3.2	22.4	3.8	27.8	31.2	23.2	260.8
Sick, Injured, Unruly Passenger - Foreign	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.0
Weather - TOTAL	193.0	101.0	28.8	33.4	5.0	98.4	87.2	33.2	112.0	21.4	82.4	93.4	79.6	968.8
Weather - Metra/PSA	192.0	101.0	28.8	33.4	4.6	96.2	86.6	33.2	112.0	20.4	82.4	93.0	79.2	962.8
Weather - Foreign	1.0	0.0	0.0	0.0	0.4	2.2	0.6	0.0	0.0	1.0	0.0	0.4	0.4	6.0
Passenger Loading - TOTAL	51.4	87.8	15.0	31.4	0.0	60.8	60.8	1.4	116.2	1.6	78.8	76.2	53.4	634.8
Lift Deployment - TOTAL	22.2	1.4	0.0	0.8	0.0	22.2	20.6	2.0	27.4	1.2	9.6	12.2	20.0	139.6
Obstruction/Debris - TOTAL	49.8	20.8	6.4	22.4	3.0	28.2	34.8	6.2	23.6	16.2	25.8	35.0	27.0	299.2
Catenary Failure - TOTAL	0.0	43.8	9.6	19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	72.6
Other - TOTAL	34.4	16.2	3.8	11.0	0.6	11.6	14.2	5.2	19.0	9.6	14.2	14.4	32.2	186.4
TOTAL TRAINS DELAYED	1,222.8	509.6	139.2	234.4	73.0	826.2	642.6	301.8	671.8	298.4	443.0	546.4	623.0	6,532.2
Total Metra/PSA Delays	919.4	499.4	136.6	231.8	22.4	643.6	504.8	170.2	615.4	111.4	424.6	484.6	466.0	5,230.2
Total Foreign Carrier Delays	303.4	10.2	2.6	2.6	50.6	182.6	137.8	131.6	56.4	187.0	18.4	61.8	157.0	1,302.0

Data for latest month is final (09/22/16) 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 9.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
January - August 2017 Divergence From January - August Average Over Previous Five Years

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	-111.8	0.0	0.8	0.0	-1.8	-40.8	-69.0	-26.6	1.8	-12.0	4.2	-3.8	6.0	-253.0
Freight Interference - Peak	-45.2	0.0	0.8	0.0	-5.2	-10.4	-12.8	-11.2	-5.0	-8.8	2.0	-2.2	25.2	-72.8
Primary	-23.6	0.0	0.0	0.0	-7.2	-6.4	-5.2	-6.0	-3.4	-4.8	1.0	-2.4	11.2	-46.8
Secondary	-21.6	0.0	0.8	0.0	2.0	-4.0	-7.6	-5.2	-1.6	-4.0	1.0	0.2	14.0	-26.0
Freight Interference - Off-Peak	-66.6	0.0	0.0	0.0	3.4	-30.4	-56.2	-15.4	6.8	-3.2	2.2	-1.6	-19.2	-180.2
Primary	-53.2	0.0	0.0	0.0	2.4	-25.0	-35.4	-11.8	2.0	-5.8	1.0	-2.4	-23.2	-151.4
Secondary	-13.4	0.0	0.0	0.0	1.0	-5.4	-20.8	-3.6	4.8	2.6	1.2	0.8	4.0	-28.8
Signal/Switch Failure - TOTAL	-51.4	12.6	12.8	18.0	-6.2	-55.6	-24.2	-30.8	-18.2	-31.0	-6.6	-23.0	-23.2	-226.8
Signal/Switch Failure - Metra/PSA	-11.6	12.6	13.0	18.0	-1.8	-63.6	-36.8	-32.4	-14.4	3.2	-6.0	-20.0	-27.6	-167.4
Primary	-11.2	7.0	13.6	11.6	-1.6	-10.8	-13.0	-14.0	-8.0	0.8	-1.4	-4.2	-1.6	-32.8
Secondary	-0.4	5.6	-0.6	6.4	-0.2	-52.8	-23.8	-18.4	-6.4	2.4	-4.6	-15.8	-26.0	-134.6
Signal/Switch Failure - Foreign	-39.8	0.0	-0.2	0.0	-4.4	8.0	12.6	1.6	-3.8	-34.2	-0.6	-3.0	4.4	-59.4
Primary	-34.6	0.0	0.0	0.0	-6.2	-4.4	9.4	-0.2	-2.2	-19.8	-0.6	0.2	3.4	-55.0
Secondary	-5.2	0.0	-0.2	0.0	1.8	12.4	3.2	1.8	-1.6	-14.4	0.0	-3.2	1.0	-4.4
Mechanical Failure - TOTAL	-25.8	-17.8	-8.0	-2.6	-0.6	-30.8	-17.8	-10.6	58.0	2.6	20.0	-10.2	1.0	-42.6
Mechanical Failure - Metra/PSA	-31.4	-20.0	-7.2	-2.4	-1.6	-36.4	-17.6	-10.6	58.4	2.6	20.0	-10.2	1.2	-55.2
Non-Locomotive Equipment Failure - Metra/PSA	4.6	-20.0	-7.2	-2.4	-0.2	-7.0	-6.2	-0.8	-3.6	-1.6	-5.0	11.8	7.6	-30.0
Primary	2.0	-8.2	-2.8	-1.6	0.2	-1.0	-3.0	-0.4	0.6	-0.6	-2.6	5.6	4.4	-7.4
Secondary	2.6	-11.8	-4.4	-0.8	-0.4	-6.0	-3.2	-0.4	-4.2	-1.0	-2.4	6.2	3.2	-22.6
Locomotive Failure - Metra/PSA	-36.0	0.0	0.0	0.0	-1.4	-29.4	-11.4	-9.8	62.0	4.2	25.0	-22.0	-6.4	-25.2
Primary	-5.4	0.0	0.0	0.0	-0.6	0.2	0.4	0.2	23.0	-2.0	2.2	-1.8	-4.0	12.2
Secondary	-30.6	0.0	0.0	0.0	-0.8	-29.6	-11.8	-10.0	39.0	6.2	22.8	-20.2	-2.4	-37.4
Mechanical Failure - Foreign	5.6	2.2	-0.8	-0.2	1.0	5.6	-0.2	0.0	-0.4	0.0	0.0	0.0	-0.2	12.6
Passenger Train Interference - TOTAL	-1.0	-7.0	0.8	-0.4	3.2	-26.2	-9.6	-6.8	-6.6	5.2	-1.4	-3.4	-6.2	-59.4
Passenger Train Interference - Metra/PSA	-0.8	-3.2	2.0	-1.8	-0.6	-13.6	-7.8	-6.6	-3.2	-2.2	-1.4	-3.2	-6.8	-49.2
Passenger Train Interference - Foreign	-0.2	-3.8	-1.2	1.4	3.8	-12.6	-1.8	-0.2	-3.4	7.4	0.0	-0.2	0.6	-10.2
Accident - TOTAL	-14.4	11.4	5.6	13.2	-1.0	-40.2	-10.2	-7.8	-5.4	-5.8	10.6	87.2	-11.0	32.2
Accident - Metra/PSA	-1.4	11.4	5.6	13.2	-0.8	-37.2	-11.2	-5.2	-9.2	-7.8	4.6	54.8	-24.6	-7.8
Accident - Foreign	-13.0	0.0	0.0	0.0	-0.2	-3.0	1.0	-2.6	3.8	2.0	6.0	32.4	13.6	40.0
Track Work - TOTAL	-96.4	34.0	14.2	1.4	-1.8	10.6	-2.8	-13.8	10.8	3.4	-0.6	17.2	18.6	-5.2
Track Work - Metra/PSA	-89.0	34.0	14.2	1.4	-1.8	10.8	-2.0	-13.0	10.8	4.8	-0.6	17.2	18.6	5.4
Track Work - Foreign	-7.4	0.0	0.0	0.0	0.0	-0.2	-0.8	-0.8	0.0	-1.4	0.0	0.0	0.0	-10.6
Human Error - TOTAL	20.0	-11.2	1.2	-11.4	1.8	30.4	24.8	-1.2	2.6	-6.0	13.4	-2.8	32.2	93.8
Human Error - Metra/PSA	-23.0	-10.6	1.4	-10.6	-1.6	20.8	13.8	-6.2	0.8	-1.2	18.4	4.0	28.2	34.2
Human Error - Foreign	43.0	-0.6	-0.2	-0.8	3.4	9.6	11.0	5.0	1.8	-4.8	-5.0	-6.8	4.0	59.6
Sick, Injured, Unruly Passenger - TOTAL	0.8	-13.6	-5.0	-2.6	-1.0	-0.4	0.8	-0.2	1.4	-3.8	-8.8	-2.2	26.8	-7.8
Sick, Injured, Unruly Passenger - Metra/PSA	-4.4	-13.6	-5.0	-2.6	-1.0	-0.4	0.8	-0.2	1.6	-3.8	-8.8	-2.2	26.8	-12.8
Sick, Injured, Unruly Passenger - Foreign	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	5.0
Weather - TOTAL	-141.0	-79.0	-20.8	-18.4	-1.0	-13.4	-44.2	-21.2	-81.0	-20.4	-54.4	-75.4	-72.6	-642.8
Weather - Metra/PSA	-140.0	-79.0	-20.8	-18.4	-0.6	-12.2	-43.6	-21.2	-81.0	-19.4	-54.4	-75.0	-72.2	-637.8
Weather - Foreign	-1.0	0.0	0.0	0.0	-0.4	-1.2	-0.6	0.0	0.0	-1.0	0.0	-0.4	-0.4	-5.0
Passenger Loading - TOTAL	-26.4	-56.8	-9.0	-22.4	0.0	-10.8	-29.8	-0.4	-80.2	-1.6	-30.8	13.8	4.6	-249.8
Lift Deployment - TOTAL	-8.2	2.6	0.0	0.2	0.0	24.8	-10.6	-1.0	-3.4	-1.2	2.4	5.8	1.0	12.4
Obstruction/Debris - TOTAL	39.2	2.2	6.6	2.6	5.0	1.8	-11.8	11.8	15.4	4.8	-19.8	13.0	36.0	106.8
Catenary Failure - TOTAL	0.0	-38.8	-7.6	-13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-59.6
Other - TOTAL	0.6	-10.2	3.2	-6.0	0.4	-1.6	5.8	-0.2	3.0	0.4	-0.2	17.6	-2.2	10.6
TOTAL TRAINS DELAYED	-415.8	-171.6	-5.2	-41.4	-3.0	-152.2	-198.6	-108.8	-101.8	-65.4	-72.0	33.6	11.0	-1,291.2
Total Metra/PSA Delays	-296.4	-169.4	-3.6	-41.8	-4.4	-117.6	-150.8	-85.2	-101.4	-21.4	-76.6	15.4	-17.0	-1,070.2
Total Foreign Carrier Delays	-119.4	-2.2	-1.6	0.4	1.4	-34.6	-47.8	-23.6	-0.4	-44.0	4.6	18.2	28.0	-221.0

Data for current month is final (09/18/17) 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.a: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH
2017**

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Aug
Freight Interference - TOTAL	53	68	69	79	49	110	74	74					576 11.0%
Freight Interference - Peak	20	21	23	25	14	34	31	28					196 3.7%
Primary	11	16	17	11	12	22	20	22					131 2.5%
Secondary	9	5	6	14	2	12	11	6					65 1.2%
Freight Interference - Off-Peak	33	47	46	54	35	76	43	46					380 7.3%
Primary	26	38	36	34	27	57	30	35					283 5.4%
Secondary	7	9	10	20	8	19	13	11					97 1.9%
Signal/Switch Failure - TOTAL	118	44	80	79	91	87	69	132					700 13.4%
Signal/Switch Failure - Metra/PSA	98	31	74	28	72	74	63	99					539 10.3%
Primary	69	21	41	25	46	42	55	72					371 7.1%
Secondary	29	10	33	3	26	32	8	27					168 3.2%
Signal/Switch Failure - Foreign	20	13	6	51	19	13	6	33					161 3.1%
Primary	10	9	4	16	15	10	4	30					98 1.9%
Secondary	10	4	2	35	4	3	2	3					63 1.2%
Mechanical Failure - TOTAL	84	61	64	42	111	85	85	85					617 11.8%
Mechanical Failure - Metra/PSA	83	55	62	42	111	84	80	78					595 11.4%
Non-Locomotive Equipment Failure - Metra/PSA	12	8	15	10	23	35	16	21					140 2.7%
Primary	6	8	5	7	7	13	6	10					62 1.2%
Secondary	6	0	10	3	16	22	10	11					78 1.5%
Locomotive Failure - Metra/PSA	71	47	47	32	88	49	64	57					455 8.7%
Primary	18	21	20	17	29	25	21	17					168 3.2%
Secondary	53	26	27	15	59	24	43	40					287 5.5%
Mechanical Failure - Foreign	1	6	2	0	0	1	5	7					22 0.4%
Passenger Train Interference - TOTAL	16	2	2	5	19	9	9	14					76 1.5%
Passenger Train Interference - Metra/PSA	9	0	1	2	2	4	6	10					34 0.6%
Passenger Train Interference - Foreign	7	2	1	3	17	5	3	4					42 0.8%
Accident - TOTAL	74	32	26	101	18	65	45	43					404 7.7%
Accident - Metra/PSA	69	32	23	98	9	64	40	1					336 6.4%
Accident - Foreign	5	0	3	3	9	1	5	42					68 1.3%
Track Work - TOTAL	78	17	29	72	98	107	71	86					558 10.6%
Track Work - Metra/PSA	78	17	29	72	98	107	71	80					552 10.5%
Track Work - Foreign	0	0	0	0	0	0	0	6					6 0.1%
Human Error - TOTAL	68	140	54	69	56	75	73	42					577 11.0%
Human Error - Metra/PSA	58	50	37	49	41	58	48	37					378 7.2%
Human Error - Foreign	10	90	17	20	15	17	25	5					199 3.8%
Sick, Injured, Unruly Passenger - TOTAL	27	28	40	27	20	38	44	30					254 4.8%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34	27	20	38	44	30					248 4.7%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0	0	0	0					6 0.1%
Weather - TOTAL	97	25	59	4	2	33	104	2					326 6.2%
Weather - Metra/PSA	96	25	59	4	2	33	104	2					325 6.2%
Weather - Foreign	1	0	0	0	0	0	0	0					1 0.0%
Passenger Loading - TOTAL	33	7	12	10	36	81	94	112					385 7.3%
Lift Deployment - TOTAL	17	8	8	13	23	31	29	23					152 2.9%
Obstruction/Debris - TOTAL	66	44	43	35	78	64	24	52					406 7.7%
Catenary Failure - TOTAL	6	1	4	1	0	0	1	0					13 0.2%
Other - TOTAL	15	15	24	20	22	37	32	32					197 3.8%
TOTAL TRAINS DELAYED	752	492	514	557	623	822	754	727					5,241 100.0%
Total Metra/PSA Delays	655	313	410	401	514	675	636	556					4,160 79.4%
Total Foreign Carrier Delays	97	179	104	156	109	147	118	171					1,081 20.6%

Data for current month is final (09/18/17) 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 & MONTH
2016**

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Aug	
Freight Interference - TOTAL	82	53	43	44	72	73	82	108	78	48	65	94	557	10.3%
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	202	3.8%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	131	2.4%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	71	1.3%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	355	6.6%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	271	5.0%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	84	1.6%
Signal/Switch Failure - TOTAL	154	155	123	98	145	143	108	63	105	67	110	120	989	18.4%
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	622	11.5%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	345	6.4%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	277	5.1%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	367	6.8%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	273	5.1%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	94	1.7%
Mechanical Failure - TOTAL	107	68	131	43	80	88	120	78	114	64	71	88	715	13.3%
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	714	13.3%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	139	2.6%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	66	1.2%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	73	1.4%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	575	10.7%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	185	3.4%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	390	7.2%
Mechanical Failure - Foreign	0	0	0	1	0	0	0	0	0	0	0	8	1	0.0%
Passenger Train Interference - TOTAL	22	12	3	4	19	14	12	11	5	10	4	38	97	1.8%
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	36	0.7%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	61	1.1%
Accident - TOTAL	59	15	62	48	86	29	18	55	34	10	79	49	372	6.9%
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	343	6.4%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	29	0.5%
Track Work - TOTAL	40	21	36	44	141	114	99	133	177	75	59	61	628	11.7%
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	590	11.0%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	38	0.7%
Human Error - TOTAL	38	33	21	53	23	112	47	93	50	45	49	71	420	7.8%
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	336	6.2%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	84	1.6%
Sick, Injured, Unruly Passenger - TOTAL	20	39	27	50	44	32	29	43	30	24	35	34	284	5.3%
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	282	5.2%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	2	0	0	0	0	1	0	2	0.0%
Weather - TOTAL	129	132	28	1	4	23	49	38	1	4	13	132	404	7.5%
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	404	7.5%
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	1	0	0.0%
Passenger Loading - TOTAL	13	7	29	8	51	83	109	42	32	28	68	71	342	6.3%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	98	1.8%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	290	5.4%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	49	0.9%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	141	2.6%
TOTAL TRAINS DELAYED	707	599	572	451	716	791	769	781	729	455	647	836	5,386	100.0%
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	4,247	78.9%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	1,139	21.1%

Data for latest month is final (01/26/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 09/19/2017

'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 & MONTH
2017 Divergence From 2016

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Aug	
Freight Interference - TOTAL	-29	15	26	35	-23	37	-8	-34					19	0.6%
Freight Interference - Peak	-12	4	9	16	-14	14	-1	-22					-6	0.0%
Primary	-15	6	6	4	-3	12	-1	-9					0	0.1%
Secondary	3	-2	3	12	-11	2	0	-13					-6	-0.1%
Freight Interference - Off-Peak	-17	11	17	19	-9	23	-7	-12					25	0.7%
Primary	-6	9	13	5	-5	13	-4	-13					12	0.4%
Secondary	-11	2	4	14	-4	10	-3	1					13	0.3%
Signal/Switch Failure - TOTAL	-36	-111	-43	-19	-54	-56	-39	69					-289	-5.0%
Signal/Switch Failure - Metra/PSA	31	-91	-25	-32	-12	-10	12	44					-83	-1.3%
Primary	34	-9	-11	-16	-8	-10	14	32					26	0.7%
Secondary	-3	-82	-14	-16	-4	0	-2	12					-109	-1.9%
Signal/Switch Failure - Foreign	-67	-20	-18	13	-42	-46	-51	25					-206	-3.7%
Primary	-58	-15	-10	-17	-34	-33	-32	24					-175	-3.2%
Secondary	-9	-5	-8	30	-8	-13	-19	1					-31	-0.5%
Mechanical Failure - TOTAL	-23	-7	-67	-1	31	-3	-35	7					-98	-1.5%
Mechanical Failure - Metra/PSA	-24	-13	-69	0	31	-4	-40	0					-119	-1.9%
Non-Locomotive Equipment Failure - Metra/PSA	-13	-11	5	4	10	18	-3	-9					1	0.1%
Primary	-5	-1	1	2	-2	4	-2	-1					-4	0.0%
Secondary	-8	-10	4	2	12	14	-1	-8					5	0.1%
Locomotive Failure - Metra/PSA	-11	-2	-74	-4	21	-22	-37	9					-120	-2.0%
Primary	-10	3	-4	3	11	-2	-15	-3					-17	-0.2%
Secondary	-1	-5	-70	-7	10	-20	-22	12					-103	-1.8%
Mechanical Failure - Foreign	1	6	2	-1	0	1	5	7					21	0.4%
Passenger Train Interference - TOTAL	-6	-10	-1	1	0	-5	-3	3					-21	-0.4%
Passenger Train Interference - Metra/PSA	-4	-5	-1	-1	0	2	-1	8					-2	0.0%
Passenger Train Interference - Foreign	-2	-5	0	2	0	-7	-2	-5					-19	-0.3%
Accident - TOTAL	15	17	-36	53	-68	36	27	-12					32	0.8%
Accident - Metra/PSA	20	18	-39	57	-68	35	22	-52					-7	0.0%
Accident - Foreign	-5	-1	3	-4	0	1	5	40					39	0.8%
Track Work - TOTAL	38	-4	-7	28	-43	-7	-28	-47					-70	-1.0%
Track Work - Metra/PSA	38	-4	-7	31	-41	-3	-28	-24					-38	-0.4%
Track Work - Foreign	0	0	0	-3	-2	-4	0	-23					-32	-0.6%
Human Error - TOTAL	30	107	33	16	33	-37	26	-51					157	3.2%
Human Error - Metra/PSA	28	25	22	7	26	-36	14	-44					42	1.0%
Human Error - Foreign	2	82	11	9	7	-1	12	-7					115	2.2%
Sick, Injured, Unruly Passenger - TOTAL	7	-11	13	-23	-24	6	15	-13					-30	-0.4%
Sick, Injured, Unruly Passenger - Metra/PSA	7	-11	7	-23	-24	8	15	-13					-34	-0.5%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0	-2	0	0					4	0.1%
Weather - TOTAL	-32	-107	31	3	-2	10	55	-36					-78	-1.3%
Weather - Metra/PSA	-33	-107	31	3	-2	10	55	-36					-79	-1.3%
Weather - Foreign	1	0	0	0	0	0	0	0					1	0.0%
Passenger Loading - TOTAL	20	0	-17	2	-15	-2	-15	70					43	1.0%
Lift Deployment - TOTAL	6	-6	-4	10	8	20	18	2					54	1.1%
Obstruction/Debris - TOTAL	48	14	3	-19	56	33	-20	1					116	2.4%
Catenary Failure - TOTAL	-3	-2	2	0	-4	-13	-10	-6					-36	-0.7%
Other - TOTAL	10	-2	9	20	12	12	2	-7					56	1.1%
TOTAL TRAINS DELAYED	45	-107	-58	106	-93	31	-15	-54					-145	
Total Metra/PSA Delays	144	-184	-88	55	-33	52	24	-57					-87	
Total Foreign Carrier Delays	-99	77	30	51	-60	-21	-39	3					-58	

Data for current month is final (09/18/17) version from TOPS.

P:\ONTIME\report[DelaysByCause.xlsx]AllMonths 09/19/2017

'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 2015 and August 2017

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Sep-15	20	0	0	0	1	9	6	11	14	6	0	2	15	84
Oct-15	16	0	0	0	0	5	4	3	3	11	0	3	15	60
Nov-15	15	0	0	0	7	0	4	7	5	10	3	6	8	65
Dec-15	9	0	0	0	2	4	4	5	4	5	0	1	15	49
Jan-16	14	0	0	0	1	4	23	5	24	3	0	3	5	82
Feb-16	11	0	0	0	3	5	6	1	16	2	0	2	7	53
Mar-16	4	0	0	0	2	6	8	6	2	7	0	0	8	43
Apr-16	13	0	0	0	3	8	4	3	1	8	0	1	3	44
May-16	17	0	0	0	0	9	12	7	0	8	0	1	18	72
Jun-16	19	0	0	0	1	4	6	9	4	10	0	0	20	73
Jul-16	25	0	0	0	2	5	24	6	2	9	0	1	8	82
Aug-16	56	0	0	0	2	14	6	4	3	5	1	2	15	108
Total	219	0	0	0	24	73	107	67	78	84	4	22	137	815
Sep-16	22	0	0	0	5	9	4	3	4	17	1	2	11	78
Oct-16	11	0	0	0	2	2	2	9	3	2	1	3	13	48
Nov-16	8	0	0	0	5	3	5	7	2	9	1	4	21	65
Dec-16	9	0	0	0	4	7	4	8	6	9	2	8	37	94
Jan-17	3	0	0	0	2	6	5	6	3	3	2	1	22	53
Feb-17	4	0	0	0	2	9	3	13	3	10	2	7	15	68
Mar-17	6	0	0	0	4	6	7	5	2	17	1	6	15	69
Apr-17	0	0	0	0	1	8	9	12	4	7	0	4	34	79
May-17	2	0	0	0	2	5	2	11	2	15	2	2	6	49
Jun-17	19	0	1	0	3	9	2	14	18	8	4	5	27	110
Jul-17	7	0	0	0	4	13	5	5	11	4	3	8	14	74
Aug-17	10	0	0	0	3	11	2	4	6	22	0	5	11	74
Total	101	0	1	0	37	88	50	97	64	123	19	55	226	861

Data for current month is final (09/18/17) version from TOPS.

TABLES 12.a & 12.b: FREQUENCY OF LIFT-DEPLOYMENT TRAIN DELAYS BY LINE & MONTH
2017

LINE	Jan Feb Mar			Apr May Jun			Jul Aug Sep			Oct Nov Dec			Lift Delays YTD	% of All Delays YTD
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
BNSF	1	1	0	0	4	5	2	1					14	1.73%
Electric ML	0	0	0	0	1	2	1	0					4	1.18%
Electric BI	0	0	0	0	0	0	0	0					0	0.00%
Electric SC	0	1	0	0	0	0	0	0					1	0.52%
HER	0	0	0	0	0	0	0	0					0	0.00%
Milw N	3	2	1	1	4	12	14	10					47	6.97%
Milw W	3	0	2	1	0	0	0	4					10	2.25%
NCS	0	0	0	0	0	0	1	0					1	0.52%
RI	2	1	0	2	4	8	4	3					24	4.21%
SWS	0	0	0	0	0	0	0	0					0	0.00%
UP N	2	1	1	0	4	0	2	2					12	3.23%
UP NW	2	1	0	6	3	2	2	2					18	3.10%
UP W	4	1	4	3	3	2	3	1					21	3.31%
Total Lift Delays	17	8	8	13	23	31	29	23					152	2.90%
ALL DELAYS													5,241	

Data for current month is final (09/18/17) version from TOPS.

2016

LINE	Jan Feb Mar			Apr May Jun			Jul Aug Sep			Oct Nov Dec			Lift Delays All Year	% of All Delays All Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
BNSF	5	1	1	0	1	0	1	1	0	4	0	0	14	0.87%
Electric ML	1	0	0	0	0	0	0	0	0	1	0	0	2	0.33%
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	0	1	0	0	0	1	0.39%
HER	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Milw N	1	6	8	0	7	3	0	6	4	3	2	2	42	4.42%
Milw W	0	0	1	2	0	2	7	1	3	3	2	1	22	2.51%
NCS	0	1	0	0	0	0	0	1	0	0	0	0	2	0.65%
RI	2	2	0	0	1	2	1	3	1	0	2	8	22	2.60%
SWS	0	0	0	0	2	1	0	0	0	0	0	1	4	1.05%
UP N	0	0	0	0	0	0	0	4	0	0	0	1	5	1.12%
UP NW	1	0	2	0	2	2	1	3	1	1	1	1	15	2.16%
UP W	1	4	0	1	2	1	1	2	1	0	1	2	16	1.89%
Total Lift Delays	11	14	12	3	15	11	11	21	11	12	8	16	145	1.80%
ALL DELAYS													8,053	

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION

August 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
Peak *														
6-10	34	5	3	0	1	11	6	2	15	9	7	9	22	124
11-15	16	0	1	0	2	7	2	0	9	1	2	4	8	52
16-20	8	0	0	0	0	0	1	0	3	2	0	2	3	19
21+	6	0	0	0	0	4	7	4	10	1	1	19	5	57
Annulled	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>5</u>	<u>1</u>	<u>13</u>
Sub-Total	65	5	4	0	3	22	17	6	40	14	11	39	39	265
Off-Peak **														
6-10	38	19	2	16	0	55	22	3	29	11	13	19	17	244
11-15	18	2	0	6	0	15	6	1	5	10	8	10	16	97
16-20	5	3	0	1	0	7	6	0	6	3	1	2	9	43
21+	8	4	0	3	1	8	4	0	10	3	6	17	3	67
Annulled	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>11</u>
Sub-Total	69	28	2	28	1	85	38	4	54	27	29	50	47	462
August 2017 Total														
6-10	72	24	5	16	1	66	28	5	44	20	20	28	39	368
11-15	34	2	1	6	2	22	8	1	14	11	10	14	24	149
16-20	13	3	0	1	0	7	7	0	9	5	1	4	12	62
21+	14	4	0	3	1	12	11	4	20	4	7	36	8	124
Annulled	<u>1</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>7</u>	<u>1</u>	<u>2</u>	<u>7</u>	<u>3</u>	<u>24</u>
TOTAL	134	33	6	28	4	107	55	10	94	41	40	89	86	727
2017 Year-to-Date														
6-10	397	199	89	102	19	329	161	88	280	109	161	206	323	2,463
11-15	142	48	16	24	15	138	101	36	103	42	71	112	135	983
16-20	64	26	12	14	11	69	39	19	54	16	30	51	69	474
21+	146	65	16	39	25	101	111	42	114	59	86	176	98	1,078
Annulled	<u>58</u>	<u>0</u>	<u>1</u>	<u>14</u>	<u>0</u>	<u>37</u>	<u>32</u>	<u>8</u>	<u>19</u>	<u>7</u>	<u>23</u>	<u>35</u>	<u>9</u>	<u>243</u>
TOTAL	807	338	134	193	70	674	444	193	570	233	371	580	634	5,241
PERCENT COMPOSITION OF DELAYS BY RANGE OF DURATION														
Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
August 2017 Total														
6-10	53.7%	72.7%	83.3%	57.1%	25.0%	61.7%	50.9%	50.0%	46.8%	48.8%	50.0%	31.5%	45.3%	50.6%
11-15	25.4%	6.1%	16.7%	21.4%	50.0%	20.6%	14.5%	10.0%	14.9%	26.8%	25.0%	15.7%	27.9%	20.5%
16-20	9.7%	9.1%	0.0%	3.6%	0.0%	6.5%	12.7%	0.0%	9.6%	12.2%	2.5%	4.5%	14.0%	8.5%
21+	10.4%	12.1%	0.0%	10.7%	25.0%	11.2%	20.0%	40.0%	21.3%	9.8%	17.5%	40.4%	9.3%	17.1%
Annulled	<u>0.7%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>7.1%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>1.8%</u>	<u>0.0%</u>	<u>7.4%</u>	<u>2.4%</u>	<u>5.0%</u>	<u>7.9%</u>	<u>3.5%</u>	<u>3.3%</u>
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%
2017 Year-to-Date Delays By Duration														
6-10	49.2%	58.9%	66.4%	52.8%	27.1%	48.8%	36.3%	45.6%	49.1%	46.8%	43.4%	35.5%	50.9%	47.0%
11-15	17.6%	14.2%	11.9%	12.4%	21.4%	20.5%	22.7%	18.7%	18.1%	18.0%	19.1%	19.3%	21.3%	18.8%
16-20	7.9%	7.7%	9.0%	7.3%	15.7%	10.2%	8.8%	9.8%	9.5%	6.9%	8.1%	8.8%	10.9%	9.0%
21+	18.1%	19.2%	11.9%	20.2%	35.7%	15.0%	25.0%	21.8%	20.0%	25.3%	23.2%	30.3%	15.5%	20.6%
Annulled	<u>7.2%</u>	<u>0.0%</u>	<u>0.7%</u>	<u>7.3%</u>	<u>0.0%</u>	<u>5.5%</u>	<u>7.2%</u>	<u>4.1%</u>	<u>3.3%</u>	<u>3.0%</u>	<u>6.2%</u>	<u>6.0%</u>	<u>1.4%</u>	<u>4.6%</u>
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 (09/18/17) version from TOPS.

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 2017														
Peak *	13.0	7.4	8.3	0.0	11.0	13.4	23.0	24.5	16.2	12.0	9.9	58.3	12.4	20.1
Off-Peak **	15.4	12.1	7.0	11.4	22.0	11.5	13.1	8.8	13.0	15.1	19.9	27.4	12.8	15.0
All	14.2	11.4	7.8	11.4	13.8	11.9	16.0	18.2	14.4	14.1	17.3	40.2	12.6	16.8
2017 Year-to-Date														
Peak *	20.5	17.3	12.6	16.5	22.9	17.7	22.3	17.7	18.0	16.5	19.2	39.0	14.3	20.7
Off-Peak **	15.9	13.4	11.5	14.9	17.9	14.0	17.1	16.9	14.1	19.0	19.1	25.7	15.0	16.5
All	18.5	14.8	11.8	15.2	21.6	15.2	19.1	17.3	15.8	18.2	19.1	31.3	14.8	18.2

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.

Data for most recent month is final (09/18/17) version from TOPS.