

**COMMUTER RAIL SYSTEM**

**ON-TIME PERFORMANCE REPORT**

**October 2017**



# COMMUTER RAIL ON-TIME PERFORMANCE

## October 2017

This report presents an analysis of the October 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 October 2017, Metra operated 17,149 scheduled trains, including scheduled "extras", if any. 741 of these trains were delayed (late or annulled), representing an on-time performance rate of 95.7%. 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 October 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 October 2017. Of the 741 delays systemwide in October 2017, all but 386 (52%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Octobers, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in October 2017, 61 more delays than the average over the previous five Octobers were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 6,755 delays in 2017, all but 3,298 (49%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during October 2017. Table 8.b shows the average frequencies over the previous five Octobers, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 741 delays systemwide in October 2017, 100 more than the average over the previous five Octobers. Table 9.a shows delays from the beginning of the year through October 2017. Table 9.b shows the average frequencies from the beginning of the year through October 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 October of 2017, a total of 6,755 trains were delayed, compared to 6,570 trains delayed in the same ten 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 October 2017 freight operations delayed 109 trains systemwide, compared to 48 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 15 trains were delayed by lift deployment in October 2017.

A review of October 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 49.1% of all late trains. Table 14 shows that the average length of delay was 16.3 minutes in October 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  
October 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			
<b>BNSF</b>	1,188	80	93.3%	882	53	94.0%	2,070	133	93.6%	112	8	92.9%	92	1	98.9%	2,274	142	93.8%
<b>Elec -ML</b>	924	28	97.0%	924	5	99.5%	1,848	33	98.2%	160	7	95.6%	103	3	97.1%	2,111	43	98.0%
<b>-BI</b>	286	5	98.3%	308	0	100.0%	594	5	99.2%	32	1	96.9%		--		626	6	99.0%
<b>-SC</b>	<u>308</u>	<u>5</u>	98.4%	<u>682</u>	<u>6</u>	99.1%	<u>990</u>	<u>11</u>	98.9%	<u>128</u>	<u>6</u>	95.3%	<u>100</u>	<u>1</u>	99.0%	<u>1,218</u>	<u>18</u>	98.5%
<b>Subtotal</b>	1,518	38	97.5%	1,914	11	99.4%	3,432	49	98.6%	320	14	95.6%	203	4	98.0%	3,955	67	98.3%
<b>Heritage</b>	132	14	89.4%	22	1	95.5%	154	15	90.3%	--			--			154	15	90.3%
<b>Milw -N</b>	550	31	94.4%	770	54	93.0%	1,320	85	93.6%	96	3	96.9%	102	4	96.1%	1,518	92	93.9%
<b>-W</b>	<u>594</u>	<u>22</u>	96.3%	<u>682</u>	<u>26</u>	96.2%	<u>1,276</u>	<u>48</u>	96.2%	<u>96</u>	<u>0</u>	100.0%	<u>90</u>	<u>0</u>	100.0%	<u>1,462</u>	<u>48</u>	96.7%
<b>Subtotal</b>	1,144	53	95.4%	1,452	80	94.5%	2,596	133	94.9%	192	3	98.4%	192	4	97.9%	2,980	140	95.3%
<b>NCS</b>	242	9	96.3%	242	30	87.6%	484	39	91.9%	--			--			484	39	91.9%
<b>RI</b>	792	22	97.2%	748	47	93.7%	1,540	69	95.5%	128	4	96.9%	140	1	99.3%	1,808	74	95.9%
<b>SWS</b>	242	12	95.0%	418	31	92.6%	660	43	93.5%	24	0	100.0%	--			684	43	93.7%
<b>UP -N</b>	620	5	99.2%	921	20	97.8%	1,541	25	98.4%	104	5	95.2%	90	3	96.7%	1,735	33	98.1%
<b>-NW</b>	726	39	94.6%	705	29	95.9%	1,431	68	95.2%	96	6	93.8%	77	9	88.3%	1,604	83	94.8%
<b>-W</b>	<u>594</u>	<u>51</u>	91.4%	<u>705</u>	<u>42</u>	94.0%	<u>1,299</u>	<u>93</u>	92.8%	<u>80</u>	<u>5</u>	93.8%	<u>92</u>	<u>7</u>	92.4%	<u>1,471</u>	<u>105</u>	92.9%
<b>Subtotal</b>	1,940	95	95.1%	2,331	91	96.1%	4,271	186	95.6%	280	16	94.3%	259	19	92.7%	4,810	221	95.4%
<b>SYSTEM</b>	7,198	323	95.5%	8,009	344	95.7%	15,207	667	95.6%	1,056	45	95.7%	886	29	96.7%	17,149	741	95.7%

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

Delays data for most recent month is final (11/15/17) 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-OCT	AVG
<b>BNSF</b>	<b>2012</b>	94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	95.8%	96.0%
	<b>2013</b>	95.8	93.9	94.6	93.3	96.0	88.5	95.2	97.1	97.2	94.0	95.8	92.2	94.6%	94.5%
	<b>2014</b>	78.6	84.6	95.6	92.0	82.2	82.0	94.1	91.4	94.1	92.2	95.2	94.1	88.7%	89.7%
	<b>2015</b>	90.9	90.1	96.8	97.5	96.6	92.4	93.0	95.4	95.8	93.6	93.5	97.4	94.2%	94.4%
	<b>2016</b>	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	93.9%	94.0%
	<b>2017</b>	95.9	95.6	96.2	96.3	95.4	93.7	96.2	94.4	92.7	93.8			95.0%	95.0%
	<b>2012-2016 average</b>	90.5	92.0	95.6	95.6	93.2	89.7	94.2	93.9	95.2	94.4	95.0	95.1	93.5%	93.7%
<b>Electric</b>	<b>2012</b>	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%
	<b>2013</b>	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%
	<b>2014</b>	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	97.3%	97.5%
	<b>2015</b>	96.3	95.4	98.4	98.4	98.3	97.7	96.5	98.2	97.9	97.8	97.8	99.0	97.5%	97.6%
	<b>2016</b>	98.0	98.6	98.8	98.9	98.9	96.5	97.9	98.5	97.1	98.6	97.7	97.7	98.2%	98.1%
	<b>2017</b>	95.6	98.9	98.3	98.9	98.7	97.1	98.7	98.5	98.2	98.3			98.1%	98.1%
	<b>2012-2016 average</b>	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%
<b>Heritage</b>	<b>2012</b>	95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	95.7%	95.6%
	<b>2013</b>	97.0	99.2	94.4	97.7	94.7	92.5	97.7	99.2	97.5	96.4	98.3	92.1	96.7%	96.4%
	<b>2014</b>	79.5	75.8	88.1	93.2	92.1	94.4	94.7	93.7	92.1	97.8	96.5	98.5	90.3%	91.4%
	<b>2015</b>	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	90.6%	90.2%
	<b>2016</b>	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	94.4%	94.2%
	<b>2017</b>	93.9	94.3	96.9	96.4	94.2	89.0	90.7	97.5	95.7	90.3			93.9%	93.9%
	<b>2012-2016 average</b>	90.7	91.5	94.3	95.1	93.3	92.7	92.7	93.9	93.7	97.1	93.5	93.9	93.5%	93.6%
<b>Milw - N</b>	<b>2012</b>	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	93.4%	93.8%
	<b>2013</b>	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%
	<b>2014</b>	73.1	81.9	89.5	97.9	95.1	91.1	96.0	95.2	95.5	96.2	95.4	93.5	91.2%	91.7%
	<b>2015</b>	91.8	87.9	93.5	95.1	95.4	94.8	97.1	94.9	95.6	97.9	97.0	96.8	94.5%	94.9%
	<b>2016</b>	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	94.7%	94.6%
	<b>2017</b>	95.3	95.6	96.5	96.1	95.9	93.4	88.4	93.1	90.4	93.9			93.9%	93.9%
	<b>2012-2016 average</b>	90.1	90.6	93.4	96.2	94.4	92.3	93.2	93.9	94.7	95.9	95.7	93.4	93.5%	93.7%
<b>Milw - W</b>	<b>2012</b>	94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	94.6%	94.7%
	<b>2013</b>	96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	94.3%	94.2%
	<b>2014</b>	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	93.0%	93.5%
	<b>2015</b>	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8	97.8	99.0	98.2	96.5	96.2%	96.4%
	<b>2016</b>	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	95.0%	94.9%
	<b>2017</b>	96.9	95.2	95.2	95.6	97.5	95.8	96.3	96.3	95.5	96.7			96.1%	96.1%
	<b>2012-2016 average</b>	92.7	92.7	94.4	96.9	96.2	93.5	94.0	94.6	94.8	96.4	96.0	94.7	94.6%	94.7%
<b>NCS</b>	<b>2012</b>	94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	92.3%	92.4%
	<b>2013</b>	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%
	<b>2014</b>	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	88.9%	89.9%
	<b>2015</b>	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	93.6%	93.8%
	<b>2016</b>	92.3	95.5	91.7	93.3	94.4	96.3	95.0	96.4	96.1	95.5	95.2	92.6	94.6%	94.5%
	<b>2017</b>	92.6	91.6	95.1	95.2	95.5	95.7	94.8	98.0	92.7	91.9			94.4%	94.4%
	<b>2012-2016 average</b>	90.4	88.3	92.2	92.1	93.6	93.6	92.3	93.0	95.0	94.0	94.2	92.1	92.5%	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-OCT	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	95.1%	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	95.7%	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	93.0%	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	97.0%	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	95.9%	96.1%
	2017	95.2	97.1	97.8	98.0	94.6	96.0	95.3	95.2	95.7	95.9			96.1%	96.1%
	<b>2012-2016 average</b>	92.6	94.0	96.2	96.1	96.5	94.4	93.9	96.0	96.8	97.0	96.4	96.3	95.4%	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	94.8%	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	96.3%	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	92.4%	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	94.4%	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	95.0%	95.2%
	2017	96.2	94.1	96.4	97.3	92.8	97.1	97.1	94.3	96.3	93.7			95.5%	95.5%
	<b>2012-2016 average</b>	92.4	94.6	95.8	95.9	94.4	92.7	94.7	94.7	94.9	95.7	94.0	94.9	94.6%	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	96.4%	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	96.4%	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	96.4%	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	97.4%	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	97.8%	97.8%
	2017	95.6	99.0	98.3	97.0	97.3	97.3	95.6	97.7	96.9	98.1			97.3%	97.3%
	<b>2012-2016 average</b>	95.9	96.4	97.7	97.6	97.0	96.4	96.7	96.0	97.4	97.4	97.4	97.7	96.9%	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	96.5%	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	94.6%	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	94.9%	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	96.0%	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	93.8	94.8			95.2%	95.2%
	<b>2012-2016 average</b>	94.3	95.5	96.8	97.4	95.5	94.8	94.5	96.2	97.1	95.6	95.2	95.6	95.8%	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	95.1%	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	94.8%	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	94.1%	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	95.1%	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	95.4%	95.1%
	2017	95.0	96.5	96.1	92.9	93.8	92.4	94.8	94.3	94.7	92.9			94.3%	94.3%
	<b>2012-2016 average</b>	93.4	93.7	96.0	95.9	94.6	93.0	95.1	94.7	96.5	96.0	95.4	94.7	94.9%	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	95.5%	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	93.8%	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	96.0%	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	96.2%	96.1%
	2017	95.6	96.9	97.2	96.6	96.5	95.3	95.5	96.0	95.2	95.7			96.1%	96.1%
	<b>2012-2016 average</b>	93.4	94.4	96.3	96.9	96.0	94.3	94.9	95.6	96.4	96.4	96.2	96.0	95.5%	95.6%

Delays data for most recent month is final (11/15/17) 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  
October 2017**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
BNSF	1243 <b>77% OT</b>	Tue, Oct 03	8	C	MULTIPLE FORM A RESTRICTIONS
		Thu, Oct 05	9	CC	MULTIPLE FORM A RESTRICTIONS
		Wed, Oct 18	8	G	HAND LINE ROUTE MT 2 @ LAVERGNE
		Tue, Oct 24	6	D	FOLLOWING BRCNTW1 24
		Wed, Oct 25	11	G1	OPERATING DECISION...HINSDALE - AUR TO EXPIDITE 1241, ROOT CAUSE SWITCH FAILURE ON TRAIN 1241
BNSF	1249 <b>77% OT</b>	Mon, Oct 02	9	JM	ASSISTING PASSENGER THAT FELL ON PLATFORM AT BROOKFIELD
		Tue, Oct 10	8	IW	RAIN
		Mon, Oct 16	9	E	ELECTRICAL SMELL INSIDE CAB, STOPPED TO INSPECT
		Tue, Oct 17	7	GT	TMDS FROZE IN NOC
		Fri, Oct 20	8	L	NEAR MISS
BNSF	1252 <b>82% OT</b>	Tue, Oct 03	16	CC1	LATE ARRIVAL OF EQUIPMENT FROM 1205
		Tue, Oct 10	14	CC1	RESTRICTION 3601 10 MPH MT 1 MP 33 - 35
		Fri, Oct 27	12	ZF1	MAKING ADDITIONAL STOPS @ LISLE / BELMONT TO ACCOMMODATE PASSENGERS FROM 1258 / RESIDUAL MECHANICAL FROM 1220
		Mon, Oct 30	6	E1	MECHANICAL ISSUES ON 1240 AND TRAINS OUT OF SLOT AT LISLE
BNSF	1269 <b>68% OT</b>	Tue, Oct 10	7	IW	HEAVY RAIN
		Fri, Oct 13	7	UI	WAITING ON DELAYED 1261, FOLLOWING DELAYED 1253 WITH TWO ADA LIFTS.
		Mon, Oct 16	9	E1	HEAVY PASSENGER LOADING WITH CUSTOMERS FROM 1259.
		Tue, Oct 17	6	GT	NOC TMDS FROZEN
		Fri, Oct 20	20	E1	WAITING ION 1288
		Mon, Oct 23	14	E1	WAITED BEHIND 1267
		Tue, Oct 24	8	RF1	CONGESTION AT CPK
BNSF	1271 <b>77% OT</b>	Tue, Oct 17	21	E	METX 117 SHUTDOWN
		Fri, Oct 20	12	E1	WAITING ON TRAFFIC FROM 1288 DELAYED DEPARTING
		Mon, Oct 23	17	E1	DUE TO 1267
		Tue, Oct 24	11	RF1	CONGESTION AT CPK
		Fri, Oct 27	6	R1	WAITING FOR 1292 TO DEPART.
BNSF	1279 <b>77% OT</b>	Wed, Oct 04	10	CC	WAITING FOR FOREMAN WAWRYK TO CLEAR FORM B
		Tue, Oct 17	8	E1	DELAYED BEHIND 1271
		Fri, Oct 20	15	E1	CONGESTION AT ATC DUE TO ENGINE FAILURE
		Mon, Oct 23	15	E1	WAITED BEHIND 1267
		Tue, Oct 24	7	RF1	CONGESTION AT CPK
BNSF	1295 <b>82% OT</b>	Tue, Oct 03	12	CC	WORKED MT3 DOWNERS - RT 59SCHEDULED TIE WORK MT 1 @ LISLE
		Tue, Oct 10	15	CC	TIE GANG WORKING BETWEEN EOLA AND WEST EOLA.
		Wed, Oct 18	17	DD	HELD AT EOLA FOR FREIGHT TRAFFIC GETTING NEW PAPERWORK
		Fri, Oct 20	13	E1	HELD FOR ISSUES ON TRAIN 12
HC	919 <b>73% OT</b>	Mon, Oct 02	20	GF1	15M CORWITH W/ AMTRAK #305 AHEAD. PLANT TROUBLE AT LEMOYNE, BRC DISP. COULD NOT CONTACT CN DISPATCHER FOR AUTHORITY TO FLAG WEST.
		Tue, Oct 03	20	D	8M CORWITH 544/552PM BNSF YARD JOB CLEARING. HAD TO WAIT FOR CN TO REQUEST SIGNAL BEFORE THE COULD GIVE HERITAGE THE SIGNAL.
		Fri, Oct 06	10	K1	15" DELAY WILLOW SPRINGS TO LEMONT FOLLOWING AMTRAK; DELAYED DUE TO TRUCK ON TRACKS AT MP 28.81.
		Mon, Oct 09	10	RF	10M AT CANAL DUE TO CN LINING AN R924 INTO IHB BEFORE HC919. IHB IN TURN HAD AN NP12 WITH 50 CARS GOING ACROSS AHEAD OF THE HC919
		Fri, Oct 20	40	DE	7M CUS ACCT AMTRAK #6 WYE MOVE/ BRAKE TEST AND BACK UP MOVE INTO CUS. 8M BRIGHTON CSXQ137 W/4654FT, 33M CP CANAL UP FREIGHT ON SHORT TIME.
		Mon, Oct 30	25	GF1	10" BRIGHTON; 20" CORWITH, 3" RED SIGNAL 47 X-OVER. SIGNAL ISSUES ON CN, TRAINS AHEAD.
ELML	129 <b>0% OT</b>	Mon, Oct 02	7	A	WIATING FOR 132 TO DEPART AND PASSANGER HANDLING
		Tue, Oct 03	7	I	6 MIN DUE TO PASSANGER HANDLING
		Wed, Oct 04	7	I	PASSANGER HANDLING AT 55TH,56TH,57TH.
		Thu, Oct 05	8	A	WAITING ON MEET WITH ME132 AT RICHTON AND TEMPORARY SPEED RESTRICTION 28.55 - 31.00
		Fri, Oct 06	7	A	WAITED FOR MEET WITH ME132 AT RICHTON YD AND SPEED RESTRICTION A104
		Mon, Oct 09	7	A	6MIN EVERYDAY WAITING ON TRAIN TO CLEAR
		Tue, Oct 10	8	I	STOPPING @ 55-56-57TH STREET
		Wed, Oct 11	8	I	STOPPING @ 55TH-56-57TH STREET
		Thu, Oct 12	7	I	PASSANGER HANDLING
		Fri, Oct 13	7	I	WAITED 3M FOR ME132 TO CLEAR RICHTON YARD INTERLOCKING. NO OTHER DELAY INFORMATION GIVEN BY THE CREW.
		Mon, Oct 16	8	A	PASSENGER TRAIN INTERFERENCE
		Tue, Oct 17	7	I	STOPPING @ 51-55-56-57TH PLATFORM
		Wed, Oct 18	7	I	PASSENGER STOP @ 51ST-55TH-56TH-57TH PLATFORM
		Thu, Oct 19	7	A	WAIT AT RICHTON YARD FOR ME132
		Fri, Oct 20	6	A	WAIT FOR ME132 AT RICHTON YD
		Mon, Oct 23	7	A	6M PASSENGER TRAIN INTEREFERENCE
		Tue, Oct 24	7	A	WAIT FOR MEET WITH ME132 AT RICHTON YD
		Wed, Oct 25	7	I	STOPPING @ 51ST. 55TH-56TH-57TH STATIONS.
		Thu, Oct 26	7	I	7M ACCT. STATION STOPS AT 51ST. ST. AND 55TH.-56TH.-57TH. ST.
Fri, Oct 27	7	I	7M ACCT. STATION STOPS AT 51ST. ST. AND 55TH.-56TH. 57TH. ST.		
Mon, Oct 30	6	A	WAIT ON MEET WITH ME132 AT RICHTON YARD		
Tue, Oct 31	8	I	STOPPING @ 51ST-53RD, 55TH 56TH, 57TH PLATFORM		

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

Line	Train	Date	Minutes Late	Delay Code	Delay Explanation
MN	2128 <b>82% OT</b>	Mon, Oct 02	7	D	4" STOP SIGNAL, CN XING; 3" TRACK CONSTRUCTION.
		Tue, Oct 10	20	G	20" SWITCH FAILURE #11, HAND LINE ROUTE, MORGAN ST
		Mon, Oct 16	7	U	5" ADA, LIBERTYVILLE; 3" ITEM 2 HALF DAY RD
		Wed, Oct 18	26	RF1	10" LATE TURN FROM #2103, FOX LAKE; 4" ADA, INGLESIDE-LIBERTYVILLE; 15" UP CY COMPUTER CRASHED, MAYFAIR; 3" AMTRAK 333.
MN	2129 <b>82% OT</b>	Wed, Oct 11	12	JM	17" WAIT ON MEDICAL PERSONAL TO REMOVE UNRESPONSIVE WHITE MALE
		Wed, Oct 18	7	G	10" A-20 TO DEERFIELD STOP SIGNAL RESTRICTED SPEED & FOLLOWING #2127
		Tue, Oct 24	7	D	5" FOLLOWING #2127; 6" CN
		Mon, Oct 30	9	D	12" CN N/B FREIGHT
MN	2135 <b>77% OT</b>	Wed, Oct 04	24	JM1	25" FOLLOWING TRAINS AHEAD
		Tue, Oct 10	22	JM1	22" FOLLOWING #2133
		Mon, Oct 16	8	E1	8" #2125 MECHANICAL FAILURE
		Tue, Oct 24	6	U	6" ADA PASSENGER LOADING AT LIBERTYVILLE
MN	2141 <b>82% OT</b>	Wed, Oct 25	13	JM	9" STOPPED BEHIND AMTRAK 339 W/ MEDICAL EMERGENCY, GLENVIEW; 2" CN N/B FREIGHT
		Wed, Oct 04	21	JM1	21" ACCT #2131 MEDICAL EMERGENCY
		Wed, Oct 10	18	JM1	18" #2133'S MEDICAL EMERGENCY @ MAYFAIR
		Fri, Oct 20	0	M1	COMBO W/2158
MN	2151 <b>77% OT</b>	Mon, Oct 23	8	GX	4" COPY ITEM 2, RACINE; 4" ADA, GOLF
		Tue, Oct 03	20	E1	23" TYING ON LOCO 417, CUS
		Tue, Oct 10	23	JM1	23" WAIT ON #2158, RONDOUT
		Fri, Oct 13	11	GF	11" DUE TO WAITING ON 2158 TO CLEAR GRAYSLAKE
MN	2155 <b>82% OT</b>	Fri, Oct 20	15	M1	13" AMTRAK 340 STRUCK VEHICLE @ DUNDEE RD
		Mon, Oct 30	11	RF1	10" WAIT ON #2158 TO CLEAR RONDOUT
		Fri, Oct 06	8	D1	7" WAIT FOR #2160 TO CLEAR, RONDOUT; 3" STOP, CN XING
		Wed, Oct 18	8	U1	8" WAIT FOR LATE #2160, RONDOUT
MN	2158 <b>77% OT</b>	Fri, Oct 20	11	M1	12" WAIT ON LATE #2160 ACCT AMTRAK 340 STRIKING VEHICLE @ DUNDEE RD
		Mon, Oct 30	12	D1	15" WAITING ON #2160, RONDOUT
		Mon, Oct 02	10	RF1	10" WAITING ON #2149 TO CLEAR.
		Tue, Oct 10	31	JM1	25" WAIT FOR LATE #2149 TO CLEAR, GRAYSLAKE
NCS	109 <b>82% OT</b>	Fri, Oct 13	12	GF1	12" LATE; 5" WAITING ON 2149; 10" STOP SIGNAL @ GRAYSLAKE
		Fri, Oct 20	17	M1	17" AMTRAK 340 STRUCK VEHICLE @ DUNDEE RD(COMBO #2141/2158)
		Mon, Oct 30	13	RF1	13" WAIT ON #2149; 4" STOP SIGNAL CN
		Mon, Oct 02	8	U	3" ADA, OHARE; 2" ADA, LAKE VILLA; 3" Crossover FROM 1-3 MAIN, SWITCH FAILURE;
NCS	114 <b>77% OT</b>	Mon, Oct 24	7	D1	9" WAIT FOR #2129 TO CLEAR, GRAYSLAKE XING
		Mon, Oct 30	11	D	2" STOP SIGNAL, A-2; 10" FOLLOWING N/B CN FREIGHT;
		Tue, Oct 31	11	E1	14" WAIT ON #118 TO CLEAR, LOMOND
		Fri, Oct 06	9	D	3" N/B FREIGHT, GRAYSLAKE; 2" STOP SIGNAL CICERO WEST; 4" FREIGHT, B-6
NCS	118 <b>73% OT</b>	Thu, Oct 12	7	G	6" STOP SIGNAL, RESTRICTING, DEVAL; 4" ADA, PRAIRIE CROSSING TOO HARE
		Thu, Oct 19	9	RA	4" STOP SIGNAL, DEVAL RSETRICTING TO DES PLAINES; 3" STOP SIGNAL, B-12; 4" FOLLOW AMTRAK 334 A2; 1" WAIT ON AMTRAK 333, CANAL ST;
		Thu, Oct 26	13	D	14" UP FREIGHT TRAIN, DEVAL; THEN FLAGGED BY SIGNAL & RESTRICTEDSPEED TO DESPLAINES; 4" STOP/APPROACH FOLLOWING #2234 FROM GALEWOOD
		Tue, Oct 31	12	G	17" FLAGGED/VERBAL PERMISSION BY SIGNAL, DEVAL
NCS	119 <b>73% OT</b>	Fri, Oct 06	6	D	11" ANTIOCH YARD STOP SIGNAL
		Mon, Oct 09	10	D	8" ANTIOCH YARD STOP SIGNAL WAITING ON CN FREIGHT TO CLEAR; 2" 10MPH, DEVAL; 5" MEETING W/B #109 & #111
		Thu, Oct 12	11	U	14" B/O ADA LIFT ON CAR 7430, WOULDNT DEPLOY OR KIND OF STUCK IN THE MIDDLE, ROUND LAKE BEACH
		Fri, Oct 13	8	D	8" LATE; 2" DUE TO DELAY STOP SIGNAL; 6" FOLLOWING A SB CN FREIGHT TRAIN; 2" FOLLOWING CUS PROTECTOR
RI	503 <b>73% OT</b>	Thu, Oct 26	11	D	12" N/B CN, GRAYSLAKE
		Tue, Oct 31	18	E	19" AIR PROBLEM W/LOCO 410, ANTIOCH
		Mon, Oct 02	9	G	12" STOP TALKED BY RESTRICTED SPEED, GRAYSLAKE-RAM.
		Thu, Oct 05	77	DE	76" BLCOKED BY S/B CN FREIGHT W/ BAD AIR HOSE, CN CREW HAD ONE WRENCH AND NO AIR HOSE, CREW FROM #119 BROUGHT A SECOND WRENCH AND AIR HOSE
RI	503 <b>73% OT</b>	Tue, Oct 10	8	R	8" LOCO #426 LOST AIR, WENT INTO EMERGENCY, NO REASON, NOTHING FOUND
		Thu, Oct 26	7	D	7" WAIT ON S/B CN FREIGHT, N. GRAYSLAKE
		Mon, Oct 30	6	D	10" WAIT ON CN S/B FREIGHT TO CLEAR, LOMOND
		Tue, Oct 31	27	E1	30" AIR PROBLEM W/LOCO 410, CUS
		Tue, Oct 10	8	G	4M 14TH & 4M 15TH ST DUE TO FLAGGED BY SIGNAL & SPEED RESTRICTIONS
		Mon, Oct 16	12	KD1	10" LATE DEPARTING JOL DUE TO RI0408 MECHANICAL ISSUES AFTER TRAIN STRUCK A DEER.
RI	503 <b>73% OT</b>	Thu, Oct 19	9	I	4M @ BI PICKING UP NEW WARRANT, 3M CONTACTING B1508, 4M FOR PASSENGER LOADING.
		Thu, Oct 26	7	KW1	4M AT 99TH WAITING ON RI616. 4M AT TINLEY WAITING ON THE RI506. ALL WAS CAUSED BY WHEEL SLIPPAGE
		Fri, Oct 27	6	VE	DELAYED 4M AT LSS ACCT AIR ISSUES CHARGING TRAIN LOCO 410, ISSUE FIXED AFTER PUTTING TRAIN IN EMERGENCY, 3M ENROUTE FOR FORM A'S
		Mon, Oct 30	9	L	3M DUMPED AIR @ 107TH ST, 3M HOLDING OUT FOR 616 @ 111TH, 3M HOLDING OUT FOR 506 @ ROBBINS



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

Line	Train Date	Minutes Late	Delay Code	Delay Explanation
RI <b>68% OT</b>	508 Tue, Oct 03	31	VF	DELAYED 6M @ EJE FOR IC 1020+1 & 161 CARS ; DELAYED 22M DUE TO CAB SIGNAL FAILURE CAB CAR 8575, DELAYED 3M AT 37.1CAR ACCIDENT ON MAIN
	Tue, Oct 10	6	G1	DEP. RICHARDS 7M LATE DUE TO LATER TURN OF EQUIPMENT FROM RI503
	Fri, Oct 13	7	U	2M ROBBINS, 2M CP VERMONT, 2M 115TH, 1M 111TH, ALL DUE TO ADA LIFTS
	Tue, Oct 17	7	C	7M FOR TRAVELING DOWN THE WRONG MAIN FOR UNPLANNED TRACK WORK.
	Wed, Oct 18	10	G	2M LATE DEPARTING JUD, 3M AT EJE WAITING ON X-TRAFFIC, 4M @ BI DUE TO SIGNAL PROBLEMS. 2M ACCOMODATING PASSENGERS EN ROUTE
	Fri, Oct 27	28	C	8M LATE DEPARTING JOLIET, 14M AT CP35.5 WAITING ON RI505 TO CLEAR BEFORE PROCEEDING EAST. ALSO HAD 3 FORM A'S AND 2 FORM BS ALONG THE WAY.
Mon, Oct 30	20	VF	DELAYED DUE TO BAD CAB SIGNALS, RESTRICTED TO 35.5, CUT CABS ABSOLUTE BLOCKS/ENG #207	
SWS <b>77% OT</b>	837 Mon, Oct 02	30	M1	DEPART CUS 33" LATE; LATE FLIP OF SWS #838
	Thu, Oct 05	31	K	37M MP 12.8 ACCT AUTO ACCIDENT BLOCKING TRACKS AT 87TH ST. & PULASKI.
	Tue, Oct 10	29	G1	20" CP 518 TK CIRCUIT ON TK 2. UP ISACSR UP8408 YARDING AT CANAL ST. YARD; MTR DID NOT RELEAASE TRACK & TIME IN A TIMELY MANNER.
	Mon, Oct 16	8	C	10" SIGNAL, ASHBURN
Tue, Oct 31	10	D1	DEPART CUS 17" LATE ACCT. LATE FLIP OF SWS#838	
SWS <b>77% OT</b>	838 Mon, Oct 02	41	M1	DEPART ORLAND PK 179TH, LATE FLIP OF SWS #827; 5M AWDMM 95TH ST.
	Wed, Oct 04	16	GF	18M AT CP RIDGE DUE TO TRACK CIRCUIT LEFT ON FROM NSBS31 DOUBLING UP 9200 FT NS-295 WEST END OF LANDERS/ ASHBURN.
	Fri, Oct 13	10	D1	15M ASHBURN 729/744PM MEET SWS#833; NS233 DOUBLING OUT WEST END OF LANDERS W/10720FT.
	Thu, Oct 19	11	D	14M FOREST HILL 732/746PM FOR CSX Q138 BNSF 6789 W/10886FT DEPARTING 59TH ST YARD.
Tue, Oct 31	24	D	17" FOREST HILL 734/751PM FOR CSX Q137 CSXT5342 W/9124FT YARDING HIS TRAIN AT 59TH ST.; 8" CP21ST ST. FOR CN M337 CN2344 W/9925FT	
UPNW <b>82% OT</b>	641 Wed, Oct 04	81	M1	81" #650 STRUCK VEHICLE @ MP10.31
	Tue, Oct 10	7	KW	7" WET LEAVES ON TRACKS LED TO CONSTANT WHEEL SLIP GOING UP THE HILL NEAR PALATINE-BARRINGTON
	Wed, Oct 18	10	GX	10" XH, MP11.68; FOLLOWING TRAINS AHEAD
	Fri, Oct 20	74	K	74" STOPPED SHORT OF MP44.06 DUE TO CAR ON THE TRACKS, WAIT FOR CAR TO BE REMOVED AND TRACKS INSPECTED; XG PROCEDURE, MP10.31 FALSE REPORT
UPW <b>82% OT</b>	30 Tue, Oct 03	6	F1	6" FOLLOW #26, THEN #28 FROM ELMHURST ACCT #26 STICKY S/S LOADING DOORS ON CAR 7882 & MANUALLY OPERATE ADA LIFT ON CAR 8421
	Thu, Oct 05	22	C1	22" BROKEN RAIL TK1 MP17.1, FOLLOWING TRAINS AHEAD
	Mon, Oct 16	8	I	8" PASSENGER LOADING, RIVER FOREST & OAK PARK; NO SIGNAL, CN @ WEST CHICAGO(B76241-11); DEAD TRACK @ BERKELEY
	Tue, Oct 31	7	F1	7" FOLLOWED #28, ELMHURST-CPT
UPW <b>82% OT</b>	54 Mon, Oct 09	15	DE1	15" WAIT FOR #37 TO CLEAR ON TK3 @ TURNER TO RUN TK3 GRACE-PARK DUE TO ABCEPR ON TK2 & MNPCH ON TK1
	Fri, Oct 20	7	U	7" WAIT FOR DISABLED PASSENGER TO COME TO PROPER SIDE TO LOAD LIFT, ELMHURST; SLOW LOADING GROUP(60 PSGRS), COLLEGE AVE
	Tue, Oct 24	20	JM1	19" LATE TURN FROM #35; SLOW PASSENGER LOADING, WEST CHICAGO- WHEATON
Thu, Oct 26	20	CC1	16" LATE TURN FROM #35, ELBURN; HELD @ VALE FOR 2 W/B METRA TRAINS; X-TRAFFIC, WESTERN	
UPW <b>67% OT</b>	55 Wed, Oct 04	8	D	8" CN FREIGHT A49191-04 INTERFERENCE
	Fri, Oct 06	8	D1	8" TRAIN CONTROL FOLLOWING #53
	Wed, Oct 11	40	K1	10" VEHICLE ON TRACKS @ MP28.85, WAIT FOR TRACKS TO BE INSPECTED, COLLEGE AVE
	Mon, Oct 16	10	C1	4" LATE DEPARTING EQUIPMENT WOULD NOT MOVE IN PROPER DIRECTION DUE TO REVERSER LEFT IN CONTROL PANEL IN CAR 8573; FOLLOW #53
	Tue, Oct 17	15	U	15" VISUALLY IMPAIRED FEMALE PASSENGER GIVEN BAD INFO GOT ON WRONG TRAIN;CREW ASSISTED TO PARKING LOT & STAYED FOR SOMEONE TO PICK HER UP
Wed, Oct 25	13	R1	13" TRAIN CONTROL FOLLOWING #53 OAK PARK-ELMHURST ACCT #641 STOPPED ACROSS LAKE ST PL ATS DUMPED AIR @ BRIDGE A	
Thu, Oct 26	7	GM1	7" XH, MP5.22; TRAIN CONTROL FOLLOWING #53, OAK PARK-ELMHURST	
UPW <b>77% OT</b>	57 Wed, Oct 11	37	K1	39" VEHICLE ON TRACKS @ MP28.85, WAIT FOR TRACKS TO BE INSPECTED
	Mon, Oct 16	8	C1	10" FOLLOWING TRAINS AHEAD
	Tue, Oct 17	7	U1	9" FOLLOWING #55 DUE TO ASSISTING VISUALLY IMPAIRED FEMALE PASSENGER @ WHEATON
	Wed, Oct 25	11	R1	13" FOLLOWNG #55 ACCT #641 ATS DUMPED AIR @ BRIDGE A; M34241-24, CN @ WEST CHICAGO
Thu, Oct 26	6	GM1	8" XH, MP5.22; TRAIN CONTROL FOLLOWING #55	
UPW <b>77% OT</b>	64 Mon, Oct 02	16	DE	16" DELAYED @ PARK, WAITED FOR THE MELNP TO CLEAR AND GET BACK ON THE MOVE DUE TO BEING STOPPED WITH A BAD ORDER EOT.
	Wed, Oct 11	31	K1	31" LATE TURN FROM #57 ACCT VEHICLE ON TRACKS @ MP28.85
	Mon, Oct 16	7	C1	6" LATE TURN FROM #57; FOLLOWING YRPPI, VALE-KEDZIE
	Wed, Oct 25	10	R1	12" LATE TURN FROM #57, ELBURN
	Thu, Oct 26	6	GM1	5" LATE TURN FROM #57 ACCT XH @ MP5.22

Data is final (11/15/17) 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
<b>1 Passenger Train Interference</b>				<b>13 Human Error</b>				<b>1 Passenger Train Interference</b>			
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	<b>2 &amp; 3 Freight Interference - Peak &amp; Off-Peak</b>			
<b>4 Accident</b>				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)
<b>5 Passenger Loading</b>				YB	YB1	XYB	Derailment - Human Error, Engineering	<b>4 Accident</b>			
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
<b>6 Lift Deployment</b>				ZB	ZB1	XZB	PTC Human Error, Engineering Dept.	<b>8 Signal/Switch Failure</b>			
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
<b>7 Obstruction/Debris</b>				ZR	ZR1	XZR	PTC Human Error, Transportation	ZN	ZN1	XZN	PTC Foreign Line (Non-Train)
K	K1	XK	Obstruction On Tracks	<b>14 Sick, Injured, Unruly Passenger</b>				<b>9 Track Work</b>			
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	<b>11 Non-Locomotive Equipment Failure</b>			
<b>8 Signal/Switch Failure</b>				<b>15 Weather</b>				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	<b>12 Locomotive Failure</b>			
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.)	<b>13 Human Error</b>			
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
<b>9 Track Work</b>				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	<b>14 Sick, Injured, Unruly Passenger</b>			
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	<b>15 Weather</b>			
CG	CG1	XCG	Scheduled Signal Work	ZW	ZW1	XZW	PTC Weather	DW	DW1	XDW	Freight Train Interference, Weather
CH	CH1	XCH	Contractor Failure	<b>16 Other</b>							
ZC	ZC1	XZC	PTC Construction/Maintenance	L	L1	XL	Unauthorized People On Tracks/Near Miss				
<b>10 Catenary Failure</b>				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				
<b>11 Non-Locomotive Equipment Failure</b>				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				
<b>12 Locomotive Failure</b>											
E	E1	XE	Locomotive Malfunction								
EZ	EZ1	XEZ	ETMS Malfunction on Locomotive [obsolete 2015]								
ZE	ZE1	XZE	PTC Malfunction Locomotive								

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'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**

**October 2017**

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	118	28	4	11	5	35	32	15	49	16	8	20	45	386	52%
Semi-controllable	4	0	0	0	9	12	4	18	5	16	2	17	31	118	16%
Uncontrollable	20	15	2	7	1	45	12	6	20	11	23	46	29	237	32%
<b>TOTAL TRAINS DELAYED</b>	<b>142</b>	<b>43</b>	<b>6</b>	<b>18</b>	<b>15</b>	<b>92</b>	<b>48</b>	<b>39</b>	<b>74</b>	<b>43</b>	<b>33</b>	<b>83</b>	<b>105</b>	<b>741</b>	<b>100%</b>

**October - 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	73.2	29.2	5.2	18.2	1.4	36.4	25.2	13.2	32.0	9.8	23.6	31.8	25.8	325.0	51%
Semi-controllable	22.4	0.0	0.0	0.0	2.2	9.4	12.0	13.2	4.2	15.8	1.0	9.0	13.2	102.4	16%
Uncontrollable	34.0	30.4	7.4	12.2	0.4	16.4	16.6	3.0	17.0	4.4	20.4	31.4	20.2	213.8	33%
<b>TOTAL TRAINS DELAYED</b>	<b>129.6</b>	<b>59.6</b>	<b>12.6</b>	<b>30.4</b>	<b>4.0</b>	<b>62.2</b>	<b>53.8</b>	<b>29.4</b>	<b>53.2</b>	<b>30.0</b>	<b>45.0</b>	<b>72.2</b>	<b>59.2</b>	<b>641.2</b>	<b>100%</b>

**October 2017 Divergence From October 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	44.8	-1.2	-1.2	-7.2	3.6	-1.4	6.8	1.8	17.0	6.2	-15.6	-11.8	19.2	61.0	61%
Semi-controllable	-18.4	0.0	0.0	0.0	6.8	2.6	-8.0	4.8	0.8	0.2	1.0	8.0	17.8	15.6	16%
Uncontrollable	-14.0	-15.4	-5.4	-5.2	0.6	28.6	-4.6	3.0	3.0	6.6	2.6	14.6	8.8	23.2	23%
<b>TOTAL TRAINS DELAYED</b>	<b>12.4</b>	<b>-16.6</b>	<b>-6.6</b>	<b>-12.4</b>	<b>11.0</b>	<b>29.8</b>	<b>-5.8</b>	<b>9.6</b>	<b>20.8</b>	<b>13.0</b>	<b>-12.0</b>	<b>10.8</b>	<b>45.8</b>	<b>99.8</b>	<b>100%</b>

**January-October 2017**

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	666	272	109	128	37	417	263	81	419	127	219	227	333	3,298	49%
Semi-controllable	85	0	1	0	38	140	72	124	55	131	16	60	194	916	14%
Uncontrollable	352	160	43	89	16	346	218	59	244	41	219	469	285	2,541	38%
<b>TOTAL TRAINS DELAYED</b>	<b>1,103</b>	<b>432</b>	<b>153</b>	<b>217</b>	<b>91</b>	<b>903</b>	<b>553</b>	<b>264</b>	<b>718</b>	<b>299</b>	<b>454</b>	<b>756</b>	<b>812</b>	<b>6,755</b>	<b>100%</b>

Data for current month is final (11/15/17) version from TOPS.

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11/17/2017

**TABLE 7: NUMBER OF DELAYS BY DATE**  
**October 2017**

WEEKDAY	2	3	4	5	6	9	10	11	12	13	16	17	18	19	20	23	24	25	26	27	30	31	TOTAL
	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	
<b>BNSF</b>	9	13	4	8	1	7	8	0	1	1	8	6	4	0	14	6	9	3	0	15	12	4	133
<b>Elec -ML</b>	4	2	2	2	1	2	1	1	2	1	1	1	1	3	1	1	1	2	1	1	1	1	33
<b>-BI</b>	0	0	1	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	5
<b>-SC</b>	1	1	0	0	0	0	0	6	0	2	1	0	0	0	0	0	0	0	0	0	0	0	11
<b>Heritage</b>	2	1	0	0	1	1	0	1	1	1	0	0	1	0	1	0	0	0	0	1	4	0	15
<b>Milw -N</b>	4	3	8	2	1	4	13	3	0	4	5	0	5	0	11	1	7	2	0	0	12	0	85
<b>-W</b>	1	4	0	3	0	2	4	1	1	1	2	5	0	4	11	0	5	1	1	0	1	1	48
<b>NCS</b>	3	1	0	1	2	1	2	2	2	2	3	2	0	1	0	0	4	0	5	0	4	4	39
<b>RI</b>	0	2	0	0	0	4	9	3	3	11	9	5	5	1	3	1	0	0	5	2	4	2	69
<b>SWS</b>	9	2	2	5	0	0	1	4	1	2	3	3	0	3	1	1	1	0	1	1	0	3	43
<b>UP -N</b>	0	0	2	3	1	0	0	0	0	0	9	4	0	3	1	0	0	0	0	2	0	0	25
<b>-NW</b>	0	3	23	1	0	0	3	3	0	0	4	0	8	1	9	2	2	2	7	0	0	0	68
<b>-W</b>	<u>3</u>	<u>2</u>	<u>2</u>	<u>15</u>	<u>9</u>	<u>6</u>	<u>0</u>	<u>11</u>	<u>2</u>	<u>1</u>	<u>7</u>	<u>7</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>7</u>	<u>10</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>93</u>
<b>SYSTEM</b>	36	34	44	40	16	27	41	35	14	26	53	33	25	19	54	13	32	17	30	22	39	17	667

  

SATURDAY	7	14	21	28	TOTAL	SUNDAY/HOLIDAY	1	8	15	22	29	TOTAL
<b>BNSF</b>	0	2	1	5	8	<b>BNSF</b>	0	0	1	0	0	1
<b>Elec -ML</b>	0	1	4	2	7	<b>Elec -ML</b>	0	1	0	1	1	3
<b>-BI</b>	0	0	0	1	1	<b>-BI</b>	-	-	-	-	-	0
<b>-SC</b>	0	0	1	5	6	<b>-SC</b>	0	0	1	0	0	1
<b>Heritage</b>	-	-	-	-	-	<b>Heritage</b>	-	-	-	-	-	0
<b>Milw -N</b>	1	1	0	1	3	<b>Milw -N</b>	0	2	0	2	0	4
<b>-W</b>	0	0	0	0	0	<b>-W</b>	0	0	0	0	0	0
<b>NCS</b>	-	-	-	-	-	<b>NCS</b>	-	-	-	-	-	0
<b>RI</b>	2	2	0	0	4	<b>RI</b>	0	0	0	1	0	1
<b>SWS</b>	0	0	0	0	0	<b>SWS</b>	-	-	-	-	-	0
<b>UP -N</b>	1	0	3	1	5	<b>UP -N</b>	0	1	2	0	0	3
<b>-NW</b>	0	1	5	0	6	<b>-NW</b>	0	2	0	6	1	9
<b>-W</b>	<u>1</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>5</u>	<b>-W</b>	<u>2</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>7</u>
<b>SYSTEM</b>	5	11	14	15	45	<b>SYSTEM</b>	2	7	7	11	2	29

Data is final (11/15/17) version from TOPS.

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

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
<b>Freight Interference - TOTAL</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>4</b>	<b>18</b>	<b>5</b>	<b>15</b>	<b>2</b>	<b>14</b>	<b>31</b>	<b>109</b>
Freight Interference - Peak	2	0	0	0	5	3	2	4	0	6	0	9	14	45
Primary	2	0	0	0	5	2	2	2	0	6	0	4	7	30
Secondary	0	0	0	0	0	1	0	2	0	0	0	5	7	15
Freight Interference - Off-Peak	3	0	0	0	0	7	2	14	5	9	2	5	17	64
Primary	3	0	0	0	0	5	2	14	4	6	2	4	10	50
Secondary	0	0	0	0	0	2	0	0	1	3	0	1	7	14
<b>Signal/Switch Failure - TOTAL</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>6</b>	<b>12</b>	<b>2</b>	<b>0</b>	<b>12</b>	<b>5</b>	<b>64</b>
Signal/Switch Failure - Metra/PSA	6	3	2	3	0	4	3	6	12	1	0	9	5	54
Primary	5	1	1	3	0	3	3	6	9	0	0	3	1	35
Secondary	1	2	1	0	0	1	0	0	3	1	0	6	4	19
Signal/Switch Failure - Foreign	0	0	0	0	4	2	0	0	0	1	0	3	0	10
Primary	0	0	0	0	1	1	0	0	0	1	0	1	0	4
Secondary	0	0	0	0	3	1	0	0	0	0	0	2	0	6
<b>Mechanical Failure - TOTAL</b>	<b>55</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>3</b>	<b>16</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>125</b>
Mechanical Failure - Metra/PSA	55	0	0	0	0	12	21	3	16	3	5	6	4	125
Non-Locomotive Equipment Failure - Metra/PSA	13	0	0	0	0	0	0	0	0	0	2	2	3	20
Primary	5	0	0	0	0	0	0	0	0	0	1	1	1	8
Secondary	8	0	0	0	0	0	0	0	0	0	1	1	2	12
Locomotive Failure - Metra/PSA	42	0	0	0	0	12	21	3	16	3	3	4	1	105
Primary	11	0	0	0	0	5	6	1	5	2	1	2	1	34
Secondary	31	0	0	0	0	7	15	2	11	1	2	2	0	71
Mechanical Failure - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Passenger Train Interference - TOTAL</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>17</b>
Passenger Train Interference - Metra/PSA	0	10	0	0	0	0	0	0	1	0	0	0	1	12
Passenger Train Interference - Foreign	2	0	0	0	1	0	0	0	0	2	0	0	0	5
<b>Accident - TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>10</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>2</b>	<b>23</b>	<b>2</b>	<b>55</b>
Accident - Metra/PSA	0	0	0	6	0	10	0	0	1	7	2	23	0	49
Accident - Foreign	0	0	0	0	0	0	4	0	0	0	0	0	2	6
<b>Track Work - TOTAL</b>	<b>27</b>	<b>10</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>6</b>	<b>21</b>	<b>94</b>
Track Work - Metra/PSA	27	10	1	5	0	4	5	1	7	5	2	6	21	94
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Human Error - TOTAL</b>	<b>25</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>15</b>	<b>3</b>	<b>2</b>	<b>10</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>13</b>	<b>85</b>
Human Error - Metra/PSA	16	5	1	2	0	1	1	1	10	0	1	1	11	50
Human Error - Foreign	9	0	0	0	3	14	2	1	0	4	0	0	2	35
<b>Sick, Injured, Unruly Passenger - TOTAL</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>37</b>
Sick, Injured, Unruly Passenger - Metra/PSA	3	0	0	0	0	22	3	2	0	0	4	1	2	37
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Weather - TOTAL</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>5</b>	<b>37</b>
Weather - Metra/PSA	6	0	0	0	0	2	0	1	5	0	13	5	5	37
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	3	14	1	0	0	2	0	0	1	0	3	7	4	35
Lift Deployment - TOTAL	2	0	0	0	0	3	1	2	3	0	0	1	3	15
Obstruction/Debris - TOTAL	5	1	1	1	1	4	3	1	8	4	1	3	12	45
Catenary Failure - TOTAL	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Other - TOTAL	3	0	0	0	1	2	1	3	5	1	0	4	2	22
<b>TOTAL TRAINS DELAYED</b>	<b>142</b>	<b>43</b>	<b>6</b>	<b>18</b>	<b>15</b>	<b>92</b>	<b>48</b>	<b>39</b>	<b>74</b>	<b>43</b>	<b>33</b>	<b>83</b>	<b>105</b>	<b>741</b>
Total Metra/PSA Delays	126	43	6	18	2	66	38	20	69	21	31	66	70	576
Total Foreign Carrier Delays	16	0	0	0	13	26	10	19	5	22	2	17	35	165

Data for current month is final (11/15/17) 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**  
**October - 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	25.4	0.0	0.0	0.0	1.6	8.0	11.2	11.6	4.4	9.8	1.0	8.6	13.2	94.8
Freight Interference - Peak	7.0	0.0	0.0	0.0	1.6	1.4	2.8	4.6	1.2	2.4	0.0	4.2	2.8	28.0
<i>Primary</i>	3.8	0.0	0.0	0.0	1.6	1.2	1.6	2.8	1.0	1.8	0.0	1.8	2.0	17.6
<i>Secondary</i>	3.2	0.0	0.0	0.0	0.0	0.2	1.2	1.8	0.2	0.6	0.0	2.4	0.8	10.4
Freight Interference - Off-Peak	18.4	0.0	0.0	0.0	0.0	6.6	8.4	7.0	3.2	7.4	1.0	4.4	10.4	66.8
<i>Primary</i>	15.4	0.0	0.0	0.0	0.0	4.8	6.4	6.0	3.2	6.2	0.6	3.4	8.8	54.8
<i>Secondary</i>	3.0	0.0	0.0	0.0	0.0	1.8	2.0	1.0	0.0	1.2	0.4	1.0	1.6	12.0
Signal/Switch Failure - TOTAL	17.6	7.2	1.8	3.0	0.6	14.2	10.6	5.2	6.6	9.0	6.8	5.6	5.2	93.4
Signal/Switch Failure - Metra/PSA	15.0	7.2	1.8	3.0	0.0	12.4	9.8	3.4	6.2	1.8	6.8	5.2	5.2	77.8
<i>Primary</i>	11.6	3.2	1.4	1.4	0.0	7.8	7.4	2.8	5.8	1.6	2.0	1.8	2.8	49.6
<i>Secondary</i>	3.4	4.0	0.4	1.6	0.0	4.6	2.4	0.6	0.4	0.2	4.8	3.4	2.4	28.2
Signal/Switch Failure - Foreign	2.6	0.0	0.0	0.0	0.6	1.8	0.8	1.8	0.4	7.2	0.0	0.4	0.0	15.6
<i>Primary</i>	2.6	0.0	0.0	0.0	0.6	0.8	0.4	1.4	0.2	5.2	0.0	0.4	0.0	11.6
<i>Secondary</i>	0.0	0.0	0.0	0.0	0.0	1.0	0.4	0.4	0.2	2.0	0.0	0.0	0.0	4.0
Mechanical Failure - TOTAL	9.8	1.6	0.6	0.2	0.0	4.8	4.2	5.0	12.4	1.2	8.0	10.6	13.2	71.6
Mechanical Failure - Metra/PSA	9.8	1.2	0.4	0.2	0.0	4.8	4.2	5.0	12.4	1.2	8.0	10.6	13.2	71.0
Non-Locomotive Equipment Failure - Metra/PSA	1.8	1.2	0.4	0.2	0.0	0.8	0.4	1.0	0.2	0.4	0.6	0.8	4.2	12.0
<i>Primary</i>	1.6	0.6	0.2	0.2	0.0	0.2	0.2	0.4	0.2	0.4	0.6	0.4	1.0	6.0
<i>Secondary</i>	0.2	0.6	0.2	0.0	0.0	0.6	0.2	0.6	0.0	0.0	0.0	0.4	3.2	6.0
Locomotive Failure - Metra/PSA	8.0	0.0	0.0	0.0	0.0	4.0	3.8	4.0	12.2	0.8	7.4	9.8	9.0	59.0
<i>Primary</i>	3.4	0.0	0.0	0.0	0.0	1.0	1.4	1.8	4.0	0.2	2.0	2.4	2.0	18.2
<i>Secondary</i>	4.6	0.0	0.0	0.0	0.0	3.0	2.4	2.2	8.2	0.6	5.4	7.4	7.0	40.8
Mechanical Failure - Foreign	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Passenger Train Interference - TOTAL	2.6	0.6	0.0	0.4	0.8	3.4	0.8	1.2	0.6	0.4	0.0	0.2	0.4	11.4
Passenger Train Interference - Metra/PSA	0.6	0.6	0.0	0.2	0.0	2.8	0.6	1.2	0.2	0.0	0.0	0.2	0.4	6.8
Passenger Train Interference - Foreign	2.0	0.0	0.0	0.2	0.8	0.6	0.2	0.0	0.4	0.4	0.0	0.0	0.0	4.6
Accident - TOTAL	7.2	1.6	0.6	1.4	0.0	4.6	5.0	0.4	5.6	0.2	5.4	7.0	5.2	44.2
Accident - Metra/PSA	7.2	1.6	0.6	1.4	0.0	4.6	5.0	0.4	5.6	0.2	5.4	7.0	4.4	43.4
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	0.8	0.8
Track Work - TOTAL	24.8	8.0	1.4	10.4	0.0	10.4	4.4	1.6	7.8	0.6	5.2	13.4	3.0	91.0
Track Work - Metra/PSA	24.8	8.0	1.4	10.4	0.0	10.4	4.4	1.6	7.8	0.4	5.2	13.4	3.0	90.8
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Human Error - TOTAL	12.6	1.8	0.4	0.8	0.6	5.0	4.6	1.6	5.0	4.4	2.8	1.8	5.6	47.0
Human Error - Metra/PSA	6.8	1.8	0.4	0.8	0.2	2.2	2.2	0.4	4.8	1.4	2.6	1.2	2.4	27.2
Human Error - Foreign	5.8	0.0	0.0	0.0	0.4	2.8	2.4	1.2	0.2	3.0	0.2	0.6	3.2	19.8
Sick, Injured, Unruly Passenger - TOTAL	3.4	5.4	1.2	1.8	0.4	2.8	2.4	1.0	2.6	0.2	5.2	4.8	2.6	33.8
Sick, Injured, Unruly Passenger - Metra/PSA	3.4	5.4	1.2	1.8	0.4	2.8	2.4	1.0	2.6	0.2	5.2	4.8	2.6	33.8
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	2.0	2.4	1.2	1.2	0.0	2.0	3.8	0.2	1.6	0.4	2.4	6.8	0.6	24.6
Weather - Metra/PSA	2.0	2.4	1.2	1.2	0.0	2.0	3.8	0.2	1.6	0.4	2.4	6.8	0.6	24.6
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	4.6	7.8	1.4	3.6	0.0	3.0	1.2	0.0	2.6	0.2	3.4	4.6	3.0	35.4
Lift Deployment - TOTAL	3.0	0.2	0.0	0.0	0.0	1.8	1.8	0.2	2.4	0.0	0.2	1.4	1.4	12.4
Obstruction/Debris - TOTAL	14.0	7.2	2.6	3.6	0.0	1.4	1.8	0.8	1.2	3.2	3.8	6.6	5.0	51.2
Catenary Failure - TOTAL	0.0	10.2	1.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6
Other - TOTAL	2.6	5.6	0.2	0.8	0.0	0.8	2.0	0.6	0.4	0.4	0.8	0.8	0.8	15.8
<b>TOTAL TRAINS DELAYED</b>	<b>129.6</b>	<b>59.6</b>	<b>12.6</b>	<b>30.4</b>	<b>4.0</b>	<b>62.2</b>	<b>53.8</b>	<b>29.4</b>	<b>53.2</b>	<b>30.0</b>	<b>45.0</b>	<b>72.2</b>	<b>59.2</b>	<b>641.2</b>
Total Metra/PSA Delays	93.8	59.2	12.4	30.2	0.6	49.0	39.2	14.8	47.8	9.4	43.8	62.6	42.0	504.8
Total Foreign Carrier Delays	35.8	0.4	0.2	0.2	3.4	13.2	14.6	14.6	5.4	20.6	1.2	9.6	17.2	136.4

Data for latest month is final (11/14/16) 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**  
**October 2017 Divergence From October 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	-20.4	0.0	0.0	0.0	3.4	2.0	-7.2	6.4	0.6	5.2	1.0	5.4	17.8	14.2
Freight Interference - Peak	-5.0	0.0	0.0	0.0	3.4	1.6	-0.8	-0.6	-1.2	3.6	0.0	4.8	11.2	17.0
<i>Primary</i>	-1.8	0.0	0.0	0.0	3.4	0.8	0.4	-0.8	-1.0	4.2	0.0	2.2	5.0	12.4
<i>Secondary</i>	-3.2	0.0	0.0	0.0	0.0	0.8	-1.2	0.2	-0.2	-0.6	0.0	2.6	6.2	4.6
Freight Interference - Off-Peak	-15.4	0.0	0.0	0.0	0.0	0.4	-6.4	7.0	1.8	1.6	1.0	0.6	6.6	-2.8
<i>Primary</i>	-12.4	0.0	0.0	0.0	0.0	0.2	-4.4	8.0	0.8	-0.2	1.4	0.6	1.2	-4.8
<i>Secondary</i>	-3.0	0.0	0.0	0.0	0.0	0.2	-2.0	-1.0	1.0	1.8	-0.4	0.0	5.4	2.0
Signal/Switch Failure - TOTAL	-11.6	-4.2	0.2	0.0	3.4	-8.2	-7.6	0.8	5.4	-7.0	-6.8	6.4	-0.2	-29.4
Signal/Switch Failure - Metra/PSA	-9.0	-4.2	0.2	0.0	0.0	-8.4	-6.8	2.6	5.8	-0.8	-6.8	3.8	-0.2	-23.8
<i>Primary</i>	-6.6	-2.2	-0.4	1.6	0.0	-4.8	-4.4	3.2	3.2	-1.6	-2.0	1.2	-1.8	-14.6
<i>Secondary</i>	-2.4	-2.0	0.6	-1.6	0.0	-3.6	-2.4	-0.6	2.6	0.8	-4.8	2.6	1.6	-9.2
Signal/Switch Failure - Foreign	-2.6	0.0	0.0	0.0	3.4	0.2	-0.8	-1.8	-0.4	-6.2	0.0	2.6	0.0	-5.6
<i>Primary</i>	-2.6	0.0	0.0	0.0	0.4	0.2	-0.4	-1.4	-0.2	-4.2	0.0	0.6	0.0	-7.6
<i>Secondary</i>	0.0	0.0	0.0	0.0	3.0	0.0	-0.4	-0.4	-0.2	-2.0	0.0	2.0	0.0	2.0
Mechanical Failure - TOTAL	45.2	-1.6	-0.6	-0.2	0.0	7.2	16.8	-2.0	3.6	1.8	-3.0	-4.6	-9.2	53.4
Mechanical Failure - Metra/PSA	45.2	-1.2	-0.4	-0.2	0.0	7.2	16.8	-2.0	3.6	1.8	-3.0	-4.6	-9.2	54.0
Non-Locomotive Equipment Failure - Metra/PSA	11.2	-1.2	-0.4	-0.2	0.0	-0.8	-0.4	-1.0	-0.2	-0.4	1.4	1.2	-1.2	8.0
<i>Primary</i>	3.4	-0.6	-0.2	-0.2	0.0	-0.2	-0.2	-0.4	-0.2	-0.4	0.4	0.6	0.0	2.0
<i>Secondary</i>	7.8	-0.6	-0.2	0.0	0.0	-0.6	-0.2	-0.6	0.0	0.0	1.0	0.6	-1.2	6.0
Locomotive Failure - Metra/PSA	34.0	0.0	0.0	0.0	0.0	8.0	17.2	-1.0	3.8	2.2	-4.4	-5.8	-8.0	46.0
<i>Primary</i>	7.6	0.0	0.0	0.0	0.0	4.0	4.6	-0.8	1.0	1.8	-1.0	-0.4	-1.0	15.8
<i>Secondary</i>	26.4	0.0	0.0	0.0	0.0	4.0	12.6	-0.2	2.8	0.4	-3.4	-5.4	-7.0	30.2
Mechanical Failure - Foreign	0.0	-0.4	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6
Passenger Train Interference - TOTAL	-0.6	9.4	0.0	-0.4	0.2	-3.4	-0.8	-1.2	0.4	1.6	0.0	-0.2	0.6	5.6
Passenger Train Interference - Metra/PSA	-0.6	9.4	0.0	-0.2	0.0	-2.8	-0.6	-1.2	0.8	0.0	0.0	-0.2	0.6	5.2
Passenger Train Interference - Foreign	0.0	0.0	0.0	-0.2	0.2	-0.6	-0.2	0.0	-0.4	1.6	0.0	0.0	0.0	0.4
Accident - TOTAL	-7.2	-1.6	-0.6	4.6	0.0	5.4	-1.0	-0.4	-4.6	6.8	-3.4	16.0	-3.2	10.8
Accident - Metra/PSA	-7.2	-1.6	-0.6	4.6	0.0	5.4	-5.0	-0.4	-4.6	6.8	-3.4	16.0	-4.4	5.6
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	1.2	5.2
Track Work - TOTAL	2.2	2.0	-0.4	-5.4	0.0	-6.4	0.6	-0.6	-0.8	4.4	-3.2	-7.4	18.0	3.0
Track Work - Metra/PSA	2.2	2.0	-0.4	-5.4	0.0	-6.4	0.6	-0.6	-0.8	4.6	-3.2	-7.4	18.0	3.2
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-0.2
Human Error - TOTAL	12.4	3.2	0.6	1.2	2.4	10.0	-1.6	0.4	5.0	-0.4	-1.8	-0.8	7.4	38.0
Human Error - Metra/PSA	9.2	3.2	0.6	1.2	-0.2	-1.2	-1.2	0.6	5.2	-1.4	-1.6	-0.2	8.6	22.8
Human Error - Foreign	3.2	0.0	0.0	0.0	2.6	11.2	-0.4	-0.2	-0.2	1.0	-0.2	-0.6	-1.2	15.2
Sick, Injured, Unruly Passenger - TOTAL	-0.4	-5.4	-1.2	-1.8	-0.4	19.2	0.6	1.0	-2.6	-0.2	-1.2	-3.8	-0.6	3.2
Sick, Injured, Unruly Passenger - Metra/PSA	-0.4	-5.4	-1.2	-1.8	-0.4	19.2	0.6	1.0	-2.6	-0.2	-1.2	-3.8	-0.6	3.2
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	4.0	-2.4	-1.2	-1.2	0.0	0.0	-3.8	0.8	3.4	-0.4	10.6	-1.8	4.4	12.4
Weather - Metra/PSA	4.0	-2.4	-1.2	-1.2	0.0	0.0	-3.8	0.8	3.4	-0.4	10.6	-1.8	4.4	12.4
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	-1.6	6.2	-0.4	-3.6	0.0	-1.0	-1.2	0.0	-1.6	-0.2	-0.4	2.4	1.0	-0.4
Lift Deployment - TOTAL	-1.0	-0.2	0.0	0.0	0.0	1.2	-0.8	1.8	0.6	0.0	-0.2	-0.4	1.6	2.6
Obstruction/Debris - TOTAL	-9.0	-6.2	-1.6	-2.6	1.0	2.6	1.2	0.2	6.8	0.8	-2.8	-3.6	7.0	-6.2
Catenary Failure - TOTAL	0.0	-10.2	-1.2	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-13.6
Other - TOTAL	0.4	-5.6	-0.2	-0.8	1.0	1.2	-1.0	2.4	4.6	0.6	-0.8	3.2	1.2	6.2
<b>TOTAL TRAINS DELAYED</b>	<b>12.4</b>	<b>-16.6</b>	<b>-6.6</b>	<b>-12.4</b>	<b>11.0</b>	<b>29.8</b>	<b>-5.8</b>	<b>9.6</b>	<b>20.8</b>	<b>13.0</b>	<b>-12.0</b>	<b>10.8</b>	<b>45.8</b>	<b>99.8</b>
Total Metra/PSA Delays	32.2	-16.2	-6.4	-12.2	1.4	17.0	-1.2	5.2	21.2	11.6	-12.8	3.4	28.0	71.2
Total Foreign Carrier Delays	-19.8	-0.4	-0.2	-0.2	9.6	12.8	-4.6	4.4	-0.4	1.4	0.8	7.4	17.8	28.6

Data for current month is final (11/15/17) 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 - October 2017**

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	73	0	1	0	28	98	41	96	55	115	17	57	200	781
Freight Interference - Peak	32	0	1	0	24	18	11	32	8	36	4	29	88	283
Primary	22	0	0	0	21	14	11	23	5	30	2	14	39	181
Secondary	10	0	1	0	3	4	0	9	3	6	2	15	49	102
Freight Interference - Off-Peak	41	0	0	0	4	80	30	64	47	79	13	28	112	498
Primary	37	0	0	0	3	48	24	59	37	57	9	22	76	372
Secondary	4	0	0	0	1	32	6	5	10	22	4	6	36	126
Signal/Switch Failure - TOTAL	148	71	37	42	15	149	95	49	64	52	20	66	75	883
Signal/Switch Failure - Metra/PSA	119	71	37	42	0	105	63	21	64	28	20	60	67	697
Primary	88	47	31	30	0	60	47	18	50	17	12	17	35	452
Secondary	31	24	6	12	0	45	16	3	14	11	8	43	32	245
Signal/Switch Failure - Foreign	29	0	0	0	15	44	32	28	0	24	0	6	8	186
Primary	19	0	0	0	9	20	24	16	0	17	0	4	7	116
Secondary	10	0	0	0	6	24	8	12	0	7	0	2	1	70
Mechanical Failure - TOTAL	180	15	3	5	5	90	75	21	199	25	91	71	59	839
Mechanical Failure - Metra/PSA	174	10	3	5	4	80	75	21	199	25	91	71	59	817
Non-Locomotive Equipment Failure - Metra/PSA	49	10	3	5	1	5	8	3	14	5	12	25	31	171
Primary	20	3	2	2	1	3	4	1	8	2	5	11	15	77
Secondary	29	7	1	3	0	2	4	2	6	3	7	14	16	94
Locomotive Failure - Metra/PSA	125	0	0	0	3	75	67	18	185	20	79	46	28	646
Primary	40	0	0	0	2	30	28	9	61	6	20	18	10	224
Secondary	85	0	0	0	1	45	39	9	124	14	59	28	18	422
Mechanical Failure - Foreign	6	5	0	0	1	10	0	0	0	0	0	0	0	22
Passenger Train Interference - TOTAL	13	17	7	4	9	26	1	5	6	17	0	0	6	111
Passenger Train Interference - Metra/PSA	0	16	6	1	0	22	1	5	6	0	0	0	5	62
Passenger Train Interference - Foreign	13	1	1	3	9	4	0	0	0	17	0	0	1	49
Accident - TOTAL	97	28	11	27	0	15	42	12	39	10	63	193	18	555
Accident - Metra/PSA	94	28	11	27	0	15	35	9	34	7	57	160	1	478
Accident - Foreign	3	0	0	0	0	0	7	3	5	3	6	33	17	77
Track Work - TOTAL	132	101	30	51	1	85	45	8	72	17	49	57	88	736
Track Work - Metra/PSA	119	101	30	51	1	85	45	8	72	17	49	57	88	723
Track Work - Foreign	13	0	0	0	0	0	0	0	0	0	0	0	0	13
Human Error - TOTAL	181	34	16	12	17	112	67	18	66	25	53	37	90	728
Human Error - Metra/PSA	91	32	16	10	1	67	42	4	64	5	49	31	71	483
Human Error - Foreign	90	2	0	2	16	45	25	14	2	20	4	6	19	245
Sick, Injured, Unruly Passenger - TOTAL	27	36	4	11	0	54	35	6	25	0	26	30	54	308
Sick, Injured, Unruly Passenger - Metra/PSA	21	36	4	11	0	54	35	6	25	0	26	30	54	302
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	58	22	8	15	4	87	43	13	36	1	41	23	12	363
Weather - Metra/PSA	58	22	8	15	4	86	43	13	36	1	41	23	12	362
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	35	57	9	9	0	62	33	1	50	0	57	105	66	484
Lift Deployment - TOTAL	20	4	0	1	0	59	12	3	28	0	14	23	28	192
Obstruction/Debris - TOTAL	98	24	14	26	10	38	33	20	51	26	8	52	76	476
Catenary Failure - TOTAL	0	17	6	9	0	0	0	0	0	0	0	0	0	32
Other - TOTAL	41	6	7	5	2	28	31	12	27	11	15	42	40	267
<b>TOTAL TRAINS DELAYED</b>	<b>1,103</b>	<b>432</b>	<b>153</b>	<b>217</b>	<b>91</b>	<b>903</b>	<b>553</b>	<b>264</b>	<b>718</b>	<b>299</b>	<b>454</b>	<b>756</b>	<b>812</b>	<b>6,755</b>
Total Metra/PSA Delays	870	424	151	212	22	701	448	123	656	120	427	654	567	5,375
Total Foreign Carrier Delays	233	8	2	5	69	202	105	141	62	179	27	102	245	1,380

Data for current month is final (11/15/17) 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 - October - 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	203.6	0.0	0.2	0.0	27.0	125.2	129.4	115.4	56.2	120.0	12.0	53.4	162.0	1,004.4	
Freight Interference - Peak	75.2	0.0	0.2	0.0	26.4	25.0	25.8	43.8	16.6	38.4	2.8	24.6	39.4	318.2	
Primary	47.0	0.0	0.0	0.0	25.4	17.8	16.4	30.4	10.2	29.6	1.4	13.2	20.2	211.6	
Secondary	28.2	0.0	0.2	0.0	1.0	7.2	9.4	13.4	6.4	8.8	1.4	11.4	19.2	106.6	
Freight Interference - Off-Peak	128.4	0.0	0.0	0.0	0.6	100.2	103.6	71.6	39.6	81.6	9.2	28.8	122.6	686.2	
Primary	107.2	0.0	0.0	0.0	0.6	69.6	71.2	61.4	35.2	63.2	5.8	23.4	99.4	537.0	
Secondary	21.2	0.0	0.0	0.0	0.0	30.6	32.4	10.2	4.4	18.4	3.4	5.4	23.2	149.2	
Signal/Switch Failure - TOTAL	195.8	74.6	27.0	26.8	16.8	200.8	124.6	82.0	75.6	89.0	35.2	60.6	94.0	1,102.8	
Signal/Switch Failure - Metra/PSA	118.4	74.6	26.8	26.8	2.2	169.6	106.0	53.6	70.4	19.4	34.6	54.0	89.0	845.4	
Primary	87.2	51.0	19.2	18.4	2.0	82.8	63.2	30.4	53.4	14.6	16.6	22.2	33.6	494.6	
Secondary	31.2	23.6	7.6	8.4	0.2	86.8	42.8	23.2	17.0	4.8	18.0	31.8	55.4	350.8	
Signal/Switch Failure - Foreign	77.4	0.0	0.2	0.0	14.6	31.2	18.6	28.4	5.2	69.6	0.6	6.6	5.0	257.4	
Primary	57.8	0.0	0.0	0.0	13.4	20.0	12.4	16.4	2.8	45.8	0.6	3.4	4.2	176.8	
Secondary	19.6	0.0	0.2	0.0	1.2	11.2	6.2	12.0	2.4	23.8	0.0	3.2	0.8	80.6	
Mechanical Failure - TOTAL	136.4	38.2	11.6	9.2	4.8	110.8	78.6	31.6	124.2	21.4	72.0	79.6	73.4	791.8	
Mechanical Failure - Metra/PSA	136.0	34.6	10.4	8.8	4.8	106.4	78.4	31.6	123.8	21.4	72.0	79.6	73.2	781.0	
Non-Locomotive Equipment Failure - Metra/PSA	31.4	34.6	10.4	8.8	1.2	13.4	15.4	5.0	13.8	7.4	14.6	14.4	25.0	195.4	
Primary	12.8	12.0	4.2	4.4	0.8	4.8	7.8	2.0	6.0	3.4	6.6	6.0	11.0	81.8	
Secondary	18.6	22.6	6.2	4.4	0.4	8.6	7.6	3.0	7.8	4.0	8.0	8.4	14.0	113.6	
Locomotive Failure - Metra/PSA	104.6	0.0	0.0	0.0	3.6	93.0	63.0	26.6	110.0	14.0	57.4	65.2	48.2	585.6	
Primary	34.0	0.0	0.0	0.0	2.6	24.4	23.8	8.6	35.6	6.6	21.0	18.2	16.4	191.2	
Secondary	70.6	0.0	0.0	0.0	1.0	68.6	39.2	18.0	74.4	7.4	36.4	47.0	31.8	394.4	
Mechanical Failure - Foreign	0.4	3.6	1.2	0.4	0.0	4.4	0.2	0.0	0.4	0.0	0.0	0.0	0.2	10.8	
Passenger Train Interference - TOTAL	16.0	8.6	2.2	4.8	5.8	53.6	12.2	14.0	11.8	11.8	1.4	3.8	10.2	156.2	
Passenger Train Interference - Metra/PSA	1.4	3.8	1.0	3.0	0.6	36.2	10.0	13.6	8.0	2.8	1.4	3.6	9.8	95.2	
Passenger Train Interference - Foreign	14.6	4.8	1.2	1.8	5.2	17.4	2.2	0.4	3.8	9.0	0.0	0.2	0.4	61.0	
Accident - TOTAL	103.8	18.2	6.0	9.2	1.6	55.0	49.0	15.2	36.8	10.6	32.6	65.2	33.8	437.0	
Accident - Metra/PSA	86.8	18.2	6.0	9.2	1.4	52.0	47.0	12.6	35.6	9.6	32.6	64.6	31.6	407.2	
Accident - Foreign	17.0	0.0	0.0	0.0	0.2	3.0	2.0	2.6	1.2	1.0	0.0	0.6	2.2	29.8	
Track Work - TOTAL	238.2	57.4	16.6	60.6	3.6	68.2	35.8	18.8	66.4	12.0	64.0	52.4	53.6	747.6	
Track Work - Metra/PSA	224.0	57.4	16.6	60.6	3.6	68.0	35.0	18.0	66.4	10.0	64.0	52.4	53.6	729.6	
Track Work - Foreign	14.2	0.0	0.0	0.0	0.0	0.2	0.8	0.8	0.0	2.0	0.0	0.0	0.0	18.0	
Human Error - TOTAL	140.6	40.6	12.2	21.8	14.4	76.0	50.0	20.0	56.2	34.8	39.6	41.2	40.8	588.2	
Human Error - Metra/PSA	100.2	38.0	12.0	21.0	3.2	45.6	34.2	9.8	55.8	8.6	30.6	27.2	23.6	409.8	
Human Error - Foreign	40.4	2.6	0.2	0.8	11.2	30.4	15.8	10.2	0.4	26.2	9.0	14.0	17.2	178.4	
Sick, Injured, Unruly Passenger - TOTAL	29.6	57.8	11.0	17.0	1.6	31.4	33.4	4.2	27.6	4.2	37.0	40.0	28.0	322.8	
Sick, Injured, Unruly Passenger - Metra/PSA	28.6	57.8	11.0	17.0	1.6	31.4	33.4	4.2	27.4	4.2	37.0	40.0	28.0	321.6	
Sick, Injured, Unruly Passenger - Foreign	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.2	
Weather - TOTAL	196.2	105.4	30.8	36.2	5.4	103.4	96.2	34.2	116.0	22.0	87.8	102.8	84.2	1,020.6	
Weather - Metra/PSA	195.2	105.4	30.8	36.2	5.0	101.2	95.6	34.2	116.0	20.8	87.8	102.4	83.8	1,014.4	
Weather - Foreign	1.0	0.0	0.0	0.0	0.4	2.2	0.6	0.0	0.0	1.2	0.0	0.4	0.4	6.2	
Passenger Loading - TOTAL	59.0	101.4	18.8	39.0	0.0	68.2	74.0	1.8	124.4	1.8	86.0	85.8	60.4	720.6	
Lift Deployment - TOTAL	26.2	1.6	0.0	1.0	0.0	26.8	26.0	3.4	32.6	1.4	11.6	15.2	22.4	168.2	
Obstruction/Debris - TOTAL	68.4	31.4	10.2	27.4	3.2	30.8	40.2	7.4	28.6	21.2	30.8	46.0	32.6	378.2	
Catenary Failure - TOTAL	0.0	63.8	12.6	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	104.6	
Other - TOTAL	40.0	24.8	6.6	12.8	0.8	13.6	18.6	5.8	21.8	11.0	19.8	16.6	34.8	227.0	
<b>TOTAL TRAINS DELAYED</b>	<b>1,453.8</b>	<b>623.8</b>	<b>165.8</b>	<b>293.8</b>	<b>85.0</b>	<b>963.8</b>	<b>768.0</b>	<b>353.8</b>	<b>778.2</b>	<b>361.2</b>	<b>529.8</b>	<b>662.8</b>	<b>730.2</b>	<b>7,770.0</b>	
Total Metra/PSA Delays	1,084.2	612.8	162.8	290.8	26.4	749.8	598.4	196.0	710.8	132.2	508.2	587.6	542.8	6,202.8	
Total Foreign Carrier Delays	369.6	11.0	3.0	3.0	58.6	214.0	169.6	157.8	67.4	229.0	21.6	75.2	187.4	1,567.2	

Data for latest month is final (11/14/16) 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 - October 2017 Divergence From January - October 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	
<b>Freight Interference - TOTAL</b>	<b>-130.6</b>	<b>0.0</b>	<b>0.8</b>	<b>0.0</b>	<b>1.0</b>	<b>-27.2</b>	<b>-88.4</b>	<b>-19.4</b>	<b>-1.2</b>	<b>-5.0</b>	<b>5.0</b>	<b>3.6</b>	<b>38.0</b>	<b>-223.4</b>
Freight Interference - Peak	-43.2	0.0	0.8	0.0	-2.4	-7.0	-14.8	-11.8	-8.6	-2.4	1.2	4.4	48.6	-35.2
Primary	-25.0	0.0	0.0	0.0	-4.4	-3.8	-5.4	-7.4	-5.2	0.4	0.6	0.8	18.8	-30.6
Secondary	-18.2	0.0	0.8	0.0	2.0	-3.2	-9.4	-4.4	-3.4	-2.8	0.6	3.6	29.8	-4.6
Freight Interference - Off-Peak	-87.4	0.0	0.0	0.0	3.4	-20.2	-73.6	-7.6	7.4	-2.6	3.8	-0.8	-10.6	-188.2
Primary	-70.2	0.0	0.0	0.0	2.4	-21.6	-47.2	-2.4	1.8	-6.2	3.2	-1.4	-23.4	-165.0
Secondary	-17.2	0.0	0.0	0.0	1.0	1.4	-26.4	-5.2	5.6	3.6	0.6	0.6	12.8	-23.2
<b>Signal/Switch Failure - TOTAL</b>	<b>-47.8</b>	<b>-3.6</b>	<b>10.0</b>	<b>15.2</b>	<b>-1.8</b>	<b>-51.8</b>	<b>-29.6</b>	<b>-33.0</b>	<b>-11.6</b>	<b>-37.0</b>	<b>-15.2</b>	<b>5.4</b>	<b>-19.0</b>	<b>-219.8</b>
Signal/Switch Failure - Metra/PSA	0.6	-3.6	10.2	15.2	-2.2	-64.6	-43.0	-32.6	-6.4	8.6	-14.6	6.0	-22.0	-148.4
Primary	0.8	-4.0	11.8	11.6	-2.0	-22.8	-16.2	-12.4	-3.4	2.4	-4.6	-5.2	1.4	-42.6
Secondary	-0.2	0.4	-1.6	3.6	-0.2	-41.8	-26.8	-20.2	-3.0	6.2	-10.0	11.2	-23.4	-105.8
Signal/Switch Failure - Foreign	-48.4	0.0	-0.2	0.0	0.4	12.8	13.4	-0.4	-5.2	-45.6	-0.6	-0.6	3.0	-71.4
Primary	-38.8	0.0	0.0	0.0	-4.4	0.0	11.6	-0.4	-2.8	-28.8	-0.6	0.6	2.8	-60.8
Secondary	-9.6	0.0	-0.2	0.0	4.8	12.8	1.8	0.0	-2.4	-16.8	0.0	-1.2	0.2	-10.6
<b>Mechanical Failure - TOTAL</b>	<b>43.6</b>	<b>-23.2</b>	<b>-8.6</b>	<b>-4.2</b>	<b>0.2</b>	<b>-20.8</b>	<b>-3.6</b>	<b>-10.6</b>	<b>74.8</b>	<b>3.6</b>	<b>19.0</b>	<b>-8.6</b>	<b>-14.4</b>	<b>47.2</b>
Mechanical Failure - Metra/PSA	38.0	-24.6	-7.4	-3.8	-0.8	-26.4	-3.4	-10.6	75.2	3.6	19.0	-8.6	-14.2	36.0
Non-Locomotive Equipment Failure - Metra/PSA	17.6	-24.6	-7.4	-3.8	-0.2	-8.4	-7.4	-2.0	0.2	-2.4	-2.6	10.6	6.0	-24.4
Primary	7.2	-9.0	-2.2	-2.4	0.2	-1.8	-3.8	-1.0	2.0	-1.4	-1.6	5.0	4.0	-4.8
Secondary	10.4	-15.6	-5.2	-1.4	-0.4	-6.6	-3.6	-1.0	-1.8	-1.0	-1.0	5.6	2.0	-19.6
Locomotive Failure - Metra/PSA	20.4	0.0	0.0	0.0	-0.6	-18.0	4.0	-8.6	75.0	6.0	21.6	-19.2	-20.2	60.4
Primary	6.0	0.0	0.0	0.0	-0.6	5.6	4.2	0.4	25.4	-0.6	-1.0	-0.2	-6.4	32.8
Secondary	14.4	0.0	0.0	0.0	0.0	-23.6	-0.2	-9.0	49.6	6.6	22.6	-19.0	-13.8	27.6
Mechanical Failure - Foreign	5.6	1.4	-1.2	-0.4	1.0	5.6	-0.2	0.0	-0.4	0.0	0.0	0.0	-0.2	11.2
<b>Passenger Train Interference - TOTAL</b>	<b>-3.0</b>	<b>8.4</b>	<b>4.8</b>	<b>-0.8</b>	<b>3.2</b>	<b>-27.6</b>	<b>-11.2</b>	<b>-9.0</b>	<b>-5.8</b>	<b>5.2</b>	<b>-1.4</b>	<b>-3.8</b>	<b>-4.2</b>	<b>-45.2</b>
Passenger Train Interference - Metra/PSA	-1.4	12.2	5.0	-2.0	-0.6	-14.2	-9.0	-8.6	-2.0	-2.8	-1.4	-3.6	-4.8	-33.2
Passenger Train Interference - Foreign	-1.6	-3.8	-0.2	1.2	3.8	-13.4	-2.2	-0.4	-3.8	8.0	0.0	-0.2	0.6	-12.0
<b>Accident - TOTAL</b>	<b>-6.8</b>	<b>9.8</b>	<b>5.0</b>	<b>17.8</b>	<b>-1.6</b>	<b>-40.0</b>	<b>-7.0</b>	<b>-3.2</b>	<b>2.2</b>	<b>-0.6</b>	<b>30.4</b>	<b>127.8</b>	<b>-15.8</b>	<b>118.0</b>
Accident - Metra/PSA	7.2	9.8	5.0	17.8	-1.4	-37.0	-12.0	-3.6	-1.6	-2.6	24.4	95.4	-30.6	70.8
Accident - Foreign	-14.0	0.0	0.0	0.0	-0.2	-3.0	5.0	0.4	3.8	2.0	6.0	32.4	14.8	47.2
<b>Track Work - TOTAL</b>	<b>-106.2</b>	<b>43.6</b>	<b>13.4</b>	<b>-9.6</b>	<b>-2.6</b>	<b>16.8</b>	<b>9.2</b>	<b>-10.8</b>	<b>5.6</b>	<b>5.0</b>	<b>-15.0</b>	<b>4.6</b>	<b>34.4</b>	<b>-11.6</b>
Track Work - Metra/PSA	-105.0	43.6	13.4	-9.6	-2.6	17.0	10.0	-10.0	5.6	7.0	-15.0	4.6	34.4	-6.6
Track Work - Foreign	-1.2	0.0	0.0	0.0	0.0	-0.2	-0.8	-0.8	0.0	-2.0	0.0	0.0	0.0	-5.0
<b>Human Error - TOTAL</b>	<b>40.4</b>	<b>-6.6</b>	<b>3.8</b>	<b>-9.8</b>	<b>2.6</b>	<b>36.0</b>	<b>17.0</b>	<b>-2.0</b>	<b>9.8</b>	<b>-9.8</b>	<b>13.4</b>	<b>-4.2</b>	<b>49.2</b>	<b>139.8</b>
Human Error - Metra/PSA	-9.2	-6.0	4.0	-11.0	-2.2	21.4	7.8	-5.8	8.2	-3.6	18.4	3.8	47.4	73.2
Human Error - Foreign	49.6	-0.6	-0.2	1.2	4.8	14.6	9.2	3.8	1.6	-6.2	-5.0	-8.0	1.8	66.6
<b>Sick, Injured, Unruly Passenger - TOTAL</b>	<b>-2.6</b>	<b>-21.8</b>	<b>-7.0</b>	<b>-6.0</b>	<b>-1.6</b>	<b>22.6</b>	<b>1.6</b>	<b>1.8</b>	<b>-2.4</b>	<b>-4.2</b>	<b>-11.0</b>	<b>-10.0</b>	<b>26.0</b>	<b>-14.8</b>
Sick, Injured, Unruly Passenger - Metra/PSA	-7.6	-21.8	-7.0	-6.0	-1.6	22.6	1.6	1.8	-2.4	-4.2	-11.0	-10.0	26.0	-19.6
Sick, Injured, Unruly Passenger - Foreign	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	4.8
<b>Weather - TOTAL</b>	<b>-138.2</b>	<b>-83.4</b>	<b>-22.8</b>	<b>-21.2</b>	<b>-1.4</b>	<b>-16.4</b>	<b>-53.2</b>	<b>-21.2</b>	<b>-80.0</b>	<b>-21.0</b>	<b>-46.8</b>	<b>-79.8</b>	<b>-72.2</b>	<b>-657.6</b>
Weather - Metra/PSA	-137.2	-83.4	-22.8	-21.2	-1.0	-15.2	-52.6	-21.2	-80.0	-19.8	-46.8	-79.4	-71.8	-652.4
Weather - Foreign	-1.0	0.0	0.0	0.0	-0.4	-1.2	-0.6	0.0	0.0	-1.2	0.0	-0.4	-0.4	-5.2
<b>Passenger Loading - TOTAL</b>	<b>-24.0</b>	<b>-44.4</b>	<b>-9.8</b>	<b>-30.0</b>	<b>0.0</b>	<b>-6.2</b>	<b>-41.0</b>	<b>-0.8</b>	<b>-74.4</b>	<b>-1.8</b>	<b>-29.0</b>	<b>19.2</b>	<b>5.6</b>	<b>-236.6</b>
Lift Deployment - TOTAL	-6.2	2.4	0.0	0.0	0.0	32.2	-14.0	-0.4	-4.6	-1.4	2.4	7.8	5.6	23.8
Obstruction/Debris - TOTAL	29.6	-7.4	3.8	-1.4	6.8	7.2	-7.2	12.6	22.4	4.8	-22.8	6.0	43.4	97.8
Catenary Failure - TOTAL	0.0	-46.8	-6.6	-19.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-72.6
Other - TOTAL	1.0	-18.8	0.4	-7.8	1.2	14.4	12.4	6.2	5.2	0.0	-4.8	25.4	5.2	40.0
<b>TOTAL TRAINS DELAYED</b>	<b>-350.8</b>	<b>-191.8</b>	<b>-12.8</b>	<b>-76.8</b>	<b>6.0</b>	<b>-60.8</b>	<b>-215.0</b>	<b>-89.8</b>	<b>-60.2</b>	<b>-62.2</b>	<b>-75.8</b>	<b>93.2</b>	<b>81.8</b>	<b>-1,015.0</b>
Total Metra/PSA Delays	-214.2	-188.8	-11.8	-78.8	-4.4	-48.8	-150.4	-73.0	-54.8	-12.2	-81.2	66.4	24.2	-827.8
Total Foreign Carrier Delays	-136.6	-3.0	-1.0	2.0	10.4	-12.0	-64.6	-16.8	-5.4	-50.0	5.4	26.8	57.6	-187.2

Data for current month is final (11/15/17) 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 - Oct	
Freight Interference - TOTAL	53	68	69	79	49	110	74	74	96	109			781	11.6%
Freight Interference - Peak	20	21	23	25	14	34	31	28	42	45			283	4.2%
Primary	11	16	17	11	12	22	20	22	20	30			181	2.7%
Secondary	9	5	6	14	2	12	11	6	22	15			102	1.5%
Freight Interference - Off-Peak	33	47	46	54	35	76	43	46	54	64			498	7.4%
Primary	26	38	36	34	27	57	30	35	39	50			372	5.5%
Secondary	7	9	10	20	8	19	13	11	15	14			126	1.9%
Signal/Switch Failure - TOTAL	118	44	80	79	91	87	69	132	119	64			883	13.1%
Signal/Switch Failure - Metra/PSA	98	31	74	28	72	74	63	99	104	54			697	10.3%
Primary	69	21	41	25	46	42	55	72	46	35			452	6.7%
Secondary	29	10	33	3	26	32	8	27	58	19			245	3.6%
Signal/Switch Failure - Foreign	20	13	6	51	19	13	6	33	15	10			186	2.8%
Primary	10	9	4	16	15	10	4	30	14	4			116	1.7%
Secondary	10	4	2	35	4	3	2	3	1	6			70	1.0%
Mechanical Failure - TOTAL	84	61	64	42	111	85	85	85	97	125			839	12.4%
Mechanical Failure - Metra/PSA	83	55	62	42	111	84	80	78	97	125			817	12.1%
Non-Locomotive Equipment Failure - Metra/PSA	12	8	15	10	23	35	16	21	11	20			171	2.5%
Primary	6	8	5	7	7	13	6	10	7	8			77	1.1%
Secondary	6	0	10	3	16	22	10	11	4	12			94	1.4%
Locomotive Failure - Metra/PSA	71	47	47	32	88	49	64	57	86	105			646	9.6%
Primary	18	21	20	17	29	25	21	17	22	34			224	3.3%
Secondary	53	26	27	15	59	24	43	40	64	71			422	6.2%
Mechanical Failure - Foreign	1	6	2	0	0	1	5	7	0	0			22	0.3%
Passenger Train Interference - TOTAL	16	2	2	5	19	9	9	14	18	17			111	1.6%
Passenger Train Interference - Metra/PSA	9	0	1	2	2	4	6	10	16	12			62	0.9%
Passenger Train Interference - Foreign	7	2	1	3	17	5	3	4	2	5			49	0.7%
Accident - TOTAL	74	32	26	101	18	65	45	43	96	55			555	8.2%
Accident - Metra/PSA	69	32	23	98	9	64	40	1	93	49			478	7.1%
Accident - Foreign	5	0	3	3	9	1	5	42	3	6			77	1.1%
Track Work - TOTAL	78	17	29	72	98	107	71	86	84	94			736	10.9%
Track Work - Metra/PSA	78	17	29	72	98	107	71	80	77	94			723	10.7%
Track Work - Foreign	0	0	0	0	0	0	0	6	7	0			13	0.2%
Human Error - TOTAL	68	140	54	69	56	75	73	42	66	85			728	10.8%
Human Error - Metra/PSA	58	50	37	49	41	58	48	37	55	50			483	7.2%
Human Error - Foreign	10	90	17	20	15	17	25	5	11	35			245	3.6%
Sick, Injured, Unruly Passenger - TOTAL	27	28	40	27	20	38	44	30	17	37			308	4.6%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34	27	20	38	44	30	17	37			302	4.5%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0	0	0	0	0	0			6	0.1%
Weather - TOTAL	97	25	59	4	2	33	104	2	0	37			363	5.4%
Weather - Metra/PSA	96	25	59	4	2	33	104	2	0	37			362	5.4%
Weather - Foreign	1	0	0	0	0	0	0	0	0	0			1	0.0%
Passenger Loading - TOTAL	33	7	12	10	36	81	94	112	64	35			484	7.2%
Lift Deployment - TOTAL	17	8	8	13	23	31	29	23	25	15			192	2.8%
Obstruction/Debris - TOTAL	66	44	43	35	78	64	24	52	25	45			476	7.0%
Catenary Failure - TOTAL	6	1	4	1	0	0	1	0	18	1			32	0.5%
Other - TOTAL	15	15	24	20	22	37	32	32	48	22			267	4.0%
<b>TOTAL TRAINS DELAYED</b>	<b>752</b>	<b>492</b>	<b>514</b>	<b>557</b>	<b>623</b>	<b>822</b>	<b>754</b>	<b>727</b>	<b>773</b>	<b>741</b>			<b>6,755</b>	<b>100.0%</b>
Total Metra/PSA Delays	655	313	410	401	514	675	636	556	639	576			5,375	79.6%
Total Foreign Carrier Delays	97	179	104	156	109	147	118	171	134	165			1,380	20.4%

Data for current month is final (11/15/17) 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 - Oct	
<b>Freight Interference - TOTAL</b>	<b>82</b>	<b>53</b>	<b>43</b>	<b>44</b>	<b>72</b>	<b>73</b>	<b>82</b>	<b>108</b>	<b>78</b>	<b>48</b>	<b>65</b>	<b>94</b>	<b>683</b>	<b>10.4%</b>
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	243	3.7%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	164	2.5%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	79	1.2%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	440	6.7%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	343	5.2%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	97	1.5%
<b>Signal/Switch Failure - TOTAL</b>	<b>154</b>	<b>155</b>	<b>123</b>	<b>98</b>	<b>145</b>	<b>143</b>	<b>108</b>	<b>63</b>	<b>105</b>	<b>67</b>	<b>110</b>	<b>120</b>	<b>1,161</b>	<b>17.7%</b>
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	749	11.4%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	435	6.6%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	314	4.8%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	412	6.3%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	306	4.7%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	106	1.6%
<b>Mechanical Failure - TOTAL</b>	<b>107</b>	<b>68</b>	<b>131</b>	<b>43</b>	<b>80</b>	<b>88</b>	<b>120</b>	<b>78</b>	<b>114</b>	<b>64</b>	<b>71</b>	<b>88</b>	<b>893</b>	<b>13.6%</b>
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	892	13.6%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	159	2.4%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	80	1.2%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	79	1.2%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	733	11.2%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	230	3.5%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	503	7.7%
Mechanical Failure - Foreign	0	0	0	1	0	0	0	0	0	0	0	8	1	0.0%
<b>Passenger Train Interference - TOTAL</b>	<b>22</b>	<b>12</b>	<b>3</b>	<b>4</b>	<b>19</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>5</b>	<b>10</b>	<b>4</b>	<b>38</b>	<b>112</b>	<b>1.7%</b>
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	44	0.7%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	68	1.0%
<b>Accident - TOTAL</b>	<b>59</b>	<b>15</b>	<b>62</b>	<b>48</b>	<b>86</b>	<b>29</b>	<b>18</b>	<b>55</b>	<b>34</b>	<b>10</b>	<b>79</b>	<b>49</b>	<b>416</b>	<b>6.3%</b>
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	383	5.8%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	33	0.5%
<b>Track Work - TOTAL</b>	<b>40</b>	<b>21</b>	<b>36</b>	<b>44</b>	<b>141</b>	<b>114</b>	<b>99</b>	<b>133</b>	<b>177</b>	<b>75</b>	<b>59</b>	<b>61</b>	<b>880</b>	<b>13.4%</b>
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	839	12.8%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	41	0.6%
<b>Human Error - TOTAL</b>	<b>38</b>	<b>33</b>	<b>21</b>	<b>53</b>	<b>23</b>	<b>112</b>	<b>47</b>	<b>93</b>	<b>50</b>	<b>45</b>	<b>49</b>	<b>71</b>	<b>515</b>	<b>7.8%</b>
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	411	6.3%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	104	1.6%
<b>Sick, Injured, Unruly Passenger - TOTAL</b>	<b>20</b>	<b>39</b>	<b>27</b>	<b>50</b>	<b>44</b>	<b>32</b>	<b>29</b>	<b>43</b>	<b>30</b>	<b>24</b>	<b>35</b>	<b>34</b>	<b>338</b>	<b>5.1%</b>
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	336	5.1%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	2	0	0	0	0	1	0	2	0.0%
<b>Weather - TOTAL</b>	<b>129</b>	<b>132</b>	<b>28</b>	<b>1</b>	<b>4</b>	<b>23</b>	<b>49</b>	<b>38</b>	<b>1</b>	<b>4</b>	<b>13</b>	<b>132</b>	<b>409</b>	<b>6.2%</b>
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	409	6.2%
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	402	6.1%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	121	1.8%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	357	5.4%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	90	1.4%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	193	2.9%
<b>TOTAL TRAINS DELAYED</b>	<b>707</b>	<b>599</b>	<b>572</b>	<b>451</b>	<b>716</b>	<b>791</b>	<b>769</b>	<b>781</b>	<b>729</b>	<b>455</b>	<b>647</b>	<b>836</b>	<b>6,570</b>	<b>100.0%</b>
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	5,226	79.5%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	1,344	20.5%

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

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 11/17/2017

'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 - Oct	
Freight Interference - TOTAL	-29	15	26	35	-23	37	-8	-34	18	61			98	1.2%
Freight Interference - Peak	-12	4	9	16	-14	14	-1	-22	16	30			40	0.5%
Primary	-15	6	6	4	-3	12	-1	-9	0	17			17	0.2%
Secondary	3	-2	3	12	-11	2	0	-13	16	13			23	0.3%
Freight Interference - Off-Peak	-17	11	17	19	-9	23	-7	-12	2	31			58	0.7%
Primary	-6	9	13	5	-5	13	-4	-13	-4	21			29	0.3%
Secondary	-11	2	4	14	-4	10	-3	1	6	10			29	0.4%
Signal/Switch Failure - TOTAL	-36	-111	-43	-19	-54	-56	-39	69	14	-3			-278	-4.6%
Signal/Switch Failure - Metra/PSA	31	-91	-25	-32	-12	-10	12	44	15	16			-52	-1.1%
Primary	34	-9	-11	-16	-8	-10	14	32	-12	3			17	0.1%
Secondary	-3	-82	-14	-16	-4	0	-2	12	27	13			-69	-1.2%
Signal/Switch Failure - Foreign	-67	-20	-18	13	-42	-46	-51	25	-1	-19			-226	-3.5%
Primary	-58	-15	-10	-17	-34	-33	-32	24	2	-17			-190	-2.9%
Secondary	-9	-5	-8	30	-8	-13	-19	1	-3	-2			-36	-0.6%
Mechanical Failure - TOTAL	-23	-7	-67	-1	31	-3	-35	7	-17	61			-54	-1.2%
Mechanical Failure - Metra/PSA	-24	-13	-69	0	31	-4	-40	0	-17	61			-75	-1.5%
Non-Locomotive Equipment Failure - Metra/PSA	-13	-11	5	4	10	18	-3	-9	3	8			12	0.1%
Primary	-5	-1	1	2	-2	4	-2	-1	0	1			-3	-0.1%
Secondary	-8	-10	4	2	12	14	-1	-8	3	7			15	0.2%
Locomotive Failure - Metra/PSA	-11	-2	-74	-4	21	-22	-37	9	-20	53			-87	-1.6%
Primary	-10	3	-4	3	11	-2	-15	-3	-6	17			-6	-0.2%
Secondary	-1	-5	-70	-7	10	-20	-22	12	-14	36			-81	-1.4%
Mechanical Failure - Foreign	1	6	2	-1	0	1	5	7	0	0			21	0.3%
Passenger Train Interference - TOTAL	-6	-10	-1	1	0	-5	-3	3	13	7			-1	-0.1%
Passenger Train Interference - Metra/PSA	-4	-5	-1	-1	0	2	-1	8	14	6			18	0.2%
Passenger Train Interference - Foreign	-2	-5	0	2	0	-7	-2	-5	-1	1			-19	-0.3%
Accident - TOTAL	15	17	-36	53	-68	36	27	-12	62	45			139	1.9%
Accident - Metra/PSA	20	18	-39	57	-68	35	22	-52	63	39			95	1.2%
Accident - Foreign	-5	-1	3	-4	0	1	5	40	-1	6			44	0.6%
Track Work - TOTAL	38	-4	-7	28	-43	-7	-28	-47	-93	19			-144	-2.5%
Track Work - Metra/PSA	38	-4	-7	31	-41	-3	-28	-24	-98	20			-116	-2.1%
Track Work - Foreign	0	0	0	-3	-2	-4	0	-23	5	-1			-28	-0.4%
Human Error - TOTAL	30	107	33	16	33	-37	26	-51	16	40			213	2.9%
Human Error - Metra/PSA	28	25	22	7	26	-36	14	-44	12	18			72	0.9%
Human Error - Foreign	2	82	11	9	7	-1	12	-7	4	22			141	2.0%
Sick, Injured, Unruly Passenger - TOTAL	7	-11	13	-23	-24	6	15	-13	-13	13			-30	-0.6%
Sick, Injured, Unruly Passenger - Metra/PSA	7	-11	7	-23	-24	8	15	-13	-13	13			-34	-0.6%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0	-2	0	0	0	0			4	0.1%
Weather - TOTAL	-32	-107	31	3	-2	10	55	-36	-1	33			-46	-0.9%
Weather - Metra/PSA	-33	-107	31	3	-2	10	55	-36	-1	33			-47	-0.9%
Weather - Foreign	1	0	0	0	0	0	0	0	0	0			1	0.0%
Passenger Loading - TOTAL	20	0	-17	2	-15	-2	-15	70	32	7			82	1.0%
Lift Deployment - TOTAL	6	-6	-4	10	8	20	18	2	14	3			71	1.0%
Obstruction/Debris - TOTAL	48	14	3	-19	56	33	-20	1	-3	6			119	1.6%
Catenary Failure - TOTAL	-3	-2	2	0	-4	-13	-10	-6	-11	-11			-58	-0.9%
Other - TOTAL	10	-2	9	20	12	12	2	-7	13	5			74	1.0%
<b>TOTAL TRAINS DELAYED</b>	<b>45</b>	<b>-107</b>	<b>-58</b>	<b>106</b>	<b>-93</b>	<b>31</b>	<b>-15</b>	<b>-54</b>	<b>44</b>	<b>286</b>			<b>185</b>	
Total Metra/PSA Delays	144	-184	-88	55	-33	52	24	-57	20	216			149	
Total Foreign Carrier Delays	-99	77	30	51	-60	-21	-39	3	24	70			36	

Data for current month is final (11/15/17) 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 11: FREIGHT DELAYS**  
**between November 2015 and October 2017**

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
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
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
<b>Total</b>	<b>216</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>70</b>	<b>103</b>	<b>65</b>	<b>68</b>	<b>86</b>	<b>6</b>	<b>22</b>	<b>131</b>	<b>797</b>
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
Sep-17	17	0	0	0	2	21	2	8	1	14	1	5	25	96
<b>Oct-17</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>4</b>	<b>18</b>	<b>5</b>	<b>15</b>	<b>2</b>	<b>14</b>	<b>31</b>	<b>109</b>
<b>Total</b>	<b>90</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>37</b>	<b>108</b>	<b>50</b>	<b>111</b>	<b>63</b>	<b>133</b>	<b>20</b>	<b>69</b>	<b>258</b>	<b>940</b>

Data for current month is final (11/15/17) 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	4	2			20	1.81%
Electric ML	0	0	0	0	1	2	1	0	0	0			4	0.93%
Electric BI	0	0	0	0	0	0	0	0	0	0			0	0.00%
Electric SC	0	1	0	0	0	0	0	0	0	0			1	0.46%
HER	0	0	0	0	0	0	0	0	0	0			0	0.00%
Milw N	3	2	1	1	4	12	14	10	9	3			59	6.53%
Milw W	3	0	2	1	0	0	0	4	1	1			12	2.17%
NCS	0	0	0	0	0	0	1	0	0	2			3	1.14%
RI	2	1	0	2	4	8	4	3	1	3			28	3.90%
SWS	0	0	0	0	0	0	0	0	0	0			0	0.00%
UP N	2	1	1	0	4	0	2	2	2	0			14	3.08%
UP NW	2	1	0	6	3	2	2	2	4	1			23	3.04%
UP W	4	1	4	3	3	2	3	1	4	3			28	3.45%
<b>Total Lift Delays</b>	<b>17</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>23</b>	<b>31</b>	<b>29</b>	<b>23</b>	<b>25</b>	<b>15</b>			<b>192</b>	<b>2.84%</b>
<b>ALL DELAYS</b>														<b>6,755</b>

Data for current month is final (11/15/17) 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%
<b>Total Lift Delays</b>	<b>11</b>	<b>14</b>	<b>12</b>	<b>3</b>	<b>15</b>	<b>11</b>	<b>11</b>	<b>21</b>	<b>11</b>	<b>12</b>	<b>8</b>	<b>16</b>	<b>145</b>	<b>1.80%</b>
<b>ALL DELAYS</b>														<b>8,053</b>



**TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION**

October 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
<b>Peak *</b>														
6-10	39	28	4	2	6	9	8	6	10	7	2	15	29	165
11-15	25	0	0	0	2	7	2	2	3	0	2	3	11	57
16-20	7	0	0	1	4	4	3	1	2	1	0	5	3	31
21+	5	0	1	1	2	7	5	0	5	3	0	16	8	53
Annulled	<u>4</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>4</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>17</u>
Sub-Total	80	28	5	5	14	31	22	9	22	12	5	39	51	323
<b>Off-Peak **</b>														
6-10	29	13	1	10	0	24	14	19	24	14	7	20	24	199
11-15	12	1	0	1	0	20	4	5	11	4	8	8	5	79
16-20	7	1	0	0	0	7	3	4	2	2	3	6	6	41
21+	13	0	0	1	1	10	4	2	12	11	8	9	17	88
Annulled	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>11</u>
Sub-Total	62	15	1	13	1	61	26	30	52	31	28	44	54	418
<b>October 2017 Total</b>														
6-10	68	41	5	12	6	33	22	25	34	21	9	35	53	364
11-15	37	1	0	1	2	27	6	7	14	4	10	11	16	136
16-20	14	1	0	1	4	11	6	5	4	3	3	11	9	72
21+	18	0	1	2	3	17	9	2	17	14	8	25	25	141
Annulled	<u>5</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>4</u>	<u>5</u>	<u>0</u>	<u>5</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>28</u>
TOTAL	142	43	6	18	15	92	48	39	74	43	33	83	105	741
<b>2017 Year-to-Date</b>														
6-10	541	273	105	117	27	430	202	127	356	141	190	259	414	3,182
11-15	210	58	16	27	18	186	119	49	129	52	85	131	168	1,248
16-20	94	32	12	15	17	92	54	27	62	21	34	69	89	618
21+	185	67	18	42	29	144	136	51	141	77	108	254	130	1,382
Annulled	<u>73</u>	<u>2</u>	<u>2</u>	<u>16</u>	<u>0</u>	<u>51</u>	<u>42</u>	<u>10</u>	<u>30</u>	<u>8</u>	<u>37</u>	<u>43</u>	<u>11</u>	<u>325</u>
TOTAL	1,103	432	153	217	91	903	553	264	718	299	454	756	812	6,755
<b>PERCENT COMPOSITION OF DELAYS BY RANGE OF DURATION</b>														
Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
<b>October 2017 Total</b>														
6-10	47.9%	95.3%	83.3%	66.7%	40.0%	35.9%	45.8%	64.1%	45.9%	48.8%	27.3%	42.2%	50.5%	49.1%
11-15	26.1%	2.3%	0.0%	5.6%	13.3%	29.3%	12.5%	17.9%	18.9%	9.3%	30.3%	13.3%	15.2%	18.4%
16-20	9.9%	2.3%	0.0%	5.6%	26.7%	12.0%	12.5%	12.8%	5.4%	7.0%	9.1%	13.3%	8.6%	9.7%
21+	12.7%	0.0%	16.7%	11.1%	20.0%	18.5%	18.8%	5.1%	23.0%	32.6%	24.2%	30.1%	23.8%	19.0%
Annulled	<u>3.5%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>11.1%</u>	<u>0.0%</u>	<u>4.3%</u>	<u>10.4%</u>	<u>0.0%</u>	<u>6.8%</u>	<u>2.3%</u>	<u>9.1%</u>	<u>1.2%</u>	<u>1.9%</u>	<u>3.8%</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%
<b>2017 Year-to-Date Delays By Duration</b>														
6-10	49.0%	63.2%	68.6%	53.9%	29.7%	47.6%	36.5%	48.1%	49.6%	47.2%	41.9%	34.3%	51.0%	47.1%
11-15	19.0%	13.4%	10.5%	12.4%	19.8%	20.6%	21.5%	18.6%	18.0%	17.4%	18.7%	17.3%	20.7%	18.5%
16-20	8.5%	7.4%	7.8%	6.9%	18.7%	10.2%	9.8%	10.2%	8.6%	7.0%	7.5%	9.1%	11.0%	9.1%
21+	16.8%	15.5%	11.8%	19.4%	31.9%	15.9%	24.6%	19.3%	19.6%	25.8%	23.8%	33.6%	16.0%	20.5%
Annulled	<u>6.6%</u>	<u>0.5%</u>	<u>1.3%</u>	<u>7.4%</u>	<u>0.0%</u>	<u>5.6%</u>	<u>7.6%</u>	<u>3.8%</u>	<u>4.2%</u>	<u>2.7%</u>	<u>8.1%</u>	<u>5.7%</u>	<u>1.4%</u>	<u>4.8%</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 (11/15/17) 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	
<b>October 2017</b>														
Peak *	13.2	7.2	9.4	19.3	16.1	15.9	18.4	9.1	13.4	18.5	11.0	35.7	14.2	16.4
Off-Peak **	14.0	8.5	6.0	11.1	38.0	14.5	12.9	13.0	16.7	17.2	17.9	20.8	21.7	16.2
All	13.5	7.7	8.8	13.1	17.5	15.0	15.2	12.1	15.7	17.5	17.0	27.9	18.0	16.3
<b>2017 Year-to-Date</b>														
Peak *	18.8	14.6	12.2	16.7	20.8	17.8	21.5	16.5	17.2	16.1	25.0	38.9	13.9	20.3
Off-Peak **	15.3	12.8	11.2	14.5	18.9	14.0	17.3	17.7	14.3	18.4	19.0	27.8	15.7	16.8
All	17.3	13.5	11.6	14.9	20.5	15.2	18.9	17.2	15.5	17.7	21.3	32.6	15.0	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 (11/15/17) version from TOPS.