

COMMUTER RAIL SYSTEM
ON-TIME PERFORMANCE REPORT

May 2017



COMMUTER RAIL ON-TIME PERFORMANCE

May 2017

This report presents an analysis of the May 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 May 2017, Metra operated 17,706 scheduled trains, including scheduled "extras", if any. 623 of these trains were delayed (late or annulled), representing an on-time performance rate of 96.5%. 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 May 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 May 2017. Of the 623 delays systemwide in May 2017, all but 369 (59%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Mays, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in May 2017, 22 more delays than the average over the previous five Mays were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 2,938 delays in 2017, all but 1,449 (49%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during May 2017. Table 8.b shows the average frequencies over the previous five Mays, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 623 delays systemwide in May 2017, 69 less than the average over the previous five Mays. Table 9.a shows delays from the beginning of the year through May 2017. Table 9.b shows the average frequencies from the beginning of the year through May 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 May of 2017, a total of 2,938 trains were delayed, compared to 3,045 trains delayed in the same five 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 May 2017 freight operations delayed 49 trains systemwide, compared to 72 a year earlier. Tables 12.a and 12.b display the frequency of lift-deployment train delays by line and month, for 2017 and 2016 respectively. A total of 23 trains were delayed by lift deployment in May 2017.

A review of May 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 47.4% of all late trains. Table 14 shows that the average length of delay was 15.8 minutes in May 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
May 2017**

	Weekdays									Weekends						Total		
	Peak*			Off-Peak**			Total			Saturdays			Sundays & Holidays			Trains Scheduled	Trains Late	Percent On-Time
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time			
BNSF	1,188	73	93.9%	883	22	97.5%	2,071	95	95.4%	112	8	92.9%	90	1	98.9%	2,273	104	95.4%
Elec -ML	987	6	99.4%	751	22	97.1%	1,738	28	98.4%	184	1	99.5%	100	1	99.0%	2,022	30	98.5%
-BI	308	1	99.7%	506	6	98.8%	814	7	99.1%	120	0	100.0%		--		934	7	99.3%
-SC	<u>374</u>	<u>4</u>	98.9%	<u>814</u>	<u>9</u>	98.9%	<u>1,188</u>	<u>13</u>	98.9%	<u>192</u>	<u>6</u>	96.9%	<u>100</u>	<u>0</u>	100.0%	<u>1,480</u>	<u>19</u>	98.7%
Subtotal	1,669	11	99.3%	2,071	37	98.2%	3,740	48	98.7%	496	7	98.6%	200	1	99.5%	4,436	56	98.7%
Heritage	132	5	96.2%	22	4	81.8%	154	9	94.2%	--			--			154	9	94.2%
Milw -N	549	28	94.9%	771	23	97.0%	1,320	51	96.1%	96	9	90.6%	100	2	98.0%	1,516	62	95.9%
-W	<u>593</u>	<u>15</u>	97.5%	<u>683</u>	<u>17</u>	97.5%	<u>1,276</u>	<u>32</u>	97.5%	<u>96</u>	<u>3</u>	96.9%	<u>90</u>	<u>2</u>	97.8%	<u>1,462</u>	<u>37</u>	97.5%
Subtotal	1,142	43	96.2%	1,454	40	97.2%	2,596	83	96.8%	192	12	93.8%	190	4	97.9%	2,978	99	96.7%
NCS	242	12	95.0%	242	10	95.9%	484	22	95.5%	--			--			484	22	95.5%
RI	792	31	96.1%	836	38	95.5%	1,628	69	95.8%	128	17	86.7%	140	16	88.6%	1,896	102	94.6%
SWS	242	14	94.2%	418	35	91.6%	660	49	92.6%	24	0	100.0%	--			684	49	92.8%
UP -N	658	28	95.7%	882	14	98.4%	1,540	42	97.3%	104	5	95.2%	90	0	100.0%	1,734	47	97.3%
-NW	722	20	97.2%	706	9	98.7%	1,428	29	98.0%	96	6	93.8%	75	9	88.0%	1,599	44	97.2%
-W	<u>593</u>	<u>40</u>	93.3%	<u>705</u>	<u>42</u>	94.0%	<u>1,298</u>	<u>82</u>	93.7%	<u>80</u>	<u>6</u>	92.5%	<u>90</u>	<u>3</u>	96.7%	<u>1,468</u>	<u>91</u>	93.8%
Subtotal	1,973	88	95.5%	2,293	65	97.2%	4,266	153	96.4%	280	17	93.9%	255	12	95.3%	4,801	182	96.2%
SYSTEM	7,380	277	96.2%	8,219	251	96.9%	15,599	528	96.6%	1,232	61	95.0%	875	34	96.1%	17,706	623	96.5%

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

Delays data for most recent month is final (06/21/17) 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-MAY	AVG
BNSF	2012	94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	96.5%	96.0%
	2013	95.8	93.9	94.6	93.3	96.0	88.5	95.2	97.1	97.2	94.0	95.8	92.2	94.7%	94.5%
	2014	78.6	84.6	95.6	92.0	82.2	82.0	94.1	91.4	94.1	92.2	95.2	94.1	86.6%	89.7%
	2015	90.9	90.1	96.8	97.5	96.6	92.4	93.0	95.4	95.8	93.6	93.5	97.4	94.4%	94.4%
	2016	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	94.8%	94.0%
	2017	95.9	95.6	96.2	96.3	95.4								95.9%	95.9%
	2012-2016 average		90.5	92.0	95.6	95.6	93.2	89.7	94.2	93.9	95.2	94.4	95.0	95.1	93.4%
Electric	2012	93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	97.3%	97.3%
	2013	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	98.3%	97.2%
	2014	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	96.8%	97.5%
	2015	96.3	95.4	98.4	98.4	98.3	97.7	96.5	98.2	97.9	97.8	97.8	99.0	97.4%	97.6%
	2016	98.0	98.6	98.8	98.9	98.9	96.5	97.9	98.5	97.1	98.6	97.7	97.7	98.6%	98.1%
	2017	95.6	98.9	98.3	98.9	98.7								98.1%	98.1%
	2012-2016 average		95.9	97.4	98.3	98.5	98.3	97.4	96.1	97.8	97.7	97.7	97.6	98.1	97.7%
Heritage	2012	95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	97.0%	95.6%
	2013	97.0	99.2	94.4	97.7	94.7	92.5	97.7	99.2	97.5	96.4	98.3	92.1	96.6%	96.4%
	2014	79.5	75.8	88.1	93.2	92.1	94.4	94.7	93.7	92.1	97.8	96.5	98.5	85.8%	91.4%
	2015	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	90.6%	90.2%
	2016	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	94.8%	94.2%
	2017	93.9	94.3	96.9	96.4	94.2								95.1%	95.1%
	2012-2016 average		90.7	91.5	94.3	95.1	93.3	92.7	92.7	93.9	93.7	97.1	93.5	93.9	93.0%
Milw - N	2012	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	94.8%	93.8%
	2013	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	94.6%	93.3%
	2014	73.1	81.9	89.5	97.9	95.1	91.1	96.0	95.2	95.5	96.2	95.4	93.5	87.5%	91.7%
	2015	91.8	87.9	93.5	95.1	95.4	94.8	97.1	94.9	95.6	97.9	97.0	96.8	92.8%	94.9%
	2016	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	94.9%	94.6%
	2017	95.3	95.6	96.5	96.1	95.9								95.9%	95.9%
	2012-2016 average		90.1	90.6	93.4	96.2	94.4	92.3	93.2	93.9	94.7	95.9	95.7	93.4	92.9%
Milw - W	2012	94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	95.9%	94.7%
	2013	96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	95.3%	94.2%
	2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	91.7%	93.5%
	2015	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8	97.8	99.0	98.2	96.5	95.3%	96.4%
	2016	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.9%	94.9%
	2017	96.9	95.2	95.2	95.6	97.5								96.1%	96.1%
	2012-2016 average		92.7	92.7	94.4	96.9	96.2	93.5	94.0	94.6	94.8	96.4	96.0	94.7	94.6%
NCS	2012	94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	92.8%	92.4%
	2013	95.0	87.5	93.7	90.9	94.0	92.7	93.6	95.0	92.5	93.1	90.0	87.4	92.3%	92.2%
	2014	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	86.2%	89.9%
	2015	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	92.0%	93.8%
	2016	92.3	95.5	91.7	93.3	94.4	96.3	95.0	96.4	96.1	95.5	95.2	92.6	93.4%	94.5%
	2017	92.6	91.6	95.1	95.2	95.5								94.0%	94.0%
	2012-2016 average		90.4	88.3	92.2	92.1	93.6	93.6	92.3	93.0	95.0	94.0	94.2	92.1	91.4%

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

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-MAY	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	95.6%	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	96.4%	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	90.1%	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	97.7%	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	95.8%	96.1%
	2017	95.2	97.1	97.8	98.0	94.6								96.6%	96.6%
	2012-2016 average	92.6	94.0	96.2	96.1	96.5	94.4	93.9	96.0	96.8	97.0	96.4	96.3	95.1%	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	95.3%	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	91.3%	92.6%
	2015	94.7	89.7	95.6	96.1	96.3	91.1	92.4	93.8	97.6	96.8	96.0	94.4	94.5%	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	95.7%	95.2%
	2017	96.2	94.1	96.4	97.3	92.8								95.3%	95.3%
	2012-2016 average	92.4	94.6	95.8	95.9	94.4	92.7	94.7	94.7	94.9	95.7	94.0	94.9	94.6%	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	96.8%	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	97.3%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	95.2%	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	97.5%	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								97.5%	97.5%
	2012-2016 average	95.9	96.4	97.7	97.6	97.0	96.4	96.7	96.0	97.4	97.4	97.4	97.7	96.9%	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	97.1%	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	95.6%	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	93.7%	95.2%
	2015	96.0	91.6	97.6	96.3	96.9	96.8	94.1	96.5	96.1	97.5	96.7	97.5	95.8%	96.2%
	2016	97.0	98.1	97.8	98.1	96.0	96.6	94.9	96.8	96.9	96.5	93.2	93.4	97.4%	96.3%
	2017	96.2	97.4	98.1	93.7	97.2								96.6%	96.6%
	2012-2016 average	94.3	95.5	96.8	97.4	95.5	94.8	94.5	96.2	97.1	95.6	95.2	95.6	95.9%	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	95.3%	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	95.5%	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	92.9%	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	95.0%	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	95.1%	95.1%
	2017	95.0	96.5	96.1	92.9	93.8								94.9%	94.9%
	2012-2016 average	93.4	93.7	96.0	95.9	94.6	93.0	95.1	94.7	96.5	96.0	95.4	94.7	94.7%	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	96.3%	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	96.3%	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	92.2%	94.3%
	2015	94.9	92.5	97.0	97.2	97.2	95.8	95.3	96.3	96.8	97.0	96.8	97.5	95.8%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.4%	96.1%
	2017	95.6	96.9	97.2	96.6	96.5								96.6%	96.6%
2012-2016 average	93.4	94.4	96.3	96.9	96.0	94.3	94.9	95.6	96.4	96.4	96.2	96.0	95.4%	95.6%	

Delays data for most recent month is final (06/21/17) 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
May 2017**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
BNSF	1265 77% OT	Tue, May 02	0	GA1	46 SWITCH FAILURE INSIDE CUS ON TRACKS 4 / 6, UNABLE TO GET TRAIN OUT OF TRACK 6
		Fri, May 05	6	C	MOW WORKING ON 10MPH S/R LAVERGNE.
		Fri, May 12	10	R	EXTRABOARD ENGINEER MISSED SPOT AT CONGRESS PARK
		Tue, May 30	6	I	PASSENGER LOADING
		Wed, May 31	10	C	WELDING @ HIGHLAND
BNSF	1271 71% OT	Tue, May 02	9	GA1	CUS SWITCH FAILURE HANDLING
		Fri, May 12	9	R1	FOLLOWING TRAFFIC FROM 1265 ISSUE
		Mon, May 15	17	F1	WAITING ON 1292 TO CLEAR PLANT
		Tue, May 16	22	KP1	A4 INCIDENT
		Tue, May 30	7	I	PASSENGER LOADING
	Wed, May 31	7	C1	WAITING, TRAFFIC AT HIGHLAND	
BNSF	1279 82% OT	Mon, May 15	14	C1	FOLLOWING TRAFFIC AHEAD
		Tue, May 16	35	KP1	A4 INCIDENT
		Wed, May 17	6	CW	WAITING FOR 1271 TO CLEAR INTO THE YARD
		Wed, May 31	8	C	FAIRVIEW - HIGHLAND TRK 3.
HC	915 82% OT	Wed, May 17	16	CC1	4M CP CANAL; TRACK INSPECTOR (HEAT INSPECTION) AHEAD. 12M XO36 ATTEMPTING TO CONTACT UP DISP. / AUTHORITY INTO WORK ZONE JOLIET.
		Fri, May 19	30	DD	34M XO36 345/419PM FOR UP ITAG4X-13 UP 7878 W/ 134 CARS 7975FT. LINED FROM EJ&E CONNECTION. UP DISP CLAIMED UNAWARE #915 WAS DUE.
		Wed, May 24	15	AM	LOST 6M CONGESTION CUS AND FOLLOWING AMTRAK #21; 7M 47XO AMTRAK #21 AHEAD @ SUMMIT POLICE ACTIVITY; 4M CP JUSTICE RED SIG, 3M FOLLOWING #21
		Tue, May 30	34	L1	39M TAYLOR ST, AMTRAK #21; SWS#819 AHEAD DUE TO POLICE ACTIVITY SOUTH BRANCH BRIDGE; THEN AWDM LUMBER ST. ACCT TRUCK BROKE OFF CROSSING GATE
NCS	110 82% OT	Mon, May 01	15	E1	13" FOLLOWING #108; 6" X-TRAFFIC, DEVAL
		Wed, May 03	7	GA	2" BEHIND #108; 5" SWITCH PROBLEMS, CUS
		Tue, May 09	6	D	3" BEHIND #108, ANTIOCH; 8" X-TRAFFIC, DEVAL; 3" CAR ON TRACKS,CANAL ST
		Tue, May 16	8	GA	8" SIGNAL/SWITCH PROBLEMS(FLOODED) 210/210 N FAILING
NCS	114 82% OT	Mon, May 01	13	D	13" FREIGHT TRAFFIC DEVAL
		Mon, May 08	7	D	4" S/B FREIGHT, ANTIOCH; 2" ADA, PRAIRIE VIEW; 2" 2 ADA'S, O'HARE
		Tue, May 09	9	D	8" NORTHBOUND FREIGHT, 6" DEVAL RED SIGNAL
		Fri, May 12	15	RF	3" LATE DEPARTING N/B FREIGHT, ANTIOCH COACH YD; 15" RED, PROSPECT; 5" B-12; 2" STOP SIGNAL, A-2
RI	417 82% OT	Tue, May 09	40	E	28M 15TH ST 1727/1755 ENGINE 206 CAB SIGNAL PENALTY APPLICATION, HAD TO GET PROTECTOR ENGINE 180 OUT OF LSS AND TIE ON.
		Thu, May 11	11	UF1	10M FOLLOWING RI415
		Fri, May 12	0	E1	ANNULLED
		Fri, May 26	16	E1	21M AT ROBBINS HOLDING FOR RI424
RI	419 82% OT	Fri, May 12	15	E1	DEPARTED LSS 14M LATE, LATE TURN FROM 422, 3M AT BI DUE TO ADA
		Mon, May 15	6	K1	DEPARTED LSS 9M LATE ACCT LATE TURN FROM 422
		Thu, May 18	6	L	6M DROPPED AIR AT HAMILTON PARK (72ND ST) FOR KIDS PLAYING ON TRACKS
		Fri, May 26	0	E1	ANNULLED
RI	422 82% OT	Fri, May 12	23	E1	21M AT NEW LENOX TAKING PASSENGERS FROM RI420
		Mon, May 15	18	K	20M DELAY WAITING ON CIECRO AVE BRIDGE TO BE RELEASED
		Fri, May 19	6	G	3M TALKED BY SIGNAL AT PERSHING, 2M ADA @35TH
		Fri, May 26	0	XE	15M EJE X-TRAFFIC L508 BN4803+1 70 CARS 4300', 40M ENROUTE WITH ENG TROUBLE. TRAIN NEVER ARRIVED TO LSS
RI	509 68% OT	Wed, May 03	11	E	8M LATE DEPARTING LSS DUE TO MECH PROBLEMS W/HEP/DEPARTED LSS W/NO DOOR LIGHT TO SAVE ENERGY, 3M ENROUTE MANUALLY OPERATING DOORS.
		Wed, May 10	8	CC	11M @ ROBBINS WAITING ON RI510 TO CLEAR ACCOUNT SINGLE TRACKING AROUND TRACK WORK.
		Thu, May 11	6	D	6M DELAY WAITING ON FREIGHT TRAFFIC (BNSF9112 129CAR) SIGNAL UP @ 1009A, TOOK IT AT 1025A, CLEARED 1038A
		Wed, May 17	8	CC	7M ST ROBBINS WAITING ON RI510 GETTING BY DUE TO FORM D ON TK 2
		Fri, May 19	8	II	4M @ GRESHAM FOR LATE 508, 4MIN RUNNING TIME
		Mon, May 22	7	CC	10 @ ROBBINS WAITING ON RI510 TO CLEAR DUE TO SINGLE TRACKING DUE TO FORM D
		Fri, May 26	7	R	10M LATE DEPARTING LSS DUE TO CREW 504/704 COULDN'T MAKE THE MEET W/RI506. SO THEY CAME DT W/LT ENG 409, THAT DIDN'T GET DT UNTIL 1028
SWS	831 81% OT	Wed, May 03	38	G1	25M RESTRICTED SPEED OAK LAWN TO CP PALOS, SWS#829 AHEAD, SWITCH FAILURE CP PALOS. 12M CP 143RD ST MEET SWS#838.
		Tue, May 16	70	AM1	74M CP LUMBER TRAINS AHEAD, SOUTH BRANCH BRIDGE STUCK AGAIN.
		Fri, May 19	13	D	19M BELT JCT 636/655PM FOR NS11GB31 NS9535 W/ 9058FT. BRC DS SAYS STACK ROUTE MIS-FIRED.
		Wed, May 24	8	D	13" CP 518 628/ 641PM FOR NS 23K NS9156 W/60CARS 9900FT HEADROOM AT 55TH ST YARD.
SWS	833 82% OT	Mon, May 01	18	E1	15M LATE ON FLIP OFF 836
		Wed, May 03	30	G1	DEPART CUS 34" LATE, LATE FLIP OF SWS#836.
		Fri, May 05	9	D	13M BELT JCT 721/734PM FOR CSX Z20804 CSXT3265 W/129CARS 8106FT.
		Tue, May 16	51	AM1	DEPART CUS 55M LATE ACCT. LATE FLIP OF SWS#836

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

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
SWS	834	Wed, May 03	0	XE	LOST HEP/ ENGINE FIRE TRAIN DISABLED AND ANNULLED PALOS HTS.
		Mon, May 08	7	K	8M 23RD ST 459/507PM BRIDGE LIFT.
		Tue, May 16	53	AM	41M CP23RD ST, 456/537PM SOUTH BRANCH BRIDGE PROBLEMS. TRAIN TALKED BY RESTRICTED SPEED; CONGESTION ENTERING CUS DUE TO LATE TRAINS LEAVING.
		Tue, May 30	12	L1	DEPARTED ORLAND 179TH ST 22M LATE ACCT. LATE FLIP OF SWS#819.
SWS	836	Mon, May 01	24	E	20M ENGINE PROBLEMS PRIOR TO CP518, CUT OUT TRACTION MOTOR #3 4M LATE FLIPPING OFF 823
		Wed, May 03	40	G	DP 153RD ST 12M LATE FLIP OF #823. 28M CP PALOS MEET LATE SWS#825 AND SWITCH FAILURE
		Tue, May 16	62	AM	65M 23RD ST 635/740PM SOUTH BRANCH BRIDGE STUCK AGAIN (AFTER A LIFT.)
		Wed, May 24	10	D1	15" CP518 628/643PM FOR NS 23K NS9156 W/ 60 CARS 9900FT HEADROOM MOVE 55TH ST YARD AND SWS#831 TO CLEAR.
		Wed, May 31	7	D1	10M CP518 FOR NS 23K 9848FT TO CLEAR AND MEET SWS#83 DELAYED BY NS FREIGHT.
SWS	838	Wed, May 03	38	E1	SWAPPED EQUIP. W/ SWS#825
		Fri, May 05	10	D1	15M ASHBURN 728/743PM, MEET SWS#833 DELAYED @ FOREST HILL
		Tue, May 16	38	AM1	DEPARTED 40M LATE ACCT LATE FLIP OF SWS#827.
		Fri, May 26	20	D1	20M CHICAGO RIDGE RED SIGNAL TK AHEAD OCCUPIED BY NS 20R BUILDING TRAIN WEST END OF LANDERS/ WEST OF ASHBURN; MEET SWS#833., 4M AMTRAK YARD
SWS	842	Wed, May 03	27	RA	15 MIN AMTRAK AHEAD AT 23RD/CUS
		Thu, May 04	8	D	WAITING FOR A SIGNAL AT FOREST HILLD
		Wed, May 17	8	AM	7 MINUTES DUE TO SOUTH BRANCH BRIDGE BEING UP.
		Tue, May 23	6	D1	6 MIN WAITING ON SWS839
UPNW	622	Mon, May 01	9	D1	9" HELD @ SEEGER #620 AHEAD; 10MPH, MP17.8-17.42
		Tue, May 02	12	CC	12" 10MPH, MP17.8-17.42; X-TRAFFIC(#110), DEVAL; X-TRAFFIC, MAYFAIR
		Wed, May 03	12	U	12" SLOW LOADING ADA, PINGREE RD; WAIT FOR #2107 TO CLEAR, MAYFAIR; HELD @ RED SIGNAL, BRIDGE A, LAKE ST INT
		Fri, May 12	17	GT	17" STOPPED @ DEVAL & MAYFAIR DUE TO SIGNAL/COMMUNICATION FAILURE
UPW	42	Thu, May 04	6	I	6" HEAVY PASSENGER LOADING, MULTIPLE STOPS; XG, MP17.71
		Mon, May 08	10	C	10" TRAIN CONTROL BETWEEN MP32.4-28.6 ACCT TRACK LIGHT ON TK1 @CPY029 DUE TO BROKEN RAIL; XH, MP27.58; USED SHORT X/O, KEDZIE
		Thu, May 18	14	CC	14" TRACK CONSTRUCTION FORM B, MP29-24.25; RAN THROUGH THE SHORT X/O FOR TRACK WORK, KEDZIE; SLOW PASSENGER LOADING, EN ROUTE
		Fri, May 19	13	IW	13" SLOW PASSENGER LOADING/WEATHER, EN ROUTE
		Wed, May 31	7	I	7" HEAVY PASSENGER LOADING, EN ROUTE; LARGE GROUP 175 STUDENTS, WHEATON
UPW	44	Mon, May 01	10	I	10" SLOW LOADING PASSENGER, LA FOX; LATE TURN FROM #25, ELBURN
		Thu, May 04	10	U	10" 2 ADA'S, VILLA PARK; FORM B'S, TURNER-UNIVERSITY; SLOW PASSENGER LOADING
		Mon, May 08	12	C	12" TRACK LIGHT @ CPY029 DUE TO BROKEN RAIL; XH, MP27.58; FTX, MP24.75; 2 ADA'S
		Tue, May 09	13	CC	13" FORM B'S, MP27.5-27 & 21-19; 40MPH, MP20.45; XH, MP19.26; HEAVY PASSENGER LOADING, LOMBARD & ELMHURST; LATE TURN FROM #25, ELBURN
		Tue, May 16	10	G	10" SIGNAL ISSUES BAD LIGHT BULB, PECK; PASSENGER LOADING, WINFIELD
		Thu, May 18	16	CC	16" TRACK CONSTRUCTION FORM B MP29-24.25, RAN THROUGH SHORT X/O FOR TRACK WORK @ KEDZIE; SLOW PASSENGER LOADING, EN ROUTE
		Tue, May 30	25	E	25" METX 126 ISSUES HAD TO BREAK THE TLC, WEST CHICAGO
UPW	49	Fri, May 05	10	KP	10" REPORT OF MALE W/GUN @ MP33.53, WAIT FOR PD TO CLEAR AREA
		Tue, May 16	13	G1	13" FOLLOWING #47, BELLWOOD-WINFIELD
		Mon, May 22	7	L	7" RMCC REQUESTED ALL TRAIN TRAFFIC TO BE STOPPED BEFORE VILLA PARK MP17.6 ACCT INTOXICATED MALE STUMBLING ON PLATFORM @ VILLA PARK
		Wed, May 31	8	D1	8" FOLLOWING #47 FROM MP6.5-BELLWOOD ACCT IOJPRJ

Data is final (06/21/17) 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				CATEGORY				CATEGORY			
Codes				Codes				Codes			
Pri.	Sec.	Ann.	Definition	Pri.	Sec.	Ann.	Definition	Pri.	Sec.	Ann.	Definition
1 Passenger Train Interference				13 Human Error				1 Passenger Train Interference			
A	A1	XA	Passenger Train Interference	B	B1	XB	Human Error, Eng. Dept.	AM	AM1	XAM	Amtrak Caused Delay
AA	AA1	XAA	Rule 9.9 Delayed in Block/Rule 6.30	H	H1	XH	Human Error, Mechanical Department	AS	AS1	XAS	NICTD Train Interference
AD	AD1	XAD	Non-Revenue Passenger Train Interference	R	R1	XR	Human Error, Transportation	2 & 3 Freight Interference - Peak & Off-Peak			
4 Accident				RD	RD1	XRD	Human Error, Metra Dispatcher	D	D1	XD	Freight Train Interference
M	M1	XM	Right of Way Accident/Misc.	RL	RL1	XRL	Human Error, Job Action/Employee No Show (CMS Error)	DD	DD1	XDD	Freight Dispatcher/Opr/Freight Train Error
YC	YC1	XYC	Derailment - Engineering	RN	RN1	XRN	Human Error, Job Action/Employee No Show (Non-CMS)	DE	DE1	XDE	Freight Mechanical Malfunction
YE	YE1	XYE	Derailment - Mechanical	RO	RO1	XRO	Human Error, Tower Operator	DR	DR1	XDR	Freight-Human Error
YM	YM1	XYM	Derailment - Accident	RZ	RZ1	XRZ	ETMS Train Crew Error [obsolete 2015]	ZD	ZD1	XZD	PTC Freight Train (On-Board)
5 Passenger Loading				YB	YB1	XYB	Derailment - Human Error, Engineering	4 Accident			
I	I1	XI	Passenger Handling, Running Time	YH	YH1	XYH	Derailment - Human Error, Mechanical	DM	DM1	XDM	Freight-Accident/Incident
IB	IB1	XIB	Passenger Handling, Bicycle	YR	YR1	XYR	Derailment - Human Error, Transportation	YF	YF1	XYF	Derailment - Accident, Foreign Line
6 Lift Deployment				ZB	ZB1	XZB	PTC Human Error, Engineering Dept.	8 Signal/Switch Failure			
U	U1	XU	Accessibility Related (ADA)	ZH	ZH1	XZH	PTC Human Error, Mechanical	GA	GA1	XGA	Signal/Switch Failure Amtrak (Signal Dept.)
UF	UF1	XUF	ADA Lift Failure	ZP	ZP1	XZP	PTC Dispatcher	GF	GF1	XGF	Signal/Switch Foreign Line
7 Obstruction/Debris				ZR	ZR1	XZR	PTC Human Error, Transportation	ZN	ZN1	XZN	PTC Foreign Line (Non-Train)
K	K1	XK	Obstruction On Tracks	14 Sick, Injured, Unruly Passenger				9 Track Work			
KD	KD1	XKD	Train Struck Debris	J	J1	XJ	Passenger Problems/Removal	CA	CA1	XCA	Amtrak Engineering
KP	KP1	XKP	Suspicious Package(s)/Person(s)/Activity	JM	JM1	XJM	Passenger Medical Emergency	11 Non-Locomotive Equipment Failure			
8 Signal/Switch Failure				15 Weather				FS	FS1	XFS	NICTD MU Malfunction
CM	CM1	XCM	Switch Malfunction (Track Dept.)	AW	AW1	XAW	Pass. Train Interference, Weather	ZS	ZS1	XZS	PTC NICTD MU Train (On-Board)
G	G1	XG	Signal/Switch Malfunction (Signal Dept.)	CW	CW1	XCW	M of W Work, Weather	12 Locomotive Failure			
GM	GM1	XGM	Gate Crossing Malfunction	EW	EW1	XEW	Locomotive Malfunction, Weather	EA	EA1	XEA	Amtrak Locomotive/Car Malfunction
GT	GT1	XGT	Telecom Failure	FW	FW1	XFW	Cab Car/TRL/MU Malfunction, Weather	ZA	ZA1	XZA	PTC Amtrak Train (On-Board)
GX	GX1	XGX	Broken Gate Crossing	GW	GW1	XGW	Signal/Switch Malfunction Weather (Signal Dept.)	13 Human Error			
GZ	GZ1	XGZ	ETMS Signal Malfunction [obsolete 2015]	IW	IW1	XIW	Passenger Handling, Weather	BA	BA1	XBA	Amtrak Engineering Human Error
VG	VG1	XVG	Broken Gate Crossing Reported, Nothing Found	KW	KW1	XKW	Obstruction On Tracks, Weather	HS	HS1	XHS	Human Error, NICTD Mechanical Dept.
ZG	ZG1	XZG	PTC Wayside	MW	MW1	XMW	Right of Way Accident/Misc., Weather	RA	RA1	XRA	Human Error, Amtrak Transportation
ZT	ZT1	XZT	PTC Back Office	NW	NW1	XNW	Electricity Utility Failure, Weather	RF	RF1	XRF	Freight Dispatcher/Opr/Non-Freight Train Error
9 Track Work				OW	OW1	XOW	AC/DC System Failure, Weather	RS	RS1	XRS	Human Error, NICTD Transportation
C	C1	XC	Unscheduled Track Work	RW	RW1	XRW	Train Crew Issues, Weather	14 Sick, Injured, Unruly Passenger			
CC	CC1	XCC	Scheduled Track Work	UW	UW1	XUW	Accessibility, Weather	JA	JA1	XJA	Amtrak Passenger Problems/Removal
CF	CF1	XCF	Engineering Equipment Malfunction	YW	YW1	XYW	Derailment Accident, Weather	15 Weather			
CG	CG1	XCG	Scheduled Signal Work	ZW	ZW1	XZW	PTC Weather	DW	DW1	XDW	Freight Train Interference, Weather
CH	CH1	XCH	Contractor Failure	16 Other							
ZC	ZC1	XZC	PTC Construction/Maintenance	L	L1	XL	Unauthorized People On Tracks/Near Miss				
10 Catenary Failure				N	N1	XN	Electricity Utility Failure				
CO	CO1	XCO	Scheduled Wire Work	Q	Q1	XQ	Late Issuance of Track Warrant				
O	O1	XO	AC/DC System Failure	S	S1	XS	Operational (Efficiency) Testing				
11 Non-Locomotive Equipment Failure				T	T1	XT	Property Vandalism				
F	F1	XF	Cab Car/Trailer/MU Malfunction	VE	VE1	XVE	Locomotive Problem Reported, Nothing Found				
FZ	FZ1	XFZ	ETMS Malfunction on Cab Car [obsolete 2015]	VF	VF1	XVF	Cab Car Problem Reported, Nothing Found				
ZF	ZF1	XZF	PTC Malfunction Coach	W	W1	XW	Gas Leak				
12 Locomotive Failure											
E	E1	XE	Locomotive Malfunction								
EZ	EZ1	XEZ	ETMS Malfunction on Locomotive [obsolete 2015]								
ZE	ZE1	XZE	PTC Malfunction Locomotive								

Effective July 1, 2016

Revised July 19, 2016

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

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

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

May 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	55	17	4	7	7	46	23	5	67	30	42	20	46	369	59%
Semi-controllable	9	0	0	0	1	7	4	15	2	15	2	2	8	65	10%
Uncontrollable	40	13	3	12	1	9	10	2	33	4	3	22	37	189	30%
TOTAL TRAINS DELAYED	104	30	7	19	9	62	37	22	102	49	47	44	91	623	100%

May - 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	88.0	20.4	6.8	8.8	3.6	48.2	21.8	11.6	28.2	12.6	27.8	33.2	36.2	347.2	50%
Semi-controllable	32.8	0.0	0.0	0.0	4.6	13.2	13.2	13.4	2.4	17.8	1.4	4.0	15.4	118.2	17%
Uncontrollable	29.4	23.4	5.0	9.0	0.6	22.4	18.8	5.0	27.2	6.4	21.2	32.8	25.4	226.6	33%
TOTAL TRAINS DELAYED	150.2	43.8	11.8	17.8	8.8	83.8	53.8	30.0	57.8	36.8	50.4	70.0	77.0	692.0	100%

May 2017 Divergence From May 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	-33.0	-3.4	-2.8	-1.8	3.4	-2.2	1.2	-6.6	38.8	17.4	14.2	-13.2	9.8	21.8	-32%
Semi-controllable	-23.8	0.0	0.0	0.0	-3.6	-6.2	-9.2	1.6	-0.4	-2.8	0.6	-2.0	-7.4	-53.2	77%
Uncontrollable	10.6	-10.4	-2.0	3.0	0.4	-13.4	-8.8	-3.0	5.8	-2.4	-18.2	-10.8	11.6	-37.6	54%
TOTAL TRAINS DELAYED	-46.2	-13.8	-4.8	1.2	0.2	-21.8	-16.8	-8.0	44.2	12.2	-3.4	-26.0	14.0	-69.0	100%

January-May 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	245	127	52	62	17	151	136	42	180	68	140	79	150	1,449	49%
Semi-controllable	20	0	0	0	12	60	47	68	14	66	6	20	95	408	14%
Uncontrollable	185	81	33	61	7	91	94	29	123	20	68	168	121	1,081	37%
TOTAL TRAINS DELAYED	450	208	85	123	36	302	277	139	317	154	214	267	366	2,938	100%

Data for current month is final (06/21/17) version from TOPS.

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06/22/2017

TABLE 7: NUMBER OF DELAYS BY DATE
May 2017

WEEKDAY	1	2	3	4	5	8	9	10	11	12	15	16	17	18	19	22	23	24	25	26	30	31	TOTAL
	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Tu	We	
BNSF	2	5	8	0	2	2	0	5	0	3	9	24	4	5	2	1	3	2	0	1	6	11	95
Elec -ML	2	1	0	4	6	0	1	0	0	0	4	0	1	3	0	0	3	0	3	0	0	0	28
-BI	0	0	1	0	0	1	0	0	1	0	1	0	0	2	0	0	0	0	1	0	0	0	7
-SC	1	0	0	1	0	1	0	0	0	0	0	0	0	2	1	5	1	0	0	0	0	1	13
Heritage	0	0	0	0	0	0	0	0	0	0	0	3	1	1	1	0	0	1	0	0	2	0	9
Milw -N	2	0	0	2	2	0	2	7	9	2	0	4	4	1	0	3	1	0	0	3	5	4	51
-W	1	3	3	1	2	1	1	0	1	0	0	5	1	2	1	2	0	0	3	2	0	3	32
NCS	4	0	1	0	1	1	2	2	1	2	1	1	1	2	0	0	0	0	0	0	2	1	22
RI	1	0	3	1	4	0	3	1	4	10	9	1	3	5	5	1	5	0	0	8	5	0	69
SWS	3	1	13	1	2	3	1	0	0	0	0	11	1	0	3	0	1	2	0	2	2	3	49
UP -N	6	6	0	2	0	1	0	5	7	0	1	4	0	0	2	2	2	0	1	0	0	3	42
-NW	8	3	2	0	0	0	0	2	1	2	1	2	0	2	1	1	0	0	0	0	4	0	29
-W	<u>10</u>	<u>13</u>	<u>4</u>	<u>2</u>	<u>2</u>	<u>4</u>	<u>5</u>	<u>2</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>9</u>	<u>0</u>	<u>7</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>82</u>
SYSTEM	40	32	35	14	28	14	15	24	24	23	26	64	16	32	17	17	16	7	10	17	29	28	528

SATURDAY	6	13	20	27	TOTAL	SUNDAY/HOLIDAY	7	14	21	28	29	TOTAL
BNSF	0	7	0	1	8	BNSF	0	0	0	0	1	1
Elec -ML	0	0	1	0	1	Elec -ML	0	0	0	0	1	1
-BI	0	0	0	0	0	-BI	-	-	-	-	-	0
-SC	0	0	6	0	6	-SC	0	0	0	0	0	0
Heritage	-	-	-	-	-	Heritage	-	-	-	-	-	0
Milw -N	0	4	4	1	9	Milw -N	0	2	0	0	0	2
-W	2	0	0	1	3	-W	0	0	0	0	2	2
NCS	-	-	-	-	-	NCS	-	-	-	-	-	0
RI	0	4	3	10	17	RI	0	0	1	6	9	16
SWS	0	0	0	0	0	SWS	-	-	-	-	-	0
UP -N	2	2	1	0	5	UP -N	0	0	0	0	0	0
-NW	6	0	0	0	6	-NW	2	2	0	0	5	9
-W	<u>5</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>6</u>	-W	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>3</u>
SYSTEM	15	18	15	13	61	SYSTEM	2	5	1	7	19	34

Data is final (06/21/17) version from TOPS.

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

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	2	0	0	0	2	5	2	11	2	15	2	2	6	49
Freight Interference - Peak	0	0	0	0	1	0	1	4	0	2	1	2	3	14
Primary	0	0	0	0	1	0	1	4	0	2	1	1	2	12
Secondary	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Freight Interference - Off-Peak	2	0	0	0	1	5	1	7	2	13	1	0	3	35
Primary	2	0	0	0	1	3	1	7	2	8	0	0	3	27
Secondary	0	0	0	0	0	2	0	0	0	5	1	0	0	8
Signal/Switch Failure - TOTAL	8	2	1	10	1	22	13	5	5	9	4	2	9	91
Signal/Switch Failure - Metra/PSA	1	2	1	10	0	20	11	1	5	8	4	2	7	72
Primary	1	2	1	5	0	9	10	1	5	3	3	2	4	46
Secondary	0	0	0	5	0	11	1	0	0	5	1	0	3	26
Signal/Switch Failure - Foreign	7	0	0	0	1	2	2	4	0	1	0	0	2	19
Primary	3	0	0	0	1	2	2	4	0	1	0	0	2	15
Secondary	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Mechanical Failure - TOTAL	17	2	0	0	0	11	7	3	28	7	19	3	14	111
Mechanical Failure - Metra/PSA	17	2	0	0	0	11	7	3	28	7	19	3	14	111
Non-Locomotive Equipment Failure - Metra/PSA	7	2	0	0	0	0	0	0	0	0	2	0	12	23
Primary	2	1	0	0	0	0	0	0	0	0	1	0	3	7
Secondary	5	1	0	0	0	0	0	0	0	0	1	0	9	16
Locomotive Failure - Metra/PSA	10	0	0	0	0	11	7	3	28	7	17	3	2	88
Primary	6	0	0	0	0	2	3	2	7	2	3	2	2	29
Secondary	4	0	0	0	0	9	4	1	21	5	14	1	0	59
Mechanical Failure - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Train Interference - TOTAL	0	0	0	0	4	2	0	0	1	12	0	0	0	19
Passenger Train Interference - Metra/PSA	0	0	0	0	0	1	0	0	1	0	0	0	0	2
Passenger Train Interference - Foreign	0	0	0	0	4	1	0	0	0	12	0	0	0	17
Accident - TOTAL	4	3	1	0	0	0	4	0	0	0	0	3	3	18
Accident - Metra/PSA	4	3	1	0	0	0	1	0	0	0	0	0	0	9
Accident - Foreign	0	0	0	0	0	0	3	0	0	0	0	3	3	9
Track Work - TOTAL	18	5	2	2	1	7	3	0	21	0	7	11	21	98
Track Work - Metra/PSA	18	5	2	2	1	7	3	0	21	0	7	11	21	98
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	11	8	1	1	0	6	2	1	10	2	7	4	3	56
Human Error - Metra/PSA	7	8	1	1	0	2	1	0	9	0	7	2	3	41
Human Error - Foreign	4	0	0	0	0	4	1	1	1	2	0	2	0	15
Sick, Injured, Unruly Passenger - TOTAL	0	7	0	1	0	0	3	0	5	0	0	3	1	20
Sick, Injured, Unruly Passenger - Metra/PSA	0	7	0	1	0	0	3	0	5	0	0	3	1	20
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	1	2
Weather - Metra/PSA	1	0	0	0	0	0	0	0	0	0	0	0	1	2
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	4	0	0	0	0	3	2	0	6	0	1	12	8	36
Lift Deployment - TOTAL	4	1	0	0	0	4	0	0	4	0	4	3	3	23
Obstruction/Debris - TOTAL	29	2	1	5	0	2	1	2	16	2	0	1	17	78
Catenary Failure - TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other - TOTAL	6	0	1	0	1	0	0	0	4	2	3	0	5	22
TOTAL TRAINS DELAYED	104	30	7	19	9	62	37	22	102	49	47	44	91	623
Total Metra/PSA Delays	91	30	7	19	2	50	29	6	99	19	45	37	80	514
Total Foreign Carrier Delays	13	0	0	0	7	12	8	16	3	30	2	7	11	109

Data for current month is final (06/21/17) 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

May - 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	24.2	0.0	0.0	0.0	2.6	12.2	12.2	9.8	2.6	10.8	1.2	3.6	15.0	94.2
Freight Interference - Peak	14.6	0.0	0.0	0.0	2.6	3.6	2.4	5.2	0.0	3.2	0.4	1.2	4.8	38.0
<i>Primary</i>	8.6	0.0	0.0	0.0	2.6	2.8	1.6	4.0	0.0	2.6	0.2	0.8	1.6	24.8
<i>Secondary</i>	6.0	0.0	0.0	0.0	0.0	0.8	0.8	1.2	0.0	0.6	0.2	0.4	3.2	13.2
Freight Interference - Off-Peak	9.6	0.0	0.0	0.0	0.0	8.6	9.8	4.6	2.6	7.6	0.8	2.4	10.2	56.2
<i>Primary</i>	7.4	0.0	0.0	0.0	0.0	6.8	7.6	4.2	2.2	6.2	0.6	1.8	7.8	44.6
<i>Secondary</i>	2.2	0.0	0.0	0.0	0.0	1.8	2.2	0.4	0.4	1.4	0.2	0.6	2.4	11.6
Signal/Switch Failure - TOTAL	25.8	7.8	3.4	1.8	2.2	18.4	12.2	7.8	6.6	9.4	6.0	12.2	9.4	123.0
Signal/Switch Failure - Metra/PSA	14.2	7.8	3.4	1.8	0.2	17.6	11.2	4.8	6.6	1.6	5.6	11.8	9.0	95.6
<i>Primary</i>	11.0	6.4	2.8	1.0	0.2	8.6	5.4	3.6	5.6	1.4	1.4	3.0	3.4	53.8
<i>Secondary</i>	3.2	1.4	0.6	0.8	0.0	9.0	5.8	1.2	1.0	0.2	4.2	8.8	5.6	41.8
Signal/Switch Failure - Foreign	11.6	0.0	0.0	0.0	2.0	0.8	1.0	3.0	0.0	7.8	0.4	0.4	0.4	27.4
<i>Primary</i>	9.6	0.0	0.0	0.0	1.6	0.6	0.6	1.6	0.0	5.2	0.4	0.4	0.4	20.4
<i>Secondary</i>	2.0	0.0	0.0	0.0	0.4	0.2	0.4	1.4	0.0	2.6	0.0	0.0	0.0	7.0
Mechanical Failure - TOTAL	14.4	2.8	0.4	0.4	0.2	11.0	4.8	3.0	10.2	1.8	7.4	12.6	3.6	72.6
Mechanical Failure - Metra/PSA	14.4	1.6	0.4	0.4	0.2	11.0	4.8	3.0	10.2	1.8	7.4	12.6	3.6	71.4
Non-Locomotive Equipment Failure - Metra/PSA	1.2	1.6	0.4	0.4	0.0	0.4	1.8	0.0	1.2	0.0	1.4	1.0	1.6	11.0
<i>Primary</i>	0.6	1.2	0.4	0.4	0.0	0.4	0.8	0.0	0.8	0.0	0.6	0.8	1.0	7.0
<i>Secondary</i>	0.6	0.4	0.0	0.0	0.0	0.0	1.0	0.0	0.4	0.0	0.8	0.2	0.6	4.0
Locomotive Failure - Metra/PSA	13.2	0.0	0.0	0.0	0.2	10.6	3.0	3.0	9.0	1.8	6.0	11.6	2.0	60.4
<i>Primary</i>	3.8	0.0	0.0	0.0	0.2	2.4	1.0	1.4	3.8	1.2	2.2	1.8	0.8	18.6
<i>Secondary</i>	9.4	0.0	0.0	0.0	0.0	8.2	2.0	1.6	5.2	0.6	3.8	9.8	1.2	41.8
Mechanical Failure - Foreign	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Passenger Train Interference - TOTAL	1.6	0.4	0.0	0.8	0.8	3.0	0.6	1.0	1.4	2.2	0.2	0.4	0.6	13.0
Passenger Train Interference - Metra/PSA	0.0	0.0	0.0	0.0	0.0	1.8	0.4	1.0	0.4	0.2	0.2	0.4	0.6	5.0
Passenger Train Interference - Foreign	1.6	0.4	0.0	0.8	0.8	1.2	0.2	0.0	1.0	2.0	0.0	0.0	0.0	8.0
Accident - TOTAL	9.8	0.0	0.0	0.0	0.0	8.2	6.6	4.0	1.6	2.0	5.8	8.4	9.2	55.6
Accident - Metra/PSA	9.0	0.0	0.0	0.0	0.0	8.2	6.2	4.0	1.6	1.0	5.8	8.4	9.0	53.2
Accident - Foreign	0.8	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	1.0	0.0	0.0	0.2	2.4
Track Work - TOTAL	42.8	1.6	0.8	2.8	1.0	13.2	4.0	1.6	3.8	1.6	11.0	4.0	17.8	106.0
Track Work - Metra/PSA	42.4	1.6	0.8	2.8	1.0	13.0	3.8	1.0	3.8	1.6	11.0	4.0	17.8	104.6
Track Work - Foreign	0.4	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.0	0.0	0.0	0.0	0.0	1.4
Human Error - TOTAL	11.0	6.6	2.0	2.8	1.4	3.6	1.6	1.8	5.4	4.2	3.2	4.0	3.0	50.6
Human Error - Metra/PSA	8.8	6.6	2.0	2.8	0.0	2.4	1.2	0.6	5.4	2.0	2.0	2.6	1.8	38.2
Human Error - Foreign	2.2	0.0	0.0	0.0	1.4	1.2	0.4	1.2	0.0	2.2	1.2	1.4	1.2	12.4
Sick, Injured, Unruly Passenger - TOTAL	3.0	6.2	1.2	1.2	0.2	2.0	3.2	0.0	4.2	0.4	4.4	4.2	1.8	32.0
Sick, Injured, Unruly Passenger - Metra/PSA	3.0	6.2	1.2	1.2	0.2	2.0	3.2	0.0	4.2	0.4	4.4	4.2	1.8	32.0
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	2.4	1.4	0.0	0.2	0.0	2.0	0.8	0.8	2.8	1.0	1.4	0.8	0.2	13.8
Weather - Metra/PSA	2.4	1.4	0.0	0.2	0.0	2.0	0.8	0.8	2.8	0.8	1.4	0.8	0.2	13.6
Weather - 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
Passenger Loading - TOTAL	5.6	9.8	1.4	3.2	0.0	5.0	3.2	0.0	11.0	0.2	5.6	12.8	5.0	62.8
Lift Deployment - TOTAL	1.0	0.0	0.0	0.0	0.0	3.8	1.4	0.2	2.6	0.6	1.4	1.2	1.0	13.2
Obstruction/Debris - TOTAL	5.6	3.4	1.6	3.4	0.4	0.6	2.2	0.0	1.0	2.0	2.0	4.6	5.2	32.0
Catenary Failure - TOTAL	0.0	2.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Other - TOTAL	3.0	1.6	1.0	0.8	0.0	0.8	1.0	0.0	4.6	0.6	0.8	1.2	5.2	20.6
TOTAL TRAINS DELAYED	150.2	43.8	11.8	17.8	8.8	83.8	53.8	30.0	57.8	36.8	50.4	70.0	77.0	692.0
Total Metra/PSA Delays	109.4	42.2	11.8	17.0	2.0	68.2	39.4	15.4	54.2	12.8	47.6	64.6	60.2	544.8
Total Foreign Carrier Delays	40.8	1.6	0.0	0.8	6.8	15.6	14.4	14.6	3.6	24.0	2.8	5.4	16.8	147.2

Data for latest month is final (06/14/16) 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
May 2017 Divergence From May 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	-22.2	0.0	0.0	0.0	-0.6	-7.2	-10.2	1.2	-0.6	4.2	0.8	-1.6	-9.0	-45.2
Freight Interference - Peak	-14.6	0.0	0.0	0.0	-1.6	-3.6	-1.4	-1.2	0.0	-1.2	0.6	0.8	-1.8	-24.0
<i>Primary</i>	-8.6	0.0	0.0	0.0	-1.6	-2.8	-0.6	0.0	0.0	-0.6	0.8	0.2	0.4	-12.8
<i>Secondary</i>	-6.0	0.0	0.0	0.0	0.0	-0.8	-0.8	-1.2	0.0	-0.6	-0.2	0.6	-2.2	-11.2
Freight Interference - Off-Peak	-7.6	0.0	0.0	0.0	1.0	-3.6	-8.8	2.4	-0.6	5.4	0.2	-2.4	-7.2	-21.2
<i>Primary</i>	-5.4	0.0	0.0	0.0	1.0	-3.8	-6.6	2.8	-0.2	1.8	-0.6	-1.8	-4.8	-17.6
<i>Secondary</i>	-2.2	0.0	0.0	0.0	0.0	0.2	-2.2	-0.4	-0.4	3.6	0.8	-0.6	-2.4	-3.6
Signal/Switch Failure - TOTAL	-17.8	-5.8	-2.4	8.2	-1.2	3.6	0.8	-2.8	-1.6	-0.4	-2.0	-10.2	-0.4	-32.0
Signal/Switch Failure - Metra/PSA	-13.2	-5.8	-2.4	8.2	-0.2	2.4	-0.2	-3.8	-1.6	6.4	-1.6	-9.8	-2.0	-23.6
<i>Primary</i>	-10.0	-4.4	-1.8	4.0	-0.2	0.4	4.6	-2.6	-0.6	1.6	1.6	-1.0	0.6	-7.8
<i>Secondary</i>	-3.2	-1.4	-0.6	4.2	0.0	2.0	-4.8	-1.2	-1.0	4.8	-3.2	-8.8	-2.6	-15.8
Signal/Switch Failure - Foreign	-4.6	0.0	0.0	0.0	-1.0	1.2	1.0	1.0	0.0	-6.8	-0.4	-0.4	1.6	-8.4
<i>Primary</i>	-6.6	0.0	0.0	0.0	-0.6	1.4	1.4	2.4	0.0	-4.2	-0.4	-0.4	1.6	-5.4
<i>Secondary</i>	2.0	0.0	0.0	0.0	-0.4	-0.2	-0.4	-1.4	0.0	-2.6	0.0	0.0	0.0	-3.0
Mechanical Failure - TOTAL	2.6	-0.8	-0.4	-0.4	-0.2	0.0	2.2	0.0	17.8	5.2	11.6	-9.6	10.4	38.4
Mechanical Failure - Metra/PSA	2.6	0.4	-0.4	-0.4	-0.2	0.0	2.2	0.0	17.8	5.2	11.6	-9.6	10.4	39.6
Non-Locomotive Equipment Failure - Metra/PSA	5.8	0.4	-0.4	-0.4	0.0	-0.4	-1.8	0.0	-1.2	0.0	0.6	-1.0	10.4	12.0
<i>Primary</i>	1.4	-0.2	-0.4	-0.4	0.0	-0.4	-0.8	0.0	-0.8	0.0	0.4	-0.8	2.0	0.0
<i>Secondary</i>	4.4	0.6	0.0	0.0	0.0	0.0	-1.0	0.0	-0.4	0.0	0.2	-0.2	8.4	12.0
Locomotive Failure - Metra/PSA	-3.2	0.0	0.0	0.0	-0.2	0.4	4.0	0.0	19.0	5.2	11.0	-8.6	0.0	27.6
<i>Primary</i>	2.2	0.0	0.0	0.0	-0.2	-0.4	2.0	0.6	3.2	0.8	0.8	0.2	1.2	10.4
<i>Secondary</i>	-5.4	0.0	0.0	0.0	0.0	0.8	2.0	-0.6	15.8	4.4	10.2	-8.8	-1.2	17.2
Mechanical Failure - Foreign	0.0	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2
Passenger Train Interference - TOTAL	-1.6	-0.4	0.0	-0.8	3.2	-1.0	-0.6	-1.0	-0.4	9.8	-0.2	-0.4	-0.6	6.0
Passenger Train Interference - Metra/PSA	0.0	0.0	0.0	0.0	0.0	-0.8	-0.4	-1.0	0.6	-0.2	-0.2	-0.4	-0.6	-3.0
Passenger Train Interference - Foreign	-1.6	-0.4	0.0	-0.8	3.2	-0.2	-0.2	0.0	-1.0	10.0	0.0	0.0	0.0	9.0
Accident - TOTAL	-5.8	3.0	1.0	0.0	0.0	-8.2	-2.6	-4.0	-1.6	-2.0	-5.8	-5.4	-6.2	-37.6
Accident - Metra/PSA	-5.0	3.0	1.0	0.0	0.0	-8.2	-5.2	-4.0	-1.6	-1.0	-5.8	-8.4	-9.0	-44.2
Accident - Foreign	-0.8	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	-1.0	0.0	3.0	2.8	6.6
Track Work - TOTAL	-24.8	3.4	1.2	-0.8	0.0	-6.2	-1.0	-1.6	17.2	-1.6	-4.0	7.0	3.2	-8.0
Track Work - Metra/PSA	-24.4	3.4	1.2	-0.8	0.0	-6.0	-0.8	-1.0	17.2	-1.6	-4.0	7.0	3.2	-6.6
Track Work - Foreign	-0.4	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.6	0.0	0.0	0.0	0.0	0.0	-1.4
Human Error - TOTAL	0.0	1.4	-1.0	-1.8	-1.4	2.4	0.4	-0.8	4.6	-2.2	3.8	0.0	0.0	5.4
Human Error - Metra/PSA	-1.8	1.4	-1.0	-1.8	0.0	-0.4	-0.2	-0.6	3.6	-2.0	5.0	-0.6	1.2	2.8
Human Error - Foreign	1.8	0.0	0.0	0.0	-1.4	2.8	0.6	-0.2	1.0	-0.2	-1.2	0.6	-1.2	2.6
Sick, Injured, Unruly Passenger - TOTAL	-3.0	0.8	-1.2	-0.2	-0.2	-2.0	-0.2	0.0	0.8	-0.4	-4.4	-1.2	-0.8	-12.0
Sick, Injured, Unruly Passenger - Metra/PSA	-3.0	0.8	-1.2	-0.2	-0.2	-2.0	-0.2	0.0	0.8	-0.4	-4.4	-1.2	-0.8	-12.0
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	-1.4	-1.4	0.0	-0.2	0.0	-2.0	-0.8	-0.8	-2.8	-1.0	-1.4	-0.8	0.8	-11.8
Weather - Metra/PSA	-1.4	-1.4	0.0	-0.2	0.0	-2.0	-0.8	-0.8	-2.8	-0.8	-1.4	-0.8	0.8	-11.6
Weather - 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
Passenger Loading - TOTAL	-1.6	-9.8	-1.4	-3.2	0.0	-2.0	-1.2	0.0	-5.0	-0.2	-4.6	-0.8	3.0	-26.8
Lift Deployment - TOTAL	3.0	1.0	0.0	0.0	0.0	0.2	-1.4	-0.2	1.4	-0.6	2.6	1.8	2.0	9.8
Obstruction/Debris - TOTAL	23.4	-1.4	-0.6	1.6	-0.4	1.4	-1.2	2.0	15.0	0.0	-2.0	-3.6	11.8	46.0
Catenary Failure - TOTAL	0.0	-2.2	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6
Other - TOTAL	3.0	-1.6	0.0	-0.8	1.0	-0.8	-1.0	0.0	-0.6	1.4	2.2	-1.2	-0.2	1.4
TOTAL TRAINS DELAYED	-46.2	-13.8	-4.8	1.2	0.2	-21.8	-16.8	-8.0	44.2	12.2	-3.4	-26.0	14.0	-69.0
Total Metra/PSA Delays	-18.4	-12.2	-4.8	2.0	0.0	-18.2	-10.4	-9.4	44.8	6.2	-2.6	-27.6	19.8	-30.8
Total Foreign Carrier Delays	-27.8	-1.6	0.0	-0.8	0.2	-3.6	-6.4	1.4	-0.6	6.0	-0.8	1.6	-5.8	-38.2

Data for current month is final (06/21/17) 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 - May 2017

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	15	0	0	0	11	34	26	47	14	52	7	20	92	318
Freight Interference - Peak	5	0	0	0	8	4	6	19	3	13	2	5	38	103
Primary	4	0	0	0	5	3	6	15	3	10	2	3	16	67
Secondary	1	0	0	0	3	1	0	4	0	3	0	2	22	36
Freight Interference - Off-Peak	10	0	0	0	3	30	20	28	11	39	5	15	54	215
Primary	9	0	0	0	3	22	16	25	10	25	4	11	36	161
Secondary	1	0	0	0	0	8	4	3	1	14	1	4	18	54
Signal/Switch Failure - TOTAL	43	49	26	37	4	53	55	32	28	32	13	11	29	412
Signal/Switch Failure - Metra/PSA	32	49	26	37	0	26	33	11	28	14	13	10	24	303
Primary	18	34	22	25	0	15	25	8	22	8	5	7	13	202
Secondary	14	15	4	12	0	11	8	3	6	6	8	3	11	101
Signal/Switch Failure - Foreign	11	0	0	0	4	27	22	21	0	18	0	1	5	109
Primary	6	0	0	0	3	6	14	9	0	11	0	1	4	54
Secondary	5	0	0	0	1	21	8	12	0	7	0	0	1	55
Mechanical Failure - TOTAL	54	9	2	2	2	46	34	12	77	8	59	20	37	362
Mechanical Failure - Metra/PSA	52	5	2	2	1	44	34	12	77	8	59	20	37	353
Non-Locomotive Equipment Failure - Metra/PSA	16	5	2	2	1	2	4	3	3	0	3	6	21	68
Primary	8	2	1	0	1	1	3	1	3	0	2	2	9	33
Secondary	8	3	1	2	0	1	1	2	0	0	1	4	12	35
Locomotive Failure - Metra/PSA	36	0	0	0	0	42	30	9	74	8	56	14	16	285
Primary	16	0	0	0	0	16	13	5	28	3	9	10	5	105
Secondary	20	0	0	0	0	26	17	4	46	5	47	4	11	180
Mechanical Failure - Foreign	2	4	0	0	1	2	0	0	0	0	0	0	0	9
Passenger Train Interference - TOTAL	5	1	3	4	5	8	0	3	1	13	0	0	1	44
Passenger Train Interference - Metra/PSA	0	0	3	1	0	5	0	3	1	0	0	0	1	14
Passenger Train Interference - Foreign	5	1	0	3	5	3	0	0	0	13	0	0	0	30
Accident - TOTAL	65	6	2	9	0	2	29	7	25	3	14	82	7	251
Accident - Metra/PSA	65	6	2	9	0	2	26	7	20	0	14	79	1	231
Accident - Foreign	0	0	0	0	0	0	3	0	5	3	0	3	6	20
Track Work - TOTAL	37	53	12	16	1	12	11	1	33	11	29	36	42	294
Track Work - Metra/PSA	37	53	12	16	1	12	11	1	33	11	29	36	42	294
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	101	15	7	4	7	56	51	12	34	14	36	11	39	387
Human Error - Metra/PSA	38	15	7	4	1	31	30	0	33	2	34	9	31	235
Human Error - Foreign	63	0	0	0	6	25	21	12	1	12	2	2	8	152
Sick, Injured, Unruly Passenger - TOTAL	16	25	2	6	0	19	16	3	11	0	10	18	16	142
Sick, Injured, Unruly Passenger - Metra/PSA	10	25	2	6	0	19	16	3	11	0	10	18	16	136
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	23	22	8	14	4	28	23	5	30	1	15	7	7	187
Weather - Metra/PSA	23	22	8	14	4	27	23	5	30	1	15	7	7	186
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	7	5	5	5	0	5	3	0	11	0	13	18	26	98
Lift Deployment - TOTAL	6	1	0	1	0	11	6	0	9	0	8	12	15	69
Obstruction/Debris - TOTAL	62	13	12	16	1	25	15	13	32	13	1	19	44	266
Catenary Failure - TOTAL	0	4	2	6	0	0	0	0	0	0	0	0	0	12
Other - TOTAL	16	5	4	3	1	3	8	4	12	7	9	13	11	96
TOTAL TRAINS DELAYED	450	208	85	123	36	302	277	139	317	154	214	267	366	2,938
Total Metra/PSA Delays	348	203	85	120	9	210	205	59	297	56	205	241	255	2,293
Total Foreign Carrier Delays	102	5	0	3	27	92	72	80	20	98	9	26	111	645

Data for current month is final (06/21/17) 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 - May - 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	98.8	0.0	0.0	0.0	16.0	67.8	63.8	64.4	28.6	58.6	8.4	22.6	82.6	511.6
Freight Interference - Peak	44.0	0.0	0.0	0.0	15.6	16.2	14.2	24.6	7.8	18.6	1.6	10.8	20.6	174.0
Primary	27.8	0.0	0.0	0.0	15.0	11.4	9.8	17.0	4.6	14.8	0.8	6.0	10.0	117.2
Secondary	16.2	0.0	0.0	0.0	0.6	4.8	4.4	7.6	3.2	3.8	0.8	4.8	10.6	56.8
Freight Interference - Off-Peak	54.8	0.0	0.0	0.0	0.4	51.6	49.6	39.8	20.8	40.0	6.8	11.8	62.0	337.6
Primary	45.4	0.0	0.0	0.0	0.4	35.4	35.6	33.2	17.8	32.6	4.0	8.8	50.4	263.6
Secondary	9.4	0.0	0.0	0.0	0.0	16.2	14.0	6.6	3.0	7.4	2.8	3.0	11.6	74.0
Signal/Switch Failure - TOTAL	106.2	30.8	14.6	10.8	9.4	105.4	67.4	46.0	41.4	42.4	16.6	27.6	53.8	572.4
Signal/Switch Failure - Metra/PSA	57.2	30.8	14.6	10.8	1.6	87.4	55.4	27.2	38.8	8.4	16.0	25.4	52.8	426.4
Primary	39.6	19.8	11.0	8.4	1.4	44.0	31.6	16.4	28.2	6.0	8.2	11.2	18.0	243.8
Secondary	17.6	11.0	3.6	2.4	0.2	43.4	23.8	10.8	10.6	2.4	7.8	14.2	34.8	182.6
Signal/Switch Failure - Foreign	49.0	0.0	0.0	0.0	7.8	18.0	12.0	18.8	2.6	34.0	0.6	2.2	1.0	146.0
Primary	40.4	0.0	0.0	0.0	7.0	13.6	8.8	10.0	1.2	22.6	0.6	1.0	1.0	106.2
Secondary	8.6	0.0	0.0	0.0	0.8	4.4	3.2	8.8	1.4	11.4	0.0	1.2	0.0	39.8
Mechanical Failure - TOTAL	65.6	14.8	4.6	4.2	2.2	71.4	42.0	18.2	68.2	13.8	36.2	40.2	28.6	410.0
Mechanical Failure - Metra/PSA	65.2	12.0	4.0	4.0	2.2	67.0	41.8	18.2	67.8	13.8	36.2	40.2	28.4	400.8
Non-Locomotive Equipment Failure - Metra/PSA	18.2	12.0	4.0	4.0	1.0	10.2	9.4	3.2	8.6	5.8	9.6	5.8	9.4	101.2
Primary	6.4	6.0	2.0	2.6	0.6	3.0	4.2	1.2	3.6	2.0	3.6	2.6	5.0	42.8
Secondary	11.8	6.0	2.0	1.4	0.4	7.2	5.2	2.0	5.0	3.8	6.0	3.2	4.4	58.4
Locomotive Failure - Metra/PSA	47.0	0.0	0.0	0.0	1.2	56.8	32.4	15.0	59.2	8.0	26.6	34.4	19.0	299.6
Primary	15.4	0.0	0.0	0.0	1.0	13.6	11.8	4.2	17.6	3.8	8.6	9.0	8.0	93.0
Secondary	31.6	0.0	0.0	0.0	0.2	43.2	20.6	10.8	41.6	4.2	18.0	25.4	11.0	206.6
Mechanical Failure - Foreign	0.4	2.8	0.6	0.2	0.0	4.4	0.2	0.0	0.4	0.0	0.0	0.0	0.2	9.2
Passenger Train Interference - TOTAL	6.4	3.6	1.0	2.8	2.6	30.2	5.6	7.0	7.2	4.2	0.8	2.0	6.2	79.6
Passenger Train Interference - Metra/PSA	0.6	1.8	0.2	1.6	0.0	21.8	5.0	7.0	5.4	0.8	0.8	2.0	6.0	53.0
Passenger Train Interference - Foreign	5.8	1.8	0.8	1.2	2.6	8.4	0.6	0.0	1.8	3.4	0.0	0.0	0.2	26.6
Accident - TOTAL	62.0	7.2	2.6	1.8	0.6	30.4	28.6	12.0	18.4	3.6	22.8	43.6	20.0	253.6
Accident - Metra/PSA	48.2	7.2	2.6	1.8	0.6	28.6	27.8	9.8	17.2	2.6	22.8	43.0	18.8	231.0
Accident - Foreign	13.8	0.0	0.0	0.0	0.0	1.8	0.8	2.2	1.2	1.0	0.0	0.6	1.2	22.6
Track Work - TOTAL	88.2	22.6	9.8	12.0	1.4	27.6	14.0	10.8	19.4	2.0	23.4	13.2	26.6	271.0
Track Work - Metra/PSA	84.2	22.6	9.8	12.0	1.4	27.4	13.4	10.0	19.4	1.8	23.4	13.2	26.6	265.2
Track Work - Foreign	4.0	0.0	0.0	0.0	0.0	0.2	0.6	0.8	0.0	0.2	0.0	0.0	0.0	5.8
Human Error - TOTAL	67.6	18.0	6.4	9.4	6.6	36.4	19.8	12.2	32.0	15.4	21.2	18.0	16.2	279.2
Human Error - Metra/PSA	49.4	15.4	6.2	8.6	1.6	22.4	12.0	5.8	32.0	4.2	18.6	14.0	10.6	200.8
Human Error - Foreign	18.2	2.6	0.2	0.8	5.0	14.0	7.8	6.4	0.0	11.2	2.6	4.0	5.6	78.4
Sick, Injured, Unruly Passenger - TOTAL	12.2	29.2	5.2	7.0	0.8	13.0	17.4	1.8	13.8	2.6	14.8	20.4	13.8	152.0
Sick, Injured, Unruly Passenger - Metra/PSA	11.8	29.2	5.2	7.0	0.8	13.0	17.4	1.8	13.6	2.6	14.8	20.4	13.8	151.4
Sick, Injured, Unruly Passenger - Foreign	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.6
Weather - TOTAL	142.6	90.4	26.4	31.2	3.4	76.4	68.0	21.4	95.0	17.8	63.0	68.6	59.8	764.0
Weather - Metra/PSA	141.6	90.4	26.4	31.2	3.0	74.2	67.4	21.4	95.0	16.8	63.0	68.6	59.4	758.4
Weather - Foreign	1.0	0.0	0.0	0.0	0.4	2.2	0.6	0.0	0.0	1.0	0.0	0.0	0.4	5.6
Passenger Loading - TOTAL	16.8	33.6	7.4	10.0	0.0	20.8	18.2	0.4	41.4	1.0	19.4	23.2	18.4	210.6
Lift Deployment - TOTAL	11.4	0.2	0.0	0.2	0.0	16.2	8.0	1.0	11.8	0.6	5.2	7.0	12.6	74.2
Obstruction/Debris - TOTAL	24.0	16.2	5.0	13.6	2.2	16.4	22.6	3.0	16.0	9.0	15.2	23.6	17.0	183.8
Catenary Failure - TOTAL	0.0	19.6	3.2	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	29.4
Other - TOTAL	22.6	11.2	2.8	4.8	0.0	7.2	8.0	3.2	10.8	7.0	10.2	7.8	18.4	114.0
TOTAL TRAINS DELAYED	724.4	297.4	89.0	114.2	45.2	519.2	383.4	201.4	404.0	178.0	257.2	318.0	374.0	3,905.4
Total Metra/PSA Delays	533.0	290.2	87.4	112.0	13.4	402.4	297.0	108.8	369.2	68.6	245.6	288.6	282.8	3,099.0
Total Foreign Carrier Delays	191.4	7.2	1.6	2.2	31.8	116.8	86.4	92.6	34.8	109.4	11.6	29.4	91.2	806.4

Data for latest month is final (06/14/16) 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 - May 2017 Divergence From January - May 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	-83.8	0.0	0.0	0.0	-5.0	-33.8	-37.8	-17.4	-14.6	-6.6	-1.4	-2.6	9.4	-193.6
Freight Interference - Peak	-39.0	0.0	0.0	0.0	-7.6	-12.2	-8.2	-5.6	-4.8	-5.6	0.4	-5.8	17.4	-71.0
Primary	-23.8	0.0	0.0	0.0	-10.0	-8.4	-3.8	-2.0	-1.6	-4.8	1.2	-3.0	6.0	-50.2
Secondary	-15.2	0.0	0.0	0.0	2.4	-3.8	-4.4	-3.6	-3.2	-0.8	-0.8	-2.8	11.4	-20.8
Freight Interference - Off-Peak	-44.8	0.0	0.0	0.0	2.6	-21.6	-29.6	-11.8	-9.8	-1.0	-1.8	3.2	-8.0	-122.6
Primary	-36.4	0.0	0.0	0.0	2.6	-13.4	-19.6	-8.2	-7.8	-7.6	0.0	2.2	-14.4	-102.6
Secondary	-8.4	0.0	0.0	0.0	0.0	-8.2	-10.0	-3.6	-2.0	6.6	-1.8	1.0	6.4	-20.0
Signal/Switch Failure - TOTAL	-63.2	18.2	11.4	26.2	-5.4	-52.4	-12.4	-14.0	-13.4	-10.4	-3.6	-16.6	-24.8	-160.4
Signal/Switch Failure - Metra/PSA	-25.2	18.2	11.4	26.2	-1.6	-61.4	-22.4	-16.2	-10.8	5.6	-3.0	-15.4	-28.8	-123.4
Primary	-21.6	14.2	11.0	16.6	-1.4	-29.0	-6.6	-8.4	-6.2	2.0	-3.2	-4.2	-5.0	-41.8
Secondary	-3.6	4.0	0.4	9.6	-0.2	-32.4	-15.8	-7.8	-4.6	3.6	0.2	-11.2	-23.8	-81.6
Signal/Switch Failure - Foreign	-38.0	0.0	0.0	0.0	-3.8	9.0	10.0	2.2	-2.6	-16.0	-0.6	-1.2	4.0	-37.0
Primary	-34.4	0.0	0.0	0.0	-4.0	-7.6	5.2	-1.0	-1.2	-11.6	-0.6	0.0	3.0	-52.2
Secondary	-3.6	0.0	0.0	0.0	0.2	16.6	4.8	3.2	-1.4	-4.4	0.0	-1.2	1.0	15.2
Mechanical Failure - TOTAL	-11.6	-5.8	-2.6	-2.2	-0.2	-25.4	-8.0	-6.2	8.8	-5.8	22.8	-20.2	8.4	-48.0
Mechanical Failure - Metra/PSA	-13.2	-7.0	-2.0	-2.0	-1.2	-23.0	-7.8	-6.2	9.2	-5.8	22.8	-20.2	8.6	-47.8
Non-Locomotive Equipment Failure - Metra/PSA	-2.2	-7.0	-2.0	-2.0	0.0	-8.2	-5.4	-0.2	-5.6	-5.8	-6.6	0.2	11.6	-33.2
Primary	1.6	-4.0	-1.0	-2.6	0.4	-2.0	-1.2	0.2	-0.6	-2.0	-1.6	-0.6	4.0	-9.8
Secondary	-3.8	-3.0	-1.0	0.6	-0.4	-6.2	-4.2	0.0	-5.0	-3.8	-5.0	0.8	7.6	-23.4
Locomotive Failure - Metra/PSA	-11.0	0.0	0.0	0.0	-1.2	-14.8	-2.4	-6.0	14.8	0.0	29.4	-20.4	-3.0	-14.6
Primary	0.6	0.0	0.0	0.0	-1.0	2.4	1.2	0.8	10.4	-0.8	0.4	1.0	-3.0	12.0
Secondary	-11.6	0.0	0.0	0.0	-0.2	-17.2	-3.6	-6.8	4.4	0.8	29.0	-21.4	0.0	-26.6
Mechanical Failure - Foreign	1.6	1.2	-0.6	-0.2	1.0	-2.4	-0.2	0.0	-0.4	0.0	0.0	0.0	-0.2	-0.2
Passenger Train Interference - TOTAL	-1.4	-2.6	2.0	1.2	2.4	-22.2	-5.6	-4.0	-6.2	8.8	-0.8	-2.0	-5.2	-35.6
Passenger Train Interference - Metra/PSA	-0.6	-1.8	2.8	-0.6	0.0	-16.8	-5.0	-4.0	-4.4	-0.8	-0.8	-2.0	-5.0	-39.0
Passenger Train Interference - Foreign	-0.8	-0.8	-0.8	1.8	2.4	-5.4	-0.6	0.0	-1.8	9.6	0.0	0.0	-0.2	3.4
Accident - TOTAL	3.0	-1.2	-0.6	7.2	-0.6	-28.4	0.4	-5.0	6.6	-0.6	-8.8	38.4	-13.0	-2.6
Accident - Metra/PSA	16.8	-1.2	-0.6	7.2	-0.6	-26.6	-1.8	-2.8	2.8	-2.6	-8.8	36.0	-17.8	0.0
Accident - Foreign	-13.8	0.0	0.0	0.0	0.0	-1.8	2.2	-2.2	3.8	2.0	0.0	2.4	4.8	-2.6
Track Work - TOTAL	-51.2	30.4	2.2	4.0	-0.4	-15.6	-3.0	-9.8	13.6	9.0	5.6	22.8	15.4	23.0
Track Work - Metra/PSA	-47.2	30.4	2.2	4.0	-0.4	-15.4	-2.4	-9.0	13.6	9.2	5.6	22.8	15.4	28.8
Track Work - Foreign	-4.0	0.0	0.0	0.0	0.0	-0.2	-0.6	-0.8	0.0	-0.2	0.0	0.0	0.0	-5.8
Human Error - TOTAL	33.4	-3.0	0.6	-5.4	0.4	19.6	31.2	-0.2	2.0	-1.4	14.8	-7.0	22.8	107.8
Human Error - Metra/PSA	-11.4	-0.4	0.8	-4.6	-0.6	8.6	18.0	-5.8	1.0	-2.2	15.4	-5.0	20.4	34.2
Human Error - Foreign	44.8	-2.6	-0.2	-0.8	1.0	11.0	13.2	5.6	1.0	0.8	-0.6	-2.0	2.4	73.6
Sick, Injured, Unruly Passenger - TOTAL	3.8	-4.2	-3.2	-1.0	-0.8	6.0	-1.4	1.2	-2.8	-2.6	-4.8	-2.4	2.2	-10.0
Sick, Injured, Unruly Passenger - Metra/PSA	-1.8	-4.2	-3.2	-1.0	-0.8	6.0	-1.4	1.2	-2.6	-2.6	-4.8	-2.4	2.2	-15.4
Sick, Injured, Unruly Passenger - Foreign	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	5.4
Weather - TOTAL	-119.6	-68.4	-18.4	-17.2	0.6	-48.4	-45.0	-16.4	-65.0	-16.8	-48.0	-61.6	-52.8	-577.0
Weather - Metra/PSA	-118.6	-68.4	-18.4	-17.2	1.0	-47.2	-44.4	-16.4	-65.0	-15.8	-48.0	-61.6	-52.4	-572.4
Weather - Foreign	-1.0	0.0	0.0	0.0	-0.4	-1.2	-0.6	0.0	0.0	-1.0	0.0	0.0	-0.4	-4.6
Passenger Loading - TOTAL	-9.8	-28.6	-2.4	-5.0	0.0	-15.8	-15.2	-0.4	-30.4	-1.0	-6.4	-5.2	7.6	-112.6
Lift Deployment - TOTAL	-5.4	0.8	0.0	0.8	0.0	-5.2	-2.0	-1.0	-2.8	-0.6	2.8	5.0	2.4	-5.2
Obstruction/Debris - TOTAL	38.0	-3.2	7.0	2.4	-1.2	8.6	-7.6	10.0	16.0	4.0	-14.2	-4.6	27.0	82.2
Catenary Failure - TOTAL	0.0	-15.6	-1.2	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-17.4
Other - TOTAL	-6.6	-6.2	1.2	-1.8	1.0	-4.2	0.0	0.8	1.2	0.0	-1.2	5.2	-7.4	-18.0
TOTAL TRAINS DELAYED	-274.4	-89.4	-4.0	8.8	-9.2	-217.2	-106.4	-62.4	-87.0	-24.0	-43.2	-51.0	-8.0	-967.4
Total Metra/PSA Delays	-185.0	-87.2	-2.4	8.0	-4.4	-192.4	-92.0	-49.8	-72.2	-12.6	-40.6	-47.6	-27.8	-806.0
Total Foreign Carrier Delays	-89.4	-2.2	-1.6	0.8	-4.8	-24.8	-14.4	-12.6	-14.8	-11.4	-2.6	-3.4	19.8	-161.4

Data for current month is final (06/21/17) 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 - May
Freight Interference - TOTAL	53	68	69	79	49								318 10.8%
Freight Interference - Peak	20	21	23	25	14								103 3.5%
Primary	11	16	17	11	12								67 2.3%
Secondary	9	5	6	14	2								36 1.2%
Freight Interference - Off-Peak	33	47	46	54	35								215 7.3%
Primary	26	38	36	34	27								161 5.5%
Secondary	7	9	10	20	8								54 1.8%
Signal/Switch Failure - TOTAL	118	44	80	79	91								412 14.0%
Signal/Switch Failure - Metra/PSA	98	31	74	28	72								303 10.3%
Primary	69	21	41	25	46								202 6.9%
Secondary	29	10	33	3	26								101 3.4%
Signal/Switch Failure - Foreign	20	13	6	51	19								109 3.7%
Primary	10	9	4	16	15								54 1.8%
Secondary	10	4	2	35	4								55 1.9%
Mechanical Failure - TOTAL	84	61	64	42	111								362 12.3%
Mechanical Failure - Metra/PSA	83	55	62	42	111								353 12.0%
Non-Locomotive Equipment Failure - Metra/PSA	12	8	15	10	23								68 2.3%
Primary	6	8	5	7	7								33 1.1%
Secondary	6	0	10	3	16								35 1.2%
Locomotive Failure - Metra/PSA	71	47	47	32	88								285 9.7%
Primary	18	21	20	17	29								105 3.6%
Secondary	53	26	27	15	59								180 6.1%
Mechanical Failure - Foreign	1	6	2	0	0								9 0.3%
Passenger Train Interference - TOTAL	16	2	2	5	19								44 1.5%
Passenger Train Interference - Metra/PSA	9	0	1	2	2								14 0.5%
Passenger Train Interference - Foreign	7	2	1	3	17								30 1.0%
Accident - TOTAL	74	32	26	101	18								251 8.5%
Accident - Metra/PSA	69	32	23	98	9								231 7.9%
Accident - Foreign	5	0	3	3	9								20 0.7%
Track Work - TOTAL	78	17	29	72	98								294 10.0%
Track Work - Metra/PSA	78	17	29	72	98								294 10.0%
Track Work - Foreign	0	0	0	0	0								0 0.0%
Human Error - TOTAL	68	140	54	69	56								387 13.2%
Human Error - Metra/PSA	58	50	37	49	41								235 8.0%
Human Error - Foreign	10	90	17	20	15								152 5.2%
Sick, Injured, Unruly Passenger - TOTAL	27	28	40	27	20								142 4.8%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34	27	20								136 4.6%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0								6 0.2%
Weather - TOTAL	97	25	59	4	2								187 6.4%
Weather - Metra/PSA	96	25	59	4	2								186 6.3%
Weather - Foreign	1	0	0	0	0								1 0.0%
Passenger Loading - TOTAL	33	7	12	10	36								98 3.3%
Lift Deployment - TOTAL	17	8	8	13	23								69 2.3%
Obstruction/Debris - TOTAL	66	44	43	35	78								266 9.1%
Catenary Failure - TOTAL	6	1	4	1	0								12 0.4%
Other - TOTAL	15	15	24	20	22								96 3.3%
TOTAL TRAINS DELAYED	752	492	514	557	623								2,938 100.0%
Total Metra/PSA Delays	655	313	410	401	514								2,293 78.0%
Total Foreign Carrier Delays	97	179	104	156	109								645 22.0%

Data for current month is final (06/21/17) 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 - May	
Freight Interference - TOTAL	82	53	43	44	72	73	82	108	78	48	65	94	294	9.7%
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	100	3.3%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	69	2.3%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	31	1.0%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	194	6.4%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	145	4.8%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	49	1.6%
Signal/Switch Failure - TOTAL	154	155	123	98	145	143	108	63	105	67	110	120	675	22.2%
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	432	14.2%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	212	7.0%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	220	7.2%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	243	8.0%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	188	6.2%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	55	1.8%
Mechanical Failure - TOTAL	107	68	131	43	80	88	120	78	114	64	71	88	429	14.1%
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	428	14.1%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	73	2.4%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	38	1.2%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	35	1.1%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	355	11.7%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	102	3.3%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	253	8.3%
Mechanical Failure - Foreign	0	0	0	1	0	0	0	0	0	0	0	8	1	0.0%
Passenger Train Interference - TOTAL	22	12	3	4	19	14	12	11	5	10	4	38	60	2.0%
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	25	0.8%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	35	1.1%
Accident - TOTAL	59	15	62	48	86	29	18	55	34	10	79	49	270	8.9%
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	243	8.0%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	27	0.9%
Track Work - TOTAL	40	21	36	44	141	114	99	133	177	75	59	61	282	9.3%
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	277	9.1%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	5	0.2%
Human Error - TOTAL	38	33	21	53	23	112	47	93	50	45	49	71	168	5.5%
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	127	4.2%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	41	1.3%
Sick, Injured, Unruly Passenger - TOTAL	20	39	27	50	44	32	29	43	30	24	35	34	180	5.9%
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	180	5.9%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	2	0	0	0	0	1	0	0	0.0%
Weather - TOTAL	129	132	28	1	4	23	49	38	1	4	13	132	294	9.7%
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	294	9.7%
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	108	3.5%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	55	1.8%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	164	5.4%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	19	0.6%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	47	1.5%
TOTAL TRAINS DELAYED	707	599	572	451	716	791	769	781	729	455	647	836	3,045	100.0%
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	2,399	78.8%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	646	21.2%

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

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 06/22/2017

'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 - May
Freight Interference - TOTAL	-29	15	26	35	-23								24 1.2%
Freight Interference - Peak	-12	4	9	16	-14								3 0.2%
Primary	-15	6	6	4	-3								-2 0.0%
Secondary	3	-2	3	12	-11								5 0.2%
Freight Interference - Off-Peak	-17	11	17	19	-9								21 0.9%
Primary	-6	9	13	5	-5								16 0.7%
Secondary	-11	2	4	14	-4								5 0.2%
Signal/Switch Failure - TOTAL	-36	-111	-43	-19	-54								-263 -8.1%
Signal/Switch Failure - Metra/PSA	31	-91	-25	-32	-12								-129 -3.9%
Primary	34	-9	-11	-16	-8								-10 -0.1%
Secondary	-3	-82	-14	-16	-4								-119 -3.8%
Signal/Switch Failure - Foreign	-67	-20	-18	13	-42								-134 -4.3%
Primary	-58	-15	-10	-17	-34								-134 -4.3%
Secondary	-9	-5	-8	30	-8								0 0.1%
Mechanical Failure - TOTAL	-23	-7	-67	-1	31								-67 -1.8%
Mechanical Failure - Metra/PSA	-24	-13	-69	0	31								-75 -2.0%
Non-Locomotive Equipment Failure - Metra/PSA	-13	-11	5	4	10								-5 -0.1%
Primary	-5	-1	1	2	-2								-5 -0.1%
Secondary	-8	-10	4	2	12								0 0.0%
Locomotive Failure - Metra/PSA	-11	-2	-74	-4	21								-70 -2.0%
Primary	-10	3	-4	3	11								3 0.2%
Secondary	-1	-5	-70	-7	10								-73 -2.2%
Mechanical Failure - Foreign	1	6	2	-1	0								8 0.3%
Passenger Train Interference - TOTAL	-6	-10	-1	1	0								-16 -0.5%
Passenger Train Interference - Metra/PSA	-4	-5	-1	-1	0								-11 -0.3%
Passenger Train Interference - Foreign	-2	-5	0	2	0								-5 -0.1%
Accident - TOTAL	15	17	-36	53	-68								-19 -0.3%
Accident - Metra/PSA	20	18	-39	57	-68								-12 -0.1%
Accident - Foreign	-5	-1	3	-4	0								-7 -0.2%
Track Work - TOTAL	38	-4	-7	28	-43								12 0.7%
Track Work - Metra/PSA	38	-4	-7	31	-41								17 0.9%
Track Work - Foreign	0	0	0	-3	-2								-5 -0.2%
Human Error - TOTAL	30	107	33	16	33								219 7.7%
Human Error - Metra/PSA	28	25	22	7	26								108 3.8%
Human Error - Foreign	2	82	11	9	7								111 3.8%
Sick, Injured, Unruly Passenger - TOTAL	7	-11	13	-23	-24								-38 -1.1%
Sick, Injured, Unruly Passenger - Metra/PSA	7	-11	7	-23	-24								-44 -1.3%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0								6 0.2%
Weather - TOTAL	-32	-107	31	3	-2								-107 -3.3%
Weather - Metra/PSA	-33	-107	31	3	-2								-108 -3.3%
Weather - Foreign	1	0	0	0	0								1 0.0%
Passenger Loading - TOTAL	20	0	-17	2	-15								-10 -0.2%
Lift Deployment - TOTAL	6	-6	-4	10	8								14 0.5%
Obstruction/Debris - TOTAL	48	14	3	-19	56								102 3.7%
Catenary Failure - TOTAL	-3	-2	2	0	-4								-7 -0.2%
Other - TOTAL	10	-2	9	20	12								49 1.7%
TOTAL TRAINS DELAYED	45	-107	-58	106	-93								-107
Total Metra/PSA Delays	144	-184	-88	55	-33								-106
Total Foreign Carrier Delays	-99	77	30	51	-60								-1

Data for current month is final (06/21/17) 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 June 2015 and May 2017**

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Jun-15	12	0	0	0	4	11	1	9	3	24	0	6	20	90
Jul-15	23	0	0	0	1	11	0	3	12	17	0	18	31	116
Aug-15	13	0	0	0	8	7	5	11	4	17	0	0	24	89
Sep-15	20	0	0	0	1	9	6	11	14	6	0	2	15	84
Oct-15	16	0	0	0	0	5	4	3	3	11	0	3	15	60
Nov-15	15	0	0	0	7	0	4	7	5	10	3	6	8	65
Dec-15	9	0	0	0	2	4	4	5	4	5	0	1	15	49
Jan-16	14	0	0	0	1	4	23	5	24	3	0	3	5	82
Feb-16	11	0	0	0	3	5	6	1	16	2	0	2	7	53
Mar-16	4	0	0	0	2	6	8	6	2	7	0	0	8	43
Apr-16	13	0	0	0	3	8	4	3	1	8	0	1	3	44
May-16	17	0	0	0	0	9	12	7	0	8	0	1	18	72
Total	167	0	0	0	32	79	77	71	88	118	3	43	169	847
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
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
Total	165	0	0	0	32	78	77	93	38	113	13	40	217	866

Data for current month is final (06/21/17) 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								6	1.33%
Electric ML	0	0	0	0	1								1	0.48%
Electric BI	0	0	0	0	0								0	0.00%
Electric SC	0	1	0	0	0								1	0.81%
HER	0	0	0	0	0								0	0.00%
Milw N	3	2	1	1	4								11	3.64%
Milw W	3	0	2	1	0								6	2.17%
NCS	0	0	0	0	0								0	0.00%
RI	2	1	0	2	4								9	2.84%
SWS	0	0	0	0	0								0	0.00%
UP N	2	1	1	0	4								8	3.74%
UP NW	2	1	0	6	3								12	4.49%
UP W	4	1	4	3	3								15	4.10%
Total Lift Delays	17	8	8	13	23								69	2.35%
ALL DELAYS													2,938	

Data for current month is final (06/21/17) version from TOPS.

2016

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

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION

May 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
Peak *														
6-10	33	3	1	2	1	20	9	8	7	3	17	14	18	136
11-15	9	1	0	0	1	5	4	1	15	2	5	3	5	51
16-20	10	2	0	0	0	1	1	3	2	1	3	1	9	33
21+	14	0	0	1	3	1	0	0	4	7	3	1	8	42
Annulled	<u>7</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>15</u>
Sub-Total	73	6	1	4	5	28	15	12	31	14	28	20	40	277
Off-Peak **														
6-10	16	8	4	6	0	23	7	5	37	13	8	7	25	159
11-15	4	5	2	0	1	4	3	5	13	3	4	12	16	72
16-20	5	1	0	2	1	2	2	0	4	3	2	1	4	27
21+	4	10	0	5	2	3	7	0	15	15	5	4	6	76
Annulled	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>3</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>12</u>
Sub-Total	31	24	6	15	4	34	22	10	71	35	19	24	51	346
May 2017 Total														
6-10	49	11	5	8	1	43	16	13	44	16	25	21	43	295
11-15	13	6	2	0	2	9	7	6	28	5	9	15	21	123
16-20	15	3	0	2	1	3	3	3	6	4	5	2	13	60
21+	18	10	0	6	5	4	7	0	19	22	8	5	14	118
Annulled	<u>9</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>4</u>	<u>0</u>	<u>5</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>27</u>
TOTAL	104	30	7	19	9	62	37	22	102	49	47	44	91	623
2017 Year-to-Date														
6-10	192	113	57	64	7	153	92	65	151	66	86	93	192	1,331
11-15	72	32	10	13	8	63	65	29	57	23	47	49	77	545
16-20	39	17	9	8	7	32	25	12	28	10	21	19	38	265
21+	95	46	9	29	14	42	70	26	70	50	52	85	56	644
Annulled	<u>52</u>	<u>0</u>	<u>0</u>	<u>9</u>	<u>0</u>	<u>12</u>	<u>25</u>	<u>7</u>	<u>11</u>	<u>5</u>	<u>8</u>	<u>21</u>	<u>3</u>	<u>153</u>
TOTAL	450	208	85	123	36	302	277	139	317	154	214	267	366	2,938
PERCENT COMPOSITION OF DELAYS BY RANGE OF DURATION														
Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
May 2017 Total														
6-10	47.1%	36.7%	71.4%	42.1%	11.1%	69.4%	43.2%	59.1%	43.1%	32.7%	53.2%	47.7%	47.3%	47.4%
11-15	12.5%	20.0%	28.6%	0.0%	22.2%	14.5%	18.9%	27.3%	27.5%	10.2%	19.1%	34.1%	23.1%	19.7%
16-20	14.4%	10.0%	0.0%	10.5%	11.1%	4.8%	8.1%	13.6%	5.9%	8.2%	10.6%	4.5%	14.3%	9.6%
21+	17.3%	33.3%	0.0%	31.6%	55.6%	6.5%	18.9%	0.0%	18.6%	44.9%	17.0%	11.4%	15.4%	18.9%
Annulled	<u>8.7%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>15.8%</u>	<u>0.0%</u>	<u>4.8%</u>	<u>10.8%</u>	<u>0.0%</u>	<u>4.9%</u>	<u>4.1%</u>	<u>0.0%</u>	<u>2.3%</u>	<u>0.0%</u>	<u>4.3%</u>
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2017 Year-to-Date Delays By Duration														
6-10	42.7%	54.3%	67.1%	52.0%	19.4%	50.7%	33.2%	46.8%	47.6%	42.9%	40.2%	34.8%	52.5%	45.3%
11-15	16.0%	15.4%	11.8%	10.6%	22.2%	20.9%	23.5%	20.9%	18.0%	14.9%	22.0%	18.4%	21.0%	18.6%
16-20	8.7%	8.2%	10.6%	6.5%	19.4%	10.6%	9.0%	8.6%	8.8%	6.5%	9.8%	7.1%	10.4%	9.0%
21+	21.1%	22.1%	10.6%	23.6%	38.9%	13.9%	25.3%	18.7%	22.1%	32.5%	24.3%	31.8%	15.3%	21.9%
Annulled	<u>11.6%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>7.3%</u>	<u>0.0%</u>	<u>4.0%</u>	<u>9.0%</u>	<u>5.0%</u>	<u>3.5%</u>	<u>3.2%</u>	<u>3.7%</u>	<u>7.9%</u>	<u>0.8%</u>	<u>5.2%</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 (06/21/17) 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	
May 2017														
Peak *	15.3	11.2	10.0	14.0	39.6	9.4	10.4	10.8	14.2	29.2	12.3	14.6	15.8	14.8
Off-Peak **	15.0	23.5	9.0	16.8	23.8	12.0	20.3	10.2	16.2	21.9	16.6	19.8	12.9	16.6
All	15.3	21.0	9.1	16.3	32.6	10.8	16.1	10.5	15.6	23.9	14.0	17.5	14.1	15.8
2017 Year-to-Date														
Peak *	22.8	17.3	11.7	16.6	26.0	16.9	20.5	16.5	18.5	19.2	15.7	44.9	14.6	20.7
Off-Peak **	16.4	14.5	11.4	15.2	19.3	14.7	17.7	16.0	15.6	21.5	18.9	30.6	14.2	17.4
All	20.2	15.6	11.5	15.5	24.1	15.6	18.8	16.3	17.0	20.8	17.5	36.7	14.3	18.8

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 (06/21/17) version from TOPS.