

COMMUTER RAIL SYSTEM
ON-TIME PERFORMANCE REPORT

April 2017



COMMUTER RAIL ON-TIME PERFORMANCE

April 2017

This report presents an analysis of the April 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 April 2017, Metra operated 16,602 scheduled trains, including scheduled "extras", if any. 557 of these trains were delayed (late or annulled), representing an on-time performance rate of 96.6%. 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 April 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 April 2017. Of the 557 delays systemwide in April 2017, all but 225 (40%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Aprils, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in April 2017, 5 fewer delays than the average over the previous five Aprils were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 2,315 delays in 2017, all but 1,080 (47%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during April 2017. Table 8.b shows the average frequencies over the previous five Aprils, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 557 delays systemwide in April 2017, 17 more than the average over the previous five Aprils. Table 9.a shows delays from the beginning of the year through April 2017. Table 9.b shows the average frequencies from the beginning of the year through April 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 April of 2017, a total of 2,315 trains were delayed, compared to 2,329 trains delayed in the same four 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 April 2017 freight operations delayed 79 trains systemwide, compared to 44 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 13 trains were delayed by lift deployment in April 2017.

A review of April 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 40.8% of all late trains. Table 14 shows that the average length of delay was 21.9 minutes in April 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
April 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	1,080	45	95.8%	803	28	96.5%	1,883	73	96.1%	140	1	99.3%	90	4	95.6%	2,113	78	96.3%
Elec -ML	897	4	99.6%	683	7	99.0%	1,580	11	99.3%	230	4	98.3%	100	5	95.0%	1,910	20	99.0%
-BI	280	1	99.6%	460	6	98.7%	740	7	99.1%	150	3	98.0%		--		890	10	98.9%
-SC	<u>340</u>	<u>1</u>	99.7%	<u>740</u>	<u>6</u>	99.2%	<u>1,080</u>	<u>7</u>	99.4%	<u>240</u>	<u>10</u>	95.8%	<u>100</u>	<u>0</u>	100.0%	<u>1,420</u>	<u>17</u>	98.8%
Subtotal	1,517	6	99.6%	1,883	19	99.0%	3,400	25	99.3%	620	17	97.3%	200	5	97.5%	4,220	47	98.9%
Heritage	120	4	96.7%	20	1	95.0%	140	5	96.4%	--			--			140	5	96.4%
Milw -N	499	21	95.8%	701	28	96.0%	1,200	49	95.9%	120	6	95.0%	100	0	100.0%	1,420	55	96.1%
-W	<u>539</u>	<u>20</u>	96.3%	<u>621</u>	<u>32</u>	94.8%	<u>1,160</u>	<u>52</u>	95.5%	<u>120</u>	<u>6</u>	95.0%	<u>90</u>	<u>2</u>	97.8%	<u>1,370</u>	<u>60</u>	95.6%
Subtotal	1,038	41	96.1%	1,322	60	95.5%	2,360	101	95.7%	240	12	95.0%	190	2	98.9%	2,790	115	95.9%
NCS	220	10	95.5%	220	11	95.0%	440	21	95.2%	--			--			440	21	95.2%
RI	720	7	99.0%	761	25	96.7%	1,481	32	97.8%	160	3	98.1%	140	0	100.0%	1,781	35	98.0%
SWS	220	1	99.5%	380	15	96.1%	600	16	97.3%	30	1	96.7%	--			630	17	97.3%
UP -N	600	12	98.0%	801	16	98.0%	1,401	28	98.0%	130	14	89.2%	90	6	93.3%	1,621	48	97.0%
-NW	660	35	94.7%	641	39	93.9%	1,301	74	94.3%	120	16	86.7%	75	4	94.7%	1,496	94	93.7%
-W	<u>540</u>	<u>40</u>	92.6%	<u>641</u>	<u>51</u>	92.0%	<u>1,181</u>	<u>91</u>	92.3%	<u>100</u>	<u>4</u>	96.0%	<u>90</u>	<u>2</u>	97.8%	<u>1,371</u>	<u>97</u>	92.9%
Subtotal	1,800	87	95.2%	2,083	106	94.9%	3,883	193	95.0%	350	34	90.3%	255	12	95.3%	4,488	239	94.7%
SYSTEM	6,715	201	97.0%	7,472	265	96.5%	14,187	466	96.7%	1,540	68	95.6%	875	23	97.4%	16,602	557	96.6%

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

Delays data for most recent month is final (05/18/17) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls\OTPbyServPeriod&Line 05/22/17

TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN- APR	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	96.3%	96.0%
	2013	95.8	93.9	94.6	93.3	96.0	88.5	95.2	97.1	97.2	94.0	95.8	92.2	94.4%	94.5%
	2014	78.6	84.6	95.6	92.0	82.2	82.0	94.1	91.4	94.1	92.2	95.2	94.1	87.7%	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	93.9%	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	95.0%	94.0%
	2017	95.9	95.6	96.2	96.3									96.0%	96.0%
	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	93.5%	93.7%
Electric	2012	93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	97.2%	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	98.4%	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	96.4%	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	97.2%	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									97.9%	97.9%
	2012-2016 average	95.9	97.4	98.3	98.5	98.3	97.4	96.1	97.8	97.7	97.7	97.6	98.1	97.5%	97.6%
Heritage	2012	95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	96.9%	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	97.1%	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	84.3%	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	91.8%	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	94.7%	94.2%
	2017	93.9	94.3	96.9	96.4									95.4%	95.4%
	2012-2016 average	90.7	91.5	94.3	95.1	93.3	92.7	92.7	93.9	93.7	97.1	93.5	93.9	93.0%	93.6%
Milw - N	2012	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	95.2%	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	94.5%	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	85.6%	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	92.2%	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	95.5%	94.6%
	2017	95.3	95.6	96.5	96.1									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	92.6%	93.7%
Milw - W	2012	94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	95.6%	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	95.1%	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	90.6%	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	94.8%	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									95.7%	95.7%
	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	94.2%	94.7%
NCS	2012	94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	92.2%	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	91.9%	92.2%
	2014	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	85.7%	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	91.1%	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	93.2%	94.5%
	2017	92.6	91.6	95.1	95.2									93.7%	93.7%
	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	90.8%	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- APR	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	95.5%	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	96.6%	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	88.7%	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	97.6%	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	95.3%	96.1%	
	2017	95.2	97.1	97.8	98.0										97.1%	97.1%
	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	94.7%	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	95.2%	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	96.7%	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	90.8%	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	94.1%	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	96.6%	95.2%	
	2017	96.2	94.1	96.4	97.3										96.0%	96.0%
	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	94.7%	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	97.3%	96.4%	
	2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9	97.0	96.5	96.9	98.0	97.5%	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	94.7%	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	97.7%	97.8%	
	2017	95.6	99.0	98.3	97.0									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	97.4%	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	96.2%	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	93.2%	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	95.5%	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	97.8%	96.3%	
	2017	96.2	97.4	98.1	93.7									96.4%	96.4%	
	2012-2016 average	94.3	95.5	96.8	97.4	95.5	94.8	94.5	96.2	97.1	95.6	95.2	95.6	96.0%	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	95.2%	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	96.0%	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	92.0%	94.4%	
	2015	93.9	91.1	96.1	96.3	97.5	93.9	93.9	95.9	96.0	96.1	97.3	96.8	94.4%	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	96.3%	95.1%	
	2017	95.0	96.5	96.1	92.9									95.1%	95.1%	
	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	94.8%	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	96.2%	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	91.7%	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	95.5%	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	96.6%	96.1%	
	2017	95.6	96.9	97.2	96.6									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	95.3%	95.6%	

Delays data for most recent month is final (05/18/17) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls|OTPhyLine&Month 5/22/2017

'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
April 2017

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
MN	2158 75% OT	Mon, Apr 03	8	A	8" WAIT ON #2149 TO CLEAR
		Fri, Apr 07	15	GA1	13" MULTIPLE AMTRAK SWITCH FAILURES
		Thu, Apr 13	9	D	4" WAIT ON #2149 TO CLEAR; 5" STOP SIGNAL, CN
		Mon, Apr 17	10	DD	14" WAITING ON #2149 TO CLEAR, GRAYSLAKE; STOPPED, CN XING
		Wed, Apr 26	7	A	10" WAIT FOR #2149 TO CLEAR, GRAYSLAKE
MW	2244 80% OT	Tue, Apr 04	8	RF	6" STOP SIGNAL, NORTHWEST BRIDGE; 3" MEETING W/B TRAINS
		Wed, Apr 05	26	J	24" PD REMOVED INTOXICATED PASSENGER, HANOVER PARK
		Fri, Apr 07	18	GA1	18" MULTIPLE AMTRAK SWITCH FAILURES
		Wed, Apr 12	7	D	14" DELAY ENROUTE USED 2 MAIN B-12 TO GALEWOOD
MW	2254 80% OT	Fri, Apr 07	11	D	13" DELAY STOP SIGNAL @ SPAULDING WAITING ON CP PATROL TO CLEAR
		Mon, Apr 10	18	RO1	18" LATE TURN FROM #2249
		Mon, Apr 24	15	R	16" TRAIN WENT INTO EMERGENCY(LOST IT'S AIR), CREW WALKED TRAIN PERFORMED SECOND AIR TEST THEN PROCEEDED, BIG TIMBER
		Thu, Apr 27	17	J	5" FARE DISPUTE W/PASSENGER, GALEWOOD; 6" MEET PD WHO IN TURN DID REMOVE PASSENGER, WESTERN; 5" PASSENGER LOADING, EN ROUTE
MW	2255 70% OT	Mon, Apr 10	18	RO1	15" LATE TURN FROM #2254
		Thu, Apr 13	36	KP	31" STOPPED @ SHORT OF HANOVER PARK DUE TO METRA PD HAD TRAIN TRAFFIC STOPPED LOOKING FOR SUICIDAL SUBJECT; 10" BARTLETT EAST
		Fri, Apr 14	10	UF	9" LATE DEPARTING MECHANICAL ISSUES, CUS
		Fri, Apr 21	12	J	14" WAIT FOR METRA PD TO REMOVE PASSENGER, BENSSENVILLE
		Mon, Apr 24	10	K1	12" LATE TURN FROM #2254
		Thu, Apr 27	11	J1	11" LATE TURN FROM #2254
RI	509 75% OT	Fri, Apr 14	7	D	7M @ 66TH CT. WAITING ON SIGNAL CHANGE DUE TO IA150 NOT ANSWERING THEIR RADIO.
		Wed, Apr 19	8	CC	12M @ BI WAITING FOR RI 510 TO CLEAR DUE TO SINGLE TRACKING AROUND SPERRY CAR.
		Fri, Apr 21	7	CC	2M LATE DEP. LSS FOR PASSENGER. 4M @ GRESHAM WAITING ON SIGNAL. 2M @ 66TH CT. CHANGING X-ING OVER AROUND TRACK DEPT. 2M 103RD FOR SPERRY CAR
		Mon, Apr 24	6	G	4M @ GRESHAM WAITING ON RI508 TO CLEAR, 4M B/W EJE AND CP RICHARDS DUE TO SIGNAL PROBLEMS AT MILLER ST.
		Wed, Apr 26	6	E1	8M @ BI WAITING ON RI 508 TO CLEAR DUE TO MECHANICAL PROBLEMS AND UNLOADING PASSENGERS
SWS	842 80% OT	Tue, Apr 04	8	D1	8M @ ASHBURN WAITING FOR SWS839
		Fri, Apr 07	7	D	7" X-TRAFFIC, CP518
		Tue, Apr 18	13	D	DELAYED 11 MINUTES AT CP518 BY 23K-16 WITH 7500 FEET OF TRAIN AND NS9595 AS A LEADING ENGINE.
		Wed, Apr 26	19	DE1	27M LATE OFF OF FLIP FROM SW837 DUE TO BRC FREIGHT TRAIN FIRE
UPNW	656 80% OT	Fri, Apr 07	20	C	10" WAIT @ BARRINGTON FOR EC5 CAR TO CLEAR SEEGER BEFORE HE WASABLE TO GET PERMISSION TO LEAVE & STOP @ DEVAL WAIT FOR IT TO CLEAR MAYFAIR
		Thu, Apr 13	103	M1	95" #627 STRUCK PEDESTRIAN @ MP19.7
		Fri, Apr 14	12	LI	12" STOPPED SHORT OF ARLINGTON PARK ACCT POLICE ACTIVITY
		Fri, Apr 28	13	M1	13" LATE TURN DUE TO #642 STRIKING PEDESTRIAN
UPW	45 80% OT	Tue, Apr 11	23	E1	23" FOLLOWING #41
		Wed, Apr 19	14	DE	14" MPRCBV IN EMERGENCY BROKEN DRAWBAR ON TK2, BETWEEN KRESS & PECK; WAIT FOR #58 TO CLEAR TURNER
		Mon, Apr 24	10	RF1	10" FOLLOWING LATE #43 THAT WAS DELAYED BY ZG3SKP
		Thu, Apr 27	11	K	11" STOPPED AT MP 7.62 FOR BRIDGE STRIKE, WAITED TO GET PERMISSION FROM STRUCTURES BEFORE PROCEEDING
UPW	47 80% OT	Tue, Apr 11	7	D	7" WAIT FOR IG3AH CROSSING ONTO ROCKWELL SUB, KEDZIE
		Wed, Apr 19	10	DE1	10" TRAIN CONTROL BEHIND #45 BROKEN DOWN FREIGHT
		Mon, Apr 24	8	RF1	8" FOLLOWING TRAINS DUE TO #43 BEING DELAYED BY ZG3SKP @ VALE
		Thu, Apr 27	8	K1	8" RAIN TRAIN CONTROL BEHIND M45;ALSO HEAVY PASS UNLOADING AT WINFIELD
UPW	49 80% OT	Tue, Apr 11	12	D1	12" STOPPED BEHIND #47, KEDZIE; RAN TRAIN CONTROL FOLLOWING #47
		Wed, Apr 19	11	DE1	11" TRAIN CONTROL BEHIND #47 DUE TO BROKEN DOWN FREIGHT
		Mon, Apr 24	10	RF1	10" FOLLOWING TRAINS AHEAD DUE TO #43 DELAYED BY ZG3SKP
		Thu, Apr 27	10	K1	10" RAN CONTROL BEHIND M47
UPW	51 80% OT	Tue, Apr 11	10	D1	10" TRAIN CONTROL FOLLOWING #49
		Wed, Apr 19	10	DE1	10" TRAIN CONTROL BEHIND #49 DUE TO BROKEN DOWN FREIGHT
		Mon, Apr 24	7	RF1	7" FOLLOWING TRAINS AHEAD DUE TO #43 DELAYED BY ZG3SKP
		Thu, Apr 27	9	K1	9" RAN TRAIN CONTROL BEHIND M49
UPW	54 75% OT	Tue, Apr 04	26	KP1	28" LATE ARRIVAL OF #35, ELBURN
		Wed, Apr 05	10	CC1	9" LATE TURN OFF M35 EQUIPMENT; 1 ADA LIFT, 40 MPH @M25 SLOW ORDER & CROSS TRAFFIC @ WESTERN AVE
		Thu, Apr 06	9	D	9" U75081-04, CN @ WEST CHICAGO; SLOW PASSENGER LOADING, EN ROUTE
		Fri, Apr 21	11	RF	11" COULD NOT REACH ANYONE ON RADIO FOR FORM C 54294 SO CONDUCTOR STARTED FLAGGING TRAIN ACROSS 5 CROSSINGS BEFORE DISP RELEASED
		Mon, Apr 24	7	I	8" SLOW PASSENGER LOADING, SEVERAL STOPS; 40MPH SPEED RESTRICTION, MP17.75-16

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

Line	Train	Date	Minutes		Delay Code	Delay Explanation	
			Late	Delay			
UPW	55	Tue, Apr 11	8		D1	8" TRAIN CONTROL FOLLOWING #53	
		74% OT	Wed, Apr 12	20		H	11" LATE ARRIVAL FROM CAL AVE YD, ENGINE RELAYED FROM CPT INSTEAD OF M19A NO ENGINES AVAILABLE, #55 TOWED TO CAL AVE BY M351 ENGINEER
			Wed, Apr 19	11		DE1	11" TRAIN CONTROL BEHIND #43 DUE TO BROKEN DOWN FREIGHT
			Tue, Apr 25	10		RO1	9" FOLLOWING #53; XH, MP15.90
			Thu, Apr 27	9		K1	5" RAN TRAIN CONTROL BEHIND M53
UPW	65	Thu, Apr 06	13		KP1	13" STOPPED @ BELLWOOD DUE TO EMERGENCY RESPONDERS @ WOLF RD	
		80% OT	Fri, Apr 14	10		D	10" TRAIN CONTROL FOLLOWING IG2G3R, WEST CHICAGO-PECK
			Wed, Apr 19	13		DE1	23" WAIT FOR CNAWK9(SHORT TIME) TO CLEAR DUE TO BROKEN DOWN FREIGHT
			Thu, Apr 27	25		G	25" STOPPED AT KEDZIE FOR A TRACK LIGHT, ENGINEER SWITCHED ENDSTO BACK UP PASS WESTERN IN ORDER TO COME BACK UP A DIFFERENT ROUTE

Data is final (05/18/17) version from TOPS.

P:\ONTIME\report\WeekdayTrainsBelow85% table.xlsx\PrintCopy 05/22/2017

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

P:\QNTIME\JFDelayClassification\Tbl2012_v2016md.xlsx\IncidentCodeTable_Lnd 08/16/2016

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

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

Effective July 1, 2016

Revised July 19, 2016

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

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

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

April 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	27	10	6	2	2	18	26	3	22	3	36	26	44	225	40%
Semi-controllable	0	0	0	0	2	29	25	18	4	11	0	5	34	128	23%
Uncontrollable	51	10	4	15	1	8	9	0	9	3	12	63	19	204	37%
TOTAL TRAINS DELAYED	78	20	10	17	5	55	60	21	35	17	48	94	97	557	100%

April - 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	46.4	14.8	3.4	8.4	1.4	37.2	16.6	14.6	29.6	9.8	15.6	12.8	19.0	229.6	43%
Semi-controllable	20.0	0.0	0.0	0.0	4.0	11.6	9.6	17.6	5.2	14.0	2.0	5.0	15.2	104.2	19%
Uncontrollable	31.4	24.6	6.2	6.4	1.2	8.2	17.6	5.2	30.2	3.8	23.6	23.2	24.2	205.8	38%
TOTAL TRAINS DELAYED	97.8	39.4	9.6	14.8	6.6	57.0	43.8	37.4	65.0	27.6	41.2	41.0	58.4	539.6	100%

April 2017 Divergence From April 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	-19.4	-4.8	2.6	-6.4	0.6	-19.2	9.4	-11.6	-7.6	-6.8	20.4	13.2	25.0	-4.6	-26%
Semi-controllable	-20.0	0.0	0.0	0.0	-2.0	17.4	15.4	0.4	-1.2	-3.0	-2.0	0.0	18.8	23.8	137%
Uncontrollable	19.6	-14.6	-2.2	8.6	-0.2	-0.2	-8.6	-5.2	-21.2	-0.8	-11.6	39.8	-5.2	-1.8	-10%
TOTAL TRAINS DELAYED	-19.8	-19.4	0.4	2.2	-1.6	-2.0	16.2	-16.4	-30.0	-10.6	6.8	53.0	38.6	17.4	100%

January-April 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	190	110	48	55	10	105	113	37	113	38	98	59	104	1,080	47%
Semi-controllable	11	0	0	0	11	53	43	53	12	51	4	18	87	343	15%
Uncontrollable	145	68	30	49	6	82	84	27	90	16	65	146	84	892	39%
TOTAL TRAINS DELAYED	346	178	78	104	27	240	240	117	215	105	167	223	275	2,315	100%

Data for current month is final (05/18/17) version from TOPS.

P:\ONTIME\report\DelaysByControl.xls>LastMonthRespByLine

05/22/2017

TABLE 7: NUMBER OF DELAYS BY DATE
April 2017

WEEKDAY	3	4	5	6	7	10	11	12	13	14	17	18	19	20	21	24	25	26	27	28	TOTAL
	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	
BNSF	1	3	0	0	2	2	1	0	0	1	2	3	0	38	0	3	4	2	0	11	73
Elec -ML	1	0	0	0	0	0	0	0	3	0	1	1	0	0	0	2	0	1	2	0	11
-BI	1	1	0	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0	1	0	7
-SC	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	1	1	1	7
Heritage	0	0	1	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5
Milw -N	9	0	3	2	21	1	0	0	2	1	2	0	0	0	3	0	1	1	1	2	49
-W	0	2	2	0	12	6	0	4	2	3	7	1	0	0	1	4	0	1	2	5	52
NCS	3	0	5	1	6	0	0	1	0	0	0	0	0	2	0	0	0	0	2	1	21
RI	0	1	3	2	1	0	0	0	0	7	2	1	1	0	4	4	0	4	2	0	32
SWS	1	1	0	3	1	0	0	1	1	3	0	2	0	0	0	0	0	3	0	0	16
UP -N	0	4	1	1	1	0	0	0	0	0	6	0	0	0	0	3	4	2	0	6	28
-NW	7	0	2	2	4	0	0	0	25	8	0	0	6	0	0	0	1	0	1	18	74
-W	0	2	5	4	2	1	2	5	0	1	0	2	16	11	3	10	8	1	9	2	91
SYSTEM	23	15	22	15	51	11	11	12	33	24	22	12	23	51	14	26	18	16	21	46	466

SATURDAY	1	8	15	22	29	TOTAL	SUNDAY/HOLIDAY	2	9	16	23	30	TOTAL
BNSF	0	0	0	1	0	1	BNSF	0	2	1	1	0	4
Elec -ML	3	0	0	0	1	4	Elec -ML	2	1	0	2	0	5
-BI	0	1	1	0	1	3	-BI	-	-	-	-	-	0
-SC	0	1	9	0	0	10	-SC	0	0	0	0	0	0
Heritage	-	-	-	-	-	-	Heritage	-	-	-	-	-	0
Milw -N	0	2	3	0	1	6	Milw -N	0	0	0	0	0	0
-W	0	1	0	0	5	6	-W	0	1	0	0	1	2
NCS	-	-	-	-	-	-	NCS	-	-	-	-	-	0
RI	1	1	0	0	1	3	RI	0	0	0	0	0	0
SWS	0	1	0	0	0	1	SWS	-	-	-	-	-	0
UP -N	0	1	1	11	1	14	UP -N	1	2	0	2	1	6
-NW	0	1	2	1	12	16	-NW	0	0	2	0	2	4
-W	0	0	0	1	3	4	-W	0	0	0	0	2	2
SYSTEM	4	9	16	14	25	68	SYSTEM	3	6	3	5	6	23

Data is final (05/18/17) version from TOPS.

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

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	0	0	0	0	1	8	9	12	4	7	0	4	34	79
Freight Interference - Peak	0	0	0	0	1	1	2	4	1	1	0	0	15	25
Primary	0	0	0	0	1	0	2	2	1	1	0	0	4	11
Secondary	0	0	0	0	0	1	0	2	0	0	0	0	11	14
Freight Interference - Off-Peak	0	0	0	0	0	7	7	8	3	6	0	4	19	54
Primary	0	0	0	0	0	5	5	5	3	3	0	3	10	34
Secondary	0	0	0	0	0	2	2	3	0	3	0	1	9	20
Signal/Switch Failure - TOTAL	5	4	4	1	1	24	22	6	4	5	0	1	2	79
Signal/Switch Failure - Metra/PSA	5	4	4	1	0	2	5	0	4	1	0	0	2	28
Primary	5	3	3	1	0	2	5	0	4	1	0	0	1	25
Secondary	0	1	1	0	0	0	0	0	0	0	0	0	1	3
Signal/Switch Failure - Foreign	0	0	0	0	1	22	17	6	0	4	0	1	0	51
Primary	0	0	0	0	0	2	9	0	0	4	0	1	0	16
Secondary	0	0	0	0	1	20	8	6	0	0	0	0	0	35
Mechanical Failure - TOTAL	5	2	0	0	0	4	1	1	10	1	3	4	11	42
Mechanical Failure - Metra/PSA	5	2	0	0	0	4	1	1	10	1	3	4	11	42
Non-Locomotive Equipment Failure - Metra/PSA	4	2	0	0	0	0	0	0	1	0	1	2	0	10
Primary	3	1	0	0	0	0	0	0	1	0	1	1	0	7
Secondary	1	1	0	0	0	0	0	0	0	0	0	1	0	3
Locomotive Failure - Metra/PSA	1	0	0	0	0	4	1	1	9	1	2	2	11	32
Primary	1	0	0	0	0	3	1	1	5	1	1	2	2	17
Secondary	0	0	0	0	0	1	0	0	4	0	1	0	9	15
Mechanical Failure - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Train Interference - TOTAL	0	0	0	1	1	3	0	0	0	0	0	0	0	5
Passenger Train Interference - Metra/PSA	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Passenger Train Interference - Foreign	0	0	0	1	1	1	0	0	0	0	0	0	0	3
Accident - TOTAL	38	3	1	9	0	0	0	0	0	0	7	40	3	101
Accident - Metra/PSA	38	3	1	9	0	0	0	0	0	0	7	40	0	98
Accident - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Track Work - TOTAL	5	3	2	1	0	1	6	1	4	1	20	16	12	72
Track Work - Metra/PSA	5	3	2	1	0	1	6	1	4	1	20	16	12	72
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	13	0	0	0	1	7	9	1	3	0	11	6	18	69
Human Error - Metra/PSA	5	0	0	0	1	7	7	0	3	0	10	6	10	49
Human Error - Foreign	8	0	0	0	0	0	2	1	0	0	1	0	8	20
Sick, Injured, Unruly Passenger - TOTAL	1	3	0	2	0	6	6	0	2	0	4	2	1	27
Sick, Injured, Unruly Passenger - Metra/PSA	1	3	0	2	0	6	6	0	2	0	4	2	1	27
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	0	1	1	0	0	1	0	0	0	0	0	1	0	4
Weather - Metra/PSA	0	1	1	0	0	1	0	0	0	0	0	1	0	4
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	1	0	2	1	0	0	0	0	0	0	1	3	2	10
Lift Deployment - TOTAL	0	0	0	0	0	1	1	0	2	0	0	6	3	13
Obstruction/Debris - TOTAL	10	0	0	0	1	0	3	0	5	3	0	3	10	35
Catenary Failure - TOTAL	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Other - TOTAL	0	3	0	2	0	0	3	0	1	0	2	8	1	20
TOTAL TRAINS DELAYED	78	20	10	17	5	55	60	21	35	17	48	94	97	557
Total Metra/PSA Delays	70	20	10	16	2	24	32	2	31	6	47	89	52	401
Total Foreign Carrier Delays	8	0	0	1	3	31	28	19	4	11	1	5	45	156

Data for current month is final (05/18/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 05/22/2017

'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 8.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
April - 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	16.2	0.0	0.0	0.0	2.6	8.4	7.8	15.4	4.8	11.8	2.0	5.0	15.2	89.2
Freight Interference - Peak	5.4	0.0	0.0	0.0	2.2	2.4	1.4	6.2	1.6	2.4	0.4	2.8	3.4	28.2
<i>Primary</i>	2.2	0.0	0.0	0.0	2.0	1.8	1.0	4.4	0.8	2.4	0.2	1.4	1.4	17.6
<i>Secondary</i>	3.2	0.0	0.0	0.0	0.2	0.6	0.4	1.8	0.8	0.0	0.2	1.4	2.0	10.6
Freight Interference - Off-Peak	10.8	0.0	0.0	0.0	0.4	6.0	6.4	9.2	3.2	9.4	1.6	2.2	11.8	61.0
<i>Primary</i>	9.2	0.0	0.0	0.0	0.4	5.4	4.6	7.0	2.8	7.6	1.2	1.8	8.8	48.8
<i>Secondary</i>	1.6	0.0	0.0	0.0	0.0	0.6	1.8	2.2	0.4	1.8	0.4	0.4	3.0	12.2
Signal/Switch Failure - TOTAL	12.8	3.0	1.4	1.2	1.4	19.0	9.2	8.6	4.2	3.8	3.2	3.0	9.2	80.0
Signal/Switch Failure - Metra/PSA	7.4	3.0	1.4	1.2	0.0	15.8	7.8	6.0	3.6	0.8	3.2	3.0	9.2	62.4
<i>Primary</i>	5.6	2.6	1.2	1.0	0.0	9.4	5.4	4.6	2.8	0.4	1.8	2.2	3.0	40.0
<i>Secondary</i>	1.8	0.4	0.2	0.2	0.0	6.4	2.4	1.4	0.8	0.4	1.4	0.8	6.2	22.4
Signal/Switch Failure - Foreign	5.4	0.0	0.0	0.0	1.4	3.2	1.4	2.6	0.6	3.0	0.0	0.0	0.0	17.6
<i>Primary</i>	4.8	0.0	0.0	0.0	1.4	1.8	0.2	0.8	0.4	2.0	0.0	0.0	0.0	11.4
<i>Secondary</i>	0.6	0.0	0.0	0.0	0.0	1.4	1.2	1.8	0.2	1.0	0.0	0.0	0.0	6.2
Mechanical Failure - TOTAL	10.0	4.4	1.4	0.6	0.0	5.4	4.0	2.4	8.8	3.2	2.2	3.0	3.0	48.4
Mechanical Failure - Metra/PSA	10.0	3.0	0.8	0.4	0.0	5.4	4.0	2.4	8.4	3.2	2.2	3.0	3.0	45.8
Non-Locomotive Equipment Failure - Metra/PSA	2.6	3.0	0.8	0.4	0.0	0.0	0.8	0.4	1.0	0.4	0.6	1.6	0.6	12.2
<i>Primary</i>	1.4	1.4	0.6	0.2	0.0	0.0	0.4	0.2	0.4	0.2	0.6	0.8	0.4	6.6
<i>Secondary</i>	1.2	1.6	0.2	0.2	0.0	0.0	0.4	0.2	0.6	0.2	0.0	0.8	0.2	5.6
Locomotive Failure - Metra/PSA	7.4	0.0	0.0	0.0	0.0	5.4	3.2	2.0	7.4	2.8	1.6	1.4	2.4	33.6
<i>Primary</i>	3.0	0.0	0.0	0.0	0.0	2.2	1.4	0.8	2.4	1.2	0.8	0.8	1.2	13.8
<i>Secondary</i>	4.4	0.0	0.0	0.0	0.0	3.2	1.8	1.2	5.0	1.6	0.8	0.6	1.2	19.8
Mechanical Failure - Foreign	0.0	1.4	0.6	0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	2.6
Passenger Train Interference - TOTAL	0.4	0.0	0.0	0.2	0.4	3.4	0.4	1.2	0.6	0.2	0.0	0.0	0.4	7.2
Passenger Train Interference - Metra/PSA	0.0	0.0	0.0	0.2	0.0	2.6	0.4	1.2	0.6	0.0	0.0	0.0	0.4	5.4
Passenger Train Interference - Foreign	0.4	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.8
Accident - TOTAL	4.2	3.8	1.6	1.2	0.0	0.0	6.0	2.8	3.6	0.0	4.4	4.4	7.0	39.0
Accident - Metra/PSA	4.2	3.8	1.6	1.2	0.0	0.0	5.8	2.0	3.6	0.0	4.4	3.8	7.0	37.4
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	0.0	0.0	0.0	0.6	0.0	1.6
Track Work - TOTAL	13.0	4.8	0.4	4.0	0.0	5.0	2.0	4.0	8.8	0.2	6.4	3.2	2.8	54.6
Track Work - Metra/PSA	13.0	4.8	0.4	4.0	0.0	5.0	1.6	3.8	8.8	0.2	6.4	3.2	2.8	54.0
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.6
Human Error - TOTAL	13.0	1.8	0.6	1.6	1.0	7.4	3.0	0.8	7.8	4.4	3.6	2.4	2.8	50.2
Human Error - Metra/PSA	10.6	1.8	0.6	1.6	0.4	4.0	1.8	0.4	7.8	1.0	3.6	2.0	2.2	37.8
Human Error - Foreign	2.4	0.0	0.0	0.0	0.6	3.4	1.2	0.4	0.0	3.4	0.0	0.4	0.6	12.4
Sick, Injured, Unruly Passenger - TOTAL	2.2	5.4	0.8	1.6	0.2	2.8	4.2	1.2	4.4	1.2	3.0	3.6	4.2	34.8
Sick, Injured, Unruly Passenger - Metra/PSA	1.8	5.4	0.8	1.6	0.2	2.8	4.2	1.2	4.2	1.2	3.0	3.6	4.2	34.2
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	18.8	0.6	0.6	0.0	0.2	2.4	0.8	0.2	6.2	0.6	5.8	6.6	4.4	47.2
Weather - Metra/PSA	18.8	0.6	0.6	0.0	0.2	2.4	0.8	0.2	6.2	0.6	5.8	6.6	4.4	47.2
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	1.4	6.0	1.2	1.8	0.0	1.0	0.6	0.0	7.0	0.6	1.8	1.4	2.8	25.6
Lift Deployment - TOTAL	1.8	0.0	0.0	0.0	0.0	0.4	0.8	0.0	2.2	0.0	1.2	1.0	1.0	8.4
Obstruction/Debris - TOTAL	3.4	6.0	1.4	1.2	0.8	1.6	4.4	0.4	6.0	1.2	4.6	6.2	4.0	41.2
Catenary Failure - TOTAL	0.0	1.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Other - TOTAL	0.6	2.2	0.2	0.6	0.0	0.2	0.6	0.4	0.6	0.4	3.0	1.2	1.6	11.6
TOTAL TRAINS DELAYED	97.8	39.4	9.6	14.8	6.6	57.0	43.8	37.4	65.0	27.6	41.2	41.0	58.4	539.6
Total Metra/PSA Delays	73.0	38.0	9.0	14.6	1.6	41.2	32.8	18.0	59.0	9.2	39.2	35.0	42.6	413.2
Total Foreign Carrier Delays	24.8	1.4	0.6	0.2	5.0	15.8	11.0	19.4	6.0	18.4	2.0	6.0	15.8	126.4

Data for latest month is final (05/13/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 05/22/2017

'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 8.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
April 2017 Divergence From April 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	-16.2	0.0	0.0	0.0	-1.6	-0.4	1.2	-3.4	-0.8	-4.8	-2.0	-1.0	18.8	-10.2
Freight Interference - Peak	-5.4	0.0	0.0	0.0	-1.2	-1.4	0.6	-2.2	-0.6	-1.4	-0.4	-2.8	11.6	-3.2
<i>Primary</i>	-2.2	0.0	0.0	0.0	-1.0	-1.8	1.0	-2.4	0.2	-1.4	-0.2	-1.4	2.6	-6.6
<i>Secondary</i>	-3.2	0.0	0.0	0.0	-0.2	0.4	-0.4	0.2	-0.8	0.0	-0.2	-1.4	9.0	3.4
Freight Interference - Off-Peak	-10.8	0.0	0.0	0.0	-0.4	1.0	0.6	-1.2	-0.2	-3.4	-1.6	1.8	7.2	-7.0
<i>Primary</i>	-9.2	0.0	0.0	0.0	-0.4	-0.4	0.4	-2.0	0.2	-4.6	-1.2	1.2	1.2	-14.8
<i>Secondary</i>	-1.6	0.0	0.0	0.0	0.0	1.4	0.2	0.8	-0.4	1.2	-0.4	0.6	6.0	7.8
Signal/Switch Failure - TOTAL	-7.8	1.0	2.6	-0.2	-0.4	5.0	12.8	-2.6	-0.2	1.2	-3.2	-2.0	-7.2	-1.0
Signal/Switch Failure - Metra/PSA	-2.4	1.0	2.6	-0.2	0.0	-13.8	-2.8	-6.0	0.4	0.2	-3.2	-3.0	-7.2	-34.4
<i>Primary</i>	-0.6	0.4	1.8	0.0	0.0	-7.4	-0.4	-4.6	1.2	0.6	-1.8	-2.2	-2.0	-15.0
<i>Secondary</i>	-1.8	0.6	0.8	-0.2	0.0	-6.4	-2.4	-1.4	-0.8	-0.4	-1.4	-0.8	-5.2	-19.4
Signal/Switch Failure - Foreign	-5.4	0.0	0.0	0.0	-0.4	18.8	15.6	3.4	-0.6	1.0	0.0	1.0	0.0	33.4
<i>Primary</i>	-4.8	0.0	0.0	0.0	-1.4	0.2	8.8	-0.8	-0.4	2.0	0.0	1.0	0.0	4.6
<i>Secondary</i>	-0.6	0.0	0.0	0.0	1.0	18.6	6.8	4.2	-0.2	-1.0	0.0	0.0	0.0	28.8
Mechanical Failure - TOTAL	-5.0	-2.4	-1.4	-0.6	0.0	-1.4	-3.0	-1.4	1.2	-2.2	0.8	1.0	8.0	-6.4
Mechanical Failure - Metra/PSA	-5.0	-1.0	-0.8	-0.4	0.0	-1.4	-3.0	-1.4	1.6	-2.2	0.8	1.0	8.0	-3.8
Non-Locomotive Equipment Failure - Metra/PSA	1.4	-1.0	-0.8	-0.4	0.0	0.0	-0.8	-0.4	0.0	-0.4	0.4	0.4	-0.6	-2.2
<i>Primary</i>	1.6	-0.4	-0.6	-0.2	0.0	0.0	-0.4	-0.2	0.6	-0.2	0.4	0.2	-0.4	0.4
<i>Secondary</i>	-0.2	-0.6	-0.2	-0.2	0.0	0.0	-0.4	-0.2	-0.6	-0.2	0.0	0.2	-0.2	-2.6
Locomotive Failure - Metra/PSA	-6.4	0.0	0.0	0.0	0.0	-1.4	-2.2	-1.0	1.6	-1.8	0.4	0.6	8.6	-1.6
<i>Primary</i>	-2.0	0.0	0.0	0.0	0.0	0.8	-0.4	0.2	2.6	-0.2	0.2	1.2	0.8	3.2
<i>Secondary</i>	-4.4	0.0	0.0	0.0	0.0	-2.2	-1.8	-1.2	-1.0	-1.6	0.2	-0.6	7.8	-4.8
Mechanical Failure - Foreign	0.0	-1.4	-0.6	-0.2	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	-2.6
Passenger Train Interference - TOTAL	-0.4	0.0	0.0	0.8	0.6	-0.4	-0.4	-1.2	-0.6	-0.2	0.0	0.0	-0.4	-2.2
Passenger Train Interference - Metra/PSA	0.0	0.0	0.0	-0.2	0.0	-0.6	-0.4	-1.2	-0.6	0.0	0.0	0.0	-0.4	-3.4
Passenger Train Interference - Foreign	-0.4	0.0	0.0	1.0	0.6	0.2	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	1.2
Accident - TOTAL	33.8	-0.8	-0.6	7.8	0.0	0.0	-6.0	-2.8	-3.6	0.0	2.6	35.6	-4.0	62.0
Accident - Metra/PSA	33.8	-0.8	-0.6	7.8	0.0	0.0	-5.8	-2.0	-3.6	0.0	2.6	36.2	-7.0	60.6
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.8	0.0	0.0	0.0	-0.6	3.0	1.4
Track Work - TOTAL	-8.0	-1.8	1.6	-3.0	0.0	-4.0	4.0	-3.0	-4.8	0.8	13.6	12.8	9.2	17.4
Track Work - Metra/PSA	-8.0	-1.8	1.6	-3.0	0.0	-4.0	4.4	-2.8	-4.8	0.8	13.6	12.8	9.2	18.0
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.2	0.0	0.0	0.0	0.0	0.0	-0.6
Human Error - TOTAL	0.0	-1.8	-0.6	-1.6	0.0	-0.4	6.0	0.2	-4.8	-4.4	7.4	3.6	15.2	18.8
Human Error - Metra/PSA	-5.6	-1.8	-0.6	-1.6	0.6	3.0	5.2	-0.4	-4.8	-1.0	6.4	4.0	7.8	11.2
Human Error - Foreign	5.6	0.0	0.0	0.0	-0.6	-3.4	0.8	0.6	0.0	-3.4	1.0	-0.4	7.4	7.6
Sick, Injured, Unruly Passenger - TOTAL	-1.2	-2.4	-0.8	0.4	-0.2	3.2	1.8	-1.2	-2.4	-1.2	1.0	-1.6	-3.2	-7.8
Sick, Injured, Unruly Passenger - Metra/PSA	-0.8	-2.4	-0.8	0.4	-0.2	3.2	1.8	-1.2	-2.2	-1.2	1.0	-1.6	-3.2	-7.2
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	-18.8	0.4	0.4	0.0	-0.2	-1.4	-0.8	-0.2	-6.2	-0.6	-5.8	-5.6	-4.4	-43.2
Weather - Metra/PSA	-18.8	0.4	0.4	0.0	-0.2	-1.4	-0.8	-0.2	-6.2	-0.6	-5.8	-5.6	-4.4	-43.2
Weather - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passenger Loading - TOTAL	-0.4	-6.0	0.8	-0.8	0.0	-1.0	-0.6	0.0	-7.0	-0.6	-0.8	1.6	-0.8	-15.6
Lift Deployment - TOTAL	-1.8	0.0	0.0	0.0	0.0	0.6	0.2	0.0	-0.2	0.0	-1.2	5.0	2.0	4.6
Obstruction/Debris - TOTAL	6.6	-6.0	-1.4	-1.2	0.2	-1.6	-1.4	-0.4	-1.0	1.8	-4.6	-3.2	6.0	-6.2
Catenary Failure - TOTAL	0.0	-0.4	0.0	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2
Other - TOTAL	-0.6	0.8	-0.2	1.4	0.0	-0.2	2.4	-0.4	0.4	-0.4	-1.0	6.8	-0.6	8.4
TOTAL TRAINS DELAYED	-19.8	-19.4	0.4	2.2	-1.6	-2.0	16.2	-16.4	-30.0	-10.6	6.8	53.0	38.6	17.4
Total Metra/PSA Delays	-3.0	-18.0	1.0	1.4	0.4	-17.2	-0.8	-16.0	-28.0	-3.2	7.8	54.0	9.4	-12.2
Total Foreign Carrier Delays	-16.8	-1.4	-0.6	0.8	-2.0	15.2	17.0	-0.4	-2.0	-7.4	-1.0	-1.0	29.2	29.6

Data for current month is final (05/18/17) version from TOPS.

P:\ONTIME\report[DelaysByCause.xlsx]LastMonthByLine 05/22/2017

'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 9.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
January - April 2017

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	13	0	0	0	9	29	24	36	12	37	5	18	86	269
Freight Interference - Peak	5	0	0	0	7	4	5	15	3	11	1	3	35	89
Primary	4	0	0	0	4	3	5	11	3	8	1	2	14	55
Secondary	1	0	0	0	3	1	0	4	0	3	0	1	21	34
Freight Interference - Off-Peak	8	0	0	0	2	25	19	21	9	26	4	15	51	180
Primary	7	0	0	0	2	19	15	18	8	17	4	11	33	134
Secondary	1	0	0	0	0	6	4	3	1	9	0	4	18	46
Signal/Switch Failure - TOTAL	35	47	25	27	3	31	42	27	23	23	9	9	20	321
Signal/Switch Failure - Metra/PSA	31	47	25	27	0	6	22	10	23	6	9	8	17	231
Primary	17	32	21	20	0	6	15	7	17	5	2	5	9	156
Secondary	14	15	4	7	0	0	7	3	6	1	7	3	8	75
Signal/Switch Failure - Foreign	4	0	0	0	3	25	20	17	0	17	0	1	3	90
Primary	3	0	0	0	2	4	12	5	0	10	0	1	2	39
Secondary	1	0	0	0	1	21	8	12	0	7	0	0	1	51
Mechanical Failure - TOTAL	37	7	2	2	2	35	27	9	49	1	40	17	23	251
Mechanical Failure - Metra/PSA	35	3	2	2	1	33	27	9	49	1	40	17	23	242
Non-Locomotive Equipment Failure - Metra/PSA	9	3	2	2	1	2	4	3	3	0	1	6	9	45
Primary	6	1	1	0	1	1	3	1	3	0	1	2	6	26
Secondary	3	2	1	2	0	1	1	2	0	0	0	4	3	19
Locomotive Failure - Metra/PSA	26	0	0	0	0	31	23	6	46	1	39	11	14	197
Primary	10	0	0	0	0	14	10	3	21	1	6	8	3	76
Secondary	16	0	0	0	0	17	13	3	25	0	33	3	11	121
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	1	6	0	3	0	1	0	0	1	25
Passenger Train Interference - Metra/PSA	0	0	3	1	0	4	0	3	0	0	0	0	1	12
Passenger Train Interference - Foreign	5	1	0	3	1	2	0	0	0	1	0	0	0	13
Accident - TOTAL	61	3	1	9	0	2	25	7	25	3	14	79	4	233
Accident - Metra/PSA	61	3	1	9	0	2	25	7	20	0	14	79	1	222
Accident - Foreign	0	0	0	0	0	0	0	0	5	3	0	0	3	11
Track Work - TOTAL	19	48	10	14	0	5	8	1	12	11	22	25	21	196
Track Work - Metra/PSA	19	48	10	14	0	5	8	1	12	11	22	25	21	196
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	90	7	6	3	7	50	49	11	24	12	29	7	36	331
Human Error - Metra/PSA	31	7	6	3	1	29	29	0	24	2	27	7	28	194
Human Error - Foreign	59	0	0	0	6	21	20	11	0	10	2	0	8	137
Sick, Injured, Unruly Passenger - TOTAL	16	18	2	5	0	19	13	3	6	0	10	15	15	122
Sick, Injured, Unruly Passenger - Metra/PSA	10	18	2	5	0	19	13	3	6	0	10	15	15	116
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	22	22	8	14	4	28	23	5	30	1	15	7	6	185
Weather - Metra/PSA	22	22	8	14	4	27	23	5	30	1	15	7	6	184
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	3	5	5	5	0	2	1	0	5	0	12	6	18	62
Lift Deployment - TOTAL	2	0	0	1	0	7	6	0	5	0	4	9	12	46
Obstruction/Debris - TOTAL	33	11	11	11	1	23	14	11	16	11	1	18	27	188
Catenary Failure - TOTAL	0	4	2	6	0	0	0	0	0	0	0	0	0	12
Other - TOTAL	10	5	3	3	0	3	8	4	8	5	6	13	6	74
TOTAL TRAINS DELAYED	346	178	78	104	27	240	240	117	215	105	167	223	275	2,315
Total Metra/PSA Delays	257	173	78	101	7	160	176	53	198	37	160	204	175	1,779
Total Foreign Carrier Delays	89	5	0	3	20	80	64	64	17	68	7	19	100	536

Data for current month is final (05/18/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx|YTDByLine 05/22/2017

'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 9.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
January - April - 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	74.6	0.0	0.0	0.0	13.4	55.6	51.6	54.6	26.0	47.8	7.2	19.0	67.6	417.4	
Freight Interference - Peak	29.4	0.0	0.0	0.0	13.0	12.6	11.8	19.4	7.8	15.4	1.2	9.6	15.8	136.0	
<i>Primary</i>	19.2	0.0	0.0	0.0	12.4	8.6	8.2	13.0	4.6	12.2	0.6	5.2	8.4	92.4	
<i>Secondary</i>	10.2	0.0	0.0	0.0	0.6	4.0	3.6	6.4	3.2	3.2	0.6	4.4	7.4	43.6	
Freight Interference - Off-Peak	45.2	0.0	0.0	0.0	0.4	43.0	39.8	35.2	18.2	32.4	6.0	9.4	51.8	281.4	
<i>Primary</i>	38.0	0.0	0.0	0.0	0.4	28.6	28.0	29.0	15.6	26.4	3.4	7.0	42.6	219.0	
<i>Secondary</i>	7.2	0.0	0.0	0.0	0.0	14.4	11.8	6.2	2.6	6.0	2.6	2.4	9.2	62.4	
Signal/Switch Failure - TOTAL	80.4	23.0	11.2	9.0	7.2	87.0	55.2	38.2	34.8	33.0	10.6	15.4	44.4	449.4	
Signal/Switch Failure - Metra/PSA	43.0	23.0	11.2	9.0	1.4	69.8	44.2	22.4	32.2	6.8	10.4	13.6	43.8	330.8	
<i>Primary</i>	28.6	13.4	8.2	7.4	1.2	35.4	26.2	12.8	22.6	4.6	6.8	8.2	14.6	190.0	
<i>Secondary</i>	14.4	9.6	3.0	1.6	0.2	34.4	18.0	9.6	9.6	2.2	3.6	5.4	29.2	140.8	
Signal/Switch Failure - Foreign	37.4	0.0	0.0	0.0	5.8	17.2	11.0	15.8	2.6	26.2	0.2	1.8	0.6	118.6	
<i>Primary</i>	30.8	0.0	0.0	0.0	5.4	13.0	8.2	8.4	1.2	17.4	0.2	0.6	0.6	85.8	
<i>Secondary</i>	6.6	0.0	0.0	0.0	0.4	4.2	2.8	7.4	1.4	8.8	0.0	1.2	0.0	32.8	
Mechanical Failure - TOTAL	51.2	12.0	4.2	3.8	2.0	60.4	37.2	15.2	58.0	12.0	28.8	27.6	25.0	337.4	
Mechanical Failure - Metra/PSA	50.8	10.4	3.6	3.6	2.0	56.0	37.0	15.2	57.6	12.0	28.8	27.6	24.8	329.4	
Non-Locomotive Equipment Failure - Metra/PSA	17.0	10.4	3.6	3.6	1.0	9.8	7.6	3.2	7.4	5.8	8.2	4.8	7.8	90.2	
<i>Primary</i>	5.8	4.8	1.6	2.2	0.6	2.6	3.4	1.2	2.8	2.0	3.0	1.8	4.0	35.8	
<i>Secondary</i>	11.2	5.6	2.0	1.4	0.4	7.2	4.2	2.0	4.6	3.8	5.2	3.0	3.8	54.4	
Locomotive Failure - Metra/PSA	33.8	0.0	0.0	0.0	1.0	46.2	29.4	12.0	50.2	6.2	20.6	22.8	17.0	239.2	
<i>Primary</i>	11.6	0.0	0.0	0.0	0.8	11.2	10.8	2.8	13.8	2.6	6.4	7.2	7.2	74.4	
<i>Secondary</i>	22.2	0.0	0.0	0.0	0.2	35.0	18.6	9.2	36.4	3.6	14.2	15.6	9.8	164.8	
Mechanical Failure - Foreign	0.4	1.6	0.6	0.2	0.0	4.4	0.2	0.0	0.4	0.0	0.0	0.0	0.2	8.0	
Passenger Train Interference - TOTAL	4.8	3.2	1.0	2.0	1.8	27.2	5.0	6.0	5.8	2.0	0.6	1.6	5.6	66.6	
Passenger Train Interference - Metra/PSA	0.6	1.8	0.2	1.6	0.0	20.0	4.6	6.0	5.0	0.6	0.6	1.6	5.4	48.0	
Passenger Train Interference - Foreign	4.2	1.4	0.8	0.4	1.8	7.2	0.4	0.0	0.8	1.4	0.0	0.0	0.2	18.6	
Accident - TOTAL	52.2	7.2	2.6	1.8	0.6	22.2	22.0	8.0	16.8	1.6	17.0	35.2	10.8	198.0	
Accident - Metra/PSA	39.2	7.2	2.6	1.8	0.6	20.4	21.6	5.8	15.6	1.6	17.0	34.6	9.8	177.8	
Accident - Foreign	13.0	0.0	0.0	0.0	0.0	1.8	0.4	2.2	1.2	0.0	0.0	0.6	1.0	20.2	
Track Work - TOTAL	45.4	21.0	9.0	9.2	0.4	14.4	10.0	9.2	15.6	0.4	12.4	9.2	8.8	165.0	
Track Work - Metra/PSA	41.8	21.0	9.0	9.2	0.4	14.4	9.6	9.0	15.6	0.2	12.4	9.2	8.8	160.6	
Track Work - Foreign	3.6	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.2	0.0	0.0	0.0	4.4	
Human Error - TOTAL	56.6	11.4	4.4	6.6	5.2	32.8	18.2	10.4	26.6	11.2	18.0	14.0	13.2	228.6	
Human Error - Metra/PSA	40.6	8.8	4.2	5.8	1.6	20.0	10.8	5.2	26.6	2.2	16.6	11.4	8.8	162.6	
Human Error - Foreign	16.0	2.6	0.2	0.8	3.6	12.8	7.4	5.2	0.0	9.0	1.4	2.6	4.4	66.0	
Sick, Injured, Unruly Passenger - TOTAL	9.2	23.0	4.0	5.8	0.6	11.0	14.2	1.8	9.6	2.2	10.4	16.2	12.0	120.0	
Sick, Injured, Unruly Passenger - Metra/PSA	8.8	23.0	4.0	5.8	0.6	11.0	14.2	1.8	9.4	2.2	10.4	16.2	12.0	119.4	
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	140.2	89.0	26.4	31.0	3.4	74.4	67.2	20.6	92.2	16.8	61.6	67.8	59.6	750.2	
Weather - Metra/PSA	139.2	89.0	26.4	31.0	3.0	72.2	66.6	20.6	92.2	16.0	61.6	67.8	59.2	744.8	
Weather - Foreign	1.0	0.0	0.0	0.0	0.4	2.2	0.6	0.0	0.0	0.8	0.0	0.0	0.4	5.4	
Passenger Loading - TOTAL	11.2	23.8	6.0	6.8	0.0	15.8	15.0	0.4	30.4	0.8	13.8	10.4	13.4	147.8	
Lift Deployment - TOTAL	10.4	0.2	0.0	0.2	0.0	12.4	6.6	0.8	9.2	0.0	3.8	5.8	11.6	61.0	
Obstruction/Debris - TOTAL	18.4	12.8	3.4	10.2	1.8	15.8	20.4	3.0	15.0	7.0	13.2	19.0	11.8	151.8	
Catenary Failure - TOTAL	0.0	17.4	3.2	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	26.8	
Other - TOTAL	19.6	9.6	1.8	4.0	0.0	6.4	7.0	3.2	6.2	6.4	9.4	6.6	13.2	93.4	
TOTAL TRAINS DELAYED	574.2	253.6	77.2	96.4	36.4	435.4	329.6	171.4	346.2	141.2	206.8	248.0	297.0	3,213.4	
Total Metra/PSA Delays	423.6	248.0	75.6	95.0	11.4	334.2	257.6	93.4	315.0	55.8	198.0	224.0	222.6	2,554.2	
Total Foreign Carrier Delays	150.6	5.6	1.6	1.4	25.0	101.2	72.0	78.0	31.2	85.4	8.8	24.0	74.4	659.2	

Data for latest month is final (05/13/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\YTDBByLine 05/22/2017

'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 9.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
January - April 2017 Divergence From January - April 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	-61.6	0.0	0.0	0.0	-4.4	-26.6	-27.6	-18.6	-14.0	-10.8	-2.2	-1.0	18.4	-148.4
Freight Interference - Peak	-24.4	0.0	0.0	0.0	-6.0	-8.6	-6.8	-4.4	-4.8	-4.4	-0.2	-6.6	19.2	-47.0
Primary	-15.2	0.0	0.0	0.0	-8.4	-5.6	-3.2	-2.0	-1.6	-4.2	0.4	-3.2	5.6	-37.4
Secondary	-9.2	0.0	0.0	0.0	2.4	-3.0	-3.6	-2.4	-3.2	-0.2	-0.6	-3.4	13.6	-9.6
Freight Interference - Off-Peak	-37.2	0.0	0.0	0.0	1.6	-18.0	-20.8	-14.2	-9.2	-6.4	-2.0	5.6	-0.8	-101.4
Primary	-31.0	0.0	0.0	0.0	1.6	-9.6	-13.0	-11.0	-7.6	-9.4	0.6	4.0	-9.6	-85.0
Secondary	-6.2	0.0	0.0	0.0	0.0	-8.4	-7.8	-3.2	-1.6	3.0	-2.6	1.6	8.8	-16.4
Signal/Switch Failure - TOTAL	-45.4	24.0	13.8	18.0	-4.2	-56.0	-13.2	-11.2	-11.8	-10.0	-1.6	-6.4	-24.4	-128.4
Signal/Switch Failure - Metra/PSA	-12.0	24.0	13.8	18.0	-1.4	-63.8	-22.2	-12.4	-9.2	-0.8	-1.4	-5.6	-26.8	-99.8
Primary	-11.6	18.6	12.8	12.6	-1.2	-29.4	-11.2	-5.8	-5.6	0.4	-4.8	-3.2	-5.6	-34.0
Secondary	-0.4	5.4	1.0	5.4	-0.2	-34.4	-11.0	-6.6	-3.6	-1.2	3.4	-2.4	-21.2	-65.8
Signal/Switch Failure - Foreign	-33.4	0.0	0.0	0.0	-2.8	7.8	9.0	1.2	-2.6	-9.2	-0.2	-0.8	2.4	-28.6
Primary	-27.8	0.0	0.0	0.0	-3.4	-9.0	3.8	-3.4	-1.2	-7.4	-0.2	0.4	1.4	-46.8
Secondary	-5.6	0.0	0.0	0.0	0.6	16.8	5.2	4.6	-1.4	-1.8	0.0	-1.2	1.0	18.2
Mechanical Failure - TOTAL	-14.2	-5.0	-2.2	-1.8	0.0	-25.4	-10.2	-6.2	-9.0	-11.0	11.2	-10.6	-2.0	-86.4
Mechanical Failure - Metra/PSA	-15.8	-7.4	-1.6	-1.6	-1.0	-23.0	-10.0	-6.2	-8.6	-11.0	11.2	-10.6	-1.8	-87.4
Non-Locomotive Equipment Failure - Metra/PSA	-8.0	-7.4	-1.6	-1.6	0.0	-7.8	-3.6	-0.2	-4.4	-5.8	-7.2	1.2	1.2	-45.2
Primary	0.2	-3.8	-0.6	-2.2	0.4	-1.6	-0.4	-0.2	0.2	-2.0	-2.0	0.2	2.0	-9.8
Secondary	-8.2	-3.6	-1.0	0.6	-0.4	-6.2	-3.2	0.0	-4.6	-3.8	-5.2	1.0	-0.8	-35.4
Locomotive Failure - Metra/PSA	-7.8	0.0	0.0	0.0	-1.0	-15.2	-6.4	-6.0	-4.2	-5.2	18.4	-11.8	-3.0	-42.2
Primary	-1.6	0.0	0.0	0.0	-0.8	2.8	-0.8	0.2	7.2	-1.6	-0.4	0.8	-4.2	1.6
Secondary	-6.2	0.0	0.0	0.0	-0.2	-18.0	-5.6	-6.2	-11.4	-3.6	18.8	-12.6	1.2	-43.8
Mechanical Failure - Foreign	1.6	2.4	-0.6	-0.2	1.0	-2.4	-0.2	0.0	-0.4	0.0	0.0	0.0	-0.2	1.0
Passenger Train Interference - TOTAL	0.2	-2.2	2.0	2.0	-0.8	-21.4	-5.0	-3.0	-5.8	-1.0	-0.6	-1.6	-4.6	-41.6
Passenger Train Interference - Metra/PSA	-0.6	-1.8	2.8	-0.6	0.0	-16.0	-4.6	-3.0	-5.0	-0.6	-0.6	-1.6	-4.4	-36.0
Passenger Train Interference - Foreign	0.8	-0.4	-0.8	2.6	-0.8	-5.2	-0.4	0.0	-0.8	-0.4	0.0	0.0	-0.2	-5.6
Accident - TOTAL	8.8	-4.2	-1.6	7.2	-0.6	-20.2	3.0	-1.0	8.2	1.4	-3.0	43.8	-6.8	35.0
Accident - Metra/PSA	21.8	-4.2	-1.6	7.2	-0.6	-18.4	3.4	1.2	4.4	-1.6	-3.0	44.4	-8.8	44.2
Accident - Foreign	-13.0	0.0	0.0	0.0	0.0	-1.8	-0.4	-2.2	3.8	3.0	0.0	-0.6	2.0	-9.2
Track Work - TOTAL	-26.4	27.0	1.0	4.8	-0.4	-9.4	-2.0	-8.2	-3.6	10.6	9.6	15.8	12.2	31.0
Track Work - Metra/PSA	-22.8	27.0	1.0	4.8	-0.4	-9.4	-1.6	-8.0	-3.6	10.8	9.6	15.8	12.2	35.4
Track Work - Foreign	-3.6	0.0	0.0	0.0	0.0	0.0	-0.4	-0.2	0.0	-0.2	0.0	0.0	0.0	-4.4
Human Error - TOTAL	33.4	-4.4	1.6	-3.6	1.8	17.2	30.8	0.6	-2.6	0.8	11.0	-7.0	22.8	102.4
Human Error - Metra/PSA	-9.6	-1.8	1.8	-2.8	-0.6	9.0	18.2	-5.2	-2.6	-0.2	10.4	-4.4	19.2	31.4
Human Error - Foreign	43.0	-2.6	-0.2	-0.8	2.4	8.2	12.6	5.8	0.0	1.0	0.6	-2.6	3.6	71.0
Sick, Injured, Unruly Passenger - TOTAL	6.8	-5.0	-2.0	-0.8	-0.6	8.0	-1.2	1.2	-3.6	-2.2	-0.4	-1.2	3.0	2.0
Sick, Injured, Unruly Passenger - Metra/PSA	1.2	-5.0	-2.0	-0.8	-0.6	8.0	-1.2	1.2	-3.4	-2.2	-0.4	-1.2	3.0	-3.4
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	-118.2	-67.0	-18.4	-17.0	0.6	-46.4	-44.2	-15.6	-62.2	-15.8	-46.6	-60.8	-53.6	-565.2
Weather - Metra/PSA	-117.2	-67.0	-18.4	-17.0	1.0	-45.2	-43.6	-15.6	-62.2	-15.0	-46.6	-60.8	-53.2	-560.8
Weather - Foreign	-1.0	0.0	0.0	0.0	-0.4	-1.2	-0.6	0.0	0.0	-0.8	0.0	0.0	-0.4	-4.4
Passenger Loading - TOTAL	-8.2	-18.8	-1.0	-1.8	0.0	-13.8	-14.0	-0.4	-25.4	-0.8	-1.8	-4.4	4.6	-85.8
Lift Deployment - TOTAL	-8.4	-0.2	0.0	0.8	0.0	-5.4	-0.6	-0.8	-4.2	0.0	0.2	3.2	0.4	-15.0
Obstruction/Debris - TOTAL	14.6	-1.8	7.6	0.8	-0.8	7.2	-6.4	8.0	1.0	4.0	-12.2	-1.0	15.2	36.2
Catenary Failure - TOTAL	0.0	-13.4	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-14.8
Other - TOTAL	-9.6	-4.6	1.2	-1.0	0.0	-3.4	1.0	0.8	1.8	-1.4	-3.4	6.4	-7.2	-19.4
TOTAL TRAINS DELAYED	-228.2	-75.6	0.8	7.6	-9.4	-195.4	-89.6	-54.4	-131.2	-36.2	-39.8	-25.0	-22.0	-898.4
Total Metra/PSA Delays	-166.6	-75.0	2.4	6.0	-4.4	-174.2	-81.6	-40.4	-117.0	-18.8	-38.0	-20.0	-47.6	-775.2
Total Foreign Carrier Delays	-61.6	-0.6	-1.6	1.6	-5.0	-21.2	-8.0	-14.0	-14.2	-17.4	-1.8	-5.0	25.6	-123.2

Data for current month is final (05/18/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx|YTDByLine 05/22/2017

'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.a: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH
2017**

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Apr	
Freight Interference - TOTAL	53	68	69	79									269	11.6%
Freight Interference - Peak	20	21	23	25									89	3.8%
Primary	11	16	17	11									55	2.4%
Secondary	9	5	6	14									34	1.5%
Freight Interference - Off-Peak	33	47	46	54									180	7.8%
Primary	26	38	36	34									134	5.8%
Secondary	7	9	10	20									46	2.0%
Signal/Switch Failure - TOTAL	118	44	80	79									321	13.9%
Signal/Switch Failure - Metra/PSA	98	31	74	28									231	10.0%
Primary	69	21	41	25									156	6.7%
Secondary	29	10	33	3									75	3.2%
Signal/Switch Failure - Foreign	20	13	6	51									90	3.9%
Primary	10	9	4	16									39	1.7%
Secondary	10	4	2	35									51	2.2%
Mechanical Failure - TOTAL	84	61	64	42									251	10.8%
Mechanical Failure - Metra/PSA	83	55	62	42									242	10.5%
Non-Locomotive Equipment Failure - Metra/PSA	12	8	15	10									45	1.9%
Primary	6	8	5	7									26	1.1%
Secondary	6	0	10	3									19	0.8%
Locomotive Failure - Metra/PSA	71	47	47	32									197	8.5%
Primary	18	21	20	17									76	3.3%
Secondary	53	26	27	15									121	5.2%
Mechanical Failure - Foreign	1	6	2	0									9	0.4%
Passenger Train Interference - TOTAL	16	2	2	5									25	1.1%
Passenger Train Interference - Metra/PSA	9	0	1	2									12	0.5%
Passenger Train Interference - Foreign	7	2	1	3									13	0.6%
Accident - TOTAL	74	32	26	101									233	10.1%
Accident - Metra/PSA	69	32	23	98									222	9.6%
Accident - Foreign	5	0	3	3									11	0.5%
Track Work - TOTAL	78	17	29	72									196	8.5%
Track Work - Metra/PSA	78	17	29	72									196	8.5%
Track Work - Foreign	0	0	0	0									0	0.0%
Human Error - TOTAL	68	140	54	69									331	14.3%
Human Error - Metra/PSA	58	50	37	49									194	8.4%
Human Error - Foreign	10	90	17	20									137	5.9%
Sick, Injured, Unruly Passenger - TOTAL	27	28	40	27									122	5.3%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34	27									116	5.0%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0									6	0.3%
Weather - TOTAL	97	25	59	4									185	8.0%
Weather - Metra/PSA	96	25	59	4									184	7.9%
Weather - Foreign	1	0	0	0									1	0.0%
Passenger Loading - TOTAL	33	7	12	10									62	2.7%
Lift Deployment - TOTAL	17	8	8	13									46	2.0%
Obstruction/Debris - TOTAL	66	44	43	35									188	8.1%
Catenary Failure - TOTAL	6	1	4	1									12	0.5%
Other - TOTAL	15	15	24	20									74	3.2%
TOTAL TRAINS DELAYED	752	492	514	557									2,315	100.0%
Total Metra/PSA Delays	655	313	410	401									1,779	76.8%
Total Foreign Carrier Delays	97	179	104	156									536	23.2%

Data for current month is final (05/18/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx|AllMonths 05/22/2017

'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.b: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH
2016**

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Apr	
Freight Interference - TOTAL	82	53	43	44	72	73	82	108	78	48	65	94	222	9.5%
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	72	3.1%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	54	2.3%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	18	0.8%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	150	6.4%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	113	4.9%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	37	1.6%
Signal/Switch Failure - TOTAL	154	155	123	98	145	143	108	63	105	67	110	120	530	22.8%
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	348	14.9%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	158	6.8%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	190	8.2%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	182	7.8%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	139	6.0%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	43	1.8%
Mechanical Failure - TOTAL	107	68	131	43	80	88	120	78	114	64	71	88	349	15.0%
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	348	14.9%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	60	2.6%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	29	1.2%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	31	1.3%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	288	12.4%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	84	3.6%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	204	8.8%
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	41	1.8%
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	23	1.0%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	18	0.8%
Accident - TOTAL	59	15	62	48	86	29	18	55	34	10	79	49	184	7.9%
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	166	7.1%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	18	0.8%
Track Work - TOTAL	40	21	36	44	141	114	99	133	177	75	59	61	141	6.1%
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	138	5.9%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	3	0.1%
Human Error - TOTAL	38	33	21	53	23	112	47	93	50	45	49	71	145	6.2%
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	112	4.8%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	33	1.4%
Sick, Injured, Unruly Passenger - TOTAL	20	39	27	50	44	32	29	43	30	24	35	34	136	5.8%
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	136	5.8%
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	290	12.5%
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	290	12.5%
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	1	0	0.0%
Passenger Loading - TOTAL	13	7	29	8	51	83	109	42	32	28	68	71	57	2.4%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	40	1.7%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	142	6.1%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	15	0.6%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	37	1.6%
TOTAL TRAINS DELAYED	707	599	572	451	716	791	769	781	729	455	647	836	2,329	100.0%
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	1,852	79.5%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	477	20.5%

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

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 05/22/2017

'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 - Apr	
Freight Interference - TOTAL	-29	15	26	35									47	2.1%
Freight Interference - Peak	-12	4	9	16									17	0.8%
Primary	-15	6	6	4									1	0.1%
Secondary	3	-2	3	12									16	0.7%
Freight Interference - Off-Peak	-17	11	17	19									30	1.3%
Primary	-6	9	13	5									21	0.9%
Secondary	-11	2	4	14									9	0.4%
Signal/Switch Failure - TOTAL	-36	-111	-43	-19									-209	-8.9%
Signal/Switch Failure - Metra/PSA	31	-91	-25	-32									-117	-5.0%
Primary	34	-9	-11	-16									-2	0.0%
Secondary	-3	-82	-14	-16									-115	-4.9%
Signal/Switch Failure - Foreign	-67	-20	-18	13									-92	-3.9%
Primary	-58	-15	-10	-17									-100	-4.3%
Secondary	-9	-5	-8	30									8	0.4%
Mechanical Failure - TOTAL	-23	-7	-67	-1									-98	-4.1%
Mechanical Failure - Metra/PSA	-24	-13	-69	0									-106	-4.5%
Non-Locomotive Equipment Failure - Metra/PSA	-13	-11	5	4									-15	-0.6%
Primary	-5	-1	1	2									-3	-0.1%
Secondary	-8	-10	4	2									-12	-0.5%
Locomotive Failure - Metra/PSA	-11	-2	-74	-4									-91	-3.9%
Primary	-10	3	-4	3									-8	-0.3%
Secondary	-1	-5	-70	-7									-83	-3.5%
Mechanical Failure - Foreign	1	6	2	-1									8	0.3%
Passenger Train Interference - TOTAL	-6	-10	-1	1									-16	-0.7%
Passenger Train Interference - Metra/PSA	-4	-5	-1	-1									-11	-0.5%
Passenger Train Interference - Foreign	-2	-5	0	2									-5	-0.2%
Accident - TOTAL	15	17	-36	53									49	2.2%
Accident - Metra/PSA	20	18	-39	57									56	2.5%
Accident - Foreign	-5	-1	3	-4									-7	-0.3%
Track Work - TOTAL	38	-4	-7	28									55	2.4%
Track Work - Metra/PSA	38	-4	-7	31									58	2.5%
Track Work - Foreign	0	0	0	-3									-3	-0.1%
Human Error - TOTAL	30	107	33	16									186	8.1%
Human Error - Metra/PSA	28	25	22	7									82	3.6%
Human Error - Foreign	2	82	11	9									104	4.5%
Sick, Injured, Unruly Passenger - TOTAL	7	-11	13	-23									-14	-0.6%
Sick, Injured, Unruly Passenger - Metra/PSA	7	-11	7	-23									-20	-0.8%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0									6	0.3%
Weather - TOTAL	-32	-107	31	3									-105	-4.5%
Weather - Metra/PSA	-33	-107	31	3									-106	-4.5%
Weather - Foreign	1	0	0	0									1	0.0%
Passenger Loading - TOTAL	20	0	-17	2									5	0.2%
Lift Deployment - TOTAL	6	-6	-4	10									6	0.3%
Obstruction/Debris - TOTAL	48	14	3	-19									46	2.0%
Catenary Failure - TOTAL	-3	-2	2	0									-3	-0.1%
Other - TOTAL	10	-2	9	20									37	1.6%
TOTAL TRAINS DELAYED	45	-107	-58	106									-14	
Total Metra/PSA Delays	144	-184	-88	55									-73	
Total Foreign Carrier Delays	-99	77	30	51									59	

Data for current month is final (05/18/17) version from TOPS.

P:\ONTIME\report[DelaysByCause.xlsx]AllMonths 05/22/2017

'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 11: FREIGHT DELAYS
between May 2015 and April 2017**

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
May-15	20	0	0	0	4	5	2	8	2	9	0	3	6	59
Jun-15	12	0	0	0	4	11	1	9	3	24	0	6	20	90
Jul-15	23	0	0	0	1	11	0	3	12	17	0	18	31	116
Aug-15	13	0	0	0	8	7	5	11	4	17	0	0	24	89
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
Total	170	0	0	0	36	75	67	72	90	119	3	45	157	834
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
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
Total	180	0	0	0	30	82	87	89	36	106	11	39	229	889

Data for current month is final (05/18/17) version from TOPS.

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

LINE	Jan Feb Mar			Apr May Jun			Jul Aug Sep			Oct Nov Dec			Lift Delays YTD	% of All Delays YTD
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
BNSF	1	1	0	0									2	0.58%
Electric ML	0	0	0	0									0	0.00%
Electric BI	0	0	0	0									0	0.00%
Electric SC	0	1	0	0									1	0.96%
HER	0	0	0	0									0	0.00%
Milw N	3	2	1	1									7	2.92%
Milw W	3	0	2	1									6	2.50%
NCS	0	0	0	0									0	0.00%
RI	2	1	0	2									5	2.33%
SWS	0	0	0	0									0	0.00%
UP N	2	1	1	0									4	2.40%
UP NW	2	1	0	6									9	4.04%
UP W	4	1	4	3									12	4.36%
Total Lift Delays	17	8	8	13									46	1.99%
ALL DELAYS													2,315	

Data for current month is final (05/18/17) version from TOPS.

2016

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

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION

April 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
Peak *														
6-10	14	0	1	1	0	8	6	4	4	1	11	11	22	83
11-15	4	1	0	0	1	7	6	0	3	0	0	5	6	33
16-20	0	2	0	0	1	2	3	0	0	0	0	4	4	16
21+	15	1	0	0	2	2	5	4	0	0	0	14	7	50
Annulled	<u>12</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>19</u>
Sub-Total	45	4	1	1	4	21	20	10	7	1	12	35	40	201
Off-Peak **														
6-10	13	10	9	8	0	14	12	5	16	10	13	12	22	144
11-15	3	3	0	1	0	12	14	2	3	2	10	11	14	75
16-20	2	1	0	0	1	2	6	2	4	1	2	4	2	27
21+	5	2	0	3	0	5	8	2	5	3	10	26	17	86
Annulled	<u>10</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>6</u>	<u>2</u>	<u>24</u>
Sub-Total	33	16	9	16	1	34	40	11	28	16	36	59	57	356
April 2017 Total														
6-10	27	10	10	9	0	22	18	9	20	11	24	23	44	227
11-15	7	4	0	1	1	19	20	2	6	2	10	16	20	108
16-20	2	3	0	0	2	4	9	2	4	1	2	8	6	43
21+	20	3	0	3	2	7	13	6	5	3	10	40	24	136
Annulled	<u>22</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>7</u>	<u>3</u>	<u>43</u>
TOTAL	78	20	10	17	5	55	60	21	35	17	48	94	97	557
2017 Year-to-Date														
6-10	143	102	52	56	6	110	76	52	107	50	61	72	149	1,036
11-15	59	26	8	13	6	54	58	23	29	18	38	34	56	422
16-20	24	14	9	6	6	29	22	9	22	6	16	17	25	205
21+	77	36	9	23	9	38	63	26	51	28	44	80	42	526
Annulled	<u>43</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>9</u>	<u>21</u>	<u>7</u>	<u>6</u>	<u>3</u>	<u>8</u>	<u>20</u>	<u>3</u>	<u>126</u>
TOTAL	346	178	78	104	27	240	240	117	215	105	167	223	275	2,315
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	
April 2017 Total														
6-10	34.6%	50.0%	100.0%	52.9%	0.0%	40.0%	30.0%	42.9%	57.1%	64.7%	50.0%	24.5%	45.4%	40.8%
11-15	9.0%	20.0%	0.0%	5.9%	20.0%	34.5%	33.3%	9.5%	17.1%	11.8%	20.8%	17.0%	20.6%	19.4%
16-20	2.6%	15.0%	0.0%	0.0%	40.0%	7.3%	15.0%	9.5%	11.4%	5.9%	4.2%	8.5%	6.2%	7.7%
21+	25.6%	15.0%	0.0%	17.6%	40.0%	12.7%	21.7%	28.6%	14.3%	17.6%	20.8%	42.6%	24.7%	24.4%
Annulled	<u>28.2%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>23.5%</u>	<u>0.0%</u>	<u>5.5%</u>	<u>0.0%</u>	<u>9.5%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>4.2%</u>	<u>7.4%</u>	<u>3.1%</u>	<u>7.7%</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	41.3%	57.3%	66.7%	53.8%	22.2%	45.8%	31.7%	44.4%	49.8%	47.6%	36.5%	32.3%	54.2%	44.8%
11-15	17.1%	14.6%	10.3%	12.5%	22.2%	22.5%	24.2%	19.7%	13.5%	17.1%	22.8%	15.2%	20.4%	18.2%
16-20	6.9%	7.9%	11.5%	5.8%	22.2%	12.1%	9.2%	7.7%	10.2%	5.7%	9.6%	7.6%	9.1%	8.9%
21+	22.3%	20.2%	11.5%	22.1%	33.3%	15.8%	26.3%	22.2%	23.7%	26.7%	26.3%	35.9%	15.3%	22.7%
Annulled	<u>12.4%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>5.8%</u>	<u>0.0%</u>	<u>3.8%</u>	<u>8.8%</u>	<u>6.0%</u>	<u>2.8%</u>	<u>2.9%</u>	<u>4.8%</u>	<u>9.0%</u>	<u>1.1%</u>	<u>5.4%</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 (05/18/17) version from TOPS.

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

	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
April 2017														
Peak *	50.0	19.3	8.0	6.0	19.0	12.6	15.7	18.5	9.7	6.0	7.4	40.4	17.3	26.0
Off-Peak **	20.3	16.6	6.9	18.4	16.0	13.2	15.6	17.5	14.8	13.7	18.7	35.6	19.1	19.6
All	37.8	17.1	7.0	17.5	18.4	13.0	15.6	17.9	13.8	13.2	16.0	37.5	18.3	21.9
2017 Year-to-Date														
Peak *	25.8	17.7	11.8	16.9	22.8	19.1	22.1	17.7	19.5	15.2	17.2	51.6	14.2	22.3
Off-Peak **	16.7	12.4	11.7	14.9	16.3	15.3	17.3	17.2	15.2	21.3	19.4	32.8	14.6	17.6
All	21.7	14.7	11.7	15.4	21.3	16.8	19.2	17.5	17.6	19.4	18.5	40.7	14.4	19.6

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 (05/18/17) version from TOPS.