

COMMUTER RAIL SYSTEM
ON-TIME PERFORMANCE REPORT

March 2017



COMMUTER RAIL ON-TIME PERFORMANCE

March 2017

This report presents an analysis of the March 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 March 2017, Metra operated 18,259 scheduled trains, including scheduled "extras", if any. 514 of these trains were delayed (late or annulled), representing an on-time performance rate of 97.2%. 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 March 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 March 2017. Of the 514 delays systemwide in March 2017, all but 235 (46%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Marchs, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in March 2017, 54 fewer delays than the average over the previous five Marchs were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 1,758 delays in 2017, all but 855 (49%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during March 2017. Table 8.b shows the average frequencies over the previous five Marchs, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 514 delays systemwide in March 2017, 131 less than the average over the previous five Marchs. Table 9.a shows delays from the beginning of the year through March 2017. Table 9.b shows the average frequencies from the beginning of the year through March 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 March of 2017, a total of 1,758 trains were delayed, compared to 1,878 trains delayed in the same three 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 March 2017 freight operations delayed 69 trains systemwide, compared to 43 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 8 trains were delayed by lift deployment in March 2017.

A review of March 2017 late trains by duration of delay is shown in Table 13. The range with the greatest number of delays was, as usual, six-to-ten minutes, accounting for 50.0% of all late trains. Table 14 shows that the average length of delay was 16.2 minutes in March 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
March 2017**

	Weekdays									Weekends						Total		
	Peak*			Off-Peak**			Total			Saturdays			Sundays & Holidays			Trains Scheduled	Trains Late	Percent On-Time
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time			
BNSF	1,242	43	96.5%	920	33	96.4%	2,162	76	96.5%	119	11	90.8%	72	2	97.2%	2,353	89	96.2%
Elec -ML	1,035	18	98.3%	782	21	97.3%	1,817	39	97.9%	184	2	98.9%	80	0	100.0%	2,081	41	98.0%
-BI	322	4	98.8%	529	14	97.4%	851	18	97.9%	120	0	100.0%	80	--		971	18	98.1%
-SC	<u>391</u>	<u>3</u>	99.2%	<u>851</u>	<u>11</u>	98.7%	<u>1,242</u>	<u>14</u>	98.9%	<u>192</u>	<u>3</u>	98.4%	<u>80</u>	<u>3</u>	96.3%	<u>1,514</u>	<u>20</u>	98.7%
Subtotal	1,748	25	98.6%	2,162	46	97.9%	3,910	71	98.2%	496	5	99.0%	160	3	98.1%	4,566	79	98.3%
Heritage	138	3	97.8%	23	2	91.3%	161	5	96.9%	--			--			161	5	96.9%
Milw -N	575	18	96.9%	805	31	96.1%	1,380	49	96.4%	99	6	93.9%	80	0	100.0%	1,559	55	96.5%
-W	<u>621</u>	<u>32</u>	94.8%	<u>713</u>	<u>32</u>	95.5%	<u>1,334</u>	<u>64</u>	95.2%	<u>99</u>	<u>6</u>	93.9%	<u>72</u>	<u>2</u>	97.2%	<u>1,505</u>	<u>72</u>	95.2%
Subtotal	1,196	50	95.8%	1,518	63	95.8%	2,714	113	95.8%	198	12	93.9%	152	2	98.7%	3,064	127	95.9%
NCS	253	12	95.3%	253	13	94.9%	506	25	95.1%	--			--			506	25	95.1%
RI	828	25	97.0%	874	15	98.3%	1,702	40	97.6%	128	2	98.4%	112	0	100.0%	1,942	42	97.8%
SWS	253	11	95.7%	437	15	96.6%	690	26	96.2%	24	0	100.0%	--			714	26	96.4%
UP -N	690	15	97.8%	920	13	98.6%	1,610	28	98.3%	105	1	99.0%	72	1	98.6%	1,787	30	98.3%
-NW	759	12	98.4%	736	8	98.9%	1,495	20	98.7%	99	11	88.9%	60	1	98.3%	1,654	32	98.1%
-W	<u>621</u>	<u>21</u>	96.6%	<u>736</u>	<u>35</u>	95.2%	<u>1,357</u>	<u>56</u>	95.9%	<u>83</u>	<u>2</u>	97.6%	<u>72</u>	<u>1</u>	98.6%	<u>1,512</u>	<u>59</u>	96.1%
Subtotal	2,070	48	97.7%	2,392	56	97.7%	4,462	104	97.7%	287	14	95.1%	204	3	98.5%	4,953	121	97.6%
SYSTEM	7,728	217	97.2%	8,579	243	97.2%	16,307	460	97.2%	1,252	44	96.5%	700	10	98.6%	18,259	514	97.2%

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

Delays data for most recent month is final (04/13/17) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls\OTPbyServPeriod&Line 04/14/17

TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-MAR	AVG
BNSF	2012	94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	95.6%	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	94.8%	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	86.3%	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	92.7%	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	94.3%	94.0%
	2017	95.9	95.6	96.2										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	92.8%	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	96.7%	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	98.5%	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	95.6%	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	96.7%	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	98.5%	98.1%
	2017	95.6	98.9	98.3										97.6%	97.6%
	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	97.2%	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	96.4%	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	96.8%	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	81.2%	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	92.9%	90.2%
	2016	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	93.7%	94.2%
	2017	93.9	94.3	96.9										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	92.2%	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	95.1%	93.8%
	2013	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	94.1%	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	81.4%	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	91.2%	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	95.1%	94.6%
	2017	95.3	95.6	96.5										95.8%	95.8%
	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	91.4%	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	94.9%	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	94.8%	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	88.2%	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	93.8%	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	94.6%	94.9%
	2017	96.9	95.2	95.2										95.8%	95.8%
	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	93.3%	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	94.5%	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	92.2%	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	81.9%	89.9%
	2015	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	89.8%	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	93.1%	94.5%
	2017	92.6	91.6	95.1										93.2%	93.2%
	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	90.4%	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-MAR	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	95.3%	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	97.5%	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	86.4%	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	97.3%	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	94.9%	96.1%
	2017	95.2	97.1	97.8										96.7%	96.7%
	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	94.3%
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	96.3%	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	89.4%	92.6%
	2015	94.7	89.7	95.6	96.1	96.3	91.1	92.4	93.8	97.6	96.8	96.0	94.4	93.4%	94.5%
	2016	95.6	97.2	97.8	95.6	91.9	95.3	94.1	93.3	91.6	97.4	96.6	96.2	96.9%	95.2%
	2017	96.2	94.1	96.4										95.6%	95.6%
	2012-2016 average		92.4	94.6	95.8	95.9	94.4	92.7	94.7	94.7	94.9	95.7	94.0	94.9	94.3%
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	97.0%	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	97.8%	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	93.6%	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	97.6%	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	97.5%	97.8%
	2017	95.6	99.0	98.3										97.6%	97.6%
	2012-2016 average		95.9	96.4	97.7	97.6	97.0	96.4	96.7	96.0	97.4	97.4	97.4	97.7	96.7%
UP - NW	2012	95.9	98.6	96.4	98.9	95.9	96.0	94.8	96.7	97.8	94.2	94.6	96.6	96.9%	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	96.6%	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	91.3%	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	95.2%	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	97.7%	96.3%
	2017	96.2	97.4	98.1										97.2%	97.2%
	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	95.5%
UP - W	2012	93.1	97.1	95.2	95.5	95.6	92.4	93.8	94.3	97.2	97.2	96.0	96.4	95.1%	95.3%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	96.5%	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	90.4%	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	93.8%	95.4%
	2016	97.8	93.4	97.2	96.7	90.1	94.4	96.6	96.0	96.2	95.6	94.0	92.9	96.2%	95.1%
	2017	95.0	96.5	96.1										95.8%	95.8%
	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	94.4%
SYSTEM excluding South Shore	2012	94.3	97.4	96.1	97.2	96.3	94.7	94.0	95.2	96.2	95.9	95.8	96.9	95.9%	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	96.6%	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	89.9%	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	94.9%	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%	96.6%
	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	94.7%

Delays data for most recent month is final (04/13/17) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls|OTPhyLine&Month 4/14/2017

'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
March 2017**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
ELBI	216 78% OT	Mon, Mar 13	10	CC	8' SPEED RESTRICTION AND SLOW SIGNALS AT MCCORMICK, 2' FORM B AT 11TH PLACE
		Tue, Mar 14	7	IW	WEATHER CONDITIONS
		Wed, Mar 15	9	G	7 MINS ON THE BI SUB DUE TO SIGNAL PROBLEMS AND 2 MINS FOR CALLING FORM B'S
		Fri, Mar 17	6	CO	5 MINS FOR DARK SIGNALS MP 2.83 AND 2 MINS FOR FORM B'S
		Fri, Mar 24	7	CC	4M DUE TO SPEED RESTRICTIONS CAUGHT YELLOW & RED SIGNALS / 3M DUE TO FLAG STOPS
ELML	124 78% OT	Thu, Mar 02	6	OW1	LOST 7M WAITING AT HW FOR MEET WITH ME121 WHO HAD SIGNAL ISSUES AT 51ST
		Wed, Mar 15	9	CC	8M AT HW WAITING ON MEET WITH ME121, 1M FOLLOWING ME324 MAKING LOCAL STOPS
		Thu, Mar 16	8	CC	9M AT HW WAITING ON MEET WITH ME121
		Fri, Mar 17	7	CC1	7M LATE MEET WITH ME121 AT HW INT DUE TO SINGLE TRACKING
		Fri, Mar 31	11	CC1	11M WAITING ON MEET WITH ME121 AT HW. 5M FOLLOWING THE ME224.
MN	2128 78% OT	Mon, Mar 13	9	IW	9" SLOW LOADING
		Tue, Mar 14	7	K1	7" AUTO STUCK ON TRACKS, CLINTON-JEFFERSON ST
		Thu, Mar 16	6	A	WAITING ON OTHER TRAIN
		Mon, Mar 27	10	E1	5" LATE DEPARTING GRAYSLAKE WAITING ON #2107; 3" ADA, NORTH GLENVIEW; 3" STOP SIGNAL, A-2; 3" SLOW PASSENGER LOADING
		Tue, Mar 28	8	D	4" WAITING ON #2107, GRAYSLAKE; 4" STOP SIGNAL, CN; 3" STOP SIGNAL, MAYFAIR
MN	2158 83% OT	Wed, Mar 01	13	EA1	17" #2158 HAD TO MAKE A REVERSE MOVE BACK INTO SIDING TO CLEAR J-LINE FOR #2151; #2158 USED 1MAIN AFTER #2151 CLEARED ACCT AMTRAK 342 STALLED
		Mon, Mar 06	7	JM1	10" WAIT FOR #2149 TO CLEAR, GRAYSLAKE
		Tue, Mar 14	8	CW	6" WAITING ON #2149, GRAYSLAKE; 8" RESTRICTED SPEED, RONDOUT- DEERFIELD
		Mon, Mar 27	14	D1	9" WAITING ON LATE #2149, GRAYSLAKE; 4" WAIT ON CN FREIGHT; 10" WAITING ON SIGNAL
NCS	118 78% OT	Wed, Mar 08	29	F	30" LOCO 416 LOADING LOW AMPS MAYBE FROM BAD CAR CAB?, EN ROUTE
		Thu, Mar 16	9	GF	10" MEETING W/B TRAINS, EN ROUTE
		Wed, Mar 22	8	GM	5" COPY ITEM 2 FOR GRAND AVE & THATCHER AVE; 3" MEETING W/B TRAINS, EN ROUTE
		Thu, Mar 23	10	G	5" MEETING W/B TRAINS, EN ROUTE; 8" CREW HAND LINE 1MAIN CP WEST CICERO
		Mon, Mar 27	13	D	15" FOLLOWING CN FREIGHT FRMO ROUND LAKE BEACH; 3" 529-A, 38.65ALLEGANY RD
SWS	806 78% OT	Wed, Mar 15	7	GF1	6M DELAY ASHBURN MEETING SW803
		Fri, Mar 17	9	D1	11M DELAY 653//704AM ACCT NS 282 HEAD ROOM MOVE AND MEETING SW803
		Thu, Mar 23	6	D1	8M DELAY ASHBURN MEETING SW803 652/800AM
		Tue, Mar 28	7	YF1	7M 720/27AM DELAY LUMBER ST ACCT SINGLE TRACKING FROM DERAILMENT OF 3/27/17 .HELD FOR AMTRAK 350
		Wed, Mar 29	6	YF1	5M DELAY 21ST ST ACCT AT350, SINGLE TRACKING ACCT TK5 OOS
UPW	29 78% OT	Wed, Mar 08	8	R	4" ENGINEER HAD TO USE THE RESTROOM, LA FOX; 2" RUNNING SLOW UPTO A RED SIGNAL, WESTERN; 2" TRAIN CONTROL, BELLWOOD
		Thu, Mar 16	8	U	8" WAIT FOR #44 TO CLEAR, VILLA PARK & ELMHURST; 2 ADA'S
		Fri, Mar 17	9	VE	9" CUT OUT ATC ON METX 137, PARK
		Thu, Mar 23	9	I	9" RUNNING SLOW UP TO AN APPROACH, BERKELEY-BELLWOOD; #44 RUNNING OFF TK3, VILLA PARK-ELMHURST
		Fri, Mar 24	8	I	8" SLOW PASSENGER LOADING, LOMBARD & COLLEGE AVE; ADA LIFT FAILED ON CAR 8408 ON FIRST TRY, COLLEGE AVE
UPW	35 83% OT	Thu, Mar 02	10	D	3" LATE DEPARTING NO SIGNAL, LAKE ST; ADA'S, GENEVA & WINFIELD; FOLLOWING CPPCA1, KRESS
		Mon, Mar 20	6	U	6" SLOW LOADING ADA, WINFIELD
		Thu, Mar 23	12	D	12" MPRPB-23, 25TH AVE; 2 ADA'S & SLOW PASSENGER LOADING, GENEVA
		Thu, Mar 30	7	CC	7" STOPPED TO COPY FORM A, RIVER FOREST; STOPPED @ VILLA PARK TO VOID A FORM C; ADA; 20MPH MP25.50-26.75
UPW	44 83% OT	Tue, Mar 07	8	GT	4" LATE DEPARTING CAD WARM START, ELBURN; FTX, MP29.5
		Mon, Mar 20	7	D	8" OPERATE SOUTH SIDE ELBURN-PARK ACCT QNPPR ON TK1; TRAIN CONTROL FOLLOWING ZCIG1-17, KILBOURN-KEDZIE
		Wed, Mar 29	7	I	7" HEAVY PASSENGER LOADING, LOMBARD-ELMHURST
UPW	48 83% OT	Fri, Mar 31	40	K1	26" LATE FURN FROM UPW #25, ELBURN; 14" STOPPED DUE TO CROSS TRAFFIC M34081-30, WASHINGTON ST.
		Wed, Mar 01	8	D	8" FOLLOWING CNAOK9-26TH, PECK - WEST CHICAGO
		Wed, Mar 08	7	R1	4" LATE TURN FROM #29, ELBURN; SLOW LOADING ADA, ELMHURST
		Fri, Mar 17	7	VE1	9" LATE TURN FROM #29, ELBURN
		Thu, Mar 23	15	II	7" LATE TURN FROM #29; SLOW PASSENGER LOADING, VILLA PARK

Data is final (04/13/17) version from TOPS.

P:\ONTIME\report\WeekdayTrainsBelow85% table.xlsx\PrintCopy 04/14/2017

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

March 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	55	24	11	14	0	20	26	12	33	3	7	11	19	235	46%
Semi-controllable	5	0	0	0	5	6	7	6	2	19	0	5	15	70	14%
Uncontrollable	29	17	7	6	0	29	39	7	7	4	23	16	25	209	41%
TOTAL TRAINS DELAYED	89	41	18	20	5	55	72	25	42	26	30	32	59	514	100%

March - 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	47.2	17.6	6.2	7.4	2.4	54.8	38.2	15.2	32.2	8.6	19.0	18.0	22.2	289.0	45%
Semi-controllable	10.0	0.0	0.0	0.0	4.4	17.8	15.8	19.2	3.8	14.6	2.0	3.8	17.6	109.0	17%
Uncontrollable	42.2	24.8	8.4	12.8	0.8	27.4	27.4	3.0	29.0	5.4	18.2	28.8	19.2	247.4	38%
TOTAL TRAINS DELAYED	99.4	42.4	14.6	20.2	7.6	100.0	81.4	37.4	65.0	28.6	39.2	50.6	59.0	645.4	100%

March 2017 Divergence From March 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	7.8	6.4	4.8	6.6	-2.4	-34.8	-12.2	-3.2	0.8	-5.6	-12.0	-7.0	-3.2	-54.0	41%
Semi-controllable	-5.0	0.0	0.0	0.0	0.6	-11.8	-8.8	-13.2	-1.8	4.4	-2.0	1.2	-2.6	-39.0	30%
Uncontrollable	-13.2	-7.8	-1.4	-6.8	-0.8	1.6	11.6	4.0	-22.0	-1.4	4.8	-12.8	5.8	-38.4	29%
TOTAL TRAINS DELAYED	-10.4	-1.4	3.4	-0.2	-2.6	-45.0	-9.4	-12.4	-23.0	-2.6	-9.2	-18.6	0.0	-131.4	100%

January-March 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	163	100	42	53	8	87	87	34	91	35	62	33	60	855	49%
Semi-controllable	11	0	0	0	9	24	18	35	8	40	4	13	53	215	12%
Uncontrollable	94	58	26	34	5	74	75	27	81	13	53	83	65	688	39%
TOTAL TRAINS DELAYED	268	158	68	87	22	185	180	96	180	88	119	129	178	1,758	100%

Data for current month is final (04/13/17) version from TOPS.

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

04/14/2017

TABLE 7: NUMBER OF DELAYS BY DATE
March 2017

WEEKDAY	1	2	3	6	7	8	9	10	13	14	15	16	17	20	21	22	23	24	27	28	29	30	31	TOTAL
	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	
BNSF	1	3	1	2	1	6	0	1	0	20	6	8	1	1	0	3	1	7	1	5	1	5	2	76
Elec -ML	0	2	0	2	0	0	1	0	0	5	3	1	3	0	0	10	0	1	3	0	0	5	3	39
-BI	1	0	0	1	0	0	1	0	1	3	3	1	1	0	0	2	0	2	0	0	2	0	0	18
-SC	1	2	0	0	1	0	0	0	1	2	1	0	1	0	0	3	0	0	0	0	1	0	1	14
Heritage	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	2	5
Milw -N	2	3	2	2	0	5	2	0	8	13	0	4	1	0	0	1	1	0	4	1	0	0	0	49
-W	2	3	9	0	0	11	4	7	13	7	3	2	1	0	0	0	1	1	0	0	0	0	0	64
NCS	0	2	0	2	0	4	2	1	2	5	0	2	1	0	0	1	2	0	1	0	0	0	0	25
RI	15	0	2	0	1	1	1	4	0	8	1	0	1	0	0	0	0	0	1	0	0	5	0	40
SWS	1	2	0	2	0	0	0	0	3	3	3	1	1	0	0	2	1	0	2	1	2	1	1	26
UP -N	0	1	1	1	2	0	0	0	3	9	0	0	5	0	0	3	0	1	0	0	0	2	0	28
-NW	0	0	0	1	3	0	2	1	0	0	1	1	3	2	0	0	0	0	6	0	0	0	0	20
-W	3	2	0	2	1	2	0	2	0	5	1	2	8	2	3	4	6	1	1	0	4	2	5	56
SYSTEM	26	20	15	15	9	29	13	16	31	82	22	23	27	5	3	29	12	13	19	7	10	20	14	460

SATURDAY	4	11	18	25	TOTAL	SUNDAY/HOLIDAY	5	12	19	26	TOTAL
BNSF	6	2	2	1	11	BNSF	0	1	0	1	2
Elec -ML	1	0	0	1	2	Elec -ML	0	0	0	0	0
-BI	0	0	0	0	0	-BI	-	-	-	-	0
-SC	1	1	0	1	3	-SC	1	0	0	2	3
Heritage	-	-	-	-	-	Heritage	-	-	-	-	0
Milw -N	4	2	0	0	6	Milw -N	0	0	0	0	0
-W	0	0	4	2	6	-W	1	0	1	0	2
NCS	-	-	-	-	-	NCS	-	-	-	-	0
RI	0	1	1	0	2	RI	0	0	0	0	0
SWS	0	0	0	0	0	SWS	-	-	-	-	0
UP -N	0	1	0	0	1	UP -N	0	0	0	1	1
-NW	3	7	1	0	11	-NW	0	1	0	0	1
-W	0	2	0	0	2	-W	0	1	0	0	1
SYSTEM	15	16	8	5	44	SYSTEM	2	3	1	4	10

Data is final (04/13/17) version from TOPS.

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

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	6	0	0	0	4	6	7	5	2	17	1	6	15	69
Freight Interference - Peak	2	0	0	0	3	0	1	2	1	8	0	1	5	23
Primary	2	0	0	0	1	0	1	2	1	5	0	1	4	17
Secondary	0	0	0	0	2	0	0	0	0	3	0	0	1	6
Freight Interference - Off-Peak	4	0	0	0	1	6	6	3	1	9	1	5	10	46
Primary	3	0	0	0	1	4	6	3	1	6	1	3	8	36
Secondary	1	0	0	0	0	2	0	0	0	3	0	2	2	10
Signal/Switch Failure - TOTAL	20	12	5	7	1	0	7	5	8	3	9	1	2	80
Signal/Switch Failure - Metra/PSA	20	12	5	7	0	0	7	4	8	0	9	1	1	74
Primary	6	9	5	3	0	0	5	4	5	0	2	1	1	41
Secondary	14	3	0	4	0	0	2	0	3	0	7	0	0	33
Signal/Switch Failure - Foreign	0	0	0	0	1	0	0	1	0	3	0	0	1	6
Primary	0	0	0	0	1	0	0	1	0	1	0	0	1	4
Secondary	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Mechanical Failure - TOTAL	10	0	0	0	0	13	12	6	10	0	0	9	4	64
Mechanical Failure - Metra/PSA	10	0	0	0	0	11	12	6	10	0	0	9	4	62
Non-Locomotive Equipment Failure - Metra/PSA	2	0	0	0	0	0	2	3	0	0	0	4	4	15
Primary	1	0	0	0	0	0	1	1	0	0	0	1	1	5
Secondary	1	0	0	0	0	0	1	2	0	0	0	3	3	10
Locomotive Failure - Metra/PSA	8	0	0	0	0	11	10	3	10	0	0	5	0	47
Primary	4	0	0	0	0	4	2	1	6	0	0	3	0	20
Secondary	4	0	0	0	0	7	8	2	4	0	0	2	0	27
Mechanical Failure - Foreign	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Passenger Train Interference - TOTAL	1	0	0	0	0	1	0	0	0	0	0	0	0	2
Passenger Train Interference - Metra/PSA	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Train Interference - Foreign	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Accident - TOTAL	5	0	0	0	0	0	10	0	0	3	5	3	0	26
Accident - Metra/PSA	5	0	0	0	0	0	10	0	0	0	5	3	0	23
Accident - Foreign	0	0	0	0	0	0	0	0	0	3	0	0	0	3
Track Work - TOTAL	2	10	4	3	0	3	1	0	0	0	1	0	5	29
Track Work - Metra/PSA	2	10	4	3	0	3	1	0	0	0	1	0	5	29
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	16	2	1	1	0	4	5	0	15	2	2	0	6	54
Human Error - Metra/PSA	7	2	1	1	0	0	3	0	15	1	1	0	6	37
Human Error - Foreign	9	0	0	0	0	4	2	0	0	1	1	0	0	17
Sick, Injured, Unruly Passenger - TOTAL	13	7	0	1	0	6	4	1	0	0	2	1	5	40
Sick, Injured, Unruly Passenger - Metra/PSA	7	7	0	1	0	6	4	1	0	0	2	1	5	34
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	2	7	3	3	0	9	17	1	6	0	6	0	5	59
Weather - Metra/PSA	2	7	3	3	0	9	17	1	6	0	6	0	5	59
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	1	0	0	0	0	0	0	0	1	0	2	2	6	12
Lift Deployment - TOTAL	0	0	0	0	0	1	2	0	0	0	1	0	4	8
Obstruction/Debris - TOTAL	3	2	1	2	0	11	7	5	0	0	0	7	5	43
Catenary Failure - TOTAL	0	0	1	3	0	0	0	0	0	0	0	0	0	4
Other - TOTAL	10	1	3	0	0	1	0	2	0	1	1	3	2	24
TOTAL TRAINS DELAYED	89	41	18	20	5	55	72	25	42	26	30	32	59	514
Total Metra/PSA Delays	67	41	18	20	0	43	63	19	40	2	28	26	43	410
Total Foreign Carrier Delays	22	0	0	0	5	12	9	6	2	24	2	6	16	104

Data for current month is final (04/13/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 04/14/2017

'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
March - 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	13.2	0.0	0.0	0.0	4.0	14.4	13.0	13.8	3.8	11.2	1.8	3.4	18.2	96.8
Freight Interference - Peak	4.8	0.0	0.0	0.0	4.0	2.4	2.4	4.0	0.2	4.8	0.6	1.8	5.2	30.2
<i>Primary</i>	2.2	0.0	0.0	0.0	3.8	1.4	1.2	2.4	0.2	3.8	0.2	0.8	2.2	18.2
<i>Secondary</i>	2.6	0.0	0.0	0.0	0.2	1.0	1.2	1.6	0.0	1.0	0.4	1.0	3.0	12.0
Freight Interference - Off-Peak	8.4	0.0	0.0	0.0	0.0	12.0	10.6	9.8	3.6	6.4	1.2	1.6	13.0	66.6
<i>Primary</i>	7.6	0.0	0.0	0.0	0.0	7.6	8.0	8.8	3.6	5.6	0.4	1.6	11.0	54.2
<i>Secondary</i>	0.8	0.0	0.0	0.0	0.0	4.4	2.6	1.0	0.0	0.8	0.8	0.0	2.0	12.4
Signal/Switch Failure - TOTAL	10.4	6.8	3.8	0.6	0.8	23.0	13.0	9.8	6.0	6.6	2.2	3.6	4.2	90.8
Signal/Switch Failure - Metra/PSA	9.6	6.8	3.8	0.6	0.4	19.0	10.2	4.2	5.8	2.4	2.0	3.2	3.8	71.8
<i>Primary</i>	7.2	2.6	2.8	0.6	0.4	9.2	6.6	2.0	4.4	1.6	1.6	1.8	2.8	43.6
<i>Secondary</i>	2.4	4.2	1.0	0.0	0.0	9.8	3.6	2.2	1.4	0.8	0.4	1.4	1.0	28.2
Signal/Switch Failure - Foreign	0.8	0.0	0.0	0.0	0.4	4.0	2.8	5.6	0.2	4.2	0.2	0.4	0.4	19.0
<i>Primary</i>	0.4	0.0	0.0	0.0	0.4	3.6	2.6	3.2	0.2	3.2	0.2	0.2	0.4	14.4
<i>Secondary</i>	0.4	0.0	0.0	0.0	0.0	0.4	0.2	2.4	0.0	1.0	0.0	0.2	0.0	4.6
Mechanical Failure - TOTAL	14.6	1.2	0.8	0.8	0.6	14.0	14.6	4.2	19.0	2.0	8.8	9.2	6.8	96.6
Mechanical Failure - Metra/PSA	14.6	1.2	0.8	0.8	0.6	14.0	14.6	4.2	19.0	2.0	8.8	9.2	6.8	96.6
Non-Locomotive Equipment Failure - Metra/PSA	4.4	1.2	0.8	0.8	0.6	2.8	1.4	2.2	3.0	1.8	0.8	0.2	1.4	21.4
<i>Primary</i>	0.6	0.8	0.4	0.4	0.2	0.6	1.0	1.0	0.6	0.2	0.4	0.0	0.6	6.8
<i>Secondary</i>	3.8	0.4	0.4	0.4	0.4	2.2	0.4	1.2	2.4	1.6	0.4	0.2	0.8	14.6
Locomotive Failure - Metra/PSA	10.2	0.0	0.0	0.0	0.0	11.2	13.2	2.0	16.0	0.2	8.0	9.0	5.4	75.2
<i>Primary</i>	2.2	0.0	0.0	0.0	0.0	2.8	3.6	0.0	3.6	0.2	2.6	2.0	2.0	19.0
<i>Secondary</i>	8.0	0.0	0.0	0.0	0.0	8.4	9.6	2.0	12.4	0.0	5.4	7.0	3.4	56.2
Mechanical Failure - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passenger Train Interference - TOTAL	1.0	0.6	0.2	0.6	0.6	5.4	0.4	1.4	1.2	0.8	0.0	0.0	0.4	12.6
Passenger Train Interference - Metra/PSA	0.4	0.4	0.2	0.6	0.0	3.6	0.4	1.4	1.2	0.2	0.0	0.0	0.4	8.8
Passenger Train Interference - Foreign	0.6	0.2	0.0	0.0	0.6	1.8	0.0	0.0	0.0	0.6	0.0	0.0	0.0	3.8
Accident - TOTAL	22.6	2.8	1.0	0.4	0.2	4.2	2.0	1.8	4.2	0.2	4.4	12.6	1.6	58.0
Accident - Metra/PSA	22.6	2.8	1.0	0.4	0.2	4.2	2.0	0.6	3.4	0.2	4.4	12.6	1.6	56.0
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.8	0.0	0.0	0.0	0.0	2.0
Track Work - TOTAL	8.6	2.0	0.4	1.8	0.2	1.6	4.6	0.4	1.4	0.0	3.4	1.8	2.8	29.0
Track Work - Metra/PSA	8.6	2.0	0.4	1.8	0.2	1.6	4.6	0.4	1.4	0.0	3.4	1.8	2.8	29.0
Track Work - 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
Human Error - TOTAL	7.4	3.0	0.8	1.6	0.8	12.2	8.0	4.4	5.2	2.6	3.2	2.8	3.4	55.4
Human Error - Metra/PSA	4.0	2.4	0.8	1.0	0.2	10.0	6.4	3.2	5.2	1.0	3.2	2.2	1.6	41.2
Human Error - Foreign	3.4	0.6	0.0	0.6	0.6	2.2	1.6	1.2	0.0	1.6	0.0	0.6	1.8	14.2
Sick, Injured, Unruly Passenger - TOTAL	2.0	5.0	1.0	1.8	0.0	4.4	2.4	0.0	2.0	0.2	2.8	4.0	3.4	29.0
Sick, Injured, Unruly Passenger - Metra/PSA	2.0	5.0	1.0	1.8	0.0	4.4	2.4	0.0	2.0	0.2	2.8	4.0	3.4	29.0
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	3.6	9.2	3.0	3.2	0.0	3.2	4.0	0.6	4.6	1.0	1.0	2.8	4.4	40.6
Weather - Metra/PSA	3.2	9.2	3.0	3.2	0.0	3.2	4.0	0.6	4.6	1.0	1.0	2.8	4.4	40.2
Weather - Foreign	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Passenger Loading - TOTAL	6.4	5.6	1.6	2.2	0.0	7.0	10.2	0.0	11.2	0.0	6.0	7.2	4.0	61.4
Lift Deployment - TOTAL	2.8	0.0	0.0	0.2	0.0	3.2	1.6	0.0	2.0	0.0	1.0	1.6	2.6	15.0
Obstruction/Debris - TOTAL	3.6	0.6	0.6	2.6	0.4	4.2	5.2	0.6	2.0	2.8	2.4	1.0	2.0	28.0
Catenary Failure - TOTAL	0.0	3.0	0.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
Other - TOTAL	3.2	2.6	1.2	2.2	0.0	3.2	2.4	0.4	2.4	1.2	2.2	0.6	5.2	26.8
TOTAL TRAINS DELAYED	99.4	42.4	14.6	20.2	7.6	100.0	81.4	37.4	65.0	28.6	39.2	50.6	59.0	645.4
Total Metra/PSA Delays	81.0	41.6	14.6	19.6	2.0	77.6	64.0	15.6	60.2	11.0	37.2	46.2	38.6	509.2
Total Foreign Carrier Delays	18.4	0.8	0.0	0.6	5.6	22.4	17.4	21.8	4.8	17.6	2.0	4.4	20.4	136.2

Data for latest month is final (04/14/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 04/14/2017

'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
March 2017 Divergence From March 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	-7.2	0.0	0.0	0.0	0.0	-8.4	-6.0	-8.8	-1.8	5.8	-0.8	2.6	-3.2	-27.8
Freight Interference - Peak	-2.8	0.0	0.0	0.0	-1.0	-2.4	-1.4	-2.0	0.8	3.2	-0.6	-0.8	-0.2	-7.2
<i>Primary</i>	-0.2	0.0	0.0	0.0	-2.8	-1.4	-0.2	-0.4	0.8	1.2	-0.2	0.2	1.8	-1.2
<i>Secondary</i>	-2.6	0.0	0.0	0.0	1.8	-1.0	-1.2	-1.6	0.0	2.0	-0.4	-1.0	-2.0	-6.0
Freight Interference - Off-Peak	-4.4	0.0	0.0	0.0	1.0	-6.0	-4.6	-6.8	-2.6	2.6	-0.2	3.4	-3.0	-20.6
<i>Primary</i>	-4.6	0.0	0.0	0.0	1.0	-3.6	-2.0	-5.8	-2.6	0.4	0.6	1.4	-3.0	-18.2
<i>Secondary</i>	0.2	0.0	0.0	0.0	0.0	-2.4	-2.6	-1.0	0.0	2.2	-0.8	2.0	0.0	-2.4
Signal/Switch Failure - TOTAL	9.6	5.2	1.2	6.4	0.2	-23.0	-6.0	-4.8	2.0	-3.6	6.8	-2.6	-2.2	-10.8
Signal/Switch Failure - Metra/PSA	10.4	5.2	1.2	6.4	-0.4	-19.0	-3.2	-0.2	2.2	-2.4	7.0	-2.2	-2.8	2.2
<i>Primary</i>	-1.2	6.4	2.2	2.4	-0.4	-9.2	-1.6	2.0	0.6	-1.6	0.4	-0.8	-1.8	-2.6
<i>Secondary</i>	11.6	-1.2	-1.0	4.0	0.0	-9.8	-1.6	-2.2	1.6	-0.8	6.6	-1.4	-1.0	4.8
Signal/Switch Failure - Foreign	-0.8	0.0	0.0	0.0	0.6	-4.0	-2.8	-4.6	-0.2	-1.2	-0.2	-0.4	0.6	-13.0
<i>Primary</i>	-0.4	0.0	0.0	0.0	0.6	-3.6	-2.6	-2.2	-0.2	-2.2	-0.2	-0.2	0.6	-10.4
<i>Secondary</i>	-0.4	0.0	0.0	0.0	0.0	-0.4	-0.2	-2.4	0.0	1.0	0.0	-0.2	0.0	-2.6
Mechanical Failure - TOTAL	-4.6	-1.2	-0.8	-0.8	-0.6	-1.0	-2.6	1.8	-9.0	-2.0	-8.8	-0.2	-2.8	-32.6
Mechanical Failure - Metra/PSA	-4.6	-1.2	-0.8	-0.8	-0.6	-3.0	-2.6	1.8	-9.0	-2.0	-8.8	-0.2	-2.8	-34.6
Non-Locomotive Equipment Failure - Metra/PSA	-2.4	-1.2	-0.8	-0.8	-0.6	-2.8	0.6	0.8	-3.0	-1.8	-0.8	3.8	2.6	-6.4
<i>Primary</i>	0.4	-0.8	-0.4	-0.4	-0.2	-0.6	0.0	0.0	-0.6	-0.2	-0.4	1.0	0.4	-1.8
<i>Secondary</i>	-2.8	-0.4	-0.4	-0.4	-0.4	-2.2	0.6	0.8	-2.4	-1.6	-0.4	2.8	2.2	-4.6
Locomotive Failure - Metra/PSA	-2.2	0.0	0.0	0.0	0.0	-0.2	-3.2	1.0	-6.0	-0.2	-8.0	-4.0	-5.4	-28.2
<i>Primary</i>	1.8	0.0	0.0	0.0	0.0	1.2	-1.6	1.0	2.4	-0.2	-2.6	1.0	-2.0	1.0
<i>Secondary</i>	-4.0	0.0	0.0	0.0	0.0	-1.4	-1.6	0.0	-8.4	0.0	-5.4	-5.0	-3.4	-29.2
Mechanical Failure - Foreign	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Passenger Train Interference - TOTAL	0.0	-0.6	-0.2	-0.6	-0.6	-4.4	-0.4	-1.4	-1.2	-0.8	0.0	0.0	-0.4	-10.6
Passenger Train Interference - Metra/PSA	-0.4	-0.4	-0.2	-0.6	0.0	-2.6	-0.4	-1.4	-1.2	-0.2	0.0	0.0	-0.4	-7.8
Passenger Train Interference - Foreign	0.4	-0.2	0.0	0.0	-0.6	-1.8	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	-2.8
Accident - TOTAL	-17.6	-2.8	-1.0	-0.4	-0.2	-4.2	8.0	-1.8	-4.2	2.8	0.6	-9.6	-1.6	-32.0
Accident - Metra/PSA	-17.6	-2.8	-1.0	-0.4	-0.2	-4.2	8.0	-0.6	-3.4	-0.2	0.6	-9.6	-1.6	-33.0
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	-0.8	3.0	0.0	0.0	0.0	1.0
Track Work - TOTAL	-6.6	8.0	3.6	1.2	-0.2	1.4	-3.6	-0.4	-1.4	0.0	-2.4	-1.8	2.2	0.0
Track Work - Metra/PSA	-6.6	8.0	3.6	1.2	-0.2	1.4	-3.6	-0.4	-1.4	0.0	-2.4	-1.8	2.2	0.0
Track Work - 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
Human Error - TOTAL	8.6	-1.0	0.2	-0.6	-0.8	-8.2	-3.0	-4.4	9.8	-0.6	-1.2	-2.8	2.6	-1.4
Human Error - Metra/PSA	3.0	-0.4	0.2	0.0	-0.2	-10.0	-3.4	-3.2	9.8	0.0	-2.2	-2.2	4.4	-4.2
Human Error - Foreign	5.6	-0.6	0.0	-0.6	-0.6	1.8	0.4	-1.2	0.0	-0.6	1.0	-0.6	-1.8	2.8
Sick, Injured, Unruly Passenger - TOTAL	11.0	2.0	-1.0	-0.8	0.0	1.6	1.6	1.0	-2.0	-0.2	-0.8	-3.0	1.6	11.0
Sick, Injured, Unruly Passenger - Metra/PSA	5.0	2.0	-1.0	-0.8	0.0	1.6	1.6	1.0	-2.0	-0.2	-0.8	-3.0	1.6	5.0
Sick, Injured, Unruly Passenger - Foreign	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Weather - TOTAL	-1.6	-2.2	0.0	-0.2	0.0	5.8	13.0	0.4	1.4	-1.0	5.0	-2.8	0.6	18.4
Weather - Metra/PSA	-1.2	-2.2	0.0	-0.2	0.0	5.8	13.0	0.4	1.4	-1.0	5.0	-2.8	0.6	18.8
Weather - Foreign	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4
Passenger Loading - TOTAL	-5.4	-5.6	-1.6	-2.2	0.0	-7.0	-10.2	0.0	-10.2	0.0	-4.0	-5.2	2.0	-49.4
Lift Deployment - TOTAL	-2.8	0.0	0.0	-0.2	0.0	-2.2	0.4	0.0	-2.0	0.0	0.0	-1.6	1.4	-7.0
Obstruction/Debris - TOTAL	-0.6	1.4	0.4	-0.6	-0.4	6.8	1.8	4.4	-2.0	-2.8	-2.4	6.0	3.0	15.0
Catenary Failure - TOTAL	0.0	-3.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4
Other - TOTAL	6.8	-1.6	1.8	-2.2	0.0	-2.2	-2.4	1.6	-2.4	-0.2	-1.2	2.4	-3.2	-2.8
TOTAL TRAINS DELAYED	-10.4	-1.4	3.4	-0.2	-2.6	-45.0	-9.4	-12.4	-23.0	-2.6	-9.2	-18.6	0.0	-131.4
Total Metra/PSA Delays	-14.0	-0.6	3.4	0.4	-2.0	-34.6	-1.0	3.4	-20.2	-9.0	-9.2	-20.2	4.4	-99.2
Total Foreign Carrier Delays	3.6	-0.8	0.0	-0.6	-0.6	-10.4	-8.4	-15.8	-2.8	6.4	0.0	1.6	-4.4	-32.2

Data for current month is final (04/13/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 04/14/2017

'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 - March 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	8	21	15	24	8	30	5	14	52	190
Freight Interference - Peak	5	0	0	0	6	3	3	11	2	10	1	3	20	64
Primary	4	0	0	0	3	3	3	9	2	7	1	2	10	44
Secondary	1	0	0	0	3	0	0	2	0	3	0	1	10	20
Freight Interference - Off-Peak	8	0	0	0	2	18	12	13	6	20	4	11	32	126
Primary	7	0	0	0	2	14	10	13	5	14	4	8	23	100
Secondary	1	0	0	0	0	4	2	0	1	6	0	3	9	26
Signal/Switch Failure - TOTAL	30	43	21	26	2	7	20	21	19	18	9	8	18	242
Signal/Switch Failure - Metra/PSA	26	43	21	26	0	4	17	10	19	5	9	8	15	203
Primary	12	29	18	19	0	4	10	7	13	4	2	5	8	131
Secondary	14	14	3	7	0	0	7	3	6	1	7	3	7	72
Signal/Switch Failure - Foreign	4	0	0	0	2	3	3	11	0	13	0	0	3	39
Primary	3	0	0	0	2	2	3	5	0	6	0	0	2	23
Secondary	1	0	0	0	0	1	0	6	0	7	0	0	1	16
Mechanical Failure - TOTAL	32	5	2	2	2	31	26	8	39	0	37	13	12	209
Mechanical Failure - Metra/PSA	30	1	2	2	1	29	26	8	39	0	37	13	12	200
Non-Locomotive Equipment Failure - Metra/PSA	5	1	2	2	1	2	4	3	2	0	0	4	9	35
Primary	3	0	1	0	1	1	3	1	2	0	0	1	6	19
Secondary	2	1	1	2	0	1	1	2	0	0	0	3	3	16
Locomotive Failure - Metra/PSA	25	0	0	0	0	27	22	5	37	0	37	9	3	165
Primary	9	0	0	0	0	11	9	2	16	0	5	6	1	59
Secondary	16	0	0	0	0	16	13	3	21	0	32	3	2	106
Mechanical Failure - Foreign	2	4	0	0	1	2	0	0	0	0	0	0	0	9
Passenger Train Interference - TOTAL	5	1	3	3	0	3	0	3	0	1	0	0	1	20
Passenger Train Interference - Metra/PSA	0	0	3	1	0	2	0	3	0	0	0	0	1	10
Passenger Train Interference - Foreign	5	1	0	2	0	1	0	0	0	1	0	0	0	10
Accident - TOTAL	23	0	0	0	0	2	25	7	25	3	7	39	1	132
Accident - Metra/PSA	23	0	0	0	0	2	25	7	20	0	7	39	1	124
Accident - Foreign	0	0	0	0	0	0	0	0	5	3	0	0	0	8
Track Work - TOTAL	14	45	8	13	0	4	2	0	8	10	2	9	9	124
Track Work - Metra/PSA	14	45	8	13	0	4	2	0	8	10	2	9	9	124
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	77	7	6	3	6	43	40	10	21	12	18	1	18	262
Human Error - Metra/PSA	26	7	6	3	0	22	22	0	21	2	17	1	18	145
Human Error - Foreign	51	0	0	0	6	21	18	10	0	10	1	0	0	117
Sick, Injured, Unruly Passenger - TOTAL	15	15	2	3	0	13	7	3	4	0	6	13	14	95
Sick, Injured, Unruly Passenger - Metra/PSA	9	15	2	3	0	13	7	3	4	0	6	13	14	89
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	22	21	7	14	4	27	23	5	30	1	15	6	6	181
Weather - Metra/PSA	22	21	7	14	4	26	23	5	30	1	15	6	6	180
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	2	5	3	4	0	2	1	0	5	0	11	3	16	52
Lift Deployment - TOTAL	2	0	0	1	0	6	5	0	3	0	4	3	9	33
Obstruction/Debris - TOTAL	23	11	11	11	0	23	11	11	11	8	1	15	17	153
Catenary Failure - TOTAL	0	3	2	6	0	0	0	0	0	0	0	0	0	11
Other - TOTAL	10	2	3	1	0	3	5	4	7	5	4	5	5	54
TOTAL TRAINS DELAYED	268	158	68	87	22	185	180	96	180	88	119	129	178	1,758
Total Metra/PSA Delays	187	153	68	85	5	136	144	51	167	31	113	115	123	1,378
Total Foreign Carrier Delays	81	5	0	2	17	49	36	45	13	57	6	14	55	380

Data for current month is final (04/13/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx|YTDByLine 04/14/2017

'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 - March - 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	58.4	0.0	0.0	0.0	10.8	47.2	43.8	39.2	21.2	36.0	5.2	14.0	52.4	328.2
Freight Interference - Peak	24.0	0.0	0.0	0.0	10.8	10.2	10.4	13.2	6.2	13.0	0.8	6.8	12.4	107.8
<i>Primary</i>	17.0	0.0	0.0	0.0	10.4	6.8	7.2	8.6	3.8	9.8	0.4	3.8	7.0	74.8
<i>Secondary</i>	7.0	0.0	0.0	0.0	0.4	3.4	3.2	4.6	2.4	3.2	0.4	3.0	5.4	33.0
Freight Interference - Off-Peak	34.4	0.0	0.0	0.0	0.0	37.0	33.4	26.0	15.0	23.0	4.4	7.2	40.0	220.4
<i>Primary</i>	28.8	0.0	0.0	0.0	0.0	23.2	23.4	22.0	12.8	18.8	2.2	5.2	33.8	170.2
<i>Secondary</i>	5.6	0.0	0.0	0.0	0.0	13.8	10.0	4.0	2.2	4.2	2.2	2.0	6.2	50.2
Signal/Switch Failure - TOTAL	67.6	20.0	9.8	7.8	5.8	68.0	46.0	29.6	30.6	29.2	7.4	12.4	35.2	369.4
Signal/Switch Failure - Metra/PSA	35.6	20.0	9.8	7.8	1.4	54.0	36.4	16.4	28.6	6.0	7.2	10.6	34.6	268.4
<i>Primary</i>	23.0	10.8	7.0	6.4	1.2	26.0	20.8	8.2	19.8	4.2	5.0	6.0	11.6	150.0
<i>Secondary</i>	12.6	9.2	2.8	1.4	0.2	28.0	15.6	8.2	8.8	1.8	2.2	4.6	23.0	118.4
Signal/Switch Failure - Foreign	32.0	0.0	0.0	0.0	4.4	14.0	9.6	13.2	2.0	23.2	0.2	1.8	0.6	101.0
<i>Primary</i>	26.0	0.0	0.0	0.0	4.0	11.2	8.0	7.6	0.8	15.4	0.2	0.6	0.6	74.4
<i>Secondary</i>	6.0	0.0	0.0	0.0	0.4	2.8	1.6	5.6	1.2	7.8	0.0	1.2	0.0	26.6
Mechanical Failure - TOTAL	41.2	7.6	2.8	3.2	2.0	55.0	33.2	12.8	49.2	8.8	26.6	24.6	22.0	289.0
Mechanical Failure - Metra/PSA	40.8	7.4	2.8	3.2	2.0	50.6	33.0	12.8	49.2	8.8	26.6	24.6	21.8	283.6
Non-Locomotive Equipment Failure - Metra/PSA	14.4	7.4	2.8	3.2	1.0	9.8	6.8	2.8	6.4	5.4	7.6	3.2	7.2	78.0
<i>Primary</i>	4.4	3.4	1.0	2.0	0.6	2.6	3.0	1.0	2.4	1.8	2.4	1.0	3.6	29.2
<i>Secondary</i>	10.0	4.0	1.8	1.2	0.4	7.2	3.8	1.8	4.0	3.6	5.2	2.2	3.6	48.8
Locomotive Failure - Metra/PSA	26.4	0.0	0.0	0.0	1.0	40.8	26.2	10.0	42.8	3.4	19.0	21.4	14.6	205.6
<i>Primary</i>	8.6	0.0	0.0	0.0	0.8	9.0	9.4	2.0	11.4	1.4	5.6	6.4	6.0	60.6
<i>Secondary</i>	17.8	0.0	0.0	0.0	0.2	31.8	16.8	8.0	31.4	2.0	13.4	15.0	8.6	145.0
Mechanical Failure - Foreign	0.4	0.2	0.0	0.0	0.0	4.4	0.2	0.0	0.0	0.0	0.0	0.0	0.2	5.4
Passenger Train Interference - TOTAL	4.4	3.2	1.0	1.8	1.4	23.8	4.6	4.8	5.2	1.8	0.6	1.6	5.2	59.4
Passenger Train Interference - Metra/PSA	0.6	1.8	0.2	1.4	0.0	17.4	4.2	4.8	4.4	0.6	0.6	1.6	5.0	42.6
Passenger Train Interference - Foreign	3.8	1.4	0.8	0.4	1.4	6.4	0.4	0.0	0.8	1.2	0.0	0.0	0.2	16.8
Accident - TOTAL	48.0	3.4	1.0	0.6	0.6	22.2	16.0	5.2	13.2	1.6	12.6	30.8	3.8	159.0
Accident - Metra/PSA	35.0	3.4	1.0	0.6	0.6	20.4	15.8	3.8	12.0	1.6	12.6	30.8	2.8	140.4
Accident - Foreign	13.0	0.0	0.0	0.0	0.0	1.8	0.2	1.4	1.2	0.0	0.0	0.0	1.0	18.6
Track Work - TOTAL	32.4	16.2	8.6	5.2	0.4	9.4	8.0	5.2	6.8	0.2	6.0	6.0	6.0	110.4
Track Work - Metra/PSA	28.8	16.2	8.6	5.2	0.4	9.4	8.0	5.2	6.8	0.0	6.0	6.0	6.0	106.6
Track Work - Foreign	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	3.8
Human Error - TOTAL	43.6	9.6	3.8	5.0	4.2	25.4	15.2	9.6	18.8	6.8	14.4	11.6	10.4	178.4
Human Error - Metra/PSA	30.0	7.0	3.6	4.2	1.2	16.0	9.0	4.8	18.8	1.2	13.0	9.4	6.6	124.8
Human Error - Foreign	13.6	2.6	0.2	0.8	3.0	9.4	6.2	4.8	0.0	5.6	1.4	2.2	3.8	53.6
Sick, Injured, Unruly Passenger - TOTAL	7.0	17.6	3.2	4.2	0.4	8.2	10.0	0.6	5.2	1.0	7.4	12.6	7.8	85.2
Sick, Injured, Unruly Passenger - Metra/PSA	7.0	17.6	3.2	4.2	0.4	8.2	10.0	0.6	5.2	1.0	7.4	12.6	7.8	85.2
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	121.4	88.4	25.8	31.0	3.2	72.0	66.4	20.4	86.0	16.2	55.8	61.2	55.2	703.0
Weather - Metra/PSA	120.4	88.4	25.8	31.0	2.8	69.8	65.8	20.4	86.0	15.4	55.8	61.2	54.8	697.6
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	9.8	17.8	4.8	5.0	0.0	14.8	14.4	0.4	23.4	0.2	12.0	9.0	10.6	122.2
Lift Deployment - TOTAL	8.6	0.2	0.0	0.2	0.0	12.0	5.8	0.8	7.0	0.0	2.6	4.8	10.6	52.6
Obstruction/Debris - TOTAL	15.0	6.8	2.0	9.0	1.0	14.2	16.0	2.6	9.0	5.8	8.6	12.8	7.8	110.6
Catenary Failure - TOTAL	0.0	16.0	3.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	24.6
Other - TOTAL	19.0	7.4	1.6	3.4	0.0	6.2	6.4	2.8	5.6	6.0	6.4	5.4	11.6	81.8
TOTAL TRAINS DELAYED	476.4	214.2	67.6	81.6	29.8	378.4	285.8	134.0	281.2	113.6	165.6	207.0	238.6	2,673.8
Total Metra/PSA Delays	350.6	210.0	66.6	80.4	9.8	293.0	224.8	75.4	256.0	46.6	158.8	189.0	180.0	2,141.0
Total Foreign Carrier Delays	125.8	4.2	1.0	1.2	20.0	85.4	61.0	58.6	25.2	67.0	6.8	18.0	58.6	532.8

Data for latest month is final (04/14/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\YTDBByLine 04/14/2017

'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 - March 2017 Divergence From January - March 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	-45.4	0.0	0.0	0.0	-2.8	-26.2	-28.8	-15.2	-13.2	-6.0	-0.2	0.0	-0.4	-138.2
Freight Interference - Peak	-19.0	0.0	0.0	0.0	-4.8	-7.2	-7.4	-2.2	-4.2	-3.0	0.2	-3.8	7.6	-43.8
Primary	-13.0	0.0	0.0	0.0	-7.4	-3.8	-4.2	0.4	-1.8	-2.8	0.6	-1.8	3.0	-30.8
Secondary	-6.0	0.0	0.0	0.0	2.6	-3.4	-3.2	-2.6	-2.4	-0.2	-0.4	-2.0	4.6	-13.0
Freight Interference - Off-Peak	-26.4	0.0	0.0	0.0	2.0	-19.0	-21.4	-13.0	-9.0	-3.0	-0.4	3.8	-8.0	-94.4
Primary	-21.8	0.0	0.0	0.0	2.0	-9.2	-13.4	-9.0	-7.8	-4.8	1.8	2.8	-10.8	-70.2
Secondary	-4.6	0.0	0.0	0.0	0.0	-9.8	-8.0	-4.0	-1.2	1.8	-2.2	1.0	2.8	-24.2
Signal/Switch Failure - TOTAL	-37.6	23.0	11.2	18.2	-3.8	-61.0	-26.0	-8.6	-11.6	-11.2	1.6	-4.4	-17.2	-127.4
Signal/Switch Failure - Metra/PSA	-9.6	23.0	11.2	18.2	-1.4	-50.0	-19.4	-6.4	-9.6	-1.0	1.8	-2.6	-19.6	-65.4
Primary	-11.0	18.2	11.0	12.6	-1.2	-22.0	-10.8	-1.2	-6.8	-0.2	-3.0	-1.0	-3.6	-19.0
Secondary	1.4	4.8	0.2	5.6	-0.2	-28.0	-8.6	-5.2	-2.8	-0.8	4.8	-1.6	-16.0	-46.4
Signal/Switch Failure - Foreign	-28.0	0.0	0.0	0.0	-2.4	-11.0	-6.6	-2.2	-2.0	-10.2	-0.2	-1.8	2.4	-62.0
Primary	-23.0	0.0	0.0	0.0	-2.0	-9.2	-5.0	-2.6	-0.8	-9.4	-0.2	-0.6	1.4	-51.4
Secondary	-5.0	0.0	0.0	0.0	-0.4	-1.8	-1.6	0.4	-1.2	-0.8	0.0	-1.2	1.0	-10.6
Mechanical Failure - TOTAL	-9.2	-2.6	-0.8	-1.2	0.0	-24.0	-7.2	-4.8	-10.2	-8.8	10.4	-11.6	-10.0	-80.0
Mechanical Failure - Metra/PSA	-10.8	-6.4	-0.8	-1.2	-1.0	-21.6	-7.0	-4.8	-10.2	-8.8	10.4	-11.6	-9.8	-83.6
Non-Locomotive Equipment Failure - Metra/PSA	-9.4	-6.4	-0.8	-1.2	0.0	-7.8	-2.8	0.2	-4.4	-5.4	-7.6	0.8	1.8	-43.0
Primary	-1.4	-3.4	0.0	-2.0	0.4	-1.6	0.0	0.0	-0.4	-1.8	-2.4	0.0	2.4	-10.2
Secondary	-8.0	-3.0	-0.8	0.8	-0.4	-6.2	-2.8	0.2	-4.0	-3.6	-5.2	0.8	-0.6	-32.8
Locomotive Failure - Metra/PSA	-1.4	0.0	0.0	0.0	-1.0	-13.8	-4.2	-5.0	-5.8	-3.4	18.0	-12.4	-11.6	-40.6
Primary	0.4	0.0	0.0	0.0	-0.8	2.0	-0.4	0.0	4.6	-1.4	-0.6	-0.4	-5.0	-1.6
Secondary	-1.8	0.0	0.0	0.0	-0.2	-15.8	-3.8	-5.0	-10.4	-2.0	18.6	-12.0	-6.6	-39.0
Mechanical Failure - Foreign	1.6	3.8	0.0	0.0	1.0	-2.4	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2	3.6
Passenger Train Interference - TOTAL	0.6	-2.2	2.0	1.2	-1.4	-20.8	-4.6	-1.8	-5.2	-0.8	-0.6	-1.6	-4.2	-39.4
Passenger Train Interference - Metra/PSA	-0.6	-1.8	2.8	-0.4	0.0	-15.4	-4.2	-1.8	-4.4	-0.6	-0.6	-1.6	-4.0	-32.6
Passenger Train Interference - Foreign	1.2	-0.4	-0.8	1.6	-1.4	-5.4	-0.4	0.0	-0.8	-0.2	0.0	0.0	-0.2	-6.8
Accident - TOTAL	-25.0	-3.4	-1.0	-0.6	-0.6	-20.2	9.0	1.8	11.8	1.4	-5.6	8.2	-2.8	-27.0
Accident - Metra/PSA	-12.0	-3.4	-1.0	-0.6	-0.6	-18.4	9.2	3.2	8.0	-1.6	-5.6	8.2	-1.8	-16.4
Accident - Foreign	-13.0	0.0	0.0	0.0	0.0	-1.8	-0.2	-1.4	3.8	3.0	0.0	0.0	-1.0	-10.6
Track Work - TOTAL	-18.4	28.8	-0.6	7.8	-0.4	-5.4	-6.0	-5.2	1.2	9.8	-4.0	3.0	3.0	13.6
Track Work - Metra/PSA	-14.8	28.8	-0.6	7.8	-0.4	-5.4	-6.0	-5.2	1.2	10.0	-4.0	3.0	3.0	17.4
Track Work - Foreign	-3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-3.8
Human Error - TOTAL	33.4	-2.6	2.2	-2.0	1.8	17.6	24.8	0.4	2.2	5.2	3.6	-10.6	7.6	83.6
Human Error - Metra/PSA	-4.0	0.0	2.4	-1.2	-1.2	6.0	13.0	-4.8	2.2	0.8	4.0	-8.4	11.4	20.2
Human Error - Foreign	37.4	-2.6	-0.2	-0.8	3.0	11.6	11.8	5.2	0.0	4.4	-0.4	-2.2	-3.8	63.4
Sick, Injured, Unruly Passenger - TOTAL	8.0	-2.6	-1.2	-1.2	-0.4	4.8	-3.0	2.4	-1.2	-1.0	-1.4	0.4	6.2	9.8
Sick, Injured, Unruly Passenger - Metra/PSA	2.0	-2.6	-1.2	-1.2	-0.4	4.8	-3.0	2.4	-1.2	-1.0	-1.4	0.4	6.2	3.8
Sick, Injured, Unruly Passenger - Foreign	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Weather - TOTAL	-99.4	-67.4	-18.8	-17.0	0.8	-45.0	-43.4	-15.4	-56.0	-15.2	-40.8	-55.2	-49.2	-522.0
Weather - Metra/PSA	-98.4	-67.4	-18.8	-17.0	1.2	-43.8	-42.8	-15.4	-56.0	-14.4	-40.8	-55.2	-48.8	-517.6
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	-7.8	-12.8	-1.8	-1.0	0.0	-12.8	-13.4	-0.4	-18.4	-0.2	-1.0	-6.0	5.4	-70.2
Lift Deployment - TOTAL	-6.6	-0.2	0.0	0.8	0.0	-6.0	-0.8	-0.8	-4.0	0.0	1.4	-1.8	-1.6	-19.6
Obstruction/Debris - TOTAL	8.0	4.2	9.0	2.0	-1.0	8.8	-5.0	8.4	2.0	2.2	-7.6	2.2	9.2	42.4
Catenary Failure - TOTAL	0.0	-13.0	-1.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-13.6
Other - TOTAL	-9.0	-5.4	1.4	-2.4	0.0	-3.2	-1.4	1.2	1.4	-1.0	-2.4	-0.4	-6.6	-27.8
TOTAL TRAINS DELAYED	-208.4	-56.2	0.4	5.4	-7.8	-193.4	-105.8	-38.0	-101.2	-25.6	-46.6	-78.0	-60.6	-915.8
Total Metra/PSA Delays	-163.6	-57.0	1.4	4.6	-4.8	-157.0	-80.8	-24.4	-89.0	-15.6	-45.8	-74.0	-57.0	-763.0
Total Foreign Carrier Delays	-44.8	0.8	-1.0	0.8	-3.0	-36.4	-25.0	-13.6	-12.2	-10.0	-0.8	-4.0	-3.6	-152.8

Data for current month is final (04/13/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\YTDByLine 04/14/2017

'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 - Mar	
Freight Interference - TOTAL	53	68	69										190	10.8%
Freight Interference - Peak	20	21	23										64	3.6%
Primary	11	16	17										44	2.5%
Secondary	9	5	6										20	1.1%
Freight Interference - Off-Peak	33	47	46										126	7.2%
Primary	26	38	36										100	5.7%
Secondary	7	9	10										26	1.5%
Signal/Switch Failure - TOTAL	118	44	80										242	13.8%
Signal/Switch Failure - Metra/PSA	98	31	74										203	11.5%
Primary	69	21	41										131	7.5%
Secondary	29	10	33										72	4.1%
Signal/Switch Failure - Foreign	20	13	6										39	2.2%
Primary	10	9	4										23	1.3%
Secondary	10	4	2										16	0.9%
Mechanical Failure - TOTAL	84	61	64										209	11.9%
Mechanical Failure - Metra/PSA	83	55	62										200	11.4%
Non-Locomotive Equipment Failure - Metra/PSA	12	8	15										35	2.0%
Primary	6	8	5										19	1.1%
Secondary	6	0	10										16	0.9%
Locomotive Failure - Metra/PSA	71	47	47										165	9.4%
Primary	18	21	20										59	3.4%
Secondary	53	26	27										106	6.0%
Mechanical Failure - Foreign	1	6	2										9	0.5%
Passenger Train Interference - TOTAL	16	2	2										20	1.1%
Passenger Train Interference - Metra/PSA	9	0	1										10	0.6%
Passenger Train Interference - Foreign	7	2	1										10	0.6%
Accident - TOTAL	74	32	26										132	7.5%
Accident - Metra/PSA	69	32	23										124	7.1%
Accident - Foreign	5	0	3										8	0.5%
Track Work - TOTAL	78	17	29										124	7.1%
Track Work - Metra/PSA	78	17	29										124	7.1%
Track Work - Foreign	0	0	0										0	0.0%
Human Error - TOTAL	68	140	54										262	14.9%
Human Error - Metra/PSA	58	50	37										145	8.2%
Human Error - Foreign	10	90	17										117	6.7%
Sick, Injured, Unruly Passenger - TOTAL	27	28	40										95	5.4%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34										89	5.1%
Sick, Injured, Unruly Passenger - Foreign	0	0	6										6	0.3%
Weather - TOTAL	97	25	59										181	10.3%
Weather - Metra/PSA	96	25	59										180	10.2%
Weather - Foreign	1	0	0										1	0.1%
Passenger Loading - TOTAL	33	7	12										52	3.0%
Lift Deployment - TOTAL	17	8	8										33	1.9%
Obstruction/Debris - TOTAL	66	44	43										153	8.7%
Catenary Failure - TOTAL	6	1	4										11	0.6%
Other - TOTAL	15	15	24										54	3.1%
TOTAL TRAINS DELAYED	752	492	514										1,758	100.0%
Total Metra/PSA Delays	655	313	410										1,378	78.4%
Total Foreign Carrier Delays	97	179	104										380	21.6%

Data for current month is final (04/13/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\AllMonths 04/14/2017

'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 - Mar	
Freight Interference - TOTAL	82	53	43	44	72	73	82	108	78	48	65	94	178	9.5%
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	63	3.4%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	47	2.5%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	16	0.9%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	115	6.1%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	84	4.5%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	31	1.7%
Signal/Switch Failure - TOTAL	154	155	123	98	145	143	108	63	105	67	110	120	432	23.0%
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	288	15.3%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	117	6.2%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	171	9.1%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	144	7.7%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	106	5.6%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	38	2.0%
Mechanical Failure - TOTAL	107	68	131	43	80	88	120	78	114	64	71	88	306	16.3%
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	306	16.3%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	54	2.9%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	24	1.3%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	30	1.6%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	252	13.4%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	70	3.7%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	182	9.7%
Mechanical Failure - Foreign	0	0	0	1	0	0	0	0	0	0	0	8	0	0.0%
Passenger Train Interference - TOTAL	22	12	3	4	19	14	12	11	5	10	4	38	37	2.0%
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	20	1.1%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	17	0.9%
Accident - TOTAL	59	15	62	48	86	29	18	55	34	10	79	49	136	7.2%
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	125	6.7%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	11	0.6%
Track Work - TOTAL	40	21	36	44	141	114	99	133	177	75	59	61	97	5.2%
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	97	5.2%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	0	0.0%
Human Error - TOTAL	38	33	21	53	23	112	47	93	50	45	49	71	92	4.9%
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	70	3.7%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	22	1.2%
Sick, Injured, Unruly Passenger - TOTAL	20	39	27	50	44	32	29	43	30	24	35	34	86	4.6%
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	86	4.6%
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	289	15.4%
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	289	15.4%
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	49	2.6%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	37	2.0%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	88	4.7%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	14	0.7%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	37	2.0%
TOTAL TRAINS DELAYED	707	599	572	451	716	791	769	781	729	455	647	836	1,878	100.0%
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	1,506	80.2%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	372	19.8%

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

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 04/14/2017

'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 - Mar	
Freight Interference - TOTAL	-29	15	26										12	1.3%
Freight Interference - Peak	-12	4	9										1	0.3%
Primary	-15	6	6										-3	0.0%
Secondary	3	-2	3										4	0.3%
Freight Interference - Off-Peak	-17	11	17										11	1.0%
Primary	-6	9	13										16	1.2%
Secondary	-11	2	4										-5	-0.2%
Signal/Switch Failure - TOTAL	-36	-111	-43										-190	-9.2%
Signal/Switch Failure - Metra/PSA	31	-91	-25										-85	-3.8%
Primary	34	-9	-11										14	1.2%
Secondary	-3	-82	-14										-99	-5.0%
Signal/Switch Failure - Foreign	-67	-20	-18										-105	-5.4%
Primary	-58	-15	-10										-83	-4.3%
Secondary	-9	-5	-8										-22	-1.1%
Mechanical Failure - TOTAL	-23	-7	-67										-97	-4.4%
Mechanical Failure - Metra/PSA	-24	-13	-69										-106	-4.9%
Non-Locomotive Equipment Failure - Metra/PSA	-13	-11	5										-19	-0.9%
Primary	-5	-1	1										-5	-0.2%
Secondary	-8	-10	4										-14	-0.7%
Locomotive Failure - Metra/PSA	-11	-2	-74										-87	-4.0%
Primary	-10	3	-4										-11	-0.4%
Secondary	-1	-5	-70										-76	-3.7%
Mechanical Failure - Foreign	1	6	2										9	0.5%
Passenger Train Interference - TOTAL	-6	-10	-1										-17	-0.8%
Passenger Train Interference - Metra/PSA	-4	-5	-1										-10	-0.5%
Passenger Train Interference - Foreign	-2	-5	0										-7	-0.3%
Accident - TOTAL	15	17	-36										-4	0.3%
Accident - Metra/PSA	20	18	-39										-1	0.4%
Accident - Foreign	-5	-1	3										-3	-0.1%
Track Work - TOTAL	38	-4	-7										27	1.9%
Track Work - Metra/PSA	38	-4	-7										27	1.9%
Track Work - Foreign	0	0	0										0	0.0%
Human Error - TOTAL	30	107	33										170	10.0%
Human Error - Metra/PSA	28	25	22										75	4.5%
Human Error - Foreign	2	82	11										95	5.5%
Sick, Injured, Unruly Passenger - TOTAL	7	-11	13										9	0.8%
Sick, Injured, Unruly Passenger - Metra/PSA	7	-11	7										3	0.5%
Sick, Injured, Unruly Passenger - Foreign	0	0	6										6	0.3%
Weather - TOTAL	-32	-107	31										-108	-5.1%
Weather - Metra/PSA	-33	-107	31										-109	-5.1%
Weather - Foreign	1	0	0										1	0.1%
Passenger Loading - TOTAL	20	0	-17										3	0.3%
Lift Deployment - TOTAL	6	-6	-4										-4	-0.1%
Obstruction/Debris - TOTAL	48	14	3										65	4.0%
Catenary Failure - TOTAL	-3	-2	2										-3	-0.1%
Other - TOTAL	10	-2	9										17	1.1%
TOTAL TRAINS DELAYED	45	-107	-58										-120	
Total Metra/PSA Delays	144	-184	-88										-128	
Total Foreign Carrier Delays	-99	77	30										8	

Data for current month is final (04/13/17) version from TOPS.

P:\ONTIME\report[DelaysByCause.xlsx]AllMonths 04/14/2017

'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 April 2015 and March 2017**

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Apr-15	8	0	0	0	6	11	4	13	4	12	4	9	16	87
May-15	20	0	0	0	4	5	2	8	2	9	0	3	6	59
Jun-15	12	0	0	0	4	11	1	9	3	24	0	6	20	90
Jul-15	23	0	0	0	1	11	0	3	12	17	0	18	31	116
Aug-15	13	0	0	0	8	7	5	11	4	17	0	0	24	89
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
Total	165	0	0	0	39	78	67	82	93	123	7	53	170	877
Apr-16	13	0	0	0	3	8	4	3	1	8	0	1	3	44
May-16	17	0	0	0	0	9	12	7	0	8	0	1	18	72
Jun-16	19	0	0	0	1	4	6	9	4	10	0	0	20	73
Jul-16	25	0	0	0	2	5	24	6	2	9	0	1	8	82
Aug-16	56	0	0	0	2	14	6	4	3	5	1	2	15	108
Sep-16	22	0	0	0	5	9	4	3	4	17	1	2	11	78
Oct-16	11	0	0	0	2	2	2	9	3	2	1	3	13	48
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
Total	193	0	0	0	32	82	82	80	33	107	11	36	198	854

Data for current month is final (04/13/17) version from TOPS.

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

LINE													Lift Delays YTD	% of All Delays YTD
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
BNSF	1	1	0										2	0.75%
Electric ML	0	0	0										0	0.00%
Electric BI	0	0	0										0	0.00%
Electric SC	0	1	0										1	1.15%
HER	0	0	0										0	0.00%
Milw N	3	2	1										6	3.24%
Milw W	3	0	2										5	2.78%
NCS	0	0	0										0	0.00%
RI	2	1	0										3	1.67%
SWS	0	0	0										0	0.00%
UP N	2	1	1										4	3.36%
UP NW	2	1	0										3	2.33%
UP W	4	1	4										9	5.06%
Total Lift Delays	17	8	8										33	1.88%
ALL DELAYS													1,758	

Data for current month is final (04/13/17) version from TOPS.

2016

LINE													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

March 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
Peak *														
6-10	23	12	3	3	1	7	10	5	11	8	1	9	11	104
11-15	9	4	0	0	1	3	5	4	1	3	8	1	8	47
16-20	4	1	1	0	0	2	1	1	3	0	1	0	2	16
21+	4	1	0	0	1	6	10	2	9	0	5	1	0	39
Annulled	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>11</u>
Sub-Total	43	18	4	3	3	18	32	12	25	11	15	12	21	217
Off-Peak **														
6-10	20	12	11	11	0	21	11	4	10	10	6	8	29	153
11-15	12	6	2	2	1	6	7	5	2	4	5	3	3	58
16-20	4	2	1	1	0	4	0	0	0	0	2	2	2	18
21+	8	3	0	2	1	5	14	4	4	1	2	7	4	55
Annulled	<u>2</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>8</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>13</u>
Sub-Total	46	23	14	17	2	37	40	13	17	15	15	20	38	297
March 2017 Total														
6-10	43	24	14	14	1	28	21	9	21	18	7	17	40	257
11-15	21	10	2	2	2	9	12	9	3	7	13	4	11	105
16-20	8	3	2	1	0	6	1	1	3	0	3	2	4	34
21+	12	4	0	2	2	11	24	6	13	1	7	8	4	94
Annulled	<u>5</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>14</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>24</u>
TOTAL	89	41	18	20	5	55	72	25	42	26	30	32	59	514
2017 Year-to-Date														
6-10	116	92	42	47	6	88	58	43	87	39	37	49	105	809
11-15	52	22	8	12	5	35	38	21	23	16	28	18	36	314
16-20	22	11	9	6	4	25	13	7	18	5	14	9	19	162
21+	57	33	9	20	7	31	50	20	46	25	34	40	18	390
Annulled	<u>21</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>6</u>	<u>21</u>	<u>5</u>	<u>6</u>	<u>3</u>	<u>6</u>	<u>13</u>	<u>0</u>	<u>83</u>
TOTAL	268	158	68	87	22	185	180	96	180	88	119	129	178	1,758
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	
March 2017 Total														
6-10	48.3%	58.5%	77.8%	70.0%	20.0%	50.9%	29.2%	36.0%	50.0%	69.2%	23.3%	53.1%	67.8%	50.0%
11-15	23.6%	24.4%	11.1%	10.0%	40.0%	16.4%	16.7%	36.0%	7.1%	26.9%	43.3%	12.5%	18.6%	20.4%
16-20	9.0%	7.3%	11.1%	5.0%	0.0%	10.9%	1.4%	4.0%	7.1%	0.0%	10.0%	6.3%	6.8%	6.6%
21+	13.5%	9.8%	0.0%	10.0%	40.0%	20.0%	33.3%	24.0%	31.0%	3.8%	23.3%	25.0%	6.8%	18.3%
Annulled	<u>5.6%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>5.0%</u>	<u>0.0%</u>	<u>1.8%</u>	<u>19.4%</u>	<u>0.0%</u>	<u>4.8%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>3.1%</u>	<u>0.0%</u>	<u>4.7%</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	43.3%	58.2%	61.8%	54.0%	27.3%	47.6%	32.2%	44.8%	48.3%	44.3%	31.1%	38.0%	59.0%	46.0%
11-15	19.4%	13.9%	11.8%	13.8%	22.7%	18.9%	21.1%	21.9%	12.8%	18.2%	23.5%	14.0%	20.2%	17.9%
16-20	8.2%	7.0%	13.2%	6.9%	18.2%	13.5%	7.2%	7.3%	10.0%	5.7%	11.8%	7.0%	10.7%	9.2%
21+	21.3%	20.9%	13.2%	23.0%	31.8%	16.8%	27.8%	20.8%	25.6%	28.4%	28.6%	31.0%	10.1%	22.2%
Annulled	<u>7.8%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>2.3%</u>	<u>0.0%</u>	<u>3.2%</u>	<u>11.7%</u>	<u>5.2%</u>	<u>3.3%</u>	<u>3.4%</u>	<u>5.0%</u>	<u>10.1%</u>	<u>0.0%</u>	<u>4.7%</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%

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

Data for most recent month is final (04/13/17) 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	
March 2017														
Peak *	12.4	10.8	9.5	7.0	17.0	26.0	28.7	19.1	29.2	9.0	21.9	10.2	10.6	18.0
Off-Peak **	14.4	12.4	9.1	10.7	20.5	16.5	19.2	16.6	13.9	10.5	15.1	24.6	12.3	15.0
All	13.4	11.7	9.2	10.1	18.4	19.7	23.5	17.8	23.1	9.8	18.5	19.5	11.7	16.2
2017 Year-to-Date														
Peak *	19.8	17.7	11.9	17.3	23.6	20.9	24.0	17.5	20.2	15.5	19.2	59.1	12.2	21.5
Off-Peak **	16.0	11.6	12.8	14.2	16.4	16.0	18.1	17.1	15.4	23.6	19.8	30.5	12.4	16.8
All	18.1	14.3	12.4	15.1	22.0	17.9	20.6	17.4	18.4	20.6	19.5	43.1	12.4	19.0

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 (04/13/17) version from TOPS.