

COMMUTER RAIL SYSTEM

ON-TIME PERFORMANCE REPORT

December 2017



COMMUTER RAIL ON-TIME PERFORMANCE

December 2017

This report presents an analysis of the December 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 December 2017, Metra operated 16,184 scheduled trains, including scheduled "extras", if any. 989 of these trains were delayed (late or annulled), representing an on-time performance rate of 93.9%. 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 December 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 December 2017. Of the 989 delays systemwide in December 2017, all but 513 (52%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Decembers, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in December 2017, 237 more delays than the average over the previous five Decembers were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 8,541 delays in 2017, all but 4,242 (50%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during December 2017. Table 8.b shows the average frequencies over the previous five Decembers, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 989 delays systemwide in December 2017, 301 more than the average over the previous five Decembers. Table 9.a shows delays from the beginning of the year through December 2017. Table 9.b shows the average frequencies from the beginning of the year through December 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 December of 2017, a total of 8,541 trains were delayed, compared to 8,053 trains delayed in the same twelve 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 December 2017 freight operations delayed 110 trains systemwide, compared to 94 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 28 trains were delayed by lift deployment in December 2017.

A review of December 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 45.8% of all late trains. Table 14 shows that the average length of delay was 15.9 minutes in December 2017. It should be noted that these averages relate only to reportable delays (i.e., trains late by six minutes or more).

Tables 15 to 19 report year-end statistics. Table 15 presents annual train delays and on-time performance by line. Table 16 displays the frequency of 2017 annual train delays by cause and by line. The top two causes for each line are highlighted. Annual system causes of delay for 2012 to 2017 are shown in Table 17. The annual frequencies of train delays by duration for the Metra system are shown in Table 18, and for each line in Table 19.

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
December 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	1,078	113	89.5%	814	54	93.4%	1,892	167	91.2%	140	1	99.3%	108	0	100.0%	2,140	168	92.1%
Elec -ML	834	9	98.9%	846	12	98.6%	1,680	21	98.8%	200	0	100.0%	122	8	93.4%	2,002	29	98.6%
-BI	260	7	97.3%	280	2	99.3%	540	9	98.3%	40	1	97.5%		--		580	10	98.3%
-SC	<u>280</u>	<u>4</u>	98.6%	<u>620</u>	<u>5</u>	99.2%	<u>900</u>	<u>9</u>	99.0%	<u>160</u>	<u>6</u>	96.3%	<u>120</u>	<u>6</u>	95.0%	<u>1,180</u>	<u>21</u>	98.2%
Subtotal	1,374	20	98.5%	1,746	19	98.9%	3,120	39	98.8%	400	7	98.3%	242	14	94.2%	3,762	60	98.4%
Heritage	120	10	91.7%	20	3	85.0%	140	13	90.7%	--			--			140	13	90.7%
Milw -N	497	31	93.8%	703	76	89.2%	1,200	107	91.1%	120	1	99.2%	120	2	98.3%	1,440	110	92.4%
-W	<u>536</u>	<u>63</u>	88.2%	<u>624</u>	<u>70</u>	88.8%	<u>1,160</u>	<u>133</u>	88.5%	<u>120</u>	<u>11</u>	90.8%	<u>108</u>	<u>20</u>	81.5%	<u>1,388</u>	<u>164</u>	88.2%
Subtotal	1,033	94	90.9%	1,327	146	89.0%	2,360	240	89.8%	240	12	95.0%	228	22	90.4%	2,828	274	90.3%
NCS	218	17	92.2%	222	18	91.9%	440	35	92.0%	--			--			440	35	92.0%
RI	715	65	90.9%	685	53	92.3%	1,400	118	91.6%	160	2	98.8%	168	4	97.6%	1,728	124	92.8%
SWS	220	11	95.0%	380	28	92.6%	600	39	93.5%	30	0	100.0%	--			630	39	93.8%
UP -N	584	27	95.4%	808	24	97.0%	1,392	51	96.3%	130	10	92.3%	108	5	95.4%	1,630	66	96.0%
-NW	640	52	91.9%	648	20	96.9%	1,288	72	94.4%	120	8	93.3%	90	1	98.9%	1,498	81	94.6%
-W	<u>532</u>	<u>62</u>	88.3%	<u>648</u>	<u>63</u>	90.3%	<u>1,180</u>	<u>125</u>	89.4%	<u>100</u>	<u>0</u>	100.0%	<u>108</u>	<u>4</u>	96.3%	<u>1,388</u>	<u>129</u>	90.7%
Subtotal	1,756	141	92.0%	2,104	107	94.9%	3,860	248	93.6%	350	18	94.9%	306	10	96.7%	4,516	276	93.9%
SYSTEM	6,514	471	92.8%	7,298	428	94.1%	13,812	899	93.5%	1,320	40	97.0%	1,052	50	95.2%	16,184	989	93.9%

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

Delays data for most recent month is final (01/25/18) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls\OTPBByServPeriod&Line 01/26/18

TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-DEC	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	96.0%	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	94.5%	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	89.7%	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	94.4%	94.4%
	2016	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	94.0%	94.0%
	2017	95.9	95.6	96.2	96.3	95.4	93.7	96.2	94.4	92.7	93.8	91.8	92.1	94.5%	94.5%
	2012-2016 average	90.5	92.0	95.6	95.6	93.2	89.7	94.2	93.9	95.2	94.4	95.0	95.1	93.7%	93.7%
Electric	2012	93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	97.3%	97.3%
	2013	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	97.2%	97.2%
	2014	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	97.5%	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	97.6%	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	98.1%	98.1%
	2017	95.6	98.9	98.3	98.9	98.7	97.1	98.7	98.5	98.2	98.3	97.8	98.4	98.1%	98.1%
	2012-2016 average	95.9	97.4	98.3	98.5	98.3	97.4	96.1	97.8	97.7	97.7	97.6	98.1	97.6%	97.6%
Heritage	2012	95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	95.6%	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	96.4%	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	91.4%	91.4%
	2015	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	90.2%	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	94.2%	94.2%
	2017	93.9	94.3	96.9	96.4	94.2	89.0	90.7	97.5	95.7	90.3	88.4	90.7	93.2%	93.2%
	2012-2016 average	90.7	91.5	94.3	95.1	93.3	92.7	92.7	93.9	93.7	97.1	93.5	93.9	93.6%	93.6%
Milw - N	2012	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	93.8%	93.8%
	2013	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	93.3%	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	91.7%	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	94.9%	94.9%
	2016	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	94.6%	94.6%
	2017	95.3	95.6	96.5	96.1	95.9	93.4	88.4	93.1	90.4	93.9	94.8	92.4	93.8%	93.8%
	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	93.7%	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	94.7%	94.7%
	2013	96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	94.2%	94.2%
	2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	93.5%	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	96.4%	96.4%
	2016	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.9%	94.9%
	2017	96.9	95.2	95.2	95.6	97.5	95.8	96.3	96.3	95.5	96.7	96.9	88.2	95.5%	95.5%
	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	94.7%	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	92.4%	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	89.9%	89.9%
	2015	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	93.8%	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	94.5%	94.5%
	2017	92.6	91.6	95.1	95.2	95.5	95.7	94.8	98.0	92.7	91.9	92.6	92.0	94.0%	94.0%
	2012-2016 average	90.4	88.3	92.2	92.1	93.6	93.6	92.3	93.0	95.0	94.0	94.2	92.1	92.6%	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-DEC	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	95.3%	95.3%
	2014	82.5	83.4	93.4	95.3	95.7	92.5	95.1	97.2	96.6	97.3	97.9	98.6	93.8%	93.8%
	2015	97.4	95.3	98.9	98.7	97.8	97.4	94.2	97.0	96.3	97.3	97.1	97.4	97.1%	97.1%
	2016	92.6	96.2	95.8	96.5	97.9	96.2	93.5	96.3	96.0	98.2	97.9	95.3	96.1%	96.1%
	2017	95.2	97.1	97.8	98.0	94.6	96.0	95.3	95.2	95.7	95.9	94.0	92.8	95.7%	95.7%
	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	95.5%	95.5%
SWS	2012	94.2	96.6	94.8	95.3	95.8	93.2	95.3	94.5	93.8	94.3	93.7	96.3	94.8%	94.8%
	2013	94.7	97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	95.6%	95.6%
	2014	83.0	92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	92.6%	92.6%
	2015	94.7	89.7	95.6	96.1	96.3	91.1	92.4	93.8	97.6	96.8	96.0	94.4	94.5%	94.5%
	2016	95.6	97.2	97.8	95.6	91.9	95.3	94.1	93.3	91.6	97.4	96.6	96.2	95.2%	95.2%
	2017	96.2	94.1	96.4	97.3	92.8	97.1	97.1	94.3	96.3	93.7	90.1	93.8	94.9%	94.9%
	2012-2016 average	92.4	94.6	95.8	95.9	94.4	92.7	94.7	94.7	94.9	95.7	94.0	94.9	94.6%	94.6%
UP - N	2012	94.6	98.4	97.9	98.1	95.1	95.1	95.9	95.1	96.3	97.3	96.6	95.8	96.4%	96.4%
	2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9	97.0	96.5	96.9	98.0	96.6%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	96.7%	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	97.8%	97.8%
	2017	95.6	99.0	98.3	97.0	97.3	97.3	95.6	97.7	96.9	98.1	96.9	96.0	97.2%	97.2%
	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	97.0%	97.0%
UP - NW	2012	95.9	98.6	96.4	98.9	95.9	96.0	94.8	96.7	97.8	94.2	94.6	96.6	96.3%	96.3%
	2013	96.3	97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	94.6%	94.6%
	2014	86.6	91.1	96.3	98.6	95.6	95.2	94.7	97.4	98.3	95.0	97.1	96.2	95.2%	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	96.2%	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	96.3%	96.3%
	2017	96.2	97.4	98.1	93.7	97.2	93.3	92.2	94.6	93.8	94.8	95.6	94.6	95.1%	95.1%
	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	95.7%	95.7%
UP - W	2012	93.1	97.1	95.2	95.5	95.6	92.4	93.8	94.3	97.2	97.2	96.0	96.4	95.3%	95.3%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	94.5%	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	94.4%	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	95.4%	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	95.1%	95.1%
	2017	95.0	96.5	96.1	92.9	93.8	92.4	94.8	94.3	94.7	92.9	94.8	90.7	94.1%	94.1%
	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	94.9%	94.9%
SYSTEM excluding South Shore	2012	94.3	97.4	96.1	97.2	96.3	94.7	94.0	95.2	96.2	95.9	95.8	96.9	95.8%	95.8%
	2013	96.8	96.1	96.7	95.7	95.9	92.4	94.0	95.2	96.4	95.9	95.1	93.8	95.4%	95.4%
	2014	85.6	89.3	94.9	96.8	94.5	93.1	95.6	95.7	96.8	95.9	96.9	96.5	94.3%	94.3%
	2015	94.9	92.5	97.0	97.2	97.2	95.8	95.3	96.3	96.8	97.0	96.8	97.5	96.2%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.1%	96.1%
	2017	95.6	96.9	97.2	96.6	96.5	95.3	95.5	96.0	95.2	95.7	95.2	93.9	95.8%	95.8%
	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	95.6%	95.6%

Delays data for most recent month is final (01/25/18) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls|OTByLine&Month 1/26/2018

'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
December 2017**

Line	Train	Date	Minutes Delay		Delay Explanation	
			Late	Code		
BNSF	1234	Mon, Dec 04	8	G1	2B SW @ BERWYN	
		70% OT	Tue, Dec 05	8	UF1	LATE FLIP FROM 1206
		Thu, Dec 07	12	FW1	FOLLOWING 1232	
		Mon, Dec 18	0	E1	METX 199	
		Tue, Dec 26	7	G1	BROKEN RETIRED IJ	
		Fri, Dec 29	21	H1	LATE TURN FROM 1207 DUE TO 1204 MECH ISSUE.	
BNSF	1238	Thu, Dec 07	10	UF1	WAITING ON TRAFFIC AT FAIRVIEW	
		80% OT	Mon, Dec 18	8	E1	ADDED 1234 STOPS
		Tue, Dec 26	15	G1	BROKEN RETIRED IJ	
		Fri, Dec 29	18	H1	LATE TURN FROM 1209 DUE TO 1204 MECHANICAL ISSUE.	
BNSF	1242	Mon, Dec 04	9	U	ADA PASSENGER HANDLING	
		70% OT	Thu, Dec 07	11	UF1	STUCK BEHIND 1236
		Thu, Dec 14	0	XFW	CAR WOULD NOT SET UP	
		Tue, Dec 19	8	RA	ROUTED INTO 4	
		Tue, Dec 26	10	G	BROKEN RETIRED IJ	
		Fri, Dec 29	18	RF1	STOPPED AT CPK BEHIND OUT OF SLOT TRAINS.	
BNSF	1248	Mon, Dec 04	6	G1	CONGESTION FROM EARLIER SWITCH FAILURE.	
		60% OT	Thu, Dec 07	7	UF1	FOLLOWING TRAFFIC AHEAD
		Fri, Dec 15	6	D1	FOLLOWING TRAFFIC AHEAD, SWS810 WAS LATE	
		Mon, Dec 18	7	E1	LATE FLIP/EARLIER MECH DELAYS	
		Tue, Dec 19	6	RA1	TRAFFIC AHEAD 1242 MISROUTED	
		Tue, Dec 26	12	G1	FAILED RETIRED IJ	
		Wed, Dec 27	8	GA	SWITCH FAILURE 818 SWITCH.	
		Fri, Dec 29	18	RF1	TRAFFIC FROM EARLIER DELAYS	
BNSF	1250	Mon, Dec 11	9	G	4B SW WOULD NOT NORMAL	
		75% OT	Mon, Dec 18	16	E1	EARLIER DELAYS
		Tue, Dec 26	15	G1	BROKEN RETIRED IJ	
		Wed, Dec 27	7	GA1	FOLLOWING 1250	
		Fri, Dec 29	17	RF1	DELAYED FROM 1213	
BNSF	1254	Mon, Dec 11	9	E1	CAB SIGNAL PROBLEMS 1223	
		80% OT	Fri, Dec 22	10	RF	MIRROUTED BY UNION AVE DS
		Tue, Dec 26	12	G1	BROKEN RETIRED IJ	
		Fri, Dec 29	11	RF1	LATE FLIP AT CPK DUE TO TRAFFIC JAM.	
BNSF	1256	Fri, Dec 08	17	E1	LATE FLIP BEHIND 1219	
		80% OT	Mon, Dec 18	16	E1	LATE FLIP
		Tue, Dec 26	9	G1	BROKEN RETIRED IJ	
		Fri, Dec 29	9	RF1	FOLLOWING DELAYED 1254	
BNSF	1258	Fri, Dec 08	18	E1	LATE FLIP FROM 1219	
		80% OT	Mon, Dec 18	7	E1	LATE FLIP
		Tue, Dec 26	23	G1	RETIRED IJ FAILED	
		Fri, Dec 29	6	RF1	FOLLOWING TRAFFIC AHEAD	
BNSF	1269	Mon, Dec 04	11	G	HELD ON MT2 FOR 1265 TO CROSSOVER AND CLEARING FOR CROSSING MALFUNCTIONS	
		80% OT	Tue, Dec 05	9	G	SIGNAL / SWITCH FAILURE TALKED BY SIGNAL AT LAVERGNE
		Mon, Dec 11	12	E	NO HEP TRYING TO DEPART CUS AND DEPARTS 7 LATE. MECHANICAL RESPONDED AND MADE REPAIRS WITH TLC	
		Fri, Dec 29	7	E1	WAITING ON DELAYED 1261	
BNSF	1271	Mon, Dec 04	15	G	MAPLE, MAIN, PRAIRIE GATE WIRE MALFUNCTION	
		78% OT	Tue, Dec 05	12	G1	FOLLOWING 1269
		Tue, Dec 26	0	E1	CANCELLED ACCT OPERATED 1275 FROM CUS ACCT METX 125 WATER LEAK	
		Fri, Dec 29	6	E1	SLOW UNLOADING, WEATHER	
BNSF	1279	Fri, Dec 01	8	DD	DELAYED DUE TO FGP1101 ROUTED THRU THE PARADE BY EE DS	
		75% OT	Mon, Dec 04	16	G1	FOLLOWING TRAFFIC FROM EARLIER, MULTIPLE XING FAILURES GATE WIRE MALFUNCTION
		Tue, Dec 05	10	G1	TRAFFIC CONGESTION FROM EARLIER DELAYS	
		Mon, Dec 11	8	RF	MISROUTE AT FAIRVIEW AVE.	
		Fri, Dec 29	7	IW	SLOW UNLOADING, WEATHER	
BNSF	1288	Fri, Dec 01	11	DD1	DELAYED DUE TO FGP1101 ROUTED THRU THE PARADE BY EE DS	
		80% OT	Wed, Dec 13	10	VE1	LATE FLIP FROM 1243
		Thu, Dec 28	12	IW	DEPART 10" LATE FROM AURORA. 1288 5" LATE DUE TO WEATHER.	
		Fri, Dec 29	21	UF1	LATE TURN FROM 1243, ADA ISSUE	
BNSF	1373	Mon, Dec 04	7	G	MAPLE, MAIN, PRAIRIE GATE WIRE MALFUNCTION	
		83% OT	Tue, Dec 05	15	G1	FOLLOWING 1281 AND 1285 FROM EARLIER DELAY
		Tue, Dec 12	9	CW	BROKEN RAIL MT2 BERWYN CAUSING 6 BOX 2S	
HC	918	Thu, Dec 07	14	D	18M DELAY CORWITH AACT X-TRAFFIC	
		80% OT	Mon, Dec 11	7	D	10M DELAY CORWITH ACCT. X-TRAFFIC, NO ANSEWER FROM BN
		Thu, Dec 21	11	D	11M DELAY CORWITH , X-TRAFFIC, NO ANSWER FROM BN	
		Thu, Dec 28	17	GF	20M MEETING AMT301, SINGLE TRACKING ACCT SWITCH PROBLEMS.	

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

Line	Train	Date	Minutes Delay		Delay Explanation	
			Late	Code		
MN	2125	Wed, Dec 06	10	CH	10" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN	
		80% OT	Fri, Dec 22	9	H	7" GETTING LOCO TIED ON @ CUS; 4" APPROACH/STOPPED, MAYFAIR
		Tue, Dec 26	8	J1	10" STOPPED @ MORTON GROBE & X/O TO 2MT GOING AROUND #2123; 3" STOPPED, A-20 X/O BACK TO IMT; 2" LOOSE HOSE ON ENGINE AIR LEAK	
		Fri, Dec 29	16	I	14" 9 CAR TRAIN; 2" STOPPED, RONDOUT	
MN	2135	Wed, Dec 06	11	CH	12" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN	
		78% OT	Thu, Dec 07	6	A	4" X-TRAFFIC, MAYFAIR; FOLLOWING #2133; 3" ADA, LIBERTYVILLE
		Tue, Dec 12	7	U	3" ADA, LIBERTYVILLE; 4" PASSENGER LOADING	
		Thu, Dec 21	26	JM	33" FEMALE PASSENGER EXPRIENCED A DIABETIC MEDICAL EMERGENCY ON BOARD, WAIT FOR MEDICS TO TREAT & REMOVE	
MN	2140	Wed, Dec 06	11	CH	18" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN	
		65% OT	Wed, Dec 13	10	G1	EN ROUTE DEERFIELD-BROKEN TRACK CIRCUIT WIRE AT DUNDEE ROAD
		Mon, Dec 18	8	KD	10" STRUCK OBJECT, WALKED TRAIN LOOK FOR OBJECT, ROUND LAKE	
		Thu, Dec 21	7	I	8" HEAVY PASSENGER LOADING, ALL STOPS; 2" STOPPED, MAYFAIR	
		Fri, Dec 22	10	I	3" WAIT FOR #2119, GRAYSLAKE; 3" HEAVY PASSENGER LOADING, ALL STOPS; 3" STOPPED, MAYFAIR	
		Thu, Dec 28	9	G	SIGNAL SWITCH MALFUNCTION	
		Fri, Dec 29	9	I	8" HEAVY PASSENGER LOADING, ENROUTE; 2" STOP INDICATION WAITING ON AMTRAK #8, A20.	
MN	2145	Tue, Dec 05	20	E1	20" HOLDING @ MORTON GROVE FOR #2152 TO SASHAY AROUND #2150	
		80% OT	Wed, Dec 06	34	CH	34" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Fri, Dec 08	18	I1	18" LATE TURN FROM #2146.	
		Mon, Dec 11	11	RF1	11" LATE TURN FROM #2146	
MN	2146	Wed, Dec 06	17	CH	17" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN	
		75% OT	Fri, Dec 08	14	I	8" HOLIDAY PASSENGER LOADING, ENROUTE; 5" LATE TURN FROM #2121; 4" CROSS TRAFFIC, MAYFAIR.
		Mon, Dec 11	8	U1	6" LATE TURN FROM #2121; 5" ADA, NORTHBROOK	
		Wed, Dec 20	6	D1	6" LATE ARRIVAL OF #2121	
		Fri, Dec 29	7	I	6" SLOW PASSENGER LOADING AND UNLOADING, ENROUTE; 1" NO REASON GIVEN, ENROUTE.	
MN	2147	Tue, Dec 05	17	E1	17" FOLLOWING #2145	
		75% OT	Wed, Dec 06	15	CH	15" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Fri, Dec 08	11	I1	12" FOLLOWING LATE TRAIN #2145, ENROUTE.	
		Mon, Dec 11	12	RF1	5" LATE TURN FROM #2148 & FOLLOWING #2145	
		Tue, Dec 12	0	XE	ANNULLED LOCO 216 DEVELOPED A WATER LEAK, GLENVIEW	
MN	2148	Fri, Dec 01	7	CC1	2" LATE TURN FROM #2127; 5" WAITING ON LATE #2146; 3" HEAVY PASSENGER LOADING	
		80% OT	Tue, Dec 05	7	E1	7" #2150 ANNULLED DUE TO MECHANICAL ISSUES
		Mon, Dec 11	7	U1	7" LATE TURN FROM #2127	
		Wed, Dec 13	6	A1	6" LATE TURN FROM #2127, DEERFIELD	
MN	2149	Tue, Dec 05	0	E1	ANNULLED ACCT #2150 MECHANICAL ISSUES @ GOLF	
		75% OT	Wed, Dec 06	10	CH	10" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Mon, Dec 11	20	RF1	18" WAIT ON #2156; 4" STOP SIGNAL, CN	
		Tue, Dec 12	57	E1	57" TIED ONTO #2147 & SHOVED TO FOX LAKE	
		Thu, Dec 26	70	GW	64" WAIT ON #2156 & 2158 TO CLEAR RONDOUT; 6" STOPPED SIGNAL/SWITCH PROBLEMS, CN XING	
MN	2150	Tue, Dec 05	0	XE	ANNULLED, LOCO 103 STOPPED LOADING, GOLF	
		80% OT	Wed, Dec 06	14	CH	14" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Fri, Dec 08	6	A1	10" LATE TURN FROM #2133.	
		Mon, Dec 18	0	E1	EXPRESSED FROM DEERFIELD ACCT LACK OF POWER IN COACHES (NO LIGHTS, ETC) NO HEP	
MN	2151	Tue, Dec 05	10	E1	10" WAITING ON LATE #2158	
		70% OT	Wed, Dec 06	21	CH	21" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Mon, Dec 11	20	RF1	20" WAIT ON #2158	
		Tue, Dec 12	31	E1	32" FOLLOWING #2147/2149	
		Mon, Dec 18	11	E1	11" HOLD FOR LATE I/B & SLOW PASSENGERS	
		Tue, Dec 26	44	GW1	44" WAIT FOR #2156 & 258 TO CLEAR, RONDOUT THEN FOLLOWED #2149 TO FOX LAKE	
MN	2154	Tue, Dec 05	15	E1	15" LATE TURN FROM #2145, DEERFIELD	
		75% OT	Wed, Dec 06	37	CH	33" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Fri, Dec 08	19	I1	19" LATE TURN FROM #2145.	
		Mon, Dec 11	12	RF1	13" LATE TURN FROM #2145	
		Fri, Dec 22	7	I1	10" LATE DEPARTING CHANGING ENDS & BRAKE TEST	
MN	2155	Tue, Dec 05	9	E1	6" LATE TURN FROM #2158, CUS	
		75% OT	Wed, Dec 06	7	CH	7" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Tue, Dec 12	13	E1	13" MEET #2158, FOREST GLEN	
		Tue, Dec 26	10	GW1	8" LATE TURN FROM #2158, CUS	
		Fri, Dec 29	9	I	9" PASSENGER LOADING, EN ROUTE	
MN	2156	Tue, Dec 05	7	E1	9" WAIT ON LATE #2147; 5" MEETING LATE TRAINS, EN ROUTE	
		80% OT	Wed, Dec 06	10	CH	10" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Mon, Dec 11	15	RF1	15" LATE TURN FROM #2147; 6" STOP SIGNAL RESTRICTED SPEED, CN	
		Tue, Dec 26	42	GW	42" SIGNAL/SWITCH PROBLEMS, CN XING	

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

Line	Train	Date	Minutes Delay		Delay Explanation	
			Late	Code		
MN	2158	Tue, Dec 05	10	E1	10" #2150 ANNULLED DUE TO MECHANICAL ISSUES @ GOLF	
		75% OT	Wed, Dec 06	30	CH	30" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Mon, Dec 11	26	RF1	26" WAIT ON #2149	
		Tue, Dec 12	65	E1	65" WAITING ON #2149/2147 & 2151	
		Tue, Dec 26	15	GW	20" SIGNAL/SWITCH PROBLEMS, CN XING	
MN	2160	Wed, Dec 06	11	CH	11" LATE TURN FROM #2153, FOX LAKE	
		75% OT	Thu, Dec 07	8	D	10" FREIGHT, CN XING
		Tue, Dec 26	13	GW1	12" LATE TURN FROM #2153, FOX LAKE	
		Wed, Dec 27	10	RO	7" LATE TURN FROM #2153; 5" OPERATOR ERROR, RED SIGNAL, GRAYLAND; 1" STOP, WESTERN	
		Fri, Dec 29	6	II	6" LATE DEPARTING CHANGING ENDS	
MW	2205	80% OT	Tue, Dec 12	21	EW1	20" LATE TURN FROM #2206, CUS
		Tue, Dec 26	20	G	30" SIGNAL PROBLEMS B-35 TO SPAULDING; LATE TURN FROM # 2204 ; LATA SYSTEM SHOW TIME UP TO ELGIN	
		Wed, Dec 27	13	G1	11" LATE TURN FROM #2206	
		Fri, Dec 29	7	G	7" SIGNAL PROBLEMS DARK SIGNAL RESTRICTED SPEED, MANNHEIM TO BENSENVILLE; SIGNAL PROBLEMS, ELGIN/B-35	
MW	2208	75% OT	Thu, Dec 07	8	GT	8" SIGNAL PROBLEMS, TRACK CIRCUIT, RESTRICTING SIGNALS, ROSELLE-ITASCA
		Tue, Dec 12	23	EW1	15" FOLLOWING #2206	
		Tue, Dec 26	38	G1	40" OPERATING ON RESTRICTING SIGNALS ELGIN COACH YARD TO A-5; FOLLOWING TRAINS AHEAD DUE TO SIGNAL PROBLEMS @ B-35	
		Wed, Dec 27	15	G	15" 3 ITEM 2' ELGIN; RED SIGNAL B-35; BROKEN RAIL/3 MORE ITEM 2'S	
		Thu, Dec 28	10	G	11" SIGNAL PROBLEMS, ELGIN	
MW	2212	80% OT	Thu, Dec 07	7	GT	8" SIGNAL PROBLEMS, TRACK CIRCUIT, RESTRICTING SIGNALS, ROSELLE-ITASCA
		Tue, Dec 12	14	GW	25" SIGNAL PROBLEMS, ROSELLE WEST-ITASCA; FLAGGED BY VERBAL PERMISSION PAST SIGNAL, RESTRICTED SPEED	
		Tue, Dec 26	0	G1	ANNULLED UESD EQUIPMENT FROM #2220; #104 ACCOMMODATED PASSENGERS	
Wed, Dec 27	9	CW	10" BROKEN RAIL & 3 ITEM 2'S			
MW	2214	80% OT	Thu, Dec 07	8	GT	8" SIGNAL PROBLEMS, TRACK CIRCUIT, RSETRICTING SIGNALS, ROSELLE-ITASCA
		Tue, Dec 12	10	GW	10" SIGNAL PROBLEMS, ROSELLE WEST-ITASCA; FLAGGED BY VERBAL PERMISSION PAST SIGNAL, RESTRICTED SPEED FOLLOWING #2212	
		Tue, Dec 26	14	G	9" SIGNAL PROBLEMS, ELGIN; 2 ITEM 2'S; 2" STOP SIGNAL, CANAL ST	
Fri, Dec 29	7	R	10" WAITING ON ENGINEER, ELGIN			
MW	2216	75% OT	Thu, Dec 07	7	GT	7" SIGNAL PROBLEMS, TRACK CIRCUIT, RESTRICTING SIGNALS, ROSELLE-ITASCA
		Tue, Dec 12	15	GW	15" SIGNAL PROBLEMS ROSELLE WEST-ITASCA; FLAGGED BY VERBAL PERMISSION PAST SIGNAL, RESTRICTED SPEED	
		Tue, Dec 26	15	G	15" SIGNAL PROBLEMS, B-35 TO SPAULDING	
		Wed, Dec 27	7	CW	8" BROKEN RAIL & 3 ITEM 2'S	
Fri, Dec 29	8	G	4" SIGNAL PROBLEMS, B-35; 4" DARK SIGNAL, AUGUSTA			
MW	2220	80% OT	Tue, Dec 12	8	GW	8" SIGNAL PROBLEMS ROSELLE WEST-ITASCA; FLAGED BY VARBAL PERMISSION PAST SIGNAL, RESTRICTED SPEED
		Tue, Dec 26	33	G	33" SIGNAL PROBLEMS, B-35 TO SPAULDING	
		Wed, Dec 27	18	CW	18" BROKEN RAIL & 3 ITEM 2'S	
		Fri, Dec 29	8	G1	8" WAIT ON #2218. WEST ROSELLE; DOOR PROBLEMS SNOW/FROZEN CAR 8255 & 8257; STOP SIGNAL, LAKE ST	
MW	2221	80% OT	Wed, Dec 06	14	CH	18" SIGNAL & POWER FAILURE, CP CANAL ST-CP MORGAN
		Tue, Dec 12	10	G	4" STOP SIGNAL, B-35; 2" NEAR MISS, MARS(DUMPED AIR AT MONT CLAIRE)2" TRK 3 TO TRK 1 TO B-6, A-5; 2" YARD DROP OFF 2223 ENGINEER.	
		Wed, Dec 27	8	G	8" SIGNAL PROBLEMS/ITEM 2, B-35; 2" NO LINEUP, CUS; 2" YARD DROP OFF # 2223 ENGINEER; 2" 3 MAIN TO 1 MAIN, A5-B6.	
		Thu, Dec 28	12	G	6" SIGNAL ISSUES & ITEM 2'S, B-35; 2" YARD DROP OFF OF #2223 ENGINEER; 2" X/O 3-1 @ A-5/B-6; 3" SLOW LOADING ENG 413	
MW	2224	80% OT	Tue, Dec 12	11	GW1	12" LATE TURN FROM #7241; #7241 DEPARTED CUS 17" LATE DUE TO LATE ARRIVAL OF #2208
		Tue, Dec 26	20	G	20" SIGNAL PROBLEMS, B-35 TO SPAULDING	
		Wed, Dec 27	18	G1	15" LATE ARRIVAL OF #7241 ACCT #2208 DELAY	
		Thu, Dec 28	9	G1	10" LATE TURN FROM #7241, FRANKLIN PARK	
MW	2228	80% OT	Tue, Dec 12	23	EW1	24" LATE TURN FROM #2205, BIG TIMBER
		Wed, Dec 27	16	G1	13" LATE TURN FROM #2205	
		Thu, Dec 28	6	G1	5" LATE TURN FROM #2205 EARLIER SIGNAL PROBLEMS @ ELGIN	
		Fri, Dec 29	9	G1	7" LATE TURN FROM #2205; SIGNAL PROBLEMS, ELGIN/B-35	
MW	2231	80% OT	Wed, Dec 06	12	CH	10" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Thu, Dec 14	8	II	7" WAITING ON I/B TRAIN TO CLEAR, CUS	
		Tue, Dec 26	7	G	7" STOPPED, B-35; 3" ITEM 2	
		Thu, Dec 28	10	H1	7" X-TRAFFIC CUS ACCT #919 INCIDENT, CUS; 5" FOLLOWING TRAINS AHEAD TO A-5; 3" SIGNAL PROBLEMS, B-35	
MW	2242	80% OT	Wed, Dec 06	24	CH	24" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN
		Tue, Dec 26	8	G1	8" PERMISSION BY B-35 ON 2MT	
		Wed, Dec 27	10	G	10" PERMISSION BY B-35 ON 2MT.	
		Thu, Dec 28	7	G	SIGNAL	

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

Line	Train	Date	Minutes Delay		Delay Explanation	
			Late	Code		
MW	2251	Wed, Dec 06	13	CH	13" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN	
		75% OT	Tue, Dec 26	16	G1	11" LATE TURN FROM #2250
		Wed, Dec 27	12	G	13" SIGNAL PROBLEMS, B-35	
		Thu, Dec 28	8	G1	13" LATE TURN FROM #2250	
		Fri, Dec 29	10	G	10" SIGNAL PROBLEMS, B-35	
MW	2254	Thu, Dec 14	16	D	15" WAIT FOR CP FREIGHT TO CLEAR INTO YARD, B-12 CP141 747 101 CARS 7658 LENGTH	
		75% OT	Tue, Dec 26	12	G1	12" LATE TURN FROM #2249
		Wed, Dec 27	37	G1	20" LATE TURN FROM #2249; 7" SIGNAL PROBLEMS, B-35; 10" 3 DISRUPTIVE PASSENGERS REMOVED, WESTERN	
		Thu, Dec 28	14	G	7" LATE TURN FROM #2249; 7" SIGNAL PROBLEMS, B-35	
		Fri, Dec 29	15	G1	15" LATE TURN FROM #2249 & SIGNAL PROBLEMS, B-35	
MW	2255	Thu, Dec 14	11	D1	13" LATE TURN FROM #2254, CUS	
		75% OT	Tue, Dec 26	13	G1	10" LATE TURN FROM #2254
		Wed, Dec 27	40	G1	36" LATE TURN FROM #2254	
		Thu, Dec 28	18	G1	14" LATE TURN FROM #2254	
		Fri, Dec 29	19	G1	21" LATE TURN FROM #2254 & SIGNAL PROBLEMS, B-35	
NCS	118	Wed, Dec 06	10	CH	10" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN	
		80% OT	Tue, Dec 19	20	D1	20" STOPPED @ PRAIRIE VIEW WAIT FOR #111 & #113 TO X/O DUE TO FREIGHT INTERFERENCE
		Tue, Dec 26	6	IW	PASSENGER LOADING	
		Fri, Dec 29	10	D	9" N/B FREIGHT, LAKE VILLA	
NCS	119	Wed, Dec 06	8	CH	8" SIGNAL & POWER FAILURES, CP CANAL ST-CP MORGAN	
		65% OT	Thu, Dec 07	7	D	3" RED DUE TO X-TRAFFIC, GRAYSLAKE.
		Mon, Dec 11	10	GF1	10" STOP SIGNAL RESTRICTED SPEED, GRAYSLAKE	
		Tue, Dec 19	7	D1	8" LATE TURN FROM #118, CUS	
		Fri, Dec 22	13	D	20" S/B FREIGHT, LOMOND	
		Tue, Dec 26	20	GW1	23" WAIT FOR #2156 TO HADN LINE ROUTE, GRAYSLAKE, THEN TALKED BY SIGNAL RESTRICTED SPEED	
		Fri, Dec 29	12	E1	13" FOLLOWING #2247 THAT WAS EXPERIENCEING ENGINE PROBLEMS	
RI	401	Wed, Dec 06	6	G	7M TRAVELING RESTRICTED SPEED FROM 35.5 TO EJE DUE TO SIGNAL PROBLEMS AT 35.5	
		75% OT	Thu, Dec 14	12	R1	12M AT RICHARDS WAITING ON LATE TRAINS AHEAD.
		Tue, Dec 26	40	GW1	40M.HAD TO BE FLAGGED BY PERSHING DUE TO #1SW OUT OF CORRESPONDANCE. ALSO AND CP 81ST DUE TO #3 SWITCH OUT OF CORRESPONDANCE.	
		Wed, Dec 27	8	EW1	8M LATE ENROUTE MAKING MEETS W/E/B TRAINS	
		Fri, Dec 29	13	G	10M B/W GRESHAM AND 99TH DUE TO TRACK CIRCUIT AND GOING AT RESTRICTED SPEED.	
RI	416	Mon, Dec 04	45	M	45M 29TH @ MP 3.50 STRUCK A TRESPASSER/INDIVIDUAL WAS TAKEN THE THE HOSPITAL . CAB CAR#8570	
		80% OT	Tue, Dec 26	46	GW1	46M LATE DEPARTING JUD DUE TO SWITCH FAILURES @ CP PERSHING & CP 81ST. THE CONDUCTOR HAD TO HAND LINE SWITCHES @ CP81ST ST
		Wed, Dec 27	15	IW	5M LATE DEPARTING JUD DUE TO LATE TURN OF EQUIP AS RI401/10M LATE ENROUTE ACCOMMODATING PASSENGERS & WAITING ON W/B TRAINS	
		Fri, Dec 29	15	G1	9M LATE DEPARTING RICHARDS DUE TO LATE TURN OF EQUIPMENT. 6M ENROUTE FOLLOWING RI616 OUT OF GRESHAM	
RI	419	Mon, Dec 04	26	T1	DEPARTED LSS 29M LATE ACCT LATE TURN FROM 422 AND MECHANICAL LOOKING FOR CAUSE OF HEAVY SMOKE	
		75% OT	Mon, Dec 11	7	KW	7M ENROUTE DUE TO WHEEL SLIPPAGE DUE TO WEATHER
		Tue, Dec 26	14	GW1	1M LSS LATE PASSENGER. 3M IN ROUTE FOR DOOR ISSUES. 7M FROM 31.9 TO EJ&E FOLLOWING TRAINS AHEAD. 8M EJ&E WAITING FOR TRAINS TO YARD.	
		Thu, Dec 28	9	G	HAD TO BE TALKED PASSED SIGNAL DUE TO TRACK CIRCUT/UNABLE TO GET SIGNAL 1 TO 1 WEST (10 MIN AT GRESHAM)	
		Fri, Dec 29	11	D1	11M LATE INTO JOLIET DUE TO LATE FLIP	
RI	509	Tue, Dec 26	16	CW1	12M LATE DEPARTIKNG LSS WAITING ON MTR TO CLEAR FOUL TIME @ CP PERSHING DUE TO INTERMITTENT TRACK CIRCUIT ON TK#1 OVE #3 SW	
		80% OT	Wed, Dec 27	8	IW	8M ENROUTE FULL CONSIST & ACCOMODATING PASSENGERS
		Thu, Dec 28	6	IW	6M LATE ENROUTE ACCOMMODATING PASSENGER AND FULL CONSIST	
		Fri, Dec 29	6	I	10 EN ROUTE TRAVELLING WITH FULL CONSIST AND HEAVY PASSENGER LOADING/UNLOADING	
RI	512	Thu, Dec 07	6	D	10M AT EJE DUE TO CROSS TRAFFIC. CNL508 TAKING HEAD ROOM AND NOT BEING ABLE TO CLEAR.	
		70% OT	Tue, Dec 12	7	CF	3 MIN AT ROBBINS GOING THROUGH CROSSOVERS AND 4 MIN GOING THROUGH FORM B LIMITS COULD NOT GET AHOLD OF FOREMAN
		Thu, Dec 14	9	I	HEAVY PASSANGER LOADING	
		Fri, Dec 22	7	I	7M LATE DUE TO HEAVY LOADING & FULL CONSIST	
		Tue, Dec 26	6	IW	5M LATE ENROUTE DUE COLD WEATHER RESTRICTION	
		Thu, Dec 28	6	IW	6M ENROUTE ACCOMMODATIONG PASSENGES AND FULL CONSIST	
RI	527	Thu, Dec 07	8	D	11 MIN @ EJE DUE TO RB DISPATCHER DELAYING THE MOVEMENT IA500BROUGHT UP TO RICHARDS ON 1, Q314 GOING EAST ON 2, RB HAD ALREADY ACCEPTED IA.	
		80% OT	Fri, Dec 22	0	XE	LOST COMPLETE POWER @ NEW LENOX AND TRAIN ANNULLED
		Wed, Dec 27	0	DE1	ANNULLED FREIGHT BLOCKING 16TH ST.	
		Thu, Dec 28	9	RD	7 MIN WAITING ON A SIGNAL	

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

Line	Train	Date	Minutes Delay		Delay Explanation	
			Late	Code		
SWS	836	Wed, Dec 06	6	D	9M FOREST HILL 619/628PM FOR CSX Q138 CSXT5231 W/ 70 CARS 11768FT. DEPARTING 59TH ST. YARD.	
		80% OT	Fri, Dec 08	20	D1	27M ASHBURN 612/639PM MEET SWS#829, (DELAYED BY CSX Q-137.)
			Tue, Dec 19	7	GF	12M CP 518; 628/ 642PM, MEET SWS#831 AND THEN NS CAD SYSTEM FROZE UP CHICAGO WEST DISP. REBOOT SYSTEM.
			Fri, Dec 29	8	G	10M AT ASHBURN ACCT. SWITCH AND SIGNAL PROBLEMS
SWS	839	Wed, Dec 06	18	GF	18M @ BELT JCT DUE TO SWITCH FAILURE AND HAVINF TO HANDLINE SWITCH FOR MOVEMENT	
		80% OT	Mon, Dec 18	9	D	13 MIN FREIGHT DELAY NO TRAIN INFORMATION GIVEN
			Tue, Dec 26	15	CM	25M@CP518 TRCK CIRCUIT DROPPED SIGNAL TRK 2 CP518 HAD FREIGHT STACKED IN SO THAT FIRED OFF AND RELEASED FREIGHT 839ATCUS WHEN THIS OCCURED.
			Wed, Dec 27	8	DE1	8MIN RAN AS 837/839 HYBRID TRAIN 837 WAS ANNULLED . DUE TO CNL536 CN5640 134CARS 8101L DYING ACROSS 21ST
UPNW	632	Thu, Dec 21	6	I	2" LATE DEPARTING JOB BRIEFING W/STUDENT ENGINEER; HEAVY PASSENGER LOADING, EN ROUTE; X-TRAFFIC AMTRAK 331 & #2124, MAYFAIR	
		80% OT	Tue, Dec 26	28	CW1	18" XH, MP22.31-23.08 BROKEN RAIL @ ARLINGTON HEIGHTS
			Wed, Dec 27	28	GW1	28" SPEED RESTRICTION, COLD WEATHER & SWITCH PROBLEM @ BARRINGTON
			Thu, Dec 28	18	RO	6" DOORS STICKING ON CAR 8718 & 8260; 12" TOWER OPERATOR ATTEMPTING TO MAKE LINE UP CROSSING TRAIN 2-1 SIGNAL INDICATION RED,RAN TIMER
UPNW	635	Fri, Dec 01	9	R	12" LATE DEPARTING, STOPPED LOADING ACROSS LAKE ST PLANT DUE TOENGINE RUN SWITCH WAS DOWN ON METX 168, CPT	
		81% OT	Thu, Dec 07	7	GX	7" XH, MP20.12; X-TRAFFIC #2123, MAYFAIR; M34241-05, BARRINGTON
			Fri, Dec 15	9	R	12" LATE DEPARTING CPT POSSIBLE RULE VIOLATION COMMITTED BY ENGINEER & TICKET COLLECTOR, PULL ENGINEER FROM DIFFERENT EQUIPMENT FOR #635
UPNW	643	Fri, Dec 01	9	R1	9" LATE DEPARTING, EQUIPMENT GOT ON TRACKS LATE, WAIT FOR #635 TO CLEAR, DUE TO BEING STOPPED ACROSS LAKE ST PLANT	
		80% OT	Mon, Dec 04	8	F1	8" FOLLOWING #641 THAT DEPARTED 5" LATE FROM CPT DUE TO NO DOOR LIGHT @ DEPARTURE TIME, DOORS ON CAR6030 HAD TO BE MANUALLYCLOSED
			Tue, Dec 12	9	GX1	9" COPY & COMPLY WITH XH CROSSING ORDER, MP10.31 BROKEN XING GATE; FOLLOWING TRAINS AHEAD
			Tue, Dec 26	29	CW1	20" LATE ARRIVAL FROM CAL AVE YD ACCT WEATHER RELATED SIGNAL & TRACK ISSUES CAUSED AM RUSH LATE INTO YD; FOLLOWING TRAINS AHEAD
UPNW	655	Fri, Dec 15	20	R1	20" POSSIBLE RULES VIOLATION BY #635 ENGINEER, USED DIFFERENT ASSIGNMENTS, WAIT FOR ENGINEER TO COME ON DUTY & HAVE JOB BRIEFING	
		83% OT	Tue, Dec 26	7	CW1	8" LATE ARRIVAL FROM CAL AVE YD ACCT WEATHER RELATED SIGNAL & TRACK ISSUES CAUSED AM RUSH INTO YD LATE; FOLLOWING TRAINS AHEAD
			Wed, Dec 27	10	F1	15" LATE DEPARTING EQUIPMENT SWAPS ACCT #639 & #53 HAVING B/O EQUIPMENT
UPW	14	Fri, Dec 01	36	N1	36" RAN RSETRICTED SPEED FROM PECK-KRESS, INTERMITTENT TRACK ON TKS 1 & 2; FOLLOW #12, EN ROUTE	
		80% OT	Wed, Dec 13	70	G	70" STOPPED @ MP30.3 SWITCH #5 & #9 OUT OF CORRESPONDENCE @ CN WEST CHICAGO AFFECTING TRK1&2, REVERSE MOVE TO KRESS,TRAIN CONTROL FOLLOW #22
			Fri, Dec 15	6	JM1	6" FOLLOWING TRAINS AHEAD, EN ROUTE
			Wed, Dec 27	28	GW1	28" SW #15 OUT OF CORRESPONDENCE, PARK CPY015; PASSENGER LOADING, COLLEGE AVE & GLEN ELLYN; RAN TRK3, UNIVERSITY-25TH
UPW	18	Fri, Dec 01	18	N1	18" RAN RESTRICTED SPEED PECK-KRESS, INTERMITTEN TRACK ON TKS 1 & 2; FOLLOW #16, EN ROUTE	
		80% OT	Mon, Dec 11	6	S	6" FTX EFFICIENCY TEST, KRESS
			Wed, Dec 13	18	G1	18" MADE ALL STOP DUE TO SWITCH ISSUES @ WEST CHICAGO
			Wed, Dec 27	18	GW1	18" TRAIN CONTROL VILLA PARK THROUGH BERKELEY, SWITCH ISSUES @ PARK
UPW	42	Tue, Dec 05	10	GF	10" FLAGGED @ CN @ WEST CHICAGO ACCT CN OPERATOR COULD NOT GET A CLEAR SIGNAL FOR THE TRAIN	
		80% OT	Fri, Dec 08	11	I	11" SLOW PASSENGER LOADING AT GENEVA AND LOMBARD, TWO ADA LIFTS, AND SLOW ORDER AT MP30.3.
			Fri, Dec 15	12	D	12" IG3CH-14 CLEARING GOING EAST, KEDZIE
			Tue, Dec 26	6	IW	6" SLOW LOADING MOST STOPS, SNOW/ICE COVERED PLATFORMS
UPW	44	Tue, Dec 05	6	I	6" SLOW PASSENGER LOADING, EN ROUTE	
		75% OT	Thu, Dec 07	7	U1	6" LATE TURN FROM #25, ELBURN
			Fri, Dec 08	14	JM	14" STOPPED AT ELMHURST DUE TO A FEMALE PASSENGER THAT FELL AT GLEN ELLYN. PASSENGER REQUESTED PARAMEDICS, WENT HOME WITHOUT PARAMEDICS.
			Tue, Dec 26	7	IW	7" SIGNAL ISSUES, MP39.6; TRAIN CONTROL,XH, MP23.99;ADA,GENEVA ;SLOW LOADING, LOMBARD DUE TO PLATFORMS FULL OF SNOW/ICE
			Wed, Dec 27	9	IW	9" SLOW PASSENGER LOADING, GENEVA, WINFIELD & WHEATON
UPW	51	Wed, Dec 06	6	VF1	6" TRAIN CONTROL FOLLOWING #49	
		83% OT	Tue, Dec 26	18	CW1	30" LATE ARRIVAL FROM CAL AVE YD ACCT WEATHER RELATED SIGNAL & TRACK ISSUES CAUSED AM RUSH TRAINS TO GET INTO YD LATE
			Thu, Dec 28	6	J	10" WAIT FOR PD TO REMOVE UNRULY PASSENGER, WEST CHICAGO

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

Line	Train	Date	Minutes Late	Delay Code	Delay Explanation	
UPW	53	Tue, Dec 12	16	E1	12" LATE ARRIVAL OF EQUIPMENT FROM CAL AVE YARD	
		80% OT	Tue, Dec 26	52	CW1	50" LATE ARRIVAL FROM CAL AVE YD ACCT WEATHER RELATED SIGNAL & TRACK ISSUES CAUSED AM RUSH TRAINS LATE INTO YARD; FOLLOW TRAINS AHEAD
			Wed, Dec 27	0	XR	ANNULLED ACCT B/O ENGINE @ DEPARTURE TIME & NO EQUIPMENT TO MAKE SWAPS, CPT DIDN'T PUSH BUTTON TO RECOVER.
			Thu, Dec 28	12	J1	12" FOLLOWING #51
UPW	55	Thu, Dec 07	7	C	7" TRAIN CONTROL FOLLOWING TRAINS AHEAD ACCT TWO 30MPH SLOW ORDERS BETWEEN MP3.83-3.85 & MP8.10-8.30	
		75% OT	Fri, Dec 08	7	D	5" WAITING ON ZBRG1 TO CLEAR ON TO THE ROCKWELL SUB. ALSO ON TRAIN CONTROL FROM KEDZIE TO BERKELEY.
			Tue, Dec 26	37	CW1	33" LATE ARRIVAL FROM CAL AVE YD HAD TO REPLACE A BAD CAR
			Wed, Dec 27	9	R1	9" MADE ADDITIONAL STOPS TO ACCT #53'S ANNULMENT
UPW	58	Mon, Dec 18	20	D	20" FOLLOWING IG3AH, LA FOX-WEST CHICAGO; FOLLOWING ZBRG1B, VALE-KEDZIE	
		80% OT	Thu, Dec 21	8	I1	5" LATE TURN FROM #39, ELBURN
			Thu, Dec 28	16	D	16" WAIT FOR ZSCG1 TO CLEAR INTO THE ROCKWELL SUB, KEDZIE
			Fri, Dec 29	20	DE1	20" WAIT FOR #47 TO CLEAR TRK1 2 TURNER ACCT ZG2OA W/BROKEN KNUCKLE BETWEEN TURNER-UNIVERSITY; X-TRAFFIC, WESTERN
UPW	60	Tue, Dec 05	11	G1	11" HELD @ KEDZIE WAITING FOR #63 TO CLEAR TRK2, WESTERN A-2 SW 67 FAILED CAUSING O/B TO RUN TRK 2 HALSTED-KEDZIE	
		70% OT	Tue, Dec 12	11	E1	11" LATE TURN FROM #59, ELMHURST
			Mon, Dec 18	16	D1	16" FOLLOWING LATE #58
			Thu, Dec 21	10	I1	10" TRAIN CONTROL FOLLOWING #58 FROM ELMHURST; USED SHORT CROSSOVERS, KEDZIE
			Thu, Dec 28	6	D1	6" FOLLOWING #58
			Fri, Dec 29	20	DE1	20" FOLLOWING LATE #58
UPW	61	Tue, Dec 05	10	G	10" RAN TRACK 2, HALSTED-KEDZIE ACCT SW 67 FAILED @ A2 TOWER WESTERN AVE	
		83% OT	Tue, Dec 12	7	E1	7" FOLLOWING TRAINS AHEAD; X-TRAFFIC TO CLEAR, CN WASHINGTON ST INT.
			Tue, Dec 26	17	CW1	17" FOLLOWING TRAINS AHEAD
UPW	62	Fri, Dec 01	14	C	14" 10MPH SPEED RESTRICTION, MP23.2-23.3 TK1; 30MPH, MP15.4- 15.6; INTERMITTING DOOR LIGHT ON CAR 8441	
		80% OT	Tue, Dec 05	30	DE	30" HELD @ LA FOX WAIT FOR #57 TO CLEAR PECK, MPRCLX WAS BROKEN DOWN BETWEEN KRESS-PECK CAUSING SINLGE TRACKING
			Wed, Dec 27	32	E	32" ENG #134 HAVING GROUND RELAY ISSUES, BERKELEY; CUT OUT TRACTION #2, HAD ISSUES AGAIN, ENDED CUTTING OUT WHOLE #1 TRUCK
			Fri, Dec 29	27	D	37" STOPPED BEHIND ZLTG2B GOING INTO PROVISO; CREW WAS TOLD TO MAKE CUT BEFORE SHOVING BACK INTO THE YARD
UPW	66	Tue, Dec 05	86	G	86" STOP @ BELLWOOD ACCT SWITCHES OUT OF CORRESPONDENCE AT PROVO& 25TH; CREWS HAND THROW SWITCHES & FLAG AFFECTED INTERLOCKINGS; MELNP-05 ON	
		80% OT	Fri, Dec 15	36	R	7" LATE DEPART CAN 8573 WAS STILL ATS, HAD TO CHANGE TO AC, ELBURN;WAIT FOR #67,PARK MCLPR INTO PROVISO & ANPCPR TK3, POSSIBLE RULE VIOLA
			Mon, Dec 18	7	D	7" FOLLOWING KTAG4X-14, PECK-GENEVA
			Fri, Dec 29	41	D1	41" STOPPED ON TRK3 @ ELMHURST W/#67 STOPPED ON TRK3 @ BERKELEY ACCT MPRCL COMING OUT OF PROVISO TRK 2 MAKING CUT & SHOVE BACK INTO YARD

Data is final (01/25/18) version from TOPS.

P:\ONTIME\report\WeekdayTrainsBelow85%_table.xlsx\PrintCopy 01/26/2018

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\FM2012_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

December 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	136	15	4	10	5	68	129	16	34	8	19	25	44	513	52%
Semi-controllable	11	0	0	0	8	8	8	12	15	23	1	7	28	121	12%
Uncontrollable	21	14	6	11	0	34	27	7	75	8	46	49	57	355	36%
TOTAL TRAINS DELAYED	168	29	10	21	13	110	164	35	124	39	66	81	129	989	100%

December - 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	46.2	22.0	5.6	10.2	2.8	51.2	27.2	11.0	26.8	10.4	17.2	17.8	28.0	276.4	40%
Semi-controllable	21.6	0.0	0.0	0.0	4.0	14.6	13.4	12.2	5.0	12.4	1.2	8.0	21.4	113.8	17%
Uncontrollable	41.4	21.6	11.4	11.4	1.2	32.2	35.0	13.8	30.4	11.2	19.8	42.6	26.0	298.0	43%
TOTAL TRAINS DELAYED	109.2	43.6	17.0	21.6	8.0	98.0	75.6	37.0	62.2	34.0	38.2	68.4	75.4	688.2	100%

December 2017 Divergence From December 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	89.8	-7.0	-1.6	-0.2	2.2	16.8	101.8	5.0	7.2	-2.4	1.8	7.2	16.0	236.6	79%
Semi-controllable	-10.6	0.0	0.0	0.0	4.0	-6.6	-5.4	-0.2	10.0	10.6	-0.2	-1.0	6.6	7.2	2%
Uncontrollable	-20.4	-7.6	-5.4	-0.4	-1.2	1.8	-8.0	-6.8	44.6	-3.2	26.2	6.4	31.0	57.0	19%
TOTAL TRAINS DELAYED	58.8	-14.6	-7.0	-0.6	5.0	12.0	88.4	-2.0	61.8	5.0	27.8	12.6	53.6	300.8	100%

January-December 2017

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	916	309	122	167	45	534	405	104	521	158	266	295	400	4,242	50%
Semi-controllable	100	0	1	0	52	153	85	157	77	182	26	76	251	1,160	14%
Uncontrollable	434	184	56	108	24	402	271	72	348	63	280	534	363	3,139	37%
TOTAL TRAINS DELAYED	1,450	493	179	275	121	1,089	761	333	946	403	572	905	1,014	8,541	100%

Data for current month is final (01/25/18) version from TOPS.

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

01/26/2018

TABLE 7: NUMBER OF DELAYS BY DATE
December 2017

WEEKDAY	1	4	5	6	7	8	11	12	13	14	15	18	19	20	21	22	26	27	28	29	TOTAL
	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Tu	We	Th	Fr	
BNSF	8	14	12	1	13	8	7	3	4	4	1	17	7	0	3	3	26	3	4	29	167
Elec -ML	0	1	1	1	0	2	0	4	0	0	0	0	0	1	0	0	3	8	0	0	21
-BI	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	9
-SC	2	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	9
Heritage	0	1	0	1	1	0	1	1	0	0	0	0	0	0	1	0	0	1	6	0	13
Milw -N	3	0	10	27	2	5	14	9	2	0	1	4	0	1	5	4	11	2	2	5	107
-W	0	0	0	20	5	1	0	13	1	3	0	0	3	0	1	0	35	19	15	17	133
NCS	0	0	2	10	1	2	2	1	0	0	0	0	7	0	0	3	3	2	0	2	35
RI	0	6	8	1	2	1	2	4	1	5	0	0	0	4	1	6	33	22	7	15	118
SWS	2	3	1	3	0	6	1	1	3	2	3	1	1	1	0	1	4	4	0	2	39
UP -N	0	1	2	3	0	0	0	8	0	2	0	0	0	0	1	0	33	0	0	1	51
-NW	5	1	0	0	3	5	4	6	0	0	3	0	0	2	3	6	16	13	2	3	72
-W	<u>11</u>	<u>2</u>	<u>13</u>	<u>7</u>	<u>6</u>	<u>7</u>	<u>2</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>8</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>1</u>	<u>14</u>	<u>20</u>	<u>4</u>	<u>7</u>	<u>125</u>
SYSTEM	32	31	50	78	33	37	33	54	20	17	17	25	19	10	19	24	178	96	40	86	899

SATURDAY	2	9	16	23	30	TOTAL	SUNDAY/HOLIDAY	3	10	17	24	25	31	TOTAL
BNSF	0	1	0	0	0	1	BNSF	0	0	0	0	0	0	0
Elec -ML	0	0	0	0	0	0	Elec -ML	0	4	4	0	0	0	8
-BI	0	1	0	0	0	1	-BI	-	-	-	-	-	-	0
-SC	0	2	0	4	0	6	-SC	0	3	3	0	0	0	6
Heritage	-	-	-	-	-	-	Heritage	-	-	-	-	-	-	0
Milw -N	0	0	1	0	0	1	Milw -N	0	0	1	1	0	0	2
-W	0	2	0	0	9	11	-W	1	0	0	0	16	3	20
NCS	-	-	-	-	-	-	NCS	-	-	-	-	-	-	0
RI	0	1	0	0	1	2	RI	0	0	1	2	1	0	4
SWS	0	0	0	0	0	0	SWS	-	-	-	-	-	-	0
UP -N	2	2	2	1	3	10	UP -N	2	0	0	1	1	1	5
-NW	5	2	0	0	1	8	-NW	0	0	0	0	1	0	1
-W	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	-W	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>3</u>	4
SYSTEM	7	11	3	5	14	40	SYSTEM	3	7	9	4	20	7	50

Data is final (01/25/18) version from TOPS.

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

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	11	0	0	0	7	8	8	8	15	21	1	6	25	110
Freight Interference - Peak	3	0	0	0	5	0	2	3	4	7	0	3	3	30
Primary	2	0	0	0	5	0	1	1	1	4	0	3	2	19
Secondary	1	0	0	0	0	0	1	2	3	3	0	0	1	11
Freight Interference - Off-Peak	8	0	0	0	2	8	6	5	11	14	1	3	22	80
Primary	6	0	0	0	2	5	4	3	5	8	1	3	14	51
Secondary	2	0	0	0	0	3	2	2	6	6	0	0	8	29
Signal/Switch Failure - TOTAL	50	8	2	5	2	4	100	6	12	7	1	7	26	230
Signal/Switch Failure - Metra/PSA	44	8	2	5	0	4	100	2	12	4	1	6	23	211
Primary	21	8	2	4	0	3	69	1	7	4	1	3	9	132
Secondary	23	0	0	1	0	1	31	1	5	0	0	3	14	79
Signal/Switch Failure - Foreign	6	0	0	0	2	0	0	4	0	3	0	1	3	19
Primary	4	0	0	0	2	0	0	0	0	2	0	1	2	11
Secondary	2	0	0	0	0	0	0	4	0	1	0	0	1	8
Mechanical Failure - TOTAL	36	0	0	0	0	18	1	2	9	1	11	9	8	95
Mechanical Failure - Metra/PSA	36	0	0	0	0	18	1	2	9	1	11	9	8	95
Non-Locomotive Equipment Failure - Metra/PSA	1	0	0	0	0	0	0	0	0	0	2	4	1	8
Primary	1	0	0	0	0	0	0	0	0	0	2	2	1	6
Secondary	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Locomotive Failure - Metra/PSA	35	0	0	0	0	18	1	2	9	1	9	5	7	87
Primary	6	0	0	0	0	3	1	1	4	1	2	2	2	22
Secondary	29	0	0	0	0	15	0	1	5	0	7	3	5	65
Mechanical Failure - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Train Interference - TOTAL	2	1	0	0	1	3	1	1	0	1	0	0	1	11
Passenger Train Interference - Metra/PSA	0	0	0	0	0	3	1	1	0	0	0	0	1	6
Passenger Train Interference - Foreign	2	1	0	0	1	0	0	0	0	1	0	0	0	5
Accident - TOTAL	1	0	0	4	0	2	0	0	2	0	0	0	0	9
Accident - Metra/PSA	0	0	0	4	0	2	0	0	2	0	0	0	0	8
Accident - Foreign	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Track Work - TOTAL	6	5	0	5	0	29	22	10	2	0	2	0	2	83
Track Work - Metra/PSA	6	5	0	5	0	29	22	10	2	0	2	0	2	83
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	28	0	1	0	3	13	3	1	9	1	5	12	6	82
Human Error - Metra/PSA	9	0	1	0	3	4	3	1	8	1	5	12	5	52
Human Error - Foreign	19	0	0	0	0	9	0	0	1	0	0	0	1	30
Sick, Injured, Unruly Passenger - TOTAL	0	3	0	0	0	7	1	0	1	0	1	3	6	22
Sick, Injured, Unruly Passenger - Metra/PSA	0	3	0	0	0	7	1	0	1	0	1	3	6	22
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	15	8	6	3	0	8	22	2	56	1	37	26	28	212
Weather - Metra/PSA	15	8	6	3	0	8	22	2	55	1	37	26	28	211
Weather - Foreign	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Passenger Loading - TOTAL	4	0	0	0	0	13	3	1	9	2	6	10	6	54
Lift Deployment - TOTAL	13	0	0	0	0	3	2	0	1	0	2	4	3	28
Obstruction/Debris - TOTAL	0	3	0	4	0	1	0	4	2	4	0	1	4	23
Catenary Failure - TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Other - TOTAL	2	1	0	0	0	1	1	0	6	1	0	3	14	29
TOTAL TRAINS DELAYED	168	29	10	21	13	110	164	35	124	39	66	81	129	989
Total Metra/PSA Delays	129	28	10	21	3	93	156	23	107	14	65	74	100	823
Total Foreign Carrier Delays	39	1	0	0	10	17	8	12	17	25	1	7	29	166

Data for current month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 01/26/2018

'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

December - 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	18.6	0.0	0.0	0.0	3.2	10.4	12.6	9.2	4.2	8.0	1.2	7.8	21.0	96.2
Freight Interference - Peak	7.4	0.0	0.0	0.0	2.8	1.6	4.0	3.4	0.8	2.8	0.2	5.6	6.2	34.8
<i>Primary</i>	3.8	0.0	0.0	0.0	2.8	0.8	3.0	2.8	0.6	2.4	0.2	1.4	1.8	19.6
<i>Secondary</i>	3.6	0.0	0.0	0.0	0.0	0.8	1.0	0.6	0.2	0.4	0.0	4.2	4.4	15.2
Freight Interference - Off-Peak	11.2	0.0	0.0	0.0	0.4	8.8	8.6	5.8	3.4	5.2	1.0	2.2	14.8	61.4
<i>Primary</i>	9.4	0.0	0.0	0.0	0.4	6.2	5.0	5.4	3.4	4.2	0.6	2.0	11.6	48.2
<i>Secondary</i>	1.8	0.0	0.0	0.0	0.0	2.6	3.6	0.4	0.0	1.0	0.4	0.2	3.2	13.2
Signal/Switch Failure - TOTAL	14.4	6.2	1.8	2.8	1.2	25.8	11.6	6.6	6.2	6.6	1.0	2.4	7.2	93.8
Signal/Switch Failure - Metra/PSA	10.2	6.2	1.8	2.8	0.2	21.6	10.8	3.6	5.4	1.8	1.0	2.2	6.8	74.4
<i>Primary</i>	7.2	3.8	0.6	2.2	0.2	12.2	6.2	1.8	4.6	1.6	0.8	1.4	4.6	47.2
<i>Secondary</i>	3.0	2.4	1.2	0.6	0.0	9.4	4.6	1.8	0.8	0.2	0.2	0.8	2.2	27.2
Signal/Switch Failure - Foreign	4.2	0.0	0.0	0.0	1.0	4.2	0.8	3.0	0.8	4.8	0.0	0.2	0.4	19.4
<i>Primary</i>	3.4	0.0	0.0	0.0	1.0	2.6	0.8	2.0	0.2	4.0	0.0	0.2	0.4	14.6
<i>Secondary</i>	0.8	0.0	0.0	0.0	0.0	1.6	0.0	1.0	0.6	0.8	0.0	0.0	0.0	4.8
Mechanical Failure - TOTAL	7.4	2.0	0.4	0.4	0.8	7.4	6.2	2.4	12.4	2.0	6.8	5.2	11.2	64.6
Mechanical Failure - Metra/PSA	6.6	2.0	0.2	0.4	0.8	5.8	6.2	2.4	12.4	2.0	6.8	5.2	11.2	62.0
Non-Locomotive Equipment Failure - Metra/PSA	0.4	2.0	0.2	0.4	0.2	0.6	0.6	0.4	3.0	0.0	2.8	0.2	4.0	14.8
<i>Primary</i>	0.0	1.6	0.2	0.2	0.2	0.0	0.6	0.4	0.6	0.0	1.2	0.2	1.6	6.8
<i>Secondary</i>	0.4	0.4	0.0	0.2	0.0	0.6	0.0	0.0	2.4	0.0	1.6	0.0	2.4	8.0
Locomotive Failure - Metra/PSA	6.2	0.0	0.0	0.0	0.6	5.2	5.6	2.0	9.4	2.0	4.0	5.0	7.2	47.2
<i>Primary</i>	2.6	0.0	0.0	0.0	0.4	2.2	2.4	0.6	3.4	1.0	2.0	3.2	2.4	20.2
<i>Secondary</i>	3.6	0.0	0.0	0.0	0.2	3.0	3.2	1.4	6.0	1.0	2.0	1.8	4.8	27.0
Mechanical Failure - Foreign	0.8	0.0	0.2	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Passenger Train Interference - TOTAL	2.6	4.4	1.2	2.0	0.0	8.4	1.8	1.6	0.4	1.2	0.2	0.2	0.8	24.8
Passenger Train Interference - Metra/PSA	0.0	0.2	0.2	1.0	0.0	6.0	1.6	1.6	0.4	0.4	0.2	0.2	0.8	12.6
Passenger Train Interference - Foreign	2.6	4.2	1.0	1.0	0.0	2.4	0.2	0.0	0.0	0.8	0.0	0.0	0.0	12.2
Accident - TOTAL	9.8	1.2	6.2	4.0	0.0	1.8	7.6	6.8	1.4	7.8	6.4	10.6	1.2	64.8
Accident - Metra/PSA	9.2	1.2	6.2	4.0	0.0	1.6	5.6	6.6	1.4	7.8	6.4	10.6	0.8	61.4
Accident - Foreign	0.6	0.0	0.0	0.0	0.0	0.2	2.0	0.2	0.0	0.0	0.0	0.0	0.4	3.4
Track Work - TOTAL	10.4	4.0	1.0	2.0	0.2	2.4	1.4	1.4	2.0	0.4	2.8	3.4	4.4	35.8
Track Work - Metra/PSA	10.4	4.0	1.0	2.0	0.2	2.4	1.4	1.4	2.0	0.4	2.8	3.4	4.4	35.8
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	13.8	2.2	0.4	1.6	1.4	11.4	6.0	2.0	5.6	3.6	5.6	5.4	4.4	63.4
Human Error - Metra/PSA	6.2	2.2	0.4	1.6	0.6	3.8	5.6	0.4	5.6	0.2	5.4	4.8	3.6	40.4
Human Error - Foreign	7.6	0.0	0.0	0.0	0.8	7.6	0.4	1.6	0.0	3.4	0.2	0.6	0.8	23.0
Sick, Injured, Unruly Passenger - TOTAL	2.2	3.8	1.0	1.0	0.2	2.8	6.2	0.6	3.2	0.2	2.2	2.6	2.0	28.0
Sick, Injured, Unruly Passenger - Metra/PSA	2.2	3.8	1.0	1.0	0.2	2.8	6.2	0.6	2.8	0.2	2.2	2.6	2.0	27.6
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4
Weather - TOTAL	14.2	6.6	1.2	1.8	0.4	10.0	6.4	2.6	5.2	1.0	3.6	7.6	4.6	65.2
Weather - Metra/PSA	13.2	6.6	1.2	1.8	0.2	10.0	6.4	2.6	5.2	1.0	3.6	7.6	4.6	64.0
Weather - Foreign	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Passenger Loading - TOTAL	5.6	7.4	1.0	2.2	0.4	6.0	6.2	2.4	12.2	0.2	4.2	12.2	10.8	70.8
Lift Deployment - TOTAL	1.4	0.0	0.0	0.0	0.0	3.0	2.6	0.4	3.0	0.2	0.8	2.8	3.4	17.6
Obstruction/Debris - TOTAL	7.0	2.2	1.2	2.0	0.2	6.8	4.8	0.6	3.0	2.0	1.6	5.8	3.4	40.6
Catenary Failure - TOTAL	0.0	3.0	0.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Other - TOTAL	1.8	0.6	0.8	0.4	0.0	1.8	2.2	0.4	3.4	0.8	1.8	2.4	1.0	17.4
TOTAL TRAINS DELAYED	109.2	43.6	17.0	21.6	8.0	98.0	75.6	37.0	62.2	34.0	38.2	68.4	75.4	688.2
Total Metra/PSA Delays	73.8	39.4	15.8	20.6	2.8	71.6	59.6	23.0	56.8	17.0	36.8	59.8	52.8	529.8
Total Foreign Carrier Delays	35.4	4.2	1.2	1.0	5.2	26.4	16.0	14.0	5.4	17.0	1.4	8.6	22.6	158.4

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

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 01/26/2018

'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
December 2017 Divergence From December 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	-7.6	0.0	0.0	0.0	3.8	-2.4	-4.6	-1.2	10.8	13.0	-0.2	-1.8	4.0	13.8
Freight Interference - Peak	-4.4	0.0	0.0	0.0	2.2	-1.6	-2.0	-0.4	3.2	4.2	-0.2	-2.6	-3.2	-4.8
<i>Primary</i>	-1.8	0.0	0.0	0.0	0.0	-0.8	-2.0	-1.8	0.4	1.6	-0.2	1.6	0.2	-0.6
<i>Secondary</i>	-2.6	0.0	0.0	0.0	0.0	-0.8	0.0	1.4	2.8	2.6	0.0	-4.2	-3.4	-4.2
Freight Interference - Off-Peak	-3.2	0.0	0.0	0.0	1.6	-0.8	-2.6	-0.8	7.6	8.8	0.0	0.8	7.2	18.6
<i>Primary</i>	-3.4	0.0	0.0	0.0	1.6	-1.2	-1.0	-2.4	1.6	3.8	0.4	1.0	2.4	2.8
<i>Secondary</i>	0.2	0.0	0.0	0.0	0.0	0.4	-1.6	1.6	6.0	5.0	-0.4	-0.2	4.8	15.8
Signal/Switch Failure - TOTAL	35.6	1.8	0.2	2.2	0.8	-21.8	88.4	-0.6	5.8	0.4	0.0	4.6	18.8	136.2
Signal/Switch Failure - Metra/PSA	33.8	1.8	0.2	2.2	-0.2	-17.6	89.2	-1.6	6.6	2.2	0.0	3.8	16.2	136.6
<i>Primary</i>	13.8	4.2	1.4	1.8	-0.2	-9.2	62.8	-0.8	2.4	2.4	0.2	1.6	4.4	84.8
<i>Secondary</i>	20.0	-2.4	-1.2	0.4	0.0	-8.4	26.4	-0.8	4.2	-0.2	-0.2	2.2	11.8	51.8
Signal/Switch Failure - Foreign	1.8	0.0	0.0	0.0	1.0	-4.2	-0.8	1.0	-0.8	-1.8	0.0	0.8	2.6	-0.4
<i>Primary</i>	0.6	0.0	0.0	0.0	1.0	-2.6	-0.8	-2.0	-0.2	-2.0	0.0	0.8	1.6	-3.6
<i>Secondary</i>	1.2	0.0	0.0	0.0	0.0	-1.6	0.0	3.0	-0.6	0.2	0.0	0.0	1.0	3.2
Mechanical Failure - TOTAL	28.6	-2.0	-0.4	-0.4	-0.8	10.6	-5.2	-0.4	-3.4	-1.0	4.2	3.8	-3.2	30.4
Mechanical Failure - Metra/PSA	29.4	-2.0	-0.2	-0.4	-0.8	12.2	-5.2	-0.4	-3.4	-1.0	4.2	3.8	-3.2	33.0
Non-Locomotive Equipment Failure - Metra/PSA	0.6	-2.0	-0.2	-0.4	-0.2	-0.6	-0.6	-0.4	-3.0	0.0	-0.8	3.8	-3.0	-6.8
<i>Primary</i>	1.0	-1.6	-0.2	-0.2	-0.2	0.0	-0.6	-0.4	-0.6	0.0	0.8	1.8	-0.6	-0.8
<i>Secondary</i>	-0.4	-0.4	0.0	-0.2	0.0	-0.6	0.0	0.0	-2.4	0.0	-1.6	2.0	-2.4	-6.0
Locomotive Failure - Metra/PSA	28.8	0.0	0.0	0.0	-0.6	12.8	-4.6	0.0	-0.4	-1.0	5.0	0.0	-0.2	39.8
<i>Primary</i>	3.4	0.0	0.0	0.0	-0.4	0.8	-1.4	0.4	0.6	0.0	0.0	-1.2	-0.4	1.8
<i>Secondary</i>	25.4	0.0	0.0	0.0	-0.2	12.0	-3.2	-0.4	-1.0	-1.0	5.0	1.2	0.2	38.0
Mechanical Failure - Foreign	-0.8	0.0	-0.2	0.0	0.0	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.6
Passenger Train Interference - TOTAL	-0.6	-3.4	-1.2	-2.0	1.0	-5.4	-0.8	-0.6	-0.4	-0.2	-0.2	-0.2	0.2	-13.8
Passenger Train Interference - Metra/PSA	0.0	-0.2	-0.2	-1.0	0.0	-3.0	-0.6	-0.6	-0.4	-0.4	-0.2	-0.2	0.2	-6.6
Passenger Train Interference - Foreign	-0.6	-3.2	-1.0	-1.0	1.0	-2.4	-0.2	0.0	0.0	0.2	0.0	0.0	0.0	-7.2
Accident - TOTAL	-8.8	-1.2	-6.2	0.0	0.0	0.2	-7.6	-6.8	0.6	-7.8	-6.4	-10.6	-1.2	-55.8
Accident - Metra/PSA	-9.2	-1.2	-6.2	0.0	0.0	0.4	-5.6	-6.6	0.6	-7.8	-6.4	-10.6	-0.8	-53.4
Accident - Foreign	0.4	0.0	0.0	0.0	0.0	-0.2	-2.0	-0.2	0.0	0.0	0.0	0.0	-0.4	-2.4
Track Work - TOTAL	-4.4	1.0	-1.0	3.0	-0.2	26.6	20.6	8.6	0.0	-0.4	-0.8	-3.4	-2.4	47.2
Track Work - Metra/PSA	-4.4	1.0	-1.0	3.0	-0.2	26.6	20.6	8.6	0.0	-0.4	-0.8	-3.4	-2.4	47.2
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	14.2	-2.2	0.6	-1.6	1.6	1.6	-3.0	-1.0	3.4	-2.6	-0.6	6.6	1.6	18.6
Human Error - Metra/PSA	2.8	-2.2	0.6	-1.6	2.4	0.2	-2.6	0.6	2.4	0.8	-0.4	7.2	1.4	11.6
Human Error - Foreign	11.4	0.0	0.0	0.0	-0.8	1.4	-0.4	-1.6	1.0	-3.4	-0.2	-0.6	0.2	7.0
Sick, Injured, Unruly Passenger - TOTAL	-2.2	-0.8	-1.0	-1.0	-0.2	4.2	-5.2	-0.6	-2.2	-0.2	-1.2	0.4	4.0	-6.0
Sick, Injured, Unruly Passenger - Metra/PSA	-2.2	-0.8	-1.0	-1.0	-0.2	4.2	-5.2	-0.6	-1.8	-0.2	-1.2	0.4	4.0	-5.6
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	-0.4
Weather - TOTAL	0.8	1.4	4.8	1.2	-0.4	-2.0	15.6	-0.6	50.8	0.0	33.4	18.4	23.4	146.8
Weather - Metra/PSA	1.8	1.4	4.8	1.2	-0.2	-2.0	15.6	-0.6	49.8	0.0	33.4	18.4	23.4	147.0
Weather - Foreign	-1.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	-0.2
Passenger Loading - TOTAL	-1.6	-7.4	-1.0	-2.2	-0.4	7.0	-3.2	-1.4	-3.2	1.8	1.8	-2.2	-4.8	-16.8
Lift Deployment - TOTAL	11.6	0.0	0.0	0.0	0.0	0.0	-0.6	-0.4	-2.0	-0.2	1.2	1.2	-0.4	10.4
Obstruction/Debris - TOTAL	-7.0	0.8	-1.2	2.0	-0.2	-5.8	-4.8	3.4	-1.0	2.0	-1.6	-4.8	0.6	-17.6
Catenary Failure - TOTAL	0.0	-3.0	0.2	-1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.2
Other - TOTAL	0.2	0.4	-0.8	-0.4	0.0	-0.8	-1.2	-0.4	2.6	0.2	-1.8	0.6	13.0	11.6
TOTAL TRAINS DELAYED	58.8	-14.6	-7.0	-0.6	5.0	12.0	88.4	-2.0	61.8	5.0	27.8	12.6	53.6	300.8
Total Metra/PSA Delays	55.2	-11.4	-5.8	0.4	0.2	21.4	96.4	0.0	50.2	-3.0	28.2	14.2	47.2	293.2
Total Foreign Carrier Delays	3.6	-3.2	-1.2	-1.0	4.8	-9.4	-8.0	-2.0	11.6	8.0	-0.4	-1.6	6.4	7.6

Data for current month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 01/26/2018

'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 - December 2017

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	100	0	1	0	39	111	54	119	78	153	27	70	254	1,006
Freight Interference - Peak	43	0	1	0	33	18	13	40	12	52	11	36	100	359
Primary	29	0	0	0	29	14	12	28	6	41	3	21	45	228
Secondary	14	0	1	0	4	4	1	12	6	11	8	15	55	131
Freight Interference - Off-Peak	57	0	0	0	6	93	41	79	66	101	16	34	154	647
Primary	50	0	0	0	5	56	33	72	49	68	10	28	107	478
Secondary	7	0	0	0	1	37	8	7	17	33	6	6	47	169
Signal/Switch Failure - TOTAL	235	83	42	51	20	177	198	64	77	71	21	82	102	1,223
Signal/Switch Failure - Metra/PSA	200	83	42	51	1	133	166	26	77	34	21	73	91	998
Primary	127	58	36	38	1	78	118	21	58	23	13	25	45	641
Secondary	73	25	6	13	0	55	48	5	19	11	8	48	46	357
Signal/Switch Failure - Foreign	35	0	0	0	19	44	32	38	0	37	0	9	11	225
Primary	23	0	0	0	13	20	24	22	0	23	0	6	9	140
Secondary	12	0	0	0	6	24	8	16	0	14	0	3	2	85
Mechanical Failure - TOTAL	242	15	3	6	5	111	76	23	238	32	106	88	74	1,019
Mechanical Failure - Metra/PSA	236	10	3	6	4	101	76	23	238	32	106	88	74	997
Non-Locomotive Equipment Failure - Metra/PSA	53	10	3	6	1	6	8	3	22	5	14	29	39	199
Primary	23	3	2	3	1	4	4	1	12	2	7	13	18	93
Secondary	30	7	1	3	0	2	4	2	10	3	7	16	21	106
Locomotive Failure - Metra/PSA	183	0	0	0	3	95	68	20	216	27	92	59	35	798
Primary	50	0	0	0	2	34	29	10	72	8	25	23	12	265
Secondary	133	0	0	0	1	61	39	10	144	19	67	36	23	533
Mechanical Failure - Foreign	6	5	0	0	1	10	0	0	0	0	0	0	0	22
Passenger Train Interference - TOTAL	15	19	8	5	10	32	3	6	10	18	0	0	7	133
Passenger Train Interference - Metra/PSA	0	16	7	1	0	28	2	6	10	0	0	0	6	76
Passenger Train Interference - Foreign	15	3	1	4	10	4	1	0	0	18	0	0	1	57
Accident - TOTAL	133	28	11	31	4	19	57	12	47	18	63	193	18	634
Accident - Metra/PSA	101	28	11	31	0	19	46	9	42	7	57	160	1	512
Accident - Foreign	32	0	0	0	4	0	11	3	5	11	6	33	17	122
Track Work - TOTAL	162	118	32	78	1	116	73	20	92	18	63	79	96	948
Track Work - Metra/PSA	149	118	32	78	1	116	73	20	92	17	63	79	96	934
Track Work - Foreign	13	0	0	0	0	0	0	0	0	1	0	0	0	14
Human Error - TOTAL	226	38	20	14	23	142	74	21	82	41	63	54	100	898
Human Error - Metra/PSA	104	36	20	12	5	88	49	6	79	20	57	46	80	602
Human Error - Foreign	122	2	0	2	18	54	25	15	3	21	6	8	20	296
Sick, Injured, Unruly Passenger - TOTAL	29	42	4	12	0	72	38	8	27	0	30	34	60	356
Sick, Injured, Unruly Passenger - Metra/PSA	23	42	4	12	0	72	38	8	27	0	30	34	60	350
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	80	30	17	21	4	95	67	15	95	2	79	52	40	597
Weather - Metra/PSA	80	30	17	21	4	94	67	15	94	2	79	52	40	595
Weather - Foreign	0	0	0	0	0	1	0	0	1	0	0	0	0	2
Passenger Loading - TOTAL	43	62	11	10	0	80	36	5	63	2	70	119	80	581
Lift Deployment - TOTAL	37	4	0	1	0	66	17	3	35	0	18	31	36	248
Obstruction/Debris - TOTAL	105	29	16	31	13	39	36	25	59	36	9	55	92	545
Catenary Failure - TOTAL	0	17	7	9	0	0	0	0	0	0	0	0	0	33
Other - TOTAL	43	8	7	6	2	29	32	12	43	12	23	48	55	320
TOTAL TRAINS DELAYED	1,450	493	179	275	121	1,089	761	333	946	403	572	905	1,014	8,541
Total Metra/PSA Delays	1,121	483	177	269	30	865	638	158	859	162	533	785	711	6,791
Total Foreign Carrier Delays	329	10	2	6	91	224	123	175	87	241	39	120	303	1,750

Data for current month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\YTDByLine 01/26/2018

'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 - December - 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	237.4	0.0	0.2	0.0	33.8	141.6	154.6	133.6	67.0	142.6	14.2	65.0	195.6	1,185.6
Freight Interference - Peak	88.2	0.0	0.2	0.0	32.4	28.0	31.8	50.2	20.2	46.2	3.2	32.2	50.8	383.4
<i>Primary</i>	55.2	0.0	0.0	0.0	31.4	19.0	20.8	35.0	11.8	36.2	1.8	16.0	23.8	251.0
<i>Secondary</i>	33.0	0.0	0.2	0.0	1.0	9.0	11.0	15.2	8.4	10.0	1.4	16.2	27.0	132.4
Freight Interference - Off-Peak	149.2	0.0	0.0	0.0	1.4	113.6	122.8	83.4	46.8	96.4	11.0	32.8	144.8	802.2
<i>Primary</i>	125.2	0.0	0.0	0.0	1.4	79.6	83.6	72.6	41.0	74.8	6.8	27.0	117.8	629.8
<i>Secondary</i>	24.0	0.0	0.0	0.0	0.0	34.0	39.2	10.8	5.8	21.6	4.2	5.8	27.0	172.4
Signal/Switch Failure - TOTAL	233.6	88.0	30.8	30.8	19.4	240.6	146.2	93.8	88.4	107.0	39.6	64.6	114.6	1,297.4
Signal/Switch Failure - Metra/PSA	140.4	88.0	30.6	30.8	2.6	201.6	124.6	60.4	82.2	22.6	37.6	57.2	108.0	986.6
<i>Primary</i>	103.0	59.0	21.0	21.4	2.4	100.0	75.0	34.2	63.4	17.2	19.2	24.6	44.6	585.0
<i>Secondary</i>	37.4	29.0	9.6	9.4	0.2	101.6	49.6	26.2	18.8	5.4	18.4	32.6	63.4	401.6
Signal/Switch Failure - Foreign	93.2	0.0	0.2	0.0	16.8	39.0	21.6	33.4	6.2	84.4	2.0	7.4	6.6	310.8
<i>Primary</i>	66.8	0.0	0.0	0.0	15.6	25.4	14.6	20.2	3.2	56.4	1.0	4.2	5.0	212.4
<i>Secondary</i>	26.4	0.0	0.2	0.0	1.2	13.6	7.0	13.2	3.0	28.0	1.0	3.2	1.6	98.4
Mechanical Failure - TOTAL	155.8	49.0	15.4	11.8	5.6	126.6	89.2	35.2	145.0	27.6	86.6	98.4	87.0	933.2
Mechanical Failure - Metra/PSA	154.6	43.4	13.0	10.2	5.6	120.6	89.0	35.2	144.6	27.6	86.6	98.4	86.8	915.6
Non-Locomotive Equipment Failure - Metra/PSA	33.0	43.4	13.0	10.2	1.4	15.8	17.2	5.4	17.2	8.6	19.6	19.2	29.6	233.6
<i>Primary</i>	13.6	15.4	5.0	4.6	1.0	5.4	8.6	2.4	7.0	4.0	8.2	7.0	13.2	95.4
<i>Secondary</i>	19.4	28.0	8.0	5.6	0.4	10.4	8.6	3.0	10.2	4.6	11.4	12.2	16.4	138.2
Locomotive Failure - Metra/PSA	121.6	0.0	0.0	0.0	4.2	104.8	71.8	29.8	127.4	19.0	67.0	79.2	57.2	682.0
<i>Primary</i>	39.6	0.0	0.0	0.0	3.0	29.0	28.0	9.6	42.2	9.0	25.6	23.6	19.4	229.0
<i>Secondary</i>	82.0	0.0	0.0	0.0	1.2	75.8	43.8	20.2	85.2	10.0	41.4	55.6	37.8	453.0
Mechanical Failure - Foreign	1.2	5.6	2.4	1.6	0.0	6.0	0.2	0.0	0.4	0.0	0.0	0.0	0.2	17.6
Passenger Train Interference - TOTAL	19.0	13.2	3.6	6.8	6.2	65.0	14.6	18.4	13.4	14.4	1.8	4.4	11.4	192.2
Passenger Train Interference - Metra/PSA	1.4	4.2	1.4	4.0	0.6	44.2	12.2	17.6	9.6	3.4	1.8	4.2	11.0	115.6
Passenger Train Interference - Foreign	17.6	9.0	2.2	2.8	5.6	20.8	2.4	0.8	3.8	11.0	0.0	0.2	0.4	76.6
Accident - TOTAL	120.2	19.4	12.2	14.6	2.2	58.8	61.8	22.0	46.0	18.4	45.0	92.8	40.4	553.8
Accident - Metra/PSA	102.0	19.4	12.2	14.6	2.0	55.2	57.4	19.2	44.8	17.4	45.0	92.0	36.6	517.8
Accident - Foreign	18.2	0.0	0.0	0.0	0.2	3.6	4.4	2.8	1.2	1.0	0.0	0.8	3.8	36.0
Track Work - TOTAL	257.0	66.2	18.4	67.4	4.6	80.8	39.4	20.6	75.2	13.8	70.4	60.4	59.0	833.2
Track Work - Metra/PSA	242.8	66.2	18.4	67.4	4.6	80.6	38.6	19.8	75.2	11.8	70.4	60.4	59.0	815.2
Track Work - Foreign	14.2	0.0	0.0	0.0	0.0	0.2	0.8	0.8	0.0	2.0	0.0	0.0	0.0	18.0
Human Error - TOTAL	162.8	50.6	14.2	26.6	17.0	93.0	56.8	22.8	65.0	39.2	45.6	50.0	49.2	692.8
Human Error - Metra/PSA	111.6	48.0	14.0	25.8	4.4	51.4	40.6	10.4	64.6	9.0	36.4	33.8	30.6	480.6
Human Error - Foreign	51.2	2.6	0.2	0.8	12.6	41.6	16.2	12.4	0.4	30.2	9.2	16.2	18.6	212.2
Sick, Injured, Unruly Passenger - TOTAL	35.4	66.2	12.4	18.0	1.8	36.2	42.4	5.4	32.6	5.4	44.6	46.0	34.8	381.2
Sick, Injured, Unruly Passenger - Metra/PSA	34.2	66.2	12.4	18.0	1.8	36.2	42.4	5.4	32.0	5.4	44.6	46.0	34.8	379.4
Sick, Injured, Unruly Passenger - Foreign	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.8
Weather - TOTAL	217.8	117.0	36.0	41.2	5.8	116.2	109.4	37.6	124.8	23.8	96.8	116.8	91.2	1,134.4
Weather - Metra/PSA	215.8	117.0	36.0	41.2	5.2	114.0	108.8	37.6	124.8	22.6	96.8	116.4	90.8	1,127.0
Weather - Foreign	2.0	0.0	0.0	0.0	0.6	2.2	0.6	0.0	0.0	1.2	0.0	0.4	0.4	7.4
Passenger Loading - TOTAL	67.2	117.6	20.8	46.0	0.4	77.2	83.8	4.8	143.0	2.0	95.0	107.0	75.4	840.2
Lift Deployment - TOTAL	28.6	1.8	0.0	1.0	0.0	31.0	29.8	3.8	38.2	1.8	13.0	21.2	27.0	197.2
Obstruction/Debris - TOTAL	86.2	37.2	12.0	32.8	3.6	38.2	47.6	11.8	32.6	24.2	33.8	56.8	42.8	459.6
Catenary Failure - TOTAL	0.0	70.6	15.2	31.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	117.6
Other - TOTAL	48.6	27.6	8.0	14.2	0.8	18.0	23.4	6.8	28.2	13.0	24.4	19.6	40.2	272.8
TOTAL TRAINS DELAYED	1,669.6	724.4	199.2	342.8	101.2	1,123.2	899.0	416.6	899.4	433.2	610.8	803.2	868.6	9,091.2
Total Metra/PSA Delays	1,233.4	707.2	194.0	337.6	31.6	868.2	698.2	232.8	819.8	160.8	585.4	713.2	643.0	7,225.2
Total Foreign Carrier Delays	436.2	17.2	5.2	5.2	69.6	255.0	200.8	183.8	79.6	272.4	25.4	90.0	225.6	1,866.0

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

P:\ONTIME\report\DelaysByCause.xlsx|YTDBByLine 01/26/2018

'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 - December 2017 Divergence From January - December 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	-137.4	0.0	0.8	0.0	5.2	-30.6	-100.6	-14.6	11.0	10.4	12.8	5.0	58.4	-179.6
Freight Interference - Peak	-45.2	0.0	0.8	0.0	0.6	-10.0	-18.8	-10.2	-8.2	5.8	7.8	3.8	49.2	-24.4
Primary	-26.2	0.0	0.0	0.0	-2.4	-5.0	-8.8	-7.0	-5.8	4.8	1.2	5.0	21.2	-23.0
Secondary	-19.0	0.0	0.8	0.0	3.0	-5.0	-10.0	-3.2	-2.4	1.0	6.6	-1.2	28.0	-1.4
Freight Interference - Off-Peak	-92.2	0.0	0.0	0.0	4.6	-20.6	-81.8	-4.4	19.2	4.6	5.0	1.2	9.2	-155.2
Primary	-75.2	0.0	0.0	0.0	3.6	-23.6	-50.6	-0.6	8.0	-6.8	3.2	1.0	-10.8	-151.8
Secondary	-17.0	0.0	0.0	0.0	1.0	3.0	-31.2	-3.8	11.2	11.4	1.8	0.2	20.0	-3.4
Signal/Switch Failure - TOTAL	1.4	-5.0	11.2	20.2	0.6	-63.6	51.8	-29.8	-11.4	-36.0	-18.6	17.4	-12.6	-74.4
Signal/Switch Failure - Metra/PSA	59.6	-5.0	11.4	20.2	-1.6	-68.6	41.4	-34.4	-5.2	11.4	-16.6	15.8	-17.0	11.4
Primary	24.0	-1.0	15.0	16.6	-1.4	-22.0	43.0	-13.2	-5.4	5.8	-6.2	0.4	0.4	56.0
Secondary	35.6	-4.0	-3.6	3.6	-0.2	-46.6	-1.6	-21.2	0.2	5.6	-10.4	15.4	-17.4	-44.6
Signal/Switch Failure - Foreign	-58.2	0.0	-0.2	0.0	2.2	5.0	10.4	4.6	-6.2	-47.4	-2.0	1.6	4.4	-85.8
Primary	-43.8	0.0	0.0	0.0	-2.6	-5.4	9.4	1.8	-3.2	-33.4	-1.0	1.8	4.0	-72.4
Secondary	-14.4	0.0	-0.2	0.0	4.8	10.4	1.0	2.8	-3.0	-14.0	-1.0	-0.2	0.4	-13.4
Mechanical Failure - TOTAL	86.2	-34.0	-12.4	-5.8	-0.6	-15.6	-13.2	-12.2	93.0	4.4	19.4	-10.4	-13.0	85.8
Mechanical Failure - Metra/PSA	81.4	-33.4	-10.0	-4.2	-1.6	-19.6	-13.0	-12.2	93.4	4.4	19.4	-10.4	-12.8	81.4
Non-Locomotive Equipment Failure - Metra/PSA	20.0	-33.4	-10.0	-4.2	-0.4	-9.8	-9.2	-2.4	4.8	-3.6	-5.6	9.8	9.4	-34.6
Primary	9.4	-12.4	-3.0	-1.6	0.0	-1.4	-4.6	-1.4	5.0	-2.0	-1.2	6.0	4.8	-2.4
Secondary	10.6	-21.0	-7.0	-2.6	-0.4	-8.4	-4.6	-1.0	-0.2	-1.6	-4.4	3.8	4.6	-32.2
Locomotive Failure - Metra/PSA	61.4	0.0	0.0	0.0	-1.2	-9.8	-3.8	-9.8	88.6	8.0	25.0	-20.2	-22.2	116.0
Primary	10.4	0.0	0.0	0.0	-1.0	5.0	1.0	0.4	29.8	-1.0	-0.6	-0.6	-7.4	36.0
Secondary	51.0	0.0	0.0	0.0	-0.2	-14.8	-4.8	-10.2	58.8	9.0	25.6	-19.6	-14.8	80.0
Mechanical Failure - Foreign	4.8	-0.6	-2.4	-1.6	1.0	4.0	-0.2	0.0	-0.4	0.0	0.0	0.0	-0.2	4.4
Passenger Train Interference - TOTAL	-4.0	5.8	4.4	-1.8	3.8	-33.0	-11.6	-12.4	-3.4	3.6	-1.8	-4.4	-4.4	-59.2
Passenger Train Interference - Metra/PSA	-1.4	11.8	5.6	-3.0	-0.6	-16.2	-10.2	-11.6	0.4	-3.4	-1.8	-4.2	-5.0	-39.6
Passenger Train Interference - Foreign	-2.6	-6.0	-1.2	1.2	4.4	-16.8	-1.4	-0.8	-3.8	7.0	0.0	-0.2	0.6	-19.6
Accident - TOTAL	12.8	8.6	-1.2	16.4	1.8	-39.8	-4.8	-10.0	1.0	-0.4	18.0	100.2	-22.4	80.2
Accident - Metra/PSA	-1.0	8.6	-1.2	16.4	-2.0	-36.2	-11.4	-10.2	-2.8	-10.4	12.0	68.0	-35.6	-5.8
Accident - Foreign	13.8	0.0	0.0	0.0	3.8	-3.6	6.6	0.2	3.8	10.0	6.0	32.2	13.2	86.0
Track Work - TOTAL	-95.0	51.8	13.6	10.6	-3.6	35.2	33.6	-0.6	16.8	4.2	-7.4	18.6	37.0	114.8
Track Work - Metra/PSA	-93.8	51.8	13.6	10.6	-3.6	35.4	34.4	0.2	16.8	5.2	-7.4	18.6	37.0	118.8
Track Work - Foreign	-1.2	0.0	0.0	0.0	0.0	-0.2	-0.8	-0.8	0.0	-1.0	0.0	0.0	0.0	-4.0
Human Error - TOTAL	63.2	-12.6	5.8	-12.6	6.0	49.0	17.2	-1.8	17.0	1.8	17.4	4.0	50.8	205.2
Human Error - Metra/PSA	-7.6	-12.0	6.0	-13.8	0.6	36.6	8.4	-4.4	14.4	11.0	20.6	12.2	49.4	121.4
Human Error - Foreign	70.8	-0.6	-0.2	1.2	5.4	12.4	8.8	2.6	2.6	-9.2	-3.2	-8.2	1.4	83.8
Sick, Injured, Unruly Passenger - TOTAL	-6.4	-24.2	-8.4	-6.0	-1.8	35.8	-4.4	2.6	-5.6	-5.4	-14.6	-12.0	25.2	-25.2
Sick, Injured, Unruly Passenger - Metra/PSA	-11.2	-24.2	-8.4	-6.0	-1.8	35.8	-4.4	2.6	-5.0	-5.4	-14.6	-12.0	25.2	-29.4
Sick, Injured, Unruly Passenger - Foreign	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	0.0	4.2
Weather - TOTAL	-137.8	-87.0	-19.0	-20.2	-1.8	-21.2	-42.4	-22.6	-29.8	-21.8	-17.8	-64.8	-51.2	-537.4
Weather - Metra/PSA	-135.8	-87.0	-19.0	-20.2	-1.2	-20.0	-41.8	-22.6	-30.8	-20.6	-17.8	-64.4	-50.8	-532.0
Weather - Foreign	-2.0	0.0	0.0	0.0	-0.6	-1.2	-0.6	0.0	1.0	-1.2	0.0	-0.4	-0.4	-5.4
Passenger Loading - TOTAL	-24.2	-55.6	-9.8	-36.0	-0.4	2.8	-47.8	0.2	-80.0	0.0	-25.0	12.0	4.6	-259.2
Lift Deployment - TOTAL	8.4	2.2	0.0	0.0	0.0	35.0	-12.8	-0.8	-3.2	-1.8	5.0	9.8	9.0	50.8
Obstruction/Debris - TOTAL	18.8	-8.2	4.0	-1.8	9.4	0.8	-11.6	13.2	26.4	11.8	-24.8	-1.8	49.2	85.4
Catenary Failure - TOTAL	0.0	-53.6	-8.2	-22.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-84.6
Other - TOTAL	-5.6	-19.6	-1.0	-8.2	1.2	11.0	8.6	5.2	14.8	-1.0	-1.4	28.4	14.8	47.2
TOTAL TRAINS DELAYED	-219.6	-231.4	-20.2	-67.8	19.8	-34.2	-138.0	-83.6	46.6	-30.2	-38.8	101.8	145.4	-550.2
Total Metra/PSA Delays	-112.4	-224.2	-17.0	-68.6	-1.6	-3.2	-60.2	-74.8	39.2	1.2	-52.4	71.8	68.0	-434.2
Total Foreign Carrier Delays	-107.2	-7.2	-3.2	0.8	21.4	-31.0	-77.8	-8.8	7.4	-31.4	13.6	30.0	77.4	-116.0

Data for current month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\YTDByLine 01/26/2018

'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 - Dec	
Freight Interference - TOTAL	53	68	69	79	49	110	74	74	96	109	115	110	1,006	11.8%
Freight Interference - Peak	20	21	23	25	14	34	31	28	42	45	46	30	359	4.2%
Primary	11	16	17	11	12	22	20	22	20	30	28	19	228	2.7%
Secondary	9	5	6	14	2	12	11	6	22	15	18	11	131	1.5%
Freight Interference - Off-Peak	33	47	46	54	35	76	43	46	54	64	69	80	647	7.6%
Primary	26	38	36	34	27	57	30	35	39	50	55	51	478	5.6%
Secondary	7	9	10	20	8	19	13	11	15	14	14	29	169	2.0%
Signal/Switch Failure - TOTAL	118	44	80	79	91	87	69	132	119	64	110	230	1,223	14.3%
Signal/Switch Failure - Metra/PSA	98	31	74	28	72	74	63	99	104	54	90	211	998	11.7%
Primary	69	21	41	25	46	42	55	72	46	35	57	132	641	7.5%
Secondary	29	10	33	3	26	32	8	27	58	19	33	79	357	4.2%
Signal/Switch Failure - Foreign	20	13	6	51	19	13	6	33	15	10	20	19	225	2.6%
Primary	10	9	4	16	15	10	4	30	14	4	13	11	140	1.6%
Secondary	10	4	2	35	4	3	2	3	1	6	7	8	85	1.0%
Mechanical Failure - TOTAL	84	61	64	42	111	85	85	85	97	125	85	95	1,019	11.9%
Mechanical Failure - Metra/PSA	83	55	62	42	111	84	80	78	97	125	85	95	997	11.7%
Non-Locomotive Equipment Failure - Metra/PSA	12	8	15	10	23	35	16	21	11	20	20	8	199	2.3%
Primary	6	8	5	7	7	13	6	10	7	8	10	6	93	1.1%
Secondary	6	0	10	3	16	22	10	11	4	12	10	2	106	1.2%
Locomotive Failure - Metra/PSA	71	47	47	32	88	49	64	57	86	105	65	87	798	9.3%
Primary	18	21	20	17	29	25	21	17	22	34	19	22	265	3.1%
Secondary	53	26	27	15	59	24	43	40	64	71	46	65	533	6.2%
Mechanical Failure - Foreign	1	6	2	0	0	1	5	7	0	0	0	0	22	0.3%
Passenger Train Interference - TOTAL	16	2	2	5	19	9	9	14	18	17	11	11	133	1.6%
Passenger Train Interference - Metra/PSA	9	0	1	2	2	4	6	10	16	12	8	6	76	0.9%
Passenger Train Interference - Foreign	7	2	1	3	17	5	3	4	2	5	3	5	57	0.7%
Accident - TOTAL	74	32	26	101	18	65	45	43	96	55	70	9	634	7.4%
Accident - Metra/PSA	69	32	23	98	9	64	40	1	93	49	26	8	512	6.0%
Accident - Foreign	5	0	3	3	9	1	5	42	3	6	44	1	122	1.4%
Track Work - TOTAL	78	17	29	72	98	107	71	86	84	94	129	83	948	11.1%
Track Work - Metra/PSA	78	17	29	72	98	107	71	80	77	94	128	83	934	10.9%
Track Work - Foreign	0	0	0	0	0	0	0	6	7	0	1	0	14	0.2%
Human Error - TOTAL	68	140	54	69	56	75	73	42	66	85	88	82	898	10.5%
Human Error - Metra/PSA	58	50	37	49	41	58	48	37	55	50	67	52	602	7.0%
Human Error - Foreign	10	90	17	20	15	17	25	5	11	35	21	30	296	3.5%
Sick, Injured, Unruly Passenger - TOTAL	27	28	40	27	20	38	44	30	17	37	26	22	356	4.2%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34	27	20	38	44	30	17	37	26	22	350	4.1%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0	0	0	0	0	0	0	0	6	0.1%
Weather - TOTAL	97	25	59	4	2	33	104	2	0	37	22	212	597	7.0%
Weather - Metra/PSA	96	25	59	4	2	33	104	2	0	37	22	211	595	7.0%
Weather - Foreign	1	0	0	0	0	0	0	0	0	0	0	1	2	0.0%
Passenger Loading - TOTAL	33	7	12	10	36	81	94	112	64	35	43	54	581	6.8%
Lift Deployment - TOTAL	17	8	8	13	23	31	29	23	25	15	28	28	248	2.9%
Obstruction/Debris - TOTAL	66	44	43	35	78	64	24	52	25	45	46	23	545	6.4%
Catenary Failure - TOTAL	6	1	4	1	0	0	1	0	18	1	0	1	33	0.4%
Other - TOTAL	15	15	24	20	22	37	32	32	48	22	24	29	320	3.7%
TOTAL TRAINS DELAYED	752	492	514	557	623	822	754	727	773	741	797	989	8,541	100.0%
Total Metra/PSA Delays	655	313	410	401	514	675	636	556	639	576	593	823	6,791	79.5%
Total Foreign Carrier Delays	97	179	104	156	109	147	118	171	134	165	204	166	1,750	20.5%

Data for current month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\AllMonths 01/26/2018

'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 - Dec	
Freight Interference - TOTAL	82	53	43	44	72	73	82	108	78	48	65	94	842	10.5%
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	309	3.8%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	202	2.5%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	107	1.3%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	533	6.6%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	423	5.3%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	110	1.4%
Signal/Switch Failure - TOTAL	154	155	123	98	145	143	108	63	105	67	110	120	1,391	17.3%
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	901	11.2%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	544	6.8%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	357	4.4%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	490	6.1%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	354	4.4%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	136	1.7%
Mechanical Failure - TOTAL	107	68	131	43	80	88	120	78	114	64	71	88	1,052	13.1%
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	1,043	13.0%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	191	2.4%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	92	1.1%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	99	1.2%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	852	10.6%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	278	3.5%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	574	7.1%
Mechanical Failure - Foreign	0	0	0	1	0	0	0	0	0	0	0	8	9	0.1%
Passenger Train Interference - TOTAL	22	12	3	4	19	14	12	11	5	10	4	38	154	1.9%
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	49	0.6%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	105	1.3%
Accident - TOTAL	59	15	62	48	86	29	18	55	34	10	79	49	544	6.8%
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	505	6.3%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	39	0.5%
Track Work - TOTAL	40	21	36	44	141	114	99	133	177	75	59	61	1,000	12.4%
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	959	11.9%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	41	0.5%
Human Error - TOTAL	38	33	21	53	23	112	47	93	50	45	49	71	635	7.9%
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	500	6.2%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	135	1.7%
Sick, Injured, Unruly Passenger - TOTAL	20	39	27	50	44	32	29	43	30	24	35	34	407	5.1%
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	404	5.0%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	2	0	0	0	0	1	0	3	0.0%
Weather - TOTAL	129	132	28	1	4	23	49	38	1	4	13	132	554	6.9%
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	553	6.9%
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	1	1	0.0%
Passenger Loading - TOTAL	13	7	29	8	51	83	109	42	32	28	68	71	541	6.7%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	145	1.8%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	446	5.5%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	100	1.2%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	242	3.0%
TOTAL TRAINS DELAYED	707	599	572	451	716	791	769	781	729	455	647	836	8,053	100.0%
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	6,388	79.3%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	1,665	20.7%

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

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 01/26/2018

'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 - Dec	
Freight Interference - TOTAL	-29	15	26	35	-23	37	-8	-34	18	61	50	16	164	1.3%
Freight Interference - Peak	-12	4	9	16	-14	14	-1	-22	16	30	12	-2	50	0.4%
Primary	-15	6	6	4	-3	12	-1	-9	0	17	10	-1	26	0.2%
Secondary	3	-2	3	12	-11	2	0	-13	16	13	2	-1	24	0.2%
Freight Interference - Off-Peak	-17	11	17	19	-9	23	-7	-12	2	31	38	18	114	1.0%
Primary	-6	9	13	5	-5	13	-4	-13	-4	21	27	-1	55	0.3%
Secondary	-11	2	4	14	-4	10	-3	1	6	10	11	19	59	0.6%
Signal/Switch Failure - TOTAL	-36	-111	-43	-19	-54	-56	-39	69	14	-3	0	110	-168	-3.0%
Signal/Switch Failure - Metra/PSA	31	-91	-25	-32	-12	-10	12	44	15	16	14	135	97	0.5%
Primary	34	-9	-11	-16	-8	-10	14	32	-12	3	0	80	97	0.7%
Secondary	-3	-82	-14	-16	-4	0	-2	12	27	13	14	55	0	-0.3%
Signal/Switch Failure - Foreign	-67	-20	-18	13	-42	-46	-51	25	-1	-19	-14	-25	-265	-3.5%
Primary	-58	-15	-10	-17	-34	-33	-32	24	2	-17	-6	-18	-214	-2.8%
Secondary	-9	-5	-8	30	-8	-13	-19	1	-3	-2	-8	-7	-51	-0.7%
Mechanical Failure - TOTAL	-23	-7	-67	-1	31	-3	-35	7	-17	61	14	7	-33	-1.1%
Mechanical Failure - Metra/PSA	-24	-13	-69	0	31	-4	-40	0	-17	61	14	15	-46	-1.3%
Non-Locomotive Equipment Failure - Metra/PSA	-13	-11	5	4	10	18	-3	-9	3	8	17	-21	8	0.0%
Primary	-5	-1	1	2	-2	4	-2	-1	0	1	7	-3	1	-0.1%
Secondary	-8	-10	4	2	12	14	-1	-8	3	7	10	-18	7	0.0%
Locomotive Failure - Metra/PSA	-11	-2	-74	-4	21	-22	-37	9	-20	53	-3	36	-54	-1.2%
Primary	-10	3	-4	3	11	-2	-15	-3	-6	17	-4	-3	-13	-0.3%
Secondary	-1	-5	-70	-7	10	-20	-22	12	-14	36	1	39	-41	-0.9%
Mechanical Failure - Foreign	1	6	2	-1	0	1	5	7	0	0	0	-8	13	0.1%
Passenger Train Interference - TOTAL	-6	-10	-1	1	0	-5	-3	3	13	7	7	-27	-21	-0.4%
Passenger Train Interference - Metra/PSA	-4	-5	-1	-1	0	2	-1	8	14	6	5	4	27	0.3%
Passenger Train Interference - Foreign	-2	-5	0	2	0	-7	-2	-5	-1	1	2	-31	-48	-0.6%
Accident - TOTAL	15	17	-36	53	-68	36	27	-12	62	45	-9	-40	90	0.7%
Accident - Metra/PSA	20	18	-39	57	-68	35	22	-52	63	39	-47	-41	7	-0.3%
Accident - Foreign	-5	-1	3	-4	0	1	5	40	-1	6	38	1	83	0.9%
Track Work - TOTAL	38	-4	-7	28	-43	-7	-28	-47	-93	19	70	22	-52	-1.3%
Track Work - Metra/PSA	38	-4	-7	31	-41	-3	-28	-24	-98	20	69	22	-25	-1.0%
Track Work - Foreign	0	0	0	-3	-2	-4	0	-23	5	-1	1	0	-27	-0.3%
Human Error - TOTAL	30	107	33	16	33	-37	26	-51	16	40	39	11	263	2.6%
Human Error - Metra/PSA	28	25	22	7	26	-36	14	-44	12	18	35	-5	102	0.8%
Human Error - Foreign	2	82	11	9	7	-1	12	-7	4	22	4	16	161	1.8%
Sick, Injured, Unruly Passenger - TOTAL	7	-11	13	-23	-24	6	15	-13	-13	13	-9	-12	-51	-0.9%
Sick, Injured, Unruly Passenger - Metra/PSA	7	-11	7	-23	-24	8	15	-13	-13	13	-8	-12	-54	-0.9%
Sick, Injured, Unruly Passenger - Foreign	0	0	6	0	0	-2	0	0	0	0	-1	0	3	0.0%
Weather - TOTAL	-32	-107	31	3	-2	10	55	-36	-1	33	9	80	43	0.1%
Weather - Metra/PSA	-33	-107	31	3	-2	10	55	-36	-1	33	9	80	42	0.1%
Weather - Foreign	1	0	0	0	0	0	0	0	0	0	0	0	1	0.0%
Passenger Loading - TOTAL	20	0	-17	2	-15	-2	-15	70	32	7	-25	-17	40	0.1%
Lift Deployment - TOTAL	6	-6	-4	10	8	20	18	2	14	3	20	12	103	1.1%
Obstruction/Debris - TOTAL	48	14	3	-19	56	33	-20	1	-3	6	-1	-19	99	0.8%
Catenary Failure - TOTAL	-3	-2	2	0	-4	-13	-10	-6	-11	-11	-9	0	-67	-0.9%
Other - TOTAL	10	-2	9	20	12	12	2	-7	13	5	-6	10	78	0.7%
TOTAL TRAINS DELAYED	45	-107	-58	106	-93	31	-15	-54	44	286	150	153	488	
Total Metra/PSA Delays	144	-184	-88	55	-33	52	24	-57	20	216	70	184	403	
Total Foreign Carrier Delays	-99	77	30	51	-60	-21	-39	3	24	70	80	-31	85	

Data for current month is final (01/25/18) version from TOPS.

P:\ONTIME\report[DelaysByCause.xlsx]AllMonths 01/26/2018

'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 January 2016 and December 2017

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Jan-16	14	0	0	0	1	4	23	5	24	3	0	3	5	82
Feb-16	11	0	0	0	3	5	6	1	16	2	0	2	7	53
Mar-16	4	0	0	0	2	6	8	6	2	7	0	0	8	43
Apr-16	13	0	0	0	3	8	4	3	1	8	0	1	3	44
May-16	17	0	0	0	0	9	12	7	0	8	0	1	18	72
Jun-16	19	0	0	0	1	4	6	9	4	10	0	0	20	73
Jul-16	25	0	0	0	2	5	24	6	2	9	0	1	8	82
Aug-16	56	0	0	0	2	14	6	4	3	5	1	2	15	108
Sep-16	22	0	0	0	5	9	4	3	4	17	1	2	11	78
Oct-16	11	0	0	0	2	2	2	9	3	2	1	3	13	48
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
Total	209	0	0	0	30	76	104	68	67	89	6	27	166	842
Jan-17	3	0	0	0	2	6	5	6	3	3	2	1	22	53
Feb-17	4	0	0	0	2	9	3	13	3	10	2	7	15	68
Mar-17	6	0	0	0	4	6	7	5	2	17	1	6	15	69
Apr-17	0	0	0	0	1	8	9	12	4	7	0	4	34	79
May-17	2	0	0	0	2	5	2	11	2	15	2	2	6	49
Jun-17	19	0	1	0	3	9	2	14	18	8	4	5	27	110
Jul-17	7	0	0	0	4	13	5	5	11	4	3	8	14	74
Aug-17	10	0	0	0	3	11	2	4	6	22	0	5	11	74
Sep-17	17	0	0	0	2	21	2	8	1	14	1	5	25	96
Oct-17	5	0	0	0	5	10	4	18	5	15	2	14	31	109
Nov-17	16	0	0	0	4	5	5	15	8	17	9	7	29	115
Dec-17	11	0	0	0	7	8	8	8	15	21	1	6	25	110
Total	100	0	1	0	39	111	54	119	78	153	27	70	254	1,006

Data for current month is final (01/25/18) version from TOPS.

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

LINE	Jan Feb Mar			Apr May Jun			Jul Aug Sep			Oct Nov Dec			Lift Delays YTD	% of All Delays YTD
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
BNSF	1	1	0	0	4	5	2	1	4	2	4	13	37	2.55%
Electric ML	0	0	0	0	1	2	1	0	0	0	0	0	4	0.81%
Electric BI	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Electric SC	0	1	0	0	0	0	0	0	0	0	0	0	1	0.36%
HER	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Milw N	3	2	1	1	4	12	14	10	9	3	4	3	66	6.06%
Milw W	3	0	2	1	0	0	0	4	1	1	3	2	17	2.23%
NCS	0	0	0	0	0	0	1	0	0	2	0	0	3	0.90%
RI	2	1	0	2	4	8	4	3	1	3	6	1	35	3.70%
SWS	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
UP N	2	1	1	0	4	0	2	2	2	0	2	2	18	3.15%
UP NW	2	1	0	6	3	2	2	2	4	1	4	4	31	3.43%
UP W	4	1	4	3	3	2	3	1	4	3	5	3	36	3.55%
Total Lift Delays	17	8	8	13	23	31	29	23	25	15	28	28	248	2.90%
ALL DELAYS													8,541	

Data for current month is final (01/25/18) 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
December 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
Peak *														
6-10	69	4	4	2	1	9	30	8	20	9	5	24	30	215
11-15	20	3	2	2	4	10	11	4	25	2	4	8	10	105
16-20	14	2	0	0	1	6	6	0	7	0	2	5	11	54
21+	3	0	1	0	4	5	14	4	11	0	13	15	10	80
Annulled	<u>7</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>1</u>	<u>17</u>
Sub-Total	113	9	7	4	10	31	63	17	65	11	27	52	62	471
Off-Peak **														
6-10	32	7	2	6	2	40	35	10	33	17	15	15	24	238
11-15	14	2	0	4	0	18	25	3	10	3	5	9	12	105
16-20	2	4	0	1	1	6	18	3	6	4	2	1	13	61
21+	4	6	1	3	0	12	23	2	8	3	13	4	17	96
Annulled	<u>3</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>18</u>
Sub-Total	55	20	3	17	3	79	101	18	59	28	39	29	67	518
December 2017 Total														
6-10	101	11	6	8	3	49	65	18	53	26	20	39	54	453
11-15	34	5	2	6	4	28	36	7	35	5	9	17	22	210
16-20	16	6	0	1	2	12	24	3	13	4	4	6	24	115
21+	7	6	2	3	4	17	37	6	19	3	26	19	27	176
Annulled	<u>10</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>4</u>	<u>1</u>	<u>7</u>	<u>0</u>	<u>2</u>	<u>35</u>
TOTAL	168	29	10	21	13	110	164	35	124	39	66	81	129	989
2017 Year-to-Date														
6-10	728	307	126	151	36	518	289	161	458	194	237	326	503	4,034
11-15	282	68	18	41	24	228	166	64	185	66	110	164	204	1,620
16-20	128	40	12	18	21	112	79	34	81	30	38	85	122	800
21+	224	75	21	46	39	174	180	62	182	100	141	285	172	1,701
Annulled	<u>88</u>	<u>3</u>	<u>2</u>	<u>19</u>	<u>1</u>	<u>57</u>	<u>47</u>	<u>12</u>	<u>40</u>	<u>13</u>	<u>46</u>	<u>45</u>	<u>13</u>	<u>386</u>
TOTAL	1,450	493	179	275	121	1,089	761	333	946	403	572	905	1,014	8,541
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	
December 2017 Total														
6-10	60.1%	37.9%	60.0%	38.1%	23.1%	44.5%	39.6%	51.4%	42.7%	66.7%	30.3%	48.1%	41.9%	45.8%
11-15	20.2%	17.2%	20.0%	28.6%	30.8%	25.5%	22.0%	20.0%	28.2%	12.8%	13.6%	21.0%	17.1%	21.2%
16-20	9.5%	20.7%	0.0%	4.8%	15.4%	10.9%	14.6%	8.6%	10.5%	10.3%	6.1%	7.4%	18.6%	11.6%
21+	4.2%	20.7%	20.0%	14.3%	30.8%	15.5%	22.6%	17.1%	15.3%	7.7%	39.4%	23.5%	20.9%	17.8%
Annulled	<u>6.0%</u>	<u>3.4%</u>	<u>0.0%</u>	<u>14.3%</u>	<u>0.0%</u>	<u>3.6%</u>	<u>1.2%</u>	<u>2.9%</u>	<u>3.2%</u>	<u>2.6%</u>	<u>10.6%</u>	<u>0.0%</u>	<u>1.6%</u>	<u>3.5%</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	50.2%	62.3%	70.4%	54.9%	29.8%	47.6%	38.0%	48.3%	48.4%	48.1%	41.4%	36.0%	49.6%	47.2%
11-15	19.4%	13.8%	10.1%	14.9%	19.8%	20.9%	21.8%	19.2%	19.6%	16.4%	19.2%	18.1%	20.1%	19.0%
16-20	8.8%	8.1%	6.7%	6.5%	17.4%	10.3%	10.4%	10.2%	8.6%	7.4%	6.6%	9.4%	12.0%	9.4%
21+	15.4%	15.2%	11.7%	16.7%	32.2%	16.0%	23.7%	18.6%	19.2%	24.8%	24.7%	31.5%	17.0%	19.9%
Annulled	<u>6.1%</u>	<u>0.6%</u>	<u>1.1%</u>	<u>6.9%</u>	<u>0.8%</u>	<u>5.2%</u>	<u>6.2%</u>	<u>3.6%</u>	<u>4.2%</u>	<u>3.2%</u>	<u>8.0%</u>	<u>5.0%</u>	<u>1.3%</u>	<u>4.5%</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 (01/25/18) 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	
December 2017														
Peak *	10.4	11.4	10.7	9.3	17.6	14.4	15.2	14.6	14.8	9.0	38.8	16.6	15.3	15.1
Off-Peak **	10.7	15.7	12.7	15.2	10.0	15.9	16.7	14.2	14.7	15.8	27.1	12.4	22.7	16.7
All	10.5	14.3	11.3	13.9	15.8	15.5	16.1	14.4	14.7	13.8	31.9	15.1	19.2	15.9
2017 Year-to-Date														
Peak *	17.3	14.2	11.5	15.3	20.3	17.1	19.5	15.9	17.1	15.3	25.4	34.2	14.5	19.1
Off-Peak **	14.7	12.8	11.2	13.8	17.7	14.5	17.1	16.8	14.4	18.2	19.3	26.0	16.5	16.6
All	16.2	13.4	11.3	14.1	19.8	15.3	18.0	16.4	15.5	17.2	21.6	29.7	15.7	17.6

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 (01/25/18) version from TOPS.

**TABLE 15: ANNUAL TRAIN DELAYS AND ON-TIME PERFORMANCE
2012 - 2017**

	DELAYS									ON-TIME PERFORMANCE						
	2012	2013	2014	2015	2016	2012 - 2016 Avg	2017	2016 vs. 2017 change		2012	2013	2014	2015	2016	2012 - 2016 Avg	2017
BNSF	1,067	1,460	2,730	1,484	1,607	1,669.6	1,450	-157	-9.8%	96.0%	94.5%	89.7%	94.4%	94.0%	93.7%	94.5%
Elec-ML	834	745	710	735	598	724.4	493	-105	-17.6%	96.5%	96.9%	97.0%	96.9%	97.5%	96.9%	97.9%
Elec-BI	191	237	227	199	142	199.2	179	37	26.1%	98.3%	97.8%	97.9%	98.2%	98.7%	98.2%	98.2%
Elec-SC	358	456	349	293	258	342.8	275	17	6.6%	97.9%	97.4%	98.0%	98.3%	98.5%	98.0%	98.3%
Heritage	68	55	131	151	101	101.2	121	20	19.8%	95.6%	96.4%	91.4%	90.2%	94.2%	93.6%	93.2%
M-N	1,105	1,179	1,466	915	951	1,123.2	1,089	138	14.5%	93.8%	93.3%	91.7%	94.9%	94.6%	93.7%	93.8%
M-W	906	987	1,107	620	875	899.0	761	-114	-13.0%	94.7%	94.2%	93.5%	96.4%	94.9%	94.7%	95.5%
NCS	424	438	566	348	307	416.6	333	26	8.5%	92.4%	92.2%	89.9%	93.8%	94.5%	92.6%	94.0%
RI	911	928	1,211	600	847	899.4	946	99	11.7%	95.3%	95.3%	93.8%	97.1%	96.1%	95.5%	95.7%
SWS	413	347	590	436	380	433.2	403	23	6.1%	94.8%	95.6%	92.6%	94.5%	95.2%	94.6%	94.9%
UP-N	737	691	672	508	446	610.8	572	126	28.3%	96.4%	96.6%	96.7%	97.5%	97.8%	97.0%	97.2%
UP-NW	684	1,017	902	718	695	803.2	905	210	30.2%	96.3%	94.6%	95.2%	96.2%	96.3%	95.7%	95.1%
UP-W	806	948	954	789	846	868.6	1,014	168	19.9%	95.3%	94.5%	94.4%	95.4%	95.1%	94.9%	94.1%
SYSTEM	8,504	9,488	11,615	7,796	8,053	9,091.2	8,541	488	6.1%	95.8%	95.4%	94.3%	96.2%	96.1%	95.6%	95.8%

Delays data for 2017 is final (01/25/18) version from TOPS.

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

1/26/2018

P:\ONTIME\report\Delays&TrainsByServPeriod.xls\YearEnd

TABLE 16: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
2017

Top 2 causes for each line are shaded*														
CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	100	0	1	0	39	111	54	119	78	153	27	70	254	1,006
Freight Interference - Peak	43	0	1	0	33	18	13	40	12	52	11	36	100	359
Primary	29	0	0	0	29	14	12	28	6	41	3	21	45	228
Secondary	14	0	1	0	4	4	1	12	6	11	8	15	55	131
Freight Interference - Off-Peak	57	0	0	0	6	93	41	79	66	101	16	34	154	647
Primary	50	0	0	0	5	56	33	72	49	68	10	28	107	478
Secondary	7	0	0	0	1	37	8	7	17	33	6	6	47	169
Signal/Switch Failure - TOTAL	235	83	42	51	20	177	198	64	77	71	21	82	102	1,223
Signal/Switch Failure - Metra/PSA	200	83	42	51	1	133	166	26	77	34	21	73	91	998
Primary	127	58	36	38	1	78	118	21	58	23	13	25	45	641
Secondary	73	25	6	13	0	55	48	5	19	11	8	48	46	357
Signal/Switch Failure - Foreign	35	0	0	0	19	44	32	38	0	37	0	9	11	225
Primary	23	0	0	0	13	20	24	22	0	23	0	6	9	140
Secondary	12	0	0	0	6	24	8	16	0	14	0	3	2	85
Mechanical Failure - TOTAL	242	15	3	6	5	111	76	23	238	32	106	88	74	1,019
Mechanical Failure - Metra/PSA	236	10	3	6	4	101	76	23	238	32	106	88	74	997
Non-Locomotive Equipment Failure - Metra/PSA	53	10	3	6	1	6	8	3	22	5	14	29	39	199
Primary	23	3	2	3	1	4	4	1	12	2	7	13	18	93
Secondary	30	7	1	3	0	2	4	2	10	3	7	16	21	106
Locomotive Failure - Metra/PSA	183	0	0	0	3	95	68	20	216	27	92	59	35	798
Primary	50	0	0	0	2	34	29	10	72	8	25	23	12	265
Secondary	133	0	0	0	1	61	39	10	144	19	67	36	23	533
Mechanical Failure - Foreign	6	5	0	0	1	10	0	0	0	0	0	0	0	22
Passenger Train Interference - TOTAL	15	19	8	5	10	32	3	6	10	18	0	0	7	133
Passenger Train Interference - Metra/PSA	0	16	7	1	0	28	2	6	10	0	0	0	6	76
Passenger Train Interference - Foreign	15	3	1	4	10	4	1	0	0	18	0	0	1	57
Accident - TOTAL	133	28	11	31	4	19	57	12	47	18	63	193	18	634
Accident - Metra/PSA	101	28	11	31	0	19	46	9	42	7	57	160	1	512
Accident - Foreign	32	0	0	0	4	0	11	3	5	11	6	33	17	122
Track Work - TOTAL	162	118	32	78	1	116	73	20	92	18	63	79	96	948
Track Work - Metra/PSA	149	118	32	78	1	116	73	20	92	17	63	79	96	934
Track Work - Foreign	13	0	0	0	0	0	0	0	0	1	0	0	0	14
Human Error - TOTAL	226	38	20	14	23	142	74	21	82	41	63	54	100	898
Human Error - Metra/PSA	104	36	20	12	5	88	49	6	79	20	57	46	80	602
Human Error - Foreign	122	2	0	2	18	54	25	15	3	21	6	8	20	296
Sick, Injured, Unruly Passenger - TOTAL	29	42	4	12	0	72	38	8	27	0	30	34	60	356
Sick, Injured, Unruly Passenger - Metra/PSA	23	42	4	12	0	72	38	8	27	0	30	34	60	350
Sick, Injured, Unruly Passenger - Foreign	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Weather - TOTAL	80	30	17	21	4	95	67	15	95	2	79	52	40	597
Weather - Metra/PSA	80	30	17	21	4	94	67	15	94	2	79	52	40	595
Weather - Foreign	0	0	0	0	0	1	0	0	1	0	0	0	0	2
Passenger Loading - TOTAL	43	62	11	10	0	80	36	5	63	2	70	119	80	581
Lift Deployment - TOTAL	37	4	0	1	0	66	17	3	35	0	18	31	36	248
Obstruction/Debris - TOTAL	105	29	16	31	13	39	36	25	59	36	9	55	92	545
Catenary Failure - TOTAL	0	17	7	9	0	0	0	0	0	0	0	0	0	33
Other - TOTAL	43	8	7	6	2	29	32	12	43	12	23	48	55	320
TOTAL TRAINS DELAYED	1,450	493	179	275	121	1,089	761	333	946	403	572	905	1,014	8,541
Total Metra/PSA Delays	1,121	483	177	269	30	865	638	158	859	162	533	785	711	6,791
Total Foreign Carrier Delays	329	10	2	6	91	224	123	175	87	241	39	120	303	1,750

Data for latest month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\YearEnd_ByLine 01/26/2018

'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.

* For calculating top 2 causes, "Freight Interference - Total" is used instead of "... Peak" and "... Off-Peak".

**TABLE 17: ANNUAL SYSTEM CAUSES OF DELAY
2012 to 2017**

CAUSE CATEGORY	2012		2013		2014		2015		2016		2012-2016 Avg		2017	
	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%
Freight Interference - TOTAL	985	11.6%	1,174	12.4%	1,835	15.8%	1,092	14.0%	842	10.5%	1,186	13.0%	1,006	11.8%
Freight Interference - Peak	248	2.9%	321	3.4%	668	5.8%	371	4.8%	309	3.8%	383	4.2%	359	4.2%
<i>Primary</i>	191	2.2%	195	2.1%	427	3.7%	240	3.1%	202	2.5%	251	2.8%	228	2.7%
<i>Secondary</i>	57	0.7%	126	1.3%	241	2.1%	131	1.7%	107	1.3%	132	1.5%	131	1.5%
Freight Interference - Off-Peak	737	8.7%	853	9.0%	1,167	10.0%	721	9.2%	533	6.6%	802	8.8%	647	7.6%
<i>Primary</i>	619	7.3%	685	7.2%	855	7.4%	567	7.3%	423	5.3%	630	6.9%	478	5.6%
<i>Secondary</i>	118	1.4%	168	1.8%	312	2.7%	154	2.0%	110	1.4%	172	1.9%	169	2.0%
Signal/Switch Failure - TOTAL	1,253	14.7%	1,637	17.3%	1,268	10.9%	938	12.0%	1,391	17.3%	1,297	14.3%	1,223	14.3%
Signal/Switch Failure - Metra/PSA	920	10.8%	1,363	14.4%	1,014	8.7%	735	9.4%	901	11.2%	987	10.9%	998	11.7%
<i>Primary</i>	676	7.9%	693	7.3%	569	4.9%	443	5.7%	544	6.8%	585	6.4%	641	7.5%
<i>Secondary</i>	244	2.9%	670	7.1%	445	3.8%	292	3.7%	357	4.4%	402	4.4%	357	4.2%
Signal/Switch Failure - Foreign	333	3.9%	274	2.9%	254	2.2%	203	2.6%	490	6.1%	311	3.4%	225	2.6%
<i>Primary</i>	235	2.8%	191	2.0%	156	1.3%	126	1.6%	354	4.4%	212	2.3%	140	1.6%
<i>Secondary</i>	98	1.2%	83	0.9%	98	0.8%	77	1.0%	136	1.7%	98	1.1%	85	1.0%
Mechanical Failure - TOTAL	706	8.3%	835	8.8%	1,243	10.7%	830	10.6%	1,052	13.1%	933	10.3%	1,019	11.9%
Mechanical Failure - Metra/PSA	703	8.3%	811	8.5%	1,221	10.5%	800	10.3%	1,043	13.0%	916	10.1%	997	11.7%
Non-Locomotive Equipment Failure - Metra/PSA	161	1.9%	210	2.2%	403	3.5%	203	2.6%	191	2.4%	234	2.6%	199	2.3%
<i>Primary</i>	74	0.9%	88	0.9%	147	1.3%	76	1.0%	92	1.1%	95	1.0%	93	1.1%
<i>Secondary</i>	87	1.0%	122	1.3%	256	2.2%	127	1.6%	99	1.2%	138	1.5%	106	1.2%
Locomotive Failure - Metra/PSA	542	6.4%	601	6.3%	818	7.0%	597	7.7%	852	10.6%	682	7.5%	798	9.3%
<i>Primary</i>	176	2.1%	225	2.4%	252	2.2%	214	2.7%	278	3.5%	229	2.5%	265	3.1%
<i>Secondary</i>	366	4.3%	376	4.0%	566	4.9%	383	4.9%	574	7.1%	453	5.0%	533	6.2%
Mechanical Failure - Foreign	3	0.0%	24	0.3%	22	0.2%	30	0.4%	9	0.1%	18	0.2%	22	0.3%
Passenger Train Interference - TOTAL	220	2.6%	202	2.1%	245	2.1%	140	1.8%	154	1.9%	192	2.1%	133	1.6%
Passenger Train Interference - Metra/PSA	152	1.8%	147	1.5%	160	1.4%	70	0.9%	49	0.6%	116	1.3%	76	0.9%
Passenger Train Interference - Foreign	68	0.8%	55	0.6%	85	0.7%	70	0.9%	105	1.3%	77	0.8%	57	0.7%
Accident - TOTAL	466	5.5%	575	6.1%	685	5.9%	499	6.4%	544	6.8%	554	6.1%	634	7.4%
Accident - Metra/PSA	466	5.5%	575	6.1%	553	4.8%	490	6.3%	505	6.3%	518	5.7%	512	6.0%
Accident - Foreign	0	0.0%	0	0.0%	132	1.1%	9	0.1%	39	0.5%	36	0.4%	122	1.4%
Track Work - TOTAL	903	10.6%	664	7.0%	982	8.5%	617	7.9%	1,000	12.4%	833	9.2%	948	11.1%
Track Work - Metra/PSA	901	10.6%	659	6.9%	980	8.4%	577	7.4%	959	11.9%	815	9.0%	934	10.9%
Track Work - Foreign	2	0.0%	5	0.1%	2	0.0%	40	0.5%	41	0.5%	18	0.2%	14	0.2%
Human Error - TOTAL	647	7.6%	754	7.9%	735	6.3%	693	8.9%	635	7.9%	693	7.6%	898	10.5%
Human Error - Metra/PSA	481	5.7%	498	5.2%	467	4.0%	457	5.9%	500	6.2%	481	5.3%	602	7.0%
Human Error - Foreign	166	2.0%	256	2.7%	268	2.3%	236	3.0%	135	1.7%	212	2.3%	296	3.5%
Sick, Injured, Unruly Passenger - TOTAL	437	5.1%	384	4.0%	366	3.2%	312	4.0%	407	5.1%	381	4.2%	356	4.2%
Sick, Injured, Unruly Passenger - Metra/PSA	436	5.1%	383	4.0%	363	3.1%	311	4.0%	404	5.0%	379	4.2%	350	4.1%
Sick, Injured, Unruly Passenger - Foreign	1	0.0%	1	0.0%	3	0.0%	1	0.0%	3	0.0%	2	0.0%	6	0.1%
Weather - TOTAL	631	7.4%	1,097	11.6%	2,376	20.5%	1,014	13.0%	554	6.9%	1,134	12.5%	597	7.0%
Weather - Metra/PSA	627	7.4%	1,090	11.5%	2,368	20.4%	997	12.8%	553	6.9%	1,127	12.4%	595	7.0%
Weather - Foreign	4	0.0%	7	0.1%	8	0.1%	17	0.2%	1	0.0%	7	0.1%	2	0.0%
Passenger Loading - TOTAL	1,182	13.9%	1,138	12.0%	760	6.5%	580	7.4%	541	6.7%	840	9.2%	581	6.8%
Lift Deployment - TOTAL	250	2.9%	205	2.2%	214	1.8%	172	2.2%	145	1.8%	197	2.2%	248	2.9%
Obstruction/Debris - TOTAL	424	5.0%	391	4.1%	550	4.7%	487	6.2%	446	5.5%	460	5.1%	545	6.4%
Catenary Failure - TOTAL	81	1.0%	169	1.8%	72	0.6%	166	2.1%	100	1.2%	118	1.3%	33	0.4%
Other - TOTAL	319	3.8%	263	2.8%	284	2.4%	256	3.3%	242	3.0%	273	3.0%	320	3.7%
TOTAL TRAINS DELAYED	8,504	100.0%	9,488	100.0%	11,615	100.0%	7,796	100.0%	8,053	100.0%	9,091	100.0%	8,541	100.0%
Total Metra/PSA Delays	6,942	81.6%	7,692	81.1%	9,006	77.5%	6,098	78.2%	6,388	79.3%	7,225	79.5%	6,791	79.5%
Total Foreign Carrier Delays	1,562	18.4%	1,796	18.9%	2,609	22.5%	1,698	21.8%	1,665	20.7%	1,866	20.5%	1,750	20.5%

Data for current month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\YearEnd_System 01/26/2018

'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 18: FREQUENCY OF TRAIN DELAYS BY DURATION
Year End 2012 to 2017

Minutes	2012		2013		2014		2015		2016		2012 - 2016 Avg		2017	
	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%
6-10	4,480	52.7%	4,375	46.1%	5,152	44.4%	3,500	44.9%	3,616	44.9%	4,224.6	46.5%	4,034	47.2%
11-15	1,723	20.3%	1,893	20.0%	2,419	20.8%	1,643	21.1%	1,580	19.6%	1,851.6	20.4%	1,620	19.0%
16-20	716	8.4%	925	9.7%	1,230	10.6%	816	10.5%	801	9.9%	897.6	9.9%	800	9.4%
21+	1,347	15.8%	2,003	21.1%	2,351	20.2%	1,515	19.4%	1,704	21.2%	1,784.0	19.6%	1,701	19.9%
Annulled	238	2.8%	292	3.1%	463	4.0%	322	4.1%	352	4.4%	333.4	3.7%	386	4.5%
TOTAL	8,504	100.0%	9,488	100.0%	11,615	100.0%	7,796	100.0%	8,053	100.0%	9,091.2	100.0%	8,541	100.0%

Data for most recent month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByDuration.xls\YearEnd

TABLE 19: FREQUENCY OF TRAIN DELAYS BY DURATION AND LINE
Year End 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
6-10	728	307	126	151	36	518	289	161	458	194	237	326	503	4,034
11-15	282	68	18	41	24	228	166	64	185	66	110	164	204	1,620
16-20	128	40	12	18	21	112	79	34	81	30	38	85	122	800
21+	224	75	21	46	39	174	180	62	182	100	141	285	172	1,701
Annulled	88	3	2	19	1	57	47	12	40	13	46	45	13	386
TOTAL	1,450	493	179	275	121	1,089	761	333	946	403	572	905	1,014	8,541
6-10	50.2%	62.3%	70.4%	54.9%	29.8%	47.6%	38.0%	48.3%	48.4%	48.1%	41.4%	36.0%	49.6%	47.2%
11-15	19.4%	13.8%	10.1%	14.9%	19.8%	20.9%	21.8%	19.2%	19.6%	16.4%	19.2%	18.1%	20.1%	19.0%
16-20	8.8%	8.1%	6.7%	6.5%	17.4%	10.3%	10.4%	10.2%	8.6%	7.4%	6.6%	9.4%	12.0%	9.4%
21+	15.4%	15.2%	11.7%	16.7%	32.2%	16.0%	23.7%	18.6%	19.2%	24.8%	24.7%	31.5%	17.0%	19.9%
Annulled	<u>6.1%</u>	<u>0.6%</u>	<u>1.1%</u>	<u>6.9%</u>	<u>0.8%</u>	<u>5.2%</u>	<u>6.2%</u>	<u>3.6%</u>	<u>4.2%</u>	<u>3.2%</u>	<u>8.0%</u>	<u>5.0%</u>	<u>1.3%</u>	<u>4.5%</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%

Data for most recent month is final (01/25/18) version from TOPS.

P:\ONTIME\report\DelaysByDuration.xls\YearEnd