

**COMMUTER RAIL SYSTEM  
ON-TIME PERFORMANCE REPORT**

**February 2017**



# COMMUTER RAIL ON-TIME PERFORMANCE

## February 2017

This report presents an analysis of the February 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 February 2017, Metra operated 16,112 scheduled trains, including scheduled "extras", if any. 492 of these trains were delayed (late or annulled), representing an on-time performance rate of 96.9%. 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 February 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 February 2017. Of the 492 delays systemwide in February 2017, all but 261 (53%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Februaries, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in February 2017, 76 fewer delays than the average over the previous five Februaries were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 1,244 delays in 2017, all but 620 (50%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during February 2017. Table 8.b shows the average frequencies over the previous five Februaries, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 492 delays systemwide in February 2017, 416 less than the average over the previous five Februaries. Table 9.a shows delays from the beginning of the year through February 2017. Table 9.b shows the average frequencies from the beginning of the year through February 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 February of 2017, a total of 1,244 trains were delayed, compared to 1,306 trains delayed in the same two 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 February 2017 freight operations delayed 68 trains systemwide, compared to 53 a year earlier. Tables 12.a and 12.b display the frequency of lift-deployment train delays by line and month, for 2017 and 2016 respectively. A total of 8 trains were delayed by lift deployment in February 2017.

A review of February 2017 late trains by duration of delay is shown in Table 13. The range with the greatest number of delays was, as usual, six-to-ten minutes, accounting for 40.9% of all late trains. Table 14 shows that the average length of delay was 19.9 minutes in February 2017. It should be noted that these averages relate only to reportable delays (i.e., trains late by six minutes or more).

## **Changes in On-Time Performance Reporting Calculations**

### **“Extra” Trains**

“Extra” trains (trains added to handle special events but not shown in the regularly published schedules) are excluded from on-time performance calculations, except for those “extra” trains whose special-event schedules include all intermediate station stop times and are distributed publicly via Metra's website or on paper flyers.

Intermediate station departure times and final station arrival times for some “extra” trains are either unknown (departures of some “extra” trains are held until after the completion of the respective special event) or not published. On-time performance for these two types of “extra” trains cannot be calculated, as arrival times are not known ahead of time; these trains are therefore excluded from on-time performance calculations. However, on-time performance can be calculated for “extra” trains that have full published schedules.

### **Temporary Schedules and Notices, for Construction and Special Events**

Planned construction projects or special events can adversely affect on-time performance. Metra occasionally publishes full temporary schedules, which supersede the standard published schedules, to inform riders of possible delays or modifications to regular service. Metra also may publish informational notices to accompany temporary schedules. On-time performance is calculated using the temporary schedules and any accompanying notices.

**TABLE 1: SCHEDULED AND DELAYED TRAINS, AND ON-TIME PERFORMANCE BY SERVICE PERIOD AND LINE  
February 2017**

	Weekdays									Weekends						Total		
	Peak*			Off-Peak**			Total			Saturdays			Sundays & Holidays			Trains Scheduled	Trains Late	Percent On-Time
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time			
<b>BNSF</b>	1,080	59	94.5%	800	30	96.3%	1,880	89	95.3%	112	1	99.1%	72	0	100.0%	2,064	90	95.6%
<b>Elec -ML</b>	900	6	99.3%	680	10	98.5%	1,580	16	99.0%	184	1	99.5%	80	4	95.0%	1,844	21	98.9%
<b>-BI</b>	280	8	97.1%	460	9	98.0%	740	17	97.7%	120	1	99.2%		--		860	18	97.9%
<b>-SC</b>	<u>340</u>	<u>1</u>	99.7%	<u>740</u>	<u>4</u>	99.5%	<u>1,080</u>	<u>5</u>	99.5%	<u>192</u>	<u>2</u>	99.0%	<u>80</u>	<u>0</u>	100.0%	<u>1,352</u>	<u>7</u>	99.5%
<b>Subtotal</b>	1,520	15	99.0%	1,880	23	98.8%	3,400	38	98.9%	496	4	99.2%	160	4	97.5%	4,056	46	98.9%
<b>Heritage</b>	120	7	94.2%	20	1	95.0%	140	8	94.3%	--			--			140	8	94.3%
<b>Milw -N</b>	500	33	93.4%	700	27	96.1%	1,200	60	95.0%	96	0	100.0%	80	0	100.0%	1,376	60	95.6%
<b>-W</b>	<u>540</u>	<u>23</u>	95.7%	<u>620</u>	<u>36</u>	94.2%	<u>1,160</u>	<u>59</u>	94.9%	<u>96</u>	<u>4</u>	95.8%	<u>72</u>	<u>1</u>	98.6%	<u>1,328</u>	<u>64</u>	95.2%
<b>Subtotal</b>	1,040	56	94.6%	1,320	63	95.2%	2,360	119	95.0%	192	4	97.9%	152	1	99.3%	2,704	124	95.4%
<b>NCS</b>	220	19	91.4%	220	18	91.8%	440	37	91.6%	--			--			440	37	91.6%
<b>RI</b>	720	36	95.0%	760	11	98.6%	1,480	47	96.8%	128	3	97.7%	112	0	100.0%	1,720	50	97.1%
<b>SWS</b>	220	13	94.1%	380	23	93.9%	600	36	94.0%	24	1	95.8%	--			624	37	94.1%
<b>UP -N</b>	600	5	99.2%	800	8	99.0%	1,400	13	99.1%	104	2	98.1%	72	0	100.0%	1,576	15	99.0%
<b>-NW</b>	660	18	97.3%	640	17	97.3%	1,300	35	97.3%	96	0	100.0%	60	3	95.0%	1,456	38	97.4%
<b>-W</b>	<u>540</u>	<u>14</u>	97.4%	<u>640</u>	<u>31</u>	95.2%	<u>1,180</u>	<u>45</u>	96.2%	<u>80</u>	<u>0</u>	100.0%	<u>72</u>	<u>2</u>	97.2%	<u>1,332</u>	<u>47</u>	96.5%
<b>Subtotal</b>	1,800	37	97.9%	2,080	56	97.3%	3,880	93	97.6%	280	2	99.3%	204	5	97.5%	4,364	100	97.7%
<b>SYSTEM</b>	6,720	242	96.4%	7,460	225	97.0%	14,180	467	96.7%	1,232	15	98.8%	700	10	98.6%	16,112	492	96.9%

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

Delays data for most recent month is final (03/14/17) version from TOPS.

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**TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH**

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-FEB	AVG
BNSF	2012	94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	95.8%	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	94.9%	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	81.5%	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	90.5%	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	93.5%	94.0%
	2017	95.9	95.6											95.8%	95.8%
	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	91.3%	93.7%
Electric	2012	93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	96.0%	97.3%
	2013	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	98.5%	97.2%
	2014	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	94.4%	97.5%
	2015	96.3	95.4	98.4	98.4	98.3	97.7	96.5	98.2	97.9	97.8	97.8	99.0	95.9%	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	98.3%	98.1%
	2017	95.6	98.9											97.2%	97.2%
	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	96.6%	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	97.2%	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	98.0%	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	77.8%	91.4%
	2015	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	91.1%	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	91.5%	94.2%
	2017	93.9	94.3											94.1%	94.1%
	2012-2016 average	90.7	91.5	94.3	95.1	93.3	92.7	92.7	93.9	93.7	97.1	93.5	93.9	91.1%	93.6%
Milw - N	2012	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	95.7%	93.8%
	2013	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	94.0%	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	77.3%	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	89.9%	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	94.7%	94.6%
	2017	95.3	95.6											95.4%	95.4%
	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	90.4%	93.7%
Milw - W	2012	94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	94.8%	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	94.1%	94.2%
	2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	86.5%	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	93.3%	96.4%
	2016	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.7%	94.9%
	2017	96.9	95.2											96.1%	96.1%
	2012-2016 average	92.7	92.7	94.4	96.9	96.2	93.5	94.0	94.6	94.8	96.4	96.0	94.7	92.7%	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	94.6%	92.4%
	2013	95.0	87.5	93.7	90.9	94.0	92.7	93.6	95.0	92.5	93.1	90.0	87.4	91.5%	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	78.5%	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	88.4%	93.8%
	2016	92.3	95.5	91.7	93.3	94.4	96.3	95.0	96.4	96.1	95.5	95.2	92.6	93.9%	94.5%
	2017	92.6	91.6											92.1%	92.1%
	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	89.4%	92.6%

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

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-FEB	AVG
RI	2012	94.3	96.8	94.8	96.1	95.8	94.1	92.9	93.7	96.8	95.6	97.1	96.4	95.6%	95.3%
	2013	96.5	98.1	97.9	94.0	95.5	91.5	93.6	95.5	98.3	96.5	91.7	94.0	97.3%	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	82.9%	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	96.4%	97.1%
	2016	92.6	96.2	95.8	96.5	97.9	96.2	93.5	96.3	96.0	98.2	97.9	95.3	94.4%	96.1%
	2017	95.2	97.1											96.1%	96.1%
	<b>2012-2016 average</b>	92.6	94.0	96.2	96.1	96.5	94.4	93.9	96.0	96.8	97.0	96.4	96.3	93.3%	95.5%
SWS	2012	94.2	96.6	94.8	95.3	95.8	93.2	95.3	94.5	93.8	94.3	93.7	96.3	95.4%	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	95.9%	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	87.3%	92.6%
	2015	94.7	89.7	95.6	96.1	96.3	91.1	92.4	93.8	97.6	96.8	96.0	94.4	92.3%	94.5%
	2016	95.6	97.2	97.8	95.6	91.9	95.3	94.1	93.3	91.6	97.4	96.6	96.2	96.4%	95.2%
	2017	96.2	94.1											95.1%	95.1%
	<b>2012-2016 average</b>	92.4	94.6	95.8	95.9	94.4	92.7	94.7	94.7	94.9	95.7	94.0	94.9	93.5%	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	96.5%	96.4%
	2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9	97.0	96.5	96.9	98.0	97.8%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	91.7%	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	97.2%	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											97.3%	97.3%
	<b>2012-2016 average</b>	95.9	96.4	97.7	97.6	97.0	96.4	96.7	96.0	97.4	97.4	97.4	97.7	96.2%	97.0%
UP - NW	2012	95.9	98.6	96.4	98.9	95.9	96.0	94.8	96.7	97.8	94.2	94.6	96.6	97.2%	96.3%
	2013	96.3	97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	96.9%	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	88.7%	95.2%
	2015	96.0	91.6	97.6	96.3	96.9	96.8	94.1	96.5	96.1	97.5	96.7	97.5	93.9%	96.2%
	2016	97.0	98.1	97.8	98.1	96.0	96.6	94.9	96.8	96.9	96.5	93.2	93.4	97.6%	96.3%
	2017	96.2	97.4											96.8%	96.8%
	<b>2012-2016 average</b>	94.3	95.5	96.8	97.4	95.5	94.8	94.5	96.2	97.1	95.6	95.2	95.6	94.9%	95.7%
UP - W	2012	93.1	97.1	95.2	95.5	95.6	92.4	93.8	94.3	97.2	97.2	96.0	96.4	95.1%	95.3%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	96.3%	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	88.3%	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	92.5%	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	95.6%	95.1%
	2017	95.0	96.5											95.7%	95.7%
	<b>2012-2016 average</b>	93.4	93.7	96.0	95.9	94.6	93.0	95.1	94.7	96.5	96.0	95.4	94.7	93.6%	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	96.5%	95.4%
	2014	85.6	89.3	94.9	96.8	94.5	93.1	95.6	95.7	96.8	95.9	96.9	96.5	87.4%	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	93.8%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.1%	96.1%
	2017	95.6	96.9											96.3%	96.3%
	<b>2012-2016 average</b>	93.4	94.4	96.3	96.9	96.0	94.3	94.9	95.6	96.4	96.4	96.2	96.0	93.9%	95.6%

Delays data for most recent month is final (03/14/17) version from TOPS.

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

**TABLE 3: LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME  
February 2017**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
BNSF	1370	Tue, Feb 21	6	H	CONTROL CAR 8429 BOTTOMING OUT ON RD CROSSINGS / ENGINEER SLOWED TO 55MPH TO REDUCE IMPACT
		Wed, Feb 22	15	KD	SEPARATED AIR HOSE BETWEEN CAR 748/749 15" LATE
		Thu, Feb 23	12	H	AIR HOSE CAME APART BETWEEN COACHES 749-748 AT DOWNERS GROVE
		Fri, Feb 24	30	BA1	SOUTH DESK AMTRAK COMPUTER ISSUES
MW	2242	Wed, Feb 08	8	KP1	8" FOLLOWING TRAINS TO CUS
		Thu, Feb 09	26	E1	45" LATE TURN FROM #2219; MADE ALL STOPS TO FRANKLIN PARK THEN EXPRESSED TO WESTERN
		Fri, Feb 17	23	T1	23" LATE TURN FROM 2219; EXPRESSED FROM FRANKLIN PARK TO WESTERN
		Tue, Feb 28	13	KD1	13" STOP SIGNAL, GALEWOOD & PIKING UP PASSENGERS FROM #116
NCS	109	Thu, Feb 02	11	VE1	8" LOCO 419 LOST HEP ENGINEER TRIED TO RESTART CAT. MOTOR, MP1.8; 3" PICK UP MECHANICAL FOREMAN, SULLIVAN'S SHANTY
		Wed, Feb 08	7	KP	11" HELD FOR PD ACTIVITY 3MAIN (CRIME SCENE)NEAR CLINTON ST, CUS
		Mon, Feb 13	14	D	15" STOP SIGNAL, TRAFTON
		Wed, Feb 15	7	D	8" WAITING ON CN FREIGHT @ TRAFTON
NCS	114	Tue, Feb 07	15	D	5" FREIGHT, ROUND LAKE; 15" FREIGHT, DEVAL
		Wed, Feb 15	14	JM	17" MEDICAL EMERGENCY @ VERNON HILLS
		Fri, Feb 24	25	BA	25" AMTRAK COMPUTER SYSTEM CRASHED
		Mon, Feb 27	16	D	12" FREIGHT, ANTIOCH; 2" ADA, MUDENELEIN
NCS	116	Wed, Feb 01	8	D	5" STOP SIGNAL, ANTIOCH COACH YARD; 4" FREIGHT INTERFERENCE
		Wed, Feb 08	0	XG	ANNULLED SWITCH FAILURE 3MAIN @ MORGAN ST; MADE REVERSE MOVE TOWESTERN, TRANSFERRED PASSENGERS TO #2235/113
		Thu, Feb 09	9	E1	9" MADE EXTRA STOPS BETWEEN RIVER GROVE AND CUS TO PICK UP PASSENGERS FOR LATE #2242
		Fri, Feb 17	12	T1	12" MADE EXTRA STOPS BETWEEN RIVER GROVE AND WESTERN TO ACCOMMODATE 2242
NCS	117	Wed, Feb 01	10	D1	11" WAITING ON LATE #120, RAM
		Fri, Feb 03	30	GA	23" CREW HAND LINE SW 235 FAILED TK5, CUS; 5" COPY 2 529-B'S, PRAIRIE VIEW & 2" COPYING A THIRD 529 B
		Mon, Feb 20	12	G	9" GRAYSLAKE RED TALKED BY SIGNAL; 12" RESTRICTED TO RAM
		Tue, Feb 28	7	KD1	7" STOP SIGNAL RESTRICTED SPEED, GALEWOOD; 2" DEVAL
RI	415	Mon, Feb 06	6	YR1	WAITING FOR RI413 TO CLEAR THE MAIN IN TO THE YARD.
		Wed, Feb 08	58	E	60M ROOSEVELT ST ENGINE 422 DIED TURBO PUMP FAILURE, AFTER 6192 TIED ON TO SHOVE INTO DEPOT RFE GOT ENGINE RESTARTED. 5M 16TH FLAG PLANT
		Mon, Feb 13	19	E1	10M FOLLOWING 303
		Thu, Feb 23	15	E	5M ROOSEVELT RD ENGINE 204 NOT LOADING, 5M 16TH TO GRESHAM FOLLOWING 615
UPW	66	Thu, Feb 02	19	D	19" STOPPED @ PARK TK3 WAIT FOR MLCPR TO CLEAR INTO PROVISO
		Mon, Feb 06	29	G1	32" LATE TURN FROM #63
		Mon, Feb 13	7	J	7" WAIT FOR PD TO REMOVE UNRULY FEMALE PASSENGER, GENEVA
		Fri, Feb 17	9	KP1	12" LATE TURN FROM #63

Data is final (03/14/17) version from TOPS.

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**TABLE 4: DELAY INCIDENT CODES AND DEFINITIONS**

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

Effective July 1, 2016 Revised July 19, 2016

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

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

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**  
**February 2017**

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	53	11	8	5	4	37	38	15	31	16	11	11	21	261	53%
Semi-controllable	5	0	0	0	1	10	4	14	3	14	2	7	14	74	15%
Uncontrollable	32	10	10	2	3	13	22	8	16	7	2	20	12	157	32%
<b>TOTAL TRAINS DELAYED</b>	<b>90</b>	<b>21</b>	<b>18</b>	<b>7</b>	<b>8</b>	<b>60</b>	<b>64</b>	<b>37</b>	<b>50</b>	<b>37</b>	<b>15</b>	<b>38</b>	<b>47</b>	<b>492</b>	<b>100%</b>

**February - 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	64.2	23.8	7.2	9.0	4.4	62.2	32.2	20.2	35.6	11.0	17.2	15.0	34.8	336.8	37%
Semi-controllable	30.2	0.0	0.0	0.0	4.8	21.4	19.0	21.2	9.8	15.2	3.0	8.4	17.6	150.6	17%
Uncontrollable	73.6	38.0	11.2	19.8	1.2	47.8	48.0	11.0	48.4	8.2	36.8	44.0	32.4	420.4	46%
<b>TOTAL TRAINS DELAYED</b>	<b>168.0</b>	<b>61.8</b>	<b>18.4</b>	<b>28.8</b>	<b>10.4</b>	<b>131.4</b>	<b>99.2</b>	<b>52.4</b>	<b>93.8</b>	<b>34.4</b>	<b>57.0</b>	<b>67.4</b>	<b>84.8</b>	<b>907.8</b>	<b>100%</b>

**February 2017 Divergence From February 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	-11.2	-12.8	0.8	-4.0	-0.4	-25.2	5.8	-5.2	-4.6	5.0	-6.2	-4.0	-13.8	-75.8	18%
Semi-controllable	-25.2	0.0	0.0	0.0	-3.8	-11.4	-15.0	-7.2	-6.8	-1.2	-1.0	-1.4	-3.6	-76.6	18%
Uncontrollable	-41.6	-28.0	-1.2	-17.8	1.8	-34.8	-26.0	-3.0	-32.4	-1.2	-34.8	-24.0	-20.4	-263.4	63%
<b>TOTAL TRAINS DELAYED</b>	<b>-78.0</b>	<b>-40.8</b>	<b>-0.4</b>	<b>-21.8</b>	<b>-2.4</b>	<b>-71.4</b>	<b>-35.2</b>	<b>-15.4</b>	<b>-43.8</b>	<b>2.6</b>	<b>-42.0</b>	<b>-29.4</b>	<b>-37.8</b>	<b>-415.8</b>	<b>100%</b>

**January-February 2017**

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	108	76	31	39	8	67	61	22	58	32	55	22	41	620	50%
Semi-controllable	6	0	0	0	4	18	11	29	6	21	4	8	38	145	12%
Uncontrollable	65	41	19	28	5	45	36	20	74	9	30	67	40	479	39%
<b>TOTAL TRAINS DELAYED</b>	<b>179</b>	<b>117</b>	<b>50</b>	<b>67</b>	<b>17</b>	<b>130</b>	<b>108</b>	<b>71</b>	<b>138</b>	<b>62</b>	<b>89</b>	<b>97</b>	<b>119</b>	<b>1,244</b>	<b>100%</b>

Data for current month is final (03/14/17) version from TOPS.

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03/15/2017

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

WEEKDAY	1	2	3	6	7	8	9	10	13	14	15	16	17	20	21	22	23	24	27	28	TOTAL
	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	
<b>BNSF</b>	1	2	0	1	0	2	2	19	0	0	0	0	1	0	2	1	1	40	0	17	89
<b>Elec -ML</b>	0	5	0	1	1	1	1	0	0	2	1	1	0	0	1	1	0	0	0	1	16
<b>-BI</b>	0	1	0	0	0	0	1	1	0	3	0	5	2	0	0	2	0	1	1	0	17
<b>-SC</b>	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1	5
<b>Heritage</b>	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	3	0	2	8
<b>Milw -N</b>	1	2	2	3	2	8	4	2	3	2	5	0	1	1	1	1	1	16	0	5	60
<b>-W</b>	1	1	0	12	0	3	4	8	0	1	0	1	7	0	1	0	0	16	3	1	59
<b>NCS</b>	4	1	3	0	1	5	1	1	2	0	3	0	1	1	0	0	0	7	1	6	37
<b>RI</b>	1	0	1	5	1	5	9	0	11	0	0	0	2	0	3	4	2	2	0	1	47
<b>SWS</b>	1	7	2	1	0	0	1	4	2	0	0	0	0	1	0	1	1	9	5	1	36
<b>UP -N</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11	1	0	0	0	0	13
<b>-NW</b>	4	0	3	0	1	3	4	9	4	0	1	0	2	0	1	1	0	1	0	1	35
<b>-W</b>	<u>1</u>	<u>9</u>	<u>3</u>	<u>2</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>7</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>45</u>
<b>SYSTEM</b>	14	28	14	25	10	28	30	45	23	11	10	8	21	4	25	13	12	97	13	36	467

  

<b>SATURDAY</b>	4	11	18	25	TOTAL	<b>SUNDAY/HOLIDAY</b>	5	12	19	26	TOTAL
<b>BNSF</b>	0	1	0	0	1	<b>BNSF</b>	0	0	0	0	0
<b>Elec -ML</b>	0	0	1	0	1	<b>Elec -ML</b>	0	0	2	2	4
<b>-BI</b>	0	0	1	0	1	<b>-BI</b>	-	-	-	-	0
<b>-SC</b>	0	0	1	1	2	<b>-SC</b>	0	0	0	0	0
<b>Heritage</b>	-	-	-	-	-	<b>Heritage</b>	-	-	-	-	0
<b>Milw -N</b>	0	0	0	0	0	<b>Milw -N</b>	0	0	0	0	0
<b>-W</b>	1	0	1	2	4	<b>-W</b>	0	0	1	0	1
<b>NCS</b>	-	-	-	-	-	<b>NCS</b>	-	-	-	-	0
<b>RI</b>	1	0	0	2	3	<b>RI</b>	0	0	0	0	0
<b>SWS</b>	0	1	0	0	1	<b>SWS</b>	-	-	-	-	0
<b>UP -N</b>	0	1	1	0	2	<b>UP -N</b>	0	0	0	0	0
<b>-NW</b>	0	0	0	0	0	<b>-NW</b>	2	0	0	1	3
<b>-W</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<b>-W</b>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>2</u>
<b>SYSTEM</b>	2	3	5	5	15	<b>SYSTEM</b>	3	0	4	3	10

Data is final (03/14/17) version from TOPS.

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

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	4	0	0	0	2	9	3	13	3	10	2	7	15	68
Freight Interference - Peak	3	0	0	0	1	3	1	5	1	2	0	2	3	21
Primary	2	0	0	0	1	3	1	3	1	2	0	1	2	16
Secondary	1	0	0	0	0	0	0	2	0	0	0	1	1	5
Freight Interference - Off-Peak	1	0	0	0	1	6	2	8	2	8	2	5	12	47
Primary	1	0	0	0	1	5	2	8	2	6	2	4	7	38
Secondary	0	0	0	0	0	1	0	0	0	2	0	1	5	9
Signal/Switch Failure - TOTAL	6	2	5	2	0	2	4	7	3	7	0	4	2	44
Signal/Switch Failure - Metra/PSA	2	2	5	2	0	1	3	6	3	1	0	4	2	31
Primary	2	2	4	1	0	1	3	3	2	1	0	1	1	21
Secondary	0	0	1	1	0	0	0	3	1	0	0	3	1	10
Signal/Switch Failure - Foreign	4	0	0	0	0	1	1	1	0	6	0	0	0	13
Primary	3	0	0	0	0	1	1	1	0	3	0	0	0	9
Secondary	1	0	0	0	0	0	0	0	0	3	0	0	0	4
Mechanical Failure - TOTAL	3	4	1	0	0	12	10	1	21	0	1	3	5	61
Mechanical Failure - Metra/PSA	1	0	1	0	0	12	10	1	21	0	1	3	5	55
Non-Locomotive Equipment Failure - Metra/PSA	1	0	1	0	0	0	2	0	2	0	0	0	2	8
Primary	1	0	1	0	0	0	2	0	2	0	0	0	2	8
Secondary	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Locomotive Failure - Metra/PSA	0	0	0	0	0	12	8	1	19	0	1	3	3	47
Primary	0	0	0	0	0	5	5	0	7	0	1	2	1	21
Secondary	0	0	0	0	0	7	3	1	12	0	0	1	2	26
Mechanical Failure - Foreign	2	4	0	0	0	0	0	0	0	0	0	0	0	6
Passenger Train Interference - TOTAL	0	1	0	1	0	0	0	0	0	0	0	0	0	2
Passenger Train Interference - Metra/PSA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Train Interference - Foreign	0	1	0	1	0	0	0	0	0	0	0	0	0	2
Accident - TOTAL	18	0	0	0	0	2	12	0	0	0	0	0	0	32
Accident - Metra/PSA	18	0	0	0	0	2	12	0	0	0	0	0	0	32
Accident - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Work - TOTAL	1	6	0	1	0	1	0	0	1	1	1	3	2	17
Track Work - Metra/PSA	1	6	0	1	0	1	0	0	1	1	1	3	2	17
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	46	2	2	0	3	22	24	7	6	8	9	1	10	140
Human Error - Metra/PSA	6	2	2	0	0	6	8	0	6	0	9	1	10	50
Human Error - Foreign	40	0	0	0	3	16	16	7	0	8	0	0	0	90
Sick, Injured, Unruly Passenger - TOTAL	1	5	1	0	0	1	2	1	3	0	0	12	2	28
Sick, Injured, Unruly Passenger - Metra/PSA	1	5	1	0	0	1	2	1	3	0	0	12	2	28
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	9	0	0	0	3	1	0	0	10	1	0	1	0	25
Weather - Metra/PSA	9	0	0	0	3	1	0	0	10	1	0	1	0	25
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	0	1	2	0	0	0	0	0	0	0	1	0	3	7
Lift Deployment - TOTAL	1	0	0	1	0	2	0	0	1	0	1	1	1	8
Obstruction/Debris - TOTAL	1	0	7	0	0	8	4	6	2	6	0	5	5	44
Catenary Failure - TOTAL	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Other - TOTAL	0	0	0	1	0	0	5	2	0	4	0	1	2	15
<b>TOTAL TRAINS DELAYED</b>	<b>90</b>	<b>21</b>	<b>18</b>	<b>7</b>	<b>8</b>	<b>60</b>	<b>64</b>	<b>37</b>	<b>50</b>	<b>37</b>	<b>15</b>	<b>38</b>	<b>47</b>	<b>492</b>
Total Metra/PSA Delays	40	16	18	6	3	34	44	16	47	13	13	31	32	313
Total Foreign Carrier Delays	50	5	0	1	5	26	20	21	3	24	2	7	15	179

Data for current month is final (03/14/17) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 8.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE**  
**February - 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	20.4	0.0	0.0	0.0	3.4	18.2	16.4	16.2	8.4	11.0	3.0	7.0	17.4	121.4
Freight Interference - Peak	4.8	0.0	0.0	0.0	3.4	4.4	3.4	6.2	3.0	3.4	0.2	4.4	3.4	36.6
Primary	2.8	0.0	0.0	0.0	3.2	3.0	2.8	3.4	0.8	2.6	0.2	2.4	2.4	23.6
Secondary	2.0	0.0	0.0	0.0	0.2	1.4	0.6	2.8	2.2	0.8	0.0	2.0	1.0	13.0
Freight Interference - Off-Peak	15.6	0.0	0.0	0.0	0.0	13.8	13.0	10.0	5.4	7.6	2.8	2.6	14.0	84.8
Primary	13.6	0.0	0.0	0.0	0.0	8.8	9.0	7.8	4.6	6.4	1.4	1.6	12.0	65.2
Secondary	2.0	0.0	0.0	0.0	0.0	5.0	4.0	2.2	0.8	1.2	1.4	1.0	2.0	19.6
Signal/Switch Failure - TOTAL	21.2	4.0	2.2	3.0	1.8	19.6	16.4	12.6	11.4	8.0	4.8	5.4	21.6	132.0
Signal/Switch Failure - Metra/PSA	12.2	4.0	2.2	3.0	0.2	16.4	13.4	7.6	9.8	2.6	4.8	4.0	21.4	101.6
Primary	9.2	1.8	1.4	2.4	0.2	7.2	8.2	4.0	6.0	1.6	3.0	1.6	4.6	51.2
Secondary	3.0	2.2	0.8	0.6	0.0	9.2	5.2	3.6	3.8	1.0	1.8	2.4	16.8	50.4
Signal/Switch Failure - Foreign	9.0	0.0	0.0	0.0	1.6	3.2	3.0	5.0	1.6	5.4	0.0	1.4	0.2	30.4
Primary	6.2	0.0	0.0	0.0	1.4	1.6	2.4	2.6	0.6	3.4	0.0	0.4	0.2	18.8
Secondary	2.8	0.0	0.0	0.0	0.2	1.6	0.6	2.4	1.0	2.0	0.0	1.0	0.0	11.6
Mechanical Failure - TOTAL	15.8	3.0	1.0	0.6	0.2	22.4	8.8	4.4	14.4	3.4	8.8	3.2	5.0	91.0
Mechanical Failure - Metra/PSA	15.6	2.8	1.0	0.6	0.2	20.2	8.6	4.4	14.4	3.4	8.8	3.2	4.8	88.0
Non-Locomotive Equipment Failure - Metra/PSA	5.8	2.8	1.0	0.6	0.2	2.8	1.0	0.4	1.6	2.2	1.2	0.2	1.0	20.8
Primary	1.6	1.2	0.2	0.6	0.2	1.0	0.6	0.0	0.8	0.8	0.6	0.2	0.6	8.4
Secondary	4.2	1.6	0.8	0.0	0.0	1.8	0.4	0.4	0.8	1.4	0.6	0.0	0.4	12.4
Locomotive Failure - Metra/PSA	9.8	0.0	0.0	0.0	0.0	17.4	7.6	4.0	12.8	1.2	7.6	3.0	3.8	67.2
Primary	3.4	0.0	0.0	0.0	0.0	4.0	3.6	1.2	3.6	0.6	1.8	1.4	2.2	21.8
Secondary	6.4	0.0	0.0	0.0	0.0	13.4	4.0	2.8	9.2	0.6	5.8	1.6	1.6	45.4
Mechanical Failure - Foreign	0.2	0.2	0.0	0.0	0.0	2.2	0.2	0.0	0.0	0.0	0.0	0.0	0.2	3.0
Passenger Train Interference - TOTAL	1.6	0.4	0.0	0.4	0.4	11.6	2.4	1.8	0.6	0.8	0.4	0.8	3.2	24.4
Passenger Train Interference - Metra/PSA	0.0	0.4	0.0	0.2	0.0	8.8	2.2	1.8	0.4	0.2	0.4	0.8	3.0	18.2
Passenger Train Interference - Foreign	1.6	0.0	0.0	0.2	0.4	2.8	0.2	0.0	0.2	0.6	0.0	0.0	0.2	6.2
Accident - TOTAL	18.4	0.6	0.0	0.2	0.0	2.8	9.0	2.8	3.0	0.2	2.2	9.0	1.2	49.4
Accident - Metra/PSA	11.0	0.6	0.0	0.2	0.0	2.8	8.8	2.8	2.8	0.2	2.2	9.0	0.2	40.6
Accident - Foreign	7.4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	1.0	8.8
Track Work - TOTAL	11.8	1.4	0.4	1.0	0.2	1.4	1.6	1.4	3.0	0.0	0.2	1.6	1.0	25.0
Track Work - Metra/PSA	8.2	1.4	0.4	1.0	0.2	1.4	1.6	1.4	3.0	0.0	0.2	1.6	1.0	21.4
Track Work - Foreign	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Human Error - TOTAL	20.0	3.4	0.8	1.8	3.2	9.6	4.2	3.4	7.0	1.4	2.2	4.0	2.4	63.4
Human Error - Metra/PSA	13.8	3.4	0.8	1.6	1.0	3.6	1.2	0.8	7.0	0.0	1.8	3.0	1.6	39.6
Human Error - Foreign	6.2	0.0	0.0	0.2	2.2	6.0	3.0	2.6	0.0	1.4	0.4	1.0	0.8	23.8
Sick, Injured, Unruly Passenger - TOTAL	2.8	5.2	0.8	0.4	0.2	2.6	7.0	0.4	1.6	0.8	2.4	4.4	2.2	30.8
Sick, Injured, Unruly Passenger - Metra/PSA	2.8	5.2	0.8	0.4	0.2	2.6	7.0	0.4	1.6	0.8	2.4	4.4	2.2	30.8
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	33.4	18.4	8.0	12.2	0.6	28.8	21.6	6.4	28.4	4.0	22.0	23.4	15.8	223.0
Weather - Metra/PSA	33.2	18.4	8.0	12.2	0.2	26.6	21.6	6.4	28.4	3.4	22.0	23.4	15.4	219.2
Weather - Foreign	0.2	0.0	0.0	0.0	0.4	2.2	0.0	0.0	0.0	0.6	0.0	0.0	0.4	3.8
Passenger Loading - TOTAL	0.8	9.2	1.6	2.4	0.0	2.4	2.0	0.0	7.4	0.2	2.8	0.4	3.4	32.6
Lift Deployment - TOTAL	2.2	0.0	0.0	0.0	0.0	5.2	1.8	0.8	2.4	0.0	1.0	1.4	4.2	19.0
Obstruction/Debris - TOTAL	6.2	4.4	0.8	3.8	0.4	6.0	6.4	1.0	4.8	0.8	5.4	3.8	2.2	46.0
Catenary Failure - TOTAL	0.0	10.4	2.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	15.8
Other - TOTAL	13.4	1.4	0.4	0.2	0.0	0.8	1.6	1.2	1.4	3.8	1.8	2.8	5.2	34.0
<b>TOTAL TRAINS DELAYED</b>	<b>168.0</b>	<b>61.8</b>	<b>18.4</b>	<b>28.8</b>	<b>10.4</b>	<b>131.4</b>	<b>99.2</b>	<b>52.4</b>	<b>93.8</b>	<b>34.4</b>	<b>57.0</b>	<b>67.4</b>	<b>84.8</b>	<b>907.8</b>
Total Metra/PSA Delays	119.4	61.6	18.4	28.4	2.4	96.8	76.2	28.6	83.4	15.4	53.6	58.0	64.6	706.8
Total Foreign Carrier Delays	48.6	0.2	0.0	0.4	8.0	34.6	23.0	23.8	10.4	19.0	3.4	9.4	20.2	201.0

Data for latest month is final (03/17/16) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 8.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE**  
**February 2017 Divergence From February Average Over Previous Five Years**

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	-16.4	0.0	0.0	0.0	-1.4	-9.2	-13.4	-3.2	-5.4	-1.0	-1.0	0.0	-2.4	-53.4
Freight Interference - Peak	-1.8	0.0	0.0	0.0	-2.4	-1.4	-2.4	-1.2	-2.0	-1.4	-0.2	-2.4	-0.4	-15.6
<i>Primary</i>	-0.8	0.0	0.0	0.0	-2.2	0.0	-1.8	-0.4	0.2	-0.6	-0.2	-1.4	-0.4	-7.6
<i>Secondary</i>	-1.0	0.0	0.0	0.0	-0.2	-1.4	-0.6	-0.8	-2.2	-0.8	0.0	-1.0	0.0	-8.0
Freight Interference - Off-Peak	-14.6	0.0	0.0	0.0	1.0	-7.8	-11.0	-2.0	-3.4	0.4	-0.8	2.4	-2.0	-37.8
<i>Primary</i>	-12.6	0.0	0.0	0.0	1.0	-3.8	-7.0	0.2	-2.6	-0.4	0.6	2.4	-5.0	-27.2
<i>Secondary</i>	-2.0	0.0	0.0	0.0	0.0	-4.0	-4.0	-2.2	-0.8	0.8	-1.4	0.0	3.0	-10.6
Signal/Switch Failure - TOTAL	-15.2	-2.0	2.8	-1.0	-1.8	-17.6	-12.4	-5.6	-8.4	-1.0	-4.8	-1.4	-19.6	-88.0
Signal/Switch Failure - Metra/PSA	-10.2	-2.0	2.8	-1.0	-0.2	-15.4	-10.4	-1.6	-6.8	-1.6	-4.8	0.0	-19.4	-70.6
<i>Primary</i>	-7.2	0.2	2.6	-1.4	-0.2	-6.2	-5.2	-1.0	-4.0	-0.6	-3.0	-0.6	-3.6	-30.2
<i>Secondary</i>	-3.0	-2.2	0.2	0.4	0.0	-9.2	-5.2	-0.6	-2.8	-1.0	-1.8	0.6	-15.8	-40.4
Signal/Switch Failure - Foreign	-5.0	0.0	0.0	0.0	-1.6	-2.2	-2.0	-4.0	-1.6	0.6	0.0	-1.4	-0.2	-17.4
<i>Primary</i>	-3.2	0.0	0.0	0.0	-1.4	-0.6	-1.4	-1.6	-0.6	-0.4	0.0	-0.4	-0.2	-9.8
<i>Secondary</i>	-1.8	0.0	0.0	0.0	-0.2	-1.6	-0.6	-2.4	-1.0	1.0	0.0	-1.0	0.0	-7.6
Mechanical Failure - TOTAL	-12.8	1.0	0.0	-0.6	-0.2	-10.4	1.2	-3.4	6.6	-3.4	-7.8	-0.2	0.0	-30.0
Mechanical Failure - Metra/PSA	-14.6	-2.8	0.0	-0.6	-0.2	-8.2	1.4	-3.4	6.6	-3.4	-7.8	-0.2	0.2	-33.0
Non-Locomotive Equipment Failure - Metra/PSA	-4.8	-2.8	0.0	-0.6	-0.2	-2.8	1.0	-0.4	0.4	-2.2	-1.2	-0.2	1.0	-12.8
<i>Primary</i>	-0.6	-1.2	0.8	-0.6	-0.2	-1.0	1.4	0.0	1.2	-0.8	-0.6	-0.2	1.4	-0.4
<i>Secondary</i>	-4.2	-1.6	-0.8	0.0	0.0	-1.8	-0.4	-0.4	-0.8	-1.4	-0.6	0.0	-0.4	-12.4
Locomotive Failure - Metra/PSA	-9.8	0.0	0.0	0.0	0.0	-5.4	0.4	-3.0	6.2	-1.2	-6.6	0.0	-0.8	-20.2
<i>Primary</i>	-3.4	0.0	0.0	0.0	0.0	1.0	1.4	-1.2	3.4	-0.6	-0.8	0.6	-1.2	-0.8
<i>Secondary</i>	-6.4	0.0	0.0	0.0	0.0	-6.4	-1.0	-1.8	2.8	-0.6	-5.8	-0.6	0.4	-19.4
Mechanical Failure - Foreign	1.8	3.8	0.0	0.0	0.0	-2.2	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2	3.0
Passenger Train Interference - TOTAL	-1.6	0.6	0.0	0.6	-0.4	-11.6	-2.4	-1.8	-0.6	-0.8	-0.4	-0.8	-3.2	-22.4
Passenger Train Interference - Metra/PSA	0.0	-0.4	0.0	-0.2	0.0	-8.8	-2.2	-1.8	-0.4	-0.2	-0.4	-0.8	-3.0	-18.2
Passenger Train Interference - Foreign	-1.6	1.0	0.0	0.8	-0.4	-2.8	-0.2	0.0	-0.2	-0.6	0.0	0.0	-0.2	-4.2
Accident - TOTAL	-0.4	-0.6	0.0	-0.2	0.0	-0.8	3.0	-2.8	-3.0	-0.2	-2.2	-9.0	-1.2	-17.4
Accident - Metra/PSA	7.0	-0.6	0.0	-0.2	0.0	-0.8	3.2	-2.8	-2.8	-0.2	-2.2	-9.0	-0.2	-8.6
Accident - Foreign	-7.4	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-0.2	0.0	0.0	0.0	-1.0	-8.8
Track Work - TOTAL	-10.8	4.6	-0.4	0.0	-0.2	-0.4	-1.6	-1.4	-2.0	1.0	0.8	1.4	1.0	-8.0
Track Work - Metra/PSA	-7.2	4.6	-0.4	0.0	-0.2	-0.4	-1.6	-1.4	-2.0	1.0	0.8	1.4	1.0	-4.4
Track Work - Foreign	-3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.6
Human Error - TOTAL	26.0	-1.4	1.2	-1.8	-0.2	12.4	19.8	3.6	-1.0	6.6	6.8	-3.0	7.6	76.6
Human Error - Metra/PSA	-7.8	-1.4	1.2	-1.6	-1.0	2.4	6.8	-0.8	-1.0	0.0	7.2	-2.0	8.4	10.4
Human Error - Foreign	33.8	0.0	0.0	-0.2	0.8	10.0	13.0	4.4	0.0	6.6	-0.4	-1.0	-0.8	66.2
Sick, Injured, Unruly Passenger - TOTAL	-1.8	-0.2	0.2	-0.4	-0.2	-1.6	-5.0	0.6	1.4	-0.8	-2.4	7.6	-0.2	-2.8
Sick, Injured, Unruly Passenger - Metra/PSA	-1.8	-0.2	0.2	-0.4	-0.2	-1.6	-5.0	0.6	1.4	-0.8	-2.4	7.6	-0.2	-2.8
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	-24.4	-18.4	-8.0	-12.2	2.4	-27.8	-21.6	-6.4	-18.4	-3.0	-22.0	-22.4	-15.8	-198.0
Weather - Metra/PSA	-24.2	-18.4	-8.0	-12.2	2.8	-25.6	-21.6	-6.4	-18.4	-2.4	-22.0	-22.4	-15.4	-194.2
Weather - Foreign	-0.2	0.0	0.0	0.0	-0.4	-2.2	0.0	0.0	0.0	-0.6	0.0	0.0	-0.4	-3.8
Passenger Loading - TOTAL	-0.8	-8.2	0.4	-2.4	0.0	-2.4	-2.0	0.0	-7.4	-0.2	-1.8	-0.4	-0.4	-25.6
Lift Deployment - TOTAL	-1.2	0.0	0.0	1.0	0.0	-3.2	-1.8	-0.8	-1.4	0.0	0.0	-0.4	-3.2	-11.0
Obstruction/Debris - TOTAL	-5.2	-4.4	6.2	-3.8	-0.4	2.0	-2.4	5.0	-2.8	5.2	-5.4	1.2	2.8	-2.0
Catenary Failure - TOTAL	0.0	-10.4	-2.4	-1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-14.8
Other - TOTAL	-13.4	-1.4	-0.4	0.8	0.0	-0.8	3.4	0.8	-1.4	0.2	-1.8	-1.8	-3.2	-19.0
<b>TOTAL TRAINS DELAYED</b>	<b>-78.0</b>	<b>-40.8</b>	<b>-0.4</b>	<b>-21.8</b>	<b>-2.4</b>	<b>-71.4</b>	<b>-35.2</b>	<b>-15.4</b>	<b>-43.8</b>	<b>2.6</b>	<b>-42.0</b>	<b>-29.4</b>	<b>-37.8</b>	<b>-415.8</b>
Total Metra/PSA Delays	-79.4	-45.6	-0.4	-22.4	0.6	-62.8	-32.2	-12.6	-36.4	-2.4	-40.6	-27.0	-32.6	-393.8
Total Foreign Carrier Delays	1.4	4.8	0.0	0.6	-3.0	-8.6	-3.0	-2.8	-7.4	5.0	-1.4	-2.4	-5.2	-22.0

Data for current month is final (03/14/17) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 9.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE**  
**January - February 2017**

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	7	0	0	0	4	15	8	19	6	13	4	8	37	121
Freight Interference - Peak	3	0	0	0	3	3	2	9	1	2	1	2	15	41
Primary	2	0	0	0	2	3	2	7	1	2	1	1	6	27
Secondary	1	0	0	0	1	0	0	2	0	0	0	1	9	14
Freight Interference - Off-Peak	4	0	0	0	1	12	6	10	5	11	3	6	22	80
Primary	4	0	0	0	1	10	4	10	4	8	3	5	15	64
Secondary	0	0	0	0	0	2	2	0	1	3	0	1	7	16
Signal/Switch Failure - TOTAL	10	31	16	19	1	7	13	16	11	15	0	7	16	162
Signal/Switch Failure - Metra/PSA	6	31	16	19	0	4	10	6	11	5	0	7	14	129
Primary	6	20	13	16	0	4	5	3	8	4	0	4	7	90
Secondary	0	11	3	3	0	0	5	3	3	1	0	3	7	39
Signal/Switch Failure - Foreign	4	0	0	0	1	3	3	10	0	10	0	0	2	33
Primary	3	0	0	0	1	2	3	4	0	5	0	0	1	19
Secondary	1	0	0	0	0	1	0	6	0	5	0	0	1	14
Mechanical Failure - TOTAL	22	5	2	2	2	18	14	2	29	0	37	4	8	145
Mechanical Failure - Metra/PSA	20	1	2	2	1	18	14	2	29	0	37	4	8	138
Non-Locomotive Equipment Failure - Metra/PSA	3	1	2	2	1	2	2	0	2	0	0	0	5	20
Primary	2	0	1	0	1	1	2	0	2	0	0	0	5	14
Secondary	1	1	1	2	0	1	0	0	0	0	0	0	0	6
Locomotive Failure - Metra/PSA	17	0	0	0	0	16	12	2	27	0	37	4	3	118
Primary	5	0	0	0	0	7	7	1	10	0	5	3	1	39
Secondary	12	0	0	0	0	9	5	1	17	0	32	1	2	79
Mechanical Failure - Foreign	2	4	0	0	1	0	0	0	0	0	0	0	0	7
Passenger Train Interference - TOTAL	4	1	3	3	0	2	0	3	0	1	0	0	1	18
Passenger Train Interference - Metra/PSA	0	0	3	1	0	1	0	3	0	0	0	0	1	9
Passenger Train Interference - Foreign	4	1	0	2	0	1	0	0	0	1	0	0	0	9
Accident - TOTAL	18	0	0	0	0	2	15	7	25	0	2	36	1	106
Accident - Metra/PSA	18	0	0	0	0	2	15	7	20	0	2	36	1	101
Accident - Foreign	0	0	0	0	0	0	0	0	5	0	0	0	0	5
Track Work - TOTAL	12	35	4	10	0	1	1	0	8	10	1	9	4	95
Track Work - Metra/PSA	12	35	4	10	0	1	1	0	8	10	1	9	4	95
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	61	5	5	2	6	39	35	10	6	10	16	1	12	208
Human Error - Metra/PSA	19	5	5	2	0	22	19	0	6	1	16	1	12	108
Human Error - Foreign	42	0	0	0	6	17	16	10	0	9	0	0	0	100
Sick, Injured, Unruly Passenger - TOTAL	2	8	2	2	0	7	3	2	4	0	4	12	9	55
Sick, Injured, Unruly Passenger - Metra/PSA	2	8	2	2	0	7	3	2	4	0	4	12	9	55
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	20	14	4	11	4	18	6	4	24	1	9	6	1	122
Weather - Metra/PSA	20	14	4	11	4	17	6	4	24	1	9	6	1	121
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	1	5	3	4	0	2	1	0	4	0	9	1	10	40
Lift Deployment - TOTAL	2	0	0	1	0	5	3	0	3	0	3	3	5	25
Obstruction/Debris - TOTAL	20	9	10	9	0	12	4	6	11	8	1	8	12	110
Catenary Failure - TOTAL	0	3	1	3	0	0	0	0	0	0	0	0	0	7
Other - TOTAL	0	1	0	1	0	2	5	2	7	4	3	2	3	30
<b>TOTAL TRAINS DELAYED</b>	<b>179</b>	<b>117</b>	<b>50</b>	<b>67</b>	<b>17</b>	<b>130</b>	<b>108</b>	<b>71</b>	<b>138</b>	<b>62</b>	<b>89</b>	<b>97</b>	<b>119</b>	<b>1,244</b>
Total Metra/PSA Delays	120	112	50	65	5	93	81	32	127	29	85	89	80	968
Total Foreign Carrier Delays	59	5	0	2	12	37	27	39	11	33	4	8	39	276

Data for current month is final (03/14/17) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 9.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE**  
**January - February - 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	45.2	0.0	0.0	0.0	6.8	32.8	30.8	25.4	17.4	24.8	3.4	10.6	34.2	231.4
Freight Interference - Peak	19.2	0.0	0.0	0.0	6.8	7.8	8.0	9.2	6.0	8.2	0.2	5.0	7.2	77.6
Primary	14.8	0.0	0.0	0.0	6.6	5.4	6.0	6.2	3.6	6.0	0.2	3.0	4.8	56.6
Secondary	4.4	0.0	0.0	0.0	0.2	2.4	2.0	3.0	2.4	2.2	0.0	2.0	2.4	21.0
Freight Interference - Off-Peak	26.0	0.0	0.0	0.0	0.0	25.0	22.8	16.2	11.4	16.6	3.2	5.6	27.0	153.8
Primary	21.2	0.0	0.0	0.0	0.0	15.6	15.4	13.2	9.2	13.2	1.8	3.6	22.8	116.0
Secondary	4.8	0.0	0.0	0.0	0.0	9.4	7.4	3.0	2.2	3.4	1.4	2.0	4.2	37.8
Signal/Switch Failure - TOTAL	57.2	13.2	6.0	7.2	5.0	45.0	33.0	19.8	24.6	22.6	5.2	8.8	31.0	278.6
Signal/Switch Failure - Metra/PSA	26.0	13.2	6.0	7.2	1.0	35.0	26.2	12.2	22.8	3.6	5.2	7.4	30.8	196.6
Primary	15.8	8.2	4.2	5.8	0.8	16.8	14.2	6.2	15.4	2.6	3.4	4.2	8.8	106.4
Secondary	10.2	5.0	1.8	1.4	0.2	18.2	12.0	6.0	7.4	1.0	1.8	3.2	22.0	90.2
Signal/Switch Failure - Foreign	31.2	0.0	0.0	0.0	4.0	10.0	6.8	7.6	1.8	19.0	0.0	1.4	0.2	82.0
Primary	25.6	0.0	0.0	0.0	3.6	7.6	5.4	4.4	0.6	12.2	0.0	0.4	0.2	60.0
Secondary	5.6	0.0	0.0	0.0	0.4	2.4	1.4	3.2	1.2	6.8	0.0	1.0	0.0	22.0
Mechanical Failure - TOTAL	26.6	6.4	2.0	2.4	1.4	41.0	18.6	8.6	30.2	6.8	17.8	15.4	15.2	192.4
Mechanical Failure - Metra/PSA	26.2	6.2	2.0	2.4	1.4	36.6	18.4	8.6	30.2	6.8	17.8	15.4	15.0	187.0
Non-Locomotive Equipment Failure - Metra/PSA	10.0	6.2	2.0	2.4	0.4	7.0	5.4	0.6	3.4	3.6	6.8	3.0	5.8	56.6
Primary	3.8	2.6	0.6	1.6	0.4	2.0	2.0	0.0	1.8	1.6	2.0	1.0	3.0	22.4
Secondary	6.2	3.6	1.4	0.8	0.0	5.0	3.4	0.6	1.6	2.0	4.8	2.0	2.8	34.2
Locomotive Failure - Metra/PSA	16.2	0.0	0.0	0.0	1.0	29.6	13.0	8.0	26.8	3.2	11.0	12.4	9.2	130.4
Primary	6.4	0.0	0.0	0.0	0.8	6.2	5.8	2.0	7.8	1.2	3.0	4.4	4.0	41.6
Secondary	9.8	0.0	0.0	0.0	0.2	23.4	7.2	6.0	19.0	2.0	8.0	8.0	5.2	88.8
Mechanical Failure - Foreign	0.4	0.2	0.0	0.0	0.0	4.4	0.2	0.0	0.0	0.0	0.0	0.0	0.2	5.4
Passenger Train Interference - TOTAL	3.4	2.6	0.8	1.2	0.8	18.4	4.2	3.4	4.0	1.0	0.6	1.6	4.8	46.8
Passenger Train Interference - Metra/PSA	0.2	1.4	0.0	0.8	0.0	13.8	3.8	3.4	3.2	0.4	0.6	1.6	4.6	33.8
Passenger Train Interference - Foreign	3.2	1.2	0.8	0.4	0.8	4.6	0.4	0.0	0.8	0.6	0.0	0.0	0.2	13.0
Accident - TOTAL	25.4	0.6	0.0	0.2	0.4	18.0	14.0	3.4	9.0	1.4	8.2	18.2	2.2	101.0
Accident - Metra/PSA	12.4	0.6	0.0	0.2	0.4	16.2	13.8	3.2	8.6	1.4	8.2	18.2	1.2	84.4
Accident - Foreign	13.0	0.0	0.0	0.0	0.0	1.8	0.2	0.2	0.4	0.0	0.0	0.0	1.0	16.6
Track Work - TOTAL	23.8	14.2	8.2	3.4	0.2	7.8	3.4	4.8	5.4	0.2	2.6	4.2	3.2	81.4
Track Work - Metra/PSA	20.2	14.2	8.2	3.4	0.2	7.8	3.4	4.8	5.4	0.0	2.6	4.2	3.2	77.6
Track Work - Foreign	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	3.8
Human Error - TOTAL	36.2	6.6	3.0	3.4	3.4	13.2	7.2	5.2	13.6	4.2	11.2	8.8	7.0	123.0
Human Error - Metra/PSA	26.0	4.6	2.8	3.2	1.0	6.0	2.6	1.6	13.6	0.2	9.8	7.2	5.0	83.6
Human Error - Foreign	10.2	2.0	0.2	0.2	2.4	7.2	4.6	3.6	0.0	4.0	1.4	1.6	2.0	39.4
Sick, Injured, Unruly Passenger - TOTAL	5.0	12.6	2.2	2.4	0.4	3.8	7.6	0.6	3.2	0.8	4.6	8.6	4.4	56.2
Sick, Injured, Unruly Passenger - Metra/PSA	5.0	12.6	2.2	2.4	0.4	3.8	7.6	0.6	3.2	0.8	4.6	8.6	4.4	56.2
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	117.8	79.2	22.8	27.8	3.2	68.8	62.4	19.8	81.4	15.2	54.8	58.4	50.8	662.4
Weather - Metra/PSA	117.2	79.2	22.8	27.8	2.8	66.6	61.8	19.8	81.4	14.4	54.8	58.4	50.4	657.4
Weather - Foreign	0.6	0.0	0.0	0.0	0.4	2.2	0.6	0.0	0.0	0.8	0.0	0.0	0.4	5.0
Passenger Loading - TOTAL	3.4	12.2	3.2	2.8	0.0	7.8	4.2	0.4	12.2	0.2	6.0	1.8	6.6	60.8
Lift Deployment - TOTAL	5.8	0.2	0.0	0.0	0.0	8.8	4.2	0.8	5.0	0.0	1.6	3.2	8.0	37.6
Obstruction/Debris - TOTAL	11.4	6.2	1.4	6.4	0.6	10.0	10.8	2.0	7.0	3.0	6.2	11.8	5.8	82.6
Catenary Failure - TOTAL	0.0	13.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	19.2
Other - TOTAL	15.8	4.8	0.4	1.2	0.0	3.0	4.0	2.4	3.2	4.8	4.2	4.8	6.4	55.0
<b>TOTAL TRAINS DELAYED</b>	<b>377.0</b>	<b>171.8</b>	<b>53.0</b>	<b>61.4</b>	<b>22.2</b>	<b>278.4</b>	<b>204.4</b>	<b>96.6</b>	<b>216.2</b>	<b>85.0</b>	<b>126.4</b>	<b>156.4</b>	<b>179.6</b>	<b>2,028.4</b>
Total Metra/PSA Delays	269.6	168.4	52.0	60.8	7.8	215.4	160.8	59.8	195.8	35.6	121.6	142.8	141.4	1,631.8
Total Foreign Carrier Delays	107.4	3.4	1.0	0.6	14.4	63.0	43.6	36.8	20.4	49.4	4.8	13.6	38.2	396.6

Data for latest month is final (03/17/16) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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



**TABLE 9.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE**  
**January - February 2017 Divergence From January - February Average Over Previous Five Years**

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
<b>Freight Interference - TOTAL</b>	<b>-38.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-2.8</b>	<b>-17.8</b>	<b>-22.8</b>	<b>-6.4</b>	<b>-11.4</b>	<b>-11.8</b>	<b>0.6</b>	<b>-2.6</b>	<b>2.8</b>	<b>-110.4</b>
Freight Interference - Peak	-16.2	0.0	0.0	0.0	-3.8	-4.8	-6.0	-0.2	-5.0	-6.2	0.8	-3.0	7.8	-36.6
Primary	-12.8	0.0	0.0	0.0	-4.6	-2.4	-4.0	0.8	-2.6	-4.0	0.8	-2.0	1.2	-29.6
Secondary	-3.4	0.0	0.0	0.0	0.8	-2.4	-2.0	-1.0	-2.4	-2.2	0.0	-1.0	6.6	-7.0
Freight Interference - Off-Peak	-22.0	0.0	0.0	0.0	1.0	-13.0	-16.8	-6.2	-6.4	-5.6	-0.2	0.4	-5.0	-73.8
Primary	-17.2	0.0	0.0	0.0	1.0	-5.6	-11.4	-3.2	-5.2	-5.2	1.2	1.4	-7.8	-52.0
Secondary	-4.8	0.0	0.0	0.0	0.0	-7.4	-5.4	-3.0	-1.2	-0.4	-1.4	-1.0	2.8	-21.8
<b>Signal/Switch Failure - TOTAL</b>	<b>-47.2</b>	<b>17.8</b>	<b>10.0</b>	<b>11.8</b>	<b>-4.0</b>	<b>-38.0</b>	<b>-20.0</b>	<b>-3.8</b>	<b>-13.6</b>	<b>-7.6</b>	<b>-5.2</b>	<b>-1.8</b>	<b>-15.0</b>	<b>-116.6</b>
Signal/Switch Failure - Metra/PSA	-20.0	17.8	10.0	11.8	-1.0	-31.0	-16.2	-6.2	-11.8	1.4	-5.2	-0.4	-16.8	-67.6
Primary	-9.8	11.8	8.8	10.2	-0.8	-12.8	-9.2	-3.2	-7.4	1.4	-3.4	-0.2	-1.8	-16.4
Secondary	-10.2	6.0	1.2	1.6	-0.2	-18.2	-7.0	-3.0	-4.4	0.0	-1.8	-0.2	-15.0	-51.2
Signal/Switch Failure - Foreign	-27.2	0.0	0.0	0.0	-3.0	-7.0	-3.8	2.4	-1.8	-9.0	0.0	-1.4	1.8	-49.0
Primary	-22.6	0.0	0.0	0.0	-2.6	-5.6	-2.4	0.4	-0.6	-7.2	0.0	-0.4	0.8	-41.0
Secondary	-4.6	0.0	0.0	0.0	-0.4	-1.4	-1.4	2.8	-1.2	-1.8	0.0	-1.0	1.0	-8.0
<b>Mechanical Failure - TOTAL</b>	<b>-4.6</b>	<b>-1.4</b>	<b>0.0</b>	<b>-0.4</b>	<b>0.6</b>	<b>-23.0</b>	<b>-4.6</b>	<b>-6.6</b>	<b>-1.2</b>	<b>-6.8</b>	<b>19.2</b>	<b>-11.4</b>	<b>-7.2</b>	<b>-47.4</b>
Mechanical Failure - Metra/PSA	-6.2	-5.2	0.0	-0.4	-0.4	-18.6	-4.4	-6.6	-1.2	-6.8	19.2	-11.4	-7.0	-49.0
Non-Locomotive Equipment Failure - Metra/PSA	-7.0	-5.2	0.0	-0.4	0.6	-5.0	-3.4	-0.6	-1.4	-3.6	-6.8	-3.0	-0.8	-36.6
Primary	-1.8	-2.6	0.4	-1.6	0.6	-1.0	0.0	0.0	0.2	-1.6	-2.0	-1.0	2.0	-8.4
Secondary	-5.2	-2.6	-0.4	1.2	0.0	-4.0	-3.4	-0.6	-1.6	-2.0	-4.8	-2.0	-2.8	-28.2
Locomotive Failure - Metra/PSA	0.8	0.0	0.0	0.0	-1.0	-13.6	-1.0	-6.0	0.2	-3.2	26.0	-8.4	-6.2	-12.4
Primary	-1.4	0.0	0.0	0.0	-0.8	0.8	1.2	-1.0	2.2	-1.2	2.0	-1.4	-3.0	-2.6
Secondary	2.2	0.0	0.0	0.0	-0.2	-14.4	-2.2	-5.0	-2.0	-2.0	24.0	-7.0	-3.2	-9.8
Mechanical Failure - Foreign	1.6	3.8	0.0	0.0	1.0	-4.4	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2	1.6
<b>Passenger Train Interference - TOTAL</b>	<b>0.6</b>	<b>-1.6</b>	<b>2.2</b>	<b>1.8</b>	<b>-0.8</b>	<b>-16.4</b>	<b>-4.2</b>	<b>-0.4</b>	<b>-4.0</b>	<b>0.0</b>	<b>-0.6</b>	<b>-1.6</b>	<b>-3.8</b>	<b>-28.8</b>
Passenger Train Interference - Metra/PSA	-0.2	-1.4	3.0	0.2	0.0	-12.8	-3.8	-0.4	-3.2	-0.4	-0.6	-1.6	-3.6	-24.8
Passenger Train Interference - Foreign	0.8	-0.2	-0.8	1.6	-0.8	-3.6	-0.4	0.0	-0.8	0.4	0.0	0.0	-0.2	-4.0
<b>Accident - TOTAL</b>	<b>-7.4</b>	<b>-0.6</b>	<b>0.0</b>	<b>-0.2</b>	<b>-0.4</b>	<b>-16.0</b>	<b>1.0</b>	<b>3.6</b>	<b>16.0</b>	<b>-1.4</b>	<b>-6.2</b>	<b>17.8</b>	<b>-1.2</b>	<b>5.0</b>
Accident - Metra/PSA	5.6	-0.6	0.0	-0.2	-0.4	-14.2	1.2	3.8	11.4	-1.4	-6.2	17.8	-0.2	16.6
Accident - Foreign	-13.0	0.0	0.0	0.0	0.0	-1.8	-0.2	-0.2	4.6	0.0	0.0	0.0	-1.0	-11.6
<b>Track Work - TOTAL</b>	<b>-11.8</b>	<b>20.8</b>	<b>-4.2</b>	<b>6.6</b>	<b>-0.2</b>	<b>-6.8</b>	<b>-2.4</b>	<b>-4.8</b>	<b>2.6</b>	<b>9.8</b>	<b>-1.6</b>	<b>4.8</b>	<b>0.8</b>	<b>13.6</b>
Track Work - Metra/PSA	-8.2	20.8	-4.2	6.6	-0.2	-6.8	-2.4	-4.8	2.6	10.0	-1.6	4.8	0.8	17.4
Track Work - Foreign	-3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-3.8
<b>Human Error - TOTAL</b>	<b>24.8</b>	<b>-1.6</b>	<b>2.0</b>	<b>-1.4</b>	<b>2.6</b>	<b>25.8</b>	<b>27.8</b>	<b>4.8</b>	<b>-7.6</b>	<b>5.8</b>	<b>4.8</b>	<b>-7.8</b>	<b>5.0</b>	<b>85.0</b>
Human Error - Metra/PSA	-7.0	0.4	2.2	-1.2	-1.0	16.0	16.4	-1.6	-7.6	0.8	6.2	-6.2	7.0	24.4
Human Error - Foreign	31.8	-2.0	-0.2	-0.2	3.6	9.8	11.4	6.4	0.0	5.0	-1.4	-1.6	-2.0	60.6
<b>Sick, Injured, Unruly Passenger - TOTAL</b>	<b>-3.0</b>	<b>-4.6</b>	<b>-0.2</b>	<b>-0.4</b>	<b>-0.4</b>	<b>3.2</b>	<b>-4.6</b>	<b>1.4</b>	<b>0.8</b>	<b>-0.8</b>	<b>-0.6</b>	<b>3.4</b>	<b>4.6</b>	<b>-1.2</b>
Sick, Injured, Unruly Passenger - Metra/PSA	-3.0	-4.6	-0.2	-0.4	-0.4	3.2	-4.6	1.4	0.8	-0.8	-0.6	3.4	4.6	-1.2
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Weather - TOTAL</b>	<b>-97.8</b>	<b>-65.2</b>	<b>-18.8</b>	<b>-16.8</b>	<b>0.8</b>	<b>-50.8</b>	<b>-56.4</b>	<b>-15.8</b>	<b>-57.4</b>	<b>-14.2</b>	<b>-45.8</b>	<b>-52.4</b>	<b>-49.8</b>	<b>-540.4</b>
Weather - Metra/PSA	-97.2	-65.2	-18.8	-16.8	1.2	-49.6	-55.8	-15.8	-57.4	-13.4	-45.8	-52.4	-49.4	-536.4
Weather - Foreign	-0.6	0.0	0.0	0.0	-0.4	-1.2	-0.6	0.0	0.0	-0.8	0.0	0.0	-0.4	-4.0
<b>Passenger Loading - TOTAL</b>	<b>-2.4</b>	<b>-7.2</b>	<b>-0.2</b>	<b>1.2</b>	<b>0.0</b>	<b>-5.8</b>	<b>-3.2</b>	<b>-0.4</b>	<b>-8.2</b>	<b>-0.2</b>	<b>3.0</b>	<b>-0.8</b>	<b>3.4</b>	<b>-20.8</b>
Lift Deployment - TOTAL	-3.8	-0.2	0.0	1.0	0.0	-3.8	-1.2	-0.8	-2.0	0.0	1.4	-0.2	-3.0	-12.6
Obstruction/Debris - TOTAL	8.6	2.8	8.6	2.6	-0.6	2.0	-6.8	4.0	4.0	5.0	-5.2	-3.8	6.2	27.4
Catenary Failure - TOTAL	0.0	-10.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-12.2
Other - TOTAL	-15.8	-3.8	-0.4	-0.2	0.0	-1.0	1.0	-0.4	3.8	-0.8	-1.2	-2.8	-3.4	-25.0
<b>TOTAL TRAINS DELAYED</b>	<b>-198.0</b>	<b>-54.8</b>	<b>-3.0</b>	<b>5.6</b>	<b>-5.2</b>	<b>-148.4</b>	<b>-96.4</b>	<b>-25.6</b>	<b>-78.2</b>	<b>-23.0</b>	<b>-37.4</b>	<b>-59.4</b>	<b>-60.6</b>	<b>-784.4</b>
Total Metra/PSA Delays	-149.6	-56.4	-2.0	4.2	-2.8	-122.4	-79.8	-27.8	-68.8	-6.6	-36.6	-53.8	-61.4	-663.8
Total Foreign Carrier Delays	-48.4	1.6	-1.0	1.4	-2.4	-26.0	-16.6	2.2	-9.4	-16.4	-0.8	-5.6	0.8	-120.6

Data for current month is final (03/14/17) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 10.a: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH**  
2017

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Feb	
Freight Interference - TOTAL	53	68											121	9.7%
Freight Interference - Peak	20	21											41	3.3%
Primary	11	16											27	2.2%
Secondary	9	5											14	1.1%
Freight Interference - Off-Peak	33	47											80	6.4%
Primary	26	38											64	5.1%
Secondary	7	9											16	1.3%
Signal/Switch Failure - TOTAL	118	44											162	13.0%
Signal/Switch Failure - Metra/PSA	98	31											129	10.4%
Primary	69	21											90	7.2%
Secondary	29	10											39	3.1%
Signal/Switch Failure - Foreign	20	13											33	2.7%
Primary	10	9											19	1.5%
Secondary	10	4											14	1.1%
Mechanical Failure - TOTAL	84	61											145	11.7%
Mechanical Failure - Metra/PSA	83	55											138	11.1%
Non-Locomotive Equipment Failure - Metra/PSA	12	8											20	1.6%
Primary	6	8											14	1.1%
Secondary	6	0											6	0.5%
Locomotive Failure - Metra/PSA	71	47											118	9.5%
Primary	18	21											39	3.1%
Secondary	53	26											79	6.4%
Mechanical Failure - Foreign	1	6											7	0.6%
Passenger Train Interference - TOTAL	16	2											18	1.4%
Passenger Train Interference - Metra/PSA	9	0											9	0.7%
Passenger Train Interference - Foreign	7	2											9	0.7%
Accident - TOTAL	74	32											106	8.5%
Accident - Metra/PSA	69	32											101	8.1%
Accident - Foreign	5	0											5	0.4%
Track Work - TOTAL	78	17											95	7.6%
Track Work - Metra/PSA	78	17											95	7.6%
Track Work - Foreign	0	0											0	0.0%
Human Error - TOTAL	68	140											208	16.7%
Human Error - Metra/PSA	58	50											108	8.7%
Human Error - Foreign	10	90											100	8.0%
Sick, Injured, Unruly Passenger - TOTAL	27	28											55	4.4%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28											55	4.4%
Sick, Injured, Unruly Passenger - Foreign	0	0											0	0.0%
Weather - TOTAL	97	25											122	9.8%
Weather - Metra/PSA	96	25											121	9.7%
Weather - Foreign	1	0											1	0.1%
Passenger Loading - TOTAL	33	7											40	3.2%
Lift Deployment - TOTAL	17	8											25	2.0%
Obstruction/Debris - TOTAL	66	44											110	8.8%
Catenary Failure - TOTAL	6	1											7	0.6%
Other - TOTAL	15	15											30	2.4%
<b>TOTAL TRAINS DELAYED</b>	<b>752</b>	<b>492</b>											<b>1,244</b>	<b>100.0%</b>
Total Metra/PSA Delays	655	313											968	77.8%
Total Foreign Carrier Delays	97	179											276	22.2%

Data for current month is final (03/14/17) version from TOPS.

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 10.b: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH  
2016**

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Feb	
<b>Freight Interference - TOTAL</b>	<b>82</b>	<b>53</b>	<b>43</b>	<b>44</b>	<b>72</b>	<b>73</b>	<b>82</b>	<b>108</b>	<b>78</b>	<b>48</b>	<b>65</b>	<b>94</b>	<b>135</b>	<b>10.3%</b>
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	49	3.8%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	36	2.8%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	13	1.0%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	86	6.6%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	61	4.7%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	25	1.9%
<b>Signal/Switch Failure - TOTAL</b>	<b>154</b>	<b>155</b>	<b>123</b>	<b>98</b>	<b>145</b>	<b>143</b>	<b>108</b>	<b>63</b>	<b>105</b>	<b>67</b>	<b>110</b>	<b>120</b>	<b>309</b>	<b>23.7%</b>
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	189	14.5%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	65	5.0%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	124	9.5%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	120	9.2%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	92	7.0%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	28	2.1%
<b>Mechanical Failure - TOTAL</b>	<b>107</b>	<b>68</b>	<b>131</b>	<b>43</b>	<b>80</b>	<b>88</b>	<b>120</b>	<b>78</b>	<b>114</b>	<b>64</b>	<b>71</b>	<b>88</b>	<b>175</b>	<b>13.4%</b>
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	175	13.4%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	44	3.4%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	20	1.5%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	24	1.8%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	131	10.0%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	46	3.5%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	85	6.5%
Mechanical Failure - Foreign	0	0	0	1	0	0	0	0	0	0	0	8	0	0.0%
<b>Passenger Train Interference - TOTAL</b>	<b>22</b>	<b>12</b>	<b>3</b>	<b>4</b>	<b>19</b>	<b>14</b>	<b>12</b>	<b>11</b>	<b>5</b>	<b>10</b>	<b>4</b>	<b>38</b>	<b>34</b>	<b>2.6%</b>
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	18	1.4%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	16	1.2%
<b>Accident - TOTAL</b>	<b>59</b>	<b>15</b>	<b>62</b>	<b>48</b>	<b>86</b>	<b>29</b>	<b>18</b>	<b>55</b>	<b>34</b>	<b>10</b>	<b>79</b>	<b>49</b>	<b>74</b>	<b>5.7%</b>
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	63	4.8%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	11	0.8%
<b>Track Work - TOTAL</b>	<b>40</b>	<b>21</b>	<b>36</b>	<b>44</b>	<b>141</b>	<b>114</b>	<b>99</b>	<b>133</b>	<b>177</b>	<b>75</b>	<b>59</b>	<b>61</b>	<b>61</b>	<b>4.7%</b>
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	61	4.7%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	0	0.0%
<b>Human Error - TOTAL</b>	<b>38</b>	<b>33</b>	<b>21</b>	<b>53</b>	<b>23</b>	<b>112</b>	<b>47</b>	<b>93</b>	<b>50</b>	<b>45</b>	<b>49</b>	<b>71</b>	<b>71</b>	<b>5.4%</b>
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	55	4.2%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	16	1.2%
<b>Sick, Injured, Unruly Passenger - TOTAL</b>	<b>20</b>	<b>39</b>	<b>27</b>	<b>50</b>	<b>44</b>	<b>32</b>	<b>29</b>	<b>43</b>	<b>30</b>	<b>24</b>	<b>35</b>	<b>34</b>	<b>59</b>	<b>4.5%</b>
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	59	4.5%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	2	0	0	0	0	1	0	0	0.0%
<b>Weather - TOTAL</b>	<b>129</b>	<b>132</b>	<b>28</b>	<b>1</b>	<b>4</b>	<b>23</b>	<b>49</b>	<b>38</b>	<b>1</b>	<b>4</b>	<b>13</b>	<b>132</b>	<b>261</b>	<b>20.0%</b>
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	261	20.0%
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	1	0	0.0%
Passenger Loading - TOTAL	13	7	29	8	51	83	109	42	32	28	68	71	20	1.5%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	25	1.9%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	48	3.7%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	12	0.9%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	22	1.7%
<b>TOTAL TRAINS DELAYED</b>	<b>707</b>	<b>599</b>	<b>572</b>	<b>451</b>	<b>716</b>	<b>791</b>	<b>769</b>	<b>781</b>	<b>729</b>	<b>455</b>	<b>647</b>	<b>836</b>	<b>1,306</b>	<b>100.0%</b>
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	1,008	77.2%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	298	22.8%

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

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 03/15/2017

'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 10.c: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH**  
**2017 Divergence From 2016**

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Feb
Freight Interference - TOTAL	-29	15											-14 -0.6%
Freight Interference - Peak	-12	4											-8 -0.5%
Primary	-15	6											-9 -0.6%
Secondary	3	-2											1 0.1%
Freight Interference - Off-Peak	-17	11											-6 -0.2%
Primary	-6	9											3 0.5%
Secondary	-11	2											-9 -0.6%
Signal/Switch Failure - TOTAL	-36	-111											-147 -10.6%
Signal/Switch Failure - Metra/PSA	31	-91											-60 -4.1%
Primary	34	-9											25 2.3%
Secondary	-3	-82											-85 -6.4%
Signal/Switch Failure - Foreign	-67	-20											-87 -6.5%
Primary	-58	-15											-73 -5.5%
Secondary	-9	-5											-14 -1.0%
Mechanical Failure - TOTAL	-23	-7											-30 -1.7%
Mechanical Failure - Metra/PSA	-24	-13											-37 -2.3%
Non-Locomotive Equipment Failure - Metra/PSA	-13	-11											-24 -1.8%
Primary	-5	-1											-6 -0.4%
Secondary	-8	-10											-18 -1.4%
Locomotive Failure - Metra/PSA	-11	-2											-13 -0.5%
Primary	-10	3											-7 -0.4%
Secondary	-1	-5											-6 -0.2%
Mechanical Failure - Foreign	1	6											7 0.6%
Passenger Train Interference - TOTAL	-6	-10											-16 -1.2%
Passenger Train Interference - Metra/PSA	-4	-5											-9 -0.7%
Passenger Train Interference - Foreign	-2	-5											-7 -0.5%
Accident - TOTAL	15	17											32 2.9%
Accident - Metra/PSA	20	18											38 3.3%
Accident - Foreign	-5	-1											-6 -0.4%
Track Work - TOTAL	38	-4											34 3.0%
Track Work - Metra/PSA	38	-4											34 3.0%
Track Work - Foreign	0	0											0 0.0%
Human Error - TOTAL	30	107											137 11.3%
Human Error - Metra/PSA	28	25											53 4.5%
Human Error - Foreign	2	82											84 6.8%
Sick, Injured, Unruly Passenger - TOTAL	7	-11											-4 -0.1%
Sick, Injured, Unruly Passenger - Metra/PSA	7	-11											-4 -0.1%
Sick, Injured, Unruly Passenger - Foreign	0	0											0 0.0%
Weather - TOTAL	-32	-107											-139 -10.2%
Weather - Metra/PSA	-33	-107											-140 -10.3%
Weather - Foreign	1	0											1 0.1%
Passenger Loading - TOTAL	20	0											20 1.7%
Lift Deployment - TOTAL	6	-6											0 0.1%
Obstruction/Debris - TOTAL	48	14											62 5.2%
Catenary Failure - TOTAL	-3	-2											-5 -0.4%
Other - TOTAL	10	-2											8 0.7%
<b>TOTAL TRAINS DELAYED</b>	<b>45</b>	<b>-107</b>											<b>-62</b>
Total Metra/PSA Delays	144	-184											-40
Total Foreign Carrier Delays	-99	77											-22

Data for current month is final (03/14/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 03/15/2017

'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

**TABLE 11: FREIGHT DELAYS**  
between March 2015 and February 2017

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Mar-15	18	0	0	0	3	3	12	12	3	16	5	7	34	113
Apr-15	8	0	0	0	6	11	4	13	4	12	4	9	16	87
May-15	20	0	0	0	4	5	2	8	2	9	0	3	6	59
Jun-15	12	0	0	0	4	11	1	9	3	24	0	6	20	90
Jul-15	23	0	0	0	1	11	0	3	12	17	0	18	31	116
Aug-15	13	0	0	0	8	7	5	11	4	17	0	0	24	89
Sep-15	20	0	0	0	1	9	6	11	14	6	0	2	15	84
Oct-15	16	0	0	0	0	5	4	3	3	11	0	3	15	60
Nov-15	15	0	0	0	7	0	4	7	5	10	3	6	8	65
Dec-15	9	0	0	0	2	4	4	5	4	5	0	1	15	49
Jan-16	14	0	0	0	1	4	23	5	24	3	0	3	5	82
Feb-16	11	0	0	0	3	5	6	1	16	2	0	2	7	53
<b>Total</b>	<b>179</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>75</b>	<b>71</b>	<b>88</b>	<b>94</b>	<b>132</b>	<b>12</b>	<b>60</b>	<b>196</b>	<b>947</b>
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
Jan-17	3	0	0	0	2	6	5	6	3	3	2	1	22	53
<b>Feb-17</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>13</b>	<b>3</b>	<b>10</b>	<b>2</b>	<b>7</b>	<b>15</b>	<b>68</b>
<b>Total</b>	<b>191</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>82</b>	<b>83</b>	<b>81</b>	<b>33</b>	<b>97</b>	<b>10</b>	<b>30</b>	<b>191</b>	<b>828</b>

Data for current month is final (03/14/17) version from TOPS.

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

LINE	Jan Feb Mar			Apr May Jun			Jul Aug Sep			Oct Nov Dec			Lift Delays YTD	% of All Delays YTD
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
BNSF	1	1											2	1.12%
Electric ML	0	0											0	0.00%
Electric BI	0	0											0	0.00%
Electric SC	0	1											1	1.49%
HER	0	0											0	0.00%
Milw N	3	2											5	3.85%
Milw W	3	0											3	2.78%
NCS	0	0											0	0.00%
RI	2	1											3	2.17%
SWS	0	0											0	0.00%
UP N	2	1											3	3.37%
UP NW	2	1											3	3.09%
UP W	4	1											5	4.20%
<b>Total Lift Delays</b>	<b>17</b>	<b>8</b>											<b>25</b>	<b>2.01%</b>
<b>ALL DELAYS</b>													<b>1,244</b>	

Data for current month is final (03/14/17) version from TOPS.

**2016**

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

**TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION**  
February 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
<b>Peak *</b>														
6-10	16	3	8	1	1	10	4	6	13	4	0	6	7	79
11-15	4	3	0	0	0	7	5	4	7	1	4	2	1	38
16-20	4	0	0	0	3	6	1	1	8	2	1	3	1	30
21+	29	0	0	0	3	8	10	7	7	5	0	6	5	80
Annulled	<u>6</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>15</u>
Sub-Total	59	6	8	1	7	33	23	19	36	13	5	18	14	242
<b>Off-Peak **</b>														
6-10	11	13	8	4	1	20	13	8	9	4	6	8	17	122
11-15	5	2	1	1	0	3	9	3	1	4	3	5	8	45
16-20	0	0	0	1	0	0	5	2	0	2	0	3	3	16
21+	8	0	1	0	0	2	12	2	3	12	1	4	5	50
Annulled	<u>7</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>17</u>
Sub-Total	31	15	10	6	1	27	41	18	14	24	10	20	33	250
<b>February 2017 Total</b>														
6-10	27	16	16	5	2	30	17	14	22	8	6	14	24	201
11-15	9	5	1	1	0	10	14	7	8	5	7	7	9	83
16-20	4	0	0	1	3	6	6	3	8	4	1	6	4	46
21+	37	0	1	0	3	10	22	9	10	17	1	10	10	130
Annulled	<u>13</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>5</u>	<u>4</u>	<u>2</u>	<u>3</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>32</u>
TOTAL	90	21	18	7	8	60	64	37	50	37	15	38	47	492
<b>2017 Year-to-Date</b>														
6-10	73	68	28	33	5	60	37	34	66	21	30	32	65	552
11-15	31	12	6	10	3	26	26	12	20	9	15	14	25	209
16-20	14	8	7	5	4	19	12	6	15	5	11	7	15	128
21+	45	29	9	18	5	20	26	14	33	24	27	32	14	296
Annulled	<u>16</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>5</u>	<u>7</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>6</u>	<u>12</u>	<u>0</u>	<u>59</u>
TOTAL	179	117	50	67	17	130	108	71	138	62	89	97	119	1,244
<b>PERCENT COMPOSITION OF DELAYS BY RANGE OF DURATION</b>														
Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
<b>February 2017 Total</b>														
6-10	30.0%	76.2%	88.9%	71.4%	25.0%	50.0%	26.6%	37.8%	44.0%	21.6%	40.0%	36.8%	51.1%	40.9%
11-15	10.0%	23.8%	5.6%	14.3%	0.0%	16.7%	21.9%	18.9%	16.0%	13.5%	46.7%	18.4%	19.1%	16.9%
16-20	4.4%	0.0%	0.0%	14.3%	37.5%	10.0%	9.4%	8.1%	16.0%	10.8%	6.7%	15.8%	8.5%	9.3%
21+	41.1%	0.0%	5.6%	0.0%	37.5%	16.7%	34.4%	24.3%	20.0%	45.9%	6.7%	26.3%	21.3%	26.4%
Annulled	<u>14.4%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>6.7%</u>	<u>7.8%</u>	<u>10.8%</u>	<u>4.0%</u>	<u>8.1%</u>	<u>0.0%</u>	<u>2.6%</u>	<u>0.0%</u>	<u>6.5%</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%
<b>2017 Year-to-Date Delays By Duration</b>														
6-10	40.8%	58.1%	56.0%	49.3%	29.4%	46.2%	34.3%	47.9%	47.8%	33.9%	33.7%	33.0%	54.6%	44.4%
11-15	17.3%	10.3%	12.0%	14.9%	17.6%	20.0%	24.1%	16.9%	14.5%	14.5%	16.9%	14.4%	21.0%	16.8%
16-20	7.8%	6.8%	14.0%	7.5%	23.5%	14.6%	11.1%	8.5%	10.9%	8.1%	12.4%	7.2%	12.6%	10.3%
21+	25.1%	24.8%	18.0%	26.9%	29.4%	15.4%	24.1%	19.7%	23.9%	38.7%	30.3%	33.0%	11.8%	23.8%
Annulled	<u>8.9%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>1.5%</u>	<u>0.0%</u>	<u>3.8%</u>	<u>6.5%</u>	<u>7.0%</u>	<u>2.9%</u>	<u>4.8%</u>	<u>6.7%</u>	<u>12.4%</u>	<u>0.0%</u>	<u>4.7%</u>
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Data for most recent month is final (03/14/17) version from TOPS.

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

	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
<b>February 2017</b>														
Peak *	31.2	9.8	7.0	6.0	33.3	21.9	27.9	22.2	16.5	23.8	13.2	18.2	15.9	22.5
Off-Peak **	24.2	8.1	9.1	9.3	6.0	14.7	21.1	13.3	13.1	37.0	10.9	15.7	12.8	17.5
All	29.0	8.6	8.2	8.9	29.9	18.7	23.4	18.2	15.5	32.4	11.7	16.9	13.7	19.9
<b>2017 Year-to-Date</b>														
Peak *	23.0	20.0	12.3	18.8	25.1	19.2	21.1	17.1	17.7	19.1	18.2	72.5	13.0	22.7
Off-Peak **	17.0	11.4	14.7	15.5	13.7	15.7	17.5	17.3	15.9	28.6	21.4	33.2	12.5	17.7
All	20.4	15.3	13.6	16.6	23.1	17.2	18.9	17.2	17.0	25.4	19.9	51.7	12.7	20.1

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 (03/14/17) version from TOPS.