

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

**January 2017**



# COMMUTER RAIL ON-TIME PERFORMANCE

## January 2017

This report presents an analysis of the January 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 January 2017, Metra operated 17,171 scheduled trains, including scheduled "extras", if any. 752 of these trains were delayed (late or annulled), representing an on-time performance rate of 95.6%. Table 2 lists on-time percentages by line for each month and year since 2012.

Table 3 lists each train that was on time for less than 85% of its weekday runs in January 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 January 2017. Of the 752 delays systemwide in January 2017, all but 359 (48%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous five Januarys, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in January 2017, 8 more delays than the average over the previous five Januarys were controllable.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during January 2017. Table 8.b shows the average frequencies over the previous five Januarys, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 752 delays systemwide in January 2017, 369 less than the average over the previous five Januarys. Table 9.a shows delays from the beginning of the year through January 2017. Table 9.b shows the average frequencies from the beginning of the year through January 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. In January of 2017, a total of 752 trains were delayed, compared to 707 trains delayed in the same month 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 January 2017 freight operations delayed 53 trains systemwide, compared to 82 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 17 trains were delayed by lift deployment in January 2017.

A review of January 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 46.7% of all late trains. Table 14 shows that the average length of delay was 20.2 minutes in January 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  
January 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>	1,134	42	96.3%	840	40	95.2%	1,974	82	95.8%	112	4	96.4%	108	3	97.2%	2,194	89	95.9%
<b>Elec -ML</b>	945	47	95.0%	714	44	93.8%	1,659	91	94.5%	184	5	97.3%	120	0	100.0%	1,963	96	95.1%
<b>-BI</b>	294	15	94.9%	483	17	96.5%	777	32	95.9%	120	0	100.0%	--	--		897	32	96.4%
<b>-SC</b>	<u>357</u>	<u>20</u>	94.4%	<u>777</u>	<u>35</u>	95.5%	<u>1,134</u>	<u>55</u>	95.1%	<u>192</u>	<u>3</u>	98.4%	<u>120</u>	<u>2</u>	98.3%	<u>1,446</u>	<u>60</u>	95.9%
<b>Subtotal</b>	1,596	82	94.9%	1,974	96	95.1%	3,570	178	95.0%	496	8	98.4%	240	2	99.2%	4,306	188	95.6%
<b>Heritage</b>	126	7	94.4%	21	2	90.5%	147	9	93.9%	--	--		--	--		147	9	93.9%
<b>Milw -N</b>	525	22	95.8%	735	34	95.4%	1,260	56	95.6%	96	9	90.6%	120	5	95.8%	1,476	70	95.3%
<b>-W</b>	<u>567</u>	<u>23</u>	95.9%	<u>651</u>	<u>18</u>	97.2%	<u>1,218</u>	<u>41</u>	96.6%	<u>96</u>	<u>3</u>	96.9%	<u>108</u>	<u>0</u>	100.0%	<u>1,422</u>	<u>44</u>	96.9%
<b>Subtotal</b>	1,092	45	95.9%	1,386	52	96.2%	2,478	97	96.1%	192	12	93.8%	228	5	97.8%	2,898	114	96.1%
<b>NCS</b>	231	23	90.0%	231	11	95.2%	462	34	92.6%	--	--		--	--		462	34	92.6%
<b>RI</b>	756	53	93.0%	798	32	96.0%	1,554	85	94.5%	128	3	97.7%	168	0	100.0%	1,850	88	95.2%
<b>SWS</b>	231	8	96.5%	399	16	96.0%	630	24	96.2%	24	1	95.8%	--	--		654	25	96.2%
<b>UP -N</b>	630	36	94.3%	840	29	96.5%	1,470	65	95.6%	104	9	91.3%	108	0	100.0%	1,682	74	95.6%
<b>-NW</b>	693	26	96.2%	672	27	96.0%	1,365	53	96.1%	96	0	100.0%	90	6	93.3%	1,551	59	96.2%
<b>-W</b>	<u>567</u>	<u>28</u>	95.1%	<u>672</u>	<u>37</u>	94.5%	<u>1,239</u>	<u>65</u>	94.8%	<u>80</u>	<u>4</u>	95.0%	<u>108</u>	<u>3</u>	97.2%	<u>1,427</u>	<u>72</u>	95.0%
<b>Subtotal</b>	1,890	90	95.2%	2,184	93	95.7%	4,074	183	95.5%	280	13	95.4%	306	9	97.1%	4,660	205	95.6%
<b>SYSTEM</b>	7,056	350	95.0%	7,833	342	95.6%	14,889	692	95.4%	1,232	41	96.7%	1,050	19	98.2%	17,171	752	95.6%

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

Delays data for most recent month is final (02/14/17) 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- JAN	AVG
<b>BNSF</b>	<b>2012</b>	94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	94.4%	96.0%
	<b>2013</b>	95.8	93.9	94.6	93.3	96.0	88.5	95.2	97.1	97.2	94.0	95.8	92.2	95.8%	94.5%
	<b>2014</b>	78.6	84.6	95.6	92.0	82.2	82.0	94.1	91.4	94.1	92.2	95.2	94.1	78.6%	89.7%
	<b>2015</b>	90.9	90.1	96.8	97.5	96.6	92.4	93.0	95.4	95.8	93.6	93.5	97.4	90.9%	94.4%
	<b>2016</b>	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	93.2%	94.0%
	<b>2017</b>	95.9												95.9%	95.9%
	<b>2012-2016 average</b>	90.5	92.0	95.6	95.6	93.2	89.7	94.2	93.9	95.2	94.4	95.0	95.1	90.5%	93.7%
<b>Electric</b>	<b>2012</b>	93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	93.7%	97.3%
	<b>2013</b>	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	98.1%	97.2%
	<b>2014</b>	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	93.7%	97.5%
	<b>2015</b>	96.3	95.4	98.4	98.4	98.3	97.7	96.5	98.2	97.9	97.8	97.8	99.0	96.3%	97.6%
	<b>2016</b>	98.0	98.6	98.8	98.9	98.9	96.5	97.9	98.5	97.1	98.6	97.7	97.7	98.0%	98.1%
	<b>2017</b>	95.6												95.6%	95.6%
	<b>2012-2016 average</b>	95.9	97.4	98.3	98.5	98.3	97.4	96.1	97.8	97.7	97.7	97.6	98.1	95.9%	97.6%
<b>Heritage</b>	<b>2012</b>	95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	95.2%	95.6%
	<b>2013</b>	97.0	99.2	94.4	97.7	94.7	92.5	97.7	99.2	97.5	96.4	98.3	92.1	97.0%	96.4%
	<b>2014</b>	79.5	75.8	88.1	93.2	92.1	94.4	94.7	93.7	92.1	97.8	96.5	98.5	79.5%	91.4%
	<b>2015</b>	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	92.1%	90.2%
	<b>2016</b>	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	90.0%	94.2%
	<b>2017</b>	93.9												93.9%	93.9%
	<b>2012-2016 average</b>	90.7	91.5	94.3	95.1	93.3	92.7	92.7	93.9	93.7	97.1	93.5	93.9	90.7%	93.6%
<b>Milw - N</b>	<b>2012</b>	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	95.1%	93.8%
	<b>2013</b>	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	95.5%	93.3%
	<b>2014</b>	73.1	81.9	89.5	97.9	95.1	91.1	96.0	95.2	95.5	96.2	95.4	93.5	73.1%	91.7%
	<b>2015</b>	91.8	87.9	93.5	95.1	95.4	94.8	97.1	94.9	95.6	97.9	97.0	96.8	91.8%	94.9%
	<b>2016</b>	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	95.3%	94.6%
	<b>2017</b>	95.3												95.3%	95.3%
	<b>2012-2016 average</b>	90.1	90.6	93.4	96.2	94.4	92.3	93.2	93.9	94.7	95.9	95.7	93.4	90.1%	93.7%
<b>Milw - W</b>	<b>2012</b>	94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	94.4%	94.7%
	<b>2013</b>	96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	96.6%	94.2%
	<b>2014</b>	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	84.8%	93.5%
	<b>2015</b>	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8	97.8	99.0	98.2	96.5	93.6%	96.4%
	<b>2016</b>	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.0%	94.9%
	<b>2017</b>	96.9												96.9%	96.9%
	<b>2012-2016 average</b>	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%
<b>NCS</b>	<b>2012</b>	94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	94.8%	92.4%
	<b>2013</b>	95.0	87.5	93.7	90.9	94.0	92.7	93.6	95.0	92.5	93.1	90.0	87.4	95.0%	92.2%
	<b>2014</b>	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	76.0%	89.9%
	<b>2015</b>	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	93.9%	93.8%
	<b>2016</b>	92.3	95.5	91.7	93.3	94.4	96.3	95.0	96.4	96.1	95.5	95.2	92.6	92.3%	94.5%
	<b>2017</b>	92.6												92.6%	92.6%
	<b>2012-2016 average</b>	90.4	88.3	92.2	92.1	93.6	93.6	92.3	93.0	95.0	94.0	94.2	92.1	90.4%	92.6%

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

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN- JAN	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	94.3%	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	96.5%	95.3%
	2014	82.5	83.4	93.4	95.3	95.7	92.5	95.1	97.2	96.6	97.3	97.9	98.6	82.5%	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	97.4%	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	92.6%	96.1%
	2017	95.2												95.2%	95.2%
	<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	92.6%	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	94.2%	94.8%
	2013	94.7	97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	94.7%	95.6%
	2014	83.0	92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	83.0%	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	94.7%	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	95.6%	95.2%
	2017	96.2												96.2%	96.2%
	<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	92.4%	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	94.6%	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	98.3%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	91.2%	96.7%
	2015	98.6	95.6	98.3	97.1	97.7	98.2	97.0	95.9	98.2	97.0	97.6	98.4	98.6%	97.5%
	2016	96.9	98.6	97.1	98.3	98.3	98.2	97.0	96.0	98.1	99.1	98.0	98.1	96.9%	97.8%
	2017	95.6												95.6%	95.6%
	<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	95.9%	97.0%
UP - NW	2012	95.9	98.6	96.4	98.9	95.9	96.0	94.8	96.7	97.8	94.2	94.6	96.6	95.9%	96.3%
	2013	96.3	97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	96.3%	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	86.6%	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	96.0%	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	97.0%	96.3%
	2017	96.2												96.2%	96.2%
	<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	94.3%	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	93.1%	95.3%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	96.5%	94.5%
	2014	85.9	90.9	94.4	96.7	96.4	94.8	96.4	94.3	96.7	94.6	95.9	96.2	85.9%	94.4%
	2015	93.9	91.1	96.1	96.3	97.5	93.9	93.9	95.9	96.0	96.1	97.3	96.8	93.9%	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	97.8%	95.1%
	2017	95.0												95.0%	95.0%
	<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	93.4%	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	94.3%	95.8%
	2013	96.8	96.1	96.7	95.7	95.9	92.4	94.0	95.2	96.4	95.9	95.1	93.8	96.8%	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	85.6%	94.3%
	2015	94.9	92.5	97.0	97.2	97.2	95.8	95.3	96.3	96.8	97.0	96.8	97.5	94.9%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	95.8%	96.1%
	2017	95.6												95.6%	95.6%
	<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	93.4%	95.6%

Delays data for most recent month is final (02/14/17) 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  
January 2017**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
ELML	142 <b>71% OT</b>	Tue, Jan 10	6	KP1	6M 67TH ST WAITING ON ME342
		Thu, Jan 12	10	KP1	8M DUE TO LATE TURN OF THE ME141.
		Tue, Jan 17	6	CO	3M UP WAITING ON ME141 TO CLEAR, 3M 47TH ST. LOADING/UNLOADING ON GROUND
		Thu, Jan 19	9	CC	3M WAITING AT UP TO DEPART. 6M DUE TO TRACK WORK D406.
		Fri, Jan 20	11	CC	5" LATE DEPARTURE A/C WAITING ON 141, 6" CONSTRUCTION D404.
		Tue, Jan 24	6	CC	2M UP WAITING ON SIGNAL TO COME IN AFTER 141 TO CLEAR, 2M 67TH WAITING ON ME342. 2M 51ST RESTRICTING SIG @ 6.33 RUNNING AGAINST CURRENT
ELML	144 <b>76% OT</b>	Wed, Jan 04	9	CC	4M COPING TRACK PERMIT 4M PASSENGER'S ON THE WRONG TRACK
		Tue, Jan 10	6	I	6M PSGR LOADING MCCORMICK PL.
		Thu, Jan 12	8	CC	3M 47TH 3M MCCORMICK PL RUNNING AGAINST THE CURRENT, 2M 111TH 75TH FLAG STOPS
		Wed, Jan 18	6	CC	4M GRND LOADING 47TH-111TH DUE TO SCHED. TRACK WORK + 2M SPEED RESTR. FORM B207
		Thu, Jan 19	7	CC	3M 63RD WAITING ON PASSENGER, 2M 23RD & 18TH FLAG STOPS, 2M 2.83 TO 2.95 RESTRICTED SPEED THRU FORM B LIMITS
ELSC	332 <b>81% OT</b>	Fri, Jan 06	7	F1	7M DUE TO BAD EQUIPMENT ON 731 AND 405
		Wed, Jan 11	29	G	103/104 SW REVERSE AND TRACK CIRCUIT
		Thu, Jan 12	9	G	10M DUE TO SWT 127 FAILING CAUSING A DELAY GETTING INTO RAND
		Mon, Jan 16	49	G	46 MIN DUE TO TRCK CIRCUIT ON 104 SW
ELSC	336 <b>81% OT</b>	Thu, Jan 05	13	GW	20M LATE DEPARTING 93RD ST DUE TO SWITCH PROBLEMS AT 92ND ST
		Tue, Jan 10	15	KP	14M 51ST DUE TO PRESIDENTIAL MOTORCADE
		Fri, Jan 13	6	AS	5M FOLLOWING SS920 THAT HAD TO MAKE A STOP AT MCCORMICK PLACE.
		Mon, Jan 16	15	G	15M DUE TO TRCK CIRCUIT ON 104 SW
MN	2155 <b>81% OT</b>	Fri, Jan 06	0	XKP	ANNULLED PD EVACUATED PSGRS & CREW FROM TRAIN, ADVISED ENGINEER TO LOCK HIMSELF IN ENGINE, PD BOARDED TO SEARCH FOR SUSPECT, LAKE COOK RD
		Wed, Jan 11	13	ROI	17" LATE TURN FROM #2158
		Fri, Jan 20	7	D1	7" WAITING ON LATE #2160, RONDOUT
		Fri, Jan 27	16	J1	15" LATE TURN FROM #2158
MW	2241 <b>81% OT</b>	Wed, Jan 04	10	G1	10" TRAINS AHEAD BEING DELAYED BY SIGNAL PROBLEMS @ WOODDALE & ITASCA
		Tue, Jan 10	12	M1	12" LATE FOLLOWING #2237
		Wed, Jan 11	15	RO	15" TRAINS OUT OF ORDER
		Tue, Jan 31	8	GA	8" WAITING ON LINE UP, CUS
NCS	109 <b>76% OT</b>	Tue, Jan 10	18	D	3" GATE MALFUNCTION CANAL ST. ITEM 1; 3" 529-A FRONTAGE RD; 10" FOLLOWING CN FREIGHT FROM TRAFON-ANTIOCH
		Wed, Jan 11	6	KW	6" SLICK PLATFORM & RAIL
		Wed, Jan 18	6	D	8" S/B FREIGHT, RAM
		Wed, Jan 25	15	M1	18" PASSING #116 AT PROSPECT HEIGHTS AND ACCIDENT SCENE @ MP26.85
		Thu, Jan 26	10	A	5" FOLLOWING 2227, CUS TO B-12; 3" DEVAL' 2" WAIT ON S/B CN FREIGHT, RAM
NCS	111 <b>81% OT</b>	Mon, Jan 09	9	RF	3" WAITING ON I/B TRAINS, CUS; 3" DEVAL; 10" METRA GRAYSLAKE STOP SIGNAL RESTRICTED SPEED
		Tue, Jan 10	10	GF	3" CUS TRAIN AHEAD; 2" B-12 CROSS TRAFFIC; 3" MIN 529A'S PARK ST & FRONTAGE; 5" DEVAL CROSS TRAFFIC
		Wed, Jan 11	20	RA1	15" LATE ARRIVAL OF EQUIPMENT FROM WACY; 5" X-TRAFFIC, DEVAL
NCS	115 <b>81% OT</b>	Wed, Jan 25	0	M1	ANNULLED USED CREW FOR A 113/111 COMBO, CUS-ANTIOCH
		Tue, Jan 10	10	M1	14" FOLLOWING 2241
		Wed, Jan 11	7	RA1	6" LATE DEPARTING, CUS; 5" FOLLOWING TRAINS TO A-5
		Wed, Jan 25	32	M1	28" WAIT ON MEET W/116 ENGINEER SWAP, JCT 16; 4" MEET #120, RAM
NCS	117 <b>81% OT</b>	Tue, Jan 31	12	GA1	15" WAIT ON #113 TO PASS, JCT 16
		Tue, Jan 10	11	GW1	2" DEVAL CROSS TRAFFIC; 5" 529A BUTTERFIELD RD
		Thu, Jan 12	10	D	10" LOMOND WAITING ON S/B CN FREIGHT; 4" FOLLOWING TRAIN AHEAD TO B-12; 2" DEVAL CROSS TRAFFIC
		Fri, Jan 20	7	GF1	1" STOP SIGNAL, DEVAL; 6" WAIT ON #118 TO CLEAR, JCT 16
RI	413 <b>81% OT</b>	Wed, Jan 25	10	M1	9" FOLLOWING #115; 4" COPY 529A; 2" DEVAL
		Wed, Jan 04	46	M1	DEPARTED LSS 5M LATE ACCT MECHANICAL PROBLEMS ENG 179, HAD TO CUT OUT CAB SIGNALS. 47M DELAY BEHIND 409 STRUCK PEDESTRIAN
		Tue, Jan 10	7	I	3MINS LATE DEPARTING PASSENGER HANDLING 3
		Wed, Jan 11	7	G	5M 16TH ST FLAG 14TH AND 15TH ACCT PLANT PROBLEMS, ALSO 5M AT RICHARDS 411 SWITCH PROBLEMS AHEAD
RI	416 <b>81% OT</b>	Tue, Jan 17	22	K	10M GRESHAM 1710/1720 CAR ON TRACKS AT 107TH AND MAIN LINE, COPIED TRACK PERMIT TO TRAVEL UP SUB LINE 12M TRAVELING UP SUB
		Fri, Jan 06	13	DM1	13M LATE DEPARTING JUD DUE TO Q557 ON OUR MAIN TRKS & SW #67 FAILING REVERSE @ CP35.5/LATE TURN OF EQUIP AS RI401
		Thu, Jan 12	18	VE1	6M LATE DEPARTING JUD DUE TO MECH PROBLEMS W/RI414/9M ENROUTE HEAVY LOADING MAKING UNSCHEDULED STOPS DUE TO BREAK DOWN OF RI414/3M GRE
		Tue, Jan 24	10	C1	9M LATE DEPARTING JUD DUE TO LATE TURN OF EQUIP AS RI401 DUE TO BROKEN RAIL ON TK#2 @ MP20.32/1M CP81ST WAITING ON RI616 TO CLEAR
		Mon, Jan 30	7	GX1	7M B.I. DUE TO BROKEN GATE @ GROVE ST FOLLOWING RI302

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

Line	Train	Date	Minutes Delay		Delay Explanation	
			Late	Code		
RI	417	Wed, Jan 04	39	M1	37 M DELAY. STUCK BEHIND 409 STRUCK PASSENGER	
		<b>81% OT</b>	Tue, Jan 10	9	GW1	6M TRAINS AHEAD AT GATE MALFUNCTION. 3 M GATE MALFUNCTIONG
		Tue, Jan 17	21	K	7M FOLLOWING RI415 AT GRESHAM, 7M WALKING SPEED AT 107TH AND ITEM 1	
		Mon, Jan 23	9	E	9M RESETTING THE GROUND RELAY AFTER BEING TRIPPED 3 TIMES PUTTING THE TRAIN IN PENALTY.	
UPN	308	Tue, Jan 03	9	KW	9" INCLEMENT WEATHER(FOG) & SLOW LOADING	
		<b>81% OT</b>	Wed, Jan 04	10	FW	10" STICKING LOADING DOORS ON CAR 7758, EN ROUTE
		Fri, Jan 20	30	R	30" STOPPED @ WAUKEGAN METX 151 TROUBLE BUILDING UP IT'S AIR, MIC BOARDED, SOWNLOAD SHOWED BOTH ENDS WERE CUT IN AT THE SAME TIME	
		Fri, Jan 27	16	E1	16" WRONG MAIN, RP-CPT ACCT #302 BROKE DOWN @ RAVENSWOOD	
UPN	309	Tue, Jan 03	42	E1	42" FOLLOWING #307	
		<b>81% OT</b>	Fri, Jan 06	12	GW	12" #3 SWITCH FAILED TO LINE IN NORMAL POSITION, WK
		Tue, Jan 10	7	R1	7" FOLLOWING #307, DEERING BRIDGE TO RP	
		Fri, Jan 27	9	E1	9" HELD @ CY TOWER DUE TO #302 BROKE DOWN @ RAVENSWOOD	
UPN	316	Tue, Jan 03	39	E1	39" LATE TURN FROM #311	
		<b>81% OT</b>	Mon, Jan 09	11	JM	11" MEDICAL EMERGENCY MALE PASSED OUT ON FLOOR 2ND CAR FROM ENGINE COACH CAR, MEDICAL RESPONSE ARRIVED/REMOVED PASSENGER, RAVENSWOOD
		Fri, Jan 20	10	R1	10" LATE DEPARTING WAIT FOR #314 TO CLEAR, WAUKEGAN; FOLLOWING #314, EN ROUTE; HEAVY LAODING, EN ROUTE	
		Fri, Jan 27	47	E1	47" BEHIND #322, WK; STOPPED @ CENTRAL ST TRAINS AHEAD DUE TO #302 MECHANICAL ISSUE @ RAVENSWOOD	
UPN	320	Tue, Jan 03	11	E1	11" FOLLOWING #312, WK-CPT	
		<b>81% OT</b>	Mon, Jan 09	8	JM	8" STOPPED @ ROGERS PARK DUE TO #316 MEDICAL EMERGENCY
		Fri, Jan 20	11	R1	11" FOLLOWING #318, EN ROUTE	
		Fri, Jan 27	27	E1	27" #302 MECHANICAL ISSUE @ RAVENSWOOD	
UPNW	615	Tue, Jan 03	7	CC	7" SINGLE TRACK(WELDING), MP41.9-CPT031	
		<b>71% OT</b>	Wed, Jan 11	8	CC	8" FORM B SINGLE TRACKING CARY; PINGREE RD; CRYSTAL LAKE
		Tue, Jan 17	10	CC	10" SINGLE TRACK MP51.5-45.6, REPLACING RAIL @ MP51.1 TK1.	
		Mon, Jan 23	8	KP	8" SINGLE TRACK(BRUSH CUTTING), MP38.1-41.9; STOPPED JEFFERSON PARK SUICIDAL MALE SUBJECT @ MP11.09	
		Wed, Jan 25	10	C	10" STOP RED & COPY PERMISSION FROM DISPATCHER TO PROCEED @ MP38.1; SINGLE TRACK 38.1-41.9; STOP & WAIT FOR PERMISSION ON FORM B#49204	
		Thu, Jan 26	0	M1	ANNULLED #610 & 636 INCIDENTS @ MP10.03 & 42.92	
UPNW	625	Wed, Jan 04	9	G	9" FLAGGED DEVAL ACCT TRACK CIRCUIT ON MILWAUKEE TK2 AFFECTING ALL THREE HARVARD TRACKS	
		<b>81% OT</b>	Tue, Jan 10	9	NW1	9" XH, MP16.64 & 10.31 POWER OUTAGE AFFECTING CITY TRAFFIC SIGNALS; FOLLOWING TRAINS AHEAD
		Thu, Jan 19	11	UF	11" B/O ADA LIFT, WOULD NOT LIFT UP ON CAR 8416; XH, MP24.95	
		Thu, Jan 26	31	M1	31" MADE ALL STOPS CPT-HARVARD TO ACCOMMODATE PASSENGERS DUE TO #623 ANULLMENT	
UPW	10	Tue, Jan 17	8	R	5" LEFT ELBURN LATE DUE TO FREIGHT CONDUCTOR UINSURE OF MOVE; RAN RESTRICTED SPEED DUE TO MCPCH IN EMERGENCY ON TK1 @ LA FOX	
		<b>76% OT</b>	Fri, Jan 20	26	G	26" SWITCH & SIGNAL FAILURE, CREW HAD TO WALK THE LINE UP, TURNER
		Fri, Jan 27	10	JM	10" PASSENGER STATED HE WAS HEARING VOICES & REQUESTED AN AMBULANCE, PD ARRIVED AND REMOVED HIM FROM TRAIN, BERKELEY	
		Mon, Jan 30	7	I	7" SLOW LOADING LOMBARD TO ELMHURST;STICKY SOUTH SIDE LOADING DOOR ON CAR 7882	
		Tue, Jan 31	7	D	7" IG3AH GOING INTO ROCKWELL, USED SHORT X/O TO GO AROUND FREIGHT, KEDZIE	
UPW	44	Tue, Jan 03	11	GF	10" SIGNAL ISSUES @ CN @ WEST CHICAGO, E/B SIGNAL WAS STICKING;4 ADA'S	
		<b>81% OT</b>	Wed, Jan 04	17	C	17" HELD @ PECK DUE TO BROKEN RAIL ON TK1 @ KRESS; REROUTED; 2 ADA'S
		Tue, Jan 10	10	CC	10" TRAIN CONTROL(RESTRICTED SPEED), MP6.6-WESTERN; TK2, MELROSE-KEDZIE; TK1, KEDZIE-CPT ACCT SURFACING	
		Mon, Jan 16	20	KD	20" AIR ISSUES, MAIN RESERVOIR HOSE BETWEEN ENGINE & HEAD CAR DISCONNECTED, BERKELEY	
UPW	48	Wed, Jan 04	9	S	9" FTX, MP.36.09; SLOW LOADING, VILLA PARK	
		<b>81% OT</b>	Thu, Jan 12	7	F	DEPARTED ELBURN 2" DUE TO HAVING TO CUT THE ATC ON CAB CAR 8455 OPERATED ON BLOCKS ELBURN TO CPT
		Wed, Jan 18	7	F	7" OPERATE ON ABSOLUTE TRAIN BLOCKS FROM ELBURN-KEDZIE ACCT B/O TRAIN CONTROL ON CAR 8455	
		Tue, Jan 31	17	KP1	5" LATE TURN FROM #29; STOPPED ACCT HEP ISSUES, GLEN ELLYN	

Data is final (02/14/17) 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**

**January 2017**

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	55	65	23	34	4	30	23	7	27	16	44	11	20	359	48%
Semi-controllable	1	0	0	0	3	8	7	15	3	7	2	1	24	71	9%
Uncontrollable	33	31	9	26	2	32	14	12	58	2	28	47	28	322	43%
<b>TOTAL TRAINS DELAYED</b>	<b>89</b>	<b>96</b>	<b>32</b>	<b>60</b>	<b>9</b>	<b>70</b>	<b>44</b>	<b>34</b>	<b>88</b>	<b>25</b>	<b>74</b>	<b>59</b>	<b>72</b>	<b>752</b>	<b>100%</b>

**January - 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	60.2	34.6	16.2	12.0	2.6	53.2	28.6	16.0	42.0	8.8	22.6	25.6	28.8	351.2	31%
Semi-controllable	43.2	0.0	0.0	0.0	5.8	21.2	18.2	11.8	9.0	26.8	0.4	3.6	16.6	156.6	14%
Uncontrollable	105.6	75.4	18.4	20.6	3.4	72.6	58.4	16.4	71.4	15.0	46.4	59.8	49.4	612.8	55%
<b>TOTAL TRAINS DELAYED</b>	<b>209.0</b>	<b>110.0</b>	<b>34.6</b>	<b>32.6</b>	<b>11.8</b>	<b>147.0</b>	<b>105.2</b>	<b>44.2</b>	<b>122.4</b>	<b>50.6</b>	<b>69.4</b>	<b>89.0</b>	<b>94.8</b>	<b>1,120.6</b>	<b>100%</b>

**January 2017 Divergence From January 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	-5.2	30.4	6.8	22.0	1.4	-23.2	-5.6	-9.0	-15.0	7.2	21.4	-14.6	-8.8	7.8	-2%
Semi-controllable	-42.2	0.0	0.0	0.0	-2.8	-13.2	-11.2	3.2	-6.0	-19.8	1.6	-2.6	7.4	-85.6	23%
Uncontrollable	-72.6	-44.4	-9.4	5.4	-1.4	-40.6	-44.4	-4.4	-13.4	-13.0	-18.4	-12.8	-21.4	-290.8	79%
<b>TOTAL TRAINS DELAYED</b>	<b>-120.0</b>	<b>-14.0</b>	<b>-2.6</b>	<b>27.4</b>	<b>-2.8</b>	<b>-77.0</b>	<b>-61.2</b>	<b>-10.2</b>	<b>-34.4</b>	<b>-25.6</b>	<b>4.6</b>	<b>-30.0</b>	<b>-22.8</b>	<b>-368.6</b>	<b>100%</b>

**January-January 2017**

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	55	65	23	34	4	30	23	7	27	16	44	11	20	359	48%
Semi-controllable	1	0	0	0	3	8	7	15	3	7	2	1	24	71	9%
Uncontrollable	33	31	9	26	2	32	14	12	58	2	28	47	28	322	43%
<b>TOTAL TRAINS DELAYED</b>	<b>89</b>	<b>96</b>	<b>32</b>	<b>60</b>	<b>9</b>	<b>70</b>	<b>44</b>	<b>34</b>	<b>88</b>	<b>25</b>	<b>74</b>	<b>59</b>	<b>72</b>	<b>752</b>	<b>100%</b>

Data for current month is final (02/14/17) version from TOPS.

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02/15/2017

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

WEEKDAY	3	4	5	6	9	10	11	12	13	16	17	18	19	20	23	24	25	26	27	30	31	TOTAL
	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	
<b>BNSF</b>	3	1	12	5	3	12	4	2	2	5	1	0	3	18	0	0	2	2	7	0	0	82
<b>Elec -ML</b>	2	2	0	6	0	8	9	21	3	10	1	4	5	5	0	1	4	0	0	10	0	91
<b>-BI</b>	1	0	0	2	0	2	2	5	4	6	4	3	2	0	0	0	1	0	0	0	0	32
<b>-SC</b>	1	0	8	6	1	8	9	2	2	8	1	2	0	0	0	0	6	0	0	1	0	55
<b>Heritage</b>	1	0	0	0	1	2	0	1	0	1	0	0	0	0	1	0	0	0	1	1	0	9
<b>Milw -N</b>	0	1	0	7	1	14	17	1	2	0	2	0	1	3	0	0	1	0	2	1	3	56
<b>-W</b>	1	6	0	7	0	5	7	2	0	3	2	0	0	0	0	0	4	1	0	0	3	41
<b>NCS</b>	0	0	0	0	2	10	3	2	0	0	0	2	0	2	0	0	6	1	1	0	5	34
<b>RI</b>	0	24	3	5	3	13	4	6	0	0	9	1	3	1	1	5	0	1	1	4	1	85
<b>SWS</b>	1	0	1	3	1	0	0	0	3	11	0	0	1	0	0	0	0	1	1	0	1	24
<b>UP -N</b>	14	5	1	4	6	2	3	1	0	0	0	0	0	5	1	0	0	2	20	0	1	65
<b>-NW</b>	1	1	0	0	0	7	1	0	0	0	2	0	2	2	3	0	2	32	0	0	0	53
<b>-W</b>	<u>2</u>	<u>10</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>4</u>	<u>5</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>1</u>	<u>1</u>	<u>7</u>	<u>7</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>4</u>	<u>10</u>	<u>4</u>	<u>65</u>
<b>SYSTEM</b>	27	50	25	45	19	87	64	44	18	48	23	13	24	43	7	6	26	41	37	27	18	692

  

SATURDAY	7	14	21	28	TOTAL	SUNDAY/HOLIDAY	1	2	8	15	22	29	TOTAL
<b>BNSF</b>	0	1	3	0	4	<b>BNSF</b>	0	2	0	1	0	0	3
<b>Elec -ML</b>	1	2	2	0	5	<b>Elec -ML</b>	0	0	0	0	0	0	0
<b>-BI</b>	0	0	0	0	0	<b>-BI</b>	-	-	-	-	-	-	0
<b>-SC</b>	0	1	2	0	3	<b>-SC</b>	0	1	0	0	0	1	2
<b>Heritage</b>	-	-	-	-	-	<b>Heritage</b>	-	-	-	-	-	-	0
<b>Milw -N</b>	5	1	3	0	9	<b>Milw -N</b>	2	0	0	2	0	1	5
<b>-W</b>	0	0	2	1	3	<b>-W</b>	0	0	0	0	0	0	0
<b>NCS</b>	-	-	-	-	-	<b>NCS</b>	-	-	-	-	-	-	0
<b>RI</b>	0	1	2	0	3	<b>RI</b>	0	0	0	0	0	0	0
<b>SWS</b>	0	0	1	0	1	<b>SWS</b>	-	-	-	-	-	-	0
<b>UP -N</b>	0	0	8	1	9	<b>UP -N</b>	0	0	0	0	0	0	0
<b>-NW</b>	0	0	0	0	0	<b>-NW</b>	1	0	1	4	0	0	6
<b>-W</b>	<u>0</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>4</u>	<b>-W</b>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>3</u>
<b>SYSTEM</b>	6	7	26	2	41	<b>SYSTEM</b>	4	3	1	8	0	3	19

Data is final (02/14/17) version from TOPS.

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

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	3	0	0	0	2	6	5	6	3	3	2	1	22	53
Freight Interference - Peak	0	0	0	0	2	0	1	4	0	0	1	0	12	20
Primary	0	0	0	0	1	0	1	4	0	0	1	0	4	11
Secondary	0	0	0	0	1	0	0	0	0	0	0	0	8	9
Freight Interference - Off-Peak	3	0	0	0	0	6	4	2	3	3	1	1	10	33
Primary	3	0	0	0	0	5	2	2	2	2	1	1	8	26
Secondary	0	0	0	0	0	1	2	0	1	1	0	0	2	7
Signal/Switch Failure - TOTAL	4	29	11	17	1	5	9	9	8	8	0	3	14	118
Signal/Switch Failure - Metra/PSA	4	29	11	17	0	3	7	0	8	4	0	3	12	98
Primary	4	18	9	15	0	3	2	0	6	3	0	3	6	69
Secondary	0	11	2	2	0	0	5	0	2	1	0	0	6	29
Signal/Switch Failure - Foreign	0	0	0	0	1	2	2	9	0	4	0	0	2	20
Primary	0	0	0	0	1	1	2	3	0	2	0	0	1	10
Secondary	0	0	0	0	0	1	0	6	0	2	0	0	1	10
Mechanical Failure - TOTAL	19	1	1	2	2	6	4	1	8	0	36	1	3	84
Mechanical Failure - Metra/PSA	19	1	1	2	1	6	4	1	8	0	36	1	3	83
Non-Locomotive Equipment Failure - Metra/PSA	2	1	1	2	1	2	0	0	0	0	0	0	3	12
Primary	1	0	0	0	1	1	0	0	0	0	0	0	3	6
Secondary	1	1	1	2	0	1	0	0	0	0	0	0	0	6
Locomotive Failure - Metra/PSA	17	0	0	0	0	4	4	1	8	0	36	1	0	71
Primary	5	0	0	0	0	2	2	1	3	0	4	1	0	18
Secondary	12	0	0	0	0	2	2	0	5	0	32	0	0	53
Mechanical Failure - Foreign	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Passenger Train Interference - TOTAL	4	0	3	2	0	2	0	3	0	1	0	0	1	16
Passenger Train Interference - Metra/PSA	0	0	3	1	0	1	0	3	0	0	0	0	1	9
Passenger Train Interference - Foreign	4	0	0	1	0	1	0	0	0	1	0	0	0	7
Accident - TOTAL	0	0	0	0	0	0	3	7	25	0	2	36	1	74
Accident - Metra/PSA	0	0	0	0	0	0	3	7	20	0	2	36	1	69
Accident - Foreign	0	0	0	0	0	0	0	0	5	0	0	0	0	5
Track Work - TOTAL	11	29	4	9	0	0	1	0	7	9	0	6	2	78
Track Work - Metra/PSA	11	29	4	9	0	0	1	0	7	9	0	6	2	78
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	15	3	3	2	3	17	11	3	0	2	7	0	2	68
Human Error - Metra/PSA	13	3	3	2	0	16	11	0	0	1	7	0	2	58
Human Error - Foreign	2	0	0	0	3	1	0	3	0	1	0	0	0	10
Sick, Injured, Unruly Passenger - TOTAL	1	3	1	2	0	6	1	1	1	0	4	0	7	27
Sick, Injured, Unruly Passenger - Metra/PSA	1	3	1	2	0	6	1	1	1	0	4	0	7	27
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	11	14	4	11	1	17	6	4	14	0	9	5	1	97
Weather - Metra/PSA	11	14	4	11	1	16	6	4	14	0	9	5	1	96
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	1	4	1	4	0	2	1	0	4	0	8	1	7	33
Lift Deployment - TOTAL	1	0	0	0	0	3	3	0	2	0	2	2	4	17
Obstruction/Debris - TOTAL	19	9	3	9	0	4	0	0	9	2	1	3	7	66
Catenary Failure - TOTAL	0	3	1	2	0	0	0	0	0	0	0	0	0	6
Other - TOTAL	0	1	0	0	0	2	0	0	7	0	3	1	1	15
<b>TOTAL TRAINS DELAYED</b>	<b>89</b>	<b>96</b>	<b>32</b>	<b>60</b>	<b>9</b>	<b>70</b>	<b>44</b>	<b>34</b>	<b>88</b>	<b>25</b>	<b>74</b>	<b>59</b>	<b>72</b>	<b>752</b>
Total Metra/PSA Delays	80	96	32	59	2	59	37	16	80	16	72	58	48	655
Total Foreign Carrier Delays	9	0	0	1	7	11	7	18	8	9	2	1	24	97

Data for current month is final (02/14/17) 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**  
**January - Average Over Previous Five Years: 2012-2016**

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	24.8	0.0	0.0	0.0	3.4	14.6	14.4	9.2	9.0	13.8	0.4	3.6	16.8	110.0
Freight Interference - Peak	14.4	0.0	0.0	0.0	3.4	3.4	4.6	3.0	3.0	4.8	0.0	0.6	3.8	41.0
<i>Primary</i>	12.0	0.0	0.0	0.0	3.4	2.4	3.2	2.8	2.8	3.4	0.0	0.6	2.4	33.0
<i>Secondary</i>	2.4	0.0	0.0	0.0	0.0	1.0	1.4	0.2	0.2	1.4	0.0	0.0	1.4	8.0
Freight Interference - Off-Peak	10.4	0.0	0.0	0.0	0.0	11.2	9.8	6.2	6.0	9.0	0.4	3.0	13.0	69.0
<i>Primary</i>	7.6	0.0	0.0	0.0	0.0	6.8	6.4	5.4	4.6	6.8	0.4	2.0	10.8	50.8
<i>Secondary</i>	2.8	0.0	0.0	0.0	0.0	4.4	3.4	0.8	1.4	2.2	0.0	1.0	2.2	18.2
Signal/Switch Failure - TOTAL	36.0	9.2	3.8	4.2	3.2	25.4	16.6	7.2	13.2	14.6	0.4	3.4	9.4	146.6
Signal/Switch Failure - Metra/PSA	13.8	9.2	3.8	4.2	0.8	18.6	12.8	4.6	13.0	1.0	0.4	3.4	9.4	95.0
<i>Primary</i>	6.6	6.4	2.8	3.4	0.6	9.6	6.0	2.2	9.4	1.0	0.4	2.6	4.2	55.2
<i>Secondary</i>	7.2	2.8	1.0	0.8	0.2	9.0	6.8	2.4	3.6	0.0	0.0	0.8	5.2	39.8
Signal/Switch Failure - Foreign	22.2	0.0	0.0	0.0	2.4	6.8	3.8	2.6	0.2	13.6	0.0	0.0	0.0	51.6
<i>Primary</i>	19.4	0.0	0.0	0.0	2.2	6.0	3.0	1.8	0.0	8.8	0.0	0.0	0.0	41.2
<i>Secondary</i>	2.8	0.0	0.0	0.0	0.2	0.8	0.8	0.8	0.2	4.8	0.0	0.0	0.0	10.4
Mechanical Failure - TOTAL	10.8	3.4	1.0	1.8	1.2	18.6	9.8	4.2	15.8	3.4	9.0	12.2	10.2	101.4
Mechanical Failure - Metra/PSA	10.6	3.4	1.0	1.8	1.2	16.4	9.8	4.2	15.8	3.4	9.0	12.2	10.2	99.0
Non-Locomotive Equipment Failure - Metra/PSA	4.2	3.4	1.0	1.8	0.2	4.2	4.4	0.2	1.8	1.4	5.6	2.8	4.8	35.8
<i>Primary</i>	2.2	1.4	0.4	1.0	0.2	1.0	1.4	0.0	1.0	0.8	1.4	0.8	2.4	14.0
<i>Secondary</i>	2.0	2.0	0.6	0.8	0.0	3.2	3.0	0.2	0.8	0.6	4.2	2.0	2.4	21.8
Locomotive Failure - Metra/PSA	6.4	0.0	0.0	0.0	1.0	12.2	5.4	4.0	14.0	2.0	3.4	9.4	5.4	63.2
<i>Primary</i>	3.0	0.0	0.0	0.0	0.8	2.2	2.2	0.8	4.2	0.6	1.2	3.0	1.8	19.8
<i>Secondary</i>	3.4	0.0	0.0	0.0	0.2	10.0	3.2	3.2	9.8	1.4	2.2	6.4	3.6	43.4
Mechanical Failure - Foreign	0.2	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Passenger Train Interference - TOTAL	1.8	2.2	0.8	0.8	0.4	6.8	1.8	1.6	3.4	0.2	0.2	0.8	1.6	22.4
Passenger Train Interference - Metra/PSA	0.2	1.0	0.0	0.6	0.0	5.0	1.6	1.6	2.8	0.2	0.2	0.8	1.6	15.6
Passenger Train Interference - Foreign	1.6	1.2	0.8	0.2	0.4	1.8	0.2	0.0	0.6	0.0	0.0	0.0	0.0	6.8
Accident - TOTAL	7.0	0.0	0.0	0.0	0.4	15.2	5.0	0.6	6.0	1.2	6.0	9.2	1.0	51.6
Accident - Metra/PSA	1.4	0.0	0.0	0.0	0.4	13.4	5.0	0.4	5.8	1.2	6.0	9.2	1.0	43.8
Accident - Foreign	5.6	0.0	0.0	0.0	0.0	1.8	0.0	0.2	0.2	0.0	0.0	0.0	0.0	7.8
Track Work - TOTAL	12.0	12.8	7.8	2.4	0.0	6.4	1.8	3.4	2.4	0.2	2.4	2.6	2.2	56.4
Track Work - Metra/PSA	12.0	12.8	7.8	2.4	0.0	6.4	1.8	3.4	2.4	0.0	2.4	2.6	2.2	56.2
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Human Error - TOTAL	16.2	3.2	2.2	1.6	0.2	3.6	3.0	1.8	6.6	2.8	9.0	4.8	4.6	59.6
Human Error - Metra/PSA	12.2	1.2	2.0	1.6	0.0	2.4	1.4	0.8	6.6	0.2	8.0	4.2	3.4	44.0
Human Error - Foreign	4.0	2.0	0.2	0.0	0.2	1.2	1.6	1.0	0.0	2.6	1.0	0.6	1.2	15.6
Sick, Injured, Unruly Passenger - TOTAL	2.2	7.4	1.4	2.0	0.2	1.2	0.6	0.2	1.6	0.0	2.2	4.2	2.2	25.4
Sick, Injured, Unruly Passenger - Metra/PSA	2.2	7.4	1.4	2.0	0.2	1.2	0.6	0.2	1.6	0.0	2.2	4.2	2.2	25.4
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	84.4	60.8	14.8	15.6	2.6	40.0	40.8	13.4	53.0	11.2	32.8	35.0	35.0	439.4
Weather - Metra/PSA	84.0	60.8	14.8	15.6	2.6	40.0	40.2	13.4	53.0	11.0	32.8	35.0	35.0	438.2
Weather - Foreign	0.4	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.2	0.0	0.0	0.0	1.2
Passenger Loading - TOTAL	2.6	3.0	1.6	0.4	0.0	5.4	2.2	0.4	4.8	0.0	3.2	1.4	3.2	28.2
Lift Deployment - TOTAL	3.6	0.2	0.0	0.0	0.0	3.6	2.4	0.0	2.6	0.0	0.6	1.8	3.8	18.6
Obstruction/Debris - TOTAL	5.2	1.8	0.6	2.6	0.2	4.0	4.4	1.0	2.2	2.2	0.8	8.0	3.6	36.6
Catenary Failure - TOTAL	0.0	2.6	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Other - TOTAL	2.4	3.4	0.0	1.0	0.0	2.2	2.4	1.2	1.8	1.0	2.4	2.0	1.2	21.0
<b>TOTAL TRAINS DELAYED</b>	<b>209.0</b>	<b>110.0</b>	<b>34.6</b>	<b>32.6</b>	<b>11.8</b>	<b>147.0</b>	<b>105.2</b>	<b>44.2</b>	<b>122.4</b>	<b>50.6</b>	<b>69.4</b>	<b>89.0</b>	<b>94.8</b>	<b>1,120.6</b>
Total Metra/PSA Delays	150.2	106.8	33.6	32.4	5.4	118.6	84.6	31.2	112.4	20.2	68.0	84.8	76.8	925.0
Total Foreign Carrier Delays	58.8	3.2	1.0	0.2	6.4	28.4	20.6	13.0	10.0	30.4	1.4	4.2	18.0	195.6

Data for latest month is final (02/16/16) 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**  
**January 2017 Divergence From January 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	-21.8	0.0	0.0	0.0	-1.4	-8.6	-9.4	-3.2	-6.0	-10.8	1.6	-2.6	5.2	-57.0
Freight Interference - Peak	-14.4	0.0	0.0	0.0	-1.4	-3.4	-3.6	1.0	-3.0	-4.8	1.0	-0.6	8.2	-21.0
<i>Primary</i>	-12.0	0.0	0.0	0.0	-2.4	-2.4	-2.2	1.2	-2.8	-3.4	1.0	-0.6	1.6	-22.0
<i>Secondary</i>	-2.4	0.0	0.0	0.0	1.0	-1.0	-1.4	-0.2	-0.2	-1.4	0.0	0.0	6.6	1.0
Freight Interference - Off-Peak	-7.4	0.0	0.0	0.0	0.0	-5.2	-5.8	-4.2	-3.0	-6.0	0.6	-2.0	-3.0	-36.0
<i>Primary</i>	-4.6	0.0	0.0	0.0	0.0	-1.8	-4.4	-3.4	-2.6	-4.8	0.6	-1.0	-2.8	-24.8
<i>Secondary</i>	-2.8	0.0	0.0	0.0	0.0	-3.4	-1.4	-0.8	-0.4	-1.2	0.0	-1.0	-0.2	-11.2
Signal/Switch Failure - TOTAL	-32.0	19.8	7.2	12.8	-2.2	-20.4	-7.6	1.8	-5.2	-6.6	-0.4	-0.4	4.6	-28.6
Signal/Switch Failure - Metra/PSA	-9.8	19.8	7.2	12.8	-0.8	-15.6	-5.8	-4.6	-5.0	3.0	-0.4	-0.4	2.6	3.0
<i>Primary</i>	-2.6	11.6	6.2	11.6	-0.6	-6.6	-4.0	-2.2	-3.4	2.0	-0.4	0.4	1.8	13.8
<i>Secondary</i>	-7.2	8.2	1.0	1.2	-0.2	-9.0	-1.8	-2.4	-1.6	1.0	0.0	-0.8	0.8	-10.8
Signal/Switch Failure - Foreign	-22.2	0.0	0.0	0.0	-1.4	-4.8	-1.8	6.4	-0.2	-9.6	0.0	0.0	2.0	-31.6
<i>Primary</i>	-19.4	0.0	0.0	0.0	-1.2	-5.0	-1.0	1.2	0.0	-6.8	0.0	0.0	1.0	-31.2
<i>Secondary</i>	-2.8	0.0	0.0	0.0	-0.2	0.2	-0.8	5.2	-0.2	-2.8	0.0	0.0	1.0	-0.4
Mechanical Failure - TOTAL	8.2	-2.4	0.0	0.2	0.8	-12.6	-5.8	-3.2	-7.8	-3.4	27.0	-11.2	-7.2	-17.4
Mechanical Failure - Metra/PSA	8.4	-2.4	0.0	0.2	-0.2	-10.4	-5.8	-3.2	-7.8	-3.4	27.0	-11.2	-7.2	-16.0
Non-Locomotive Equipment Failure - Metra/PSA	-2.2	-2.4	0.0	0.2	0.8	-2.2	-4.4	-0.2	-1.8	-1.4	-5.6	-2.8	-1.8	-23.8
<i>Primary</i>	-1.2	-1.4	-0.4	-1.0	0.8	0.0	-1.4	0.0	-1.0	-0.8	-1.4	-0.8	0.6	-8.0
<i>Secondary</i>	-1.0	-1.0	0.4	1.2	0.0	-2.2	-3.0	-0.2	-0.8	-0.6	-4.2	-2.0	-2.4	-15.8
Locomotive Failure - Metra/PSA	10.6	0.0	0.0	0.0	-1.0	-8.2	-1.4	-3.0	-6.0	-2.0	32.6	-8.4	-5.4	7.8
<i>Primary</i>	2.0	0.0	0.0	0.0	-0.8	-0.2	-0.2	0.2	-1.2	-0.6	2.8	-2.0	-1.8	-1.8
<i>Secondary</i>	8.6	0.0	0.0	0.0	-0.2	-8.0	-1.2	-3.2	-4.8	-1.4	29.8	-6.4	-3.6	9.6
Mechanical Failure - Foreign	-0.2	0.0	0.0	0.0	1.0	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4
Passenger Train Interference - TOTAL	2.2	-2.2	2.2	1.2	-0.4	-4.8	-1.8	1.4	-3.4	0.8	-0.2	-0.8	-0.6	-6.4
Passenger Train Interference - Metra/PSA	-0.2	-1.0	3.0	0.4	0.0	-4.0	-1.6	1.4	-2.8	-0.2	-0.2	-0.8	-0.6	-6.6
Passenger Train Interference - Foreign	2.4	-1.2	-0.8	0.8	-0.4	-0.8	-0.2	0.0	-0.6	1.0	0.0	0.0	0.0	0.2
Accident - TOTAL	-7.0	0.0	0.0	0.0	-0.4	-15.2	-2.0	6.4	19.0	-1.2	-4.0	26.8	0.0	22.4
Accident - Metra/PSA	-1.4	0.0	0.0	0.0	-0.4	-13.4	-2.0	6.6	14.2	-1.2	-4.0	26.8	0.0	25.2
Accident - Foreign	-5.6	0.0	0.0	0.0	0.0	-1.8	0.0	-0.2	4.8	0.0	0.0	0.0	0.0	-2.8
Track Work - TOTAL	-1.0	16.2	-3.8	6.6	0.0	-6.4	-0.8	-3.4	4.6	8.8	-2.4	3.4	-0.2	21.6
Track Work - Metra/PSA	-1.0	16.2	-3.8	6.6	0.0	-6.4	-0.8	-3.4	4.6	9.0	-2.4	3.4	-0.2	21.8
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-0.2
Human Error - TOTAL	-1.2	-0.2	0.8	0.4	2.8	13.4	8.0	1.2	-6.6	-0.8	-2.0	-4.8	-2.6	8.4
Human Error - Metra/PSA	0.8	1.8	1.0	0.4	0.0	13.6	9.6	-0.8	-6.6	0.8	-1.0	-4.2	-1.4	14.0
Human Error - Foreign	-2.0	-2.0	-0.2	0.0	2.8	-0.2	-1.6	2.0	0.0	-1.6	-1.0	-0.6	-1.2	-5.6
Sick, Injured, Unruly Passenger - TOTAL	-1.2	-4.4	-0.4	0.0	-0.2	4.8	0.4	0.8	-0.6	0.0	1.8	-4.2	4.8	1.6
Sick, Injured, Unruly Passenger - Metra/PSA	-1.2	-4.4	-0.4	0.0	-0.2	4.8	0.4	0.8	-0.6	0.0	1.8	-4.2	4.8	1.6
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	-73.4	-46.8	-10.8	-4.6	-1.6	-23.0	-34.8	-9.4	-39.0	-11.2	-23.8	-30.0	-34.0	-342.4
Weather - Metra/PSA	-73.0	-46.8	-10.8	-4.6	-1.6	-24.0	-34.2	-9.4	-39.0	-11.0	-23.8	-30.0	-34.0	-342.2
Weather - Foreign	-0.4	0.0	0.0	0.0	0.0	1.0	-0.6	0.0	0.0	-0.2	0.0	0.0	0.0	-0.2
Passenger Loading - TOTAL	-1.6	1.0	-0.6	3.6	0.0	-3.4	-1.2	-0.4	-0.8	0.0	4.8	-0.4	3.8	4.8
Lift Deployment - TOTAL	-2.6	-0.2	0.0	0.0	0.0	-0.6	0.6	0.0	-0.6	0.0	1.4	0.2	0.2	-1.6
Obstruction/Debris - TOTAL	13.8	7.2	2.4	6.4	-0.2	0.0	-4.4	-1.0	6.8	-0.2	0.2	-5.0	3.4	29.4
Catenary Failure - TOTAL	0.0	0.4	0.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Other - TOTAL	-2.4	-2.4	0.0	-1.0	0.0	-0.2	-2.4	-1.2	5.2	-1.0	0.6	-1.0	-0.2	-6.0
<b>TOTAL TRAINS DELAYED</b>	<b>-120.0</b>	<b>-14.0</b>	<b>-2.6</b>	<b>27.4</b>	<b>-2.8</b>	<b>-77.0</b>	<b>-61.2</b>	<b>-10.2</b>	<b>-34.4</b>	<b>-25.6</b>	<b>4.6</b>	<b>-30.0</b>	<b>-22.8</b>	<b>-368.6</b>
Total Metra/PSA Delays	-70.2	-10.8	-1.6	26.6	-3.4	-59.6	-47.6	-15.2	-32.4	-4.2	4.0	-26.8	-28.8	-270.0
Total Foreign Carrier Delays	-49.8	-3.2	-1.0	0.8	0.6	-17.4	-13.6	5.0	-2.0	-21.4	0.6	-3.2	6.0	-98.6

Data for current month is final (02/14/17) 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 - January 2017**

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	3	0	0	0	2	6	5	6	3	3	2	1	22	53
Freight Interference - Peak	0	0	0	0	2	0	1	4	0	0	1	0	12	20
Primary	0	0	0	0	1	0	1	4	0	0	1	0	4	11
Secondary	0	0	0	0	1	0	0	0	0	0	0	0	8	9
Freight Interference - Off-Peak	3	0	0	0	0	6	4	2	3	3	1	1	10	33
Primary	3	0	0	0	0	5	2	2	2	2	1	1	8	26
Secondary	0	0	0	0	0	1	2	0	1	1	0	0	2	7
Signal/Switch Failure - TOTAL	4	29	11	17	1	5	9	9	8	8	0	3	14	118
Signal/Switch Failure - Metra/PSA	4	29	11	17	0	3	7	0	8	4	0	3	12	98
Primary	4	18	9	15	0	3	2	0	6	3	0	3	6	69
Secondary	0	11	2	2	0	0	5	0	2	1	0	0	6	29
Signal/Switch Failure - Foreign	0	0	0	0	1	2	2	9	0	4	0	0	2	20
Primary	0	0	0	0	1	1	2	3	0	2	0	0	1	10
Secondary	0	0	0	0	0	1	0	6	0	2	0	0	1	10
Mechanical Failure - TOTAL	19	1	1	2	2	6	4	1	8	0	36	1	3	84
Mechanical Failure - Metra/PSA	19	1	1	2	1	6	4	1	8	0	36	1	3	83
Non-Locomotive Equipment Failure - Metra/PSA	2	1	1	2	1	2	0	0	0	0	0	0	3	12
Primary	1	0	0	0	1	1	0	0	0	0	0	0	3	6
Secondary	1	1	1	2	0	1	0	0	0	0	0	0	0	6
Locomotive Failure - Metra/PSA	17	0	0	0	0	4	4	1	8	0	36	1	0	71
Primary	5	0	0	0	0	2	2	1	3	0	4	1	0	18
Secondary	12	0	0	0	0	2	2	0	5	0	32	0	0	53
Mechanical Failure - Foreign	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Passenger Train Interference - TOTAL	4	0	3	2	0	2	0	3	0	1	0	0	1	16
Passenger Train Interference - Metra/PSA	0	0	3	1	0	1	0	3	0	0	0	0	1	9
Passenger Train Interference - Foreign	4	0	0	1	0	1	0	0	0	1	0	0	0	7
Accident - TOTAL	0	0	0	0	0	0	3	7	25	0	2	36	1	74
Accident - Metra/PSA	0	0	0	0	0	0	3	7	20	0	2	36	1	69
Accident - Foreign	0	0	0	0	0	0	0	0	5	0	0	0	0	5
Track Work - TOTAL	11	29	4	9	0	0	1	0	7	9	0	6	2	78
Track Work - Metra/PSA	11	29	4	9	0	0	1	0	7	9	0	6	2	78
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	15	3	3	2	3	17	11	3	0	2	7	0	2	68
Human Error - Metra/PSA	13	3	3	2	0	16	11	0	0	1	7	0	2	58
Human Error - Foreign	2	0	0	0	3	1	0	3	0	1	0	0	0	10
Sick, Injured, Unruly Passenger - TOTAL	1	3	1	2	0	6	1	1	1	0	4	0	7	27
Sick, Injured, Unruly Passenger - Metra/PSA	1	3	1	2	0	6	1	1	1	0	4	0	7	27
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	11	14	4	11	1	17	6	4	14	0	9	5	1	97
Weather - Metra/PSA	11	14	4	11	1	16	6	4	14	0	9	5	1	96
Weather - Foreign	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	1	4	1	4	0	2	1	0	4	0	8	1	7	33
Lift Deployment - TOTAL	1	0	0	0	0	3	3	0	2	0	2	2	4	17
Obstruction/Debris - TOTAL	19	9	3	9	0	4	0	0	9	2	1	3	7	66
Catenary Failure - TOTAL	0	3	1	2	0	0	0	0	0	0	0	0	0	6
Other - TOTAL	0	1	0	0	0	2	0	0	7	0	3	1	1	15
<b>TOTAL TRAINS DELAYED</b>	<b>89</b>	<b>96</b>	<b>32</b>	<b>60</b>	<b>9</b>	<b>70</b>	<b>44</b>	<b>34</b>	<b>88</b>	<b>25</b>	<b>74</b>	<b>59</b>	<b>72</b>	<b>752</b>
Total Metra/PSA Delays	80	96	32	59	2	59	37	16	80	16	72	58	48	655
Total Foreign Carrier Delays	9	0	0	1	7	11	7	18	8	9	2	1	24	97

Data for current month is final (02/14/17) 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 - January - Average Over Previous Five Years: 2012-2016**

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	24.8	0.0	0.0	0.0	3.4	14.6	14.4	9.2	9.0	13.8	0.4	3.6	16.8	110.0
Freight Interference - Peak	14.4	0.0	0.0	0.0	3.4	3.4	4.6	3.0	3.0	4.8	0.0	0.6	3.8	41.0
Primary	12.0	0.0	0.0	0.0	3.4	2.4	3.2	2.8	2.8	3.4	0.0	0.6	2.4	33.0
Secondary	2.4	0.0	0.0	0.0	0.0	1.0	1.4	0.2	0.2	1.4	0.0	0.0	1.4	8.0
Freight Interference - Off-Peak	10.4	0.0	0.0	0.0	0.0	11.2	9.8	6.2	6.0	9.0	0.4	3.0	13.0	69.0
Primary	7.6	0.0	0.0	0.0	0.0	6.8	6.4	5.4	4.6	6.8	0.4	2.0	10.8	50.8
Secondary	2.8	0.0	0.0	0.0	0.0	4.4	3.4	0.8	1.4	2.2	0.0	1.0	2.2	18.2
Signal/Switch Failure - TOTAL	36.0	9.2	3.8	4.2	3.2	25.4	16.6	7.2	13.2	14.6	0.4	3.4	9.4	146.6
Signal/Switch Failure - Metra/PSA	13.8	9.2	3.8	4.2	0.8	18.6	12.8	4.6	13.0	1.0	0.4	3.4	9.4	95.0
Primary	6.6	6.4	2.8	3.4	0.6	9.6	6.0	2.2	9.4	1.0	0.4	2.6	4.2	55.2
Secondary	7.2	2.8	1.0	0.8	0.2	9.0	6.8	2.4	3.6	0.0	0.0	0.8	5.2	39.8
Signal/Switch Failure - Foreign	22.2	0.0	0.0	0.0	2.4	6.8	3.8	2.6	0.2	13.6	0.0	0.0	0.0	51.6
Primary	19.4	0.0	0.0	0.0	2.2	6.0	3.0	1.8	0.0	8.8	0.0	0.0	0.0	41.2
Secondary	2.8	0.0	0.0	0.0	0.2	0.8	0.8	0.8	0.2	4.8	0.0	0.0	0.0	10.4
Mechanical Failure - TOTAL	10.8	3.4	1.0	1.8	1.2	18.6	9.8	4.2	15.8	3.4	9.0	12.2	10.2	101.4
Mechanical Failure - Metra/PSA	10.6	3.4	1.0	1.8	1.2	16.4	9.8	4.2	15.8	3.4	9.0	12.2	10.2	99.0
Non-Locomotive Equipment Failure - Metra/PSA	4.2	3.4	1.0	1.8	0.2	4.2	4.4	0.2	1.8	1.4	5.6	2.8	4.8	35.8
Primary	2.2	1.4	0.4	1.0	0.2	1.0	1.4	0.0	1.0	0.8	1.4	0.8	2.4	14.0
Secondary	2.0	2.0	0.6	0.8	0.0	3.2	3.0	0.2	0.8	0.6	4.2	2.0	2.4	21.8
Locomotive Failure - Metra/PSA	6.4	0.0	0.0	0.0	1.0	12.2	5.4	4.0	14.0	2.0	3.4	9.4	5.4	63.2
Primary	3.0	0.0	0.0	0.0	0.8	2.2	2.2	0.8	4.2	0.6	1.2	3.0	1.8	19.8
Secondary	3.4	0.0	0.0	0.0	0.2	10.0	3.2	3.2	9.8	1.4	2.2	6.4	3.6	43.4
Mechanical Failure - Foreign	0.2	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Passenger Train Interference - TOTAL	1.8	2.2	0.8	0.8	0.4	6.8	1.8	1.6	3.4	0.2	0.2	0.8	1.6	22.4
Passenger Train Interference - Metra/PSA	0.2	1.0	0.0	0.6	0.0	5.0	1.6	1.6	2.8	0.2	0.2	0.8	1.6	15.6
Passenger Train Interference - Foreign	1.6	1.2	0.8	0.2	0.4	1.8	0.2	0.0	0.6	0.0	0.0	0.0	0.0	6.8
Accident - TOTAL	7.0	0.0	0.0	0.0	0.4	15.2	5.0	0.6	6.0	1.2	6.0	9.2	1.0	51.6
Accident - Metra/PSA	1.4	0.0	0.0	0.0	0.4	13.4	5.0	0.4	5.8	1.2	6.0	9.2	1.0	43.8
Accident - Foreign	5.6	0.0	0.0	0.0	0.0	1.8	0.0	0.2	0.2	0.0	0.0	0.0	0.0	7.8
Track Work - TOTAL	12.0	12.8	7.8	2.4	0.0	6.4	1.8	3.4	2.4	0.2	2.4	2.6	2.2	56.4
Track Work - Metra/PSA	12.0	12.8	7.8	2.4	0.0	6.4	1.8	3.4	2.4	0.0	2.4	2.6	2.2	56.2
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
Human Error - TOTAL	16.2	3.2	2.2	1.6	0.2	3.6	3.0	1.8	6.6	2.8	9.0	4.8	4.6	59.6
Human Error - Metra/PSA	12.2	1.2	2.0	1.6	0.0	2.4	1.4	0.8	6.6	0.2	8.0	4.2	3.4	44.0
Human Error - Foreign	4.0	2.0	0.2	0.0	0.2	1.2	1.6	1.0	0.0	2.6	1.0	0.6	1.2	15.6
Sick, Injured, Unruly Passenger - TOTAL	2.2	7.4	1.4	2.0	0.2	1.2	0.6	0.2	1.6	0.0	2.2	4.2	2.2	25.4
Sick, Injured, Unruly Passenger - Metra/PSA	2.2	7.4	1.4	2.0	0.2	1.2	0.6	0.2	1.6	0.0	2.2	4.2	2.2	25.4
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	84.4	60.8	14.8	15.6	2.6	40.0	40.8	13.4	53.0	11.2	32.8	35.0	35.0	439.4
Weather - Metra/PSA	84.0	60.8	14.8	15.6	2.6	40.0	40.2	13.4	53.0	11.0	32.8	35.0	35.0	438.2
Weather - Foreign	0.4	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.2	0.0	0.0	0.0	1.2
Passenger Loading - TOTAL	2.6	3.0	1.6	0.4	0.0	5.4	2.2	0.4	4.8	0.0	3.2	1.4	3.2	28.2
Lift Deployment - TOTAL	3.6	0.2	0.0	0.0	0.0	3.6	2.4	0.0	2.6	0.0	0.6	1.8	3.8	18.6
Obstruction/Debris - TOTAL	5.2	1.8	0.6	2.6	0.2	4.0	4.4	1.0	2.2	2.2	0.8	8.0	3.6	36.6
Catenary Failure - TOTAL	0.0	2.6	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
Other - TOTAL	2.4	3.4	0.0	1.0	0.0	2.2	2.4	1.2	1.8	1.0	2.4	2.0	1.2	21.0
<b>TOTAL TRAINS DELAYED</b>	<b>209.0</b>	<b>110.0</b>	<b>34.6</b>	<b>32.6</b>	<b>11.8</b>	<b>147.0</b>	<b>105.2</b>	<b>44.2</b>	<b>122.4</b>	<b>50.6</b>	<b>69.4</b>	<b>89.0</b>	<b>94.8</b>	<b>1,120.6</b>
Total Metra/PSA Delays	150.2	106.8	33.6	32.4	5.4	118.6	84.6	31.2	112.4	20.2	68.0	84.8	76.8	925.0
Total Foreign Carrier Delays	58.8	3.2	1.0	0.2	6.4	28.4	20.6	13.0	10.0	30.4	1.4	4.2	18.0	195.6

Data for latest month is final (02/16/16) 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 - January 2017 Divergence From January - January 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	-21.8	0.0	0.0	0.0	-1.4	-8.6	-9.4	-3.2	-6.0	-10.8	1.6	-2.6	5.2	-57.0
Freight Interference - Peak	-14.4	0.0	0.0	0.0	-1.4	-3.4	-3.6	1.0	-3.0	-4.8	1.0	-0.6	8.2	-21.0
Primary	-12.0	0.0	0.0	0.0	-2.4	-2.4	-2.2	1.2	-2.8	-3.4	1.0	-0.6	1.6	-22.0
Secondary	-2.4	0.0	0.0	0.0	1.0	-1.0	-1.4	-0.2	-0.2	-1.4	0.0	0.0	6.6	1.0
Freight Interference - Off-Peak	-7.4	0.0	0.0	0.0	0.0	-5.2	-5.8	-4.2	-3.0	-6.0	0.6	-2.0	-3.0	-36.0
Primary	-4.6	0.0	0.0	0.0	0.0	-1.8	-4.4	-3.4	-2.6	-4.8	0.6	-1.0	-2.8	-24.8
Secondary	-2.8	0.0	0.0	0.0	0.0	-3.4	-1.4	-0.8	-0.4	-1.2	0.0	-1.0	-0.2	-11.2
Signal/Switch Failure - TOTAL	-32.0	19.8	7.2	12.8	-2.2	-20.4	-7.6	1.8	-5.2	-6.6	-0.4	-0.4	4.6	-28.6
Signal/Switch Failure - Metra/PSA	-9.8	19.8	7.2	12.8	-0.8	-15.6	-5.8	-4.6	-5.0	3.0	-0.4	-0.4	2.6	3.0
Primary	-2.6	11.6	6.2	11.6	-0.6	-6.6	-4.0	-2.2	-3.4	2.0	-0.4	0.4	1.8	13.8
Secondary	-7.2	8.2	1.0	1.2	-0.2	-9.0	-1.8	-2.4	-1.6	1.0	0.0	-0.8	0.8	-10.8
Signal/Switch Failure - Foreign	-22.2	0.0	0.0	0.0	-1.4	-4.8	-1.8	6.4	-0.2	-9.6	0.0	0.0	2.0	-31.6
Primary	-19.4	0.0	0.0	0.0	-1.2	-5.0	-1.0	1.2	0.0	-6.8	0.0	0.0	1.0	-31.2
Secondary	-2.8	0.0	0.0	0.0	-0.2	0.2	-0.8	5.2	-0.2	-2.8	0.0	0.0	1.0	-0.4
Mechanical Failure - TOTAL	8.2	-2.4	0.0	0.2	0.8	-12.6	-5.8	-3.2	-7.8	-3.4	27.0	-11.2	-7.2	-17.4
Mechanical Failure - Metra/PSA	8.4	-2.4	0.0	0.2	-0.2	-10.4	-5.8	-3.2	-7.8	-3.4	27.0	-11.2	-7.2	-16.0
Non-Locomotive Equipment Failure - Metra/PSA	-2.2	-2.4	0.0	0.2	0.8	-2.2	-4.4	-0.2	-1.8	-1.4	-5.6	-2.8	-1.8	-23.8
Primary	-1.2	-1.4	-0.4	-1.0	0.8	0.0	-1.4	0.0	-1.0	-0.8	-1.4	-0.8	0.6	-8.0
Secondary	-1.0	-1.0	0.4	1.2	0.0	-2.2	-3.0	-0.2	-0.8	-0.6	-4.2	-2.0	-2.4	-15.8
Locomotive Failure - Metra/PSA	10.6	0.0	0.0	0.0	-1.0	-8.2	-1.4	-3.0	-6.0	-2.0	32.6	-8.4	-5.4	7.8
Primary	2.0	0.0	0.0	0.0	-0.8	-0.2	-0.2	0.2	-1.2	-0.6	2.8	-2.0	-1.8	-1.8
Secondary	8.6	0.0	0.0	0.0	-0.2	-8.0	-1.2	-3.2	-4.8	-1.4	29.8	-6.4	-3.6	9.6
Mechanical Failure - Foreign	-0.2	0.0	0.0	0.0	1.0	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.4
Passenger Train Interference - TOTAL	2.2	-2.2	2.2	1.2	-0.4	-4.8	-1.8	1.4	-3.4	0.8	-0.2	-0.8	-0.6	-6.4
Passenger Train Interference - Metra/PSA	-0.2	-1.0	3.0	0.4	0.0	-4.0	-1.6	1.4	-2.8	-0.2	-0.2	-0.8	-0.6	-6.6
Passenger Train Interference - Foreign	2.4	-1.2	-0.8	0.8	-0.4	-0.8	-0.2	0.0	-0.6	1.0	0.0	0.0	0.0	0.2
Accident - TOTAL	-7.0	0.0	0.0	0.0	-0.4	-15.2	-2.0	6.4	19.0	-1.2	-4.0	26.8	0.0	22.4
Accident - Metra/PSA	-1.4	0.0	0.0	0.0	-0.4	-13.4	-2.0	6.6	14.2	-1.2	-4.0	26.8	0.0	25.2
Accident - Foreign	-5.6	0.0	0.0	0.0	0.0	-1.8	0.0	-0.2	4.8	0.0	0.0	0.0	0.0	-2.8
Track Work - TOTAL	-1.0	16.2	-3.8	6.6	0.0	-6.4	-0.8	-3.4	4.6	8.8	-2.4	3.4	-0.2	21.6
Track Work - Metra/PSA	-1.0	16.2	-3.8	6.6	0.0	-6.4	-0.8	-3.4	4.6	9.0	-2.4	3.4	-0.2	21.8
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-0.2
Human Error - TOTAL	-1.2	-0.2	0.8	0.4	2.8	13.4	8.0	1.2	-6.6	-0.8	-2.0	-4.8	-2.6	8.4
Human Error - Metra/PSA	0.8	1.8	1.0	0.4	0.0	13.6	9.6	-0.8	-6.6	0.8	-1.0	-4.2	-1.4	14.0
Human Error - Foreign	-2.0	-2.0	-0.2	0.0	2.8	-0.2	-1.6	2.0	0.0	-1.6	-1.0	-0.6	-1.2	-5.6
Sick, Injured, Unruly Passenger - TOTAL	-1.2	-4.4	-0.4	0.0	-0.2	4.8	0.4	0.8	-0.6	0.0	1.8	-4.2	4.8	1.6
Sick, Injured, Unruly Passenger - Metra/PSA	-1.2	-4.4	-0.4	0.0	-0.2	4.8	0.4	0.8	-0.6	0.0	1.8	-4.2	4.8	1.6
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	-73.4	-46.8	-10.8	-4.6	-1.6	-23.0	-34.8	-9.4	-39.0	-11.2	-23.8	-30.0	-34.0	-342.4
Weather - Metra/PSA	-73.0	-46.8	-10.8	-4.6	-1.6	-24.0	-34.2	-9.4	-39.0	-11.0	-23.8	-30.0	-34.0	-342.2
Weather - Foreign	-0.4	0.0	0.0	0.0	0.0	1.0	-0.6	0.0	0.0	-0.2	0.0	0.0	0.0	-0.2
Passenger Loading - TOTAL	-1.6	1.0	-0.6	3.6	0.0	-3.4	-1.2	-0.4	-0.8	0.0	4.8	-0.4	3.8	4.8
Lift Deployment - TOTAL	-2.6	-0.2	0.0	0.0	0.0	-0.6	0.6	0.0	-0.6	0.0	1.4	0.2	0.2	-1.6
Obstruction/Debris - TOTAL	13.8	7.2	2.4	6.4	-0.2	0.0	-4.4	-1.0	6.8	-0.2	0.2	-5.0	3.4	29.4
Catenary Failure - TOTAL	0.0	0.4	0.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Other - TOTAL	-2.4	-2.4	0.0	-1.0	0.0	-0.2	-2.4	-1.2	5.2	-1.0	0.6	-1.0	-0.2	-6.0
<b>TOTAL TRAINS DELAYED</b>	<b>-120.0</b>	<b>-14.0</b>	<b>-2.6</b>	<b>27.4</b>	<b>-2.8</b>	<b>-77.0</b>	<b>-61.2</b>	<b>-10.2</b>	<b>-34.4</b>	<b>-25.6</b>	<b>4.6</b>	<b>-30.0</b>	<b>-22.8</b>	<b>-368.6</b>
Total Metra/PSA Delays	-70.2	-10.8	-1.6	26.6	-3.4	-59.6	-47.6	-15.2	-32.4	-4.2	4.0	-26.8	-28.8	-270.0
Total Foreign Carrier Delays	-49.8	-3.2	-1.0	0.8	0.6	-17.4	-13.6	5.0	-2.0	-21.4	0.6	-3.2	6.0	-98.6

Data for current month is final (02/14/17) 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 - Jan	
Freight Interference - TOTAL	53												53	7.0%
Freight Interference - Peak	20												20	2.7%
<i>Primary</i>	11												11	1.5%
<i>Secondary</i>	9												9	1.2%
Freight Interference - Off-Peak	33												33	4.4%
<i>Primary</i>	26												26	3.5%
<i>Secondary</i>	7												7	0.9%
Signal/Switch Failure - TOTAL	118												118	15.7%
Signal/Switch Failure - Metra/PSA	98												98	13.0%
<i>Primary</i>	69												69	9.2%
<i>Secondary</i>	29												29	3.9%
Signal/Switch Failure - Foreign	20												20	2.7%
<i>Primary</i>	10												10	1.3%
<i>Secondary</i>	10												10	1.3%
Mechanical Failure - TOTAL	84												84	11.2%
Mechanical Failure - Metra/PSA	83												83	11.0%
Non-Locomotive Equipment Failure - Metra/PSA	12												12	1.6%
<i>Primary</i>	6												6	0.8%
<i>Secondary</i>	6												6	0.8%
Locomotive Failure - Metra/PSA	71												71	9.4%
<i>Primary</i>	18												18	2.4%
<i>Secondary</i>	53												53	7.0%
Mechanical Failure - Foreign	1												1	0.1%
Passenger Train Interference - TOTAL	16												16	2.1%
Passenger Train Interference - Metra/PSA	9												9	1.2%
Passenger Train Interference - Foreign	7												7	0.9%
Accident - TOTAL	74												74	9.8%
Accident - Metra/PSA	69												69	9.2%
Accident - Foreign	5												5	0.7%
Track Work - TOTAL	78												78	10.4%
Track Work - Metra/PSA	78												78	10.4%
Track Work - Foreign	0												0	0.0%
Human Error - TOTAL	68												68	9.0%
Human Error - Metra/PSA	58												58	7.7%
Human Error - Foreign	10												10	1.3%
Sick, Injured, Unruly Passenger - TOTAL	27												27	3.6%
Sick, Injured, Unruly Passenger - Metra/PSA	27												27	3.6%
Sick, Injured, Unruly Passenger - Foreign	0												0	0.0%
Weather - TOTAL	97												97	12.9%
Weather - Metra/PSA	96												96	12.8%
Weather - Foreign	1												1	0.1%
Passenger Loading - TOTAL	33												33	4.4%
Lift Deployment - TOTAL	17												17	2.3%
Obstruction/Debris - TOTAL	66												66	8.8%
Catenary Failure - TOTAL	6												6	0.8%
Other - TOTAL	15												15	2.0%
<b>TOTAL TRAINS DELAYED</b>	<b>752</b>												<b>752</b>	<b>100.0%</b>
Total Metra/PSA Delays	655												655	87.1%
Total Foreign Carrier Delays	97												97	12.9%

Data for current month is final (02/14/17) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\AllMonths 02/15/2017

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

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Jan
Freight Interference - TOTAL	82	53	43	44	72	73	82	108	78	48	65	94	82 11.6%
Freight Interference - Peak	32	17	14	9	28	20	32	50	26	15	34	32	32 4.5%
Primary	26	10	11	7	15	10	21	31	20	13	18	20	26 3.7%
Secondary	6	7	3	2	13	10	11	19	6	2	16	12	6 0.8%
Freight Interference - Off-Peak	50	36	29	35	44	53	50	58	52	33	31	62	50 7.1%
Primary	32	29	23	29	32	44	34	48	43	29	28	52	32 4.5%
Secondary	18	7	6	6	12	9	16	10	9	4	3	10	18 2.5%
Signal/Switch Failure - TOTAL	154	155	123	98	145	143	108	63	105	67	110	120	154 21.8%
Signal/Switch Failure - Metra/PSA	67	122	99	60	84	84	51	55	89	38	76	76	67 9.5%
Primary	35	30	52	41	54	52	41	40	58	32	57	52	35 5.0%
Secondary	32	92	47	19	30	32	10	15	31	6	19	24	32 4.5%
Signal/Switch Failure - Foreign	87	33	24	38	61	59	57	8	16	29	34	44	87 12.3%
Primary	68	24	14	33	49	43	36	6	12	21	19	29	68 9.6%
Secondary	19	9	10	5	12	16	21	2	4	8	15	15	19 2.7%
Mechanical Failure - TOTAL	107	68	131	43	80	88	120	78	114	64	71	88	107 15.1%
Mechanical Failure - Metra/PSA	107	68	131	42	80	88	120	78	114	64	71	80	107 15.1%
Non-Locomotive Equipment Failure - Metra/PSA	25	19	10	6	13	17	19	30	8	12	3	29	25 3.5%
Primary	11	9	4	5	9	9	8	11	7	7	3	9	11 1.6%
Secondary	14	10	6	1	4	8	11	19	1	5	0	20	14 2.0%
Locomotive Failure - Metra/PSA	82	49	121	36	67	71	101	48	106	52	68	51	82 11.6%
Primary	28	18	24	14	18	27	36	20	28	17	23	25	28 4.0%
Secondary	54	31	97	22	49	44	65	28	78	35	45	26	54 7.6%
Mechanical Failure - Foreign	0	0	0	1	0	0	0	0	0	0	0	8	0 0.0%
Passenger Train Interference - TOTAL	22	12	3	4	19	14	12	11	5	10	4	38	22 3.1%
Passenger Train Interference - Metra/PSA	13	5	2	3	2	2	7	2	2	6	3	2	13 1.8%
Passenger Train Interference - Foreign	9	7	1	1	17	12	5	9	3	4	1	36	9 1.3%
Accident - TOTAL	59	15	62	48	86	29	18	55	34	10	79	49	59 8.3%
Accident - Metra/PSA	49	14	62	41	77	29	18	53	30	10	73	49	49 6.9%
Accident - Foreign	10	1	0	7	9	0	0	2	4	0	6	0	10 1.4%
Track Work - TOTAL	40	21	36	44	141	114	99	133	177	75	59	61	40 5.7%
Track Work - Metra/PSA	40	21	36	41	139	110	99	104	175	74	59	61	40 5.7%
Track Work - Foreign	0	0	0	3	2	4	0	29	2	1	0	0	0 0.0%
Human Error - TOTAL	38	33	21	53	23	112	47	93	50	45	49	71	38 5.4%
Human Error - Metra/PSA	30	25	15	42	15	94	34	81	43	32	32	57	30 4.2%
Human Error - Foreign	8	8	6	11	8	18	13	12	7	13	17	14	8 1.1%
Sick, Injured, Unruly Passenger - TOTAL	20	39	27	50	44	32	29	43	30	24	35	34	20 2.8%
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27	50	44	30	29	43	30	24	34	34	20 2.8%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	2	0	0	0	0	1	0	0 0.0%
Weather - TOTAL	129	132	28	1	4	23	49	38	1	4	13	132	129 18.2%
Weather - Metra/PSA	129	132	28	1	4	23	49	38	1	4	13	131	129 18.2%
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	13 1.8%
Lift Deployment - TOTAL	11	14	12	3	15	11	11	21	11	12	8	16	11 1.6%
Obstruction/Debris - TOTAL	18	30	40	54	22	31	44	51	28	39	47	42	18 2.5%
Catenary Failure - TOTAL	9	3	2	1	4	13	11	6	29	12	9	1	9 1.3%
Other - TOTAL	5	17	15	0	10	25	30	39	35	17	30	19	5 0.7%
<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>707 100.0%</b>
Total Metra/PSA Delays	511	497	498	346	547	623	612	613	619	360	523	639	511 72.3%
Total Foreign Carrier Delays	196	102	74	105	169	168	157	168	110	95	124	197	196 27.7%

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

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 02/15/2017

'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 - Jan
Freight Interference - TOTAL	-29												-29 -4.6%
Freight Interference - Peak	-12												-12 -1.9%
Primary	-15												-15 -2.2%
Secondary	3												3 0.3%
Freight Interference - Off-Peak	-17												-17 -2.7%
Primary	-6												-6 -1.1%
Secondary	-11												-11 -1.6%
Signal/Switch Failure - TOTAL	-36												-36 -6.1%
Signal/Switch Failure - Metra/PSA	31												31 3.6%
Primary	34												34 4.2%
Secondary	-3												-3 -0.7%
Signal/Switch Failure - Foreign	-67												-67 -9.6%
Primary	-58												-58 -8.3%
Secondary	-9												-9 -1.4%
Mechanical Failure - TOTAL	-23												-23 -4.0%
Mechanical Failure - Metra/PSA	-24												-24 -4.1%
Non-Locomotive Equipment Failure - Metra/PSA	-13												-13 -1.9%
Primary	-5												-5 -0.8%
Secondary	-8												-8 -1.2%
Locomotive Failure - Metra/PSA	-11												-11 -2.2%
Primary	-10												-10 -1.6%
Secondary	-1												-1 -0.6%
Mechanical Failure - Foreign	1												1 0.1%
Passenger Train Interference - TOTAL	-6												-6 -1.0%
Passenger Train Interference - Metra/PSA	-4												-4 -0.6%
Passenger Train Interference - Foreign	-2												-2 -0.3%
Accident - TOTAL	15												15 1.5%
Accident - Metra/PSA	20												20 2.2%
Accident - Foreign	-5												-5 -0.7%
Track Work - TOTAL	38												38 4.7%
Track Work - Metra/PSA	38												38 4.7%
Track Work - Foreign	0												0 0.0%
Human Error - TOTAL	30												30 3.7%
Human Error - Metra/PSA	28												28 3.5%
Human Error - Foreign	2												2 0.2%
Sick, Injured, Unruly Passenger - TOTAL	7												7 0.8%
Sick, Injured, Unruly Passenger - Metra/PSA	7												7 0.8%
Sick, Injured, Unruly Passenger - Foreign	0												0 0.0%
Weather - TOTAL	-32												-32 -5.3%
Weather - Metra/PSA	-33												-33 -5.5%
Weather - Foreign	1												1 0.1%
Passenger Loading - TOTAL	20												20 2.5%
Lift Deployment - TOTAL	6												6 0.7%
Obstruction/Debris - TOTAL	48												48 6.2%
Catenary Failure - TOTAL	-3												-3 -0.5%
Other - TOTAL	10												10 1.3%
<b>TOTAL TRAINS DELAYED</b>	<b>45</b>												<b>45</b>
Total Metra/PSA Delays	144												144
Total Foreign Carrier Delays	-99												-99

Data for current month is final (02/14/17) version from TOPS.

P:\ONTIME\report[DelaysByCause.xlsx]AllMonths 02/15/2017

'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 February 2015 and January 2017**

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Feb-15	5	0	0	0	4	31	14	26	2	19	5	13	39	158
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
<b>Total</b>	<b>173</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>101</b>	<b>79</b>	<b>113</b>	<b>80</b>	<b>149</b>	<b>17</b>	<b>71</b>	<b>228</b>	<b>1,052</b>
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
<b>Jan-17</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>22</b>	<b>53</b>
<b>Total</b>	<b>198</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>78</b>	<b>86</b>	<b>69</b>	<b>46</b>	<b>89</b>	<b>8</b>	<b>25</b>	<b>183</b>	<b>813</b>

Data for current month is final (02/14/17) 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	% of All
													Delays	Delays
													YTD	YTD
BNSF	1												1	1.12%
Electric ML	0												0	0.00%
Electric BI	0												0	0.00%
Electric SC	0												0	0.00%
HER	0												0	0.00%
Milw N	3												3	4.29%
Milw W	3												3	6.82%
NCS	0												0	0.00%
RI	2												2	2.27%
SWS	0												0	0.00%
UP N	2												2	2.70%
UP NW	2												2	3.39%
UP W	4												4	5.56%
<b>Total Lift Delays</b>	<b>17</b>												<b>17</b>	<b>2.26%</b>
<b>ALL DELAYS</b>														<b>752</b>

Data for current month is final (02/14/17) version from TOPS.

**2016**

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift	% of All
													Delays	Delays
													All Year	All Year
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**

January 2017

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
<b>Peak *</b>														
6-10	21	21	6	7	3	8	6	14	24	4	13	8	19	154
11-15	13	2	1	4	2	7	7	4	8	3	6	2	4	63
16-20	5	2	5	0	0	3	5	2	3	0	4	0	2	31
21+	2	22	3	9	2	4	3	2	16	1	10	13	3	90
Annulled	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>3</u>	<u>3</u>	<u>0</u>	<u>12</u>
Sub-Total	42	47	15	20	7	22	23	23	53	8	36	26	28	350
<b>Off-Peak **</b>														
6-10	25	31	6	21	0	22	14	6	20	9	11	10	22	197
11-15	9	5	4	5	1	9	5	1	4	1	2	5	12	63
16-20	5	6	2	4	1	10	1	1	4	1	6	1	9	51
21+	6	7	5	9	0	6	1	3	7	6	16	9	1	76
Annulled	<u>2</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>8</u>	<u>0</u>	<u>15</u>
Sub-Total	47	49	17	40	2	48	21	11	35	17	38	33	44	402
<b>January 2017 Total</b>														
6-10	46	52	12	28	3	30	20	20	44	13	24	18	41	351
11-15	22	7	5	9	3	16	12	5	12	4	8	7	16	126
16-20	10	8	7	4	1	13	6	3	7	1	10	1	11	82
21+	8	29	8	18	2	10	4	5	23	7	26	22	4	166
Annulled	<u>3</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>6</u>	<u>11</u>	<u>0</u>	<u>27</u>
TOTAL	89	96	32	60	9	70	44	34	88	25	74	59	72	752
<b>2017 Year-to-Date</b>														
6-10	46	52	12	28	3	30	20	20	44	13	24	18	41	351
11-15	22	7	5	9	3	16	12	5	12	4	8	7	16	126
16-20	10	8	7	4	1	13	6	3	7	1	10	1	11	82
21+	8	29	8	18	2	10	4	5	23	7	26	22	4	166
Annulled	<u>3</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>6</u>	<u>11</u>	<u>0</u>	<u>27</u>
TOTAL	89	96	32	60	9	70	44	34	88	25	74	59	72	752
<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>January 2017 Total</b>														
6-10	51.7%	54.2%	37.5%	46.7%	33.3%	42.9%	45.5%	58.8%	50.0%	52.0%	32.4%	30.5%	56.9%	46.7%
11-15	24.7%	7.3%	15.6%	15.0%	33.3%	22.9%	27.3%	14.7%	13.6%	16.0%	10.8%	11.9%	22.2%	16.8%
16-20	11.2%	8.3%	21.9%	6.7%	11.1%	18.6%	13.6%	8.8%	8.0%	4.0%	13.5%	1.7%	15.3%	10.9%
21+	9.0%	30.2%	25.0%	30.0%	22.2%	14.3%	9.1%	14.7%	26.1%	28.0%	35.1%	37.3%	5.6%	22.1%
Annulled	<u>3.4%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>1.7%</u>	<u>0.0%</u>	<u>1.4%</u>	<u>4.5%</u>	<u>2.9%</u>	<u>2.3%</u>	<u>0.0%</u>	<u>8.1%</u>	<u>18.6%</u>	<u>0.0%</u>	<u>3.6%</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	51.7%	54.2%	37.5%	46.7%	33.3%	42.9%	45.5%	58.8%	50.0%	52.0%	32.4%	30.5%	56.9%	46.7%
11-15	24.7%	7.3%	15.6%	15.0%	33.3%	22.9%	27.3%	14.7%	13.6%	16.0%	10.8%	11.9%	22.2%	16.8%
16-20	11.2%	8.3%	21.9%	6.7%	11.1%	18.6%	13.6%	8.8%	8.0%	4.0%	13.5%	1.7%	15.3%	10.9%
21+	9.0%	30.2%	25.0%	30.0%	22.2%	14.3%	9.1%	14.7%	26.1%	28.0%	35.1%	37.3%	5.6%	22.1%
Annulled	<u>3.4%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>1.7%</u>	<u>0.0%</u>	<u>1.4%</u>	<u>4.5%</u>	<u>2.9%</u>	<u>2.3%</u>	<u>0.0%</u>	<u>8.1%</u>	<u>18.6%</u>	<u>0.0%</u>	<u>3.6%</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 (02/14/17) 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>January 2017</b>														
Peak *	12.3	21.3	15.1	19.5	16.9	15.3	14.6	12.9	18.5	11.9	18.9	112.7	11.6	22.9
Off-Peak **	13.2	12.4	18.0	16.5	17.5	16.3	10.8	22.8	16.9	17.7	24.4	47.2	12.3	17.8
All	12.8	16.8	16.7	17.5	17.0	16.0	12.7	16.2	17.8	15.8	21.7	78.6	12.0	20.2
<b>2017 Year-to-Date</b>														
Peak *	12.3	21.3	15.1	19.5	16.9	15.3	14.6	12.9	18.5	11.9	18.9	112.7	11.6	22.9
Off-Peak **	13.2	12.4	18.0	16.5	17.5	16.3	10.8	22.8	16.9	17.7	24.4	47.2	12.3	17.8
All	12.8	16.8	16.7	17.5	17.0	16.0	12.7	16.2	17.8	15.8	21.7	78.6	12.0	20.2

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 (02/14/17) version from TOPS.