

COMMUTER RAIL SYSTEM

ON-TIME PERFORMANCE REPORT

December 2016



COMMUTER RAIL ON-TIME PERFORMANCE

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This report presents an analysis of the December 2016 train delays as reported for Metra's eleven commuter rail lines. On-time is defined, for this analysis, as those regularly scheduled trains arriving at their last station stop less than six minutes behind schedule. Trains that are six minutes or more behind schedule, including annulled trains (trains that do not complete their scheduled runs), are regarded as late. "Extra" trains (trains added to handle special events but not shown in the regularly published timetables) are excluded from on-time performance calculations unless shown in special-event schedules that include all intermediate station stop times and are distributed publicly via Metra's website or on paper flyers. Cancelled (not annulled) trains and non-revenue trains are also excluded from on-time performance calculations.

On-Time Performance Tables

Table 1 presents the number of train delays by rail line and service period. During December 2016, Metra operated 17,283 scheduled trains, including scheduled "extras", if any. 836 of these trains were delayed (late or annulled), representing an on-time performance rate of 95.2%. Table 2 lists on-time percentages by line for each month and year since 2011.

Table 3 lists each train that was on time for less than 85% of its weekday runs in December 2016, in order of line, train, and dates delayed. The codes in the 'Delay Code' column of Table 3 are defined in Table 4 and shown sorted by delay-cause category and carrier designation in Table 5. Effective January 1, 2012, January 1, 2014, and July 1, 2016, Metra is using an expanded set of delay codes, to provide more detail about the cause of and responsibility for each train delay.

Table 6.a shows the frequency of train delays by delay-cause control and by line during December 2016. Of the 836 delays systemwide in December 2016, all but 348 (42%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous four Decembers, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in December 2016, 90 more delays than the average over the previous four Decembers were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 8,053 delays in 2016, all but 3,972 (49%) were beyond Metra's control.

Table 7 provides a daily listing of the number of delays by line and branch for December 2016.

Table 8.a shows the frequency of train delays by delay-cause category and by line during December 2016. Table 8.b shows the average frequencies over the previous five Decembers, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 836 delays systemwide in December 2016, 165 more than the average over the previous five Decembers. Table 9.a shows delays from the beginning of the year through December 2016. Table 9.b shows the average frequencies from the beginning of the year through December of each of the previous five years, and Table 9.c shows the differences between Table 9.a and Table 9.b. Tables 10.a and 10.b display the systemwide frequency of train delays by cause and by month, for 2016 and 2015 respectively, and Table 10.c shows the difference between the two. From January through December of 2016, a total of 8,053 trains were delayed, compared to 7,796 trains delayed in the same twelve months of 2015.

In Tables 8 through 10, delays by cause are separated into 'Metra/PSA' and 'Foreign' designations, where applicable. 'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation. 'Foreign' refers to

delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations. See Table 5 for a detailed breakdown of delay codes by cause category and carrier designation.

Table 11 shows, by line and month, all train delays caused by freight operations over the past 24 months. In December 2016 freight operations delayed 94 trains systemwide, compared to 49 a year earlier. Tables 12.a and 12.b display the frequency of lift-deployment train delays by line and month, for 2016 and 2015 respectively. A total of 16 trains were delayed by lift deployment in December 2016.

A review of December 2016 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 44.6% of all late trains. Table 14 shows that the average length of delay was 16.9 minutes in December 2016. It should be noted that these averages relate only to reportable delays (i.e., trains late by six minutes or more).

Tables 15 to 19 report year-end statistics. Table 15 presents annual train delays and on-time performance by line. Table 16 displays the frequency of 2016 annual train delays by cause and by line. The top two causes for each line are highlighted. Annual system causes of delay for 2011 to 2016 are shown in Table 17. The annual frequencies of train delays by duration for the Metra system are shown in Table 18, and for each line in Table 19.

Changes in On-Time Performance Reporting Calculations (effective with the May 2011 On-Time Performance Report)

“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. Prior to May 2011, all “extra” trains were included in the count of all trains for the purpose of calculating on-time performance and were always reported as on-time.

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.

(Prior to May 2011, some trains affected by planned construction work arrived at their last station stops six minutes or more late, but were counted as on-time because a construction time allowance was deducted from the actual delay time. This allowance, typically five or ten minutes (but occasionally more) depending on the nature of the scheduled work, was assigned in advance to all off-peak and

reverse-peak trains that might be affected by a particular project, but never to peak period/peak direction trains. For such trains, the assigned construction allowance was added onto the scheduled arrival time at the destination station for the purpose of calculating the total minutes of delay.)

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**TABLE 1: SCHEDULED AND DELAYED TRAINS, AND ON-TIME PERFORMANCE BY SERVICE PERIOD AND LINE
December 2016**

	Weekdays									Weekends						Total		
	Peak*			Off-Peak**			Total			Saturdays			Sundays & Holidays			Trains Scheduled	Trains Late	Percent On-Time
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time			
BNSF	1,115	83	92.6%	859	56	93.5%	1,974	139	93.0%	140	7	95.0%	90	5	94.4%	2,204	151	93.1%
Elec -ML	939	46	95.1%	720	18	97.5%	1,659	64	96.1%	230	2	99.1%	101	1	99.0%	1,990	67	96.6%
-BI	294	11	96.3%	483	4	99.2%	777	15	98.1%	150	0	100.0%		--		927	15	98.4%
-SC	<u>357</u>	<u>11</u>	96.9%	<u>777</u>	<u>8</u>	99.0%	<u>1,134</u>	<u>19</u>	98.3%	<u>240</u>	<u>2</u>	99.2%	<u>100</u>	<u>0</u>	100.0%	<u>1,474</u>	<u>21</u>	98.6%
Subtotal	1,590	68	95.7%	1,980	30	98.5%	3,570	98	97.3%	620	4	99.4%	201	1	99.5%	4,391	103	97.7%
Heritage	126	9	92.9%	21	3	85.7%	147	12	91.8%	--			--			147	12	91.8%
Milw -N	522	34	93.5%	738	48	93.5%	1,260	82	93.5%	120	9	92.5%	100	1	99.0%	1,480	92	93.8%
-W	<u>563</u>	<u>44</u>	92.2%	<u>655</u>	<u>43</u>	93.4%	<u>1,218</u>	<u>87</u>	92.9%	<u>120</u>	<u>3</u>	97.5%	<u>90</u>	<u>6</u>	93.3%	<u>1,428</u>	<u>96</u>	93.3%
Subtotal	1,085	78	92.8%	1,393	91	93.5%	2,478	169	93.2%	240	12	95.0%	190	7	96.3%	2,908	188	93.5%
NCS	229	14	93.9%	233	20	91.4%	462	34	92.6%	--			--			462	34	92.6%
RI	751	49	93.5%	801	28	96.5%	1,552	77	95.0%	160	2	98.8%	140	8	94.3%	1,852	87	95.3%
SWS	231	9	96.1%	399	16	96.0%	630	25	96.0%	30	0	100.0%	--			660	25	96.2%
UP -N	614	12	98.0%	848	12	98.6%	1,462	24	98.4%	130	6	95.4%	90	2	97.8%	1,682	32	98.1%
-NW	673	55	91.8%	680	27	96.0%	1,353	82	93.9%	120	17	85.8%	75	3	96.0%	1,548	102	93.4%
-W	<u>559</u>	<u>32</u>	94.3%	<u>680</u>	<u>54</u>	92.1%	<u>1,239</u>	<u>86</u>	93.1%	<u>100</u>	<u>10</u>	90.0%	<u>90</u>	<u>6</u>	93.3%	<u>1,429</u>	<u>102</u>	92.9%
Subtotal	1,846	99	94.6%	2,208	93	95.8%	4,054	192	95.3%	350	33	90.6%	255	11	95.7%	4,659	236	94.9%
SYSTEM	6,973	409	94.1%	7,894	337	95.7%	14,867	746	95.0%	1,540	58	96.2%	876	32	96.3%	17,283	836	95.2%

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

Delays data for most recent month is final (01/26/17) 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-DEC	AVG
BNSF	2011	96.2	89.6	97.4	96.9	93.0	93.0	83.3	92.3	90.4	92.8	94.0	95.4	92.9%	92.9%
	2012	94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	96.0%	96.0%
	2013	95.8	93.9	94.6	93.3	96.0	88.5	95.2	97.1	97.2	94.0	95.8	92.2	94.5%	94.5%
	2014	78.6	84.6	95.6	92.0	82.2	82.0	94.1	91.4	94.1	92.2	95.2	94.1	89.7%	89.7%
	2015	90.9	90.1	96.8	97.5	96.6	92.4	93.0	95.4	95.8	93.6	93.5	97.4	94.4%	94.4%
	2016	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	94.0%	94.0%
	2011-2015 average	91.2	91.2	95.9	95.6	93.0	89.6	92.2	94.1	95.1	93.9	94.7	95.5	93.5%	93.5%
Electric	2011	98.6	95.1	98.1	97.7	97.7	95.1	94.6	96.6	97.0	94.4	97.2	98.7	96.8%	96.8%
	2012	93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	97.3%	97.3%
	2013	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	97.2%	97.2%
	2014	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	97.5%	97.5%
	2015	96.3	95.4	98.4	98.4	98.3	97.7	96.5	98.2	97.9	97.8	97.8	99.0	97.6%	97.6%
	2016	98.0	98.6	98.8	98.9	98.9	96.5	97.9	98.5	97.1	98.6	97.7	97.7	98.1%	98.1%
	2011-2015 average	96.1	96.7	98.1	98.3	98.1	97.1	95.5	97.4	97.7	96.9	97.5	98.3	97.3%	97.3%
Heritage	2011	92.1	77.2	94.2	96.0	98.4	89.4	73.3	92.0	84.1	78.6	80.8	75.4	86.2%	86.2%
	2012	95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	95.6%	95.6%
	2013	97.0	99.2	94.4	97.7	94.7	92.5	97.7	99.2	97.5	96.4	98.3	92.1	96.4%	96.4%
	2014	79.5	75.8	88.1	93.2	92.1	94.4	94.7	93.7	92.1	97.8	96.5	98.5	91.4%	91.4%
	2015	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	90.2%	90.2%
	2016	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	94.2%	94.2%
	2011-2015 average	91.1	88.5	93.6	94.8	93.9	91.5	90.1	93.3	91.5	93.5	90.6	90.7	92.0%	92.0%
Milw - N	2011	92.9	85.3	95.7	95.5	89.2	84.4	78.3	87.6	92.3	88.1	91.9	93.9	89.6%	89.6%
	2012	95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	93.8%	93.8%
	2013	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	93.3%	93.3%
	2014	73.1	81.9	89.5	97.9	95.1	91.1	96.0	95.2	95.5	96.2	95.4	93.5	91.7%	91.7%
	2015	91.8	87.9	93.5	95.1	95.4	94.8	97.1	94.9	95.6	97.9	97.0	96.8	94.9%	94.9%
	2016	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	94.6%	94.6%
	2011-2015 average	89.6	88.9	93.4	95.9	93.7	90.6	90.0	92.8	94.4	94.1	95.0	93.4	92.7%	92.7%
Milw - W	2011	96.0	87.2	97.4	95.2	95.1	88.0	84.4	92.5	95.6	98.0	89.1	96.5	93.0%	93.0%
	2012	94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	94.7%	94.7%
	2013	96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	94.2%	94.2%
	2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	93.5%	93.5%
	2015	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8	97.8	99.0	98.2	96.5	96.4%	96.4%
	2016	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.9%	94.9%
	2011-2015 average	93.1	91.0	95.1	96.8	96.3	92.4	92.5	94.0	94.5	96.6	94.6	95.4	94.4%	94.4%
NCS	2011	95.5	88.3	93.5	90.9	92.9	88.8	87.3	92.1	93.1	93.5	83.7	92.4	91.1%	91.1%
	2012	94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	92.4%	92.4%
	2013	95.0	87.5	93.7	90.9	94.0	92.7	93.6	95.0	92.5	93.1	90.0	87.4	92.2%	92.2%
	2014	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	89.9%	89.9%
	2015	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	93.8%	93.8%
	2016	92.3	95.5	91.7	93.3	94.4	96.3	95.0	96.4	96.1	95.5	95.2	92.6	94.5%	94.5%
	2011-2015 average	91.1	86.8	92.6	91.7	93.3	92.1	90.9	92.1	94.3	93.7	91.8	92.0	91.9%	91.9%

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

LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN-DEC	AVG
RI	2011	97.8	89.5	97.7	96.0	95.6	88.8	83.4	94.0	94.8	96.9	96.6	96.5	94.0%	94.0%
	2012	94.3	96.8	94.8	96.1	95.8	94.1	92.9	93.7	96.8	95.6	97.1	96.4	95.3%	95.3%
	2013	96.5	98.1	97.9	94.0	95.5	91.5	93.6	95.5	98.3	96.5	91.7	94.0	95.3%	95.3%
	2014	82.5	83.4	93.4	95.3	95.7	92.5	95.1	97.2	96.6	97.3	97.9	98.6	93.8%	93.8%
	2015	97.4	95.3	98.9	98.7	97.8	97.4	94.2	97.0	96.3	97.3	97.1	97.4	97.1%	97.1%
	2016	92.6	96.2	95.8	96.5	97.9	96.2	93.5	96.3	96.0	98.2	97.9	95.3	96.1%	96.1%
	2011-2015 average	93.6	92.7	96.6	96.0	96.1	92.9	92.0	95.5	96.5	96.7	96.1	96.6	95.1%	95.1%
SWS	2011	95.1	89.7	96.2	95.3	94.0	85.1	88.9	90.3	91.3	92.4	92.8	94.1	92.1%	92.1%
	2012	94.2	96.6	94.8	95.3	95.8	93.2	95.3	94.5	93.8	94.3	93.7	96.3	94.8%	94.8%
	2013	94.7	97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	95.6%	95.6%
	2014	83.0	92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	92.6%	92.6%
	2015	94.7	89.7	95.6	96.1	96.3	91.1	92.4	93.8	97.6	96.8	96.0	94.4	94.5%	94.5%
	2016	95.6	97.2	97.8	95.6	91.9	95.3	94.1	93.3	91.6	97.4	96.6	96.2	95.2%	95.2%
	2011-2015 average	92.3	93.1	95.5	95.8	94.9	90.6	93.7	94.1	94.8	94.8	93.2	94.4	93.9%	93.9%
UP - N	2011	96.4	86.7	94.9	95.5	95.8	91.5	85.1	90.6	91.8	91.6	94.2	96.5	92.6%	92.6%
	2012	94.6	98.4	97.9	98.1	95.1	95.1	95.9	95.1	96.3	97.3	96.6	95.8	96.4%	96.4%
	2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9	97.0	96.5	96.9	98.0	96.6%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	96.7%	96.7%
	2015	98.6	95.6	98.3	97.1	97.7	98.2	97.0	95.9	98.2	97.0	97.6	98.4	97.5%	97.5%
	2016	96.9	98.6	97.1	98.3	98.3	98.2	97.0	96.0	98.1	99.1	98.0	98.1	97.8%	97.8%
	2011-2015 average	95.8	94.1	97.3	97.0	96.5	95.0	94.4	94.9	96.2	96.0	96.6	97.4	95.9%	95.9%
UP - NW	2011	97.0	89.4	97.9	97.3	94.6	93.4	91.2	93.3	95.1	97.6	95.8	95.0	94.9%	94.9%
	2012	95.9	98.6	96.4	98.9	95.9	96.0	94.8	96.7	97.8	94.2	94.6	96.6	96.3%	96.3%
	2013	96.3	97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	94.6%	94.6%
	2014	86.6	91.1	96.3	98.6	95.6	95.2	94.7	97.4	98.3	95.0	97.1	96.2	95.2%	95.2%
	2015	96.0	91.6	97.6	96.3	96.9	96.8	94.1	96.5	96.1	97.5	96.7	97.5	96.2%	96.2%
	2016	97.0	98.1	97.8	98.1	96.0	96.6	94.9	96.8	96.9	96.5	93.2	93.4	96.3%	96.3%
	2011-2015 average	94.3	93.7	96.9	97.2	95.2	94.2	93.8	95.5	96.7	95.8	95.7	95.9	95.4%	95.4%
UP - W	2011	93.5	87.3	93.8	94.5	93.3	89.0	85.9	89.3	90.8	91.6	92.0	89.4	90.9%	90.9%
	2012	93.1	97.1	95.2	95.5	95.6	92.4	93.8	94.3	97.2	97.2	96.0	96.4	95.3%	95.3%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	94.5%	94.5%
	2014	85.9	90.9	94.4	96.7	96.4	94.8	96.4	94.3	96.7	94.6	95.9	96.2	94.4%	94.4%
	2015	93.9	91.1	96.1	96.3	97.5	93.9	93.9	95.9	96.0	96.1	97.3	96.8	95.4%	95.4%
	2016	97.8	93.4	97.2	96.7	90.1	94.4	96.6	96.0	96.2	95.6	94.0	92.9	95.1%	95.1%
	2011-2015 average	92.6	92.6	95.3	95.5	95.3	91.9	93.1	93.3	95.4	95.3	95.0	94.1	94.1%	94.1%
SYSTEM excluding South Shore	2011	96.4	89.8	96.8	96.2	94.8	91.1	87.3	92.7	93.8	93.7	94.0	95.6	93.6%	93.6%
	2012	94.3	97.4	96.1	97.2	96.3	94.7	94.0	95.2	96.2	95.9	95.8	96.9	95.8%	95.8%
	2013	96.8	96.1	96.7	95.7	95.9	92.4	94.0	95.2	96.4	95.9	95.1	93.8	95.4%	95.4%
	2014	85.6	89.3	94.9	96.8	94.5	93.1	95.6	95.7	96.8	95.9	96.9	96.5	94.3%	94.3%
	2015	94.9	92.5	97.0	97.2	97.2	95.8	95.3	96.3	96.8	97.0	96.8	97.5	96.2%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.1%	96.1%
	2011-2015 average	93.6	93.1	96.3	96.6	95.8	93.4	93.3	95.0	96.0	95.7	95.7	96.1	95.1%	95.1%

Delays data for most recent month is final (01/26/17) version from TOPS.

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'2011-2015 average' calculated by summing the delays over the five years, summing the trains run over the five years, and calculating their ratio.

Due to changes in calculation methodology, on-time performance figures from May 2011 onward are not exactly comparable to prior months' figures.

**TABLE 3: LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME
December 2016**

Line	Train	Date	Minutes Late	Delay Code	Delay Explanation	
BNSF	1249	Mon, Dec 05	7	GW	DROPPED FLAGMAN AT BOX 2 PROSPECT AVE MP 18.32	
		74% OT	Fri, Dec 09	10	C	MOW CLEARED LATE @ BERWYN/ RESTRICTION 1143
		Mon, Dec 12	8	E	ENGINEER REPORTS NO BLENDED BRAKE AND HEP ISSUES/ METX 112	
		Tue, Dec 20	8	D	FOLLOWING 1251 DUE TO ZCHCPTL920 LATE DEPARTURE CICERO	
		Wed, Dec 21	9	GM	DROPPING FLAGMAN AT BOX 2 LAWN AVE MP15.39	
BNSF	1259	Mon, Dec 05	8	GW	BOX 2 PROSPECT AVE MP 18.32, FOLLOWING 1257 DELAYED BY RCHI452 AT WEOLA	
		70% OT	Tue, Dec 06	12	C	WORKING AROUND TRAFFICE FROM OPTLCHC102 AT CONGRESS, BROKEN RAIL MT2 EAST NAP
		Thu, Dec 08	6	R	ENGINEER UNABLE TO HEAR/SEE ALERTE/INDUCED PENALTY AT RT 59	
		Thu, Dec 15	20	GA	AMTRAK SWITCH FAILURE 01 AT CP HARRISON	
		Fri, Dec 16	9	C	MOW MT2 AT EOLA REPAIRING 10MPH	
		Thu, Dec 29	7	RF1	FOLLOWING 1257 / RESIDUAL MISROUTE	
BNSF	1273	Fri, Dec 09	6	C1	FOLLOWING 1275	
		84% OT	Fri, Dec 16	98	M1	PEDESTRIAN STRIKE AT MONROE ST MP17.47
		Mon, Dec 19	15	GW1	SWITCH FAILURE AT HIGHLANDS	
BNSF	1275	Fri, Dec 09	9	C1	CONGESTION @ CONGRESS PARK DUE TO RESIDUAL DELAY FROM 1282, 1283, 1284, & 1286/ 5"	
		84% OT	Fri, Dec 16	0	XM	PEDESTRIAN STRIKE AT MONROE ST MP17.47
		Mon, Dec 19	10	GW1	SWITCH FAILURE AT HIGHLANDS	
BNSF	1276	Tue, Dec 06	8	C	TRAFFIC DUE TO QPTLCHC102 CLEARING INTO CICERO	
		81% OT	Fri, Dec 09	8	C	UNSCHEDULED TRACK WORK CHICAGO SUB/ FORM A RESTS 1143 AND 1144
		Fri, Dec 16	24	C1	LATE FLIP FROM 1239	
		Tue, Dec 27	11	R	HUMAN ERROR TRANSPORTATION / LIGHT BREAKER UNINTENTIONALLY TRIPPED	
BNSF	1279	Mon, Dec 05	9	RF	MISROUTED AT FVW	
		74% OT	Mon, Dec 12	10	E1	FOLLIWNG 1277/ METX 183/ AMTRAK 383 @ EOLA
		Thu, Dec 15	9	GA	AMTRAK SWITCH FAILURE 01 AT CP HARRISON	
		Fri, Dec 16	55	M1	PEDESTRIAN STRIKE AT MONROE ST MP17.47 FATALITY	
		Mon, Dec 19	23	GW1	SWITCH FAILURE AT HIGHLANDS	
BNSF	1283	Tue, Dec 06	6	C1	LATE FLIP FROM 1282	
		82% OT	Tue, Dec 13	15	GM	BOX 2S @ MONROE AND CASS AVE/ BOX 2S WASHINGTON MP 21.03, MAIN ST 21.21, FOREST AVE 21.28
		Fri, Dec 16	49	M1	PEDESTRIAN STRIKE AT MONROE ST MP17.47	
BNSF	1285	Fri, Dec 02	7	DD1	LATE FLIP FROM 1286 DUE TO FGA1130102 AT BERWYN	
		57% OT	Mon, Dec 05	10	GW1	LATE FLIP FROM 1284, PICKING UP FLAGMAN AT PROSPECT AVE MP18.32
		Tue, Dec 06	10	C1	LATE FLIP FROM 1286	
		Wed, Dec 07	8	J1	RUNNING AS 1373 DUE TO LATE ARRIVAL OF EQUIPMENT 1284/HEAVY PASSENGER HANDLING	
		Fri, Dec 09	6	C1	LATE ARRIVAL OF EQUIPMENT	
		Thu, Dec 15	25	GA1	LATE FLIP FROM 1284	
		Fri, Dec 16	85	M1	PEDESTRIAN STRIKE AT MONROE ST MP17.47	
		Wed, Dec 21	25	GM1	LATE FLIP FROM 1282	
Thu, Dec 22	10	C1	LATE FLIP FROM 1286, BOX 2 MONROE ST MP17.48			
BNSF	1287	Mon, Dec 05	7	GW1	WAITING ON 1285 TO YARD AT HILLWEST	
		81% OT	Tue, Dec 06	6	C1	FOLLOWING 1285
		Tue, Dec 13	16	GM	MULTIPLE BOX 2S ON THE CHICAGO SUB	
		Fri, Dec 16	57	M1	PEDESTRIAN STRIKE AT MONROE ST MP17.47	
BNSF	1288	Fri, Dec 09	11	C1	CONGESTION AT FAIRVIEW DUE TO RESIDUAL DELAY FROM 1282/1284	
		81% OT	Fri, Dec 16	7	C	MOW MT2 AT EOLA REPAIRING 10MPH
		Thu, Dec 22	10	C	10MPH FORM A MP 7.1-7.3, BOX 2 MONROE ST, OPERATING 10 CAR SET	
		Thu, Dec 29	8	R	WRONG TRAIN SET ON OPERATING PLAN	
BNSF	1289	Tue, Dec 13	10	GM	BOX 2S @ MONROE AND CASS AVE	
		81% OT	Wed, Dec 14	7	D	F GA 1130 AT CICERO WORKED MT3 BERWYN-CPK
		Fri, Dec 16	0	M1	PEDESTRIAN STRIKE AT MONROE ST MP17.47	
		Thu, Dec 22	12	GA	TALKED PASS SIGNAL ON CUS STATION TRACK 8, OPERATING 10 CAR SET	
BNSF	1373	Tue, Dec 06	9	C1	LATE FLIP FROM 1284	
		76% OT	Fri, Dec 16	77	M1	PEDESTRIAN STRIKE AT MONROE ST MP17.47
		Mon, Dec 19	7	GW1	SWITCH FAILURE AT HIGHLANDS	
		Wed, Dec 21	10	GM1	LATE FLIP FROM 1284	
ELML	100	Fri, Dec 09	6	I	2M KENSINGTON WAITING ON ME200, 2M 59TH WAITING ON ME300, 2M VAN BUREN RELAY PICK UP	
		76% OT	Mon, Dec 12	6	I	2M 59TH ST SLOW LOADING, 2M KENSINGTON WAITING ON ME200, 2M RANDOLPH FLAGGED BY SIG
		Mon, Dec 19	6	GW1	4MRESTR. SIG. 19.28 W/ NEXT CLR 18.62 TK2 N/B + 2M 67TH ST. WAITING ON ME302	
		Wed, Dec 21	7	KW1	5M 59TH WAITING ON LATE ME300 + 2M PSGR LOADING ENROUTE	
		Fri, Dec 30	8	R	WAITING AT VANBUREN TO PICK UP THE RELAY FROM 4 MAIN PER GYM	
MN	2135	Mon, Dec 05	13	VE1	3" STOP SIGNAL, MAYFAIR; 4" FOLLOW #2133; 5" LIBERTYVILLE; 2" ADA; 3" WAIT DEPLOY LIGHT TO GO OUT	
	84% OT	Tue, Dec 06	14	AM	9" WAIT ON #2148 TO CLEAR MORTON GROVE, USED 2MT GO AROUND 339, MORTON GROVE TO A-20	

**TABLE 3 (continued): LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME
December 2016**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
		Wed, Dec 14	11	FW	4" STICKING DOORS; 2" MEET #2148; 2" ITEM 2; 2" ADA; 2" MAYFAIR
MN	2150	Mon, Dec 05	11	VE1	11" LATE TURN FROM #2133
	81% OT	Tue, Dec 06	11	AM1	11" WAIT ON #2135, 2137 & 2139 TO CLEAR 2MT @ A-20
		Fri, Dec 09	9	G	9" SWITCH FAILURE @ A-2, X/O USED 3MT, A-2 TO CUS
		Fri, Dec 16	7	AM	3" FOLLOWING AMTRAK, DEERFIELD; 3" TURN AROUND, DEERFIELD; 2" LOADING, DEERFIELD
MW	2205	Mon, Dec 12	10	JM1	10" HELD OUT DUE TO #2216 MEDICAL EMERGENCY, FRANKLIN PARK
	81% OT	Thu, Dec 15	26	G	15" PLANT PROBLEMS, SPAULDING
		Mon, Dec 19	21	GW1	21" LATE TURN FROM #2206, CUS
		Tue, Dec 27	8	G	8" HELD AT A2 FOR SWITCHING PROBLEMS.
MW	2216	Mon, Dec 12	14	JM	17" MEDICAL EMERGENCY, FRANKLIN PARK
	81% OT	Thu, Dec 15	12	E1	12" FOLLOWING #2214
		Mon, Dec 19	8	E1	6" FOLLOWING #2214
		Tue, Dec 20	14	EW	14" MECHANICAL PROBLEMS ENG #101; BLOW DOWNS FROZE UP
MW	2218	Mon, Dec 12	18	JM1	17" FOLLOWING #2216
	81% OT	Thu, Dec 15	9	E1	9" FOLLOWING #2216
		Mon, Dec 19	11	E1	10" #2212 ANNULLED DUE TO MECHANICAL PROBLEM
		Tue, Dec 20	17	EW1	14" FOLLOWING #2216
MW	2220	Mon, Dec 12	9	JM1	9" FOLLOWING #2218
	76% OT	Thu, Dec 15	8	G	8" PLANT PROBLEMS, SPAULDING
		Mon, Dec 19	21	E1	21" #2212 ANNULMENT DUE TO MECHANICAL PROBLEM
		Tue, Dec 20	13	EW1	13" FOLLOWING #2218
		Tue, Dec 27	6	G1	6" DEPARTING ROSELLE LATE ARRIVAL/TURN OF 7201
MW	2248	Wed, Dec 07	33	B1	34" LATE TURN FROM #227 & HAND LINE ROUTE E/B
	67% OT	Mon, Dec 12	22	G	19" HAND LINE ROUTE, B-35
		Thu, Dec 15	10	G	5" PASSENGER LOADING; 10" STOP SIGNAL RESTRICTED SPEED, BARTLETT EAST
		Fri, Dec 16	9	IW	9" SLOW LOADING
		Mon, Dec 19	8	IW	8" SLOW LOADING AND WEATHER, EN ROUTE.
		Tue, Dec 20	10	JM1	2" MEET #2231, NATIONAL ST; 5" STOP SIGNAL, SPAULDING; 5" MEETING LATE W/B TRAINS
		Wed, Dec 21	8	U	5" 2 ADA'S; 5" WAITING FOR PROPER LINE UP, SIGNAL DROPPED HAD TO TIME OUT, A-6
MW	2254	Wed, Dec 07	30	B1	28" LATE TURN FROM #2249
	76% OT	Mon, Dec 12	21	G1	21" LATE TURN FROM #2249
		Wed, Dec 14	11	IW	7" LATE TURN FROM #2249, BIG TIMBER; 5" WAIT ON PASSENGERS, EN ROUTE
		Tue, Dec 20	21	D	6" LATE TURN FROM #2249, BIG TIMBER; 3" LOADING, EN ROUTE; 12" WAIT ON CP FREIGHT TO CLEAR INTO YARD, B-17
		Thu, Dec 22	6	I	6" SLOW PASSENGER LOADING, EN ROUTE.
MW	2255	Wed, Dec 07	23	B1	24" LATE TURN FROM #2254
	67% OT	Mon, Dec 12	27	G1	18" LATE TURN FROM #2254; 8" REMOVE INTOXICATED PASSENGER, ELMWOOD PARK
		Wed, Dec 14	12	IW1	9" LATE TURN FROM #2254
		Fri, Dec 16	7	IW	8" WEATHER CONDITIONS PER CREW
		Tue, Dec 20	22	D1	17" LATE TURN FROM #2254, CUS
		Thu, Dec 22	21	J	20" HELD WAITING FOR METRA PD TO REMOVE PASSENGER, SCHAUMBURG.
		Fri, Dec 23	9	G	10" TALKED BY SIGNAL, BARTLETT
NCS	110	Mon, Dec 12	10	JM1	5" LATE DEPARTING FOLLOWING #108, ANTIOCH; STOP, B-12; STOP, B-6
	81% OT	Mon, Dec 19	14	CW1	13" FOLLOWING #108
		Wed, Dec 21	18	GF1	16" STOPPED BEHIND #108, GRAYSLAKE C&M XING, PICKED UP #108'S SHORTS, PRAIRIE XING; SLOW/HEAVY LOADING
		Thu, Dec 22	7	GF	MP 44.51 FLAG CROSSING ON CN
NCS	114	Mon, Dec 05	12	D	9" N/B FREIGHT, ROUND LAKE BEACH; 7" N/B FREIGHT, GRAYSLAKE
	67% OT	Tue, Dec 06	14	I	4" 529 A, RT 45; 5" GROUP TRAVEL, ANTIOCH-BUFFALO GROVE
		Tue, Dec 20	7	D	7" FREIGHT, GRAYSLAKE; GROUP MOVEMENT POLAR EXPRESS, MORTON GROVE
		Wed, Dec 21	9	I	5" GROUP MOVEMENT POLAR EXPRESS, ANTIOCH-BUFFALO GROVE; 3" SLOWLOADING; 2" STOP SIGNAL, DEVAL
		Thu, Dec 22	12	D	7" FREIGHT INTERFERENCE, GRAYSLAKE.
		Fri, Dec 23	12	GF1	12" LATE TURN FROM #103, ANTIOCH; GROUP MOVEMENT/POLAR EXPRESS,ANTIOCH-BUFFALO GROVE
		Wed, Dec 28	17	GF	22" HAND LINE ROUTE @ ROUND LAKE BEACH TRACK CIRCUIT CUT, STOP SIGNAL
RI	302	Mon, Dec 05	0	E1	33M LATE PICKING-UP PASSENGERS FROM RI412 WHICH HAD MECH PROBLEMS
	81% OT	Thu, Dec 15	6	IW	6M DUE TEMP SPEED RESTRICTION/0 @ OHARE
		Mon, Dec 19	0	F1	406 RAN IN 302'S PLACE DUE TO MECHANICAL ISSUE
		Tue, Dec 27	16	E1	16M LATE DEPARTING BI DUE TO LATE TURN OF EQUIP AS RI406 HAD TO FOLLOW RI416 OUT OF GRESHAM/LOCO 8580
RI	414	Mon, Dec 05	21	E1	21M NEW LENOX PICKING-UP RI412 PASSENGERS & MAKING EXTRA STOPS PICKING-UP PASSENGERS
	81% OT	Thu, Dec 15	10	D	8M CP MILLER WAITING ON RI401 TO CLEAR DUE TO DEAD Q556 STOPPED BETWEEN EJE & CP
		Mon, Dec 19	33	F1	33M LATE DEPARTING CP MILLER DUE TO MECH PROBLEMS W/RI406
		Tue, Dec 20	6	I	6M ENROUTE SLOW LOADING/UNLOADING DUE TO WEATHER & FOLLOWING RI612 EAST OUT OF GRESHAM

**TABLE 3 (continued): LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME
December 2016**

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
RI	415	Tue, Dec 06	31	KP	POLICE ACTIVITY AT 95TH ST
		Thu, Dec 08	8	G1	8M LATE INTO JOLIET DUE TO RI526 HAND LINING SWITCH AHEAD.
		Wed, Dec 14	7	GF1	SOUTH END OF THEM PURINGTON X-OVER ON MT2 HAD(S) A BAR ROD. THE CRL IS RESPONSIBLE FOR MAINTANACE. WE HAD TO SINLGE TRACK ON MT1.
		Thu, Dec 22	0	XE	66M LATE INTO JOLIET DUE TO ENG 108 LOOSING HEAD END POWER AT OAK FOREST. TRAIN KEPT SHUTTING DOWN.
RI	417	Tue, Dec 06	33	KP	POLICE ATIVIITY AT 95TH ST
		Thu, Dec 08	8	G1	8M LATE INTO JOLIET FOLLOWING RI413
		Wed, Dec 14	7	GF1	SOUTH END OF THE PURINGTON X-OVER ON MT2 HAD(S) A BAD ORDER ROD. THE CRL IS RESPONSIBLE FOR MAINTANACE. WE HAD TO SINLGE TRACK ON MT1.
		Thu, Dec 22	56	E1	XM DELAY AT OAK FOREST HAD TO TIE ONTO TRAIN RI415
RI	419	Tue, Dec 06	24	KP	POLICE ATIVITY AT 95TH ST
		Wed, Dec 14	8	GF1	SOUTH END OF THE PURINGTON X-OVER OFF MT2 HAS(D) A BAD ORDER ROD. THE CRL IS RESPONSIBLE FOR THE MAINTANACE. WE HAD TO SINGLE TRACK ON MT1.
		Thu, Dec 15	7	G	1M 95TH ST STICKING DOOR, 3M ADA @BI, 5M CAB SIGNAL PROBLEMS B/T MP 28 AND MP 29
		Mon, Dec 19	8	UW	4M VERMONT ST. ADA, 2M RESTRICTED SIGNAL 16TH ST TO 81ST, 2M OAK PK. AVE. STICKING DOORS ON 7358
RI	505	Mon, Dec 12	10	K1	4M 16TH FOR X-TRAFFIC, 2M ASHLAND FOR GATE MALFUNCTION, 2M ADA LSS-103RD, 2M ADA BI TO ROBBINS
		Tue, Dec 13	7	E	14M EN ROUTE DUE TO MECHANICAL PROBLEMS. UNABLE TO BUILD ENOUGH AIR.
		Mon, Dec 19	13	E	1M LATE DEPARTING LSS WAITING ON AN INBOUND TRAIN TO ENTER THE DEPOT 5M LATE ENROUTE DUE TO EQUIP NOT ABLE TO MAKE TRACK SPEED 6M ENG PROB
		Fri, Dec 23	6	E1	13M LATE DEPARTING LSS DUE TO SWAPPING EQUIP W/RI412, MAKING RI505 A DOUBLEHEADER E/179/206
UPNW	614	Mon, Dec 12	13	S	16" LATE DEPART FTX TEST, CRYSTAL LAKE YD; BRAKES WOULD NOT SET
		Thu, Dec 15	21	E	21" STOPPED METX 167 HAVING GROUND RELAY, CUT OUT MULTIPLE TRACTION MOTORS, PALATINE; DROPPED SHORTS @ ARLINGTON HTS EXPRESSED TO CPT
		Mon, Dec 19	32	FW1	32" FOLLOW #608, RESTRICTED SPEED, CRYSTAL LAKE-CARY; NO DOOR LIGHT & SLOW LOADING
		Tue, Dec 20	18	D	18" X11641-17, CN @ BARRINGTON
UPNW	622	Mon, Dec 05	12	VF	12" WEST SIDE VESTIBULE DOORS WERE STICKING OPEN ON CAR 8738, EN ROUTE
		Mon, Dec 12	11	H1	11" FOLLOW #624, CRYSTAL LAKE-BARRINGTON; WAIT ON#2107 & #2114.MAYFAIR
		Mon, Dec 19	79	FW1	79" SET OUT CAR 7230 MECHANICAL ISSUES, ALL STOPS MECHENRY TO CPT
		Tue, Dec 20	10	D1	10" FOLLOWING TRAINS AHEAD, #614 FREIGHT INTERFERENCE
UPNW	649	Thu, Dec 01	72	M1	72" #635 STRUCK VEHICLE, SOUTH OF MT PROSPECT
		Tue, Dec 13	15	C1	18" SIGNAL PROBLEMS, MP 10.31 - 12.19.
		Tue, Dec 20	144	M	145" EQUIPMENT STRUCK VEHICLE THAT WAS FOULING TK1 @ CY TOWER MP2.2
		Thu, Dec 29	8	H1	17" LATE ON ACCOUNT OF EQUIPMENT WAS LATE COMING FROM CAL AVE DUE TO EARLIER MECHANICAL ISSUES.
UPNW	651	Thu, Dec 01	56	M1	78" #635 STRUCK VEHICLE SOUTH OF MT PROSPECT, JEFFERSON
		Mon, Dec 12	7	GW	10" LATE DEPARTING #172 SWITCH WAS FROZEN, WAIT FOR MAINTAINER TO RESOLVE, CPT; WAIT FOR #2145 & #2150 TO CLEAR, MAYFAIR
		Tue, Dec 13	17	C1	17" SIGNAL PROBLEMS, MP 10.31 - 12.19
		Tue, Dec 20	49	M1	50" #649 STRUCK VEHICLE @MP2.2 CY TOWER
UPW	10	Tue, Dec 13	9	D	9" FREIGHT TRAIN INTERFERENCE, VILLA PARK.
		Wed, Dec 14	20	F	15" LATE DEPARTING, SWAP SCHEDULES W/#12 DUE TO BATTERY VOLTAGEINDICATOR LIGHT WAS LIT ON CAR 8430
		Thu, Dec 15	8	F	3" LATE DEPARTING BATTERY VOLTAGE INDICATOR LIGHT WAS LIT ON CAR 8430, ELBURN; SLOW LOADING/WEATHER, EN ROUTE
		Fri, Dec 16	10	D	10" WAIT FOR SIGNAL DUE TO M34241-14 CROSSED AHEAD, CN WEST CHICAGO
UPW	44	Mon, Dec 05	7	D1	17" LATE TURN FROM #25
		Tue, Dec 06	15	I	5" LATE DEPART COMPUTER WARM START, ELBURN; 15" SLOW PASSENGER LOADING, EN ROUTE
		Fri, Dec 16	15	R1	15" LATE TURN FROM #25, ELBURN; SLOW LOADING/WEATHER
		Thu, Dec 22	10	I	10" HEAVY LOADING, ENROUTE.
		Fri, Dec 23	15	I	10" HEAVY LOADING, EN ROUTE; ADA FAULURE ON CAR 8431 WOULD NOT STOE, GENEVA
		Wed, Dec 28	7	I	5"HEAVY LOADING PASSENGERS ENROUTE
		Thu, Dec 29	7	I	7" HEAVY PASSENGER LOADING ENROUTE
UPW	49	Wed, Dec 14	8	D1	8" FOLLOWING #47
		Thu, Dec 15	8	D	8" STOPPED BEHIND #47, WAIT FOR M34391-15 TO CLEAR, JB TOWER
		Fri, Dec 16	8	D	8" RAN TRAIN CONTROL COMING UP BEHIND #47, WHO WAS STOPPED @ CN WEST CHICAGO JB TOWER DUE TO Q198511-16 CROSSED AHEAD
		Wed, Dec 21	9	D1	9" FOLLOWING #47; TRAIN CONTROL, MP4.6 TO JUST WEST OF KILBOURN#49 REPORTED DEAD TRACK MP4.25-5.25 TK3
UPW	58	Fri, Dec 02	19	D	11" LATE DEPARTING WAIT FOR WWGMLG-2 TO CLEAR TK2, ELBURN; SLOW/HEAVY LOADING, EN ROUTE
		Tue, Dec 13	10	E	10" LATE DEPARTING ELBURN DUE TO MECHANICAL FAILUR ON METS 138 AND HAD TO SWAP EQUIPMENT WITH #41, ELBURN.
		Wed, Dec 14	9	D	9" E25161-14, CN WEST CHICAGO
		Fri, Dec 16	10	D	10" RAN TRAIN CONTROL FROM PARK DUE TO YPRBL-15 WAS BACKING UP INTO PROVISO YD TK1 @ 25TH AVE
UPW	60	Wed, Dec 14	11	D1	11" WAIT FOR #58 TO CLEAR,PARK, THEN FOLLOWED TO CPT
		Fri, Dec 16	11	D1	11" RAN TRAIN CONTROL FOLLOWING #58
		Mon, Dec 19	9	D1	9" LATE TURN FROM #59
		Wed, Dec 21	7	G1	6" LATE TURN FROM #59

Data is final (01/26/17) 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						

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

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

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

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

December 2016

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	66	45	10	15	6	34	48	8	43	5	15	21	32	348	42%
Semi-controllable	23	0	0	0	4	13	4	19	10	14	2	8	37	134	16%
Uncontrollable	62	22	5	6	2	45	44	7	34	6	15	73	33	354	42%
TOTAL TRAINS DELAYED	151	67	15	21	12	92	96	34	87	25	32	102	102	836	100%

December - Average Over Previous Four Years: 2012-2015

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	41.3	16.3	4.5	9.0	2.0	55.5	22.0	11.8	22.8	11.8	17.8	17.0	27.0	258.5	40%
Semi-controllable	21.3	0.0	0.0	0.0	4.0	15.0	15.8	10.5	3.8	12.0	1.0	8.0	17.5	108.8	17%
Uncontrollable	36.3	21.5	13.0	12.8	1.0	29.0	32.8	15.5	29.5	12.5	21.0	35.0	24.3	284.0	44%
TOTAL TRAINS DELAYED	98.8	37.8	17.5	21.8	7.0	99.5	70.5	37.8	56.0	36.3	39.8	60.0	68.8	651.3	100%

December 2016 Divergence From December Average Over Previous Four Years

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	24.8	28.8	5.5	6.0	4.0	-21.5	26.0	-3.8	20.3	-6.8	-2.8	4.0	5.0	89.5	48%
Semi-controllable	1.8	0.0	0.0	0.0	0.0	-2.0	-11.8	8.5	6.3	2.0	1.0	0.0	19.5	25.3	14%
Uncontrollable	25.8	0.5	-8.0	-6.8	1.0	16.0	11.3	-8.5	4.5	-6.5	-6.0	38.0	8.8	70.0	38%
TOTAL TRAINS DELAYED	52.3	29.3	-2.5	-0.8	5.0	-7.5	25.5	-3.8	31.0	-11.3	-7.8	42.0	33.3	184.8	100%

January-December 2016

DELAY CONTROL	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM	
		ML	BI	SC		N	W				N	NW	W		
Controllable	739	391	98	156	43	491	371	117	504	126	210	259	467	3,972	49%
Semi-controllable	416	0	0	0	52	127	132	130	70	175	6	34	167	1,309	16%
Uncontrollable	452	207	44	102	6	333	372	60	273	79	230	402	212	2,772	34%
TOTAL TRAINS DELAYED	1,607	598	142	258	101	951	875	307	847	380	446	695	846	8,053	100%

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

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01/30/2017

TABLE 7: NUMBER OF DELAYS BY DATE
December 2016

WEEKDAY	1	2	5	6	7	8	9	12	13	14	15	16	19	20	21	22	23	27	28	29	30	TOTAL
	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Tu	We	Th	Fr	
BNSF	0	1	7	11	2	2	8	8	8	21	14	22	16	1	5	7	0	1	1	4	0	139
Elec -ML	1	0	1	1	2	0	4	7	1	3	4	1	22	11	3	0	0	1	1	0	1	64
-BI	0	0	0	0	0	0	0	4	0	1	0	0	6	3	1	0	0	0	0	0	0	15
-SC	1	0	0	0	0	1	0	2	1	0	0	1	5	4	0	0	1	1	0	1	1	19
Heritage	0	0	2	1	0	1	0	0	0	0	1	0	2	2	1	1	0	0	0	1	0	12
Milw -N	3	0	6	5	1	0	1	4	0	12	1	2	24	7	0	0	7	6	0	1	2	82
-W	0	0	7	0	8	1	5	12	0	2	12	2	16	13	1	4	1	2	0	1	0	87
NCS	0	0	3	2	1	0	1	5	1	0	0	1	6	5	3	3	2	0	1	0	0	34
RI	1	0	7	9	1	2	0	4	2	7	6	4	18	3	0	4	6	3	0	0	0	77
SWS	0	3	0	0	2	1	0	1	0	0	0	0	2	7	2	2	1	3	1	0	0	25
UP -N	0	1	0	0	2	2	1	8	0	4	0	0	1	4	0	0	1	0	0	0	0	24
-NW	19	2	1	1	2	1	0	6	7	1	3	0	17	16	0	2	1	0	1	1	1	82
-W	<u>0</u>	<u>1</u>	<u>3</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>8</u>	<u>0</u>	<u>8</u>	<u>13</u>	<u>5</u>	<u>6</u>	<u>9</u>	<u>1</u>	<u>8</u>	<u>7</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>86</u>
SYSTEM	25	8	37	34	21	11	28	61	28	64	46	39	144	77	24	30	21	17	9	13	9	746

SATURDAY	3	10	17	24	31	TOTAL	SUNDAY/HOLIDAY	4	11	18	25	26	TOTAL
BNSF	3	0	2	1	1	7	BNSF	1	0	3	0	1	5
Elec -ML	0	0	0	1	1	2	Elec -ML	1	0	0	0	0	1
-BI	0	0	0	0	0	0	-BI	-	-	-	-	-	0
-SC	0	2	0	0	0	2	-SC	0	0	0	0	0	0
Heritage	-	-	-	-	-	-	Heritage	-	-	-	-	-	0
Milw -N	1	1	5	1	1	9	Milw -N	0	1	0	0	0	1
-W	2	0	0	1	0	3	-W	4	0	1	0	1	6
NCS	-	-	-	-	-	-	NCS	-	-	-	-	-	0
RI	1	0	0	0	1	2	RI	8	0	0	0	0	8
SWS	0	0	0	0	0	0	SWS	-	-	-	-	-	0
UP -N	0	1	0	0	5	6	UP -N	0	1	0	0	1	2
-NW	7	2	2	4	2	17	-NW	2	0	1	0	0	3
-W	<u>6</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>10</u>	-W	<u>4</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>6</u>
SYSTEM	20	6	11	10	11	58	SYSTEM	20	3	5	1	3	32

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

TABLE 8.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
December 2016

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	9	0	0	0	4	7	4	8	6	9	2	8	37	94
Freight Interference - Peak	3	0	0	0	3	0	1	2	2	4	0	5	12	32
Primary	2	0	0	0	3	0	1	2	2	4	0	1	5	20
Secondary	1	0	0	0	0	0	0	0	0	0	0	4	7	12
Freight Interference - Off-Peak	6	0	0	0	1	7	3	6	4	5	2	3	25	62
Primary	6	0	0	0	1	4	2	6	4	4	2	3	20	52
Secondary	0	0	0	0	0	3	1	0	0	1	0	0	5	10
Signal/Switch Failure - TOTAL	26	11	2	2	1	16	19	12	15	7	0	1	8	120
Signal/Switch Failure - Metra/PSA	9	11	2	2	0	10	19	1	11	2	0	1	8	76
Primary	7	8	0	1	0	4	12	1	9	2	0	1	7	52
Secondary	2	3	2	1	0	6	7	0	2	0	0	0	1	24
Signal/Switch Failure - Foreign	17	0	0	0	1	6	0	11	4	5	0	0	0	44
Primary	13	0	0	0	1	3	0	7	1	4	0	0	0	29
Secondary	4	0	0	0	0	3	0	4	3	1	0	0	0	15
Mechanical Failure - TOTAL	7	2	0	0	1	9	11	5	30	0	8	5	10	88
Mechanical Failure - Metra/PSA	7	2	0	0	1	1	11	5	30	0	8	5	10	80
Non-Locomotive Equipment Failure - Metra/PSA	1	2	0	0	0	0	1	1	12	0	4	0	8	29
Primary	0	2	0	0	0	0	1	1	1	0	1	0	3	9
Secondary	1	0	0	0	0	0	0	0	11	0	3	0	5	20
Locomotive Failure - Metra/PSA	6	0	0	0	1	1	10	4	18	0	4	5	2	51
Primary	3	0	0	0	1	1	3	1	7	0	2	5	2	25
Secondary	3	0	0	0	0	0	7	3	11	0	2	0	0	26
Mechanical Failure - Foreign	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Passenger Train Interference - TOTAL	0	20	5	5	0	8	0	0	0	0	0	0	0	38
Passenger Train Interference - Metra/PSA	0	0	0	0	0	2	0	0	0	0	0	0	0	2
Passenger Train Interference - Foreign	0	20	5	5	0	6	0	0	0	0	0	0	0	36
Accident - TOTAL	14	0	0	0	0	1	0	0	0	1	5	28	0	49
Accident - Metra/PSA	14	0	0	0	0	1	0	0	0	1	5	28	0	49
Accident - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Track Work - TOTAL	31	11	3	4	0	2	0	0	0	0	0	9	1	61
Track Work - Metra/PSA	31	11	3	4	0	2	0	0	0	0	0	9	1	61
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	13	1	0	3	4	10	12	2	1	2	6	5	12	71
Human Error - Metra/PSA	9	1	0	3	2	7	12	0	1	0	6	4	12	57
Human Error - Foreign	4	0	0	0	2	3	0	2	0	2	0	1	0	14
Sick, Injured, Unruly Passenger - TOTAL	3	1	0	0	0	1	18	1	0	0	2	3	5	34
Sick, Injured, Unruly Passenger - Metra/PSA	3	1	0	0	0	1	18	1	0	0	2	3	5	34
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	41	6	2	2	2	25	14	4	7	3	2	20	4	132
Weather - Metra/PSA	41	6	2	2	1	25	14	4	7	3	2	20	4	131
Weather - Foreign	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	4	4	0	0	0	7	9	2	8	0	3	17	17	71
Lift Deployment - TOTAL	0	0	0	0	0	2	1	0	8	1	1	1	2	16
Obstruction/Debris - TOTAL	0	10	3	4	0	0	2	0	12	2	1	2	6	42
Catenary Failure - TOTAL	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Other - TOTAL	3	1	0	0	0	4	6	0	0	0	2	3	0	19
TOTAL TRAINS DELAYED	151	67	15	21	12	92	96	34	87	25	32	102	102	836
Total Metra/PSA Delays	121	47	10	16	4	62	92	13	77	9	30	93	65	639
Total Foreign Carrier Delays	30	20	5	5	8	30	4	21	10	16	2	9	37	197

Data for current month is final (01/26/17) 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
December - Average Over Previous Five Years: 2011-2015

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	19.0	0.0	0.0	0.0	3.8	12.0	13.6	10.0	4.2	10.0	1.2	6.2	21.0	101.0
Freight Interference - Peak	7.0	0.0	0.0	0.0	3.6	2.2	4.0	5.0	0.4	3.8	0.2	4.6	4.6	35.4
<i>Primary</i>	3.6	0.0	0.0	0.0	3.4	1.2	3.0	4.0	0.2	2.8	0.2	1.2	1.6	21.2
<i>Secondary</i>	3.4	0.0	0.0	0.0	0.2	1.0	1.0	1.0	0.2	1.0	0.0	3.4	3.0	14.2
Freight Interference - Off-Peak	12.0	0.0	0.0	0.0	0.2	9.8	9.6	5.0	3.8	6.2	1.0	1.6	16.4	65.6
<i>Primary</i>	10.0	0.0	0.0	0.0	0.2	6.8	6.2	4.6	3.8	4.2	0.4	1.4	13.8	51.4
<i>Secondary</i>	2.0	0.0	0.0	0.0	0.0	3.0	3.4	0.4	0.0	2.0	0.6	0.2	2.6	14.2
Signal/Switch Failure - TOTAL	10.6	4.4	1.4	3.2	3.0	29.4	12.8	7.2	4.0	6.2	4.6	2.6	7.6	97.0
Signal/Switch Failure - Metra/PSA	9.6	4.4	1.4	3.2	2.0	25.8	11.6	6.2	4.0	2.0	4.6	2.4	7.2	84.4
<i>Primary</i>	7.0	2.6	0.6	2.8	2.0	13.8	6.8	3.0	3.6	1.8	3.4	1.6	4.4	53.4
<i>Secondary</i>	2.6	1.8	0.8	0.4	0.0	12.0	4.8	3.2	0.4	0.2	1.2	0.8	2.8	31.0
Signal/Switch Failure - Foreign	1.0	0.0	0.0	0.0	1.0	3.6	1.2	1.0	0.0	4.2	0.0	0.2	0.4	12.6
<i>Primary</i>	1.0	0.0	0.0	0.0	1.0	2.6	1.2	0.8	0.0	3.6	0.0	0.2	0.4	10.8
<i>Secondary</i>	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.2	0.0	0.6	0.0	0.0	0.0	1.8
Mechanical Failure - TOTAL	6.6	2.2	0.8	1.0	0.6	7.4	5.2	2.0	9.0	3.2	6.0	4.8	12.0	60.8
Mechanical Failure - Metra/PSA	5.8	2.2	0.6	1.0	0.6	7.4	5.2	2.0	9.0	3.2	6.0	4.8	12.0	59.8
Non-Locomotive Equipment Failure - Metra/PSA	0.2	2.2	0.6	1.0	0.2	0.6	0.4	0.2	1.6	0.0	2.6	0.2	3.0	12.8
<i>Primary</i>	0.0	1.8	0.2	0.2	0.2	0.0	0.4	0.2	0.6	0.0	1.2	0.2	1.4	6.4
<i>Secondary</i>	0.2	0.4	0.4	0.8	0.0	0.6	0.0	0.0	1.0	0.0	1.4	0.0	1.6	6.4
Locomotive Failure - Metra/PSA	5.6	0.0	0.0	0.0	0.4	6.8	4.8	1.8	7.4	3.2	3.4	4.6	9.0	47.0
<i>Primary</i>	2.2	0.0	0.0	0.0	0.2	2.6	2.6	0.6	2.4	1.6	1.8	2.4	2.6	19.0
<i>Secondary</i>	3.4	0.0	0.0	0.0	0.2	4.2	2.2	1.2	5.0	1.6	1.6	2.2	6.4	28.0
Mechanical Failure - Foreign	0.8	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Passenger Train Interference - TOTAL	3.2	1.0	0.2	1.4	0.0	8.2	2.2	1.8	0.4	1.8	0.4	0.4	1.8	22.8
Passenger Train Interference - Metra/PSA	0.2	0.2	0.2	1.4	0.0	6.4	2.0	1.8	0.4	0.4	0.4	0.4	1.8	15.6
Passenger Train Interference - Foreign	3.0	0.8	0.0	0.0	0.0	1.8	0.2	0.0	0.0	1.4	0.0	0.0	0.0	7.2
Accident - TOTAL	7.0	1.2	6.2	4.0	0.4	1.6	7.6	7.4	2.0	7.6	5.8	7.2	5.0	63.0
Accident - Metra/PSA	6.4	1.2	6.2	4.0	0.4	1.4	5.6	7.2	2.0	7.6	5.8	7.2	4.6	59.6
Accident - Foreign	0.6	0.0	0.0	0.0	0.0	0.2	2.0	0.2	0.0	0.0	0.0	0.0	0.4	3.4
Track Work - TOTAL	6.0	2.8	0.6	1.4	1.8	2.4	1.4	1.4	2.0	1.2	3.2	1.6	5.4	31.2
Track Work - Metra/PSA	6.0	2.8	0.6	1.4	1.8	2.4	1.4	1.4	2.0	1.2	3.2	1.6	5.4	31.2
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Human Error - TOTAL	13.8	2.2	0.8	1.2	1.4	10.4	4.0	1.8	6.6	3.2	4.8	5.8	2.8	58.8
Human Error - Metra/PSA	6.6	2.0	0.8	1.2	0.8	3.2	3.6	0.4	6.6	0.2	4.2	4.6	1.6	35.8
Human Error - Foreign	7.2	0.2	0.0	0.0	0.6	7.2	0.4	1.4	0.0	3.0	0.6	1.2	1.2	23.0
Sick, Injured, Unruly Passenger - TOTAL	3.4	5.2	1.0	2.0	0.2	3.2	3.4	0.4	4.0	0.2	2.4	3.6	2.4	31.4
Sick, Injured, Unruly Passenger - Metra/PSA	3.4	5.2	1.0	2.0	0.2	3.2	3.4	0.4	3.6	0.2	2.4	3.6	2.4	31.0
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4
Weather - TOTAL	7.0	5.4	0.8	1.4	0.0	5.0	3.6	1.8	4.2	0.6	3.2	5.0	4.0	42.0
Weather - Metra/PSA	6.0	5.4	0.8	1.4	0.0	5.0	3.6	1.8	4.2	0.6	3.2	5.0	4.0	41.0
Weather - Foreign	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Passenger Loading - TOTAL	11.2	8.0	1.2	2.2	0.4	6.6	4.6	2.0	13.2	0.4	6.4	14.0	14.0	84.2
Lift Deployment - TOTAL	2.4	0.2	0.0	0.0	0.0	2.6	2.4	0.4	1.8	0.0	2.2	3.0	4.0	19.0
Obstruction/Debris - TOTAL	7.4	0.4	0.6	1.8	0.2	7.8	4.4	0.6	0.8	1.6	1.4	7.0	3.2	37.2
Catenary Failure - TOTAL	0.0	3.0	0.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
Other - TOTAL	1.4	0.4	1.0	0.6	0.0	1.2	1.2	0.4	4.0	0.8	2.0	2.4	2.0	17.4
TOTAL TRAINS DELAYED	99.0	36.4	15.4	21.4	11.8	97.8	66.4	37.2	56.2	36.8	43.6	63.6	85.2	670.8
Total Metra/PSA Delays	66.4	35.4	15.2	21.4	6.4	73.0	49.0	24.6	51.6	18.2	41.8	56.0	62.2	521.2
Total Foreign Carrier Delays	32.6	1.0	0.2	0.0	5.4	24.8	17.4	12.6	4.6	18.6	1.8	7.6	23.0	149.6

Data for latest month is final (01/14/16) 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
December 2016 Divergence From December Average Over Previous Five Years

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	-10.0	0.0	0.0	0.0	0.2	-5.0	-9.6	-2.0	1.8	-1.0	0.8	1.8	16.0	-7.0
Freight Interference - Peak	-4.0	0.0	0.0	0.0	-0.6	-2.2	-3.0	-3.0	1.6	0.2	-0.2	0.4	7.4	-3.4
<i>Primary</i>	-1.6	0.0	0.0	0.0	-0.4	-1.2	-2.0	-2.0	1.8	1.2	-0.2	-0.2	3.4	-1.2
<i>Secondary</i>	-2.4	0.0	0.0	0.0	-0.2	-1.0	-1.0	-1.0	-0.2	-1.0	0.0	0.6	4.0	-2.2
Freight Interference - Off-Peak	-6.0	0.0	0.0	0.0	0.8	-2.8	-6.6	1.0	0.2	-1.2	1.0	1.4	8.6	-3.6
<i>Primary</i>	-4.0	0.0	0.0	0.0	0.8	-2.8	-4.2	1.4	0.2	-0.2	1.6	1.6	6.2	0.6
<i>Secondary</i>	-2.0	0.0	0.0	0.0	0.0	0.0	-2.4	-0.4	0.0	-1.0	-0.6	-0.2	2.4	-4.2
Signal/Switch Failure - TOTAL	15.4	6.6	0.6	-1.2	-2.0	-13.4	6.2	4.8	11.0	0.8	-4.6	-1.6	0.4	23.0
Signal/Switch Failure - Metra/PSA	-0.6	6.6	0.6	-1.2	-2.0	-15.8	7.4	-5.2	7.0	0.0	-4.6	-1.4	0.8	-8.4
<i>Primary</i>	0.0	5.4	-0.6	-1.8	-2.0	-9.8	5.2	-2.0	5.4	0.2	-3.4	-0.6	2.6	-1.4
<i>Secondary</i>	-0.6	1.2	1.2	0.6	0.0	-6.0	2.2	-3.2	1.6	-0.2	-1.2	-0.8	-1.8	-7.0
Signal/Switch Failure - Foreign	16.0	0.0	0.0	0.0	0.0	2.4	-1.2	10.0	4.0	0.8	0.0	-0.2	-0.4	31.4
<i>Primary</i>	12.0	0.0	0.0	0.0	0.0	0.4	-1.2	6.2	1.0	0.4	0.0	-0.2	-0.4	18.2
<i>Secondary</i>	4.0	0.0	0.0	0.0	0.0	2.0	0.0	3.8	3.0	0.4	0.0	0.0	0.0	13.2
Mechanical Failure - TOTAL	0.4	-0.2	-0.8	-1.0	0.4	1.6	5.8	3.0	21.0	-3.2	2.0	0.2	-2.0	27.2
Mechanical Failure - Metra/PSA	1.2	-0.2	-0.6	-1.0	0.4	-6.4	5.8	3.0	21.0	-3.2	2.0	0.2	-2.0	20.2
Non-Locomotive Equipment Failure - Metra/PSA	0.8	-0.2	-0.6	-1.0	-0.2	-0.6	0.6	0.8	10.4	0.0	1.4	-0.2	5.0	16.2
<i>Primary</i>	0.0	0.2	-0.2	-0.2	-0.2	0.0	0.6	0.8	0.4	0.0	-0.2	-0.2	1.6	2.6
<i>Secondary</i>	0.8	-0.4	-0.4	-0.8	0.0	-0.6	0.0	0.0	10.0	0.0	1.6	0.0	3.4	13.6
Locomotive Failure - Metra/PSA	0.4	0.0	0.0	0.0	0.6	-5.8	5.2	2.2	10.6	-3.2	0.6	0.4	-7.0	4.0
<i>Primary</i>	0.8	0.0	0.0	0.0	0.8	-1.6	0.4	0.4	4.6	-1.6	0.2	2.6	-0.6	6.0
<i>Secondary</i>	-0.4	0.0	0.0	0.0	-0.2	-4.2	4.8	1.8	6.0	-1.6	0.4	-2.2	-6.4	-2.0
Mechanical Failure - Foreign	-0.8	0.0	-0.2	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Passenger Train Interference - TOTAL	-3.2	19.0	4.8	3.6	0.0	-0.2	-2.2	-1.8	-0.4	-1.8	-0.4	-0.4	-1.8	15.2
Passenger Train Interference - Metra/PSA	-0.2	-0.2	-0.2	-1.4	0.0	-4.4	-2.0	-1.8	-0.4	-0.4	-0.4	-0.4	-1.8	-13.6
Passenger Train Interference - Foreign	-3.0	19.2	5.0	5.0	0.0	4.2	-0.2	0.0	0.0	-1.4	0.0	0.0	0.0	28.8
Accident - TOTAL	7.0	-1.2	-6.2	-4.0	-0.4	-0.6	-7.6	-7.4	-2.0	-6.6	-0.8	20.8	-5.0	-14.0
Accident - Metra/PSA	7.6	-1.2	-6.2	-4.0	-0.4	-0.4	-5.6	-7.2	-2.0	-6.6	-0.8	20.8	-4.6	-10.6
Accident - Foreign	-0.6	0.0	0.0	0.0	0.0	-0.2	-2.0	-0.2	0.0	0.0	0.0	0.0	-0.4	-3.4
Track Work - TOTAL	25.0	8.2	2.4	2.6	-1.8	-0.4	-1.4	-1.4	-2.0	-1.2	-3.2	7.4	-4.4	29.8
Track Work - Metra/PSA	25.0	8.2	2.4	2.6	-1.8	-0.4	-1.4	-1.4	-2.0	-1.2	-3.2	7.4	-4.4	29.8
Track Work - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Human Error - TOTAL	-0.8	-1.2	-0.8	1.8	2.6	-0.4	8.0	0.2	-5.6	-1.2	1.2	-0.8	9.2	12.2
Human Error - Metra/PSA	2.4	-1.0	-0.8	1.8	1.2	3.8	8.4	-0.4	-5.6	-0.2	1.8	-0.6	10.4	21.2
Human Error - Foreign	-3.2	-0.2	0.0	0.0	1.4	-4.2	-0.4	0.6	0.0	-1.0	-0.6	-0.2	-1.2	-9.0
Sick, Injured, Unruly Passenger - TOTAL	-0.4	-4.2	-1.0	-2.0	-0.2	-2.2	14.6	0.6	-4.0	-0.2	-0.4	-0.6	2.6	2.6
Sick, Injured, Unruly Passenger - Metra/PSA	-0.4	-4.2	-1.0	-2.0	-0.2	-2.2	14.6	0.6	-3.6	-0.2	-0.4	-0.6	2.6	3.0
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	-0.4
Weather - TOTAL	34.0	0.6	1.2	0.6	2.0	20.0	10.4	2.2	2.8	2.4	-1.2	15.0	0.0	90.0
Weather - Metra/PSA	35.0	0.6	1.2	0.6	1.0	20.0	10.4	2.2	2.8	2.4	-1.2	15.0	0.0	90.0
Weather - Foreign	-1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passenger Loading - TOTAL	-7.2	-4.0	-1.2	-2.2	-0.4	0.4	4.4	0.0	-5.2	-0.4	-3.4	3.0	3.0	-13.2
Lift Deployment - TOTAL	-2.4	-0.2	0.0	0.0	0.0	-0.6	-1.4	-0.4	6.2	1.0	-1.2	-2.0	-2.0	-3.0
Obstruction/Debris - TOTAL	-7.4	9.6	2.4	2.2	-0.2	-7.8	-2.4	-0.6	11.2	0.4	-0.4	-5.0	2.8	4.8
Catenary Failure - TOTAL	0.0	-3.0	-0.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-4.0
Other - TOTAL	1.6	0.6	-1.0	-0.6	0.0	2.8	4.8	-0.4	-4.0	-0.8	0.0	0.6	-2.0	1.6
TOTAL TRAINS DELAYED	52.0	30.6	-0.4	-0.4	0.2	-5.8	29.6	-3.2	30.8	-11.8	-11.6	38.4	16.8	165.2
Total Metra/PSA Delays	54.6	11.6	-5.2	-5.4	-2.4	-11.0	43.0	-11.6	25.4	-9.2	-11.8	37.0	2.8	117.8
Total Foreign Carrier Delays	-2.6	19.0	4.8	5.0	2.6	5.2	-13.4	8.4	5.4	-2.6	0.2	1.4	14.0	47.4

Data for current month is final (01/26/17) 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 - December 2016

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	209	0	0	0	30	76	104	68	67	89	6	27	166	842
Freight Interference - Peak	86	0	0	0	25	10	33	26	24	32	0	14	59	309
Primary	49	0	0	0	25	9	18	21	17	27	0	10	26	202
Secondary	37	0	0	0	0	1	15	5	7	5	0	4	33	107
Freight Interference - Off-Peak	123	0	0	0	5	66	71	42	43	57	6	13	107	533
Primary	102	0	0	0	5	49	37	41	36	50	6	10	87	423
Secondary	21	0	0	0	0	17	34	1	7	7	0	3	20	110
Signal/Switch Failure - TOTAL	317	113	37	29	26	191	148	92	86	132	19	46	155	1,391
Signal/Switch Failure - Metra/PSA	101	113	37	29	1	137	122	30	82	42	19	39	149	901
Primary	72	65	23	21	1	73	83	19	60	32	13	31	51	544
Secondary	29	48	14	8	0	64	39	11	22	10	6	8	98	357
Signal/Switch Failure - Foreign	216	0	0	0	25	54	26	62	4	90	0	7	6	490
Primary	162	0	0	0	23	38	18	43	1	65	0	2	2	354
Secondary	54	0	0	0	2	16	8	19	3	25	0	5	4	136
Mechanical Failure - TOTAL	132	26	3	1	12	113	121	41	262	14	80	115	132	1,052
Mechanical Failure - Metra/PSA	132	25	3	1	12	105	121	41	262	14	80	115	132	1,043
Non-Locomotive Equipment Failure - Metra/PSA	20	25	3	1	2	12	11	8	21	6	24	7	51	191
Primary	11	9	2	0	1	8	9	4	5	6	12	5	20	92
Secondary	9	16	1	1	1	4	2	4	16	0	12	2	31	99
Locomotive Failure - Metra/PSA	112	0	0	0	10	93	110	33	241	8	56	108	81	852
Primary	43	0	0	0	8	33	40	12	58	5	21	33	25	278
Secondary	69	0	0	0	2	60	70	21	183	3	35	75	56	574
Mechanical Failure - Foreign	0	1	0	0	0	8	0	0	0	0	0	0	0	9
Passenger Train Interference - TOTAL	22	27	7	12	6	28	4	13	9	22	0	2	2	154
Passenger Train Interference - Metra/PSA	0	3	0	2	0	16	3	12	9	1	0	2	1	49
Passenger Train Interference - Foreign	22	24	7	10	6	12	1	1	0	21	0	0	1	105
Accident - TOTAL	111	6	3	10	1	78	81	28	31	28	38	115	14	544
Accident - Metra/PSA	100	6	3	10	1	69	77	23	31	23	38	111	13	505
Accident - Foreign	11	0	0	0	0	9	4	5	0	5	0	4	1	39
Track Work - TOTAL	339	103	15	54	1	103	47	6	72	13	71	64	112	1,000
Track Work - Metra/PSA	305	103	15	54	1	103	44	5	72	10	71	64	112	959
Track Work - Foreign	34	0	0	0	0	0	3	1	0	3	0	0	0	41
Human Error - TOTAL	113	52	24	37	20	96	59	24	67	28	30	38	47	635
Human Error - Metra/PSA	89	52	24	37	3	59	45	16	66	8	27	32	42	500
Human Error - Foreign	24	0	0	0	17	37	14	8	1	20	3	6	5	135
Sick, Injured, Unruly Passenger - TOTAL	40	52	8	15	1	49	65	3	37	3	37	50	47	407
Sick, Injured, Unruly Passenger - Metra/PSA	37	52	8	15	1	49	65	3	37	3	37	50	47	404
Sick, Injured, Unruly Passenger - Foreign	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Weather - TOTAL	161	54	14	25	2	71	51	13	61	10	44	33	15	554
Weather - Metra/PSA	161	54	14	25	1	71	51	13	61	10	44	33	15	553
Weather - Foreign	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	49	34	7	10	0	44	85	3	76	1	54	124	54	541
Lift Deployment - TOTAL	14	2	0	1	0	42	22	2	22	4	5	15	16	145
Obstruction/Debris - TOTAL	53	56	12	33	2	35	60	9	37	24	37	47	41	446
Catenary Failure - TOTAL	0	64	11	25	0	0	0	0	0	0	0	0	0	100
Other - TOTAL	47	9	1	6	0	25	28	5	20	12	25	19	45	242
TOTAL TRAINS DELAYED	1,607	598	142	258	101	951	875	307	847	380	446	695	846	8,053
Total Metra/PSA Delays	1,088	573	135	248	22	755	723	162	775	152	437	651	667	6,388
Total Foreign Carrier Delays	519	25	7	10	79	196	152	145	72	228	9	44	179	1,665

Data for current month is final (01/26/17) 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 - December - Average Over Previous Five Years: 2011-2015

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	231.2	0.0	0.2	0.0	41.8	171.6	163.8	155.6	72.6	178.2	16.8	68.4	243.2	1,343.4
Freight Interference - Peak	88.0	0.0	0.2	0.0	41.4	31.4	31.2	60.2	23.2	54.4	3.8	33.4	53.4	420.6
<i>Primary</i>	55.6	0.0	0.0	0.0	39.4	20.4	21.4	41.8	12.6	41.8	2.2	16.0	28.0	279.2
<i>Secondary</i>	32.4	0.0	0.2	0.0	2.0	11.0	9.8	18.4	10.6	12.6	1.6	17.4	25.4	141.4
Freight Interference - Off-Peak	143.2	0.0	0.0	0.0	0.4	140.2	132.6	95.4	49.4	123.8	13.0	35.0	189.8	922.8
<i>Primary</i>	120.4	0.0	0.0	0.0	0.4	101.2	94.8	82.2	43.6	93.6	7.8	29.6	159.6	733.2
<i>Secondary</i>	22.8	0.0	0.0	0.0	0.0	39.0	37.8	13.2	5.8	30.2	5.2	5.4	30.2	189.6
Signal/Switch Failure - TOTAL	204.4	91.8	32.8	34.2	24.0	280.2	156.4	93.8	90.8	108.2	52.4	69.8	110.0	1,348.8
Signal/Switch Failure - Metra/PSA	144.4	91.8	32.6	34.2	11.4	247.6	135.0	70.8	85.4	38.0	50.4	63.8	104.6	1,110.0
<i>Primary</i>	104.4	68.8	23.6	24.4	11.2	136.0	84.4	41.0	68.2	28.8	28.0	31.8	55.6	706.2
<i>Secondary</i>	40.0	23.0	9.0	9.8	0.2	111.6	50.6	29.8	17.2	9.2	22.4	32.0	49.0	403.8
Signal/Switch Failure - Foreign	60.0	0.0	0.2	0.0	12.6	32.6	21.4	23.0	5.4	70.2	2.0	6.0	5.4	238.8
<i>Primary</i>	44.4	0.0	0.0	0.0	11.8	22.2	16.0	13.6	3.0	47.2	1.0	3.8	4.6	167.6
<i>Secondary</i>	15.6	0.0	0.2	0.0	0.8	10.4	5.4	9.4	2.4	23.0	1.0	2.2	0.8	71.2
Mechanical Failure - TOTAL	152.2	57.8	19.4	15.6	3.8	132.4	75.2	30.6	120.2	31.8	90.2	97.8	76.4	903.4
Mechanical Failure - Metra/PSA	151.0	52.4	17.0	14.0	3.8	128.0	75.0	30.6	119.8	30.6	90.2	97.8	76.2	886.4
Non-Locomotive Equipment Failure - Metra/PSA	30.2	52.4	17.0	14.0	1.0	18.2	17.4	4.0	17.8	8.4	18.8	20.6	24.2	244.0
<i>Primary</i>	12.2	17.6	6.4	5.8	0.8	6.4	7.8	1.6	9.6	3.4	7.4	7.4	11.8	98.2
<i>Secondary</i>	18.0	34.8	10.6	8.2	0.2	11.8	9.6	2.4	8.2	5.0	11.4	13.2	12.4	145.8
Locomotive Failure - Metra/PSA	120.8	0.0	0.0	0.0	2.8	109.8	57.6	26.6	102.0	22.2	71.4	77.2	52.0	642.4
<i>Primary</i>	36.8	0.0	0.0	0.0	2.0	29.0	24.0	8.4	38.2	10.4	26.2	21.2	19.0	215.2
<i>Secondary</i>	84.0	0.0	0.0	0.0	0.8	80.8	33.6	18.2	63.8	11.8	45.2	56.0	33.0	427.2
Mechanical Failure - Foreign	1.2	5.4	2.4	1.6	0.0	4.4	0.2	0.0	0.4	1.2	0.0	0.0	0.2	17.0
Passenger Train Interference - TOTAL	22.8	13.0	3.6	6.8	7.2	93.4	21.8	20.8	18.4	15.8	10.6	8.2	17.8	260.2
Passenger Train Interference - Metra/PSA	2.2	5.8	2.8	5.8	0.8	65.2	17.2	19.6	12.6	4.0	10.6	8.0	17.6	172.2
Passenger Train Interference - Foreign	20.6	7.2	0.8	1.0	6.4	28.2	4.6	1.2	5.8	11.8	0.0	0.2	0.2	88.0
Accident - TOTAL	130.4	19.0	14.0	14.8	2.4	49.2	73.0	26.4	48.8	17.0	52.0	82.6	49.2	578.8
Accident - Metra/PSA	114.4	19.0	14.0	14.8	2.2	47.4	69.4	24.6	47.6	17.0	52.0	82.6	45.6	550.6
Accident - Foreign	16.0	0.0	0.0	0.0	0.2	1.8	3.6	1.8	1.2	0.0	0.0	0.0	3.6	28.2
Track Work - TOTAL	253.6	68.8	20.6	64.2	12.2	89.0	71.0	26.4	78.8	14.4	86.0	64.2	59.8	909.0
Track Work - Metra/PSA	245.8	68.8	20.6	64.2	12.2	88.6	70.8	25.8	78.8	12.8	86.0	64.2	59.8	898.4
Track Work - Foreign	7.8	0.0	0.0	0.0	0.0	0.4	0.2	0.6	0.0	1.6	0.0	0.0	0.0	10.6
Human Error - TOTAL	177.6	53.0	12.6	25.8	17.2	96.2	54.0	24.4	63.2	41.6	59.0	54.0	61.2	739.8
Human Error - Metra/PSA	123.2	50.2	12.4	25.0	4.8	52.0	37.8	9.6	62.6	9.4	47.4	34.2	37.0	505.6
Human Error - Foreign	54.4	2.8	0.2	0.8	12.4	44.2	16.2	14.8	0.6	32.2	11.6	19.8	24.2	234.2
Sick, Injured, Unruly Passenger - TOTAL	39.8	71.0	12.8	22.0	1.6	34.2	35.6	4.8	33.0	5.8	55.4	46.4	37.4	399.8
Sick, Injured, Unruly Passenger - Metra/PSA	39.2	71.0	12.8	22.0	1.6	34.2	35.6	4.8	32.2	5.8	55.4	46.4	37.4	398.4
Sick, Injured, Unruly Passenger - Foreign	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	1.4
Weather - TOTAL	228.0	135.4	39.6	49.0	8.0	143.8	126.0	45.4	139.4	28.0	126.6	148.6	115.2	1,333.0
Weather - Metra/PSA	225.8	135.4	39.6	49.0	7.6	140.6	125.4	45.0	138.2	26.4	126.6	148.2	114.6	1,322.4
Weather - Foreign	2.2	0.0	0.0	0.0	0.4	3.2	0.6	0.4	1.2	1.6	0.0	0.4	0.6	10.6
Passenger Loading - TOTAL	110.8	168.2	26.2	68.2	0.4	119.6	85.2	5.2	175.2	3.0	174.4	114.0	110.6	1,161.0
Lift Deployment - TOTAL	35.2	1.8	0.0	1.4	0.0	32.0	36.4	3.8	56.6	1.6	29.4	21.4	38.8	258.4
Obstruction/Debris - TOTAL	89.2	33.2	12.0	36.4	3.4	35.2	39.6	11.0	32.6	21.0	32.4	55.4	49.2	450.6
Catenary Failure - TOTAL	0.0	62.4	14.2	28.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	105.6
Other - TOTAL	46.6	28.8	9.8	15.2	1.0	21.8	24.8	7.0	32.0	15.6	35.2	24.6	41.2	303.6
TOTAL TRAINS DELAYED	1,721.8	804.2	217.8	382.4	123.0	1,298.6	962.8	455.2	961.6	482.0	820.4	855.6	1,010.0	10,095.4
Total Metra/PSA Delays	1,327.8	788.8	214.0	379.0	49.2	1,012.2	752.2	257.8	873.6	185.2	790.0	760.8	732.6	8,123.2
Total Foreign Carrier Delays	394.0	15.4	3.8	3.4	73.8	286.4	210.6	197.4	88.0	296.8	30.4	94.8	277.4	1,972.2

Data for latest month is final (01/14/16) 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 - December 2016 Divergence From January - December Average Over Previous Five Years

CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	-22.2	0.0	-0.2	0.0	-11.8	-95.6	-59.8	-87.6	-5.6	-89.2	-10.8	-41.4	-77.2	-501.4
Freight Interference - Peak	-2.0	0.0	-0.2	0.0	-16.4	-21.4	1.8	-34.2	0.8	-22.4	-3.8	-19.4	5.6	-111.6
Primary	-6.6	0.0	0.0	0.0	-14.4	-11.4	-3.4	-20.8	4.4	-14.8	-2.2	-6.0	-2.0	-77.2
Secondary	4.6	0.0	-0.2	0.0	-2.0	-10.0	5.2	-13.4	-3.6	-7.6	-1.6	-13.4	7.6	-34.4
Freight Interference - Off-Peak	-20.2	0.0	0.0	0.0	4.6	-74.2	-61.6	-53.4	-6.4	-66.8	-7.0	-22.0	-82.8	-389.8
Primary	-18.4	0.0	0.0	0.0	4.6	-52.2	-57.8	-41.2	-7.6	-43.6	-1.8	-19.6	-72.6	-310.2
Secondary	-1.8	0.0	0.0	0.0	0.0	-22.0	-3.8	-12.2	1.2	-23.2	-5.2	-2.4	-10.2	-79.6
Signal/Switch Failure - TOTAL	112.6	21.2	4.2	-5.2	2.0	-89.2	-8.4	-1.8	-4.8	23.8	-33.4	-23.8	45.0	42.2
Signal/Switch Failure - Metra/PSA	-43.4	21.2	4.4	-5.2	-10.4	-110.6	-13.0	-40.8	-3.4	4.0	-31.4	-24.8	44.4	-209.0
Primary	-32.4	-3.8	-0.6	-3.4	-10.2	-63.0	-1.4	-22.0	-8.2	3.2	-15.0	-0.8	-4.6	-162.2
Secondary	-11.0	25.0	5.0	-1.8	-0.2	-47.6	-11.6	-18.8	4.8	0.8	-16.4	-24.0	49.0	-46.8
Signal/Switch Failure - Foreign	156.0	0.0	-0.2	0.0	12.4	21.4	4.6	39.0	-1.4	19.8	-2.0	1.0	0.6	251.2
Primary	117.6	0.0	0.0	0.0	11.2	15.8	2.0	29.4	-2.0	17.8	-1.0	-1.8	-2.6	186.4
Secondary	38.4	0.0	-0.2	0.0	1.2	5.6	2.6	9.6	0.6	2.0	-1.0	2.8	3.2	64.8
Mechanical Failure - TOTAL	-20.2	-31.8	-16.4	-14.6	8.2	-19.4	45.8	10.4	141.8	-17.8	-10.2	17.2	55.6	148.6
Mechanical Failure - Metra/PSA	-19.0	-27.4	-14.0	-13.0	8.2	-23.0	46.0	10.4	142.2	-16.6	-10.2	17.2	55.8	156.6
Non-Locomotive Equipment Failure - Metra/PSA	-10.2	-27.4	-14.0	-13.0	1.0	-6.2	-6.4	4.0	3.2	-2.4	5.2	-13.6	26.8	-53.0
Primary	-1.2	-8.6	-4.4	-5.8	0.2	1.6	1.2	2.4	-4.6	2.6	4.6	-2.4	8.2	-6.2
Secondary	-9.0	-18.8	-9.6	-7.2	0.8	-7.8	-7.6	1.6	7.8	-5.0	0.6	-11.2	18.6	-46.8
Locomotive Failure - Metra/PSA	-8.8	0.0	0.0	0.0	7.2	-16.8	52.4	6.4	139.0	-14.2	-15.4	30.8	29.0	209.6
Primary	6.2	0.0	0.0	0.0	6.0	4.0	16.0	3.6	19.8	-5.4	-5.2	11.8	6.0	62.8
Secondary	-15.0	0.0	0.0	0.0	1.2	-20.8	36.4	2.8	119.2	-8.8	-10.2	19.0	23.0	146.8
Mechanical Failure - Foreign	-1.2	-4.4	-2.4	-1.6	0.0	3.6	-0.2	0.0	-0.4	-1.2	0.0	0.0	-0.2	-8.0
Passenger Train Interference - TOTAL	-0.8	14.0	3.4	5.2	-1.2	-65.4	-17.8	-7.8	-9.4	6.2	-10.6	-6.2	-15.8	-106.2
Passenger Train Interference - Metra/PSA	-2.2	-2.8	-2.8	-3.8	-0.8	-49.2	-14.2	-7.6	-3.6	-3.0	-10.6	-6.0	-16.6	-123.2
Passenger Train Interference - Foreign	1.4	16.8	6.2	9.0	-0.4	-16.2	-3.6	-0.2	-5.8	9.2	0.0	-0.2	0.8	17.0
Accident - TOTAL	-19.4	-13.0	-11.0	-4.8	-1.4	28.8	8.0	1.6	-17.8	11.0	-14.0	32.4	-35.2	-34.8
Accident - Metra/PSA	-14.4	-13.0	-11.0	-4.8	-1.2	21.6	7.6	-1.6	-16.6	6.0	-14.0	28.4	-32.6	-45.6
Accident - Foreign	-5.0	0.0	0.0	0.0	-0.2	7.2	0.4	3.2	-1.2	5.0	0.0	4.0	-2.6	10.8
Track Work - TOTAL	85.4	34.2	-5.6	-10.2	-11.2	14.0	-24.0	-20.4	-6.8	-1.4	-15.0	-0.2	52.2	91.0
Track Work - Metra/PSA	59.2	34.2	-5.6	-10.2	-11.2	14.4	-26.8	-20.8	-6.8	-2.8	-15.0	-0.2	52.2	60.6
Track Work - Foreign	26.2	0.0	0.0	0.0	0.0	-0.4	2.8	0.4	0.0	1.4	0.0	0.0	0.0	30.4
Human Error - TOTAL	-64.6	-1.0	11.4	11.2	2.8	-0.2	5.0	-0.4	3.8	-13.6	-29.0	-16.0	-14.2	-104.8
Human Error - Metra/PSA	-34.2	1.8	11.6	12.0	-1.8	7.0	7.2	6.4	3.4	-1.4	-20.4	-2.2	5.0	-5.6
Human Error - Foreign	-30.4	-2.8	-0.2	-0.8	4.6	-7.2	-2.2	-6.8	0.4	-12.2	-8.6	-13.8	-19.2	-99.2
Sick, Injured, Unruly Passenger - TOTAL	0.2	-19.0	-4.8	-7.0	-0.6	14.8	29.4	-1.8	4.0	-2.8	-18.4	3.6	9.6	7.2
Sick, Injured, Unruly Passenger - Metra/PSA	-2.2	-19.0	-4.8	-7.0	-0.6	14.8	29.4	-1.8	4.8	-2.8	-18.4	3.6	9.6	5.6
Sick, Injured, Unruly Passenger - Foreign	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	0.0	0.0	0.0	0.0	1.6
Weather - TOTAL	-67.0	-81.4	-25.6	-24.0	-6.0	-72.8	-75.0	-32.4	-78.4	-18.0	-82.6	-115.6	-100.2	-779.0
Weather - Metra/PSA	-64.8	-81.4	-25.6	-24.0	-6.6	-69.6	-74.4	-32.0	-77.2	-16.4	-82.6	-115.2	-99.6	-769.4
Weather - Foreign	-2.2	0.0	0.0	0.0	0.6	-3.2	-0.6	-0.4	-1.2	-1.6	0.0	-0.4	-0.6	-9.6
Passenger Loading - TOTAL	-61.8	-134.2	-19.2	-58.2	-0.4	-75.6	-0.2	-2.2	-99.2	-2.0	-120.4	10.0	-56.6	-620.0
Lift Deployment - TOTAL	-21.2	0.2	0.0	-0.4	0.0	10.0	-14.4	-1.8	-34.6	2.4	-24.4	-6.4	-22.8	-113.4
Obstruction/Debris - TOTAL	-36.2	22.8	0.0	-3.4	-1.4	-0.2	20.4	-2.0	4.4	3.0	4.6	-8.4	-8.2	-4.6
Catenary Failure - TOTAL	0.0	1.6	-3.2	-3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-5.6
Other - TOTAL	0.4	-19.8	-8.8	-9.2	-1.0	3.2	3.2	-2.0	-12.0	-3.6	-10.2	-5.6	3.8	-61.6
TOTAL TRAINS DELAYED	-114.8	-206.2	-75.8	-124.4	-22.0	-347.6	-87.8	-148.2	-114.6	-102.0	-374.4	-160.6	-164.0	-2,042.4
Total Metra/PSA Delays	-239.8	-215.8	-79.0	-131.0	-27.2	-257.2	-29.2	-95.8	-98.6	-33.2	-353.0	-109.8	-65.6	-1,735.2
Total Foreign Carrier Delays	125.0	9.6	3.2	6.6	5.2	-90.4	-58.6	-52.4	-16.0	-68.8	-21.4	-50.8	-98.4	-307.2

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

P:\ONTIME\report\DelaysByCause.xlsx\YTDByLine 01/30/2017

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

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

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

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

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

P:\ONTIME\report\DelaysByCause.xlsx\AllMonths 01/30/2017

'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
2015**

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Dec	
Freight Interference - TOTAL	122	158	113	87	59	90	116	89	84	60	65	49	1,092	14.0%
Freight Interference - Peak	35	48	42	36	23	42	38	31	27	12	29	8	371	4.8%
Primary	24	33	24	24	13	25	26	19	16	9	22	5	240	3.1%
Secondary	11	15	18	12	10	17	12	12	11	3	7	3	131	1.7%
Freight Interference - Off-Peak	87	110	71	51	36	48	78	58	57	48	36	41	721	9.2%
Primary	63	86	59	42	28	38	56	42	48	41	31	33	567	7.3%
Secondary	24	24	12	9	8	10	22	16	9	7	5	8	154	2.0%
Signal/Switch Failure - TOTAL	93	126	35	69	69	79	116	87	64	84	63	53	938	12.0%
Signal/Switch Failure - Metra/PSA	73	83	28	53	54	67	103	68	51	74	39	42	735	9.4%
Primary	38	54	25	29	30	42	63	32	34	35	35	26	443	5.7%
Secondary	35	29	3	24	24	25	40	36	17	39	4	16	292	3.7%
Signal/Switch Failure - Foreign	20	43	7	16	15	12	13	19	13	10	24	11	203	2.6%
Primary	17	23	5	12	7	6	11	11	9	7	10	8	126	1.6%
Secondary	3	20	2	4	8	6	2	8	4	3	14	3	77	1.0%
Mechanical Failure - TOTAL	82	102	69	66	51	100	65	62	67	46	80	40	830	10.6%
Mechanical Failure - Metra/PSA	71	93	69	56	51	100	65	62	67	46	80	40	800	10.3%
Non-Locomotive Equipment Failure - Metra/PSA	27	19	22	17	8	35	28	11	11	5	12	8	203	2.6%
Primary	10	6	10	7	6	4	9	4	5	4	4	7	76	1.0%
Secondary	17	13	12	10	2	31	19	7	6	1	8	1	127	1.6%
Locomotive Failure - Metra/PSA	44	74	47	39	43	65	37	51	56	41	68	32	597	7.7%
Primary	16	25	14	17	15	14	15	22	24	14	20	18	214	2.7%
Secondary	28	49	33	22	28	51	22	29	32	27	48	14	383	4.9%
Mechanical Failure - Foreign	11	9	0	10	0	0	0	0	0	0	0	0	30	0.4%
Passenger Train Interference - TOTAL	13	19	6	7	16	27	12	10	3	8	9	10	140	1.8%
Passenger Train Interference - Metra/PSA	6	14	5	4	4	15	1	4	1	3	3	10	70	0.9%
Passenger Train Interference - Foreign	7	5	1	3	12	12	11	6	2	5	6	0	70	0.9%
Accident - TOTAL	29	35	60	60	20	59	29	13	27	73	44	50	499	6.4%
Accident - Metra/PSA	28	34	60	60	18	59	25	13	27	73	43	50	490	6.3%
Accident - Foreign	1	1	0	0	2	0	4	0	0	0	1	0	9	0.1%
Track Work - TOTAL	38	50	19	52	57	49	85	79	60	71	34	23	617	7.9%
Track Work - Metra/PSA	38	32	19	52	57	49	71	73	58	71	34	23	577	7.4%
Track Work - Foreign	0	18	0	0	0	0	14	6	2	0	0	0	40	0.5%
Human Error - TOTAL	32	67	103	31	40	45	148	41	65	43	44	34	693	8.9%
Human Error - Metra/PSA	24	45	91	17	28	41	59	29	38	22	35	28	457	5.9%
Human Error - Foreign	8	22	12	14	12	4	89	12	27	21	9	6	236	3.0%
Sick, Injured, Unruly Passenger - TOTAL	21	25	20	29	24	36	36	28	22	27	19	25	312	4.0%
Sick, Injured, Unruly Passenger - Metra/PSA	21	25	20	29	24	36	36	28	21	27	19	25	311	4.0%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	1	0	0	0	1	0.0%
Weather - TOTAL	335	395	17	10	3	59	17	22	22	12	83	39	1,014	13.0%
Weather - Metra/PSA	333	381	17	10	3	59	17	22	21	12	83	39	997	12.8%
Weather - Foreign	2	14	0	0	0	0	0	0	1	0	0	0	17	0.2%
Passenger Loading - TOTAL	20	21	42	21	44	98	124	101	23	27	21	38	580	7.4%
Lift Deployment - TOTAL	22	23	20	9	9	24	18	10	14	8	8	7	172	2.2%
Obstruction/Debris - TOTAL	31	71	8	34	48	49	34	61	30	44	25	52	487	6.2%
Catenary Failure - TOTAL	4	34	10	0	3	4	23	9	37	14	13	15	166	2.1%
Other - TOTAL	23	59	10	10	19	16	31	19	24	11	22	12	256	3.3%
TOTAL TRAINS DELAYED	865	1,185	532	485	462	735	854	631	542	528	530	447	7,796	100.0%
Total Metra/PSA Delays	694	915	399	355	362	617	607	499	412	432	425	381	6,098	78.2%
Total Foreign Carrier Delays	171	270	133	130	100	118	247	132	130	96	105	66	1,698	21.8%

Data for latest month is final (01/14/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx AllMonths 01/30/2017

'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
2016 Divergence From 2015

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Dec	
Freight Interference - TOTAL	-40	-105	-70	-43	13	-17	-34	19	-6	-12	0	45	-250	-3.6%
Freight Interference - Peak	-3	-31	-28	-27	5	-22	-6	19	-1	3	5	24	-62	-0.9%
Primary	2	-23	-13	-17	2	-15	-5	12	4	4	-4	15	-38	-0.6%
Secondary	-5	-8	-15	-10	3	-7	-1	7	-5	-1	9	9	-24	-0.4%
Freight Interference - Off-Peak	-37	-74	-42	-16	8	5	-28	0	-5	-15	-5	21	-188	-2.6%
Primary	-31	-57	-36	-13	4	6	-22	6	-5	-12	-3	19	-144	-2.0%
Secondary	-6	-17	-6	-3	4	-1	-6	-6	0	-3	-2	2	-44	-0.6%
Signal/Switch Failure - TOTAL	61	29	88	29	76	64	-8	-24	41	-17	47	67	453	5.2%
Signal/Switch Failure - Metra/PSA	-6	39	71	7	30	17	-52	-13	38	-36	37	34	166	1.8%
Primary	-3	-24	27	12	24	10	-22	8	24	-3	22	26	101	1.1%
Secondary	-3	63	44	-5	6	7	-30	-21	14	-33	15	8	65	0.7%
Signal/Switch Failure - Foreign	67	-10	17	22	46	47	44	-11	3	19	10	33	287	3.5%
Primary	51	1	9	21	42	37	25	-5	3	14	9	21	228	2.8%
Secondary	16	-11	8	1	4	10	19	-6	0	5	1	12	59	0.7%
Mechanical Failure - TOTAL	25	-34	62	-23	29	-12	55	16	47	18	-9	48	222	2.4%
Mechanical Failure - Metra/PSA	36	-25	62	-14	29	-12	55	16	47	18	-9	40	243	2.7%
Non-Locomotive Equipment Failure - Metra/PSA	-2	0	-12	-11	5	-18	-9	19	-3	7	-9	21	-12	-0.2%
Primary	1	3	-6	-2	3	5	-1	7	2	3	-1	2	16	0.2%
Secondary	-3	-3	-6	-9	2	-23	-8	12	-5	4	-8	19	-28	-0.4%
Locomotive Failure - Metra/PSA	38	-25	74	-3	24	6	64	-3	50	11	0	19	255	2.9%
Primary	12	-7	10	-3	3	13	21	-2	4	3	3	7	64	0.7%
Secondary	26	-18	64	0	21	-7	43	-1	46	8	-3	12	191	2.2%
Mechanical Failure - Foreign	-11	-9	0	-9	0	0	0	0	0	0	0	8	-21	-0.3%
Passenger Train Interference - TOTAL	9	-7	-3	-3	3	-13	0	1	2	2	-5	28	14	0.1%
Passenger Train Interference - Metra/PSA	7	-9	-3	-1	-2	-13	6	-2	1	3	0	-8	-21	-0.3%
Passenger Train Interference - Foreign	2	2	0	-2	5	0	-6	3	1	-1	-5	36	35	0.4%
Accident - TOTAL	30	-20	2	-12	66	-30	-11	42	7	-63	35	-1	45	0.4%
Accident - Metra/PSA	21	-20	2	-19	59	-30	-7	40	3	-63	30	-1	15	0.0%
Accident - Foreign	9	0	0	7	7	0	-4	2	4	0	5	0	30	0.4%
Track Work - TOTAL	2	-29	17	-8	84	65	14	54	117	4	25	38	383	4.5%
Track Work - Metra/PSA	2	-11	17	-11	82	61	28	31	117	3	25	38	382	4.5%
Track Work - Foreign	0	-18	0	3	2	4	-14	23	0	1	0	0	1	0.0%
Human Error - TOTAL	6	-34	-82	22	-17	67	-101	52	-15	2	5	37	-58	-1.0%
Human Error - Metra/PSA	6	-20	-76	25	-13	53	-25	52	5	10	-3	29	43	0.3%
Human Error - Foreign	0	-14	-6	-3	-4	14	-76	0	-20	-8	8	8	-101	-1.4%
Sick, Injured, Unruly Passenger - TOTAL	-1	14	7	21	20	-4	-7	15	8	-3	16	9	95	1.1%
Sick, Injured, Unruly Passenger - Metra/PSA	-1	14	7	21	20	-6	-7	15	9	-3	15	9	93	1.0%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	2	0	0	-1	0	1	0	2	0.0%
Weather - TOTAL	-206	-263	11	-9	1	-36	32	16	-21	-8	-70	93	-460	-6.1%
Weather - Metra/PSA	-204	-249	11	-9	1	-36	32	16	-20	-8	-70	92	-444	-5.9%
Weather - Foreign	-2	-14	0	0	0	0	0	0	-1	0	0	1	-16	-0.2%
Passenger Loading - TOTAL	-7	-14	-13	-13	7	-15	-15	-59	9	1	47	33	-39	-0.7%
Lift Deployment - TOTAL	-11	-9	-8	-6	6	-13	-7	11	-3	4	0	9	-27	-0.4%
Obstruction/Debris - TOTAL	-13	-41	32	20	-26	-18	10	-10	-2	-5	22	-10	-41	-0.7%
Catenary Failure - TOTAL	5	-31	-8	1	1	9	-12	-3	-8	-2	-4	-14	-66	-0.9%
Other - TOTAL	-18	-42	5	-10	-9	9	-1	20	11	6	8	7	-14	-0.3%
TOTAL TRAINS DELAYED	-158	-586	40	-34	254	56	-85	150	187	-73	117	389	257	
Total Metra/PSA Delays	-183	-418	99	-9	185	6	5	114	207	-72	98	258	290	
Total Foreign Carrier Delays	25	-168	-59	-25	69	50	-90	36	-20	-1	19	131	-33	

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

P:\ONTIME\report[DelaysByCause.xlsx]AllMonths 01/30/2017

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

**TABLE 11: FREIGHT DELAYS
between January 2015 and December 2016**

	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Jan-15	13	0	0	0	3	29	17	11	3	16	0	3	27	122
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
Total	172	0	0	0	43	126	73	119	59	162	17	71	250	1,092
Jan-16	14	0	0	0	1	4	23	5	24	3	0	3	5	82
Feb-16	11	0	0	0	3	5	6	1	16	2	0	2	7	53
Mar-16	4	0	0	0	2	6	8	6	2	7	0	0	8	43
Apr-16	13	0	0	0	3	8	4	3	1	8	0	1	3	44
May-16	17	0	0	0	0	9	12	7	0	8	0	1	18	72
Jun-16	19	0	0	0	1	4	6	9	4	10	0	0	20	73
Jul-16	25	0	0	0	2	5	24	6	2	9	0	1	8	82
Aug-16	56	0	0	0	2	14	6	4	3	5	1	2	15	108
Sep-16	22	0	0	0	5	9	4	3	4	17	1	2	11	78
Oct-16	11	0	0	0	2	2	2	9	3	2	1	3	13	48
Nov-16	8	0	0	0	5	3	5	7	2	9	1	4	21	65
Dec-16	9	0	0	0	4	7	4	8	6	9	2	8	37	94
Total	209	0	0	0	30	76	104	68	67	89	6	27	166	842

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

TABLES 12.a & 12.b: FREQUENCY OF LIFT-DEPLOYMENT TRAIN DELAYS BY LINE & MONTH
2016

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

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

2015

LINE													Lift Delays All Year	% of All Delays All Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
BNSF	6	7	8	1	1	2	7	1	3	3	1	0	40	2.70%
Electric ML	0	0	0	0	0	1	2	0	0	0	0	0	3	0.41%
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	0	0	0	0	0	0.00%
HER	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Milw N	4	9	0	1	2	2	0	0	2	1	2	0	23	2.51%
Milw W	4	1	1	1	1	11	2	3	0	1	1	1	27	4.35%
NCS	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
RI	0	1	1	0	1	0	5	1	2	1	0	1	13	2.17%
SWS	0	0	0	0	1	0	0	0	0	0	0	0	1	0.23%
UP N	0	0	0	1	2	1	2	2	5	0	0	0	13	2.56%
UP NW	5	0	1	3	1	3	0	1	2	1	2	1	20	2.79%
UP W	3	5	9	2	0	4	0	2	0	1	2	4	32	4.06%
Total Lift Delays	22	23	20	9	9	24	18	10	14	8	8	7	172	2.21%
ALL DELAYS													7,796	

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION

December 2016

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
Peak *														
6-10	42	22	6	6	2	13	10	10	22	4	4	7	20	168
11-15	16	3	2	2	5	11	14	3	6	2	2	12	5	83
16-20	5	7	1	2	1	4	9	1	4	3	3	7	3	50
21+	16	14	2	1	1	6	10	0	13	0	2	28	2	95
Annulled	<u>4</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>13</u>
Sub-Total	83	46	11	11	9	34	44	14	49	9	12	55	32	409
Off-Peak **														
6-10	32	16	3	6	3	35	18	10	23	7	8	12	32	205
11-15	21	2	1	2	0	11	10	4	10	3	9	13	20	106
16-20	3	2	0	1	0	6	6	4	3	2	1	5	6	39
21+	9	1	0	1	0	6	18	2	2	4	2	17	12	74
Annulled	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
Sub-Total	68	21	4	10	3	58	52	20	38	16	20	47	70	427
December 2016 Total														
6-10	74	38	9	12	5	48	28	20	45	11	12	19	52	373
11-15	37	5	3	4	5	22	24	7	16	5	11	25	25	189
16-20	8	9	1	3	1	10	15	5	7	5	4	12	9	89
21+	25	15	2	2	1	12	28	2	15	4	4	45	14	169
Annulled	<u>7</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>16</u>
TOTAL	151	67	15	21	12	92	96	34	87	25	32	102	102	836
2016 Year-to-Date														
6-10	775	327	87	144	43	434	327	145	411	191	151	231	350	3,616
11-15	326	105	14	36	19	198	195	61	144	60	93	151	178	1,580
16-20	145	46	5	21	10	109	97	40	85	42	48	68	85	801
21+	284	107	24	36	25	173	208	56	172	83	123	221	192	1,704
Annulled	<u>77</u>	<u>13</u>	<u>12</u>	<u>21</u>	<u>4</u>	<u>37</u>	<u>48</u>	<u>5</u>	<u>35</u>	<u>4</u>	<u>31</u>	<u>24</u>	<u>41</u>	<u>352</u>
TOTAL	1,607	598	142	258	101	951	875	307	847	380	446	695	846	8,053
PERCENT COMPOSITION OF DELAYS BY RANGE OF DURATION														
Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
December 2016 Total														
6-10	49.0%	56.7%	60.0%	57.1%	41.7%	52.2%	29.2%	58.8%	51.7%	44.0%	37.5%	18.6%	51.0%	44.6%
11-15	24.5%	7.5%	20.0%	19.0%	41.7%	23.9%	25.0%	20.6%	18.4%	20.0%	34.4%	24.5%	24.5%	22.6%
16-20	5.3%	13.4%	6.7%	14.3%	8.3%	10.9%	15.6%	14.7%	8.0%	20.0%	12.5%	11.8%	8.8%	10.6%
21+	16.6%	22.4%	13.3%	9.5%	8.3%	13.0%	29.2%	5.9%	17.2%	16.0%	12.5%	44.1%	13.7%	20.2%
Annulled	<u>4.6%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>1.0%</u>	<u>0.0%</u>	<u>4.6%</u>	<u>0.0%</u>	<u>3.1%</u>	<u>1.0%</u>	<u>2.0%</u>	<u>1.9%</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%
2016 Year-to-Date Delays By Duration														
6-10	48.2%	54.7%	61.3%	55.8%	42.6%	45.6%	37.4%	47.2%	48.5%	50.3%	33.9%	33.2%	41.4%	44.9%
11-15	20.3%	17.6%	9.9%	14.0%	18.8%	20.8%	22.3%	19.9%	17.0%	15.8%	20.9%	21.7%	21.0%	19.6%
16-20	9.0%	7.7%	3.5%	8.1%	9.9%	11.5%	11.1%	13.0%	10.0%	11.1%	10.8%	9.8%	10.0%	9.9%
21+	17.7%	17.9%	16.9%	14.0%	24.8%	18.2%	23.8%	18.2%	20.3%	21.8%	27.6%	31.8%	22.7%	21.2%
Annulled	<u>4.8%</u>	<u>2.2%</u>	<u>8.5%</u>	<u>8.1%</u>	<u>4.0%</u>	<u>3.9%</u>	<u>5.5%</u>	<u>1.6%</u>	<u>4.1%</u>	<u>1.1%</u>	<u>7.0%</u>	<u>3.5%</u>	<u>4.8%</u>	<u>4.4%</u>
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Data for most recent month is final (01/26/17) 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	
December 2016														
Peak *	17.1	16.0	13.7	12.2	13.1	15.4	15.6	10.4	18.8	12.7	18.4	38.3	11.1	18.7
Off-Peak **	13.4	9.9	8.5	10.9	9.3	12.2	16.5	12.6	11.7	16.8	12.9	27.0	16.7	15.3
All	15.4	14.1	12.3	11.6	12.2	13.4	16.1	11.7	15.5	15.3	14.8	33.0	15.0	16.9
2016 Year-to-Date														
Peak *	16.0	15.0	17.5	13.4	19.1	15.8	18.6	16.1	19.0	16.3	24.0	29.5	17.5	18.4
Off-Peak **	15.5	14.9	18.9	14.0	14.0	15.5	16.2	16.6	14.7	17.3	18.7	22.3	20.0	16.8
All	15.7	14.9	18.4	13.9	18.1	15.6	17.0	16.3	16.7	16.9	20.7	25.7	18.9	17.5

Excludes annulled trains, which do not have delay times.

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

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

**TABLE 15: ANNUAL TRAIN DELAYS AND ON-TIME PERFORMANCE
2011 - 2016**

	DELAYS								ON-TIME PERFORMANCE							
	2011	2012	2013	2014	2015	2011 - 2015 Avg	2016	2015 vs. 2016 change		2011	2012	2013	2014	2015	2011 - 2015 Avg	2016
BNSF	1,868	1,067	1,460	2,730	1,484	1,721.8	1,607	123	8.3%	92.9%	96.0%	94.5%	89.7%	94.4%	93.5%	94.0%
Elec-ML	997	834	745	710	735	804.2	598	-137	-18.6%	95.8%	96.5%	96.9%	97.0%	96.9%	96.6%	97.5%
Elec-BI	235	191	237	227	199	217.8	142	-57	-28.6%	97.9%	98.3%	97.8%	97.9%	98.2%	98.0%	98.7%
Elec-SC	456	358	456	349	293	382.4	258	-35	-11.9%	97.4%	97.9%	97.4%	98.0%	98.3%	97.8%	98.5%
Heritage	210	68	55	131	151	123.0	101	-50	-33.1%	86.2%	95.6%	96.4%	91.4%	90.2%	92.0%	94.2%
M-N	1,828	1,105	1,179	1,466	915	1,298.6	951	36	3.9%	89.6%	93.8%	93.3%	91.7%	94.9%	92.7%	94.6%
M-W	1,194	906	987	1,107	620	962.8	875	255	41.1%	93.0%	94.7%	94.2%	93.5%	96.4%	94.4%	94.9%
NCS	500	424	438	566	348	455.2	307	-41	-11.8%	91.1%	92.4%	92.2%	89.9%	93.8%	91.9%	94.5%
RI	1,158	911	928	1,211	600	961.6	847	247	41.2%	94.0%	95.3%	95.3%	93.8%	97.1%	95.1%	96.1%
SWS	624	413	347	590	436	482.0	380	-56	-12.8%	92.1%	94.8%	95.6%	92.6%	94.5%	93.9%	95.2%
UP-N	1,494	737	691	672	508	820.4	446	-62	-12.2%	92.6%	96.4%	96.6%	96.7%	97.5%	95.9%	97.8%
UP-NW	957	684	1,017	902	718	855.6	695	-23	-3.2%	94.9%	96.3%	94.6%	95.2%	96.2%	95.4%	96.3%
UP-W	1,553	806	948	954	789	1,010.0	846	57	7.2%	90.9%	95.3%	94.5%	94.4%	95.4%	94.1%	95.1%
SYSTEM	13,074	8,504	9,488	11,615	7,796	10,095.4	8,053	257	3.3%	93.6%	95.8%	95.4%	94.3%	96.2%	95.1%	96.1%

Delays data for 2016 is final (01/26/17) version from TOPS.

'ON-TIME PERFORMANCE' '2011 - 2015 Avg' calculated by summing the delays over the five years, summing the trains run over the five years, and calculating their ratio.

Due to changes in calculation methodology, on-time performance figures from May 2011 onward are not exactly comparable to prior months' figures.

TABLE 16: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
2016

Top 2 causes for each line are shaded*														
CAUSE CATEGORY	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - TOTAL	209	0	0	0	30	76	104	68	67	89	6	27	166	842
Freight Interference - Peak	86	0	0	0	25	10	33	26	24	32	0	14	59	309
Primary	49	0	0	0	25	9	18	21	17	27	0	10	26	202
Secondary	37	0	0	0	0	1	15	5	7	5	0	4	33	107
Freight Interference - Off-Peak	123	0	0	0	5	66	71	42	43	57	6	13	107	533
Primary	102	0	0	0	5	49	37	41	36	50	6	10	87	423
Secondary	21	0	0	0	0	17	34	1	7	7	0	3	20	110
Signal/Switch Failure - TOTAL	317	113	37	29	26	191	148	92	86	132	19	46	155	1,391
Signal/Switch Failure - Metra/PSA	101	113	37	29	1	137	122	30	82	42	19	39	149	901
Primary	72	65	23	21	1	73	83	19	60	32	13	31	51	544
Secondary	29	48	14	8	0	64	39	11	22	10	6	8	98	357
Signal/Switch Failure - Foreign	216	0	0	0	25	54	26	62	4	90	0	7	6	490
Primary	162	0	0	0	23	38	18	43	1	65	0	2	2	354
Secondary	54	0	0	0	2	16	8	19	3	25	0	5	4	136
Mechanical Failure - TOTAL	132	26	3	1	12	113	121	41	262	14	80	115	132	1,052
Mechanical Failure - Metra/PSA	132	25	3	1	12	105	121	41	262	14	80	115	132	1,043
Non-Locomotive Equipment Failure - Metra/PSA	20	25	3	1	2	12	11	8	21	6	24	7	51	191
Primary	11	9	2	0	1	8	9	4	5	6	12	5	20	92
Secondary	9	16	1	1	1	4	2	4	16	0	12	2	31	99
Locomotive Failure - Metra/PSA	112	0	0	0	10	93	110	33	241	8	56	108	81	852
Primary	43	0	0	0	8	33	40	12	58	5	21	33	25	278
Secondary	69	0	0	0	2	60	70	21	183	3	35	75	56	574
Mechanical Failure - Foreign	0	1	0	0	0	8	0	0	0	0	0	0	0	9
Passenger Train Interference - TOTAL	22	27	7	12	6	28	4	13	9	22	0	2	2	154
Passenger Train Interference - Metra/PSA	0	3	0	2	0	16	3	12	9	1	0	2	1	49
Passenger Train Interference - Foreign	22	24	7	10	6	12	1	1	0	21	0	0	1	105
Accident - TOTAL	111	6	3	10	1	78	81	28	31	28	38	115	14	544
Accident - Metra/PSA	100	6	3	10	1	69	77	23	31	23	38	111	13	505
Accident - Foreign	11	0	0	0	0	9	4	5	0	5	0	4	1	39
Track Work - TOTAL	339	103	15	54	1	103	47	6	72	13	71	64	112	1,000
Track Work - Metra/PSA	305	103	15	54	1	103	44	5	72	10	71	64	112	959
Track Work - Foreign	34	0	0	0	0	0	3	1	0	3	0	0	0	41
Human Error - TOTAL	113	52	24	37	20	96	59	24	67	28	30	38	47	635
Human Error - Metra/PSA	89	52	24	37	3	59	45	16	66	8	27	32	42	500
Human Error - Foreign	24	0	0	0	17	37	14	8	1	20	3	6	5	135
Sick, Injured, Unruly Passenger - TOTAL	40	52	8	15	1	49	65	3	37	3	37	50	47	407
Sick, Injured, Unruly Passenger - Metra/PSA	37	52	8	15	1	49	65	3	37	3	37	50	47	404
Sick, Injured, Unruly Passenger - Foreign	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Weather - TOTAL	161	54	14	25	2	71	51	13	61	10	44	33	15	554
Weather - Metra/PSA	161	54	14	25	1	71	51	13	61	10	44	33	15	553
Weather - Foreign	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Passenger Loading - TOTAL	49	34	7	10	0	44	85	3	76	1	54	124	54	541
Lift Deployment - TOTAL	14	2	0	1	0	42	22	2	22	4	5	15	16	145
Obstruction/Debris - TOTAL	53	56	12	33	2	35	60	9	37	24	37	47	41	446
Catenary Failure - TOTAL	0	64	11	25	0	0	0	0	0	0	0	0	0	100
Other - TOTAL	47	9	1	6	0	25	28	5	20	12	25	19	45	242
TOTAL TRAINS DELAYED	1,607	598	142	258	101	951	875	307	847	380	446	695	846	8,053
Total Metra/PSA Delays	1,088	573	135	248	22	755	723	162	775	152	437	651	667	6,388
Total Foreign Carrier Delays	519	25	7	10	79	196	152	145	72	228	9	44	179	1,665

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

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

**TABLE 17: ANNUAL SYSTEM CAUSES OF DELAY
2011 to 2016**

CAUSE CATEGORY	2011		2012		2013		2014		2015		2011-2015 Avg		2016	
	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%
Freight Interference - TOTAL	1,631	12.5%	985	11.6%	1,174	12.4%	1,835	15.8%	1,092	14.0%	1,343	13.3%	842	10.5%
Freight Interference - Peak	495	3.8%	248	2.9%	321	3.4%	668	5.8%	371	4.8%	421	4.2%	309	3.8%
Primary	343	2.6%	191	2.2%	195	2.1%	427	3.7%	240	3.1%	279	2.8%	202	2.5%
Secondary	152	1.2%	57	0.7%	126	1.3%	241	2.1%	131	1.7%	141	1.4%	107	1.3%
Freight Interference - Off-Peak	1,136	8.7%	737	8.7%	853	9.0%	1,167	10.0%	721	9.2%	923	9.1%	533	6.6%
Primary	940	7.2%	619	7.3%	685	7.2%	855	7.4%	567	7.3%	733	7.3%	423	5.3%
Secondary	196	1.5%	118	1.4%	168	1.8%	312	2.7%	154	2.0%	190	1.9%	110	1.4%
Signal/Switch Failure - TOTAL	1,648	12.6%	1,253	14.7%	1,637	17.3%	1,268	10.9%	938	12.0%	1,349	13.4%	1,391	17.3%
Signal/Switch Failure - Metra/PSA	1,518	11.6%	920	10.8%	1,363	14.4%	1,014	8.7%	735	9.4%	1,110	11.0%	901	11.2%
Primary	1,150	8.8%	676	7.9%	693	7.3%	569	4.9%	443	5.7%	706	7.0%	544	6.8%
Secondary	368	2.8%	244	2.9%	670	7.1%	445	3.8%	292	3.7%	404	4.0%	357	4.4%
Signal/Switch Failure - Foreign	130	1.0%	333	3.9%	274	2.9%	254	2.2%	203	2.6%	239	2.4%	490	6.1%
Primary	130	1.0%	235	2.8%	191	2.0%	156	1.3%	126	1.6%	168	1.7%	354	4.4%
Secondary	0	0.0%	98	1.2%	83	0.9%	98	0.8%	77	1.0%	71	0.7%	136	1.7%
Mechanical Failure - TOTAL	903	6.9%	706	8.3%	835	8.8%	1,243	10.7%	830	10.6%	903	8.9%	1,052	13.1%
Mechanical Failure - Metra/PSA	897	6.9%	703	8.3%	811	8.5%	1,221	10.5%	800	10.3%	886	8.8%	1,043	13.0%
Non-Locomotive Equipment Failure - Metra/PSA	243	1.9%	161	1.9%	210	2.2%	403	3.5%	203	2.6%	244	2.4%	191	2.4%
Primary	106	0.8%	74	0.9%	88	0.9%	147	1.3%	76	1.0%	98	1.0%	92	1.1%
Secondary	137	1.0%	87	1.0%	122	1.3%	256	2.2%	127	1.6%	146	1.4%	99	1.2%
Locomotive Failure - Metra/PSA	654	5.0%	542	6.4%	601	6.3%	818	7.0%	597	7.7%	642	6.4%	852	10.6%
Primary	209	1.6%	176	2.1%	225	2.4%	252	2.2%	214	2.7%	215	2.1%	278	3.5%
Secondary	445	3.4%	366	4.3%	376	4.0%	566	4.9%	383	4.9%	427	4.2%	574	7.1%
Mechanical Failure - Foreign	6	0.0%	3	0.0%	24	0.3%	22	0.2%	30	0.4%	17	0.2%	9	0.1%
Passenger Train Interference - TOTAL	494	3.8%	220	2.6%	202	2.1%	245	2.1%	140	1.8%	260	2.6%	154	1.9%
Passenger Train Interference - Metra/PSA	332	2.5%	152	1.8%	147	1.5%	160	1.4%	70	0.9%	172	1.7%	49	0.6%
Passenger Train Interference - Foreign	162	1.2%	68	0.8%	55	0.6%	85	0.7%	70	0.9%	88	0.9%	105	1.3%
Accident - TOTAL	669	5.1%	466	5.5%	575	6.1%	685	5.9%	499	6.4%	579	5.7%	544	6.8%
Accident - Metra/PSA	669	5.1%	466	5.5%	575	6.1%	553	4.8%	490	6.3%	551	5.5%	505	6.3%
Accident - Foreign	0	0.0%	0	0.0%	0	0.0%	132	1.1%	9	0.1%	28	0.3%	39	0.5%
Track Work - TOTAL	1,379	10.5%	903	10.6%	664	7.0%	982	8.5%	617	7.9%	909	9.0%	1,000	12.4%
Track Work - Metra/PSA	1,375	10.5%	901	10.6%	659	6.9%	980	8.4%	577	7.4%	898	8.9%	959	11.9%
Track Work - Foreign	4	0.0%	2	0.0%	5	0.1%	2	0.0%	40	0.5%	11	0.1%	41	0.5%
Human Error - TOTAL	870	6.7%	647	7.6%	754	7.9%	735	6.3%	693	8.9%	740	7.3%	635	7.9%
Human Error - Metra/PSA	625	4.8%	481	5.7%	498	5.2%	467	4.0%	457	5.9%	506	5.0%	500	6.2%
Human Error - Foreign	245	1.9%	166	2.0%	256	2.7%	268	2.3%	236	3.0%	234	2.3%	135	1.7%
Sick, Injured, Unruly Passenger - TOTAL	500	3.8%	437	5.1%	384	4.0%	366	3.2%	312	4.0%	400	4.0%	407	5.1%
Sick, Injured, Unruly Passenger - Metra/PSA	499	3.8%	436	5.1%	383	4.0%	363	3.1%	311	4.0%	398	3.9%	404	5.0%
Sick, Injured, Unruly Passenger - Foreign	1	0.0%	1	0.0%	1	0.0%	3	0.0%	1	0.0%	1	0.0%	3	0.0%
Weather - TOTAL	1,547	11.8%	631	7.4%	1,097	11.6%	2,376	20.5%	1,014	13.0%	1,333	13.2%	554	6.9%
Weather - Metra/PSA	1,530	11.7%	627	7.4%	1,090	11.5%	2,368	20.4%	997	12.8%	1,322	13.1%	553	6.9%
Weather - Foreign	17	0.1%	4	0.0%	7	0.1%	8	0.1%	17	0.2%	11	0.1%	1	0.0%
Passenger Loading - TOTAL	2,145	16.4%	1,182	13.9%	1,138	12.0%	760	6.5%	580	7.4%	1,161	11.5%	541	6.7%
Lift Deployment - TOTAL	451	3.4%	250	2.9%	205	2.2%	214	1.8%	172	2.2%	258	2.6%	145	1.8%
Obstruction/Debris - TOTAL	401	3.1%	424	5.0%	391	4.1%	550	4.7%	487	6.2%	451	4.5%	446	5.5%
Catenary Failure - TOTAL	40	0.3%	81	1.0%	169	1.8%	72	0.6%	166	2.1%	106	1.0%	100	1.2%
Other - TOTAL	396	3.0%	319	3.8%	263	2.8%	284	2.4%	256	3.3%	304	3.0%	242	3.0%
TOTAL TRAINS DELAYED	13,074	100.0%	8,504	100.0%	9,488	100.0%	11,615	100.0%	7,796	100.0%	10,095	100.0%	8,053	100.0%
Total Metra/PSA Delays	10,878	83.2%	6,942	81.6%	7,692	81.1%	9,006	77.5%	6,098	78.2%	8,123	80.5%	6,388	79.3%
Total Foreign Carrier Delays	2,196	16.8%	1,562	18.4%	1,796	18.9%	2,609	22.5%	1,698	21.8%	1,972	19.5%	1,665	20.7%

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

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Due to changes in calculation methodology, on-time performance figures from May 2011 onward are not exactly comparable to prior months' figures.

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

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

TABLE 18: FREQUENCY OF TRAIN DELAYS BY DURATION
Year End 2011 to 2016

Minutes	2011		2012		2013		2014		2015		2011 - 2015 Avg		2016	
	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%	Delays	%
6-10	6,730	51.5%	4,480	52.7%	4,375	46.1%	5,152	44.4%	3,500	44.9%	4,847.4	48.0%	3,616	44.9%
11-15	2,701	20.7%	1,723	20.3%	1,893	20.0%	2,419	20.8%	1,643	21.1%	2,075.8	20.6%	1,580	19.6%
16-20	1,251	9.6%	716	8.4%	925	9.7%	1,230	10.6%	816	10.5%	987.6	9.8%	801	9.9%
21+	2,005	15.3%	1,347	15.8%	2,003	21.1%	2,351	20.2%	1,515	19.4%	1,844.2	18.3%	1,704	21.2%
Annulled	387	3.0%	238	2.8%	292	3.1%	463	4.0%	322	4.1%	340.4	3.4%	352	4.4%
TOTAL	13,074	100.0%	8,504	100.0%	9,488	100.0%	11,615	100.0%	7,796	100.0%	10,095.4	100.0%	8,053	100.0%

Due to changes in calculation methodology, on-time performance figures from May 2011 onward are not exactly comparable to prior months' figures.

1/30/2017

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TABLE 19: FREQUENCY OF TRAIN DELAYS BY DURATION AND LINE
Year End 2016

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
6-10	775	327	87	144	43	434	327	145	411	191	151	231	350	3,616
11-15	326	105	14	36	19	198	195	61	144	60	93	151	178	1,580
16-20	145	46	5	21	10	109	97	40	85	42	48	68	85	801
21+	284	107	24	36	25	173	208	56	172	83	123	221	192	1,704
Annulled	77	13	12	21	4	37	48	5	35	4	31	24	41	352
TOTAL	1,607	598	142	258	101	951	875	307	847	380	446	695	846	8,053
6-10	48.2%	54.7%	61.3%	55.8%	42.6%	45.6%	37.4%	47.2%	48.5%	50.3%	33.9%	33.2%	41.4%	44.9%
11-15	20.3%	17.6%	9.9%	14.0%	18.8%	20.8%	22.3%	19.9%	17.0%	15.8%	20.9%	21.7%	21.0%	19.6%
16-20	9.0%	7.7%	3.5%	8.1%	9.9%	11.5%	11.1%	13.0%	10.0%	11.1%	10.8%	9.8%	10.0%	9.9%
21+	17.7%	17.9%	16.9%	14.0%	24.8%	18.2%	23.8%	18.2%	20.3%	21.8%	27.6%	31.8%	22.7%	21.2%
Annulled	4.8%	2.2%	8.5%	8.1%	4.0%	3.9%	5.5%	1.6%	4.1%	1.1%	7.0%	3.5%	4.8%	4.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

1/30/2017

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