COMMUTER RAIL SYSTEM ON-TIME PERFORMANCE REPORT April 2015



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This report presents an analysis of the April 2015 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 April 2015, Metra operated 17,312 scheduled trains, including scheduled "extras", if any. 485 of these trains were delayed (late or annulled), representing an on-time performance rate of 97.2%. Table 2 lists on-time percentages by line for each month and year since 2010.

Table 3 lists each train that was on time for less than 85% of its weekday runs in April 2015, 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, and January 1, 2014, 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 April 2015. Of the 485 delays systemwide in April 2015, all but 206 (42%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous three Aprils, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in April 2015, 41 fewer delays than the average over the previous three Aprils were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 3,067 delays in 2015, all but 1,067 (35%) were beyond Metra's control.

Table 7 provides a daily listing of the number of delays by line and branch for April 2015.

Table 8.a shows the frequency of train delays by delay-cause category and by line during April 2015. Table 8.b shows the average frequencies over the previous five Aprils, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 485 delays systemwide in April 2015, 107 less than the average over the previous five Aprils. Table 9.a shows delays from the beginning of the year through April 2015. Table 9.b shows the average frequencies from the beginning of the year through April 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 2015 and 2014 respectively, and Table 10.c shows the difference between the two. From January through April of 2015, a total of 3,067 trains were delayed, compared to 5,640 trains delayed in the same four months of 2014.

As of January 2015, Tables 8 through 10 are enhanced to show the total numbers of primary and secondary train delays for freight interference, signal/switch, non-locomotive, and locomotive delays. Also, delays by cause are now 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 April 2015 freight operations delayed 87 trains systemwide, compared to 140 a year earlier. Tables 12.a and 12.b display the frequency of lift-deployment train delays by line and month, for 2015 and 2014 respectively. A total of 9 trains were delayed by lift deployment in April 2015.

A review of April 2015 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 42.7% of all late trains. Table 14 shows that the average length of delay was 16.5 minutes in April 2015. It should be noted that these averages relate only to reportable delays (i.e., trains late by six minutes or more).

Changes in On-Time Performance Reporting Calculations (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 April 2015

				W	eekday	S						Weel	kends				Total	
]	Peak*		Off	f-Peak*	*		Total		Sa	turday	S	Sunday	s & Ho	lidays			
	Trains Scheduled	Trains Late	Percent On-Time															
BNSF	1,188	33	97.2%	883	15	98.3%	2,071	48	97.7%	112	6	94.6%	72	2	97.2%	2,255	56	97.5%
Elec -ML	987	36	96.4%	751	13	98.3%	1,738	49	97.2%	184	2	98.9%	80	0	100.0%	2,002	51	97.5%
-BI	308	6	98.1%	506	5	99.0%	814	11	98.6%	120	0	100.0%				934	11	98.8%
-SC	<u>374</u>	<u>6</u>	98.4%	<u>814</u>	<u>4</u>	99.5%	1,188	<u>10</u>	99.2%	<u>192</u>	<u>0</u>	100.0%	<u>80</u>	<u>0</u>	100.0%	<u>1,460</u>	<u>10</u>	99.3%
Subtotal	1,669	48	97.1%	2,071	22	98.9%	3,740	70	98.1%	496	2	99.6%	160	0	100.0%	4,396	72	98.4%
Heritage	132	15	88.6%				132	15	88.6%							132	15	88.6%
Milw -N	549	23	95.8%	771	39	94.9%	1,320	62	95.3%	96	6	93.8%	80	6	92.5%	1,496	74	95.1%
-W	<u>593</u>	<u>16</u>	97.3%	<u>683</u>	<u>16</u>	97.7%	<u>1,276</u>	<u>32</u>	97.5%	<u>96</u>	<u>0</u>	100.0%	<u>72</u>	<u>1</u>	98.6%	<u>1,444</u>	<u>33</u>	97.7%
Subtotal	1,142	39	96.6%	1,454	55	96.2%	2,596	94	96.4%	192	6	96.9%	152	7	95.4%	2,940	107	96.4%
NCS	242	12	95.0%	242	13	94.6%	484	25	94.8%							484	25	94.8%
RI	792	6	99.2%	727	15	97.9%	1,519	21	98.6%	81	1	98.8%	66	0	100.0%	1,666	22	98.7%
sws	242	8	96.7%	418	18	95.7%	660	26	96.1%	24	1	95.8%				684	27	96.1%
UP -N	660	18	97.3%	881	24	97.3%	1,541	42	97.3%	104	5	95.2%	72	2	97.2%	1,717	49	97.1%
-NW	726	21	97.1%	705	22	96.9%	1,431	43	97.0%	96	13	86.5%	60	2	96.7%	1,587	58	96.3%
-W	<u>594</u>	<u>14</u>	97.6%	<u>705</u>	<u>35</u>	95.0%	<u>1,299</u>	<u>49</u>	96.2%	<u>80</u>	<u>3</u>	96.3%	<u>72</u>	<u>2</u>	97.2%	<u>1,451</u>	<u>54</u>	96.3%
Subtotal	1,980	53	97.3%	2,291	81	96.5%	4,271	134	96.9%	280	21	92.5%	204	6	97.1%	4,755	161	96.6%
SYSTEM	7,387	214	97.1%	8,086	219	97.3%	15,473	433	97.2%	1,185	37	96.9%	654	15	97.7%	17,312	485	97.2%

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

Delays data for most recent month is final (05/21/15) version from TOPS.

TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

														JAN-	
LINE YEA	R	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	APR	AVG
	•														
BNSF 201	10	97.8	97.4	96.4	95.7	95.2	89.0	94.7	94.6	96.7	94.8	94.7	96.2	96.8%	95.2%
201		96.2	89.6	97.4	96.9	93.0	93.0	83.3	92.3	90.4	92.8	94.0	95.4	95.2%	92.9%
201		94.4	97.3	95.2	98.4	97.2	91.8	95.0	94.2	98.0	96.9	95.0	98.5	96.3%	96.0%
201		95.8	93.9	94.6	93.3	96.0	88.5	95.2	97.1	97.2	94.0	95.8	92.2	94.4%	94.5%
201		78.6	84.6	95.6	92.0	82.2	82.0	94.1	91.4	94.1	92.2	95.2	94.1	87.7%	89.7%
2010 2014		90.9	90.1	96.8	97.5	02.0	00.0	02.5	02.0	05.2	0.1.1	0.1.0	05.2	93.9%	93.9%
2010-2014 avera	ige	92.5	92.6	95.8	95.3	92.8	88.9	92.5	93.9	95.3	94.1	94.9	95.3	94.1%	93.7%
Electric 201	10	97.7	98.1	98.4	97.9	98.3	95.5	97.6	98.0	98.0	98.2	97.8	97.5	98.0%	97.8%
201		98.6	95.1	98.1	97.7	97.7	95.1	94.6	96.6	97.0	94.4	97.8	98.7	97.5%	96.8%
201		93.7	98.4	97.9	98.7	98.0	97.0	97.3	97.7	97.5	96.6	97.1	98.2	97.2%	97.3%
201		98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	98.4%	97.2%
201		93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	96.4%	97.5%
201		96.3	95.4	98.4	98.4	70.5	<i>,</i> , , ,	, , , ,	70.1	70.7	70.1	70.0	70.7	97.2%	97.2%
2010-2014 avera		96.3	97.2	98.1	98.2	98.1	96.6	95.7	97.4	97.7	97.0	97.5	98.0	97.5%	97.3%
	0 ,												l	1	ı
Heritage 201	10	92.5	93.3	89.1	91.7	85.0	83.3	87.3	89.4	84.1	90.5	92.9	84.1	91.6%	88.5%
201		92.1	77.2	94.2	96.0	98.4	89.4	73.3	92.0	84.1	78.6	80.8	75.4	90.3%	86.2%
201		95.2	99.2	94.7	98.4	97.7	92.1	91.3	95.7	98.2	94.9	92.9	96.7	96.9%	95.6%
201		97.0	99.2	94.4	97.7	94.7	92.5	97.7	99.2	97.5	96.4	98.3	92.1	97.1%	96.4%
201		79.5	75.8	88.1	93.2	92.1	94.4	94.7	93.7	92.1	97.8	96.5	98.5	84.3%	91.4%
201		92.1	90.0	96.2	88.6									91.8%	91.8%
2010-2014 avera	ıge	91.2	89.2	92.1	95.4	93.7	90.3	89.2	94.0	91.0	91.9	92.1	89.3	92.0%	91.6%
M:1 N 201	10	06.1	06.4	04.2	04.5	00.4	01.6	93.5	93.7	00.4	02.1	04.9	06.6	05.20/	04.20/
Milw - N 201 201		96.1 92.9	96.4 85.3	94.2 95.7	94.5 95.5	88.4 89.2	91.6 84.4	93.3 78.3	93.7 87.6	98.4 92.3	93.1 88.1	94.8 91.9	96.6 93.9	95.3% 92.6%	94.3% 89.6%
201		95.1	96.4	94.0	95.3	93.5	93.2	84.8	92.9	94.3	94.9	95.4	95.5	95.2%	93.8%
201		95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	94.5%	93.3%
201		73.1	81.9	89.5	97.9	95.1	91.1	96.0	95.2	95.5	96.2	95.4	93.5	85.6%	91.7%
201		91.8	87.9	93.5	95.1	73.1	71.1	70.0	75.2	75.5	70.2	75.4	75.5	92.2%	92.2%
2010-2014 avera		90.5	90.5	93.5	95.8	92.3	90.0	89.2	92.6	95.0	93.2	94.6	93.4	92.6%	92.6%
	0 ,												l	1	ı
Milw - W 201	10	96.0	95.9	97.3	97.9	95.7	93.9	95.6	96.3	97.4	94.8	95.1	95.9	96.8%	96.0%
201		96.0	87.2	97.4	95.2	95.1	88.0	84.4	92.5	95.6	98.0	89.1	96.5	94.2%	93.0%
201		94.4	95.1	95.3	97.5	97.1	95.6	93.7	94.1	89.3	93.9	94.6	95.5	95.6%	94.7%
201		96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	95.1%	94.2%
201		84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	90.6%	
2010 2014		93.6	93.0	94.8	97.7	0.6.0	00.1	02.2	02.0	0.4.4	05.7	0.1.0	05.0	94.8%	
2010-2014 avera	ige	93.5	91.6	95.6	96.8	96.0	92.1	92.2	93.9	94.4	95.7	94.0	95.2	94.4%	94.3%
NCS 201	10	96.4	94.5	92.3	91.1	96.8	90.1	90.9	94.0	95.9	92.6	93.9	90.3	93.5%	93.2%
201		95.5	88.3	93.5	90.9	92.9	88.8	87.3	92.1	93.1	93.5	83.7	92.4	92.2%	
201		94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	92.2%	
201		95.0	87.5	93.7	90.9	94.0	92.7	93.6	95.0	92.5	93.1	90.0	87.4	91.9%	92.2%
201		76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	85.7%	89.9%
201		93.9	82.5	92.6	94.8									91.1%	91.1%
2010-2014 avera		91.5	89.2	92.5	90.9	93.5	91.1	89.8	92.3	94.5	92.8	91.4	91.3	91.1%	91.7%

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

														JAN-	
LINE Y	EAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	APR	AVG
·															
RI	2010	95.4	96.7	97.6	97.1	97.4	94.3	96.8	96.6	95.7	96.6	96.4	95.5	96.7%	96.3%
	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	95.4%	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	95.5%	95.3%
	2013	96.5	98.1	97.9	94.0	95.5	91.5	93.6	95.5	98.3	96.5	91.7	94.0	96.6%	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	88.7%	93.8%
	2015	97.4	95.3	98.9	98.7									97.6%	97.6%
2010-2014 av	erage	93.2	93.0	96.3	95.7	96.0	92.2	92.4	95.4	96.4	96.6	95.9	96.2	94.6%	95.0%
	2010	94.6	93.4	96.9	97.2	94.6	89.6	90.5	94.4	96.6	96.2	94.3	91.4	95.6%	94.2%
	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	94.2%	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	95.2%	94.8%
	2013	94.7	97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	96.7%	95.6%
	2014	83.0	92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	90.8%	92.6%
	2015	94.7	89.7	95.6	96.1									94.1%	94.1%
2010-2014 av	erage	92.3	93.8	95.8	96.1	94.5	90.3	93.4	94.2	94.6	94.6	92.9	93.8	94.5%	93.9%
TID N	2010	02.0	06.0	06.5	07.2	04.2	01.6	04.6	02.5	04.5	07.5	04.7	06.2	06.10/	05.00/
	2010	93.9	96.8	96.5	97.2	94.3	91.6	94.6	92.5	94.5	97.5	94.7	96.2	96.1%	95.0%
	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	93.6%	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	97.3%	96.4%
	2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9 98.1	97.0	96.5	96.9	98.0	97.5%	96.6%
	2014 2015	91.2 98.6	92.1 95.6	97.4 98.3	97.8 97.1	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	94.7% 97.5%	96.7% 97.5%
2010-2014 av		94.9	93.0	96.9	97.1	95.8	93.6	93.9	94.2	95.4	96.1	96.0	97.0	95.8%	95.4%
2010-2014 av	crage	74.7	74.4	30.3	97.0	93.6	93.0	73.7	74.2	73.4	90.1	90.0	97.0	93.670	93.470
UP - NW	2010	96.7	97.2	97.3	97.7	96.1	96.7	96.1	94.9	97.6	96.4	95.4	96.8	97.2%	96.6%
	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	95.6%	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	97.4%	96.3%
	2013	96.3	97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	96.2%	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	93.2%	95.2%
	2015	96.0	91.6	97.6	96.3									95.5%	95.5%
2010-2014 av	erage	94.4	94.8	96.8	97.5	95.1	94.1	94.2	95.2	97.0	95.5	95.5	95.8	95.9%	95.5%
	2010	96.6	96.7	97.9	95.9	94.6	91.0	90.1	94.1	95.2	95.9	94.8	91.9	96.8%	94.5%
	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	92.4%	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	95.2%	95.3%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	96.0%	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	92.0%	94.4%
	2015	93.9	91.1	96.1	96.3									94.4%	
2010-2014 av	erage	93.1	93.7	95.6	95.4	94.7	91.3	92.3	93.0	95.3	95.2	94.5	93.1	94.5%	93.9%
GERGERES 5	^ 040 '	0.5.5	0.5.0	05.0	0.5 =	05.5	00.0	05.0	0.5.	0.5.0	0.5.5	A = =	05	0.5.0	0.5.0
	2010	96.5	96.9	97.0	96.7	95.5	92.9	95.0	95.4	96.8	96.2	95.7	95.7	96.8%	95.9%
	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	95.0%	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	96.2%	95.8%
	2013	96.8	96.1	96.7	95.7	95.9	92.4	94.0	95.2	96.4	95.9	95.1	93.8	96.3%	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	91.7%	94.3%
2010-2014 av	2015	94.9	92.5 94.0	97.0 96.3	97.2 96.5	95.4	92.8	93.2	94.9	96.0	95.5	95.5	95.7	95.5% 95.2%	95.5% 95.0%
2010-2014 av	erage	73.7		90.3	90.3	95.4	92.8	93.2	74.9	90.0	93.3	93.3	93.1	93.2%	9J.U%

Delays data for most recent month is final (05/21/15) version from TOPS.

P:\ONTIME\report\[Delays&TrainsByServPeriod.xls\]OTPbyLine&Month 5/21/2015

^{&#}x27;2010-2014 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 April 2015

			Minutes		
Line	Train	Date	Late	Code	Delay Explanation
BNSF	1252	Thu, Apr 09	13	G	SIGNAL ISSUES AT FAIRVIEW
829	% OT	Thu, Apr 16	13	DD	MISROUTE @ CPK, TRAINING DS LINED TRAIN 1256 AHEAD AND FOLLOWED 1256
		Mon, Apr 27	14	RF1	STUCK BEHIND TRAFFIC
		Thu, Apr 30	8	RF	WAITING FOR LINEUP AT BERWYN
HC	919	Wed, Apr 01	13	DE	17" STOPPED BEHIND ANTRAK 305 WAITING FOR BNSF CHICHH-501 YARD JOB W/MECHANICAL PROBELMS TO SHOVE BACK INTO CORWITH YD, CORWITH.
779	% OT	Mon, Apr 20	15	D	18" BNSF QSTCHI6167, CORWITH.
		Tue, Apr 21	7	GF	5" RESTRICTIVE SIGNAL, CP CERMAK-BRIGHTON PK; 4" 10 MPH & APPROACH SIGNAL, LEMOYNE; 4" RESTRICTIVE SIGNAL X/O 1-2, STATESVILLE.
		Mon, Apr 27	6	GF	10" STOP SIGNAL TRAFFIC AHEAD AMTRAK 305 @ JOLIET PLATFORM, STATEVILLE.
		Thu, Apr 30	15	D	COAL TRAIN @JACKSON.
MN	2107	Mon, Apr 06	7	D	2" LATE DEPARTING RESETTING RADIO, CUS; 5" STOP SIGNAL CN FREIGHT INTERFERENCE.
829	% OT	Fri, Apr 17	9	G	9" SIGNAL PROBLEMS, CN XING.
		Tue, Apr 21	9	CC	2" STOP, A-2; 4" HELD OUT, #2126 NO FENCE, LAKE COOK RD; 2" X-TRAFFIC, MAYFAIR; 2" SPEED RESTRICTIONS.
		Fri, Apr 24	30	G	13" SWITCH FAILURES, A-2 & A-5; 5" FORM B, FOREMAN FOREMAN NOT ANSWERING RADIO, MP21.8; 11" WAIT FOR #2128, RONDOUT.
MN	2131	Wed, Apr 01	15	A	9" X-TRAFFIC, MAYFAIR; 3" CN 30MPH; 2" ITEM 2, MP43.3.
829	% OT	Thu, Apr 16	12	G1	12" FOLLOWING #2129, ENROUTE.
		Fri, Apr 24	9	CC	9" NO REASON GIVEN;2" X-TRAFFIC, CN XING; 2" SPD RESTRICTIONS, ENROUTE;2" NO INNER TRACK FENCING WAITED FOR #2148, NORTHBROOK.
		Wed, Apr 29	11	GA1	13" FOLLOWING #109, ENROUTE;2" SPD RESTRICTION, ENROUTE.
MN	2151	Mon, Apr 13	8	RO	10" WAITING ON TRACK & TIME TO CLEAR UP, MAYFAIR.
829	% OT	Wed, Apr 15	10	G1	13" WAITING ON #2158, RONDOUT.
		Tue, Apr 21	9	GM	2" ITEM 1, LINCOLN AVE; 7" MEET DUE TO NO FENCE, NORTHBROOK.
		Thu, Apr 30	11	RF1	11" FOLLOWING #2149, FOX LAKE.
NCS	111	Wed, Apr 01	11	A1	5" STOP SIGNAL, B-12; 12" WAITING ON LATE #2131, GRAYSLAKE.
779	% OT	Mon, Apr 13	7	D	3" 10MPH OVER 23.40 DEVAL DIAMOND; 9" FREIGHT, LOMOND.
		Thu, Apr 16	12	D1	12" WAITING ON LINE UP FOLLOWING #2231, B-12; 5" X-TRAFFIC, DEVAL.
		Tue, Apr 21	15	D	15" WAIT ON S/B CN FREIHGT.
		Wed, Apr 29	15	GA1	15" FOLLOWING #109.
NCS	120	Tue, Apr 21	6	GM	6" ITEM 1, LINCOLN AVE.
829	% OT	Wed, Apr 22	8	A	3" SPEED RESTRICTIONS; 5" STOP SIGNAL, MAYFAIR.
		Fri, Apr 24	8	CC1	5" MEETING TRAINS; 2" CN/METRA.
L		Thu, Apr 30	17	RF1	15" STOP SIGNAL WAITING FOR #2147 AND WAITING FOR A SIGNAL, CN XING.
UPW	44	Wed, Apr 01	25	U	25" 7 ADA'S(5 AT OAK PARK), ENROUTE.
829	% OT	Fri, Apr 03	10	I	10" HEAVY ENTRAINING, ENROUTE.
		Mon, Apr 06	10	E1	10" HEAVY ENTRAINING DUE TO #42'S ANNULLMENT; ADDITIONAL STOP, MELROSE PK; WAIT FOR #29 ON MIDDLE TK, VILLA PK & ELMHURST.
		Fri, Apr 10	10	U	10" SLOW ENTRAINING & 5 ADA'S, ENROUTE.
UPW	66	Wed, Apr 15	26	DE1	26" WAIT FOR #65 TO CLEARTK 1 AT TURNER, WEST CHICAGO; RAN AROUND MCHNP-15 WITH SEPERATED HOSE @ WHEATON.
829	% OT	Wed, Apr 22	12	VG	12" XG PROCEDURE, MP36.09; MET FREIGHT, PECK.
		Fri, Apr 24	58	K	58" CAR ON TRACKS @ 1ST AVE WAIT FOR TOW TRUCK & TRACK INSPECTOR, MP10.25
		Thu, Apr 30	6	I	6" SLOW ENTRAINING, RIVER FOREST; TRAIN CONTROL, KILBOURN- KEDZIE.
		21/15) version fr			

Data is final (05/21/15) version from TOPS.

TABLE 4: DELAY INCIDENT CODES AND DEFINITIONS

A AA AA AD AM AS AW B B C C CA CC CF CG CG CCH CO	A1 AA1 AD1 AM1 AS1 AW1	XA XAA XAD	Passenger Train Interference Rule 9.9 Delayed in Block/Rule 6.30	Delay Class Transportation	Responsibility Controllable
AD AM AS AW B BA C C CA CC CF CG CH	AD1 AM1 AS1		Pula 0.0 Dalayad in Plack/Pula 6.20	T	
AM AS AW B BA C C CA CC CF CG CH	AM1 AS1	XAD	Kule 9.9 Delayed III Block/Kule 0.50	Transportation	Controllable
AS AW B BA C C CA CC CF CG CH	AS1		Non-Revenue Passenger Train Interference	Transportation	Controllable
AW B BA C C CA CC CF CG CH		XAM	Amtrak Caused Delay	Transportation	Controllable
B BA C CA CC CF CG	AW1	XAS	NICTD Train Interference	Transportation	Controllable
BA C CA CC CF CG CH		XAW	Pass. Train Interference, Weather	Transportation	Uncontrollable
C CA CC CF CG CH	B1	XB	Human Error, Eng. Dept.	Engineering	Controllable
CA CC CF CG CH	BA1	XBA	Amtrak Engineering Human Error	Engineering	Controllable
CC CF CG CH	C1	XC	Unscheduled Track Work	Engineering	Controllable
CF CG CH	CA1	XCA	Amtrak Engineering	Engineering	Semi-controllabl
CG CH	CC1	XCC	Scheduled Track Work	Engineering	Controllable
CG CH	CF1	XCF	Engineering Equipment Malfunction	Engineering	Controllable
CH	CG1	XCG	Scheduled Signal Work	Engineering	Controllable
	CH1	XCH	Contractor Failure	Engineering	Controllable
	CO1	XCO	Scheduled Wire Work	Engineering	Controllable
CM	CM1	XCM	Switch Malfunction (Track Dept.)	Engineering	Controllable
CW	CW1	XCW	M of W Work, Weather	Engineering	Uncontrollable
D	D1	XD	Freight Train Interference	Transportation	Semi-controllabl
DD	DD1	XDD	Freight Dispatcher/Opr/Freight Train Error	Transportation	Controllable
DE DE	DE1	XDE	Freight Mechanical Malfunction	Transportation	Semi-controllabl
DE DM	DM1	XDM	Freight-Accident/Incident	Incidental	Uncontrollable
			· ·		
DR DW	DR1	XDR VDW	Freight-Human Error Freight Train Interference, Weather	Transportation Transportation	Semi-controllable
	DW1	XDW	<u> </u>	Transportation	Uncontrollable
E	E1	XE	Locomotive Malfunction	Mechanical	Controllable
EA	EA1	XEA	Amtrak Locomotive/Car Malfunction	Mechanical	Uncontrollable
EW	EW1	XEW	Locomotive Malfunction, Weather	Mechanical	Uncontrollable
EZ	EZ1	XEZ		Mechanical	Controllable
F	F1	XF	Cab Car/Trailer/MU Malfunction	Mechanical	Controllable
FS	FS1	XFS	NICTD MU Malfunction	Mechanical	Uncontrollable
FW	FW1	XFW	Cab Car/TRL/MU Malfunction, Weather	Mechanical	Uncontrollable
FZ	FZ1	XFZ	ETMS Malfunction on Cab Car	Mechanical	Controllable
G	G1	XG	Signal/Switch Malfunction (Signal Dept.)	Engineering	Controllable
GA	GA1	XGA	Signal/Switch Failure Amtrak (Signal Dept.)	Engineering	Semi-controllab
GF	GF1	XGF	Signal/Switch Foreign Line	Engineering	Semi-controllable
GM	GM1	XGM	Gate Crossing Malfunction	Engineering	Controllable
GT	GT1	XGT	Telecom Failure	Engineering	Controllable
GW	GW1	XGW	Signal/Switch Malfunction Weather (Signal Dept.)	Engineering	Uncontrollable
GX	GX1	XGX	Broken Gate Crossing	Engineering	Uncontrollable
GZ	GZ1	XGZ	ETMS Signal Malfunction	Engineering	Controllable
Н	H1	XH	Human Error, Mechanical Department	Mechanical	Controllable
HS	HS1	XHS	Human Error, NICTD Mechanical Dept.	Mechanical	Controllable
I	I1	XI	Passenger Handling, Running Time	Ridership	Uncontrollable
IB	IB1	XIB	Passenger Handling, Bicycle	Ridership	Uncontrollable
IW	IW1	XIW	Passenger Handling, Weather	Ridership	Uncontrollable
J	J1	XJ	Passenger Problems/Removal	Incidental	Uncontrollable
JA	JA1	XJA	Amtrak Passenger Problems/Removal	Incidental	Uncontrollable
JM	JM1	XJM	Passenger Medical Emergency	Incidental	Uncontrollable
K	K1	XK	Obstruction On Tracks	Incidental	Uncontrollable
KD	KD1	XKD	Train Struck Debris	Incidental	Uncontrollable
KP	KP1	XKP	Suspicious Package(s)/Person(s)/Activity	Incidental	Uncontrollable
KW	KW1	XKW	Obstruction On Tracks, Weather	Incidental	Uncontrollable
T T	Ll	XL	Unauthorized People On Tracks/Near Miss	Incidental	Uncontrollable
M	M1	XM	Right of Way Accident/Misc.	Incidental	Uncontrollable
MW			Right of Way Accident/Misc., Weather	Incidental	Uncontrollable
N	MW1 N1	XMW XN	Electricity Utility Failure	Incidental	Uncontrollable
NW	NW1	XNW	Electricity Utility Failure, Weather	Incidental	Uncontrollable
O	O1	XO	AC/DC System Failure	Engineering	Controllable
			•		
OW	OW1	XOW	AC/DC System Failure, Weather	Engineering Transportation	Uncontrollable
Q	Q1	XQ VP	Late Issuance of Track Warrant	Transportation Transportation	Controllable
R	R1	XR	Human Error, Transportation	Transportation	Controllable
RA	RA1	XRA	Human Error, Amtrak Transportation	Transportation	Controllable
RD	RD1	XRD	Human Error, Metra Dispatcher	Transportation	Controllable
RF	RF1	XRF	Freight Dispatcher/Opr/Non-Freight Train Error	Transportation	Controllable
RL	RL1	XRL	Human Error, Job Action/Employee No Show (CMS Error)		Controllable
RN	RN1	XRN	1	Transportation	Controllable
RO	RO1	XRO	Human Error, Tower Operator	Transportation	Controllable
RS	RS1	XRS	Human Error, NICTD Transportation	Transportation	Controllable
RW	RW1	XRW	Train Crew Issues, Weather	Transportation	Uncontrollable
RZ	RZ1	XRZ	ETMS Train Crew Error	Transportation	Controllable
S	S1	XS	Operational (Efficiency) Testing	Transportation	Uncontrollable
T	T1	XT	Property Vandalism	Incidental	Uncontrollable
U	U1	XU	Accessibility Related (ADA)	Ridership	Uncontrollable
UF	UF1	XUF	ADA Lift Failure	Mechanical	Controllable
UW	UW1	XUW	Accessibility, Weather	Ridership	Uncontrollable
VE	VE1	XVE		Incidental	Controllable
VF VC	VF1	XVF	Cab Car Problem Reported, Nothing Found	Incidental	Controllable
VG W	VG1 W1	XVG XW	Broken Gate Crossing Reported, Nothing Found Gas Leak	Incidental Incidental	Uncontrollable Uncontrollable

Effective January 1, 2014 Revised February 3 & March 12, 2014

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	CATEGORY	CATEGORY
Codes	Codes	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
5 Passenger Loading	RN RN1 XRN Human Error, Job Action/Employee No Show (Non-CMS)	DE DE1 XDE Freight Mechanical Malfunction
I II XI Passenger Handling, Running Time	RO RO1 XRO Human Error, Tower Operator	DR DR1 XDR Freight-Human Error
IB IB1 XIB Passenger Handling, Bicycle	RZ RZ1 XRZ ETMS Train Crew Error	4 Accident
6 Lift Deployment	14 Sick, Injured, Unruly Passenger	DM DM1 XDM Freight-Accident/Incident
U U1 XU Accessibility Related (ADA)	J J1 XJ Passenger Problems/Removal	8 Signal/Switch Failure
UF UF1 XUF ADA Lift Failure	JM JM1 XJM Passenger Medical Emergency	GA GA1 XGA Signal/Switch Failure Amtrak (Signal Dept.)
7 Obstruction/Debris	15 Weather	GF GF1 XGF Signal/Switch Foreign Line
K K1 XK Obstruction On Tracks	AW AW1 XAW Pass. Train Interference, Weather	9 Track Work
KD KD1 XKD Train Struck Debris	CW CW1 XCW M of W Work, Weather	CA CA1 XCA Amtrak Engineering
KP KP1 XKP Suspicious Package(s)/Person(s)/Activity	EW EW1 XEW Locomotive Malfunction, Weather	11 Non-Locomotive Equipment Failure
8 Signal/Switch Failure	FW FW1 XFW Cab Car/TRL/MU Malfunction, Weather	FS FS1 XFS NICTD MU Malfunction
CM CM1 XCM Switch Malfunction (Track Dept.)	GW GW1 XGW Signal/Switch Malfunction Weather (Signal Dept.)	12 Locomotive Failure
G G1 XG Signal/Switch Malfunction (Signal Dept.)	IW IW1 XIW Passenger Handling, Weather	EA EA1 XEA Amtrak Locomotive/Car Malfunction
GM GM1 XGM Gate Crossing Malfunction	KW KW1 XKW Obstruction On Tracks, Weather	13 Human Error
GT GT1 XGT Telecom Failure	MW MW1XMW Right of Way Accident/Misc., Weather	BA BA1 XBA Amtrak Engineering Human Error
GX GX1 XGX Broken Gate Crossing	NW NW1 XNW Electricity Utility Failure, Weather	HS HS1 XHS Human Error, NICTD Mechanical Dept.
GZ GZ1 XGZ ETMS Signal Malfunction	OW OW1 XOW AC/DC System Failure, Weather	RA RA1 XRA Human Error, Amtrak Transportation
VG VG1 XVG Broken Gate Crossing Reported, Nothing Found	RW RW1 XRW Train Crew Issues, Weather	RF RF1 XRF Freight Dispatcher/Opr/Non-Freight Train Error
9 Track Work	UW UW1 XUW Accessibility, Weather	RS RS1 XRS Human Error, NICTD Transportation
C C1 XC Unscheduled Track Work	16 Other	14 Sick, Injured, Unruly Passenger
CC CC1 XCC Scheduled Track Work	L L1 XL Unauthorized People On Tracks/Near Miss	JA JA1 XJA Amtrak Passenger Problems/Removal
CF CF1 XCF Engineering Equipment Malfunction	N N1 XN Electricity Utility Failure	15 Weather
CG CG1 XCG Scheduled Signal Work	Q Q1 XQ Late Issuance of Track Warrant	DW DW1 XDW Freight Train Interference, Weather
CH CH1 XCH Contractor Failure	S S1 XS Operational (Efficiency) Testing	
10 Catenary Failure	T T1 XT Property Vandalism	
CO CO1 XCO Scheduled Wire Work	VE VE1 XVE Locomotive Problem Reported, Nothing Found	
O O1 XO AC/DC System Failure	VF VF1 XVF Cab Car Problem Reported, Nothing Found	
11 Non-Locomotive Equipment Failure	W W1 XW Gas Leak	
F F1 XF Cab Car/Trailer/MU Malfunction		
FZ FZ1 XFZ ETMS Malfunction on Cab Car		
12 Locomotive Failure		
E E1 XE Locomotive Malfunction		
EZ EZ1 XEZ ETMS Malfunction on Locomotive		
Effective January 1 2014 Payised February 2 2015		IL

Effective January 1, 2014

Revised February 2, 2015

'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 April 2015

			Electric			Mi	lw				Ur	nion Pacif	ĭc		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	35	15	1	2	3	52	22	6	15	7	12	20	16	206	42%
Semi-controllable	7	0	0	0	11	15	4	17	4	14	4	9	16	101	21%
Uncontrollable	14	36	10	8	1	7	7	2	3	6	33	29	22	178	37%
TOTAL TRAINS DELAYED	56	51	11	10	15	74	33	25	22	27	49	58	54	485	100%

April - Average Over Previous Three Years: 2012-2014

			Electric			Mi	lw				Uı	nion Paci	fic		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	58.3	18.0	5.3	12.3	1.3	34.3	15.7	19.0	29.7	11.7	14.3	10.7	16.3	247.0	42%
Semi-controllable	19.3	0.0	0.0	0.0	1.7	10.7	12.7	22.0	7.0	13.0	2.0	5.0	19.0	112.3	19%
Uncontrollable	43.7	18.3	4.3	7.3	1.7	10.0	15.0	2.7	44.0	2.7	26.3	23.3	28.7	228.0	39%
TOTAL TRAINS DELAYED	121.3	36.3	9.7	19.7	4.7	55.0	43.3	43.7	80.7	27.3	42.7	39.0	64.0	587.3	100%

April 2015 Divergence From April Average Over Previous Three Years

			Electric			M	ilw				Ur	ion Paci	fic		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	-23.3	-3.0	-4.3	-10.3	1.7	17.7	6.3	-13.0	-14.7	-4.7	-2.3	9.3	-0.3	-41.0	40%
Semi-controllable	-12.3	0.0	0.0	0.0	9.3	4.3	-8.7	-5.0	-3.0	1.0	2.0	4.0	-3.0	-11.3	11%
Uncontrollable	-29.7	17.7	5.7	0.7	-0.7	-3.0	-8.0	-0.7	-41.0	3.3	6.7	5.7	-6.7	-50.0	49%
TOTAL TRAINS DELAYED	-65.3	14.7	1.3	-9.7	10.3	19.0	-10.3	-18.7	-58.7	-0.3	6.3	19.0	-10.0	-102.3	100%

January-April 2015

			Electric			Mi	lw				Ur	nion Pacif	ĭc		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYST	EM
Controllable	217	88	22	35	10	217	104	67	78	41	52	60	76	1,067	35%
Semi-controllable	65	0	0	0	27	85	53	74	11	84	14	34	116	563	18%
Uncontrollable	253	227	65	54	5	159	138	25	64	31	105	186	125	1,437	47%
TOTAL TRAINS DELAYED	535	315	87	89	42	461	295	166	153	156	171	280	317	3,067	100%

Data for current month is final (05/21/15) version from TOPS.

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TABLE 7: NUMBER OF DELAYS BY DATE April 2015

WEEK	DAY	1	2	3	6	7	8		10	13		15			20		22		24	27	28	29	30	TOTAL
		We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	
BNSF		0	1	1	2	0	0	8	0	3	0	0	6	0	6	2	0	0	2	6	6	1	4	48
Elec -M	L	0	0	0	1	19	1	0	2	0	0	0	0	5	3	6	0	0	2	8	0	0	2	49
-BI	[0	0	0	1	5	0	0	0	0	1	0	0	0	0	0	0	0	1	3	0	0	0	11
-SC	C	0	0	0	1	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	10
Heritage	:	2	0	0	0	0	0	0	0	0	1	0	0	0	1	4	1	0	1	2	0	1	2	15
Milw -N		2	2	2	1	0	0	2	0	6	5	5	4	4	2	2	4	3	7	2	2	1	6	62
-W	·	1	2	0	0	1	0	2	1	2	2	3	6	0	3	1	0	3	3	0	0	2	0	32
NCS		1	0	1	1	0	0	0	1	1	1	0	2	3	2	3	1	0	1	0	0	4	3	25
RI		0	0	4	0	0	0	0	2	2	0	3	0	8	0	0	0	0	0	0	2	0	0	21
SWS		2	2	0	4	1	1	0	0	0	2	2	0	3	0	1	0	3	0	0	2	3	0	26
UP -N		0	0	5	4	1	0	0	1	1	3	0	0	1	2	0	1	0	0	0	21	1	1	42
-NV	W	3	0	7	0	0	0	3	3	2	1	1	3	6	3	1	2	5	1	1	0	1	0	43
-W	,	<u>2</u>	<u>2</u>	2	<u>7</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>2</u>	1	0	<u>6</u>	<u>1</u>	<u>2</u>	<u>4</u>	0	0	0	<u>3</u>	<u>49</u>
SYSTEM	1	13	9	22	22	35	4	18	14	20	18	16	23	31	22	26	10	16	22	23	33	15	21	433
SATUR	RDAY	4	11	18	25		T	OT	AL			SUN	NDA	Y/I	IOF	LID	AY	5	12	19	26			TOTAL
BNSF		1	2	1	2				6			BN	ISF					0	0	0	2			2
Elec -M	L	0	0	1	1				2			Ele	ec	-MI	,			0	0	0	0			0
-BI		0	0	0	0				0					-BI				-	-	-	-			0
-SC	C	0	0	0	0				0					-SC				0	0	0	0			0
Heritage	;	-	-	-	-				-			Не	ritaș	ge				-	-	-	-			0
Milw -N		2	0	2	2				6			Mi	ilw	-N				3	1	1	1			6
-W	,	0	0	0	0				0					-W				0	1	0	0			1
NCS		-	-	-	-				-			N(CS					-	-	-	-			0
RI		0	0	1	0				1			RI						0	0	0	0			0
sws		1	0	0	0				1			SV	VS					-	-	-	-			0
UP -N		0	4	1	0				5			UI	•	-N				1	0	0	1			2
-NV	W	3	8	2	0				13					-NW	7			0	0	1	1			2
-W		<u>1</u>	1	1	<u>0</u>				<u>3</u>					-W				<u>0</u>	<u>0</u>	<u>2</u>	0			<u>2</u>
SYSTEM	л	8	15	9	5				37			SY	STE	EM				4	2	4	5			15

Data is final (05/21/15) version from TOPS.

 $P: \label{eq:continuous} P: \label{eq:contin$

TABLE 8.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE April 2015

			Electric		11 201.	Mil	w				Un	ion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - TOTAL	8	0	0	0	6	11	4	13	4	12	4	9	16	87
Freight Interference - Peak	2	0	0	0	6	5	3	7	0	3	2	6	2	36
Primary	2	0	0	0	6	3	1	4	0	3	1	2	2	24
Secondary	0	0	0	0	0	2	2	3	0	0	1	4	0	12
Freight Interference - Off-Peak	6	0	0	0	0	6	1	6	4	9	2	3	14	51
Primary	5	0	0	0	0	6	1	6	4	6	1	2	11	42
Secondary	1	0	0	0	0	0	0	0	0	3	1	1	3	9
Signal/Switch Failure - TOTAL	2	2	1	0	5	23	6	5	2	4	4	5	10	69
Signal/Switch Failure - Metra/PSA	2	2	1	0	0	19	6	1	1	2	4	5	10	53
Primary	1	1	0	0	0	10	3	1	1	1	3	3	5	29
Secondary	1	1	1	0	0	9	3	0	0	1	1	2	5	24
Signal/Switch Failure - Foreign	0	0	0	0	5	4	0	4	1	2	0	0	0	16
Primary	0	0	0	0	5 0	3 1	0	1 3	1 0	2	0	0	0	12 4
Secondary									_					
Mechanical Failure - TOTAL	12	17	3	2	0	2	12	0	6	4	2	4	2	66
Mechanical Failure - Metra/PSA	12	11	0	1	0	2	12	0	6	4	2	4	2	56
Non-Locomotive Equipment Failure - Metra/PSA	0	11	0	1	0	0	1	0	0	1	0	3	0	17
Primary Secondary	0	3 8	0	0	0	0	1 0	0	0	0	0	3 0	0	7 10
	12		0			2				3	2		2	
Locomotive Failure - Metra/PSA Primary	3	0	0	0	0	1	11 5	0	6 3	2	1	1	1	39 17
Primary Secondary	9	0	0	0	0	1	6	0	3	1	1	0	1	22
Mechanical Failure - Foreign	0	6	3	1	0	0	0	0	0	0	0	0	0	10
Passenger Train Interference - TOTAL	0	0	0	0	1	3	0	3	0	0	0	0	0	7
Passenger Train Interference - TOTAL Passenger Train Interference - Metra/PSA	0	0	0	0	0	1	0	3	0	0	0	0	0	4
C .	0	0	0	0		2	0	0	0	0	0	0	0	3
Passenger Train Interference - Foreign Accident - TOTAL	0	19	5	6	0	0	0	0	0	0	21	3	6	60
	0	19	5	6	0	0	0	0	0	0	21	3	-	60
Accident - Metra/PSA	0	0	0	0	0	0	0	0	0	0	0	0	6 0	0
Accident - Foreign Track Work - TOTAL	12	0	0	0	0	18	2	1	5	0	3	10		52
								-	-		_		1	_
Track Work - Metra/PSA	12	0	0	0	0	18	2	1	5	0	3	10	1	52
Track Work - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Human Error - TOTAL	8	0	0	1	2	9	2	1	2	1	2	1	2	31
Human Error - Metra/PSA	3	0	0	1	0	6	0	0	2	1	2	0	2	17
Human Error - Foreign	5	0	0	0	2	3	2	1	0	0	0	1	0	14
Sick, Injured, Unruly Passenger - TOTAL	2	6	1	0	1	6	3	0	1	2	2	4	1	29
Sick, Injured, Unruly Passenger - Metra/PSA	2	6	1	0	1	6	3	0	1	2	2	4	1	29
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	7	0	0	0	0	0	0	0	0	0	1	2	0	10
Weather - Metra/PSA	7	0	0	0	0	0	0	0	0	0	1	2	0	10
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	1	4	1	0	0	0	0	0	2	2	2	5	4	21
Lift Deployment - TOTAL	1	0	0	0	0	1	1	0	0	0	1	3	2	9
Obstruction/Debris - TOTAL	1	1	0	1	0	1	2	0	0	2	6	12	8	34
Catenary Failure - TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other - TOTAL	2	2	0	0	0	0	1	2	0	0	1	0	2	10
TOTAL TRAINS DELAYED	56	51	11	10	15	74	33	25	22	27	49	58	54	485
Total Metra/PSA Delays	43	45	8	9	1	54	27	7	17	13	45	48	38	355
Total Foreign Carrier Delays	13	6	3	1	14	20	6	18	5	14	4	10	16	130

Data for current month is final (05/21/15) version from TOPS.

TABLE 8.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

April - Average Over Previous Five Years: 2010-2014

			Electric			Mi					Uı	nion Paci	fic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - TOTAL	15.6	0.0	0.0	0.0	2.6	11.4	9.4	23.4	5.8	13.0	1.6	4.4	19.0	106.2
Freight Interference - Peak	6.6	0.0	0.0	0.0	2.6	2.6	1.6	10.0	2.2	2.0	0.0	2.0	3.8	33.4
Primary	3.4	0.0	0.0	0.0	2.4	2.2	1.4	7.2	1.2	1.8	0.0	1.4	2.0	23.0
Secondary	3.2	0.0	0.0	0.0	0.2	0.4	0.2	2.8	1.0	0.2	0.0	0.6	1.8	10.4
Freight Interference - Off-Peak	9.0	0.0	0.0	0.0	0.0	8.8	7.8	13.4	3.6	11.0	1.6	2.4	15.2	72.8
Primary	7.8	0.0	0.0	0.0	0.0	7.0	6.2	9.8	3.0	9.6	1.4	2.2	12.6	59.6
Secondary	1.2	0.0	0.0	0.0	0.0	1.8	1.6	3.6	0.6	1.4	0.2	0.2	2.6	13.2
Signal/Switch Failure - TOTAL	13.6	4.8	2.6	2.4	1.2	15.8	8.8	8.4	5.8	3.0	2.8	3.0	9.0	81.2
Signal/Switch Failure - Metra/PSA	12.8	4.8	2.6	2.4	0.6	13.8	6.4	6.8	5.4	0.8	2.8	3.0	9.0	71.2
Primary	10.6	4.2	1.6	1.8	0.6	9.6	4.4	5.0	4.6	0.4	1.6	3.0	4.2	51.6
Secondary	2.2	0.6	1.0	0.6	0.0	4.2	2.0	1.8	0.8	0.4	1.2	0.0	4.8	19.6
Signal/Switch Failure - Foreign	0.8	0.0	0.0	0.0	0.6	2.0	2.4	1.6	0.4	2.2	0.0	0.0	0.0	10.0
Primary Secondary	0.4 0.4	0.0	0.0	0.0	0.6	1.0 1.0	1.2 1.2	0.4 1.2	0.2	1.8 0.4	0.0	0.0	0.0	5.6 4.4
Mechanical Failure - TOTAL	8.2	6.8	3.6	3.4	0.0	8.0	5.2	3.2	8.8	3.2	3.4	6.8	2.4	63.0
Mechanical Failure - Metra/PSA	8.2	6.8	3.6	3.4	0.0	8.0	5.2	3.2	8.4	3.2	3.4	6.8	2.4	62.6
Non-Locomotive Equipment Failure - Metra/PSA	2.4	6.8	3.6	3.4	0.0	0.2	0.6	0.0	2.2	0.2	0.6	1.2	0.6	21.8
Primary	1.2	1.2	0.8	0.2	0.0	0.2	0.0	0.0	1.4	0.2	0.0	0.4	0.4	6.6
Secondary	1.2	5.6	2.8	3.2	0.0	0.0	0.4	0.0	0.8	0.0	0.2	0.8	0.2	15.2
Locomotive Failure - Metra/PSA	5.8	0.0	0.0	0.0	0.0	7.8	4.6	3.2	6.2	3.0	2.8	5.6	1.8	40.8
Primary	2.6	0.0	0.0	0.0	0.0	2.8	1.6	1.0	2.6	1.0	1.0	1.0	1.4	15.0
Secondary	3.2	0.0	0.0	0.0	0.0	5.0	3.0	2.2	3.6	2.0	1.8	4.6	0.4	25.8
Mechanical Failure - 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
Passenger Train Interference - TOTAL	1.4	0.4	0.2	0.2	0.2	4.0	1.0	0.8	1.0	0.2	0.6	1.0	0.4	11.4
Passenger Train Interference - Metra/PSA	0.0	0.4	0.2	0.2	0.0	3.6	0.8	0.8	1.0	0.0	0.6	1.0	0.4	9.0
Passenger Train Interference - Foreign	1.4	0.0	0.0	0.0	0.2	0.4	0.2	0.0	0.0	0.2	0.0	0.0	0.0	2.4
Accident - TOTAL	4.4	0.8	1.8	0.0	0.0	0.0	2.2	0.0	4.8	0.0	0.2	4.4	6.2	24.8
Accident - Metra/PSA	4.4	0.8	1.8	0.0	0.0	0.0	2.0	0.0	4.8	0.0	0.2	4.4	6.2	24.6
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Track Work - TOTAL	11.0	4.2	0.4	4.0	0.0	5.0	3.0	3.8	9.0	0.2	9.2	1.4	4.4	55.6
Track Work - Metra/PSA	11.0	4.2	0.4	4.0	0.0	5.0	3.0	3.8	9.0	0.2	9.2	1.4	4.4	55.6
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	13.2	2.8	0.8	3.6	1.0	5.4	2.6	1.0	5.4	4.6	6.4	2.4	1.6	50.8
Human Error - Metra/PSA	11.6	2.8	0.8	3.4	0.6	3.2	2.0	0.4	5.2	0.8	6.0	1.6	0.4	38.8
Human Error - Foreign	1.6	0.0	0.0	0.2	0.4	2.2	0.6	0.6	0.2	3.8	0.4	0.8	1.2	12.0
Sick, Injured, Unruly Passenger - TOTAL	2.6	5.2	1.2	3.0	0.0	2.4	5.0	1.0	2.4	0.6	3.6	2.0	3.2	32.2
Sick, Injured, Unruly Passenger - Metra/PSA	2.2	5.2	1.2	3.0	0.0	2.4	5.0	1.0	2.2	0.6	3.6	2.0	3.2	31.6
Sick, Injured, Unruly Passenger - Foreign	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.6
Weather - TOTAL	19.4	0.8	0.6	0.0	0.2	3.6	1.0	0.8	6.2	0.6	6.4	6.4	4.8	50.8
Weather - Metra/PSA	19.4	0.8	0.6	0.0	0.2	3.6	1.0	0.8	6.2	0.6	6.4	6.4	4.8	50.8
Weather - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passenger Loading - TOTAL	2.4	7.2	1.8	4.6	0.0	0.8	1.6	0.2	10.6	0.0	7.8	1.4	4.8	43.2
Lift Deployment - TOTAL	2.0	0.2	0.0	0.0	0.0	0.8	1.2	0.0	3.6	0.0	1.4	0.6	3.4	13.2
Obstruction/Debris - TOTAL	10.4	1.4	0.2	2.4	0.8	1.8	2.4	0.6	6.4	0.2	3.4	3.8	2.8	36.6
Catenary Failure - TOTAL	0.0	1.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Other - TOTAL	1.4	1.8	0.4	1.2	0.0	3.4	2.2	0.0	0.8	0.8	3.6	1.2	3.8	20.6
TOTAL TRAINS DELAYED	105.6	37.8	13.6	25.8	6.0	62.4	45.6	43.2	70.6	26.4	50.4	38.8	65.8	592.0
Total Metra/PSA Delays	85.8	37.8	13.6	25.6	2.2	46.4	32.8	17.6	63.6	7.2	48.4	33.6	45.6	460.2
Total Foreign Carrier Delays	19.8	0.0	0.0	0.2	3.8	16.0	12.8	25.6	7.0	19.2	2.0	5.2	20.2	131.8

Data for latest month is final (05/13/14) version from TOPS.

TABLE 8.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

April 2015 Divergence From April Average Over Previous Five Years

			Electric			Mi	ilw				Ur	nion Paci	fic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - TOTAL	-7.6	0.0	0.0	0.0	3.4	-0.4	-5.4	-10.4	-1.8	-1.0	2.4	4.6	-3.0	-19.2
Freight Interference - Peak	-4.6	0.0	0.0	0.0	3.4	2.4	1.4	-3.0	-2.2	1.0	2.0	4.0	-1.8	2.6
Primary	-1.4	0.0	0.0	0.0	3.6	0.8	-0.4	-3.2	-1.2	1.2	1.0	0.6	0.0	1.0
Secondary	-3.2	0.0	0.0	0.0	-0.2	1.6	1.8	0.2	-1.0	-0.2	1.0	3.4	-1.8	1.6
Freight Interference - Off-Peak	-3.0	0.0	0.0	0.0	0.0	-2.8	-6.8	-7.4	0.4	-2.0	0.4	0.6	-1.2	-21.8
Primary Secondary	-2.8 -0.2	0.0	0.0	0.0	0.0	-1.0 -1.8	-5.2 -1.6	-3.8 -3.6	1.0 -0.6	-3.6 1.6	-0.4 0.8	-0.2 0.8	-1.6 0.4	-17.6 -4.2
·	-11.6	-2.8	-1.6	-2.4	3.8	7.2	-2.8	-3.4	-3.8	1.0	1.2	2.0	1.0	-12.2
Signal/Switch Failure - TOTAL	-11.0	-2.8 -2.8	-1.6	-2.4	-0.6	5.2	-2.8	-5.4	-3.8 -4.4	1.0	1.2	2.0	1.0	_
Signal/Switch Failure - Metra/PSA Primary	-10.8 -9.6	-2.8 -3.2	-1.6 -1.6	-2.4 -1.8	-0.6	5.2 0.4	-0.4 -1.4	-5.8 -4.0	-4.4 -3.6	0.6	1.2	0.0	0.8	-18.2 -22.6
Secondary	-1.2	0.4	0.0	-0.6	0.0	4.8	1.0	-1.8	-0.8	0.6	-0.2	2.0	0.3	4.4
Signal/Switch Failure - Foreign	-0.8	0.0	0.0	0.0	4.4	2.0	-2.4	2.4	0.6	-0.2	0.0	0.0	0.0	6.0
Primary	-0.4	0.0	0.0	0.0	4.4	2.0	-1.2	0.6	0.8	0.2	0.0	0.0	0.0	6.4
Secondary	-0.4	0.0	0.0	0.0	0.0	0.0	-1.2	1.8	-0.2	-0.4	0.0	0.0	0.0	-0.4
Mechanical Failure - TOTAL	3.8	10.2	-0.6	-1.4	0.0	-6.0	6.8	-3.2	-2.8	0.8	-1.4	-2.8	-0.4	3.0
Mechanical Failure - Metra/PSA	3.8	4.2	-3.6	-2.4	0.0	-6.0	6.8	-3.2	-2.4	0.8	-1.4	-2.8	-0.4	-6.6
Non-Locomotive Equipment Failure - Metra/PSA	-2.4	4.2	-3.6	-2.4	0.0	-0.2	0.4	0.0	-2.2	0.8	-0.6	1.8	-0.6	-4.8
Primary	-1.2	1.8	-0.8	-0.2	0.0	-0.2	0.8	0.0	-1.4	-0.2	-0.4	2.6	-0.4	0.4
Secondary	-1.2	2.4	-2.8	-2.2	0.0	0.0	-0.4	0.0	-0.8	1.0	-0.2	-0.8	-0.2	-5.2
Locomotive Failure - Metra/PSA	6.2	0.0	0.0	0.0	0.0	-5.8	6.4	-3.2	-0.2	0.0	-0.8	-4.6	0.2	-1.8
Primary	0.4	0.0	0.0	0.0	0.0	-1.8	3.4	-1.0	0.4	1.0	0.0	0.0	-0.4	2.0
Secondary	5.8	0.0	0.0	0.0	0.0	-4.0	3.0	-2.2	-0.6	-1.0	-0.8	-4.6	0.6	-3.8
Mechanical Failure - Foreign	0.0	6.0	3.0	1.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	9.6
Passenger Train Interference - TOTAL	-1.4	-0.4	-0.2	-0.2	0.8	-1.0	-1.0	2.2	-1.0	-0.2	-0.6	-1.0	-0.4	-4.4
Passenger Train Interference - Metra/PSA	0.0	-0.4	-0.2	-0.2	0.0	-2.6	-0.8	2.2	-1.0	0.0	-0.6	-1.0	-0.4	-5.0
Passenger Train Interference - Foreign	-1.4	0.0	0.0	0.0	0.8	1.6	-0.2	0.0	0.0	-0.2	0.0	0.0	0.0	0.6
Accident - TOTAL	-4.4	18.2	3.2	6.0	0.0	0.0	-2.2	0.0	-4.8	0.0	20.8	-1.4	-0.2	35.2
Accident - Metra/PSA	-4.4	18.2	3.2	6.0	0.0	0.0	-2.0	0.0	-4.8	0.0	20.8	-1.4	-0.2	35.4
Accident - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
Track Work - TOTAL	1.0	-4.2	-0.4	-4.0	0.0	13.0	-1.0	-2.8	-4.0	-0.2	-6.2	8.6	-3.4	-3.6
Track Work - Metra/PSA	1.0	-4.2	-0.4	-4.0	0.0	13.0	-1.0	-2.8	-4.0	-0.2	-6.2	8.6	-3.4	-3.6
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	-5.2	-2.8	-0.8	-2.6	1.0	3.6	-0.6	0.0	-3.4	-3.6	-4.4	-1.4	0.4	-19.8
Human Error - Metra/PSA	-8.6	-2.8	-0.8	-2.4	-0.6	2.8	-2.0	-0.4	-3.2	0.2	-4.0	-1.6	1.6	-21.8
Human Error - Foreign	3.4	0.0	0.0	-0.2	1.6	0.8	1.4	0.4	-0.2	-3.8	-0.4	0.2	-1.2	2.0
Sick, Injured, Unruly Passenger - TOTAL	-0.6	0.8	-0.2	-3.0	1.0	3.6	-2.0	-1.0	-1.4	1.4	-1.6	2.0	-2.2	-3.2
Sick, Injured, Unruly Passenger - Metra/PSA	-0.2	0.8	-0.2	-3.0	1.0	3.6	-2.0	-1.0	-1.2	1.4	-1.6	2.0	-2.2	-2.6
Sick, Injured, Unruly Passenger - Foreign	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	-0.6
Weather - TOTAL	-12.4	-0.8	-0.6	0.0	-0.2	-3.6	-1.0	-0.8	-6.2	-0.6	-5.4	-4.4	-4.8	-40.8
Weather - Metra/PSA	-12.4	-0.8	-0.6	0.0	-0.2	-3.6	-1.0	-0.8	-6.2	-0.6	-5.4	-4.4	-4.8	-40.8
Weather - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passenger Loading - TOTAL	-1.4	-3.2	-0.8	-4.6	0.0	-0.8	-1.6	-0.2	-8.6	2.0	-5.8	3.6	-0.8	-22.2
Lift Deployment - TOTAL	-1.0	-0.2	0.0	0.0	0.0	0.2	-0.2	0.0	-3.6	0.0	-0.4	2.4	-1.4	-4.2
Obstruction/Debris - TOTAL	-9.4	-0.4	-0.2	-1.4	-0.8	-0.8	-0.4	-0.6	-6.4	1.8	2.6	8.2	5.2	-2.6
Catenary Failure - TOTAL	0.0	-1.4	0.0	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4
Other - TOTAL	0.6	0.2	-0.4	-1.2	0.0	-3.4	-1.2	2.0	-0.8	-0.8	-2.6	-1.2	-1.8	-10.6
TOTAL TRAINS DELAYED	-49.6	13.2	-2.6	-15.8	9.0	11.6	-12.6	-18.2	-48.6	0.6	-1.4	19.2	-11.8	-107.0
Total Metra/PSA Delays	-42.8	7.2	-5.6	-16.6	-1.2	7.6	-5.8	-10.6	-46.6	5.8	-3.4	14.4	-7.6	-105.2
Total Foreign Carrier Delays	-6.8	6.0	3.0	0.8	10.2	4.0	-6.8	-7.6	-2.0	-5.2	2.0	4.8	-4.2	-1.8

Data for current month is final (05/21/15) version from TOPS.

?:\ONTIME\report\[DelaysByCause.xlsm]LastMonthByLine 05/21/2015

'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 - April 2015

			Electric			Mil	w				Ur	ion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - TOTAL	44	0	0	0	16	74	47	62	12	63	14	32	116	480
Freight Interference - Peak	18	0	0	0	16	21	9	26	2	20	5	17	27	161
Primary	11	0	0	0	16	15	3	17	2	14	2	8	17	105
Secondary	7	0	0	0	0	6	6	9	0	6	3	9	10	56
Freight Interference - Off-Peak	26	0	0	0	0	53	38	36	10	43	9	15	89	319
Primary	20	0	0	0	0	35	30	30	10	34	5	12	74	250
Secondary	6	0	0	0	0	18	8	6	0	9	4	3	15	69
Signal/Switch Failure - TOTAL	58	15	7_	10	12	58	36	34	14	28	11	9_	31	323
Signal/Switch Failure - Metra/PSA	39	15	7	10	1	47	30	22	13	4	11	7	31	237
Primary Secondary	22 17	8	4 3	10 0	1	26 21	18 12	12 10	11 2	2 2	8	4 3	20 11	146 91
Signal/Switch Failure - Foreign	19	0	0	0	11	11	6	12	1	24	0	2	0	86
Primary	14	0	0	0	10	6	4	6	1	15	0	1	0	57
Secondary	5	0	0	0	1	5	2	6	0	9	0	1	0	29
Mechanical Failure - TOTAL	47	30	6	3	1	88	35	8	37	11	18	22	13	319
Mechanical Failure - Metra/PSA	46	24	3	2	1	69	35	8	37	11	18	22	13	289
Non-Locomotive Equipment Failure - Metra/PSA	11	24	3	2	0	9	10	1	10	3	4	4	4	85
Primary	3	8	0	1	0	3	2	1	4	2	2	3	4	33
Secondary	8	16	3	1	0	6	8	0	6	1	2	1	0	52
Locomotive Failure - Metra/PSA	35	0	0	0	1	60	25	7	27	8	14	18	9	204
Primary	10 25	0	0	0	1	14 46	11 14	1	14 13	5 3	6 8	5 13	5 4	72 132
Secondary				_				6						
Mechanical Failure - Foreign	8	6	3	1	0	19 15	0	0	0	2	0	0	0	30 45
Passenger Train Interference - TOTAL	-	3	0	1	1	15	1	7	0	_	1	0	6	_
Passenger Train Interference - Metra/PSA Passenger Train Interference - Foreign	2	1	0	1	1	8 7	1	0	0	1 1	0	0	6 0	29 16
Accident - TOTAL	24	33	10	9	0	12	30	3	3	0	25	29	6	184
Accident - 101AL Accident - Metra/PSA	24	33	10	9	0	12	30	3	1	0	25	29	6	184
Accident - Foreign	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Track Work - TOTAL	79	8	3	4	0	24	8	8	7	0	4	12	2	159
Track Work - Metra/PSA	61	8	3	4	0	24	8	8	7	0	4	12	2	139
Track Work - Foreign	18	0	0	0	0	0	0	0	0	0	0	0	0	18
Human Error - TOTAL	34	4	2	3	7	58	29	21	17	14	16	11	17	233
Human Error - Metra/PSA	29	4	2	3	2	47	24	14	17	4	15	3	12	176
Human Error - Foreign	5	0	0	0	5	11	5	7	0	10	1	8	5	57
Sick, Injured, Unruly Passenger - TOTAL	9	22	3	0	2	16	6	0	1	3	9	18	6	95
Sick, Injured, Unruly Passenger - Metra/PSA	9	22	3	0	2	16	6	0	1	3	9	18	6	95
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	141	147	43	27	3	58	62	14	42	16	55	77	72	757
Weather - Metra/PSA	140	147	43	27	3	47	61	14	42	15	55	77	70	741
Weather - Foreign	1	0	0	0	0	11	1	0	0	1	0	0	2	16
Passenger Loading - TOTAL	8	14	4	2	0	21	14	2	8	2	4	14	11	104
Lift Deployment - TOTAL	22	0	0	0	0	14	7	0	2	0	1	9	19	74
Obstruction/Debris - TOTAL	21	4	2	15	0	18	17	3	6	3	11	32	12	144
Catenary Failure - TOTAL	0	28	6	14	0	0	0	0	0	0	0	0	0	48
Other - TOTAL	40	7	1	1	0	5	3	4	4	14	2	15	6	102
TOTAL TRAINS DELAYED	535	315	87	89	42	461	295	166	153	156	171	280	317	3,067
Total Metra/PSA Delays	441	308	84	88	9	328	236	85	138	57	156	238	194	2,362
Total Foreign Carrier Delays	94	7	3	1	33	133	59	81	15	99	15	42	123	705

Data for current month is final (05/21/15) version from TOPS.

TABLE 9.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

January - April - Average Over Previous Five Years: 2010-2014

			Electric			Mi	lw				U	nion Paci	fic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - TOTAL	78.4	0.2	0.2	0.0	16.0	57.8	48.2	62.6	24.4	51.6	9.2	14.4	75.4	438.4
Freight Interference - Peak	35.6	0.0	0.0	0.0	16.0	10.8	11.6	24.2	6.2	14.6	2.0	6.4	17.6	145.0
Primary	22.0	0.0	0.0	0.0	15.0	7.2	8.6	16.8	3.8	12.2	0.4	3.8	9.0	98.8
Secondary	13.6	0.0	0.0	0.0	1.0	3.6	3.0	7.4	2.4	2.4	1.6	2.6	8.6	46.2
Freight Interference - Off-Peak	42.8	0.2	0.2	0.0	0.0	47.0	36.6	38.4	18.2	37.0	7.2	8.0	57.8	293.4
Primary	36.8	0.0	0.0	0.0	0.0	31.8	26.0	31.8	16.6	30.6	4.8	6.4	48.8	233.6
Secondary	6.0	0.2	0.2	0.0	0.0	15.2	10.6	6.6	1.6	6.4	2.4	1.6	9.0	59.8
Signal/Switch Failure - TOTAL	68.8	27.0	12.2	9.0	9.0	85.4	50.4	28.4	37.8	32.2	16.8	21.8	32.2	431.0
Signal/Switch Failure - Metra/PSA	44.8	27.0	12.2	9.0	6.2	73.4	40.0	20.4	35.4	13.0	16.6	21.8	31.6	351.4
Primary	33.2	22.6	9.8	7.4	6.0	41.2	25.2	12.4	26.2	10.0	10.6	15.8	17.2	237.6
Secondary	11.6	4.4	2.4	1.6	0.2	32.2	14.8	8.0	9.2	3.0	6.0	6.0	14.4	113.8
Signal/Switch Failure - Foreign	24.0	0.0	0.0	0.0	2.8	12.0	10.4	8.0	2.4	19.2	0.2	0.0	0.6	79.6
Primary	21.4	0.0	0.0	0.0	2.8	9.6	8.0	4.0	1.0	13.6	0.2	0.0	0.6	61.2
Secondary	2.6	0.0	0.0	0.0	0.0	2.4	2.4	4.0	1.4	5.6	0.0	0.0	0.0	18.4
Mechanical Failure - TOTAL	41.0	14.0	7.0	7.8	1.0	58.0	32.4	16.0	43.6	11.6	28.4	30.0	20.0	310.8
Mechanical Failure - Metra/PSA	40.8	13.8	7.0	7.8	1.0	57.4	32.2	16.0	43.2	11.6	28.4	30.0	19.8	309.0
Non-Locomotive Equipment Failure - Metra/PSA	14.8	13.8	7.0	7.8	0.6	8.0	7.4	2.4	9.2	5.8	7.8	5.6	4.6	94.8
Primary	4.8	5.2	2.4	2.4	0.4	2.4	3.4	0.8	5.2	1.8	2.4	1.6	2.8	35.6
Secondary	10.0	8.6	4.6	5.4	0.2	5.6	4.0	1.6	4.0	4.0	5.4	4.0	1.8	59.2
Locomotive Failure - Metra/PSA	26.0	0.0	0.0	0.0	0.4	49.4	24.8	13.6	34.0	5.8	20.6	24.4	15.2	214.2
Primary Secondary	8.6 17.4	0.0 0.0	0.0 0.0	0.0	0.4	12.2 37.2	8.4 16.4	3.8 9.8	11.0 23.0	2.2 3.6	5.8 14.8	6.6 17.8	6.2 9.0	65.2 149.0
	0.2			0.0		0.6	0.2	0.0	0.4	0.0	0.0	0.0	0.2	
Mechanical Failure - Foreign		0.2	2.2		2.8	35.4		4.8		3.8				96.2
Passenger Train Interference - TOTAL	5.6	5.6		2.6			6.8		6.8		8.0	5.2	6.6	
Passenger Train Interference - Metra/PSA	0.4	2.6	1.6	2.2	0.2	21.4	5.8	4.8	5.6	0.4	8.0	5.2	6.4	64.6
Passenger Train Interference - Foreign	5.2	3.0	0.6	0.4	2.6	14.0	1.0	0.0	1.2	3.4	0.0	0.0	0.2	31.6
Accident - TOTAL	46.0	1.4	1.8	1.0	0.4	15.0	21.0	6.6	20.6	0.8	17.4	28.4	15.6	176.0
Accident - Metra/PSA	33.0	1.4	1.8	1.0	0.4	15.0	20.6	5.4	19.8	0.8	17.4	28.4	14.8	159.8
Accident - Foreign	13.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	0.8	0.0	0.0	0.0	0.8	16.2
Track Work - TOTAL	26.6	20.6	8.6	6.8	0.4	18.0	8.4	8.6	15.6	0.8	17.2	5.0	13.0	149.6
Track Work - Metra/PSA	26.4	20.6	8.6	6.8	0.4	18.0	8.4	8.6	15.6	0.6	17.2	5.0	13.0	149.2
Track Work - Foreign	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.4
Human Error - TOTAL	55.0	16.2	4.2	9.0	4.8	27.6	15.8	8.2	21.0	11.4	24.6	17.6	12.6	228.0
Human Error - Metra/PSA	37.4	13.4	4.0	8.0	1.4	15.0	8.2	2.2	20.6	2.0	22.6	14.8	6.4	156.0
Human Error - Foreign	17.6	2.8	0.2	1.0	3.4	12.6	7.6	6.0	0.4	9.4	2.0	2.8	6.2	72.0
Sick, Injured, Unruly Passenger - TOTAL	10.2	24.4	3.8	9.4	0.2	9.8	13.4	1.6	10.0	1.2	15.2	12.6	11.4	123.2
Sick, Injured, Unruly Passenger - Metra/PSA	9.6	24.4	3.8	9.4	0.2	9.8	13.4	1.6	9.6	1.2	15.2	12.6	11.4	122.2
Sick, Injured, Unruly Passenger - Foreign	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	1.0
Weather - TOTAL	131.2	70.8	20.0	30.2	4.2	83.4	71.8	23.8	97.2	19.6	72.2	74.6	65.2	764.2
Weather - Metra/PSA	130.2	70.8	20.0	30.2	3.8	82.4	71.2	23.4	97.0	18.2	72.2	74.6	65.0	759.0
Weather - Foreign	1.0	0.0	0.0	0.0	0.4	1.0	0.6	0.4	0.2	1.4	0.0	0.0	0.2	5.2
Passenger Loading - TOTAL	12.6	34.0	8.6	13.4	0.0	15.0	13.0	0.2	31.8	0.6	36.8	12.4	17.0	195.4
Lift Deployment - TOTAL	8.0	0.2	0.0	0.2	0.0	8.0	10.2	0.8	15.2	0.0	8.2	4.2	12.2	67.2
Obstruction/Debris - TOTAL	22.4	8.8	2.2	9.8	1.8	10.8	13.4	2.4	17.4	6.6	10.8	18.6	14.8	139.8
Catenary Failure - TOTAL	0.0	13.6	3.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	20.2
Other - TOTAL	11.8	14.2	2.0	4.8	0.0	8.2	9.6	2.0	8.4	5.0	15.0	7.4	17.6	106.0
TOTAL TRANSCRETATION	515 C	251.0	77.0	107.4	40.6	422.4	2144	166.0	240.0	145.0	250.0	252.4	212.6	2.246.6
TOTAL TRAINS DELAYED	517.6	251.0	75.8	107.4	40.6	432.4	314.4	166.0	349.8	145.2	279.8	252.4	313.6	3,246.0
Total Metra/PSA Delays	377.4	244.8	74.8	106.0	15.4	334.4	246.0	87.8	319.6	60.0	268.4	235.2	230.0	2,599.8
Total Foreign Carrier Delays	140.2	6.2	1.0	1.4	25.2	98.0	68.4	78.2	30.2	85.2	11.4	17.2	83.6	646.2

Data for latest month is final (05/13/14) version from TOPS.

TABLE 9.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

January - April 2015 Divergence From January - April Average Over Previous Five Years

			Electric			Mi	lw				Uı	nion Pacif	ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	w	SYSTEM
Freight Interference - TOTAL	-34.4	-0.2	-0.2	0.0	0.0	16.2	-1.2	-0.6	-12.4	11.4	4.8	17.6	40.6	41.6
Freight Interference - Peak	-17.6	0.0	0.0	0.0	0.0	10.2	-2.6	1.8	-4.2	5.4	3.0	10.6	9.4	16.0
Primary	-11.0	0.0	0.0	0.0	1.0	7.8	-5.6	0.2	-1.8	1.8	1.6	4.2	8.0	6.2
Secondary	-6.6	0.0	0.0	0.0	-1.0	2.4	3.0	1.6	-2.4	3.6	1.4	6.4	1.4	9.8
Freight Interference - Off-Peak	-16.8	-0.2	-0.2	0.0	0.0	6.0	1.4	-2.4	-8.2	6.0	1.8	7.0	31.2	25.6
Primary	-16.8	0.0	0.0	0.0	0.0	3.2	4.0	-1.8	-6.6	3.4	0.2	5.6	25.2	16.4
Secondary	0.0	-0.2	-0.2	0.0	0.0	2.8	-2.6	-0.6	-1.6	2.6	1.6	1.4	6.0	9.2
Signal/Switch Failure - TOTAL	-10.8	-12.0	-5.2	1.0	3.0	-27.4	-14.4	5.6	-23.8	-4.2	-5.8	-12.8	-1.2	-108.0
Signal/Switch Failure - Metra/PSA	-5.8	-12.0	-5.2	1.0	-5.2	-26.4	-10.0	1.6	-22.4	-9.0	-5.6	-14.8	-0.6	-114.4
Primary	-11.2	-14.6	-5.8	2.6	-5.0	-15.2	-7.2	-0.4	-15.2	-8.0	-2.6	-11.8	2.8	-91.6
Secondary	5.4	2.6	0.6	-1.6	-0.2	-11.2	-2.8	2.0	-7.2	-1.0	-3.0	-3.0	-3.4	-22.8
Signal/Switch Failure - Foreign	-5.0	0.0	0.0	0.0	8.2	-1.0	-4.4	4.0	-1.4	4.8	-0.2	2.0	-0.6	6.4
Primary Secondary	-7.4 2.4	0.0	0.0	0.0	7.2 1.0	-3.6 2.6	-4.0 -0.4	2.0 2.0	0.0 -1.4	1.4 3.4	-0.2 0.0	1.0 1.0	-0.6 0.0	-4.2 10.6
-														
Mechanical Failure - TOTAL	6.0 5.2	16.0	-1.0	-4.8	0.0	30.0	2.6	-8.0 -8.0	-6.6	-0.6 -0.6	-10.4	-8.0	-7.0	8.2
Mechanical Failure - Metra/PSA		10.2	-4.0	-5.8		11.6	2.8		-6.2		-10.4	-8.0	-6.8	-20.0
Non-Locomotive Equipment Failure - Metra/PSA Primary	-3.8 -1.8	10.2 2.8	-4.0 -2.4	-5.8 -1.4	-0.6 -0.4	1.0 0.6	2.6 -1.4	-1.4 0.2	0.8 -1.2	-2.8 0.2	-3.8 -0.4	-1.6 1.4	-0.6 1.2	-9.8 -2.6
Secondary	-2.0	7.4	-2.4	-4.4	-0.4	0.0	4.0	-1.6	2.0	-3.0	-3.4	-3.0	-1.8	-7.2
Locomotive Failure - Metra/PSA	9.0	0.0	0.0	0.0	0.6	10.6	0.2	-6.6	-7.0	2.2	-6.6	-6.4	-6.2	-10.2
Primary	9.0 1.4	0.0	0.0	0.0	0.6	10.0	2.6	-0.0	3.0	2.2	0.2	-0.4	-0.2	6.8
Secondary	7.6	0.0	0.0	0.0	0.0	8.8	-2.4	-3.8	-10.0	-0.6	-6.8	-4.8	-5.0	-17.0
Mechanical Failure - Foreign	0.8	5.8	3.0	1.0	0.0	18.4	-0.2	0.0	-0.4	0.0	0.0	0.0	-0.2	28.2
Passenger Train Interference - TOTAL	2.4	-2.6	-2.2	-1.6	-1.8	-20.4	-5.8	2.2	-6.8	-1.8	-7.0	-5.2	-0.6	-51.2
Passenger Train Interference - Metra/PSA	1.6	-0.6	-1.6	-1.2	-0.2	-13.4	-4.8	2.2	-5.6	0.6	-7.0	-5.2	-0.4	-35.6
Passenger Train Interference - Foreign	0.8	-2.0	-0.6	-0.4	-1.6	-7.0	-1.0	0.0	-1.2	-2.4	0.0	0.0	-0.2	-15.6
Accident - TOTAL	-22.0	31.6	8.2	8.0	-0.4	-3.0	9.0	-3.6	-17.6	-0.8	7.6	0.6	-9.6	8.0
Accident - Metra/PSA	-9.0	31.6	8.2	8.0	-0.4	-3.0	9.4	-2.4	-18.8	-0.8	7.6	0.6	-8.8	22.2
Accident - Foreign	-13.0	0.0	0.0	0.0	0.0	0.0	-0.4	-1.2	1.2	0.0	0.0	0.0	-0.8	-14.2
Track Work - TOTAL	52.4	-12.6	-5.6	-2.8	-0.4	6.0	-0.4	-0.6	-8.6	-0.8	-13.2	7.0	-11.0	9.4
Track Work - Metra/PSA	34.6	-12.6	-5.6	-2.8	-0.4	6.0	-0.4	-0.6	-8.6	-0.6	-13.2	7.0	-11.0	-8.2
Track Work - Foreign	17.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	17.6
Human Error - TOTAL	-21.0	-12.2	-2.2	-6.0	2.2	30.4	13.2	12.8	-4.0	2.6	-8.6	-6.6	4.4	5.0
Human Error - Metra/PSA	-8.4	-9.4	-2.0	-5.0	0.6	32.0	15.8	11.8	-3.6	2.0	-7.6	-11.8	5.6	20.0
Human Error - Foreign	-12.6	-2.8	-0.2	-1.0	1.6	-1.6	-2.6	1.0	-0.4	0.6	-1.0	5.2	-1.2	-15.0
Sick, Injured, Unruly Passenger - TOTAL	-1.2	-2.4	-0.8	-9.4	1.8	6.2	-7.4	-1.6	-9.0	1.8	-6.2	5.4	-5.4	-28.2
Sick, Injured, Unruly Passenger - Metra/PSA	-0.6	-2.4	-0.8	-9.4	1.8	6.2	-7.4	-1.6	-8.6	1.8	-6.2	5.4	-5.4	-27.2
Sick, Injured, Unruly Passenger - Foreign	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	-1.0
Weather - TOTAL	9.8	76.2	23.0	-3.2	-1.2	-25.4	-9.8	-9.8	-55.2	-3.6	-17.2	2.4	6.8	-7.2
Weather - Metra/PSA	9.8	76.2	23.0	-3.2	-0.8	-35.4	-10.2	-9.4	-55.0	-3.2	-17.2	2.4	5.0	-18.0
Weather - Foreign	0.0	0.0	0.0	0.0	-0.4	10.0	0.4	-0.4	-0.2	-0.4	0.0	0.0	1.8	10.8
Passenger Loading - TOTAL	-4.6	-20.0	-4.6	-11.4	0.0	6.0	1.0	1.8	-23.8	1.4	-32.8	1.6	-6.0	-91.4
Lift Deployment - TOTAL	14.0	-0.2	0.0	-0.2	0.0	6.0	-3.2	-0.8	-13.2	0.0	-7.2	4.8	6.8	6.8
Obstruction/Debris - TOTAL	-1.4	-4.8	-0.2	5.2	-1.8	7.2	3.6	0.6	-11.4	-3.6	0.2	13.4	-2.8	4.2
Catenary Failure - TOTAL	0.0	14.4	3.0	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	27.8
Other - TOTAL	28.2	-7.2	-1.0	-3.8	0.0	-3.2	-6.6	2.0	-4.4	9.0	-13.0	7.6	-11.6	-4.0
101111	20.2	7.2	1.0	5.0	0.0	3.2	0.0	2.0	7.7	7.0	13.0	7.0	11.0	7.0
TOTAL TRAINS DELAYED	17.4	64.0	11.2	-18.4	1.4	28.6	-19.4	0.0	-196.8	10.8	-108.8	27.6	3.4	-179.0
Total Metra/PSA Delays	63.6	63.2	9.2	-18.0	-6.4	-6.4	-10.0	-2.8	-181.6	-3.0	-112.4	2.8	-36.0	-237.8
Total Foreign Carrier Delays	-46.2	0.8	2.0	-0.4	7.8	35.0	-9.4	2.8	-15.2	13.8	3.6	24.8	39.4	58.8
Total Totolgii Carrioi Dolays	-70.2	0.0	2.0	-0.4	7.0	33.0	-7.4	2.0	-13.2	15.0	5.0	27.0	37.4	50.0

Data for current month is final (05/21/15) version from TOPS.

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

2015

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	Apr
Freight Interference - TOTAL	122	158	113	87									480	15.7%
Freight Interference - Peak	35	48	42	36									161	5.2%
Primary	24	33	24	24									105	3.4%
Secondary	11	15	18	12									56	1.8%
Freight Interference - Off-Peak	87	110	71	51									319	10.4%
Primary	63	86	59	42									250	8.2%
Secondary	24	24	12	9									69	2.2%
Signal/Switch Failure - TOTAL	93	126	35	69									323	10.5%
Signal/Switch Failure - Metra/PSA	73	83	28	53									237	7.7%
Primary	38	54	25	29									146	4.8%
Secondary	35	29	3	24									91	3.0%
Signal/Switch Failure - Foreign	20	43	7	16									86	2.8%
Primary	17	23	5	12									57	1.9%
Secondary	3	20	2	4									29	0.9%
Mechanical Failure - TOTAL	82	102	69	66									319	10.4%
Mechanical Failure - Metra/PSA	71	93	69	56									289	9.4%
Non-Locomotive Equipment Failure - Metra/PSA	27	19	22	17									85	2.8%
Primary	10 17	6 13	10 12	7 10									33 52	1.1% 1.7%
Secondary														
Locomotive Failure - Metra/PSA	44 16	74 25	47 14	39 17									204	6.7% 2.3%
Primary Secondary	16 28	25 49	33	22									132	2.3% 4.3%
Mechanical Failure - Foreign	11	9	0	10									30	1.0%
Passenger Train Interference - TOTAL	13	19	6	7									45	1.5%
Passenger Train Interference - TOTAL Passenger Train Interference - Metra/PSA	6	19	5	4									29	0.9%
e e e e e e e e e e e e e e e e e e e	7	5	1	3									16	0.5%
Passenger Train Interference - Foreign Accident - TOTAL	29	35	60	60									184	6.0%
Accident - Metra/PSA	29	33	60	60									182	5.9%
	28 1												182	
Accident - Foreign		50	19	52									159	0.1%
Track Work - TOTAL	38		-											5.2%
Track Work - Metra/PSA	38 0	32 18	19	52 0									141	4.6%
Track Work - Foreign	,		0										18	0.6%
Human Error - TOTAL	32	67	103	31									233	7.6%
Human Error - Metra/PSA	24	45	90	17									176	5.7%
Human Error - Foreign	8	22	13	14									57	1.9%
Sick, Injured, Unruly Passenger - TOTAL	21	25	20	29									95	3.1%
Sick, Injured, Unruly Passenger - Metra/PSA		25	20	29									95	3.1%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0									0	0.0%
Weather - TOTAL	335	395	17	10									757	24.7%
Weather - Metra/PSA	333	381	17	10									741	24.2%
Weather - Foreign	2	14	0	0									16	0.5%
Passenger Loading - TOTAL	20	21	42	21									104	3.4%
Lift Deployment - TOTAL	22	23	20	9									74	2.4%
Obstruction/Debris - TOTAL	31	71	8	34									144	4.7%
Catenary Failure - TOTAL	4	34	10	0									48	1.6%
Other - TOTAL	23	59	10	10									102	3.3%
TOTAL TRAINS DELAYED	865	1,185	532	485									3,067	100.0%
Total Metra/PSA Delays	694	915	398	355									2,362	77.0%
Total Foreign Carrier Delays	171	270	134	130									705	23.0%

Data for current month is final (05/21/15) version from TOPS.

TABLE 10.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

2014

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	Apr
Freight Interference - TOTAL	207	249	159	140	177	191	137	153	100	167	80	75	755	13.4%
Freight Interference - Peak	103	92	60	52	87	66	34	43	25	54	30	22	307	5.4%
Primary	88	53	30	27	62	45	21	20	22	23	21	15	198	3.5%
Secondary	15	39	30	25	25	21	13	23	3	31	9	7	109	1.9%
Freight Interference - Off-Peak	104	157	99	88	90	125	103	110	75	113	50	53	448	7.9%
Primary	72	110	70	68	71	87	80	76	57	84	35	45	320	5.7%
Secondary	32	47	29	20	19	38	23	34	18	29	15	8	128	2.3%
Signal/Switch Failure - TOTAL	190	181	112	47	121	155	87	66	89	82	69	69	530	9.4%
Signal/Switch Failure - Metra/PSA	150	144	98	44	89	145	68	50	56	68	45	57	436	7.7%
Primary Secondary	79 71	83 61	44 54	28 16	57 32	77 68	35 33	27 23	37 19	44 24	25 20	33 24	234 202	4.1% 3.6%
	40	37		3	32	10	19			14	24	12	94	
Signal/Switch Failure - Foreign	40 24	37 20	14	3 2	32 21	10 7		16 10	33 13	14 10	24 19	12 7	94 58	1.7%
Primary Secondary	24 16	20 17	12 2	2 1	21 11	3	11 8	10 6	20	10 4	19 5	5	38 36	1.0% 0.6%
Mechanical Failure - TOTAL	189	174	128	48	113	109	98	51	62	141	56	74	539	9.6%
Mechanical Failure - Metra/PSA	188	169	128	46	107	109	98	51	58	141	56	70	531	9.6%
	92	48	38	15	15	33	43	19	28	25	29	18	193	3.4%
Non-Locomotive Equipment Failure - Metra/PSA Primary	92 29	48 19	38 9	15 8	15 7	33 13	43 12	19 11	28	25 8	29 13	18	193 65	3.4% 1.2%
Primary Secondary	63	29	29	7	8	20	31	8	19	0 17	15 16	9	128	2.3%
Locomotive Failure - Metra/PSA	96	121	90	31	92	76	55	32	30	116	27	52	338	6.0%
Primary	25	33	28	12	17	24	19	16	13	30	12	23	98	1.7%
Secondary	71	88	62	19	75	52	36	16	17	86	15	29	240	4.3%
Mechanical Failure - Foreign	1	5	0	2	6	0	0	0	4	0	0	4	8	0.1%
Passenger Train Interference - TOTAL	38	58	22	8	6	14	9	9	7	18	10	46	126	2.2%
Passenger Train Interference - Metra/PSA	29	45	15	5	4	6	5	5	3	11	6	26	94	1.7%
Passenger Train Interference - Foreign	9	13	7	3	2	8	4	4	4	7	4	20	32	0.6%
Accident - TOTAL	116	117	39	11	81	42	39	87	10	24	35	84	283	5.0%
Accident - Metra/PSA	88	75	29	10	80	33	27	87	9	20	28	67	202	3.6%
Accident - Foreign	28	42	10	1	1	9	12	0	1	4	7	17	81	1.4%
Track Work - TOTAL	42	33	37	78	208	237	58	46	61	72	56	54	190	3.4%
Track Work - Metra/PSA	42	33	37	78	208	237	58	46	59	72	56	54	190	3.4%
Track Work - Foreign	0	0	0	0	0	0	0	0	2	0	0	0	0	0.0%
Human Error - TOTAL	96	84	53	81	46	72	75	39	59	63	23	44	314	5.6%
Human Error - Metra/PSA	64	53	22	63	34	45	55	28	39	34	12	7	202	3.6%
Human Error - Foreign	32	31	31	18	12	27	20	11	20	29	11	37	112	2.0%
Sick, Injured, Unruly Passenger - TOTAL	27	38	31	23	36	38	39	25	24	31	20	34	119	2.1%
Sick, Injured, Unruly Passenger - Metra/PSA	27	38	31	20	36	38	39	25	24	31	20	34	116	2.1%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	3	0	0	0	0	0	0	0	0	3	0.1%
Weather - TOTAL	1,431	487	123	6	36	67	25	88	32	57	22	2	2,047	36.3%
Weather - Metra/PSA	1,427	483	123	6	36	67	25	88	32	57	22	2	2,039	36.2%
Weather - Foreign	4	4	0	0	0	0	0	0	0	0	0	0	2,039	0.1%
Passenger Loading - TOTAL	30	75	89	29	47	145	134	101	16	14	16	64	223	4.0%
Lift Deployment - TOTAL	28	41	13	10	11	19	11	38	13	6	8	16	92	1.6%
Obstruction/Debris - TOTAL	85	88	32	44	23	49	36	10	35	66	57	25	249	4.4%
Catenary Failure - TOTAL	0	32	9	3	23 5	5	14	2	0	0	2	0	44	0.8%
Other - TOTAL	31	45	32	21	27	19	11	19	25	6	32	16	129	2.3%
Outer - TOTAL	31	40	32	41	21	17	11	17	23	U	32	10	127	2.370
TOTAL TRAINS DELAYED	2,510	1,702	879	549	937	1,162	773	734	533	747	486	603	5,640	100.0%
Total Metra/PSA Delays	2,189	1,321	658	379	707	917	581	550	369	526	360	438	4,547	80.6%
Total Foreign Carrier Delays	321	381	221	170	230	245	192	184	164	221	126	165	1,093	19.4%
			-							-			,	

Data for latest month is final (01/20/15) version from TOPS.

ONTIME\report\[DelaysByCause.xlsm]AllMonths 05/21/20

TABLE 10.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE

2015 Divergence From 2014

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	Apr
Freight Interference - TOTAL	-85	-91	-46	-53				8	~				-275	2.3%
Freight Interference - Peak	-68	-44	-18	-16									-146	-0.2%
Primary	-64	-20	-6	-3									-93	-0.1%
Secondary	-4	-24	-12	-13									-53	-0.1%
Freight Interference - Off-Peak	-17	-47	-28	-37									-129	2.5%
Primary	-9	-24	-11	-26									-70	2.5%
Secondary	-8	-23	-17	-11									-59	0.0%
Signal/Switch Failure - TOTAL	-97	-55	-77	22									-207	1.1%
Signal/Switch Failure - Metra/PSA	-77	-61	-70	9									-199	0.0%
Primary	-41	-29	-19	1									-88	0.6%
Secondary	-36	-32	-51	8									-111	-0.6%
Signal/Switch Failure - Foreign	-20	6	-7	13									-8	1.1%
Primary	-7	3	-7	10									-1	0.8%
Secondary	-13	3	0	3									-7	0.3%
Mechanical Failure - TOTAL	-107	-72	-59	18									-220	0.8%
Mechanical Failure - Metra/PSA	-117	-76	-59	10									-242	0.0%
Non-Locomotive Equipment Failure - Metra/PSA	-65	-29	-16	2									-108	-0.7%
Primary	-19	-13	1	-1									-32	-0.1%
Secondary	-46	-16	-17	3									-76	-0.6%
Locomotive Failure - Metra/PSA	-52	-47	-43	8									-134	0.7%
Primary	-9	-8	-14	5									-26	0.6%
Secondary	-43	-39	-29	3									-108	0.0%
Mechanical Failure - Foreign	10	4	0	8									22	0.8%
Passenger Train Interference - TOTAL	-25	-39	-16	-1									-81	-0.8%
Passenger Train Interference - Metra/PSA	-23	-31	-10	-1									-65	-0.7%
Passenger Train Interference - Foreign	-2	-8	-6	0									-16	0.0%
Accident - TOTAL	-87	-82	21	49									-99	1.0%
Accident - Metra/PSA	-60	-41	31	50									-20	2.4%
Accident - Foreign	-27	-41	-10	-1									-79	-1.4%
Track Work - TOTAL	-4	17	-18	-26									-31	1.8%
Track Work - Metra/PSA	-4	-1	-18	-26									-49	1.2%
Track Work - Foreign	0	18	0	0									18	0.6%
Human Error - TOTAL	-64	-17	50	-50									-81	2.0%
Human Error - Metra/PSA	-40	-8	68	-46									-26	2.2%
Human Error - Foreign	-24	-9	-18	-4									-55	-0.1%
Sick, Injured, Unruly Passenger - TOTAL	-6	-13	-11	6									-24	1.0%
Sick, Injured, Unruly Passenger - Metra/PSA	-6	-13	-11	9									-21	1.0%
Sick, Injured, Unruly Passenger - Foreign	0	0	0	-3									-3	-0.1%
Weather - TOTAL	-1,096	-92	-106	4									-1,290	-11.6%
Weather - Metra/PSA	-1,094	-102	-106	4									-1,298	-12.0%
Weather - Foreign	-2	10	0	0									8	0.4%
Passenger Loading - TOTAL	-10	-54	-47	-8									-119	-0.6%
Lift Deployment - TOTAL	-6	-18	7	-1									-18	0.8%
Obstruction/Debris - TOTAL	-54	-17	-24	-10									-105	0.3%
Catenary Failure - TOTAL	4	2	1	-3									4	0.8%
Other - TOTAL	-8	14	-22	-11									-27	1.0%
TOTAL TRAINS DELAYED	-1,645	-517	-347	-64									-2,573	
Total Metra/PSA Delays	-1,495	-406	-260	-24									-2,185	
Total Foreign Carrier Delays	-150	-111	-87	-40									-388	

Data for current month is final (05/21/15) version from TOPS.

ONTIME\report\[DelaysByCause.xlsm]AllMonths 05/21/20

TABLE 11: FREIGHT DELAYS between May 2013 and April 2015

]	Electric			Mil	lw				Un	ion Paci	fic	
	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
May-13	15	0	0	0	2	9	9	6	3	8	4	8	34	98
Jun-13	22	0	0	0	2	14	11	8	9	10	1	7	31	115
Jul-13	8	0	0	0	2	14	14	11	5	4	1	13	7	79
Aug-13	14	0	1	0	1	8	13	12	2	11	1	6	11	80
Sep-13	9	0	0	0	2	11	19	8	2	4	0	6	10	71
Oct-13	22	0	0	0	4	13	18	14	5	11	0	10	11	108
Nov-13	28	0	0	0	1	8	22	15	22	21	0	4	25	146
Dec-13	59	0	0	0	6	15	25	15	7	12	4	23	31	197
Jan-14	86	0	0	0	9	28	16	16	8	30	0	3	11	207
Feb-14	69	0	0	0	9	40	35	32	15	15	6	11	17	249
Mar-14	27	0	0	0	9	26	23	28	2	11	4	5	24	159
Apr-14	48	0	0	0	1	4	19	13	14	16	2	3	20	140
Total	407	0	1	0	48	190	224	178	94	153	23	99	232	1,649
May-14	61	0	0	0	5	25	31	20	3	19	1	2	10	177
Jun-14	48	0	0	0	2	12	38	17	9	30	1	13	21	191
Jul-14	18	0	0	0	1	24	19	16	12	23	0	5	19	137
Aug-14	26	0	0	0	3	12	24	25	4	17	0	4	38	153
Sep-14	24	0	0	0	5	5	22	8	0	24	5	0	7	100
Oct-14	68	0	0	0	0	10	19	20	3	16	4	11	16	167
Nov-14	13	0	0	0	2	12	14	5	1	25	0	1	7	80
Dec-14	11	0	0	0	2	11	20	6	2	6	0	3	14	75
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
Total	313	0	0	0	36	185	234	179	46	223	25	71	248	1,560

Data for current month is final (05/21/15) version from TOPS.

TABLES 12.a & 12.b: FREQUENCY OF LIFT-DEPLOYMENT TRAIN DELAYS BY LINE & MONTH $2015\,$

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift Delays YTD	% of All Delays YTD
BNSF	6	7	8	1									22	4.11%
Electric ML	0	0	0	0									0	0.00%
Electric BI	0	0	0	0									0	0.00%
Electric SC	0	0	0	0									0	0.00%
HER	0	0	0	0									0	0.00%
Milw N	4	9	0	1									14	3.04%
Milw W	4	1	1	1									7	2.37%
NCS	0	0	0	0									0	0.00%
RI	0	1	1	0									2	1.31%
SWS	0	0	0	0									0	0.00%
UP N	0	0	0	1									1	0.58%
UP NW	5	0	1	3									9	3.21%
UP W	3	5	9	2									19	5.99%
Total Lift Delays	22	23	20	9									74	2.41%
ALL DELAYS														3,067

Data for current month is final (05/21/15) version from TOPS.

2014

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift Delays All Year	% of All Delays All Year
BNSF	4	2	2	3	2	1	0	22	2	1	0	2	41	1.50%
Electric ML	0	0	0	0	0	0	0	3	0	0	0	0	3	0.42%
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	1	0	0	0	0	1	0.29%
HER	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
Milw N	5	10	2	0	4	2	0	1	2	1	2	4	33	2.25%
Milw W	8	5	5	1	1	9	5	2	4	1	1	5	47	4.25%
NCS	0	3	0	0	0	0	0	2	0	0	0	0	5	0.88%
RI	3	6	2	3	3	4	3	2	0	0	3	1	30	2.48%
SWS	0	0	0	0	0	0	1	1	0	0	1	0	3	0.51%
UP N	0	1	1	1	0	0	0	0	0	0	1	0	4	0.60%
UP NW	3	6	0	1	1	1	0	1	2	1	0	2	18	2.00%
UP W	5	8	1	1	0	2	2	3	3	2	0	2	29	3.04%
Total Lift Delays	28	41	13	10	11	19	11	38	13	6	8	16	214	1.84%
ALL DELAYS		·	·	·				·						11,615

 $P: \label{lem:linear_loss} P: \label{linear_loss} P: \label{linear$

05/21/2015

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION April 2015

Minutes	BNSF		Electric		Her	Milwa		NCS	RI	SWS		UP		System
		ML	BI	SC		N	W				N	NW	W	
Peak *														
6-10	20	8	1	1	7	14	8	5	2	2	3	8	7	86
11-15	8	5	1	0	6	8	4	6	1	2	0	3	2	46
16-20	3	6	2	3	1	0	2	0	0	2	1	2	0	22
21+	1	14	2	2	1	1	0	1	1	1	11	8	3	46
Annulled	<u>1</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>3</u>	<u>0</u>	<u>2</u>	<u>14</u>
Sub-Total	33	36	6	6	15	23	16	12	6	8	18	21	14	214
Off-Peak *														
6-10	11	7	4	2	0	25	5	9	10	11	11	16	10	121
11-15	11	6	1	1	0	10	5	2	3	5	2	8	7	61
16-20	0	1	0	0	0	10	2	2	0	1	5	8	6	35
21+	0	1	0	1	0	6	4	0	2	2	8	5	15	44
Annulled	1	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>5</u>	<u>0</u>	<u>2</u>	<u>10</u>
Sub-Total	23	15	5	4	0	51	17	13	16	19	31	37	40	271
April 2015														
6-10	31	15	5	3	7	39	13	14	12	13	14	24	17	207
11-15	19	11	2	1	6	18	9	8	4	7	2	11	9	107
16-20	3	7	2	3	1	10	4	2	0	3	6	10	6	57
21+	1	15	2	3	1	7	4	1	3	3	19	13	18	90
Annulled	<u>2</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>8</u>	<u>0</u>	<u>4</u>	<u>24</u>
TOTAL	56	51	11	10	15	74	33	25	22	27	49	58	54	485
2015 Year-	to-Date													
6-10	269	107	39	37	14	185	109	81	81	78	61	87	125	1,273
11-15	119	69	23	12	13	92	64	32	31	36	27	72	83	673
16-20	51	39	9	12	6	61	29	18	13	13	14	46	39	350
21+	81	93	14	22	7	98	75	28	19	28	51	71	65	652
Annulled	<u>15</u>	<u>7</u>	<u>2</u>	<u>6</u>	<u>2</u>	<u>25</u>	<u>18</u>	<u>7</u>	<u>9</u>	<u>1</u>	<u>18</u>	<u>4</u>	<u>5</u>	<u>119</u>
TOTAL	535	315	87	89	42	461	295	166	153	156	171	280	317	3,067
		PER	CENT	COMP	OSITIC	N OF I	DELAY	SBYR	ANGE	OF DU	RATIO	N		
				001.11										
Minutes	BNSF	ML	Electric BI	SC	Her	Milwa N	aukee W	NCS	RI	SWS	N	UP NW	W	System
April 2015	Total	1112	D1	БС		- 1	**				Ξ,	1111	**	
6-10	55.4%	29.4%	45.5%	30.0%	46.7%	52.7%	39.4%	56.0%	54.5%	48.1%	28.6%	41.4%	31.5%	42.7%
11-15	33.9%	21.6%	18.2%	10.0%	40.0%	24.3%	27.3%	32.0%	18.2%	25.9%	4.1%	19.0%	16.7%	22.1%
16-20	5.4%	13.7%	18.2%	30.0%	6.7%	13.5%	12.1%	8.0%	0.0%	11.1%	12.2%	17.2%	11.1%	11.8%
21+	1.8%	29.4%	18.2%	30.0%	6.7%	9.5%	12.1%	4.0%	13.6%	11.1%	38.8%	22.4%	33.3%	18.6%
Annulled	3.6%	5.9%	0.0%	0.0%	0.7%	0.0%	9.1%	0.0%	13.6%	3.7%	16.3%	0.0%	7.4%	4.9%
TOTAL		100.0%	<u> </u>						100.0%				100.0%	100.0%
2015 Year-					100.070	100.070	100.070	100.070	100.070	100.070	100.070	100.070	100.070	100.070
6-10	50.3%	34.0%	44.8%	41.6%	33.3%	40.1%	36.9%	48.8%	52.9%	50.0%	35.7%	31.1%	39.4%	41.5%
11-15	22.2%	21.9%	26.4%	13.5%	31.0%	20.0%	21.7%	19.3%	20.3%	23.1%	15.8%	25.7%	26.2%	21.9%
16-20	9.5%	12.4%	10.3%	13.5%	14.3%	13.2%	9.8%	10.8%	8.5%	8.3%	8.2%	16.4%	12.3%	11.4%
21+	15.1%	29.5%	16.1%	24.7%	16.7%	21.3%	25.4%	16.9%	12.4%	17.9%	29.8%	25.4%	20.5%	21.3%
Annulled	2.8%	2.2%	2.3%	6.7%	4.8%	5.4%	6.1%	4.2%	5.9%	0.6%	10.5%	1.4%	1.6%	3.9%
TOTAL									100.0%				100.0%	100.0%
- U 1/1L	100.070	100.070	100.070	200.070	200.070	100.070	100.070	100.070	100.070	100.070	100.070	100.070	100.070	100.070

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

Data for most recent month is final (05/21/15) version from TOPS.

5/21/2015

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	
April 2015														
Peak *	10.6	18.9	18.8	18.7	12.1	11.0	10.6	11.8	20.8	14.3	50.7	18.6	21.0	17.5
Off-Peak **	10.5	11.6	9.0	13.0		13.7	17.8	10.2	10.8	11.5	21.6	16.8	23.7	15.6
All	10.6	16.6	14.4	16.4	12.1	12.9	14.4	11.0	12.9	12.2	32.2	17.5	23.1	16.5
2015 Year-to-Date														
Peak *	13.6	21.5	14.7	20.7	16.8	19.8	20.1	15.3	13.9	12.5	25.5	19.1	14.9	17.4
Off-Peak **	17.3	16.1	13.2	16.9		20.3	19.7	15.7	13.6	15.7	20.7	22.3	18.2	18.3
All	14.9	19.6	14.1	18.8	16.8	20.1	19.8	15.5	13.7	14.6	22.7	20.8	16.9	17.9

Data for most recent month is final (05/21/15) version from TOPS.

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.