COMMUTER RAIL SYSTEM ON-TIME PERFORMANCE REPORT March 2016



Division of Strategic Capital Planning

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COMMUTER RAIL ON-TIME PERFORMANCE March 2016

This report presents an analysis of the March 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 March 2016, Metra operated 18,148 scheduled trains, including scheduled "extras", if any. 572 of these trains were delayed (late or annulled), representing an on-time performance rate of 96.8%. 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 February 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, 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 March 2016. Of the 572 delays systemwide in March 2016, all but 308 (54%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous four Marches, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in March 2016, 24 more delays than the average over the previous four Marches were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 1,878 delays in 2016, all but 875 (47%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during March 2016. Table 8.b shows the average frequencies over the previous five Marches, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 572 delays systemwide in March 2016, 75 less than the average over the previous five Marches. Table 9.a shows delays from the beginning of the year through March 2016. Table 9.b shows the average frequencies from the beginning of the year through March 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 March of 2016, a total of 1,878 trains were delayed, compared to 2,582 trains delayed in the same three 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 March 2016 freight operations delayed 43 trains systemwide, compared to 113 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 12 trains were delayed by lift deployment in March 2016.

A review of March 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 39.2% of all late trains. Table 14 shows that the average length of delay was 20.1 minutes in March 2016. 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 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 March 2016

				W	eekdays	S						Weel	kends				Total	
	J	Peak*		Of	f-Peak*	*		Total		Sa	turday	s	Sunday	s & Ho	olidays			
	Trains Scheduled	Trains Late	Percent On-Time															
BNSF	1,242	56	95.5%	923	36	96.1%	2,165	92	95.8%	119	5	95.8%	72	0	100.0%	2,356	97	95.9%
Elec -ML	1,032	19	98.2%	785	14	98.2%	1,817	33	98.2%	184	0	100.0%	80	0	100.0%	2,081	33	98.4%
-BI	322	7	97.8%	529	7	98.7%	851	14	98.4%	120	0	100.0%				971	14	98.6%
-SC	<u>391</u>	<u>0</u>	100.0%	<u>851</u>	<u>4</u>	99.5%	<u>1,242</u>	<u>4</u>	99.7%	<u>192</u>	<u>0</u>	100.0%	<u>80</u>	<u>2</u>	97.5%	<u>1,514</u>	<u>6</u>	99.6%
Subtotal	1,745	26	98.5%	2,165	25	98.8%	3,910	51	98.7%	496	0	100.0%	160	2	98.8%	4,566	53	98.8%
Heritage	138	4	97.1%	14	0	100.0%	152	4	97.4%							152	4	97.4%
Milw -N	574	35	93.9%	806	25	96.9%	1,380	60	95.7%	99	6	93.9%	80	1	98.8%	1,559	67	95.7%
-W	<u>620</u>	25	96.0%	714	<u>35</u>	95.1%	1,334	<u>60</u>	95.5%	<u>99</u>	<u>22</u>	77.8%	72	<u>3</u>	95.8%	1,505	<u>85</u>	94.4%
Subtotal	1,194	60	95.0%	1,520	60	96.1%	2,714	120	95.6%	198	28	85.9%	152	4	97.4%	3,064	152	95.0%
NCS	253	18	92.9%	253	24	90.5%	506	42	91.7%							506	42	91.7%
RI	828	39	95.3%	760	27	96.4%	1,588	66	95.8%	128	9	93.0%	112	2	98.2%	1,828	77	95.8%
SWS	253	5	98.0%	437	11	97.5%	690	16	97.7%	24	0	100.0%				714	16	97.8%
UP -N	690	23	96.7%	921	29	96.9%	1,611	52	96.8%	106	0	100.0%	72	0	100.0%	1,789	52	97.1%
-NW	759	11	98.6%	737	23	96.9%	1,496	34	97.7%	105	2	98.1%	60	0	100.0%	1,661	36	97.8%
-W	<u>621</u>	<u>14</u>	97.7%	737	<u>24</u>	96.7%	1,358	<u>38</u>	97.2%	<u>85</u>	<u>3</u>	96.5%	<u>69</u>	<u>2</u>	97.1%	1,512	<u>43</u>	97.2%
Subtotal	2,070	48	97.7%	2,395	76	96.8%	4,465	124	97.2%	296	5	98.3%	201	2	99.0%	4,962	131	97.4%
SYSTEM	7,723	256	96.7%	8,467	259	96.9%	16,190	515	96.8%	1,261	47	96.3%	697	10	98.6%	18,148	572	96.8%

*Includes peak direction trains operating during weekday peak periods. **Includes all other weekday trains. Delays data for most recent month is final (04/14/16) version from TOPS.

 $\label{eq:loss_result} P:\ONTIME\report\Delays&TrainsByServPeriod.xls]OTPbyServPeriod&Line 04/14/16$

														JAN-	
LINE	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MAR	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	94.6%	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	95.6%	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	94.8%	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	86.3%	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	92.7%	94.4%
	2016	93.2	93.8	95.9										94.3%	94.3%
2011-2015	average	91.2	91.2	95.9	95.6	92.2	89.6	92.2	94.1	95.1	93.9	94.7	95.5	92.8%	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	97.4%	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	96.7%	97.3%
	2013	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	98.5%	97.2%
	2014	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	95.6%	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	96.7%	97.6%
	2016	98.0	98.6	98.8										98.5%	98.5%
2011-2015	average	96.1	96.7	98.1	98.3	98.0	97.1	95.5	97.4	97.7	96.9	97.5	98.3	97.0%	97.3%
															r
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	88.4%	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	96.4%	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	96.8%	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	81.2%	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	92.9%	90.2%
	2016	90.0	92.9	97.4										93.7%	93.7%
2011-2015	average	91.1	88.5	93.6	94.8	95.7	91.5	90.1	93.3	91.5	93.5	90.6	90.7	91.1%	92.1%
															0.0.1.
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	91.6%	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	95.1%	93.8%
	2013	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	94.1%	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	81.4%	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	91.2%	94.9%
2011 2015	2016	95.3	94.2	95.7	05.0	02.2	00.0	00.0	02.0	04.4	04.1	05.0	02.4	95.1%	95.1%
2011-2015	average	89.6	88.9	93.4	95.9	93.3	90.6	90.0	92.8	94.4	94.1	95.0	93.4	90.7%	92.6%
M41 XX7	2011	96.0	07.2	07.4	05.2	05.1	00.0	04.4	92.5	05.6	00.0	90.1	065	02.00/	02.00/
Milw - W	2011 2012	96.0 94.4	87.2 95.1	97.4 95.3	95.2 97.5	95.1 97.1	88.0 95.6	84.4 93.7	92.5 94.1	95.6 89.3	98.0 93.9	89.1 94.6	96.5 95.5	93.8% 94.9%	93.0% 94.7%
	2012 2013	94.4 96.6	95.1 91.3	95.5 96.3	97.3 95.8	97.1 96.2	95.0 90.9	93.7 93.2	94.1 93.2	89.5 92.6	95.9 96.5	94.0 93.9	93.3 93.7	94.9% 94.8%	94.7% 94.2%
	2013 2014	90.0 84.8	88.4	90.3 91.4	95.8 97.6	90.2 95.9	90.9 92.2	93.2 94.0	93.2 93.5	92.0 96.7	90.5 95.5	93.9 97.7	93.7 94.6		
	2014	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8	97.8	99.0	98.2	96.5	93.8%	
	2015	94.0	95.3	94.4	71.1	<i>)1.2</i>	75.4	70.0	70.0	71.0	<i>))</i> .0	70.2	70.5	94.6%	
2011-2015		93.1	91.0	95.1	96.8	96.1	92.4	92.5	94.0	94.5	96.6	94.6	95.4	93.1%	94.3%
2011-2013	average	75.1	71.0	75.1	70.0	70.1	72.4	12.5	74.0	74.5	70.0	74.0	75.4	75.170	74.370
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	92.6%	91.1%
	2011	94.8	94.4	94.4	85.1	95.2	94.8	82.5	91.9	95.7	93.9	92.0	94.8	94.5%	
	2012	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%	
	2013	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	81.9%	
	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	89.8%	
	2015	92.3	95.5	91.7	2 1.0	20.1	2 110	2010	/	/0.2	27.1	2 0.1	20.0	93.1%	
2011-2015		91.1	86.8	92.6	91.7	92.7	92.1	90.9	92.1	94.3	93.7	91.8	92.0	90.2%	91.8%

 TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

													JAN-	
LINE YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	MAR	AVG
												I	1 11	
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	95.2%	94.0%
2012		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		98.1	97.9	94.0	95.5	91.5	93.6	95.5	98.3	96.5	91.7	94.0	97.5%	95.3%
2014		83.4	93.4	95.3	95.7	92.5	95.1	97.2	96.6	97.3	97.9	98.6	86.4%	93.8%
2015		95.3	98.9	98.7	97.8	97.4	94.2	97.0	96.3	97.3	97.1	97.4	97.3%	97.1%
2016		96.2	95.8										94.9%	94.9%
2011-2015 averag	e 93.6	92.7	96.6	96.0	95.6	92.9	92.0	95.5	96.5	96.7	96.1	96.6	94.4%	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	93.9%	92.1%
2011		89.7 96.6	90.2 94.8	95.5 95.3	94.0 95.8	83.1 93.2	00.9 95.3	90.5 94.5	91.5 93.8	92.4 94.3	92.8 93.7	94.1 96.3	95.9% 95.2%	92.1% 94.8%
2012		97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	96.3%	95.6%
2013		92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	89.4%	92.6%
2014		89.7	95.6	96.1	96.3	91.1	92.4	93.8	97.6	96.8	96.0	94.4	93.4%	94.5%
2015		97.2	97.8	20.1	20.5	× 1.1	/2.7	20.0	21.0	20.0	20.0	2 I.T	96.9%	96.9%
2011-2015 averag		93.1	95.5	95.8	94.5	90.6	93.7	94.1	94.8	94.8	93.2	94.4	93.7%	93.9%
8													1	
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	92.9%	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	97.0%	96.4%
2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9	97.0	96.5	96.9	98.0	97.8%	96.6%
2014		92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	93.6%	96.7%
2015		95.6	98.3	97.1	97.7	98.2	97.0	95.9	98.2	97.0	97.6	98.4	97.6%	97.5%
2016		98.6	97.1										97.5%	97.5%
2011-2015 averag	e 95.8	94.1	97.3	97.0	96.2	95.0	94.4	94.9	96.2	96.0	96.6	97.4	95.8%	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	95.0%	94.9%
2011		98.6	96.4	98.9	94.0 95.9	95.4 96.0	91.2 94.8	95.5 96.7	97.8	94.2	95.8 94.6	95.0 96.6	96.9%	96.3%
2012		97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	96.6%	94.6%
2013		91.1	96.3	98.6	95.6	95.2	94.7	97.4	98.3	95.0	97.1	96.2	91.3%	95.2%
2015		91.6	97.6	96.3	96.9	96.8	94.1	96.5	96.1	97.5	96.7	97.5	95.2%	96.2%
2016		98.1	97.8	2010	,	2010	2.01	2010	2011	2710	2011	110	97.7%	97.7%
2011-2015 averag		93.7	96.9	97.2	94.9	94.2	93.8	95.5	96.7	95.8	95.7	95.9	95.0%	95.4%
UP - W 2011		87.3	93.8	94.5	93.3	89.0	85.9	89.3	90.8	91.6	92.0	89.4	91.7%	90.9%
2012		97.1	95.2	95.5	95.6	92.4	93.8	94.3	97.2	97.2	96.0	96.4	95.1%	95.3%
2013		96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	96.5%	94.5%
2014		90.9	94.4	96.7	96.4	94.8	96.4		96.7			96.2		
2015		91.1	96.1	96.3	97.5	93.9	93.9	95.9	96.0	96.1	97.3	96.8	93.8%	95.4%
2016		93.4	97.2	05.5	047	01.0	02.1	02.2	05.4	05.0	05.0	04.1	96.2%	96.2%
2011-2015 averag	e 92.6	92.6	95.3	95.5	94.7	91.9	93.1	93.3	95.4	95.3	95.0	94.1	93.5%	94.1%
SYSTEM 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	94.5%	93.6%
excluding 2012		97.4	96.1	97.2	96.3	94.7	94.0	95.2	96.2	95.9	95.8	96.9	95.9%	95.8%
South Shore 2013		96.1	96.7	95.7	95.9	92.4	94.0	95.2	96.4	95.9	95.1	93.8	96.6%	95.4%
2014		89.3	94.9	96.8	94.5	93.1	95.6	95.7	96.8	95.9	96.9	96.5	89.9%	94.3%
2015		92.5	97.0	97.2	97.2	95.8	95.3	96.3	96.8	97.0	96.8	97.5	94.9%	96.2%
2016	95.8	96.4	96.8										96.4%	96.4%
2011-2015 averag		93.1	96.3	96.6	95.8	93.4	93.3	95.0	96.0	95.7	95.7	96.1	94.4%	95.1%
Delays data for most rece		final (04	/14/16) ve	rsion fro	n TOPS			D.	ONTIME	ant\[Dalara &	Facin a Dave and B	aniad alalOTE	byLine&Month	4/14/2016

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

P:\ONTIME\report\[Delays&TrainsByServPeriod.xls]OTPbyLine&Month 4/14/2016

'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-TIMEMarch 2016

			Minutes	Delay	
Line	Train	Date	Late	Code	Delay Explanation
BNSF	1251	Tue, Mar 08	7	L	LOCAL PD SEARCHING FOR SUICIDAL PERSON AT LAGRANGE RD
83%	6 OT	Tue, Mar 15	34	M1	TRESPASSER STRIKE ON 1239
		Tue, Mar 22	10	GM	DROPPING FLAGMAN AT CASS AVE, 10MPH FORM 1 LISLE MT1
ĺ		Wed, Mar 23	15	DE	FOLLOWING UCXPTIO012 FROM CICERO NOT MAKING TRACK SPEED
MN	2118	Wed, Mar 02	7	G	6" STOP SIGNAL, RONDOUT; CALDWELL; #29 SWITCH FAILURE, A-5
83%	6 OT	Wed, Mar 23	8	E1	10" STOP SIGNAL, A-5
		Mon, Mar 28	11	KP1	11" #2110 W/SUSPICIOUS SUITCASE, @ FOX LAKE
ĺ		Tue, Mar 29	16	UF1	16" FOLLOWING #2116
MN	2135	Wed, Mar 02	10	G	10" RESTRICTED SPEED, A-5 MP10.5 FOLLOWING TRAIN AHEAD
82%	6 OT	Fri, Mar 11	11	U	3" STOP SIGNAL, MORTON GROVE; 3 ADA'S
		Mon, Mar 21	9	Κ	8" WALKING SPEED PAST TRACK OBSTRUCTION, CUS; 3" 2 ADA'S, LIBERTY VILLE
		Wed, Mar 23	11	JM	8" MEDICAL EMERGENCY, CUS; 4" FOLLOWING MATRAK 339
MN	2137	Wed, Mar 02	9	G1	7" STOP SIGNAL, A-2; FOLLOWING #2135
83%	6 OT	Fri, Mar 11	9	Ν	9" 4 ITEM 2'S
		Mon, Mar 21	7	K1	7" FOLLOWING #2135
		Wed, Mar 23	10	JM1	9" LATE EQUIPMENT, CUS
MW	2254	Tue, Mar 01	11	I1	5" LATE TURN FROM #2249; 5" ENTRAINING.
83%	6 OT	Thu, Mar 10	12	D	16" FOLLOWING CP FREIGHT, ROSELLE TO B-17
ĺ		Mon, Mar 14	9	K	10" STOP SIGNAL, ROSELLE. FIRE NEAR TRACKS
L		Wed, Mar 30	26	K1	22" LATE TURN FROM #2249, BIG TIMBER; 5" WALKING SPEED, SPAULDING RD
NCS	114	Mon, Mar 07	7	D	10" FREIGHT, ROUND LAKE
83%	6 OT	Tue, Mar 15	7	GF	5"PASSENGER LOADING, ANTIOCH TO ROUND LAKE;5" FLAGGED BY SIGNAL, JCT 17
ĺ		Mon, Mar 21	10	RF	4" TALKED BY SIGNAL, CP GRAYSLAKE; 10" RESTRICTING, 42.4
		Wed, Mar 23	16	D	16" N/B FREIGHT, RAM; S/B FREIGHT
NCS	118	Tue, Mar 01	46	GF	50" SIGNAL FAILURE, HAND LINE ROUTE & RESTRICTED SPEED, JCT 19
74%	6 OT	Mon, Mar 07	13	GF1	13" LATE TURN FROM #107; 5" STOP SIGNAL, DEVAL
ĺ		Tue, Mar 22	31	GF	40" SIGNAL PROBLEM, LAKE VILLA-LOMND & CN N/B FREIGHT
ĺ		Wed, Mar 23	9	D	9" FREIGHT, RAM
		Mon, Mar 28	10	VF	5" WALKED TRAIN LOOKING FOR HOT AXLE REPORTED BY CN DISP; 5" X-TRAFFIC, DEVAL; 4" COPY
					SLOW ORDERS
L		Tue, Mar 29	18	G1	13" LATE TURN FROM #107, ANTIOCH; 5" X-TRAFFIC, DEVAL
NCS	119	Tue, Mar 01	33	GF1	33" LATE TURN FROM #118
78%	6 OT	Wed, Mar 16	14	D	15" WAIT ON CN FREIGHT, TRAFTON
ĺ		Thu, Mar 17	11	K	16" CAR STUCK ON TRACKS AND WALKING SPEED, IVANHOE
		Tue, Mar 22	16	GF1	16" LATE TURN FROM #118
ĺ		Wed, Mar 23	13	Н	10" CREW INSPECTED LOCO 101 DRAGGING TRACTION MOTOR CABLE(WAS CUT OUT), O'HARE; 5"
					MEET #2149 CN
RI	508	Thu, Mar 03	33	E1	24M LATE DEPARTING CP RICHARDS DUE TO LATE TURN OF EQUIPMENT. ENCOUNTERED 9 MORE MIN
1			_		ENROUTE DUE TO NOT ABLE TO MAKE TRACK SPEED
83%	6 OT	Wed, Mar 09	7	E1	7M DEPARTING JUDDUE TO LATE TURN OF EQUIPMENT AS RI0503
1		Thu, Mar 10	10	G1	10MINS LATE JOLIET DUE TO LATE TURN EQUIPMENT.
		Tue, Mar 15 4/16) version fr	7	С	8M GRESHAM DOING WALKING SPEED OVER SW #9 & SW#11

Data is final (04/14/16) version from TOPS.

P:\ONTIME\report\[WeekdayTrainsBelow85% table.xlsx]PrintCopy 04/18/2016

Primary	Code Secondary	Primary Annulled	Definition	Delay Class	Responsibility
А	A1	XA	Passenger Train Interference	Transportation	Controllable
AA	AA1	XAA	Rule 9.9 Delayed in Block/Rule 6.30	Transportation	Controllable
AD	AD1	XAD	Non-Revenue Passenger Train Interference	Transportation	Controllable
AM	AM1	XAM	Amtrak Caused Delay	Transportation	Controllable
AS	AS1	XAS	NICTD Train Interference	Transportation	Controllable
AW	AW1	XAW	Pass. Train Interference, Weather	Transportation	Uncontrollable
В	B1	XB	Human Error, Eng. Dept.	Engineering	Controllable
BA	BA1	XBA	Amtrak Engineering Human Error	Engineering	Controllable
С	C1	XC	Unscheduled Track Work	Engineering	Controllable
CA	CA1	XCA	Amtrak Engineering	Engineering	Semi-controllabl
CC	CC1	XCC	Scheduled Track Work	Engineering	Controllable
CF	CF1	XCF	Engineering Equipment Malfunction	Engineering	Controllable
CG	CG1	XCG	Scheduled Signal Work	Engineering	Controllable
CH	CH1	XCH	Contractor Failure	Engineering	Controllable
со	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	DE1	XDE	Freight Mechanical Malfunction	Transportation	Semi-controllabl
DM	DM1	XDM	Freight-Accident/Incident	Incidental	Uncontrollable
DR	DR1	XDR	Freight-Human Error	Transportation	Semi-controllabl
DW	DW1	XDW	Freight Train Interference, Weather	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	ETMS Malfunction on Locomotive	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-controllabl
GF	GF1	XGF	Signal/Switch Foreign Line	Engineering	Semi-controllabl
GM	GM1	XGM	Gate Crossing Malfunction	Engineering	Controllable
GNI 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
KF KW	KW1	XKW	Obstruction On Tracks, Weather	Incidental	Uncontrollable
KW L	Ll		,		
		XL	Unauthorized People On Tracks/Near Miss	Incidental	Uncontrollable
M	MI	XM	Right of Way Accident/Misc.	Incidental	Uncontrollable
MW	MW1	XMW	Right of Way Accident/Misc., Weather	Incidental	Uncontrollable
N	N1	XN	Electricity Utility Failure	Incidental	Uncontrollable
NW	NW1	XNW	Electricity Utility Failure, Weather	Incidental	Uncontrollable
0	01	XO	AC/DC System Failure	Engineering	Controllable
OW	OW1	XOW	AC/DC System Failure, Weather	Engineering	Uncontrollable
Q	Q1	XQ	Late Issuance of Track Warrant	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		Transportation	Controllable
RO	RO1	XRO	Human Error, Tower Operator	Transportation	Controllable
			Human Error, NICTD Transportation		
RS	RS1 DW1	XRS	, <u>1</u>	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
Т	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	Locomotive Problem Reported, Nothing Found	Incidental	Controllable
	VF1	XVF	Cab Car Problem Reported, Nothing Found	Incidental	Controllable
VE		22.7.1	cue cui i robieni reported, robining i bund	monutina	controllable
VF VG	VG1	XVG	Broken Gate Crossing Reported, Nothing Found	Incidental	Uncontrollable

TABLE 4: DELAY INCIDENT CODES AND DEFINITIONS

 W
 W1
 XW
 Gas Leak

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

P:\ONTIME\[#DelayClassificationTbl2012_v2014.xls]IncidentCodeTable 03/12/2014

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		
		<u></u>

Effective January 1, 2014 Revised

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 March 2016

			Electric			Mi	lw				Ur	ion Pacif	ic		
DELAY CONTROL	BNSF	ML	BI	SC	HER	Ν	W	NCS	RI	SWS	Ν	NW	W	SYSTI	EM
Controllable	37	23	9	2	2	30	56	16	59	4	22	27	21	308	54%
Semi-controllable	3	0	0	0	2	3	10	25	2	9	0	0	4	58	10%
Uncontrollable	57	10	5	4	0	34	19	1	16	3	30	9	18	206	36%
TOTAL TRAINS DELAYED	97	33	14	6	4	67	85	42	77	16	52	36	43	572	100%

March - Average Over Previous Four Years: 2012-2015

			Electric			M	ilw				Ur	nion Pacif	fic		
DELAY CONTROL	BNSF	ML	BI	SC	HER	Ν	W	NCS	RI	SWS	N	NW	W	SYST	ΈM
Controllable	49.8	16.3	5.5	8.8	2.5	61.0	33.8	15.0	25.5	9.8	18.3	15.8	22.5	284.3	43%
Semi-controllable	11.8	0.0	0.0	0.0	5.0	21.5	17.3	17.8	4.3	16.0	2.5	4.8	21.0	121.8	18%
Uncontrollable	38.5	28.5	9.3	15.0	1.0	25.8	29.5	3.5	32.3	6.0	15.3	33.8	19.5	257.8	39%
TOTAL TRAINS DELAYED	100.0	44.8	14.8	23.8	8.5	108.3	80.5	36.3	62.0	31.8	36.0	54.3	63.0	663.8	100%

March 2016 Divergence From March Average Over Previous Four Years

			Electric			Μ	ilw				Uı	nion Paci	fic		
DELAY CONTROL	BNSF	ML	BI	SC	HER	Ν	W	NCS	RI	SWS	Ν	NW	W	SYST	EM
Controllable	-12.8	6.8	3.5	-6.8	-0.5	-31.0	22.3	1.0	33.5	-5.8	3.8	11.3	-1.5	23.8	-26%
Semi-controllable	-8.8	0.0	0.0	0.0	-3.0	-18.5	-7.3	7.3	-2.3	-7.0	-2.5	-4.8	-17.0	-63.8	69%
Uncontrollable	18.5	-18.5	-4.3	-11.0	-1.0	8.3	-10.5	-2.5	-16.3	-3.0	14.8	-24.8	-1.5	-51.8	56%
TOTAL TRAINS DELAYED	-3.0	-11.8	-0.8	-17.8	-4.5	-41.3	4.5	5.8	15.0	-15.8	16.0	-18.3	-20.0	-91.8	100%

					Jan	uary-N	Aarch	2016							
			Electric			Mi	lw				Uı	ion Pacif	ïc		
DELAY CONTROL	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	Ν	NW	W	SYST	EM
Controllable	133	59	17	16	11	89	113	44	144	17	61	54	117	875	47%
Semi-controllable	74	0	0	0	13	32	48	42	41	26	0	12	16	304	16%
Uncontrollable	169	61	13	33	1	97	72	11	83	19	64	44	32	699	37%
TOTAL TRAINS DELAYED	376	120	30	49	25	218	233	97	268	62	125	110	165	1,878	100%

- - - - -

Data for current month is final (04/14/16) version from TOPS.

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04/14/2016

WEEKDAY	1	2	3	4	7	8	9	10	11	14		16				22	23	24		28	29	30	31	TOTAL
	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	Fr	Mo	Tu	We	Th	
BNSF	2	8	1	1	1	5	2	7	1	2	35	6	0	4	11	1	1	2	1	0	1	0	0	92
Elec -ML	2	0	1	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	1	2	22	0	1	33
-BI	0	0	0	0	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	9	0	0	14
-SC	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
Heritage	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	4
Milw -N	1	5	0	0	0	0	0	0	8	3	0	5	0	0	4	0	13	0	2	10	4	1	4	60
-W	5	1	3	1	2	3	2	2	1	3	0	1	6	0	4	0	17	0	1	1	0	7	0	60
NCS	5	0	0	0	4	0	0	0	0	5	2	1	1	0	1	6	7	0	0	4	5	0	1	42
RI	0	0	7	0	2	15	11	4	0	0	6	1	1	2	9	0	1	2	2	0	1	1	1	66
SWS	0	4	0	1	0	4	0	0	0	1	0	2	0	1	0	1	1	1	0	0	0	0	0	16
UP -N	2	18	3	0	0	0	0	0	0	4	0	0	6	10	3	0	0	0	0	2	3	1	0	52
-NW	1	3	0	0	0	0	1	0	1	2	2	10	2	1	0	0	5	1	3	0	1	0	1	34
-W	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>5</u>	<u>3</u>	<u>0</u>	<u>8</u>	<u>2</u>	<u>4</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>5</u>	<u>0</u>	<u>38</u>
SYSTEM	20	39	17	4	11	28	22	17	11	29	49	36	19	20	32	9	45	7	10	20	47	15	8	515
										F														
SATURDAY	5	12	19	26]	TOT.	AL			SUI	NDA	Y/I	IOI	LID	AY	6	13	20	27				TOTAL
BNSF	0	2	0	3				5			BN	SF					0	0	0	0				0
Elec -ML	0	0	0	0				0			El		ML				0	0	0	0				0
-BI	0	0	0	0				0					·BI				-	-	-	-				0
-SC	0	0	0	0				0					-SC				1	1	0	0				2
Heritage	-	-	-	-				-			He	eritag	ge				-	-	-	-				0
Heritage Milw -N	- 0	- 6	- 0	-0				- 6				eritag ilw	-				- 0	- 0	- 0	- 1				0 1
C	- 0 13	- 6 6	- 0 2	- 0 1				- 6 22				ilw	-				- 0 2	- 0 0	- 0 0	- 1 1				
Milw -N												ilw -	-N											1
Milw -N -W											Mi	ilw CS	-N											1 3
Milw -N -W NCS	13	6 -	2	1				-			Mi NC	ilw CS	-N				2	0 -	0 -	1 -				1 3 0
Milw -N -W NCS RI	13 - 1	6 - 8	2 - 0	1 - 0				22 - 9			Mi N(RI	ilw CS VS	-N				2	0 -	0 -	1 -				1 3 0 2
Milw -N -W NCS RI SWS	13 - 1 0	6 - 8 0	2 - 0 0	1 - 0 0				22 - 9 0			Mi NC RI SV	ilw CS VS	-N -W	ŗ			2 - 0 -	0 - 2 -	0 - 0 -	1 - 0 -				1 3 0 2 0
Milw -N -W NCS RI SWS UP -N	13 - 1 0 0	6 - 8 0 0	2 - 0 0 0	1 - 0 0 0				22 - 9 0 0			Mi NC RI SV	ilw CS VS	-N -W	,			2 - 0 - 0	0 - 2 - 0	0 - 0 - 0	1 - 0 - 0				1 3 0 2 0 0 0

TABLE 7: NUMBER OF DELAYS BY DATEMarch 2016

Data is final (04/14/16) version from TOPS.

 $P:\label{eq:loss} P:\label{eq:loss} P:\label{e$

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

Freight Interference - TOTAL 4 0 0 0 2 6 8 6 2 7 0 0 0 0 0 0 0 0 2 0 1 1 0 0 0 0 2 0 1 1 0					wiai	ch 201	-								
Freight Interference - TOTAL 4 0 0 0 2 6 8 6 2 7 0 0 0 0 0 0 0 0 2 0 1 1 0 0 0 0 2 0 1 1 0				Electric											
									_		SWS				SYSTEM
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	8	-			~	-			~	-	7				-
Secondary 0															14
Friedpring 3 0 0 0 6 7 7 2 3 0 0 3 0															11
Primary Secondary j 0 0 0 0 0 0 1 0 1 0 0 0 0 0 1 0 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 1 0			-									-	-		3
scoolary Signal/Switch Failure - Metra/PSA 4 20 8 1 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 <td></td>															
															23 6
			-												
Primary Secondary 4 3 3 1 0 8 1 3 6 1 2 2 3 5 Signal/Switch Failure - Foreign 0 0 0 0 0 0 2 19 0 3 0 0 0 2 19 0 3 0	6	-			-	-				-					99
secondary 0 17 5 0 8 5 2 0 2 1 2 4 Signal Switch Failure - Foreign 0 0 0 0 0 0 2 19 0 3 0	8							-							52
Preserver Description Description <thdescription< th=""> <thdescription< th=""> <</thdescription<></thdescription<>											-				47
$i_{scondary}$ i_{o}	Signal/Switch Failure - Foreign	0	0	0	0	0	0	2	19	0	3	0	0	0	24
Mechanical Failure - TOTAL 22 0 0 0 2 2 19 2 43 0 14 20 7 131 Mechanical Failure - Metra/PSA 2 0 0 0 2 2 19 2 43 0 14 20 7 131 Mochanical Failure - Metra/PSA 2 0	6	0	0	0	0	0	0		10	0	2	0	0	0	14
Mechanical Failure - Metra/PSA 22 0 0 2 2 19 2 43 0 14 20 7 13 Non-Locomotive Equipment Failure - Metra/PSA 2 0 0 0 2 0	Secondary	0	0	0	0	0	0	0	9	0	1	0	0	0	10
Non-Locomotive Equipment Failure - Metra/PSA 2 0 <td>Mechanical Failure - TOTAL</td> <td>22</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>2</td> <td>19</td> <td>2</td> <td>43</td> <td>0</td> <td>14</td> <td>20</td> <td>7</td> <td>131</td>	Mechanical Failure - TOTAL	22	0	0	0	2	2	19	2	43	0	14	20	7	131
Primary Secondary 1 0	Mechanical Failure - Metra/PSA	22	0	0	0	2	2	19	2	43	0	14	20	7	131
Secondary 1 0 0 0 0 0 0 0 2 0 2 Loconotive Faiure - Metra/PSA 20 0 0 0 0 0 0 2 19 2 43 0 11 20 4 3 2 Primary 3 0	Non-Locomotive Equipment Failure - Metra/PSA	2	0	0	0	2	0	0	0	0	0	3	0	3	10
Locomotive Failure - Metra/PSA 20 0 0 0 2 19 2 43 0 11 20 4 3 2 Primary Secondary 17 0 0 0 0 0 1 4 0 17 0 2 43 0 11 20 4 3 2 Mechanical Failure - Foreign 0 </td <td></td> <td>4</td>															4
Primary Secondary 3 0 0 0 0 1 4 0 7 0 2 4 3 2 Mechanical Failure - Foreign 0 <td></td> <td>6</td>															6
Secondary 17 0 0 0 1 15 2 36 0 9 16 1 9 Mechanical Failure - Foreign 0 1 0															121
Mechanical Failure - Foreign 0														-	24 97
Passenger Train Interference - TOTAL 0 1 0 0 0 0 0 0 1 0 1 0 0 0 0 0 1 0 1 0						-						· · · ·		-	97
Passenger Train Interference - Metra/PSA 0		~											-		•
Passenger Train Interference - Foreign 0 1 0		~	1		~			-	-	~	-	~	~		_
Accident - TOTAL 35 0 0 0 4 0 0 0 19 1 3 62 Accident - Metra/PSA 35 0 </td <td>5</td> <td>~</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>~</td> <td>-</td> <td></td> <td>2</td>	5	~							-		-	~	-		2
Accident - Metra/PSA 35 0	ε	-				-				-	-		1		1
Accident - Foreign 0			0	0	0	0			~	0	0	- /	1		~ -
Track Work - TOTAL 8 0 0 2 0 0 15 0 6 0 2 1 2 36 Track Work - Metra/PSA 8 0					-			-		-	-				02
Track Work - Metra/PSA 8 0 0 2 0 0 15 0 6 0 2 1 2 33 Track Work - Foreign 0 <th< td=""><td>6</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>•</td><td>-</td><td>1</td><td>-</td><td>-</td></th<>	6	-	-	-		-	-	-	-		•	-	1	-	-
Track Work - Foreign 0		-							~	-	~	-	1		
Human Error - TOTAL 2 0 0 0 4 4 4 2 1 1 2 1 21 Human Error - Metra/PSA 1 0 0 0 0 4 1 2 2 0 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 2 1 1 2 1 1 1 1 1 0 0 1 1 0 0 0 1 1 0 0 1 1 0 0 1 1 0		-						-		-	-				0
Human Error - Metra/PSA 1 0 0 0 0 4 1 2 2 0 1 2 1 1 Human Error - Foreign 1 0 0 0 0 3 2 0 1 0 0 0 0 Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 1 0 4 1 0 1 1 3 3 8 27 Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 1 0 4 1 0 1 1 3 3 8 27 Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 0 4 1 0 1 1 1 3 3 8 27 Weather - TOTAL 14 4 4 0 0 4 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1	6		-		-	-		-	-	-		1		1	
Human Error - Foreign 1 0 0 0 3 2 0 1 0 0 0 7 Sick, Injured, Unruly Passenger - TOTAL 0 4 1 1 0 4 1 0 1 1 3 3 8 27 Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 1 0 4 1 0 1 1 3 3 8 27 Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 1 0 4 1 0 1 1 1 3 3 8 27 Weather - TOTAL 14 4 4 0 0 4 0 0 1 0 0 1 0 0 1 0 2 3 2 9 3 2 9 3 2 0 0 0 0 0 0 0 0 0 0					~			-	-		-	1	_	1	
Sick, Injured, Unruly Passenger - TOTAL 0 4 1 1 0 4 1 0 4 1 0 1 1 3 3 8 27 Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 1 0 4 1 0 4 1 0 1 1 1 3 3 8 27 Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 1 0 4 1 0 1 1 1 3 3 8 27 Sick, Injured, Unruly Passenger - Foreign 0					-						-				14
Sick, Injured, Unruly Passenger - Metra/PSA 0 4 1 1 0 4 1 0 4 1 0 1 1 1 3 3 8 2' Sick, Injured, Unruly Passenger - Foreign 0		-	-		-	-	-			-		-	-	-	
Sick, Injured, Unruly Passenger - Foreign 0		~		-		0		-	~	-	-	-			
Weather - TOTAL 14 4 4 0 0 4 0 0 1 0 0 1 0 0 1 0 28 Weather - Metra/PSA 14 4 4 0 0 4 0 0 1 0 0 1 0 0 1 0 28 Weather - Metra/PSA 0 0 0 0 0 0 0 0 1 0 0 1 0 28 Weather - Foreign 0 0 0 0 0 0 0 0 0 0 0 0 0 23 29 Lift Deployment - TOTAL 1 1 0 0 0 3 8 0 11 0 0 2 0 12 Obstruction/Debris - TOTAL 3 1 0 2 0 10 8 1 3 0 7 1 4 40 Catenary Failure - TOTAL 0 2 0 0 0 0 </td <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td>		-		-		-			-						0
Weather - Metra/PSA 14 4 4 0 0 4 0 0 1 0 0 1 0 0 1 0 23 Weather - Foreign 0 <td></td> <td>~</td> <td>-</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td>		~	-			-						-			-
Weather - Foreign 0 1 0					~			-	~		~	-	-		28
Passenger Loading - TOTAL 1 1 1 0 0 3 8 0 11 0 0 2 3 29 Lift Deployment - TOTAL 1 0 0 0 0 8 1 0 0 0 2 3 29 Lift Deployment - TOTAL 3 1 0 2 0 10 8 1 3 0 7 1 4 40 Obstruction/Debris - TOTAL 3 1 0 2 0 10 8 1 3 0 7 1 4 40 Catenary Failure - TOTAL 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 0 0 1 0 2 2 0 0 1 0 2 2 0 0 1 0 2 2 0 0 15 15 15 15 15 15 15 15				-		~	-		-	-	~	-	-		0
Lift Deployment - TOTAL 1 0 0 0 0 0 0 0 2 0 12 Obstruction/Debris - TOTAL 3 1 0 2 0 10 8 1 3 0 7 1 4 40 Catenary Failure - TOTAL 0 2 0 0 0 0 0 0 0 0 0 0 2 0 12 Other - TOTAL 3 0 1 0 2 2 0 0 15 TOTAL TRAINS DELAYED 97 33 14 6 4 67 85 42 77 16 52 36 43 572 Total Metra/PSA Delays 92 32		-			-						-	-			-
Obstruction/Debris - TOTAL 3 1 0 2 0 10 8 1 3 0 7 1 4 40 Catenary Failure - TOTAL 0 2 0 2 2 0 0 15 TOTAL TRAINS DELAYED 97 33 14 6 4 67 85 42 77 16 52 36 43 572 Total Metra/PSA Delays 92 32 14 6 2 61 72 15 75 5 52 36 35 49	0	-	-		~			-	~		~	~			
Catenary Failure - TOTAL 0 2 0 15 TOTAL TRAINS DELAYED 97 33 14 6 2 61 72 15 75 5 52 36 35 49' Total Metra/PSA Delays 92 32 14 6 2 61 72 15						-			-		-				
Other - TOTAL 3 0 1 0 0 6 0 1 0 2 2 0 0 15 TOTAL TRAINS DELAYED 97 33 14 6 4 67 85 42 77 16 52 36 43 572 Total Metra/PSA Delays 92 32 14 6 2 61 72 15 75 5 52 36 35 49'			-					-	-	-	~		-		
TOTAL TRAINS DELAYED 97 33 14 6 4 67 85 42 77 16 52 36 43 572 Total Metra/PSA Delays 92 32 14 6 2 61 72 15 75 5 52 36 35 49'		~	-		~				~	~	~				
Total Metra/PSA Delays 92 32 14 6 2 61 72 15 75 5 52 36 35 49'		5	•	-	Ŭ	Ŭ		Ŭ	-	Ū	_		•	Ŭ	10
	TOTAL TRAINS DELAYED	97	33	14	6	4	67	85	42	77	16	52	36	43	572
Total Foreign Carrier Delays $5 \ 1 \ 0 \ 0 \ 2 \ 6 \ 13 \ 27 \ 2 \ 11 \ 0 \ 0 \ 8 \ 7'$	Total Metra/PSA Delays	92	32	14	6	2	61	72	15	75	5	52	36		497
	Total Foreign Carrier Delays	5	1	0	0	2	6	13	27	2	11	0	0	8	75

Data for current month is final (04/14/16) version from TOPS.

 $P:\label{eq:ontime} P:\label{eq:ontime} P:\label{eq:ontime} OMTIME\content equation of the set of$

'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.

N	Aarch	- Aver	age Ov	ver Pr	evious	Five Y	lears:	2011-2	2015					
			Electric			Mi	lw				Uı	nion Paci	fic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	Ν	W	NCS	RI	SWS	Ν	NW	W	SYSTEM
Freight Interference - TOTAL	17.0	0.0	0.0	0.0	4.4	15.6	13.6	15.8	4.0	12.4	2.2	3.8	24.4	113.2
Freight Interference - Peak	7.8	0.0	0.0	0.0	4.4	2.8	2.6	5.4	0.2	4.6	0.6	1.8	4.8	35.0
Primary	2.0	0.0	0.0	0.0	4.2	1.6	1.4	3.6	0.2	3.6	0.2	0.8	2.4	20.0
Secondary	5.8	0.0	0.0	0.0	0.2	1.2	1.2	1.8	0.0	1.0	0.4	1.0	2.4	15.0
Freight Interference - Off-Peak	9.2 8.0	0.0	0.0	0.0	0.0	12.8 9.0	11.0 7.6	10.4 9.2	3.8 3.8	7.8 6.8	1.6 0.8	2.0 2.0	19.6 16.8	78.2 64.0
Secondary	8.0 1.2	0.0	0.0	0.0	0.0	3.8	3.4	9.2	5.8 0.0	0.8 1.0	0.8	2.0	2.8	64.0 14.2
Signal/Switch Failure - TOTAL	9.8	5.0	2.8	0.4	1.2	23.0	11.4	5.4	5.0	7.0	3.8	4.4	3.2	82.4
Signal/Switch Failure - Metra/PSA	9.0	5.0	2.8	0.4	0.8	19.0	8.8	3.2	4.8	3.2	3.6	4.0	2.8	67.4
Primary	6.6	4.2	2.8	0.4	0.8	9.2	5.6	1.6	3.8	2.2	2.8	2.8	2.2	45.0
Secondary	2.4	0.8	0.0	0.0	0.0	9.8	3.2	1.6	1.0	1.0	0.8	1.2	0.6	22.4
Signal/Switch Failure - Foreign	0.8	0.0	0.0	0.0	0.4	4.0	2.6	2.2	0.2	3.8	0.2	0.4	0.4	15.0
Primary	0.4	0.0	0.0	0.0	0.4	3.6	2.4	1.6	0.2	3.0	0.2	0.2	0.4	12.4
Secondary	0.4	0.0	0.0	0.0	0.0	0.4	0.2	0.6	0.0	0.8	0.0	0.2	0.0	2.6
Mechanical Failure - TOTAL Mechanical Failure - Metra/PSA	11.0 11.0	1.4 1.4	1.0 1.0	1.0 1.0	0.4 0.4	15.2 15.2	11.4 11.4	5.0 5.0	12.6 12.6	2.0 2.0	7.0 7.0	5.8 5.8	6.4 6.4	80.2 80.2
Non-Locomotive Equipment Failure - Metra/PSA	4.0	1.4	1.0	1.0	0.4	3.4	2.0	2.4	3.0	2.0	0.8	0.8	0.4	22.8
Primary	4.0 0.4	0.8	0.6	0.4	0.2	3.4 1.0	2.0	1.0	0.6	0.2	0.8	0.8	0.6	7.6
Secondary	3.6	0.6	0.4	0.6	0.2	2.4	0.8	1.4	2.4	1.6	0.2	0.6	0.4	15.2
Locomotive Failure - Metra/PSA	7.0	0.0	0.0	0.0	0.2	11.8	9.4	2.6	9.6	0.2	6.2	5.0	5.4	57.4
Primary	2.0	0.0	0.0	0.0	0.2	3.2	2.8	0.4	2.8	0.2	2.4	1.2	1.8	17.0
Secondary	5.0	0.0	0.0	0.0	0.0	8.6	6.6	2.2	6.8	0.0	3.8	3.8	3.6	40.4
Mechanical Failure - 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 Train Interference - TOTAL	1.0	1.0	0.4	0.6	0.8	7.4	0.4	1.6	1.6	1.0	0.8	0.0	1.4	18.0
Passenger Train Interference - Metra/PSA	0.4	0.4	0.4	0.6	0.0	4.2	0.4	1.6	1.6	0.0	0.8	0.0	1.4	11.8
Passenger Train Interference - Foreign	0.6	0.6	0.0	0.0	0.8	3.2	0.0	0.0	0.0	1.0	0.0	0.0	0.0	6.2
Accident - TOTAL	15.6	2.8	1.0	0.4	0.2	3.4	2.0	1.8	4.2	0.2	5.4	12.6	1.6	51.2
Accident - Metra/PSA	15.6 0.0	2.8 0.0	1.0 0.0	0.4 0.0	0.2 0.0	3.4 0.0	2.0 0.0	0.6 1.2	3.4 0.8	0.2 0.0	5.4 0.0	12.6 0.0	1.6 0.0	49.2 2.0
Accident - Foreign Track Work - TOTAL	7.6	3.8	0.0	1.4	0.0	2.4	2.0	0.4	0.8	0.0	3.0	1.6	3.2	2.0
Track Work - Metra/PSA	7.6	3.8	0.6	1.4	0.2	2.4	2.0	0.4	0.8	0.2	3.0	1.0	3.2	27.2
Track Work - Foreign	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.8	0.2	0.0	0.0	0.0	0.0
Human Error - TOTAL	8.6	4.2	0.8	2.4	0.8	12.2	8.0	4.2	5.0	3.2	5.6	4.0	5.0	64.0
Human Error - Metra/PSA	4.0	3.6	0.8	1.8	0.0	9.2	6.4	2.8	4.8	1.0	5.2	3.0	2.4	45.2
Human Error - Foreign	4.6	0.6	0.0	0.6	0.6	3.0	1.6	1.4	0.2	2.2	0.4	1.0	2.6	18.8
Sick, Injured, Unruly Passenger - TOTAL	3.0	5.0	0.8	2.0	0.0	4.6	2.8	0.0	1.8	0.0	4.8	4.0	2.4	31.2
Sick, Injured, Unruly Passenger - Metra/PSA	3.0	5.0	0.8	2.0	0.0	4.6	2.8	0.0	1.8	0.0	4.8	4.0	2.4	31.2
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	1.0	8.4	2.2	3.2	0.0	2.4	4.0	0.6	4.6	1.0	1.0	2.6	4.4	35.4
Weather - Metra/PSA	0.6	8.4	2.2	3.2	0.0	2.4	4.0	0.6	4.6	1.0	1.0	2.6	4.4	35.0
Weather - Foreign	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Passenger Loading - TOTAL	6.6	9.4	2.0	3.6	0.0	6.8	8.8	0.0	9.2	0.0	8.0	7.2	5.2	66.8
Lift Deployment - TOTAL	3.0	0.0	0.0	0.2	0.0	1.6	1.8	0.0	3.6	0.0	1.4	1.2	3.2	16.0
Obstruction/Debris - TOTAL	4.8	0.8	0.6	3.0	0.4	3.0	3.6	0.6	1.8	3.0	1.0	1.0	2.0	25.6
Catenary Failure - TOTAL	0.0	3.4	0.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
Other - TOTAL	3.2	2.6	1.0	2.2	0.0	2.4	2.4	0.2	3.2	0.8	3.0	2.0	6.8	29.8
TOTAL TRAINS DELAYED	92.2	47.8	13.4	22.6	8.4	100.0	72.2	35.6	57.4	30.8	47.0	50.2	69.2	646.8
Total Metra/PSA Delays	68.8	46.6	13.4	22.0	2.2	74.2	54.4	15.0	52.2	11.4	44.2	45.0	41.8	491.2
Total Foreign Carrier Delays	23.4	1.2	0.0	0.6	6.2	25.8	17.8	20.6	5.2	19.4	2.8	5.2	27.4	155.6
												2.2		

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

March - Average Over Previous Five Years: 2011-2015

Data for latest month is final (04/15/15) version from TOPS.

P:\ONTIME\report\[DelaysByCause.xlsm]LastMonthByLine 04/14/2016

'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.

March 20	16 Div	ergenc	e Fror	n Mar	ch Av	erage (Over I	Previou	ıs Five	e Years	S			
			Electric			Mi	lw				U	nion Paci	fic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	Ν	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - TOTAL	-13.0	0.0	0.0	0.0	-2.4	-9.6	-5.6	-9.8	-2.0	-5.4	-2.2	-3.8	-16.4	-70.2
Freight Interference - Peak	-6.8	0.0	0.0	0.0	-2.4	-2.8	-1.6	-4.4	-0.2	-0.6	-0.6	-1.8	0.2	-21.0
Primary	-1.0	0.0	0.0	0.0	-2.2 -0.2	-1.6	-0.4	-2.6	-0.2	0.4	-0.2	-0.8	-0.4	-9.0
Secondary	-5.8 -6.2	0.0	0.0	0.0	-0.2	-1.2	-1.2	-1.8 -5.4	0.0	-1.0	-0.4	-1.0	0.6	-12.0 -49.2
Freight Interference - Off-Peak Primary	-0.2 -5.0	0.0	0.0	0.0	0.0	-0.8 -6.0	-4.0 -1.6	-5.4 -4.2	-1.8 -1.8	-4.8 -4.8	-1.0 -0.8	-2.0	-16.6 -14.8	-49.2 -41.0
Secondary	-1.2	0.0	0.0	0.0	0.0	-0.0	-1.0	-4.2	-1.8	-4.8	-0.8	-2.0	-14.8	-41.0
Signal/Switch Failure - TOTAL	-5.8	15.0	5.2	0.6	-1.2	-7.0	9.6	21.6	3.0	-3.0	0.2	-1.4	3.8	40.6
Signal/Switch Failure - Metra/PSA	-5.0	15.0	5.2	0.6	-0.8	-3.0	10.2	4.8	3.2	-2.2	0.4	-1.0	4.2	31.6
Primary	-2.6	-1.2	0.2	0.6	-0.8	-1.2	8.4	1.4	2.2	-1.2	-0.8	-0.8	2.8	7.0
Secondary	-2.4	16.2	5.0	0.0	0.0	-1.8	1.8	3.4	1.0	-1.0	1.2	-0.2	1.4	24.6
Signal/Switch Failure - Foreign	-0.8	0.0	0.0	0.0	-0.4	-4.0	-0.6	16.8	-0.2	-0.8	-0.2	-0.4	-0.4	9.0
Primary	-0.4	0.0	0.0	0.0	-0.4	-3.6	-0.4	8.4	-0.2	-1.0	-0.2	-0.2	-0.4	1.6
	-0.4	0.0	0.0	0.0	0.0	-0.4	-0.2	8.4	0.0	0.2	0.0	-0.2	0.0	7.4
Mechanical Failure - TOTAL	11.0 11.0	-1.4 -1.4	-1.0 -1.0	-1.0 -1.0	1.6 1.6	-13.2 -13.2	7.6 7.6	-3.0 -3.0	30.4 30.4	-2.0 -2.0	7.0	14.2 14.2	0.6 0.6	50.8 50.8
Mechanical Failure - Metra/PSA	-2.0	-1.4	-1.0		1.0	-13.2	-2.0	-3.0	-3.0	-2.0	2.2	-0.8	2.0	-12.8
Non-Locomotive Equipment Failure - Metra/PSA Primary	-2.0	-1.4 -0.8	-1.0 -0.6	-1.0 -0.4	1.8	-3.4 -1.0	-2.0	-2.4	-3.0 -0.6	-1.8	2.2 0.4	-0.8	2.0 0.4	-12.8
Secondary	-2.6	-0.6	-0.4	-0.4	0.8	-2.4	-0.8	-1.4	-2.4	-1.6	1.8	-0.2	1.6	-9.2
Locomotive Failure - Metra/PSA	13.0	0.0	0.0	0.0	-0.2	-9.8	9.6	-0.6	33.4	-0.2	4.8	15.0	-1.4	63.6
Primary	1.0	0.0	0.0	0.0	-0.2	-2.2	1.2	-0.4	4.2	-0.2	-0.4	2.8	1.2	7.0
Secondary	12.0	0.0	0.0	0.0	0.0	-7.6	8.4	-0.2	29.2	0.0	5.2	12.2	-2.6	56.6
Mechanical Failure - 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 Train Interference - TOTAL	-1.0	0.0	-0.4	-0.6	-0.8	-7.4	-0.4	-0.6	-1.6	0.0	-0.8	0.0	-1.4	-15.0
Passenger Train Interference - Metra/PSA	-0.4	-0.4	-0.4	-0.6	0.0	-4.2	-0.4	-0.6	-1.6	1.0	-0.8	0.0	-1.4	-9.8
Passenger Train Interference - Foreign	-0.6	0.4	0.0	0.0	-0.8	-3.2	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	-5.2
Accident - TOTAL	19.4	-2.8	-1.0	-0.4	-0.2	0.6	-2.0	-1.8	-4.2	-0.2	13.6	-11.6	1.4	10.8
Accident - Metra/PSA	19.4	-2.8	-1.0	-0.4	-0.2	0.6	-2.0	-0.6	-3.4	-0.2	13.6	-11.6	1.4	12.8
Accident - Foreign Track Work - TOTAL	0.0	-3.8	0.0	0.0	0.0	-2.4	0.0	-1.2	-0.8 5.2	0.0	0.0	-0.6	-1.2	-2.0
Track Work - IOTAL Track Work - Metra/PSA	0.4	-3.8 -3.8	-0.6 -0.6	0.6	-0.2	-2.4	13.0	-0.4	5.2	-0.2	-1.0	-0.6 -0.6	-1.2	8.8 8.8
Track Work - Foreign	0.4	-5.8	-0.0	0.0	-0.2	-2.4	0.0	-0.4	0.0	-0.2	0.0	-0.0	-1.2	0.0 0.0
Human Error - TOTAL	-6.6	-4.2	-0.8	-2.4	-0.8	-8.2	-4.0	-0.2	-3.0	-2.2	-4.6	-2.0	-4.0	-43.0
Human Error - Metra/PSA	-3.0	-3.6	-0.8	-1.8	-0.2	-5.2	-5.4	-0.2	-2.8	-1.0	-4.2	-1.0	-1.4	-31.2
Human Error - Foreign	-3.6	-0.6	0.0	-0.6	-0.6	-3.0	1.4	0.6	-0.2	-1.2	-0.4	-1.0	-2.6	-11.8
Sick, Injured, Unruly Passenger - TOTAL	-3.0	-1.0	0.2	-1.0	0.0	-0.6	-1.8	0.0	-0.8	1.0	-1.8	-1.0	5.6	-4.2
Sick, Injured, Unruly Passenger - Metra/PSA	-3.0	-1.0	0.2	-1.0	0.0	-0.6	-1.8	0.0	-0.8	1.0	-1.8	-1.0	5.6	-4.2
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Weather - TOTAL	13.0	-4.4	1.8	-3.2	0.0	1.6	-4.0	-0.6	-3.6	-1.0	-1.0	-1.6	-4.4	-7.4
Weather - Metra/PSA	13.4	-4.4	1.8	-3.2	0.0	1.6	-4.0	-0.6	-3.6	-1.0	-1.0	-1.6	-4.4	-7.0
Weather - Foreign	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4
Passenger Loading - TOTAL	-5.6	-8.4	-2.0	-3.6	0.0	-3.8	-0.8	0.0	1.8	0.0	-8.0	-5.2	-2.2	-37.8
Lift Deployment - TOTAL	-2.0	0.0	0.0	-0.2	0.0	6.4	-0.8	0.0	-3.6	0.0	-1.4	0.8	-3.2	-4.0
Obstruction/Debris - TOTAL	-1.8	0.2	-0.6	-1.0	-0.4	7.0	4.4	0.4	1.2	-3.0	6.0	0.0	2.0	14.4
Catenary Failure - TOTAL	0.0	-1.4	-0.2	-2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.8
Other - TOTAL	-0.2	-2.6	0.0	-2.2	0.0	3.6	-2.4	0.8	-3.2	1.2	-1.0	-2.0	-6.8	-14.8
TOTAL TRAINS DELAYED	4.8	-14.8	0.6	-16.6	-4.4	-33.0	12.8	6.4	19.6	-14.8	5.0	-14.2	-26.2	-74.8
Total Metra/PSA Delays	23.2	-14.6	0.6	-16.0	-0.2	-13.2	17.6	0.0	22.8	-6.4	7.8	-9.0	-6.8	5.8
Total Foreign Carrier Delays	-18.4	-0.2	0.0	-0.6	-4.2	-19.8	-4.8	6.4	-3.2	-8.4	-2.8	-5.2	-19.4	-80.6

TABLE 8.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE March 2016 Divergence From March Average Over Previous Five Years

Data for current month is final (04/14/16) version from TOPS.

P:\ONTIME\report\[DelaysByCause.xlsm]LastMonthByLine 04/14/2016

'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

			Ja	nuary	- Mare	ch 2016								
			Electric	-	ion Pacifi	-								
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	Ν	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - TOTAL	29	0	0	0	6	15	37	12	42	12	0	5	20	178
Freight Interference - Peak	8	0	0	0	6	1	12	3	18	5	0	3	7	63
Primary Secondary	7	0	0 0	0 0	6 0	1	8 4	2 1	11 7	5 0	0	3 0	4 3	47 16
Freight Interference - Off-Peak	21	0	0	0	0	14	25	9	24	7	0	2	13	115
Primary	21	0	0	0	0	14	13	8	24 17	6	0	2	13	84
Secondary	3	0	0	0	0	4	12	1	7	1	0	1	2	31
Signal/Switch Failure - TOTAL	69	31	11	8	7	56	57	45	27	26	5	15	75	432
Signal/Switch Failure - Metra/PSA	17	31	11	8	0	36	46	15	27	9	5	8	75	288
Primary	11	7	5	4	0	15	28	7	16	5	3	7	9	117
Secondary	6	24	6	4	0	21	18	8	11	4	2	1	66	171
Signal/Switch Failure - Foreign	52	0	0	0	7	20	11	30	0	17	0	7	0	144
Primary Secondary	38 14	0	0 0	0 0	6	17 3	11 0	19 11	0	13 4	0	2 5	0 0	106 38
Mechanical Failure - TOTAL	46	5	0	0	6	18	43	13	85	0	38	26	26	306
Mechanical Failure - Metra/PSA	46	5	0	0	6	18	43	13	85	0	38	26	26	306
Non-Locomotive Equipment Failure - Metra/PSA	4	5	0	0	2	8	4	2	0	0	11	1	17	54
Primary		3	0	0	1	4	2	0	0	0	4	1	6	24
Secondary	1	2	0	0	1	4	2	2	0	0	7	0	11	30
Locomotive Failure - Metra/PSA	42	0	0	0	4	10	39	11	85	0	27	25	9	252
Primary	12	0	0	0	3	4	13	2	16	0	7	7	6	70
Secondary	30	0	0	0	1	6	26	9	69	0	20	18	3	182
Mechanical Failure - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Train Interference - TOTAL	4	6	1	1	2	9	0	5	7	1	0	0	1	37
Passenger Train Interference - Metra/PSA	0 4	2 4	0	0	0	4 5	0	5	7	1	0	0	1	20
Passenger Train Interference - Foreign Accident - TOTAL	42	0	0	0	2	25	0	0	7	0	27	21	4	17 136
Accident - Metra/PSA	42	0	0	0	1	23 16	2	0	7	6	27	21	4	130
Accident - Foreign	42	0	0	0	0	9	0	1	0	0	0	0	1	123
Track Work - TOTAL	30	3	1	8	0	2	17	1	9	0	8	13	5	97
Track Work - Metra/PSA	30	3	1	8	0	2	17	1	9	0	8	13	5	97
Track Work - Foreign	0	0	0	0	0	0	0	0	ó	0	0	0	0	0
Human Error - TOTAL	24	2	2	3	3	10	9	7	13	5	6	7	1	92
Human Error - Metra/PSA	22	2	2	3	0	8	4	4	13	0	3	. 7	1	69
Human Error - Foreign	2	0	0	0	3	2	5	3	0	5	3	0	0	23
Sick, Injured, Unruly Passenger - TOTAL	5	21	3	4	0	5	17	1	2	1	6	11	10	86
Sick, Injured, Unruly Passenger - Metra/PSA	5	21	3	4	0	5	17	1	2	1	6	11	10	86
Sick, Injured, Unruly Passenger - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Weather - TOTAL	96	34	6	14	0	38	18	6	46	4	20	2	5	289
Weather - Metra/PSA	96	34	6	14	0	38	18	6	46	4	20	2	5	289
Weather - Foreign	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Passenger Loading - TOTAL	2	4	3	0	0	3	10	0	20	0	2	2	3	49
Lift Deployment - TOTAL	7	1	0	0	0	15	1	1	4	0	0	3	5	37
Obstruction/Debris - TOTAL	13	1	1	10	0	14	20	3	3	5	7	3	8	88
Catenary Failure - TOTAL	0	12	1	1	0	0	0	0	0	0	0	0	0	14
Other - TOTAL	9	0	1	0	0	8	2	2	3	2	6	2	2	37
TOTAL TRAINS DELAYED	376	120	30	49	25	218	233	97	268	62	125	110	165	1,878
Total Metra/PSA Delays	289	116	29	48	7	167	180	51	226	28	122	98	144	1,505
Total Foreign Carrier Delays	87	4	1	1	18	51	53	46	42	34	3	12	21	373

TABLE 9.a: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE January - March 2016

Data for current month is final (04/14/16) version from TOPS.

P:\ONTIME\report\[DelaysByCause.xlsm]YTDByLine 04/14/2016

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, Antrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays

J	anuary -	March	- Avei	age O	ver Pre			ears: 20	11-201	5				
													ic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	Ν	NW	W	SYSTEM
Freight Interference - TOTAL	62.0	0.0	0.0	0.0	12.0	53.2	42.4	42.8	16.4	40.4	6.2	13.8	69.6	358.8
Freight Interference - Peak	28.6	0.0	0.0	0.0	12.0	10.6	9.8	15.0	3.6	14.0	0.8	6.2	17.0	117.6
Primary	17.2	0.0	0.0	0.0	11.4	6.8	7.0	10.2	2.6	10.6	0.4	3.2	9.0	78.4
Secondary	11.4	0.0	0.0	0.0	0.6	3.8	2.8	4.8	1.0	3.4	0.4	3.0	8.0	39.2
Freight Interference - Off-Peak Primary	33.4 27.8	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	42.6 27.0	32.6 23.0	27.8 23.8	12.8 11.8	26.4 21.2	5.4 3.0	7.6 5.8	52.6 44.2	241.2 187.6
Primary Secondary	27.8	0.0	0.0	0.0	0.0	27.0	23.0 9.6	23.8	11.8	5.2	3.0 2.4	5.8 1.8	44.2 8.4	53.6
Signal/Switch Failure - TOTAL	58.8	18.2	9.6	6.6	7.0	68.6	41.0	23.0	31.2	29.4	11.8	17.0	25.2	347.4
Signal/Switch Failure - Metra/PSA	36.8	18.2	9.6	6.6	3.8	58.4	33.4	15.2	29.2	9.2	11.6	16.6	24.6	273.2
Primary	24.2	13.6	8.0	6.0	3.6	30.4	19.8	7.4	21.8	7.2	8.2	11.6	13.8	175.6
Secondary	12.6	4.6	1.6	0.6	0.2	28.0	13.6	7.8	7.4	2.0	3.4	5.0	10.8	97.6
Signal/Switch Failure - Foreign	22.0	0.0	0.0	0.0	3.2	10.2	7.6	7.8	2.0	20.2	0.2	0.4	0.6	74.2
Primary	18.8	0.0	0.0	0.0	3.0	8.0	6.0	4.4	0.8	13.2	0.2	0.2	0.6	55.2
Secondary	3.2	0.0	0.0	0.0	0.2	2.2	1.6	3.4	1.2	7.0	0.0	0.2	0.0	19.0
Mechanical Failure - TOTAL	36.4	8.2	3.8	4.2	1.2	61.0	28.0	12.2	38.0	9.0	24.6	23.2	18.2	268.0
Mechanical Failure - Metra/PSA	36.0	8.0	3.8	4.2	1.2	56.6	27.8	12.2	38.0	9.0	24.6	23.2	18.0	262.6
Non-Locomotive Equipment Failure - Metra/PSA Primary	13.6 3.8	8.0 3.6	3.8 1.4	4.2 2.4	0.6 0.4	9.4 2.6	8.0 3.2	2.6 1.0	7.0 3.0	5.4 1.8	7.2 2.2	3.6 1.0	4.4 2.8	77.8 29.2
Secondary	5.8 9.8	5.0 4.4	2.4	2.4 1.8	0.4	2.0 6.8	3.2 4.8	1.0	4.0	3.6	5.0	2.6	2.0	48.6
Locomotive Failure - Metra/PSA	22.4	0.0	0.0	0.0	0.6	47.2	19.8	9.6	31.0	3.6	17.4	19.6	13.6	184.8
Primary	6.8	0.0	0.0	0.0	0.6	10.4	7.4	2.4	10.2	1.6	4.8	5.6	5.2	55.0
Secondary	15.6	0.0	0.0	0.0	0.0	36.8	12.4	7.2	20.8	2.0	12.6	14.0	8.4	129.8
Mechanical Failure - Foreign	0.4	0.2	0.0	0.0	0.0	4.4	0.2	0.0	0.0	0.0	0.0	0.0	0.2	5.4
Passenger Train Interference - TOTAL	4.4	3.6	1.2	2.2	2.0	27.0	5.2	4.4	5.2	3.2	4.0	2.6	6.6	71.6
Passenger Train Interference - Metra/PSA	0.8	1.8	0.6	1.8	0.0	18.4	4.6	4.4	4.4	0.6	4.0	2.6	6.4	50.4
Passenger Train Interference - Foreign	3.6	1.8	0.6	0.4	2.0	8.6	0.6	0.0	0.8	2.6	0.0	0.0	0.2	21.2
Accident - TOTAL	41.0	3.4	1.0	1.6	0.4	17.4	24.8	6.2	11.8	0.4	17.6	27.2	6.8	159.6
Accident - Metra/PSA	28.0	3.4	1.0	1.6	0.4	17.4	24.6	5.0	10.6	0.4	17.6	27.2	6.0	143.2
Accident - Foreign	13.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2	1.2	0.0	0.0	0.0	0.8	16.4
Track Work - TOTAL	28.2	17.6	8.6	3.6	0.4	10.6	6.0	6.0	5.6	0.6	5.8	4.0	7.6	104.6
Track Work - Metra/PSA	24.4	17.6	8.6	3.6	0.4	10.6	6.0	6.0	5.6	0.4	5.8	4.0	7.6	100.6
Track Work - Foreign	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.0
Human Error - TOTAL	44.0	13.6	3.4	5.4	4.6	28.8	14.4	9.6	17.2	8.0	18.6	12.8	13.4	193.8
Human Error - Metra/PSA	28.2	10.8	3.2	4.6	1.2	18.8	8.6	4.2	17.0	1.6	17.0	10.0	7.4	132.6
Human Error - Foreign	15.8	2.8	0.2	0.8	3.4	10.0	5.8	5.4	0.2	6.4	1.6	2.8	6.0	61.2
Sick, Injured, Unruly Passenger - TOTAL	8.0	15.8	2.6	4.6	0.4	9.0	7.8	0.4	5.0	0.8	10.8	11.4	7.0	83.6
Sick, Injured, Unruly Passenger - Metra/PSA	8.0 0.0	15.8 0.0	2.6 0.0	4.6 0.0	0.4 0.0	9.0 0.0	7.8 0.0	0.4	4.8 0.2	0.8 0.0	10.8 0.0	11.4 0.0	7.0 0.0	83.4 0.2
Sick, Injured, Unruly Passenger - Foreign Weather - TOTAL	135.0	97.4	27.2	35.4	4.6	88.4	81.2	25.0	95.6	20.6	71.2	81.4	72.2	835.2
Weather - Metra/PSA	133.8	97.4 97.4	27.2	35.4	4.0	85.2	80.6	23.0	95.0 95.4	20.6 19.4	71.2	81.4	72.2	833.2
Weather - Foreign	1.2	0.0	0.0	0.0	4.2 0.4	3.2	0.6	0.4	0.2	19.4	0.0	0.0	0.6	7.8
Passenger Loading - TOTAL	11.0	25.0	5.2	7.0	0.4	17.2	12.8	0.4	20.4	0.4	19.2	9.6	12.0	140.2
Lift Deployment - TOTAL	9.2	0.0	0.0	0.2	0.0	9.6	7.2	0.4	9.2	0.4	5.0	4.2	12.0	57.0
Obstruction/Debris - TOTAL	15.0	7.0	2.0	8.2	1.0	12.4	13.2	2.2	10.0	5.6	7.8	14.8	12.0	111.2
Catenary Failure - TOTAL	0.0	16.4	3.6	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	25.2
Other - TOTAL	17.8	7.8	1.6	3.4	0.0	5.0	7.4	2.4	7.4	6.8	8.6	8.8	13.4	90.4
TOTAL TRAINS DELAYED	470.8	234.0	69.8	87.4	33.6	408.2	291.4	135.2	273.0	125.2	211.2	231.0	275.8	2,846.6
Total Metra/PSA Delays	349.0	229.2	69.0	86.2	12.6	318.6	234.0	77.6	252.0	54.2	203.2	214.0	197.8	2,297.4
Total Foreign Carrier Delays	121.8	4.8	0.8	1.2	21.0	89.6	57.4	57.6	21.0	71.0	8.0	17.0	78.0	549.2

TABLE 9.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE Jonuary March Average Over Previous Fire Verses 2011 2015

Data for latest month is final (04/15/15) version from TOPS.

P:\ONTIME\report\[DelaysByCause.xlsm]YTDByLine 04/14/2016

'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

January - Mar	ch 2016 l	Diverge	nce Fr	om Jar	uary -	March	Avera	ige Ove	er Prev	ious Fi	ve Year	`S		
			Electric			Mi	lw				U	nion Pacif	lic	
CAUSE CATEGORY	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	Ν	NW	W	SYSTEM
Freight Interference - TOTAL	-33.0	0.0	0.0	0.0	-6.0	-38.2	-5.4	-30.8	25.6	-28.4	-6.2	-8.8	-49.6	-180.8
Freight Interference - Peak	-20.6	0.0	0.0	0.0	-6.0	-9.6	2.2	-12.0	14.4	-9.0	-0.8	-3.2	-10.0	-54.6
Primary	-10.2	0.0	0.0	0.0	-5.4	-5.8	1.0	-8.2	8.4	-5.6	-0.4	-0.2	-5.0	-31.4
Secondary	-10.4	0.0	0.0	0.0	-0.6	-3.8	1.2	-3.8	6.0	-3.4	-0.4	-3.0	-5.0	-23.2
Freight Interference - Off-Peak	-12.4	0.0	0.0	0.0	0.0	-28.6	-7.6	-18.8	11.2	-19.4	-5.4	-5.6	-39.6	-126.2
Primary Secondary	-9.8 -2.6	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	-17.0 -11.6	-10.0 2.4	-15.8 -3.0	5.2 6.0	-15.2 -4.2	-3.0 -2.4	-4.8 -0.8	-33.2 -6.4	-103.6 -22.6
Signal/Switch Failure - TOTAL	10.2	12.8	1.4	1.4	0.0	-12.6	16.0	22.0	-4.2	-3.4	-6.8	-2.0	49.8	84.6
Signal/Switch Failure - Metra/PSA	-19.8	12.8	1.4	1.4	-3.8	-12.0	12.6	-0.2	-4.2	-0.2	-0.8	-2.0	50.4	14.8
Primary	-13.2	-6.6	-3.0	-2.0	-3.6	-15.4	8.2	-0.2	-5.8	-0.2	-5.2	-4.6	-4.8	-58.6
Secondary	-6.6	19.4	4.4	3.4	-0.2	-7.0	4.4	0.2	3.6	2.0	-1.4	-4.0	55.2	73.4
Signal/Switch Failure - Foreign	30.0	0.0	0.0	0.0	3.8	9.8	3.4	22.2	-2.0	-3.2	-0.2	6.6	-0.6	69.8
Primary	19.2	0.0	0.0	0.0	3.0	9.0	5.0	14.6	-0.8	-0.2	-0.2	1.8	-0.6	50.8
Secondary	10.8	0.0	0.0	0.0	0.8	0.8	-1.6	7.6	-1.2	-3.0	0.0	4.8	0.0	19.0
Mechanical Failure - TOTAL	9.6	-3.2	-3.8	-4.2	4.8	-43.0	15.0	0.8	47.0	-9.0	13.4	2.8	7.8	38.0
Mechanical Failure - Metra/PSA	10.0	-3.0	-3.8	-4.2	4.8	-38.6	15.2	0.8	47.0	-9.0	13.4	2.8	8.0	43.4
Non-Locomotive Equipment Failure - Metra/PSA	-9.6	-3.0	-3.8	-4.2	1.4	-1.4	-4.0	-0.6	-7.0	-5.4	3.8	-2.6	12.6	-23.8
Primary Secondary	-0.8 -8.8	-0.6 -2.4	-1.4 -2.4	-2.4 -1.8	0.6 0.8	1.4 -2.8	-1.2 -2.8	-1.0 0.4	-3.0 -4.0	-1.8 -3.6	1.8 2.0	0.0 -2.6	3.2 9.4	-5.2 -18.6
Locomotive Failure - Metra/PSA	19.6	0.0	0.0	0.0	3.4	-37.2	19.2	1.4	54.0	-3.6	9.6	5.4	-4.6	67.2
Primary	5.2	0.0	0.0	0.0	2.4	-57.2	5.6	-0.4	5.8	-1.6	2.2	1.4	-4.0	15.0
Secondary	14.4	0.0	0.0	0.0	1.0	-30.8	13.6	1.8	48.2	-2.0	7.4	4.0	-5.4	52.2
Mechanical Failure - Foreign	-0.4	-0.2	0.0	0.0	0.0	-4.4	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2	-5.4
Passenger Train Interference - TOTAL	-0.4	2.4	-0.2	-1.2	0.0	-18.0	-5.2	0.6	1.8	-2.2	-4.0	-2.6	-5.6	-34.6
Passenger Train Interference - Metra/PSA	-0.8	0.2	-0.6	-1.8	0.0	-14.4	-4.6	0.6	2.6	0.4	-4.0	-2.6	-5.4	-30.4
Passenger Train Interference - Foreign	0.4	2.2	0.4	0.6	0.0	-3.6	-0.6	0.0	-0.8	-2.6	0.0	0.0	-0.2	-4.2
Accident - TOTAL	1.0	-3.4	-1.0	-1.6	0.6	7.6	-22.8	-5.2	-4.8	5.6	9.4	-6.2	-2.8	-23.6
Accident - Metra/PSA	14.0	-3.4	-1.0	-1.6	0.6	-1.4	-22.6	-5.0	-3.6	5.6	9.4	-6.2	-3.0	-18.2
Accident - Foreign	-13.0	0.0	0.0	0.0	0.0	9.0	-0.2	-0.2	-1.2	0.0	0.0	0.0	0.2	-5.4
Track Work - TOTAL	1.8	-14.6	-7.6	4.4	-0.4	-8.6	11.0	-5.0	3.4	-0.6	2.2	9.0	-2.6	-7.6
Track Work - Metra/PSA	5.6	-14.6	-7.6	4.4	-0.4	-8.6	11.0	-5.0	3.4	-0.4	2.2	9.0	-2.6	-3.6
Track Work - Foreign	-3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-4.0
Human Error - TOTAL	-20.0	-11.6	-1.4	-2.4	-1.6 -1.2	-18.8 -10.8	-5.4	-2.6 -0.2	-4.2 -4.0	-3.0	-12.6 -14.0	-5.8 -3.0	-12.4 -6.4	-101.8
Human Error - Metra/PSA	-6.2 -13.8	-8.8	-1.2	-1.6	-1.2	-10.8 -8.0	-4.6 -0.8	-0.2 -2.4	-4.0	-1.0 -1.4	-14.0	-3.0	-6.4 -6.0	-63.6 -38.2
Human Error - Foreign Sick, Injured, Unruly Passenger - TOTAL	-13.8	5.2	0.4	-0.8	-0.4	-4.0	9.2	-2.4	-0.2	0.2	-4.8	-0.4	3.0	-38.2
Sick, Injured, Unruly Passenger - Metra/PSA	-3.0	5.2	0.4	-0.6	-0.4	-4.0	9.2	0.6	-2.8	0.2	-4.8	-0.4	3.0	2.4
Sick, Injured, Unruly Passenger - Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.4	0.0	-0.2
Weather - TOTAL	-39.0	-63.4	-21.2	-21.4	-4.6	-50.4	-63.2	-19.0	-49.6	-16.6	-51.2	-79.4	-67.2	-546.2
Weather - Metra/PSA	-37.8	-63.4	-21.2	-21.4	-4.2	-47.2	-62.6	-18.6	-49.4	-15.4	-51.2	-79.4	-66.6	-538.4
Weather - Foreign	-1.2	0.0	0.0	0.0	-0.4	-3.2	-0.6	-0.4	-0.2	-1.2	0.0	0.0	-0.6	-7.8
Passenger Loading - TOTAL	-9.0	-21.0	-2.2	-7.0	0.0	-14.2	-2.8	-0.4	-0.4	-0.4	-17.2	-7.6	-9.0	-91.2
Lift Deployment - TOTAL	-2.2	1.0	0.0	-0.2	0.0	5.4	-6.2	0.4	-5.2	0.0	-5.0	-1.2	-6.8	-20.0
Obstruction/Debris - TOTAL	-2.0	-6.0	-1.0	1.8	-1.0	1.6	6.8	0.8	-7.0	-0.6	-0.8	-11.8	-4.0	-23.2
Catenary Failure - TOTAL	0.0	-4.4	-2.6	-4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	-11.2
Other - TOTAL	-8.8	-7.8	-0.6	-3.4	0.0	3.0	-5.4	-0.4	-4.4	-4.8	-2.6	-6.8	-11.4	-53.4
TOTAL TRAINS DELAYED	-94.8	-114.0	-39.8	-38.4	-8.6	-190.2	-58.4	-38.2	-5.0	-63.2	-86.2	-121.0	-110.8	-968.6
Total Metra/PSA Delays	-60.0	-113.2	-40.0	-38.2	-5.6	-151.6	-54.0	-26.6	-26.0	-26.2	-81.2	-116.0	-53.8	-792.4
Total Foreign Carrier Delays	-34.8	-0.8	0.2	-0.2	-3.0	-38.6	-4.4	-11.6	21.0	-37.0	-5.0	-5.0	-57.0	-176.2

TABLE 9.c: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE January - March 2016 Divergence From January - March Average Over Previous Five Years

Data for current month is final (04/14/16) version from TOPS.

P:\ONTIME\report\[DelaysByCause.xlsm]YTDByLine 04/14/2016

'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

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

2016

CAUSE CATEGORY Freight Interference - TOTAL Freight Interference - Peak Primary Secondary	Jan 82 32 26	Feb 53 17	Mar 43	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Mar
Freight Interference - Peak Primary Secondary	32 26		43											
Primary Secondary	26												178	9.5%
Secondary			14										63	3.4%
-		10	11										47	2.5%
E 1 1 Z 2 Z	6	7	3										16	0.9%
Freight Interference - Off-Peak	50	36	29										115	6.1%
Primary Secondary	32 18	29 7	23 6										84 31	4.5% 1.7%
Signal/Switch Failure - TOTAL	154	155	123										432	23.0%
0	-	155	99											
Signal/Switch Failure - Metra/PSA	67 35	122 30	99 52										288 117	15.3%
Primary Secondary	35 32	30 92	52 47										11/ 171	6.2% 9.1%
Signal/Switch Failure - Foreign	87	33	24										144	7.7%
Primary	68	24	24 14										144	5.6%
Secondary	19	24	10										38	2.0%
Mechanical Failure - TOTAL	107	68	131										306	16.3%
Mechanical Failure - Metra/PSA	107	68	131										306	16.3%
Non-Locomotive Equipment Failure - Metra/PSA		19	10										54	2.9%
Primary	11	9	4										24	1.3%
Secondary	14	10	6										30	1.6%
Locomotive Failure - Metra/PSA	82	49	121										252	13.4%
Primary	28	18	24										70	3.7%
Secondary	54	31	97										182	9.7%
Mechanical Failure - Foreign	0	0	0										0	0.0%
Passenger Train Interference - TOTAL	22	12	3										37	2.0%
Passenger Train Interference - Metra/PSA	13	5	2										20	1.1%
Passenger Train Interference - Foreign	9	7	1										17	0.9%
Accident - TOTAL	59	15	62										136	7.2%
Accident - Metra/PSA	49	14	62										125	6.7%
Accident - Foreign	10	1	0										11	0.6%
Frack Work - TOTAL	40	21	36										97	5.2%
Track Work - Metra/PSA	40	21	36										97	5.2%
Track Work - Foreign	0	0	0										0	0.0%
Human Error - TOTAL	38	33	21										92	4.9%
Human Error - Metra/PSA	30	25	14										69	3.7%
Human Error - Foreign	8	8	7										23	1.2%
Sick, Injured, Unruly Passenger - TOTAL	20	39	27										86	4.6%
Sick, Injured, Unruly Passenger - Metra/PSA	20	39	27										86	4.6%
Sick, Injured, Unruly Passenger - Foreign	0	0	0										0	0.0%
Weather - TOTAL	129	132	28										289	15.4%
Weather - Metra/PSA	129	132	28										289	15.4%
Weather - Foreign	0	0	0										0	0.0%
Passenger Loading - TOTAL	13	7	29										49	2.6%
Lift Deployment - TOTAL	11	14	12										37	2.0%
Obstruction/Debris - TOTAL	18	30	40										88	4.7%
Catenary Failure - TOTAL	9	3	2										14	0.7%
Other - TOTAL	5	17	15										37	2.0%
FOTAL TRAINS DELAYED	707	599	572							<u>.</u>			1,878	100.0%
Total Metra/PSA Delays	511	497	497										1,505	80.1%
Total Foreign Carrier Delays	196	102	75							-			373	19.9%

Data for current month is final (04/14/16) version from TOPS.

04/14/2016 P:\ONTIME\report\[DelaysByCause.xlsm]AllMonths

'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

					2015									
CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		- Mar
Freight Interference - TOTAL	122	158	113	87	59	90	116	89	84	60	65	49	393	15.2%
Freight Interference - Peak	35	48	42	36	23	42	38	31	27	12	29	8	125	4.8%
Primary	24	33	24	24	13	25	26	19	16	9	22	5	81	3.1%
Secondary	11	15	18	12	10	17	12	12	11	3	7	3	44	1.7%
Freight Interference - Off-Peak	87	110	71	51	36	48	78	58	57	48	36	41	268	10.4%
Primary Secondary	63 24	86 24	59 12	42 9	28 8	38 10	56 22	42 16	48 9	41 7	31 5	33 8	208 60	8.1% 2.3%
Signal/Switch Failure - TOTAL	93	126	35	69	69	79	116	87	64	84	63	53	254	9.8%
Signal/Switch Failure - Metra/PSA	73	83	28	53	54	79 67	103	68	51	74	39	42	184	9.8% 7.1%
Primary	38	65 54	28 25	29	34 30	42	63	32	34	35	39	42	184	4.5%
Secondary	35	29	3	29	24	42 25	40	36	17	39	4	16	67	2.6%
Signal/Switch Failure - Foreign	20	43	7	16	15	12	13	19	13	10	24	11	70	2.7%
Primary	17	23	5	12	7	6	11	11	9	7	10	8	45	1.7%
Secondary	3	20	2	4	8	6	2	8	4	3	14	3	25	1.0%
Mechanical Failure - TOTAL	82	102	69	66	51	100	65	62	67	46	80	40	253	9.8%
Mechanical Failure - Metra/PSA	71	93	69	56	51	100	65	62	67	46	80	40	233	9.0%
Non-Locomotive Equipment Failure - Metra/PSA	27	19	22	17	8	35	28	11	11	5	12	8	68	2.6%
Primary	10	6	10	7	6	4	9	4	5	4	4	7	26	1.0%
Secondary	17	13	12	10	2	31	19	7	6	1	8	1	42	1.6%
Locomotive Failure - Metra/PSA	44	74	47	39	43	65	37	51	56	41	68	32	165	6.4%
Primary	16	25	14	17	15	14	15	22	24	14	20	18	55	2.1%
Secondary	28	49	33	22	28	51	22	29	32	27	48	14	110	4.3%
Mechanical Failure - Foreign	11	9	0	10	0	0	0	0	0	0	0	0	20	0.8%
Passenger Train Interference - TOTAL	13	19	6	7	16	27	12	10	3	8	9	10	38	1.5%
Passenger Train Interference - Metra/PSA	6 7	14	5	4	4	15	1	4	1	3	3	10	25	1.0%
Passenger Train Interference - Foreign Accident - TOTAL	29	35	1 60	<u> </u>	12 20	12 59	11 29	13	27	5 73	6 44	0 50	13	0.5%
	29		~ ~	60	20	59 59		13	27	73	44	50	124	4.8%
Accident - Metra/PSA	28	34	60 0	0	18	59 0	25 4	15	0	0		50 0	122	4.7%
Accident - Foreign Track Work - TOTAL	38	50	19	52	57	49	85	79	60	71	34	23	107	0.1%
Track Work - Metra/PSA	38	30	19	52	57	49	83 71	73	58	71	34	23	89	4.1%
Track Work - Foreign		52 18	19	0	0	49	14	6	2	0	0 0	23	89 18	5.4% 0.7%
Human Error - TOTAL	32	67	103	31	40	45	14	41	65	43	44	34	202	7.8%
Human Error - Metra/PSA	24	45	90	17	28	43	57	41 29	37	43	44 34	28	159	6.2%
Human Error - Foreign	24 8	43 22	13	14	12	40	91	12	28	22	10	28 6	43	1.7%
Sick, Injured, Unruly Passenger - TOTAL	21	25	20	29	24	36	36	28	28	21	19	25	66	2.6%
Sick, Injured, Unruly Passenger - Metra/PSA	21	25	20	29	24	36	36	28	22	27	19	25	66	2.6%
Sick, Injured, Unruly Passenger - Foreign	0	23	20	29	0	0	0	28	21	0	0	23	0	0.0%
Weather - TOTAL	335	395	17	10	3	59	17	22	22	12	83	39	747	28.9%
Weather - Metra/PSA	333	395	17	10	3	59	17	22	21	12	83	39	731	28.3%
Weather - Foreign	2	14	0	0	0	0	0	0	1	0	0	0	16	0.6%
Passenger Loading - TOTAL	20	21	42	21	44	98	124	101	23	27	21	38	83	3.2%
Lift Deployment - TOTAL	20	23	20	9	9	24	124	101	14	8	8	7	65	2.5%
Obstruction/Debris - TOTAL	31	71	8	34	48	49	34	61	30	44	25	52	110	4.3%
Catenary Failure - TOTAL	4	34	10	0	3	49	23	9	37	14	13	15	48	1.9%
Other - TOTAL	23	59	10	10	19	16	31	19	24	14	22	12	48 92	3.6%
TOTAL TRAINS DELAYED	865	1,185	532	485	462	735	854	631	542	528	530	447	2,582	100.0%
		'			-				-					
Total Metra/PSA Delays	694	915	398	355	362	616	605	499	411	432	424	381	2,007	77.7%
Total Foreign Carrier Delays	171	270	134	130	100	119	249	132	131	96	106	66	575	22.3%

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

P:\ONTIME\report\[DelaysByCause.xlsm]AllMonths 04/14/2016

'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

CAUSE CATEGORY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan -	Mar
Freight Interference - TOTAL	-40	-105	-70										-215	-5.7%
Freight Interference - Peak	-3	-31	-28										-62	-1.5%
Primary	2	-23	-13										-34	-0.6%
Secondary	-5	-8	-15										-28	-0.9%
Freight Interference - Off-Peak	-37	-74	-42										-153	-4.3%
Primary	-31	-57	-36										-124	-3.6%
Secondary	-6	-17	-6										-29	-0.7%
Signal/Switch Failure - TOTAL	61	29	88										178	13.2%
Signal/Switch Failure - Metra/PSA	-6	39	71										104	8.2%
Primary Secondary	-3 -3	-24 63	27 44										0 104	1.7% 6.5%
Signal/Switch Failure - Foreign	67	-10	17										74	5.0%
Primary	67 51	-10 1	17										/4 61	5.0% <i>3.9%</i>
Secondary	16	-11	8										13	1.1%
Mechanical Failure - TOTAL	25	-34	62										53	6.5%
Mechanical Failure - Metra/PSA	36	-25	62										73	7.3%
Non-Locomotive Equipment Failure - Metra/PSA	-2	0	-12										-14	0.2%
Primary	-2	3	-12										-14	0.2%
Secondary	-3	-3	-6										-12	0.0%
Locomotive Failure - Metra/PSA	38	-25	74										87	7.0%
Primary	12	-7	10										15	1.6%
Secondary	26	-18	64										72	5.4%
Mechanical Failure - Foreign	-11	-9	0										-20	-0.8%
Passenger Train Interference - TOTAL	9	-7	-3										-1	0.5%
Passenger Train Interference - Metra/PSA	7	-9	-3										-5	0.1%
Passenger Train Interference - Foreign	2	2	0										4	0.4%
Accident - TOTAL	30	-20	2										12	2.4%
Accident - Metra/PSA	21	-20	2										3	1.9%
Accident - Foreign	9	0	0										9	0.5%
Track Work - TOTAL	2	-29	17										-10	1.0%
Track Work - Metra/PSA	2	-11	17										8	1.7%
Track Work - Foreign	0	-18	0										-18	-0.7%
Human Error - TOTAL	6	-34	-82										-110	-2.9%
Human Error - Metra/PSA	6	-20	-76										-90	-2.5%
Human Error - Foreign	0	-14	-6										-20	-0.4%
Sick, Injured, Unruly Passenger - TOTAL	-1	14	7										20	2.0%
Sick, Injured, Unruly Passenger - Metra/PSA	-1	14	7										20	2.0%
Sick, Injured, Unruly Passenger - Foreign	0	0	0										0	0.0%
Weather - TOTAL	-206	-263	11										-458	-13.5%
Weather - Metra/PSA	-204	-249	11										-442	-12.9%
Weather - Foreign	-2	-14	0										-16	-0.6%
Passenger Loading - TOTAL	-7	-14	-13										-34	-0.6%
Lift Deployment - TOTAL	-11	-9	-8										-28	-0.5%
Obstruction/Debris - TOTAL	-13	-41	32										-22	0.4%
Catenary Failure - TOTAL	5	-31	-8										-34	-1.1%
Other - TOTAL	-18	-42	5										-55	-1.6%
TOTAL TRAINS DELAYED	-158	-586	40										-704	
Total Metra/PSA Delays	-183	-418	99										-502	
Total Foreign Carrier Delays	25	-168	-59										-202	
Total Totelgli Califer Delays	25	-108	-59										-202	

TABLE 10.c: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH 2016 Divergence From 2015

Data for current month is final (04/14/16) version from TOPS.

P:\ONTIME\report\[DelaysByCause.xlsm]AllMonths 04/14/2016

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.

				DCI		April 2	VIT a		<u>1 CH 20</u>	10				
]	Electric			Mi	w				Un	ion Pacif	fic	
	BNSF	ML	BI	SC	HER	Ν	W	NCS	RI	SWS	Ν	NW	W	SYSTEM
Apr-14	48	0	0	0	1	4	19	13	14	16	2	3	20	140
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
Total	353	0	0	0	31	178	249	179	56	227	23	65	252	1,613
Apr-15	8	0	0	0	6	11	4	13	4	12	4	9	16	87
May-15	20	0	0	0	4	5	2	8	2	9	0	3	6	59
Jun-15	12	0	0	0	4	11	1	9	3	24	0	6	20	90
Jul-15	23	0	0	0	1	11	0	3	12	17	0	18	31	116
Aug-15	13	0	0	0	8	7	5	11	4	17	0	0	24	89
Sep-15	20	0	0	0	1	9	6	11	14	6	0	2	15	84
Oct-15	16	0	0	0	0	5	4	3	3	11	0	3	15	60
Nov-15	15	0	0	0	7	0	4	7	5	10	3	6	8	65
Dec-15	9	0	0	0	2	4	4	5	4	5	0	1	15	49
Jan-16	14	0	0	0	1	4	23	5	24	3	0	3	5	82
Feb-16	11	0	0	0	3	5	6	1	16	2	0	2	7	53
Mar-16	4	0	0	0	2	6	8	6	2	7	0	0	8	43
Total	165	0	0	0	39	78	67	82	93	123	7	53	170	877

TABLE 11: FREIGHT DELAYSbetween April 2014 and March 2016

Data for current month is final (04/14/16) version from TOPS.

P:\ONTIME\report\[DelaysByCause.xlsm]Freight- YTD, 2 yrs 04/14/2016

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

LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Lift Delays YTD	% of All Delays YTD
BNSF	5	1	1										7	1.86%
Electric ML	1	0	0										1	0.83%
Electric BI	0	0	0										0	0.00%
Electric SC	0	0	0										0	0.00%
HER	0	0	0										0	0.00%
Milw N	1	6	8										15	6.88%
Milw W	0	0	1										1	0.43%
NCS	0	1	0										1	1.03%
RI	2	2	0										4	1.49%
SWS	0	0	0										0	0.00%
UP N	0	0	0										0	0.00%
UP NW	1	0	2										3	2.73%
UP W	1	4	0										5	3.03%
Total Lift Delays	11	14	12										37	1.97%
ALL DELAYS														1,878

Data for current month is final (04/14/16) version from TOPS.

						201								
													Lift Delays	% of All Delays
LINE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All Year	All Year
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

 $P:\label{eq:linew} P:\label{eq:linew} P:\label{eq:linew} ONTIME\label{eq:linew} P:\label{eq:linew} P:\label{eq:l$

04/14/2016

	March 2016 BNSF Electric Her Milwaukee NCS RI SWS UP													-
Minutes	BNSF		Electric	60	Her			NCS	RI	SWS	NT	UP	***	System
		ML	BI	SC		Ν	W				Ν	NW	W	
Peak *													_	
6-10	22	5	2	0	0	22	11	9	13	4	3	4	7	102
11-15	5	7	1	0	2	9	4	2	6	1	3	3	3	46
16-20	2	3	0	0	1	4	1	2	6	0	0	1	1	21
21+	19	4	4	0	0	0	7	4	13	0	13	2	3	69
Annulled	<u>8</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>0</u>	<u>18</u>
Sub-Total	56	19	7	0	4	35	25	18	39	5	23	11	14	256
Off-Peak *	*													
6-10	17	9	4	2	0	16	12	9	18	8	6	8	13	122
11-15	12	1	0	2	0	8	20	5	8	1	3	5	7	72
16-20	1	1	0	1	0	3	7	5	3	0	5	4	3	33
21+	7	2	3	1	0	4	19	5	9	2	11	5	6	74
Annulled	<u>4</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>3</u>	<u>0</u>	<u>15</u>
Sub-Total	41	14	7	6	0	32	60	24	38	11	29	25	29	316
March 201	6 Total													
6-10	39	14	6	2	0	38	23	18	31	12	9	12	20	224
11-15	17	8	1	2	2	17	24	7	14	2	6	8	10	118
16-20	3	4	0	1	1	7	8	7	9	0	5	5	4	54
21+	26	6	7	1	0	4	26	9	22	2	24	7	9	143
Annulled	<u>12</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>8</u>	<u>4</u>	<u>0</u>	<u>33</u>
TOTAL	97	33	14	6	4	67	85	42	77	16	52	36	43	572
2016 Year-	to-Date													
6-10	162	57	19	23	8	83	62	36	115	30	31	39	58	723
11-15	77	30	2	6	6	43	56	20	48	6	20	25	34	373
16-20	26	11	0	4	1	29	27	14	33	6	10	14	11	186
21+	77	20	9	11	7	55	77	24	63	20	52	24	48	487
Annulled	<u>34</u>	<u>2</u>	<u>0</u>	<u>5</u>	<u>3</u>	<u>8</u>	<u>11</u>	<u>3</u>	<u>9</u>	<u>0</u>	<u>12</u>	<u>8</u>	<u>14</u>	<u>109</u>
TOTAL	376	120	30	49	25	218	233	97	268	62	125	110	165	1,878
		PEI	RCENT	сомр	OSITIC	ON OF I	DELAY	S BY R	ANGE	OF DUI	RATION	N		
Minutes	BNSF	ML	Electric BI	SC	Her	Milwa N	aukee W	NCS	RI	SWS	Ν	UP NW	W	System
March 201	6 Total		DI	50		11					11	1111		
6-10	40.2%	42.4%	42.9%	33.3%	0.0%	56.7%	27.1%	42.9%	40.3%	75.0%	17.3%	33.3%	46.5%	39.2%
11-15	17.5%	24.2%	42.9% 7.1%	33.3%				42.9%						
							28.2% 9.4%							20.0% 9.4%
16-20 21+	3.1%	12.1%	0.0%	16.7%	25.0%	10.4%		16.7%	11.7%	0.0%	9.6%	13.9%	9.3% 20.9%	
Annulled	26.8% <u>12.4%</u>	18.2% <u>3.0%</u>	50.0% <u>0.0%</u>	16.7% <u>0.0%</u>	0.0% <u>25.0%</u>	6.0% <u>1.5%</u>	30.6% <u>4.7%</u>	21.4% <u>2.4%</u>	28.6% <u>1.3%</u>	12.5% <u>0.0%</u>	46.2% <u>15.4%</u>	19.4% <u>11.1%</u>	<u>0.0%</u>	25.0% <u>5.8%</u>
TOTAL			100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2016 Year-					00.000	00.11	0.5	05.455	10.000	40.455	01.000	05.50	07.63	<u> </u>
6-10	43.1%	47.5%	63.3%	46.9%	32.0%	38.1%	26.6%	37.1%	42.9%	48.4%	24.8%	35.5%	35.2%	38.5%
11-15	20.5%	25.0%	6.7%	12.2%	24.0%	19.7%	24.0%	20.6%	17.9%	9.7%	16.0%	22.7%	20.6%	19.9%
16-20	6.9%	9.2%	0.0%	8.2%	4.0%	13.3%	11.6%	14.4%	12.3%	9.7%	8.0%	12.7%	6.7%	9.9%
21+	20.5%	16.7%	30.0%	22.4%	28.0%	25.2%	33.0%	24.7%	23.5%	32.3%	41.6%	21.8%	29.1%	25.9%
Annulled	<u>9.0%</u>	<u>1.7%</u>	0.0%	10.2%	12.0%	<u>3.7%</u>	4.7%	3.1%	3.4%	0.0%	<u>9.6%</u>	<u>7.3%</u>	<u>8.5%</u>	<u>5.8%</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%
			nerating											

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION March 2016

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

Data for most recent month is final (04/14/16) version from TOPS.

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

	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
	ľ	ML	BI	SC		Ν	W				Ν	NW	W	Ĩ
March 2016														
Peak *	27.0	15.3	31.9	0.0	13.0	10.6	16.1	15.1	24.4	8.4	46.0	16.5	13.2	21.2
Off-Peak **	19.0	19.0	21.9	13.8		18.9	19.2	16.3	15.6	13.7	27.5	21.7	20.8	19.2
All	23.6	16.8	26.9	13.8	13.0	14.5	18.3	15.8	20.0	12.1	35.5	20.1	18.3	20.1
2016 Year-to-Date														
Peak *	17.5	12.9	20.8	14.8	23.3	19.4	21.6	18.3	18.4	16.7	39.0	14.5	25.8	19.8
Off-Peak **	19.3	15.1	17.6	16.0		20.1	18.3	15.4	16.4	18.7	20.6	20.4	21.0	18.6
All	18.3	13.7	19.0	15.8	23.3	19.8	19.6	16.9	17.6	18.0	28.4	17.7	23.0	19.2

Excludes annulled trains, which do not have delay times.

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

Data for most recent month is final (04/14/16) version from TOPS.

 $P: ONTIME \ report \ Delays By Duration.xls \ Minutes By ServPeriod \qquad 4/14/2016$