## **On-Time Performance**

**June 2019** 



# On-Time Performance June 2019

This report presents an analysis of June 2019 train delays as reported for Metra's eleven rail lines. Ontime 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 shows the total number of scheduled and delayed trains for each line by service period for the current month and year-to-date.

Table 2 lists on-time percentages by line for each month and year since 2014.

Table 3 lists each weekday train that was less than 85% on-time for the current month, in order of line, train, and dates delayed. The codes in the *Delay Code* column of Table 3 are defined and shown sorted by cause category and carrier designation in Table 4.

Table 5 shows the number of delays by cause and line for the current month, including a 5-year average. The table highlights the top two delay causes for each line.

Table 6 shows the number of delays by cause and line for year-to-date, including a 5-year average. The table highlights the top two delay causes for each line.

Table 7 shows the number of delays by cause and month for the current year and prior year. The table highlights the top two delay causes for each month.

For Tables 5 through 7, 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 4 for a detailed breakdown of delay codes by cause category and carrier designation.

Table 8 shows the number of delays by duration and service period for each line.

### Reporting Calculations for Temporary Schedules & Special Events

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

Table 1.a: Scheduled Trains, Delayed Trains, and On-Time Performance by Service Period and Line June 2019

				W	eekday	s						Weel	kends				Total	
	F	Peak*		Off	-Peak*	*		Total		Sa	turday	s	Sunday	ys & Ho	lidays			
	Trains Scheduled	Trains Late	Percent On-Time															
BNSF	1,120	59	94.7%	820	51	93.8%	1,940	110	94.3%	148	5	96.6%	102	4	96.1%	2,190	119	94.6%
Elec -ML	840	3	99.6%	840	9	98.9%	1,680	12	99.3%	200	2	99.0%	100	0	100.0%	,	14	99.3%
-BI	260	0	100.0%	280	2	99.3%	540	2	99.6%	40	0	100.0%				580	2	99.7%
-SC	<u>260</u>	<u>1</u>	99.6%	<u>620</u>	<u>1</u>	99.8%	<u>880</u>	2	99.8%	<u>160</u>	1	99.4%	<u>100</u>	<u>0</u>	100.0%		<u>3</u>	99.7%
Subtotal	1,360	4	99.7%	1,740	12	99.3%	3,100	16	99.5%	400	3	99.3%	200	0	100.0%	3,700	19	99.5%
Heritage	120	10	91.7%	20	1	95.0%	140	11	92.1%							140	11	92.1%
Milw -N	520	46	91.2%	740	41	94.5%	1,260	87	93.1%	100	20	80.0%	90	5	94.4%	1,450	112	92.3%
-W	<u>540</u>	<u>16</u>	97.0%	<u>621</u>	<u>12</u>	98.1%	<u>1,161</u>	<u>28</u>	97.6%	<u>121</u>	<u>3</u>	97.5%	<u>91</u>	<u>10</u>	89.0%	<u>1,373</u>	<u>41</u>	97.0%
Subtotal	1,060	62	94.2%	1,361	53	96.1%	2,421	115	95.2%	221	23	89.6%	181	15	91.7%	2,823	153	94.6%
NCS	180	5	97.2%	220	6	97.3%	400	11	97.3%							400	11	97.3%
RI	720	44	93.9%	640	39	93.9%	1,360	83	93.9%	220	11	95.0%	140	9	93.6%	1,720	103	94.0%
sws	220	19	91.4%	380	32	91.6%	600	51	91.5%	30	1	96.7%				630	52	91.7%
UP -N	600	16	97.3%	791	25	96.8%	1,391	41	97.1%	135	28	79.3%	97	7	92.8%	1,623	76	95.3%
-NW	660	30	95.5%	640	27	95.8%	1,300	57	95.6%	169	13	92.3%	105	13	87.6%	,-	83	94.7%
-W	<u>540</u>	<u>9</u>	98.3%	<u>640</u>	<u>31</u>	95.2%	<u>1,180</u>	<u>40</u>	96.6%	<u>100</u>	<u>14</u>	86.0%	<u>92</u>	<u>2</u>	97.8%		<u>56</u>	95.9%
Subtotal	1,800	55	96.9%	2,071	83	96.0%	3,871	138	96.4%	404	55	86.4%	294	22	92.5%	4,569	215	95.3%
System	6,580	258	96.1%	7,252	277	96.2%	13,832	535	96.1%	1,423	98	93.1%	917	50	94.5%	16,172	683	95.8%

<sup>\*</sup>Includes peak direction trains operating during weekday peak periods. \*\*Includes all other weekday trains.

Delays data for most recent month is final (08/05/19) version from TOPS.

Table 1.b: Scheduled Trains, Delayed Trains, and On-Time Performance by Service Period and Line January - June 2019

				W	eekday	S						Wee	kends				Total	
	-	Peak*			f-Peak*			Total			turday			ys & Ho	•			
	Trains Scheduled	Trains Late	Percent On-Time															
	Scrieduled	Late	On-Time	Scheduled	Late	On-Time	Scrieduled	Late	On-Time									
BNSF	6,836	460	93.3%	5,175	286	94.5%	12,011	746	93.8%	744	36	95.2%	516	9	98.3%	13,271	791	94.0%
Elec -ML	5,194	156	97.0%	5,211	150	97.1%	10,405	306	97.1%	1,000	25	97.5%	560	4	99.3%	11,965	335	97.2%
-BI	1,615	49	97.0%	1,743	44	97.5%	3,358	93	97.2%	240	1	99.6%	40	0	100.0%	3,638	94	97.4%
-SC	<u>1,618</u>	<u>33</u>	98.0%	<u>3,870</u>	<u>77</u>	98.0%	<u>5,488</u>	<u>110</u>	98.0%	<u>800</u>	<u>5</u>	99.4%	<u>560</u>	<u>6</u>	98.9%	<u>6,848</u>	<u>121</u>	98.2%
Subtotal	8,427	238	97.2%	10,824	271	97.5%	19,251	509	97.4%	2,040	31	98.5%	1,160	10	99.1%	22,451	550	97.6%
Heritage	762	105	86.2%	127	20	84.3%	889	125	85.9%							889	125	85.9%
Milw -N	3,235	283	91.3%	4,574	353	92.3%	7,809	636	91.9%	529	71	86.6%	504	35	93.1%	8,842	742	91.6%
-W	<u>3,401</u>	<u>210</u>	93.8%	<u>3,920</u>	<u>180</u>	95.4%	<u>7,321</u>	<u>390</u>	94.7%	<u>632</u>	<u>28</u>	95.6%	<u>505</u>	<u>18</u>	96.4%	<u>8,458</u>	<u>436</u>	94.8%
Subtotal	6,636	493	92.6%	8,494	533	93.7%	15,130	1,026	93.2%	1,161	99	91.5%	1,009	53	94.7%	17,300	1,178	93.2%
NCS	1,139	61	94.6%	1,389	100	92.8%	2,528	161	93.6%							2,528	161	93.6%
RI	4,542	414	90.9%	4,041	323	92.0%	8,583	737	91.4%	918	49	94.7%	804	31	96.1%	10,305	817	92.1%
sws	1,391	92	93.4%	2,409	185	92.3%	3,800	277	92.7%	156	7	95.5%				3,956	284	92.8%
UP -N	3,792	250	93.4%	5,053	194	96.2%	8,845	444	95.0%	683	74	89.2%	511	22	95.7%	10,039	540	94.6%
-NW	4,181	345	91.7%	4,054	200	95.1%	8,235	545	93.4%	682	48	93.0%	450	45	90.0%	9,367	638	93.2%
-W	<u>3,420</u>	<u>360</u>	89.5%	<u>4,057</u>	<u>393</u>	90.3%	<u>7,477</u>	<u>753</u>	89.9%	<u>526</u>	<u>43</u>	91.8%	<u>506</u>	<u>29</u>	94.3%	<u>8,509</u>	<u>825</u>	90.3%
Subtotal	11,393	955	91.6%	13,164	787	94.0%	24,557	1,742	92.9%	1,891	165	91.3%	1,467	96	93.5%	27,915	2,003	92.8%
System	41,126	2,818	93.1%	45,623	2,505	94.5%	86,749	5,323	93.9%	6,910	387	94.4%	4,956	199	96.0%	98,615	5,909	94.0%

<sup>\*</sup>Includes peak direction trains operating during weekday peak periods. \*\*Includes all other weekday trains.

Delays data for most recent month is final (08/05/19) version from TOPS.

**Table 2: On-Time Performance by Line** 

Line Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-Jun	Annual
BNSF 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	85.9%	
2015	90.9	90.1	96.8	97.5	96.6	92.4	93.0	95.4	95.8	93.6	93.5	97.4	94.1%	
2016	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	94.5%	94.0%
2017	95.9	95.6	96.2	96.3	95.4	93.7	96.2	94.4	92.7	93.8	91.8	92.1	95.5%	
2018	89.6	91.6	92.7	94.2	90.5	92.2	91.6	92.7	92.0	92.4	92.5	95.1	91.8%	
2019	92.7	88.8	97.8	95.1	94.9	94.6						0.4.4	94.0%	
2014-2018 average	89.6	91.2	95.4	95.4	91.7	90.8	93.7	93.0	93.2	93.4	93.7	94.4	92.4%	93.0%
Floatria 2014	02.7	05.3	07.7	00.0	00.2	07.4	06.7	00.1	98.7	00.4	00.6	00.7	96.9%	07.50/
Electric 2014 2015	93.7 96.3	95.3 95.4	97.7 98.4	98.8 98.4	98.3	97.4 97.7	96.7 96.5	98.1 98.2	98.7 97.9	98.4 97.8	98.6 97.8	98.7	96.9% 97.4%	
2015	98.0	93.4 98.6	98.4 98.8	98.9	98.3 98.9	96.5	96.5 97.9	98.5	97.9 97.1	98.6	97.8 97.7	99.0 97.7	ll l	
2017	95.6	98.9	98.3	98.9	98.7	96.5 97.1	98.7	98.5	98.2	98.3	97.7 97.8	98.4	98.3% 97.9%	
2017	95.6 97.7	98.9	99.1	99.0		97.1	98.2	98.6	98.6		97.8 97.7		II I	
2019	96.4	90.7	99.1	99.7	99.2 98.6	99.5	96.2	98.0	98.0	98.2	97.7	95.9	98.3% 97.6%	98.1%
2014-2018 average	96.2	97.1	98.5	98.8	98.7	97.2	97.6	98.4	98.1	98.3	97.9	98.0	97.8%	
2014-2018 average	30.2	37.1	36.5	30.0	30.7	37.2	37.0	30.4	30.1	30.3	37.3	30.0	37.670	37.370
Heritage 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	87.3%	91.4%
2015	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	90.4%	
2016	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	94.8%	
2017	93.9	94.3	96.9	96.4	94.2	89.0	90.7	97.5	95.7	90.3	88.4	90.7	94.1%	
2018	86.4	90.7	90.9	95.2	73.4	87.1	93.9	93.2	96.2	88.8	87.8	90.7	87.2%	
2019	81.8	82.1	87.1	87.7	85.1	92.1							85.9%	
2014-2018 average	88.4	89.0	94.1	94.3	88.0	90.9	91.8	93.2	93.2	94.4	90.4	92.5	90.8%	
													II .	II.
Milw - N 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	88.1%	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	93.1%	94.9%
2016	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	94.6%	94.6%
2017	95.3	95.6	96.5	96.1	95.9	93.4	88.4	93.1	90.4	93.9	94.8	92.4	95.5%	93.8%
2018	91.8	89.2	95.2	91.6	92.4	93.6	94.8	94.8	92.4	92.0	90.3	94.3	92.4%	92.7%
2019	88.4	85.2	94.2	94.3	94.3	92.3							91.6%	
2014-2018 average	89.4	89.8	94.1	95.5	94.3	93.2	94.3	94.2	93.6	95.5	94.5	94.2	92.7%	93.6%
Milw - W 2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	91.7%	
2015	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8	97.8	99.0	98.2	96.5	95.3%	
2016	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.7%	94.9%
2017	96.9	95.2	95.2	95.6	97.5	95.8	96.3	96.3	95.5	96.7	96.9	88.2	96.0%	
2018	94.7	91.3	96.3	97.7	95.8	96.5	97.4	96.6	96.4	95.7	93.2	96.6	95.4%	
2019	92.3	91.9	96.4	95.7	95.5	97.0							94.8%	
2014-2018 average	92.8	92.7	94.4	96.9	96.3	94.7	95.3	95.7	96.8	96.8	96.3	93.9	94.6%	95.2%
NCC 2014	76.0	01.1	00.5	06.3	00.5	00.2	04.0	00 5	05.3	00.0	07.0	01.0	0.070/	00.00/
NCS 2014 2015	76.0 93.9	81.1 82.5	88.5 92.6	96.3 94.8	88.5 95.7	89.2 94.8	94.0 96.0	88.5 92.6	95.2 95.2	90.9 97.1	97.8 96.1	91.9 93.6	86.7% 92.5%	
2015	93.9	82.5 95.5	92.6	93.3	95.7 94.4	94.8	95.0	92.6 96.4	95.2 96.1	95.5	95.2	93.6	92.5%	
2016	92.3 92.6	95.5 91.6	91.7	93.3 95.2	94.4 95.5	96.3 95.7	95.0 94.8	96.4 98.0	96.1	95.5 91.9	95.2	92.6	93.9%	
2017	93.2	86.4	95.1 95.9	95.2 95.5	90.0	93.7	98.8	93.3	93.2	96.1	90.0	92.0 88.5	94.3%	
2019	93.2 87.6	91.8	95.9	95.2	95.0	97.3	50.0	د.د	<i>5</i> 3.∠	JU.1	50.0	00.5	93.6%	
2014-2018 average	89.6	87.5	92.7	95.0	92.8	93.8	95.7	93.9	94.6	94.2	94.4	91.9	92.0%	
_ord for a verage	05.0	07.5	J2.1	55.0	72.0	23.0	55.7	55.5	5-7.0	J-7.2	J-7T	J 1.J	52.070	55.070

Table 2 (continued): On-Time Performance by Line

Line	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-Jun	Annual
RI	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	90.5%	93.8%
	2015	97.4	95.3	98.9	98.7	97.8	97.4	94.2	97.0	96.3	97.3	97.1	97.4	97.6%	97.1%
	2016	92.6	96.2	95.8	96.5	97.9	96.2	93.5	96.3	96.0	98.2	97.9	95.3	95.9%	96.1%
	2017	95.2	97.1	97.8	98.0	94.6	96.0	95.3	95.2	95.7	95.9	94.0	92.8	96.5%	95.7%
	2018	92.2	90.2	95.7	96.8	94.8	95.0	96.7	94.9	95.6	97.2	93.3	95.4	94.1%	94.8%
	2019	89.8	87.1	96.7	95.7	88.9	94.0							92.1%	
2014-2018 av	verage	92.0	92.6	96.4	97.1	96.1	95.5	94.9	96.1	96.0	97.2	96.0	95.9	95.0%	95.5%
SWS	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	91.5%	92.6%
	2015	94.7	89.7	95.6	96.1	96.3	91.1	92.4	93.8	97.6	96.8	96.0	94.4	93.9%	94.5%
	2016	95.6	97.2	97.8	95.6	91.9	95.3	94.1	93.3	91.6	97.4	96.6	96.2	95.6%	95.2%
	2017	96.2	94.1	96.4	97.3	92.8	97.1	97.1	94.3	96.3	93.7	90.1	93.8	95.6%	94.9%
	2018	93.9	90.5	92.0	95.4	92.4	87.1	91.9	92.7	94.8	93.6	93.1	95.2	91.9%	92.7%
	2019	90.4	91.0	93.8	94.4	95.3	91.7							92.8%	
2014-2018 av	verage	92.6	92.8	95.1	95.8	93.3	92.7	93.8	93.8	94.9	94.7	93.2	95.2	93.7%	94.0%
	•														
UP - N	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	95.5%	96.7%
	2015	98.6	95.6	98.3	97.1	97.7	98.2	97.0	95.9	98.2	97.0	97.6	98.4	97.6%	97.5%
	2016	96.9	98.6	97.1	98.3	98.3	98.2	97.0	96.0	98.1	99.1	98.0	98.1	97.9%	97.8%
	2017	95.6	99.0	98.3	97.0	97.3	97.3	95.6	97.7	96.9	98.1	96.9	96.0	97.4%	97.2%
	2018	97.6	94.2	97.1	97.4	97.6	97.2	97.7	96.6	97.4	96.8	94.2	94.8	96.9%	96.6%
	2019	90.7	89.1	96.9	97.6	97.6	95.3							94.6%	
2014-2018 av	verage	96.0	95.9	97.7	97.5	97.7	97.6	97.0	96.9	97.7	97.7	96.9	97.2	97.1%	97.1%
														'	,
UP - NW	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	93.9%	95.2%
	2015	96.0	91.6	97.6	96.3	96.9	96.8	94.1	96.5	96.1	97.5	96.7	97.5	95.9%	96.2%
	2016	97.0	98.1	97.8	98.1	96.0	96.6	94.9	96.8	96.9	96.5	93.2	93.4	97.3%	96.3%
	2017	96.2	97.4	98.1	93.7	97.2	93.3	92.2	94.6	93.8	94.8	95.6	94.6	96.0%	95.1%
	2018	95.7	90.7	95.8	98.0	95.6	91.3	95.5	95.8	94.7	97.8	92.4	94.9	94.6%	94.9%
	2019	90.3	89.9	94.8	93.4	95.7	94.7							93.2%	
2014-2018 av	verage	94.3	93.8	97.1	97.0	96.3	94.7	94.3	96.2	96.0	96.3	95.0	95.4	95.5%	95.5%
UP - W	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	93.2%	94.4%
	2015	93.9	91.1	96.1	96.3	97.5	93.9	93.9	95.9	96.0	96.1	97.3	96.8	94.8%	95.4%
	2016	97.8	93.4	97.2	96.7	90.1	94.4	96.6	96.0	96.2	95.6	94.0	92.9	95.0%	95.1%
	2017	95.0	96.5	96.1	92.9	93.8	92.4	94.8	94.3	94.7	92.9	94.8	90.7	94.4%	94.1%
	2018	92.3	89.0	94.4	92.8	88.9	93.9	91.6	89.9	92.9	92.2	91.2	88.5	91.9%	
	2019	90.4	77.0	90.7	94.0	92.9	95.9							90.3%	
2014-2018 av	verage	92.9	92.2	95.7	95.1	93.3	93.9	94.6	94.0	95.3	94.3	94.6	93.1	93.9%	94.1%
System	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	92.4%	94.3%
excluding	2015	94.9	92.5	97.0	97.2	97.2	95.8	95.3	96.3	96.8	97.0	96.8	97.5	95.8%	96.2%
South Shore	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.3%	96.1%
	2017	95.6	96.9	97.2	96.6	96.5	95.3	95.5	96.0	95.2	95.7	95.2	93.9	96.4%	95.8%
	2018	94.2	92.3	95.9	96.3	94.5	94.6	95.6	95.3	95.4	95.5	93.6	94.6	94.7%	94.8%
	2019	91.8	88.2	96.3	96.1	95.3	95.8							94.0%	
2014-2018 av	verage	93.2	93.5	96.4	96.9	95.7	94.9	95.5	95.8	96.0	96.3	95.7	95.6	95.1%	95.5%

Delays data for most recent month is final (08/05/19) version from TOPS.

<sup>&#</sup>x27;2014-2018 average' calculated by summing the delays over the five years, summing the trains run over the five years, and calculating their ratio.

Table 3: Weekday Trains less than 85% On-Time June 2019

			Minutes	Delay	
Line	Train	Date	Late	•	Delay Explanation
BNSF	1259	Mon, Jun 03	14	F1	TREAD BRAKE UNIT (TBU) DEVELOPED A AIR LEAK ON 1253, DELAYING ITS DEPARTURE AND CAUSING CONGESTION IN
	75% OT	Tue, Jun 11	7	JM1	AND OUT OF CUS. PASSENGER HAD MEDICAL EMERGENCY AS TRAIN 1251 WAS DEPARTING. PASSENGER RECEIVED MEDICAL ATTENTION
		Thu, Jun 13	9	н	AND THEN THE TRAIN DEPARTED. CAR 799. RESU 1259'S LOCOMOTIVE METX 188 FEED VALVE WAS SET TO 70 INSTEAD OF 90 DELAYING COMPLETION OF THE CLASS II
					AIR BRAKE TEST.
		Mon, Jun 24	7	E	METX 190 COULD NOT MAKE TRACK SPEED.
		Tue, Jun 25	51	AM	AMTRAK E10 SWITCH FAILED AT CP HARRISON PREVENTING ANY MOVEMENT OF EQUIPMENT FROM 14TH STREET COACH YARD TO CUS AND CAUSING CONGESTION INSID
BNSF		Fri, Jun 07	15	D	H EOLKCK AT WEST EOLA BLOCKING ROUTE
	60% OT	Thu, Jun 13	6	Е	LOST HEP METX 112, PRIOR TO DEPARTING CUS
		Fri, Jun 14	8	DD	LACK OF COMMUNICATION BETWEEN DISPATCHERS CAUSING FREIGHT INTERFERENCE WITH HEOLKCK
		Thu, Jun 20	10	CC	DELAY DUE TO SCHEDULED TRACK WORK/FORM B FORM B
		Tue, Jun 25	6 14	CC	FORM B
		Wed, Jun 26	30	J	DISRUPTIVE PASSNEGER REMOVED BY POLICE
		Thu, Jun 27 Fri, Jun 28	10	CC	SURFACING GANG.
MN	2115	Thu, Jun 20	16	CC	10" SWITCH PROBLEMS A-5, RAN THROUGH ZERO TRACK; TRACK CONSTRUCTION; TOOK LIBERTYVILLE SIDING TO MEET
10114	2113	1110, 3011 20	10	CC	#2134.
	75% OT	Fri, Jun 21	15	CC	16" STOP SIGNAL MAYFAIR, SINGLE TRACKING TRACK CONSTRUCTION, WAITING ON #2132 TO CLEAR; 12" CUS MECH. PROBLEMS MAIN RESEVOIR HOSE
		Wed, Jun 26	18	CC	30" SINGLE TRACKING TRACK CONSTRUCTION, STOP SIGNAL MAYFAIR WAITING ON #2132 & AMTRAK 334 TO CLEAR.
		Thu, Jun 27	17	CC	27" DELAY: TRACK CONSTRUCTION SINGLE TRACKING, WAITING ON #2132 & AMTRAK #334 TO CLEAR MAYFAIR; 6"
		Fri, Jun 28	16	СС	SIGNAL PROBLEMS, RONDOUT.  27" SIGNAL TRACKING TRACK CONSTRUCTION, WAITING ON #2132 @ MAYFAIR TO CLEAR; 10" WAITING FOR #2132,
		, 54 20	10		LIBERTY SIDING.
MN	2116	Mon, Jun 03	29	E1	29" DELAY, FOLLOWING #2114.
	80% OT	Tue, Jun 04	7	D	6" STOP SIGNAL EAST END FOX LAKE, VERBAL PERMISSION BY, RESTRICTED SPEED; STOP SIGNAL CN X-ING.
		Mon, Jun 10	12	E	12" MECH. PROBLEMS W/ENGINES #90/#417 LOST HEP, ENGINEER UNABLETO RESTORE IT FROM CAB CAR, WALKED BACK TO WESTERN AVE TO TROUBLESHOOT.
		Thu, Jun 20	9	RF1	6" DEPARTED FOX LAKE LATE DUE TO WAITING; 3" FOLLOWING #2114.
MN	2120	Mon, Jun 03	20	E1	22" FOLLOWING #2118.
	80% OT	Tue, Jun 04	9	D1	9" DELAY, FOLLOWING TRAINS AHEAD (2118).
		Mon, Jun 10	6	E1	10" FOLLOWING #2118.
		Thu, Jun 20	9	RF1	8" FOLLOWING TRAINS AHEAD; 2" STOP SIGNAL A-2.
MN	2122	Mon, Jun 03	35	G	20" FOLLOWING TRAINS AHEAD, APPROACH & RESTRICTING SIGNALS LIBERTYVILLE-A5; 15" SWITCH PROBLEMS A5 #11 SWITCH
	80% OT	Fri, Jun 07	6	Α	4" FOLLOWING TRAINS AHEAD, OPERATING ON APPROACH SIGNALS; 3" STOP SIGNAL @ A-2
		Fri, Jun 21	6	Α	9" STOP SIGNAL MAYFAIR; 2" STOP SIGNAL A-2.
L	2424	Thu, Jun 27	6	CC	4" FOLLOWING TRAINS AHEAD, OPERATING ON APPROACH SIGNALS; 2" STOP SIGNAL A-2.
MN	2131	Wed, Jun 05	7	D	4" CROSS TRAFFIC, CN; 4" TWO ADA LIFTS; 4" CROSS TRAFFIC, MAYFAIR.
	70% OT	Wed, Jun 12	9	D	8" CROSS TRAFFIC, CN; 4" ADA LIFT. 8" STOP SIGNAL CN & RESTRICTED SPEED.
		Wed, Jun 19 Thu, Jun 20	6 12	G E	8" ENROUTE LOW POWER LOCO #403; 4" TWO ADA LIFTS; 2" CROSS TRAFFIC MAYFAIR.
		Mon, Jun 24	7	E1	HELD AT A2 T GET EQUIP DOWNTOWN, EQUIP LATE OUT OF YARD DUE TO LOCO FAILURE ON 104
		Tue, Jun 25	15	UF	15" LOADING ADA AND BAD LIFT.
MN	2148	Fri, Jun 21	9	CC1	SLOW ORDERS CAUSING CONGESTION DUE TO TIE GANG REPLACING TIES FAR AHEAD OF SURFACING GANG
	80% OT	Mon, Jun 24	7	CC1	6" WAITING ON #2146; 3" FOLLOWING #2146. DUE TO SLOW ORDERS FROM TIE GANG GETTING FARTHER AHEAD
					THAN SURFACING GANG.
		Tue, Jun 25	0	XE	ANNULLED @ EDGEBROOK, LOCOMOTIVE #102, COMPRESSIR COULD NO LONGER MAKE AIR.
	2252	Wed, Jun 26	8	CC1	SLOW ORDERS CAUSING CONGESTON DUE TO TIE GANG REPLACING TIES FAR AHEAD OF SURFACING GANG.
MW	2253	Tue, Jun 11	10	U	-2" ADA AT WESTERN; -2" ADA AT NATIONAL
	80% OT	Fri, Jun 14 Mon, Jun 24	8 20	D K1	STOPPED AT SPAULDING WAITING ON FREIGHT CROSS TRAFFIC 17" DELAY, LATE TURN FROM #2252.
Ĭ		Wed, Jun 24	30	G	23" DELAY, FREIGHT CROSS TRAFFIC FOLLOWED BY A SWITCH FAILURE CREW HAD TO HAND LINE THEIR ROUTE AT B-
		**Ca, Juli 20	50	J	17.
RI	302	Thu, Jun 13	6	H1	FOLLOWING 606
	80% OT	Fri, Jun 14	21		DELAYED MAKING MEETS DUE TO CONGESTION FROM PTC HOLDING TRAINS ATRESTRICTED SPEED DUE TO WHEEL SLIP
				_	FROM RAINY WEATHER.
		Mon, Jun 17	8	R	6M LATE DEPARTING MOKENA DUE TO LATE TURN OF EQUIP DH3021 ENGINEER COACHED TO MAKE MORE AGGRESSIVE MEETS.
		Mon, Jun 24	18	GM	(GATECROSSING MALFUNCTION) - GRADE CROSSING
RI	508	Thu, Jun 13	12	CC	DEPARTED JOLIET 7M LATE FROM THE FLIP OF RI503.
	80% OT	Fri, Jun 21	13	11	(PSGR HANDLING, TRN AHD) - DEPARTED LATE DUE TO ARRIVIAL OF RI503
		Thu, Jun 27	8	11	(PSGR HANDLING, TRN AHD) - DEPARTED 10M LATE DUE TO FLIP
		Fri, Jun 28	20	CC	COULD NOT GET AHOLD OF THE FORM B FOREMAN ON RADIO. ROCK DISPATCHER NEEDED TO RELAY.

## Table 3 (continued): Weekday Trains less than 85% On-Time June 2019

			Minutes	Delay	
Line	Train	Date	Late	Code	Delay Explanation
RI	524	Thu, Jun 13	11	- 1	(PSGR HANDLING) - HEAVY LOADING SOX AND PASSENGERS ON WRONG SIDE.
	80% OT	Fri, Jun 14	7	- 1	HEAVY LOADING FOR WHITE SOX GAME
		Fri, Jun 21	24	E1	(LOCO MALFCN, TRN AHD) - LATE TURN OFF RI0407
		Wed, Jun 26	15	VF	(CAR CAB/TRAILER/MU MALFUNCTION) - 19M ACCT. CAB SIGNALS DROPPED AT MP 33 AND MP 23.1. ENGINEER HAD
					TO CUT OUT THE CAB SIGNALS AT OAK FORES
RI	528	Thu, Jun 13	10	G1	(SIG/SWT MALFCN,TRAIN AHEAD) - 10M ACCT. LATE TURN FROM RI419.
	80% OT	Fri, Jun 21	9	Q	- 9M ACCT. CREW HAD TO ACQUIRE SECOND DOB 106212
		Mon, Jun 24	9	S	(OPERATIONAL TESTS) - EFFICIENCY TEST AT 18TH
		Fri, Jun 28	6	G	SLOW PASSENGER LOADING AND BAD MEETS AT STATI ONS WITH OUTBOUND TRAINS DUE TO TRACK CIRCUITS.
RI	529	Wed, Jun 12	10	GT	(TELECOM FAILURE) - SYSTEM CRASHED AND HAD TO INSTRUCT TRAIN TO HAND-LINE THEIR ROUTE
	80% OT	Fri, Jun 14	8	ZW	- WHEEL SLIPPAGE DUE TO RAINY CONDITIONS
		Wed, Jun 19	8	U	HELPED SPECIAL NEEDS PASSENGER
		Fri, Jun 28	8	D	FREIGTH INTERFERENCE IN JOLIET.
SWS	827	Wed, Jun 19	21	DD	(FRT.DISPOPER./FRT.TRAIN ERRO) - CSX DISPATCHER RAN A 11,000 FOOT Q137 TRAIN INFRONT OF SW0827 AT
					FOREST HILL.
	80% OT	Thu, Jun 20	11	GA	(SIG/SWT FAILURE AMTK) - SWITCH FAILURE AT CP21ST AMT, HAD TO BACK UP AND TAKE DIFFERENT TRACK
		Fri, Jun 21	13	D	(FREIGHT TRAIN INTERFERENCE) - STOPPED 17MIN AT FORSEST HILL WAITING FOR A TRAIN TO YARD AT LANDERS-
					223(11160 FT)
		Fri, Jun 28	7	D	(FREIGHT TRAIN INTERFERENCE) - BLOCKED AT FORREST HILL BY CSX CROSS TRAFFIC Q138/28
UPN	W 625	Tue, Jun 11	6	1	SLOW AND HEAVY PASSENGER LOADING.
	80% OT	Fri, Jun 14	11	UF	DELAYED LOADING A ADA LIFT PASSENGER, ADA LIFT ON CAB CAR #8416 NOT WORKING PROPERLY.
		Mon, Jun 17	14	U	5 ADA LIFTS ALSO SLOW PASSENGER LOADING @ DES PLAINES AND 40MPH SPEED RESTRICTION @ MP47.4-47.6.
		Wed, Jun 26	11	CC	FORM A BETWEEN MP47.25-48.5 (20MPH) & FORM A BETWEEN MP51.25-51.30 (25MPH) & 1 ADA LIFT.
UPN	W 636	Wed, Jun 12	11	ZT	HAD TO CUT OUT PTC FOR THE FORM B DUE TO NOT GETTING CLEARANCE THRU TRACK CONSTRUCTION.
	80% OT	Thu, Jun 13	13	- 1	HEAVY PASSENGER LOADING EN ROUTE, 2 ADA LIFTS, FORM B'S.
		Wed, Jun 26	10	RO	FOLLOWING TRAINS AHEAD. 2 ADA LIFTS, WAITED FOR SIGNAL AT BRIDGE C DUE TO OPERATOR ERROR.
		Fri, Jun 28		GF1	FOLLOWING TRAINS AHEAD EN ROUTE.
UPW	48	Fri, Jun 07	7	GT	17" STOPPED AT KRESS FOR CAD FAILURE
	80% OT	Mon, Jun 10	8	U1	SLOW PASSENGER LOADING EN ROUTE & LATE DEPARTURE FROM ELBURN ON ACCT. OF LATE TURN OFF #29.
		Tue, Jun 11	14	G	USED SHORT X/O'S @ KEDZIE, SWITCH #47 @ WESTERN AVE & SLOW PASSENGER LOADING COLLEGE AVE, GLEN ELLYN,
					& LOMBARD.
		Thu, Jun 13	18	D	STOPPED @ TURNER WAITING FOR #31 TO CLEAR TRACK 3 DEU TO MNRNP ON TRK 1 AND APRBE ON TRK 2, SLOW
					PASSENGER LOADING ENROUTE

Data is final (08/05/19) version from TOPS.

**Table 4: Delay Codes by Cause Category & Carrier** 

			METRA/PSA				METRA/PSA (continued)				Foreign Carrier
Cate	gory			Cate	gory			Categ	ory		
Code				Code	es			Code	es .		
Pri.	Sec.	Ann.	Definition	Pri.	Sec.	Ann.	Definition	Pri.	Sec.	Ann.	Definition
1			Passenger Train Interference	13			Human Error	1			Passenger Train Interference
Α	A1	XA	Passenger Train Interference	В	B1	XB	Human Error, Eng. Dept.	AM	AM1	XAM	Amtrak Caused Delay
AA	AA1	XAA	Rule 9.9 Delayed in Block/Rule 6.30	н	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
М	M1	XM	Right of Way Accident/Misc.	RL	RL1	XRL	Human Error, Job Action/Employee No Show (CMS Error)	DD	DD1	XDD	Freight Dispatcher/Opr/Freight Train Error
YC	YC1	XYC	Derailment - Engineering	RN	RN1	XRN	Human Error, Job Action/Employee No Show (Non-CMS)	DE	DE1	XDE	Freight Mechanical Malfunction
YE	YE1	XYE	Derailment - Mechanical	RO	RO1	XRO	Human Error, Tower Operator	DR	DR1	XDR	Freight-Human Error
YM	YM1	XYM	Derailment - Accident	RZ	RZ1	XRZ	ETMS Train Crew Error [obsolete 2015]	ZD	ZD1	XZD	PTC Freight Train (On-Board)
5			Passenger Loading	YB	YB1	XYB	Derailment - Human Error, Engineering	4			Accident
1	I1	ΧI	Passenger Handling, Running Time	YΗ	YH1	XYH	Derailment - Human Error, Mechanical	DM	DM1	XDM	Freight-Accident/Incident
IB	IB1	XIB	Passenger Handling, Bicycle	YR	YR1	XYR	Derailment - Human Error, Transportation	YF	YF1	XYF	Derailment - Accident, Foreign Line
6			Lift Deployment	ZB	ZB1	XZB	PTC Human Error, Engineering Dept.	8			Signal/Switch Failure
U	U1	XU	Accessibility Related (ADA)	ZH	ZH1	XZH	PTC Human Error, Mechanical	GA	GA1	XGA	Signal/Switch Failure Amtrak (Signal Dept.)
UF	UF1	XUF	ADA Lift Failure	ZP	ZP1	XZP	PTC Dispatcher	GF	GF1	XGF	Signal/Switch Foreign Line
7			Obstruction/Debris	ZR	ZR1	XZR	PTC Human Error, Transportation	ZN	ZN1	XZN	PTC Foreign Line (Non-Train)
K	K1	XK	Obstruction On Tracks	14			Sick, Injured, Unruly Passenger	9			Track Work
KD	KD1	XKD	Train Struck Debris	J	J1	XJ	Passenger Problems/Removal	CA	CA1	XCA	Amtrak Engineering
KP	KP1	XKP	Suspicious Package(s)/Person(s)/Activity	JM	JM1	XJM	Passenger Medical Emergency	11			Non-Locomotive Equipment Failure
8			Signal/Switch Failure	15			Weather	FS	FS1	XFS	NICTD MU Malfunction
CM	CM1	XCM	Switch Malfunction (Track Dept.)	AW	AW1	XAW	Pass. Train Interference, Weather	ZS	ZS1	XZS	PTC NICTD MU Train (On-Board)
G	G1	XG	Signal/Switch Malfunction (Signal Dept.)	CW	CW1	XCW	M of W Work, Weather	12			Locomotive Failure
GM	GM1	XGM	Gate Crossing Malfunction	EW	EW1	XEW	Locomotive Malfunction, Weather	EA	EA1	XEA	Amtrak Locomotive/Car Malfunction
GT	GT1	XGT	Telecom Failure	FW	FW1	XFW	Cab Car/TRL/MU Malfunction, Weather	ZA	ZA1	XZA	PTC Amtrak Train (On-Board)
GX	GX1	XGX	Broken Gate Crossing	GW	GW1	XGW	Signal/Switch Malfunction Weather (Signal Dept.)	13			Human Error
GZ	GZ1	XGZ	ETMS Signal Malfunction [obsolete 2015]	IW	IW1	XIW	Passenger Handling, Weather	BA	BA1	XBA	Amtrak Engineering Human Error
VG	VG1	XVG	Broken Gate Crossing Reported, Nothing Found		KW1	XKW	Obstruction On Tracks, Weather	HS	HS1	XHS	Human Error, NICTD Mechanical Dept.
ZG	ZG1	XZG	PTC Wayside	MW	MW1	XMW	Right of Way Accident/Misc., Weather	RA	RA1	XRA	Human Error, Amtrak Transportation
ZT	ZT1	XZT	PTC Back Office	4		XNW	Electricity Utility Failure, Weather	RF	RF1	XRF	Freight Dispatcher/Opr/Non-Freight Train Error
9			Track Work	1		XOW	AC/DC System Failure, Weather	RS	RS1	XRS	Human Error, NICTD Transportation
С	C1	XC	Unscheduled Track Work			XRW	Train Crew Issues, Weather	14			Sick, Injured, Unruly Passenger
CC	CC1	XCC	Scheduled Track Work			XUW	Accessibility, Weather	JA	JA1	XJA	Amtrak Passenger Problems/Removal
CF	CF1	XCF	Engineering Equipment Malfunction		YW1		Derailment Accident, Weather	15			Weather
CG	CG1	XCG	Scheduled Signal Work		ZW1	XZW	PTC Weather	DW	DW1	XDW	Freight Train Interference, Weather
СН	CH1	XCH	Contractor Failure	16			Other	4			
ZC	ZC1	XZC	PTC Construction/Maintenance	L	L1	XL	Unauthorized People On Tracks/Near Miss				
10			Catenary Failure	N	N1	XN	Electricity Utility Failure	l			
СО	CO1	XCO	Scheduled Wire Work	Q	Q1	XQ	Late Issuance of Track Warrant				
0	01	XO	AC/DC System Failure	S	S1	XS	Operational (Efficiency) Testing	l			
11		\/F	Non-Locomotive Equipment Failure	T VE	T1	XT	Property Vandalism				
F	F1	XF Cab Car/Trailer/MU Malfunction			VE1	XVE	Locomotive Problem Reported, Nothing Found	l			
FZ	FZ1	XFZ	ETMS Malfunction on Cab Car [obsolete 2015]	VF	VF1	XVF	Cab Car Problem Reported, Nothing Found				
ZF	ZF1	XZF	PTC Malfunction Coach	W	W1	XW	Gas Leak				
12	F4	VE	Locomotive Failure								
E	E1 EZ1	XE	Locomotive Malfunction								
EZ		XEZ	ETMS Malfunction on Locomotive [obsolete 2015]								
ZE	ZE1	XZE	PTC Malfunction Locomotive					l			
		lv 1. 201	6 Revised July 19, 2016					_			

Effective July 1, 2016

Revised July 19, 2016

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

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

Table 5.a: Train Delays by Cause and Line June 2019

			Electric			Mil						nion Pacifi		
Cause Category	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - Total	12	-	-		9	13	7	2	8	23	-	6	12	92
Freight Interference - Peak	4	-	-	-	9	9	1	-	1	9	-	5	1	3!
Primary	3	-	-	-	2	5	1	-	-	8	-	-	1	2
Secondary	1	-	-	÷	7	4	-	-	1	1	-	5	-	1
Freight Interference - Off-Peak	8	-	-	-	-	4	6	2	7	14	-	1	11	53
Primary	7	-	-	-	-	3	4	2	6	8	-	1	10	4.
Secondary	1	-	-	-	-	1	2	-	1	6	-		1	1.
Signal/Switch Failure - Total	5	5	2	2	1	11	7	1	31	7	1	17	11	101
Signal/Switch Failure - Metra/PSA	5	5	2	2	-	10	7	1	31	3	1	5	10	82
Primary	5	5	2	2	-	9	5 2	1	21 10	3	1	4 1	9	64
Secondary  Signature 160 in the Failure Facility 1	-	-	-	,	-	1	2	-	10				1	18
Signal/Switch Failure - Foreign	-	-	-	-	1	1	-	-	-	4	-	12	1	19
Primary Secondary	-	-	-	-	1	1	-	-	-	4	-	7 5	1	14
Mechanical Failure - Total	27	_			_	25	4	_	14	13	22	4	4	113
		-	-	-	-			-				-		
Mechanical Failure - Metra/PSA	27	-	-	•	-	25	4	-	14	13	22	4	4	113
Non-Locomotive Equipment Failure - Metra/PSA  Primary	8 2	-	-	-	-	-	2	-	1	6	-	1	-	18
Secondary	6	_	-	-	-	_	1	-	_	4	_	-	-	11
Locomotive Failure - Metra/PSA	19	_				25	2		13	7	22	3	4	95
Primary	7	_	-	-	-	25 5	1	-	3	3	1	3 3	2	25
Secondary	12	-	_	-	-	20	1	-	10	4	21	-	2	70
Mechanical Failure - Foreign	_	-			_	_	_	_	_	_			_	
Passenger Train Interference - Total	18			_	_	6	1	1	_	_	_		_	26
Passenger Train Interference - Metra/PSA	1	_	_	_	_	3		1	_	_	_	_	_	5
Passenger Train Interference - Foreign	17		_	_		3	1	-				_		21
Accident - Total	14						1	_	4	_		1	5	25
Accident - Total  Accident - Metra/PSA	14	_		_	_	_	-	_	4	_	_	1	5	24
Accident - Foreign	14	-	-	-	-	-	1	-	4	-	-	1	5	1
Track Work - Total	9	1			-	28	-	1	10	-	18	17	3	87
	_		-	-	-									
Track Work - Metra/PSA	9	1	-	-	-	28	-	1	10	-	18	17	3	87
Track Work - Foreign	- 12	-	-	-	-	- 44	-		- 10	-	-		-	
Human Error - Total	12	-	-	-	-	11	2	5	10	4	4	6	4	58
Human Error - Metra/PSA	10	-	-	-	-	5	2	3	9	1	4	4	3	41
Human Error - Foreign	2	-	-	-	-	6	-	2	1	3	-	2	1	17
Sick, Injured, Unruly Passenger - Total	4	2	-	-	-	5	6	-	2	2	6	-	2	29
Sick, Injured, Unruly Passenger - Metra/PSA	4	2	-	-	-	5	6	-	2	2	6	-	2	29
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	
Weather - Total	5	-	-	-	-	-	-	-	6	-	-	1	-	12
Weather - Metra/PSA	5	-	-	-	-	-	-	-	6	-	-	1	-	12
Weather - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	
Passenger Loading - Total	4	3	-	-	-	5	7	-	9	-	23	16	5	72
Lift Deployment - Total	-	-	-	-	-	1	1	-	2	-	1	10	2	17
Obstruction/Debris - Total	5	3		-	-	6	3	-	3	1	1	5	4	31
Catenary Failure - Total	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Other - Total	4	-	-	-	1	1	2	1	4	2	-	-	4	19
Total Trains Delayed	119	14	2	3	11	112	41	11	103	52	76	83	56	683
Total Metra/PSA Delays	88	14	2	3	1	89	32	7	94	22	76	63	42	533
Total Foreign Carrier Delays	31	0	0	0	10	23	9	4	9	30	0	20	14	150

Data for current month is final (08/05/19) version of TOPS

<sup>&#</sup>x27;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 5.b: Train Delays by Cause and Line

Average June Over Previous Five Years: 2014-2018

Top 2 causes for each line are shaded Electric **Union Pacific** SYSTEM Cause Category BNSF ML SC HER NCS RI sws Ν NW Freight Interference - Total Freight Interference - Peak n Primary Freight Interference - Off-Peak Primary Signal/Switch Failure - Total Signal/Switch Failure - Metra/PSA 39 Signal/Switch Failure - Foreign Secondary Mechanical Failure - Total Mechanical Failure - Metra/PSA Non-Locomotive Equipment Failure - Metra/PSA Locomotive Failure - Metra/PSA Primary Mechanical Failure - Foreign Passenger Train Interference - Total n n n Passenger Train Interference - Metra/PSA Passenger Train Interference - Foreign Accident - Total Accident - Metra/PSA n Accident - Foreign Track Work - Total Track Work - Metra/PSA Track Work - Foreign Human Error - Total Human Error - Metra/PSA Human Error - Foreign Sick, Injured, Unruly Passenger - Total O Sick, Injured, Unruly Passenger - Metra/PSA Sick, Injured, Unruly Passenger - Foreign Weather - Total Weather - Metra/PSA Weather - Foreign Passenger Loading - Total Lift Deployment - Total Obstruction/Debris - Total Catenary Failure - Total Other - Total **Total Trains Delayed** Total Metra/PSA Delays 

Data for latest month is final (07/25/18) version of TOPS

Total Foreign Carrier Delays

<sup>&#</sup>x27;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.

<sup>&#</sup>x27;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 5.c: Train Delays by Cause and Line

June 2019 Compared to Average June Over Previous Five Years: 2014-2018

			Electric			Mil	w				Un	ion Pacif	ic	
Cause Category	BNSF	ML	ВІ	SC	HER	N	w	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - Total	(12)	-	(0)	-	6	4	(5)	(9)	1	3	(1)	(4)	(11)	(29)
Freight Interference - Peak	(5)	-	(0)	_	6	7	(1)		0	2	(1)	(2)	(6)	(4
Primary	(4)	-	-	-	(0)	4	(0)		(1)	3	(0)	(1)	(3)	(6
Secondary	(1)	-	(0)	-	7	3	(0)	(1)	1	(2)	(1)	(1)	(4)	1
Freight Interference - Off-Peak	(7)	-	-	-	(0)	(3)	(4)	(5)	0	1	(1)	(2)	(4)	(25
Primary	(5)	-	-	-	(0)	(1)	(2)	(5)	1	(1)	(0)	(1)	(2)	(17
Secondary	(2)	-	-	-	-	(2)	(2)	(1)	(0)	2	(0)	(1)	(2)	(8
Signal/Switch Failure - Total	(18)	(1)	(1)	(1)	(2)	(10)	(4)	(7)	23	(4)	(2)	8	(3)	(22)
Signal/Switch Failure - Metra/PSA	(10)	(1)	(1)	(1)	(0)	(8)	(2)	(3)	23	(1)	(2)	(4)	(3)	(13
Primary	(5)	1	-	(0)	(0)	(1)	(0)	(1)	15	(3)	(1)	1	3	9
Secondary	(5)	(2)	(1)	(1)	-	(8)	(1)	(2)	8	2	(1)	(5)	(6)	(21
Signal/Switch Failure - Foreign	(8)	-	-	-	(2)	(2)	(2)	(3)	(0)	(3)	-	12	0	(9)
Primary	(6)	-	-	-	(1)	(1)	(2)	(2)	(0)	0	-	7	0	(5
Secondary	(2)	-	-	-	(1)	(1)	(1)	(1)	-	(3)	-	5	-	(4
Mechanical Failure - Total	4	(7)	(1)	(1)	(1)	11	(4)	(3)	5	10	15	(4)	(5)	18
Mechanical Failure - Metra/PSA	4	(7)	(1)	(1)	(1)	11	(4)	(3)	5	10	15	(4)	(5)	18
Non-Locomotive Equipment Failure - Metra/PSA	3	(7)	(1)	(1)	-	(0)	1	-	(1)	5	(2)	(2)	(3)	(8)
Primary	(0)	(1)	(0)	(1)	-	(0)	0	-	-	2	(1)	(0)	(1)	(2
Secondary	3	(7)	(1)	(1)	-	-	1	-	(1)	3	(1)	(2)	(2)	(6
Locomotive Failure - Metra/PSA	1	-	-	-	(1)	11	(6)	(3)	6	5	18	(2)	(2)	27
Primary	3	-	-	*	(1)	2	(2)	(1)	(0)	2	(2)	1	*	3
Secondary	(2)	-	-	-	(0)	9	(4)	(2)	6	3	19	(3)	(2)	24
Mechanical Failure - Foreign	-	(0)	-	-	-	-	-	-	-	-	-	-	-	(0)
Passenger Train Interference - Total	14	(1)	(0)	(1)	(1)	3	-	0	(0)	(5)	(0)	(0)	(0)	8
Passenger Train Interference - Metra/PSA	(0)	(1)	-	(0)	(0)	2	(1)	0	(0)	(1)	(0)	-	(0)	(2)
Passenger Train Interference - Foreign	14	(0)	(0)	(0)	(1)	1	1	-	(0)	(4)	-	(0)	-	9
Accident - Total	1	(6)	(2)	(4)	-	(3)	(4)	(1)	2	-	-	(2)	4	(14)
Accident - Metra/PSA	2	(6)	(2)	(4)	-	(2)	(5)	(0)	2	-	-	(2)	4	(13
Accident - Foreign	(1)	-	-	-	-	(1)	1	(0)	-	-	-	-	(0)	(1
Track Work - Total	(42)	(2)	(5)	(9)	-	15	(5)	-	(9)	(1)	15	12	(3)	(34)
Track Work - Metra/PSA	(41)	(2)	(5)	(9)	_	15	(5)	-	(9)	(1)	15	12	(3)	(33
Track Work - Foreign	(1)	-	-	-	_	-	(0)	-	-	(1)	_	_	-	(1
Human Error - Total	(5)	(11)	(4)	(5)	(4)	(0)	(4)	3	6	-	1	1	1	(21)
Human Error - Metra/PSA	(2)	(11)	(4)	(5)	(1)	(4)	(2)	2	5	(1)	1	1	1	(18
Human Error - Foreign	(3)	(0)		-	(3)	4	(2)	1	1	1	(0)	(0)	(0)	(3
Sick, Injured, Unruly Passenger - Total	(1)	(1)	(1)	(1)	-	0	2	-	(2)	2	3	(5)	(4)	(9)
Sick, Injured, Unruly Passenger - Metra/PSA	(1)	(1)	(1)	(1)	_	0	2	_	(2)	2	3	(5)	(4)	(8)
Sick, Injured, Unruly Passenger - Foreign	(0)	(1)	(1)	(1)	_	_	_		(2)	_	_	(5)	(4)	(0)
Weather - Total	( <del>0</del> )	(7)	(2)	(2)	(0)	(4)	(1)	(1)	2	(1)	(2)	(4)	(5)	(35)
Weather - Metra/PSA	(9)	(7)	(2)	(2)	(0)	(4)	(1)		2	(1)	(2)	(4)		(35)
l ,	(9)	(7)	(2)	(2)	(0)	(4)	(1)	(1)	2	(1)	(2)	(4)	(5)	(55)
Weather - Foreign	(7)	(5)	(2)	(3)		(2)	(7)	(0)	(4)	(0)	10	(5)	(3)	(28)
Passenger Loading - Total			(2)	(3)	-			(0)						
Lift Deployment - Total	(3)	(1)	- (0)	(2)	(4)	(3)	(4)	(2)	(1)	(0)	0	8	(0)	(5)
Obstruction/Debris - Total	(8)	(1)	(0)	(2)	(1)	2	1	(1)	(1)	(2)	(1)	(4)	0	(18)
Catenary Failure - Total	_	(3)	(1)	0		-	-	_	-	-	(2)	-	- (2)	(3)
Other - Total	0	(2)	(0)	(2)	1	0	(1)	1	3	2	(2)	(2)	(3)	(5)
Total Trains Delayed	(86)	(48)	(20)	(30)	(2)	11	(35)	(18)	25	3	36	(1)	(32)	(196)
Total Metra/PSA Delays	(75)	(47)	(20)	(30)	(2)	5	(27)	(6)	24	7	38	(8)	(21)	(162
Total Foreign Carrier Delays	(11)	(1)	(0)	(0)	(0)	7	(8)	(12)	1	(4)	(2)	8	(11)	(34

Data for current month is final (08/05/19) version of TOPS  $\,$ 

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<sup>&#</sup>x27;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 6.a: Train Delays by Cause & Line - YTD January - June 2019

#### Top 2 causes for each line are shaded

			Electric			Mil	w				U	nion Pacifi	ic	
Cause Category	BNSF	ML	BI	SC	HER	N	w	NCS	RI	sws	N	NW	w	SYSTEM
Freight Interference - Total	65	-	-	-	46	103	55	26	31	81	3	56	130	596
Freight Interference - Peak	16				40	31	19	6	7	29	1	35	38	222
Primary	14	_			28	18	15	6	5	21	1	17	17	142
Secondary	2	-	-	-	12	13	4	-	2	8	-	18	21	80
Freight Interference - Off-Peak	49	-	-	-	6	72	36	20	24	52	2	21	92	374
Primary	37	-	-	-	5	40	24	18	17	33	1	12	62	249
Secondary	12	-	-	-	1	32	12	2	7	19	1	9	30	125
Signal/Switch Failure - Total	177	49	13	9	25	138	96	25	185	60	123	112	202	1,214
Signal/Switch Failure - Metra/PSA	95	49	13	9	5	118	86	20	185	22	123	65	168	958
Primary	75	38	8	6	5	72	69	16	133	17	80	46	113	678
Secondary	20	11	5	3	-	46	17	4	52	5	43	19	55	280
Signal/Switch Failure - Foreign	82	-	-	-	20	20	10	5	-	38	-	47	34	256
Primary Secondary	66 16	-	-	-	16 4	14 6	6 4	3 2	-	22 16	-	29 18	24 10	180 76
Mechanical Failure - Total	84		1	1	1	123	62	11	93	24	35	64	70	569
	_	-	1			-	-						-	
Mechanical Failure - Metra/PSA	82	-	-	-	1	111	60	9	93	24	35	64	70	549
Non-Locomotive Equipment Failure - Metra/PSA  Primary	27 10	-	-	-	-	9	3	2	19 4	15 6	5 2	34 19	22 11	136 57
Secondary	17					7	1	1	15	9	3	15	11	79
Locomotive Failure - Metra/PSA	55	_			1	102	57	7	74	9	30	30	48	413
Primary	19		-	_	1	27	18	3	25	4	4	11	12	124
Secondary	36	-	-	-	-	75	39	4	49	5	26	19	36	289
Mechanical Failure - Foreign	2	-	1	1	-	12	2	2	-	-	-		-	20
Passenger Train Interference - Total	22	2		2	7	19	3	5	-	23	-	-	-	83
Passenger Train Interference - Metra/PSA	2	2	-	-	1	13	-	5	-	-		-	-	23
Passenger Train Interference - Foreign	20	-	-	2	6	6	3	-	_	23	-	-	-	60
Accident - Total	15	81	12	-	9	12	19	7	38	14	37	38	57	339
Accident - Metra/PSA	14	15	2	-	2	12	17	7	37	2	37	38	19	202
Accident - Foreign	1	66	10	-	7	_	2	-	1	12		-	38	137
Track Work - Total	52	10	1	3	15	71	18	17	39	3	32	40	24	325
Track Work - Metra/PSA	52	10	1	3	15	65	11	16	39	2	32	40	24	310
Track Work - Foreign	-	-	-	-	-	6	7	1	-	1		-	-	15
Human Error - Total	138	5	4	2	15	93	42	26	84	33	70	65	93	670
Human Error - Metra/PSA	77	5	4	2	3	37	15	10	83	3	64	48	66	417
Human Error - Foreign	61	-	-	-	12	56	27	16	1	30	6	17	27	253
Sick, Injured, Unruly Passenger - Total	17	17	1	3	-	11	23	2	19	3	45	17	28	186
Sick, Injured, Unruly Passenger - Metra/PSA	15	17	1	3	-	11	23	2	19	3	45	17	28	184
Sick, Injured, Unruly Passenger - Foreign	2	-	-	-	-	-	-	-	-	-		-	-	2
Weather - Total	129	159	54	92	4	99	52	24	183	14	97	96	79	1,082
Weather - Metra/PSA	128	159	54	92	4	99	52	24	182	10	97	96	79	1,076
Weather - Foreign	1	-	-	-	-	-	-	-	1	4	-	-	-	6
Passenger Loading - Total	9	5	4	1	-	11	15	1	46	-	41	37	39	209
Lift Deployment - Total	10	-	-	-	-	18	11	1	25	2	6	34	45	152
Obstruction/Debris - Total	49	5	2	5	-	38	19	8	48	20	23	53	30	300
Catenary Failure - Total	_	1	1	2	-	-	-	_	-	-	-	-	-	4
Other - Total	24	1	1	1	3	6	21	8	26	7	28	26	28	180
Total Trains Delayed	791	335	94	121	125	742	436	161	817	284	540	638	825	5,909
Total Metra/PSA Delays	557	269	83	118	34	539	330	111	783	95	531	518	596	4,564

Data for current month is final (08/05/19) version of TOPS

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

Table 6.b: Train Delays by Cause & Line - YTD

January - June Average Over Previous 5 Years: 2014-2018

Top 2 causes for each line are shaded

			Electric			Mil					U	nion Pacifi	-	
Cause Category	BNSF	ML	BI	SC	HER	N	W	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - Total	137	-	0	-	25	76	72	67	37	82	9	36	125	665
Freight Interference - Peak	64	-	0	-	22	18	18	26	10	28	2	20	40	248
Primary	39	-	-	-	20	11	12	18	6	20	1	8	19	155
Secondary	25	-	0	-	2	6	6	8	4	8	1	12	21	93
Freight Interference - Off-Peak	73	-	-	-	2	58	54	41	26	54	7	16	85	416
Primary	57	-	-	-	2	37	36	35	21	40	4	12	69	312
Secondary	16					21	18	6	5	14	3	4	17	105
Signal/Switch Failure - Total	132	41	20	24	15	110	72	50	54	58	17	28	62	683
Signal/Switch Failure - Metra/PSA	81	41	20	24	1	87	59	26	53	16	17	25	58	507
Primary Secondary	50 31	25 16	14 6	18 5	1 0	46 42	37 21	16 10	38 14	11 5	11 6	13 12	25 33	305 202
Signal/Switch Failure - Foreign	51	- 10	-	,	13	23	14	24	2	43	-	3	4	176
Primary	39				11	11	9	14	1	26		1	3	116
Secondary	12	_	_	_	2	11	5	10	0	17	-	2	1	60
Mechanical Failure - Total	98	21	6	4	3	96	54	23	91	20	55	50	49	571
Mechanical Failure - Metra/PSA	97	17	5	4	3	89	54	22	91	20	55	50	49	556
Non-Locomotive Equipment Failure - Metra/PSA	26	17	5	4	1	11	7	3	10	7	16	15	21	142
Primary	11	5	2	2	1	3	4	1	5	3	6	5	9	55
Secondary	15	12	3	2	0	7	4	2	5	5	10	9	12	87
Locomotive Failure - Metra/PSA	72	-	-	-	2	78	47	20	81	12	39	35	28	414
Primary	20	-	-	-	2	19	16	5	24	6	12	10	10	124
Secondary	52	-	-	-	0	59	31	14	57	7	27	26	18	290
Mechanical Failure - Foreign	1	4	1	0	0	7	0	0	0	-	-	-	0	14
Passenger Train Interference - Total	10	4	1	3	7	31	4	8	4	18	1	1	6	97
Passenger Train Interference - Metra/PSA	2	2	1	1	0	20	3	8	3	2	1	1	6	49
Passenger Train Interference - Foreign	9	2	1	2	6	10	1	0	1	16		0	0	49
Accident - Total	80	15	5	9	0	30	36	12	16	4	23	51	18	300
Accident - Metra/PSA	64	15	5	9	0	27	35	9	13	2	23	50	14	266
Accident - Foreign	16	-		-	-	2	1	3	3	2		1	4	33
Track Work - Total	142	23	9	20	6	51	17	8	45	6	31	19	37	414
Track Work - Metra/PSA	138	23	9	20	6	51	16	8	45	5	31	19	37	408
Track Work - Foreign	5	-		-	-	-	1	0	-	1			-	6
Human Error - Total	114	21	10	13	12	56	32	15	39	17	22	22	30	404
Human Error - Metra/PSA	71	21	10	13	2	38	21	8	39	5	20	17	21	286
Human Error - Foreign	43	0		0	9	18	11	7	0	12	2	5	10	118
Sick, Injured, Unruly Passenger - Total	21	28	4	7	1	20	20	2	19	3	18	26	25	192
Sick, Injured, Unruly Passenger - Metra/PSA	19	28	4	7	1	20	20	2	18	3	18	26	25	190
Sick, Injured, Unruly Passenger - Foreign	2	-		-	-	-	- 70	-	0	- 40	-		-	2
Weather - Total	159	94	28	33	5	87	73	22	117	19	60	73	59	827
Weather - Metra/PSA	158	94	28	33	4	84	73	22	116	18	60	73	58	822
Weather - Foreign	1	- 22		9	0	2	1	2	0	1	- 24	- 44	1	6
Passenger Loading - Total	24	22	8	0	-	28 21	30		45	1	24 5	44 13	28 21	265
Lift Deployment - Total	19	1	-	-	-		16	2	11	1				110
Obstruction/Debris - Total	47	19 20	8 4	16 7	3	25	20	8	25	13	16	40	42	282 31
Catenary Failure - Total Other - Total	27	6	3	4	0	11	11	3	13	7	14	13	23	136
Total Trains Delayed	1.010	315	109	148	76	640	457	222	516	250	294	416	524	4,977
Total Metra/PSA Delays	746	308	107	146	22	502	356	120	473	94	283	370	381	3,907
iotai Metia/FOA Delays	740	7	2	2	22	302	330	120	4/3	94	203	3/0	201	3,507

Data for latest month is final (07/25/18) version of TOPS  $\,$ 

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

Table 6.c: Train Delays by Cause & Line - YTD

January - June 2019 Compared to January - June Average Over Previous 5 Years: 2014-2018

	lile 2015		Electric			Milv						nion Pacifi	С	
Cause Category	BNSF	ML	BI	sc	HER	N	w	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - Total	(72)	-	(0)	_	21	27	(17)	(41)	(6)	(1)	(6)	20	5	(69)
Freight Interference - Peak	(48)	_	(0)	_	18	13	1	(20)	(3)	1	(1)	15	(2)	(26)
Primary	(25)	-	-	-	8	7	3	(12)	(1)	1	(0)	9	(2)	(13)
Secondary	(23)	-	(0)	-	10	7	(2)	(8)	(2)	0	(1)	6	(0)	(13)
Freight Interference - Off-Peak	(24)	-	-	-	4	14	(18)	(21)	(2)	(2)	(5)	5	7	(42)
Primary	(20)	-	-	-	3	3	(12)	(17)	(4)	(7)	(3)	0	(7)	(63)
Secondary	(4)	-	-	-	1	11	(6)	(4)	2	5	(2)	5	13	20
Signal/Switch Failure - Total	45	8	(7)	(15)	10	28	24	(25)	131	2	106	84	140	531
Signal/Switch Failure - Metra/PSA	14	8	(7)	(15)	4	31	27	(6)	132	6	106	40	110	451
Primary	25	13	(6)	(12)	4	26	32	-	95	6	69	33	88	373
Secondary	(11)	(5)	(1)	(2)	(0)	4	(4)	(6)	38	-	37	7	22	78
Signal/Switch Failure - Foreign	31	-	-	-	7	(3)	(4)	(19)	(2)	(5)	-	44	30	80
Primary Secondary	27	-	-	-	5 2	3 (5)	(3) (1)	(11) (8)	(1) (0)	(4) (1)	-	28 16	21 9	64 16
Mechanical Failure - Total	(14)	/21\	(5)	(3)	(2)	27	8	(12)	2	4	/20\	14	21	(2)
		(21)				27	<b>8</b>		2	4	(20)	14 14	21	
Mechanical Failure - Metra/PSA  Non-Locomotive Equipment Failure - Metra/PSA	(15)	(17)	(5) (5)	(4)	(2) (1)	(2)	(4)	(13)	9	8	(20)	19	1	(7)
Primary	(1)	(17)	(2)	(4)	(1)	(2)	(2)	(1)	(1)	3	(11)	19	2	(0)
Secondary	2	(12)	(3)	(2)	(0)	(0)	(3)	(1)	10	4	(7)	6	(1)	(8)
Locomotive Failure - Metra/PSA	(17)	- '-	-	-	(1)	24	10	(13)	(7)	(3)	(9)	(5)	20	(1)
Primary	(1)	-	-	-	(1)	8	2	(2)	1	(2)	(8)	1	2	0
Secondary	(16)	-	-	-	(0)	16	8	(10)	(8)	(2)	(1)	(7)	18	(1)
Mechanical Failure - Foreign	1	(4)	0	1	(0)	5	2	2	(0)	-	-	-	(0)	6
Passenger Train Interference - Total	12	(2)	(1)	(1)	0	(12)	(1)	(3)	(4)	5	(1)	(1)	(6)	(14)
Passenger Train Interference - Metra/PSA	0	0	(1)	(1)	1	(7)	(3)	(3)	(3)	(2)	(1)	(1)	(6)	(26)
Passenger Train Interference - Foreign	11	(2)	(1)	0	(0)	(4)	2	(0)	(1)	7	-	(0)	(0)	11
Accident - Total	(65)	66	7	(9)	9	(18)	(17)	(5)	22	10	14	(13)	39	39
Accident - Metra/PSA	(50)	(0)	(3)	(9)	2	(15)	(18)	(2)	24	(0)	14	(12)	5	(64)
Accident - Foreign	(15)	66	10	-	7	(2)	1	(3)	(2)	10	-	(1)	34	104
Track Work - Total	(90)	(13)	(8)	(17)	9	20	1	9	(6)	(3)	1	21	(13)	(89)
Track Work - Metra/PSA	(86)	(13)	(8)	(17)	9	14	(5)	8	(6)	(3)	1	21	(13)	(98)
Track Work - Foreign	(5)	-	-	-	-	6	6	1	-	0	-	-	-	9
Human Error - Total	24	(16)	(6)	(11)	3	37	10	11	45	16	48	43	63	266
Human Error - Metra/PSA	6	(16)	(6)	(11)	1	(1)	(6)	2	44	(2)	44	31	45	131
Human Error - Foreign	18	(0)	-	(0)	3	38	16	9	1	18	4	12	17	135
Sick, Injured, Unruly Passenger - Total	(4)	(11)	(3)	(4)	(1)	(9)	3	0	0	-	27	(9)	3	(6)
Sick, Injured, Unruly Passenger - Metra/PSA	(4)	(11)	(3)	(4)	(1)	(9)	3	0	1	-	27	(9)	3	(6)
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	(0)	-	-	-	-	(0)
Weather - Total	(30)	65	26	59	(1)	12	(21)	2	66	(5)	37	23	20	255
Weather - Metra/PSA	(30)	65	26	59	(0)	15	(21)	2	66	(8)	37	23	21	254
Weather - Foreign	0	-	-	-	(0)	(2)	(1)	-	1	3	-	-	(1)	0
Passenger Loading - Total	(15)	(17)	(4)	(8)	-	(17)	(15)	(1)	1	(1)	17	(7)	11	(56)
Lift Deployment - Total	(9)	(1)	-	(0)	-	(3)	(5)	(1)	14	1	1	21	24	42
Obstruction/Debris - Total	2	(14)	(6)	(11)	(3)	13	(1)	0	23	7	7	13	(12)	18
Catenary Failure - Total	-	(19)	(3)	(5)	-	-	-	-	-	-	-	-	-	(27)
Other - Total	(3)	(5)	(2)	(3)	3	(5)	10	5	13	(0)	14	13	5	44
Total Trains Delayed	(219)	20	(15)	(27)	49	102	(21)	(61)	301	34	246	222	301	932
Total Metra/PSA Delays	(189)	(39)	(24)	(28)	12	37	(26)	(9)	310	1	248	148	215	657
Total Foreign Carrier Delays	(30)	59	9	1	36	65		(52)	(10)	33	(3)	74	86	275

Data for current month is final (08/05/19) version of TOPS

<sup>&#</sup>x27;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.

<sup>&#</sup>x27;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 7.a: Train Delays by Cause & Month 2019

Top 2 causes for each month are shaded Cause Category Feb Mar May Jun Jul Aug Sep Oct Nov Dec Jan - Jun Jan Apr Freight Interference - Total 10.1% Freight Interference - Peak 3.8% Primary 2.4% 6.3% Freight Interference - Off-Peak 4.2% 2.1% Signal/Switch Failure - Total 1,214 20.5% Signal/Switch Failure - Metra/PSA 16.2% 11.5% Primary 4.79 Signal/Switch Failure - Foreign 4.3% Primary 3.0% 1.3% Mechanical Failure - Total 9.6% Mechanical Failure - Metra/PSA 9.3% Non-Locomotive Equipment Failure - Metra/PSA 2.3% 1.3% Locomotive Failure - Metra/PSA 7.0% Secondary 4.9% Mechanical Failure - Foreign 0.3% Passenger Train Interference - Total 1.4% Passenger Train Interference - Metra/PSA 0.49 Passenger Train Interference - Foreign 1.0% Accident - Total 5.7% Accident - Metra/PSA 3.4% Accident - Foreign 2.3% Track Work - Total 5.5% Track Work - Metra/PSA 5.2% Track Work - Foreign 0.3% Human Error - Total 11.3% Human Error - Metra/PSA 7.1% Human Error - Foreign 4.3% Sick, Injured, Unruly Passenger - Total 3.1% Sick, Injured, Unruly Passenger - Metra/PSA 3.1% Sick, Injured, Unruly Passenger - Foreign 0.0% Weather - Total 1,082 18.3% Weather - Metra/PSA 1,076 18.2% Weather - Foreign 0.19 Passenger Loading - Total 3.5% Lift Deployment - Total 2.6% Obstruction/Debris - Total 5.1% Catenary Failure - Total 0.1% Other - Total 3.0% **Total Trains Delayed** 100.0% 1,341 1,805 5,909 Total Metra/PSA Delays 1.129 1.328 4,564 77.29 **Total Foreign Carrier Delays** 1 345 22.89

Data for current month is FINAL (08/05/19) version of TOPS

'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 7.b: Train Delays by Cause & Month

Cause Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	- Jun
Freight Interference - Total	134	126	154	86	136	141	101	95	133	159	112	137	777	14.7%
Freight Interference - Peak	65	52	55	30	42	55	39	29	30	61	44	54	299	5.7%
Primary	36	25	26	20	27	26	16	19	17	34	27	26	160	3.09
Secondary	29	27	29	10	15	29	23	10	13	27	17	28	139	2.69
Freight Interference - Off-Peak	69	74	99	56	94	86	62	66	103	98	68	83	478	9.0%
Primary	43	58	76	49	69	62	48	52	68	66	48	57	357	6.89
Secondary	26	16	23	7	25	24	14	14	35	32	20	26	121	2.39
Signal/Switch Failure - Total	160	171	102	95	145	149	128	141	124	110	217	197	822	15.6%
Signal/Switch Failure - Metra/PSA	97	133	96	73	113	103	103	131	97	89	179	188	615	11.6%
Primary Secondary	68 29	105 28	51 45	52 21	92 21	63 40	74 29	72 59	73 24	61 28	144 35	132 56	431 184	8.25 3.55
*	63	38	6	22	32	46	25	10	27	21	38	9	207	3.9%
Signal/Switch Failure - Foreign Primary	63 22	38 33	5 5	22	32 17	46 30	25 16	10 8	17	21 15	38 26	5	207 127	3.9% 2.49
Secondary Secondary	41	33 5	1	20	17	30 16	16 9	2	10	6	26 12	4	80	1.59
Mechanical Failure - Total	204	139	89	60	74	92	65	102	70	95	94	98	658	12.4%
Mechanical Failure - Metra/PSA	200	132	88	55	74	92	63	102	69	87	84	96	641	12.19
Non-Locomotive Equipment Failure - Metra/PSA	46	49	21	10	10	12	23	7	13	30	29	26	148	2.8%
Primary	13	13	8	5	8	8	15	6	7	8	7	10	55	1.09
Secondary	33	36	13	5	2	4	8	1	6	22	22	16	93	1.89
Locomotive Failure - Metra/PSA	154	83	67	45	64	80	40	95	56	57	55	70	493	9.3%
Primary	25	19	20	15	20	21	20	20	16	22	18	25	120	2.39
Secondary	129	64	47	30	44	59	20	75	40	35	37	45	373	7.19
Mechanical Failure - Foreign	4	7	1	5	-	-	2	-	1	8	10	2	17	0.39
Passenger Train Interference - Total	15	12	9	29	33	28	25	5	19	17	23	7	126	2.4%
Passenger Train Interference - Metra/PSA	7	5	6	12	10	7	1	3	6	9	8	4	47	0.99
Passenger Train Interference - Foreign	8	7	3	17	23	21	24	2	13	8	15	3	79	1.5%
Accident - Total	25	82	70	12	25	-	19	23	20	43	45	43	214	4.0%
Accident - Metra/PSA	25	79	67	7	12	-	13	17	20	43	45	43	190	3.69
Accident - Foreign	-	3	3	5	13	-	6	6	-	-	-	-	24	0.5%
Track Work - Total	11	18	43	101	100	100	58	59	88	120	51	36	373	7.1%
Track Work - Metra/PSA	11	18	43	101	99	97	57	59	88	120	51	36	369	7.09
Track Work - Foreign	-	-	-	-	1	3	1	-	-	-	-	-	4	0.19
Human Error - Total	109	121	61	52	94	91	80	104	69	72	63	79	528	10.0%
Human Error - Metra/PSA	95	100	49	14	64	59	37	92	53	49	42	72	381	7.29
Human Error - Foreign	14	21	12	38	30	32	43	12	16	23	21	7	147	2.89
Sick, Injured, Unruly Passenger - Total	24	33	44	33	43	44	36	32	32	25	20	22	221	4.2%
Sick, Injured, Unruly Passenger - Metra/PSA	24	33	44	33	43	44	36	32	32	25	20	22	221	4.29
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09
Weather - Total	172	295	14	27	71	51	8	41	34	10	295	36	630	11.9%
Weather - Metra/PSA	172	294	13	27	70	51	8	40	34	10	295	36	627	11.99
Weather - Foreign	-	1	1	-	1	-	-	1	-	-	-	-	3	0.19
Passenger Loading - Total	31	56	32	13	67	95	78	139	33	35	37	46	294	5.6%
Lift Deployment - Total	24	27	21	13	45	23	30	36	27	18	27	29	153	2.9%
Obstruction/Debris - Total	40	82	29	62	60	51	63	35	30	59	47	57	324	6.1%
Catenary Failure - Total	-	1	1	-	-	-	-	-	9	-	3	63	2	0.0%
Other - Total	38	27	25	19	33	22	31	20	22	19	5	20	164	3.1%
Total Trains Delayed	987	1,190	694	602	926	887	722	832	710	782	1,039	870	5,286	100.0%
Total Metra/PSA Delays	764	987	514	429	690	644	520	706	520	563	843	712	4,028	76.29
Total Foreign Carrier Delays	223	203	180	173	236	243	202	126	190	219	196	158	1.258	23.89

Data for latest month is final (01/28/19) version from TOPS.

<sup>&#</sup>x27;Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.

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

Table 8: Train Delays by Duration June 2019

June 2019														
Minutes	BNSF		Electric		Her	Milwa		NCS	RI	SWS	NI .	UP	14/	System
		ML	BI	SC	<u> </u>	N	W		ļ	ļ	N	NW	W	
	Weekday Peak *         6-10         30         3         0         0         2         26         8         2         21         8         2         16         7         125													
11-15	12	0	0	1	0	4	6	0	10	5	3	8	0	125 49
16-20	4	0	0	0	1	4	1	1	5	2	5	0	1	24
21+	6	0	0	0	4	9	0	1	7	4	4	6	0	41
Annulled	<u>7</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>19</u>
Sub-Total	59	3	0	1	10	46	16	5	44	19	16	30	9	258
Weekday C														250
6-10	28	5	1	1	0	12	5	4	23	15	6	11	14	125
11-15	11	2	1	0	0	7	1	2	7	7	3	7	6	54
16-20	1	0	0	0	0	11	4	0	5	3	4	3	1	32
21+	9	2	0	0	1	9	2	0	2	7	11	6	10	59
Annulled	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>7</u>
Sub-Total	51	9	2	1	1	41	12	6	39	32	25	27	31	277
Saturday													',	
6-10	2	2	0	0	0	9	0	0	4	1	7	6	8	39
11-15	2	0	0	0	0	7	1	0	1	0	10	2	3	26
16-20	0	0	0	1	0	2	1	0	1	0	8	0	1	14
21+	1	0	0	0	0	2	1	0	5	0	3	5	2	19
Annulled	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Sub-Total	5	2	0	1	0	20	3	0	11	1	28	13	14	98
Sunday-Holiday														
6-10	2	0	0	0	0	4	7	0	4	0	4	2	1	24
11-15	0	0	0	0	0	1	1	0	3	0	2	1	1	9
16-20	0	0	0	0	0	0	0	0	0	0	1	5	0	6
21+	2	0	0	0	0	0	2	0	2	0	0	5	0	11
Annulled	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Sub-Total	4	0	0	0	0	5	10	0	9	0	7	13	2	50
June 2019 1	Total													
6-10	62	10	1	1	2	51	20	6	52	24	19	35	30	313
11-15	25	2	1	1	0	19	9	2	21	12	18	18	10	138
16-20 21+	5 18	0 2	0	1	1 5	17 20	6 5	1	11 16	5 11	18 18	8 22	3 12	76 130
Annulled	9	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>5</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>0</u>	3	<u>0</u>	12 1	26
TOTAL	119	14	2	3	11	112	41	11	103	52	76	83	56	683
2019 Year-1														
6-10	361	89	36	24	45	292	180	84	411 146	84	204	271 127	337	2,418
11-15 16-20	127 79	48 23	8 2	13 5	20 15	155 90	97 41	28 13	71	61 27	135 68	72	190 103	1,155 609
21+	155	42	9	3	31	170	92	31	153	98	101	151	163	1,199
Annulled	<u>69</u>	<u>133</u>	<u>39</u>	<u>76</u>	<u>14</u>	<u>35</u>	<u> 26</u>	<u>5</u>	<u>36</u>	<u>14</u>	<u>32</u>	<u>17</u>	<u>32</u>	528
TOTAL	791	335	94	121	125	742	436	161	817	284	540	638	825	5,909
TOTAL	731	333	34	121	123	742	430	101	017	204	340	030	023	3,303
					Sha	re of De	lays by I	Duratio	n					
200	DNCE		Fl	1		D dil		NICC	DI I	CMC		ш		Contain
Minutes	BNSF	ML	Electric BI	SC	Her	Milwa N	W	NCS	RI	SWS	N	UP NW	w	System
June 2019 1	Total				<u>i</u>									
6-10	52.1%	71.4%	50.0%	33.3%	18.2%	45.5%	48.8%	54.5%	50.5%	46.2%	25.0%	42.2%	53.6%	45.8%
11-15	21.0%	14.3%	50.0%	33.3%	0.0%	17.0%	22.0%	18.2%	20.4%	23.1%	23.7%	21.7%	17.9%	20.2%
16-20	4.2%	0.0%	0.0%	33.3%	9.1%	15.2%	14.6%	9.1%	10.7%	9.6%	23.7%	9.6%	5.4%	11.1%
21+	15.1%	14.3%	0.0%	0.0%	45.5%	17.9%	12.2%	9.1%	15.5%	21.2%	23.7%	26.5%	21.4%	19.0%
Annulled	7.6%	0.0%	0.0%	0.0%	27.3%	4.5%	2.4%	9.1%	2.9%	0.0%	3.9%	0.0%	<u>1.8%</u>	3.8%
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%
							. 2.3/0		22.073					22.0,0
<b>2019 Year-to-Date Delays By Duration</b> 6-10														
11-15	16.1%	14.3%	8.5%	10.7%	16.0%	20.9%	22.2%	17.4%	17.9%	21.5%	25.0%	19.9%	23.0%	19.5%
16-20	10.0%	6.9%	2.1%	4.1%	12.0%	12.1%	9.4%	8.1%	8.7%	9.5%	12.6%	11.3%	12.5%	10.3%
21+	19.6%	12.5%	9.6%	2.5%	24.8%	22.9%	21.1%	19.3%	18.7%	34.5%	18.7%	23.7%	19.8%	20.3%
Annulled	8.7%	39.7%	41.5%	62.8%	<u>11.2%</u>	4.7%	6.0%	3.1%	4.4%	4.9%	<u>5.9%</u>	2.7%	3.9%	8.9%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
*Includes pe														