### **On-Time Performance**

**July 2018** 



# On-Time Performance July 2018

This report presents an analysis of July 2018 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 2013.

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.

### Changes in Reporting

In continued efforts to streamline and enhance the information provided in this report, Metra staff modified or removed the following tables effective with the March 2018 Report:

- Table 1: Scheduled and Delayed Trains, and On-Time Performance by Service Period and Line Modified to include a year-to-date time period.
- Table 2: On-Time Performance by Line and Branch Made minor formatting changes.
- Table 3: List of Weekday Trains less than 85% On-Time Made minor formatting changes.
- Table 4: Delay Incident Codes and Definitions Removed
- Table 5: Delay Incident Codes Sorted by Cause Category & Carrier Designation Made minor formatting changes. Changed table number and title to Table 4: Delay Codes by Cause Category & Carrier.
- Table 6: Frequency of Train Delays by Control and Line Removed
- Table 7: Number of Delays by Date Removed
- Table 8: Frequency of Train Delays by Cause and Line Added shading to highlight the top two delay causes for each line. Changed table number and title to Table 5: Train Delays by Cause and Line.
- Table 9: Frequency of Train Delays by Cause and Line Added shading to highlight the top two delay causes for each line. Changed table number and title to Table 6: Train Delays by Cause & Line YTD.
- Table 10: Frequency of Train Delays by Cause & Month Added shading to highlight the top two delay causes for each month. Changed table number and title to Table 7: Train Delays by Cause & Month.
- Table 11: Freight Delays Removed
- Table 12: Frequency of Lift-Deployment Train Delays by Line & Month Removed
- Table 13: Frequency of Train Delays by Duration Included delay information for the Saturday and Sunday service periods. Changed table number and title to Table 8: Train Delays by Duration.
- Table 14: Average Length of Delay by Service Period , in Minutes Removed

Table 1.a: Scheduled Trains, Delayed Trains, and On-Time Performance by Service Period and Line July 2018

				W	eekdays	s						Weel	kends				Total	
	l	Peak*		Off	-Peak*	*		Total		Sa	turday	S	Sunday	/s & Ho	lidays			
	Trains Scheduled	Trains Late	Percent On-Time															
BNSF	1,134	85	92.5%	870	87	90.0%	2,004	172	91.4%	119	7	94.1%	114	10	91.2%	2,237	189	91.6%
Elec -ML	879	11	98.7%	885	12	98.6%	1,764	23	98.7%	160	7	95.6%	120	10	91.7%	2,044	40	98.0%
-BI	273	2	99.3%	294	6	98.0%	567	8	98.6%	32	6	81.3%				599	14	97.7%
-SC	<u>273</u>	<u>3</u>	98.9%	<u>651</u>	<u>6</u>	99.1%	<u>924</u>	<u>9</u>	99.0%	<u>128</u>	<u>6</u>	95.3%	<u>120</u>	<u>1</u>	99.2%	<u>1,172</u>	<u>16</u>	98.6%
Subtotal	1,425	16	98.9%	1,830	24	98.7%	3,255	40	98.8%	320	19	94.1%	240	11	95.4%	3,815	70	98.2%
Heritage	126	6	95.2%	21	3	85.7%	147	9	93.9%							147	9	93.9%
Milw -N	524	21	96.0%	736	38	94.8%	1,260	59	95.3%	80	10	87.5%	108	6	94.4%	1,448	75	94.8%
-W	<u>566</u>	<u>3</u>	99.5%	<u>652</u>	<u>25</u>	96.2%	<u>1,218</u>	<u>28</u>	97.7%	<u>96</u>	<u>2</u>	97.9%	<u>108</u>	<u>7</u>	93.5%	<u>1,422</u>	<u>37</u>	97.4%
Subtotal	1,090	24	97.8%	1,388	63	95.5%	2,478	87	96.5%	176	12	93.2%	216	13	94.0%	2,870	112	96.1%
NCS	189	2	98.9%	231	3	98.7%	420	5	98.8%							420	5	98.8%
RI	756	24	96.8%	651	25	96.2%	1,407	49	96.5%	128	1	99.2%	168	6	96.4%	1,703	56	96.7%
sws	231	20	91.3%	399	33	91.7%	630	53	91.6%	24	0	100.0%				654	53	91.9%
UP -N	628	6	99.0%	823	15	98.2%	1,451	21	98.6%	107	8	92.5%	110	9	91.8%	1,668	38	97.7%
-NW	689	11	98.4%	674	23	96.6%	1,363	34	97.5%	97	19	80.4%	91	17	81.3%	,	70	95.5%
-W	<u>566</u>	<u>51</u>	91.0%	<u>673</u>	<u>51</u>	92.4%	<u>1,239</u>	<u>102</u>	91.8%	<u>80</u>	<u>10</u>	87.5%	<u>108</u>	<u>8</u>	92.6%		<u>120</u>	91.6%
Subtotal	1,883	68	96.4%	2,170	89	95.9%	4,053	157	96.1%	284	37	87.0%	309	34	89.0%	4,646	228	95.1%
System	6,834	245	96.4%	7,560	327	95.7%	14,394	572	96.0%	1,051	76	92.8%	1,047	74	92.9%	16,492	722	95.6%

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

Table 1.b: Scheduled Trains, Delayed Trains, and On-Time Performance by Service Period and Line January - July 2018

Peak*			W	eekdays	5						Weel	kends				Total	
-										•			,	lidays			
														Percent On-Time	Trains Scheduled		Percent On-Time
cileduled	Late	Oll-Tille	Scrieduled	Late	Oll-Tille	Scrieduleu	Late	OII-TIIIIe	Scheduled	Late	OII-TIIIIe	Scrieduled	Late	OII-TIIIIE	Scrieduled	Late	OII-TIME
8,030	752	90.6%	6,014	447	92.6%	14,044	1,199	91.5%	863	53	93.9%	604	29	95.2%	15,511	1,281	91.7%
6,249	125	98.0%	6,267	69	98.9%	12,516	194	98.4%	1,200	23	98.1%	660	22	96.7%	14,376	239	98.3%
1,937	38	98.0%	2,086	43	97.9%	4,023	81	98.0%	240	15	93.8%				4,263	96	97.7%
<u>2,015</u>	<u>33</u>	98.4%	<u>4,620</u>	<u>64</u>	98.6%	<u>6,635</u>	<u>97</u>	98.5%	<u>959</u>	<u>15</u>	98.4%	<u>658</u>	<u>11</u>	98.3%	<u>8,252</u>	<u>123</u>	98.5%
10,201	196	98.1%	12,973	176	98.6%	23,174	372	98.4%	2,399	53	97.8%	1,318	33	97.5%	26,891	458	98.3%
894	100	88.8%	149	24	83.9%	1,043	124	88.1%							1,043	124	88.1%
3,722	232	93.8%	5,218	431	91.7%	8,940	663	92.6%	625	48	92.3%	606	31	94.9%	10,171	742	92.7%
<u>4,020</u>	<u>164</u>	95.9%	<u>4,622</u>	<u>202</u>	95.6%	<u>8,642</u>	<u>366</u>	95.8%	<u>723</u>	<u>25</u>	96.5%	<u>594</u>	<u>36</u>	93.9%	<u>9,959</u>	<u>427</u>	95.7%
7,742	396	94.9%	9,840	633	93.6%	17,582	1,029	94.1%	1,348	73	94.6%	1,200	67	94.4%	20,130	1,169	94.2%
1,389	101	92.7%	1,639	103	93.7%	3,028	204	93.3%							3,028	204	93.3%
5,364	324	94.0%	4,692	267	94.3%	10,056	591	94.1%	948	22	97.7%	912	42	95.4%	11,916	655	94.5%
1,639	151	90.8%	2,831	215	92.4%	4,470	366	91.8%	180	10	94.4%				4,650	376	91.9%
4,466	138	96.9%	5,933	113	98.1%	10,399	251	97.6%	786	60	92.4%	597	41	93.1%	11,782	352	97.0%
4,909	271	94.5%	4,774	177	96.3%	9,683	448	95.4%	728	65	91.1%	497	64	87.1%	10,908	577	94.7%
<u>4,021</u>	<u>364</u>	90.9%	<u>4,772</u>	<u>371</u>	92.2%	<u>8,793</u>	<u>735</u>	91.6%	<u>607</u>	<u>48</u>	92.1%	<u>595</u>	<u>29</u>	95.1%	<u>9,995</u>	<u>812</u>	91.9%
13,396	773	94.2%	15,479	661	95.7%	28,875	1,434	95.0%	2,121	173	91.8%	1,689	134	92.1%	32,685	1,741	94.7%
18 655	2 793	9/1 3%	53 617	2 526	95 3%	102 272	5 310	9/1 8%	7 850	38/1	95 1%	5 722	305	9/1 7%	115 85/	6.008	94.8%
ci -	7rains heduled 8,030 6,249 1,937 2,015 10,201 894 3,722 4,020 7,742 1,389 5,364 1,639 4,466 4,909 4,021 13,396	Trains heduled         Trains Late           8,030         752           6,249         125           1,937         38           2,015         33           10,201         196           894         100           3,722         232           4,020         164           7,742         396           1,389         101           5,364         324           1,639         151           4,466         138           4,909         271           4,021         364           13,396         773	Trains heduled         Trains Late         Percent On-Time           8,030         752         90.6%           6,249         125         98.0%           1,937         38         98.0%           2,015         33         98.4%           10,201         196         98.1%           894         100         88.8%           3,722         232         93.8%           4,020         164         95.9%           7,742         396         94.9%           1,389         101         92.7%           5,364         324         94.0%           1,639         151         90.8%           4,466         138         96.9%           4,909         271         94.5%           4,021         364         90.9%           13,396         773         94.2%	Trains heduled         Trains Late         Percent On-Time         Trains Scheduled           8,030         752         90.6%         6,014           6,249         125         98.0%         6,267           1,937         38         98.0%         2,086           2,015         33         98.4%         4,620           10,201         196         98.1%         12,973           894         100         88.8%         149           3,722         232         93.8%         5,218           4,020         164         95.9%         4,622           7,742         396         94.9%         9,840           1,389         101         92.7%         1,639           5,364         324         94.0%         4,692           1,639         151         90.8%         2,831           4,466         138         96.9%         5,933           4,909         271         94.5%         4,774           4,021         364         90.9%         4,772           13,396         773         94.2%         15,479	Trains heduled         Trains Late         Percent On-Time         Trains Scheduled         Trains Late           8,030         752         90.6%         6,014         447           6,249         125         98.0%         6,267         69           1,937         38         98.0%         2,086         43           2,015         33         98.4%         4,620         64           10,201         196         98.1%         12,973         176           894         100         88.8%         149         24           3,722         232         93.8%         5,218         431           4,020         164         95.9%         4,622         202           7,742         396         94.9%         9,840         633           1,389         101         92.7%         1,639         103           5,364         324         94.0%         4,692         267           1,639         151         90.8%         2,831         215           4,466         138         96.9%         5,933         113           4,909         271         94.5%         4,774         177           4,021         364	Trains heduled         Trains Late         Percent On-Time         Trains Scheduled         Trains Late         Percent On-Time           8,030         752         90.6%         6,014         447         92.6%           6,249         125         98.0%         6,267         69         98.9%           1,937         38         98.0%         2,086         43         97.9%           2,015         33         98.4%         4,620         64         98.6%           10,201         196         98.1%         12,973         176         98.6%           894         100         88.8%         149         24         83.9%           3,722         232         93.8%         5,218         431         91.7%           4,020         164         95.9%         4,622         202         95.6%           7,742         396         94.9%         9,840         633         93.7%           5,364         324         94.0%         4,692         267         94.3%           1,639         151         90.8%         2,831         215         92.4%           4,466         138         96.9%         5,933         113         98.1% <tr< th=""><th>Trains heduled         Trains Late         Percent On-Time         Trains Scheduled         Trains Late         Percent On-Time         Trains Scheduled           8,030         752         90.6%         6,014         447         92.6%         14,044           6,249         125         98.0%         6,267         69         98.9%         12,516           1,937         38         98.0%         2,086         43         97.9%         4,023           2,015         33         98.4%         4,620         64         98.6%         6,635           10,201         196         98.1%         12,973         176         98.6%         23,174           894         100         88.8%         149         24         83.9%         1,043           3,722         232         93.8%         5,218         431         91.7%         8,940           4,020         164         95.9%         4,622         202         95.6%         8,642           7,742         396         94.9%         9,840         633         93.6%         17,582           1,389         101         92.7%         1,639         103         93.7%         3,028           5,364         3</th><th>Trains heduled         Trains Late         Percent On-Time         Trains Scheduled         Trains Late         Percent Late         Trains Scheduled         Percent Late         Trains Scheduled         To 2</th><th>Trains heduled         Trains Late         Percent On-Time         Trains Scheduled         Percent Late         Trains On-Time         Percent Late         Trains Scheduled         Percent Late         Trains Scheduled         Train</th><th>Trains heduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Percent Late         Trains Scheduled         Percent Late         Trains Scheduled         Trains</th><th>Trains heduled         Trains Late         Percent Scheduled         Trains Scheduled         Trains Late         Percent Scheduled         Trains Scheduled         Trains Scheduled         Percent Late         Trains Scheduled         &lt;</th><th>Trains heduled         Trains Late         Percent On-Time         Trains Scheduled Late         Trains Ineduled On-Time         Trains Scheduled Late         Trains On-Time Scheduled On-Time         Trains Scheduled Indicated On-Time Scheduled Indicated On-Time Scheduled Indicated Indicat</th><th>Trains heduled         Trains heduled         Percent Trains heduled         Trains heduled         Trains heduled         Percent Scheduled         Trains Scheduled<!--</th--><th>Trains heduled         Trains Late         Percent Late         Trains On-Time         Percent Late         Trains Scheduled Late         Trains On-Time         Percent Late         Trains Scheduled Late         Trains Scheduled Late         Trains Scheduled Dn-Time         Trains Scheduled Late         Trains Sche</th><th>Trains heduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Trains On-Time Scheduled         Trains Scheduled Late         Trains On-Time Scheduled Late         Percent Scheduled On-Time Scheduled Late         Trains On-Time Scheduled Late</th><th>Trains heduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Percent Late         Trains Scheduled Late         Trains Scheduled Dn-Time         Percent Late         Trains Scheduled Late         Percent Late        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83.9%         1,043           3,722         232         93.8%         5,218         431         91.7%         8,940           4,020         164         95.9%         4,622         202         95.6%         8,642           7,742         396         94.9%         9,840         633         93.6%         17,582           1,389         101         92.7%         1,639         103         93.7%         3,028           5,364         3	Trains heduled         Trains Late         Percent On-Time         Trains Scheduled         Trains Late         Percent Late         Trains Scheduled         Percent Late         Trains Scheduled         To 2	Trains heduled         Trains Late         Percent On-Time         Trains Scheduled         Percent Late         Trains On-Time         Percent Late         Trains Scheduled         Percent Late         Trains Scheduled         Train	Trains heduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Percent Late      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Trains Scheduled Late         Trains Scheduled Dn-Time         Trains Scheduled Late         Trains Sche</th> <th>Trains heduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Trains On-Time Scheduled         Trains Scheduled Late         Trains On-Time Scheduled Late         Percent Scheduled On-Time Scheduled Late         Trains On-Time Scheduled Late</th> <th>Trains heduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Percent Late         Trains Scheduled         Trains Late         Percent Late         Trains Scheduled Late         Trains Scheduled Dn-Time         Percent Late         Trains Scheduled Late         Percent Late         Trains Scheduled Late         Trains</th> <th>Trains beduled         Trains Late         Percent Late         Trains beduled         Trains Late         Trains beduled         Trains Late         Trains Late         Percent Late         Trains beduled Late  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Trains	Trains beduled         Trains Late         Percent Late         Trains beduled         Trains Late         Trains beduled         Trains Late         Trains Late         Percent Late         Trains beduled Late         Trains bedul

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

Delays data for most recent month is final (08/27/18) 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-Jul	Annual
													11	
BNSF 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	94.0%	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	87.1%	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	93.9%	94.4%
2016	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	94.4%	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	95.6%	94.5%
2018	89.6	91.6	92.7	94.2	90.5	92.2	91.6						91.7%	
2013-2017 average	90.8	91.6	95.8	95.2	92.9	90.1	94.4	93.9	94.2	93.7	94.3	93.8	93.0%	93.4%
Electric 2013	98.1	99.0	98.5	98.0	98.0	98.3	92.4	96.4	97.2	97.3	96.9	97.0	97.4%	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	96.8%	97.5%
2015	96.3	95.4	98.4	98.4	98.3	97.7	96.5	98.2	97.9	97.8	97.8	99.0	97.3%	97.6%
2016	98.0	98.6	98.8	98.9	98.9	96.5	97.9	98.5	97.1	98.6	97.7	97.7	98.2%	98.1%
2017	95.6	98.9	98.3	98.9	98.7	97.1	98.7	98.5	98.2	98.3	97.8	98.4	98.0%	98.1%
2018	97.7	97.2	99.1	99.0	99.2	97.7	98.2	30.3	30.2	30.3	37.0	50	98.3%	30.170
2013-2017 average	96.3	97.4	98.3	98.6	98.5	97.4	96.4	98.0	97.8	98.1	97.7	98.1	97.6%	97.7%
Heritage 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	96.2%	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	88.4%	91.4%
2015	92.1	90.0	96.2	88.6	85.8	89.4	92.0	85.7	86.5	98.5	85.0	90.9	90.7%	90.2%
2016	90.0	92.9	97.4	97.3	95.2	94.8	87.9	94.4	94.6	98.0	94.6	91.8	93.8%	94.2%
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	93.6%	93.2%
2018	86.4	90.7	90.9	95.2	73.4	87.1	93.9						88.1%	
2013-2017 average	90.6	90.6	94.8	94.7	92.6	92.0	92.5	94.3	93.3	96.1	92.4	92.8	92.6%	93.1%
													n	0
Milw - N 2013	95.5	92.4	94.1	95.7	95.3	89.6	92.8	93.6	94.4	93.3	95.7	87.5	93.7%	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	89.3%	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	93.7%	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	94.5%	93.8%
2018 2013-2017 average	91.8	89.2	95.2	91.6	92.4	93.6	94.8	04.0	04.0	95.8	05.6	02.0	92.7%	02.70/
2013-2017 average	90.1	90.4	93.9	96.3	94.9	92.4	93.9	94.0	94.0	95.8	95.6	92.8	93.2%	93.7%
Milw - W 2013	96.6	91.3	96.3	95.8	96.2	90.9	93.2	93.2	92.6	96.5	93.9	93.7	94.4%	94.2%
2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	92.1%	93.5%
2015	93.6	93.0	94.8	97.7	97.2	95.4	96.6	96.8	97.8	99.0	98.2	96.5	95.5%	96.4%
2016	94.0	95.3	94.4	96.0	94.9	93.6	92.1	95.2	97.4	97.0	95.6	93.3	94.3%	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	96.1%	
2018	94.7	91.3	96.3	97.7	95.8	96.5	97.4						95.7%	
2013-2017 average	93.1	92.7	94.4	96.6	96.3	93.6	94.5	95.0	96.0	96.9	96.4	93.3	94.5%	94.9%
													11	u
NCS 2013	95.0	87.5	93.7	90.9	94.0	92.7	93.6	95.0	92.5	93.1	90.0	87.4	92.6%	
2014	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	87.8%	
2015	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	93.0%	93.8%
2016	92.3	95.5	91.7	93.3	94.4	96.3	95.0	96.4	96.1	95.5	95.2	92.6	94.0%	94.5%
2017	92.6	91.6	95.1	95.2	95.5	95.7	94.8	98.0	92.7	91.9	92.6	92.0	94.4%	94.0%
2018	93.2	86.4	95.9	95.5	90.0	92.9	98.8	0.1.0		00 -	0.6.5	0	93.3%	00.00
2013-2017 average	90.0	87.7	92.4	94.1	93.6	93.8	94.7	94.3	94.4	93.7	94.3	91.6	92.4%	92.9%

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

Line	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-Jul	Annual
	2013	96.5	98.1	97.9	94.0	95.5	91.5	93.6	95.5	98.3	96.5	91.7	94.0	95.3%	95.3%
	2014	82.5	83.4	93.4	95.3	95.7	92.5	95.1	97.2	96.6	97.3	97.9	98.6	91.2%	93.8%
	2015	97.4	95.3	98.9	98.7	97.8	97.4	94.2	97.0	96.3	97.3	97.1	97.4	97.1%	97.1%
	2016	92.6	96.2	95.8	96.5	97.9	96.2	93.5	96.3	96.0	98.2	97.9	95.3	95.5%	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	96.3%	95.7%
:	2018	92.2	90.2	95.7	96.8	94.8	95.0	96.7						94.5%	
2013-2017 av	erage	92.9	94.1	96.8	96.5	96.2	94.9	94.3	96.2	96.5	97.1	95.8	95.6	95.1%	95.6%
	2013	94.7	97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	95.8%	95.6%
	2014	83.0	92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	91.9%	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	93.7%	94.5%
:	2016	95.6	97.2	97.8	95.6	91.9	95.3	94.1	93.3	91.6	97.4	96.6	96.2	95.4%	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	95.8%	94.9%
	2018	93.9	90.5	92.0	95.4	92.4	87.1	91.9						91.9%	
2013-2017 av	erage	92.8	94.1	96.1	96.3	93.8	93.5	95.1	94.6	95.3	95.6	93.2	94.4	94.5%	94.6%
	2013	98.3	97.3	97.9	96.6	96.7	93.0	96.0	94.9	97.0	96.5	96.9	98.0	96.6%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	95.8%	96.7%
:	2015	98.6	95.6	98.3	97.1	97.7	98.2	97.0	95.9	98.2	97.0	97.6	98.4	97.5%	97.5%
:	2016	96.9	98.6	97.1	98.3	98.3	98.2	97.0	96.0	98.1	99.1	98.0	98.1	97.8%	97.8%
:	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	97.2%	97.2%
:	2018	97.6	94.2	97.1	97.4	97.6	97.2	97.7						97.0%	
2013-2017 av	erage	96.1	96.6	97.8	97.4	97.5	96.8	96.6	96.5	97.6	97.6	97.4	97.8	97.0%	97.1%
	2013	96.3	97.7	96.0	95.1	93.3	89.2	93.9	93.7	96.3	94.6	94.6	94.2	94.5%	94.6%
	2014	86.6	91.1	96.3	98.6	95.6	95.2	94.7	97.4	98.3	95.0	97.1	96.2	94.0%	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	95.7%	96.2%
	2016	97.0	98.1	97.8	98.1	96.0	96.6	94.9	96.8	96.9	96.5	93.2	93.4	96.9%	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	95.5%	95.1%
	2018	95.7	90.7	95.8	98.0	95.6	91.3	95.5						94.7%	
2013-2017 av	erage	94.4	95.2	97.2	96.4	95.8	94.3	94.0	95.8	96.3	95.7	95.4	95.2	95.3%	95.5%
	2013	96.5	96.2	96.9	94.4	93.7	89.2	95.0	93.0	96.6	96.6	94.0	91.5	94.6%	94.5%
	2014	85.9	90.9	94.4	96.7	96.4	94.8	96.4	94.3	96.7	94.6	95.9	96.2	93.7%	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	94.7%	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	95.2%	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	94.5%	
	2018	92.3	89.0	94.4	92.8	88.9	93.9	91.6						91.9%	
2013-2017 av	erage	93.8	93.6	96.2	95.4	94.3	93.0	95.3	94.7	96.0	95.2	95.2	93.6	94.5%	94.7%
_														· ·	
II -	2013	96.8	96.1	96.7	95.7	95.9	92.4	94.0	95.2	96.4	95.9	95.1	93.8	95.4%	95.4%
_	2014	85.6	89.3	94.9	96.8	94.5	93.1	95.6	95.7	96.8	95.9	96.9	96.5	92.8%	94.3%
	2015	94.9	92.5	97.0	97.2	97.2	95.8	95.3	96.3	96.8	97.0	96.8	97.5	95.7%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.2%	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	96.2%	95.8%
	2018	94.2	92.3	95.9	96.3	94.5	94.6	95.6	05.0				0.5	94.8%	0.5.00
2013-2017 av	erage	93.7	94.3	96.5	96.7	96.0	94.4	95.1	95.8	96.2	96.4	96.0	95.4	95.3%	95.6%

Delays data for most recent month is final (08/27/18) version from TOPS.

<sup>&#</sup>x27;2013-2017 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 July 2018

			Minutes	Delay	
Line	Train	Date	Late		Delay Explanation
BNSF	1227	Thu, Jul 05	13	VE1	LATE FLIP - PASSENGER LOADING AND DELAY FROM 1234 MECHANICAL DELAY
:	81% OT	Wed, Jul 11	6	DD	WAITING FOR U-EPPCXP0-55T TO XO
		Thu, Jul 12	6	G	DARK SIGNAL AT MP 29.9
		Tue, Jul 24	10	RF1	LATE DUE TO EQUIPMENT SWAP WITH THE 1250 THAT WAS RUNNING LATE DUE TO BEING STOPPED AT CONGRESS
BNSF	1231	Mon, Jul 09	11	С	PARK ACCOUNT 1227'S INBOUND TRAIN 1248 HAD M WORKED THE MIDDLE
	67% OT	Wed, Jul 11	8	cc	TRACK WORK/FORM B 7194
		Thu, Jul 12	7	CC	WORKED MT3 @ CICERO
		Tue, Jul 17	6	ZT	LOST SIGNAL AND THEN RAN RESTRICTED SPEED FROM RT 59 TO NEXT SIGNAL
		Wed, Jul 18	11	CC	FORM B 9081 MP5.7-6.0
		Thu, Jul 19	7	CC	WAITING ON TIE DISTRIBUTION TRAIN TO CLEAR AND SPEED RESTRICTION THROUGH WORK LIMITS
DNICE	1227	Fri, Jul 20	12	AM	WAITING FOR LINEUP
BNSF	1237 <b>81% OT</b>	Mon, Jul 02 Tue, Jul 03	15 25	J AM	PASSENGER FORCED DOORS OPEN AT FAIRVIEW. POLICE REMOVED AT MAIN STREET  AMTRAK EMPLOYEE JUMPED FROM A5
'	01/001	Wed, Jul 18	6	CC	MULTIPLE FORM B RESTRICTIONS
		Mon, Jul 23	15	F	DOORS WOULD NOT OPERATE AT DEPARTURE TIME
BNSF	1238	Tue, Jul 10	16	I	HEAVY PASSENGER LOADING
] :	71% OT	Wed, Jul 11	12	1	PASSENGER LOADING ROUTE 59 & NAPERVILLE.
		Thu, Jul 12	14	RF	DS MISROUTE OF 1248 AT CONGRESS
		Mon, Jul 16	10	F	DOOR ISSUES
		Fri, Jul 20 Mon, Jul 30	13 11	I CM	HEAVY/SLOW PASSENGER HANDLING LATE DUE TO TRACK LIGHT ON M.T 3 BETWEEN EAST EOLA AND WEST NAPERVILLE.
BNSF	1239	Tue, Jul 03	11	AM	AMTRAK EMPLOYEE JUMPED FROM A5
	76% OT	Mon, Jul 09	7	ZT	SIGNAL UNKNOWN
		Wed, Jul 18	11	CC	MULTIPLE FORM B RESTRICTIONS/WAITING FOR WORK TRAIN TO CLEAR UP
		Thu, Jul 19	8	D	FOLLOWING U-CKBSWE0-10
		Mon, Jul 23	28	R	RUN THROUGH SWITCH IN YARD BY SW CREW
BNSF	1248	Thu, Jul 05	20	VE1	PASSENGER LOADING AND DELAY FROM 1234 MECHANICAL DELAY
'	81% OT	Wed, Jul 11	8	D1	CONGESTION FROM 1238 RUNNING BEHIND AND HAVING ONLY 2 MAIN TRACKS EAST OF CICERO DUE TO FREIGHT
		Thu, Jul 19	13	RF	TRAINS PARKED ON M.T. 3. WAITING ON SIGNAL TO TIME OUT. DS ATTEMPTED TO GET OTHER TRAINS BY BUT THEN REALIZED ERROR.
		Tue, Jul 24	12	RF	DISPATCHER MISROUTE AT CONGRESS PARK.
BNSF	1256	Tue, Jul 10	8	AM1	LATE FLIP FROM 1221
	81% OT	Mon, Jul 16	17	RF	DISPATCHER GAVE AMTRAK 381 THE LINEUP BEHIND 1256, WHILE THEY WERE IN THE MIDDLE OF THEIR FLIP.
		Thu, Jul 19	22	VE	ENGINE WOULD NOT LOAD. HAD DOUBLE ENGINEER HAD TO GO BACK TO ENGINE TO ADDRESS ISSUE. BRAKER
					TRIPPED NOTHING FOUND.
	1050	Tue, Jul 31	20	GA	DELAY DUE TO AMTRAK SWITCH FAILURE AT ROOSEVELT RD. COULD NOT RUN ANY TRAFFIC ON MAIN TRACK 2.
BNSF	1258 <b>81% OT</b>	Tue, Jul 10 Mon, Jul 16	9 8	RF RF1	LATE FLIP DUE TO 1371 DELAY LATE DUE TO THE D.S MISROUTE OF 1256 AT FAIRVIEW WHICH CAUSED 1258 TO ALSO RUN LATE.
· '	61% UI	Thu, Jul 19	7	VE1	WORKED AROUND 1256 THEN RAN 1256 SCHEDULE HINSDALE TO CPK
		Tue, Jul 31	11	GA	DELAY DUE TO SECOND AMTRAK SWITCH FAILURE AT ROOSEVELT RD. COULD NOT RUN ANY TRAFFIC ON MAIN TRACK
		,			2.
BNSF	1266	Tue, Jul 10	10	CC1	LATE FLIP FROM 1229
:	81% OT	Wed, Jul 11	38	K	BRIDGE STRIKE AT KEDZIE AVE
		Wed, Jul 18	8	CC	FORM B 9224
DNCT	1267	Tue, Jul 24 Tue, Jul 03	26	E A N 4 1	METX 113 HEP SHUTDOWN THEN LOCO SHUTDOWN  LATE FLIP FROM EARLIER AS DELAY
BNSF .	1267 <b>76% OT</b>	Tue, Jul 03	13 9	AM1 ZT	PTC PENALTY LOST SIGNAL/COMMUNICATION
	. 3/0 31	Thu, Jul 19	17	Н	UTILITY PERSON STUGGLED TO UNPLUG TRAIN AT DEPARTURE TIME. DPT 7" LATE.
		Mon, Jul 23	11	RA	DISPATCHERS MISTAKES
		Tue, Jul 24	11	DE1	BRCEOL PARKED ON MT 2 @ CICERO
BNSF	1268	Tue, Jul 17	7	ZT1	LATE FLIP FROM 1231
'	81% OT	Wed, Jul 18	11		LATE FLIP 1231
		Thu, Jul 19	9	J 4 h 4 1	CONTACTED POLICE TO REMOVAL UNRULY CUSTOMER. CUSTOMER LEFT ON OWN.
BNSF	1272	Fri, Jul 20 Tue, Jul 03	<u>6</u> 7	AM1 AM1	LATE FLIP FROM 1231 LATE FLIP AMTRAK EMPLOYEE JUMPED FROM A5
	76% OT	Fri, Jul 06	7	RN	LATE FILE ANTITION FOR EE TO REST OUT
	. 3/0 31	Wed, Jul 11	11	K1	LATE FLIP BRIDGE STRIKE AT KEDZIE AVENUE
		Thu, Jul 12	8	AM	FOLLOWING A4 - WAITING ON 1247 AND 1249
		Tue, Jul 24	6	DE1	MT 1 HINSDALE - LA GRANGE
BNSF	1275	Tue, Jul 03	11		LATE FLIP FROM EARLIER AS DELAY
'	81% OT	Tue, Jul 10	8	ZT	PTC SIGNAL UNKNOWN
		Wed, Jul 18	18	CC1	LATE FLIPS FROM 1239/1276
		Mon, Jul 23	18	RA1	LATE FLIP FROM EARLIER DELAYS IN YARD

## Table 3 (continued): Weekday Trains less than 85% On-Time July 2018

			Minutes	Delay	
Line	Train Date	<u> </u>	Late	Code	Delay Explanation
BNSF	1276	Tue, Jul 03	12	AM1	LATE FLIP FROM EARLIER A5 DELAY
	76% OT	Tue, Jul 10	10	DD	WAITING FOR 1263 TO GET BY
		Wed, Jul 18	16	C1	LATE FLIP FROM 1239
		Fri, Jul 20	6		FOLLOWING 1274
<u> </u>		Mon, Jul 23	20	R1	LATE FLIP, EXPRESSED FROM NAPERVILLE
BNSF	1280	Wed, Jul 11	6	K1	BRIDGE STRIKE AT KEDZIE AVENUE
'	81% OT	Mon, Jul 16	10	R	TM RAN LIGHT GALCH POWER OUT OF EOLA
		Mon, Jul 23	11	F1 DE1	LATE FLIP FROM 1241 FOLLOWING 1278
BNSF	1288	Tue, Jul 24 Mon, Jul 09	8	VE	METX 190 WOULDN'T MAKE TRACK SPEED. MEC INSPECTED AT AUI NOTHING FOUND.
	1200 67% OT	Fri, Jul 13	10	ZG	PROBLEMS GETTING PTC INITIALIZED. B/O WAYSIDE RADIO.
l '	3770 01	Tue, Jul 17	10		LATE FLIP FROM 1243
		Wed, Jul 18	7	U1	LATE ARRIVING ADA PASSENGER ON 1243
		Thu, Jul 19	15	RF	DS MISROUTED 1247 INTO HILL YARD AHEAD OF 1288.
		Mon, Jul 23	8	F1	LATE FLIP FROM 1243/DELAYED BY 1237 DOOR ISSUES
		Wed, Jul 25	10	F	DOORS WOULD NOT FUNCTION AT AURORA
MN	2121	Tue, Jul 03	13	G	13" STOP SIGNAL GRAYSLAKE WEST RESTRICTED SPEED TO ROUND LAKE.
	76% OT	Mon, Jul 09	12	F	12" DELAY, DOOR ISSUES ENROUTE.
		Fri, Jul 13	9	VF	9" DELAY, DOOR ISSUES CAR #8205.
		Mon, Jul 16	8	U	8" DELAY, ADA LIFT AND 30MPH SPEED RESTRICTION.
<u> </u>		Tue, Jul 17	9	U	9" DELAY, ADA LIFT AND 20MPH SPEED RESTRICTION.
MN	2155	Tue, Jul 03	9	E1	FIXED MECHANICAL ISSUES DROPPED CARMAN OFF AT WAC4
	81% OT	Thu, Jul 05	18	G1	18" DELAY, LATE TURN FROM #2158.
		Mon, Jul 09	10	KP1	10" DELAY, WAITED FOR DELAYED #2160 TO CLEAR RONDOUT.
N 41 A /	2220	Fri, Jul 20	11	<u>U1</u>	7" WAITING FOR #2160 TO CLEAR RONDOUNT; 5" UP CROSS TRAFFIC, MAYFAIR.
MW	2230 <b>67% OT</b>	Fri, Jul 06	10 7	- 1	10" DELAY: SLOW/HEAVY PASSENGER LOADING (CUBS FANS); ADA, ROSELLE; ADA, ELGIN; ADA SCHAUMBURG. 8" 2 ADA'S; SLOW PASSENGER LOADING.
l '	57% UI	Mon, Jul 23 Tue, Jul 24	7	U	4" SLOW LOADING PASSENGERS;2" ADA ROSELLE;2" ADA BARTLETT.
		Thu, Jul 26	6	i	6" DELAY, SLOW PASSENGER LOADING ENROUTE.
		Fri, Jul 27	6	i	HEAVY BOARDING.
		Mon, Jul 30	9	i	9" DELAY, SLOW/HEAVY PASSENGER LOADING & STOP SIGNAL @ A-3.
		Tue, Jul 31	6	i	3" SLOW PASSENGER LOADING; 3"ADA ROSELLE TO CUS; 1" DEPARTED BIG TIMBER LATE DUE TO WAITING ON LAST
		,			MINUTE PASSENGERS.
MW	2253	Mon, Jul 02	11	D1	11" DELAY, LATE TURN FROM #2252.
1	81% OT	Thu, Jul 05	6	CH	7" DELAY, RESTRICTED SPEED FROM CANAL ST. TO A-5. BACK OFFICE CONTRACTOR POWER SURGE. CAUSED BY CN
					FREIGHT.
		Fri, Jul 06	11	I1	11" DELAY: 5" LATE TURN FROM #2252, NO FURTHER DELAY GIVEN.
<u> </u>		Fri, Jul 13	9	l1	9" DELAY, LATE TURN FROM #2252.
SWS	805	Thu, Jul 12	6	D	21M DELAY 733/54AMBRC MEETING SW808/SW810, CSX Q137-10 WEST ,13000'
'	81% OT	Tue, Jul 17	7	G1	DELAYED 10M @ FOREST HILL MEETING LATE 808 & 6M ASHBURN ACCT SIG/SWITCH PROBLEMS IN PLANT
		Thu, Jul 26	7 7	G1 GF	5M DELAY MEETING SW808 AT CSX. 5M DELAY MEETING LATE SW812
SWS	836	Mon, Jul 30 Tue, Jul 03	31	GF1	10M DELAY CP518 ACCT. NS CONTROL SYSTEM BEING REBOOTED 11M DELAY CSX MEETING SW810.  38M CP RIDGE; SWITCH FAILURE. COPYING AND COMPLYING WITH IHB DISP INSTRUCTIONS (WAIT FOR SWS#827 TO
2003	030	rue, Jui 03	31	OFI	CLEAR). RUN RESTR. SPEED TO NEXT SIGNAL.
	76% OT	Thu, Jul 05	8	GA	11M HARRISON ST. RED SIGNAL, SWITCH FAILURE CUS.
		Fri, Jul 06	11	D	12M CP 21ST ST 636/648PM FOR NS881 BNSF9293 W/ 130 CARS 7490FT (SHORT TIMER.)
		Mon, Jul 16	15	G1	25M CP RIDGE 600/625PM MEET SWS#829, SINGLE TRACKING AROUND TRACK CIRCUIT ISSUES ASHBURN
		Fri, Jul 27	30	L1	DEPART ORLAND PK. 153RD ST. 34M LATE ACCT. LATE FLIP OF SWS823 3M ASHBURN HELD FOR SWS831 TO CLEAR.
UPNW	/ 638	Fri, Jul 06	10	I	HEAVY LOADING PASSENGERS FOR THE CUBS GAME.
1	67% OT	Wed, Jul 11	10	CC	FORM B, SINGLE TRACK AT CRYSTAL LAKE. 2 ADA LIFTS.
		Tue, Jul 24	7	- 1	SLOW PASSENGER LOADING EN ROUTE & ONE ADA LIFT.
		Thu, Jul 26	7	I	SLOW AND HEAVY PASSENGER LOADING EN ROUTE.
		Fri, Jul 27	7	1	HEAVY PASSENGER LOADING EN ROUTE.
		Mon, Jul 30	9	UF	2 ADA LIFTS & ISSUES WITH CAB CAR ADA LIFT #8423 HARD TO DEPLOY & STOW.
LIDAUA	. 640	Tue, Jul 31	8	F	DOOR LIGHT ISSUES, STICKY DOORS ON COACH CAR 7208, & ADA LIFT.
UPNW	/ 640 <b>81% OT</b>	Thu, Jul 05	7	I1	LATE ARRIVAL OF #609 AT HARVARD AND SLOW LOAD PASSENGERS EN ROUTE.
. '	D1/0 U1	Fri, Jul 06 Fri, Jul 13	7 17	I B	HEAVY PASSENGER LOADING FOR THE CUBS GAME.  DEPARTED 10" LATE DUE TO HAVING TO GET NEW WARRANTS ISSUED DUE TO ERROR IN THE FORM C REGARDING THE
		111, Jul 13	1/	ь	SINGLE TRACKING MP51.5-45.7.
		Mon, Jul 23	38	KD	48" HEP & LOADING ISSUES WITH METX176/166 @MT. PROSPECT(UNDER INVESTIGATION). SPLIT MU CABLE
UPW	49	Wed, Jul 11	13	DE1	DELAYED ON ACCT. AGBNP-11 SEPERATED ON TRACK 2 @ WEST CHICAGO.
	80% OT	Thu, Jul 12	12	D1	FREIGHT TRAIN INTERFERENCE @ KEDZIE (KBRG1) & FREIGHT INTERFERECE @ CN @ WEST CHICAGO (M34391-12).
	-	.,		-	2
		Wed, Jul 18	16	G	SWITCH FAILURE AT KEDZIE, CROSS OVER SWITCH FROM TRACK 2 TO 3 OUT OF CORRESPONDENCE. RAN TRACK 2 OUT
1					
					OF HALSTED. TRAINS AHEAD.

## Table 3 (continued): Weekday Trains less than 85% On-Time July 2018

			Minutes	Delay	
Line	Train D	ate	Late	Code	Delay Explanation
UPW	51	Wed, Jul 11	23	DE1	DELAYED ON ACCT. AGBNP-11 SEPERATED ON TRACK 2 @ WEST CHICAGO.
	81% OT	Thu, Jul 12	8	D1	FREIGHT TRAIN INTERFERENCE @ KEDZIE (ZBRG1).
		Wed, Jul 18	10	G	SWITCH FAILURE AT KEDZIE, CROSS OVER SWITCH FROM TRACK 2-3 OUT OF CORRESPONDENCE. RAN TRK 2 OUT OF
					HALSTED. TRAINS AHEAD.
		Thu, Jul 19	10	D1	DELAYED FOLLOWING #49.
UPW	52	Tue, Jul 03	13	D	DELAYED WAITING AT LOMBARD FOR ZG2OA TO CLEAR.
	76% OT	Thu, Jul 05	25	KP	STOPPED AT BELLWOOD FOR POLICE ACTIVITY AT MELROSE PARK (ARMED MEN STOLE A CAR, PD LOOKING FOR THEM
					NEAR STATION).
		Fri, Jul 06	27	D	DELAYED AT 25H AVE WAITING FOR ZG1BRB-06 TO CLEAR MELROSE PARK FOLLOWING #37, FREIGHT TRAFFIC CLEARED
					AT 15:25.
		Tue, Jul 17	9	D	RAN TRAIN CONTROL UP TO KEDZIE, HELD AT RED SIGNAL WAITING FOR QNLPR TO CLEAR OFF THE ROCKWELL.
		Thu, Jul 19	7	CC	DELAYED THROUGH FORM B AT MP29-31.5.
UPW		Wed, Jul 11	15	DE1	DELAYED ON ACCT. AGBNP-11 SEPERATED ON TRACK 2 @ WEST CHICAGO.
	75% OT	Thu, Jul 12	10	D1	FREIGHT TRAIN INTERFERENCE @ KEDZIE (ZBRG1) & FREIGHT INTERFERENCE @ CN @ WEST CHICAGO.
		Tue, Jul 17	10	D	RAN ON TRAIN CONTROL FROM OAK PARK TO ELMHURST & FROM ELMHURST TO GLEN ELLYN.
		Wed, Jul 18	30	G	FOLLOWING TRAINS AHEAD DUE TO SWITCH FAILURE AT KEDZIE, CROSS OVER SWITCH FROM TRK 2-3 OUT OF
					CORRESPONDENCE. RAN TRK 2 OUT OF HALSTED.
		Thu, Jul 19	20	J1	DELAYED FOLLOWING #53.
UPW		Thu, Jul 05	35	KP1	DEPARTED ELBURN 35" LATE ON ACCOUNT OF LATE ARRIVAL OF #37.
	76% OT	Thu, Jul 12	6	U	TWO ADA LIFTS & HEAVY PASSENGER LOADING EN ROUTE.
		Thu, Jul 19	7	D1	DEPARETED ELBURN 5" LATE ON ACCOUNT OF LATE ARRIVAL OF #37; HEAVY PASSENGER LOADING AT GENEVA, W.
					CHICAGO, & ELMHURST.
		Fri, Jul 27	10	CC	WAITING @ TURNER FOR WB'S TO CLEAR TRK1 AT WINFIELD DUE TO WORKTRAIN ON TRK3 CHANGING FENCING,
					CROSS PADS, SURFACING AND DUMPING BALLAST.
		Mon, Jul 30	18	CC1	DEPARTED ELBURN 5" LATE, LATE ARRIVAL OF #37, FORM A MP26.75-27.75 (10"). HEAVY PASSENGER LOADING,
					ELMHURST & 2 ADA LIFTS.
UPW	57	Mon, Jul 09	10	VE	DEPARTED CPT 20" DOWN HAD TO SWAP EQUIPMENT DUE TO BAD ORDER ENGINE METX 150 WOULD NOT LOAD.
			_		
	81% OT	Wed, Jul 11	9		DELAYED ON ACCT. AGBNP-11 SEPERATED ON TRACK 2 @ WEST CHICAGO.
		Wed, Jul 18	17	G	FOLLOWING TRAINS AHEAD DUE TO SWITCH FAILURE AT KEDZIE, CROSS OVER SWITCH TRK 2-3 OUT OF
					CORRESPONDENCE. RAN TRK 2 OUT OF HALSTED.
		Thu, Jul 19	12	J1	DELAYED FOLLOWING #55.
UPW		Thu, Jul 12	7	U	SLOW LOADING AN ADA PASSENGER @ WHEATON.
	81% OT	Wed, Jul 18	8	G	FOLLOWING TRAINS AHEAD DUE TO SWITCH FAILURE AT KEDZIE, CROSS OVER SWITCH FROM TRK 2-3 OUT OF
					CORRESPONDENCE. RAN TRK2 OUT OF HALSTED.
		Thu, Jul 19	8	J1	DELAYED FOLLOWING #57 FROM GRACE.
		Mon, Jul 30	8	D	DELAYED FOLLOWING THE MPRCLW-30.

Data is final (08/27/18) version from TOPS.

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

			METRA/PSA				METRA/PSA (continued)				Foreign Carrier
Cate	gorv		<u> </u>	Cate	zorv			Categ	orv		J
Code				Code				Code			
	Sec.	Ann.	Definition		Sec.	Ann.	Definition	Pri.	Sec.	Ann.	Definition
1	Jec.	AIIII.	Passenger Train Interference	13	Jec.	AIIII.	Human Error	1	Jec.	AIIII.	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		70.10	Freight Interference - Peak & Off-Peak
4	7101	70.15	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	ΥH	YH1	XYH	Derailment - Human Error, Mechanical	DM	DM1	XDM	Freight-Accident/Incident
IB	IB1	XIB	Passenger Handling, Bicycle	YR	YR1	XYR	Derailment - Human Error, Transportation	YF	YF1	XYF	Derailment - Accident, Foreign Line
6			Lift Deployment	ZB	ZB1	XZB	PTC Human Error, Engineering Dept.	8			Signal/Switch Failure
U	U1	XU	Accessibility Related (ADA)	ZH	ZH1	XZH	PTC Human Error, Mechanical	GA	GA1	XGA	Signal/Switch Failure Amtrak (Signal Dept.)
UF	UF1	XUF	ADA Lift Failure	ZP	ZP1	XZP	PTC Dispatcher	GF	GF1	XGF	Signal/Switch Foreign Line
7			Obstruction/Debris	ZR	ZR1	XZR	PTC Human Error, Transportation	ZN	ZN1	XZN	PTC Foreign Line (Non-Train)
K	K1	XK	Obstruction On Tracks	14			Sick, Injured, Unruly Passenger	9			Track Work
KD	KD1	XKD	Train Struck Debris	J	J1	XJ	Passenger Problems/Removal	CA	CA1	XCA	Amtrak Engineering
KP	KP1	XKP	Suspicious Package(s)/Person(s)/Activity	JM	JM1	XJM	Passenger Medical Emergency	11			Non-Locomotive Equipment Failure
8			Signal/Switch Failure	15			Weather	FS	FS1	XFS	NICTD MU Malfunction
CM	CM1	XCM	Switch Malfunction (Track Dept.)	AW	AW1	XAW	Pass. Train Interference, Weather	ZS	ZS1	XZS	PTC NICTD MU Train (On-Board)
G	G1	XG	Signal/Switch Malfunction (Signal Dept.)	CW	CW1	XCW	M of W Work, Weather	12			Locomotive Failure
GM	GM1	XGM	Gate Crossing Malfunction	EW	EW1	XEW	Locomotive Malfunction, Weather	EA	EA1	XEA	Amtrak Locomotive/Car Malfunction
GT	GT1	XGT	Telecom Failure	FW	FW1	XFW	Cab Car/TRL/MU Malfunction, Weather	ZA	ZA1	XZA	PTC Amtrak Train (On-Board)
GX	GX1	XGX	Broken Gate Crossing	GW	GW1	XGW	Signal/Switch Malfunction Weather (Signal Dept.)	13			Human Error
GZ	GZ1	XGZ	ETMS Signal Malfunction [obsolete 2015]	IW	IW1	XIW	Passenger Handling, Weather	BA	BA1	XBA	Amtrak Engineering Human Error
VG	VG1	XVG	Broken Gate Crossing Reported, Nothing Found	KW	KW1	XKW	Obstruction On Tracks, Weather	HS	HS1	XHS	Human Error, NICTD Mechanical Dept.
ZG	ZG1	XZG	PTC Wayside	MW	MW1	XMW	Right of Way Accident/Misc., Weather	RA	RA1	XRA	Human Error, Amtrak Transportation
ZT	ZT1	XZT	PTC Back Office	NW	NW1	XNW	Electricity Utility Failure, Weather	RF	RF1	XRF	Freight Dispatcher/Opr/Non-Freight Train Error
9			Track Work	-		XOW	AC/DC System Failure, Weather	RS	RS1	XRS	Human Error, NICTD Transportation
С	C1	XC	Unscheduled Track Work		RW1		Train Crew Issues, Weather	14			Sick, Injured, Unruly Passenger
CC	CC1	XCC	Scheduled Track Work	UW	UW1	XUW	Accessibility, Weather	JA	JA1	XJA	Amtrak Passenger Problems/Removal
CF	CF1	XCF	Engineering Equipment Malfunction	YW			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				
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				
11		\/F	Non-Locomotive Equipment Failure	T	T1	XT	Property Vandalism	I			
F	F1	XF	Cab Car/Trailer/MU Malfunction	VE	VE1	XVE	Locomotive Problem Reported, Nothing Found	1			
FZ	FZ1	XFZ	ETMS Malfunction on Cab Car [obsolete 2015]	VF	VF1	XVF	Cab Car Problem Reported, Nothing Found	I			
ZF	ZF1	XZF	PTC Malfunction Coach	W	W1	XW	Gas Leak				
12	F4	VE	Locomotive Failure					I			
E	E1	XE	Locomotive Malfunction					I			
EZ	EZ1	XEZ	ETMS Malfunction on Locomotive [obsolete 2015]					I			
ZE	ZE1	XZE	PTC Malfunction Locomotive					ı			
L											
_tt		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
July 2018

			Electric			Mil	w				Uı	nion Pacif	fic	
Cause Category	BNSF	ML	BI	SC	HER	N	W	NCS	RI	SWS	N	NW	W	SYSTEM
Freight Interference - Total	27	-	-	-	5	4	4	1	1	10	2	9	38	101
Freight Interference - Peak	10	-	-	-	4	-	-	-	-	2	-	5	18	39
Primary	1	-	-	-	2	-	-	-	-	2	-	5	6	1
Secondary	9	-	-	-	2	-	-	-	-	-	-	-	12	2.
Freight Interference - Off-Peak	17	-	-	-	1	4	4	1	1	8	2	4	20	62
Primary	11	-	-	-	1	4	3	1	1	7	1	3	16	48
Secondary	6			-	-	- 10	1	-		1	1	1	4	14
Signal/Switch Failure - Total	27	5	7	5	-	19	7	2	4	27	1	5	19	128
Signal/Switch Failure - Metra/PSA	17	5	7	5	-	16	6	-	4	18	1	5	19	103
Primary Secondary	15 2	5	7	5	-	9 7	5 1	-	4	8 10	1	3 2	13 6	74 25
			-	-	-	3		-	-		-		D	25
Signal/Switch Failure - Foreign  Primary	10	-	-	-	-		1	2	-	9	-	-	-	
Secondary	8 2	-	-	-	-	1 2	1	2	-	4 5	-	-	-	10
Mechanical Failure - Total	15		1	_	_	17	_		7	2	5	7	11	65
Mechanical Failure - Metra/PSA	15	-	1		-	15	- 1	-	7	2	5	7	11	63
Non-Locomotive Equipment Failure - Metra/PSA	9		1	-	-	15	-	-	4	1	2	1	4	23
Primary	5	-	1	-	-	1	-	-	2	1	2	1	2	1:
Secondary	4	-	-	-	-	-	-	-	2	-	-	-	2	1.
Locomotive Failure - Metra/PSA	6			_	_	14		_	3	1	3	6	7	40
Primary	3	_	-	-	-	5	-	-	2	1	2	4	3	20
Secondary	3	-	-	-	-	9	-	-	1	-	1	2	4	20
Mechanical Failure - Foreign	_	-	-	_	_	2	_	-	-	_	-	-	-	2
Passenger Train Interference - Total	21	-	-	-	-		2	1	-	1	-		-	25
Passenger Train Interference - Metra/PSA	-	_	_	_	-	_	-	1	_	_	_	_	-	1
Passenger Train Interference - Foreign	21	_	_	_	-	_	2	_	_	1	_	_	-	24
Accident - Total	-	13	-	-	-	-	-	-	6	-	-	-	-	19
Accident - Metra/PSA	_	13	_	-	_	_	-	_	_	_	_	_	_	13
Accident - Foreign	_	_	_	-	_	_	-	_	6	_	_	_	_	6
Track Work - Total	16	3	-	2	-	2	2	1	5	-	1	15	11	58
Track Work - Metra/PSA	15	3	_	2	_	2	2	1	5	_	1	15	11	57
Track Work - Foreign	1	-	_	-	_	_	-	-	_	_	_			1
Human Error - Total	35	3	-	2	4	12	_	_	4	1	9	3	7	80
Human Error - Metra/PSA	8	2	_	1	1	8	_	_	4	_	9	1	3	37
Human Error - Foreign	27	1	_	1	3	4	_	_	_	1	_	2	4	43
Sick, Injured, Unruly Passenger - Total	4	1	-			7	3	_	3	-	7		11	36
Sick, Injured, Unruly Passenger - Metra/PSA	4	1	_	_	_	7	3	_	3	_	7	_	11	36
Sick, Injured, Unruly Passenger - Foreign	_	-	_	_	_	-	-	_	_	_	_	_	-	30
Weather - Total	_	3	2	_	_	_	_	_	_	_	_	3	_	8
Weather - Metra/PSA	_	3	2	_	_	_	_	_	_	_	_	3	_	8
Weather - Foreign	_	_	-	_	_	_	_	_	_	_	_	_	_	
Passenger Loading - Total	14	11	4	_	_	1	15	_	1	_	9	16	7	78
Lift Deployment - Total	5		-	_		6	4	_	3	1	1	2	8	30
Obstruction/Debris - Total	16	1		7	_	5			20	1	1	9	3	63
Catenary Failure - Total	10	-			_ [	-	_ [		20		-	_		03
Other - Total	9	-	-			2	- [	-	2	10	2	1	5	31
Other - Iotal	9	-	-	-	-	_	-	-		10		_	3	31
Total Trains Delayed	189	40	14	16	9	75	37	5	56	53	38	70	120	722
Total Metra/PSA Delays	103	39	14	15	1	62	30	2	49	32	36	59	78	520
Total Foreign Carrier Delays	86	1	0	15	8	13	7	3	7	21	2	11	42	202

Data for current month is FINAL (08/27/18) 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 5.b: Train Delays by Cause and Line

Average July Over Previous Five Years: 2013-2017

Top 2 causes for each line are shaded Union Pacific **BNSF** ML ВІ SC HER Ν W NCS RI sws N NW W SYSTEM Freight Interference - Total Freight Interference - Peak Secondary Freight Interference - Off-Peak Signal/Switch Failure - Total Signal/Switch Failure - Metra/PSA Secondary Signal/Switch Failure - Foreign Primary Mechanical Failure - Total Mechanical Failure - Metra/PSA Non-Locomotive Equipment Failure - Metra/PSA Primary Secondary Locomotive Failure - Metra/PSA Primary Secondary Mechanical Failure - Foreign Passenger Train Interference - Total Passenger Train Interference - Metra/PSA Passenger Train Interference - Foreign n n n Accident - Total Accident - Metra/PSA Accident - Foreign Track Work - Total Track Work - Metra/PSA Track Work - Foreign Human Error - Total Human Error - Metra/PSA n Human Error - Foreign Sick, Injured, Unruly Passenger - Total Sick, Injured, Unruly Passenger - Metra/PSA n 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 **Total Foreign Carrier Delays** n 

Data for current month is FINAL (08/27/18) 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 5.c: Train Delays by Cause and Line

July 2018 Compared to Average July Over Previous Five Years: 2013-2017

Freight Interference - Poak			ipaieu	Electric			Mil					Uı	nion Pacifi	С	
Freight Interference - Peak	Cause Category	BNSF			sc	HER	N	w	NCS	RI	sws				SYSTEM
Freight Interference - Peak	Freight Interference - Total	11	-	-	-	3	(9)	(8)	(7)	(7)	(1)	1	-	22	3
Primary   Secondary   S   S   S   S   S   S   S   S   S			_	_	_			٠,				_	1		
Secondary   S	S		_	_	_	-						_			
Freight Interference - Off-Peak	1		-	-	-	2						-			13
Primary	Freight Interference - Off-Peak	5	-	-	-	1	(7)	(5)	(3)	(5)	(0)	1		9	(5)
Signal/Switch Failure - Total   7   (3)   4   2   (2)   3   (1)   (4)   (4)   18   (0)   (2)   13   31   31   32   32   33   33   34   34   34   34	Primary	0	-	-	-	1	(3)		(3)	(4)	1	0	(1)	7	(2)
Signal/Switch Failure - Metra/PSA   5   (3)   4   2     2   (11)   (4)   (4)   (14)   15   (0)   (1)   13   28   28   28   29   20   (11)   (11)   (11)   (12)   (	Secondary	5	-	-	-	-	(4)	(3)	(0)	(1)	(1)	1	1	2	(3)
Primary   6	Signal/Switch Failure - Total	7	(3)	4	2	(2)	3	(1)	(4)	(4)	18	(0)	(2)	13	31
Primary   6	Signal/Switch Failure - Metra/PSA	5	(3)	4	2	-	2	(1)	(4)	(4)	15	(0)	(1)	13	28
Signal/Switch Failure - Foreign   2	Primary	6	0	5	3	-	1		(2)	(2)	6	(1)		11	26
Primary	Secondary	(1)	(3)	(0)	(1)	-	2	(0)	(3)	(2)	9	1	(2)	2	2
Primary	Signal/Switch Failure - Foreign	2	-	(0)	-	(2)	1	1	1	-	3	-	(1)	(1)	3
Mechanical Failure - Total   (3)   (2)   (0)   (0)   (1)   11   (12)   (2)   (15)   (1)   (2)   (2)   7   (24)	Primary	4	-	-	-		(0)	1	1	-	-	-	(1)	(1)	2
Mechanical Failure - Metra/PSA   (3)   (2)   (0)   (0)   (1)   (1)   (12)   (12)   (15)   (11)   (12)   (2)   (2)   (7)   (25)	Secondary		-	(0)	-		1	(0)		-		-	(1)	-	1
Non-Locomotive Equipment Failure - Metra/PSA 2 (2) (0) (0) (0) (1) (3) (0) 1 (3) (0) 1 (0) 2 (2) 1 (2) 1 (2) 2 (2) 1 (3) (3) (2) 3 (3) (4) (3) (4) (4) (4) (4) (4) (4) (4) (4) (5) (4) (4) (4) (4) (5) (4) (4) (4) (5) (6) (7) (7) (7) (1) (2) (15) (10) (10) (10) (10) (10) (10) (10) (10	Mechanical Failure - Total	(3)	(2)	(0)	(0)	(1)	11	(12)	(2)	(15)	(1)	(2)	(2)	7	(24)
Primary   3	Mechanical Failure - Metra/PSA	(3)	(2)	(0)	(0)	(1)	10	(12)	(2)	(15)	(1)	(2)	(2)	7	(25)
Secondary   (1)	Non-Locomotive Equipment Failure - Metra/PSA	2	(2)	(0)	(0)	(0)	1	(3)	(0)	1	(0)	2	(2)	1	(2)
Locomotive Failure - Metra/PSA	Primary	3	(1)	0	(0)	(0)	1		-		0	2	0	1	5
Primary   (11)     (12)   3   (13)	Secondary	(1)	(1)	(1)	(0)	-	-	(2)	(0)	0	(1)	-	(2)	1	(7)
Mechanical Failure - Foreign	Locomotive Failure - Metra/PSA	(5)	-	-	-	(1)	9	(9)	(2)	(16)	(0)	(4)	(1)	6	(23)
Mechanical Failure - Foreign	Primary		-	-	-	(1)								2	(3)
Passenger Train Interference - Total Passenger Train Interference - Metra/PSA - (0) (0) (2) (1) (0) (1) (0) - (1) (1) (1) (1) (1) (2) - (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Secondary	(4)	-	-	-	(0)	6	(6)	(1)	(13)	(1)	(3)	(2)	3	(20)
Passenger Train Interference - Metra/PSA	Mechanical Failure - Foreign	-			-	-			-	-		-		-	1
Passenger Train Interference - Metra/PSA	Passenger Train Interference - Total	20	(1)	(1)	-	(1)	(4)	1	(0)	(2)	(1)	-	(1)	(1)	10
Passenger Train Interference - Foreign   20   (1)   (0)   -   (1)   (2)   2   -   (1)   (0)   -   -   (0)   16     Accident - Total   (7)   7   (2)   (4)   (0)   (2)   (5)   (1)   1   (0)   (4)   (7)   (1)   (28     Accident - Metra/PSA   (5)   7   (2)   (4)   -   (2)   (4)   (1)   (5)   (0)   (4)   (7)   (1)   (28     Accident - Foreign   (2)   -   -     (0)   (1)   (1)   -     6     -     -     (1)   (1)   (28     Accident - Foreign   (2)   -   -     (0)   (1)   (1)   -       6     -     -       (1)     (1)   (28     Accident - Foreign   (2)   -   -     (0)   (1)   (1)     -	Passenger Train Interference - Metra/PSA	-	(0)	(0)	-	-	(2)	(1)	(0)	(1)	(0)	-	(1)	(1)	(7)
Accident - Total Accident - Metra/PSA (5) 7 (2) (4) - (2) (4) (1) (5) (0) (4) (7) (1) (28 Accident - Metra/PSA (5) 7 (2) (4) - (2) (4) (1) (5) (0) (4) (7) (1) (28 Accident - Foreign (2) (0) (1) (1) (1) - 6 (1) 2 Track Work - Total 1 (6) (2) (11) (0) (6) (1) (0) (4) (2) (4) (1) (4) 4 8 (23) Track Work - Metra/PSA 1 (6) (2) (11) (0) (6) (1) (0) (4) (1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Passenger Train Interference - Foreign	20			-	(1)			-			_			16
Accident - Metra/PSA (5) 7 (2) (4) - (2) (4) (1) (5) (0) (4) (7) (1) (28 Accident - Foreign (2) (0) (1) (1) - 6 (1) 2 (1) 2 (1) (1) (1) - 6 (1) (1) 2 (1) (1) (1) (1) - 6 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Accident - Total	(7)			(4)		(2)	(5)	(1)			(4)	(7)		(26)
Accident - Foreign   (2)     (0)   (1)   (1)   -   6   -     (1)   2	Accident - Metra/PSA	٠,	7			-					٠,				
Track Work - Total  1			_		- ( - /	(0)			-		-		-		
Track Work - Metra/PSA Track Work - Foreign  (1)			(6)	(2)	(11)				(0)		(2)	(4)	4		
Track Work - Foreign					` '						, ,		-	_	
Human Error - Total Human Error - Total Human Error - Metra/PSA (4) (2) (1) (2) 1 2 (6) (1) (2) (0) 6 (8) 2 (16) Human Error - Foreign 22 1 - 1 1 2 (1) (1) - (2) (5) (5) (5) (3) 11  Sick, Injured, Unruly Passenger - Total (0) (5) (1) (2) (0) 5 0 (1) 1 (0) 3 (4) 5 2  Sick, Injured, Unruly Passenger - Metra/PSA (0) (5) (1) (2) (0) 5 0 (1) 1 (0) 3 (4) 5  Sick, Injured, Unruly Passenger - Foreign	· ·		(0)	(2)	(11)	(0)	(0)	(±)	(0)	()		(-/		-	
Human Error - Metra/PSA	<u> </u>		(2)	(1)	(1)	2	1	(7)	(1)	(2)		2	(12)	(1)	
Human Error - Foreign   22   1   - 1   1   2   (1)   (1)   -   (2)   (5)   (5)   (3)   11															
Sick, Injured, Unruly Passenger - Total         (0)         (5)         (1)         (2)         (0)         5         0         (1)         1         (0)         3         (4)         5         2           Sick, Injured, Unruly Passenger - Metra/PSA         (0)         (5)         (1)         (2)         (0)         5         0         (1)         1         (0)         3         (4)         5         2           Sick, Injured, Unruly Passenger - Metra/PSA         (0)         (5)         (1)         (2)         (0)         5         0         (1)         1         (0)         3         (4)         5         2           Sick, Injured, Unruly Passenger - Metra/PSA         (0)         (1)         (2)         (0)         (1) <t< td=""><td>·</td><td></td><td></td><td>(1)</td><td></td><td></td><td></td><td></td><td></td><td>(2)</td><td></td><td></td><td></td><td></td><td></td></t<>	·			(1)						(2)					
Sick, Injured, Unruly Passenger - Metra/PSA       (0)       (5)       (1)       (2)       (0)       5       0       (1)       1       (0)       3       (4)       5       2         Sick, Injured, Unruly Passenger - Foreign       -	<u> </u>			/1\						- 1					
Sick, Injured, Unruly Passenger - Foreign								-							
Weather - Total         (7)         (0)         1         (1)         -         (14)         (6)         (2)         (4)         (1)         (3)         2         (0)         (34)           Weather - Metra/PSA         (7)         (0)         1         (1)         -         (14)         (6)         (2)         (4)         (1)         (3)         2         (0)         (34)           Weather - Metra/PSA         (7)         (0)         1         (1)         -         (14)         (6)         (2)         (4)         (1)         (3)         2         (0)         (34)           Weather - Metra/PSA         (7)         (0)         1         (1)         -		(0)	(5)	(1)	(2)	(0)	5	U	(1)	1	(0)	3	(4)	5	2
Weather - Metra/PSA Weather - Foreign         (7)         (0)         1         (1)         -         (14)         (6)         (2)         (4)         (1)         (3)         2         (0)         (34 Weather - Foreign           Passenger Loading - Total         3         (16)         1         (11)         -         (10)         0         (0)         (24)         -         (7)         (5)         (3)         (72)           Lift Deployment - Total         3         (1)         -         -         -         3         (0)         (1)         3         (1)         -         -         -         3         (0)         (1)         3         (1)         -         -         -         3         (0)         (1)         3         (1)         -         -         -         3         (0)         (1)         3         (1)         4         (4)         (1)         19         (0)         (5)         4         (2)         29           Catenary Failure - Total         -         (13)         (4)         (9)         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td></td> <td>(7)</td> <td>(0)</td> <td></td> <td>- (4)</td> <td>-</td> <td>(4.4)</td> <td>(C)</td> <td>(2)</td> <td>- (4)</td> <td>/4\</td> <td>(2)</td> <td></td> <td>- (a)</td> <td>(24)</td>		(7)	(0)		- (4)	-	(4.4)	(C)	(2)	- (4)	/4\	(2)		- (a)	(24)
Weather - Foreign         -						-	` '								
Passenger Loading - Total  3 (16) 1 (11) - (10) 0 (0) (24) - (7) (5) (3) (72)  Lift Deployment - Total  3 (1) 3 (0) (0) (0) 1 0 1 7 12  Obstruction/Debris - Total  Catenary Failure - Total  Other - Total  Total Trains Delayed  64 (44) (7) (36) (1) (16) (43) (20) (43) 20 (19) (25) 52 (118)  Total Metra/PSA Delays  11 (44) (7) (37) (2) (8) (36) (13) (40) 22 (15) (19) 35 (153)	*	(7)	(0)	1	(1)	-	(14)	(6)	(2)	(4)	(1)	(3)	2	(0)	(34)
Lift Deployment - Total 3 (1) 3 (0) (0) (0) 1 0 1 7 12 Obstruction/Debris - Total 13 (0) (1) 3 (1) 4 (4) (1) 19 (0) (5) 4 (2) 29 Catenary Failure - Total 6 (2) (1) (2) - (1) (2) (1) (1) 10 0 (2) 0 5  Total Trains Delayed 64 (44) (7) (36) (1) (16) (43) (20) (43) 20 (19) (25) 52 (118) Total Metra/PSA Delays 11 (44) (7) (37) (2) (8) (36) (13) (40) 22 (15) (19) 35 (153)		-	- (4.6)		- (4.4)	-	- (4.0)	-	- (0)	- (0.0)	-	-	·	- (2)	- (=0)
Obstruction/Debris - Total       13       (0)       (1)       3       (1)       4       (4)       (1)       19       (0)       (5)       4       (2)       29         Catenary Failure - Total       -       (13)       (4)       (9)       -				1	(11)	-									
Catenary Failure - Total Other - Total Other - Total Other - Total Total Metra/PSA Delays  Other - Total Other - T		_		-	-	-	_	,	٠,						
Other - Total       6       (2)       (1)       (2)       -       (1)       (2)       (1)       (1)       (1)       10       0       (2)       0       5         Total Trains Delayed       64       (44)       (7)       (36)       (1)       (16)       (43)       (20)       (43)       20       (19)       (25)       52       (118)         Total Metra/PSA Delays       11       (44)       (7)       (37)       (2)       (8)       (36)       (13)       (40)       22       (15)       (19)       35       (153)		13				(1)	4	(4)	(1)	19	(0)	(5)	4	(2)	
Total Trains Delayed         64         (44)         (7)         (36)         (1)         (16)         (43)         (20)         (43)         20         (19)         (25)         52         (118)           Total Metra/PSA Delays         11         (44)         (7)         (37)         (2)         (8)         (36)         (13)         (40)         22         (15)         (19)         35         (153)		-				-	-	-	-	-	-	-	-	-	
Total Metra/PSA Delays 11 (44) (7) (37) (2) (8) (36) (13) (40) 22 (15) (19) 35 (153)	Other - Total	6	(2)	(1)	(2)	-	(1)	(2)	(1)	(1)	10	0	(2)	0	5
	Total Trains Delayed	64	(44)	(7)	(36)	(1)	(16)	(43)	(20)	(43)	20	(19)	(25)	52	(118)
	Total Metra/PSA Delays	11	(44)	(7)	(37)	(2)	(8)	(36)	(13)	(40)	22	(15)	(19)	35	(153)
	Total Foreign Carrier Delays	52	0	(0)	1	1	(8)	(7)	(7)	(3)	(2)		(6)	18	35

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'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation.
'Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations.

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

January - July 2018

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

Top 2 causes for each line are shaded			Electric			Mi	lw				- 11	nion Pacifi	ic	
Cause Category	BNSF	ML	BI	sc	HER	N	w	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - Total	183	IVIL		-	46	79	64	39	37	105	9	77	239	878
Freight Interference - Peak	79	_	-	-	39	14	18	10	8	38	1	47	84	338
Primary	33			-	39	8	10	8	4	29	1	18	33	330 176
Secondary	46	-	-	_	7	6	8	2	4	9	-	29	51	162
Freight Interference - Off-Peak	104	-	-	_	7	65	46	29	29	67	8	30	155	540
Primary	76	-	-	_	7	40	34	25	21	49	4	20	129	405
Secondary	28	-	-	-	-	25	12	4	8	18	4	10	26	135
Signal/Switch Failure - Total	180	65	30	36	28	130	92	47	74	115	25	62	66	950
Signal/Switch Failure - Metra/PSA	133	65	30	36	4	98	73	24	70	46	25	55	59	718
Primary	88	51	24	33	3	66	56	18	54	28	15	28	41	505
Secondary	45	14	6	3	1	32	17	6	16	18	10	27	18	213
Signal/Switch Failure - Foreign	47	-	-	-	24	32	19	23	4	69	-	7	7	232
Primary	36	-	-	-	20	9	11	17	4	40	-	1	5	143
Secondary	11		- 40		4	23	8	6		29		6	2	89
Mechanical Failure - Total	140	11	10	3	4	138	47	36	91	29	57	73	84	723
Mechanical Failure - Metra/PSA	138	9	9	3	3	126	47	35	91	29	57	73	84	704
Non-Locomotive Equipment Failure - Metra/PSA	40	9	9	3	-	3	-	2	5	9	25	32	34	171
Primary Secondary	19 21	3 6	3 6	3	-	3	-	1	3 2	5 4	13 12	9 23	11 23	70 101
	98	U	U	,	3	123	47	33	86	20	32	41	50	533
Locomotive Failure - Metra/PSA  Primary	98	-	-	-	3	123 27	11	33 7	23	20 8	32 14	41 11	50 15	533 140
Secondary	76	-	-	-	1	96	36	26	63	12	18	30	35	393
Mechanical Failure - Foreign	2	2	1		1	12	_	1					-	19
Passenger Train Interference - Total	34	3	1	1	10	36	5	10	1	45	-	1	4	151
Passenger Train Interference - Metra/PSA	6	_	_	_		26	2	9	_		_	1	4	48
Passenger Train Interference - Foreign	28	3	1	1	10	10	3	1	1	45	_	_	_	103
Accident - Total	45	21	2	8	-	4	23	13	26	6	30	24	31	233
Accident - Metra/PSA	38	21	2	8	-	4	23	9	15	5	30	24	24	203
Accident - Foreign	7	_	_	-	-	-	-	4	11	1	-	-	7	30
Track Work - Total	83	21	7	19	22	76	10	7	74	9	45	27	31	431
Track Work - Metra/PSA	81	21	7	19	22	76	10	7	74	6	45	27	31	426
Track Work - Foreign	2	-	-	-	-	-	-	-	-	3	-	-	-	5
Human Error - Total	230	24	8	13	10	76	20	19	63	16	32	45	52	608
Human Error - Metra/PSA	118	23	8	12	2	53	18	11	63	10	29	35	36	418
Human Error - Foreign	112	1	-	1	8	23	2	8	-	6	3	10	16	190
Sick, Injured, Unruly Passenger - Total	29	18	2	3	-	32	15	2	27	6	42	23	58	257
Sick, Injured, Unruly Passenger - Metra/PSA	29	18	2	3	-	32	15	2	27	6	42	23	58	257
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weather - Total	161	34	14	11	2	73	59	10	129	16	30	66	33	638
Weather - Metra/PSA	161	34	14	11	2	73	59	10	128	15	30	66	32	635
Weather - Foreign	-	-	-	-	-	-	-	-	1	1	-	-	1	3
Passenger Loading - Total	55	23	11	3	-	39	41	8	43	1	32	68	48	372
Lift Deployment - Total	41	-	-	-	-	20	25	4	12	3	11	21	46	183
Obstruction/Debris - Total	58	12	7	23	2	21	5	9	56	10	13	74	97	387
Catenary Failure - Total	-	2	-	-	-	-	-	-	-	-	-	-	-	2
Other - Total	42	5	4	3	-	18	21	-	22	15	26	16	23	195
Total Trains Delayed	1,281	239	96	123	124	742	427	204	655	376	352	577	812	6,008
Total Metra/PSA Delays	900	233	94	121	35	586	339	128	601	146	340	483	542	4,548
Total Foreign Carrier Delays	381	6	2	2	89	156	88	76	54	230	12	94	270	1,460

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<sup>&#</sup>x27;Netra/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 6.b: Train Delays by Cause & Line - YTD

January - July Average Over Previous 5 Years: 2013-2017

•			Electric			Mi	w				U	nion Pacifi	c	
Cause Category	BNSF	ML	BI	SC	HER	N	w	NCS	RI	sws	N	NW	w	SYSTEM
Freight Interference - Total	134	-	0		21	87	83	81	44	83	11	38	124	706
Freight Interference - Peak	57		0	_	19	19	19	32	12	26	3	18	36	240
Primary	38		-	-	18	12	12	22	7	19	1	9	18	157
Secondary	20	-	0	-	1	6	6	9	5	7	1	9	18	82
Freight Interference - Off-Peak	77	-	-	-	1	68	65	49	33	57	8	20	88	466
Primary	64	-	-	-	1	44	43	42	27	43	5	16	68	353
Secondary	13	-	-	-	-	24	21	8	6	14	4	5	20	113
Signal/Switch Failure - Total	150	42	22	23	13	138	91	58	57	59	25	43	79	801
Signal/Switch Failure - Metra/PSA	90	42	22	23	1	111	75	33	55	14	24	39	76	605
Primary	61	25	16	17	1	54	44	17	38	9	12	14	26	333
Secondary	29	17	6	6	0	58	31	16	16	4	12	25	50	271
Signal/Switch Failure - Foreign	60	-	0	-	12	27	16	25	3	46	1	4	3	197
Primary Secondary	45 14	-	0	-	10 2	16 10	11 5	14 12	1	28 17	1	2	3 0	132 65
Mechanical Failure - Total	110	24	7	5	5	89	65	22	103	20	59	52	44	605
Mechanical Failure - Metra/PSA	110	21	6	5	5	83	65	22	103	20	59	52 52	44	593
Non-Locomotive Equipment Failure - Metra/PSA	29	21	6	5	1	11	13	4	103	7	12	13	19	154
Primary	11	7	3	3	1	4	6	1	6	3	4	5	9	63
Secondary	18	13	4	2	0	7	7	3	7	5	8	8	10	91
Locomotive Failure - Metra/PSA	81	-	-	-	3	72	52	18	90	12	47	40	25	439
Primary	25	-	-	-	3	19	19	5	28	6	15	13	10	145
Secondary	56	-	-	-	1	53	33	12	61	7	32	26	14	294
Mechanical Failure - Foreign	1	4	1	0	0	6	0		0		-	-	0	12
Passenger Train Interference - Total	10	5	2	3	5	36	6	10	9	11	1	2	7	107
Passenger Train Interference - Metra/PSA	1	2	1	1	0	24	5	10	6	2	1	2	7	62
Passenger Train Interference - Foreign	9	2	1	2	5	12	1	-	3	9	-	0	1	45
Accident - Total	91	21	8	12	1	33	40	12	21	8	21	65	14	345
Accident - Metra/PSA	75	21	8	12	0	30	37	9	19	6	21	64	11	312
Accident - Foreign	17	-	-	-	0	3	2	3	2	2	-	1	3	33
Track Work - Total	153	31	11	34	2	47	21	11	48	6	32	32	40	468
Track Work - Metra/PSA	147	31	11	34	2	47	20	10	48	5	32	32	40	459
Track Work - Foreign	6	-	-	-	-	0	1	1	-	1	-	-	-	9
Human Error - Total	110	32	12	18	13	60	40	16	40	22	30	35	31	461
Human Error - Metra/PSA	72	30	12	17	2	39	26	7	40	4	23	23	17	313
Human Error - Foreign	38	2	0	1	11	21	14	9	0	18	8	12	15	148
Sick, Injured, Unruly Passenger - Total	22	36	6	10	1	20	24	2	18	3	20	31	25	220
Sick, Injured, Unruly Passenger - Metra/PSA	20	36	6	10	1	20	24	2	18	3	20	31	25	217
Sick, Injured, Unruly Passenger - Foreign	2		-	-	-	-		-	0	-	-	-	-	2
Weather - Total	172	95	28	33	5	97	77	24	108	19	71	84	67	880
Weather - Metra/PSA	171	95	28	33	5	95	76	24	108	18	71	84	67	875
Weather - Foreign	1		- 43	-	0	2	1	-	- 04	1	-		0	5
Passenger Loading - Total	31	56	13	23	-	40	48	1	81	1	45	65	40	445
Lift Deployment - Total	16	2	-	0	-	23	18	1	17	1	7	12	17	112
Obstruction/Debris - Total	49	21	8 7	20	4	23	28	8	21	14	21	35	32	283 58
Catenary Failure - Total	24	34 7	3	17 7	0	11	- 10	4	15	7	- 12	16	20	
Other - Total	34	,	3	,	U	11	10	4	15	,	13	16	26	155
Total Trains Delayed	1,082	407	127	205	70	706	551	250	582	254	356	510	548	5,647
Total Metra/PSA Delays	813	398	125	202	20	548	433	131	529	96	337	455	401	4,489
Total Foreign Carrier Delays	268	8	2	3	49	158	118	119	53	158	19	55	146	1,157

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

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

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

January - July 2018 Compared to January - July Average Over Previous 5 Years: 2013-2017

	Electric			Milw						Union Pacific				
Cause Category	BNSF	ML	BI	sc	HER	N	w	NCS	RI	sws	N	NW	W	SYSTEM
Freight Interference - Total	49	-	(0)	-	25	(8)	(19)	(42)	(7)	22	(2)	39	115	172
Freight Interference - Peak	22	-	(0)	-	20	(5)	(1)	(22)	(4)	12	(2)	29	48	98
Primary	(5)	-	-	-	14	(4)	(2)	(14)	(3)	10	(0)	9	15	19
Secondary	26	-	(0)	-	6	(0)	2	(7)	(1)	2	(1)	20	33	80
Freight Interference - Off-Peak	27	-	-	-	6	(3)	(19)	(20)	(4)	10	(0)	10	67	74
Primary	12	-	-	-	6	(4)	(9)	(17)	(6)	6	(1)	4	61	52
Secondary	15	-		-	-	1	(9)	(4)	2	4	0	5	6	22
Signal/Switch Failure - Total	30	23	8	13	15	(8)	1	(11)	17	56	0	19	(13)	149
Signal/Switch Failure - Metra/PSA	43	23	8	13	3	(13)	(2)	(9)	15	32	1	16	(17)	113
Primary	27 16	26	8	16	2	12	12 (14)	1 (10)	16	19 14	3	14 2	15	172 (58)
Secondary		(3)	- (0)	(3)	_	(26)			(0)		(2)		(32)	
Signal/Switch Failure - Foreign	(13)	-	(0)	-	12	5	3	(2)	1	23	(1)	3	4	35
Primary Secondary	(9) (3)	-	(0)	-	10 2	(7) 13	0	3 (6)	3 (1)	12 12	(1)	(1) 4	2	11 24
Mechanical Failure - Total	30	(13)	3	(2)	(1)	49	(18)	14	(12)	9	(2)	21	40	118
						_	. ,			-			-	
Mechanical Failure - Metra/PSA  Non-Locomotive Equipment Failure - Metra/PSA	28 11	(12)	3	(2)	(2)	43	(18) (13)	13 (2)	(12)	9	(2) 13	21 19	40 15	111 17
Primary Primary	8	(12)	0	(2)	(1)	(0)	(13)	(2)	(8)	2	13 9	19	2	7
Secondary	3	(7)	2	1	(0)	(7)	(7)	(2)	(5)	(1)	4	15	13	10
Locomotive Failure - Metra/PSA	17	- ' '			(0)	51	(5)	15	(4)	8	(15)	1	25	94
Primary	(3)	_	_	_	(1)	8	(8)	2	(5)	2	(1)	(2)	5	(5)
Secondary	20	-	-	-	0	43	3	14	2	5	(14)	4	21	99
Mechanical Failure - Foreign	1	(2)	0	(0)	1	6	(0)	1	(0)	-	-	-	(0)	7
Passenger Train Interference - Total	24	(2)	(1)	(2)	5	(0)	(1)	0	(8)	34	(1)	(1)	(3)	44
Passenger Train Interference - Metra/PSA	5	(2)	(1)	(1)	(0)	2	(3)	(1)	(6)	(2)	(1)	(1)	(3)	(14)
Passenger Train Interference - Foreign	19	1	O	(1)	5	(2)	2	1	(2)	36	-	(0)	(1)	58
Accident - Total	(46)	0	(6)	(4)	(1)	(29)	(17)	1	5	(2)	9	(41)	17	(112)
Accident - Metra/PSA	(37)	0	(6)	(4)	(0)	(26)	(14)	-	(4)	(1)	9	(40)	13	(109)
Accident - Foreign	(10)	-	-	-	(0)	(3)	(2)	1	9	(1)		(1)	4	(3)
Track Work - Total	(70)	(10)	(4)	(15)	20	29	(11)	(4)	26	3	13	(5)	(9)	(37)
Track Work - Metra/PSA	(66)	(10)	(4)	(15)	20	29	(10)	(3)	26	1	13	(5)	(9)	(33)
Track Work - Foreign	(4)	(10)	(-)	(13)	20	(0)	(10)	(1)	-	2	-	(3)	(5)	(4)
Human Error - Total	120	(8)	(4)	(5)	(3)	16	(20)	3	23	(6)	2	10	21	147
Human Error - Metra/PSA	46	(7)	(4)	(5)	(0)	14	(8)	4	23	6	6	12	19	105
Human Error - Foreign	74	(1)	(0)	0	(3)	2	(12)	(1)	(0)	(12)	(5)	(2)	1	42
Sick, Injured, Unruly Passenger - Total	7	(18)	(4)	(7)	(1)	12	(9)	(0)	9	3	22	(8)	33	37
Sick, Injured, Unruly Passenger - Metra/PSA	9	(18)	(4)	(7)	(1)	12	(9)	(0)	9	3	22	(8)	33	40
Sick, Injured, Unruly Passenger - Foreign	(2)	(10)	( · /	( - )	(1)		(5)	(0)	(0)			(0)	-	(2)
Weather - Total	(11)	(61)	(14)	(22)	(3)	(24)	(18)	(14)	21	(3)	(41)	(18)	(34)	(242)
Weather - Metra/PSA	(10)	(61)	(14)	(22)	(3)	(22)	(17)	(14)	20	(3)	(41)	(18)	(35)	(240)
Weather - Foreign	(1)	(01)	(14)	(22)	(0)	(2)	(1)	(14)	1	0	(+1)	(10)	1	(2)
Passenger Loading - Total	24	(33)	(2)	(20)	-	(1)	(7)	7	(38)	(0)	(13)	3	8	(73)
Lift Deployment - Total	25	(2)	(2)	(0)	-	(3)	7	3	(5)	2	4	9	29	71
Obstruction/Debris - Total	9	(9)	(1)	3	(2)	(2)	(23)	1	35	(4)	(8)	39	65	104
Catenary Failure - Total	-	(32)	(7)	(17)	(2)	(2)	(23)		-	(+)	(0)	-	-	(56)
Other - Total	8	(2)	1	(4)	(0)	7	11	(4)	7	8	13	0	(3)	40
Total Trains Delayed	199	(168)	(31)	(82)	54	36	(124)	(46)	73	122	(4)	67	264	361
Total Metra/PSA Delays	87	(165)	(31)	(81)	15	38	(94)	(3)	72	50	3	28	141	59
			(31)	(1)	40		(30)	(43)	1	72		39	124	303
Total Foreign Carrier Delays	113	(2)	U	(1)	40	(2)	(30)	(43)	1	72	(7)	39	124	303

Data for current month is FINAL (08/27/18) 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 7.a: Train Delays by Cause & Month 2018

Top 2 causes for each month are shaded

Cause Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug Sep	Oct	Nov	Dec	Jan	- Jul	
Freight Interference - Total	134	126	154	86	136	141	101	<u> </u>				878	14.6%	
Freight Interference - Peak	65	52	55	30	42	55	39					338	5.6%	
Primary	36	25	26	20	27	26	16					176	2.9%	
Secondary	29	27	29	10	15	29	23					162	2.7%	
Freight Interference - Off-Peak	69	74	99	56	94	86	62					540	9.0%	
Primary	43	58	76	49	69	62	48					405	6.7%	
Secondary Signal/Switch Failure - Total	26 <b>160</b>	16 171	23 <b>102</b>	7 <b>95</b>	25 <b>145</b>	24 <b>149</b>	14 128					950	2.2% <b>15.8%</b>	
· ·	97		-	<b>73</b>	113	-	103						12.0%	
Signal/Switch Failure - Metra/PSA  Primary	97 68	133 105	96 51	/3 52	113 92	103 63	103 74					718 505	12.0% 8.4%	
Secondary	29	28	45	21	21	40	29					213	3.5%	
Signal/Switch Failure - Foreign	63	38	6	22	32	46	25					232	3.9%	
Primary	22	33	5	20	17	30	16					143	2.4%	
Secondary	41	5	1	2	15	16	9					89	1.5%	
Mechanical Failure - Total	204	139	89	60	74	92	65					723	12.0%	
Mechanical Failure - Metra/PSA	200	132	88	55	74	92	63					704	11.7%	
Non-Locomotive Equipment Failure - Metra/PSA	46	49	21	10	10	12	23					171	2.8%	
Primary	13	13	8	5	8	8	15					70	1.2%	
Secondary	33	36	13	5	2	4	8					101	1.7%	
Locomotive Failure - Metra/PSA  Primary	154 25	83 19	67 20	45 15	64 20	80 21	40 20					533 140	8.9% 2.3%	
Secondary	25 129	19 64	20 47	30	20 44	59	20					393	2.3% 6.5%	
Mechanical Failure - Foreign	4	7	1	5		-	2					19	0.3%	
Passenger Train Interference - Total	15	12	9	29	33	28	25					151	2.5%	
Passenger Train Interference - Metra/PSA	7	5	6	12	10	7	1					48	0.8%	
Passenger Train Interference - Foreign	8	7	3	17	23	21	24					103	1.7%	
Accident - Total	25	82	70	12	25	-	19					233	3.9%	
Accident - Metra/PSA	25	79	67	7	12	-	13					203	3.4%	
Accident - Foreign	-	3	3	5	13	-	6					30	0.5%	
Track Work - Total	11	18	43	101	100	100	58					431	7.2%	
Track Work - Metra/PSA	11	18	43	101	99	97	57					426	7.1%	
Track Work - Foreign	-	-	-	-	1	3	1					5	0.1%	
Human Error - Total	109	121	61	52	94	91	80					608	10.1%	
Human Error - Metra/PSA	95	100	49	14	64	59	37					418	7.0%	
Human Error - Foreign	14	21	12	38	30	32	43					190	3.2%	
Sick, Injured, Unruly Passenger - Total	24	33	44	33	43	44	36					257	4.3%	
Sick, Injured, Unruly Passenger - Metra/PSA	24	33	44	33	43	44	36					257	4.3%	
Sick, Injured, Unruly Passenger - Foreign			-			-	-						0.0%	
Weather - Total	172	295	14	27	71	51	8					638	10.6%	
Weather - Metra/PSA	172	294	13	27	70	51	8					635	10.6%	
Weather - Foreign		1	1		1	-						3	0.0%	
Passenger Loading - Total	31	56	32	13	67	95	78 20					372	6.2%	
Lift Deployment - Total	24 40	27	21	13	45	23	30					183	3.0%	
Obstruction/Debris - Total Catenary Failure - Total		82 1	29 1	62	60	51	63					387 2	6.4% 0.0%	
Other - Total	38	27	25	- 19	33	22	31					195	0.0% 3.2%	
Other - Total	38	27	25	19	33	22	31					195	3.2%	
Total Trains Delayed	987	1,190	694	602	926	887	722			-		6,008	100.0%	
Total Metra/PSA Delays	764	987	514	429	690	644	520					4,548	75.7%	
Total Foreign Carrier Delays	223	203	180	173	236	243	202					1,460	24.3%	

Data for current month is FINAL (08/27/18) 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, Amtrok, 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	- Jul
Freight Interference - Total	53	68	69	79	49	110	74	74	96	109	115	110	502	11.1%
Freight Interference - Peak	20	21	23	25	14	34	31	28	42	45	46	30	168	3.7%
Primary	11	16	17	11	12	22	20	22	20	30	28	19	109	2.49
Secondary	9	5	6	14	2	12	11	6	22	15	18	11	59	1.39
Freight Interference - Off-Peak	33	47	46	54	35	76	43	46	54	64	69	80	334	7.4%
Primary	26	38	36	34	27	57	30	35	39	50	55	51	248	5.5%
Secondary	7	9	10	20	8	19	13	11	15	14	14	29	86	1.9%
Signal/Switch Failure - Total	118	44	80	79	91	87	69	132	119	64	110	230	568	12.6%
Signal/Switch Failure - Metra/PSA	98	31	74	28	72	74	63	99	104	54	90	211	440	9.7%
Primary	69	21	41	25	46	42	55	72	46	35	57	132	299	6.6%
Secondary	29	10	33	3	26	32	8	27	58	19	33	79	141	3.1%
Signal/Switch Failure - Foreign	20	13	6	51	19	13	6	33	15	10	20	19	128	2.8%
Primary Secondary	10 10	9 4	4 2	16 35	15 4	10 3	4 2	30 3	14 1	4 6	13 7	11 8	68 60	1.5%
•	84	61	64	42	111	85	85	85	97		85	95	532	11.8%
Mechanical Failure - Total					111	85 84				125				11.8% 11.5%
Mechanical Failure - Metra/PSA	83 12	55 8	62 15	42 10	23	35	80 16	78 21	97 11	125 20	85 20	95 8	517 119	2.6%
Non-Locomotive Equipment Failure - Metra/PSA  Primary	12 6	8	15 5	10 7	23 7	35 13	16 6	10	7	20 8	20 10	6	119 52	2.0%
Secondary	6	-	10	3	16	22	10	10	4	12	10	2	67	1.2%
Locomotive Failure - Metra/PSA	71	47	47	32	88	49	64	57	86	105	65	87	398	8.8%
Primary	18	21	20	17	29	25	21	17	22	34	19	22	151	3.3%
Secondary	53	26	27	15	59	24	43	40	64	71	46	65	247	5.5%
Mechanical Failure - Foreign	1	6	2	-	-	1	5	7	-	-	-	-	15	0.39
Passenger Train Interference - Total	16	2	2	5	19	9	9	14	18	17	11	11	62	1.4%
Passenger Train Interference - Metra/PSA	9	-	1	2	2	4	6	10	16	12	8	6	24	0.5%
Passenger Train Interference - Foreign	7	2	1	3	17	5	3	4	2	5	3	5	38	0.89
Accident - Total	74	32	26	101	18	65	45	43	96	55	70	9	361	8.0%
Accident - Metra/PSA	69	32	23	98	9	64	40	1	93	49	26	8	335	7.49
Accident - Foreign	5	-	3	3	9	1	5	42	3	6	44	1	26	0.69
Track Work - Total	78	17	29	72	98	107	71	86	84	94	129	83	472	10.5%
Track Work - Metra/PSA	78	17	29	72	98	107	71	80	77	94	128	83	472	10.5%
Track Work - Foreign	-	-	-	-	_	-	-	6	7	-	1	-	-	0.09
Human Error - Total	68	140	54	69	56	75	73	42	66	85	88	82	535	11.9%
Human Error - Metra/PSA	58	50	37	49	41	58	48	37	55	50	67	52	341	7.69
Human Error - Foreign	10	90	17	20	15	17	25	5	11	35	21	30	194	4.39
Sick, Injured, Unruly Passenger - Total	27	28	40	27	20	38	44	30	17	37	26	22	224	5.0%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34	27	20	38	44	30	17	37	26	22	218	4.89
Sick, Injured, Unruly Passenger - Foreign	-	-	6	-	-	-	-	-	-	-	-	-	6	0.19
Weather - Total	97	25	59	4	2	33	104	2	-	37	22	212	324	7.2%
Weather - Metra/PSA	96	25	59	4	2	33	104	2	-	37	22	211	323	7.29
Weather - Foreign	1	-	-	-	-	-	-	-	-	-	-	1	1	0.09
Passenger Loading - Total	33	7	12	10	36	81	94	112	64	35	43	54	273	6.0%
Lift Deployment - Total	17	8	8	13	23	31	29	23	25	15	28	28	129	2.9%
Obstruction/Debris - Total	66	44	43	35	78	64	24	52	25	45	46	23	354	7.8%
Catenary Failure - Total	6	1	4	1	-	-	1	-	18	1	-	1	13	0.3%
Other - Total	15	15	24	20	22	37	32	32	48	22	24	29	165	3.7%
Total Trains Delayed	752	492	514	557	623	822	754	727	773	741	797	989	4,514	100.0%
Total Metra/PSA Delays	655	313	410	401	514	675	636	556	639	576	593	823	3,604	79.89
Total Foreign Carrier Delays	97	179	104	156	109	147	118	171	134	165	204	166	910	20.29

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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 8: Train Delays by Duration July 2018

	July 20													
Minutes	BNSF		Electric		Her	Milwa		NCS	RI	sws		UP		System
		ML	ВІ	SC		N	W				N	NW	W	
Weekday P	eak *													
6-10	50	2	1	2	2	7	3	1	12	9	2	8	22	121
11-15	20	4	1	0	3	5	0	1	3	4	3	1	13	58
16-20	9	1	0	0	0	4	0	0	3	4	0	1	8	30
21+	3	4	0	0	1	5	0	0	4	3	1	0	7	28
Annulled	<u>3</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>8</u>
Sub-Total	85	11	2	3	6	21	3	2	24	20	6	11	51	245
Weekday O	ff-Peak *	*												
6-10	47	2	4	3	0	11	19	3	9	12	7	16	28	161
11-15	26	0	1	2	0	14	6	0	4	8	2	2	4	69
16-20	5	2	1	0	2	4	0	0	3	6	1	1	8	33
21+	8	5	0	1	1	7	0	0	9	7	5	3	10	56
Annulled	<u>1</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>8</u>
Sub-Total	87	12	6	6	3	38	25	3	25	33	15	23	51	327
Saturday														
6-10	7	5	3	0	0	2	1	0	1	0	5	8	1	33
11-15	0	0	3	0	0	0	1	0	0	0	1	5	3	13
16-20	0	2	0	0	0	0	0	0	0	0	1	1	3	7
21+	0	0	0	0	0	6	0	0	0	0	0	5	3	14
Annulled	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	9
Sub-Total	7	7	6	6	0	10	2	0	1	0	8	19	10	76
Sunday-Hol	lidav													
6-10	9	8	0	1	0	2	5	0	4	0	5	3	2	39
11-15	1	2	0	0	0	1	1	0	1	0	2	5	5	18
16-20	0	0	0	0	0	0	0	0	1	0	0	3	0	4
21+	0	0	0	0	0	3	1	0	0	0	2	5	1	12
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>1</u>	<u>0</u>	<u>1</u>
Sub-Total	10	10	0	1	0	6	7	0	6	0	9	17	8	74
July 2018 To														
6-10	113	17	8	6	2	22	28	4	26	21	19	35	53	354
11-15	47	6	5	2	3	20	8	1	8	12	8	13	25	158
16-20	14	5	1	0	2	8	0	0	7	10	2	6	19	74
21+	11	9	0	1	2	21	1	0	13	10	8	13	21	110
Annulled	<u>4</u>	<u>3</u>	<u>0</u>	<u>7</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>26</u>
TOTAL	189	40	14	16	9	75	37	5	56	53	38	70	120	722
2018 Year-t														
6-10	674	127	61	66	49	366	214	96	345	164	135	230	386	2,913
11-15	289	48	20	17	28	149	99	31	113	85	81	126	155	1,241
16-20	113	23	7	6	16	68	41	26	60	40	44	63	103	610
21+	156	29	6	17	31	132	58	45	110	76	74	142	146	1,022
Annulled	<u>49</u>	<u>12</u>	<u>2</u>	<u>17</u>	<u>0</u>	<u>27</u>	<u>15</u>	<u>6</u>	<u>27</u>	<u>11</u>	<u>18</u>	<u>16</u>	<u>22</u>	222
TOTAL	1,281	239	96	123	124	742	427	204	655	376	352	577	812	6,008
TOTAL	1,201	233	- 30	123	124	742	727	204	033	370	332	377	012	0,000
					Sha	re of De	lays by	Duratio	n					
0.00	DNCE		Fl	1	11 1	N 4:1		NICC	DI I	CVA/C		LIB		C
Minutes	BNSF	ML	Electric BI	SC	Her	Milwa N	w W	NCS	RI	SWS	N	UP NW	w	System
		IVIL	ы	30		IV	VV				IV	1400	VV	
July 2018 To		10 =0/	== 40/	2= =2/	22.22/	20.00/		00.00/	10.10/	20.50/	=0.00/	=====		10.00/
6-10	59.8%	42.5%	57.1%	37.5%	22.2%	29.3%	75.7%	80.0%	46.4%	39.6%	50.0%	50.0%	44.2%	49.0%
11-15 16-20	24.9% 7.4%	15.0% 12.5%	35.7% 7.1%	12.5% 0.0%	33.3% 22.2%	26.7% 10.7%	21.6% 0.0%	20.0%	14.3% 12.5%	22.6% 18.9%	21.1% 5.3%	18.6% 8.6%	20.8% 15.8%	21.9% 10.2%
21+	5.8%	22.5%	0.0%	6.3%	22.2%	28.0%	2.7%	0.0%	23.2%	18.9%	21.1%	18.6%	17.5%	15.2%
Annulled	2.1%	7.5%	0.0%	43.8%	0.0%	5.3%	0.0%	0.0%	3.6%	0.0%	2.6%	4.3%	1.7%	3.6%
			<u> </u>		<u> </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%
2018 Year-t														
6-10	52.6%	53.1%	63.5%	53.7%	39.5%	49.3%	50.1%	47.1%	52.7%	43.6%	38.4%	39.9%	47.5%	48.5%
11-15	22.6%	20.1%	20.8%	13.8%	22.6%	20.1%	23.2%	15.2%	17.3%	22.6%	23.0%	21.8%	19.1%	20.7%
16-20 21+	8.8% 12.2%	9.6% 12.1%	7.3% 6.3%	4.9% 13.8%	12.9% 25.0%	9.2%	9.6%	12.7% 22.1%	9.2% 16.8%	10.6% 20.2%	12.5% 21.0%	10.9% 24.6%	12.7% 18.0%	10.2% 17.0%
Annulled	3.8%	5.0%	6.3% 2.1%	13.8% 13.8%	25.0% 0.0%	17.8% 3.6%	13.6% 3.5%	22.1% 2.9%	4.1%	20.2% 2.9%	5.1%	24.6% 2.8%	2.7%	17.0% 3.7%
TOTAL			100.0%									100.0%	100.0%	100.0%
*Includes pe	ak direction	on trains o	operating	during w	eekday pe	eak perio	as. **Inc	iudes all	other wee	кday trai	ns.			

Data for most recent month is final (08/27/2018) version from TOPS.