

On-Time Performance

August 2018



Prepared by the Division of Strategic Capital Planning

On-Time Performance August 2018

This report presents an analysis of August 2018 train delays as reported for Metra's eleven rail lines. On-time is defined, for this analysis, as those regularly scheduled trains arriving at their last station stop less than six minutes behind schedule. Trains that are six minutes or more behind schedule, including annulled trains (trains that do not complete their scheduled runs), are regarded as late. "Extra" trains (trains added to handle special events but not shown in the regularly published timetables) are excluded from on-time performance calculations unless shown in special-event schedules that include all intermediate station stop times and are distributed publicly via Metra's website or on paper flyers. Cancelled (not annulled) trains and non-revenue trains are also excluded from on-time performance calculations.

On-Time Performance Tables

Table 1 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
August 2018**

	Weekdays									Weekends						Total		
	Peak*			Off-Peak**			Total			Saturdays			Sundays & Holidays			Trains Scheduled	Trains Late	Percent On-Time
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time			
BNSF	1,242	88	92.9%	956	79	91.7%	2,198	167	92.4%	127	8	93.7%	84	1	98.8%	2,409	176	92.7%
Elec -ML	963	9	99.1%	969	9	99.1%	1,932	18	99.1%	161	11	93.2%	80	11	86.3%	2,173	40	98.2%
-BI	299	2	99.3%	322	4	98.8%	621	6	99.0%	32	0	100.0%	--	--	--	653	6	99.1%
-SC	299	<u>1</u>	99.7%	<u>713</u>	<u>5</u>	99.3%	<u>1,012</u>	<u>6</u>	99.4%	<u>128</u>	<u>2</u>	98.4%	<u>80</u>	<u>2</u>	97.5%	<u>1,220</u>	<u>10</u>	99.2%
Subtotal	1,561	12	99.2%	2,004	18	99.1%	3,565	30	99.2%	321	13	96.0%	160	13	91.9%	4,046	56	98.6%
Heritage	138	10	92.8%	23	1	95.7%	161	11	93.2%	--	--	--	--	--	--	161	11	93.2%
Milw -N	574	18	96.9%	806	40	95.0%	1,380	58	95.8%	83	14	83.1%	75	8	89.3%	1,538	80	94.8%
-W	<u>620</u>	<u>9</u>	98.5%	<u>714</u>	<u>27</u>	96.2%	<u>1,334</u>	<u>36</u>	97.3%	<u>98</u>	<u>14</u>	85.7%	<u>74</u>	<u>1</u>	98.6%	<u>1,506</u>	<u>51</u>	96.6%
Subtotal	1,194	27	97.7%	1,520	67	95.6%	2,714	94	96.5%	181	28	84.5%	149	9	94.0%	3,044	131	95.7%
NCS	207	15	92.8%	253	16	93.7%	460	31	93.3%	--	--	--	--	--	--	460	31	93.3%
RI	828	37	95.5%	717	43	94.0%	1,545	80	94.8%	129	5	96.1%	113	6	94.7%	1,787	91	94.9%
SWS	253	16	93.7%	437	36	91.8%	690	52	92.5%	24	0	100.0%	--	--	--	714	52	92.7%
UP -N	688	20	97.1%	903	25	97.2%	1,591	45	97.2%	112	4	96.4%	80	12	85.0%	1,783	61	96.6%
-NW	755	25	96.7%	740	25	96.6%	1,495	50	96.7%	102	11	89.2%	64	8	87.5%	1,661	69	95.8%
-W	<u>620</u>	<u>77</u>	87.6%	<u>739</u>	<u>59</u>	92.0%	<u>1,359</u>	<u>136</u>	90.0%	<u>84</u>	<u>8</u>	90.5%	<u>76</u>	<u>10</u>	86.8%	<u>1,519</u>	<u>154</u>	89.9%
Subtotal	2,063	122	94.1%	2,382	109	95.4%	4,445	231	94.8%	298	23	92.3%	220	30	86.4%	4,963	284	94.3%
System	7,486	327	95.6%	8,292	369	95.5%	15,778	696	95.6%	1,080	77	92.9%	726	59	91.9%	17,584	832	95.3%

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

Delays data for most recent month is final (09/25/18) version from TOPS.

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

	Weekdays									Weekends						Total		
	Peak*			Off-Peak**			Total			Saturdays			Sundays & Holidays			Trains Scheduled	Trains Late	Percent On-Time
	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time	Trains Scheduled	Trains Late	Percent On-Time			
BNSF	9,272	840	90.9%	6,970	526	92.5%	16,242	1,366	91.6%	990	61	93.8%	688	30	95.6%	17,920	1,457	91.9%
Elec -ML	7,212	134	98.1%	7,236	78	98.9%	14,448	212	98.5%	1,361	34	97.5%	740	33	95.5%	16,549	279	98.3%
-BI	2,236	40	98.2%	2,408	47	98.0%	4,644	87	98.1%	272	15	94.5%	--	--	--	4,916	102	97.9%
-SC	<u>2,314</u>	<u>34</u>	98.5%	<u>5,333</u>	<u>69</u>	98.7%	<u>7,647</u>	<u>103</u>	98.7%	<u>1,087</u>	<u>17</u>	98.4%	<u>738</u>	<u>13</u>	98.2%	<u>9,472</u>	<u>133</u>	98.6%
Subtotal	11,762	208	98.2%	14,977	194	98.7%	26,739	402	98.5%	2,720	66	97.6%	1,478	46	96.9%	30,937	514	98.3%
Heritage	1,032	110	89.3%	172	25	85.5%	1,204	135	88.8%	--	--	--	--	--	--	1,204	135	88.8%
Milw -N	4,296	250	94.2%	6,024	471	92.2%	10,320	721	93.0%	708	62	91.2%	681	39	94.3%	11,709	822	93.0%
-W	<u>4,640</u>	<u>173</u>	96.3%	<u>5,336</u>	<u>229</u>	95.7%	<u>9,976</u>	<u>402</u>	96.0%	<u>821</u>	<u>39</u>	95.2%	<u>668</u>	<u>37</u>	94.5%	<u>11,465</u>	<u>478</u>	95.8%
Subtotal	8,936	423	95.3%	11,360	700	93.8%	20,296	1,123	94.5%	1,529	101	93.4%	1,349	76	94.4%	23,174	1,300	94.4%
NCS	1,596	116	92.7%	1,892	119	93.7%	3,488	235	93.3%	--	--	--	--	--	--	3,488	235	93.3%
RI	6,192	361	94.2%	5,409	310	94.3%	11,601	671	94.2%	1,077	27	97.5%	1,025	48	95.3%	13,703	746	94.6%
SWS	1,892	167	91.2%	3,268	251	92.3%	5,160	418	91.9%	204	10	95.1%	--	--	--	5,364	428	92.0%
UP -N	5,154	158	96.9%	6,836	138	98.0%	11,990	296	97.5%	898	64	92.9%	677	53	92.2%	13,565	413	97.0%
-NW	5,664	296	94.8%	5,514	202	96.3%	11,178	498	95.5%	830	76	90.8%	561	72	87.2%	12,569	646	94.9%
-W	<u>4,641</u>	<u>441</u>	90.5%	<u>5,511</u>	<u>430</u>	92.2%	<u>10,152</u>	<u>871</u>	91.4%	<u>691</u>	<u>56</u>	91.9%	<u>671</u>	<u>39</u>	94.2%	<u>11,514</u>	<u>966</u>	91.6%
Subtotal	15,459	895	94.2%	17,861	770	95.7%	33,320	1,665	95.0%	2,419	196	91.9%	1,909	164	91.4%	37,648	2,025	94.6%
System	56,141	3,120	94.4%	61,909	2,895	95.3%	118,050	6,015	94.9%	8,939	461	94.8%	6,449	364	94.4%	133,438	6,840	94.9%

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

Delays data for most recent month is final (09/25/18) 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-Aug	Annual
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	94.4%	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	87.6%	89.7%
	2015	90.9	90.1	96.8	97.5	96.6	92.4	93.0	95.4	95.8	93.6	93.5	97.4	94.1%	94.4%
	2016	93.2	93.8	95.9	96.8	94.0	93.5	93.8	91.4	91.3	95.2	95.4	93.1	94.0%	94.0%
	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%	94.5%
	2018	89.6	91.6	92.7	94.2	90.5	92.2	91.6	92.7					91.9%	
	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	93.1%	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	97.3%	97.2%
	2014	93.7	95.3	97.7	98.8	98.3	97.4	96.7	98.1	98.7	98.4	98.6	98.7	97.0%	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	97.4%	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	98.3%	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	98.1%	98.1%
	2018	97.7	97.2	99.1	99.0	99.2	97.7	98.2	98.6					98.3%	
	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	96.6%	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	89.0%	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	90.1%	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	93.9%	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	94.2%	93.2%
	2018	86.4	90.7	90.9	95.2	73.4	87.1	93.9	93.2					88.8%	
	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	92.8%	93.1%
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	90.0%	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	93.9%	94.9%
	2016	95.3	94.2	95.7	96.8	92.5	92.9	95.0	93.1	93.8	97.5	95.1	93.8	94.4%	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	94.3%	93.8%
	2018	91.8	89.2	95.2	91.6	92.4	93.6	94.8	94.8					93.0%	
	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	93.3%	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	94.2%	94.2%
	2014	84.8	88.4	91.4	97.6	95.9	92.2	94.0	93.5	96.7	95.5	97.7	94.6	92.3%	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	95.7%	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	94.4%	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%	95.5%
	2018	94.7	91.3	96.3	97.7	95.8	96.5	97.4	96.6					95.8%	
	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%
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	92.9%	92.2%
	2014	76.0	81.1	88.5	96.3	88.5	89.2	94.0	88.5	95.2	90.9	97.8	91.9	87.9%	89.9%
	2015	93.9	82.5	92.6	94.8	95.7	94.8	96.0	92.6	95.2	97.1	96.1	93.6	93.0%	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	94.4%	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	94.9%	94.0%
	2018	93.2	86.4	95.9	95.5	90.0	92.9	98.8	93.3					93.3%	
	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	92.6%	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-Aug	Annual
RI	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	91.9%	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	95.6%	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	96.2%	95.7%
	2018	92.2	90.2	95.7	96.8	94.8	95.0	96.7	94.9					94.6%	
	2013-2017 average	92.9	94.1	96.8	96.5	96.2	94.9	94.3	96.2	96.5	97.1	95.8	95.6	95.3%	95.6%
SWS	2013	94.7	97.1	97.3	97.7	95.0	91.0	98.0	96.8	97.1	98.2	93.2	91.1	96.0%	95.6%
	2014	83.0	92.0	93.5	94.9	93.2	92.8	93.9	95.2	94.2	92.0	90.2	96.2	92.3%	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	95.1%	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					92.0%	
	2013-2017 average	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%
UP - N	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	96.3%	96.6%
	2014	91.2	92.1	97.4	97.8	97.4	97.2	97.6	98.1	97.6	97.4	97.8	98.3	96.1%	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	97.3%	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	97.6%	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	97.3%	97.2%
	2018	97.6	94.2	97.1	97.4	97.6	97.2	97.7	96.6					97.0%	
	2013-2017 average	96.1	96.6	97.8	97.4	97.5	96.8	96.6	96.5	97.6	97.6	97.4	97.8	96.9%	97.1%
UP - NW	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	94.4%	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	94.5%	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	95.8%	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	95.4%	95.1%
	2018	95.7	90.7	95.8	98.0	95.6	91.3	95.5	95.8					94.9%	
	2013-2017 average	94.4	95.2	97.2	96.4	95.8	94.3	94.0	95.8	96.3	95.7	95.4	95.2	95.4%	95.5%
UP - W	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	94.4%	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	94.8%	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	95.3%	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%	94.1%
	2018	92.3	89.0	94.4	92.8	88.9	93.9	91.6	89.9					91.6%	
	2013-2017 average	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%
System excluding South Shore	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	93.2%	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	95.8%	96.2%
	2016	95.8	96.4	96.8	97.4	95.8	95.5	95.4	95.7	95.7	97.4	96.2	95.2	96.1%	96.1%
	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	95.3					94.9%	
2013-2017 average	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 (09/25/18) version from TOPS.

'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
August 2018**

Line	Train	Date	Minutes	Delay	Delay Explanation
			Late	Code	
BNSF	1231 74% OT	Fri, Aug 03	6	I	PASSENGER HANDLING AT MAIN ST.
		Mon, Aug 06	6	I	SLOW PASSENGER HANDLING
		Tue, Aug 07	10	C	SINGLE TRACKING UNION AVE TO CICERO
		Fri, Aug 17	12	ZT	PTC ISSUES BETWEEN WESTERN SPRINGS AND HINSDALE.
		Mon, Aug 20	8	R	DOORS NOT SET UP CORRECTLY
		Mon, Aug 27	7	CC	WAITING FOR FRMN ROGUS TO ANSWER RADIO
BNSF	1238 78% OT	Tue, Aug 07	8	I	HEAVY PASSENGER LOADING AT ROUTE 59 & NAPERVILLE.
		Wed, Aug 08	8	I	HEAVY PASSENGER LOADING.
		Tue, Aug 28	9	ZT1	PTC PROBLEMS ON 1248 DELAYED 1238 DEPARTING AURORA. 1238 INITIALLY FOLLOWS 1248. 1248 DEPARTED APPROX. 7 MINS LATE.
		Wed, Aug 29	12	ZT1	DEPARTURE DELAYED WAITING FOR 1248 TO DEPART.
BNSF	1239 70% OT	Fri, Aug 31	7	RF	1238 HELD AT CONGRESS PARK, SO 1254 COULD CROSSOVER MAIN ONE TO MAIN THREE.
		Wed, Aug 01	9	ZE	PTC PENALTIES AT UNION AVE. AND CICERO B
BNSF	1239 70% OT	Thu, Aug 02	11	CC	STOPPED FOR 10MPH S/R AT LAVERGNE
		Fri, Aug 17	6	H	WHEEL TAC ISSUE METX 214 NOT CALIBRATED
		Fri, Aug 24	7	E	LOST HEP 3 TIMES. RESET AND HELD AFTER THIRD TIME
		Mon, Aug 27	0	XR	RED SIGNAL VIOLATION
		Tue, Aug 28	14	ZT	HELD TO FREIGHT TRAIN RESTRICTIONS - PTC
		Fri, Aug 31	8	ZT	10MPH SLOW ORDER IN PTC BUT NOT ON ORDERS-PTC SOFTWARE ISSUE
BNSF	1251 83% OT	Tue, Aug 07	6	IW1	WAITING ON 1251 AT FAIRVIEW
		Mon, Aug 20	68	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	17	R1	1239 ISSUE
		Tue, Aug 28	9	RF	WAITING FOR LINEUP IN ATC
BNSF	1261 83% OT	Wed, Aug 15	7	R1	FOLLOWING 1255
		Mon, Aug 20	52	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	32	R1	1239 ISSUE
		Fri, Aug 31	13	E	LOCO METX105 WOULD NOT LOAD. MECHANICAL RESPONDED AT CUS
BNSF	1267 78% OT	Thu, Aug 02	6	U	ADA HANDLING
		Mon, Aug 20	101	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Thu, Aug 23	6	GM	BOX 1 CROSSING FAILURE
		Mon, Aug 27	84	R1	1239 ISSUE
		Tue, Aug 28	7	RF	WAITING FOR SIGNAL AT BERWYN, THEN FOLLOWING 1265
BNSF	1273 78% OT	Fri, Aug 03	24	E1	1372 LOCOMOTIVE SHUT DOWN AT FWV
		Mon, Aug 20	107	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	46	R1	1239 ISSUE
		Tue, Aug 28	9	ZT1	FOLLOWING 1275
		Fri, Aug 31	24	E1	TRAFFIC FROM OTHER DELAYED TRAINS
BNSF	1275 74% OT	Thu, Aug 02	15	CC1	LATE TURN FROM 1276
		Fri, Aug 17	12	UF	ADA LIFT FAILED AT CUS
		Mon, Aug 20	83	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	0	R1	1239 ISSUE
		Tue, Aug 28	6	ZT1	LATE FLIP FROM 1239/1276
		Fri, Aug 31	7	ZT1	LATE FLIP 1276
BNSF	1276 65% OT	Wed, Aug 01	7	ZE1	LATE TURN FROM 1239
		Thu, Aug 02	18	CC1	LATE FLIP FROM 1239, PLUS HELD AT LAVERGNE FOR WBS
		Fri, Aug 17	11	U	TWO ADA LIFTS
		Mon, Aug 20	20	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	0	R1	ANNULLED
		Tue, Aug 28	12	ZT1	LATE FLIP FROM 1239
		Thu, Aug 30	8	ZT1	FOLLOWING 1274
Fri, Aug 31	15	ZT	LATE FLIP, PTC SYNC ISSUE AND SLOW PASSENGER LOADING IN ROUTE		
BNSF	1278 83% OT	Mon, Aug 20	18	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	0	R1	ANNULLED
		Tue, Aug 28	13	ZT1	FOLLOW 1276
		Fri, Aug 31	12	ZT1	FOLLOWING 1276
BNSF	1280 78% OT	Mon, Aug 20	11	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Thu, Aug 23	7	R	WATCHING METRA CUSTOMER SERVICE VIDEO
		Mon, Aug 27	9	R1	1239 ISSUE
		Tue, Aug 28	8	ZT1	FOLLOWING TRAFFIC AHEAD - 1276
		Fri, Aug 31	7	ZT1	FOLLOWING 1278
BNSF	1281 83% OT	Fri, Aug 03	12	E1	1372 ENGINE ISSUE
		Mon, Aug 20	79	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	36	R1	LATE FLIP AND RECOVERY
		Tue, Aug 28	10	RF	DS MISROUTED 1373 INTO ATC - HAD TO WAIT FOR TRAIN TO YARD.

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

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
BNSF	1283	Fri, Aug 03	9	E1	1372 ISSUE
	78% OT	Mon, Aug 20	84	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	63	R1	LATE FLIP AND SLOW PASSENGER HANDLING DUE TO 1239 ISSUE
		Tue, Aug 28	7	ZT1	FOLLOWING 1273
		Fri, Aug 31	10	G1	SWITCH FAILURE
BNSF	1288	Fri, Aug 17	13	GX	BROKEN GATE ARM, TRUCK XING
	70% OT	Mon, Aug 20	6	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Fri, Aug 24	10	IW1	LATE FLIP FROM 1243
		Mon, Aug 27	36	R1	LATE FLIP 1239 ISSUE
		Tue, Aug 28	24	RF	WAITING FOR LINEUPS
		Thu, Aug 30	10	CC	MULTIPLE FORM A RESTRICTIONS
		Fri, Aug 31	14	ZT	FORM A - PTC SYNC ISSUE
BNSF	1291	Wed, Aug 01	7	I	PASSENGER HANDLING
	78% OT	Mon, Aug 06	6	G	DS WORKED TRAIN AROUND A TRACK LIGHT @ WEST EOLA
		Tue, Aug 07	6	U	ADA PASSENGERS
		Tue, Aug 14	6	U	ADA BOARDINGS AT DOWNERS GROVE.
		Mon, Aug 20	0	E1	ANNULLED
BNSF	1294	Mon, Aug 20	40	KW1	LATE TURN FROM 1289
	83% OT	Fri, Aug 24	10	C	FAILED IJ AT WESTMONT CASS PED XING
		Mon, Aug 27	9	R1	LATE FLIP
		Tue, Aug 28	6	RF1	LATE FLIP OFF 1289
BNSF	1295	Mon, Aug 20	19	KW1	LATE FLIP FROM EARLIER DELAYS
	83% OT	Wed, Aug 22	13	VE	CAB SIGNAL ISSUE
		Tue, Aug 28	10	U	SLOW UNLOADING ADA
		Fri, Aug 31	12	I	8" SLOW PASSENGER HANDLING/4" ADA @NPV
BNSF	1373	Thu, Aug 02	13	RF	MISROUTE BY DS
	74% OT	Fri, Aug 03	13	E1	1372 ENGINE ISSUE
		Tue, Aug 07	6	ZT	PTC PENALTY SIGNAL UNKNOWN
		Mon, Aug 20	113	E1	SWS 825 BROKE DOWN IN CUS BLOCKING ROUTE
		Mon, Aug 27	30	R1	1239 ISSUE
		Fri, Aug 31	7	G1	TRAFFIC AHEAD
HC	917	Wed, Aug 01	15	E1	18M CP BRIGHTON 502/520PM RED SIGNAL. SEVERAL CALLS TO CJ DISP WENT UNANSWERED. 6M 47XO MEET HCD#924.
	83% OT	Wed, Aug 15	8	D	3 MIN DELAY AT BRIGHTON DUE TO CROSS TRAFFIC, 10 MIN DELAY AT CORWITH DUE TO CROSS TRAFFIC.
		Mon, Aug 20	74	E1	DEPARTED CUS 48M LATE ACCT. DISABLED TRAIN HARRISON ST. ; 20M XO36 HCD#919 AHEAD WAITING OUT UPRR TORNADO WARNING.
		Thu, Aug 23	22	DE1	2M CP LUMBER SOUTH BRANCH BRIDGE; 17M CORWITH BNSF QCHISBD722L STOPPED BY DISABLE BRC TRAIN AT NERSKA. 6M LEMOYNE TALK BY SIGNAL/ DISABLED T
HC	919	Wed, Aug 08	15	D	16M CORWITH 540/556PM FOR BNSF ALTWSP BNSF9249 EAST W/39 CARS 3800FT. CREW ON VERY SHORT TIME.
	83% OT	Fri, Aug 10	26	D	22M @ CORWITH (1740-1802) BY ZDENCHI909 W. BNSF8498 & 10874FT; 6M @ WILLOW SPRINGS PASSENGER LOADING
		Mon, Aug 20	33	DW	20M CORWITH; TWO BNSF FREIGHT TRAINS ; 15M XO36 RED SIGNAL UP "TORNADO WARNING."
		Thu, Aug 23	9	DE1	15M DELAYS FOLLOWING ON AMTRAK #305'S BLOCKS; TALKED BY LEMOYNE (DISABLED BRC NOSI BUT NOT FOULING CN TKS.)
MN	2140	Mon, Aug 06	10	I	8" PASSENGER LOADING ENROUTE; 4" FOLLOWING NCS #109 A-2 TO CUS.
	78% OT	Mon, Aug 13	9	A	CROSS TRAFFIC.
		Thu, Aug 23	6	I	9" PASSENGER LOADING ENROUTE.
		Thu, Aug 30	8	IW	10" PASSENGER LOADING; 2" WAITING ON LINE UP.
		Fri, Aug 31	12	I	8" PASSENGER LOADING ENROUTE; 7" CROSS TRAFFIC, CN.
MN	2157	Thu, Aug 02	28	I	29" DELAY, SLOW PASSENGER LOADING/UNLOADING ENROUTE DUE TO LOLLAPALOOZA MUSIC FESTIVAL.
	83% OT	Fri, Aug 03	19	I	19" DELAY, SLOW PASSENGER LOADING/UNLOADING ENROUTE.
		Fri, Aug 10	7	I	7" DELAY, SPEED RESTRICTIONS AND SLOW PASSENGER LOADING ENROUTE.
		Fri, Aug 17	18	CC	18" DELAY, WAITED FOR METRA EQUIPMENT TO CLEAR AHEAD ON FOX LAKE SUB.
MW	2253	Fri, Aug 03	9	I	9" DELAY, SLOW PASSENGER LOADING/UNLOADING ENROUTE.
	83% OT	Mon, Aug 06	7	U	7" DELAY, SLOW PASSENGER LOADING/UNLOADING. ADA'S
		Fri, Aug 10	9	D1	9" DELAY, LATE TURN FROM #2252 AND SLOW PASSENGER LOADING ENROUTE.
		Fri, Aug 24	9	E1	8" LATE DEPARTING CUS, COULDN'T FIND A CARMAN TO UNPLUG THEM.
MW	2255	Thu, Aug 02	28	I	28" DELAY, SLOW PASSENGER LOADING/UNLOADING ENROUTE DUE TO LOLLAPALOOZA MUSIC FESTIVAL.
	83% OT	Fri, Aug 03	22	I	22" DELAY, SLOW PASSENGER LOADING/UNLOADING ENROUTE.
		Wed, Aug 08	17	D1	17" DELAY, LATE TURN FROM #2254.
		Tue, Aug 28	10	NW	10" DELAY, RESTRICTED SPEED, SPAULDING AND B-35.
NCS	110	Fri, Aug 10	9	D	9" STOPPED @ DEVAL, CROSS TRAFFIC FREIGHT INTERFERENCE.
	83% OT	Mon, Aug 13	8	GM	10" CROSSING MALFUNCTION 529(A) @ RT 120 BELVIDERE & IVANHOE RD.; 3" STOP SIGNAL, A-2.
		Thu, Aug 16	16	E1	10" DEPARTED ANTIOCH LATE DUE TO FREIGHT INTERFERENCE; FOLLOWING NCS #108 ENROUTE.
		Tue, Aug 28	9	G	4" STOP SIGNAL DEVAL, LOST TIME WINDOW; 3" WEATHER (RAIN); 3" SLOW PASSENGER LOADING.

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

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
NCS	118 83% OT	Wed, Aug 01	31	KD	30" CREW CHANGED AIR HOSE, MUNDELEIN; 5" STOP SIGNAL, DEVAL. AIR HOSE STRUCK SOMETHING
		Thu, Aug 02	17	D	19" N. PRAIRIE VIEW FOLLOWING SOUTHBOUND CN FREIGHT.
		Tue, Aug 28	13	D	6" WAITING ON A CN FREIGHT, ANTIOCH; 5" TALKED BY METRA CROSSING; 4" ADA.
		Fri, Aug 31	15	D	6" WAITING ON #115, PROSPECT HEIGHTS; 5" ADA; 3" PASSENGERS ON WRONG PLATFORM; 4" MEET #109; 4" CN FREIGHT, ANTIOCH.
NCS	119 83% OT	Wed, Aug 01	23	KD1	23" DELAY, LATE TURN FROM #118.
		Tue, Aug 28	11	G	8" TALKED BY METRA CROSSING AND RESTRICTED SPEED.
		Wed, Aug 29	7	AM	8" DELAY ENROUTE FOLLOWING A VERY LATE AMTRAK 7 AND #2149.
		Fri, Aug 31	6	D1	4" CUS LATE TURN FROM #118.
RI	507 78% OT	Fri, Aug 03	12	I	6M SLOW PASSENGER LOAD/UNLOAD FOR LOLLAPALOOZA 6M WAITING ON A SIGANL AT CP46TH DUE TO 2030 +3 ON TRACK 2 AND BX06 ON TRACK 1 GOING EAST.
		Mon, Aug 27	26	CC	(SCHEDULED TRACK WORK) - TRACK WORK ON 2 BETWEEN 66TH AND MOKENA. WAITING ON 510 TO CLEAR 66TH CT.
		Tue, Aug 28	6	CC	(SCHEDULED TRACK WORK) - SCHEDULED TRACK WORK ON TK 2 CP 54TH ST PLUS GOING THRU 4 FORM B S.
		Wed, Aug 29	7	CC	(SCHEDULED TRACK WORK) - 7MIN FOR SINGLE TRACK AT CP 54TH ST
RI	509 83% OT	Fri, Aug 31	12	CC	(SCHEDULED TRACK WORK) - SINGLE TRACKING AT CP 46TH
		Thu, Aug 02	15	I	(PSGR HANDLING) - SLOW LOADING DUE TO LOLLAPALOOZA
		Tue, Aug 07	10	J	(PSGR PROBLEMS/REMOVAL) -
		Tue, Aug 21	17	I	(PSGR HANDLING) - DUE TO BRANDT TRUCK AT 191ST 509 HAD TO CROSS OVER AT CP 66TH CT AND CP MOKENA
RI	516 83% OT	Fri, Aug 31	7	CC	(SCHEDULED TRACK WORK) - DELAYED DUE TO SINGLE TRACKING AND FULL CONSITS
		Thu, Aug 02	30	E1	(LOCOMOTIVE MALFUNCTION) - 20M 111TH ST ACCT. NO HEAD END POWER ON ENGINE 201
		Fri, Aug 03	11	I	(PSGR HANDLING) - HEAVY PASSENGER LOADING FOR LOLLAPALOOZA
		Tue, Aug 14	7	K	(OBSTRUCTION ON TRACKS) - SEMI STUCK UNDER RICHARDS BRIDGE. B AND B AND TRACK INSP. BOTH INSPECTED AND OK TO RUN
RI	524 74% OT	Tue, Aug 28	12	CC	(SCHEDULED TRACK WORK) - 10 CP 81ST WAITING FOR 405 DUE TO FORM B 1547
		Fri, Aug 03	9	I	(PSGR HANDLING) - HEAVY PASSENGER LOADING LOLLAPALOOZA
		Wed, Aug 08	10	I	(PSGR HANDLING) - HEAVY PASSENGER LOADING AND ADA FOR SOX GAME
		Thu, Aug 09	8	H1	DAMAGED SWITCH
SWS	815 74% OT	Thu, Aug 16	14	G	SIGNAL ISSUES AT CP MILLER.
		Tue, Aug 21	21	K	(OBSTRUCTION ON TRACKS) - 24 MIN WAITING AT BI FOR 615 TO GET OFF EWD AND CONGETSION AT BI TOWER
		Fri, Aug 31	12	E1	(PASSENGER TRAIN INTERFERENCE) - 8M WAITING FOR 615 TO CLEAR DEPOT - 615 LOST ITS AIR HEADING FOR THE YD.
		Wed, Aug 29	7	YF1	9M CP518 WAITING ON SWS#826
SWS	825 83% OT	Thu, Aug 02	17	R	REAR DOORS DID NOT OPEN ORLAND PK. 153RD ST. TRAIN MADE REVERSE MOVE TO ACCOMODATE PASSENGERS. 24M DELAY.
		Mon, Aug 20	0	XE	MECHANICAL BREAKDOWN IN CONNECTION LOCOMOTIVE 186.
		Thu, Aug 23	6	RN1	5M CUS NO DOOR LIGHT 4M DELAYS ENROUTE; ENG 187 SLOW LOADING; 6M ADA'S OAK LAWN, PALOS PK, AND 143RD ST.
		Mon, Aug 27	6	R1	DEPARTED CUS 14M LATE ACCT BN INCIDENT
SWS	838 78% OT	Wed, Aug 01	10	RF	10M CP518 RED SIGNAL NS DISP STACK ROUTE DID NOT FIRE.
		Mon, Aug 13	8	D	15M FOREST HILL 732/747PM FOR CSX Y212 CSXT1212 W/ 3900FT YARD MOVE FROM 59TH ST. TO 75TH ST YARD.
		Mon, Aug 20	13	E1	DEPARTED ORLAND PK 179TH ST. 26M LATE; LATE FLIP OF SWS#827'S EQUIP.
		Thu, Aug 23	11	RN1	10M ASHBURN WAITING ON SWS#833; 3M BELT JCT FREIGHT CLEARING, 3M ROOSEVLT RED SIGNAL.
UPNW	641 82% OT	Mon, Aug 27	11	R1	DEPARTED 179TH 5M LATE ACCT LATE TURN FROM 827 4M ASHBURN MEETING 831
		Wed, Aug 01	17	K1	DELAYED ON ACCT. OF TREE STUCK ON TRACK #1 @ MP59 (ON THE MOVE @ 18.48).
		Mon, Aug 06	20	RO	DEPARTED CPT 20" LATE DUE TO EQUIP. BEING GIVEN THE WRONG LINE UP INTO THE DEPOT FROM CAL AVE YARD.
		Mon, Aug 27	17	R	DEPARTED 17" LATE DUE TO LATE ARRIVAL OF EQUIP. FROM CAL AVE COACH YD, #345 ENGINEER NOT RESPONDING TO CALLS ON THE RADIO.
UPNW	652 83% OT	Tue, Aug 28	10	G1	DEPARTED CPT 10" LATE WAITING FOR OTHER LATE TRAINS TO CLEAR LAKE ST PLANT.
		Fri, Aug 03	8	I	HEAVY PASSENGER LOADING EN ROUTE, 2 ADA LIFTS.
		Mon, Aug 20	12	U	2 ADA LIFTS WITH DOOR LIGHT ISSUES @ BARRINGTON ALSO HAD CROSSTRAFFIC @ MAYFAIR.
		Mon, Aug 27	14	G1	DELAYED AT BRIDGE A, WAITING FOR LATE TRAINS ARRIVING FROM CAL AVE TO GET INTO DEPOT. EARLIER SW. FAILURE AT CPT
UPNW	652 83% OT	Tue, Aug 28	7	G1	DELAYED AT BRIDGE A WAITING FOR LATE TRAINS ARRIVING FROM CAL AVE TO GET INTO THE DEPOT.

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

Line	Train	Date	Minutes Delay		Delay Explanation
			Late	Code	
UPW	32 83% OT	Tue, Aug 07	6	U	TWO ADA LIFTS & CROSS TRAFFIC @ HALSTED.
		Tue, Aug 14	6	U	6" 2 ADA LIFTS & TRAIN CONTROL WESTERN AVE-HALSTED FOLLOWING M30, DUE TO M28 SLOW LOADING ISSUES.
		Fri, Aug 24	23	E1	STOPPED AND TOOK OVER #34 SCHEDULE OUT OF ELMHURST.
		Tue, Aug 28	26	E	STOPPED @ GLEN ELLYN, HEP ISSUES (-13); FOLLOWED #34 FROM ELMHURST-CPT, RUNNING BEHIND SCHEDULE; X-TRAFFIC, WESTERN AVE.
UPW	34 83% OT	Wed, Aug 01	48	E1	MECHANICAL ISSUE ON #13, FOLLOWED #36 (OPERATED WITH A SMALL CONSISTS) AND MADE ALL STOPS TO CPT. HEAVY PASSENGER LOADING ENROUTE.
		Tue, Aug 21	9	I	LATE DEPARTURE FROM ELMHURST-WAITING ON #32 TO CLEAR & SLOW PASSENGER LOADING EN ROUTE & 1 ADA LIFT.
		Fri, Aug 24	0	E1	ANNULLED AS #19 AT OTC.
		Tue, Aug 28	6	E1	WAITED FOR SIGNAL TO TIME OUT @ PARK, #32 RUNNING BEHIND SCHEDULE, DUE TO HEP ISSUES.
UPW	49 77% OT	Fri, Aug 03	29	UF	ENGINE STOPPED LOADING AND LOST HEP JUST AFTER KEDZIE, CREW TROUBLESHOOTED FOR 25", RESET THE 27 POINT JUMPER AND RESOLVED ISSUE.
		Mon, Aug 06	7	RO1	DEPARTED CPT 6" DOWN WAITED FOR CROSS TRAFFIC TO CLEAR, #641 EQUIP. FROM CAL AVE BEING GIVEN WRONG LINE UP INTO THE DEPOT.
		Tue, Aug 07	17	KW	DELAYED COPYING AND COMPLYING WITH FLASH FLOOD WARNINGS ON THE GENEVA SUB FROM MP0-44.
		Tue, Aug 14	11	VE	11" INTERMITTENT TRAIN CONTROL FROM KEDZIE TO MP 13.75, CUT OUT ATC.
		Mon, Aug 27	7	G1	DELAYED FOLLOWING TRAINS AHEAD DUE TO #13 SWITCH FAILURE @ HALSTED ST.
UPW	53 78% OT	Fri, Aug 03	20	UF1	DELAYED FOLLOWING #51.
		Tue, Aug 07	9	KW	DELAYED COPYING AND COMPLYING WITH FLASH FLOOD WARNINGS ON THE GENEVA SUB FROM MP0-44 & FOLLOWING TRAINS AHEAD.
		Wed, Aug 08	9	JM1	DELAYED ON ACCT. OF #51 MEDICAL EMERGENCY @ ELMHURST.
		Mon, Aug 27	12	R1	DEPARTED CPT 12" LATE DUE TO LATE ARRIVAL OF EQUIPMENT FROM CAL AVE COACH YARD #345 ENGINEER WAS NO RESPONDING TO CALLS ON THE RADIO.
		Tue, Aug 28	22	G	DEPARTED CPT, LATE ARRIVAL OF EQUIPMENT DUE TO SWITCH PROBLEMS AT LAKE STREET PLANT.
UPW	54 78% OT	Tue, Aug 07	9	IW	PASSENGERS ON WRONG SIDE AT GENEVA 5", SLOW LOADING, DUE TO HEAVY RAIN 5", & COPYING 3 DIFFERENT FLASH FLOOD WARNINGS 9".
		Mon, Aug 20	57	L1	LATE TURN OF ENGINEER & EQUIPMENT FROM #35.
		Tue, Aug 21	7	KP1	DEPARTED ELBURN 20" LATE ON ACCT. OF LATE ARRIVAL OF #35.
		Wed, Aug 22	10	I1	LATE TURN OFF #35 & STOPPED @ KEDZIE (20") WAITING ON #49 EQUIPMENT FROM CAL AVE.
		Mon, Aug 27	12	D1	LATE TURN OF CREW AND EQUIP. FROM #35 ALSO WAITED FOR #41 & #43 TO CLEAR @ VALE DUE TO A SWITCH FAILURE AT HALSTED ST.
UPW	55 59% OT	Wed, Aug 01	9	VF	TRAIN CONTROL OAK PARK TO ELMHURST FOLLOWING #53 & DOOR ISSUES @ WHEATON (LOADING DOORS STUCK OPEN).
		Fri, Aug 03	25	UF1	DELAYED FOLLOWING #53.
		Mon, Aug 06	8	RO1	DEPARTED CPT 7" LATE WAITED FOR CROSS TRAFFIC TO CLEAR, #641 EQUIP. FROM CAL AVE BEING GIVEN THE WRONG LINE UP.
		Tue, Aug 07	17	KW	DELAYED COPYING AND COMPLYING WITH FLASH FLOOD WARNINGS ON THE GENEVA SUB FROM MP0-44 & FOLLOWING TRAINS AHEAD.
		Wed, Aug 08	15	JM1	DELAYED ON ACCT. OF #51 MEDICAL EMERGENCY @ ELMHURST & 1 ADA LIFT.
		Thu, Aug 16	7	D1	TRAIN CONTROL MAYWOOD-ELMHURST FOLLOWING TRAINS AHEAD.
		Mon, Aug 20	10	L1	DEPARTED 10" LATE, SWAPPED EQUIP. & USED #61 ENGINEER DUE TO EQUIP. & ENGINEER FOR #55 DELAYED COMING IN ON #54.
		Wed, Aug 22	8	G1	TRAIN CONTROL OAK-PARK-ELMHURST FOLLOWING #53 FROM CPT, SWITCH ISSUES @ KEDZIE, SWITCH #13 FAILED, MAINTAINERS HAD TO CLEAN CONTACTS.
		Mon, Aug 27	30	R1	DELAYED FOLLOWING TRAINS AHEAD, ALSO DELAYED @ LOMBARD RAN ON BLOCKS FROM LOMBARD-ELBURN HAD BAD ORDER ATC ON METX 165.
		UPW	57 65% OT	Fri, Aug 03	22
Tue, Aug 07	17			H	DEPARTED SPT 8" DOWN DUE TO LATE FUELING OF METX #159 ALSO DELAYED COPYING AND COMPLYING WITH FLASH FLOOD WARNINGS MP0-44.
Thu, Aug 09	9			CC	30MPH @ MP6.75-6.81, 9.13-9.74 & 40MPH @ MP22.45-23.5 ON TRK 3 & FOLLOWED TRAINS AHEAD.
Tue, Aug 14	7			VE1	9" DELAYED FOLLOWING TRAINS HAD M49 AHEAD WITH BAD ORDER ATC ON METX 163 HAD TO CUT OUT ATC AND RUN ON BLOCKS.
Mon, Aug 20	59			KW	DEPARTED 10" DOWN, LATE ARRIVAL OF EQUIP. BEHIND #643, ALSO HELD @ GLEN ELLYN DUE TO TORNADO WARNING FROM MP11-23.
Wed, Aug 22	10			G1	TRAIN CONTROL RIVER FOREST-ELMHURST FOLLOWING #55 ON ACCT. OF LATE #53 DEU TO SIGNAL ISSUES @ KEDZIE.
Mon, Aug 27	23			R1	DEPARTED 20" LATE, LATE ARRIVAL OF EQUIP. FROM CAL AVE COACH YD#345 NOT RESPONDING TO CALLS ON THE RADIO TO GET INSTRUCTIONS TO DEPART.
Tue, Aug 28	28			G1	DEPARTED 21" LATE, WAITING ON EQUIPMENT TO BE SHOVED FROM THE YARD, ALSO RAN TRAIN CONTROL FOLLOWING #59 AHEAD.

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

Line	Train	Date	Minutes		Delay Code	Delay Explanation	
			Late	Delay			
UPW	59	Thu, Aug 02	10		R	ENGINEER OVERSHOT THE PLATFORM AT KEDZIE AND NEEDED TO MAKE A REVERSE MOVE TO DROP OFF PASSENGERS.	
		65% OT	Fri, Aug 03	22		UF1	DELAYED FOLLOWING #57.
			Tue, Aug 07	15		KW1	#57 AHEAD; FOLLOWING TRAINS AHEAD DUE TO FLASH FLOOD WARNING.
			Tue, Aug 14	7		VE1	7" DELAYED FOLLOWING TRAINS HAD M49 AHEAD WITH BAD ORDER ATC ON METX 163 HAD TO CUT OUT ATC AND RUN ON BLOCKS.
			Wed, Aug 22	8		G1	TRAIN CONTROL MP6-8 & BELLWOOD-BERKELEY FOLLOWING #55 ON ACCT. OF LATE #53; SLOW ORDERS (MP9.13-9.74 30MPH-TRK 3).
			Mon, Aug 27	10		G1	DELAYED FOLLOWING TRAINS AHEAD DUE TO #13 SWITCH FAILURE @ HALSTED ST.
			Tue, Aug 28	9		G1	DEPARTED CPT 8" LATE WAITING FOR OTHER LATE TRAINS TO CLEAR LAKE STREET PLANT.
			Wed, Aug 29	8		VE	DEPARTED CPT 8" LATE FOLLOWING #57, WAS A QUICK TURN OF EQUIP. FROM #652, ORIGINAL EQUIP. HAD ENGINE AIR ISSUES AT CAL AVE.
UPW	60	Thu, Aug 02	10		R1	DEPARTED ELMHURST LATE, LATE ARRIVAL OF #59.	
		74% OT	Fri, Aug 03	25		UF1	LATE ARRIVAL OF #59 CREW & EQUIPMENT.
			Tue, Aug 07	15		KW1	LATE TURN OF EQUIPMENT FROM #59.
			Mon, Aug 27	8		G1	LATE TURN OF EQUIPMENT FROM #59.
			Tue, Aug 28	14		G1	DEPARTED 14" LATE, LATE ARRIVAL OF #59, ALSO HAD TO WAIT FOR #57 TO CLEAR PARK.
			Wed, Aug 29	8		VE1	DEPARTED ELMHURST 8" LATE ON ACCOUNT OF LATE ARRIVAL OF #59.
UPW	61	Fri, Aug 03	27		UF1	DELAYED FOLLOWING TRAINS AHEAD.	
		78% OT	Tue, Aug 07	19		KW1	DELAYED FOLLOWING TRAINS AHEAD DUE TO FLASH FLOOD WARNING.
			Mon, Aug 20	47		KW	HELD AT ELMHURST DUE TO TORNADO WARNING FROM MP 11-23.
			Wed, Aug 22	11		I	SLOW PASSENGER LOADING OAK PARK, ELMHURST, LOMBARD, GLEN ELLYN, & WHEATON; 30MPH @ MP9.13-9.74, 50MPH @ 19.75-19.85.
			Tue, Aug 28	17		G1	DEPARTED CPT 15" LATE, LATE ARRIVAL OF EQUIPMENT FROM YARD DUE TO EARLIER SWITCH ISSUES AT LAKE ST.
UPW	62	Wed, Aug 01	19		D	FREIGHT TRAIN INTERFERENCE @ 25TH AVE (MKDPRJ).	
		83% OT	Thu, Aug 16	6		D	NO SIGNAL @ KEDZIE (YPRBL-15 CLEARING ON THE ROCKWELL) & CROSS TRAFFIC @ WESTERN AVE.
			Mon, Aug 20	39		KW	HELD AT WHEATON DUE TO A TORNADO WARNING MP 11-23.
			Fri, Aug 24	12		D	DELAYED @ 25TH AVE WAITED FOR THE KG1CI-24 TO CLEAR ALSO RAN TRK 3 VALE TO KEDZIE RAN @ RESTRICTED SPEED FROM MP5.6-KEDZIE.
UPW	64	Fri, Aug 03	21		UF1	LATE TURN FROM #57.	
		70% OT	Tue, Aug 07	17		H1	LATE TURN FROM #57.
			Mon, Aug 20	62		KW1	LATE TURN OF EQUIPMENT FROM #57.
			Tue, Aug 21	11		I	SLOW PASSENGER LOADING ON TO CAB CAR ON THE NORTH SIDE @ THE CROSSING @ VILLA PARK AND ELMHURST RAN TRACK 2.
			Fri, Aug 24	21		F	DEPARTED ELBURN 10" DOWN, HAD TO SWAP EQUIP. WITH #55 DUE TO CAB CAR #8443 CAME OUT OF CAL AVE COACHYARD WITH NO CROSSING BELL.
			Mon, Aug 27	19		R1	LATE TURN OF EQUIPMENT FROM #57.
			Tue, Aug 28	25		G1	LATE DEPARTURE OUT OF KENOSHA DUE TO LATE ARRIVAL OF #57 CREW AND EQUIPMENT.
UPW	66	Tue, Aug 07	19		KW1	LATE TURN OF EQUIPMENT FROM #63 ALSO WAITED FOR THE CNAOK9 TO CLEAR INTO THE YARD ON TRK 1 @ PROVISO.	
		74% OT	Wed, Aug 08	11		D	TRAIN CONTROL VILLA PARK & ELMHURST & RED SIGNAL @ PARK ON ACCT. OF MEET #67, DUE TO FREIGHT TRAIN INTERFERENCE ON TRKS 2&3.
			Mon, Aug 13	11		D	RAN ON TRAIN CONTROL FOLLOWING FREIGHT PARK TO 25TH AVE ALSO HAD SLOW LOADING PASSENGER @ GENEVA & ELMHURST.
			Wed, Aug 15	13		D	DELAYED @PARK WAITING ON LATE M67 ON ACCT. OF SLOW ORDERS TO CLEAR, DUE TO FREIGHT ON TRK 3 (AGBNP) & ON TRK 2 (IG3AH).
			Thu, Aug 16	8		D	FREIGHT TRAIN INTERFERENCE @ CN @ WEST CHICAGO (M34791-16).
			Mon, Aug 20	33		KW1	LATE TURN OF EQUIPMENT FROM #63.

Data is final (09/25/18) version from TOPS.

Table 4: Delay Codes by Cause Category & Carrier

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

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 carriers, Amtrak, 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
August 2018

Cause Category	Top 2 causes for each line are shaded													SYSTEM	
	BNSF	Electric			HER	Milw			NCS	RI	SWS	Union Pacific			
		ML	BI	SC		N	W	N				NW	W		
Freight Interference - Total	4	-	-	-	6	10	14	12	2	14	1	3	29	95	
Freight Interference - Peak	-	-	-	-	6	-	4	6	-	2	1	1	9	29	
Primary	-	-	-	-	4	-	1	4	-	-	1	1	8	19	
Secondary	-	-	-	-	2	-	3	2	-	2	-	-	1	10	
Freight Interference - Off-Peak	4	-	-	-	-	10	10	6	2	12	-	2	20	66	
Primary	4	-	-	-	-	7	6	4	2	10	-	2	17	52	
Secondary	-	-	-	-	-	3	4	2	-	2	-	-	3	14	
Signal/Switch Failure - Total	35	6	3	-	-	15	5	9	22	7	11	13	15	141	
Signal/Switch Failure - Metra/PSA	35	6	3	-	-	13	3	6	22	4	11	13	15	131	
Primary	18	5	3	-	-	11	2	6	18	3	2	1	3	72	
Secondary	17	1	-	-	-	2	1	-	4	1	9	12	12	59	
Signal/Switch Failure - Foreign	-	-	-	-	-	2	2	3	-	3	-	-	-	10	
Primary	-	-	-	-	-	1	2	2	-	3	-	-	-	8	
Secondary	-	-	-	-	-	1	-	1	-	-	-	-	-	2	
Mechanical Failure - Total	45	-	-	-	2	7	6	3	12	4	8	2	13	102	
Mechanical Failure - Metra/PSA	45	-	-	-	2	7	6	3	12	4	8	2	13	102	
Non-Locomotive Equipment Failure - Metra/PSA	-	-	-	-	-	2	-	-	-	-	1	1	3	7	
Primary	-	-	-	-	-	2	-	-	-	-	1	1	2	6	
Secondary	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
Locomotive Failure - Metra/PSA	45	-	-	-	2	5	6	3	12	4	7	1	10	95	
Primary	4	-	-	-	-	1	2	1	3	1	3	1	4	20	
Secondary	41	-	-	-	2	4	4	2	9	3	4	-	6	75	
Mechanical Failure - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Passenger Train Interference - Total	-	-	-	-	-	1	-	2	-	1	-	1	-	5	
Passenger Train Interference - Metra/PSA	-	-	-	-	-	1	-	1	-	-	-	1	-	3	
Passenger Train Interference - Foreign	-	-	-	-	-	-	-	1	-	1	-	-	-	2	
Accident - Total	-	6	-	-	-	-	3	-	1	5	5	3	-	23	
Accident - Metra/PSA	-	6	-	-	-	-	3	-	-	-	5	3	-	17	
Accident - Foreign	-	-	-	-	-	-	-	-	1	5	-	-	-	6	
Track Work - Total	13	1	-	7	-	5	-	-	14	-	3	8	8	59	
Track Work - Metra/PSA	13	1	-	7	-	5	-	-	14	-	3	8	8	59	
Track Work - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Human Error - Total	47	1	1	-	2	3	1	-	8	16	4	8	13	104	
Human Error - Metra/PSA	38	1	1	-	1	2	1	-	8	15	4	8	13	92	
Human Error - Foreign	9	-	-	-	1	1	-	-	-	1	-	-	-	12	
Sick, Injured, Unruly Passenger - Total	1	7	1	1	-	1	4	1	2	1	3	1	9	32	
Sick, Injured, Unruly Passenger - Metra/PSA	1	7	1	1	-	1	4	1	2	1	3	1	9	32	
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Weather - Total	7	-	-	-	1	9	1	1	3	-	2	1	16	41	
Weather - Metra/PSA	7	-	-	-	-	9	1	1	3	-	2	1	16	40	
Weather - Foreign	-	-	-	-	1	-	-	-	-	-	-	-	-	1	
Passenger Loading - Total	15	18	-	-	-	21	13	1	14	1	18	19	19	139	
Lift Deployment - Total	7	1	-	-	-	1	2	-	1	-	1	3	20	36	
Obstruction/Debris - Total	-	-	1	2	-	6	-	2	12	3	2	5	2	35	
Catenary Failure - Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other - Total	2	-	-	-	-	1	2	-	-	-	3	2	10	20	
Total Trains Delayed	176	40	6	10	11	80	51	31	91	52	61	69	154	832	
Total Metra/PSA Delays	163	40	6	10	3	67	35	15	88	28	60	66	125	706	
Total Foreign Carrier Delays	13	0	0	0	8	13	16	16	3	24	1	3	29	126	

Data for current month is FINAL (09/25/18) 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 August Over Previous Five Years: 2013-2017

Cause Category	BNSF	Electric			HER	Milw			NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W	N				NW	W		
Freight Interference - Total	24	-	0	-	3	10	10	11	4	14	0	3	20	101	
Freight Interference - Peak	8	-	0	-	3	2	2	3	2	5	-	1	7	33	
Primary	4	-	-	-	3	2	2	2	1	3	-	1	2	20	
Secondary	4	-	0	-	0	0	0	1	1	2	-	0	4	13	
Freight Interference - Off-Peak	16	-	-	-	0	9	8	8	2	9	0	2	13	68	
Primary	12	-	-	-	-	6	4	7	2	7	0	2	10	52	
Secondary	3	-	-	-	0	2	4	1	-	3	-	-	3	16	
Signal/Switch Failure - Total	17	5	2	3	2	18	15	7	6	3	2	9	9	96	
Signal/Switch Failure - Metra/PSA	12	5	2	3	-	16	13	6	6	1	2	7	8	80	
Primary	10	4	2	2	-	8	7	3	5	1	1	3	4	48	
Secondary	2	1	0	1	-	8	7	3	1	0	1	4	4	32	
Signal/Switch Failure - Foreign	5	-	-	-	2	2	1	1	0	2	-	2	0	16	
Primary	3	-	-	-	2	2	1	1	0	2	-	1	0	12	
Secondary	2	-	-	-	-	0	-	-	-	0	-	1	-	4	
Mechanical Failure - Total	8	6	1	1	1	8	5	1	13	4	9	8	8	72	
Mechanical Failure - Metra/PSA	7	6	1	1	1	7	5	1	13	4	9	8	8	71	
Non-Locomotive Equipment Failure - Metra/PSA	1	6	1	1	-	1	2	0	0	-	2	3	4	21	
Primary	1	1	0	0	-	0	1	-	0	-	1	1	2	9	
Secondary	1	5	1	1	-	0	0	0	-	-	0	2	1	12	
Locomotive Failure - Metra/PSA	6	-	-	-	1	6	4	1	13	4	7	5	4	50	
Primary	3	-	-	-	0	3	2	0	5	1	3	2	1	20	
Secondary	3	-	-	-	0	4	1	1	9	3	4	3	3	30	
Mechanical Failure - Foreign	1	-	-	-	-	1	-	-	-	-	-	-	-	1	
Passenger Train Interference - Total	3	0	0	1	1	4	1	1	1	1	0	0	1	13	
Passenger Train Interference - Metra/PSA	-	0	0	0	0	3	1	1	1	-	0	0	1	7	
Passenger Train Interference - Foreign	3	-	-	0	0	1	0	0	-	1	-	-	-	6	
Accident - Total	13	1	-	0	0	5	0	1	3	2	3	12	4	44	
Accident - Metra/PSA	13	1	-	0	0	5	-	1	3	2	2	6	3	35	
Accident - Foreign	-	-	-	-	-	-	0	-	-	-	1	6	1	9	
Track Work - Total	24	8	1	12	-	5	4	1	9	1	7	4	6	82	
Track Work - Metra/PSA	16	8	1	12	-	5	4	1	9	1	7	4	6	74	
Track Work - Foreign	8	-	-	-	-	-	-	-	-	-	-	-	-	8	
Human Error - Total	7	2	1	2	1	8	7	2	7	4	3	2	5	52	
Human Error - Metra/PSA	5	2	1	2	-	6	5	2	7	1	3	2	5	42	
Human Error - Foreign	2	-	-	-	1	2	1	0	0	3	-	-	1	10	
Sick, Injured, Unruly Passenger - Total	3	6	1	3	-	7	4	1	3	0	4	2	3	34	
Sick, Injured, Unruly Passenger - Metra/PSA	3	6	1	3	-	7	4	1	3	0	4	2	3	34	
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Weather - Total	12	1	-	0	-	4	7	1	2	0	8	5	6	46	
Weather - Metra/PSA	12	1	-	0	-	4	7	1	2	0	8	5	6	46	
Weather - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Passenger Loading - Total	11	12	1	4	-	13	12	-	11	-	18	15	9	104	
Lift Deployment - Total	6	1	-	0	-	3	3	1	3	0	2	2	2	22	
Obstruction/Debris - Total	7	1	0	3	-	7	3	1	2	5	2	3	3	38	
Catenary Failure - Total	-	7	2	2	-	-	-	-	-	-	-	-	-	11	
Other - Total	5	1	0	1	0	1	3	1	3	3	2	3	3	26	
Total Trains Delayed	140	51	9	32	8	92	73	28	68	37	60	67	78	743	
Total Metra/PSA Delays	97	51	8	32	1	76	60	15	63	17	59	56	56	591	
Total Foreign Carrier Delays	43	-	0	0	7	16	13	13	4	20	2	11	22	151	

Data for current month is FINAL (09/25/18) 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
August 2018 Compared to Average August Over Previous Five Years: 2013-2017

Cause Category	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - Total	(20)	-	(0)	-	3	(0)	4	1	(2)	(0)	1	(0)	9	(6)
Freight Interference - Peak	(8)	-	(0)	-	3	(2)	2	3	(2)	(3)	1	-	2	(4)
Primary	(4)	-	-	-	1	(2)	(1)	2	(1)	(3)	1	0	6	(1)
Secondary	(4)	-	(0)	-	2	(0)	3	1	(1)	0	-	(0)	(3)	(3)
Freight Interference - Off-Peak	(12)	-	-	-	(0)	1	2	(2)	(0)	3	(0)	(0)	7	(2)
Primary	(8)	-	-	-	-	1	2	(3)	(0)	3	(0)	(0)	7	-
Secondary	(3)	-	-	-	(0)	1	0	1	-	(1)	-	-	-	(2)
Signal/Switch Failure - Total	18	1	1	(3)	(2)	(3)	(10)	2	16	4	9	4	6	45
Signal/Switch Failure - Metra/PSA	23	1	1	(3)	-	(3)	(10)	0	16	3	9	6	7	51
Primary	8	1	1	(2)	-	3	(5)	3	13	2	1	(2)	(1)	24
Secondary	15	(0)	(0)	(1)	-	(6)	(6)	(3)	3	1	8	8	8	27
Signal/Switch Failure - Foreign	(5)	-	-	-	(2)	(0)	1	2	(0)	1	-	(2)	(0)	(6)
Primary	(3)	-	-	-	(2)	(1)	1	1	(0)	1	-	(1)	(0)	(4)
Secondary	(2)	-	-	-	-	1	-	1	-	(0)	-	(1)	-	(2)
Mechanical Failure - Total	37	(6)	(1)	(1)	1	(1)	1	2	(1)	0	(1)	(6)	5	30
Mechanical Failure - Metra/PSA	38	(6)	(1)	(1)	1	(0)	1	2	(1)	0	(1)	(6)	5	31
Non-Locomotive Equipment Failure - Metra/PSA	(1)	(6)	(1)	(1)	-	1	(2)	(0)	(0)	-	(1)	(2)	(1)	(14)
Primary	(1)	(1)	(0)	(0)	-	2	(1)	-	(0)	-	(0)	(0)	(0)	(3)
Secondary	(1)	(5)	(1)	(1)	-	(0)	(0)	(0)	-	-	(0)	(2)	(0)	(11)
Locomotive Failure - Metra/PSA	39	-	-	-	1	(1)	2	2	(1)	0	-	(4)	6	45
Primary	1	-	-	-	(0)	(2)	(0)	1	(2)	-	0	(1)	3	0
Secondary	38	-	-	-	2	0	3	1	0	0	(0)	(3)	3	45
Mechanical Failure - Foreign	(1)	-	-	-	-	(1)	-	-	-	-	-	-	-	(1)
Passenger Train Interference - Total	(3)	(0)	(0)	(1)	(1)	(3)	(1)	1	(1)	(0)	(0)	1	(1)	(8)
Passenger Train Interference - Metra/PSA	-	(0)	(0)	(0)	(0)	(2)	(1)	0	(1)	-	(0)	1	(1)	(4)
Passenger Train Interference - Foreign	(3)	-	-	(0)	(0)	(1)	(0)	1	-	(0)	-	-	-	(4)
Accident - Total	(13)	5	-	(0)	(0)	(5)	3	(1)	(2)	3	2	(9)	(4)	(21)
Accident - Metra/PSA	(13)	5	-	(0)	(0)	(5)	3	(1)	(3)	(2)	3	(3)	(3)	(18)
Accident - Foreign	-	-	-	-	-	-	(0)	-	1	5	(1)	(6)	(1)	(3)
Track Work - Total	(11)	(7)	(1)	(5)	-	0	(4)	(1)	5	(1)	(4)	4	2	(23)
Track Work - Metra/PSA	(3)	(7)	(1)	(5)	-	0	(4)	(1)	5	(1)	(4)	4	2	(15)
Track Work - Foreign	(8)	-	-	-	-	-	-	-	-	-	-	-	-	(8)
Human Error - Total	40	(1)	-	(2)	1	(5)	(6)	(2)	1	12	1	6	8	52
Human Error - Metra/PSA	33	(1)	-	(2)	1	(4)	(4)	(2)	1	14	1	6	8	50
Human Error - Foreign	7	-	-	-	(0)	(1)	(1)	(0)	(0)	(2)	-	-	(1)	2
Sick, Injured, Unruly Passenger - Total	(2)	1	0	(2)	-	(6)	0	0	(1)	1	(1)	(1)	6	(2)
Sick, Injured, Unruly Passenger - Metra/PSA	(2)	1	0	(2)	-	(6)	0	0	(1)	1	(1)	(1)	6	(2)
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weather - Total	(5)	(1)	-	(0)	1	5	(6)	0	1	(0)	(6)	(4)	10	(5)
Weather - Metra/PSA	(5)	(1)	-	(0)	-	5	(6)	0	1	(0)	(6)	(4)	10	(6)
Weather - Foreign	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Passenger Loading - Total	4	6	(1)	(4)	-	8	1	1	3	1	0	4	10	35
Lift Deployment - Total	1	0	-	(0)	-	(2)	(1)	(1)	(2)	(0)	(1)	1	18	14
Obstruction/Debris - Total	(7)	(1)	1	(1)	-	(1)	(3)	1	10	(2)	-	2	(1)	(3)
Catenary Failure - Total	-	(7)	(2)	(2)	-	-	-	-	-	-	-	-	-	(11)
Other - Total	(3)	(1)	(0)	(1)	(0)	(0)	(1)	(1)	(3)	(3)	1	(1)	7	(6)
Total Trains Delayed	36	(11)	(3)	(22)	3	(12)	(22)	3	23	15	1	2	76	89
Total Metra/PSA Delays	66	(11)	(2)	(22)	2	(9)	(25)	-	25	11	1	10	69	115
Total Foreign Carrier Delays	(30)	-	(0)	(0)	1	(3)	3	3	(1)	4	(1)	(8)	7	(25)

Data for current month is FINAL (09/25/18) 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 6.a: Train Delays by Cause & Line - YTD
January - August 2018**

Cause Category	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - Total	187	-	-	-	52	89	78	51	39	119	10	80	268	973
Freight Interference - Peak	79	-	-	-	45	14	22	16	8	40	2	48	93	367
Primary	33	-	-	-	36	8	11	12	4	29	2	19	41	195
Secondary	46	-	-	-	9	6	11	4	4	11	-	29	52	172
Freight Interference - Off-Peak	108	-	-	-	7	75	56	35	31	79	8	32	175	606
Primary	80	-	-	-	7	47	40	29	23	59	4	22	146	457
Secondary	28	-	-	-	-	28	16	6	8	20	4	10	29	149
Signal/Switch Failure - Total	215	71	33	36	28	145	97	56	96	122	36	75	81	1,091
Signal/Switch Failure - Metra/PSA	168	71	33	36	4	111	76	30	92	50	36	68	74	849
Primary	106	56	27	33	3	77	58	24	72	31	17	29	44	577
Secondary	62	15	6	3	1	34	18	6	20	19	19	39	30	272
Signal/Switch Failure - Foreign	47	-	-	-	24	34	21	26	4	72	-	7	7	242
Primary	36	-	-	-	20	10	13	19	4	43	-	1	5	151
Secondary	11	-	-	-	4	24	8	7	-	29	-	6	2	91
Mechanical Failure - Total	185	11	10	3	6	145	53	39	103	33	65	75	97	825
Mechanical Failure - Metra/PSA	183	9	9	3	5	133	53	38	103	33	65	75	97	806
Non-Locomotive Equipment Failure - Metra/PSA	40	9	9	3	-	5	-	2	5	9	26	33	37	178
Primary	19	3	3	-	-	5	-	1	3	5	14	10	13	76
Secondary	21	6	6	3	-	-	-	1	2	4	12	23	24	102
Locomotive Failure - Metra/PSA	143	-	-	-	5	128	53	36	98	24	39	42	60	628
Primary	26	-	-	-	2	28	13	8	26	9	17	12	19	160
Secondary	117	-	-	-	3	100	40	28	72	15	22	30	41	468
Mechanical Failure - Foreign	2	2	1	-	1	12	-	1	-	-	-	-	-	19
Passenger Train Interference - Total	34	3	1	1	10	37	5	12	1	46	-	2	4	156
Passenger Train Interference - Metra/PSA	6	-	-	-	-	27	2	10	-	-	-	2	4	51
Passenger Train Interference - Foreign	28	3	1	1	10	10	3	2	1	46	-	-	-	105
Accident - Total	45	27	2	8	-	4	26	13	27	11	35	27	31	256
Accident - Metra/PSA	38	27	2	8	-	4	26	9	15	5	35	27	24	220
Accident - Foreign	7	-	-	-	-	-	-	4	12	6	-	-	7	36
Track Work - Total	96	22	7	26	22	81	10	7	88	9	48	35	39	490
Track Work - Metra/PSA	94	22	7	26	22	81	10	7	88	6	48	35	39	485
Track Work - Foreign	2	-	-	-	-	-	-	-	-	3	-	-	-	5
Human Error - Total	277	25	9	13	12	79	21	19	71	32	36	53	65	712
Human Error - Metra/PSA	156	24	9	12	3	55	19	11	71	25	33	43	49	510
Human Error - Foreign	121	1	-	1	9	24	2	8	-	7	3	10	16	202
Sick, Injured, Unruly Passenger - Total	30	25	3	4	-	33	19	3	29	7	45	24	67	289
Sick, Injured, Unruly Passenger - Metra/PSA	30	25	3	4	-	33	19	3	29	7	45	24	67	289
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weather - Total	168	34	14	11	3	82	60	11	132	16	32	67	49	679
Weather - Metra/PSA	168	34	14	11	2	82	60	11	131	15	32	67	48	675
Weather - Foreign	-	-	-	-	1	-	-	-	1	1	-	-	1	4
Passenger Loading - Total	70	41	11	3	-	60	54	9	57	2	50	87	67	511
Lift Deployment - Total	48	1	-	-	-	21	27	4	13	3	12	24	66	219
Obstruction/Debris - Total	58	12	8	25	2	27	5	11	68	13	15	79	99	422
Catenary Failure - Total	-	2	-	-	-	-	-	-	-	-	-	-	-	2
Other - Total	44	5	4	3	-	19	23	-	22	15	29	18	33	215
Total Trains Delayed	1,457	279	102	133	135	822	478	235	746	428	413	646	966	6,840
Total Metra/PSA Delays	1,063	273	100	131	38	653	374	143	689	174	400	549	667	5,254
Total Foreign Carrier Delays	394	6	2	2	97	169	104	92	57	254	13	97	299	1,586

Data for current month is FINAL (09/25/18) 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 6.b: Train Delays by Cause & Line - YTD
January - August Average Over Previous 5 Years: 2013-2017

Cause Category	Top 2 causes for each line are shaded														
	BNSF	Electric			HER	Milw			NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W	N				NW	W		
Freight Interference - Total	158	-	0	-	24	97	93	92	48	97	11	42	144	806	
Freight Interference - Peak	65	-	0	-	23	20	21	35	13	31	3	19	43	273	
Primary	42	-	-	-	21	14	14	24	8	23	1	10	20	178	
Secondary	23	-	0	-	1	7	6	11	5	8	1	9	23	95	
Freight Interference - Off-Peak	93	-	-	-	1	77	72	57	35	66	9	23	101	533	
Primary	77	-	-	-	1	51	47	49	29	50	5	18	78	405	
Secondary	16	-	-	-	0	26	25	8	6	17	4	5	23	129	
Signal/Switch Failure - Total	167	48	24	26	15	156	106	65	63	62	27	52	88	898	
Signal/Switch Failure - Metra/PSA	102	48	24	26	1	127	89	38	60	14	26	46	84	685	
Primary	71	29	18	19	1	61	51	19	43	10	13	17	29	381	
Secondary	31	18	6	7	0	66	38	19	17	5	13	29	55	304	
Signal/Switch Failure - Foreign	65	-	0	-	14	29	18	26	3	48	1	6	3	213	
Primary	48	-	-	-	12	18	12	15	2	30	1	3	3	144	
Secondary	17	-	0	-	2	11	5	12	1	17	-	3	0	69	
Mechanical Failure - Total	118	30	8	6	5	97	71	23	116	23	68	60	52	678	
Mechanical Failure - Metra/PSA	117	27	7	6	5	90	70	23	116	23	68	60	51	664	
Non-Locomotive Equipment Failure - Metra/PSA	30	27	7	6	1	12	15	4	13	7	14	16	23	175	
Primary	12	8	3	3	1	4	7	1	6	3	6	6	11	72	
Secondary	19	18	4	3	0	8	8	3	7	5	8	9	11	103	
Locomotive Failure - Metra/PSA	86	-	-	-	4	78	56	19	103	16	54	45	29	489	
Primary	28	-	-	-	3	22	22	6	33	7	18	15	12	164	
Secondary	59	-	-	-	1	56	34	13	70	9	36	29	17	325	
Mechanical Failure - Foreign	1	4	1	0	0	6	0	-	0	-	-	-	0	13	
Passenger Train Interference - Total	13	5	2	4	6	40	7	10	9	12	1	2	8	120	
Passenger Train Interference - Metra/PSA	1	3	1	2	1	27	6	10	6	2	1	2	7	69	
Passenger Train Interference - Foreign	12	2	1	2	6	13	1	0	3	10	-	0	1	51	
Accident - Total	104	22	8	12	1	38	40	12	24	9	24	77	19	389	
Accident - Metra/PSA	88	22	8	12	1	35	37	10	22	8	23	70	14	348	
Accident - Foreign	17	-	-	-	0	3	3	3	2	2	1	7	4	42	
Track Work - Total	177	39	12	46	2	52	25	12	57	8	39	36	46	550	
Track Work - Metra/PSA	163	39	12	46	2	52	24	11	57	6	39	36	46	533	
Track Work - Foreign	14	-	-	-	-	0	1	1	-	1	-	-	-	17	
Human Error - Total	117	35	13	20	14	68	47	18	47	26	33	37	37	513	
Human Error - Metra/PSA	77	32	13	19	2	45	32	9	47	6	26	25	21	355	
Human Error - Foreign	40	2	0	1	12	23	15	10	0	20	8	12	16	158	
Sick, Injured, Unruly Passenger - Total	25	42	7	13	1	27	27	3	21	3	24	33	28	254	
Sick, Injured, Unruly Passenger - Metra/PSA	23	42	7	13	1	27	27	3	21	3	24	33	28	252	
Sick, Injured, Unruly Passenger - Foreign	2	-	-	-	-	-	-	-	0	-	-	-	-	2	
Weather - Total	184	96	28	33	5	101	84	25	110	19	80	89	73	926	
Weather - Metra/PSA	183	96	28	33	5	99	83	25	110	19	80	89	72	921	
Weather - Foreign	1	-	-	-	0	2	1	-	-	1	-	-	0	5	
Passenger Loading - Total	42	68	13	27	-	53	60	1	91	1	63	80	49	549	
Lift Deployment - Total	22	2	-	1	-	26	20	2	20	1	9	14	18	135	
Obstruction/Debris - Total	56	22	8	23	4	30	31	9	23	19	23	38	35	321	
Catenary Failure - Total	-	42	9	19	-	-	-	-	-	-	-	-	-	69	
Other - Total	39	8	3	8	0	13	13	5	19	10	14	18	30	181	
Total Trains Delayed	1,222	458	136	237	78	798	624	277	649	291	416	578	626	6,389	
Total Metra/PSA Delays	910	449	134	234	22	624	493	146	592	113	395	511	457	5,081	
Total Foreign Carrier Delays	311	8	2	3	56	174	131	132	57	178	21	66	168	1,308	

Data for current month is FINAL (09/25/18) 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 6.c: Train Delays by Cause & Line - YTD
January - August 2018 Compared to January - August Average Over Previous 5 Years: 2013-2017

Cause Category	BNSF	Electric			HER	Milw		NCS	RI	SWS	Union Pacific			SYSTEM
		ML	BI	SC		N	W				N	NW	W	
Freight Interference - Total	29	-	(0)	-	28	(8)	(15)	(41)	(9)	22	(1)	38	124	167
Freight Interference - Peak	14	-	(0)	-	22	(6)	1	(19)	(5)	9	(1)	29	50	94
Primary	(9)	-	-	-	15	(6)	(3)	(12)	(4)	6	1	9	21	17
Secondary	23	-	(0)	-	8	(1)	5	(7)	(1)	3	(1)	20	29	77
Freight Interference - Off-Peak	15	-	-	-	6	(2)	(16)	(22)	(4)	13	(1)	9	74	73
Primary	3	-	-	-	6	(4)	(7)	(20)	(6)	9	(1)	4	68	52
Secondary	12	-	-	-	(0)	2	(9)	(2)	2	3	0	5	6	20
Signal/Switch Failure - Total	48	23	9	10	13	(11)	(9)	(9)	33	60	9	23	(7)	193
Signal/Switch Failure - Metra/PSA	66	23	9	10	3	(16)	(13)	(8)	32	36	10	22	(10)	164
Primary	35	27	9	14	2	16	7	5	29	21	4	12	15	196
Secondary	31	(3)	(0)	(4)	1	(32)	(20)	(13)	3	14	6	10	(25)	(32)
Signal/Switch Failure - Foreign	(18)	-	(0)	-	10	5	3	(0)	1	24	(1)	1	4	29
Primary	(12)	-	-	-	8	(8)	1	4	2	13	(1)	(2)	2	7
Secondary	(6)	-	(0)	-	2	13	3	(5)	(1)	12	-	3	2	22
Mechanical Failure - Total	67	(19)	2	(3)	1	48	(18)	16	(13)	10	(3)	15	45	147
Mechanical Failure - Metra/PSA	66	(18)	2	(3)	(0)	43	(17)	15	(13)	10	(3)	15	46	142
Non-Locomotive Equipment Failure - Metra/PSA	10	(18)	2	(3)	(1)	(7)	(15)	(2)	(8)	2	12	17	14	3
Primary	7	(5)	-	(3)	(1)	1	(7)	(0)	(3)	2	8	4	2	4
Secondary	2	(12)	2	-	(0)	(8)	(8)	(2)	(5)	(1)	4	14	13	(1)
Locomotive Failure - Metra/PSA	57	-	-	-	1	50	(3)	17	(5)	8	(15)	(3)	31	139
Primary	(2)	-	-	-	(1)	6	(9)	2	(7)	2	(1)	(3)	7	(4)
Secondary	58	-	-	-	2	44	6	15	2	6	(14)	1	24	143
Mechanical Failure - Foreign	1	(2)	0	(0)	1	6	(0)	1	(0)	-	-	-	(0)	6
Passenger Train Interference - Total	21	(2)	(1)	(3)	4	(3)	(2)	2	(8)	34	(1)	(0)	(4)	36
Passenger Train Interference - Metra/PSA	5	(3)	(1)	(2)	(1)	-	(4)	(0)	(6)	(2)	(1)	-	(3)	(18)
Passenger Train Interference - Foreign	16	1	0	(1)	4	(3)	2	2	(2)	36	-	(0)	(1)	54
Accident - Total	(59)	5	(6)	(4)	(1)	(34)	(14)	1	3	2	11	(50)	12	(133)
Accident - Metra/PSA	(50)	5	(6)	(4)	(1)	(31)	(11)	(1)	(7)	(3)	12	(43)	10	(128)
Accident - Foreign	(10)	-	-	-	(0)	(3)	(3)	1	10	4	(1)	(7)	3	(6)
Track Work - Total	(81)	(17)	(5)	(20)	20	29	(15)	(5)	31	1	9	(1)	(7)	(60)
Track Work - Metra/PSA	(69)	(17)	(5)	(20)	20	29	(14)	(4)	31	(0)	9	(1)	(7)	(48)
Track Work - Foreign	(12)	-	-	-	-	(0)	(1)	(1)	-	2	-	-	-	(12)
Human Error - Total	160	(10)	(4)	(7)	(2)	11	(26)	1	24	6	3	16	28	199
Human Error - Metra/PSA	79	(8)	(4)	(7)	1	10	(13)	2	24	19	7	18	28	155
Human Error - Foreign	81	(1)	(0)	0	(3)	1	(13)	(2)	(0)	(13)	(5)	(2)	0	44
Sick, Injured, Unruly Passenger - Total	5	(17)	(4)	(9)	(1)	6	(8)	-	8	4	21	(9)	39	35
Sick, Injured, Unruly Passenger - Metra/PSA	7	(17)	(4)	(9)	(1)	6	(8)	-	8	4	21	(9)	39	37
Sick, Injured, Unruly Passenger - Foreign	(2)	-	-	-	-	-	-	-	(0)	-	-	-	-	(2)
Weather - Total	(16)	(62)	(14)	(22)	(2)	(19)	(24)	(14)	22	(3)	(48)	(22)	(24)	(247)
Weather - Metra/PSA	(15)	(62)	(14)	(22)	(3)	(17)	(23)	(14)	21	(4)	(48)	(22)	(24)	(246)
Weather - Foreign	(1)	-	-	-	1	(2)	(1)	-	1	0	-	-	1	(1)
Passenger Loading - Total	28	(27)	(2)	(24)	-	7	(6)	8	(34)	1	(13)	7	18	(38)
Lift Deployment - Total	26	(1)	-	(1)	-	(5)	7	2	(7)	2	3	10	48	84
Obstruction/Debris - Total	2	(10)	(0)	2	(2)	(3)	(26)	2	45	(6)	(8)	41	64	101
Catenary Failure - Total	-	(40)	(9)	(19)	-	-	-	-	-	-	-	-	-	(67)
Other - Total	5	(3)	1	(5)	(0)	6	10	(5)	3	5	15	(0)	3	34
Total Trains Delayed	235	(179)	(34)	(104)	57	24	(146)	(42)	97	137	(3)	68	340	451
Total Metra/PSA Delays	153	(176)	(34)	(103)	16	29	(119)	(3)	97	61	5	38	210	173
Total Foreign Carrier Delays	83	(2)	-	(1)	41	(5)	(27)	(40)	(0)	76	(8)	31	131	278

Data for current month is FINAL (09/25/18) 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 7.a: Train Delays by Cause & Month
2018**

Cause Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Aug	
Freight Interference - Total	134	126	154	86	136	141	101	95					973	14.2%
Freight Interference - Peak	65	52	55	30	42	55	39	29					367	5.4%
Primary	36	25	26	20	27	26	16	19					195	2.9%
Secondary	29	27	29	10	15	29	23	10					172	2.5%
Freight Interference - Off-Peak	69	74	99	56	94	86	62	66					606	8.9%
Primary	43	58	76	49	69	62	48	52					457	6.7%
Secondary	26	16	23	7	25	24	14	14					149	2.2%
Signal/Switch Failure - Total	160	171	102	95	145	149	128	141					1,091	16.0%
Signal/Switch Failure - Metra/PSA	97	133	96	73	113	103	103	131					849	12.4%
Primary	68	105	51	52	92	63	74	72					577	8.4%
Secondary	29	28	45	21	21	40	29	59					272	4.0%
Signal/Switch Failure - Foreign	63	38	6	22	32	46	25	10					242	3.5%
Primary	22	33	5	20	17	30	16	8					151	2.2%
Secondary	41	5	1	2	15	16	9	2					91	1.3%
Mechanical Failure - Total	204	139	89	60	74	92	65	102					825	12.1%
Mechanical Failure - Metra/PSA	200	132	88	55	74	92	63	102					806	11.8%
Non-Locomotive Equipment Failure - Metra/PSA	46	49	21	10	10	12	23	7					178	2.6%
Primary	13	13	8	5	8	8	15	6					76	1.1%
Secondary	33	36	13	5	2	4	8	1					102	1.5%
Locomotive Failure - Metra/PSA	154	83	67	45	64	80	40	95					628	9.2%
Primary	25	19	20	15	20	21	20	20					160	2.3%
Secondary	129	64	47	30	44	59	20	75					468	6.8%
Mechanical Failure - Foreign	4	7	1	5	-	-	2	-					19	0.3%
Passenger Train Interference - Total	15	12	9	29	33	28	25	5					156	2.3%
Passenger Train Interference - Metra/PSA	7	5	6	12	10	7	1	3					51	0.7%
Passenger Train Interference - Foreign	8	7	3	17	23	21	24	2					105	1.5%
Accident - Total	25	82	70	12	25	-	19	23					256	3.7%
Accident - Metra/PSA	25	79	67	7	12	-	13	17					220	3.2%
Accident - Foreign	-	3	3	5	13	-	6	6					36	0.5%
Track Work - Total	11	18	43	101	100	100	58	59					490	7.2%
Track Work - Metra/PSA	11	18	43	101	99	97	57	59					485	7.1%
Track Work - Foreign	-	-	-	-	1	3	1	-					5	0.1%
Human Error - Total	109	121	61	52	94	91	80	104					712	10.4%
Human Error - Metra/PSA	95	100	49	14	64	59	37	92					510	7.5%
Human Error - Foreign	14	21	12	38	30	32	43	12					202	3.0%
Sick, Injured, Unruly Passenger - Total	24	33	44	33	43	44	36	32					289	4.2%
Sick, Injured, Unruly Passenger - Metra/PSA	24	33	44	33	43	44	36	32					289	4.2%
Sick, Injured, Unruly Passenger - Foreign	-	-	-	-	-	-	-	-					-	0.0%
Weather - Total	172	295	14	27	71	51	8	41					679	9.9%
Weather - Metra/PSA	172	294	13	27	70	51	8	40					675	9.9%
Weather - Foreign	-	1	1	-	1	-	-	1					4	0.1%
Passenger Loading - Total	31	56	32	13	67	95	78	139					511	7.5%
Lift Deployment - Total	24	27	21	13	45	23	30	36					219	3.2%
Obstruction/Debris - Total	40	82	29	62	60	51	63	35					422	6.2%
Catenary Failure - Total	-	1	1	-	-	-	-	-					2	0.0%
Other - Total	38	27	25	19	33	22	31	20					215	3.1%
Total Trains Delayed	987	1,190	694	602	926	887	722	832					6,840	100.0%
Total Metra/PSA Delays	764	987	514	429	690	644	520	706					5,254	76.8%
Total Foreign Carrier Delays	223	203	180	173	236	243	202	126					1,586	23.2%

Data for current month is FINAL (09/25/18) 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 7.b: Train Delays by Cause & Month
2017**

Top 2 causes for each month are shaded													
Cause Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan - Aug
Freight Interference - Total	53	68	69	79	49	110	74	74	96	109	115	110	576 11.0%
Freight Interference - Peak	20	21	23	25	14	34	31	28	42	45	46	30	196 3.7%
Primary	11	16	17	11	12	22	20	22	20	30	28	19	131 2.5%
Secondary	9	5	6	14	2	12	11	6	22	15	18	11	65 1.2%
Freight Interference - Off-Peak	33	47	46	54	35	76	43	46	54	64	69	80	380 7.3%
Primary	26	38	36	34	27	57	30	35	39	50	55	51	283 5.4%
Secondary	7	9	10	20	8	19	13	11	15	14	14	29	97 1.9%
Signal/Switch Failure - Total	118	44	80	79	91	87	69	132	119	64	110	230	700 13.4%
Signal/Switch Failure - Metra/PSA	98	31	74	28	72	74	63	99	104	54	90	211	539 10.3%
Primary	69	21	41	25	46	42	55	72	46	35	57	132	371 7.1%
Secondary	29	10	33	3	26	32	8	27	58	19	33	79	168 3.2%
Signal/Switch Failure - Foreign	20	13	6	51	19	13	6	33	15	10	20	19	161 3.1%
Primary	10	9	4	16	15	10	4	30	14	4	13	11	98 1.9%
Secondary	10	4	2	35	4	3	2	3	1	6	7	8	63 1.2%
Mechanical Failure - Total	84	61	64	42	111	85	85	85	97	125	85	95	617 11.8%
Mechanical Failure - Metra/PSA	83	55	62	42	111	84	80	78	97	125	85	95	595 11.4%
Non-Locomotive Equipment Failure - Metra/PSA	12	8	15	10	23	35	16	21	11	20	20	8	140 2.7%
Primary	6	8	5	7	7	13	6	10	7	8	10	6	62 1.2%
Secondary	6	-	10	3	16	22	10	11	4	12	10	2	78 1.5%
Locomotive Failure - Metra/PSA	71	47	47	32	88	49	64	57	86	105	65	87	455 8.7%
Primary	18	21	20	17	29	25	21	17	22	34	19	22	168 3.2%
Secondary	53	26	27	15	59	24	43	40	64	71	46	65	287 5.5%
Mechanical Failure - Foreign	1	6	2	-	-	1	5	7	-	-	-	-	22 0.4%
Passenger Train Interference - Total	16	2	2	5	19	9	9	14	18	17	11	11	76 1.5%
Passenger Train Interference - Metra/PSA	9	-	1	2	2	4	6	10	16	12	8	6	34 0.6%
Passenger Train Interference - Foreign	7	2	1	3	17	5	3	4	2	5	3	5	42 0.8%
Accident - Total	74	32	26	101	18	65	45	43	96	55	70	9	404 7.7%
Accident - Metra/PSA	69	32	23	98	9	64	40	1	93	49	26	8	336 6.4%
Accident - Foreign	5	-	3	3	9	1	5	42	3	6	44	1	68 1.3%
Track Work - Total	78	17	29	72	98	107	71	86	84	94	129	83	558 10.6%
Track Work - Metra/PSA	78	17	29	72	98	107	71	80	77	94	128	83	552 10.5%
Track Work - Foreign	-	-	-	-	-	-	-	6	7	-	1	-	6 0.1%
Human Error - Total	68	140	54	69	56	75	73	42	66	85	88	82	577 11.0%
Human Error - Metra/PSA	58	50	37	49	41	58	48	37	55	50	67	52	378 7.2%
Human Error - Foreign	10	90	17	20	15	17	25	5	11	35	21	30	199 3.8%
Sick, Injured, Unruly Passenger - Total	27	28	40	27	20	38	44	30	17	37	26	22	254 4.8%
Sick, Injured, Unruly Passenger - Metra/PSA	27	28	34	27	20	38	44	30	17	37	26	22	248 4.7%
Sick, Injured, Unruly Passenger - Foreign	-	-	6	-	-	-	-	-	-	-	-	-	6 0.1%
Weather - Total	97	25	59	4	2	33	104	2	-	37	22	212	326 6.2%
Weather - Metra/PSA	96	25	59	4	2	33	104	2	-	37	22	211	325 6.2%
Weather - Foreign	1	-	-	-	-	-	-	-	-	-	-	1	1 0.0%
Passenger Loading - Total	33	7	12	10	36	81	94	112	64	35	43	54	385 7.3%
Lift Deployment - Total	17	8	8	13	23	31	29	23	25	15	28	28	152 2.9%
Obstruction/Debris - Total	66	44	43	35	78	64	24	52	25	45	46	23	406 7.7%
Catenary Failure - Total	6	1	4	1	-	-	1	-	18	1	-	1	13 0.2%
Other - Total	15	15	24	20	22	37	32	32	48	22	24	29	197 3.8%
Total Trains Delayed	752	492	514	557	623	822	754	727	773	741	797	989	5,241 100.0%
Total Metra/PSA Delays	655	313	410	401	514	675	636	556	639	576	593	823	4,160 79.4%
Total Foreign Carrier Delays	97	179	104	156	109	147	118	171	134	165	204	166	1,081 20.6%

Data for latest month is final (01/25/18) version from 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 8: Train Delays by Duration
August 2018**

Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
Weekday Peak *														
6-10	27	2	1	0	4	8	5	10	11	7	9	18	40	142
11-15	11	2	0	0	2	4	4	1	10	2	7	3	12	58
16-20	4	4	1	1	0	3	0	3	5	3	1	3	7	35
21+	39	1	0	0	4	3	0	1	9	3	2	1	17	80
Annulled	<u>7</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>12</u>
Sub-Total	88	9	2	1	10	18	9	15	37	16	20	25	77	327
Weekday Off-Peak **														
6-10	44	7	2	4	0	19	17	7	20	16	9	9	22	176
11-15	17	1	1	1	1	10	6	4	12	6	5	6	17	87
16-20	6	1	1	0	0	5	2	3	4	7	6	4	8	47
21+	6	0	0	0	0	4	2	2	7	7	5	6	11	50
Annulled	<u>6</u>	<u>0</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>0</u>	<u>1</u>	<u>9</u>
Sub-Total	79	9	4	5	1	40	27	16	43	36	25	25	59	369
Saturday														
6-10	7	7	0	1	0	5	5	0	5	0	2	5	6	43
11-15	1	3	0	0	0	8	3	0	0	0	2	2	0	19
16-20	0	0	0	0	0	1	2	0	0	0	0	3	0	6
21+	0	1	0	1	0	0	4	0	0	0	0	1	1	8
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>1</u>	<u>1</u>
Sub-Total	8	11	0	2	0	14	14	0	5	0	4	11	8	77
Sunday-Holiday														
6-10	1	10	0	1	0	3	1	0	4	0	4	4	4	32
11-15	0	0	0	0	0	2	0	0	2	0	0	3	3	10
16-20	0	0	0	0	0	0	0	0	0	0	5	1	0	6
21+	0	1	0	1	0	3	0	0	0	0	3	0	3	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	1	11	0	2	0	8	1	0	6	0	12	8	10	59
August 2018 Total														
6-10	79	26	3	6	4	35	28	17	40	23	24	36	72	393
11-15	29	6	1	1	3	24	13	5	24	8	14	14	32	174
16-20	10	5	2	1	0	9	4	6	9	10	12	11	15	94
21+	45	3	0	2	4	10	6	3	16	10	10	8	32	149
Annulled	<u>13</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>1</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>22</u>
TOTAL	176	40	6	10	11	80	51	31	91	52	61	69	154	832
2018 Year-to-Date														
6-10	753	153	64	72	53	401	242	113	385	187	159	266	458	3,306
11-15	318	54	21	18	31	173	112	36	137	93	95	140	187	1,415
16-20	123	28	9	7	16	77	45	32	69	50	56	74	118	704
21+	201	32	6	19	35	142	64	48	126	86	84	150	178	1,171
Annulled	<u>62</u>	<u>12</u>	<u>2</u>	<u>17</u>	<u>0</u>	<u>29</u>	<u>15</u>	<u>6</u>	<u>29</u>	<u>12</u>	<u>19</u>	<u>16</u>	<u>25</u>	<u>244</u>
TOTAL	1,457	279	102	133	135	822	478	235	746	428	413	646	966	6,840
Share of Delays by Duration														
Minutes	BNSF	Electric			Her	Milwaukee		NCS	RI	SWS	UP			System
		ML	BI	SC		N	W				N	NW	W	
August 2018 Total														
6-10	44.9%	65.0%	50.0%	60.0%	36.4%	43.8%	54.9%	54.8%	44.0%	44.2%	39.3%	52.2%	46.8%	47.2%
11-15	16.5%	15.0%	16.7%	10.0%	27.3%	30.0%	25.5%	16.1%	26.4%	15.4%	23.0%	20.3%	20.8%	20.9%
16-20	5.7%	12.5%	33.3%	10.0%	0.0%	11.3%	7.8%	19.4%	9.9%	19.2%	19.7%	15.9%	9.7%	11.3%
21+	25.6%	7.5%	0.0%	20.0%	36.4%	12.5%	11.8%	9.7%	17.6%	19.2%	16.4%	11.6%	20.8%	17.9%
Annulled	<u>7.4%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>2.5%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>2.2%</u>	<u>1.9%</u>	<u>1.6%</u>	<u>0.0%</u>	<u>1.9%</u>	<u>2.6%</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-to-Date Delays By Duration														
6-10	51.7%	54.8%	62.7%	54.1%	39.3%	48.8%	50.6%	48.1%	51.6%	43.7%	38.5%	41.2%	47.4%	48.3%
11-15	21.8%	19.4%	20.6%	13.5%	23.0%	21.0%	23.4%	15.3%	18.4%	21.7%	23.0%	21.7%	19.4%	20.7%
16-20	8.4%	10.0%	8.8%	5.3%	11.9%	9.4%	9.4%	13.6%	9.2%	11.7%	13.6%	11.5%	12.2%	10.3%
21+	13.8%	11.5%	5.9%	14.3%	25.9%	17.3%	13.4%	20.4%	16.9%	20.1%	20.3%	23.2%	18.4%	17.1%
Annulled	<u>4.3%</u>	<u>4.3%</u>	<u>2.0%</u>	<u>12.8%</u>	<u>0.0%</u>	<u>3.5%</u>	<u>3.1%</u>	<u>2.6%</u>	<u>3.9%</u>	<u>2.8%</u>	<u>4.6%</u>	<u>2.5%</u>	<u>2.6%</u>	<u>3.6%</u>
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Data for most recent month is final (09/25/2018) version from TOPS.