

COMMUTER RAIL SYSTEM

ON-TIME PERFORMANCE REPORT

October 2016



COMMUTER RAIL ON-TIME PERFORMANCE

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This report presents an analysis of the October 2016 train delays as reported for Metra's eleven commuter rail lines. On-time is defined, for this analysis, as those regularly scheduled trains arriving at their last station stop less than six minutes behind schedule. Trains that are six minutes or more behind schedule, including annulled trains (trains that do not complete their scheduled runs), are regarded as late. "Extra" trains (trains added to handle special events but not shown in the regularly published timetables) are excluded from on-time performance calculations unless shown in special-event schedules that include all intermediate station stop times and are distributed publicly via Metra's website or on paper flyers. Cancelled (not annulled) trains and non-revenue trains are also excluded from on-time performance calculations.

On-Time Performance Tables

Table 1 presents the number of train delays by rail line and service period. During October 2016, Metra operated 17,318 scheduled trains, including scheduled "extras", if any. 455 of these trains were delayed (late or annulled), representing an on-time performance rate of 97.4%. Table 2 lists on-time percentages by line for each month and year since 2011.

Table 3 lists each train that was on time for less than 85% of its weekday runs in October 2016, in order of line, train, and dates delayed. The codes in the 'Delay Code' column of Table 3 are defined in Table 4 and shown sorted by delay-cause category and carrier designation in Table 5. Effective January 1, 2012, January 1, 2014, and July 1, 2016, Metra is using an expanded set of delay codes, to provide more detail about the cause of and responsibility for each train delay.

Table 6.a shows the frequency of train delays by delay-cause control and by line during October 2016. Of the 455 delays systemwide in October 2016, all but 256 (56%) were beyond Metra's control. Table 6.b shows the average frequencies over the previous four Octobers, and Table 6.c shows the differences between Table 6.a and Table 6.b., illustrating that in October 2016, 86 fewer delays than the average over the previous four Octobers were controllable. Table 6.d shows the delay-cause control frequencies since the beginning of the year. Of the 6,570 delays in 2016, all but 3,346 (51%) were beyond Metra's control.

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

Table 8.a shows the frequency of train delays by delay-cause category and by line during October 2016. Table 8.b shows the average frequencies over the previous five Octobers, and Table 8.c shows the differences between Table 8.a and Table 8.b. There were 455 delays systemwide in October 2016, 309 less than the average over the previous five Octobers. Table 9.a shows delays from the beginning of the year through October 2016. Table 9.b shows the average frequencies from the beginning of the year through October of each of the previous five years, and Table 9.c shows the differences between Table 9.a and Table 9.b. Tables 10.a and 10.b display the systemwide frequency of train delays by cause and by month, for 2016 and 2015 respectively, and Table 10.c shows the difference between the two. From January through October of 2016, a total of 6,570 trains were delayed, compared to 6,819 trains delayed in the same ten months of 2015.

In Tables 8 through 10, delays by cause are separated into 'Metra/PSA' and 'Foreign' designations, where applicable. 'Metra/PSA' refers to delays that may be directly or indirectly attributed to Metra or Metra Purchase of Service Agreement partners (BNSF and UP) in commuter rail operation. 'Foreign' refers to delays that may be directly or indirectly attributed to other carriers, including freight carriers, Amtrak, and

NICTD, that affect Metra trains. 'Foreign' also includes delays attributable to BNSF and Union Pacific freight operations. See Table 5 for a detailed breakdown of delay codes by cause category and carrier designation.

Table 11 shows, by line and month, all train delays caused by freight operations over the past 24 months. In October 2016 freight operations delayed 48 trains systemwide, compared to 60 a year earlier. Tables 12.a and 12.b display the frequency of lift-deployment train delays by line and month, for 2016 and 2015 respectively. A total of 12 trains were delayed by lift deployment in October 2016.

A review of October 2016 late trains by duration of delay is shown in Table 13. The range with the greatest number of delays was, as usual, six-to-ten minutes, accounting for 52.3% of all late trains. Table 14 shows that the average length of delay was 15.1 minutes in October 2016. It should be noted that these averages relate only to reportable delays (i.e., trains late by six minutes or more).

Changes in On-Time Performance Reporting Calculations (effective with the May 2011 On-Time Performance Report)

“Extra” Trains

“Extra” trains (trains added to handle special events but not shown in the regularly published schedules) are excluded from on-time performance calculations, except for those “extra” trains whose special-event schedules include all intermediate station stop times and are distributed publicly via Metra's website or on paper flyers. Prior to May 2011, all “extra” trains were included in the count of all trains for the purpose of calculating on-time performance and were always reported as on-time.

Intermediate station departure times and final station arrival times for some “extra” trains are either unknown (departures of some “extra” trains are held until after the completion of the respective special event) or not published. On-time performance for these two types of “extra” trains cannot be calculated, as arrival times are not known ahead of time; these trains are therefore excluded from on-time performance calculations. However, on-time performance can be calculated for “extra” trains that have full published schedules.

Temporary Schedules and Notices, for Construction and Special Events

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

(Prior to May 2011, some trains affected by planned construction work arrived at their last station stops six minutes or more late, but were counted as on-time because a construction time allowance was deducted from the actual delay time. This allowance, typically five or ten minutes (but occasionally more) depending on the nature of the scheduled work, was assigned in advance to all off-peak and reverse-peak trains that might be affected by a particular project, but never to peak period/peak direction trains. For such trains, the assigned construction allowance was added onto the scheduled arrival time at the destination station for the purpose of calculating the total minutes of delay.)

**TABLE 1: SCHEDULED AND DELAYED TRAINS, AND ON-TIME PERFORMANCE BY SERVICE PERIOD AND LINE
October 2016**

| | 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 | 1,134 | 54 | 95.2% | 840 | 45 | 94.6% | 1,974 | 99 | 95.0% | 140 | 4 | 97.1% | 92 | 2 | 97.8% | 2,206 | 105 | 95.2% |
| Elec -ML | 945 | 7 | 99.3% | 714 | 20 | 97.2% | 1,659 | 27 | 98.4% | 230 | 6 | 97.4% | 106 | 3 | 97.2% | 1,995 | 36 | 98.2% |
| -BI | 294 | 1 | 99.7% | 483 | 2 | 99.6% | 777 | 3 | 99.6% | 150 | 0 | 100.0% | 106 | -- | 100.0% | 927 | 3 | 99.7% |
| -SC | <u>357</u> | <u>4</u> | 98.9% | <u>777</u> | <u>11</u> | 98.6% | <u>1,134</u> | <u>15</u> | 98.7% | <u>240</u> | <u>8</u> | 96.7% | <u>100</u> | <u>0</u> | 100.0% | <u>1,474</u> | <u>23</u> | 98.4% |
| Subtotal | 1,596 | 12 | 99.2% | 1,974 | 33 | 98.3% | 3,570 | 45 | 98.7% | 620 | 14 | 97.7% | 206 | 3 | 98.5% | 4,396 | 62 | 98.6% |
| Heritage | 126 | 2 | 98.4% | 21 | 1 | 95.2% | 147 | 3 | 98.0% | -- | -- | -- | -- | -- | -- | 147 | 3 | 98.0% |
| Milw -N | 525 | 17 | 96.8% | 735 | 17 | 97.7% | 1,260 | 34 | 97.3% | 120 | 2 | 98.3% | 102 | 1 | 99.0% | 1,482 | 37 | 97.5% |
| -W | <u>567</u> | <u>21</u> | 96.3% | <u>651</u> | <u>21</u> | 96.8% | <u>1,218</u> | <u>42</u> | 96.6% | <u>120</u> | <u>0</u> | 100.0% | <u>90</u> | <u>1</u> | 98.9% | <u>1,428</u> | <u>43</u> | 97.0% |
| Subtotal | 1,092 | 38 | 96.5% | 1,386 | 38 | 97.3% | 2,478 | 76 | 96.9% | 240 | 2 | 99.2% | 192 | 2 | 99.0% | 2,910 | 80 | 97.3% |
| NCS | 231 | 13 | 94.4% | 231 | 8 | 96.5% | 462 | 21 | 95.5% | -- | -- | -- | -- | -- | -- | 462 | 21 | 95.5% |
| RI | 756 | 10 | 98.7% | 798 | 20 | 97.5% | 1,554 | 30 | 98.1% | 160 | 2 | 98.8% | 140 | 2 | 98.6% | 1,854 | 34 | 98.2% |
| SWS | 231 | 6 | 97.4% | 399 | 11 | 97.2% | 630 | 17 | 97.3% | 30 | 0 | 100.0% | -- | -- | -- | 660 | 17 | 97.4% |
| UP -N | 630 | 3 | 99.5% | 840 | 10 | 98.8% | 1,470 | 13 | 99.1% | 130 | 2 | 98.5% | 90 | 1 | 98.9% | 1,690 | 16 | 99.1% |
| -NW | 693 | 25 | 96.4% | 672 | 6 | 99.1% | 1,365 | 31 | 97.7% | 120 | 12 | 90.0% | 77 | 11 | 85.7% | 1,562 | 54 | 96.5% |
| -W | <u>567</u> | <u>29</u> | 94.9% | <u>672</u> | <u>29</u> | 95.7% | <u>1,239</u> | <u>58</u> | 95.3% | <u>100</u> | <u>4</u> | 96.0% | <u>92</u> | <u>1</u> | 98.9% | <u>1,431</u> | <u>63</u> | 95.6% |
| Subtotal | 1,890 | 57 | 97.0% | 2,184 | 45 | 97.9% | 4,074 | 102 | 97.5% | 350 | 18 | 94.9% | 259 | 13 | 95.0% | 4,683 | 133 | 97.2% |
| SYSTEM | 7,056 | 192 | 97.3% | 7,833 | 201 | 97.4% | 14,889 | 393 | 97.4% | 1,540 | 40 | 97.4% | 889 | 22 | 97.5% | 17,318 | 455 | 97.4% |

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

Delays data for most recent month is final (11/14/16) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls\OTPBbyServPeriod&Line 11/14/16

TABLE 2: ON-TIME PERFORMANCE BY LINE/BRANCH

| LINE | YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN-OCT | AVG |
|-----------------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-------|
| BNSF | 2011 | 96.2 | 89.6 | 97.4 | 96.9 | 93.0 | 93.0 | 83.3 | 92.3 | 90.4 | 92.8 | 94.0 | 95.4 | 92.6% | 92.9% |
| | 2012 | 94.4 | 97.3 | 95.2 | 98.4 | 97.2 | 91.8 | 95.0 | 94.2 | 98.0 | 96.9 | 95.0 | 98.5 | 95.8% | 96.0% |
| | 2013 | 95.8 | 93.9 | 94.6 | 93.3 | 96.0 | 88.5 | 95.2 | 97.1 | 97.2 | 94.0 | 95.8 | 92.2 | 94.6% | 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 | 88.7% | 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 | 94.2% | 94.4% |
| | 2016 | 93.2 | 93.8 | 95.9 | 96.8 | 94.0 | 93.5 | 93.8 | 91.4 | 91.3 | 95.2 | | | 93.9% | 93.9% |
| | 2011-2015 average | 91.2 | 91.2 | 95.9 | 95.6 | 92.2 | 89.6 | 92.2 | 94.1 | 95.1 | 93.9 | 94.7 | 95.5 | 93.2% | 93.5% |
| Electric | 2011 | 98.6 | 95.1 | 98.1 | 97.7 | 97.7 | 95.1 | 94.6 | 96.6 | 97.0 | 94.4 | 97.2 | 98.7 | 96.5% | 96.8% |
| | 2012 | 93.7 | 98.4 | 97.9 | 98.7 | 98.0 | 97.0 | 97.3 | 97.7 | 97.5 | 96.6 | 97.1 | 98.2 | 97.3% | 97.3% |
| | 2013 | 98.1 | 99.0 | 98.5 | 98.0 | 98.0 | 98.3 | 92.4 | 96.4 | 97.2 | 97.3 | 96.9 | 97.0 | 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 | 97.3% | 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 | 97.5% | 97.6% |
| | 2016 | 98.0 | 98.6 | 98.8 | 98.9 | 98.9 | 96.5 | 97.9 | 98.5 | 97.1 | 98.6 | | | 98.2% | 98.2% |
| | 2011-2015 average | 96.1 | 96.7 | 98.1 | 98.3 | 98.0 | 97.1 | 95.5 | 97.4 | 97.7 | 96.9 | 97.5 | 98.3 | 97.2% | 97.3% |
| Heritage | 2011 | 92.1 | 77.2 | 94.2 | 96.0 | 98.4 | 89.4 | 73.3 | 92.0 | 84.1 | 78.6 | 80.8 | 75.4 | 87.8% | 86.2% |
| | 2012 | 95.2 | 99.2 | 94.7 | 98.4 | 97.7 | 92.1 | 91.3 | 95.7 | 98.2 | 94.9 | 92.9 | 96.7 | 95.7% | 95.6% |
| | 2013 | 97.0 | 99.2 | 94.4 | 97.7 | 94.7 | 92.5 | 97.7 | 99.2 | 97.5 | 96.4 | 98.3 | 92.1 | 96.7% | 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 | 90.3% | 91.4% |
| | 2015 | 92.1 | 90.0 | 96.2 | 88.6 | 85.8 | 89.4 | 92.0 | 85.7 | 86.5 | 98.5 | 85.0 | 90.9 | 90.6% | 90.2% |
| | 2016 | 90.0 | 92.9 | 97.4 | 97.3 | 95.2 | 94.8 | 87.9 | 94.4 | 94.6 | 98.0 | | | 94.4% | 94.4% |
| | 2011-2015 average | 91.1 | 88.5 | 93.6 | 94.8 | 95.7 | 91.5 | 90.1 | 93.3 | 91.5 | 93.5 | 90.6 | 90.7 | 92.2% | 92.1% |
| Milw - N | 2011 | 92.9 | 85.3 | 95.7 | 95.5 | 89.2 | 84.4 | 78.3 | 87.6 | 92.3 | 88.1 | 91.9 | 93.9 | 89.0% | 89.6% |
| | 2012 | 95.1 | 96.4 | 94.0 | 95.3 | 93.5 | 93.2 | 84.8 | 92.9 | 94.3 | 94.9 | 95.4 | 95.5 | 93.4% | 93.8% |
| | 2013 | 95.5 | 92.4 | 94.1 | 95.7 | 95.3 | 89.6 | 92.8 | 93.6 | 94.4 | 93.3 | 95.7 | 87.5 | 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 | 91.2% | 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 | 94.5% | 94.9% |
| | 2016 | 95.3 | 94.2 | 95.7 | 96.8 | 92.5 | 92.9 | 95.0 | 93.1 | 93.8 | 97.5 | | | 94.7% | 94.7% |
| | 2011-2015 average | 89.6 | 88.9 | 93.4 | 95.9 | 93.3 | 90.6 | 90.0 | 92.8 | 94.4 | 94.1 | 95.0 | 93.4 | 92.4% | 92.6% |
| Milw - W | 2011 | 96.0 | 87.2 | 97.4 | 95.2 | 95.1 | 88.0 | 84.4 | 92.5 | 95.6 | 98.0 | 89.1 | 96.5 | 93.0% | 93.0% |
| | 2012 | 94.4 | 95.1 | 95.3 | 97.5 | 97.1 | 95.6 | 93.7 | 94.1 | 89.3 | 93.9 | 94.6 | 95.5 | 94.6% | 94.7% |
| | 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 | 94.3% | 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 | 93.0% | 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 | 96.2% | 96.4% |
| | 2016 | 94.0 | 95.3 | 94.4 | 96.0 | 94.9 | 93.6 | 92.1 | 95.2 | 97.4 | 97.0 | | | 95.0% | 95.0% |
| | 2011-2015 average | 93.1 | 91.0 | 95.1 | 96.8 | 96.1 | 92.4 | 92.5 | 94.0 | 94.5 | 96.6 | 94.6 | 95.4 | 94.2% | 94.3% |
| NCS | 2011 | 95.5 | 88.3 | 93.5 | 90.9 | 92.9 | 88.8 | 87.3 | 92.1 | 93.1 | 93.5 | 83.7 | 92.4 | 91.6% | 91.1% |
| | 2012 | 94.8 | 94.4 | 94.4 | 85.1 | 95.2 | 94.8 | 82.5 | 91.9 | 95.7 | 93.9 | 92.0 | 94.8 | 92.3% | 92.4% |
| | 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 | 88.9% | 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 | 93.6% | 93.8% |
| | 2016 | 92.3 | 95.5 | 91.7 | 93.3 | 94.4 | 96.3 | 95.0 | 96.4 | 96.1 | 95.5 | | | 94.6% | 94.6% |
| | 2011-2015 average | 91.1 | 86.8 | 92.6 | 91.7 | 92.7 | 92.1 | 90.9 | 92.1 | 94.3 | 93.7 | 91.8 | 92.0 | 91.9% | 91.8% |

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

| LINE | YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | JAN-OCT | AVG |
|------------------------------------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|---------|-------|
| RI | 2011 | 97.8 | 89.5 | 97.7 | 96.0 | 95.6 | 88.8 | 83.4 | 94.0 | 94.8 | 96.9 | 96.6 | 96.5 | 93.5% | 94.0% |
| | 2012 | 94.3 | 96.8 | 94.8 | 96.1 | 95.8 | 94.1 | 92.9 | 93.7 | 96.8 | 95.6 | 97.1 | 96.4 | 95.1% | 95.3% |
| | 2013 | 96.5 | 98.1 | 97.9 | 94.0 | 95.5 | 91.5 | 93.6 | 95.5 | 98.3 | 96.5 | 91.7 | 94.0 | 95.7% | 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 | 93.0% | 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 | 97.0% | 97.1% |
| | 2016 | 92.6 | 96.2 | 95.8 | 96.5 | 97.9 | 96.2 | 93.5 | 96.3 | 96.0 | 98.2 | | | 95.9% | 95.9% |
| | 2011-2015 average | | 93.6 | 92.7 | 96.6 | 96.0 | 95.6 | 92.9 | 92.0 | 95.5 | 96.5 | 96.7 | 96.1 | 96.6 | 94.9% |
| SWS | 2011 | 95.1 | 89.7 | 96.2 | 95.3 | 94.0 | 85.1 | 88.9 | 90.3 | 91.3 | 92.4 | 92.8 | 94.1 | 91.9% | 92.1% |
| | 2012 | 94.2 | 96.6 | 94.8 | 95.3 | 95.8 | 93.2 | 95.3 | 94.5 | 93.8 | 94.3 | 93.7 | 96.3 | 94.8% | 94.8% |
| | 2013 | 94.7 | 97.1 | 97.3 | 97.7 | 95.0 | 91.0 | 98.0 | 96.8 | 97.1 | 98.2 | 93.2 | 91.1 | 96.3% | 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 | 92.4% | 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 | 94.4% | 94.5% |
| | 2016 | 95.6 | 97.2 | 97.8 | 95.6 | 91.9 | 95.3 | 94.1 | 93.3 | 91.6 | 97.4 | | | 95.0% | 95.0% |
| | 2011-2015 average | | 92.3 | 93.1 | 95.5 | 95.8 | 94.5 | 90.6 | 93.7 | 94.1 | 94.8 | 94.8 | 93.2 | 94.4 | 94.0% |
| UP - N | 2011 | 96.4 | 86.7 | 94.9 | 95.5 | 95.8 | 91.5 | 85.1 | 90.6 | 91.8 | 91.6 | 94.2 | 96.5 | 92.1% | 92.6% |
| | 2012 | 94.6 | 98.4 | 97.9 | 98.1 | 95.1 | 95.1 | 95.9 | 95.1 | 96.3 | 97.3 | 96.6 | 95.8 | 96.4% | 96.4% |
| | 2013 | 98.3 | 97.3 | 97.9 | 96.6 | 96.7 | 93.0 | 96.0 | 94.9 | 97.0 | 96.5 | 96.9 | 98.0 | 96.4% | 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 | 96.4% | 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 | 97.4% | 97.5% |
| | 2016 | 96.9 | 98.6 | 97.1 | 98.3 | 98.3 | 98.2 | 97.0 | 96.0 | 98.1 | 99.1 | | | 97.8% | 97.8% |
| | 2011-2015 average | | 95.8 | 94.1 | 97.3 | 97.0 | 96.2 | 95.0 | 94.4 | 94.9 | 96.2 | 96.0 | 96.6 | 97.4 | 95.7% |
| UP - NW | 2011 | 97.0 | 89.4 | 97.9 | 97.3 | 94.6 | 93.4 | 91.2 | 93.3 | 95.1 | 97.6 | 95.8 | 95.0 | 94.8% | 94.9% |
| | 2012 | 95.9 | 98.6 | 96.4 | 98.9 | 95.9 | 96.0 | 94.8 | 96.7 | 97.8 | 94.2 | 94.6 | 96.6 | 96.5% | 96.3% |
| | 2013 | 96.3 | 97.7 | 96.0 | 95.1 | 93.3 | 89.2 | 93.9 | 93.7 | 96.3 | 94.6 | 94.6 | 94.2 | 94.6% | 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 | 94.9% | 95.2% |
| | 2015 | 96.0 | 91.6 | 97.6 | 96.3 | 96.9 | 96.8 | 94.1 | 96.5 | 96.1 | 97.5 | 96.7 | 97.5 | 96.0% | 96.2% |
| | 2016 | 97.0 | 98.1 | 97.8 | 98.1 | 96.0 | 96.6 | 94.9 | 96.8 | 96.9 | 96.5 | | | 96.9% | 96.9% |
| | 2011-2015 average | | 94.3 | 93.7 | 96.9 | 97.2 | 94.9 | 94.2 | 93.8 | 95.5 | 96.7 | 95.8 | 95.7 | 95.9 | 95.3% |
| UP - W | 2011 | 93.5 | 87.3 | 93.8 | 94.5 | 93.3 | 89.0 | 85.9 | 89.3 | 90.8 | 91.6 | 92.0 | 89.4 | 90.9% | 90.9% |
| | 2012 | 93.1 | 97.1 | 95.2 | 95.5 | 95.6 | 92.4 | 93.8 | 94.3 | 97.2 | 97.2 | 96.0 | 96.4 | 95.1% | 95.3% |
| | 2013 | 96.5 | 96.2 | 96.9 | 94.4 | 93.7 | 89.2 | 95.0 | 93.0 | 96.6 | 96.6 | 94.0 | 91.5 | 94.8% | 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 | 94.1% | 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 | 95.1% | 95.4% |
| | 2016 | 97.8 | 93.4 | 97.2 | 96.7 | 90.1 | 94.4 | 96.6 | 96.0 | 96.2 | 95.6 | | | 95.4% | 95.4% |
| | 2011-2015 average | | 92.6 | 92.6 | 95.3 | 95.5 | 94.7 | 91.9 | 93.1 | 93.3 | 95.4 | 95.3 | 95.0 | 94.1 | 94.0% |
| SYSTEM excluding South Shore | 2011 | 96.4 | 89.8 | 96.8 | 96.2 | 94.8 | 91.1 | 87.3 | 92.7 | 93.8 | 93.7 | 94.0 | 95.6 | 93.3% | 93.6% |
| | 2012 | 94.3 | 97.4 | 96.1 | 97.2 | 96.3 | 94.7 | 94.0 | 95.2 | 96.2 | 95.9 | 95.8 | 96.9 | 95.7% | 95.8% |
| | 2013 | 96.8 | 96.1 | 96.7 | 95.7 | 95.9 | 92.4 | 94.0 | 95.2 | 96.4 | 95.9 | 95.1 | 93.8 | 95.5% | 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 | 93.8% | 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 | 96.0% | 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% | 96.2% |
| | 2011-2015 average | | 93.6 | 93.1 | 96.3 | 96.6 | 95.8 | 93.4 | 93.3 | 95.0 | 96.0 | 95.7 | 96.1 | 94.9% | 95.1% |

Delays data for most recent month is final (11/14/16) version from TOPS.

P:\ONTIME\report\Delays&TrainsByServPeriod.xls|OTByLine&Month 11/14/2016

'2011-2015 average' calculated by summing the delays over the five years, summing the trains run over the five years, and calculating their ratio.

Due to changes in calculation methodology, on-time performance figures from May 2011 onward are not exactly comparable to prior months' figures.

**TABLE 3: LIST OF WEEKDAY TRAINS LESS THAN 85% ON-TIME
October 2016**

| Line | Train | Date | Minutes Delay | | Delay Explanation |
|------|-----------------------|-------------|---------------|------|--|
| | | | Late | Code | |
| BNSF | 1259 76% OT | Thu, Oct 13 | 16 | C | TRACK WORK/MULTIPLE SPEED RESTRICTIONS |
| | | Fri, Oct 14 | 8 | H | LATE UNPLUG, SHORTHANDED MECHANICAL STAFF |
| | | Mon, Oct 17 | 7 | C | TRACK WORK AT MULTIPLE LOCATIONS |
| | | Thu, Oct 20 | 8 | C | TRACK WORK AT MULTIPLE LOCATIONS |
| | | Mon, Oct 24 | 7 | GT | DEPARTED 4 MINUTES LATE FOR B/O RADIO ON CHANNEL 66 |
| BNSF | 1271 81% OT | Thu, Oct 13 | 9 | C | TRACK WORK/MULTIPLE SPEED RESTRICTIONS |
| | | Fri, Oct 14 | 8 | H1 | WAITING FOR 1269 TO SHOVE INTO THE YARD |
| | | Mon, Oct 17 | 13 | C | TRACK WORK AT MULTIPLE LOCATIONS |
| | | Mon, Oct 24 | 8 | GT | DEPARTED 6 MINUTES LATE ACCT LATE DEPARTURES FOR RADIO ISSUES ON CHANNEL 66 |
| BNSF | 1279 81% OT | Thu, Oct 13 | 13 | C | TRACK WORK/MULTIPLE SPEED RESTRICTIONS |
| | | Fri, Oct 14 | 9 | H1 | FOLLOWING TRAFFIC AHEAD - 1277/A383 |
| | | Mon, Oct 17 | 9 | RA | 5" LATE LEAVING CUS - NO LINEUP - TRACK WORK |
| | | Mon, Oct 24 | 8 | CC | MULTIPLE FORM A RESTRICTIONS |
| BNSF | 1291 81% OT | Wed, Oct 05 | 7 | C | MULTIPLE FORM A RESTRICTIONS/TRACK WORK |
| | | Mon, Oct 10 | 7 | U | ADA LIFT AT WESTMONT, PASSENGER UNLOADING |
| | | Tue, Oct 11 | 19 | ZR | PTC TRAIN SHOVED OUT EE TO SWAP POWER AROUND |
| | | Thu, Oct 13 | 9 | C | UNSCHEDULED TRACK WORK |
| BNSF | 1324 81% OT | Thu, Oct 06 | 18 | C | TRACK WORK @ CONGRESS PARK |
| | | Fri, Oct 21 | 9 | CC | 5" DELAY. FORM B AT ROUTE 59. 4" MT1 BRF-CHC TO PRIORITIZE OUTBOUND FROM CICERO. |
| | | Tue, Oct 25 | 16 | D | STOPPED 10" AT CICERO WAITING ON FREIGHT TRAIN TO CLEAR |
| | | Fri, Oct 28 | 8 | DD | WORKING MT2 AT RT 59 |
| BNSF | 1373 71% OT | Thu, Oct 06 | 10 | IW1 | 9" LATE FLIP/FORM A RESTRICTIONS |
| | | Mon, Oct 10 | 7 | RA1 | LATE FLIP - WAITING FOR LINEUP INTO CUS |
| | | Mon, Oct 17 | 12 | RA1 | LATE FLIP/AMTRAK MISROUTED - 11" LATE DEPARTURE |
| | | Thu, Oct 20 | 9 | C1 | LATE FLIP - TRACK WORK AT MULTIPLE LOCATIONS |
| | | Mon, Oct 24 | 10 | CC | DEPARTED CUS 7 MINS LATE ACCT LATE ARRIVAL AND FORM A RESTRICTIONS |
| | | Thu, Oct 27 | 20 | M1 | STOPPED FOR INCIDENT AT BERWYN AND MULTIPLE BOX 2'S @ DGM |
| ELML | 142 71% OT | Tue, Oct 04 | 6 | CO | 6M 47TH ST. TO 18TH ST. DUE TO LOADING/UNLOADING ON GROUND |
| | | Thu, Oct 06 | 8 | CO | TRACKS 3&4 OUT OF SERVICE, 6M WAITING FOR PASSENGERS TO CROSS OVER 59TH. THRU 51ST. ST., 2M ACCT. RUNNING AGAINST CURRENT OF TRAFFIC |
| | | Mon, Oct 10 | 12 | J | 11 MINS @ KENS WAITING TO REMOVE A PASSENGER FROM TRAIN |
| | | Mon, Oct 17 | 7 | CC | 6M DUE TO WAITING ON PASSENGERS AT 59TH 55TH 51ST. |
| | | Thu, Oct 20 | 7 | CC | 2M AT UP WAITING ON THE ME141. 5M GROUND LOSING PASSENGERS 18TH 27TH AND 47TH. 2M WITING ON THE FOREMAN FOR THE B202. |
| | | Tue, Oct 25 | 6 | U | 1M UP WAITING ON ME140, 2M 67TH ST WAITING ON ME342, 3M 51ST ADA, 1M 1.54 FORM B, U |
| ELSC | 353 81% OT | Tue, Oct 04 | 8 | CC1 | 8M WAITING ON ME153 |
| | | Tue, Oct 18 | 10 | CO1 | ARR SC 10M LATE -- ACCT. WAIT FOR LATE ME153 TO MEET 67TH |
| | | Thu, Oct 20 | 8 | CO | 8M 65TH ST WAITING ON SS9101 AND ME153 TO CLEAR TRACK PERMITS |
| | | Mon, Oct 31 | 9 | CO1 | 9M LATE ARR. 93RD-- ACCT. WAITING FOR LATE 153 FOR MEET AT 63RD |
| MW | 2241 81% OT | Fri, Oct 07 | 11 | GAI | 11" LATE AT BARTLETT DUE TO SIGNAL FAILURE AT CUS, CANAL ST. |
| | | Wed, Oct 12 | 9 | RA | 8" LATE ARRIVAL OF EQUIPMENT; 6" FOLLOWING 2141 TO A5 |
| | | Fri, Oct 14 | 0 | VE1 | ANNULLED FROM 7412 |
| | | Wed, Oct 26 | 10 | G | 10" SIGNAL FAILURE @ A-3 |

Data is final (11/14/16) version from TOPS.

TABLE 4: DELAY INCIDENT CODES AND DEFINITIONS

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

Effective July 1, 2016 Revised July 19, 2016

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TABLE 5: DELAY INCIDENT CODES SORTED BY CAUSE CATEGORY & CARRIER DESIGNATION

| METRA/PSA DELAY CODES | | | | METRA/PSA DELAY CODES (continued) | | | | FOREIGN CARRIER DELAY CODES | | | |
|--|------|------|--|---|------|------|--|---|------|------|--|
| CATEGORY 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.

TABLES 6.a, 6.b, 6.c, & 6.d: FREQUENCY OF TRAIN DELAYS BY CONTROL AND LINE

October 2016

| DELAY CONTROL | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM | |
|-----------------------------|------------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|---------------|-----------|-----------|------------|-------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | | |
| Controllable | 67 | 27 | 1 | 20 | 1 | 19 | 23 | 7 | 19 | 7 | 11 | 17 | 37 | 256 | 56% |
| Semi-controllable | 19 | 0 | 0 | 0 | 2 | 7 | 6 | 11 | 3 | 10 | 1 | 3 | 13 | 75 | 16% |
| Uncontrollable | 19 | 9 | 2 | 3 | 0 | 11 | 14 | 3 | 12 | 0 | 4 | 34 | 13 | 124 | 27% |
| TOTAL TRAINS DELAYED | 105 | 36 | 3 | 23 | 3 | 37 | 43 | 21 | 34 | 17 | 16 | 54 | 63 | 455 | 100% |

October - Average Over Previous Four Years: 2012-2015

| DELAY CONTROL | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM | |
|-----------------------------|--------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|--------------|-------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | | |
| Controllable | 74.8 | 29.8 | 6.3 | 17.8 | 1.5 | 40.8 | 25.8 | 14.8 | 35.3 | 10.5 | 26.8 | 35.5 | 23.0 | 342.3 | 50% |
| Semi-controllable | 23.3 | 0.0 | 0.0 | 0.0 | 2.3 | 10.0 | 13.5 | 13.8 | 4.5 | 17.3 | 1.0 | 10.5 | 13.3 | 109.3 | 16% |
| Uncontrollable | 37.8 | 35.8 | 8.8 | 14.5 | 0.5 | 17.8 | 17.3 | 3.0 | 18.3 | 5.5 | 24.5 | 30.8 | 22.0 | 236.3 | 34% |
| TOTAL TRAINS DELAYED | 135.8 | 65.5 | 15.0 | 32.3 | 4.3 | 68.5 | 56.5 | 31.5 | 58.0 | 33.3 | 52.3 | 76.8 | 58.3 | 687.8 | 100% |

October 2016 Divergence From October Average Over Previous Four Years

| DELAY CONTROL | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM | |
|-----------------------------|--------------|--------------|--------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|------------|---------------|-------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | | |
| Controllable | -7.8 | -2.8 | -5.3 | 2.3 | -0.5 | -21.8 | -2.8 | -7.8 | -16.3 | -3.5 | -15.8 | -18.5 | 14.0 | -86.3 | 37% |
| Semi-controllable | -4.3 | 0.0 | 0.0 | 0.0 | -0.3 | -3.0 | -7.5 | -2.8 | -1.5 | -7.3 | 0.0 | -7.5 | -0.3 | -34.3 | 15% |
| Uncontrollable | -18.8 | -26.8 | -6.8 | -11.5 | -0.5 | -6.8 | -3.3 | 0.0 | -6.3 | -5.5 | -20.5 | 3.3 | -9.0 | -112.3 | 48% |
| TOTAL TRAINS DELAYED | -30.8 | -29.5 | -12.0 | -9.3 | -1.3 | -31.5 | -13.5 | -10.5 | -24.0 | -16.3 | -36.3 | -22.8 | 4.8 | -232.8 | 100% |

January-October 2016

| DELAY CONTROL | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM | |
|-----------------------------|--------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|---------------|------------|------------|--------------|-------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | | |
| Controllable | 634 | 307 | 79 | 130 | 34 | 404 | 305 | 100 | 438 | 117 | 183 | 216 | 399 | 3,346 | 51% |
| Semi-controllable | 384 | 0 | 0 | 0 | 43 | 100 | 117 | 101 | 58 | 147 | 3 | 22 | 104 | 1,079 | 16% |
| Uncontrollable | 338 | 162 | 38 | 80 | 4 | 283 | 295 | 50 | 226 | 69 | 194 | 250 | 156 | 2,145 | 33% |
| TOTAL TRAINS DELAYED | 1,356 | 469 | 117 | 210 | 81 | 787 | 717 | 251 | 722 | 333 | 380 | 488 | 659 | 6,570 | 100% |

Data for current month is final (11/14/16) version from TOPS.

P:\ONTIME\report\DelaysByControl.xls>LastMonthRespByLine

11/14/2016

TABLE 7: NUMBER OF DELAYS BY DATE
October 2016

| WEEKDAY | 3 | 4 | 5 | 6 | 7 | 10 | 11 | 12 | 13 | 14 | 17 | 18 | 19 | 20 | 21 | 24 | 25 | 26 | 27 | 28 | 31 | TOTAL |
|-----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| | Mo | Tu | We | Th | Fr | Mo | Tu | We | Th | Fr | Mo | Tu | We | Th | Fr | Mo | Tu | We | Th | Fr | Mo | |
| BNSF | 3 | 6 | 3 | 7 | 7 | 3 | 6 | 3 | 9 | 15 | 9 | 1 | 0 | 4 | 1 | 7 | 2 | 1 | 4 | 3 | 5 | 99 |
| Elec -ML | 1 | 1 | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 1 | 3 | 1 | 0 | 2 | 0 | 0 | 2 | 3 | 0 | 0 | 6 | 27 |
| -BI | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 |
| -SC | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 15 |
| Heritage | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 3 |
| Milw -N | 1 | 0 | 1 | 1 | 9 | 5 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 4 | 2 | 34 |
| -W | 1 | 0 | 0 | 1 | 9 | 0 | 6 | 1 | 2 | 4 | 2 | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 3 | 1 | 6 | 42 |
| NCS | 1 | 2 | 0 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 21 |
| RI | 3 | 0 | 2 | 0 | 1 | 1 | 1 | 3 | 4 | 0 | 4 | 0 | 2 | 5 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 30 |
| SWS | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 1 | 0 | 17 |
| UP -N | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 13 |
| -NW | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 15 | 0 | 0 | 3 | 3 | 31 |
| -W | 8 | 0 | 0 | 1 | 7 | 6 | 1 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 7 | 2 | 15 | 2 | 4 | 0 | 58 |
| SYSTEM | 19 | 12 | 8 | 15 | 46 | 18 | 19 | 10 | 21 | 28 | 25 | 6 | 4 | 15 | 4 | 21 | 25 | 33 | 14 | 21 | 29 | 393 |

| SATURDAY | 1 | 8 | 15 | 22 | 29 | TOTAL | SUNDAY/HOLIDAY | 2 | 9 | 16 | 23 | 30 | TOTAL |
|-----------------|----|---|----|----|----|-------|-----------------|---|---|----|----|----|-------|
| BNSF | 0 | 1 | 2 | 1 | 0 | 4 | BNSF | 0 | 1 | 1 | 0 | 0 | 2 |
| Elec -ML | 6 | 0 | 0 | 0 | 0 | 6 | Elec -ML | 1 | 0 | 0 | 1 | 1 | 3 |
| -BI | 0 | 0 | 0 | 0 | 0 | 0 | -BI | - | - | - | - | - | 0 |
| -SC | 8 | 0 | 0 | 0 | 0 | 8 | -SC | 0 | 0 | 0 | 0 | 0 | 0 |
| Heritage | - | - | - | - | - | - | Heritage | - | - | - | - | - | 0 |
| Milw -N | 2 | 0 | 0 | 0 | 0 | 2 | Milw -N | 0 | 1 | 0 | 0 | 0 | 1 |
| -W | 0 | 0 | 0 | 0 | 0 | 0 | -W | 0 | 1 | 0 | 0 | 0 | 1 |
| NCS | - | - | - | - | - | - | NCS | - | - | - | - | - | 0 |
| RI | 0 | 0 | 1 | 0 | 1 | 2 | RI | 0 | 2 | 0 | 0 | 0 | 2 |
| SWS | 0 | 0 | 0 | 0 | 0 | 0 | SWS | - | - | - | - | - | 0 |
| UP -N | 0 | 0 | 1 | 0 | 1 | 2 | UP -N | 0 | 0 | 1 | 0 | 0 | 1 |
| -NW | 3 | 2 | 2 | 3 | 2 | 12 | -NW | 2 | 1 | 3 | 2 | 3 | 11 |
| -W | 1 | 0 | 1 | 1 | 1 | 4 | -W | 1 | 0 | 0 | 0 | 0 | 1 |
| SYSTEM | 20 | 3 | 7 | 5 | 5 | 40 | SYSTEM | 4 | 6 | 5 | 3 | 4 | 22 |

Data is final (11/14/16) version from TOPS.

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

| CAUSE CATEGORY | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM |
|--|------------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|---------------|-----------|-----------|------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Freight Interference - TOTAL | 11 | 0 | 0 | 0 | 2 | 2 | 2 | 9 | 3 | 2 | 1 | 3 | 13 | 48 |
| Freight Interference - Peak | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 6 | 15 |
| Primary | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 13 |
| Secondary | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Freight Interference - Off-Peak | 9 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 3 | 2 | 1 | 3 | 7 | 33 |
| Primary | 7 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 3 | 2 | 1 | 2 | 6 | 29 |
| Secondary | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 |
| Signal/Switch Failure - TOTAL | 17 | 3 | 1 | 1 | 0 | 12 | 11 | 3 | 2 | 12 | 0 | 3 | 2 | 67 |
| Signal/Switch Failure - Metra/PSA | 7 | 3 | 1 | 1 | 0 | 7 | 7 | 1 | 2 | 4 | 0 | 3 | 2 | 38 |
| Primary | 7 | 3 | 1 | 1 | 0 | 4 | 5 | 1 | 2 | 4 | 0 | 2 | 2 | 32 |
| Secondary | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 6 |
| Signal/Switch Failure - Foreign | 10 | 0 | 0 | 0 | 0 | 5 | 4 | 2 | 0 | 8 | 0 | 0 | 0 | 29 |
| Primary | 10 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 5 | 0 | 0 | 0 | 21 |
| Secondary | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 8 |
| Mechanical Failure - TOTAL | 7 | 1 | 0 | 0 | 0 | 5 | 5 | 5 | 9 | 1 | 3 | 8 | 20 | 64 |
| Mechanical Failure - Metra/PSA | 7 | 1 | 0 | 0 | 0 | 5 | 5 | 5 | 9 | 1 | 3 | 8 | 20 | 64 |
| Non-Locomotive Equipment Failure - Metra/PSA | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 1 | 3 | 1 | 12 |
| Primary | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 7 |
| Secondary | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 5 |
| Locomotive Failure - Metra/PSA | 5 | 0 | 0 | 0 | 0 | 4 | 5 | 3 | 9 | 0 | 2 | 5 | 19 | 52 |
| Primary | 4 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 0 | 1 | 2 | 3 | 17 |
| Secondary | 1 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 7 | 0 | 1 | 3 | 16 | 35 |
| Mechanical Failure - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Passenger Train Interference - TOTAL | 3 | 1 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 10 |
| Passenger Train Interference - Metra/PSA | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 6 |
| Passenger Train Interference - Foreign | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Accident - TOTAL | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 10 |
| Accident - Metra/PSA | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 10 |
| Accident - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Track Work - TOTAL | 32 | 13 | 0 | 10 | 0 | 1 | 1 | 0 | 2 | 1 | 6 | 6 | 3 | 75 |
| Track Work - Metra/PSA | 32 | 13 | 0 | 10 | 0 | 1 | 1 | 0 | 2 | 0 | 6 | 6 | 3 | 74 |
| Track Work - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Human Error - TOTAL | 12 | 1 | 0 | 3 | 1 | 5 | 3 | 1 | 6 | 1 | 2 | 0 | 10 | 45 |
| Human Error - Metra/PSA | 7 | 1 | 0 | 3 | 1 | 2 | 1 | 1 | 5 | 0 | 2 | 0 | 9 | 32 |
| Human Error - Foreign | 5 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 13 |
| Sick, Injured, Unruly Passenger - TOTAL | 3 | 3 | 0 | 0 | 0 | 2 | 3 | 0 | 4 | 0 | 4 | 4 | 1 | 24 |
| Sick, Injured, Unruly Passenger - Metra/PSA | 3 | 3 | 0 | 0 | 0 | 2 | 3 | 0 | 4 | 0 | 4 | 4 | 1 | 24 |
| Sick, Injured, Unruly Passenger - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Weather - TOTAL | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 4 |
| Weather - Metra/PSA | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 4 |
| Weather - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Passenger Loading - TOTAL | 5 | 4 | 2 | 0 | 0 | 2 | 2 | 0 | 2 | 0 | 0 | 7 | 4 | 28 |
| Lift Deployment - TOTAL | 4 | 1 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 12 |
| Obstruction/Debris - TOTAL | 1 | 1 | 0 | 1 | 0 | 3 | 6 | 3 | 2 | 0 | 0 | 16 | 6 | 39 |
| Catenary Failure - TOTAL | 0 | 8 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| Other - TOTAL | 5 | 0 | 0 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 3 | 17 |
| TOTAL TRAINS DELAYED | 105 | 36 | 3 | 23 | 3 | 37 | 43 | 21 | 34 | 17 | 16 | 54 | 63 | 455 |
| Total Metra/PSA Delays | 76 | 36 | 3 | 22 | 1 | 27 | 35 | 10 | 30 | 5 | 15 | 51 | 49 | 360 |
| Total Foreign Carrier Delays | 29 | 0 | 0 | 1 | 2 | 10 | 8 | 11 | 4 | 12 | 1 | 3 | 14 | 95 |

Data for current month is final (11/14/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 11/14/2016

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

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

TABLE 8.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
October - Average Over Previous Five Years: 2011-2015

| CAUSE CATEGORY | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM |
|--|--------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|--------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Freight Interference - TOTAL | 24.4 | 0.0 | 0.0 | 0.0 | 2.8 | 11.0 | 12.4 | 12.6 | 5.0 | 12.6 | 1.0 | 8.2 | 18.8 | 108.8 |
| Freight Interference - Peak | 6.8 | 0.0 | 0.0 | 0.0 | 2.8 | 1.4 | 3.0 | 5.0 | 1.8 | 3.4 | 0.2 | 4.4 | 3.6 | 32.4 |
| <i>Primary</i> | 3.6 | 0.0 | 0.0 | 0.0 | 2.8 | 1.2 | 1.6 | 3.0 | 1.6 | 2.6 | 0.2 | 2.0 | 3.0 | 21.6 |
| <i>Secondary</i> | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.4 | 2.0 | 0.2 | 0.8 | 0.0 | 2.4 | 0.6 | 10.8 |
| Freight Interference - Off-Peak | 17.6 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6 | 9.4 | 7.6 | 3.2 | 9.2 | 0.8 | 3.8 | 15.2 | 76.4 |
| <i>Primary</i> | 15.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 | 7.4 | 6.4 | 3.2 | 7.4 | 0.4 | 3.0 | 13.4 | 63.4 |
| <i>Secondary</i> | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 2.0 | 1.2 | 0.0 | 1.8 | 0.4 | 0.8 | 1.8 | 13.0 |
| Signal/Switch Failure - TOTAL | 16.0 | 13.6 | 3.6 | 3.6 | 1.6 | 15.8 | 9.6 | 5.4 | 7.2 | 7.4 | 8.0 | 5.8 | 7.8 | 105.4 |
| Signal/Switch Failure - Metra/PSA | 15.2 | 13.6 | 3.6 | 3.6 | 1.0 | 14.4 | 9.2 | 3.8 | 6.8 | 1.8 | 8.0 | 5.4 | 7.8 | 94.2 |
| <i>Primary</i> | 10.8 | 9.2 | 2.8 | 1.8 | 1.0 | 10.0 | 7.0 | 3.2 | 6.4 | 1.4 | 3.0 | 2.0 | 5.4 | 64.0 |
| <i>Secondary</i> | 4.4 | 4.4 | 0.8 | 1.8 | 0.0 | 4.4 | 2.2 | 0.6 | 0.4 | 0.4 | 5.0 | 3.4 | 2.4 | 30.2 |
| Signal/Switch Failure - Foreign | 0.8 | 0.0 | 0.0 | 0.0 | 0.6 | 1.4 | 0.4 | 1.6 | 0.4 | 5.6 | 0.0 | 0.4 | 0.0 | 11.2 |
| <i>Primary</i> | 0.8 | 0.0 | 0.0 | 0.0 | 0.6 | 0.8 | 0.4 | 1.4 | 0.2 | 4.2 | 0.0 | 0.4 | 0.0 | 8.8 |
| <i>Secondary</i> | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.2 | 0.2 | 1.4 | 0.0 | 0.0 | 0.0 | 2.4 |
| Mechanical Failure - TOTAL | 11.8 | 7.0 | 1.4 | 0.8 | 0.0 | 5.4 | 3.2 | 4.0 | 10.8 | 2.4 | 10.4 | 9.8 | 11.4 | 78.4 |
| Mechanical Failure - Metra/PSA | 11.8 | 6.6 | 1.2 | 0.8 | 0.0 | 5.4 | 3.2 | 4.0 | 10.8 | 2.4 | 10.4 | 9.8 | 11.4 | 77.8 |
| Non-Locomotive Equipment Failure - Metra/PSA | 1.8 | 6.6 | 1.2 | 0.8 | 0.0 | 1.2 | 0.4 | 0.6 | 0.2 | 0.8 | 0.4 | 0.6 | 4.0 | 18.6 |
| <i>Primary</i> | 1.8 | 1.4 | 0.6 | 0.4 | 0.0 | 0.4 | 0.2 | 0.2 | 0.2 | 0.6 | 0.4 | 0.6 | 0.8 | 7.6 |
| <i>Secondary</i> | 0.0 | 5.2 | 0.6 | 0.4 | 0.0 | 0.8 | 0.2 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 3.2 | 11.0 |
| Locomotive Failure - Metra/PSA | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 | 2.8 | 3.4 | 10.6 | 1.6 | 10.0 | 9.2 | 7.4 | 59.2 |
| <i>Primary</i> | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 1.0 | 1.4 | 3.8 | 0.4 | 2.4 | 2.2 | 2.0 | 18.0 |
| <i>Secondary</i> | 6.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 1.8 | 2.0 | 6.8 | 1.2 | 7.6 | 7.0 | 5.4 | 41.2 |
| Mechanical Failure - Foreign | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| Passenger Train Interference - TOTAL | 2.6 | 1.2 | 0.2 | 0.0 | 1.4 | 8.6 | 1.0 | 1.8 | 1.0 | 0.6 | 1.0 | 0.8 | 1.2 | 21.4 |
| Passenger Train Interference - Metra/PSA | 0.6 | 0.8 | 0.2 | 0.0 | 0.2 | 7.8 | 0.8 | 1.8 | 0.6 | 0.0 | 1.0 | 0.8 | 1.2 | 15.8 |
| Passenger Train Interference - Foreign | 2.0 | 0.4 | 0.0 | 0.0 | 1.2 | 0.8 | 0.2 | 0.0 | 0.4 | 0.6 | 0.0 | 0.0 | 0.0 | 5.6 |
| Accident - TOTAL | 12.0 | 1.8 | 1.0 | 1.4 | 0.0 | 4.6 | 5.0 | 0.4 | 7.2 | 1.8 | 5.4 | 7.0 | 5.4 | 53.0 |
| Accident - Metra/PSA | 12.0 | 1.8 | 1.0 | 1.4 | 0.0 | 4.6 | 5.0 | 0.4 | 7.2 | 1.8 | 5.4 | 7.0 | 4.6 | 52.2 |
| Accident - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 |
| Track Work - TOTAL | 24.6 | 11.8 | 3.4 | 10.0 | 2.0 | 17.0 | 4.8 | 2.2 | 7.8 | 1.0 | 11.0 | 12.8 | 4.8 | 113.2 |
| Track Work - Metra/PSA | 24.6 | 11.8 | 3.4 | 10.0 | 2.0 | 16.8 | 4.8 | 2.2 | 7.8 | 0.8 | 11.0 | 12.8 | 4.8 | 112.8 |
| Track Work - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 |
| Human Error - TOTAL | 13.6 | 2.8 | 1.0 | 0.8 | 0.6 | 10.4 | 4.8 | 2.0 | 4.4 | 4.6 | 4.6 | 2.0 | 4.8 | 56.4 |
| Human Error - Metra/PSA | 6.2 | 2.8 | 1.0 | 0.8 | 0.2 | 4.6 | 2.4 | 0.4 | 4.4 | 1.4 | 4.4 | 1.4 | 1.2 | 31.2 |
| Human Error - Foreign | 7.4 | 0.0 | 0.0 | 0.0 | 0.4 | 5.8 | 2.4 | 1.6 | 0.0 | 3.2 | 0.2 | 0.6 | 3.6 | 25.2 |
| Sick, Injured, Unruly Passenger - TOTAL | 3.4 | 5.8 | 1.4 | 2.0 | 0.4 | 3.2 | 2.0 | 1.0 | 2.2 | 0.2 | 6.2 | 4.4 | 3.6 | 35.8 |
| Sick, Injured, Unruly Passenger - Metra/PSA | 3.4 | 5.8 | 1.4 | 2.0 | 0.4 | 3.2 | 2.0 | 1.0 | 2.2 | 0.2 | 6.2 | 4.4 | 3.6 | 35.8 |
| Sick, Injured, Unruly Passenger - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Weather - TOTAL | 2.8 | 2.8 | 1.2 | 1.0 | 0.0 | 2.4 | 3.8 | 0.2 | 1.4 | 0.4 | 3.0 | 7.0 | 0.4 | 26.4 |
| Weather - Metra/PSA | 2.8 | 2.8 | 1.2 | 1.0 | 0.0 | 2.4 | 3.8 | 0.2 | 1.4 | 0.4 | 3.0 | 7.0 | 0.4 | 26.4 |
| Weather - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Passenger Loading - TOTAL | 7.2 | 13.4 | 1.2 | 4.6 | 0.0 | 7.0 | 1.0 | 0.0 | 3.2 | 0.4 | 10.6 | 4.0 | 3.6 | 56.2 |
| Lift Deployment - TOTAL | 2.8 | 0.2 | 0.0 | 0.2 | 0.0 | 2.2 | 1.8 | 0.4 | 4.2 | 0.0 | 2.6 | 2.0 | 2.8 | 19.2 |
| Obstruction/Debris - TOTAL | 17.2 | 10.8 | 4.0 | 5.4 | 0.0 | 1.2 | 0.8 | 0.2 | 1.4 | 3.6 | 3.8 | 3.6 | 4.4 | 56.4 |
| Catenary Failure - TOTAL | 0.0 | 9.0 | 1.4 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0 |
| Other - TOTAL | 2.0 | 6.0 | 0.4 | 0.8 | 0.0 | 1.2 | 0.8 | 1.0 | 0.8 | 1.6 | 2.6 | 1.6 | 1.6 | 20.4 |
| TOTAL TRAINS DELAYED | 140.4 | 86.2 | 20.2 | 33.2 | 8.8 | 90.0 | 51.0 | 31.2 | 56.6 | 36.6 | 70.2 | 69.0 | 70.6 | 764.0 |
| Total Metra/PSA Delays | 105.8 | 85.4 | 20.0 | 33.2 | 3.8 | 70.8 | 35.6 | 15.4 | 50.8 | 14.4 | 69.0 | 59.8 | 47.4 | 611.4 |
| Total Foreign Carrier Delays | 34.6 | 0.8 | 0.2 | 0.0 | 5.0 | 19.2 | 15.4 | 15.8 | 5.8 | 22.2 | 1.2 | 9.2 | 23.2 | 152.6 |

Data for latest month is final (11/11/15) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 11/14/2016

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

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

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

| CAUSE CATEGORY | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM |
|--|--------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|--------------|--------------|---------------|--------------|-------------|---------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Freight Interference - TOTAL | -13.4 | 0.0 | 0.0 | 0.0 | -0.8 | -9.0 | -10.4 | -3.6 | -2.0 | -10.6 | 0.0 | -5.2 | -5.8 | -60.8 |
| Freight Interference - Peak | -4.8 | 0.0 | 0.0 | 0.0 | -0.8 | -0.4 | -3.0 | -1.0 | -1.8 | -3.4 | -0.2 | -4.4 | 2.4 | -17.4 |
| <i>Primary</i> | -1.6 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -1.6 | 1.0 | -1.6 | -2.6 | -0.2 | -2.0 | 1.0 | -8.6 |
| <i>Secondary</i> | -3.2 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -1.4 | -2.0 | -0.2 | -0.8 | 0.0 | -2.4 | 1.4 | -8.8 |
| Freight Interference - Off-Peak | -8.6 | 0.0 | 0.0 | 0.0 | 0.0 | -8.6 | -7.4 | -2.6 | -0.2 | -7.2 | 0.2 | -0.8 | -8.2 | -43.4 |
| <i>Primary</i> | -8.0 | 0.0 | 0.0 | 0.0 | 0.0 | -6.2 | -5.4 | -1.4 | -0.2 | -5.4 | 0.6 | -1.0 | -7.4 | -34.4 |
| <i>Secondary</i> | -0.6 | 0.0 | 0.0 | 0.0 | 0.0 | -2.4 | -2.0 | -1.2 | 0.0 | -1.8 | -0.4 | 0.2 | -0.8 | -9.0 |
| Signal/Switch Failure - TOTAL | 1.0 | -10.6 | -2.6 | -2.6 | -1.6 | -3.8 | 1.4 | -2.4 | -5.2 | 4.6 | -8.0 | -2.8 | -5.8 | -38.4 |
| Signal/Switch Failure - Metra/PSA | -8.2 | -10.6 | -2.6 | -2.6 | -1.0 | -7.4 | -2.2 | -2.8 | -4.8 | 2.2 | -8.0 | -2.4 | -5.8 | -56.2 |
| <i>Primary</i> | -3.8 | -6.2 | -1.8 | -0.8 | -1.0 | -6.0 | -2.0 | -2.2 | -4.4 | 2.6 | -3.0 | 0.0 | -3.4 | -32.0 |
| <i>Secondary</i> | -4.4 | -4.4 | -0.8 | -1.8 | 0.0 | -1.4 | -0.2 | -0.6 | -0.4 | -0.4 | -5.0 | -2.4 | -2.4 | -24.2 |
| Signal/Switch Failure - Foreign | 9.2 | 0.0 | 0.0 | 0.0 | -0.6 | 3.6 | 3.6 | 0.4 | -0.4 | 2.4 | 0.0 | -0.4 | 0.0 | 17.8 |
| <i>Primary</i> | 9.2 | 0.0 | 0.0 | 0.0 | -0.6 | 2.2 | 1.6 | -0.4 | -0.2 | 0.8 | 0.0 | -0.4 | 0.0 | 12.2 |
| <i>Secondary</i> | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 2.0 | 0.8 | -0.2 | 1.6 | 0.0 | 0.0 | 0.0 | 5.6 |
| Mechanical Failure - TOTAL | -4.8 | -6.0 | -1.4 | -0.8 | 0.0 | -0.4 | 1.8 | 1.0 | -1.8 | -1.4 | -7.4 | -1.8 | 8.6 | -14.4 |
| Mechanical Failure - Metra/PSA | -4.8 | -5.6 | -1.2 | -0.8 | 0.0 | -0.4 | 1.8 | 1.0 | -1.8 | -1.4 | -7.4 | -1.8 | 8.6 | -13.8 |
| Non-Locomotive Equipment Failure - Metra/PSA | 0.2 | -5.6 | -1.2 | -0.8 | 0.0 | -0.2 | -0.4 | 1.4 | -0.2 | 0.2 | 0.6 | 2.4 | -3.0 | -6.6 |
| <i>Primary</i> | -0.8 | -1.4 | -0.6 | -0.4 | 0.0 | 0.6 | -0.2 | 0.8 | -0.2 | 0.4 | 0.6 | 0.4 | 0.2 | -0.6 |
| <i>Secondary</i> | 1.0 | -4.2 | -0.6 | -0.4 | 0.0 | -0.8 | -0.2 | 0.6 | 0.0 | -0.2 | 0.0 | 2.0 | -3.2 | -6.0 |
| Locomotive Failure - Metra/PSA | -5.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 2.2 | -0.4 | -1.6 | -1.6 | -8.0 | -4.2 | 11.6 | -7.2 |
| <i>Primary</i> | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | -0.4 | 1.0 | 0.6 | -1.8 | -0.4 | -1.4 | -0.2 | 1.0 | -1.0 |
| <i>Secondary</i> | -5.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.2 | -1.0 | 0.2 | -1.2 | -6.6 | -4.0 | 10.6 | -6.2 |
| Mechanical Failure - Foreign | 0.0 | -0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.6 |
| Passenger Train Interference - TOTAL | 0.4 | -0.2 | -0.2 | 2.0 | -1.4 | -6.6 | 0.0 | -1.8 | -1.0 | -0.6 | -1.0 | 0.2 | -1.2 | -11.4 |
| Passenger Train Interference - Metra/PSA | -0.6 | 0.2 | -0.2 | 1.0 | -0.2 | -5.8 | 0.2 | -1.8 | -0.6 | 0.0 | -1.0 | 0.2 | -1.2 | -9.8 |
| Passenger Train Interference - Foreign | 1.0 | -0.4 | 0.0 | 1.0 | -1.2 | -0.8 | -0.2 | 0.0 | -0.4 | -0.6 | 0.0 | 0.0 | 0.0 | -1.6 |
| Accident - TOTAL | -8.0 | -1.8 | -1.0 | -1.4 | 0.0 | -4.6 | -5.0 | -0.4 | -4.2 | -1.8 | -5.4 | -4.0 | -5.4 | -43.0 |
| Accident - Metra/PSA | -8.0 | -1.8 | -1.0 | -1.4 | 0.0 | -4.6 | -5.0 | -0.4 | -4.2 | -1.8 | -5.4 | -4.0 | -4.6 | -42.2 |
| Accident - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.8 | -0.8 |
| Track Work - TOTAL | 7.4 | 1.2 | -3.4 | 0.0 | -2.0 | -16.0 | -3.8 | -2.2 | -5.8 | 0.0 | -5.0 | -6.8 | -1.8 | -38.2 |
| Track Work - Metra/PSA | 7.4 | 1.2 | -3.4 | 0.0 | -2.0 | -15.8 | -3.8 | -2.2 | -5.8 | -0.8 | -5.0 | -6.8 | -1.8 | -38.8 |
| Track Work - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.6 |
| Human Error - TOTAL | -1.6 | -1.8 | -1.0 | 2.2 | 0.4 | -5.4 | -1.8 | -1.0 | 1.6 | -3.6 | -2.6 | -2.0 | 5.2 | -11.4 |
| Human Error - Metra/PSA | 0.8 | -1.8 | -1.0 | 2.2 | 0.8 | -2.6 | -1.4 | 0.6 | 0.6 | -1.4 | -2.4 | -1.4 | 7.8 | 0.8 |
| Human Error - Foreign | -2.4 | 0.0 | 0.0 | 0.0 | -0.4 | -2.8 | -0.4 | -1.6 | 1.0 | -2.2 | -0.2 | -0.6 | -2.6 | -12.2 |
| Sick, Injured, Unruly Passenger - TOTAL | -0.4 | -2.8 | -1.4 | -2.0 | -0.4 | -1.2 | 1.0 | -1.0 | 1.8 | -0.2 | -2.2 | -0.4 | -2.6 | -11.8 |
| Sick, Injured, Unruly Passenger - Metra/PSA | -0.4 | -2.8 | -1.4 | -2.0 | -0.4 | -1.2 | 1.0 | -1.0 | 1.8 | -0.2 | -2.2 | -0.4 | -2.6 | -11.8 |
| Sick, Injured, Unruly Passenger - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Weather - TOTAL | -1.8 | -2.8 | -1.2 | 0.0 | 0.0 | -2.4 | -3.8 | -0.2 | -0.4 | -0.4 | -3.0 | -7.0 | 0.6 | -22.4 |
| Weather - Metra/PSA | -1.8 | -2.8 | -1.2 | 0.0 | 0.0 | -2.4 | -3.8 | -0.2 | -0.4 | -0.4 | -3.0 | -7.0 | 0.6 | -22.4 |
| Weather - Foreign | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Passenger Loading - TOTAL | -2.2 | -9.4 | 0.8 | -4.6 | 0.0 | -5.0 | 1.0 | 0.0 | -1.2 | -0.4 | -10.6 | 3.0 | 0.4 | -28.2 |
| Lift Deployment - TOTAL | 1.2 | 0.8 | 0.0 | -0.2 | 0.0 | 0.8 | 1.2 | -0.4 | -4.2 | 0.0 | -2.6 | -1.0 | -2.8 | -7.2 |
| Obstruction/Debris - TOTAL | -16.2 | -9.8 | -4.0 | -4.4 | 0.0 | 1.8 | 5.2 | 2.8 | 0.6 | -3.6 | -3.8 | 12.4 | 1.6 | -17.4 |
| Catenary Failure - TOTAL | 0.0 | -1.0 | -1.4 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.0 |
| Other - TOTAL | 3.0 | -6.0 | -0.4 | 0.2 | 0.0 | -1.2 | 5.2 | -1.0 | -0.8 | -1.6 | -2.6 | 0.4 | 1.4 | -3.4 |
| TOTAL TRAINS DELAYED | -35.4 | -50.2 | -17.2 | -10.2 | -5.8 | -53.0 | -8.0 | -10.2 | -22.6 | -19.6 | -54.2 | -15.0 | -7.6 | -309.0 |
| Total Metra/PSA Delays | -29.8 | -49.4 | -17.0 | -11.2 | -2.8 | -43.8 | -0.6 | -5.4 | -20.8 | -9.4 | -54.0 | -8.8 | 1.6 | -251.4 |
| Total Foreign Carrier Delays | -5.6 | -0.8 | -0.2 | 1.0 | -3.0 | -9.2 | -7.4 | -4.8 | -1.8 | -10.2 | -0.2 | -6.2 | -9.2 | -57.6 |

Data for current month is final (11/14/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx>LastMonthByLine 11/14/2016

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

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

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

| CAUSE CATEGORY | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM |
|--|--------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|---------------|------------|------------|--------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Freight Interference - TOTAL | 192 | 0 | 0 | 0 | 21 | 66 | 95 | 53 | 59 | 71 | 3 | 15 | 108 | 683 |
| Freight Interference - Peak | 78 | 0 | 0 | 0 | 18 | 10 | 29 | 19 | 22 | 25 | 0 | 7 | 35 | 243 |
| Primary | 45 | 0 | 0 | 0 | 18 | 9 | 16 | 16 | 15 | 20 | 0 | 7 | 18 | 164 |
| Secondary | 33 | 0 | 0 | 0 | 0 | 1 | 13 | 3 | 7 | 5 | 0 | 0 | 17 | 79 |
| Freight Interference - Off-Peak | 114 | 0 | 0 | 0 | 3 | 56 | 66 | 34 | 37 | 46 | 3 | 8 | 73 | 440 |
| Primary | 93 | 0 | 0 | 0 | 3 | 42 | 33 | 33 | 30 | 40 | 3 | 6 | 60 | 343 |
| Secondary | 21 | 0 | 0 | 0 | 0 | 14 | 33 | 1 | 7 | 6 | 0 | 2 | 13 | 97 |
| Signal/Switch Failure - TOTAL | 276 | 80 | 30 | 24 | 25 | 163 | 118 | 74 | 68 | 120 | 16 | 45 | 122 | 1,161 |
| Signal/Switch Failure - Metra/PSA | 80 | 80 | 30 | 24 | 1 | 126 | 98 | 27 | 68 | 40 | 16 | 38 | 121 | 749 |
| Primary | 55 | 42 | 19 | 17 | 1 | 68 | 66 | 16 | 49 | 30 | 10 | 30 | 32 | 435 |
| Secondary | 25 | 38 | 11 | 7 | 0 | 58 | 32 | 11 | 19 | 10 | 6 | 8 | 89 | 314 |
| Signal/Switch Failure - Foreign | 196 | 0 | 0 | 0 | 24 | 37 | 20 | 47 | 0 | 80 | 0 | 7 | 1 | 412 |
| Primary | 149 | 0 | 0 | 0 | 22 | 28 | 15 | 32 | 0 | 57 | 0 | 2 | 1 | 306 |
| Secondary | 47 | 0 | 0 | 0 | 2 | 9 | 5 | 15 | 0 | 23 | 0 | 5 | 0 | 106 |
| Mechanical Failure - TOTAL | 111 | 24 | 3 | 1 | 11 | 89 | 100 | 36 | 227 | 12 | 67 | 96 | 116 | 893 |
| Mechanical Failure - Metra/PSA | 111 | 23 | 3 | 1 | 11 | 89 | 100 | 36 | 227 | 12 | 67 | 96 | 116 | 892 |
| Non-Locomotive Equipment Failure - Metra/PSA | 19 | 23 | 3 | 1 | 2 | 12 | 10 | 7 | 8 | 4 | 20 | 7 | 43 | 159 |
| Primary | 11 | 7 | 2 | 0 | 1 | 8 | 8 | 3 | 3 | 4 | 11 | 5 | 17 | 80 |
| Secondary | 8 | 16 | 1 | 1 | 1 | 4 | 2 | 4 | 5 | 0 | 9 | 2 | 26 | 79 |
| Locomotive Failure - Metra/PSA | 92 | 0 | 0 | 0 | 9 | 77 | 90 | 29 | 219 | 8 | 47 | 89 | 73 | 733 |
| Primary | 38 | 0 | 0 | 0 | 7 | 26 | 32 | 11 | 48 | 5 | 18 | 23 | 22 | 230 |
| Secondary | 54 | 0 | 0 | 0 | 2 | 51 | 58 | 18 | 171 | 3 | 29 | 66 | 51 | 503 |
| Mechanical Failure - Foreign | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Passenger Train Interference - TOTAL | 22 | 7 | 2 | 7 | 5 | 20 | 4 | 10 | 9 | 22 | 0 | 2 | 2 | 112 |
| Passenger Train Interference - Metra/PSA | 0 | 3 | 0 | 2 | 0 | 14 | 3 | 9 | 9 | 1 | 0 | 2 | 1 | 44 |
| Passenger Train Interference - Foreign | 22 | 4 | 2 | 5 | 5 | 6 | 1 | 1 | 0 | 21 | 0 | 0 | 1 | 68 |
| Accident - TOTAL | 94 | 6 | 3 | 3 | 1 | 77 | 61 | 28 | 31 | 27 | 33 | 39 | 13 | 416 |
| Accident - Metra/PSA | 86 | 6 | 3 | 3 | 1 | 68 | 59 | 23 | 31 | 22 | 33 | 36 | 12 | 383 |
| Accident - Foreign | 8 | 0 | 0 | 0 | 0 | 9 | 2 | 5 | 0 | 5 | 0 | 3 | 1 | 33 |
| Track Work - TOTAL | 305 | 88 | 11 | 43 | 1 | 77 | 45 | 5 | 66 | 12 | 68 | 48 | 111 | 880 |
| Track Work - Metra/PSA | 271 | 88 | 11 | 43 | 1 | 77 | 42 | 4 | 66 | 9 | 68 | 48 | 111 | 839 |
| Track Work - Foreign | 34 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 3 | 0 | 0 | 0 | 41 |
| Human Error - TOTAL | 93 | 44 | 24 | 33 | 14 | 74 | 47 | 20 | 57 | 26 | 22 | 32 | 29 | 515 |
| Human Error - Metra/PSA | 75 | 44 | 24 | 33 | 1 | 52 | 33 | 15 | 56 | 8 | 19 | 27 | 24 | 411 |
| Human Error - Foreign | 18 | 0 | 0 | 0 | 13 | 22 | 14 | 5 | 1 | 18 | 3 | 5 | 5 | 104 |
| Sick, Injured, Unruly Passenger - TOTAL | 32 | 47 | 8 | 15 | 1 | 46 | 45 | 2 | 34 | 3 | 31 | 44 | 30 | 338 |
| Sick, Injured, Unruly Passenger - Metra/PSA | 30 | 47 | 8 | 15 | 1 | 46 | 45 | 2 | 34 | 3 | 31 | 44 | 30 | 336 |
| Sick, Injured, Unruly Passenger - Foreign | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Weather - TOTAL | 120 | 46 | 12 | 21 | 0 | 46 | 36 | 7 | 54 | 6 | 38 | 12 | 11 | 409 |
| Weather - Metra/PSA | 120 | 46 | 12 | 21 | 0 | 46 | 36 | 7 | 54 | 6 | 38 | 12 | 11 | 409 |
| Weather - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Passenger Loading - TOTAL | 38 | 25 | 7 | 8 | 0 | 35 | 71 | 1 | 62 | 1 | 42 | 83 | 29 | 402 |
| Lift Deployment - TOTAL | 14 | 2 | 0 | 1 | 0 | 38 | 19 | 2 | 12 | 3 | 4 | 13 | 13 | 121 |
| Obstruction/Debris - TOTAL | 30 | 34 | 8 | 25 | 2 | 35 | 56 | 8 | 23 | 21 | 36 | 44 | 35 | 357 |
| Catenary Failure - TOTAL | 0 | 58 | 8 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |
| Other - TOTAL | 29 | 8 | 1 | 5 | 0 | 21 | 20 | 5 | 20 | 9 | 20 | 15 | 40 | 193 |
| TOTAL TRAINS DELAYED | 1,356 | 469 | 117 | 210 | 81 | 787 | 717 | 251 | 722 | 333 | 380 | 488 | 659 | 6,570 |
| Total Metra/PSA Delays | 884 | 464 | 115 | 205 | 18 | 647 | 582 | 139 | 662 | 135 | 374 | 458 | 543 | 5,226 |
| Total Foreign Carrier Delays | 472 | 5 | 2 | 5 | 63 | 140 | 135 | 112 | 60 | 198 | 6 | 30 | 116 | 1,344 |

Data for current month is final (11/14/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx|YTDByLine 11/14/2016

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

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

TABLE 9.b: FREQUENCY OF TRAIN DELAYS BY CAUSE AND LINE
January - October - Average Over Previous Five Years: 2011-2015

| CAUSE CATEGORY | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM |
|--|----------------|--------------|--------------|--------------|-------------|----------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|----------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Freight Interference - TOTAL | 195.2 | 0.0 | 0.2 | 0.0 | 34.0 | 150.6 | 137.4 | 134.8 | 61.6 | 152.6 | 14.4 | 58.8 | 207.4 | 1,147.0 |
| Freight Interference - Peak | 74.8 | 0.0 | 0.2 | 0.0 | 34.0 | 26.8 | 25.4 | 51.4 | 19.8 | 45.6 | 3.4 | 27.2 | 44.6 | 353.2 |
| Primary | 47.2 | 0.0 | 0.0 | 0.0 | 32.6 | 18.2 | 16.8 | 35.2 | 11.2 | 34.8 | 1.8 | 13.8 | 24.2 | 235.8 |
| Secondary | 27.6 | 0.0 | 0.2 | 0.0 | 1.4 | 8.6 | 8.6 | 16.2 | 8.6 | 10.8 | 1.6 | 13.4 | 20.4 | 117.4 |
| Freight Interference - Off-Peak | 120.4 | 0.0 | 0.0 | 0.0 | 0.0 | 123.8 | 112.0 | 83.4 | 41.8 | 107.0 | 11.0 | 31.6 | 162.8 | 793.8 |
| Primary | 100.8 | 0.0 | 0.0 | 0.0 | 0.0 | 89.4 | 80.8 | 70.8 | 37.4 | 81.6 | 6.8 | 26.4 | 135.8 | 629.8 |
| Secondary | 19.6 | 0.0 | 0.0 | 0.0 | 0.0 | 34.4 | 31.2 | 12.6 | 4.4 | 25.4 | 4.2 | 5.2 | 27.0 | 164.0 |
| Signal/Switch Failure - TOTAL | 170.6 | 82.8 | 29.2 | 29.2 | 19.6 | 233.0 | 132.4 | 80.4 | 80.2 | 89.2 | 45.0 | 65.4 | 91.6 | 1,148.6 |
| Signal/Switch Failure - Metra/PSA | 123.0 | 82.8 | 29.0 | 29.2 | 9.2 | 205.8 | 114.8 | 59.8 | 75.0 | 32.6 | 44.4 | 60.2 | 86.8 | 952.6 |
| Primary | 89.2 | 64.0 | 22.0 | 20.2 | 9.0 | 114.6 | 71.8 | 34.8 | 59.0 | 24.4 | 23.4 | 29.0 | 45.2 | 606.6 |
| Secondary | 33.8 | 18.8 | 7.0 | 9.0 | 0.2 | 91.2 | 43.0 | 25.0 | 16.0 | 8.2 | 21.0 | 31.2 | 41.6 | 346.0 |
| Signal/Switch Failure - Foreign | 47.6 | 0.0 | 0.2 | 0.0 | 10.4 | 27.2 | 17.6 | 20.6 | 5.2 | 56.6 | 0.6 | 5.2 | 4.8 | 196.0 |
| Primary | 37.4 | 0.0 | 0.0 | 0.0 | 9.6 | 17.8 | 12.4 | 11.6 | 2.8 | 37.4 | 0.6 | 3.0 | 4.0 | 136.6 |
| Secondary | 10.2 | 0.0 | 0.2 | 0.0 | 0.8 | 9.4 | 5.2 | 9.0 | 2.4 | 19.2 | 0.0 | 2.2 | 0.8 | 59.4 |
| Mechanical Failure - TOTAL | 135.4 | 46.8 | 15.2 | 12.4 | 3.2 | 118.2 | 67.6 | 27.0 | 102.2 | 22.8 | 77.4 | 78.8 | 62.2 | 769.2 |
| Mechanical Failure - Metra/PSA | 135.0 | 43.4 | 14.0 | 12.0 | 3.2 | 113.8 | 67.4 | 27.0 | 101.8 | 22.8 | 77.4 | 78.8 | 62.0 | 758.6 |
| Non-Locomotive Equipment Failure - Metra/PSA | 28.8 | 43.4 | 14.0 | 12.0 | 0.8 | 15.8 | 15.8 | 3.8 | 15.8 | 7.2 | 14.0 | 15.0 | 20.2 | 206.6 |
| Primary | 11.4 | 14.0 | 5.6 | 5.6 | 0.6 | 5.8 | 7.2 | 1.4 | 8.6 | 3.0 | 5.8 | 6.0 | 9.6 | 84.6 |
| Secondary | 17.4 | 29.4 | 8.4 | 6.4 | 0.2 | 10.0 | 8.6 | 2.4 | 7.2 | 4.2 | 8.2 | 9.0 | 10.6 | 122.0 |
| Locomotive Failure - Metra/PSA | 106.2 | 0.0 | 0.0 | 0.0 | 2.4 | 98.0 | 51.6 | 23.2 | 86.0 | 15.6 | 63.4 | 63.8 | 41.8 | 552.0 |
| Primary | 31.8 | 0.0 | 0.0 | 0.0 | 1.8 | 24.8 | 20.6 | 7.2 | 32.8 | 7.2 | 22.0 | 16.8 | 15.6 | 180.6 |
| Secondary | 74.4 | 0.0 | 0.0 | 0.0 | 0.6 | 73.2 | 31.0 | 16.0 | 53.2 | 8.4 | 41.4 | 47.0 | 26.2 | 371.4 |
| Mechanical Failure - Foreign | 0.4 | 3.4 | 1.2 | 0.4 | 0.0 | 4.4 | 0.2 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.2 | 10.6 |
| Passenger Train Interference - TOTAL | 17.8 | 11.0 | 3.2 | 5.2 | 7.0 | 78.2 | 15.2 | 15.4 | 16.0 | 11.4 | 9.8 | 6.8 | 14.8 | 211.8 |
| Passenger Train Interference - Metra/PSA | 1.8 | 5.2 | 2.4 | 4.2 | 0.8 | 53.8 | 12.0 | 14.8 | 10.4 | 3.2 | 9.8 | 6.6 | 14.6 | 139.6 |
| Passenger Train Interference - Foreign | 16.0 | 5.8 | 0.8 | 1.0 | 6.2 | 24.4 | 3.2 | 0.6 | 5.6 | 8.2 | 0.0 | 0.2 | 0.2 | 72.2 |
| Accident - TOTAL | 115.8 | 17.8 | 7.8 | 10.8 | 1.4 | 44.0 | 50.2 | 14.0 | 39.0 | 9.4 | 40.2 | 67.0 | 39.0 | 456.4 |
| Accident - Metra/PSA | 100.4 | 17.8 | 7.8 | 10.8 | 1.2 | 42.8 | 48.6 | 12.4 | 37.8 | 9.4 | 40.2 | 67.0 | 37.0 | 433.2 |
| Accident - Foreign | 15.4 | 0.0 | 0.0 | 0.0 | 0.2 | 1.2 | 1.6 | 1.6 | 1.2 | 0.0 | 0.0 | 0.0 | 2.0 | 23.2 |
| Track Work - TOTAL | 235.6 | 62.0 | 18.2 | 58.2 | 7.2 | 79.8 | 63.6 | 23.0 | 68.6 | 11.8 | 77.6 | 58.4 | 51.8 | 815.8 |
| Track Work - Metra/PSA | 227.8 | 62.0 | 18.2 | 58.2 | 7.2 | 79.4 | 63.4 | 22.4 | 68.6 | 10.2 | 77.6 | 58.4 | 51.8 | 805.2 |
| Track Work - Foreign | 7.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.6 | 0.0 | 1.6 | 0.0 | 0.0 | 0.0 | 10.6 |
| Human Error - TOTAL | 150.6 | 43.6 | 9.6 | 20.6 | 14.2 | 81.6 | 48.6 | 21.6 | 54.4 | 37.4 | 52.6 | 44.6 | 51.8 | 631.2 |
| Human Error - Metra/PSA | 106.2 | 41.0 | 9.4 | 19.8 | 3.4 | 46.6 | 33.2 | 9.0 | 53.8 | 9.0 | 41.8 | 27.6 | 29.8 | 430.6 |
| Human Error - Foreign | 44.4 | 2.6 | 0.2 | 0.8 | 10.8 | 35.0 | 15.4 | 12.6 | 0.6 | 28.4 | 10.8 | 17.0 | 22.0 | 200.6 |
| Sick, Injured, Unruly Passenger - TOTAL | 33.6 | 60.8 | 11.0 | 19.6 | 1.4 | 29.2 | 29.4 | 3.8 | 27.8 | 4.4 | 45.2 | 38.2 | 31.8 | 336.2 |
| Sick, Injured, Unruly Passenger - Metra/PSA | 33.0 | 60.8 | 11.0 | 19.6 | 1.4 | 29.2 | 29.4 | 3.8 | 27.4 | 4.4 | 45.2 | 38.2 | 31.8 | 335.2 |
| Sick, Injured, Unruly Passenger - Foreign | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| Weather - TOTAL | 213.0 | 125.2 | 33.8 | 43.8 | 8.0 | 135.0 | 115.6 | 43.2 | 131.6 | 26.6 | 117.6 | 136.0 | 108.8 | 1,238.2 |
| Weather - Metra/PSA | 211.8 | 125.2 | 33.8 | 43.8 | 7.6 | 131.8 | 115.0 | 42.8 | 130.4 | 25.0 | 117.6 | 135.6 | 108.2 | 1,228.6 |
| Weather - Foreign | 1.2 | 0.0 | 0.0 | 0.0 | 0.4 | 3.2 | 0.6 | 0.4 | 1.2 | 1.6 | 0.0 | 0.4 | 0.6 | 9.6 |
| Passenger Loading - TOTAL | 95.2 | 146.0 | 23.6 | 60.0 | 0.0 | 108.2 | 76.8 | 2.4 | 155.0 | 2.6 | 158.6 | 93.8 | 91.0 | 1,013.2 |
| Lift Deployment - TOTAL | 31.2 | 1.4 | 0.0 | 1.4 | 0.0 | 27.8 | 33.0 | 3.4 | 51.6 | 1.4 | 24.2 | 15.4 | 32.2 | 223.0 |
| Obstruction/Debris - TOTAL | 75.0 | 31.4 | 10.8 | 31.2 | 2.8 | 26.6 | 32.2 | 6.6 | 30.6 | 18.6 | 28.8 | 43.4 | 38.6 | 376.6 |
| Catenary Failure - TOTAL | 0.0 | 56.8 | 12.2 | 25.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 94.6 |
| Other - TOTAL | 40.8 | 26.0 | 8.0 | 13.8 | 1.0 | 18.0 | 20.8 | 6.0 | 24.6 | 14.0 | 30.2 | 21.4 | 35.2 | 259.8 |
| TOTAL TRAINS DELAYED | 1,509.8 | 711.6 | 182.8 | 331.6 | 99.8 | 1,130.2 | 822.8 | 381.6 | 843.2 | 402.2 | 721.6 | 728.2 | 856.2 | 8,721.6 |
| Total Metra/PSA Delays | 1,181.2 | 699.8 | 180.2 | 329.4 | 37.8 | 883.8 | 646.6 | 210.4 | 767.0 | 153.2 | 695.8 | 646.6 | 619.0 | 7,050.8 |
| Total Foreign Carrier Delays | 328.6 | 11.8 | 2.6 | 2.2 | 62.0 | 246.4 | 176.2 | 171.2 | 76.2 | 249.0 | 25.8 | 81.6 | 237.2 | 1,670.8 |

Data for latest month is final (11/11/15) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx|YTDBByLine 11/14/2016

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

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

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

| CAUSE CATEGORY | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM |
|--|---------------|---------------|--------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|-----------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Freight Interference - TOTAL | -3.2 | 0.0 | -0.2 | 0.0 | -13.0 | -84.6 | -42.4 | -81.8 | -2.6 | -81.6 | -11.4 | -43.8 | -99.4 | -464.0 |
| Freight Interference - Peak | 3.2 | 0.0 | -0.2 | 0.0 | -16.0 | -16.8 | 3.6 | -32.4 | 2.2 | -20.6 | -3.4 | -20.2 | -9.6 | -110.2 |
| Primary | -2.2 | 0.0 | 0.0 | 0.0 | -14.6 | -9.2 | -0.8 | -19.2 | 3.8 | -14.8 | -1.8 | -6.8 | -6.2 | -71.8 |
| Secondary | 5.4 | 0.0 | -0.2 | 0.0 | -1.4 | -7.6 | 4.4 | -13.2 | -1.6 | -5.8 | -1.6 | -13.4 | -3.4 | -38.4 |
| Freight Interference - Off-Peak | -6.4 | 0.0 | 0.0 | 0.0 | 3.0 | -67.8 | -46.0 | -49.4 | -4.8 | -61.0 | -8.0 | -23.6 | -89.8 | -353.8 |
| Primary | -7.8 | 0.0 | 0.0 | 0.0 | 3.0 | -47.4 | -47.8 | -37.8 | -7.4 | -41.6 | -3.8 | -20.4 | -75.8 | -286.8 |
| Secondary | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | -20.4 | 1.8 | -11.6 | 2.6 | -19.4 | -4.2 | -3.2 | -14.0 | -67.0 |
| Signal/Switch Failure - TOTAL | 105.4 | -2.8 | 0.8 | -5.2 | 5.4 | -70.0 | -14.4 | -6.4 | -12.2 | 30.8 | -29.0 | -20.4 | 30.4 | 12.4 |
| Signal/Switch Failure - Metra/PSA | -43.0 | -2.8 | 1.0 | -5.2 | -8.2 | -79.8 | -16.8 | -32.8 | -7.0 | 7.4 | -28.4 | -22.2 | 34.2 | -203.6 |
| Primary | -34.2 | -22.0 | -3.0 | -3.2 | -8.0 | -46.6 | -5.8 | -18.8 | -10.0 | 5.6 | -13.4 | 1.0 | -13.2 | -171.6 |
| Secondary | -8.8 | 19.2 | 4.0 | -2.0 | -0.2 | -33.2 | -11.0 | -14.0 | 3.0 | 1.8 | -15.0 | -23.2 | 47.4 | -32.0 |
| Signal/Switch Failure - Foreign | 148.4 | 0.0 | -0.2 | 0.0 | 13.6 | 9.8 | 2.4 | 26.4 | -5.2 | 23.4 | -0.6 | 1.8 | -3.8 | 216.0 |
| Primary | 111.6 | 0.0 | 0.0 | 0.0 | 12.4 | 10.2 | 2.6 | 20.4 | -2.8 | 19.6 | -0.6 | -1.0 | -3.0 | 169.4 |
| Secondary | 36.8 | 0.0 | -0.2 | 0.0 | 1.2 | -0.4 | -0.2 | 6.0 | -2.4 | 3.8 | 0.0 | 2.8 | -0.8 | 46.6 |
| Mechanical Failure - TOTAL | -24.4 | -22.8 | -12.2 | -11.4 | 7.8 | -29.2 | 32.4 | 9.0 | 124.8 | -10.8 | -10.4 | 17.2 | 53.8 | 123.8 |
| Mechanical Failure - Metra/PSA | -24.0 | -20.4 | -11.0 | -11.0 | 7.8 | -24.8 | 32.6 | 9.0 | 125.2 | -10.8 | -10.4 | 17.2 | 54.0 | 133.4 |
| Non-Locomotive Equipment Failure - Metra/PSA | -9.8 | -20.4 | -11.0 | -11.0 | 1.2 | -3.8 | -5.8 | 3.2 | -7.8 | -3.2 | 6.0 | -8.0 | 22.8 | -47.6 |
| Primary | -0.4 | -7.0 | -3.6 | -5.6 | 0.4 | 2.2 | 0.8 | 1.6 | -5.6 | 1.0 | 5.2 | -1.0 | 7.4 | -4.6 |
| Secondary | -9.4 | -13.4 | -7.4 | -5.4 | 0.8 | -6.0 | -6.6 | 1.6 | -2.2 | -4.2 | 0.8 | -7.0 | 15.4 | -43.0 |
| Locomotive Failure - Metra/PSA | -14.2 | 0.0 | 0.0 | 0.0 | 6.6 | -21.0 | 38.4 | 5.8 | 133.0 | -7.6 | -16.4 | 25.2 | 31.2 | 181.0 |
| Primary | 6.2 | 0.0 | 0.0 | 0.0 | 5.2 | 1.2 | 11.4 | 3.8 | 15.2 | -2.2 | -4.0 | 6.2 | 6.4 | 49.4 |
| Secondary | -20.4 | 0.0 | 0.0 | 0.0 | 1.4 | -22.2 | 27.0 | 2.0 | 117.8 | -5.4 | -12.4 | 19.0 | 24.8 | 131.6 |
| Mechanical Failure - Foreign | -0.4 | -2.4 | -1.2 | -0.4 | 0.0 | -4.4 | -0.2 | 0.0 | -0.4 | 0.0 | 0.0 | 0.0 | -0.2 | -9.6 |
| Passenger Train Interference - TOTAL | 4.2 | -4.0 | -1.2 | 1.8 | -2.0 | -58.2 | -11.2 | -5.4 | -7.0 | 10.6 | -9.8 | -4.8 | -12.8 | -99.8 |
| Passenger Train Interference - Metra/PSA | -1.8 | -2.2 | -2.4 | -2.2 | -0.8 | -39.8 | -9.0 | -5.8 | -1.4 | -2.2 | -9.8 | -4.6 | -13.6 | -95.6 |
| Passenger Train Interference - Foreign | 6.0 | -1.8 | 1.2 | 4.0 | -1.2 | -18.4 | -2.2 | 0.4 | -5.6 | 12.8 | 0.0 | -0.2 | 0.8 | -4.2 |
| Accident - TOTAL | -21.8 | -11.8 | -4.8 | -7.8 | -0.4 | 33.0 | 10.8 | 14.0 | -8.0 | 17.6 | -7.2 | -28.0 | -26.0 | -40.4 |
| Accident - Metra/PSA | -14.4 | -11.8 | -4.8 | -7.8 | -0.2 | 25.2 | 10.4 | 10.6 | -6.8 | 12.6 | -7.2 | -31.0 | -25.0 | -50.2 |
| Accident - Foreign | -7.4 | 0.0 | 0.0 | 0.0 | -0.2 | 7.8 | 0.4 | 3.4 | -1.2 | 5.0 | 0.0 | 3.0 | -1.0 | 9.8 |
| Track Work - TOTAL | 69.4 | 26.0 | -7.2 | -15.2 | -6.2 | -2.8 | -18.6 | -18.0 | -2.6 | 0.2 | -9.6 | -10.4 | 59.2 | 64.2 |
| Track Work - Metra/PSA | 43.2 | 26.0 | -7.2 | -15.2 | -6.2 | -2.4 | -21.4 | -18.4 | -2.6 | -1.2 | -9.6 | -10.4 | 59.2 | 33.8 |
| Track Work - Foreign | 26.2 | 0.0 | 0.0 | 0.0 | 0.0 | -0.4 | 2.8 | 0.4 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 30.4 |
| Human Error - TOTAL | -57.6 | 0.4 | 14.4 | 12.4 | -0.2 | -7.6 | -1.6 | -1.6 | 2.6 | -11.4 | -30.6 | -12.6 | -22.8 | -116.2 |
| Human Error - Metra/PSA | -31.2 | 3.0 | 14.6 | 13.2 | -2.4 | 5.4 | -0.2 | 6.0 | 2.2 | -1.0 | -22.8 | -0.6 | -5.8 | -19.6 |
| Human Error - Foreign | -26.4 | -2.6 | -0.2 | -0.8 | 2.2 | -13.0 | -1.4 | -7.6 | 0.4 | -10.4 | -7.8 | -12.0 | -17.0 | -96.6 |
| Sick, Injured, Unruly Passenger - TOTAL | -1.6 | -13.8 | -3.0 | -4.6 | -0.4 | 16.8 | 15.6 | -1.8 | 6.2 | -1.4 | -14.2 | 5.8 | -1.8 | 1.8 |
| Sick, Injured, Unruly Passenger - Metra/PSA | -3.0 | -13.8 | -3.0 | -4.6 | -0.4 | 16.8 | 15.6 | -1.8 | 6.6 | -1.4 | -14.2 | 5.8 | -1.8 | 0.8 |
| Sick, Injured, Unruly Passenger - Foreign | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| Weather - TOTAL | -93.0 | -79.2 | -21.8 | -22.8 | -8.0 | -89.0 | -79.6 | -36.2 | -77.6 | -20.6 | -79.6 | -124.0 | -97.8 | -829.2 |
| Weather - Metra/PSA | -91.8 | -79.2 | -21.8 | -22.8 | -7.6 | -85.8 | -79.0 | -35.8 | -76.4 | -19.0 | -79.6 | -123.6 | -97.2 | -819.6 |
| Weather - Foreign | -1.2 | 0.0 | 0.0 | 0.0 | -0.4 | -3.2 | -0.6 | -0.4 | -1.2 | -1.6 | 0.0 | -0.4 | -0.6 | -9.6 |
| Passenger Loading - TOTAL | -57.2 | -121.0 | -16.6 | -52.0 | 0.0 | -73.2 | -5.8 | -1.4 | -93.0 | -1.6 | -116.6 | -10.8 | -62.0 | -611.2 |
| Lift Deployment - TOTAL | -17.2 | 0.6 | 0.0 | -0.4 | 0.0 | 10.2 | -14.0 | -1.4 | -39.6 | 1.6 | -20.2 | -2.4 | -19.2 | -102.0 |
| Obstruction/Debris - TOTAL | -45.0 | 2.6 | -2.8 | -6.2 | -0.8 | 8.4 | 23.8 | 1.4 | -7.6 | 2.4 | 7.2 | 0.6 | -3.6 | -19.6 |
| Catenary Failure - TOTAL | 0.0 | 1.2 | -4.2 | -1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | -4.6 |
| Other - TOTAL | -11.8 | -18.0 | -7.0 | -8.8 | -1.0 | 3.0 | -0.8 | -1.0 | -4.6 | -5.0 | -10.2 | -6.4 | 4.8 | -66.8 |
| TOTAL TRAINS DELAYED | -153.8 | -242.6 | -65.8 | -121.6 | -18.8 | -343.2 | -105.8 | -130.6 | -121.2 | -69.2 | -341.6 | -240.2 | -197.2 | -2,151.6 |
| Total Metra/PSA Delays | -297.2 | -235.8 | -65.2 | -124.4 | -19.8 | -236.8 | -64.6 | -71.4 | -105.0 | -18.2 | -321.8 | -188.6 | -76.0 | -1,824.8 |
| Total Foreign Carrier Delays | 143.4 | -6.8 | -0.6 | 2.8 | 1.0 | -106.4 | -41.2 | -59.2 | -16.2 | -51.0 | -19.8 | -51.6 | -121.2 | -326.8 |

Data for current month is final (11/14/16) version from TOPS.

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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 10.a: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH
2016**

| CAUSE CATEGORY | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan - Oct | |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----|-----|--------------|---------------|
| Freight Interference - TOTAL | 82 | 53 | 43 | 44 | 72 | 73 | 82 | 108 | 78 | 48 | | | 683 | 10.4% |
| Freight Interference - Peak | 32 | 17 | 14 | 9 | 28 | 20 | 32 | 50 | 26 | 15 | | | 243 | 3.7% |
| Primary | 26 | 10 | 11 | 7 | 15 | 10 | 21 | 31 | 20 | 13 | | | 164 | 2.5% |
| Secondary | 6 | 7 | 3 | 2 | 13 | 10 | 11 | 19 | 6 | 2 | | | 79 | 1.2% |
| Freight Interference - Off-Peak | 50 | 36 | 29 | 35 | 44 | 53 | 50 | 58 | 52 | 33 | | | 440 | 6.7% |
| Primary | 32 | 29 | 23 | 29 | 32 | 44 | 34 | 48 | 43 | 29 | | | 343 | 5.2% |
| Secondary | 18 | 7 | 6 | 6 | 12 | 9 | 16 | 10 | 9 | 4 | | | 97 | 1.5% |
| Signal/Switch Failure - TOTAL | 154 | 155 | 123 | 98 | 145 | 143 | 108 | 63 | 105 | 67 | | | 1,161 | 17.7% |
| Signal/Switch Failure - Metra/PSA | 67 | 122 | 99 | 60 | 84 | 84 | 51 | 55 | 89 | 38 | | | 749 | 11.4% |
| Primary | 35 | 30 | 52 | 41 | 54 | 52 | 41 | 40 | 58 | 32 | | | 435 | 6.6% |
| Secondary | 32 | 92 | 47 | 19 | 30 | 32 | 10 | 15 | 31 | 6 | | | 314 | 4.8% |
| Signal/Switch Failure - Foreign | 87 | 33 | 24 | 38 | 61 | 59 | 57 | 8 | 16 | 29 | | | 412 | 6.3% |
| Primary | 68 | 24 | 14 | 33 | 49 | 43 | 36 | 6 | 12 | 21 | | | 306 | 4.7% |
| Secondary | 19 | 9 | 10 | 5 | 12 | 16 | 21 | 2 | 4 | 8 | | | 106 | 1.6% |
| Mechanical Failure - TOTAL | 107 | 68 | 131 | 43 | 80 | 88 | 120 | 78 | 114 | 64 | | | 893 | 13.6% |
| Mechanical Failure - Metra/PSA | 107 | 68 | 131 | 42 | 80 | 88 | 120 | 78 | 114 | 64 | | | 892 | 13.6% |
| Non-Locomotive Equipment Failure - Metra/PSA | 25 | 19 | 10 | 6 | 13 | 17 | 19 | 30 | 8 | 12 | | | 159 | 2.4% |
| Primary | 11 | 9 | 4 | 5 | 9 | 9 | 8 | 11 | 7 | 7 | | | 80 | 1.2% |
| Secondary | 14 | 10 | 6 | 1 | 4 | 8 | 11 | 19 | 1 | 5 | | | 79 | 1.2% |
| Locomotive Failure - Metra/PSA | 82 | 49 | 121 | 36 | 67 | 71 | 101 | 48 | 106 | 52 | | | 733 | 11.2% |
| Primary | 28 | 18 | 24 | 14 | 18 | 27 | 36 | 20 | 28 | 17 | | | 230 | 3.5% |
| Secondary | 54 | 31 | 97 | 22 | 49 | 44 | 65 | 28 | 78 | 35 | | | 503 | 7.7% |
| Mechanical Failure - Foreign | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | 1 | 0.0% |
| Passenger Train Interference - TOTAL | 22 | 12 | 3 | 4 | 19 | 14 | 12 | 11 | 5 | 10 | | | 112 | 1.7% |
| Passenger Train Interference - Metra/PSA | 13 | 5 | 2 | 3 | 2 | 2 | 7 | 2 | 2 | 6 | | | 44 | 0.7% |
| Passenger Train Interference - Foreign | 9 | 7 | 1 | 1 | 17 | 12 | 5 | 9 | 3 | 4 | | | 68 | 1.0% |
| Accident - TOTAL | 59 | 15 | 62 | 48 | 86 | 29 | 18 | 55 | 34 | 10 | | | 416 | 6.3% |
| Accident - Metra/PSA | 49 | 14 | 62 | 41 | 77 | 29 | 18 | 53 | 30 | 10 | | | 383 | 5.8% |
| Accident - Foreign | 10 | 1 | 0 | 7 | 9 | 0 | 0 | 2 | 4 | 0 | | | 33 | 0.5% |
| Track Work - TOTAL | 40 | 21 | 36 | 44 | 141 | 114 | 99 | 133 | 177 | 75 | | | 880 | 13.4% |
| Track Work - Metra/PSA | 40 | 21 | 36 | 41 | 139 | 110 | 99 | 104 | 175 | 74 | | | 839 | 12.8% |
| Track Work - Foreign | 0 | 0 | 0 | 3 | 2 | 4 | 0 | 29 | 2 | 1 | | | 41 | 0.6% |
| Human Error - TOTAL | 38 | 33 | 21 | 53 | 23 | 112 | 47 | 93 | 50 | 45 | | | 515 | 7.8% |
| Human Error - Metra/PSA | 30 | 25 | 15 | 42 | 15 | 94 | 34 | 81 | 43 | 32 | | | 411 | 6.3% |
| Human Error - Foreign | 8 | 8 | 6 | 11 | 8 | 18 | 13 | 12 | 7 | 13 | | | 104 | 1.6% |
| Sick, Injured, Unruly Passenger - TOTAL | 20 | 39 | 27 | 50 | 44 | 32 | 29 | 43 | 30 | 24 | | | 338 | 5.1% |
| Sick, Injured, Unruly Passenger - Metra/PSA | 20 | 39 | 27 | 50 | 44 | 30 | 29 | 43 | 30 | 24 | | | 336 | 5.1% |
| Sick, Injured, Unruly Passenger - Foreign | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | | | 2 | 0.0% |
| Weather - TOTAL | 129 | 132 | 28 | 1 | 4 | 23 | 49 | 38 | 1 | 4 | | | 409 | 6.2% |
| Weather - Metra/PSA | 129 | 132 | 28 | 1 | 4 | 23 | 49 | 38 | 1 | 4 | | | 409 | 6.2% |
| Weather - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0.0% |
| Passenger Loading - TOTAL | 13 | 7 | 29 | 8 | 51 | 83 | 109 | 42 | 32 | 28 | | | 402 | 6.1% |
| Lift Deployment - TOTAL | 11 | 14 | 12 | 3 | 15 | 11 | 11 | 21 | 11 | 12 | | | 121 | 1.8% |
| Obstruction/Debris - TOTAL | 18 | 30 | 40 | 54 | 22 | 31 | 44 | 51 | 28 | 39 | | | 357 | 5.4% |
| Catenary Failure - TOTAL | 9 | 3 | 2 | 1 | 4 | 13 | 11 | 6 | 29 | 12 | | | 90 | 1.4% |
| Other - TOTAL | 5 | 17 | 15 | 0 | 10 | 25 | 30 | 39 | 35 | 17 | | | 193 | 2.9% |
| TOTAL TRAINS DELAYED | 707 | 599 | 572 | 451 | 716 | 791 | 769 | 781 | 729 | 455 | | | 6,570 | 100.0% |
| Total Metra/PSA Delays | 511 | 497 | 498 | 346 | 547 | 623 | 612 | 613 | 619 | 360 | | | 5,226 | 79.5% |
| Total Foreign Carrier Delays | 196 | 102 | 74 | 105 | 169 | 168 | 157 | 168 | 110 | 95 | | | 1,344 | 20.5% |

Data for current month is final (11/14/16) version from TOPS.

P:\ONTIME\report\DelaysByCause.xlsx\AllMonths 11/14/2016

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

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

**TABLE 10.b: FREQUENCY OF TRAIN DELAYS BY CAUSE & MONTH
2015**

| CAUSE CATEGORY | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan - Oct | |
|--|------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|---------------|
| Freight Interference - TOTAL | 122 | 158 | 113 | 87 | 59 | 90 | 116 | 89 | 84 | 60 | 65 | 49 | 978 | 14.3% |
| Freight Interference - Peak | 35 | 48 | 42 | 36 | 23 | 42 | 38 | 31 | 27 | 12 | 29 | 8 | 334 | 4.9% |
| Primary | 24 | 33 | 24 | 24 | 13 | 25 | 26 | 19 | 16 | 9 | 22 | 5 | 213 | 3.1% |
| Secondary | 11 | 15 | 18 | 12 | 10 | 17 | 12 | 12 | 11 | 3 | 7 | 3 | 121 | 1.8% |
| Freight Interference - Off-Peak | 87 | 110 | 71 | 51 | 36 | 48 | 78 | 58 | 57 | 48 | 36 | 41 | 644 | 9.4% |
| Primary | 63 | 86 | 59 | 42 | 28 | 38 | 56 | 42 | 48 | 41 | 31 | 33 | 503 | 7.4% |
| Secondary | 24 | 24 | 12 | 9 | 8 | 10 | 22 | 16 | 9 | 7 | 5 | 8 | 141 | 2.1% |
| Signal/Switch Failure - TOTAL | 93 | 126 | 35 | 69 | 69 | 79 | 116 | 87 | 64 | 84 | 63 | 53 | 822 | 12.1% |
| Signal/Switch Failure - Metra/PSA | 73 | 83 | 28 | 53 | 54 | 67 | 103 | 68 | 51 | 74 | 39 | 42 | 654 | 9.6% |
| Primary | 38 | 54 | 25 | 29 | 30 | 42 | 63 | 32 | 34 | 35 | 35 | 26 | 382 | 5.6% |
| Secondary | 35 | 29 | 3 | 24 | 24 | 25 | 40 | 36 | 17 | 39 | 4 | 16 | 272 | 4.0% |
| Signal/Switch Failure - Foreign | 20 | 43 | 7 | 16 | 15 | 12 | 13 | 19 | 13 | 10 | 24 | 11 | 168 | 2.5% |
| Primary | 17 | 23 | 5 | 12 | 7 | 6 | 11 | 11 | 9 | 7 | 10 | 8 | 108 | 1.6% |
| Secondary | 3 | 20 | 2 | 4 | 8 | 6 | 2 | 8 | 4 | 3 | 14 | 3 | 60 | 0.9% |
| Mechanical Failure - TOTAL | 82 | 102 | 69 | 66 | 51 | 100 | 65 | 62 | 67 | 46 | 80 | 40 | 710 | 10.4% |
| Mechanical Failure - Metra/PSA | 71 | 93 | 69 | 56 | 51 | 100 | 65 | 62 | 67 | 46 | 80 | 40 | 680 | 10.0% |
| Non-Locomotive Equipment Failure - Metra/PSA | 27 | 19 | 22 | 17 | 8 | 35 | 28 | 11 | 11 | 5 | 12 | 8 | 183 | 2.7% |
| Primary | 10 | 6 | 10 | 7 | 6 | 4 | 9 | 4 | 5 | 4 | 4 | 7 | 65 | 1.0% |
| Secondary | 17 | 13 | 12 | 10 | 2 | 31 | 19 | 7 | 6 | 1 | 8 | 1 | 118 | 1.7% |
| Locomotive Failure - Metra/PSA | 44 | 74 | 47 | 39 | 43 | 65 | 37 | 51 | 56 | 41 | 68 | 32 | 497 | 7.3% |
| Primary | 16 | 25 | 14 | 17 | 15 | 14 | 15 | 22 | 24 | 14 | 20 | 18 | 176 | 2.6% |
| Secondary | 28 | 49 | 33 | 22 | 28 | 51 | 22 | 29 | 32 | 27 | 48 | 14 | 321 | 4.7% |
| Mechanical Failure - Foreign | 11 | 9 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0.4% |
| Passenger Train Interference - TOTAL | 13 | 19 | 6 | 7 | 16 | 27 | 12 | 10 | 3 | 8 | 9 | 10 | 121 | 1.8% |
| Passenger Train Interference - Metra/PSA | 6 | 14 | 5 | 4 | 4 | 15 | 1 | 4 | 1 | 3 | 3 | 10 | 57 | 0.8% |
| Passenger Train Interference - Foreign | 7 | 5 | 1 | 3 | 12 | 12 | 11 | 6 | 2 | 5 | 6 | 0 | 64 | 0.9% |
| Accident - TOTAL | 29 | 35 | 60 | 60 | 20 | 59 | 29 | 13 | 27 | 73 | 44 | 50 | 405 | 5.9% |
| Accident - Metra/PSA | 28 | 34 | 60 | 60 | 18 | 59 | 25 | 13 | 27 | 73 | 43 | 50 | 397 | 5.8% |
| Accident - Foreign | 1 | 1 | 0 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 1 | 0 | 8 | 0.1% |
| Track Work - TOTAL | 38 | 50 | 19 | 52 | 57 | 49 | 85 | 79 | 60 | 71 | 34 | 23 | 560 | 8.2% |
| Track Work - Metra/PSA | 38 | 32 | 19 | 52 | 57 | 49 | 71 | 73 | 58 | 71 | 34 | 23 | 520 | 7.6% |
| Track Work - Foreign | 0 | 18 | 0 | 0 | 0 | 0 | 14 | 6 | 2 | 0 | 0 | 0 | 40 | 0.6% |
| Human Error - TOTAL | 32 | 67 | 103 | 31 | 40 | 45 | 148 | 41 | 65 | 43 | 44 | 34 | 615 | 9.0% |
| Human Error - Metra/PSA | 24 | 45 | 91 | 17 | 28 | 41 | 59 | 29 | 38 | 22 | 35 | 28 | 394 | 5.8% |
| Human Error - Foreign | 8 | 22 | 12 | 14 | 12 | 4 | 89 | 12 | 27 | 21 | 9 | 6 | 221 | 3.2% |
| Sick, Injured, Unruly Passenger - TOTAL | 21 | 25 | 20 | 29 | 24 | 36 | 36 | 28 | 22 | 27 | 19 | 25 | 268 | 3.9% |
| Sick, Injured, Unruly Passenger - Metra/PSA | 21 | 25 | 20 | 29 | 24 | 36 | 36 | 28 | 21 | 27 | 19 | 25 | 267 | 3.9% |
| Sick, Injured, Unruly Passenger - Foreign | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0.0% |
| Weather - TOTAL | 335 | 395 | 17 | 10 | 3 | 59 | 17 | 22 | 22 | 12 | 83 | 39 | 892 | 13.1% |
| Weather - Metra/PSA | 333 | 381 | 17 | 10 | 3 | 59 | 17 | 22 | 21 | 12 | 83 | 39 | 875 | 12.8% |
| Weather - Foreign | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 17 | 0.2% |
| Passenger Loading - TOTAL | 20 | 21 | 42 | 21 | 44 | 98 | 124 | 101 | 23 | 27 | 21 | 38 | 521 | 7.6% |
| Lift Deployment - TOTAL | 22 | 23 | 20 | 9 | 9 | 24 | 18 | 10 | 14 | 8 | 8 | 7 | 157 | 2.3% |
| Obstruction/Debris - TOTAL | 31 | 71 | 8 | 34 | 48 | 49 | 34 | 61 | 30 | 44 | 25 | 52 | 410 | 6.0% |
| Catenary Failure - TOTAL | 4 | 34 | 10 | 0 | 3 | 4 | 23 | 9 | 37 | 14 | 13 | 15 | 138 | 2.0% |
| Other - TOTAL | 23 | 59 | 10 | 10 | 19 | 16 | 31 | 19 | 24 | 11 | 22 | 12 | 222 | 3.3% |
| TOTAL TRAINS DELAYED | 865 | 1,185 | 532 | 485 | 462 | 735 | 854 | 631 | 542 | 528 | 530 | 447 | 6,819 | 100.0% |
| Total Metra/PSA Delays | 694 | 915 | 399 | 355 | 362 | 617 | 607 | 499 | 412 | 432 | 425 | 381 | 5,292 | 77.6% |
| Total Foreign Carrier Delays | 171 | 270 | 133 | 130 | 100 | 118 | 247 | 132 | 130 | 96 | 105 | 66 | 1,527 | 22.4% |

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

P:\ONTIME\report\DelaysByCause.xlsx]AllMonths 11/14/2016

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

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

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

| CAUSE CATEGORY | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan - Oct | |
|--|-------------|-------------|-----------|------------|------------|-----------|------------|------------|------------|------------|-----|-----|-------------|-------|
| Freight Interference - TOTAL | -40 | -105 | -70 | -43 | 13 | -17 | -34 | 19 | -6 | -12 | | | -295 | -3.9% |
| Freight Interference - Peak | -3 | -31 | -28 | -27 | 5 | -22 | -6 | 19 | -1 | 3 | | | -91 | -1.2% |
| Primary | 2 | -23 | -13 | -17 | 2 | -15 | -5 | 12 | 4 | 4 | | | -49 | -0.6% |
| Secondary | -5 | -8 | -15 | -10 | 3 | -7 | -1 | 7 | -5 | -1 | | | -42 | -0.6% |
| Freight Interference - Off-Peak | -37 | -74 | -42 | -16 | 8 | 5 | -28 | 0 | -5 | -15 | | | -204 | -2.7% |
| Primary | -31 | -57 | -36 | -13 | 4 | 6 | -22 | 6 | -5 | -12 | | | -160 | -2.2% |
| Secondary | -6 | -17 | -6 | -3 | 4 | -1 | -6 | -6 | 0 | -3 | | | -44 | -0.6% |
| Signal/Switch Failure - TOTAL | 61 | 29 | 88 | 29 | 76 | 64 | -8 | -24 | 41 | -17 | | | 339 | 5.6% |
| Signal/Switch Failure - Metra/PSA | -6 | 39 | 71 | 7 | 30 | 17 | -52 | -13 | 38 | -36 | | | 95 | 1.8% |
| Primary | -3 | -24 | 27 | 12 | 24 | 10 | -22 | 8 | 24 | -3 | | | 53 | 1.0% |
| Secondary | -3 | 63 | 44 | -5 | 6 | 7 | -30 | -21 | 14 | -33 | | | 42 | 0.8% |
| Signal/Switch Failure - Foreign | 67 | -10 | 17 | 22 | 46 | 47 | 44 | -11 | 3 | 19 | | | 244 | 3.8% |
| Primary | 51 | 1 | 9 | 21 | 42 | 37 | 25 | -5 | 3 | 14 | | | 198 | 3.1% |
| Secondary | 16 | -11 | 8 | 1 | 4 | 10 | 19 | -6 | 0 | 5 | | | 46 | 0.7% |
| Mechanical Failure - TOTAL | 25 | -34 | 62 | -23 | 29 | -12 | 55 | 16 | 47 | 18 | | | 183 | 3.2% |
| Mechanical Failure - Metra/PSA | 36 | -25 | 62 | -14 | 29 | -12 | 55 | 16 | 47 | 18 | | | 212 | 3.6% |
| Non-Locomotive Equipment Failure - Metra/PSA | -2 | 0 | -12 | -11 | 5 | -18 | -9 | 19 | -3 | 7 | | | -24 | -0.3% |
| Primary | 1 | 3 | -6 | -2 | 3 | 5 | -1 | 7 | 2 | 3 | | | 15 | 0.3% |
| Secondary | -3 | -3 | -6 | -9 | 2 | -23 | -8 | 12 | -5 | 4 | | | -39 | -0.5% |
| Locomotive Failure - Metra/PSA | 38 | -25 | 74 | -3 | 24 | 6 | 64 | -3 | 50 | 11 | | | 236 | 3.9% |
| Primary | 12 | -7 | 10 | -3 | 3 | 13 | 21 | -2 | 4 | 3 | | | 54 | 0.9% |
| Secondary | 26 | -18 | 64 | 0 | 21 | -7 | 43 | -1 | 46 | 8 | | | 182 | 2.9% |
| Mechanical Failure - Foreign | -11 | -9 | 0 | -9 | 0 | 0 | 0 | 0 | 0 | 0 | | | -29 | -0.4% |
| Passenger Train Interference - TOTAL | 9 | -7 | -3 | -3 | 3 | -13 | 0 | 1 | 2 | 2 | | | -9 | -0.1% |
| Passenger Train Interference - Metra/PSA | 7 | -9 | -3 | -1 | -2 | -13 | 6 | -2 | 1 | 3 | | | -13 | -0.2% |
| Passenger Train Interference - Foreign | 2 | 2 | 0 | -2 | 5 | 0 | -6 | 3 | 1 | -1 | | | 4 | 0.1% |
| Accident - TOTAL | 30 | -20 | 2 | -12 | 66 | -30 | -11 | 42 | 7 | -63 | | | 11 | 0.4% |
| Accident - Metra/PSA | 21 | -20 | 2 | -19 | 59 | -30 | -7 | 40 | 3 | -63 | | | -14 | 0.0% |
| Accident - Foreign | 9 | 0 | 0 | 7 | 7 | 0 | -4 | 2 | 4 | 0 | | | 25 | 0.4% |
| Track Work - TOTAL | 2 | -29 | 17 | -8 | 84 | 65 | 14 | 54 | 117 | 4 | | | 320 | 5.2% |
| Track Work - Metra/PSA | 2 | -11 | 17 | -11 | 82 | 61 | 28 | 31 | 117 | 3 | | | 319 | 5.1% |
| Track Work - Foreign | 0 | -18 | 0 | 3 | 2 | 4 | -14 | 23 | 0 | 1 | | | 1 | 0.0% |
| Human Error - TOTAL | 6 | -34 | -82 | 22 | -17 | 67 | -101 | 52 | -15 | 2 | | | -100 | -1.2% |
| Human Error - Metra/PSA | 6 | -20 | -76 | 25 | -13 | 53 | -25 | 52 | 5 | 10 | | | 17 | 0.5% |
| Human Error - Foreign | 0 | -14 | -6 | -3 | -4 | 14 | -76 | 0 | -20 | -8 | | | -117 | -1.7% |
| Sick, Injured, Unruly Passenger - TOTAL | -1 | 14 | 7 | 21 | 20 | -4 | -7 | 15 | 8 | -3 | | | 70 | 1.2% |
| Sick, Injured, Unruly Passenger - Metra/PSA | -1 | 14 | 7 | 21 | 20 | -6 | -7 | 15 | 9 | -3 | | | 69 | 1.2% |
| Sick, Injured, Unruly Passenger - Foreign | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | -1 | 0 | | | 1 | 0.0% |
| Weather - TOTAL | -206 | -263 | 11 | -9 | 1 | -36 | 32 | 16 | -21 | -8 | | | -483 | -6.9% |
| Weather - Metra/PSA | -204 | -249 | 11 | -9 | 1 | -36 | 32 | 16 | -20 | -8 | | | -466 | -6.6% |
| Weather - Foreign | -2 | -14 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | 0 | | | -17 | -0.2% |
| Passenger Loading - TOTAL | -7 | -14 | -13 | -13 | 7 | -15 | -15 | -59 | 9 | 1 | | | -119 | -1.5% |
| Lift Deployment - TOTAL | -11 | -9 | -8 | -6 | 6 | -13 | -7 | 11 | -3 | 4 | | | -36 | -0.5% |
| Obstruction/Debris - TOTAL | -13 | -41 | 32 | 20 | -26 | -18 | 10 | -10 | -2 | -5 | | | -53 | -0.6% |
| Catenary Failure - TOTAL | 5 | -31 | -8 | 1 | 1 | 9 | -12 | -3 | -8 | -2 | | | -48 | -0.7% |
| Other - TOTAL | -18 | -42 | 5 | -10 | -9 | 9 | -1 | 20 | 11 | 6 | | | -29 | -0.3% |
| TOTAL TRAINS DELAYED | -158 | -586 | 40 | -34 | 254 | 56 | -85 | 150 | 187 | -73 | | | -249 | |
| Total Metra/PSA Delays | -183 | -418 | 99 | -9 | 185 | 6 | 5 | 114 | 207 | -72 | | | -66 | |
| Total Foreign Carrier Delays | 25 | -168 | -59 | -25 | 69 | 50 | -90 | 36 | -20 | -1 | | | -183 | |

Data for current month is final (11/14/16) version from TOPS.

P:\ONTIME\report[DelaysByCause.xlsx]AllMonths 11/14/2016

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

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

TABLE 11: FREIGHT DELAYS
between November 2014 and October 2016

| | BNSF | Electric | | | HER | Milw | | NCS | RI | SWS | Union Pacific | | | SYSTEM |
|---------------|------------|----------|----------|----------|-----------|------------|------------|------------|-----------|------------|---------------|-----------|------------|--------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Nov-14 | 13 | 0 | 0 | 0 | 2 | 12 | 14 | 5 | 1 | 25 | 0 | 1 | 7 | 80 |
| Dec-14 | 11 | 0 | 0 | 0 | 2 | 11 | 20 | 6 | 2 | 6 | 0 | 3 | 14 | 75 |
| Jan-15 | 13 | 0 | 0 | 0 | 3 | 29 | 17 | 11 | 3 | 16 | 0 | 3 | 27 | 122 |
| Feb-15 | 5 | 0 | 0 | 0 | 4 | 31 | 14 | 26 | 2 | 19 | 5 | 13 | 39 | 158 |
| Mar-15 | 18 | 0 | 0 | 0 | 3 | 3 | 12 | 12 | 3 | 16 | 5 | 7 | 34 | 113 |
| Apr-15 | 8 | 0 | 0 | 0 | 6 | 11 | 4 | 13 | 4 | 12 | 4 | 9 | 16 | 87 |
| May-15 | 20 | 0 | 0 | 0 | 4 | 5 | 2 | 8 | 2 | 9 | 0 | 3 | 6 | 59 |
| Jun-15 | 12 | 0 | 0 | 0 | 4 | 11 | 1 | 9 | 3 | 24 | 0 | 6 | 20 | 90 |
| Jul-15 | 23 | 0 | 0 | 0 | 1 | 11 | 0 | 3 | 12 | 17 | 0 | 18 | 31 | 116 |
| Aug-15 | 13 | 0 | 0 | 0 | 8 | 7 | 5 | 11 | 4 | 17 | 0 | 0 | 24 | 89 |
| Sep-15 | 20 | 0 | 0 | 0 | 1 | 9 | 6 | 11 | 14 | 6 | 0 | 2 | 15 | 84 |
| Oct-15 | 16 | 0 | 0 | 0 | 0 | 5 | 4 | 3 | 3 | 11 | 0 | 3 | 15 | 60 |
| Total | 172 | 0 | 0 | 0 | 38 | 145 | 99 | 118 | 53 | 178 | 14 | 68 | 248 | 1,133 |
| Nov-15 | 15 | 0 | 0 | 0 | 7 | 0 | 4 | 7 | 5 | 10 | 3 | 6 | 8 | 65 |
| Dec-15 | 9 | 0 | 0 | 0 | 2 | 4 | 4 | 5 | 4 | 5 | 0 | 1 | 15 | 49 |
| Jan-16 | 14 | 0 | 0 | 0 | 1 | 4 | 23 | 5 | 24 | 3 | 0 | 3 | 5 | 82 |
| Feb-16 | 11 | 0 | 0 | 0 | 3 | 5 | 6 | 1 | 16 | 2 | 0 | 2 | 7 | 53 |
| Mar-16 | 4 | 0 | 0 | 0 | 2 | 6 | 8 | 6 | 2 | 7 | 0 | 0 | 8 | 43 |
| Apr-16 | 13 | 0 | 0 | 0 | 3 | 8 | 4 | 3 | 1 | 8 | 0 | 1 | 3 | 44 |
| May-16 | 17 | 0 | 0 | 0 | 0 | 9 | 12 | 7 | 0 | 8 | 0 | 1 | 18 | 72 |
| Jun-16 | 19 | 0 | 0 | 0 | 1 | 4 | 6 | 9 | 4 | 10 | 0 | 0 | 20 | 73 |
| Jul-16 | 25 | 0 | 0 | 0 | 2 | 5 | 24 | 6 | 2 | 9 | 0 | 1 | 8 | 82 |
| Aug-16 | 56 | 0 | 0 | 0 | 2 | 14 | 6 | 4 | 3 | 5 | 1 | 2 | 15 | 108 |
| Sep-16 | 22 | 0 | 0 | 0 | 5 | 9 | 4 | 3 | 4 | 17 | 1 | 2 | 11 | 78 |
| Oct-16 | 11 | 0 | 0 | 0 | 2 | 2 | 2 | 9 | 3 | 2 | 1 | 3 | 13 | 48 |
| Total | 216 | 0 | 0 | 0 | 30 | 70 | 103 | 65 | 68 | 86 | 6 | 22 | 131 | 797 |

Data for current month is final (11/14/16) version from TOPS.

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

| LINE | Jan Feb Mar | | | Apr May Jun | | | Jul Aug Sep | | | Oct Nov Dec | | | Lift Delays YTD | % of All Delays YTD |
|--------------------------|-------------|-----------|-----------|-------------|-----------|-----------|-------------|-----------|-----------|-------------|-----|-----|-----------------|---------------------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| BNSF | 5 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 4 | | | 14 | 1.03% |
| Electric ML | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | | | 2 | 0.43% |
| Electric BI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0.00% |
| Electric SC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | 1 | 0.48% |
| HER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0.00% |
| Milw N | 1 | 6 | 8 | 0 | 7 | 3 | 0 | 6 | 4 | 3 | | | 38 | 4.83% |
| Milw W | 0 | 0 | 1 | 2 | 0 | 2 | 7 | 1 | 3 | 3 | | | 19 | 2.65% |
| NCS | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | | 2 | 0.80% |
| RI | 2 | 2 | 0 | 0 | 1 | 2 | 1 | 3 | 1 | 0 | | | 12 | 1.66% |
| SWS | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | | | 3 | 0.90% |
| UP N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | | | 4 | 1.05% |
| UP NW | 1 | 0 | 2 | 0 | 2 | 2 | 1 | 3 | 1 | 1 | | | 13 | 2.66% |
| UP W | 1 | 4 | 0 | 1 | 2 | 1 | 1 | 2 | 1 | 0 | | | 13 | 1.97% |
| Total Lift Delays | 11 | 14 | 12 | 3 | 15 | 11 | 11 | 21 | 11 | 12 | | | 121 | 1.84% |
| ALL DELAYS | | | | | | | | | | | | | | 6,570 |

Data for current month is final (11/14/16) version from TOPS.

2015

| LINE | Jan Feb Mar | | | Apr May Jun | | | Jul Aug Sep | | | Oct Nov Dec | | | Lift Delays All Year | % of All Delays All Year |
|--------------------------|-------------|-----------|-----------|-------------|----------|-----------|-------------|-----------|-----------|-------------|----------|----------|----------------------|--------------------------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| BNSF | 6 | 7 | 8 | 1 | 1 | 2 | 7 | 1 | 3 | 3 | 1 | 0 | 40 | 2.70% |
| Electric ML | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0.41% |
| Electric BI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00% |
| Electric SC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00% |
| HER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00% |
| Milw N | 4 | 9 | 0 | 1 | 2 | 2 | 0 | 0 | 2 | 1 | 2 | 0 | 23 | 2.51% |
| Milw W | 4 | 1 | 1 | 1 | 1 | 11 | 2 | 3 | 0 | 1 | 1 | 1 | 27 | 4.35% |
| NCS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00% |
| RI | 0 | 1 | 1 | 0 | 1 | 0 | 5 | 1 | 2 | 1 | 0 | 1 | 13 | 2.17% |
| SWS | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.23% |
| UP N | 0 | 0 | 0 | 1 | 2 | 1 | 2 | 2 | 5 | 0 | 0 | 0 | 13 | 2.56% |
| UP NW | 5 | 0 | 1 | 3 | 1 | 3 | 0 | 1 | 2 | 1 | 2 | 1 | 20 | 2.79% |
| UP W | 3 | 5 | 9 | 2 | 0 | 4 | 0 | 2 | 0 | 1 | 2 | 4 | 32 | 4.06% |
| Total Lift Delays | 22 | 23 | 20 | 9 | 9 | 24 | 18 | 10 | 14 | 8 | 8 | 7 | 172 | 2.21% |
| ALL DELAYS | | | | | | | | | | | | | | 7,796 |

TABLE 13: FREQUENCY OF TRAIN DELAYS BY DURATION
October 2016

| Minutes | BNSF | Electric | | | Her | Milwaukee | | NCS | RI | SWS | UP | | | System |
|---|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| Peak * | | | | | | | | | | | | | | |
| 6-10 | 36 | 5 | 1 | 1 | 1 | 8 | 8 | 7 | 5 | 3 | 0 | 6 | 10 | 91 |
| 11-15 | 8 | 2 | 0 | 3 | 1 | 7 | 7 | 4 | 2 | 2 | 0 | 9 | 3 | 48 |
| 16-20 | 7 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 13 |
| 21+ | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 3 | 1 | 2 | 8 | 12 | 33 |
| Annulled | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>0</u> | <u>3</u> | <u>7</u> |
| Sub-Total | 54 | 7 | 1 | 4 | 2 | 17 | 21 | 13 | 10 | 6 | 3 | 25 | 29 | 192 |
| Off-Peak ** | | | | | | | | | | | | | | |
| 6-10 | 36 | 21 | 2 | 10 | 0 | 8 | 13 | 2 | 15 | 8 | 11 | 10 | 11 | 147 |
| 11-15 | 7 | 6 | 0 | 3 | 1 | 5 | 4 | 2 | 2 | 1 | 2 | 4 | 9 | 46 |
| 16-20 | 6 | 1 | 0 | 2 | 0 | 1 | 2 | 1 | 2 | 1 | 0 | 5 | 3 | 24 |
| 21+ | 1 | 1 | 0 | 4 | 0 | 5 | 3 | 3 | 4 | 1 | 0 | 10 | 9 | 41 |
| Annulled | <u>1</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>2</u> | <u>5</u> |
| Sub-Total | 51 | 29 | 2 | 19 | 1 | 20 | 22 | 8 | 24 | 11 | 13 | 29 | 34 | 263 |
| October 2016 Total | | | | | | | | | | | | | | |
| 6-10 | 72 | 26 | 3 | 11 | 1 | 16 | 21 | 9 | 20 | 11 | 11 | 16 | 21 | 238 |
| 11-15 | 15 | 8 | 0 | 6 | 2 | 12 | 11 | 6 | 4 | 3 | 2 | 13 | 12 | 94 |
| 16-20 | 13 | 1 | 0 | 2 | 0 | 2 | 4 | 1 | 2 | 1 | 0 | 7 | 4 | 37 |
| 21+ | 4 | 1 | 0 | 4 | 0 | 5 | 6 | 4 | 7 | 2 | 2 | 18 | 21 | 74 |
| Annulled | <u>1</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>2</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>0</u> | <u>1</u> | <u>0</u> | <u>5</u> | <u>12</u> |
| TOTAL | 105 | 36 | 3 | 23 | 3 | 37 | 43 | 21 | 34 | 17 | 16 | 54 | 63 | 455 |
| 2016 Year-to-Date | | | | | | | | | | | | | | |
| 6-10 | 658 | 255 | 71 | 113 | 34 | 350 | 277 | 108 | 343 | 167 | 126 | 190 | 257 | 2,949 |
| 11-15 | 266 | 89 | 9 | 30 | 13 | 164 | 162 | 51 | 122 | 52 | 70 | 113 | 132 | 1,273 |
| 16-20 | 129 | 35 | 3 | 14 | 8 | 87 | 76 | 33 | 75 | 33 | 40 | 51 | 70 | 654 |
| 21+ | 240 | 80 | 22 | 34 | 22 | 152 | 163 | 54 | 154 | 77 | 115 | 120 | 165 | 1,398 |
| Annulled | <u>63</u> | <u>10</u> | <u>12</u> | <u>19</u> | <u>4</u> | <u>34</u> | <u>39</u> | <u>5</u> | <u>28</u> | <u>4</u> | <u>29</u> | <u>14</u> | <u>35</u> | <u>296</u> |
| TOTAL | 1,356 | 469 | 117 | 210 | 81 | 787 | 717 | 251 | 722 | 333 | 380 | 488 | 659 | 6,570 |
| PERCENT COMPOSITION OF DELAYS BY RANGE OF DURATION | | | | | | | | | | | | | | |
| Minutes | BNSF | Electric | | | Her | Milwaukee | | NCS | RI | SWS | UP | | | System |
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| October 2016 Total | | | | | | | | | | | | | | |
| 6-10 | 68.6% | 72.2% | 100.0% | 47.8% | 33.3% | 43.2% | 48.8% | 42.9% | 58.8% | 64.7% | 68.8% | 29.6% | 33.3% | 52.3% |
| 11-15 | 14.3% | 22.2% | 0.0% | 26.1% | 66.7% | 32.4% | 25.6% | 28.6% | 11.8% | 17.6% | 12.5% | 24.1% | 19.0% | 20.7% |
| 16-20 | 12.4% | 2.8% | 0.0% | 8.7% | 0.0% | 5.4% | 9.3% | 4.8% | 5.9% | 5.9% | 0.0% | 13.0% | 6.3% | 8.1% |
| 21+ | 3.8% | 2.8% | 0.0% | 17.4% | 0.0% | 13.5% | 14.0% | 19.0% | 20.6% | 11.8% | 12.5% | 33.3% | 33.3% | 16.3% |
| Annulled | <u>1.0%</u> | <u>0.0%</u> | <u>0.0%</u> | <u>0.0%</u> | <u>0.0%</u> | <u>5.4%</u> | <u>2.3%</u> | <u>4.8%</u> | <u>2.9%</u> | <u>0.0%</u> | <u>6.3%</u> | <u>0.0%</u> | <u>7.9%</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% |
| 2016 Year-to-Date Delays By Duration | | | | | | | | | | | | | | |
| 6-10 | 48.5% | 54.4% | 60.7% | 53.8% | 42.0% | 44.5% | 38.6% | 43.0% | 47.5% | 50.2% | 33.2% | 38.9% | 39.0% | 44.9% |
| 11-15 | 19.6% | 19.0% | 7.7% | 14.3% | 16.0% | 20.8% | 22.6% | 20.3% | 16.9% | 15.6% | 18.4% | 23.2% | 20.0% | 19.4% |
| 16-20 | 9.5% | 7.5% | 2.6% | 6.7% | 9.9% | 11.1% | 10.6% | 13.1% | 10.4% | 9.9% | 10.5% | 10.5% | 10.6% | 10.0% |
| 21+ | 17.7% | 17.1% | 18.8% | 16.2% | 27.2% | 19.3% | 22.7% | 21.5% | 21.3% | 23.1% | 30.3% | 24.6% | 25.0% | 21.3% |
| Annulled | <u>4.6%</u> | <u>2.1%</u> | <u>10.3%</u> | <u>9.0%</u> | <u>4.9%</u> | <u>4.3%</u> | <u>5.4%</u> | <u>2.0%</u> | <u>3.9%</u> | <u>1.2%</u> | <u>7.6%</u> | <u>2.9%</u> | <u>5.3%</u> | <u>4.5%</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 and weekend trains.

Data for most recent month is final (11/14/16) version from TOPS.

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

| | BNSF | Electric | | | Her | Milwaukee | | NCS | RI | SWS | UP | | | System |
|--------------------------|------|----------|------|------|------|-----------|------|------|------|------|-------|------|------|--------|
| | | ML | BI | SC | | N | W | | | | N | NW | W | |
| October 2016 | | | | | | | | | | | | | | |
| Peak * | 10.8 | 9.6 | 10.0 | 10.0 | 9.5 | 10.6 | 13.2 | 12.8 | 14.8 | 13.5 | 108.5 | 16.9 | 22.4 | 14.9 |
| Off-Peak ** | 10.2 | 9.8 | 6.0 | 13.4 | 11.0 | 15.2 | 12.6 | 41.1 | 15.9 | 9.9 | 8.5 | 21.9 | 23.7 | 15.3 |
| All | 10.5 | 9.7 | 7.3 | 12.8 | 10.0 | 13.1 | 12.9 | 24.1 | 15.6 | 11.2 | 21.8 | 19.6 | 23.1 | 15.1 |
| 2016 Year-to-Date | | | | | | | | | | | | | | |
| Peak * | 16.0 | 15.3 | 19.6 | 14.3 | 20.6 | 16.4 | 19.4 | 17.6 | 19.4 | 16.9 | 25.4 | 18.4 | 18.2 | 17.9 |
| Off-Peak ** | 15.8 | 14.4 | 20.4 | 14.8 | 14.1 | 15.8 | 16.2 | 17.5 | 15.2 | 17.5 | 19.6 | 19.4 | 20.8 | 16.8 |
| All | 15.9 | 14.8 | 20.1 | 14.8 | 19.4 | 16.0 | 17.2 | 17.5 | 17.2 | 17.3 | 21.8 | 19.0 | 19.7 | 17.3 |

Excludes annulled trains, which do not have delay times.

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

Data for most recent month is final (11/14/16) version from TOPS.