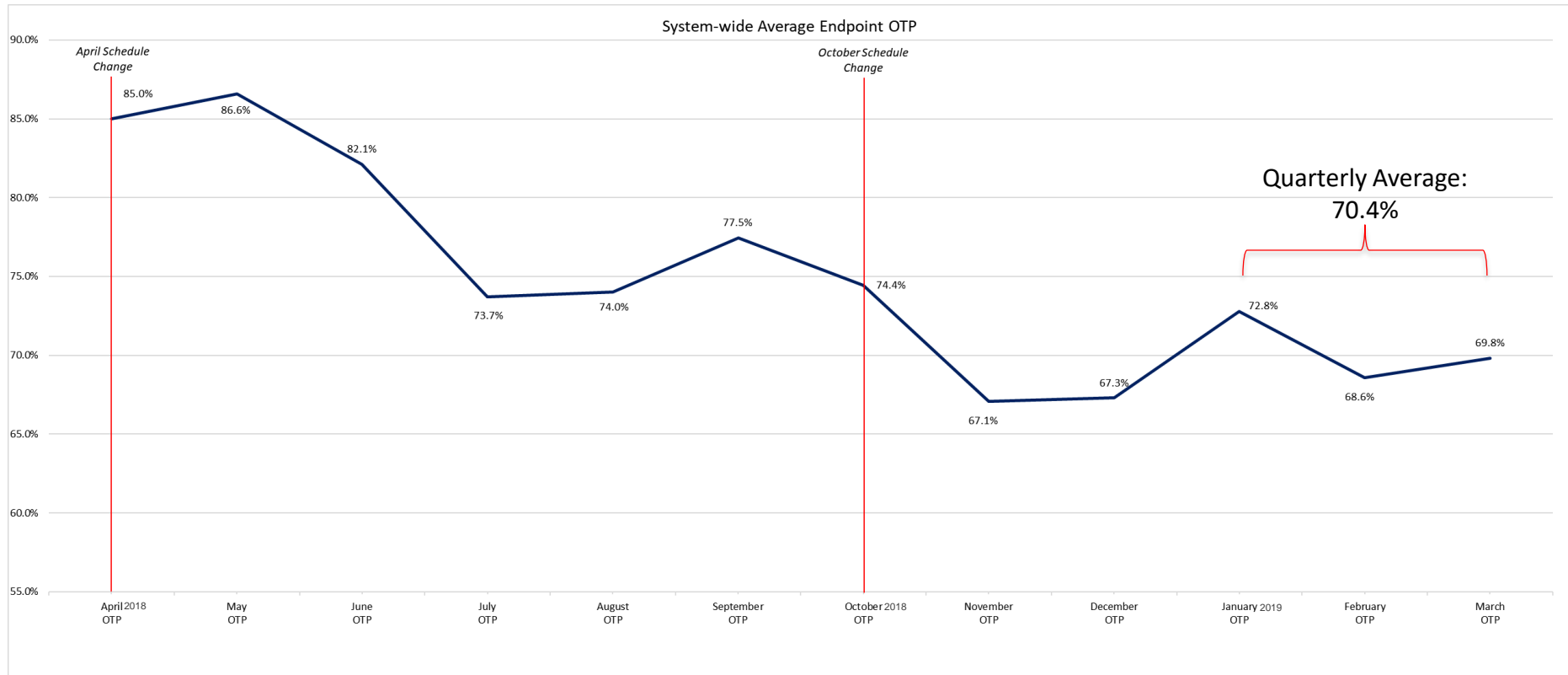# Pacific Surfliner – Quarterly On-Time Performance Analysis

Technical Advisory Committee
June 10, 2019

# Average Endpoint OTP - Systemwide



System-wide Average Endpoint OTP

*April Schedule Change*

*October Schedule Change*

85.0%
86.6%
82.1%
73.7%
74.0%
77.5%
74.4%
67.1%
67.3%
72.8%
68.6%
69.8%

Quarterly Average:
**70.4%**

| April 2018 OTP | May OTP | June OTP | July OTP | August OTP | September OTP | October 2018 OTP | November OTP | December OTP | January 2019 OTP | February OTP | March OTP |

OTP = On-time performance

# Average Endpoint OTP: Detail by Train

| Train | April 2018 OTP | May OTP | June OTP | July OTP | August OTP | September OTP | October OTP | November OTP | December OTP | January 2019 OTP | February OTP | March OTP | 12 Mnth Avg OTP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 561 | 90.5% | 86.4% | 100.0% | 100.0% | 100.0% | 100.0% | 91.3% | 100.0% | 90.0% | 86.4% | 95.0% | 85.7% | **93.8%** |
| 1565 | | | | | | | 100.0% | 100.0% | 81.8% | 85.7% | 100.0% | 83.3% | **91.8%** |
| 1590 | | | | | | | 100.0% | 77.8% | 100.0% | 85.7% | 100.0% | 83.3% | **91.1%** |
| 759 | 66.7% | 100.0% | 95.2% | 90.5% | 100.0% | 100.0% | 100.0% | 85.7% | 90.0% | 90.9% | 80.0% | 85.7% | **90.4%** |
| 562 | 92.9% | 96.7% | 90.0% | 90.3% | 90.3% | 96.4% | 92.6% | 83.3% | 87.1% | 82.8% | 73.1% | 74.1% | **87.5%** |
| 1761 | 88.9% | 100.0% | 100.0% | 100.0% | 100.0% | 81.8% | 87.5% | 100.0% | 90.9% | 55.6% | 62.5% | 80.0% | **87.3%** |
| 579 | 93.3% | 93.5% | 86.7% | 73.3% | 93.5% | 92.9% | 88.0% | 65.0% | 100.0% | 81.8% | 75.0% | 95.0% | **86.5%** |
| 590 | 85.0% | 95.5% | 76.2% | 81.0% | 100.0% | 84.2% | 85.7% | 85.7% | 85.0% | 85.7% | 77.8% | 89.5% | **85.9%** |
| 768 | 96.7% | 96.8% | 83.3% | 77.4% | 96.8% | 96.7% | 80.6% | 80.0% | 71.0% | 80.6% | 82.1% | 87.1% | **85.8%** |
| 565 | 89.3% | 96.8% | 86.7% | 96.8% | 90.3% | 89.3% | 76.0% | 66.7% | 85.0% | 81.8% | 75.0% | 66.7% | **83.4%** |
| 1564 | | | | | | | 83.3% | 88.9% | 88.9% | 66.7% | 87.5% | 80.0% | **82.5%** |
| 1584 | | | | | | | 100.0% | 77.8% | 54.5% | 77.8% | 62.5% | 100.0% | **78.8%** |
| 580 | 90.0% | 93.5% | 80.0% | 77.4% | 74.2% | 70.0% | 58.1% | 60.0% | 80.6% | 80.6% | 78.6% | 87.1% | **77.5%** |
| 1566 | 71.4% | 88.9% | 88.9% | 80.0% | 50.0% | 81.8% | 75.0% | 100.0% | 72.7% | 85.7% | 66.7% | 66.7% | **77.3%** |
| 595 | 73.3% | 90.3% | 83.3% | 67.7% | 83.9% | 73.3% | 83.9% | 73.3% | 77.4% | 77.4% | 64.3% | 74.2% | **76.9%** |
| 1579 | | | | | | | 83.3% | 88.9% | 54.5% | 66.7% | 87.5% | 80.0% | **76.8%** |
| 566 | 100.0% | 95.5% | 90.0% | 85.7% | 87.0% | 94.7% | 69.6% | 52.4% | 36.8% | 72.7% | 65.0% | 71.4% | **76.7%** |
| 584 | 93.3% | 90.3% | 86.7% | 61.3% | 83.9% | 85.7% | 84.0% | 52.4% | 70.0% | 72.7% | 65.0% | 61.9% | **75.6%** |
| 591 | 90.0% | 90.3% | 73.3% | 71.0% | 74.2% | 63.3% | 74.2% | 56.7% | 80.6% | 83.9% | 71.4% | 77.4% | **75.5%** |
| 792 | 76.7% | 83.9% | 66.7% | 61.3% | 80.6% | 80.0% | 80.6% | 76.7% | 77.4% | 71.0% | 75.0% | 74.2% | **75.3%** |
| 573 | 92.9% | 90.0% | 82.8% | 70.0% | 71.0% | 66.7% | 70.8% | 42.9% | 84.2% | 86.4% | 65.0% | 76.2% | **74.9%** |
| 564 | 100.0% | 93.5% | 93.3% | 86.7% | 90.3% | 86.7% | 62.5% | 38.1% | 50.0% | 68.2% | 60.0% | 57.1% | **73.9%** |
| 1767 | | | | | | | 66.7% | 100.0% | 81.8% | 66.7% | 62.5% | 50.0% | **71.3%** |
| 782 | 70.0% | 90.3% | 80.0% | 83.9% | 67.7% | 66.7% | 67.7% | 56.7% | 58.1% | 71.0% | 64.3% | 77.4% | **71.1%** |
| 796 | 96.7% | 80.6% | 76.7% | 64.5% | 71.0% | 56.7% | 67.7% | 46.7% | 67.7% | 71.0% | 75.0% | 74.2% | **70.7%** |
| 572 | 57.1% | 64.5% | 73.3% | 45.2% | 58.1% | 63.3% | 68.0% | 66.7% | 75.0% | 77.3% | 60.0% | 81.0% | **65.8%** |
| 583 | 53.6% | 67.7% | 66.7% | 51.6% | 54.8% | 66.7% | 74.1% | 60.0% | 67.7% | 72.4% | 76.0% | 70.4% | **65.1%** |
| 1573 | | | | | | | 77.8% | 55.6% | 71.4% | 66.7% | 50.0% | | **64.3%** |
| 763 | 86.7% | 67.7% | 90.0% | 71.0% | 64.5% | 70.0% | 51.6% | 20.0% | 38.7% | 48.4% | 57.1% | 58.1% | **60.3%** |
| 569 | | | | | | | 61.1% | 66.7% | 55.0% | 59.1% | 50.0% | 61.9% | **59.0%** |
| 777 | 73.3% | 87.1% | 73.3% | 64.5% | 64.5% | 53.3% | 32.3% | 30.0% | 38.7% | 58.1% | 50.0% | 61.3% | **57.2%** |
| 774 | 83.3% | 80.6% | 76.7% | 54.8% | 48.4% | 66.7% | 48.4% | 40.0% | 35.5% | 54.8% | 39.3% | 51.6% | **56.7%** |
| 1572 | | | | | | | 66.7% | 45.5% | 71.4% | 40.0% | 33.3% | | **51.4%** |
| 767 | | | | | | | 33.3% | 42.9% | 60.0% | 59.1% | 65.0% | 42.9% | **50.5%** |
| 785 | 70.0% | 71.0% | 66.7% | 25.8% | 22.6% | 43.3% | 54.8% | 33.3% | 16.1% | 41.9% | 53.6% | 48.4% | **45.6%** |
| 1569 | | | | | | | 55.6% | 18.2% | 71.4% | 40.0% | 16.7% | | **40.4%** |
| **System Average** | **85.0%** | **86.6%** | **82.1%** | **73.7%** | **74.0%** | **77.5%** | **74.4%** | **67.1%** | **67.3%** | **72.8%** | **68.6%** | **69.8%** | |

# Delay Analysis: Federal Fiscal Year (FFY) Q2 Year over Year
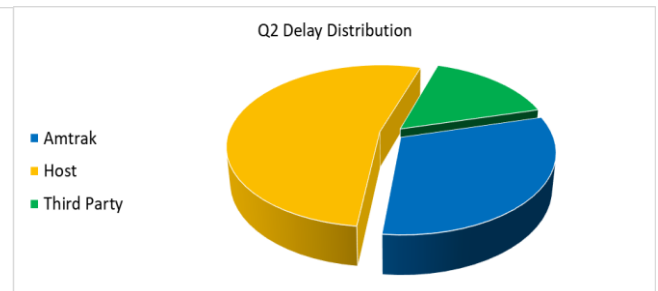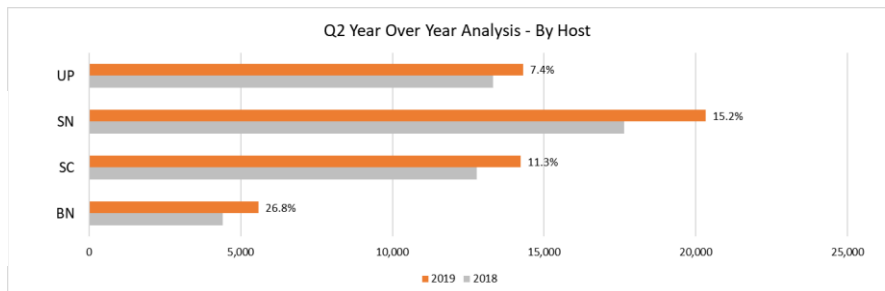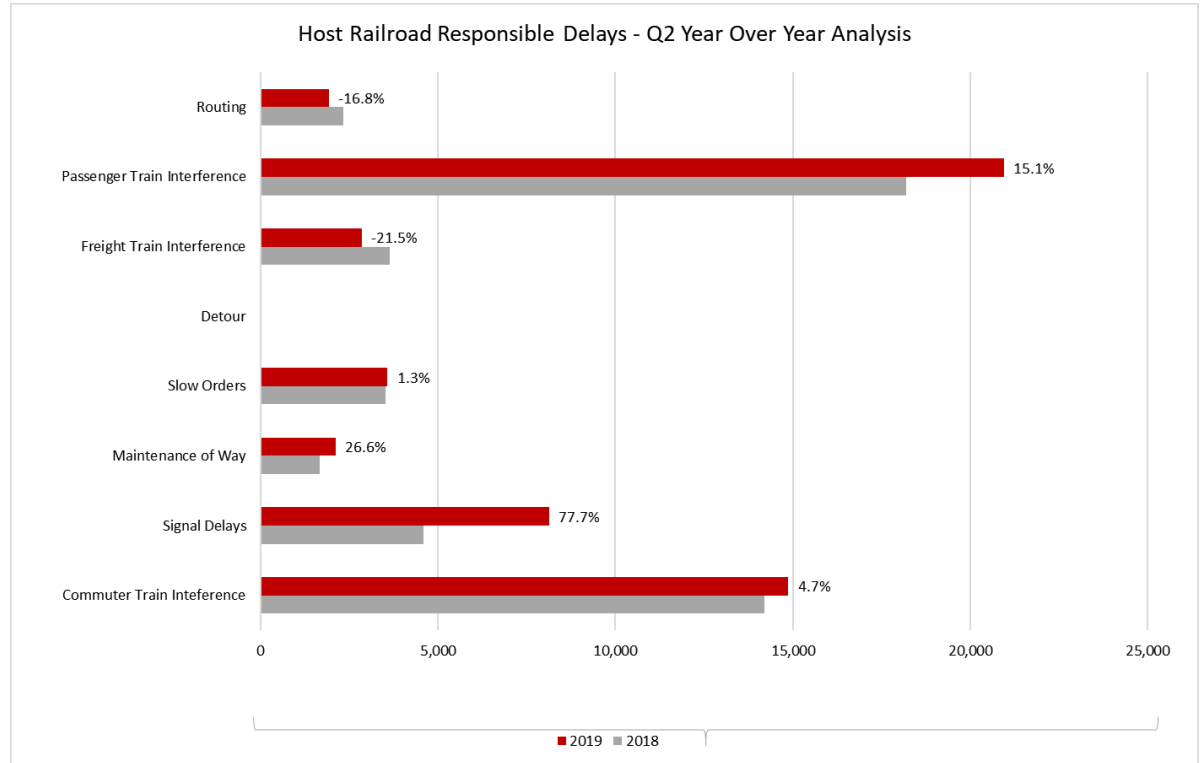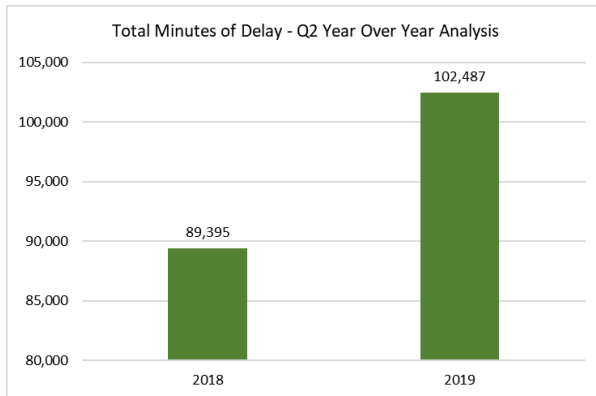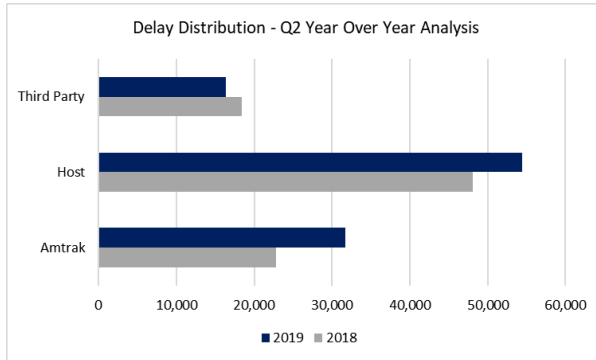


FFY: Federal Fiscal Year
Q2: Second Quarter
UP: Union Pacific
SN: North County Transit District
SC: Metrolink
BN: BNSF Railway

# Delay Analysis: FFY Q2 – Distribution by Host
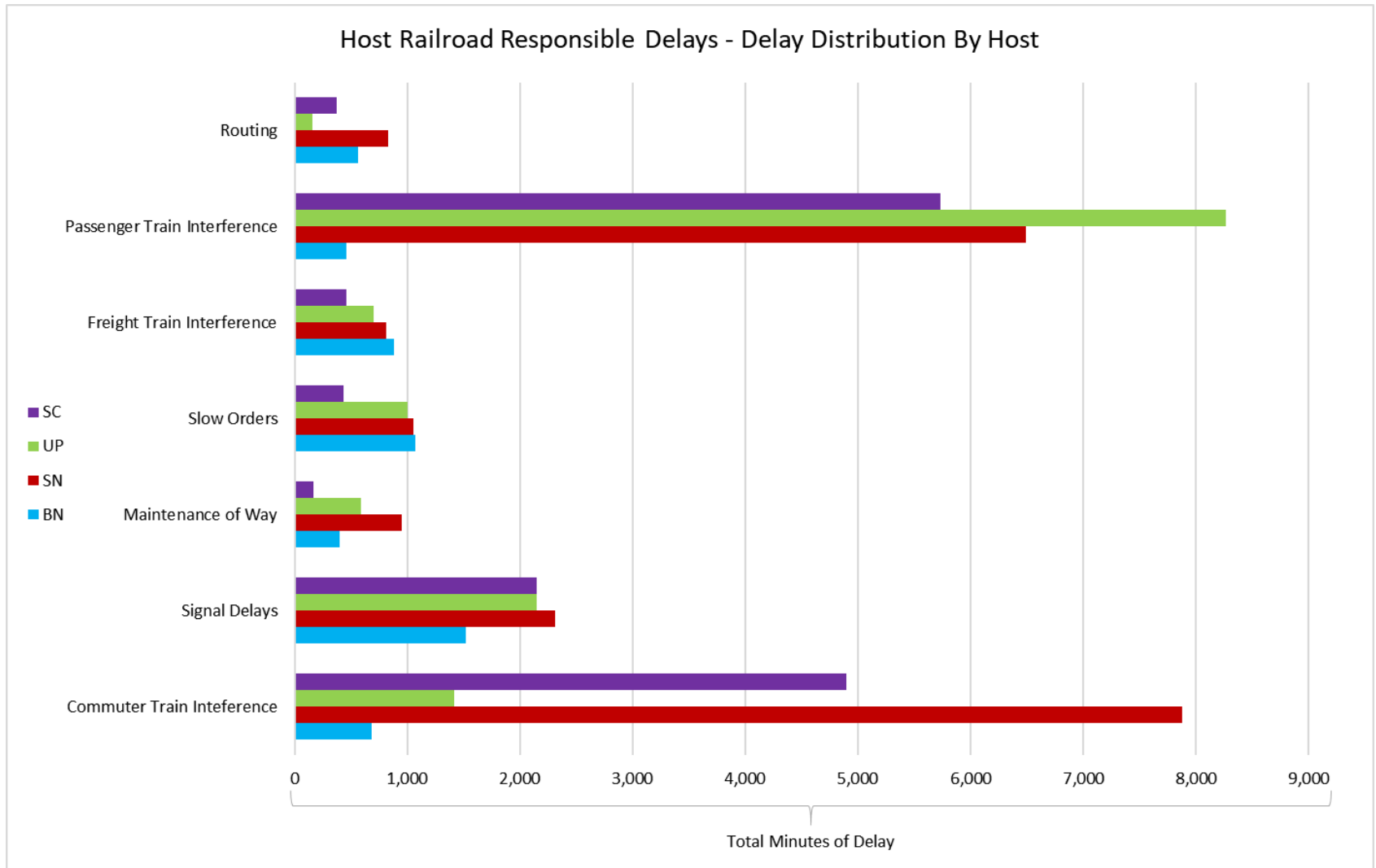
# Initial Terminal Performance

| Train | Total Delay Minutes |
|-------|---------------------|
| 785 | 2292 |
| 595 | 541 |
| 777 | 502 |
| 1573 | 425 |
| 573 | 390 |
| 583 | 382 |
| 782 | 347 |
| 796 | 332 |
| 591 | 290 |
| 792 | 271 |
| 569 | 262 |
| 774 | 241 |
| 580 | 240 |
| 564 | 233 |
| 562 | 217 |
| 590 | 217 |
| 1579 | 186 |
| 1569 | 183 |
| 579 | 181 |
| 763 | 179 |
| 759 | 155 |
| 572 | 153 |
| 768 | 135 |
| 561 | 117 |
| 1767 | 111 |
| 1584 | 100 |
| 1590 | 98 |
| 584 | 95 |
| 1566 | 92 |
| 1564 | 61 |
| 566 | 54 |
| 767 | 53 |
| 565 | 52 |
| 1761 | 45 |
| 1565 | 37 |

Initial Terminal Performance - Delay Distribution
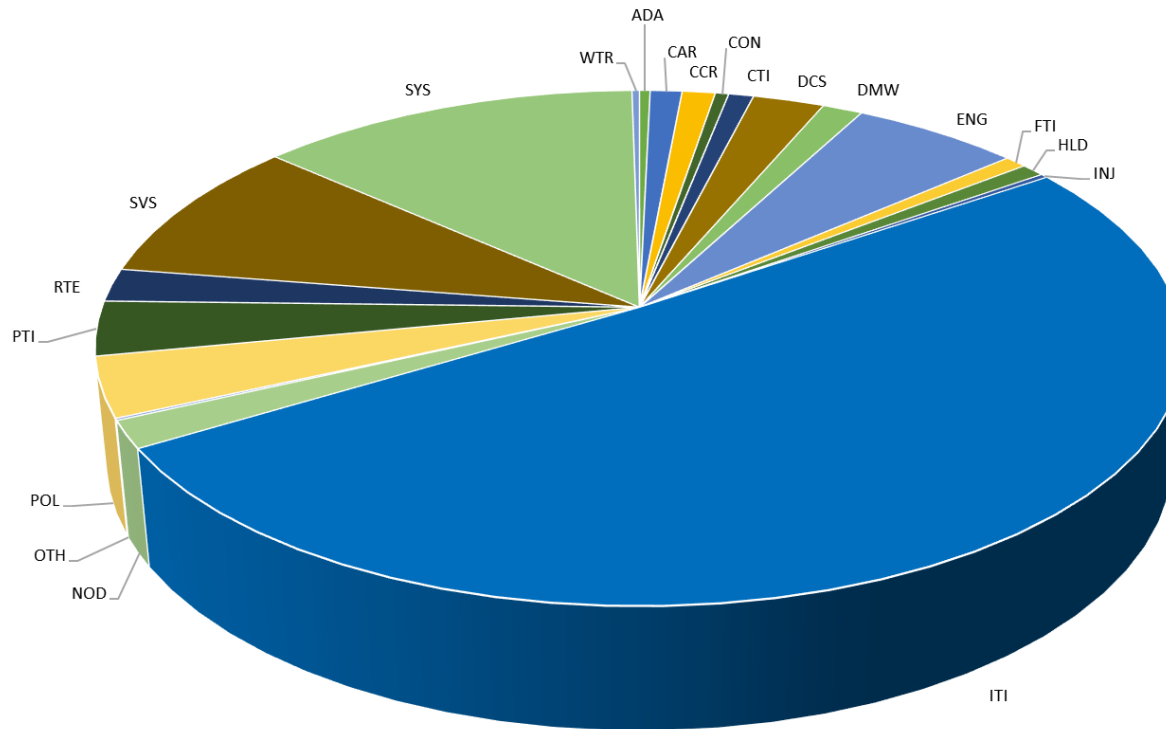


**Delay Code Legend**

**Host**

| | |
|-----|-----|
| CTI | Commuter Train Inteference |
| DCS | Signal Delays |
| DMW | Maintenance of Way |
| DSR | Slow Orders |
| DTR | Detour |
| FTI | Freight Train Interference |
| PTI | Passenger Train Interference |
| RTE | Routing |

**Amtrak**

| | |
|-----|-----|
| ADA | Passenger Related ADA |
| CAR | Car Failure |
| CCR | Cab Car Failure |
| CON | Hold for Connection |
| ENG | Locomotive Failure |
| HLD | Passenger Related |
| INJ | Injury Delay |
| ITI | Initial Terminal Delay |
| OTH | Misc |
| SVS | Servicing |
| SYS | Crew and System |

**Third Party**

| | |
|-----|-----|
| DBS | Debris |
| NOD | Unused Recovery Time |
| POL | Police |
| TRS | Trespasser |
| WTR | Weather |

- Train 785 continues to be responsible for 25% of total initial terminal delay minutes

# Train 763 – Delay Analysis
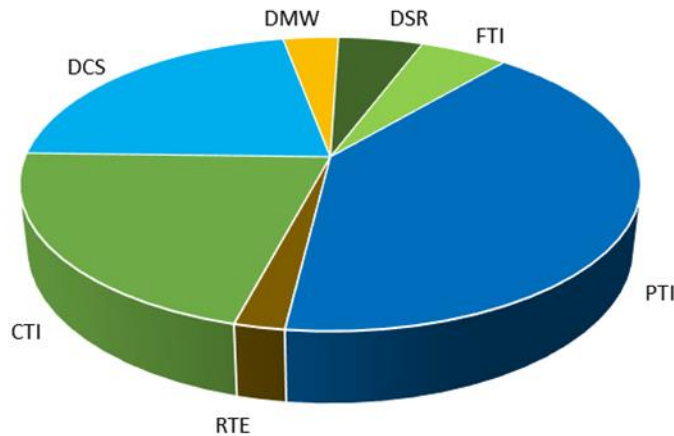
Train 763 - Host Delay Distribution
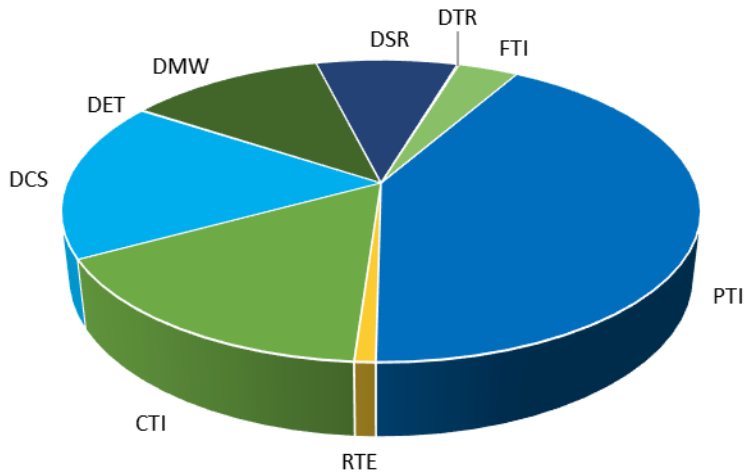


- Consistently in the bottom for OTP, however, experiences few issues with initial terminal performance
- For the quarter, 31 percent of total delay minutes (772) are CTI and PTI
- Days with highest incidence of delay start with CTI, PTI, or DCS in SN territory – Cascades and intensifies as 763 travels north
- These are days that have no issues with initial terminal performance

**Total Delay Minutes - Distribution by Host**

| UP | SC | BN | SN |
|---|---|---|---|

763

# Train 774 – Delay Analysis

Train 774 - Host Delay Distribution



- Consistently in the bottom for OTP, however, few issues with initial terminal performance
  - Only 4 occurrences of ITI during the quarter
- Over 43 percent of total delay minutes occur in UP territory
- Signal delays and slow orders account for more than 38 percent of this delay, PTI accounts for another 49 percent
- There is a daily average of more than 21 minutes of host responsible delay in UP territory
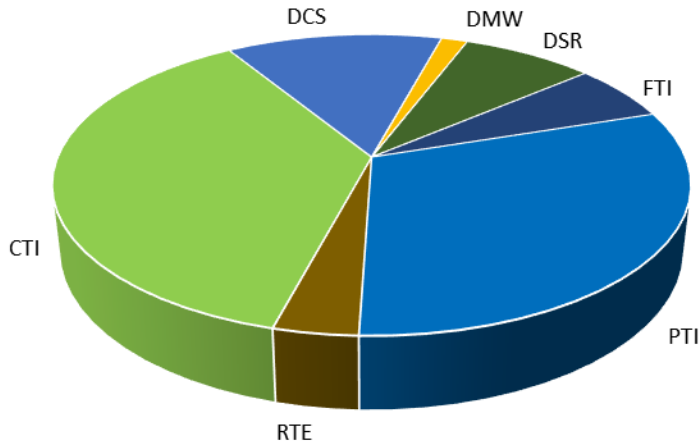
**Total Delay Minutes - Distribution by Host**

| UP | SC | BN | SN |
|---|---|---|---|

774

# Train 785 – Delay Analysis

Train 785 - Host Delay Distribution



- Consistently the bottom for OTP
- Persistent issues with initial terminal delay (43 of 90 days), with **all** delays attributed to late inbound Train 774
- For the quarter, 28 percent of total delay minutes (2,024) are ITI
  - Days with ITI – the average late departure is 47 minutes
- Another 27 percent of total delay minutes (2,007) are CTI and PTI
- More than half of this is in SN, primarily a result of late departures

Total Delay Minutes - Distribution by Host

| UP | SC | BN | SN |
|----|----|----|----|

785
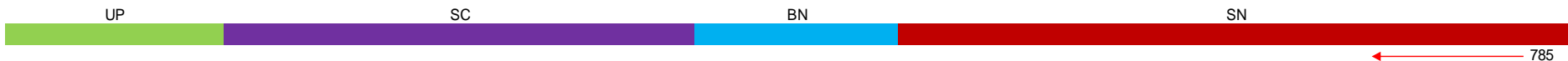
# Conclusions – Q2

- The OTP trend has not improved, though we saw a minor improvement in January 2019

- Train 763 continues to have CTI/PTI issues in SN, despite good initial terminal performance

- Cascading delays from Train 774 continues to cause issues on Train 785

  - Combined these bring down the entire system average by nearly 2 percent
- Host responsible delays for the quarter up by over 13,000 minutes vs. the prior year

# Questions