Service Performance Monitoring

Jeremy Latimer
Director of Rail Services
AMTRAK ROUTES OPERATING IN VIRGINIA - 2022

LEGEND
- Federally Sponsored Routes (longer than 750 miles)
- Virginia Sponsored Routes
- North Carolina Sponsored Routes

Note:
2. * Limited service at station.
What is On Time Performance? (OTP)

<table>
<thead>
<tr>
<th>Customer OTP</th>
<th>All Station OTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Percentage of all customers who arrive at their destination no later than 15 mins after scheduled arrival.</td>
<td>• Percentage of trains arriving at a station no later than 15 mins after scheduled arrival.</td>
</tr>
<tr>
<td>• Recovery in schedule to benefit busiest stations.</td>
<td>• Not a federal standard</td>
</tr>
<tr>
<td>• Federal Standard</td>
<td>• Does not account for recovery time in schedule</td>
</tr>
<tr>
<td>• Goal: 80%</td>
<td>• Identifies where delays happen.</td>
</tr>
</tbody>
</table>
Richmond, Newport News, Norfolk – 74%

Roanoke – 81%
Performance Committees support all operators in the RF&P

<table>
<thead>
<tr>
<th>Why Performance Committees?</th>
<th>What Topics?</th>
<th>Who Participates?</th>
<th>How are meetings conducted?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonwealth of Virginia, VRE and Amtrak are investing significant dollars in the RF&amp;P corridor</td>
<td>The Committees will focus on topics that affect the delivery of reliable service</td>
<td>JOMA, SOIP outlines participants</td>
<td>Meetings have structured agenda and action item driven objectives</td>
</tr>
</tbody>
</table>
| VPRA/VRE/Amtrak must demonstrate value from the investment | - On-Time Performance  
- Schedule changes  
- MOW work  
- Seasonal impacts | | Committees have technical support to provide analysis and empower decisions |

Technical support
After April 14, the Group At Large will divide into 3 groups

Group at Large

December '21-April '22

Beyond April 14

Service Performance
Reports every 2 weeks/monthly meeting

Performance Managers
Quarterly meeting

Performance Executive
Quarterly meeting

Periodic Group at Large meetings
Performance Committees Managed Schedule Implementation: Early Success

Completion of each step required to “unlock” the next step

1. Schedule Finalization
   - VPRA and Amtrak service concept agreement- Viriato
   - VPRA and VPRA reconciliation (DB and Ryan) (To be Completed March 1)

2. Internal Approval
   - VPRA manager level approval of final schedule (Jeremy)
   - Written commitment from Amtrak to be able to operate schedule (Amtrak)
   - Start date agreed upon in writing (VPRA/Amtrak)
   - Inform VRE of proposed change (Jeremy)

3. Host Railroad Approval
   - Present to Service Performance Committee - Apr 14th
   - Amtrak sends schedules to NS and CSX (Ryan Buckland)
   - NS-written approval (Randy Hunt and John Edward)
   - CSX -written approval (Ken Gumz or Andy Daley)
   - Amtrak to contact FRA (Jim Blair)

4. Implementation
   - Inform VRE of approved schedule and confirm start date (Jeremy)
   - Media and Marketing (Ryan and Jeremy)
   - Brief NS and CSX dispatching (DB)
   - Begin new service

Monitoring several items in the schedule.

60-90 days

Completion of each step required to “unlock” the next step.

VPRA and Amtrak service concept agreement- Viriato
VPRA and VPRA reconciliation (DB and Ryan) (To be Completed March 1)
The Service Performance Committee Process for Improvement

1. Identify Opportunity
   - Utilize data to identify 2 or 3 opportunities to reduce/eliminate delays
   - Opportunities should be:
     - Frequent
     - Significant
     - Impactful

2. Develop Solutions
   - Brainstorm initiatives to reduce/eliminate the delay
   - Initiatives should be quick-to-implement:
     - Process change
     - Operations changes
     - Education
     - Policy
     - Contractual

3. Implement Solutions
   - Place change into effect or conduct necessary training with employees

4. Measure Success
   - Measure success of solutions by looking for data indication of improvement.
   - After sustained success, close out issue.

Initiatives that can not be implemented <1 month elevate to Managers Committee.

Repeat Process
March-June 2022 OTP by Line¹

**Fredericksburg**
- 82%
- 92%

**Manassas**
- 19%
- 81%

June MTD¹ bottom 5 trains by OTP%

<table>
<thead>
<tr>
<th>FBG</th>
<th>MSS</th>
<th>FBG</th>
<th>MSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>304</td>
<td>85%</td>
<td>328</td>
<td>85%</td>
</tr>
<tr>
<td>302</td>
<td>85%</td>
<td>333</td>
<td>77%</td>
</tr>
<tr>
<td>308</td>
<td>77%</td>
<td>338</td>
<td>75%</td>
</tr>
<tr>
<td>313</td>
<td>69%</td>
<td>331</td>
<td>62%</td>
</tr>
<tr>
<td>306</td>
<td>69%</td>
<td>336</td>
<td>54%</td>
</tr>
</tbody>
</table>

(1) Data thru June 17
Quarterly Review of Amtrak Performance in the RF&P

March-June 2022 All-Station OTP by Service:

Northeast Regional: 25% (75%)
Carolinian: 39% (61%)
Palmetto: 37% (63%)
Silver Meteor: Not operating
Silver Star: 22% (78%)

NE Regional All-Station OTP v. Delay Minutes:

Long Distance All-Station OTP v. Delay Minutes:

(1) Data thru June 15
Delays: What, Where, and Which Trains?

Top 6 Delay Categories\(^{1,2,3}\)

- NOD
- NOD
- NOD
- NOD
- NOD
- NOD

Top 6 Delay Segments\(^2\)

- WAS-WAS
- RVR-RVR
- RVR-PTB
- WAS-WAS
- XVG-ALX
- RVR-RVR
- WAS-WAS
- XVG-ALX
- XVG-ALX
- XVG-ALX
- RVR-PTB
- RVR-RVR
- RVR-RVR
- RVR-PTB
- RVR-RVR
- RVR-RVR

Top 6 Delayed Trains\(^2,4\)

- WAS-WAS
- RVR-RVR
- RVR-PTB
- WAS-WAS
- XVG-ALX
- RVR-RVR
- RVR-RVR
- RVR-RVR
- RVR-RVR

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

Mar 2022 Apr 2022 May 2022 Jun 2022

(1) All delays are measured in minutes of delay
(2) Data thru June 15
(3) NOD does not delay trains but is recorded in delay reporting
(4) Excludes NOD events
### Quarterly Service Performance Committee Data (at a glance)

#### March-June 2022 All Station OTP (OT≤15") for all stations in Virginia

<table>
<thead>
<tr>
<th>Station Name</th>
<th>Carolinian</th>
<th>Northbound</th>
<th>Southbound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Northeast Regional</td>
<td>Palmetto</td>
</tr>
<tr>
<td>Washington Union</td>
<td>41%</td>
<td>83%</td>
<td>54%</td>
</tr>
<tr>
<td>Alexandria</td>
<td>37%</td>
<td>83%</td>
<td>34%</td>
</tr>
<tr>
<td>Woodbridge</td>
<td></td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>Quantico</td>
<td>37%</td>
<td>84%</td>
<td></td>
</tr>
<tr>
<td>Fredericksburg</td>
<td>36%</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Ashland</td>
<td></td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>Richmond Staples Mill Road</td>
<td>54%</td>
<td>92%</td>
<td>32%</td>
</tr>
<tr>
<td>Richmond Main Street</td>
<td></td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Williamsburg</td>
<td></td>
<td>97%</td>
<td></td>
</tr>
<tr>
<td>Newport News</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petersburg</td>
<td>35%</td>
<td>90%</td>
<td>17%</td>
</tr>
<tr>
<td>Norfolk</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

▲▼Change from previous month

(1) Data thru June 15
High on-time performance can be achieved when trains originate on time and maintain speeds consistent with the underlying service plan.

Trains arrive VA in unplanned Slots
Carolinian Service performance
Train 99’s late arrivals
Silver Star Performance

Trains operate at slower than planned speeds
Heat Orders

Fluid operating conditions difficult to dispatch, OTP suffers

Quarterly Review of Amtrak Performance in the RF&P

Performance
- Northeast Regional
- Carolinian
- Hiawatha
- Silver Star
- Silver Meteor
- Long Distance All Stations OTP + Delay Minutes
- NEC Regional All Stations OTP + Delay Minutes
- High Speed All Stations OTP + Delay Minutes

High on-time performance can be achieved when trains originate on time and maintain speeds consistent with the underlying service plan.
## Performance Focus Items

<table>
<thead>
<tr>
<th>Issue</th>
<th>Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Star Performance</td>
<td>Schedule Solution vs. Consist Solution</td>
</tr>
<tr>
<td>Carolinian service performance</td>
<td>Identify Areas Where Service is Most Affected</td>
</tr>
<tr>
<td>Train 99 late arrivals at WAS off NEC</td>
<td>Identify Strategies to Improve Performance</td>
</tr>
<tr>
<td>Heat Orders</td>
<td>Understand Decision Making Process and Risk</td>
</tr>
</tbody>
</table>