Freight Trains on Passenger Railroads

Conrail’s Experience
Understanding the past can facilitate the molding of a better future

- Significant event chronology
- Event impact on Conrail
- Concurrent opportunities evolving from rail freight and passenger growth
Events of the 1970’s set the stage for freight railroads to gradually divest themselves of passenger train operations

Pre-1971
- Penn Central and other Conrail predecessor railroads provided all inter-city and most commuter rail passenger services

1971
- Amtrak assumes responsibility for intercity passenger service

1971-72
- New York-MTA and Connecticut-DOT purchase/lease Penn Central commuter lines

1976
- Conrail begins operations – including commuter train service in 6 cities
  - Amtrak assumes control of operations on Northeast Corridor
  - Commuter agencies can acquire “3R Act” designated lines under “900 Day Option”
Transfer of intercity and commuter rail operations matured considerably between 1977 - 1986

1977  •  MBTA selects Boston & Maine to operate Boston “South Side” commuter trains

1981  •  NERSA authorizes the divestiture of commuter train service by end of 1982

1983  •  Train crews on Northeast Corridor become Amtrak employees
  •  Commuter agencies begin “independent” operation of commuter services

1986  •  Train crews on “Off Corridor” Amtrak trains become Amtrak employees
Freight train presence and associated operations changed considerably throughout the 1980’s and early 1990’s

1980’s  • Conrail gradually reroutes most through freight trains off Amtrak controlled lines

1984  • Conrail obtains trackage rights on CSX between Philadelphia and Washington

1987  • Amtrak institutes “Time of Day” and speed restrictions for freight trains on Northeast Corridor

1988  • Rail Safety Act of 1988 requires LSL equipment on all Northeast Corridor trains by April 1990

1992  • Baltimore MTA Light Rail Line begins “Time Separated” operation
      • VRE-Virginia Railway Express starts commuter train service from Washington
Post Split Conrail evolves into another era of change

1999  • Conrail Shared Assets begins operations in 3 terminal areas

2000  • New Jersey Transit expands train frequency and station presence

2001  • Amtrak expands train frequency with some higher track speeds

2004  • Southern New Jersey Light Rail Line begins “Time Separated” operation
Current passenger line partners

AMTRAK

SEPTA

CONRAIL

River LINE

NJ TRANSIT

The Way To Go.
Percent of miles interfacing with passenger trains has not changed significantly during Conrail’s history…

<table>
<thead>
<tr>
<th>FACTS</th>
<th>1976</th>
<th>1999</th>
<th>2005</th>
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</thead>
<tbody>
<tr>
<td><strong>Interface Freight/Passenger Miles</strong></td>
<td>4,928</td>
<td>2,805</td>
<td>181</td>
</tr>
<tr>
<td><strong>Total Conrail Route Miles</strong></td>
<td>19,222</td>
<td>10,826</td>
<td>762</td>
</tr>
<tr>
<td><strong>Percent of Interface Miles vs. Total Route Miles</strong></td>
<td>26%</td>
<td>26%</td>
<td>24%</td>
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…although passenger trains per mile of interface has risen more than tenfold as a result of capacity density changes…

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<td>Total Interface Passenger Trains</td>
<td>2,211</td>
<td>2,345</td>
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<tr>
<td>Number of Interface Passenger Trains per Mile</td>
<td>0.4</td>
<td>0.8</td>
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…while interface passenger trains per passenger route on Conrail’s network has grown 73.6% since its inception.

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<td>Total Passenger Routes</td>
<td>55</td>
<td>50</td>
<td>11</td>
</tr>
<tr>
<td>Passenger Interface Trains Per Route</td>
<td>40.2</td>
<td>46.9</td>
<td>69.8</td>
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The percent of Conrail freight trains operating on passenger routes versus total trains on those routes has declined substantially due to most recent automotive plant closures…

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<td><strong>Conrail Freight Trains on Amtrak and Commuter Lines</strong></td>
<td>268</td>
<td>136</td>
<td>19</td>
</tr>
<tr>
<td><strong>Amtrak NEC and Commuter Trains</strong></td>
<td>2,167</td>
<td>1,950</td>
<td>698</td>
</tr>
<tr>
<td><strong>Percent of Conrail Freight Trains versus Total Trains on Amtrak NEC and Commuter Lines</strong></td>
<td>11.0%</td>
<td>7.0%</td>
<td>2.7%</td>
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…resulting in the ratio of Conrail freight trains on Amtrak and commuter lines versus passenger route miles declining as well…

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<td>Amtrak NEC and Commuter Line Route Miles</td>
<td>1,914.4</td>
<td>944.0</td>
<td>170.3</td>
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...thus driving the number of Conrail freight trains per passenger route to decline by 68%.

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<td>Amtrak NEC/Commuter Routes Used by Conrail Freight Trains</td>
<td>45</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>Conrail Freight Trains Per Route</td>
<td>6.0</td>
<td>4.1</td>
<td>1.9</td>
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What is next? Growth in both rail sectors poses opportunity for a challenging future, either independently or collectively

- Inter and Intra capacity coordination among the freight and passenger rail sectors
  - Exclusive use
  - Train Priority
  - Scheduling

- Maximize access to “Operating Windows”
  - Accommodate more time sensitive movements
  - Continually upgrade C.A.T.D. systems with expanded predictability features
  - Minimize operating variability through improved performance of asset reliability

- Continually enhance safety efforts to reduce costs of risk
  - Apply technology to hard assets of proven capability
  - Employee training and retraining while strengthening retention rates
  - Increase positive awareness among general public towards railroad rights of ways and grade crossings
  - Continually deploy and maintain protective mechanisms that will support Homeland Security
Improving use of the existing rail habitat should ease the resolve of pending physical and economic issues

- Infrastructure improvements for heavier lading
  - 263,000 cars versus 286,000/315,000 cars

- Route clearance issues
  - Acceptable equipment heights from top of rail
  - Station platform design

- Signaling and communication systems
  - Locomotive design and performance requirements
  - Train control issues
  - Train speeds