


## 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

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 

- Conrail Shared Assets begins operations in 3 terminal areas
- New Jersey Transit expands train frequency and station presence

2001

2004

- Amtrak expands train frequency with some higher track speeds
- Southern New Jersey Light Rail Line begins "Time Separated" operation


SEPTA

# CONRAIL_? 

Current passenger line partners

The Way To Go.

Percent of miles interfacing with passenger trains has not changed significantly during Conrail's history...

| FACTS | 1976 | 1999 | 2005 |
| :---: | :---: | :---: | :---: |
| Interface Freight/Passenger Miles | 4,928 | 2,805 | 181 |
| Total Conrail Route Miles | 19,222 | 10,826 | 762 |
| Percent of Interface Miles <br> vs. Total Route Miles | $26 \%$ | $26 \%$ | $24 \%$ |

...although passenger trains per mile of interface has risen more than tenfold as a result of capacity density changes...

| FACTS | 1976 | 1999 | 2005 |
| :---: | :---: | :---: | :---: |
| Interface Freight/Passenger Miles | 4,928 | 2,805 | 181 |
| Total Interface Passenger Trains | 2,211 | 2,345 | 768 |
| Number of Interface Passenger <br> Trains per Mile | 0.4 | 0.8 | 4.2 |

...while interface passenger trains per passenger route on Conrail's network has grown 73.6\% since its inception.

| FACTS | 1976 | 1999 | 2005 |
| :--- | :---: | :---: | :---: |
| Total Interface Passenger Trains | 2,211 | 2,345 | 768 |
| Total Passenger Routes | 55 | 50 | 11 |
| Passenger Interface Trains <br> Per Route | 40.2 | 46.9 | 69.8 |

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...

## FACTS

| 1976 | 1999 | 2005 |
| :---: | :---: | :---: |
| 268 | 136 | 19 |
| 2,167 | 1,950 | 698 |
| $11.0 \%$ | $7.0 \%$ | $2.7 \%$ |

...resulting in the ratio of Conrail freight trains on Amtrak and commuter lines versus passenger route miles declining as well...

## FACTS

Amtrak NEC and Commuter Line Route Miles

Conrail Freight Trains on Amtrak NEC/Commuter Lines

| $1,914.4$ | 944.0 | 170.3 |
| :---: | :---: | :---: |
| 268 | 136 | 19 |
| 0.14 | 0.14 | 0.11 |

...thus driving the number of Conrail freight trains per passenger route to decline by $68 \%$.

## FACTS

1976
268

Amtrak NEC/Commuter Routes Used by Conrail Freight Trains

| 268 | 136 | 19 |
| :---: | :---: | :---: |
| 45 | 32 | 10 |
| 6.0 | 4.1 | 1.9 |

# 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"
a Accommodate more time sensitive movements
a 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


