WILMAPCO Rail Studies

• Elkton Train Station Study

• Claymont Train Station Improvement Study

• Newport Train Station Feasibility Study

• The Chesapeake Connector Freight & Passenger Rail Benefits Study

• The Newark Regional Transportation Center
Rail Planning in the WILMAPCO Region

- Elkton Train Station Study
- Claymont Train Station Improvement Study
- Newport Train Station Feasibility Study
- The Newark Regional Transportation Center
- The Chesapeake Connector

Benefits Study

35 miles Baltimore
17 miles Philadelphia
Elkton Station Study

The Objective: To re-establish passenger service between Newark, DE and Perryville, MD

Tasks to be completed

- National Environmental Protection Act (NEPA) studies
- Update ridership projections
- Conceptual design
- Operational analysis
- Study to be completed in Spring 2013
Elkton Station Study

Old station location

Proposed station location, Elkton TOD Study
Elkton Station Study

Proposed platform location
Newport Station Study

Analyze the feasibility of re-opening a train station for commuter rail service, and complete a TOD study to assist the Town in encouraging mixed-use growth.

Scope of Work

- Visioning process
- TOD market scan
- Railroad coordination
- Ridership forecasting
- Station design alternatives
- Public outreach
Newport Station Study

Ridership Analysis:
- How many people might use the station?
- Where will they come from?

<table>
<thead>
<tr>
<th>SEPTA station</th>
<th>Existing ridership (without Newport)</th>
<th>Existing ridership (if Newport was built)</th>
<th>Future ridership (without Newport)</th>
<th>Future ridership (if Newport was built)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newark</td>
<td>500</td>
<td>500</td>
<td>710</td>
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<tr>
<td>Churchman’s Crossing</td>
<td>463</td>
<td>330</td>
<td>560</td>
<td>450</td>
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<tr>
<td>Newport</td>
<td>--</td>
<td>480</td>
<td>--</td>
<td>500</td>
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<tr>
<td>Wilmington</td>
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<td>2,220</td>
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<tr>
<td>Claymont</td>
<td>1,024</td>
<td>1,020</td>
<td>1,380</td>
<td>1,380</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,007</strong></td>
<td><strong>4,350</strong></td>
<td><strong>4,870</strong></td>
<td><strong>5,250</strong></td>
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</tbody>
</table>

Weekday Rail Trips to/from Newport
Newport Station Study

Proposed track configuration

<table>
<thead>
<tr>
<th>Track</th>
<th>Service</th>
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</thead>
<tbody>
<tr>
<td>TRACK 3</td>
<td>AMTRAK SOUTHBOUND</td>
</tr>
<tr>
<td>TRACK 2</td>
<td>AMTRAK NORTHBOUND</td>
</tr>
<tr>
<td>TRACK 1</td>
<td>NORFOLK SOUTHERN</td>
</tr>
</tbody>
</table>

PROPOSED TRACK A – SEPTA

PROPOSED STATION PLATFORM
Newport Station Study

- High-level platform to meet SEPTA accessibility requirements
- 600 feet long by 14 feet wide
- Stair and ramp access, railings and fencing, lighting
Multi-Modal Access

- Transit Route
  - DART Route 5
- Pedestrian routes
  - Western Route
  - Eastern Route 1
  - Eastern Route 2
  - Route 3
Newport Station Study

Cost Estimate:

1. Work performed by the project contractor is estimated at $10-11 million.
   - Over $8 million for platform, including stair and ramp access, railings fencing, and lighting
   - About $2 million for parking and access, including parking lot improvements, access to James Street, sidewalk improvements, lighting, crosswalks, etc.
2. All track and overhead wiring work must be performed directly by Amtrak.
   - A rough estimate for this work is $11-15 million pending a meeting with Amtrak to clarify the scope of work.
3. The total project cost is estimated to be $21-26 million.

Study to be completed Fall 2012
Claymont Station Study

Scope of Work

- Evaluate existing conditions
- Issues, opportunities and constraints analysis
- Prepare master vision plan
- Develop traffic circulation, access and parking
- Implementation plan
- Public outreach, stakeholder meetings and workshops
Claymont Station Study

- **2011 Statistics**
  - Weekdays: 37 trains, 1,229 riders
  - Saturdays: 14 trains, 103 riders

- **2009 Statistics**
  - Weekdays: 37 trains, 1,105 riders
  - Saturdays: 14 trains, 82 riders

- **2008 Statistics**
  - Weekdays: 37 trains, 1,092 riders
  - Saturdays: 12 trains, 99 riders
Claymont Station Study

Preferred Alternative

• Relocate platforms closer to Myrtle Avenue
• New Entrance with separate bus lane and waiting area
• Preferred parking for carpool and carshare users
• 588 Parking spaces
• 4000 sq ft station building with waiting room
• Ticket sales and coffee shop
• Pedestrian concourse over tracks
• Two sets of stairs and elevators
• ADA Compliant, high-level platforms
• Full platform-length canopies
• Station plaza with landscaping and public art
• Potential for parking deck
Claymont Station Study

Cost Estimate: in 2008 $$

• New Station Structure, platform access and parking: approx. $10 million

• ADA High-level Platforms: approx. $6 million

• Total Cost: $16 million

• Potential parking deck, additional 200 spaces: approx. $3.7 million

• Total Cost: $19.7 million
Claymont Station Study

Vision
Claymont Station Study

Project Status

• Study completed in 2008, but was unfunded in DelDOT FY2009 CTP
• Claymont Station study funded for ADA compliance, parking and site issues in FY2013
• Claymont Station PE funded in FY2016

Claymont Station building, 1905; Destroyed by fire in late 1980s
Chesapeake Connector

A Freight and Passenger Rail Benefits Study for the proposed expansion of the 6.2 mile two-track section on Amtrak Northeast Corridor (NEC) in Cecil County, MD
Chesapeake Connector

- Project scope:
  - Key questions
  - Review of project documents
  - Interviews with stakeholders
  - Development of cost estimates for project alternatives
  - Analysis of Cost & Benefits
Chesapeake Connector

Key Questions:

- What is the economic benefit to freight railroads and regional industries?
- What are the benefits to passenger rail operations (intercity and commuter)?
- What is the cost/benefit difference between a grade separated crossing to the third track and an at-grade crossing?
- Where should the grade separation be located?
- Would the grade separation provide an expanded freight operating window on the NEC to justify the cost?
- Is the third track worth pursuing without a grade separated crossing?
Chesapeake Connector

Sources of Uncertainty:

- Amtrak plans for High Speed Rail
- Commuter rail service options
- BRAC and resulting development patterns
- Outlook for freight rail users in the region
Port Road Branch:
- NS needs to call AMTRAK daily for permission to access NEC for daytime trips.
- Used to "catch up" from previous night, not providing new capacity

Port Road Branch:
- Trains doing business with Port of Baltimore or Wilmington can get caught in queue if train cannot clear NEC before operating hours begin at 6am.
Chesapeake Connector

Option A:
- Includes a grade-separated freight track crossing from track 4 to new track 1

Option A:
Estimated cost is $350 million
Chesapeake Connector

Study Status

- Improvement alternative concepts complete
- Cost estimates reviewed
- Final report underway, expected Fall 2012
  - Coordination with Amtrak and MDOT has resulted in the expectation that the proposed track improvements will be incorporated into the Susquehanna Bridge Replacement Project, now underway.
Newark Regional Transportation Center

Project Studies

• Delaware Rail Passenger Engineering Study, 2002
• Wilmington to Newark Commuter Rail Improvements, 2004
• Newark Train Station Feasibility Study, 2010
• Newark Regional Transportation Center Study, 2013
Newark Regional Transportation Center

Existing Conditions

- UD STAR Campus
- Former Chrysler Plant Site
- Newark Station
- Station Parking
- Univ. of Delaware
- Norfolk Southern Delmarva Secondary
- "Davis Interlocking"
- Norfolk Southern Chrysler Yard
Newark Regional Transportation Center

Existing Conditions
Newark Regional Transportation Center

Newark Train Station Study

- Primarily an engineering and operational feasibility study
- Importance of study
  - UD Plans
  - Work within constraints of site
  - Build on previous studies
  - Opportunity for Newark
- A dual focus needed to address:
  - Conflicts between freight and commuter
  - How to accommodate expansion of passenger rail services
Newark Regional Transportation Center

Current SEPTA Operations

17 Trips per day/9 Trains

Arrival

Turnaround Layover

Departure

Morning and Evening Peak Periods Only
Newark Regional Transportation Center

Current Operations – Amtrak

- Non-stop Acela Express & Northeast Regional
  - 2 trains/hr. each way

- Non-stop Long Distance Trains Being Overtaken
  - Up to 6 trains/day each way (irregular timing)

- Northeast Regional Trains Stopping at Newark Station
  - 2 trains/day each way
Newark Regional Transportation Center

Current Operations – Norfolk Southern

10 PM to 6 AM

6 AM to 2 PM

2 PM to 10 PM
Newark Regional Transportation Center

Current Operations – Norfolk Southern

To Harrisburg via Amtrak NEC

Newark is an Important Yard Location for NS

To Port of Wilm. & Delmarva

Tail tracks available for NS use

“Iron”

3 2 1 A

“Davis”

NS cannot work the east end of the yard while SEPTA trains occupy Track A at the station

“Ruthby”
Newark Regional Transportation Center
University of Delaware, Science, Technology & Advanced Research (STAR) Campus
Newark Regional Transportation Center

Newark Regional Transportation Center Study

- Work with Rail Partners to complete station concept
- Create station operational plan for passenger and freight train movements
- Complete the NEPA Studies
- Complete Preliminary Engineering to 30%
- Prepare project for construction in 2014
Newark Regional Transportation Center

Many concepts created and discarded due to operational challenges
Newark Regional Transportation Center

Current Project Status

• Feasibility Study (Phase I) completed in July 2010
• TIGER II Planning Grant awarded in December 2010
• NRTC Study (Phase II) currently underway
• TIGER IV Grant awarded in June 2012
WILMAPCO RAIL STUDIES

For more information on these projects, visit:

www.wilmapco.org/plans-and-reports

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