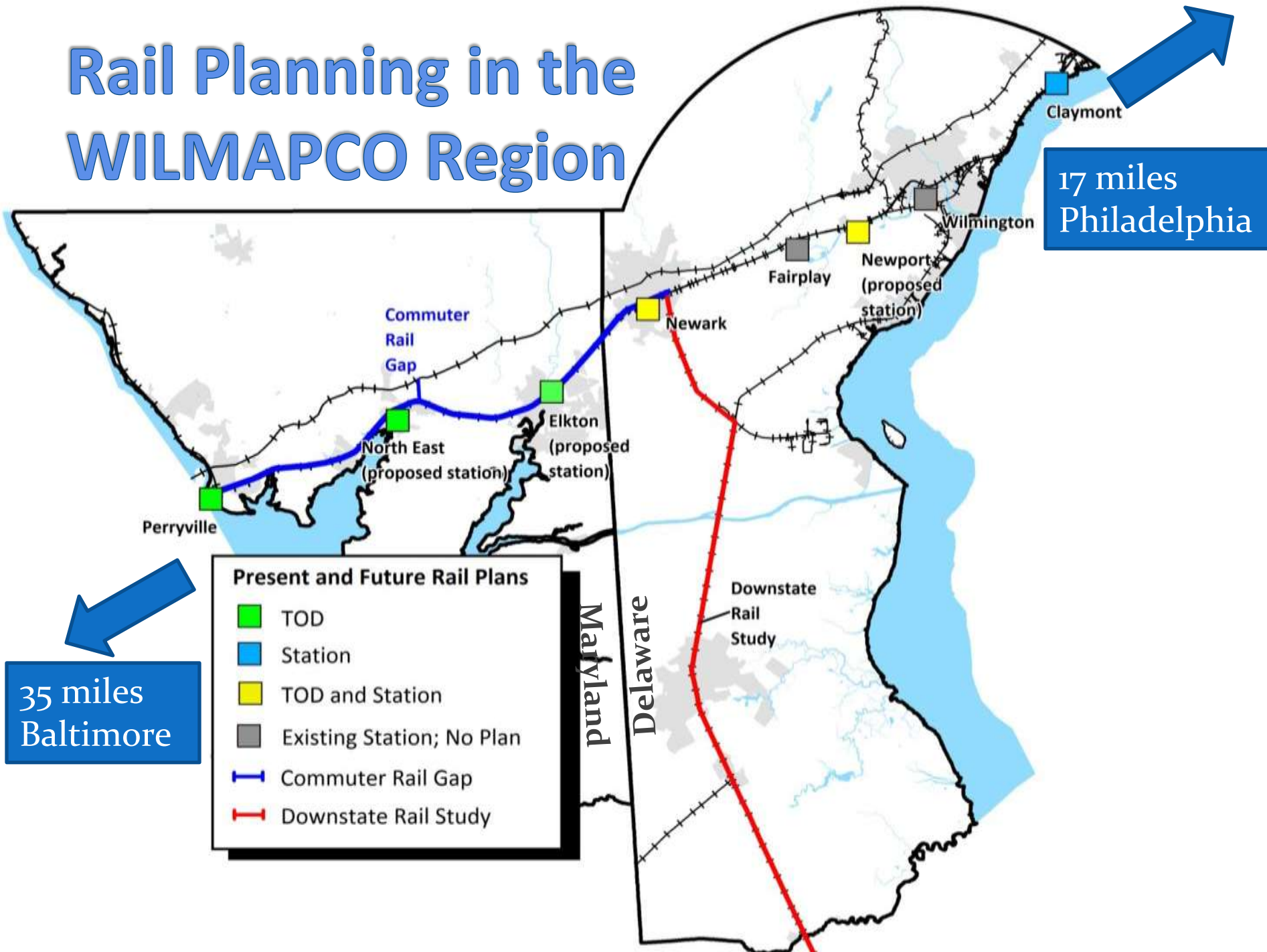


WILMAPCO Rail Studies

- 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

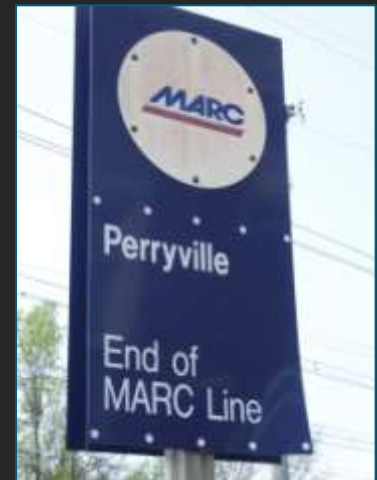


Elkton Station Study

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

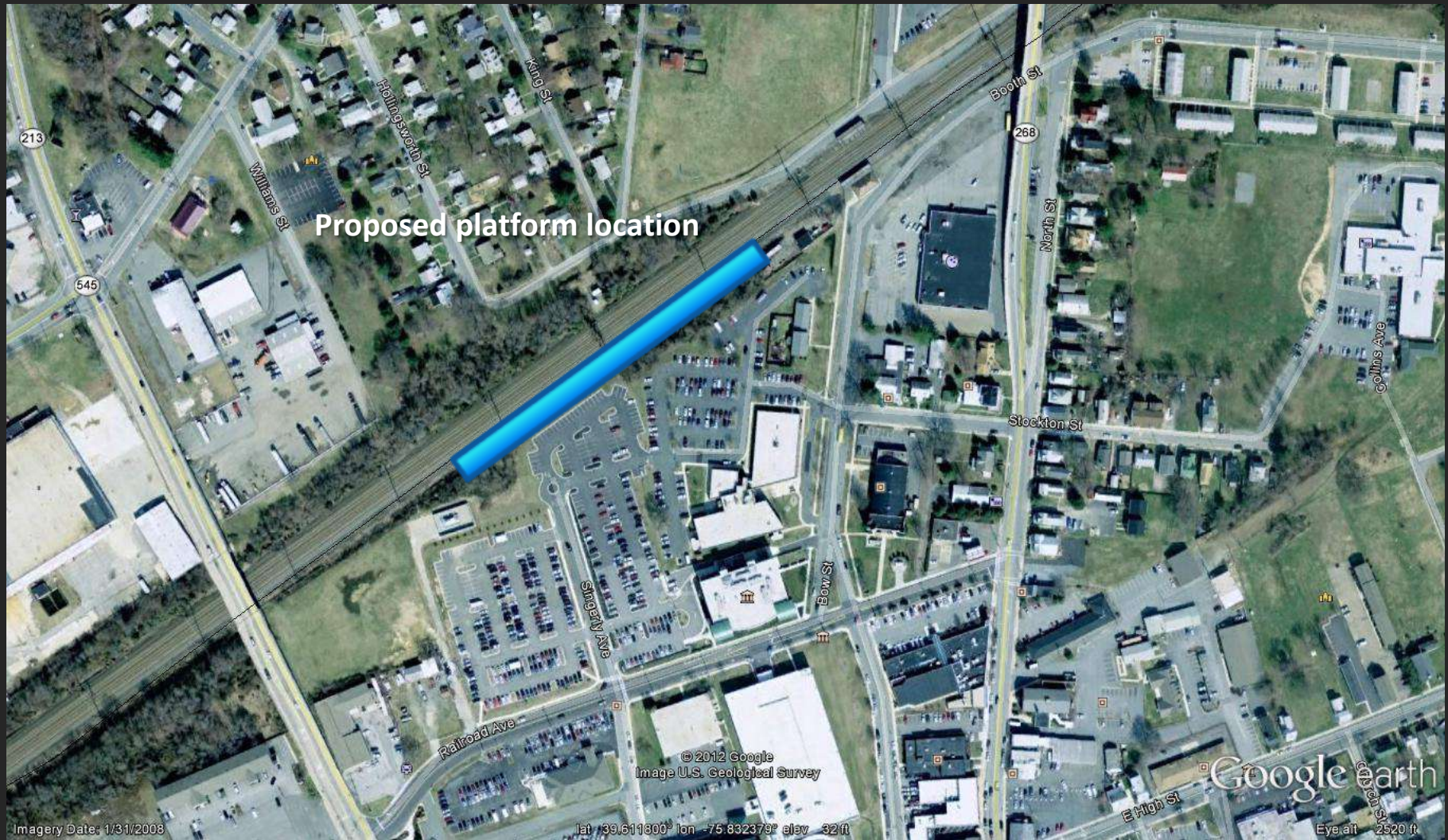


Old station location



Proposed station location,
Elkton TOD Study

Elkton Station Study



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

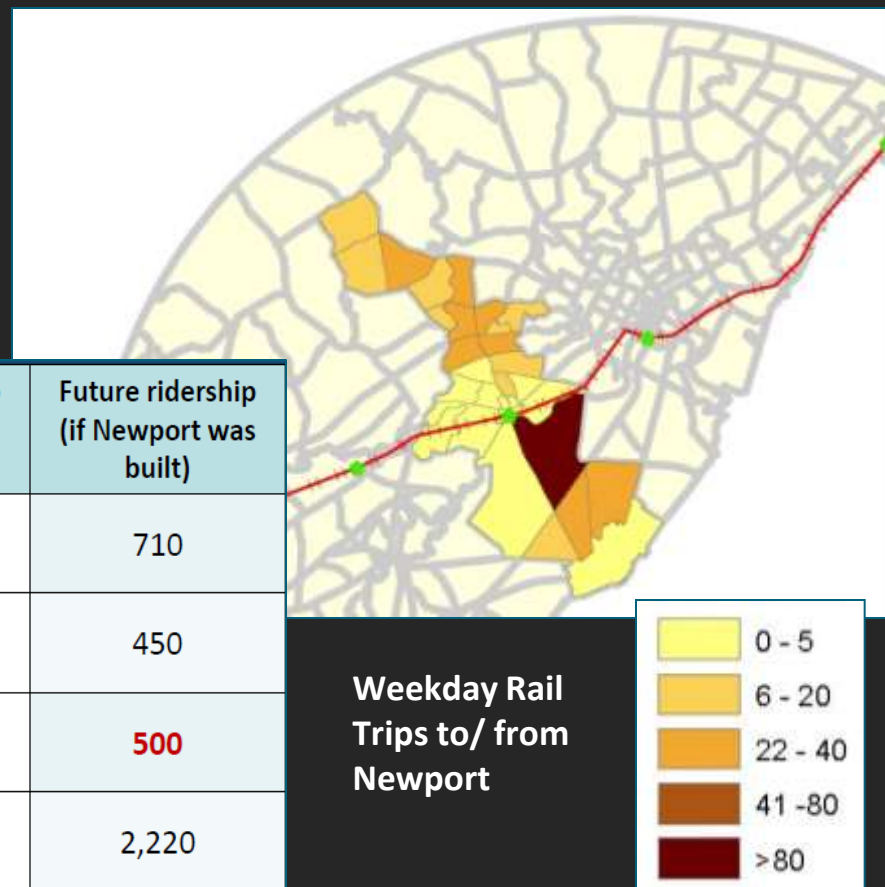


Newport Station Study

Ridership Analysis:

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

SEPTA station	Existing ridership (without Newport)	Existing ridership (if Newport was built)	Future ridership (without Newport)	Future ridership (if Newport was built)
Newark	500	500	710	710
Churchman's Crossing	463	330	560	450
Newport	--	480	--	500
Wilmington	2,020	2,020	2,220	2,220
Claymont	1,024	1,020	1,380	1,380
TOTAL	4,007	4,350	4,870	5,250





Newport Station Study

Proposed track configuration

TRACK ₃ – AMTRAK SOUTHBOUND

TRACK ₂ – AMTRAK NORTHBOUND

TRACK ₁ – NORFOLK SOUTHERN

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



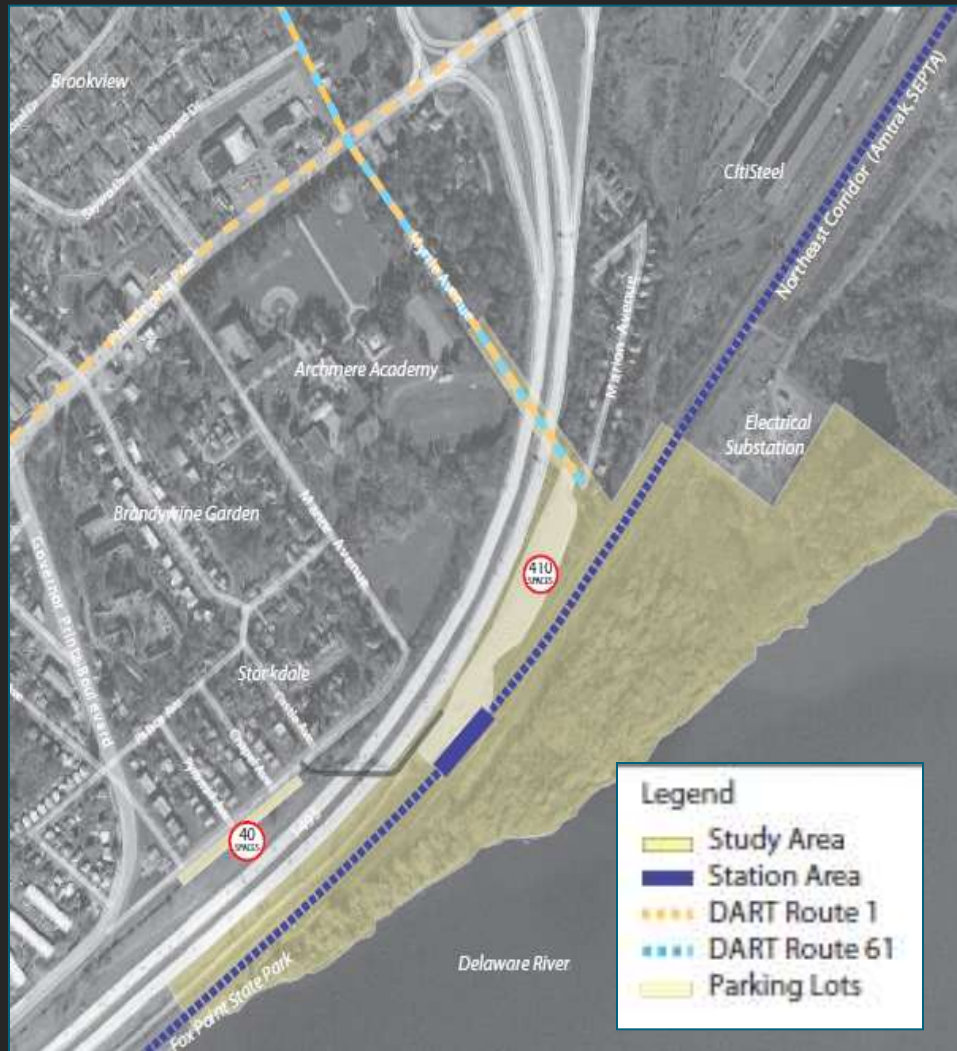
Newport Station Study

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.
- 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

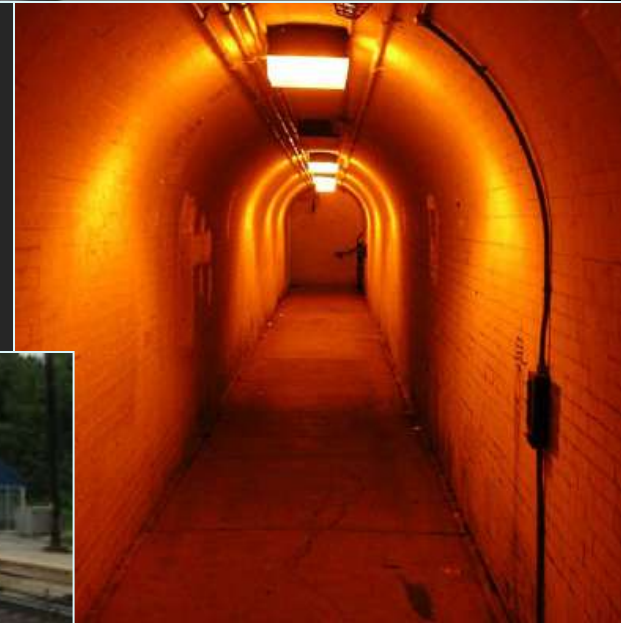
- Weekdays: 37 trains, 1,229 riders
- Saturdays: 14 trains, 103 riders

■ 2009 Statistics

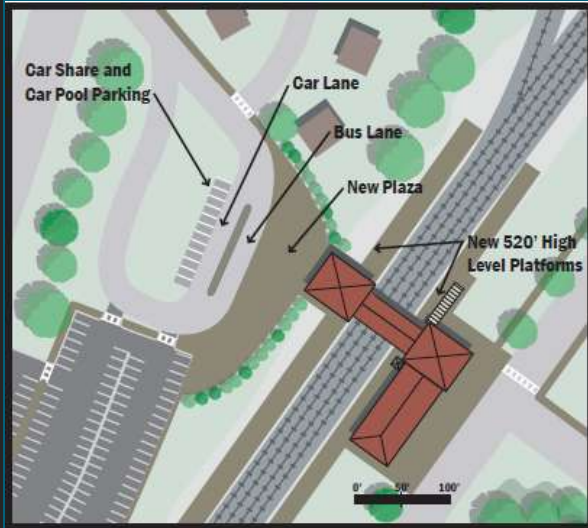
- Weekdays: 37 trains, 1,105 riders
- Saturdays: 14 trains, 82 riders

■ 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



Claymont Station Study

Project Status

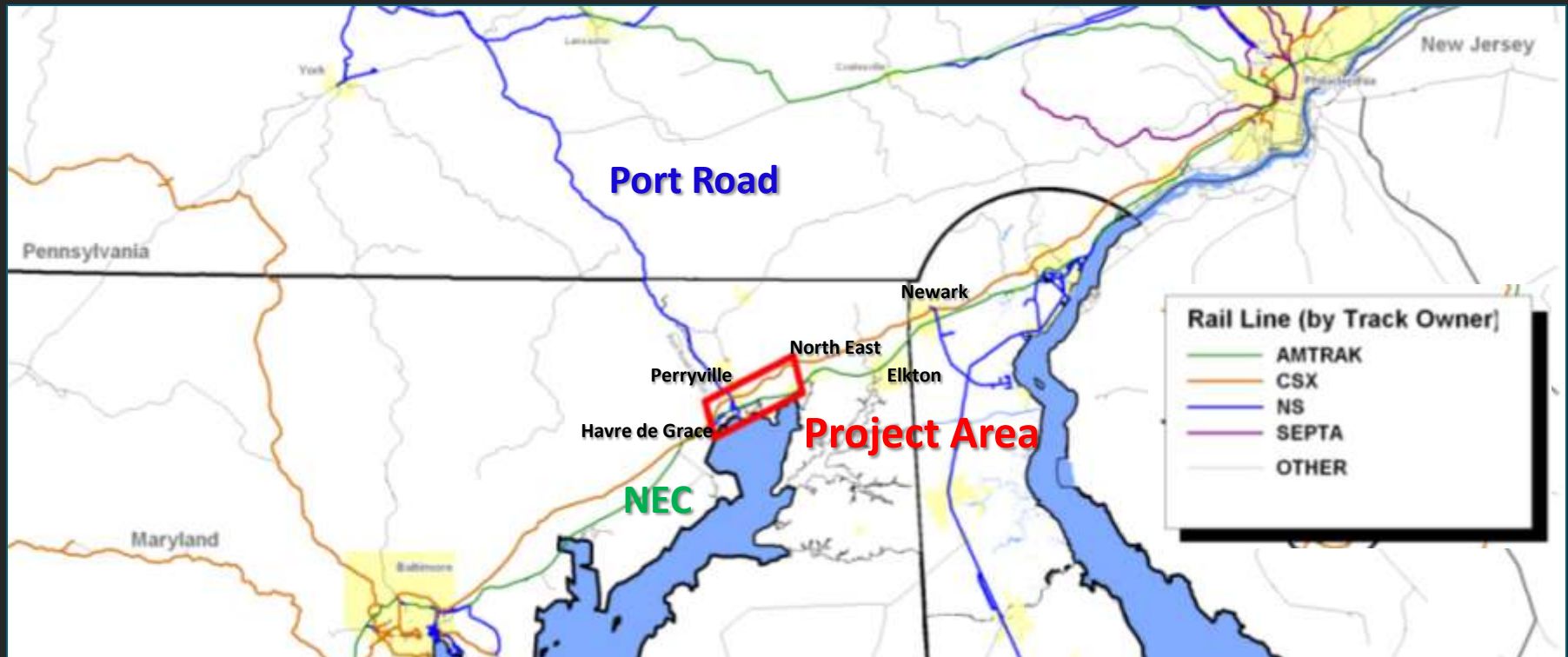
- Study completed in 2008, but was unfunded in DelDOT FY2009 CTP
- Claymont Station study funded for ADA compliance, parking and site issues in FY2013
- Claymont Station PE funded in FY2016



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 Impacts

Enola Yard:
Main Departure Point
for Shipments along
Delmarva. Delays
at Port Rd. Cause Poor
Departure Rates from
Enola

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

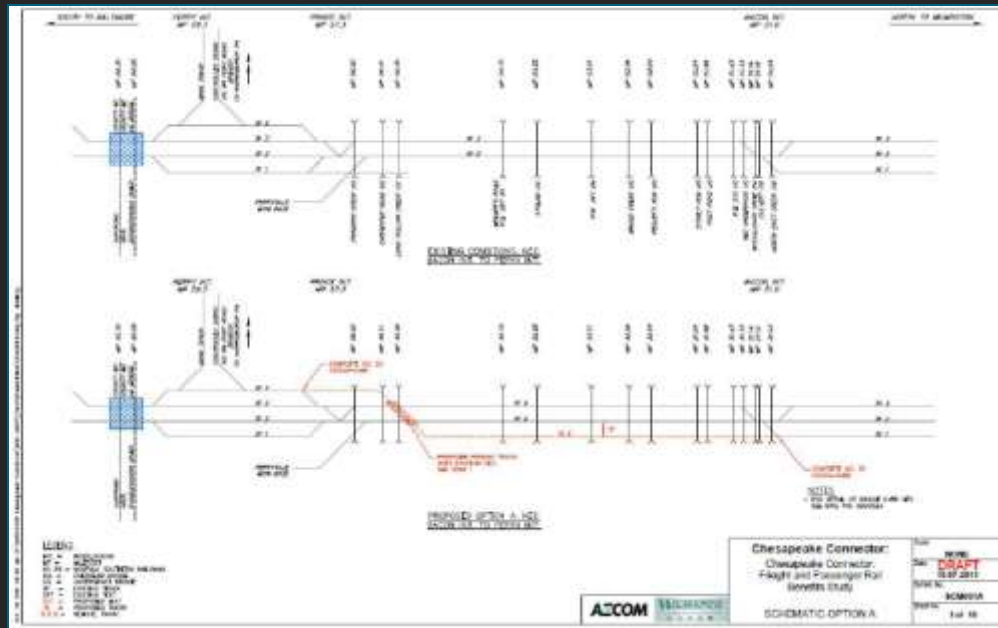
Port Road Branch:

- 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.

Rail Line (by Track Owner)

- AMTRAK
- CSX
- NS
- SEPTA
- OTHER

Chesapeake Connector

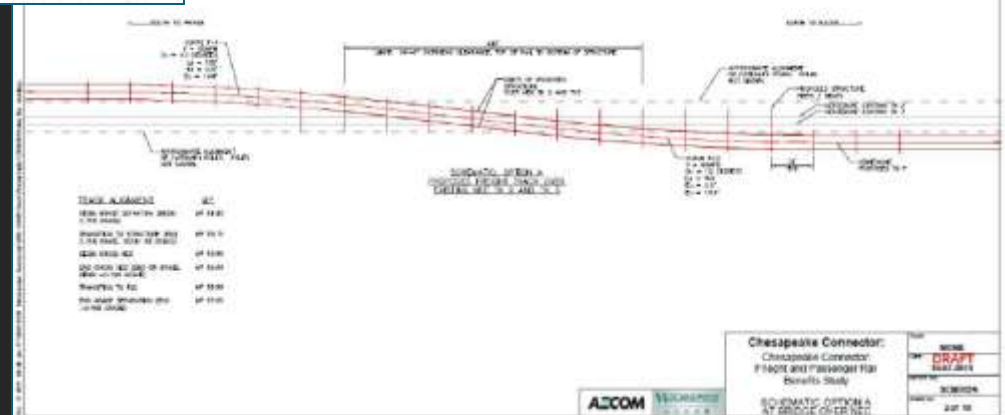


Option A:

- 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

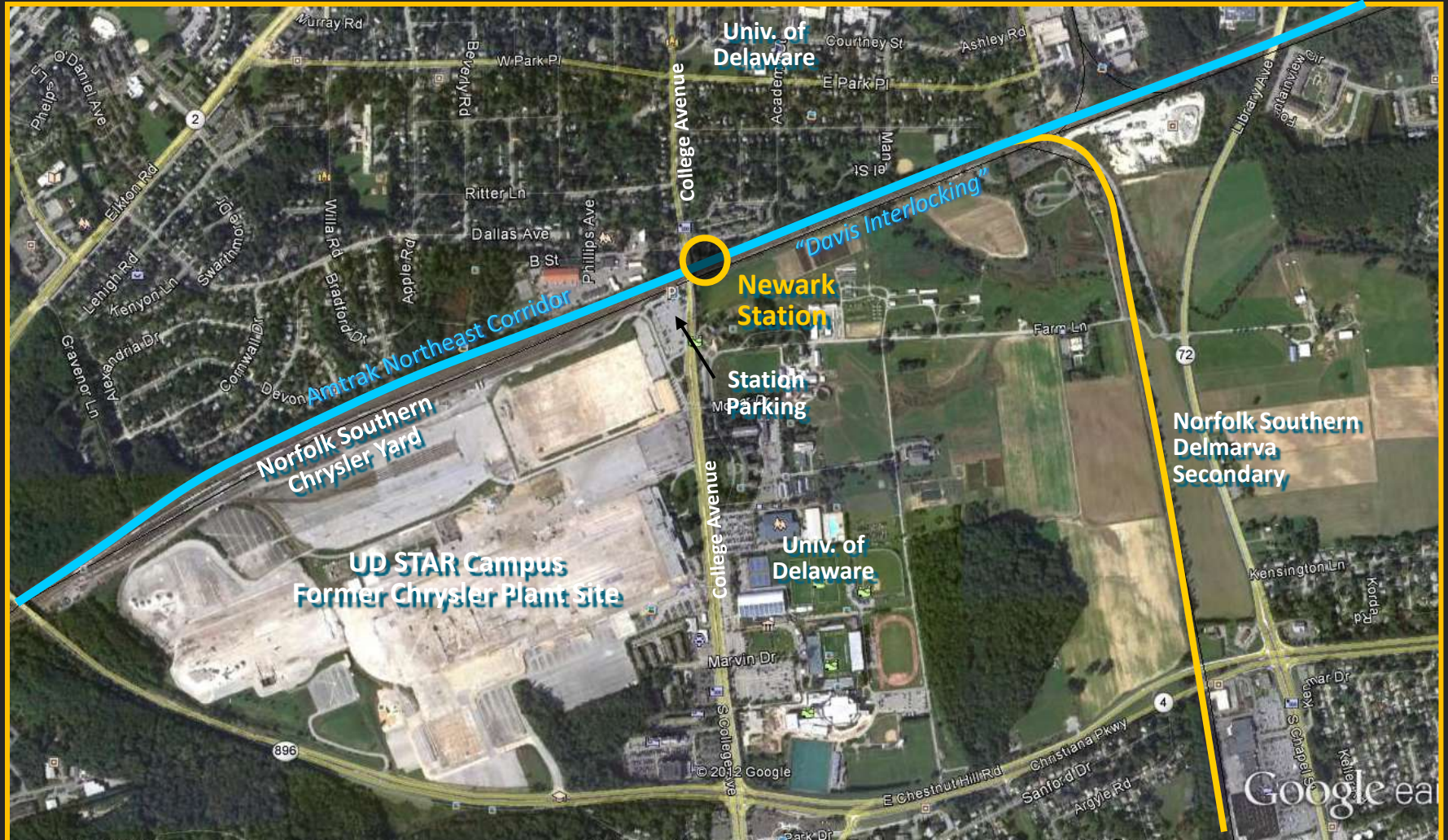


Project Studies

- 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



Newark Regional Transportation Center

Existing Conditions



Newark Regional Transportation Center

Newark Train Station Study

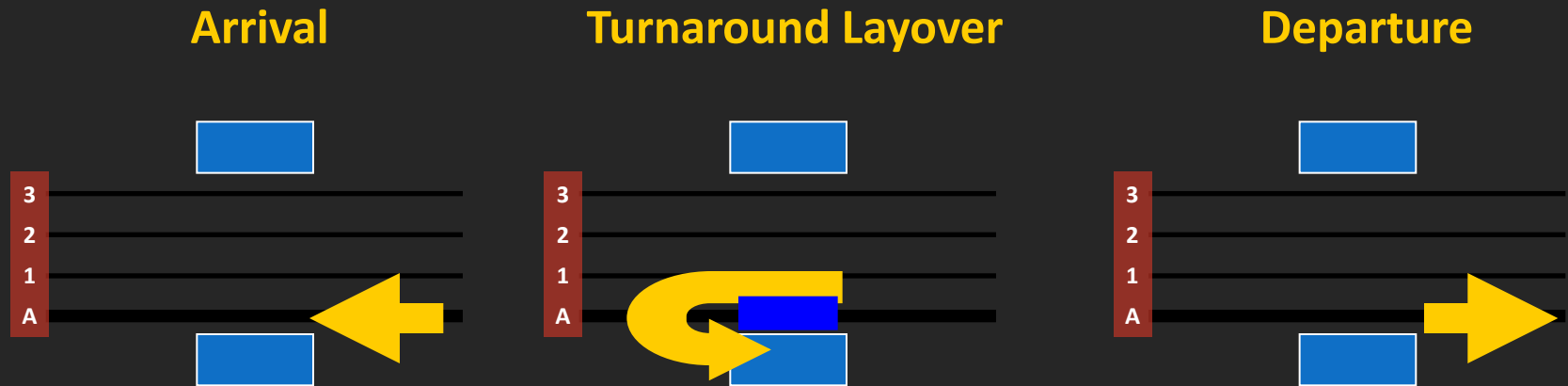
- Primarily an engineering and operational feasibility study
- Importance of study
 - UD Plans
 - Work within constraints of site
 - Build on previous studies
 - Opportunity for Newark
- A dual focus needed to address:
 - Conflicts between freight and commuter
 - How to accommodate expansion of passenger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



Newark Regional Transportation Center

Current SEPTA Operations

17 Trips per day/9 Trains

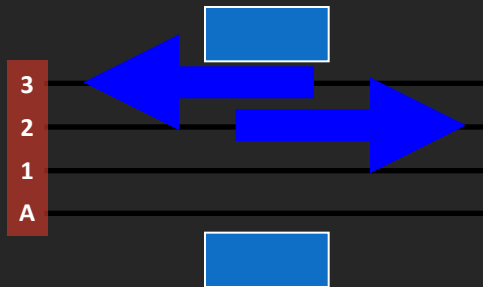


Morning and Evening Peak Periods Only

Newark Regional Transportation Center

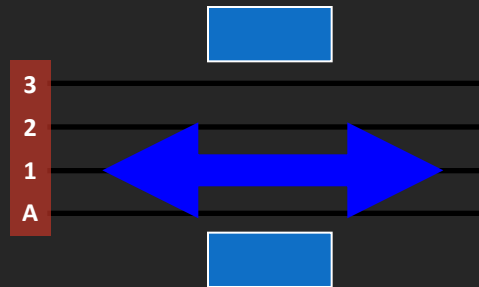
Current Operations – Amtrak

Non-stop Acela Express & Northeast Regional



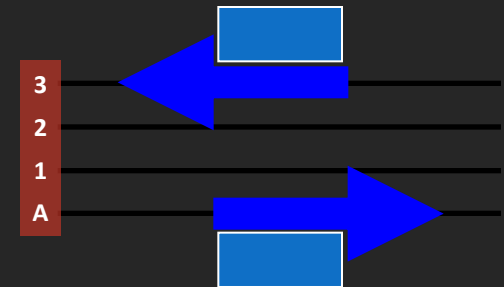
2 trains/hr. each way

Non-stop Long Distance Trains Being Overtaken



Up to 6 trains/day
each way
(irregular timing)

Northeast Regional Trains Stopping at Newark Station



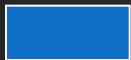
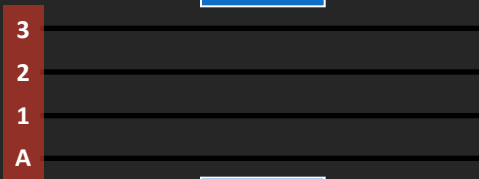
2 trains/day each way

Newark Regional Transportation Center

Current Operations – Norfolk Southern

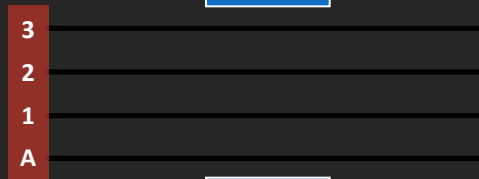
10 PM to 6 AM

?



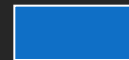
6 AM to 2 PM

?



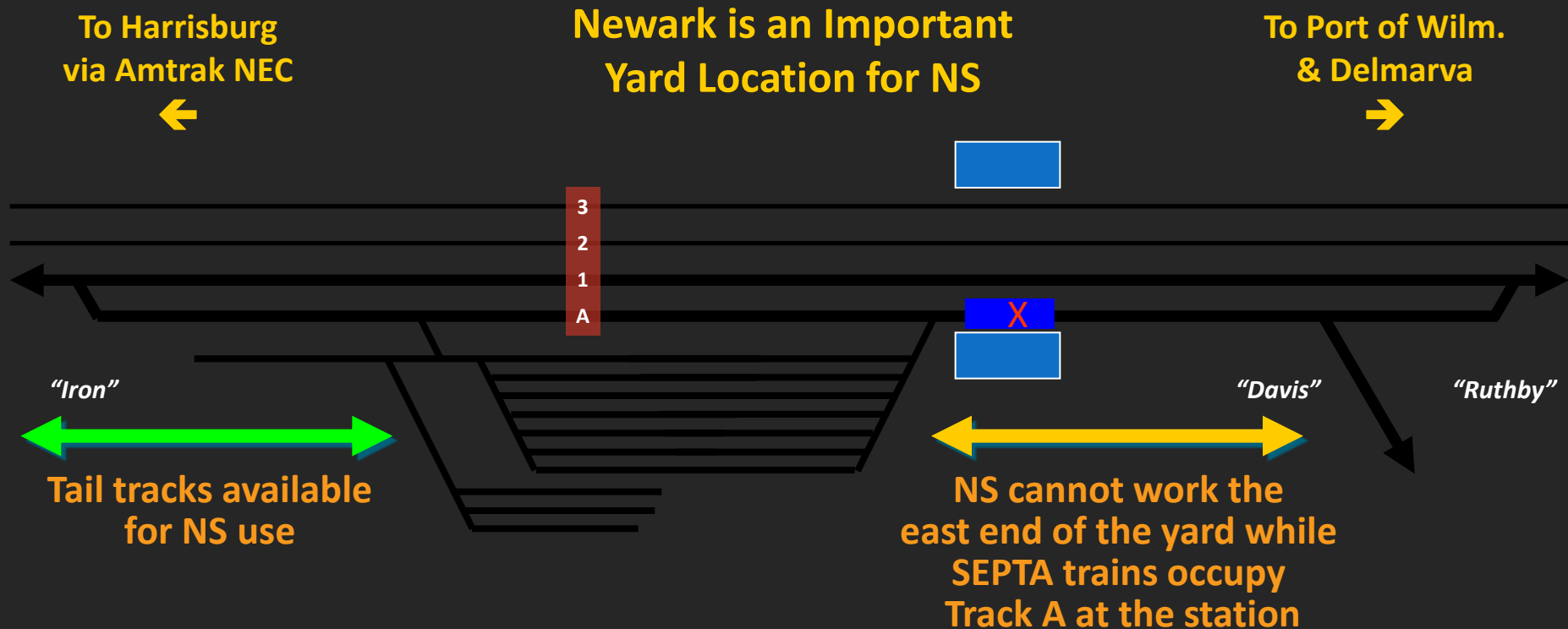
2 PM to 10 PM

?



Newark Regional Transportation Center

Current Operations – Norfolk Southern



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

Figure 10. Full Build Platform Configuration – Option 1 Double Island Platforms

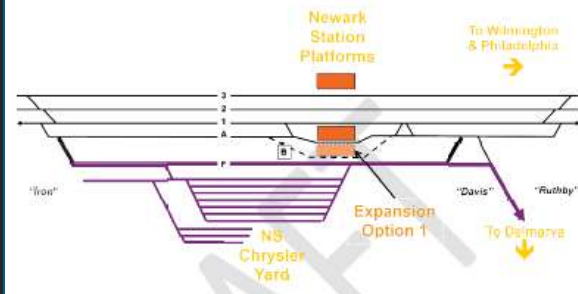
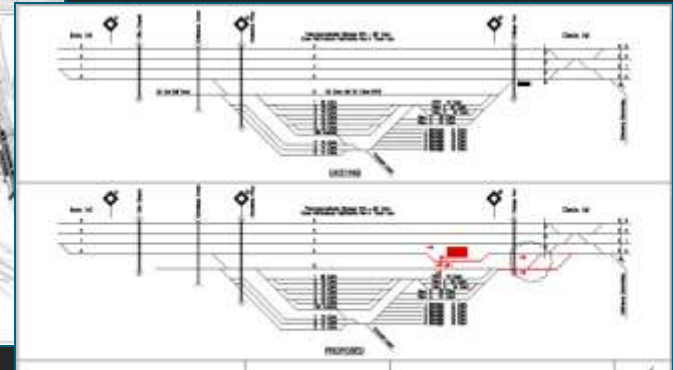
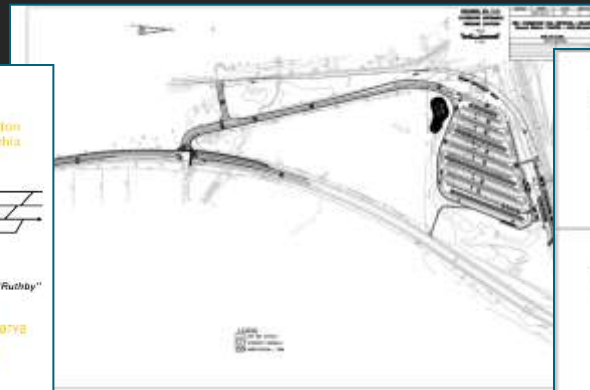
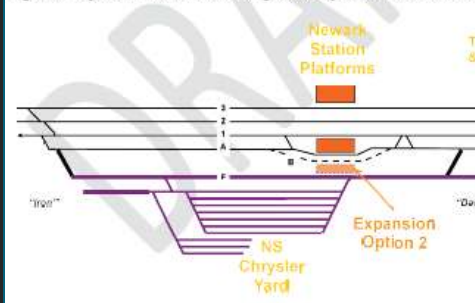
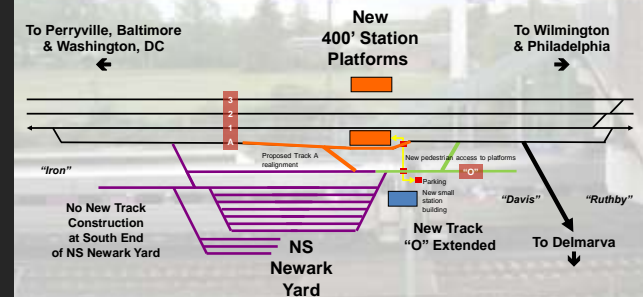


Figure 11. Proposed Full Build Platform Configuration – Option 2 Island and Side Platforms



Option 4e – Original Phase 1 Plan Modified



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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