



MULTI-MODAL

Circulation Handbook for Chester County, PA



Prepared by the Chester County Board of Commissioners and the Chester County Planning Commission

RTC Meeting

November 10, 2015



MULTI-MODAL

Circulation Handbook for Chester County, PA

Why a new Multimodal Handbook?

- **Circulation Handbook, 1994**
- **Chester County Public Transportation Plan**
“Completing the transit experience”
- **Changing Market Preferences**
“Multi-modal amenities are selling”

Handbook Purpose

To provide
municipal officials,
planners, traffic consultants,
designers, land owners and developers
with a consolidated reference guide on topics and issues which
relate to the integration of land use and circulation.



5 Guiding Principles



Eastside Flats, Malvern

Create pedestrian-oriented experiences and design to the human scale.



Route 3, West Goshen

Provide for all transportation modes.



Old Lancaster Road, Tredyffrin

Incorporate sustainable design features.



Phoenix Village, Phoenixville

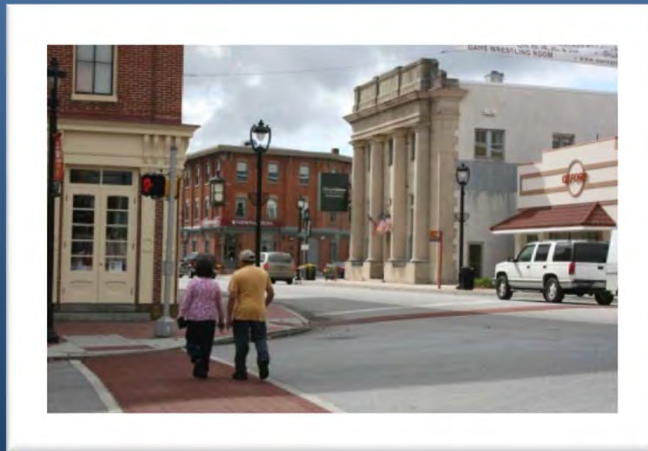
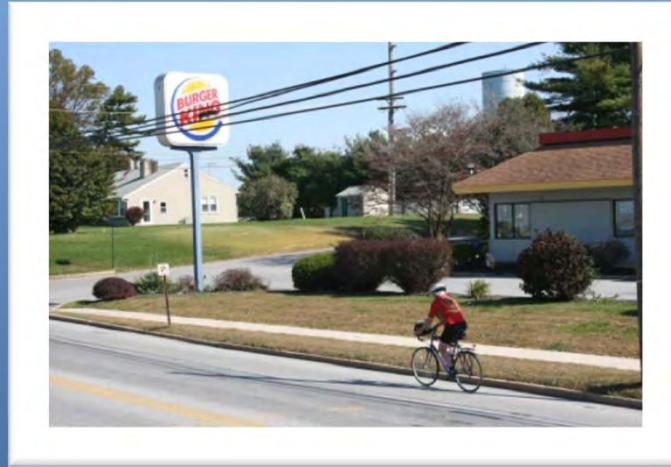
Integrate development as part of the community fabric.



Graphitz Mine Road, Upper Merion

Accommodate future growth.

Applying a Context-Sensitive Approach



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Circulation Handbook for Chester County, PA

Applying a Context-Sensitive Approach

CHAPTER 5 Transportation Context

RURAL to **URBAN**

RURAL

- Rural Places
- Suburban Neighborhood
- Suburban Corridor
- Suburban Center

URBAN

- Town/Village Neighborhood
- Town Center
- Urban Core

REGIONAL

- Regional Arterial
- Community Arterial
- Community Collector
- Neighborhood Collector
- Local Road/Street

LOCAL

The photos enclosed in a yellow box indicate the Town Center and Core City streets that also operate as a local or regional Main Street.

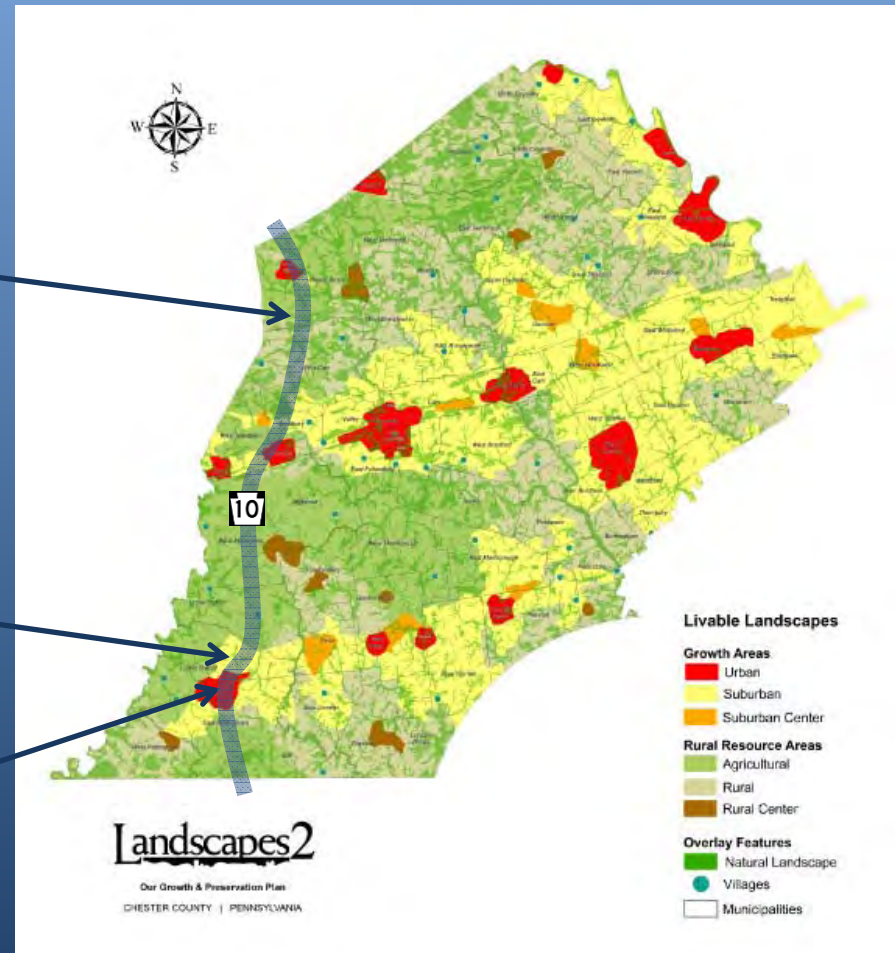
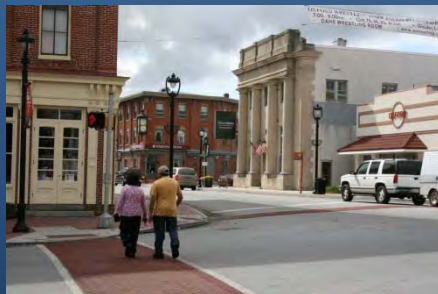
SMART TRANSPORTATION GUIDEBOOK
 Planning and Designing Highways and Streets that Support Sustainable and Livable Communities
 MARCH 2003

TRANSPORTATION GUIDEBOOK

CHAPTER 5 Transportation Context 31

Defining the Context

Step 1 – Determine Land Use Context

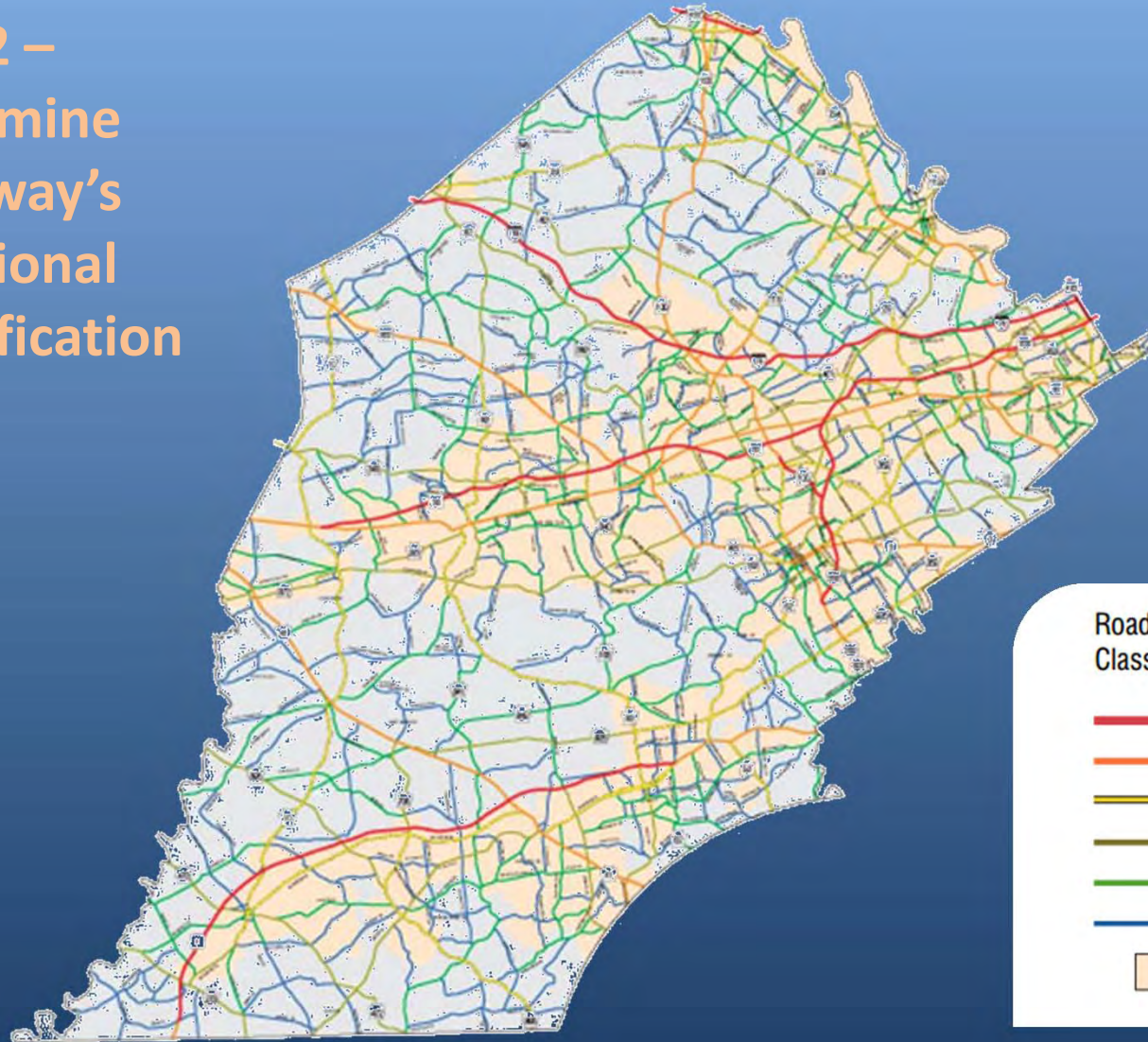


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Defining the Context

Step 2 – Determine Roadway's Functional Classification



Road Functional Classification

- Expressway
- Major arterial
- Minor arterial
- Major collector
- Minor collector
- Local distributor
- Growth area

Defining the Context

Step 3 – Translate between CCPC and PennDOT Definitions

Land Use Context

Landscapes2	PennDOT Smart Transportation
Urban	Town/ Village Center & Neighborhood
Suburban Center	Suburban Center
Suburban Center	Suburban Corridor & Neighborhood
Rural Center/ Village	Town/ Village Center
Rural Center/ Village	Rural
Ag	Rural

Functional Classification

CCPC	PennDOT Smart Transportation
Expressway	Expressway
Major Arterial	Regional Arterial
Minor Arterial	Community Arterial
Major Collector	Community Collector
Minor Collector	Neighborhood Collector
Local Distributor	Local
Local	Local

Defining the Context

Step 4 – Apply Design Criteria



Community Collector		Rural	Suburban Neighborhood	Suburban Corridor	Suburban Center	Town/Village Neighborhood	Town/Village Center	Urban Core
Roadway	Lane Width ¹	11' to 12'	10' to 12'	11' to 12'	10' to 11' with bike lanes; w/o bike lanes or shoulder, 14' for bike routes	10' to 11' with bike lanes; w/o bike lanes or shoulder, 14' for bike routes	10' to 11' with bike lanes; w/o bike lanes or shoulder, 14' for bike routes	10' to 11' with bike lanes; w/o bike lanes or shoulder, 14' for bike routes
	Paved Shoulder Width ²	4' to 8'	4' to 8' if no parking or bike lane	8' to 10'	4' to 6' (if no parking or bike lane)	4' (if no parking or bike lane)	4' (if no parking or bike lane)	4' (if no parking or bike lane)
	Parking Lane	NA	7'	NA	7' to 8' parallel; see 7.2 for angled	7' to 8' parallel; see 7.2 for angled	7' to 8' parallel; see 7.2 for angled	7' to 8' parallel; see 7.2 for angled
	Bike Lane	NA	5'	5' to 6'	5' to 6'	5' to 6'	5' to 6'	5' to 6'
	Median	NA	12 to 16 for LT, 6' for pedestrians only	12 to 16 for LT, 6' for pedestrians only	12 to 16 for LT, 6' for pedestrians only	12 to 16 for LT, 6' for pedestrians only	12 to 16 for LT, 6' for pedestrians only	12 to 16 for LT, 6' for pedestrians only
	Curb Return	20' to 40'	15' to 35'	20' to 40'	20' to 35'	10' to 25'	10' to 25'	10' to 30'
	Travel Lanes	2	2 to 4	2 to 4	2 to 4	2 to 4	2 to 4	2 to 4
Roadside	Clear Sidewalk Width	NA	4' to 5'	5' to 6'	6' to 8'	5' to 6'	6' to 8'	6' to 10'
	Buffer ³	NA	5'+	5' to 10'	4' to 5'	4' to 5'	4' to 5'	4' to 6'
	Shy Distance	NA	NA	NA	0' to 2'	0' to 2'	2'	2'
	Total Sidewalk Width	NA	4' to 5'	5' to 6'	10' to 15'	9' to 13'	12' to 15'	12' to 18'
Speed	Desired Operating Speed	35-55	25-30	30-35	25-30	25-30	25-30	25-30

- 1 11' to 12' preferred for heavy truck volumes > 5% and regular transit routes.
- 2 Shoulders should be installed in urban contexts only as part of a retrofit of wide travel lanes, to accommodate bicyclists.
- 3 Buffer is assumed to be planted area (grass, shrubs and/or trees) for suburban neighborhood and corridor contexts.

Design Elements

Multi-Modal Handbook

Introduction

Planning Principles

Design Elements

Bringing it all Together

Resources

View PDF

Design Elements: Introduction

While planning principles and design concepts provide a framework for the integration of land use and transportation planning, the application of principles and concepts is accomplished through specific, quantifiable design elements. The purpose of this chapter is to identify, describe and quantify the more significant design elements which need to be considered in the planning and design stages.

The design elements are arranged into the following categories:

Bicycle/Pedestrian Circulation	Public Transportation	Infrastructure/Amenities	Vehicular Circulation
<ul style="list-style-type: none">• ADA Accessibility• Bicycle Facilities• Pedestrian Facilities• Shared Use Facilities	<ul style="list-style-type: none">• Bus Stops• Park and Rides• Rail Stations and Transportation Centers	<ul style="list-style-type: none">• Bicycle Parking• Emergency Access• Landscape Material• Lighting• Noise Control• Parking• Setbacks and Building Placement• Signage (Non-Traffic Related)	<ul style="list-style-type: none">• Boulevard• Cul-de-sac and Spur Roads• Driveways• Intersections• Lane Design• Right-of-Way• Roadway Design Standards• Roundabouts• Traffic Calming• Vehicle Characteristics

Bringing it all Together

Commercial Centers



Bringing it all Together

Commercial Centers

Bicycle Parking

A secure location on-site or within a facility for the temporary storage of bicycles.



Bringing it all Together

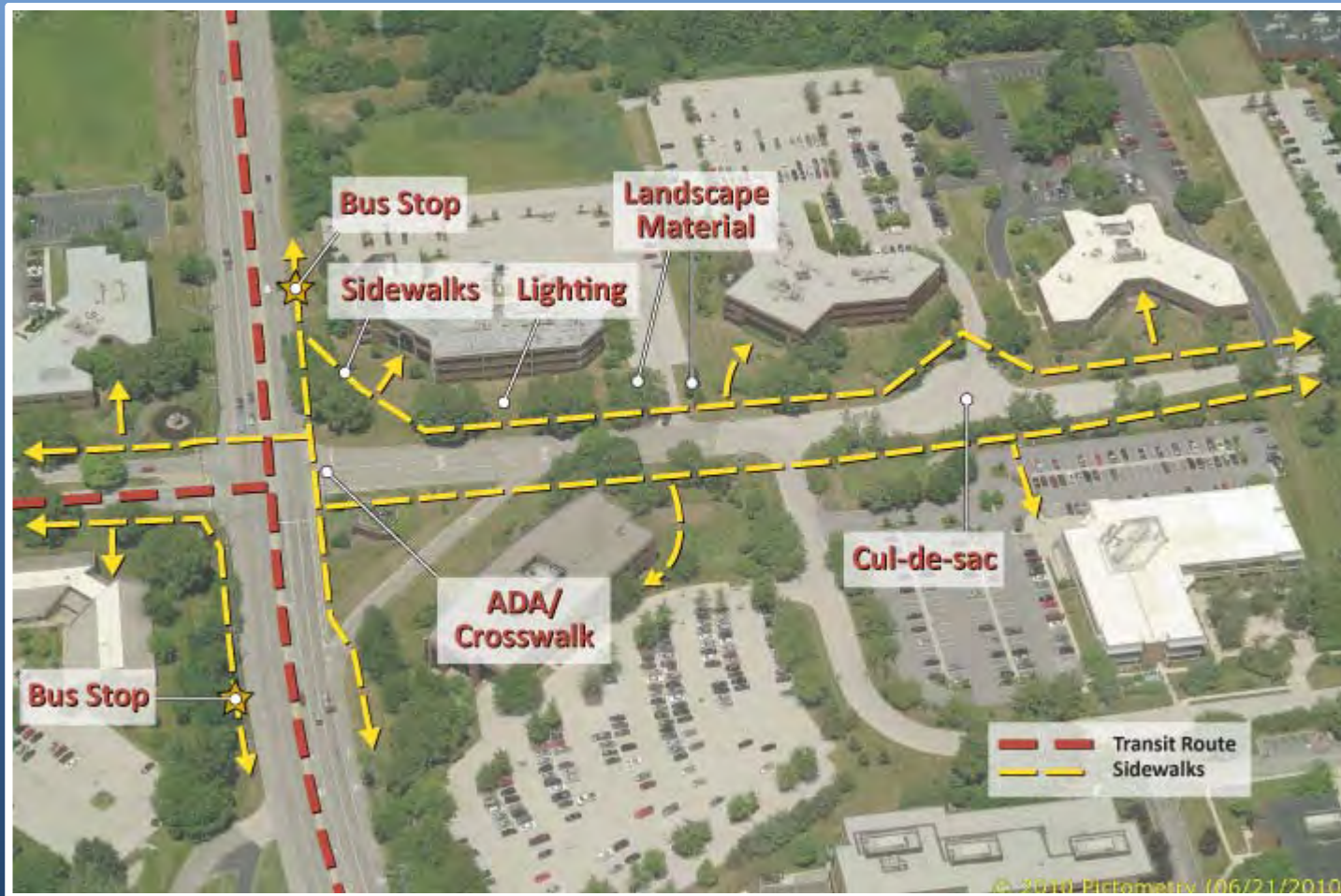
Bicycle Parking

Land Use	# of Bicycle Parking Spaces
Multi-family Residential	10 spaces for every 50 or more dwelling units
institutional, Commercial or Industrial	10 spaces for every 50,000 SF Gross Floor Area



Bringing it all Together

Corporate & Employment Centers



Bringing it all Together

Major Residential Subdivisions



Bringing it all Together

Streetscapes



Bringing it all Together

Chapter 4 Bringing It All Together

Land Development Review Checklist

General

- Is the project site located within a Landscapes2 Growth Area?
- Is the primary site access roadway a State Road or a Local Road?
- What is the functional classification of the primary access roadway?
- Is the project site located within more than one municipality?

Bicycle/Pedestrian

- Does the project site have an adjacent existing sidewalk/walkway system?
- Does the project site municipality have a bicycle/pedestrian mobility plan, or have any bicycle/pedestrian elements indicated on their Official Map or Comprehensive Plan?
- Is there an existing or planned regional multi-use trail located adjacent to or within a ¼ mile of the project site?
- Is there a proposed internal walkway system included with the proposed development?
- Does the proposed internal walkway system adhere to ADA standards (including required number of parking spaces, if applicable)?
- Is the proposed development a commercial, industrial, or institutional land use with equal to or greater than fifty-thousand (50,000) square feet, OR a multifamily residential development with 50 or more dwelling units? If yes, is there proposed Bicycle Parking?
- If not within the thresholds noted above, would Bicycle Parking be appropriate for the proposed development/land use?

Public Transportation

- Is the project site/proposed development located along an existing public transit route? Within ¼ mile?
- Is there an existing bus stop located at or adjacent to the proposed development? If yes, how many daily boards are associated with that stop?
- Is there a bus stop proposed with the development? If yes, are there sidewalks/walkways connecting the proposed bus stop to the nearest building entrance or existing pedestrian system?
- Is the proposed development a commercial, industrial, or institutional land use with equal to or greater than fifty-thousand (50,000) square feet? If yes, is there a proposed bus stop?

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Chapter 4 Bringing It All Together

- Is the proposed development a residential development equal to or greater than one hundred (100) dwellings units? If yes, will the proposed community have school age children? If yes to one or both, is there a proposed bus stop(s)?
- Is there an opportunity to provide for a shared use Park and Ride facility?

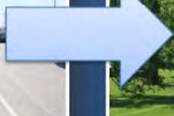
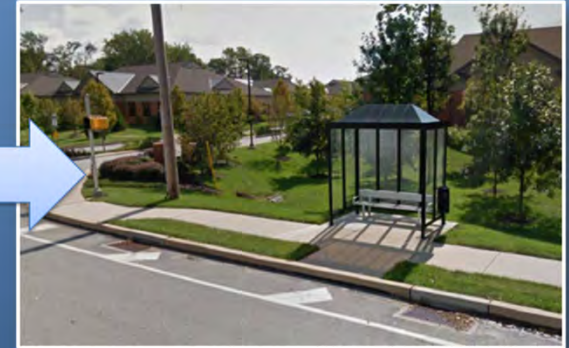
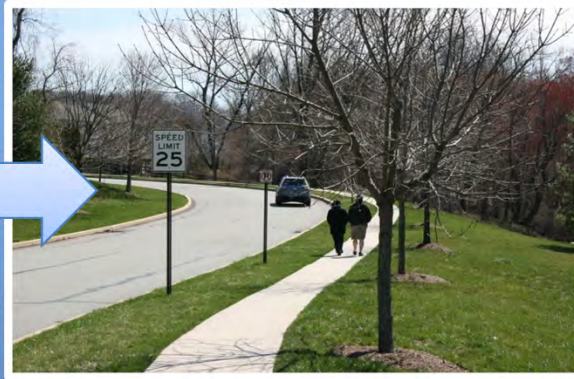
Infrastructure & Amenities

- Is Emergency Access included in the proposed land development plans?
- Will the proposed land use generate significant night time use? If yes, is there a lighting plan included with the land development plans?
- Is the proposed number of parking spaces appropriate for the proposed land use?
- Are there any opportunities for shared use parking?
- Are there any required buffers for adjacent land uses?
- Does the land development proposal include a Landscape Plan prepared by a landscape architect?

Vehicular Circulation

- Does the proposed development's street design match/comply with Multimodal Handbook standards?
 - Acceleration/Deceleration Lanes
 - Boulevard
 - Cul-de-Sac/Spur Roads
 - Lane Design (Local & Internal Roadways)
 - Roundabouts
 - Traffic Calming Measures
- Do the proposed driveways/intersections provide for clear sight triangles and adequate sight and stopping distances?
- Are the proposed local and internal roadway lane widths appropriate for the development?
- Does the proposed development's circulation system provide the proper turning radii for all vehicle types that will use the development, including service and emergency vehicles?
- Is the adjacent public right-of-way(s) wide enough to accommodate future widening of the roadway?

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Outreach & Marketing

- Marketing Materials/ Social Media
- Presentations/ Workshops
- Bus Stop Improvement Plans

Outreach & Marketing



Social Media :



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Outreach & Marketing

- **Professional Conferences**

MASITE – 10/5/15

ASLA – 4/8/16-4/9/16 ~ Still waiting

- **Local Planning Partner Meetings**

CCATO

Chester County Engineers

Urban Centers

- **CCPC Hosted Workshops**

Outreach & Marketing





Chester County Planning Commission

William Deguffroy, AICP
Transportation Planner

Randy Waltermeyer, AICP
Transportation Services Director

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Circulation Handbook for Chester County, PA





Regional Transportation Committee | November 10, 2015

CITY BRANCH

Transit Feasibility Study

STUDY AREA



STAKEHOLDER PARTICIPATION



- **Strategic Planning**
- **Service Planning**
- **Engineering (Bridges and Buildings)**
- **Financial Analysis and Operational Performance**



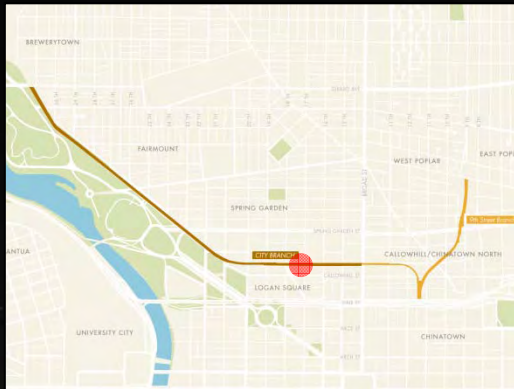
- **City Planning Commission**
- **Mayor's Office of Transportation and Utilities**
- **Parks and Recreation**

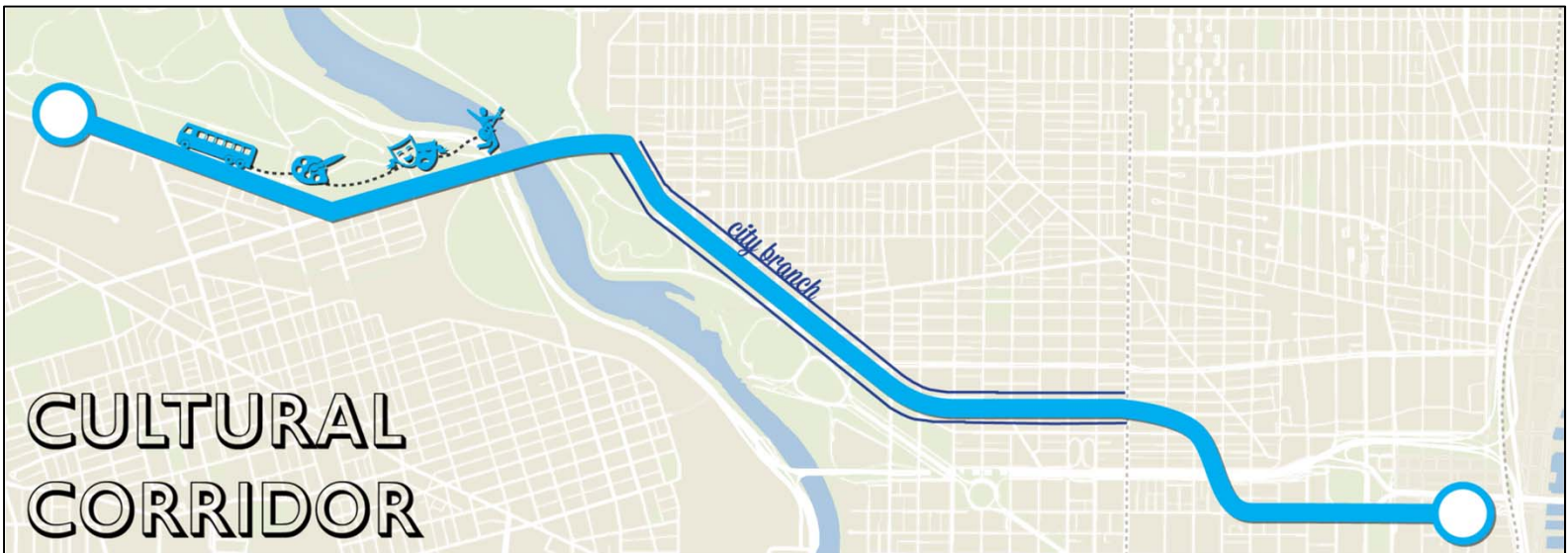
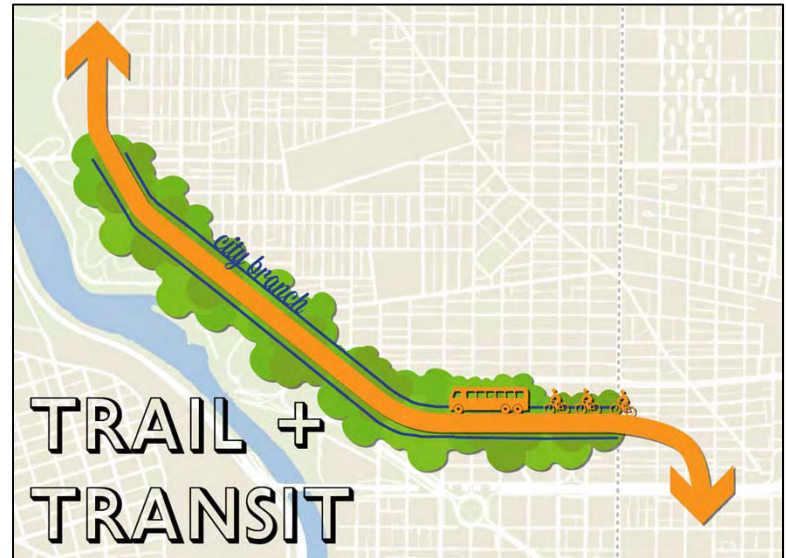
Nonprofit Organizations

- **Center City District**
- **Fairmount Civic Assoc.**
- **Friends of the Rail Park**
- **Independence Visitor Center**
- **Logan Square Neighborhood Assoc.**
- **The Parkway Council**
- **Philadelphia Convention and Visitors Bureau**
- **Visit Philadelphia**

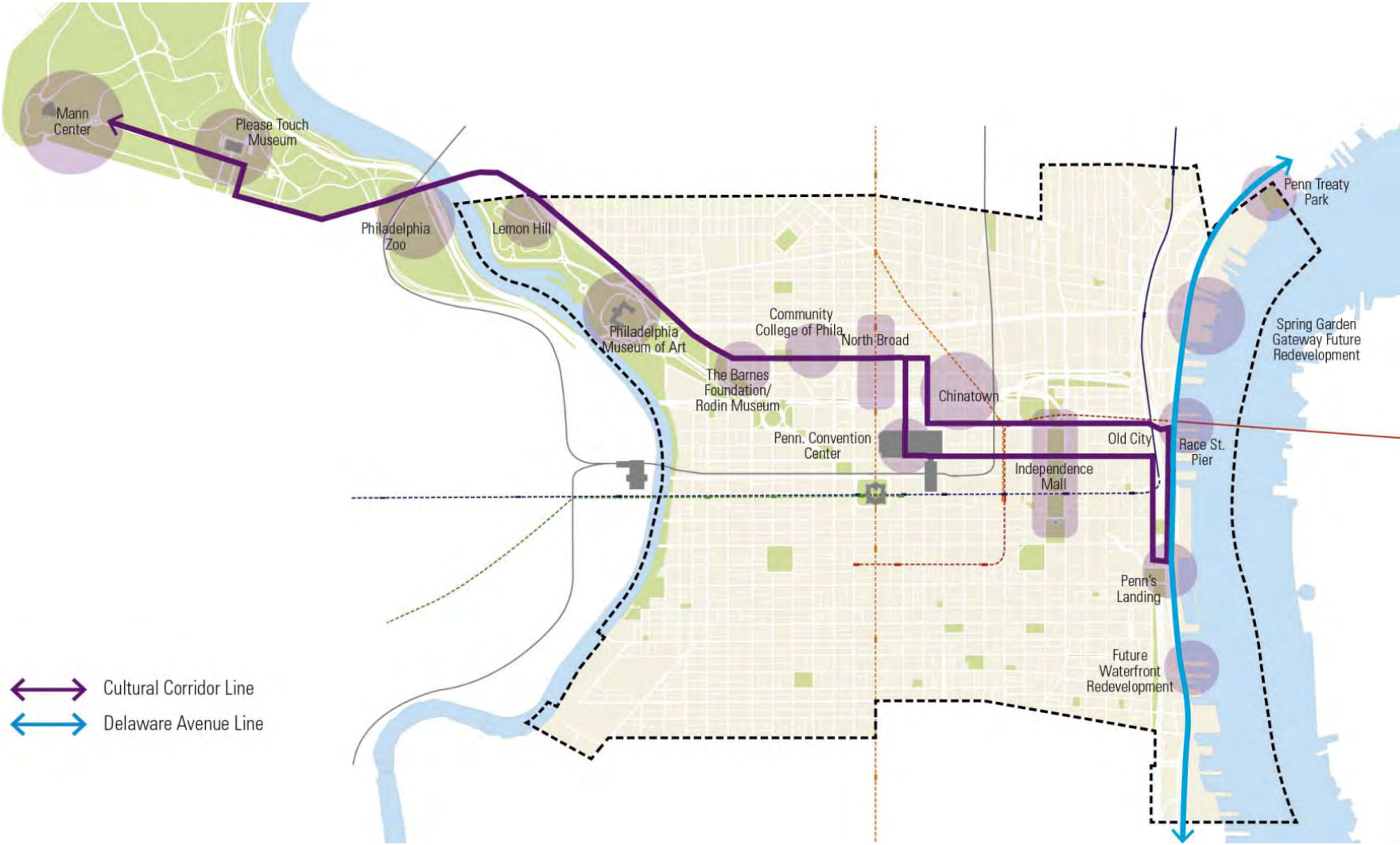
Real Estate Developers

- **Pearl Properties**
- **Ranger Properties**



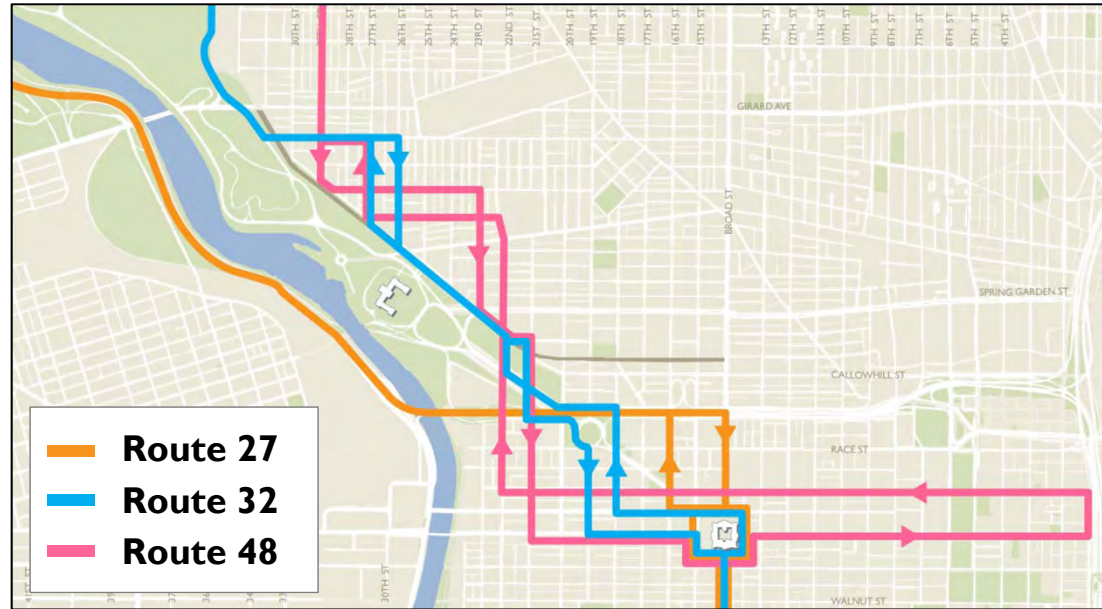


CULTURAL CORRIDOR — Conceptual Feasibility

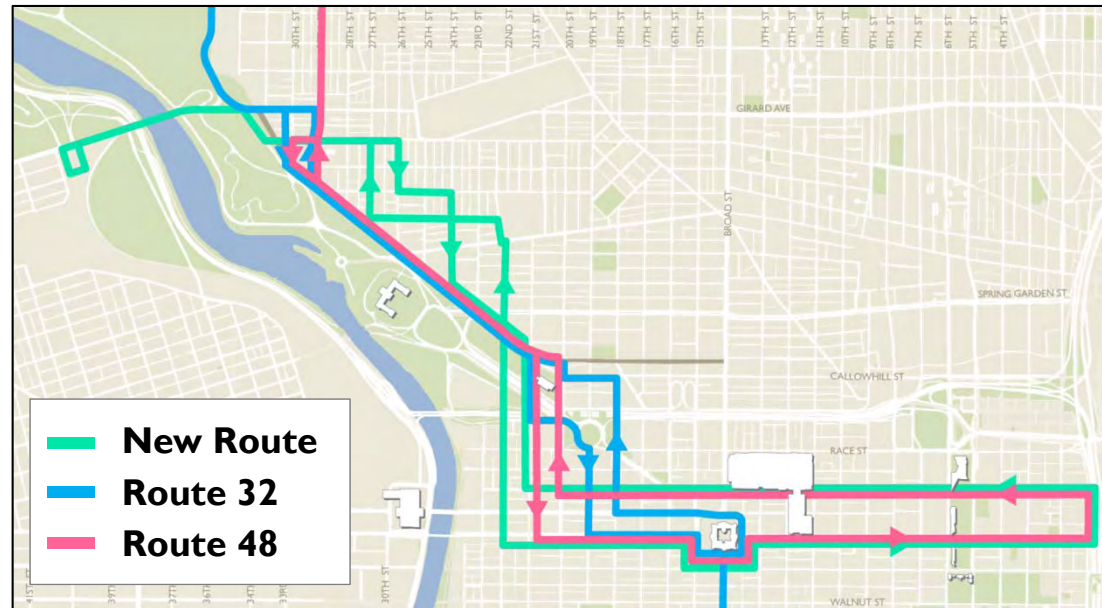


EXPRESS BUSWAY — Operational Feasibility

Existing

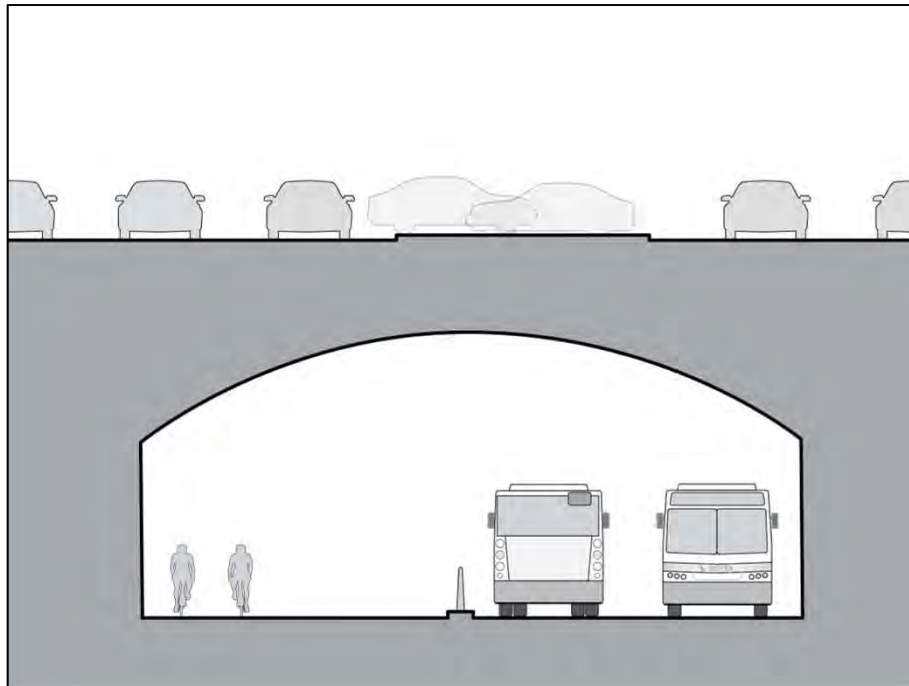


Proposed

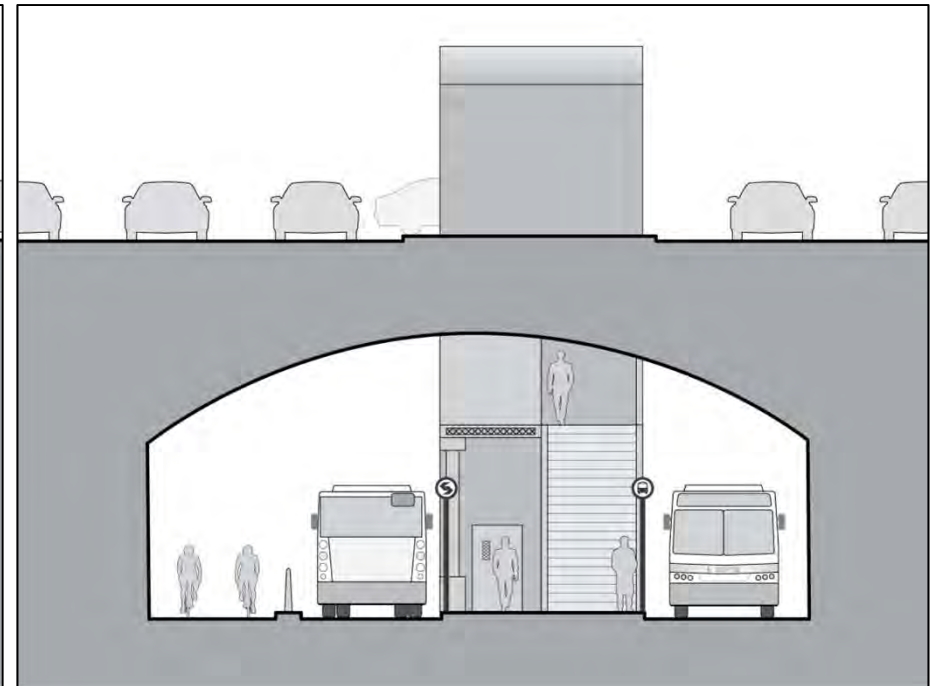


TRAIL + TRANSIT — Physical Feasibility

In the tunnel:



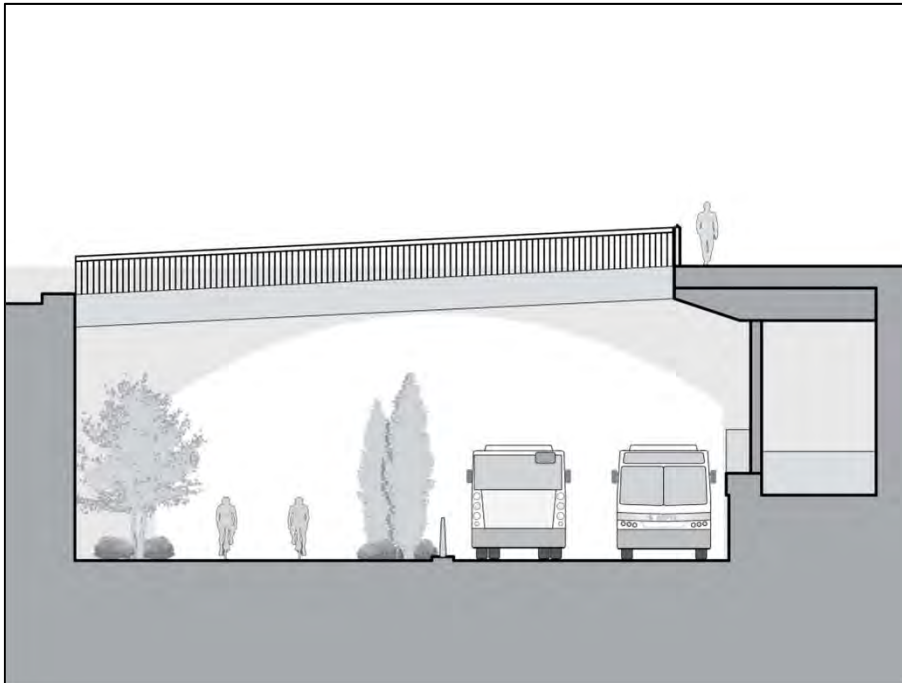
Standard Busway with Bike Facility



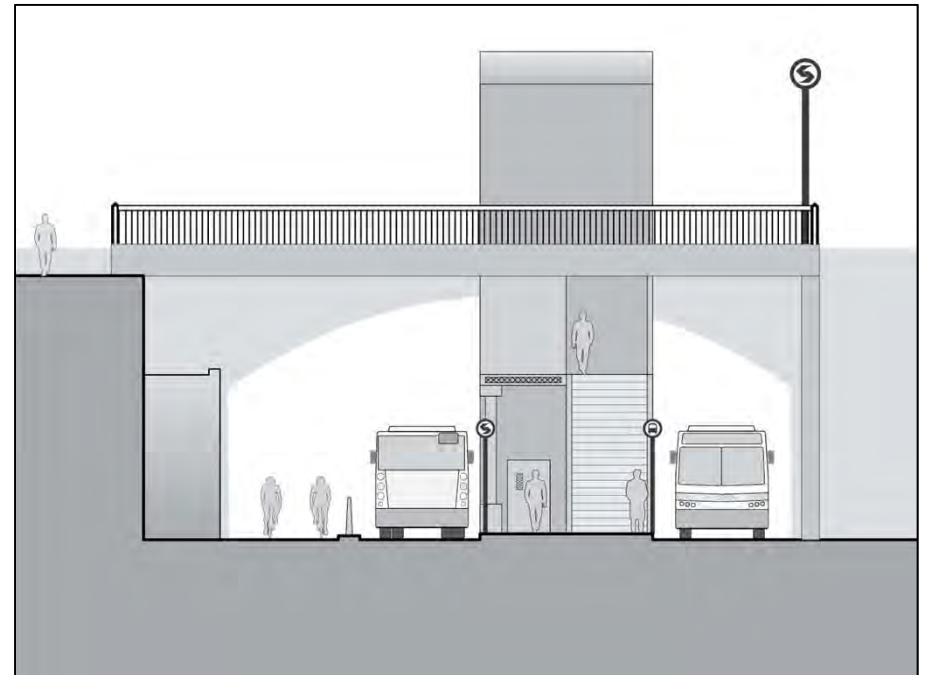
Busway with Bike Facility at Station

TRAIL + TRANSIT — Physical Feasibility

In the cut:



Standard Busway with Bike Facility



Busway with Bike Facility at Station

COST ESTIMATES



Bus Station Within Tunnel, 100 LF Increment
Scenario One - Elevator Through Street Level Gate
 EM&C Project Development - Cost Engineering
 September 25, 2014

Description	Quantity	Unit	Unit Cost	Extension
Demolish & Disposal of Tunnel Paving Per 100 LF	5200	SF	\$90.00	\$468,000
U/G Drainage (Assumed 18" Dia RCP) Per 100 LF	100	LF	\$250.00	\$25,000
Precast Catch Basin w/ Casting	1	Each	\$9,500.00	\$9,500
Repair to Tunnel Masonry Ceiling 100LF (Non Structural)	100	LF	\$7,500.00	\$750,000
HS Grout Inject	100	SQFT	\$200.00	\$20,000
In Tunnel MRL 2 Stop Elevator w/ Glass Tower through Air Gate with Minor Structural Mod. and Stair	1	Each	\$3,150,000.00	\$3,150,000
16' Wide X 80' Bus Platform at Elevator w/ Furnishings, Signage & Lighting	1280	SQFT	\$200.00	\$256,000
Bus Way 10" Thick CIP Concrete Per 100 LF / Two Lanes	2200	SQFT	\$150.00	\$330,000
Pedestrian Walk / Bicycle Path CIP Concrete 6" Thick X 11' X 100 LF	1100	SQFT	\$90.00	\$99,000
2' Wide Separation Between Bus Ways 8" Pipe Bollard & Chain 10' O.C.	100	LF	\$250.00	\$25,000
Miscellaneous Finishes within Tunnel (Within 100 LF along Tunnel)	100	LF	\$280.00	\$28,000
Police Enclosure 10'X15'	1	Allowance	\$50,000.00	\$50,000
FDC from Street Level and Feed along Tunnel 100LF	1	Allowance	\$200,000.00	\$200,000
Secondary Power Distribution 100 LF in Tunnel	100	LF	\$175.00	\$17,500
General Lighting in Tunnel Per 100 LF LED Fixtures	100	LF	\$250.00	\$25,000
Total Scenario One				\$5,703,000

Order of Magnitude \$6,000,000 to \$7,000,000

Exclusions

Hazardous Material Remediation
 Escalation
 Premium Time Labor
 Unclassified Excavation
 Tunnel Linings

Utility Relocation
 Design / Force Account Fees
 Stair Towers Beyond Elevator Locations
 PC Pavers
 Landscaping at Cut

Fencing
 Repairs to Cut Retaining Wall
 Fire Sprinkler System
 CCTV
 Asphalt Paving

Exhaust Fans
 Landscaping
 Power Feeder, Primary & MDP
 Emergency Generator
 FDC - Main & Wet Tap

Express Busway
 ≈ \$ 119 mil.

Cultural Corridor
 ≈ \$ 138 mil.

Transit + Trail
 ≈ \$ 147 mil.

***PLUS LOTS
 OF EXCLUSIONS**

RECOMMENDATIONS

Not these, not now.

Any proposed use will be expensive

Its use could be a *future* transit solution

RECOMMENDATIONS

**Preserve the City
Branch for future
transit use until major
changes in:**



Population



Employment center location



Transit ridership



VMT



Transportation funding

ACTIONS

Support enhanced PHLASH service

Investigate bus route modifications

Expand street-level bike/ped. facilities

Establish a City Branch Transit Master Plan

Identify interim uses

Publish right-of-way preservation guidelines

- NEC FUTURE: A Rail Investment Plan for the Northeast Corridor

Our Future on Track



 U.S. Department of Transportation
Federal Railroad Administration

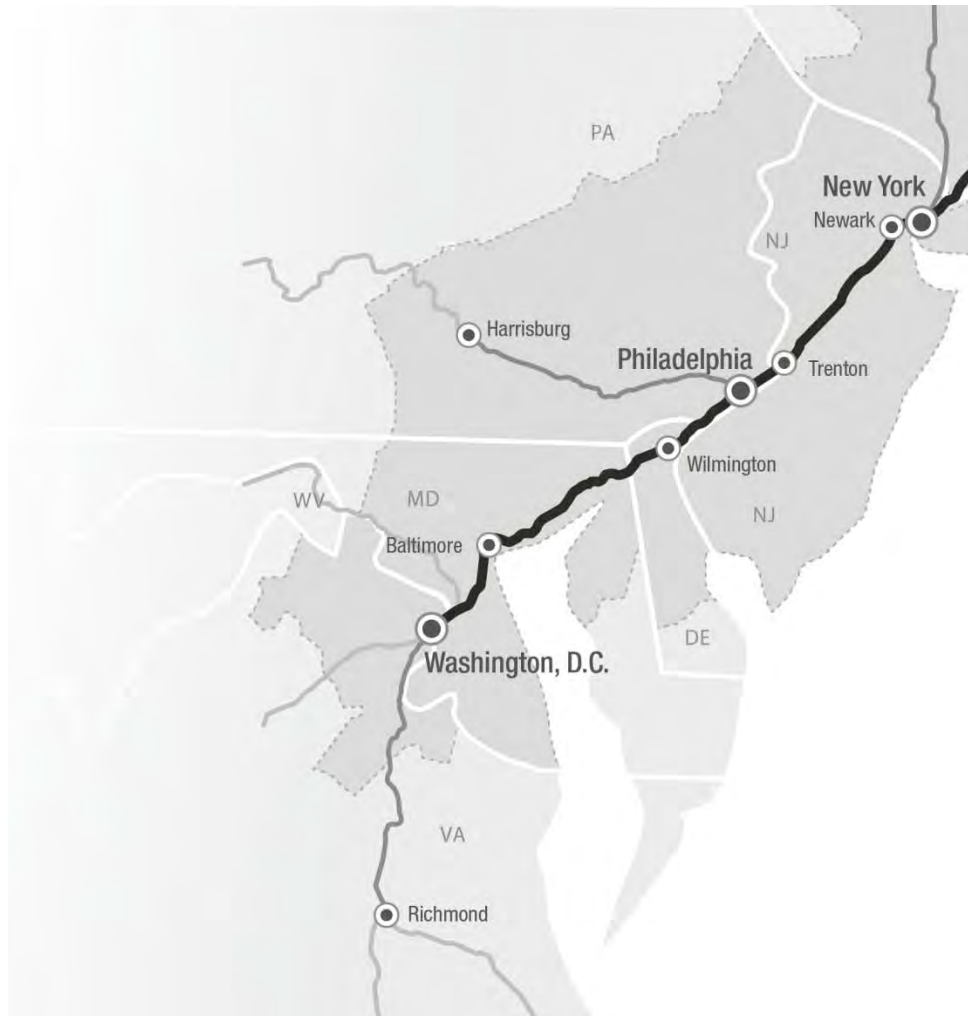


Agenda

DVRPC - Regional Technical Committee
November 10, 2015

- Program Overview
- Alternatives
- Tier 1 EIS Highlights
- Public Hearings and Comment Period
- Next Steps

The Big Picture



NEC FUTURE is a comprehensive plan for the Northeast Corridor

- ✓ Long-term vision
- ✓ Incremental approach

EXISTING:

-  Study Area
-  NEC
-  Connecting Rail Corridor
-  National Rail Network
-  Rail Station

The Big Questions

➤ How will the NEC keep pace with growth in the Northeast?

➤ What role will it play in the region's future?

Key Needs

The investment plan will address key needs:



State of Good
Repair



Connectivity



Capacity



Performance



System-Wide
Resiliency

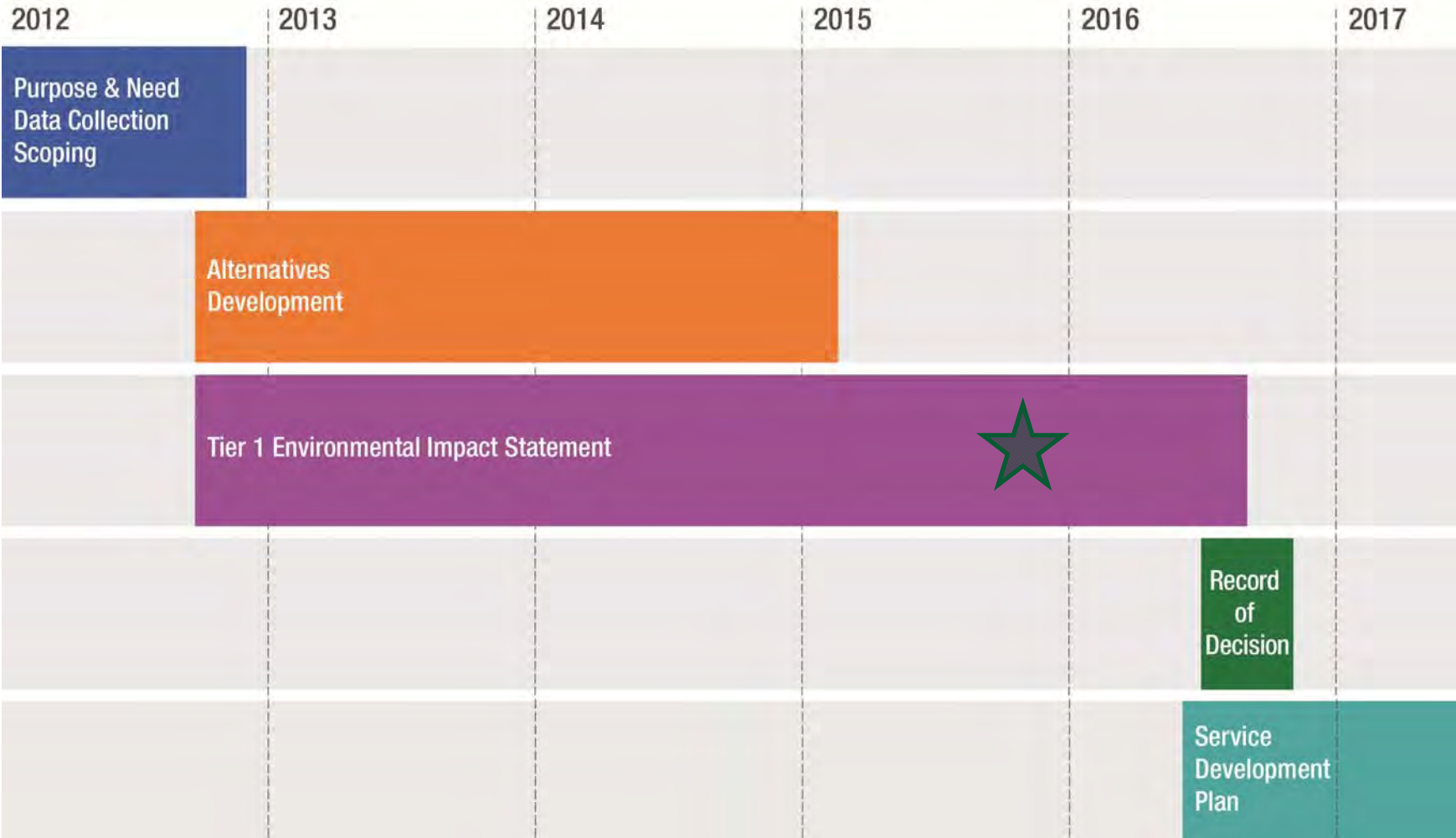


Environmental
Sustainability



Economic
Growth

Schedule



The Process is Collaborative

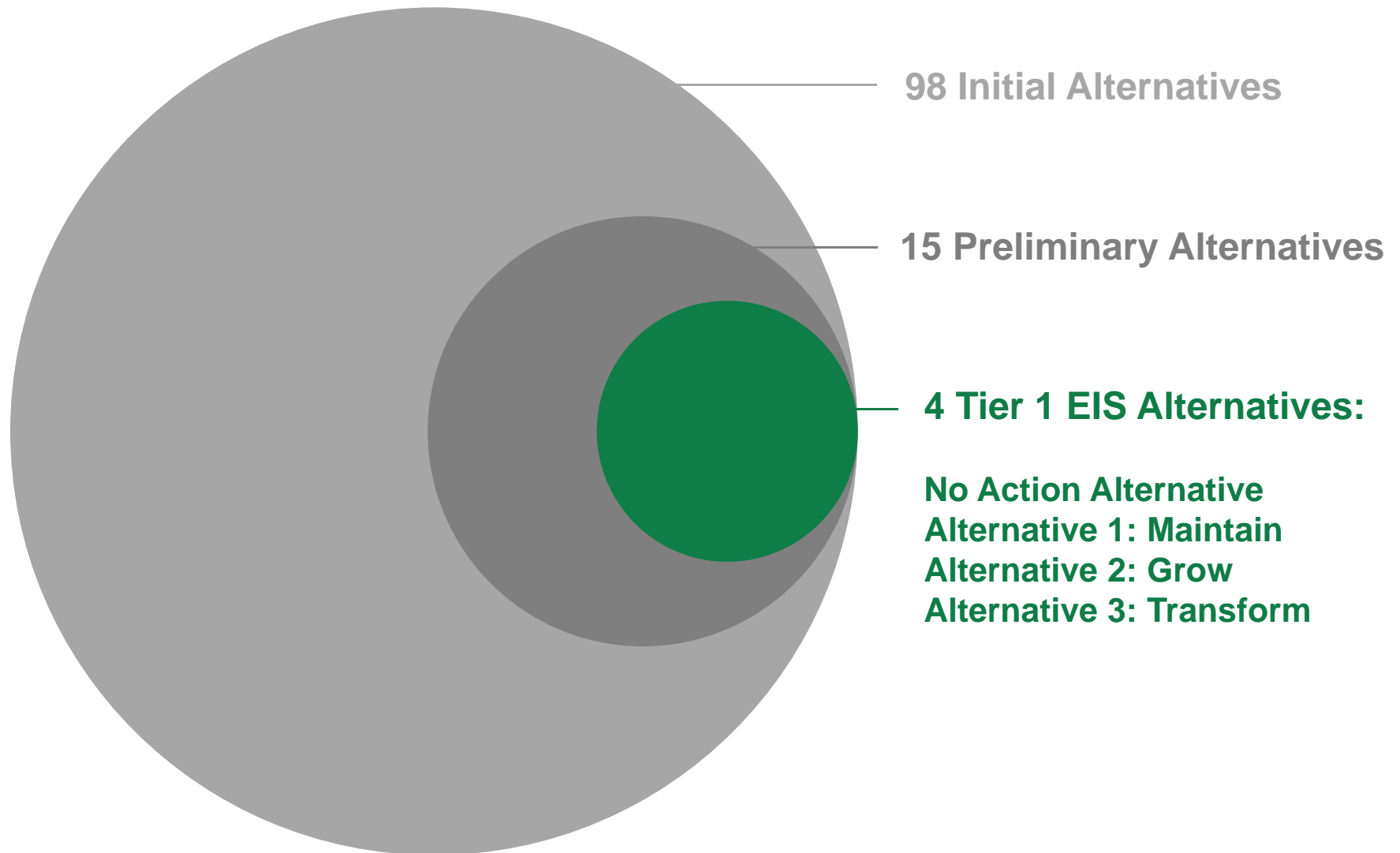
- 8 NEC states, the District of Columbia, and adjoining states
- NEC Commission
- Passenger and freight railroad operators
- Federal Transit Administration, a Cooperating Agency in the NEPA process
- Federal and state environmental resource and regulatory agencies
- Metropolitan Planning Organizations
- Businesses and organizations
- Public





Let's Talk
Alternatives

Alternatives Development



What's in an **Alternative**?

Each Action Alternative is an investment program consisting of:

Infrastructure improvements, defined at a conceptual level, that support the level of service identified



The level of passenger rail service that will be provided in 2040

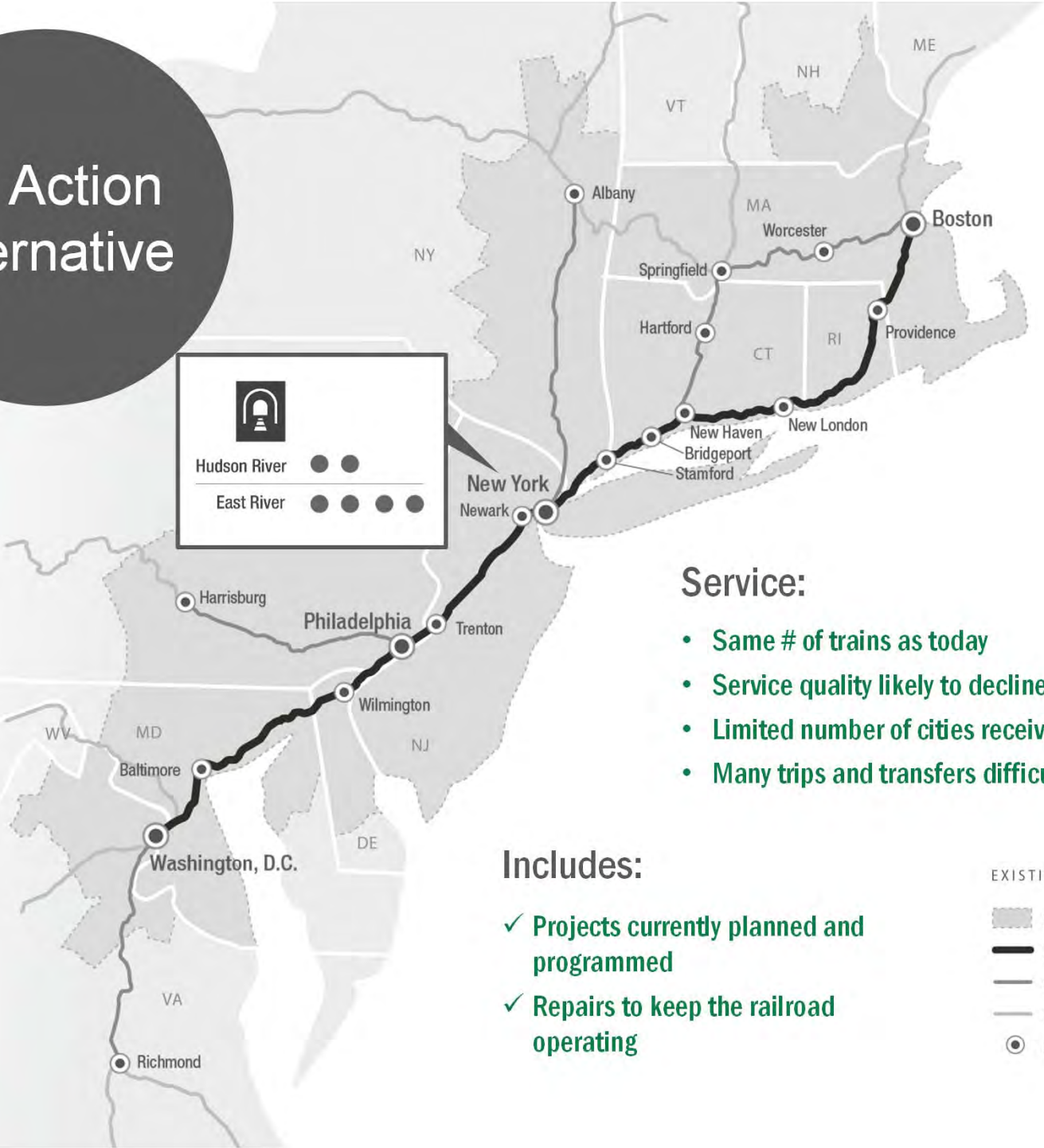


A set of geographic markets (cities) to be served by passenger rail

A representative route that connects these markets

No Action Alternative

 Hudson River ● ●
 East River ● ● ● ●








Service:

- Same # of trains as today
- Service quality likely to decline
- Limited number of cities receive intercity service
- Many trips and transfers difficult to make

Includes:

- ✓ Projects currently planned and programmed
- ✓ Repairs to keep the railroad operating

EXISTING:

-  Study Area
-  NEC
-  Connecting Rail Corridor
-  National Rail Network
-  Rail Station (not all shown)

Alternative 1: Maintain





Old Saybrook, CT to
Kenyon, RI

B&P Tunnel Replacement








Hudson River	●	●	●	●
East River	●	●	●	●

REPRESENTATIVE IMPROVEMENTS:

-  New Segment
-  Potential Station (not all shown)
-  New Track
-  Chokepoint Relief Project

EXISTING:

-  Study Area
-  NEC
-  Connecting Rail Corridor
-  National Rail Network
-  Rail Station (not all shown)




Alternative 1

Service benefits to the Philadelphia metropolitan area

- Regular peak headways
- Increased zone express service from outer service zones (Delaware and Trenton)
- Expanded Intercity and Regional rail service at locations with significant employment or regional transportation connectivity (Newark, DE, Baldwin, PA, Cornwell's Hts, PA)
- Intercity-Express service from Philadelphia to New York in 60 minutes every 30 minutes in peak periods and every 60 minutes off-peak
- Improved capacity for rolling stock storage and maintenance at service end points

Alternative 2: Grow





Hudson River	●	●	●	●	●	●	●
East River	●	●	●	●	●	●	●

- REPRESENTATIVE IMPROVEMENTS:
- New Segment
 - Potential Station (not all shown)
 - New Track
 - Chokepoint Relief Project
- EXISTING:
- Study Area
 - NEC
 - Connecting Rail Corridor
 - National Rail Network
 - Rail Station (not all shown)

Alternative 2

Service benefits to the Philadelphia metropolitan area

- 15-minute peak Regional rail headways or better at all NEC stations and on branch lines feeding NEC
- One-seat ride weekday peak period Regional rail service between Center City, Philadelphia and New York
- Regional rail zone express service from multiple zones on NEC lines
- Intercity-Express service from Philadelphia to New York in 55 minutes
- Metropolitan service at key stations at 15-minute headways
- Potential for integrated timed connections at 30th Street Station
- Direct Metropolitan service to Philadelphia International Airport

Alternative 3: Transform



Hudson River ●●●●●●●●●●

East River ●●●●●●●●●●

- REPRESENTATIVE IMPROVEMENTS:
- Southern Route (Second NEC Spine)
 - Potential Station (not all shown)
 - - - Northern Route Options (Second NEC Spine)
 - New Segment
 - New Track
 - Chokepoint Relief Project
- EXISTING:
- Study Area
 - NEC
 - Connecting Rail Corridor
 - National Rail Network
 - Rail Station (not all shown)

Alternative 3

Service benefits to the Philadelphia metropolitan area

- Integrated Intercity and Regional rail service across six-track NEC
- Increased Regional rail service frequency
- Non-stop Intercity-Express service from Philadelphia to New York in 40 minutes
- Metropolitan service at key stations at 15-minute headways
- Capacity for new or increased branch line service and new or expanded Intercity connecting corridor service
- New downtown Philadelphia and Philadelphia International Airport stations offering Intercity-Express and Metropolitan service

Common Elements



Despite differences in how they achieve these elements, each of the three Action Alternatives:

- ✓ Maintains and improves service on the existing NEC
- ✓ Brings the NEC to a state of good repair
- ✓ Addresses the most pressing chokepoints that limit the railroad's capacity and undermine reliability
- ✓ Protects freight rail access and the opportunity for future expansion
- ✓ Incorporates innovative approaches to improve passenger experience and increase efficiency

Innovative Approaches

All of the Action Alternatives include innovative approaches that improve the passenger experience. Examples include:

New Intercity
Service

Improved
Equipment

Easier
Transfers

Coordinated
Scheduling and
Ticketing



A Rail Investment Plan for
the Northeast Corridor

TIER 1
DRAFT
ENVIRONMENTAL
IMPACT
STATEMENT

NOVEMBER 2015

Tier 1 Draft EIS Highlights



U.S. Department of Transportation
Federal Railroad Administration

Tier 1 Draft EIS

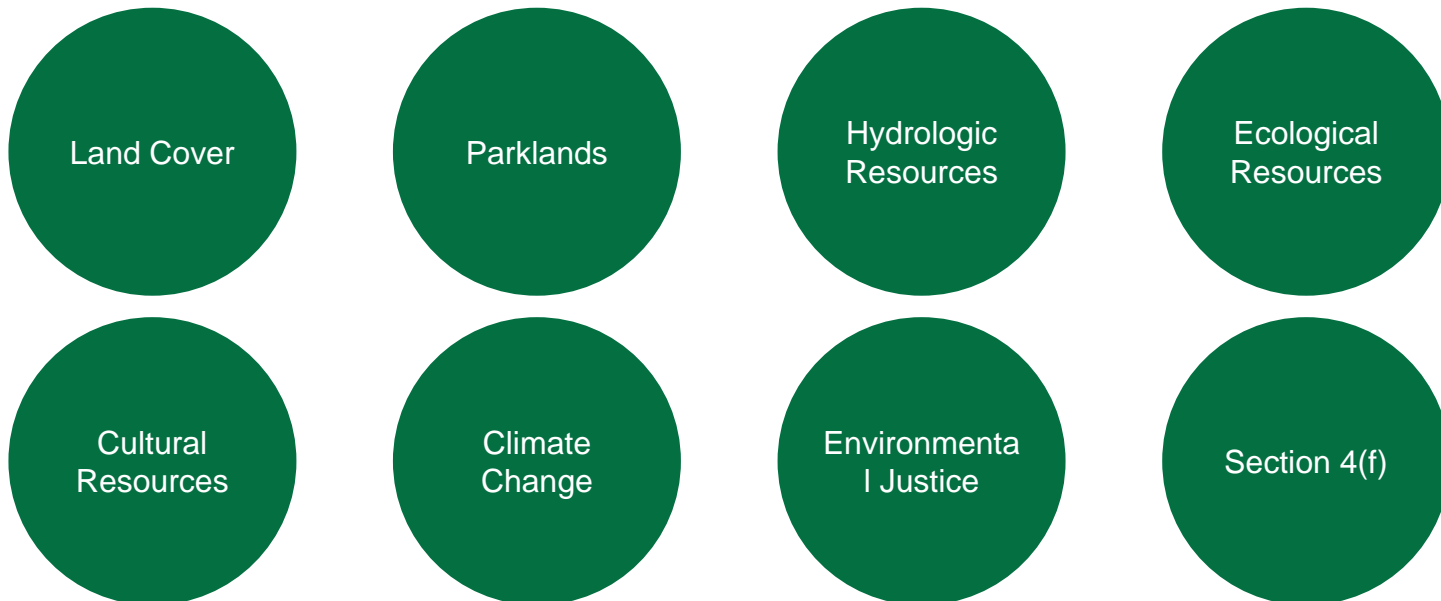
- ❑ Evaluates the No Action and All 3 Action Alternatives
 - Alternative 1 – Maintains Role of Rail
 - Alternative 2 – Grows Role of Rail
 - Alternative 3 – Transforms Role of Rail

- ❑ Tier 1 Draft EIS does not recommend a Preferred Alternative
 - Identification of a Preferred Alternative will be based on:**
 - Findings/analysis of Tier 1 Draft EIS
 - Public and Stakeholder Input
 - FRA Policy Guidance

Key Resource Areas

Tier 1 Draft EIS identifies 'Key Resource Areas'

- Summary of data/findings presented in the main body; more detailed data provided in Appendices
- Focus on resources that have more stringent regulatory requirements
- Helps identify possible differentiators among alternatives



Big Take Aways

- ❑ Footprint related impacts occur mostly where off-corridor new segments are proposed
More route miles off-corridor = more impacts to resources identified
- ❑ Service improvements change how people move within and travel throughout the Study Area
More route miles off-corridor =

Greater
travel time
savings

Greater
resiliency

Future
growth
post-2040

More places
reachable
by rail

The Benefits of Action

For Users

- Reach many more destinations conveniently by rail
- More frequent, reliable service – often with shorter travel times
- Greater range of ticket price options, allowing more affordable travel
- Easier travel arrangements across the NEC

For the Region

- World class transportation to power regional growth and mobility for future generations
- Easier communication and travel among businesses in the Northeast
- Economic development of station areas and cities along the NEC
- Supports environmental goals with reduction in automobile vehicle miles travelled

A black and white photograph of a public hearing or meeting. The scene is set in a room with a balcony on the upper level. A long table is arranged in a U-shape, with several people seated around it. The participants are dressed in business attire. In the background, there is a whiteboard and an 'EXIT' sign above a doorway. The room has large windows with curtains and a balcony with a railing. The overall atmosphere is formal and professional.

Public Hearings and Public Comment Period

Public Hearings

All Public Hearings from 4:00 PM to 7:00 PM

Date	State/City	Location
Dec. 9, 2015	Boston, MA	Back Bay Event Center (John Hancock Hall)
Dec. 14, 2015	New Haven, CT	Gateway Community College
Dec. 15, 2015	New York, NY	CUNY Graduate Center
Dec. 16, 2015	Washington, DC	Hall of States
Dec. 17, 2015	Providence, RI	State Admin Bldg
Jan. 11, 2016	Philadelphia, PA	SEPTA Bldg.
Jan. 12, 2016	Mineola, NY	Nassau County Bldg
Jan. 13, 2016	Hartford, CT	Lyceum
Jan. 14, 2016	Baltimore, MD	University of Baltimore
Jan. 19, 2016	Newark, NJ	NJ Transit Bldg
Jan. 20, 2016	Wilmington, DE	Delaware Technical & Community College

Public Comment Period

November 2015 through January 30, 2016

4 WAYS YOU CAN SUBMIT YOUR COMMENT



Comment in person by:
Attending a Public Hearing



Submit a comment online at:
www.necfuture.com



Comment via email:
comment@necfuture.com



Or send comments to:
NEC FUTURE
Rebecca Reyes-Alicea
U.S. DOT Federal Railroad Administration
One Bowling Green, Suite 429
New York, NY 10004

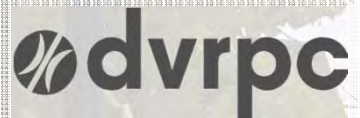
Next Steps

- Winter 2016**
Review comments
Identify Preferred Alternative for analysis in the Tier 1 Final EIS
- Spring 2016**
Announce Preferred Alternative
Agency and stakeholder coordination and outreach
- Fall 2016**
Release Tier 1 Final EIS and ROD
- Spring 2017**
Release Service Development Plan



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Please Stay
Involved!



REGIONAL TRANSIT PLANNING PROGRAM

*FY2016 update &
FY2017 preview*

**G. Krykewycz, PP, AICP
B. R. Mastaglio, RLA
RTC/RTAC
November 10, 2015**



FY2016 Transit Planning Summary

- Total DVRPC (in-house) transit planning budget of \$1,485,000 for FY2016
 - \$710,000 RTPP
 - \$180,000 NJTSP
 - \$345,000 PATSP and SEPA TP&TA
 - \$250,000 PennDOT Supplemental Land Use
- Funds a total of 13 DVRPC transit projects across multiple staff units
 - 5 projects funded through the RTPP
 - 8 projects funded through other sources

Philadelphia Zoo Passenger Rail Study

Assessment of ridership potential for various ways to provide passenger rail service to the zoo.

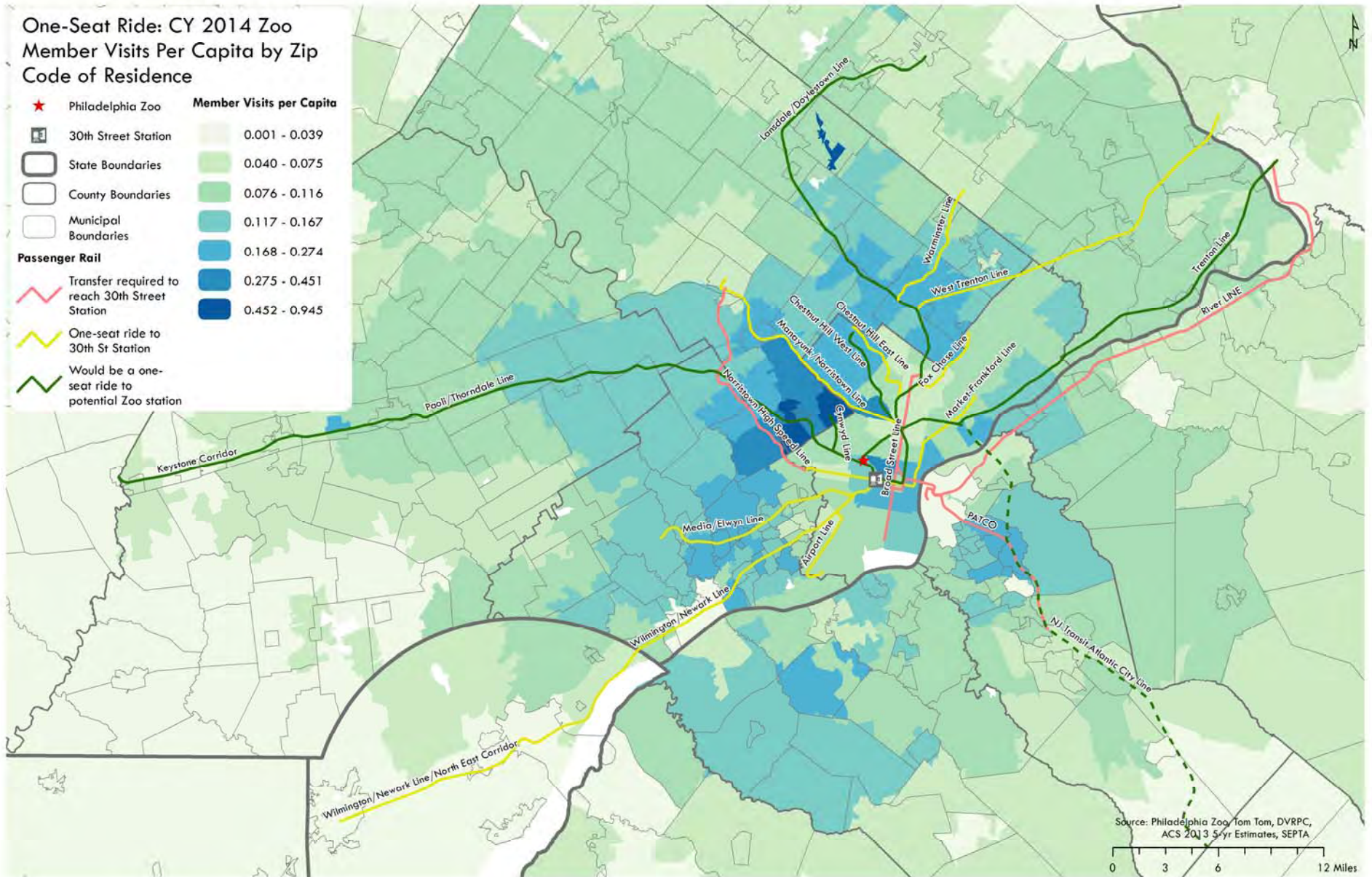
Project outline:

1. Existing conditions review: zoo membership/visit data and access trends (completed)
2. Next: Menu of alternative elements (e.g., mode, station/s, development), and preparation of 5 preferred build scenarios
3. Spring: Ridership forecasts and further analysis
4. One objective: test upper bounds of realistic demand to see which problems are worth solving



One-Seat Ride: CY 2014 Zoo Member Visits Per Capita by Zip Code of Residence

- ★ Philadelphia Zoo
 - 🚉 30th Street Station
 - ▭ State Boundaries
 - ▭ County Boundaries
 - ▭ Municipal Boundaries
 - Passenger Rail**
 - 🚊 Transfer required to reach 30th Street Station
 - 🚊 One-seat ride to 30th St Station
 - 🚊 Would be a one-seat ride to potential Zoo station
- | Member Visits per Capita | |
|--------------------------|---------------|
| Lightest Green | 0.001 - 0.039 |
| Light Green | 0.040 - 0.075 |
| Medium Green | 0.076 - 0.116 |
| Teal | 0.117 - 0.167 |
| Blue-Teal | 0.168 - 0.274 |
| Blue | 0.275 - 0.451 |
| Dark Blue | 0.452 - 0.945 |



Source: Philadelphia Zoo, Tom Tom, DVRPC, ACS 2013 5-yr Estimates, SEPTA

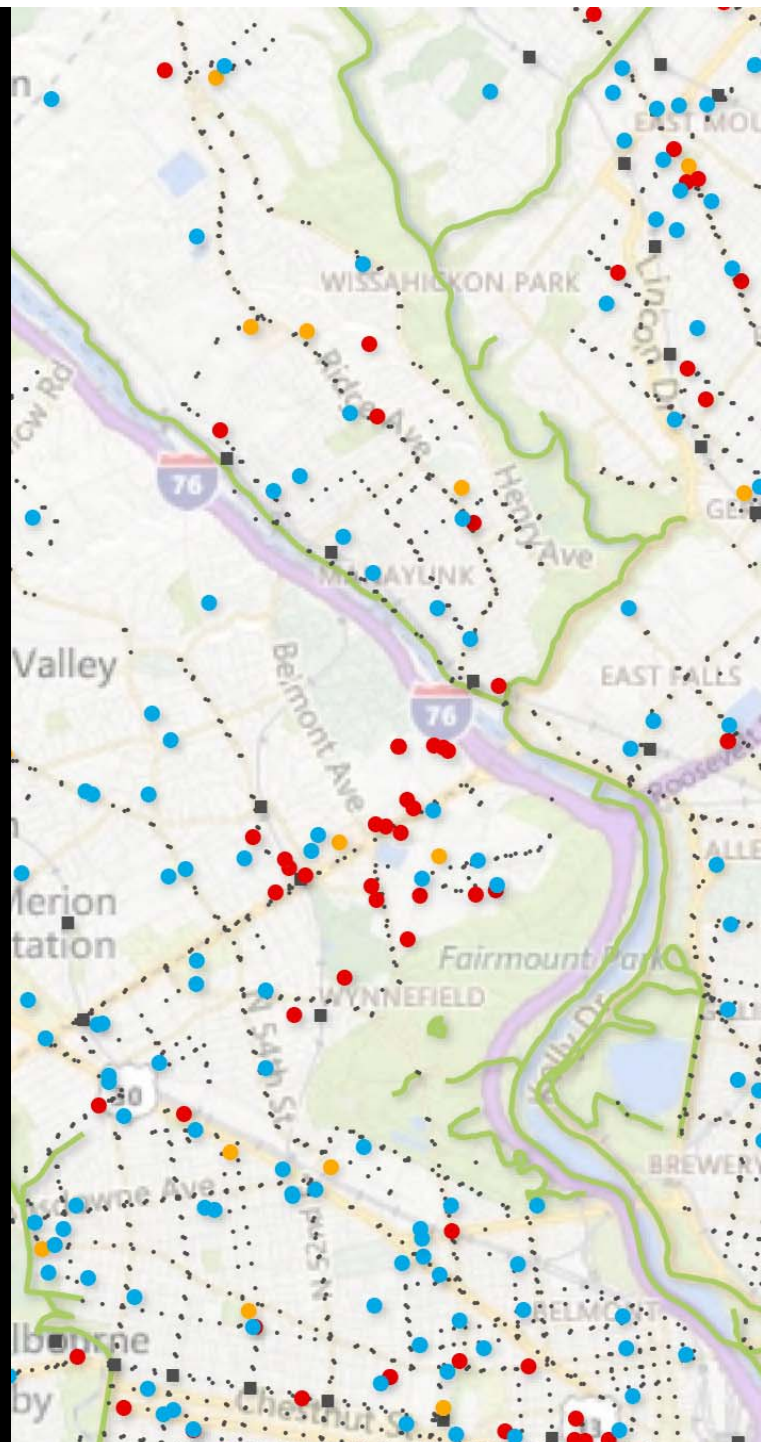
0 3 6 12 Miles

Equity Through Access

Project to update regional CHSTPlan in a more holistic way (USDOT Ladders of Opportunity) ; focused more on outcomes than funding streams.

Project outline:

1. Development of BETA map toolkit and kickoff workshop with DVRPC PPTF
2. Next: project/BETA toolkit launch, formalize advisory groups, mixed-format outreach
3. Iterative development of plan goals/objectives/priorities and regional case studies
4. Board adoption at project conclusion



DVRPC's Equity Through Access Map Toolkit - BETA

Welcome

Essential Services

Transit Walksheds

Essential Services within Transit Walksheds

Demographics

Transit Gap Analysis

Rail Walksheds (beta)

Areas within a 15-minute walk (3/4 mile) to Amtrak, NJ Transit, SEPTA, and PATCO rail stations in the DVRPC region, calculated using street network distances. Colors indicate the area of each walkshed. Red hues = larger area (more access) Blue hues = smaller area (less access)

Bus Walksheds (beta)

Areas within 5-minute walk (1/4 mile) to NJ Transit and SEPTA bus stops in the DVRPC region, calculated using street network distances. Colors indicate the number of amenities within each walkshed. Red hues = larger area (more access) Blue hues = smaller area (less access)

Note: For best performance, zoom in to area of interest. Not all features will display beyond the city level.

Scale
Miles

Bus Stops (NJT)

Bus Stops (SEPTA)

Rail Stations

Bus Routes (NJT)

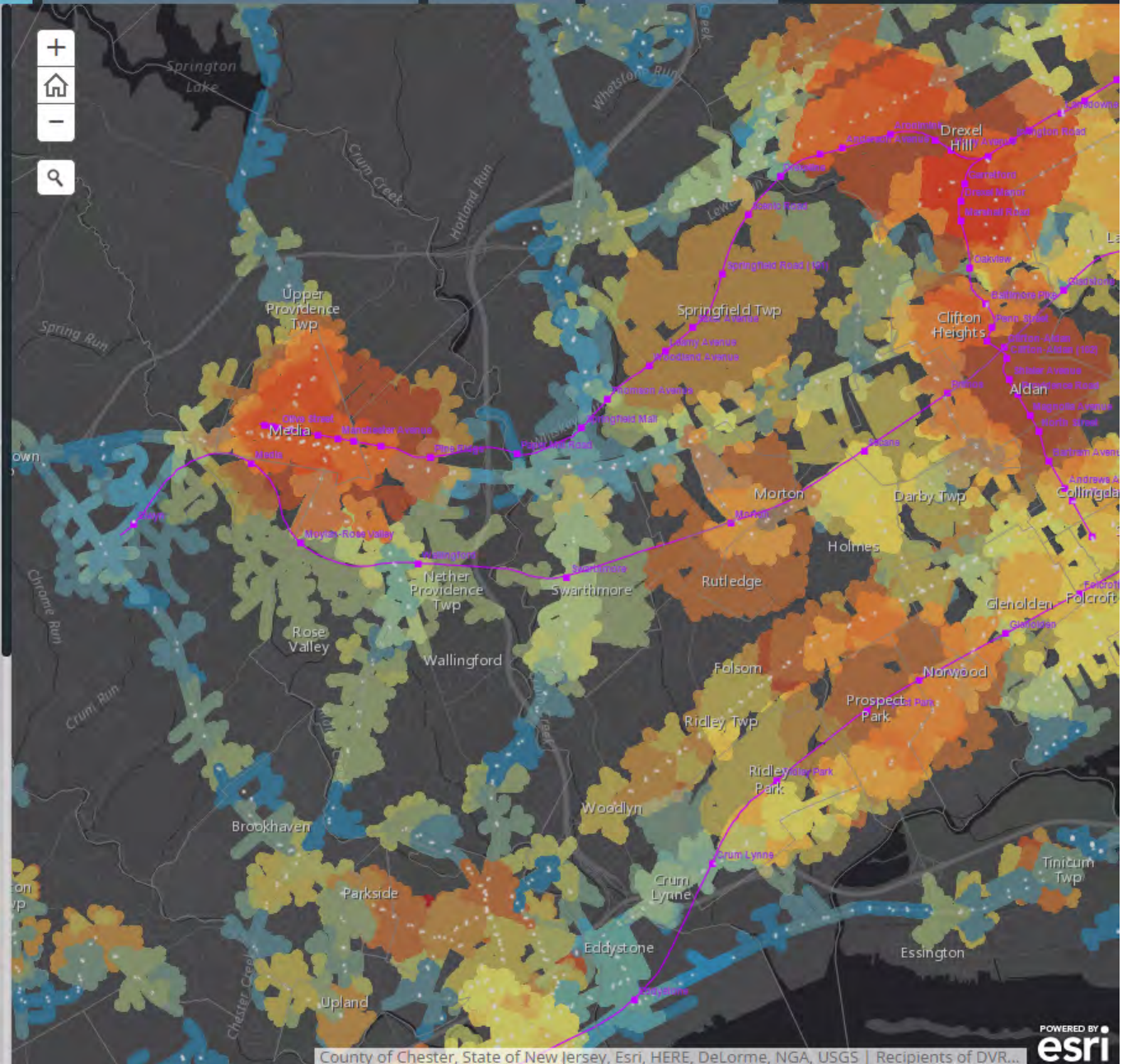
Bus Routes (SEPTA)

Rail Lines

Transit Walkshed: Rail

Area (Sq M)

Larger Area



PATCO Title VI Survey

Conduct a passenger survey of PATCO riders to fulfill FTA Title VI requirements.

Project outline:

1. Conducted on platform interview of passengers using a tablet and custom-built software (collaboration between DVRPC and PATCO staff)
2. Surveyed each station between the hours of 6 a.m. and 6 p.m. from Oct. 6 through Oct. 27
3. Tablet interface used a custom map that allowed riders to point to origin/destination
4. Collected 3,339 completed surveys (exceeded targets!)



PATCO Title VI Survey

Enter survey agent ID



Surveyor ID

wtsay

Language

English



Select language

Select station surveying



Station

15-16th + Locust



Press to Start survey



Start

To Philadelphia

Now:

1:49:21 PM

Next to arrive:

1:58 PM

2:13 PM

To Lindenwold

Now:

1:49:21 PM

Next to arrive:

1:52 PM

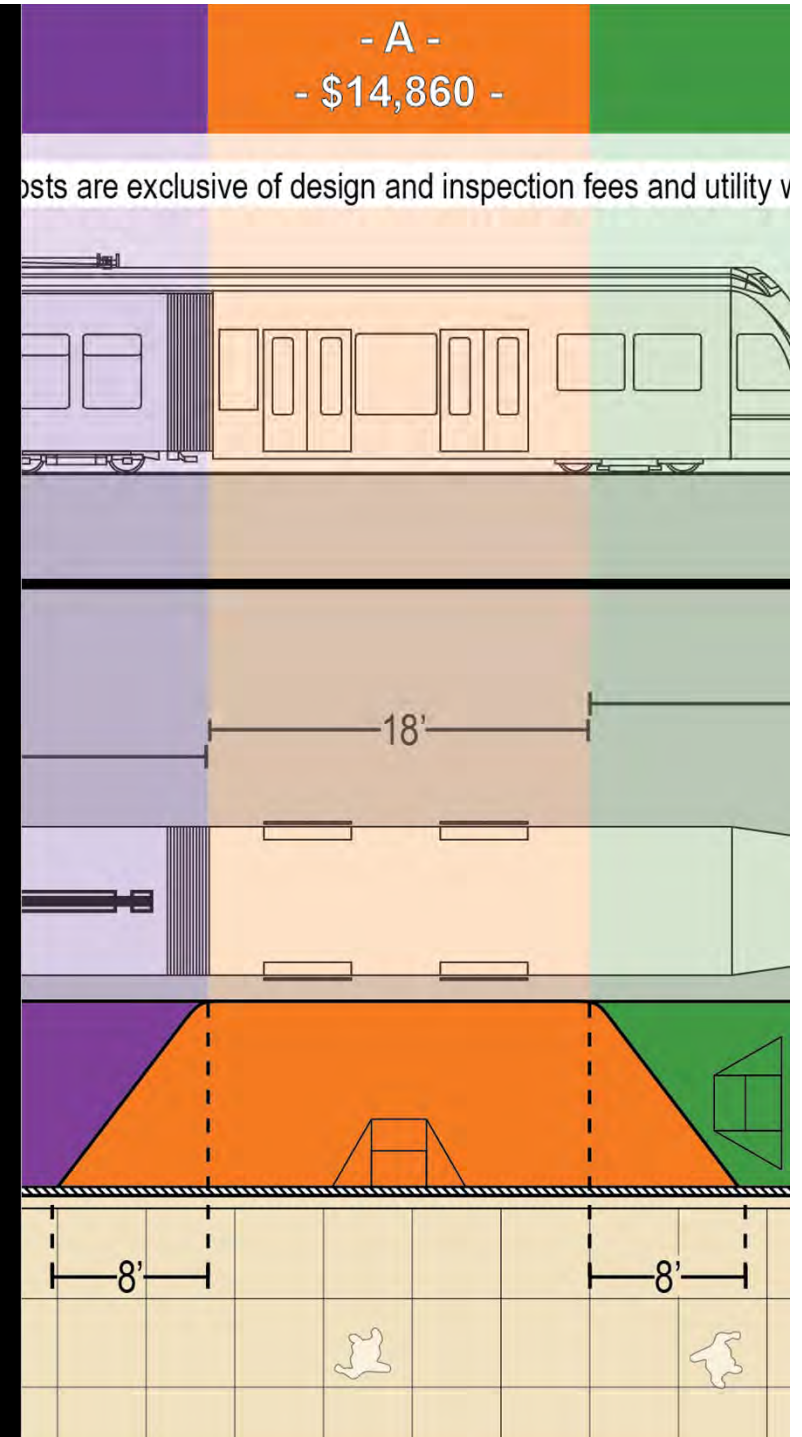
2:07 PM

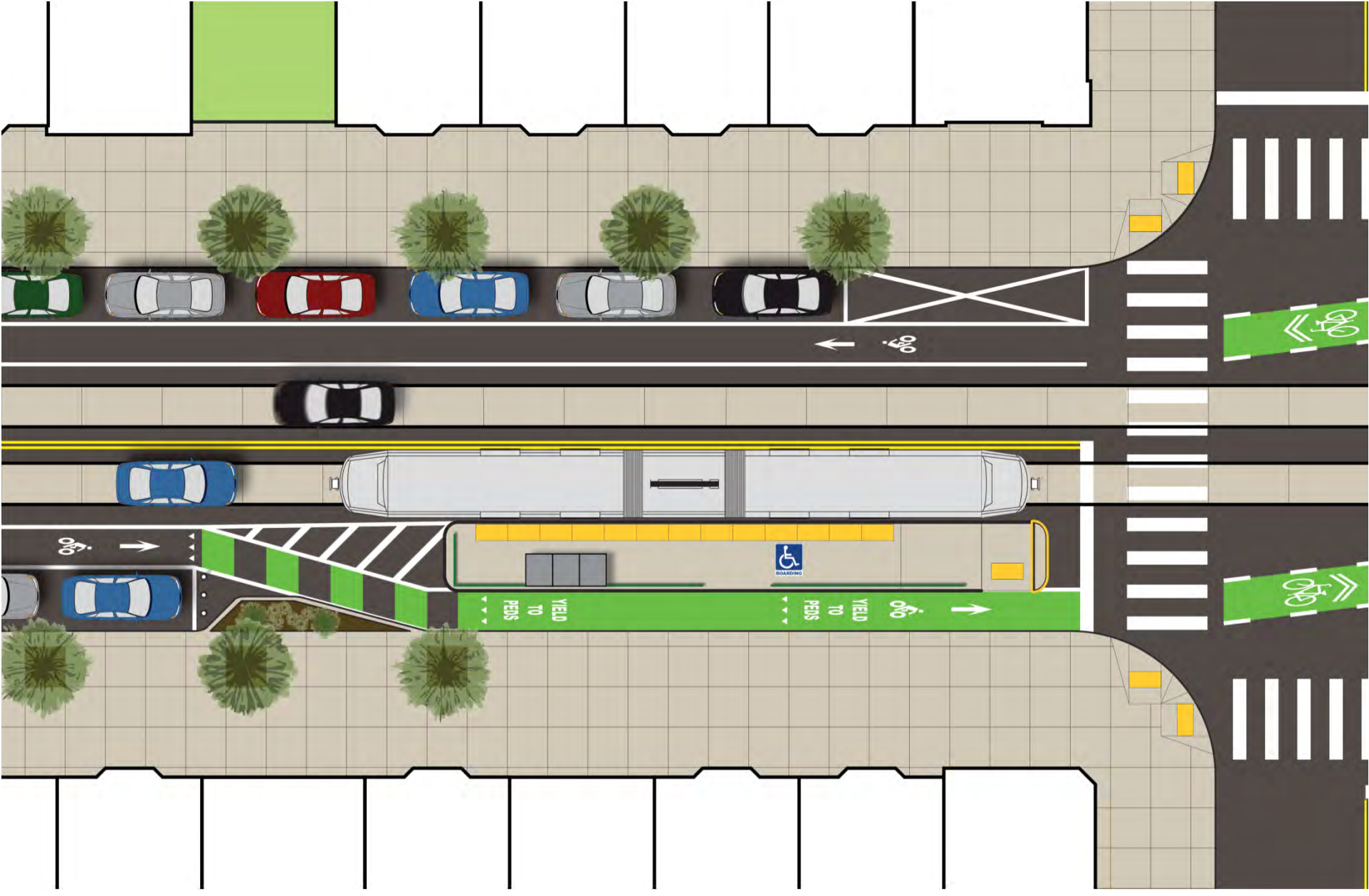
Planning/Analysis Support for SEPTA Trolley Modernization

Ongoing program of support work for SEPTA trolley modernization in Philadelphia and DelCo.

Project outline:

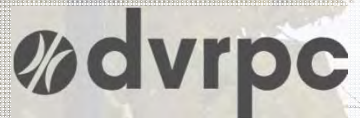
1. Review context and cross sections; concept dev. for stop design solutions based on peer practice (ongoing)
2. Operations analysis (VISSIM) of Route 34 to test impacts of ADA boards and modernization/Transit First strategies (ongoing/draft)
3. Ongoing support of/interface with related efforts (local plans, PennDOT I-95 programming, SEPTA feas. study)





FY2017 Transit Program Outlook

- 11 transit –focused work efforts in **draft** FY2017 Work Program (under development)
 - 3 integrated station/station area master planning efforts
 - 2 bike/ped access to transit studies (with implementation focus)
 - 2 transit survey/audit efforts
 - 1 service concept development study
 - 1 facilitation/coordination project
 - 1 multi-station TOD/access study
 - ETA continuation/followup
- Ongoing collaboration across DVRPC departments
- Will assess capacity early 2016 for a spring RTAC round



REGIONAL TRANSIT PLANNING PROGRAM

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