



November 2017

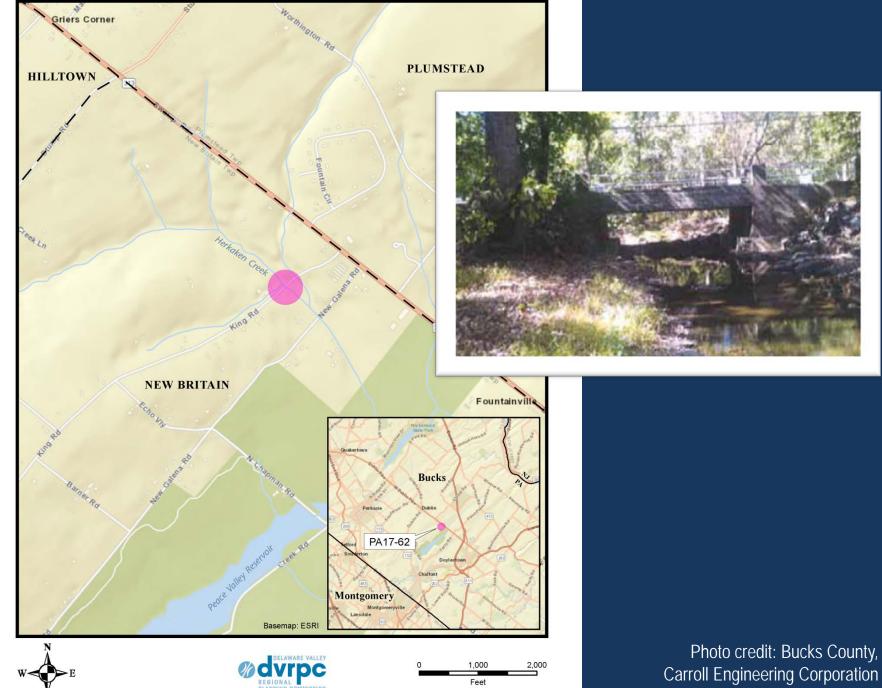
TIP Actions

Transportation Improvement Program
New Jersey TIP (FY2016-2019)
Pennsylvania TIP (FY2017-2020)

King Road Bridge over Herkaken Creek (County Bridge #54) Bucks County | Add New Project to TIP

- ► Action Type: TIP Amendment
- Action: Add a new \$2 million sSTP funded bridge project to the TIP:
 - FY18 PE (\$300,000)
 - FY19 FD (\$300,000)
 - FY20 UTL (\$20,000) and ROW (\$30,000);
 - FY21 CON (\$1.35 million).
- These are additional funds to the region from PennDOT due to county's \$5 Registration Fee.











TIP Action | Proposed – PA Amend the PA TIP for the Following Project:

a. King Road Bridge over Herkaken Creek

That the RTC Recommend that the Board approve amending the TIP by adding a new \$2 million sSTP funded bridge project to the TIP:

- FY18 PE (\$300,000)
- FY19 FD (\$300,000)
- FY20 UTL (\$20,000) and ROW (\$30,000);
- FY21 CON (\$1.35 million).

These are additional funds to the region.



Masonry Stone Arch Bridges – Group T, Various Counties | Add New Project to TIP

- **Action Type:** TIP Amendment
- Action: Add a new district-wide group of 7 bridges totaling \$10.15 million:
 - FD in FY17 (\$150,000 State 185)
 - CON (\$10 million STU/STP/State185 total) in FY18 and FY19

Chester County

(1) Mansion Road over the South Branch of French Creek (SD)

Delaware County

- (2) Bryn Mawr Avenue over a Branch (6) Eagleville Road over Eagleville of Meadow Brook Creek (SD)
- (3) Bryn Mawr Avenue over Meadow **Brook Creek**

Montgomery County

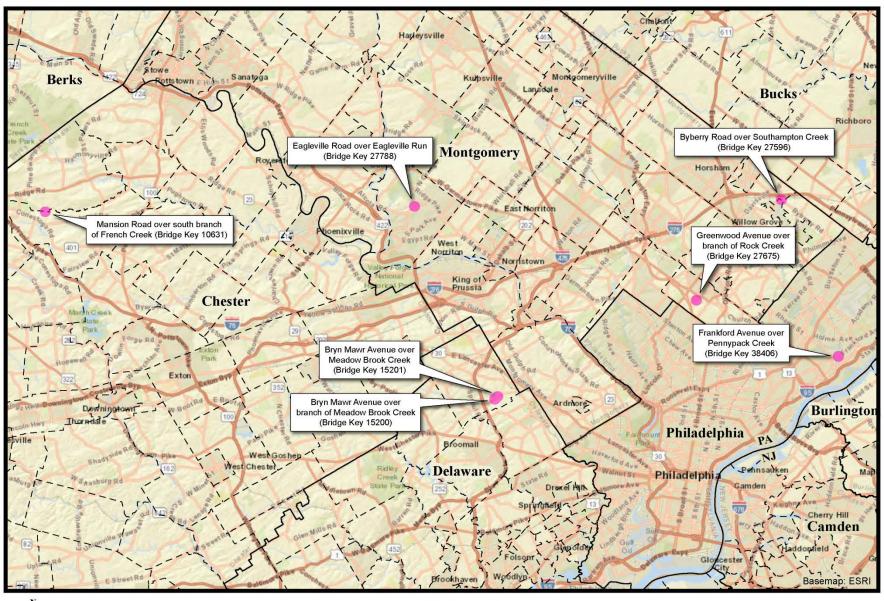
- (4) Byberry Road over Southampton Creek (SD)
- (5) Greenwood Avenue over a Branch of Rock Creek (SD)
- Run (SD)

Philadelphia

(7) Frankford Avenue over Pennypack Creek



PA17-63: Masonry Stone Arch Bridges - Group T









TIP Action | Proposed – PA Amend the PA TIP for the Following Project:

b. Masonry Stone Arch Bridges - Group T

That the RTC Recommend that the Board approve amending the TIP by adding a new district-wide group of 7 bridges totaling \$10.15 million:

- FD in FY17 (\$150,000 State 185)
- CON (\$10 million STU/STP/State185 total) in FY18 and FY19.

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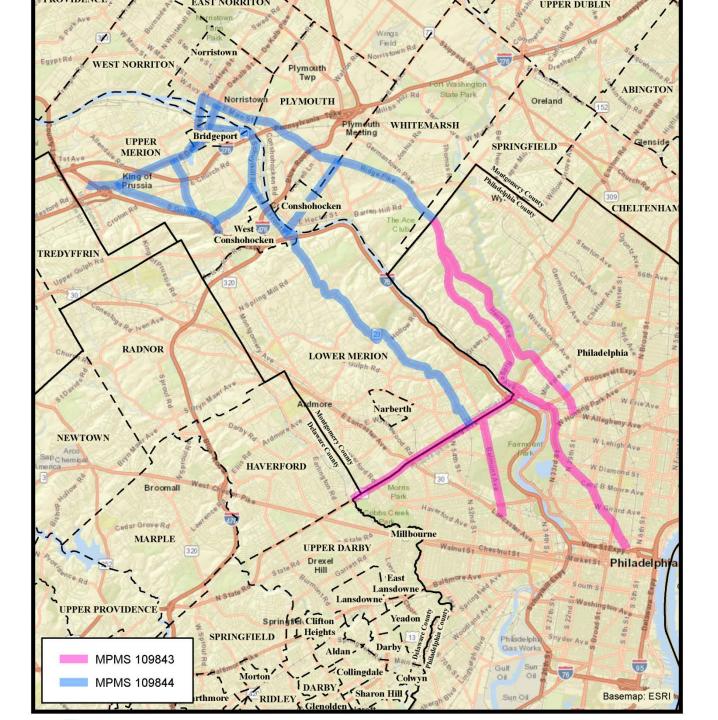
Philadelphia

(7) Frankford Avenue over Pennypack Creek



Comprehensive ATMS of I-76 Parallel Arterial Corridors Design Support Agreements (Green Light-Go), Phila. & Montgomery Counties | Add New Project to TIP

- ► Action Type: TIP Amendment
- Action: Add 2 Green Light-Go projects totaling \$3 million State 073:
 - FY18 PE (\$1.5 million) for Philadelphia
 - FY18 PE (\$1.5 million) for Montgomery County
- ▶ These are additional funds to the region.
- ▶ Purpose: Provide arterial traffic signals/ITS design to supplement the I-76 Integrated Corridor Management Project, design & construct docs to modernize traffic signals systems and ITS devices in Philadelphia and Montgomery Counties, and identify next steps.



District 6 TSMO Support Contract (Green Light-Go), Various Counties | Add New Project to TIP

- ► Action Type: TIP Amendment
- Action: Add a new \$2 million State 073 funded Green Light-Go project for FY18 PE.
- ▶ These are additional funds to the region.
- Purpose:
 - Provide operational support to TSMO projects, such as the I-76 Integrated Corridor Management Project.
 - Assist PennDOT with providing key oversight and focus on Active Arterial Traffic Management a activities to improve safety and mobility in region.

TIP Actions | Proposed – PA Amend the PA TIP for the Following Projects:

c. Comprehensive ATMS of I-76 Parallel Arterial Corridors Design Support Agreements (Green Light-Go)

That the RTC Recommend that the Board approve amending the TIP by adding 2 Green Light-Go projects totaling \$3 million State 073:

- FY18 PE (\$1.5 million) for Philadelphia
- FY18 PE (\$1.5 million) for Montgomery County

d. District 6 TSMO Support Contract (Green Light-Go)

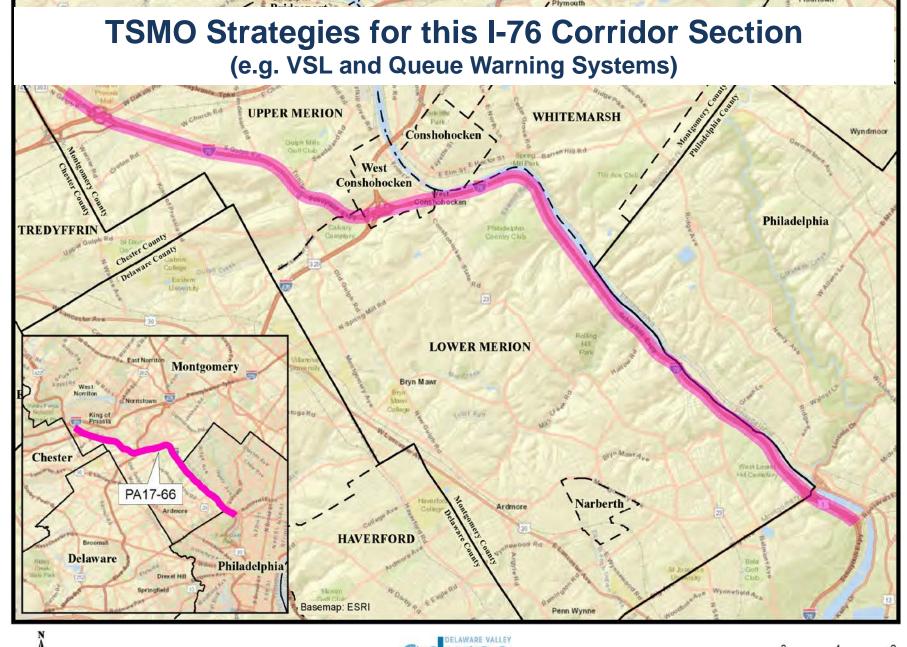
That the RTC Recommend that the Board approve amending the TIP by adding a new \$2 million State 073 funded Green Light-Go project for FY18 PE.

These are additional funds to the region.

I-76, Regional Travel Information, Various Counties | Cost Increase

- ► Action Type: TIP Amendment
- Action: Increase overall CON cost (and specifically in FY18 and FY19) by \$8.532 million from \$2.143 million (\$1.714 million NHPP/\$429,000 State 581) to \$10.675 million (\$5.538 million NHPP/\$2.405 million STU/\$598,000 STP/\$2.134 million State 581).
- Reason: Increased cost estimate due to various items (e.g. additional variable speed limit signs, ground mounted cabinets/battery backup systems)





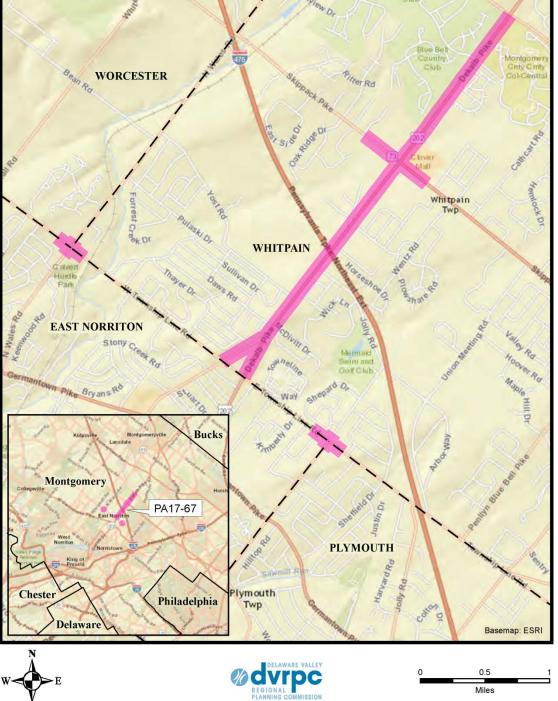






US 202, Township Line Road to Morris Road (61N), Montgomery County | Cost Increase

- ► Action Type: TIP Amendment
- ▶ Action: Increase overall project cost by \$9.649 million (for UTL) from \$67.803 million to \$77.452 million:
 - FY19 UTL: \$6.25 million (\$5 million NHPP/\$1.25 million State 581)
 - FY20 UTL: \$3.399 million (\$2.719 million NHPP/\$680,000 State 581)
- Reason: More utility relocation required than anticipated in order to meet current stormwater regulations and requirements.







TIP Actions | Proposed – PA Amend the PA TIP for the Following Cost Increases:

e. I-76, Regional Travel Information

That the RTC Recommend that the Board approve amending the TIP by increasing overall CON cost (specifically in FY18 and FY19) by \$8.532 million from \$2.143 million to \$10.675 million.

f. US 202, Township Line Road to Morris Road (61N)

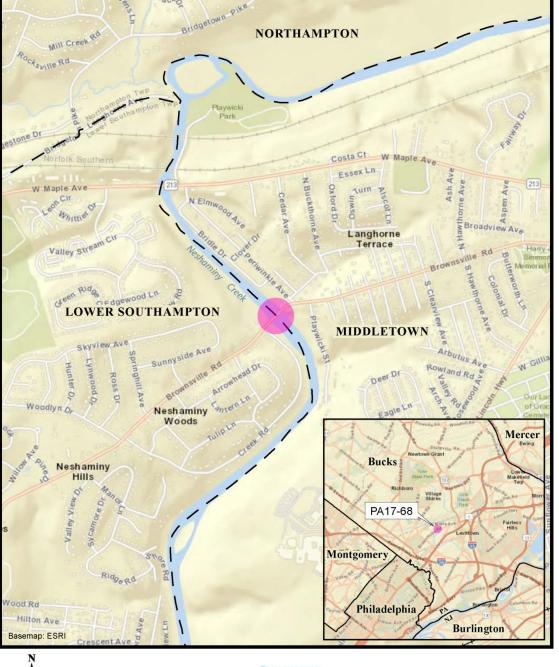
That the RTC Recommend that the Board approve amending the TIP by increasing overall project cost by \$9.649 million (for UTL in FY19 and FY20) from \$67.803 million to \$77.452 million.



Bridge Replacement Brownsville Road, Bucks County | Add FD Back into the TIP

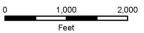
- ► Action Type: TIP Amendment
- Action: Add Final Design (FD) phase back into the TIP for \$1.4 million in FY18 (\$700,000 State 185) and FY19 (\$700,000 State 185).
- Action will not impact ROW, UTL, or CON cost and schedule.
- ▶ Reason: Funds for FD not encumbered under the previous TIP.











TIP Action | Proposed – PA Amend the PA TIP for the Following Project:

g. Bridge Replacement Brownsville Road

That the RTC Recommend that the Board approve amending the TIP by adding the Final Design (FD) phase back into the TIP for \$1.4 million in FY18 (\$700,000 State 185) and FY19 (\$700,000 State 185).







Delaware River Watershed Initiative Data/GIS/Modeling Work Group

DVRPC RTC Meeting: November 14, 2017

Presented by: Christina Arlt, AICP
Senior Planner, Office of Community and Economic Development

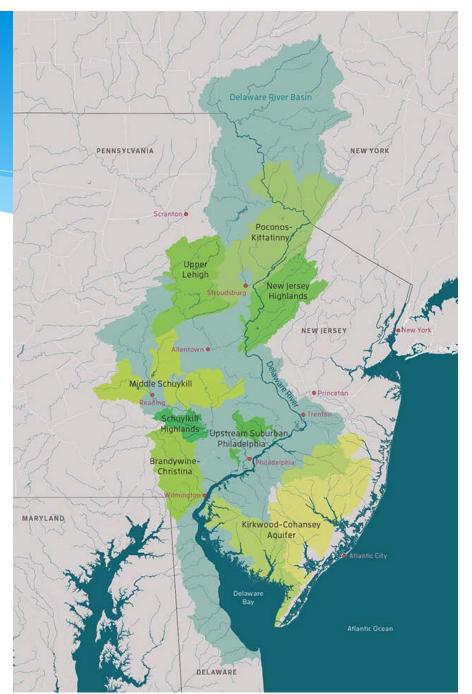




William Penn Foundation's Delaware River Watershed Initiative (DRWI)

* Need for:

- Data/GIS/Modeling professionals to collaborate
- GIS maps for small nonprofits



http://www.drwi.net/



What will the DRWI Data/GIS/Modeling Work Group do?

- * Meet up to six times (some virtual)
- Host up to four educational webinars





- Make maps for small non-profits doing work in the Delaware River Watershed
- * Prioritize recommendations for additional Delaware River watershed data sets and/or modeling analysis, as well as future Work Group activity

How does this support DVRPC's Long Range Plan, *Connections 2045*?

- * "Sustain the Environment" principle
 - * Goal: "Manage stormwater and improve water quality"
- * "Develop Livable Communities" principle
 - Goal: "Encourage regional cooperation and multimunicipal planning"

Funding

- * \$330,510 Total Project Cost
 - * \$275,000 from William Penn Foundation over 24-months
 - * \$185,000: DVRPC staff support
 - * \$90,000: Stipends to other organizations
 - * \$55,510 DVRPC Match

Work Program Amendment Action Item

Delaware River Watershed Initiative Data/GIS Work Group

Recommend for approval to the DVRPC Board this Work Program Amendment, which will allow DVRPC staff to convene a Data/GIS/Modeling group to:

- prioritize data needs,
- * share knowledge,
- expand capacity, and
- * collaborate to provide technical mapping, modeling, and spatial analysis assistance to support the Delaware River Watershed Initiative (DRWI).



PARTNERSHIPS











WHY A TDM PLAN

In an effort to:

- Meet the needs of current stakeholders
- Attract future employers and residents
- Allow for the growth of the office park while mitigating impact on an already congested transportation network of I-276, PA 309 and municipal roadways
- Allow the park to be competitive and resilient in a diversifying market place



TDM PLAN GOAL

Provide Upper Dublin Township with the tools to make
Fort Washington Office Park an accessible, multi-modal use park.



TDM PLAN TIMELINE

- o Office Park TDM Analysis
- o Public Meeting 1
- Office Park Commuter Habits Survey
- Office Park Company/Business Survey
- Office Park Property Owners Survey
- Large Employer Focus Group
- Commute Shed Analysis
- Public Meeting to discuss finding of geo-spatial analysis
- Stakeholder Interviews
- o Best Practices Research
- o Plan Development
- o Public Meeting to unveil the TDM Plan



THE PROCESS

Public Engagement

- Understanding of transportation demand management (TDM)
- Awareness of the project

Analysis

- Survey
- Geo-spatial

Recommendations

• The TDM Plan

Implementation

- Partnerships
- Support



PUBLIC ENGAGEMENT: UNDERSTANDING TDM





PUBLIC ENGAGEMENT: UNDERSTANDING TDM



<u>S</u>ingle <u>O</u>ccupant <u>V</u>ehicle

TRAVEL BEHAVIOR

What's On the Outside

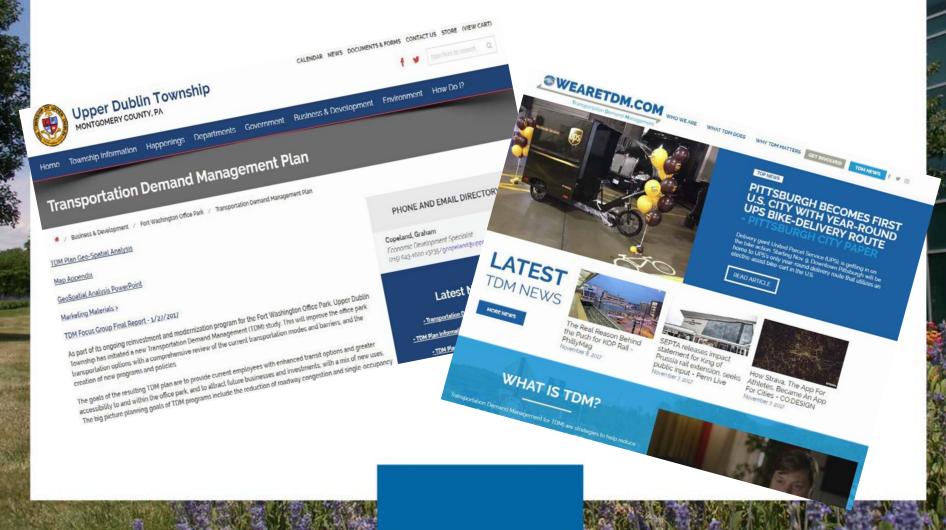


SOV TRAVEL BEHAVIOR

What's On the Inside



PUBLIC ENGAGEMENT: UNDERSTANDING TDM



PUBLIC ENGAGEMENT: AWARENESS OF THE

PROJECT









PUBLIC ENGAGEMENT: AWARENESS OF THE **PROJECT**





https://www.surveymonkey.com/r/icommute





STUCK IN TRAFFIC? **LET'S GET MOVING!**

Let us know what you think!

As part of our ongoing reinvestment and modernization program for the Fort Washington Office Park, Upper Dublin Township has initiated a new Transportation Demand Management (TDM) study. This will review current transportation modes and barriers, and provide new programs and policies to improve office park transportation options.

Take the Survey: https://www.surveymonkey.com/r/icommute









PUBLIC ENGAGEMENT: AWARENESS OF THE PROJECT





ANALYSIS: SURVEY



Participation in Survey

- 1,109 employees from 46 companies
- 38 Companies
- 6 Property Owners

Key Findings:

- Mode: 94% Drive Alone, 3% Public Transit
- Heaviest Arrival Time: 7:31 8:00 AM
- **Departure Time:** 5:01- 5:30 PM
- Commute Time:
 - 16- 30 minutes (29%)
 - 30- 45 minutes (33%)
- Commute Distance:
 - 5- 14 miles (42%)
- Barriers: Lack of access to alternative modes, fluctuating work schedules, child/adult care, cost and time.
- **Opportunity:** Shuttle from train station (40%), carpooling, commuter benefits



ANALYSIS: GEOSPATIAL

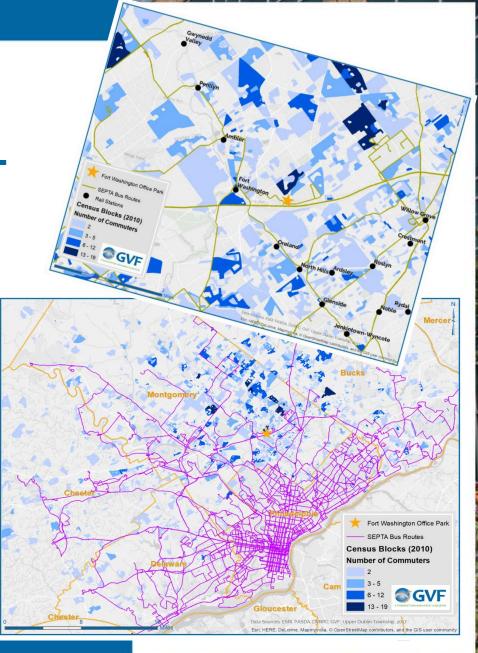
Main Components

Commuters Distribution Analysis

- Political boundaries (States, counties, local municipalities)
- US Census Blocks

Access to Alternative Modes of Transportation

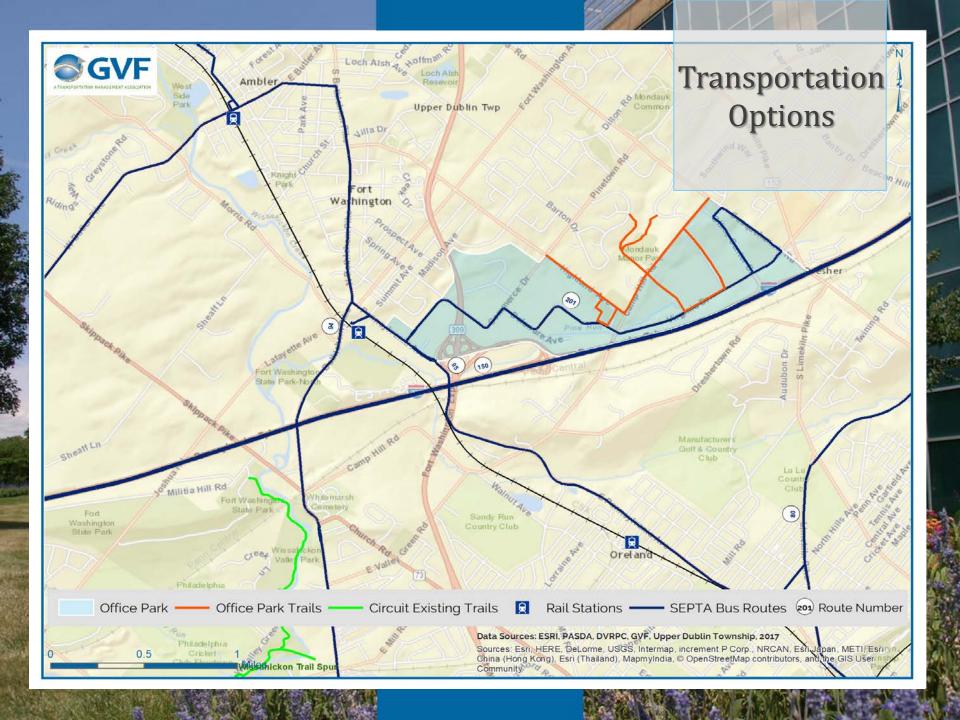
- Walking and Biking
- Public Transit
 - Bus
 - Train
- Carpooling
- Vanpooling

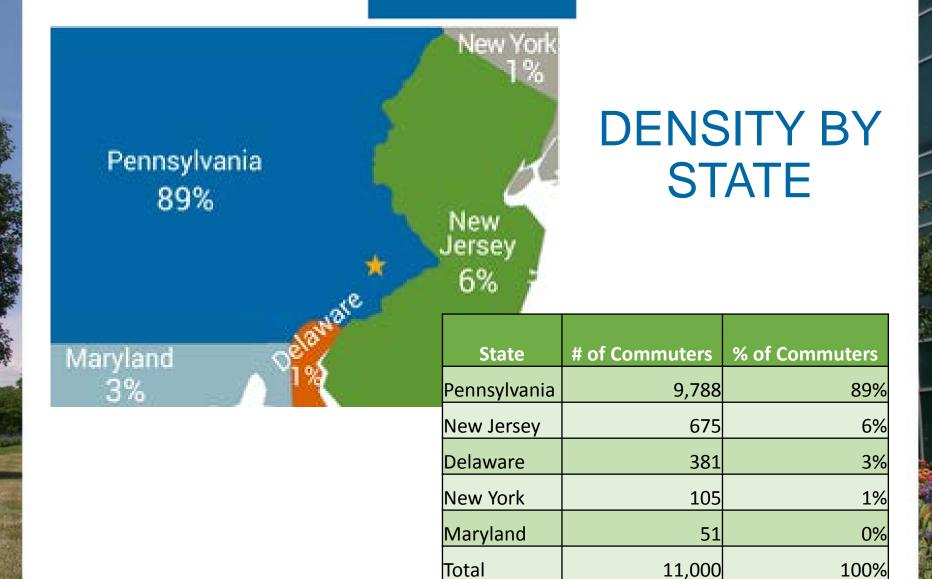


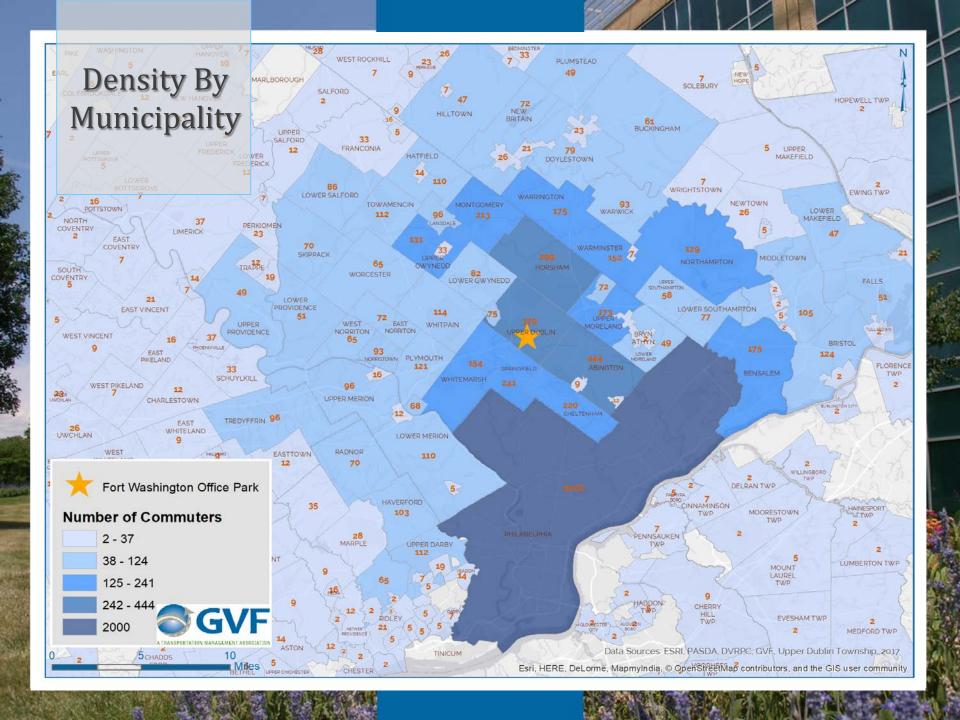
ANALYSIS: GEOSPATIAL

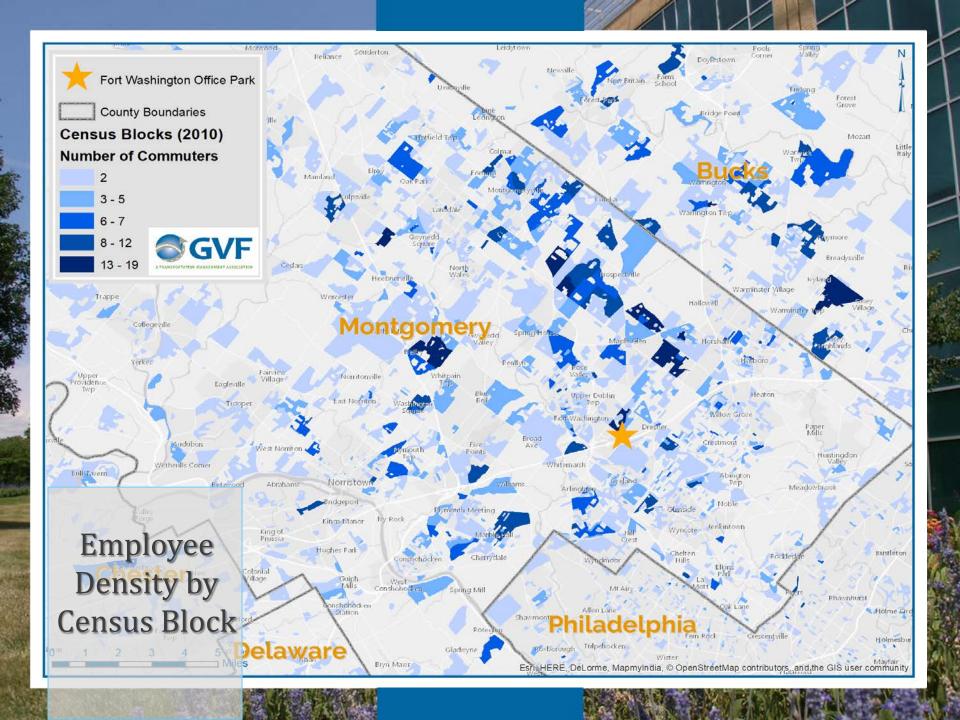
- 4,259 useable addresses of Office Park Commuters
 - Margin of Error of 1% for a population of 11,000
- Environmental Systems Research Institute (ESRI) ArcMap
 - 17 data layers provided by DVRPC, SEPTA, State of New Jersey and Delaware, Pennsylvania Spatial Data Access (PASDA), Lehigh County, Upper Dublin Township, the U.S. Census, ESRI, TomTom, Google Maps and GVF

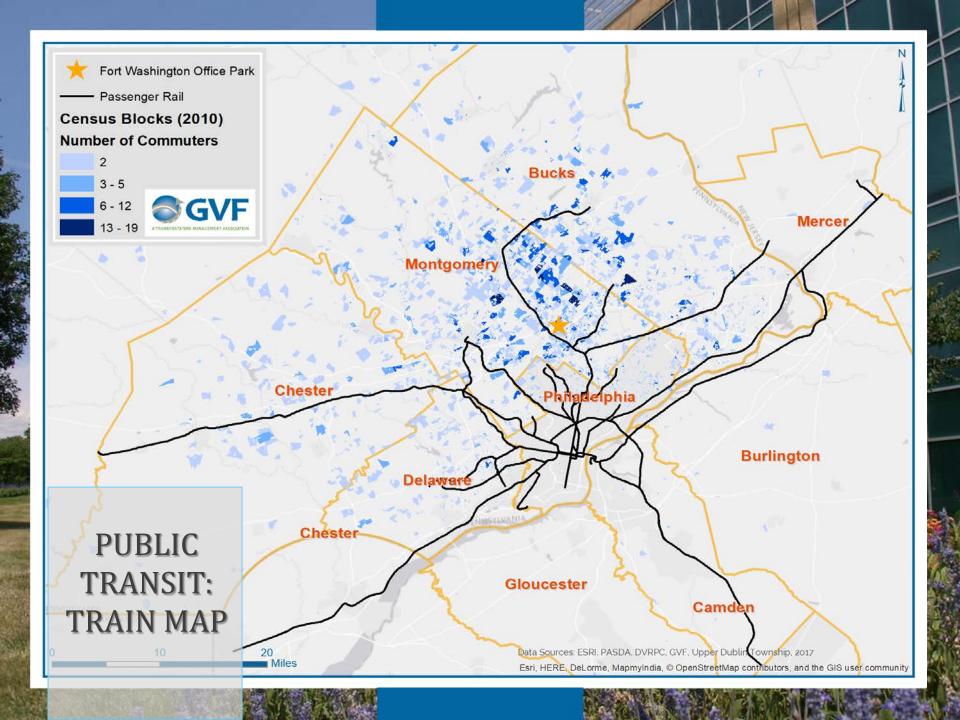


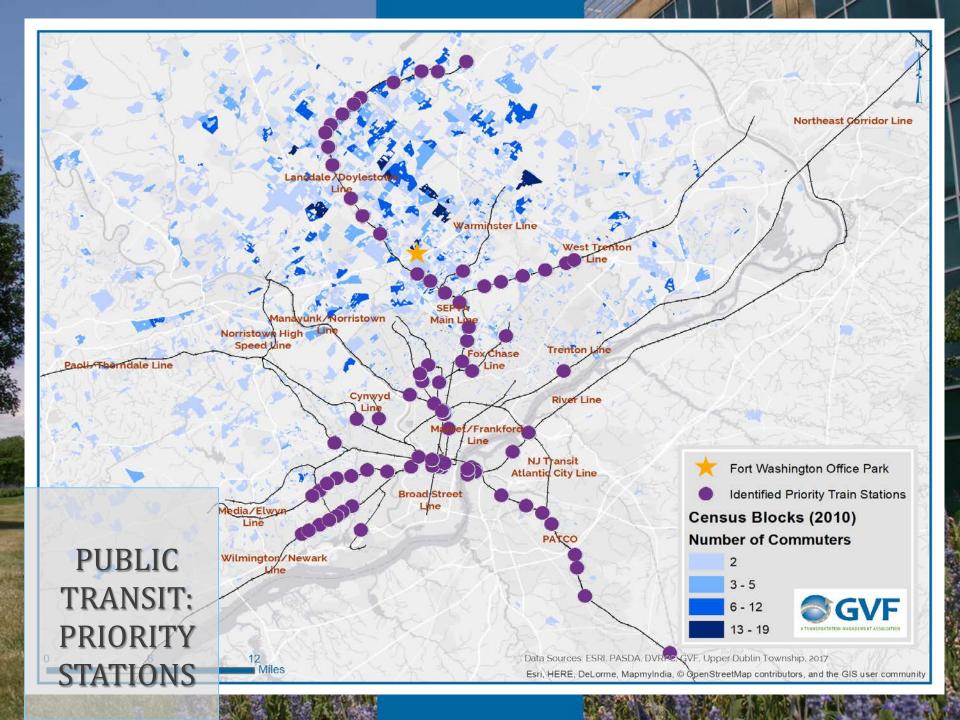


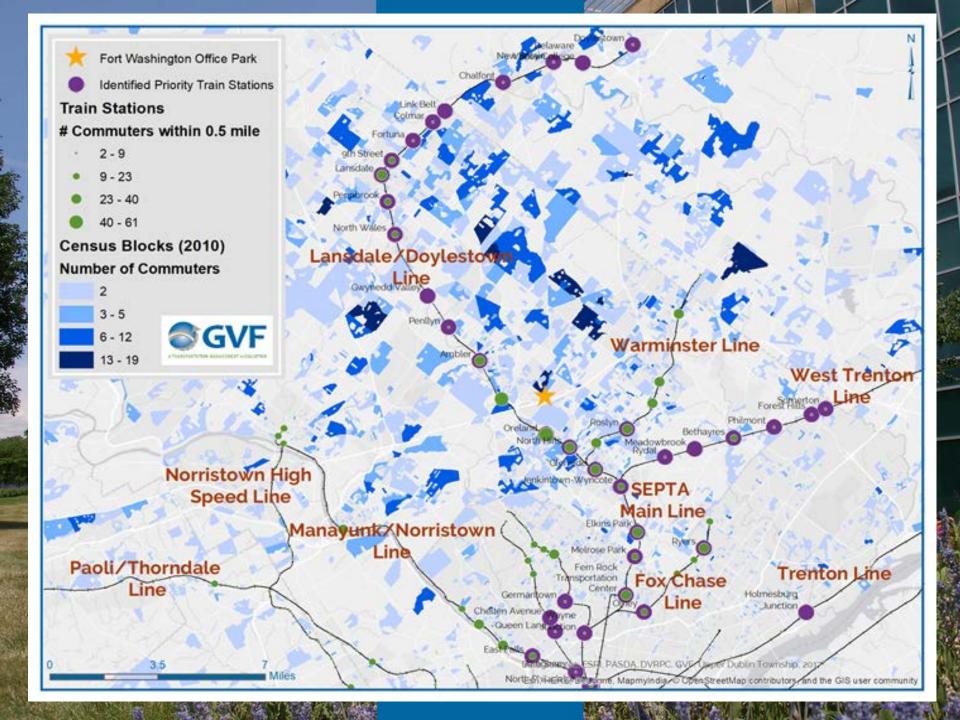






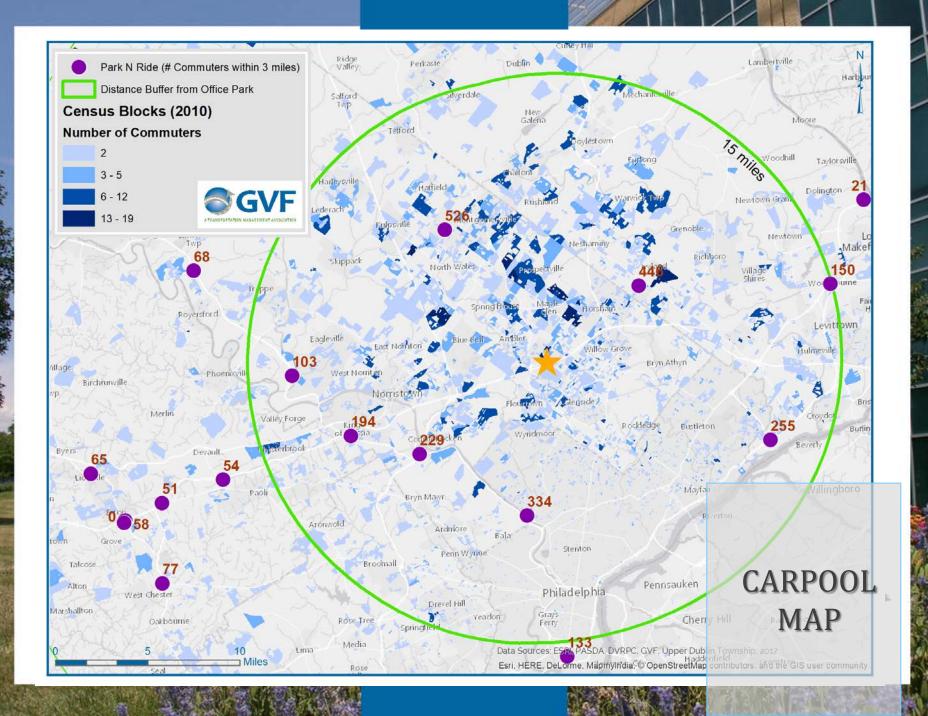






COMMUTERS TRAIN ACCESS

LINE	STATION	.25 Miles	.5 Miles	1 Mile
Lansdale/Doylestown	Oreland	21	61	121
Lansdale/Doylestown	Lansdale	9	37	75
Warminster Line	Roslyn	7	35	103
Lansdale/Doylestown	Ambler	5	33	100
Lansdale/Doylestown	North Hills	7	30	129
Multiple Lines	Fern Rock TC	7	30	103
Multiple Lines	Glenside	12	28	96
Multiple Lines	Elkins Park	7	28	63
Fox Chase Line	Ryers	5	26	93
Fox Chase Line	Fox Chase	2	23	86
Lansdale/Doylestown	North Wales	16	23	65
Fox Chase Line	Lawndale	12	21	84
Fox Chase Line	Cheltenham	2	19	84
Lansdale/Doylestown	Pennbrook	5	16	93
Multiple Lines	Jenkintown-Wyncote	2	16	58

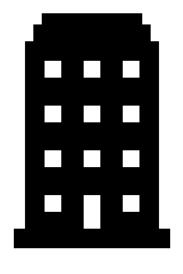


RECOMENDATIONS

Three major stakeholders:



Upper Dublin Township



Property Owners



Employers

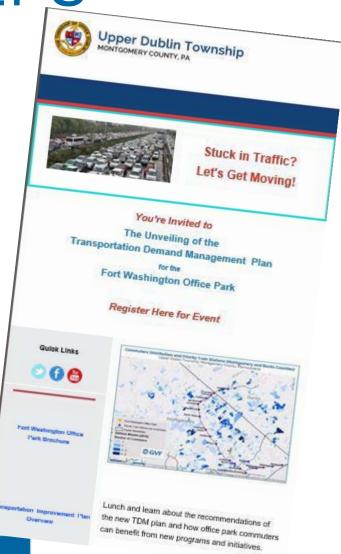


RECOMMENDATIONS

Strategy	Responsible Party	
Partnership and Coordination	Township, Property Owner, Employer	
Public Outreach, Marketing, and Education	Township, Property Owner, Employer	
Parking Management	Township, Property Owner, Employer	
Pedestrian and Bicycle Improvements	Township, Property Owner, Employer	
Financial and Non-Monetary Incentives	Property Owner, Employer	
Aesthetics	Township, Property Owner	
Employee Commute Data Collection, Analysis	Employer	
Land Use Management	Township	
Policies	Township	

NEXT STEPS



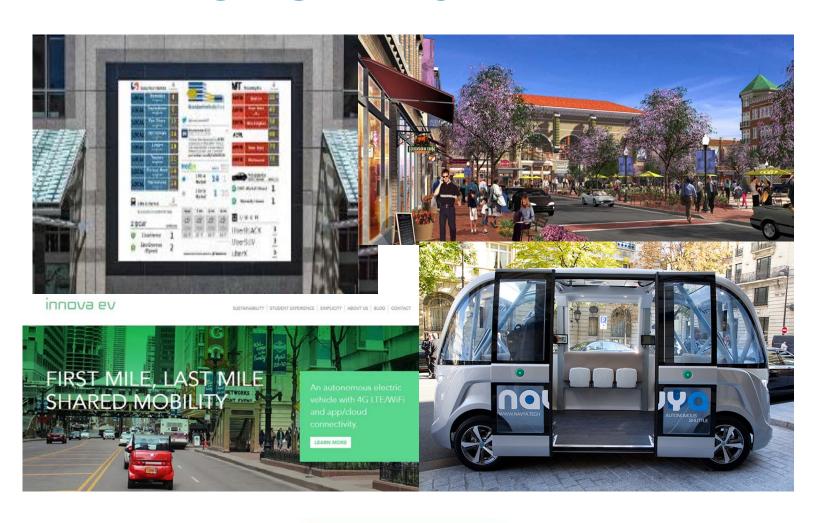


WHY TDM PLANS



Source: Montgomery County Planning Commission

FUTURE OF TDM



QUESTIONS?



New Jersey Statewide Freight Plan Update













WHY A STATEWIDE FREIGHT PLAN?

- Continues previously completed work
- Required by the FAST Act to be eligible for NHFP funding
- Creates fiscally constrained investment plan:
 - Identifies priority freight projects
 - Provides NJDOT with key elements to respond to stakeholder needs







FUNDING

- FAST Act Funding (New Jersey)
 - NHFP funding: ~\$30M annually (10% can be allocated to rail/intermodal)
 - \$4.5B nationally for discretionary freight focused grant program
- Local Freight Impact Fund (TTF) has been funded at \$28 million per year.





New Jersey Freight Advisory Committee

- Guidance on statewide freight concerns
- Provided substantive review of Plan elements
- Reflect the diverse range of stakeholders
 - Core Stakeholders
 - MPOs
 - Bridge/Toll Commissions
 - Modal-specific Industry Partners
 - Neighboring Agencies







New Jersey Goals and Objectives



Strengthen Economic Competitiveness

Support existing and emerging freight-dependent businesses, maintain and enhance the State's economic competitiveness and productivity, and retain and generate New Jersey jobs by providing freight shippers and receivers with an effective, attractive multimodal freight transportation system for moving goods to, from, within, and through the State



Improve Reliability and Efficiency

Improve the efficiency and reliability of goods movement across and between all modes of the freight transportation system



Improve Safety and Security

Ensure the protection of people, cargo, and infrastructure



Enhance System Resiliency

Improve system flexibility and the ability of the freight network and infrastructure to withstand and recover from natural disasters and other unforeseen events



Maintain and Renew Infrastructure

Prioritize maintenance actions and strategic investments to ensure the freight transportation system is in a state of good repair and provides efficient multimodal goods movement and connectivity to national and international markets



Support Environmental Stewardship, Local Communities, and Quality of Life

Promote freight as a good neighbor, encourage environmentally friendly and sustainable practices, and operate a freight transportation system that preserves New Jersey's natural, historic, and cultural resources and supports a high quality of life in New Jersey's local communities



Leverage Innovative Technology and Practices

Utilize emerging, innovative technology, practices, and programs as strategies to enhance New Jersey's economic competitiveness, improve system efficiency and reliability, and reduce costs



Facilitate Interagency Coordination and Governance

Foster cooperation, coordination, and partnerships among state, regional and local government agencies, private sector partners, and other stakeholders to promote effective investment in and operation of the freight transportation system





New Jersey Freight Networks

- Interconnected and multi-modal statewide network:
 - Highway
 - Maritime
 - Rail
 - Air

Freight Highway Component

Airport

CUFC

NHFN Highway

Rail Yard

AC 16:32)

CRFC

NJ Access Network

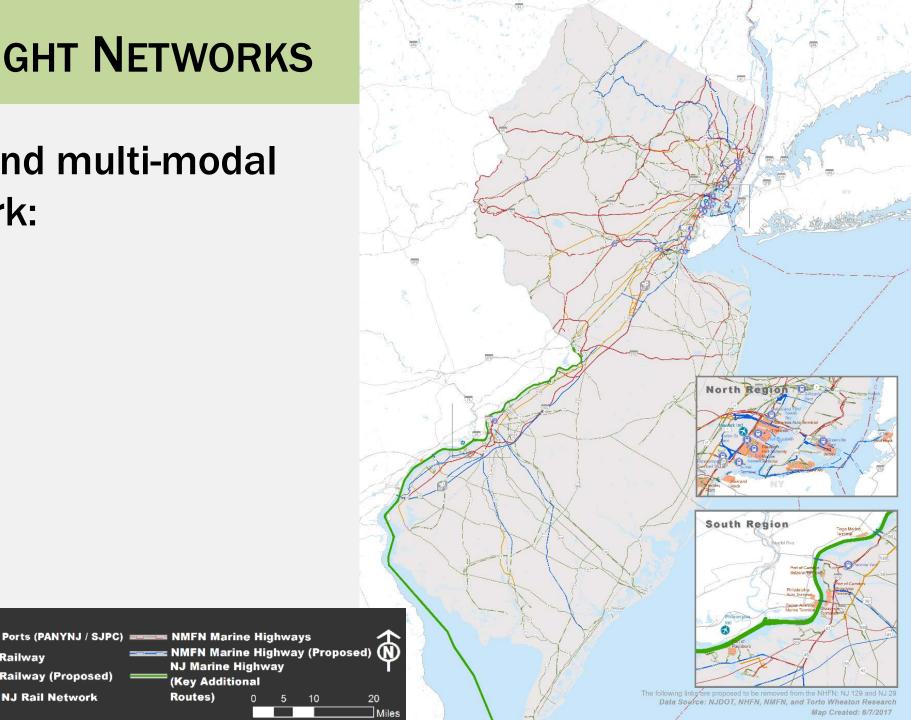
(as defined under NJ _____Railway (Proposed)

NJ Rail Network

NJ Marine Highway

(Key Additional

Routes)



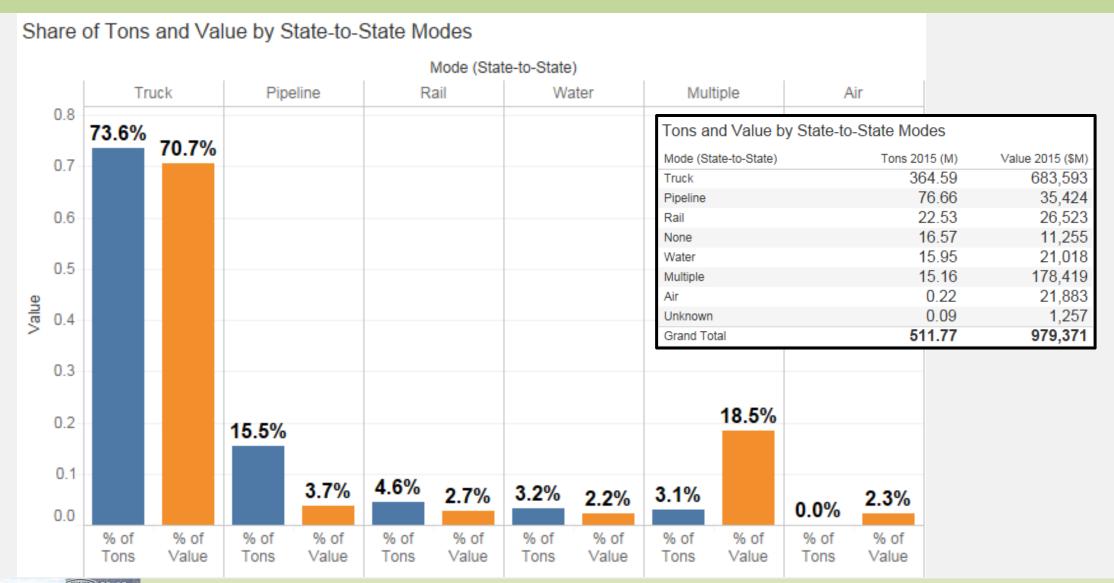
COMMODITY FLOW ANALYSIS

Tons and Value by State-to-State Direction				
State-to-State Flows	Tons 2015 (M)	Value 2015 (\$M)		
Internal	224.71	228,597		
Outbound	136.98	424,756		
Inbound	150.07	326,019		
Grand Total	511.77	979,371		





COMMODITY FLOW ANALYSIS (BY MODE)





IDENTIFYING KEY PRIORITY PROJECTS

Highway

- Planning Truck Travel Time Index
- Average Truck Travel Speed
- Truck Traffic Volumes (NJ CMS)
- Truck Crash Clusters

Rail

- Need for Upgrade to 286k
- User- or Stakeholder-Identified Issues





PRIORITY PROJECTS

- ~300 rail and highway projects identified
 - SOGR (pavement, bridge)
 - ITS Projects
 - Capital Improvements
- Freight Investment Plan
 - − 65 funded projects on the STIP that correlate with the ~300 priority projects
 - 3 NHFP-funded projects
- Freight Planning Projects
 - 4 pilot projects
 - Change the way Freight concerns are addressed within specific projects





PRIORITY PROJECTS - NHFP

- Direct Connection, Route 295/42/I-76
 Relieves existing bottleneck at interchange by providing direct connections between multiple highways; includes ITS and safety investments in addition to improvements to relieve congestion at existing bottleneck.
- Passaic and Harsimus Bridge
 Replaces two-track, riveted steel through Girder Bridge with floor beams and stringers that is nearing end of its useful life. Removes superstructure and replaces it with new ballasted deck Girder Bridge.
- Penns Grove Secondary Siding Installation
 Construction of new railroad siding track to facilitate movement at the recently improved Port of Paulsboro and reduce idling and occupation of the Penns Grove mainline during port entry/exit maneuvers.





PRIORITY PROJECTS - PLANNING

4 FRIO/HX Draw

This project will identify necessary improvements to the HX Draw bridge, which serves thousands of carloads annually, and includes multiple businesses that New Jersey risks losing if targeted improvements are not advanced.

North-South Rail Connector

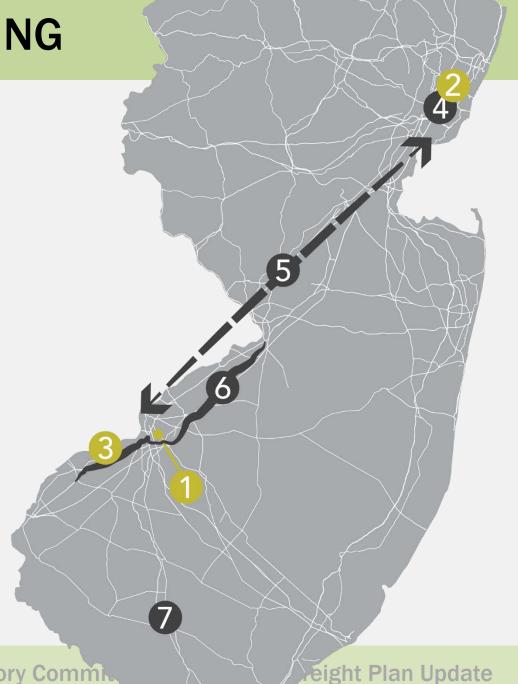
This study will investigate opportunities to better connect New Jersey's freight generators in North and South Jersey by rail, including the investigation of potential corridors and economic development opportunities.

6 I-295 Interchanges

This planning study will review conditions and identify potential solutions (focused on the needs of the freight industry) at five interchanges along I-295 within Burlington and Gloucester County.

7 NJ 55 at NJ 47 Interchange

This project will aim to address ramp, capacity, and operational deficiencies, each of which impacts the movement of heavy vehicles through this critical junction.





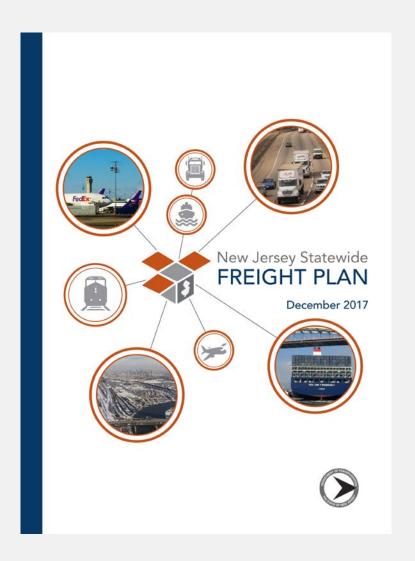
REGIONAL INITIATIVES

- Freight Advisory Committee
 - Continue to leverage knowledge, expertise, and relationships
- Capital Programming Process
 - Inclusion of Freight SMEs in CD/PE phases
- Truck Parking
 - Pilot P3 Concept in Springfield Twp
- Local Outreach
 - Improve coordination and participation with municipal/county officials/stakeholders





THANK YOU



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DVRPC's Work on Aging: Latest Tool



- What are Age-Friendly Communities?
- Aging in the Region
- WHO/AARP Designation
- Age-Friendly's Eight Domains
 - Age-Friendly Checklist
- How Can Munis Be More Age-Friendly?
- Dementia-Friendly Communities
- Resources

https://www.dvrpc.org/MIT













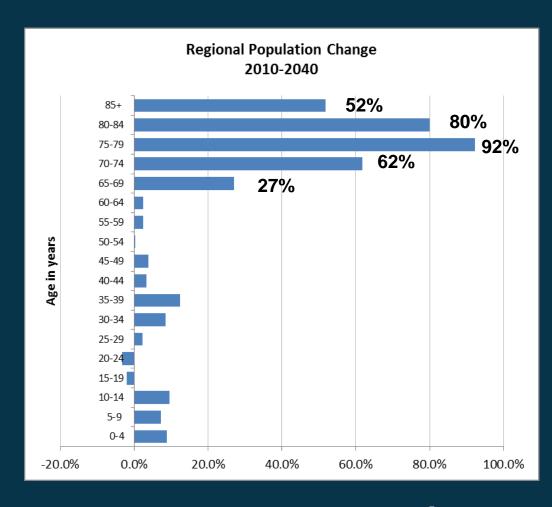


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Age-friendly communities are places where older adults can age "actively"— in the physical, social, economic, and civic life of a community.

Create Age-Friendly Communities: Why?

- Demographic imperative
- Forecast: Region will grow by 11% from 2010-2040; those 65+ will grow by 58%
 - Larger contrast in suburbs
 - Suburban SF homeowners
 - Limited mobility
 - Transit may be lacking
 - Dispersion across suburbs















WHO/AARP Age-Friendly Designation

- WHO's Global Network of Age-Friendly Cities & Communities (2010)
- Designation process via AARP:
 - Establish process to involve older people 1)
 - 2) Do a baseline assessment of the 8 domains
 - 3) Develop a 3-year action plan
 - Identify indicators to monitor progress
- City of Philadelphia, West Chester Borough, Princeton
 - Swarthmore, East Goshen, West Philly, Montgomery County













WHO/AARP Domains for Assessment

- Outdoor Spaces and Buildings
- **Transportation**
- Housing
- **Social Participation**
- Respect and Social Inclusion
- Civic Participation and Employment
- Communication and Information
- Community Support and Health Services













Outdoor Spaces and Buildings

- Narrowing down of spatial experience—getting outdoors harder, immediate neighborhood more important
- Amplification of impact of many small environmental deficits
- Assess for:
 - Sidewalks, crosswalks, quality of pavements
 - Access to green space
 - Security, cleanliness
 - Places to sit, public toilets
 - Age-friendly buildings and businesses













Outdoor Spaces and Buildings



















Transportation

- Maintaining one's sense of self and well-being
- Greater reliance on walking and transit, just as falls and traffic risks greater concerns
- Walking is barrier against vascular dementia and depression
- Assess for:
 - Transit availability, affordability, reliability, frequency
 - Travel destinations
 - Age-friendly vehicles, transit stops & stations
 - Safety and comfort of modes
 - Community transport options





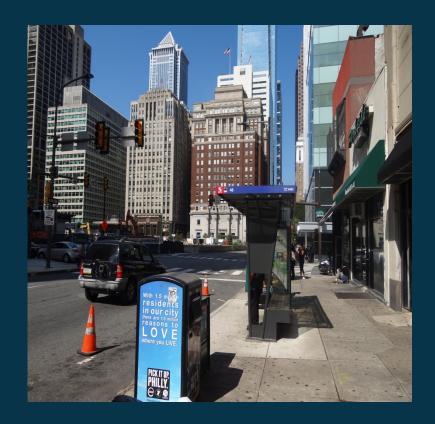




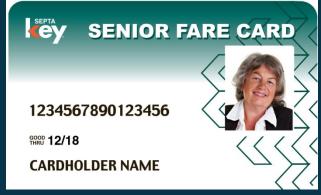




Transportation



















Housing

- Identity, continuity, status
- Poor housing=poor health
- Not necessarily downsizing, rather better design; may need more space
- Assess for:
 - Housing mix
 - **Affordability**
 - Design
 - Community integration
 - Access to essential services













Housing



















How Can Munis Be More Age-Friendly?

- Update zoning/SALDO to allow, require, or incentivize: ADUs, shared housing, less parking for senior housing, visitability, inclusionary units, adult day care, long-term care, home-based offices, sidewalks, TOD, colocation
- Adopt Complete Streets, Vision Zero, lower speed limit zones, senior pedestrian zones, wayfinding & legible signage, programs for older cyclists
- Plan for providing bus shelters, benches, public restrooms, senior playgrounds













Dementia-Friendly Communities

- In the U.S., 60% live in their communities, 1 in 7 live alone
 - Will go out for undemanding tasks
 - Will only use transit or cars with a companion
 - Less aware of physical and social dangers
 - Can be anxious or confused in crowded or complex places
 - Can't always interpret clues for entrances or uses of buildings
 - Use landmarks rather than maps or directions to orient
- Familiar, Legible, Accessible, Distinctive, Comfortable, Safe
 - Buildings that reflect uses, small block sizes, hierarchy of street types, obvious building entrances, landmarks, street furniture, public seating, pedestrian crossings with audible and visual cues













Resources

AARP Livable Communities

APA Aging in Community Policy Guide & Talking Points

APA PA Healthy Communities Task Force

Area Agencies on Aging

Dementia Friendly America

DVRPC Equity Through Access Map **Toolkit**

www.dvrpc.org/aging

Generations United

Grantmakers in Aging

Leading Age

Milken Institute Center for the Future of Aging

NJ Future Creating Places to Age in NJ

Next Avenue

Penn State Extension Program

Village to Village Network











