

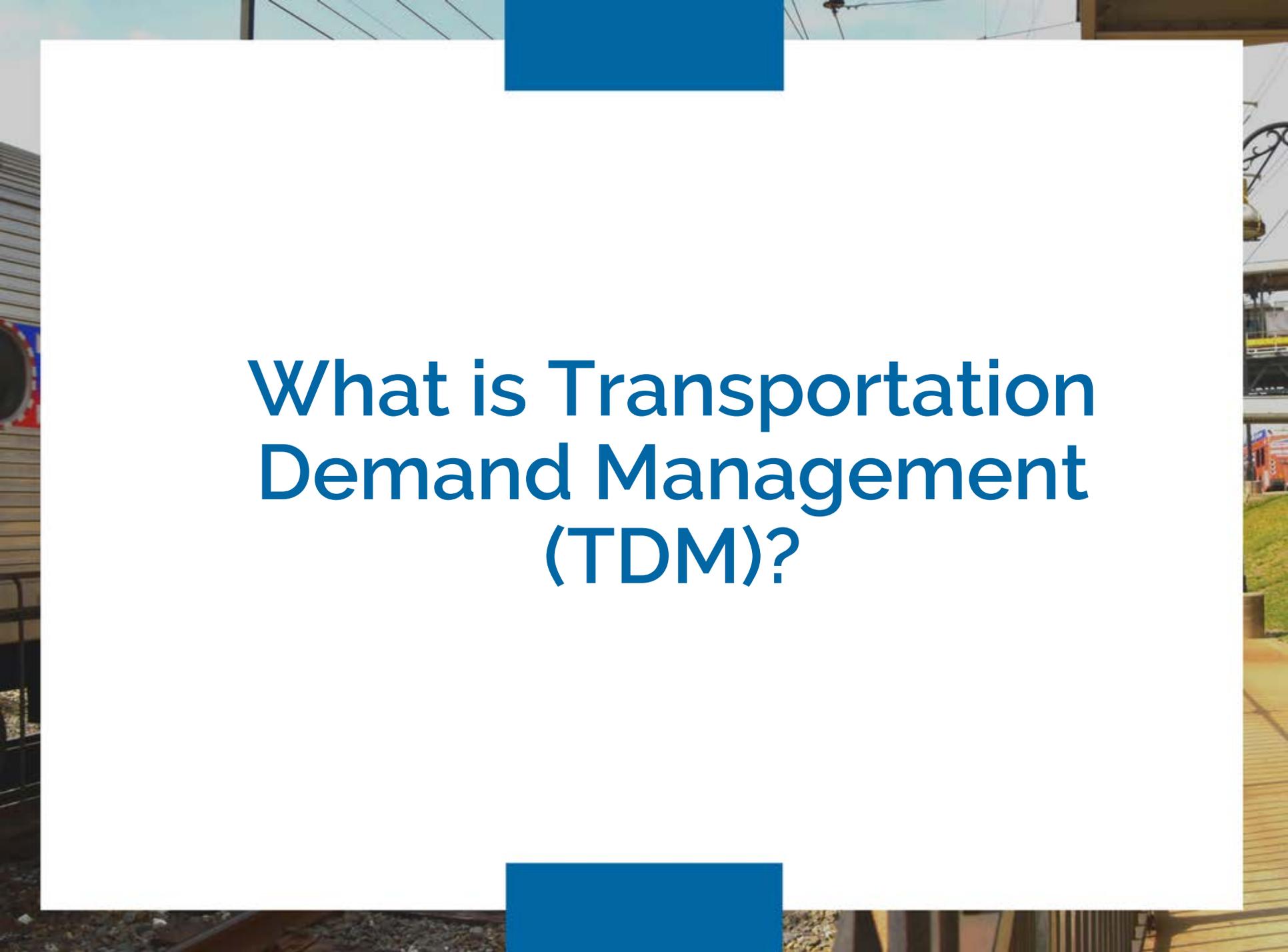


A TRANSPORTATION MANAGEMENT ASSOCIATION

# The TDM Plan for Fort Washington Office Park

NOVEMBER 16, 2017

FORT WASHINGTON OFFICE PARK  
STAKEHOLDERS

The background of the slide is a photograph of a train station. A white rectangular text box is centered on the page, with two solid blue rectangles positioned above and below it. The text is in a bold, blue, sans-serif font.

# What is Transportation Demand Management (TDM)?



<b>Location</b>	<b>Residents</b>	<b>Workers 16 and over</b>
Pennsylvania	12,770,000+	5,510,000 +
Montgomery County	812,900+	486,000+
Upper Dublin Township	26,142	17,935

# **COST**

Philadelphia (2014 \$): \$3.6 Billion

Per Commuter: \$1,112

Allentown- Bethlehem (2014 \$): \$393 Million

Per Commuter: \$694

# **TIME**

Philadelphia: 157+ million hours

Per Commuter: 48 hours

Allentown- Bethlehem: 17 + million hours

Per Commuter: 30 hours

# Defining TDM

“Transportation demand management (TDM) focuses on helping people change their travel behavior—to meet their travel needs by using different modes, traveling at different times, making fewer trips or shorter trips, or taking different routes.”

The Center for Urban Transportation Research, University of South Florida

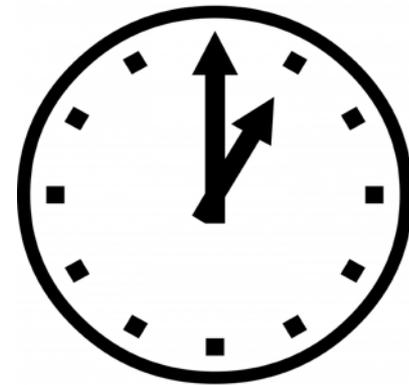
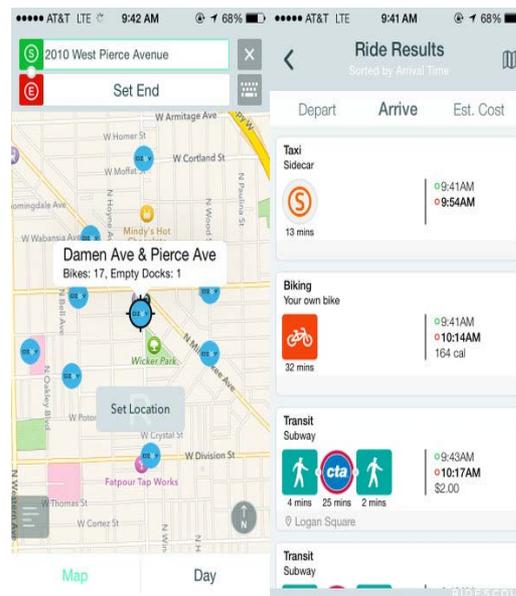
“...to meet their travel needs by using different modes”



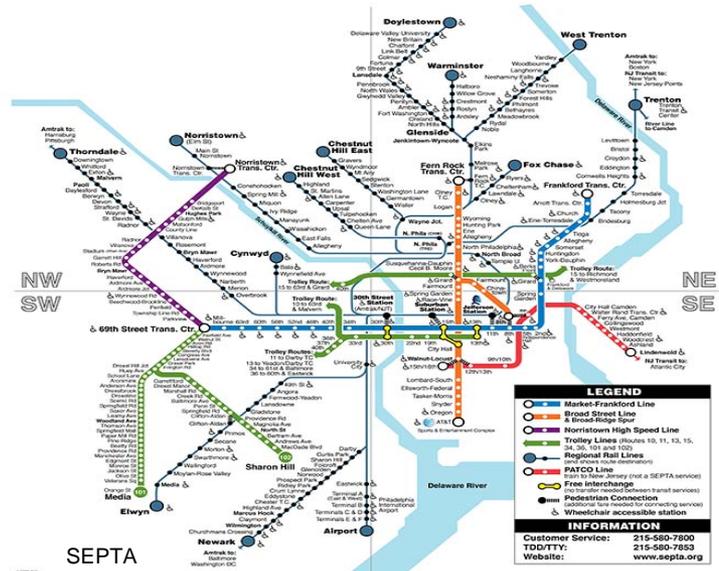
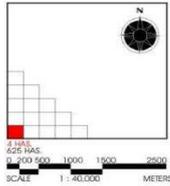
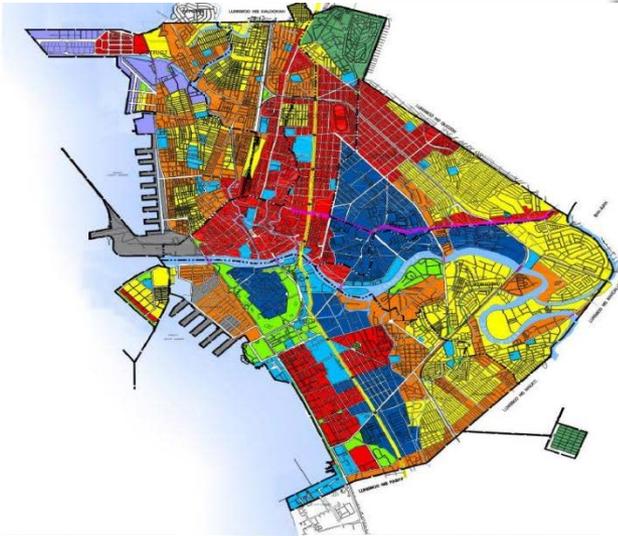
“...making fewer trips or shorter trips”

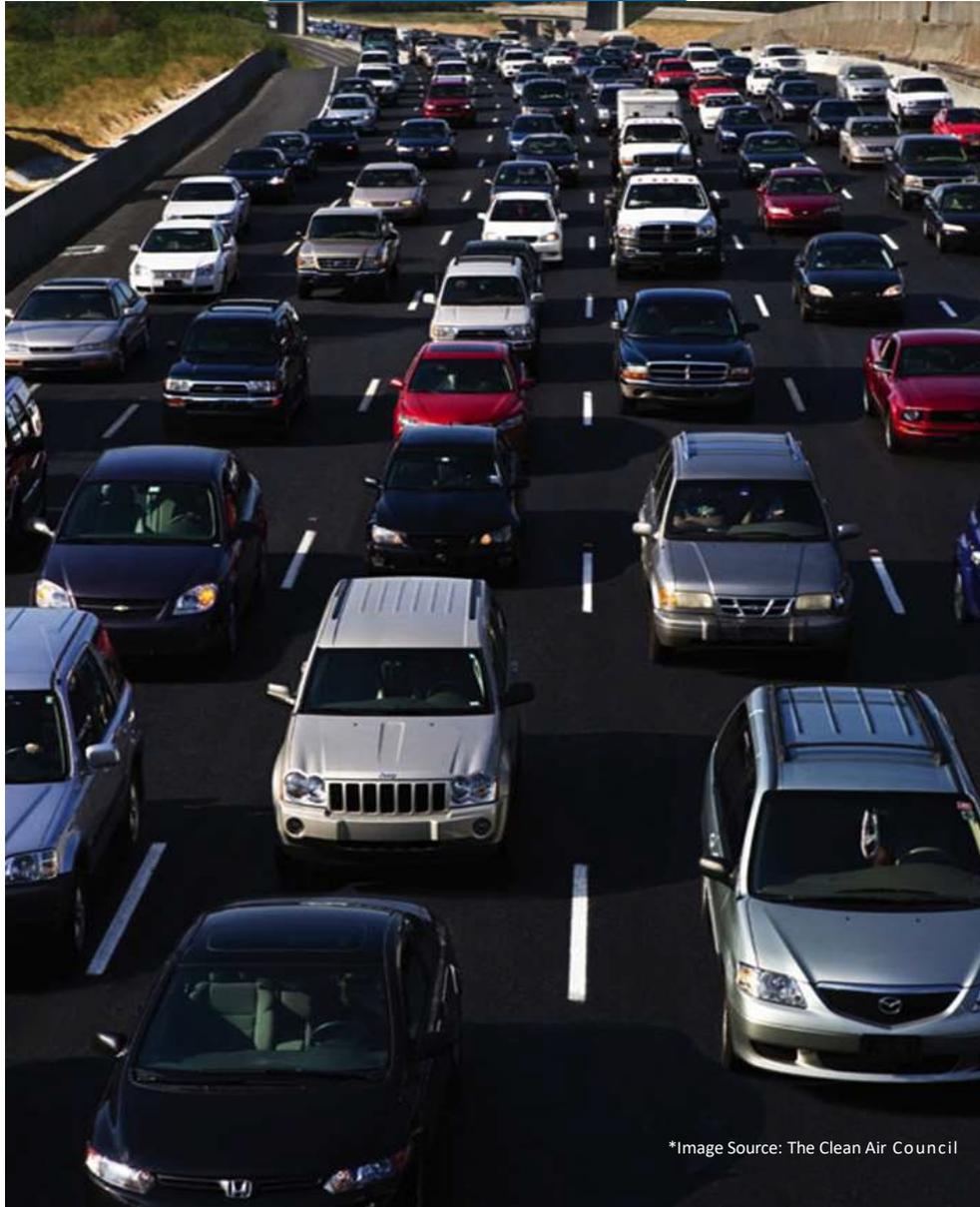


“traveling at different times...  
or taking different routes.”

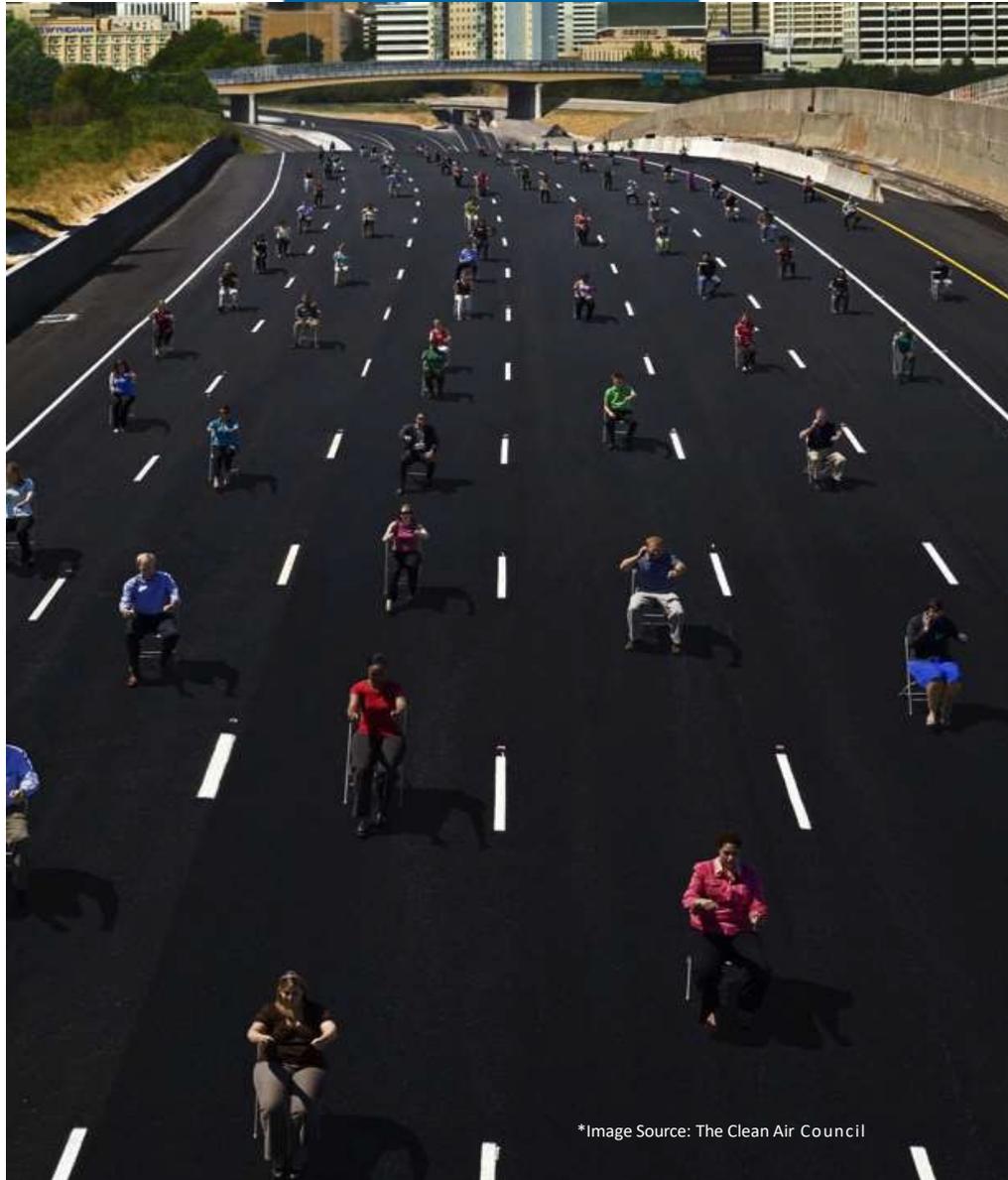


- LEGEND:**
- HIGH DENSITY RESIDENTIAL/ INSTITUTIONAL ZONE (D-100)
  - MEDIUM INTENSITY COMMERCIAL/ RESIDENTIAL ZONE (D-200)
  - HIGH INTENSITY COMMERCIAL/ RESIDENTIAL ZONE (D-300)
  - LIGHT INTENSITY INDUSTRIAL ZONE (I-1)
  - GENERAL INSTITUTIONAL ZONE (I-2)
  - UNIVERSITY CLUSTER ZONE (I-3)
  - GENERAL PUBLIC OPEN SPACE ZONE (POS-GEN)
  - CREMATION ZONE (POS-CRM)
  - UPLIFT ZONE (U-1)
  - WATER ZONE (W-1)
  - CITY BOUNDARY
  - CONGRESSIONAL DISTRICT BOUNDARY
  - CITY
  - UPLIFT
  - HIGHWAYS





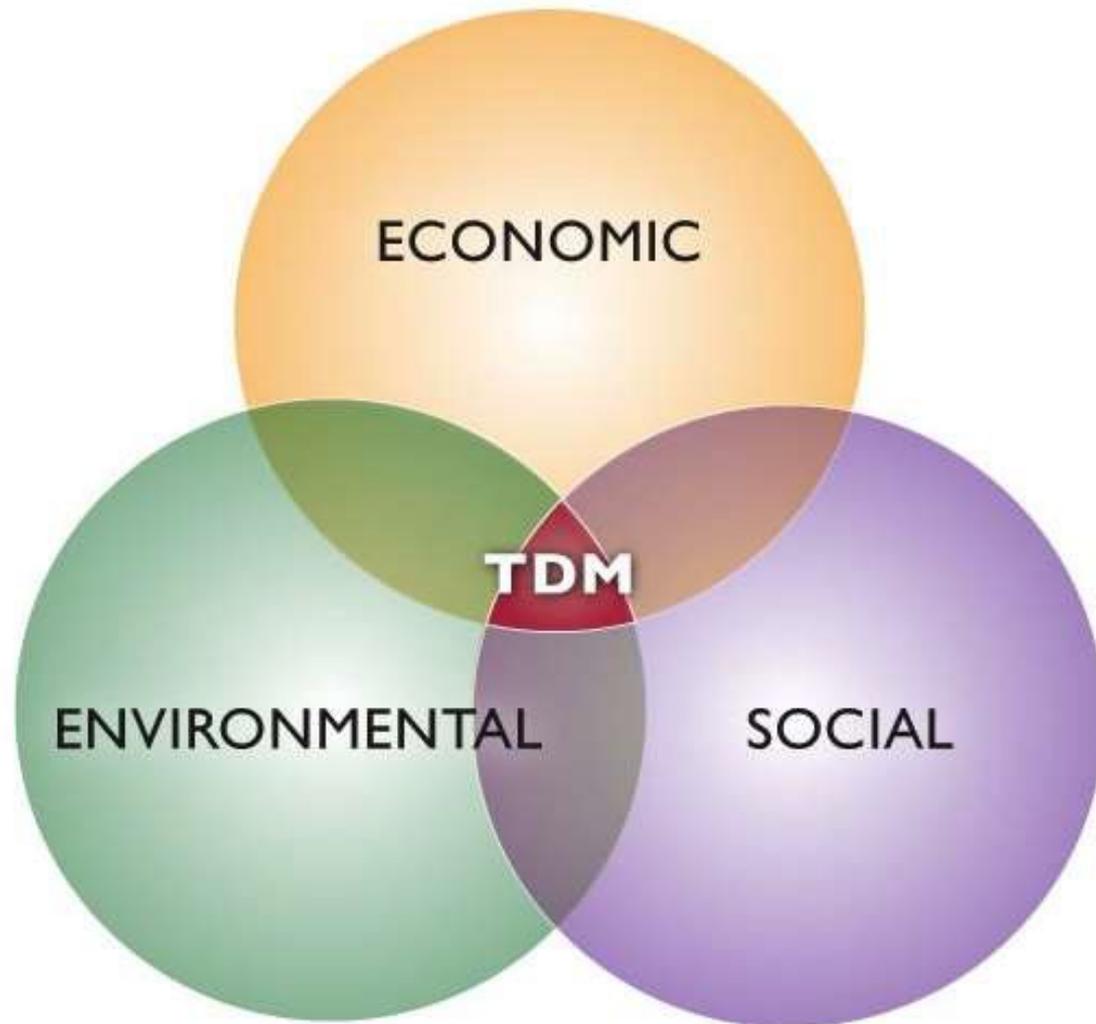
\*Image Source: The Clean Air Council



\*Image Source: The Clean Air Council



\*Image Source: The Clean Air Council



Source: Wells +Associates

# Environmental Benefits

Reduced CO<sub>2</sub>,  
NO<sub>x</sub>, VOCs

Improved  
Respiratory  
Health

Decreased Noise  
Pollution

# Economic Benefits

Reduced Travel  
Time

Expanded Labor  
Force Access

More Efficient  
Land Use

Parking  
Reduction

Stronger  
Neighborhood  
Retail

More equitable  
transportation  
options

# Social Benefits

More Personal  
Time

Expanded  
Access to Jobs

Improved  
Health/Fitness

Increased  
Sense of  
Community &  
Safety

Age in Place

Quality of Life

# PARTNERSHIPS



# Fort Washington Office Park and Major Roadways

Upper Dublin Township, Montgomery County, Pennsylvania



# TDM PLAN GOAL

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



# WHY A TDM PLAN

In an effort to:

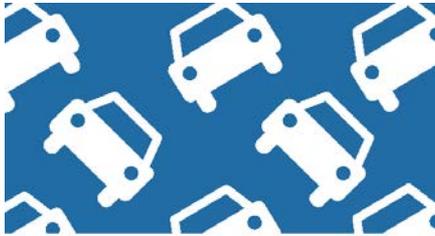
- Meet the needs of current stakeholders
- Attract future employers and residents
- Allow for the growth of the office park while mitigating impact on an already congested transportation network of I-276, PA 309 and municipal roadways
- Allow the park to be competitive and resilient in a diversifying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



# TDM PLAN ELEMENTS

- Office Park TDM Analysis
- 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
- Best Practices Research
- Plan Development
- Public Meeting to unveil the TDM Plan





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

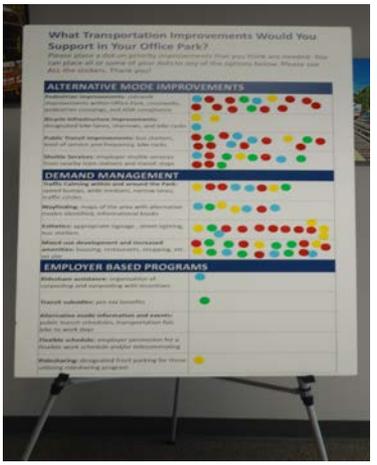
Let us know what you think!

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>



# MEETING 1



A FEW WAYS  
**TRANSPORTATION DEMAND MANAGEMENT**  
 WILL BENEFIT YOUR COMPANY

- LABOR FORCE ACCESS
- REDUCED COSTS
- IMPROVED COMMUTES & GOODS MOVEMENT
- ENHANCED EMPLOYEE RECRUITMENT AND RETENTION
- ADDITIONAL EMPLOYEE BENEFITS AT LITTLE TO NO COST
- ACHIEVE SUSTAINABILITY GOALS

TAKE THE SURVEY TODAY  
[WWW.SURVEYMONKEY.COM/R/COMPANYCOMMUTE](http://WWW.SURVEYMONKEY.COM/R/COMPANYCOMMUTE)

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.

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A FEW WAYS  
**TRANSPORTATION DEMAND MANAGEMENT**  
 WILL BENEFIT YOU

- LESS TRAFFIC
- MORE MONEY
- MORE TIME
- HEALTH BENEFITS
- IMPROVED WORK RELATIONSHIPS
- COMMUNITY INVOLVEMENT

TAKE THE SURVEY TODAY  
[WWW.SURVEYMONKEY.COM/R/ICOMMUTE](http://WWW.SURVEYMONKEY.COM/R/ICOMMUTE)

# FOCUS GROUP

## SOAR Analysis

### Strengths

- Central locations
- Access to amenities
- Company growth

### Opportunities

- Fort Washington Train Station connection
- Develop Interconnected Trail System
- Aesthetics
- Pedestrian/Bicycle amenities
- Communication strategies

### Aspirations

- Turnpike improvements
- On-demand transportation
- Shuttle services
- Enhanced public transit
- Mixed-use development
- Aesthetics

### Results



# SURVEY ANALYSIS



## 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



# GEOSPATIAL ANALYSIS

- 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



# DENSITY BY STATE

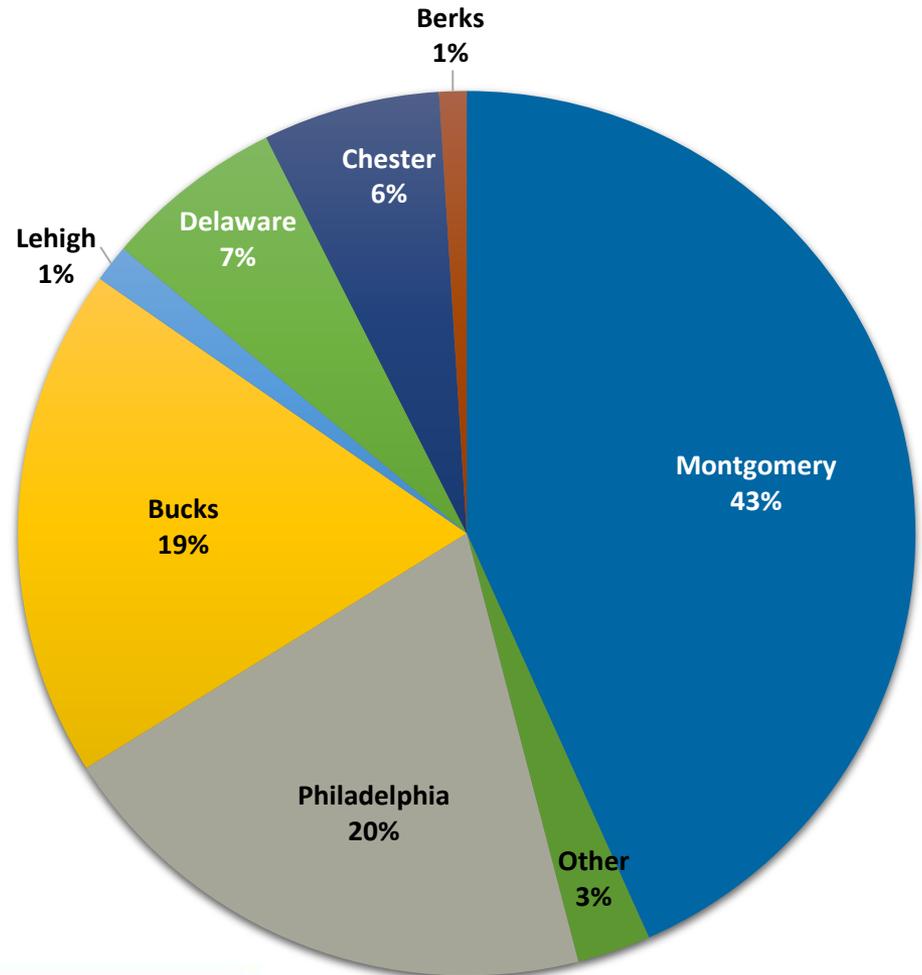


# PA DENSITY BY COUNTY

## Commuters travel from 24 Counties

### Top 6 Counties

- Montgomery: 4,290
- Philadelphia: 1,980
- Bucks: 1,870
- Delaware: 660
- Chester: 660
- Lehigh: 110







Fort Washington Office Park

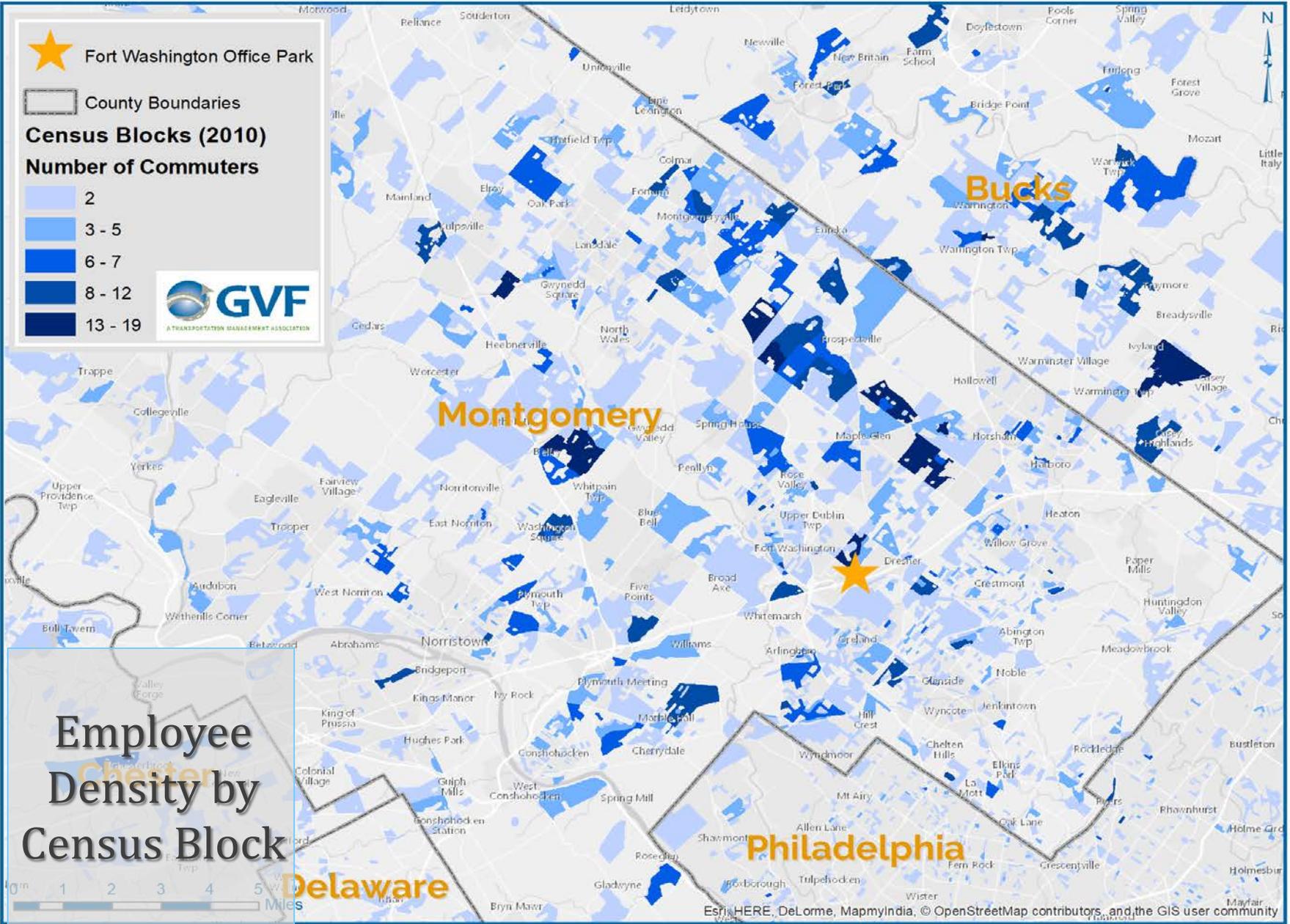


County Boundaries

### Census Blocks (2010)

### Number of Commuters

- 2
- 3 - 5
- 6 - 7
- 8 - 12
- 13 - 19



# Employee Density by Census Block

# ALTERNATIVE TRANSPORTATION

- Train
- Carpool
- Vanpool

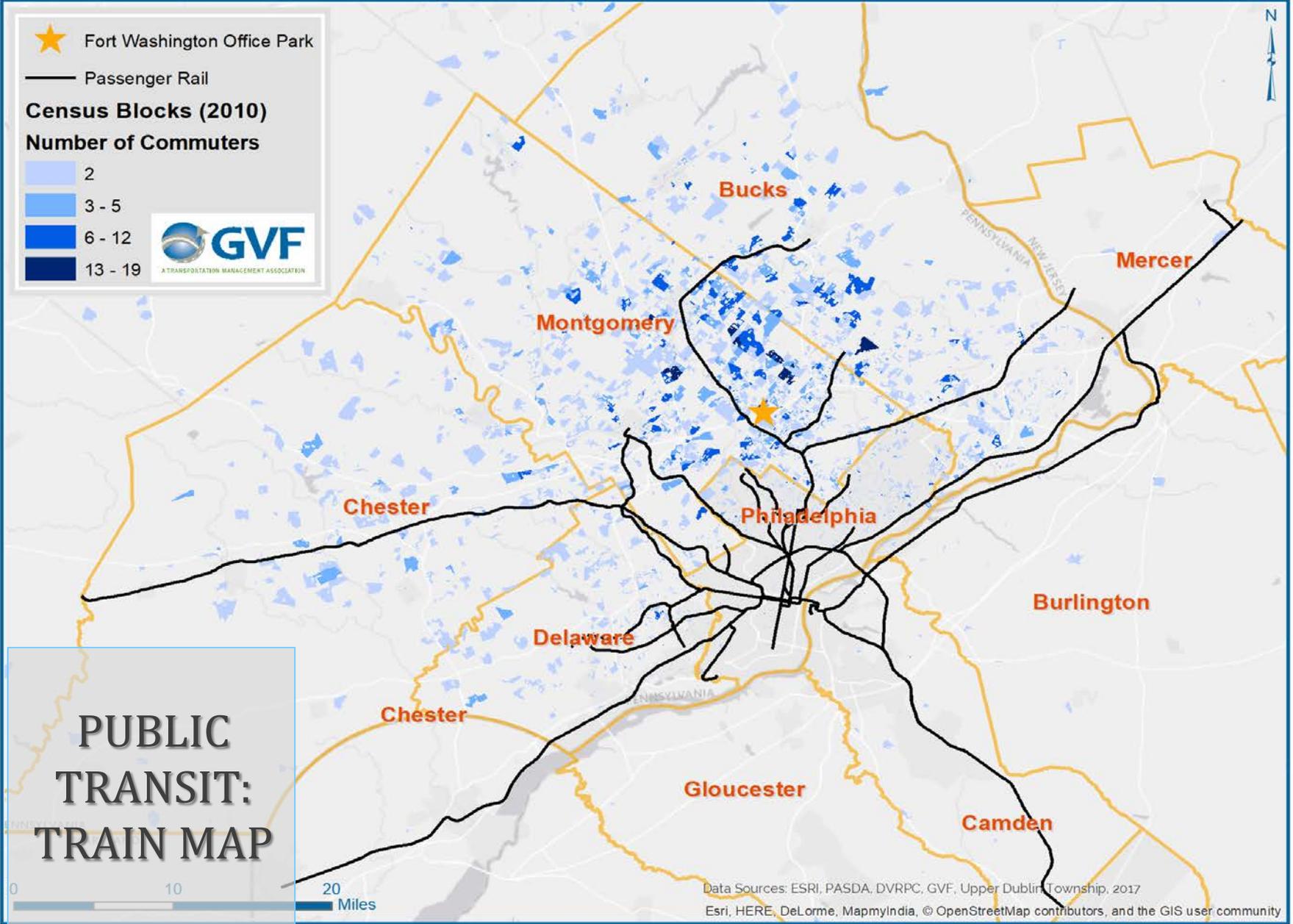
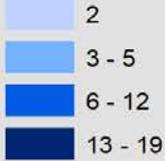


★ Fort Washington Office Park

— Passenger Rail

**Census Blocks (2010)**

**Number of Commuters**



# PUBLIC TRANSIT: TRAIN MAP



Data Sources: ESRI, PASDA, DVRPC, GVF, Upper Dublin Township, 2017  
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

- ★ Fort Washington Office Park
- Identified Priority Train Stations

### Train Stations

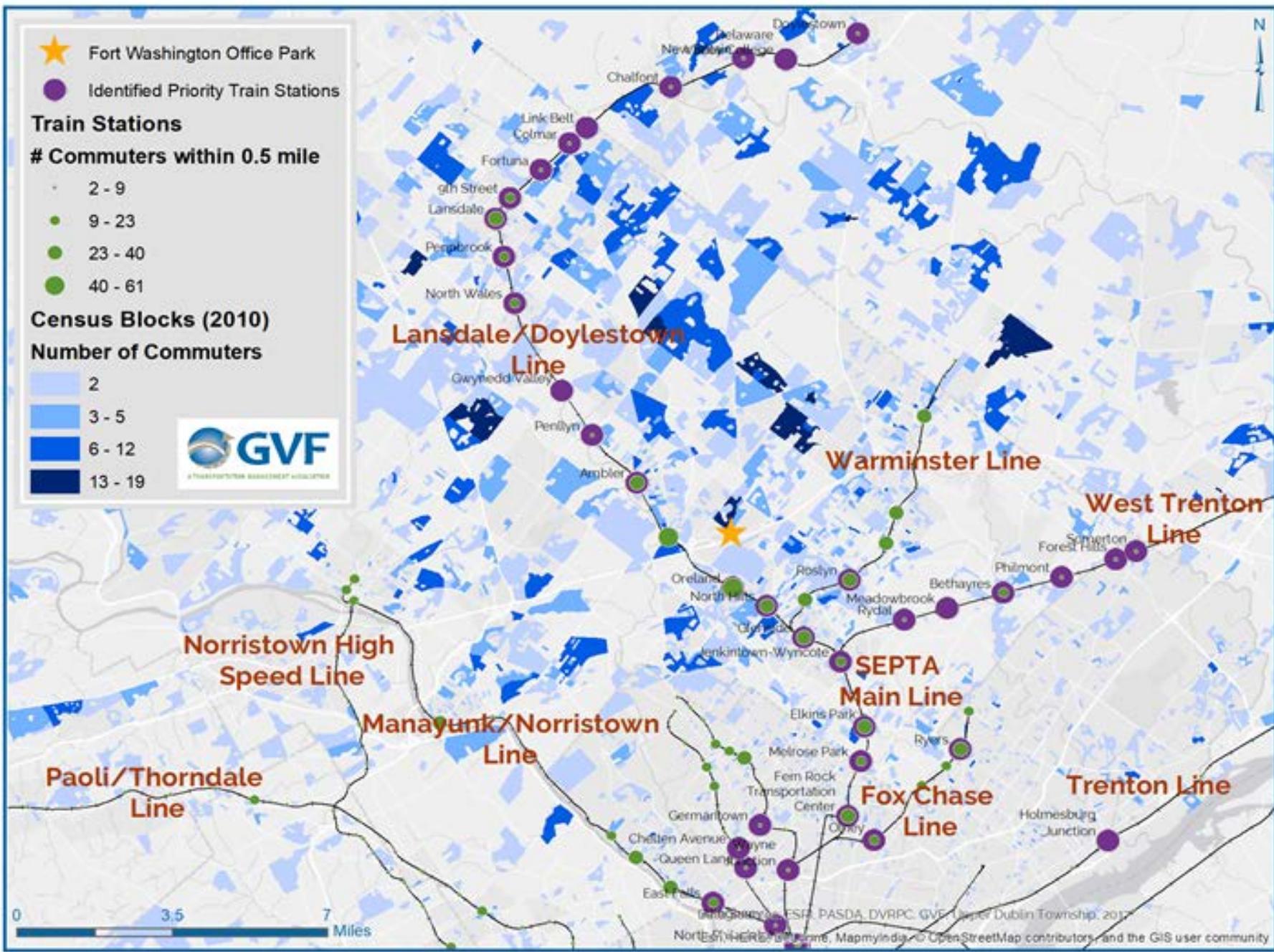
#### # Commuters within 0.5 mile

- 2 - 9
- 9 - 23
- 23 - 40
- 40 - 61

### Census Blocks (2010)

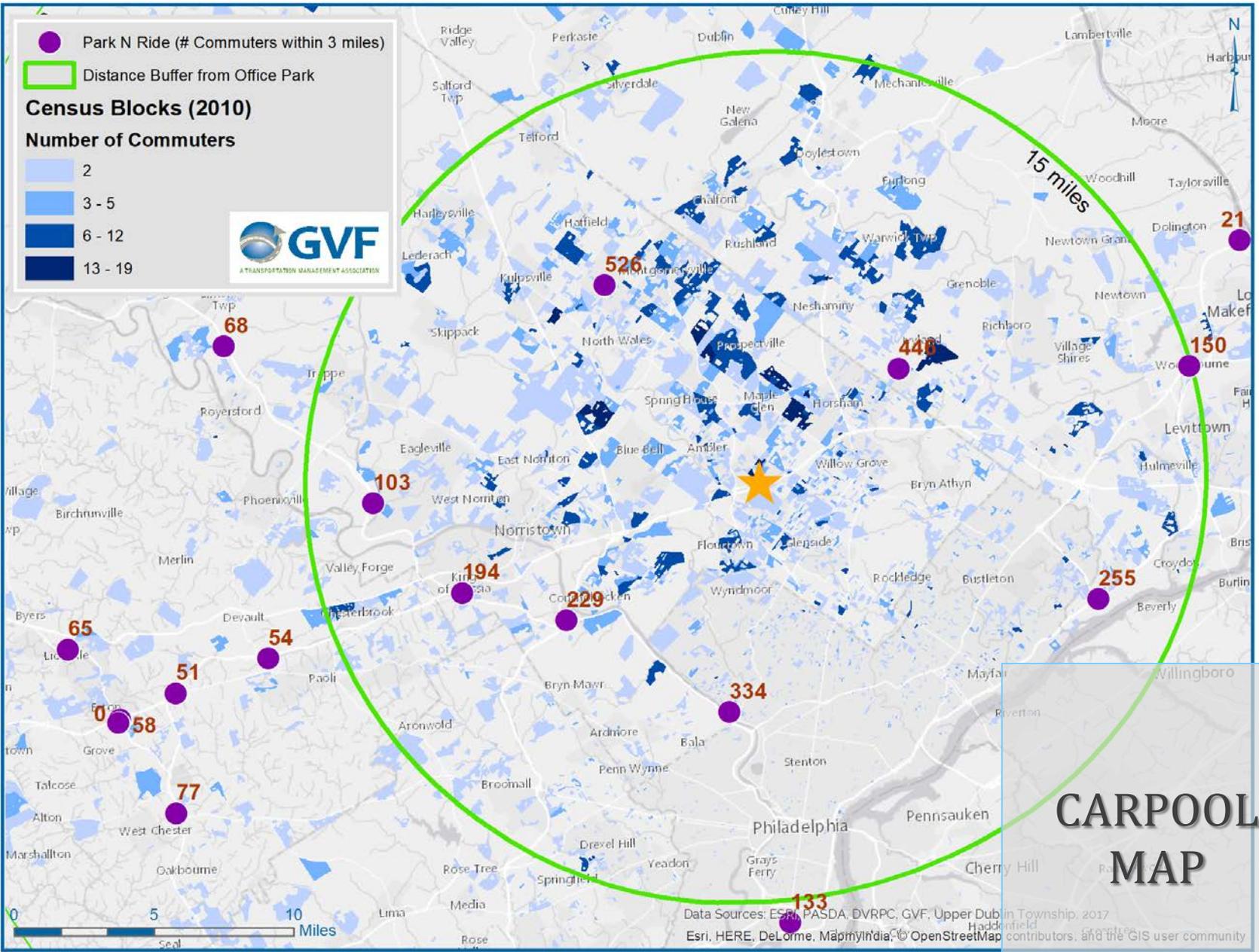
#### Number of Commuters

- 2
- 3 - 5
- 6 - 12
- 13 - 19



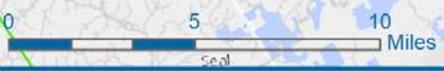
Map provided by SEPTA, PASDA, DVRPC, GVF, Upper Dublin Township, 2017.  
 North arrow, scale, map data © OpenStreetMap contributors, and the GIS user community

 Park N Ride (# Commuters within 3 miles)  
 Distance Buffer from Office Park  
**Census Blocks (2010)**  
**Number of Commuters**  
 2  
 3 - 5  
 6 - 12  
 13 - 19

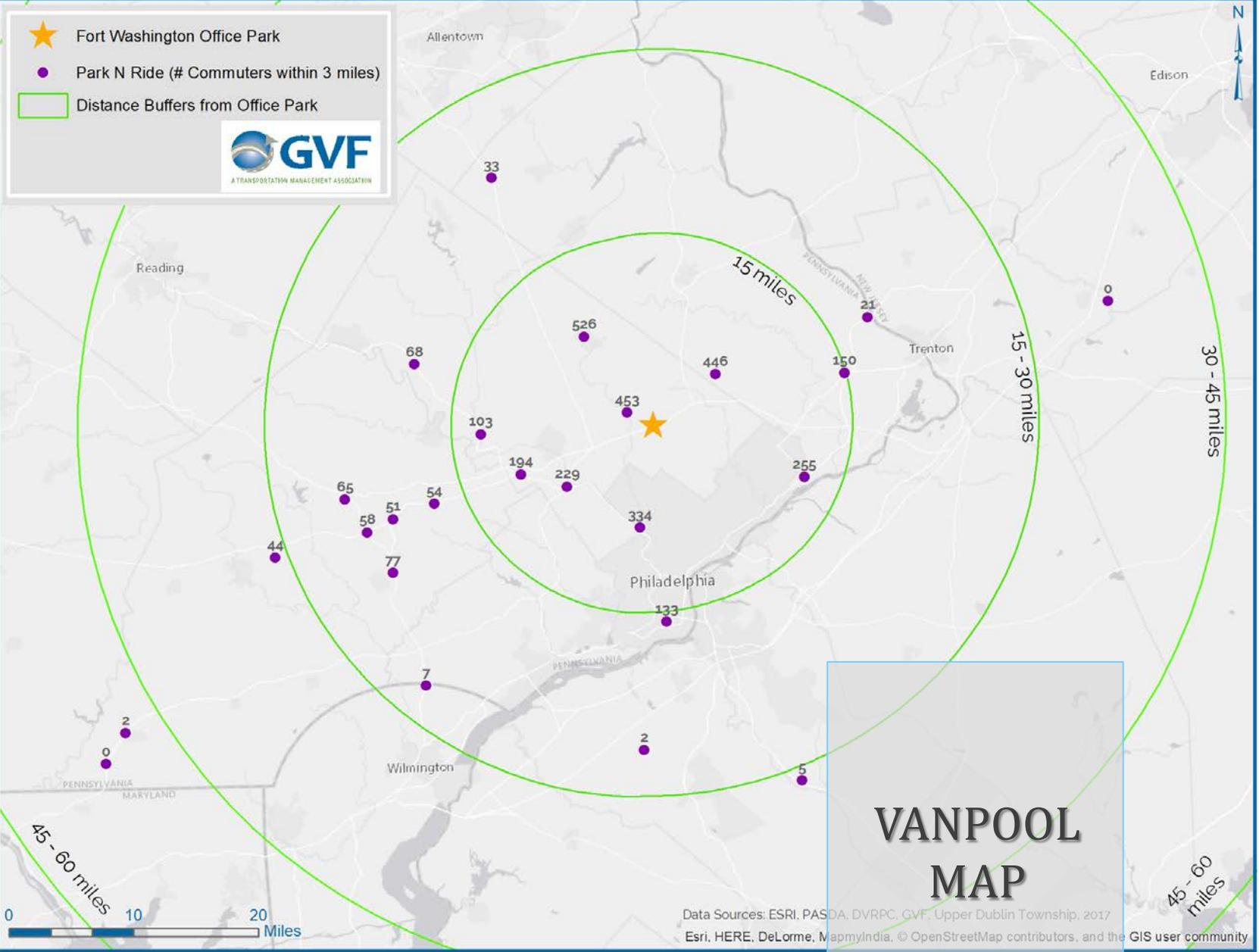



# CARPOOL MAP

Data Sources: ESRI, PASDA, DVRPC, GVF, Upper Dublin Township, 2017  
 Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community



-  Fort Washington Office Park
-  Park N Ride (# Commuters within 3 miles)
-  Distance Buffers from Office Park

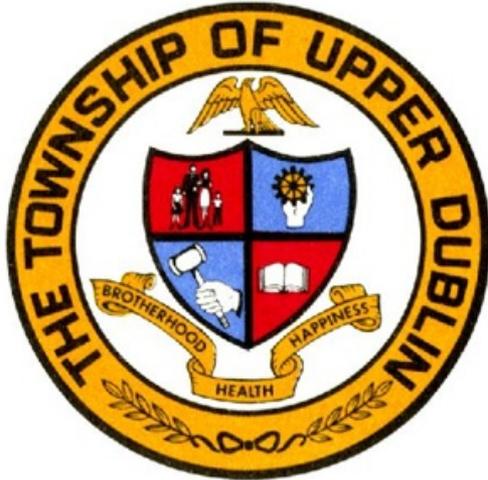



# VANPOOL MAP

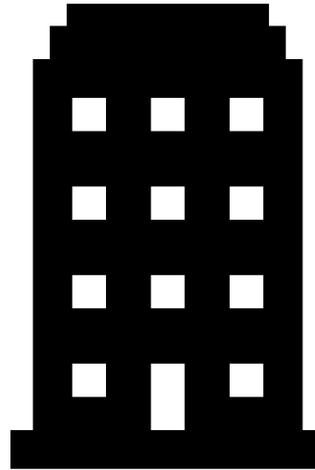
Data Sources: ESRI, PASDA, DVRPC, GVF, Upper Dublin Township, 2017  
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# RECOMMENDATIONS

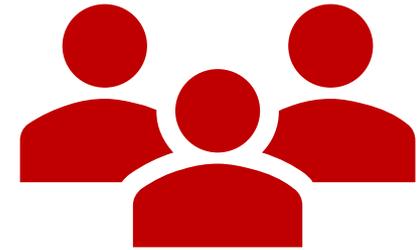
Three major stakeholders:



*Upper Dublin Township*



*Property Owners*



*Employers*



# RECOMMENDATIONS

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

# PARTNERSHIP AND COORDINATION



## **Applicable to ALL:**

- Participate in the Fort Washington Office Park Coalition
- Collaborate with SEPTA
- Partner with TMA

## **Property Owners:**

- Collaboration with tenants



# PARTNERSHIP AND COORDINATION



## Fort Washington Office Park TDM Coalition

*Goal: To work collaboratively on addressing transportation issues facing the Office Park.*



# PARTNERSHIP AND COORDINATION



## Collaboration with SEPTA

Opportunities to improve transit service within the Office Park and to the worksite



# PARTNERSHIP AND COORDINATION



## Partnership with TMA

TMA can assist with:

- TDM implementation
- Commuter Benefits
- Transportation Planning and Analysis
- Advocacy and Sustainability Goals
- Marketing and Events
- Partnerships



# PUBLIC OUTREACH, MARKETING & EDUCATION



## **Applicable to ALL:**

- TDM Coordinators (TDMCs)
- Other Information Dissemination Strategies

## **Township and Employer:**

- Internal Online Resource
- Commuter Events

## **Township:**

- Transportation Demand Management Plan

## **Property Owner and Employer:**

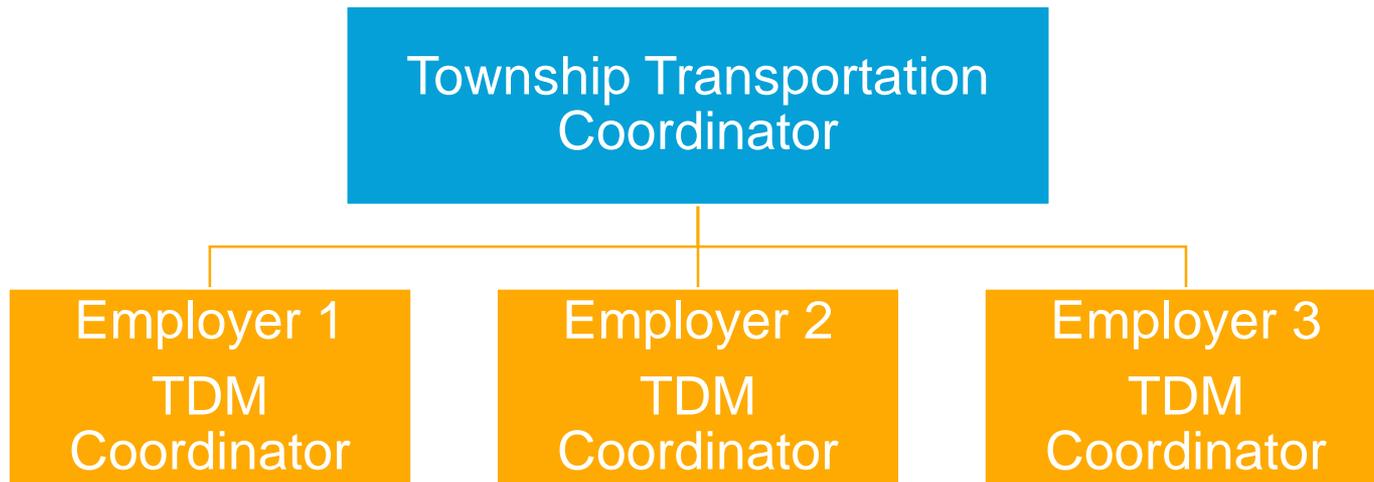
- Site Specific TDM Plan



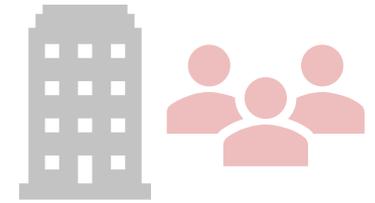
# PUBLIC OUTREACH, MARKETING & EDUCATION



## Township Transportation Coordinator (TTC)

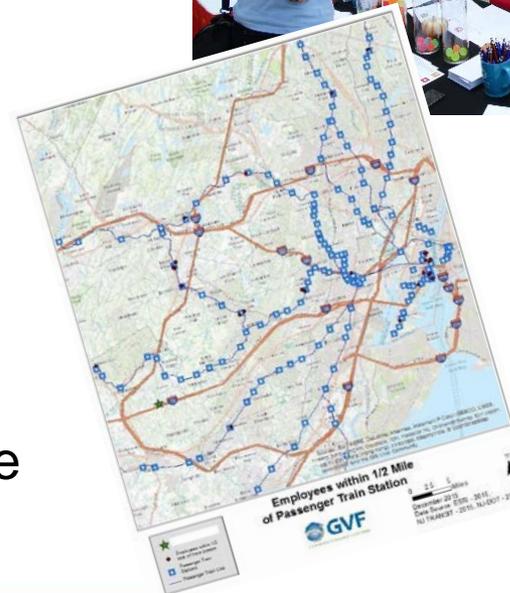


# PUBLIC OUTREACH, MARKETING & EDUCATION



## TDM Coordinators (TDMCs)

- Point of contact to employees on;
  - Transportation Services and Options
  - Commuter Benefits
- Organize and facilitate events, carpool matching groups, etc.
- Maintain internal website/webpage
- Conduct surveys and analysis



# PUBLIC OUTREACH, MARKETING & EDUCATION

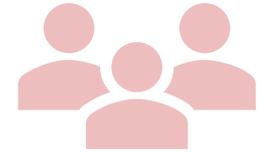


## Other Marketing and Public Outreach:

- TDM Flyers
- Commuter Events
- Lunch and Learns
- Site TDM Specific Plans



# EMPLOYEE COMMUTER INFORMATION AND REPORTING

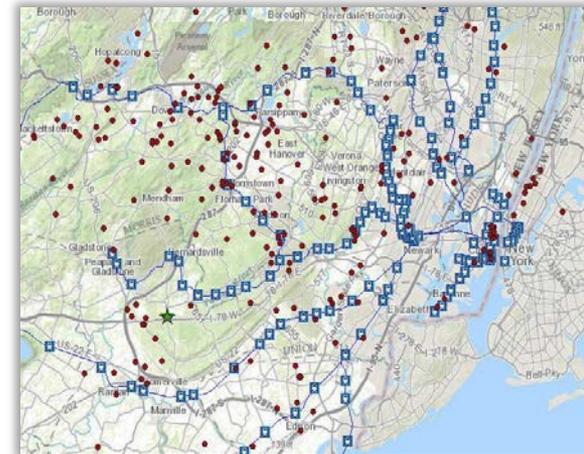
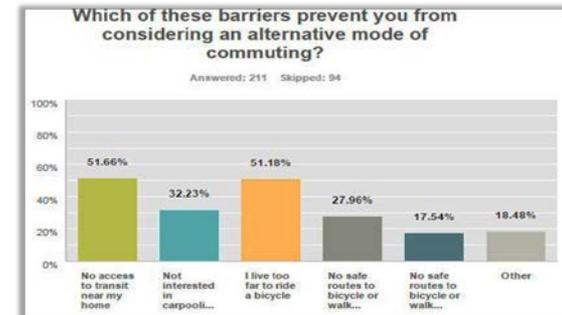


## Employee Commuter Survey

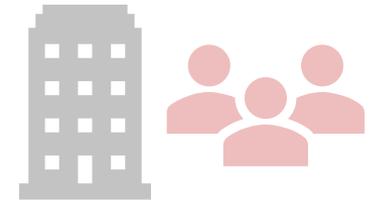
○ Information on employees' commute behavior, preferences, and desires:

- Mode Choice
- Travel Time
- Travel Distance
- Barriers
- Opportunities

○ Will be used to measure change in commuter preferences



# FINANCIAL AND OTHER INCENTIVES



## Applicable to All:

- Financial

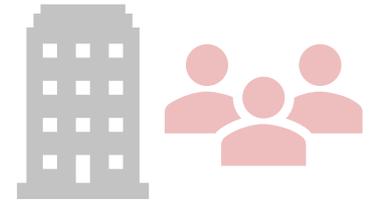
## Employer:

- Non-monetary Incentives



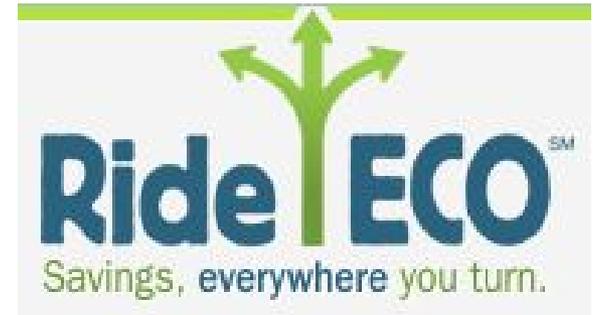
[This Photo](#) by Unknown Author is licensed under [CC BY-SA](#)

# FINANCIAL AND OTHER INCENTIVES

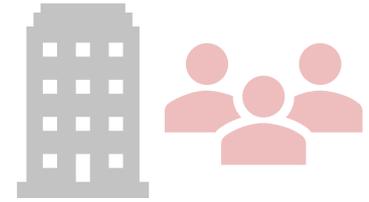


## Financial Incentives

- Transit Subsidies
  - Free and/or subsidized transit passes offered by employer
  - Cost of public transit was identified as a key barrier
- Pre-tax Benefits
  - In 2017 an employer can offer up to:
    - \$255 a month for vanpooling, public transit, and parking
    - \$20 a month for qualified reimbursement for biking when regularly bikes to work
- Parking Cash-Out



# FINANCIAL AND OTHER INCENTIVES



## Other Incentives

- Internal policies:
  - Telecommuting
  - Flexible schedule
  - Compressed work week
- Reward program to use alternative transportation options



# PARKING MANAGEMENT



## **Applicable to ALL:**

- Carsharing
- Shuttle Services

## **Property Owner and Employer:**

- Vanpooling
- Carpooling



# PARKING MANAGEMENT

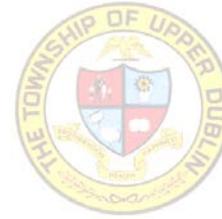


## Carsharing

- Designate parking for car-share vehicles
- Provide car share vehicle onsite
- Car sharing can be incorporated into zoning requirements



# PARKING MANAGEMENT



## Shuttle Services

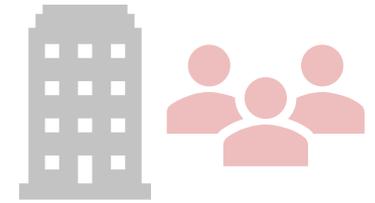
- Provide last mile connections
- Accommodate third shift employees
- Provide access to amenities
- Types of systems



# PARKING MANAGEMENT

## Vanpooling

- 15 + miles
- How
  - Employee organized
  - Employer organized
- Incentives
  - Commuter benefits
    - \$255 a month
  - Emergency Ride Home Program
  - Preferential Parking
  - Financial/Non-financial
- Features:
  - Reliable vehicle, Wi-Fi, roadside assistance, 24/7 maintenance,



## Carpooling

- 15 miles or less
- How
  - Employee organized
  - Employer organized
- Incentives
  - Emergency Ride Home Program
  - Upfront Parking
  - Financial/Non-financial

# PEDESTRIAN AND BICYCLE IMPROVEMENTS

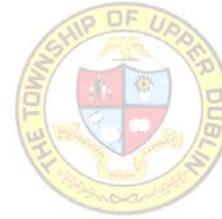


## **Applicable to ALL:**

- Pedestrian Planning and/or Infrastructure
- Bicycle Planning and/or Infrastructure



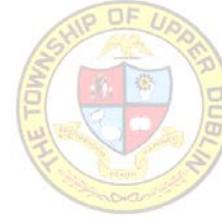
# PEDESTRIAN AND BICYCLE IMPROVEMENTS



## Pedestrian Amenities and Facilities



# PEDESTRIAN AND BICYCLE IMPROVEMENTS

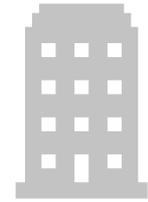


## Bicycle Amenities and Facilities

- Bicycle Network Improvements
- Employer amenities
- Bicycle Parking
- Bicycle Repair Stations
- Provide and/or support bikeshare



# AESTHETICS



## **Applicable to All:**

- Human Scale Design
- Branding and Signage

## **Township:**

- Lighting



# AESTHETICS



## Human Scale Design

- Elements
  - Scale, proportion, building setbacks, façade elements and lighting
- Identify appropriate locations for designing creative public spaces
- Collaborate to ensure consistency throughout the Office Park



# AESTHETICS

## Branding and Signage

- Messaging
- Directional and Services Information
- Sense of Place
- Real time information



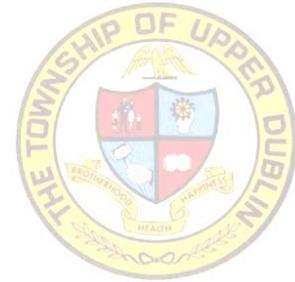
# PARKING AND LAND USE MANAGEMENT



- Support Car Sharing
- Encourage Mixed-Use Development
- Build Compact Communities
- Commute Trip Reduction Program
- Parking



# LONG-TERM POLICIES



- TDM Policy in Comprehensive Plan and Zoning
- Transit Benefit Ordinance
- Trip Reduction Ordinance
- Autonomous Vehicle Resolution



# NEXT STEPS



## TDM Plan Recommendations Survey

The Transportation Demand Management (TDM) Plan for the Fort Washington Office Park

Name: \_\_\_\_\_ Organization: \_\_\_\_\_

1. Please place an "X" over the recommendation(s) that your organization is interested in and/or would like more information on below:

Join the Office Park Coalition	Improve Aesthetics on Site (e.g. branding, signage, human scale design)	Improve Pedestrian Amenities and Facilities	Provide Financial Incentives
Collaborate with SEPTA on Public Transit Enhancements	Support/Implement Onsite Car Sharing	Improve Bicycle Amenities and Facilities	Hire or Appoint a TDM Coordinator
Partner with TMA	Support Carpooling/Vanpooling	Support/Implement Bike Sharing	Organize Commuter Events
Conduct Commuter Surveys	Implement Shuttle Services	Provide Non-Monetary Incentives (e.g. flexible schedule, reward system)	Develop Site Specific TDM Plan

2. Would your company like to participate in the Office Park Commuter Coalition and help implement the recommendations listed above and presented on? (Please Circle) Yes No

If yes, please provide information on who can be contacted about the Coalition:

Name: \_\_\_\_\_ Email/Phone: \_\_\_\_\_

3. Please list any other recommendations and/or strategies that you think should be included or explored more in the final TDM Plan:

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Thank you for your feedback!

UPPER DUBLIN TOWNSHIP  
MONTGOMERY COUNTY  
PENNSYLVANIA

## FORT WASHINGTON OFFICE PARK TRANSPORTATION DEMAND MANAGEMENT PLAN

NOVEMBER 2017

WVA BELLS + ASSOCIATES

# Interested in TDM?



Advocacy · Sustainability · Partnerships | Get To Know Us · Events · News & Media

A blue banner for a "GVF SEMINAR" on Monday, April 10, 2017, from 7:30am to 10:00am at Crowne Plaza Philadelphia - King Of Prussia. It includes logos for SV and 422, and a "News" sidebar with a "BUSINESS IN BRIEF" section.

[gvftma.com](http://gvftma.com)

A screenshot of the wearetdm.com website. The main headline reads "CITIES REVIVE AN OLD IDEA TO BECOME MORE PEDESTRIAN-FRIENDLY - GOVERNING". Below it, there's a "LATEST TDM NEWS" section with three articles: "Station placement is key to connecting bikeshare to the transportation grid - MobilityLab", "BMW's iCity electric kick scooter will go on sale later this year - TechCrunch", and "Driverless cars: Who's doing what, and how it impacts urban transportation - Curbed".

[wearetdm.com](http://wearetdm.com)

A screenshot of the PhillyTraffic.com website. The main headline is "PhillyTraffic.com is your source for traffic information in the greater Philadelphia region...". It features a "Transportation News" section with articles like "Temporary Relocation of Transit Stop on Market St. at 15th St." and "PENNDOT STARTS CONSTRUCTION TO REHABILITATE U.S. 202 BRIDGES OVER AMTRAK IN CHESTER COUNTY". There are also "Traffic Cameras" and "Construction Updates" buttons.

[phillytraffic.com](http://phillytraffic.com)

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**QUESTIONS?**

