GVF

A TRANSPORTATION MANAGEMENT ASSOCIATION

TDM PLAN UPDATE

SEPTEMBER 8, 2017

UPPER DUBLIN MUNICIPAL AUTHORITY

PARTNERSHIPS

THE TOWNSHIP OF UPPER DUBLIN

BROTHERHOOD HEALTH HAPPINESS

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

GVF

A TRANSPORTATION MANAGEMENT ASSOCIATION

WELLS + ASSOCIATES

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 TIMELINE

- ~~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~~
- ~~Stakeholder Interviews~~
- ~~Best Pra~~ctices Research
- ~~Plan~~ Development
- Public Meeting 2

MEETING 1

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

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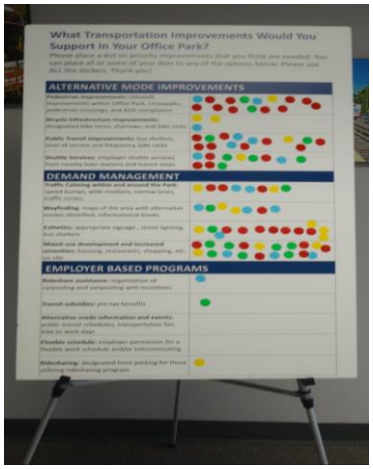
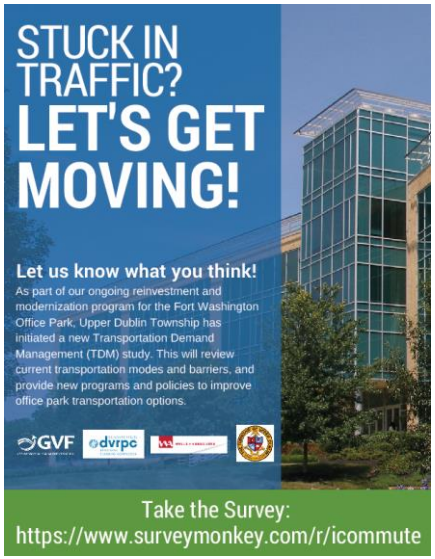




FOCUS GROUP

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

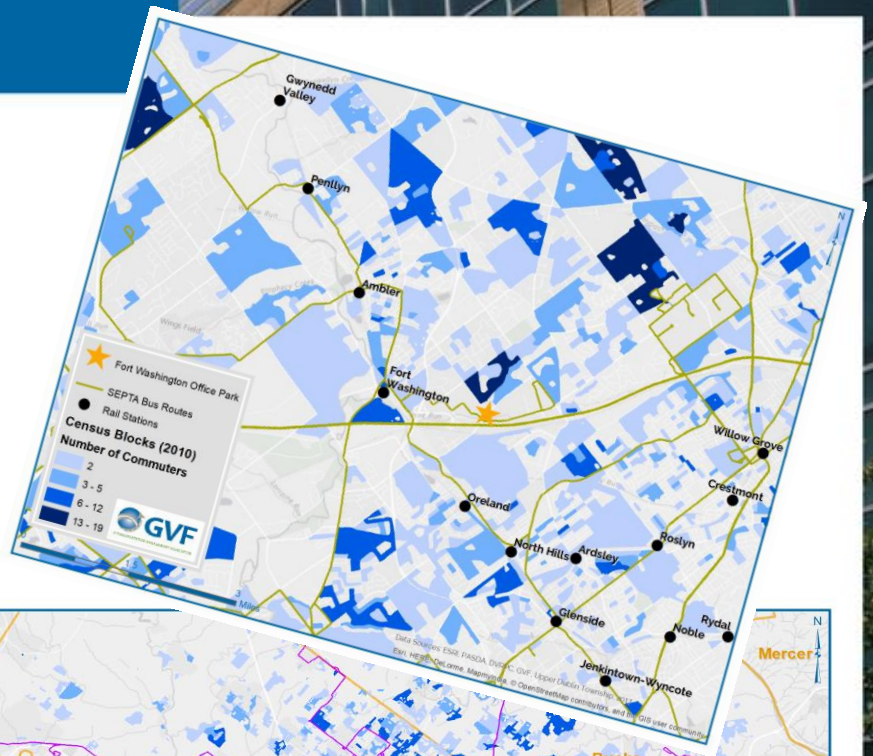
Main Components

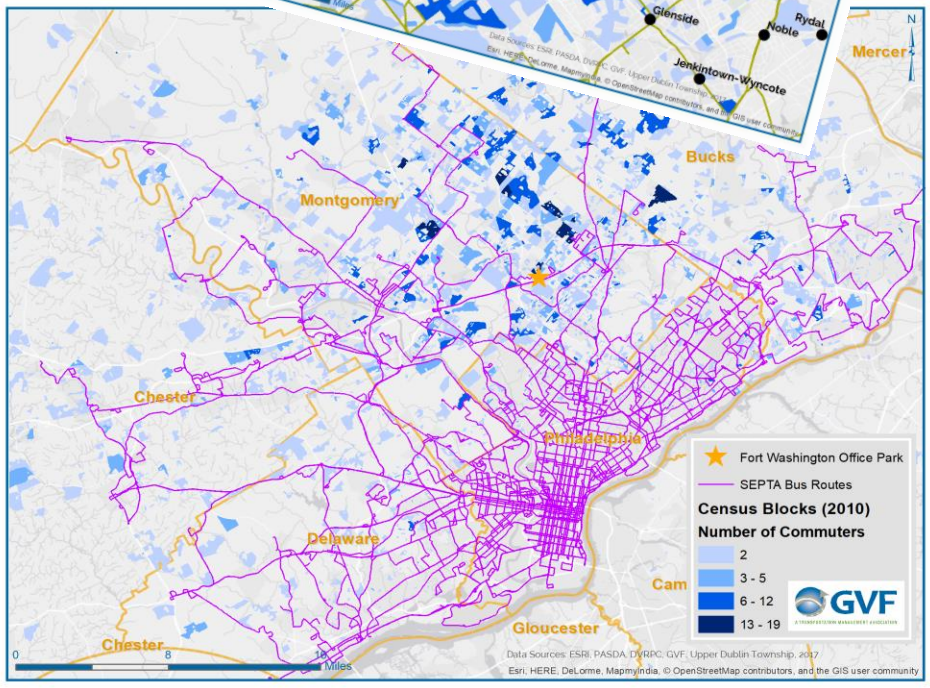
Commuters Distribution Analysis

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

Access to Alternative Modes of Transportation

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



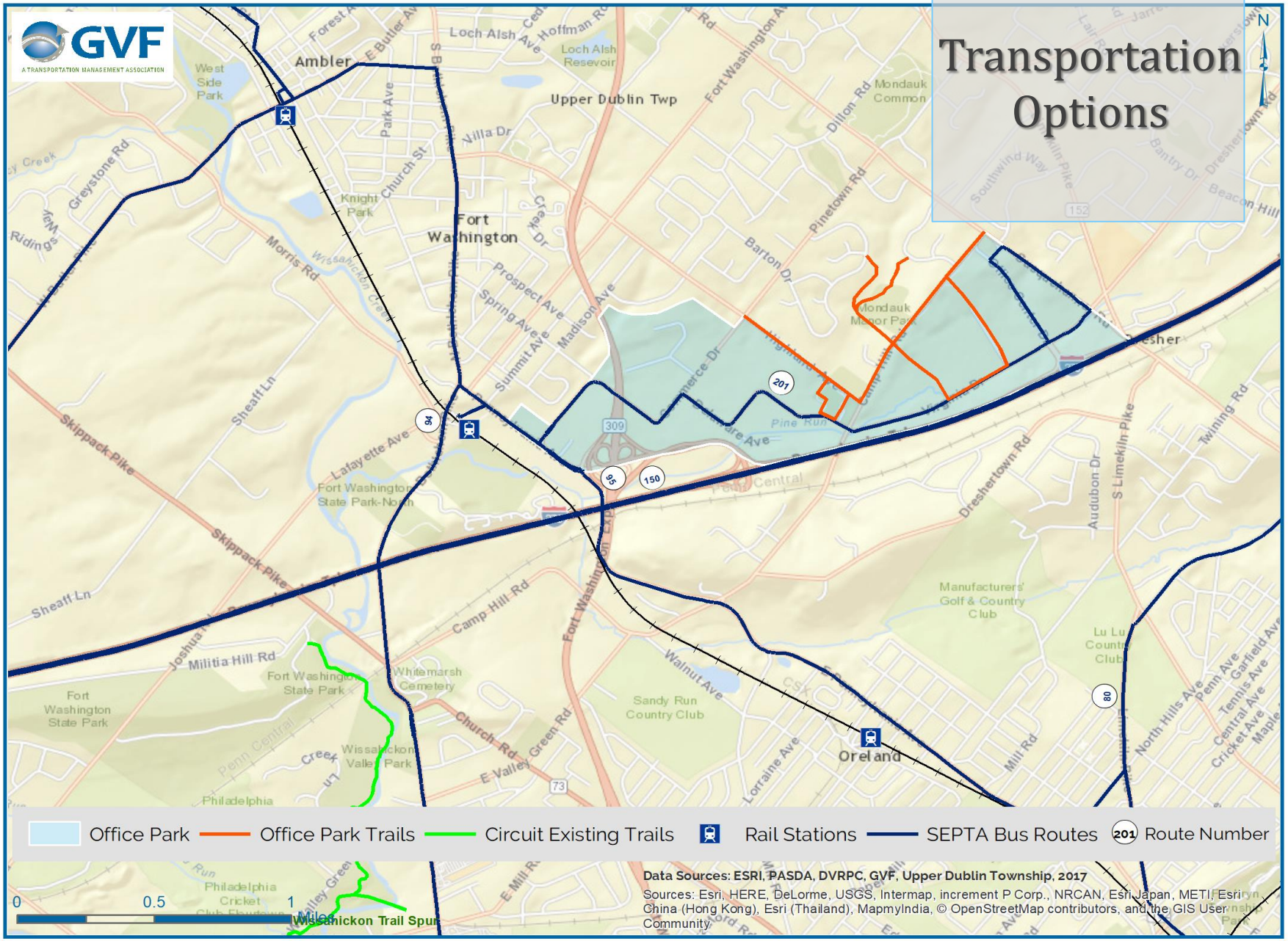


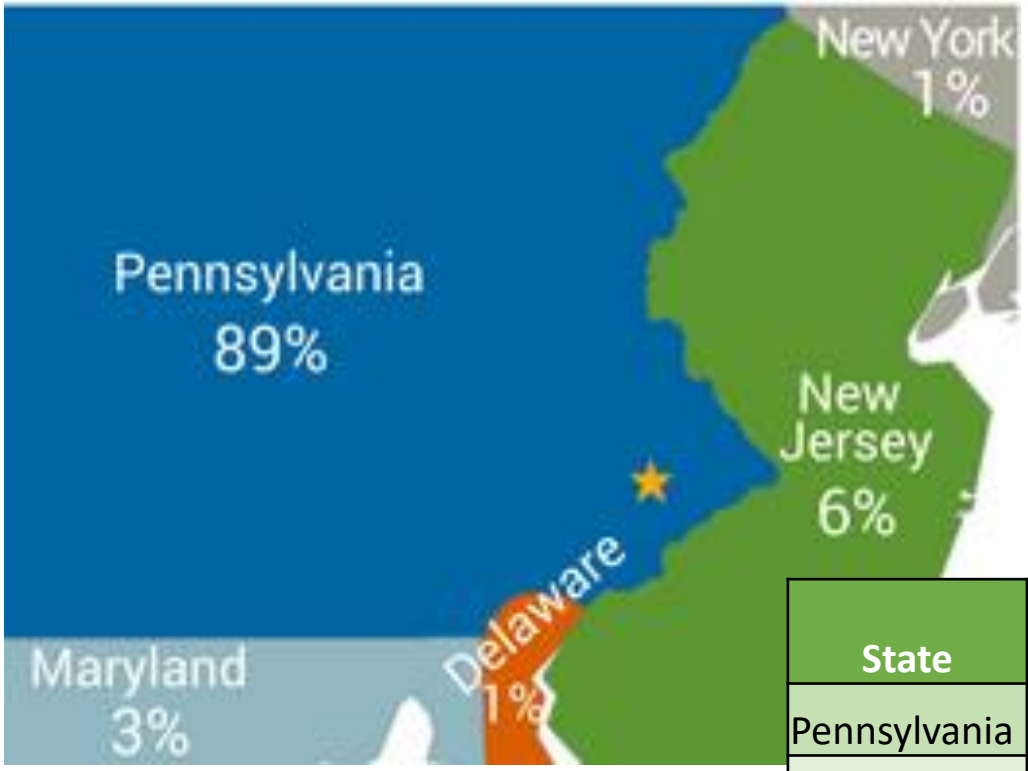
GEOSPATIAL ANALYSIS

- 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

Transportation Options





DENSITY BY STATE

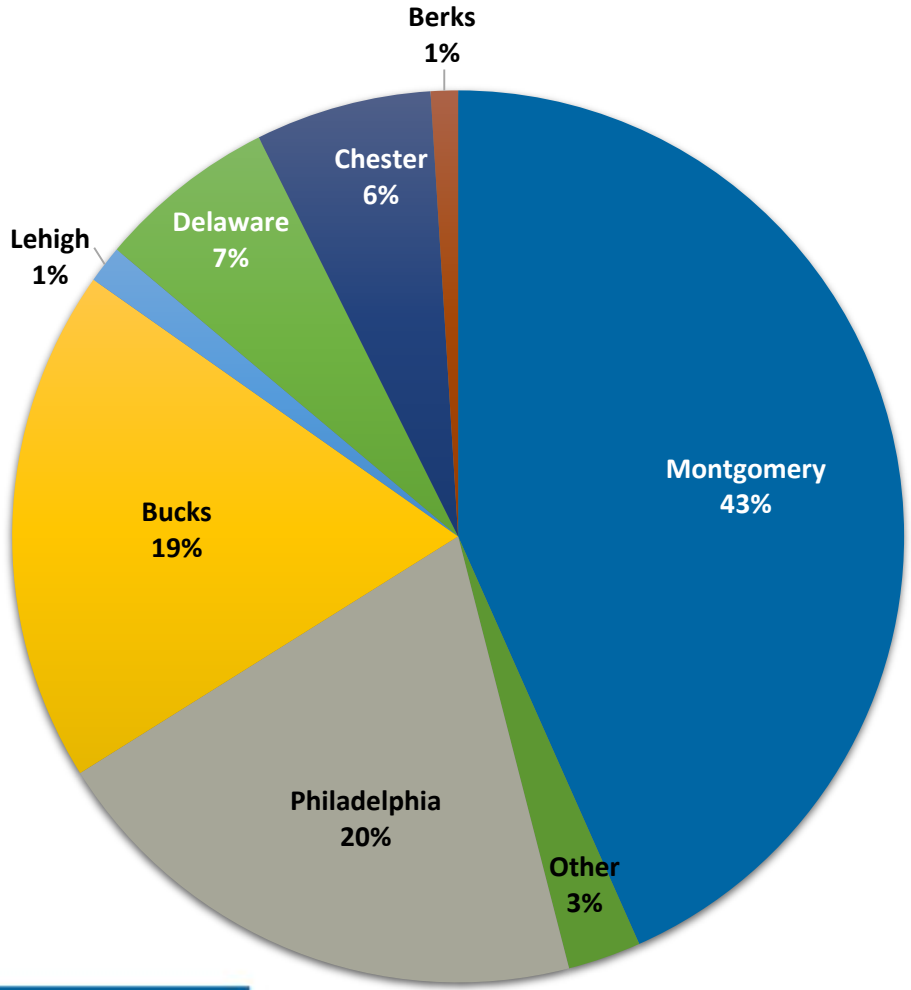
State	# of Commuters	% of Commuters
Pennsylvania	9,788	89%
New Jersey	675	6%
Delaware	381	3%
New York	105	1%
Maryland	51	0%
Total	11,000	100%

PA DENSITY BY COUNTY

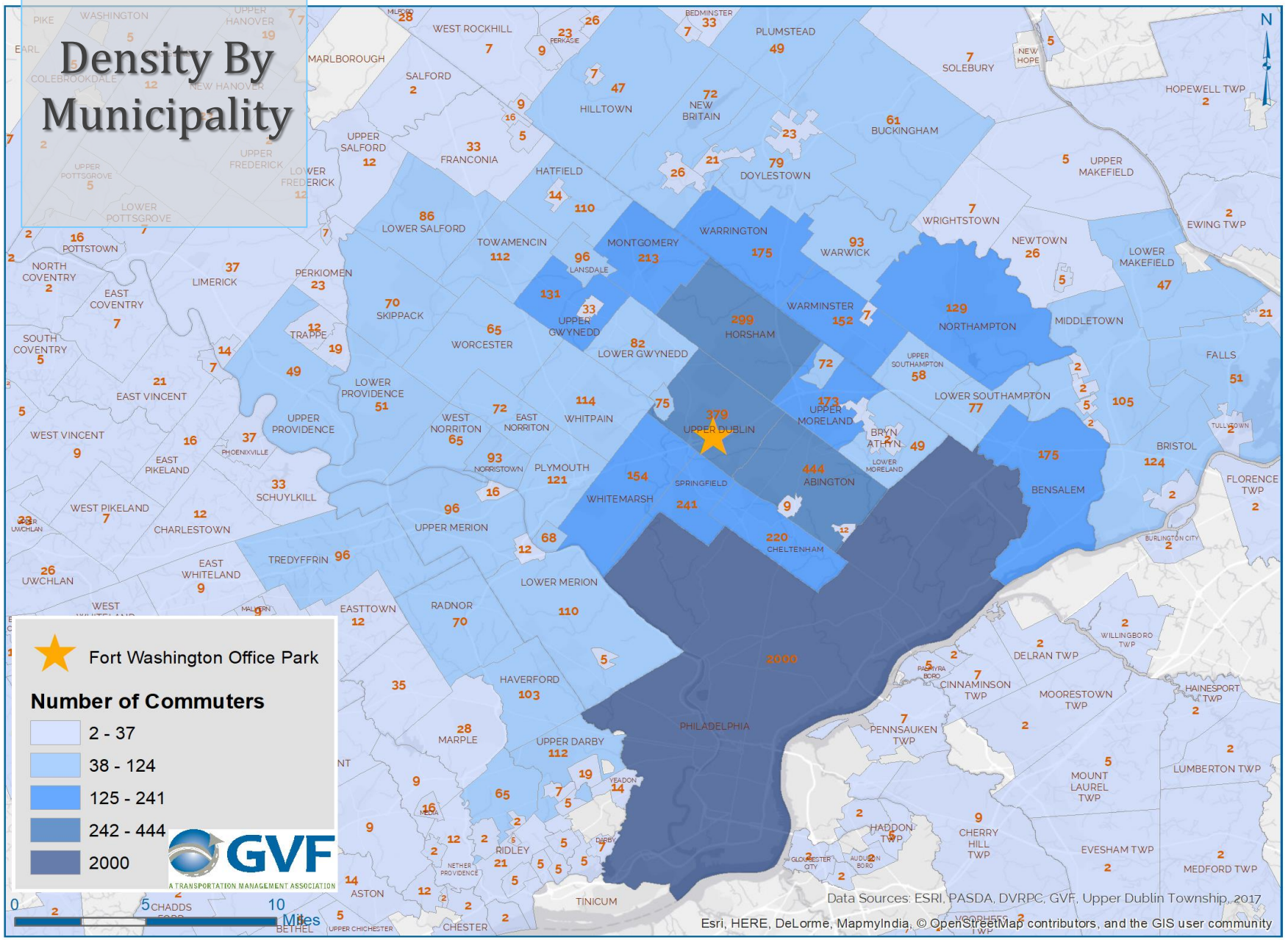
Commuters travel from 24 Counties

Top 6 Counties

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



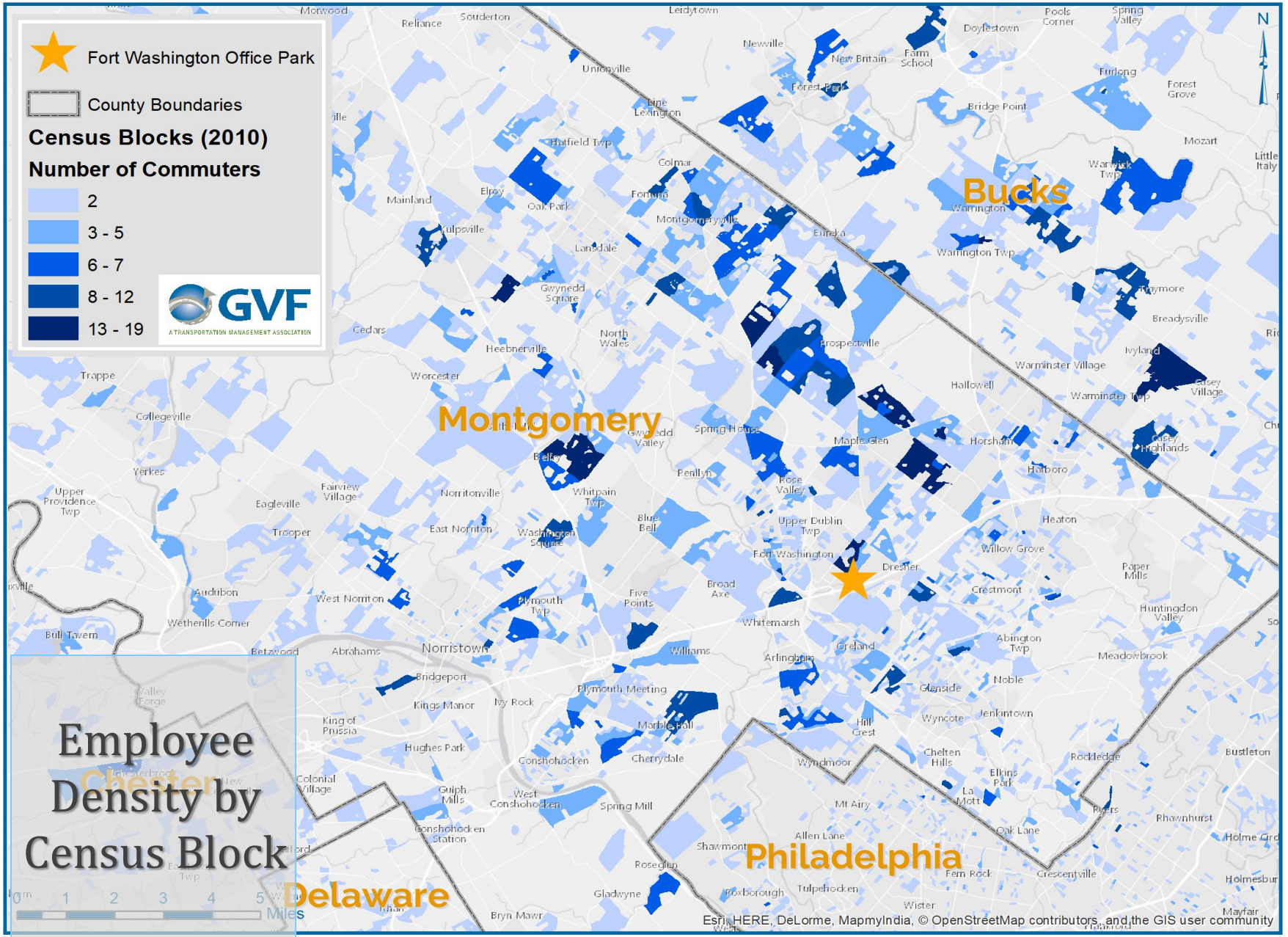
Density By Municipality



DENSITY BY MUNICIPALITY

Commuters travel from **309** different municipalities

Municipality	# of Commuters	% of Commuters
Philadelphia City	2,000	18%
Abington Township	444	4%
Upper Dublin Township	379	3%
Horsham Township	299	3%
Springfield Township	241	2%
Cheltenham Township	220	2%
Montgomery Township	213	2%


Fort Washington Office Park
County Boundaries
Census Blocks (2010)
Number of Commuters
2
3 - 5
6 - 7
8 - 12
13 - 19
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Bucks
Montgomery
Philadelphia
Delaware
Chester
Employee Density by Census Block
0 1 2 3 4 5 Miles
N
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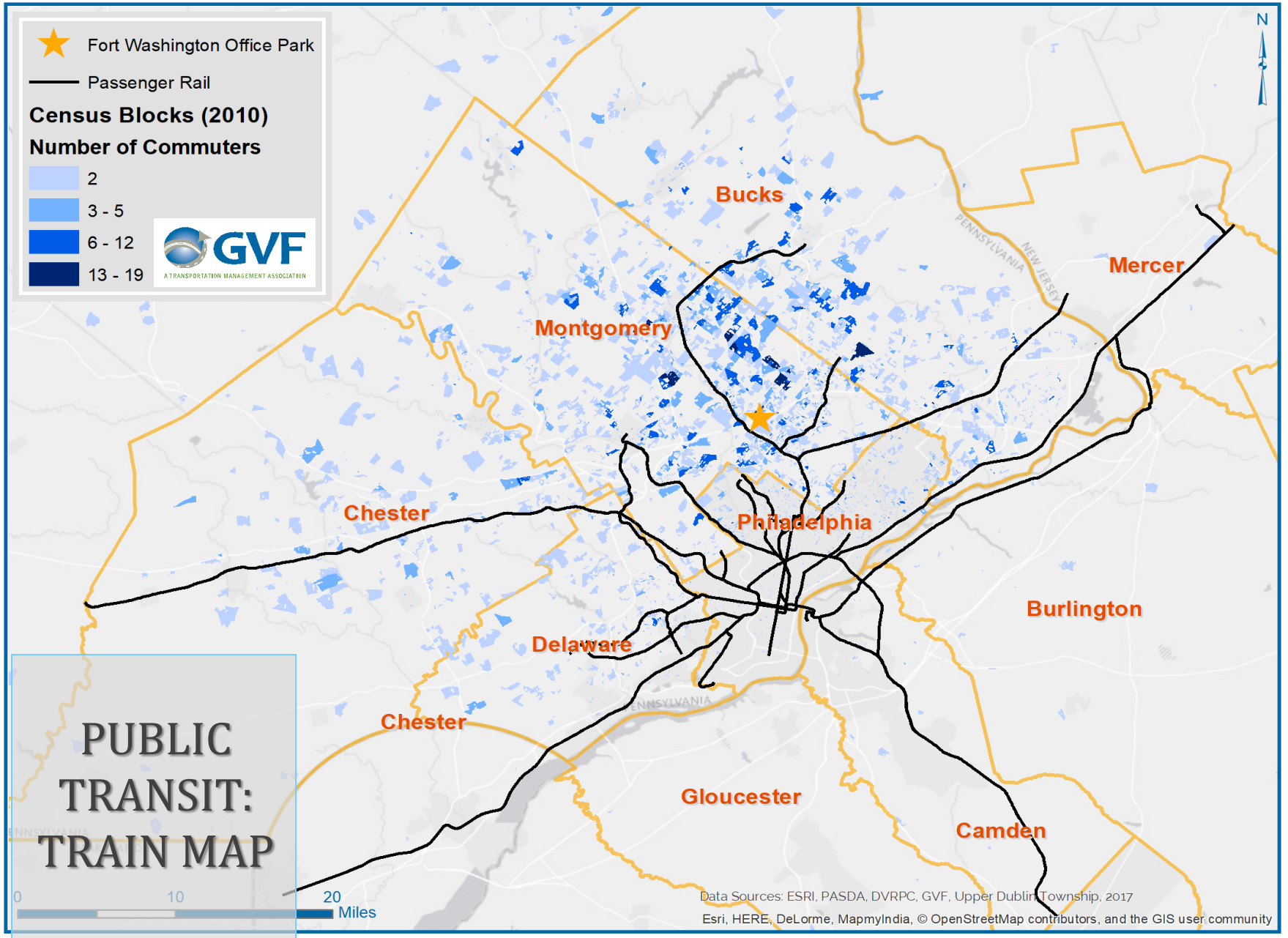
ALTERNATIVE TRANSPORTATION

- Train
- Carpool
- Vanpool

OFFICE PARK ACCESS TO TRAINS

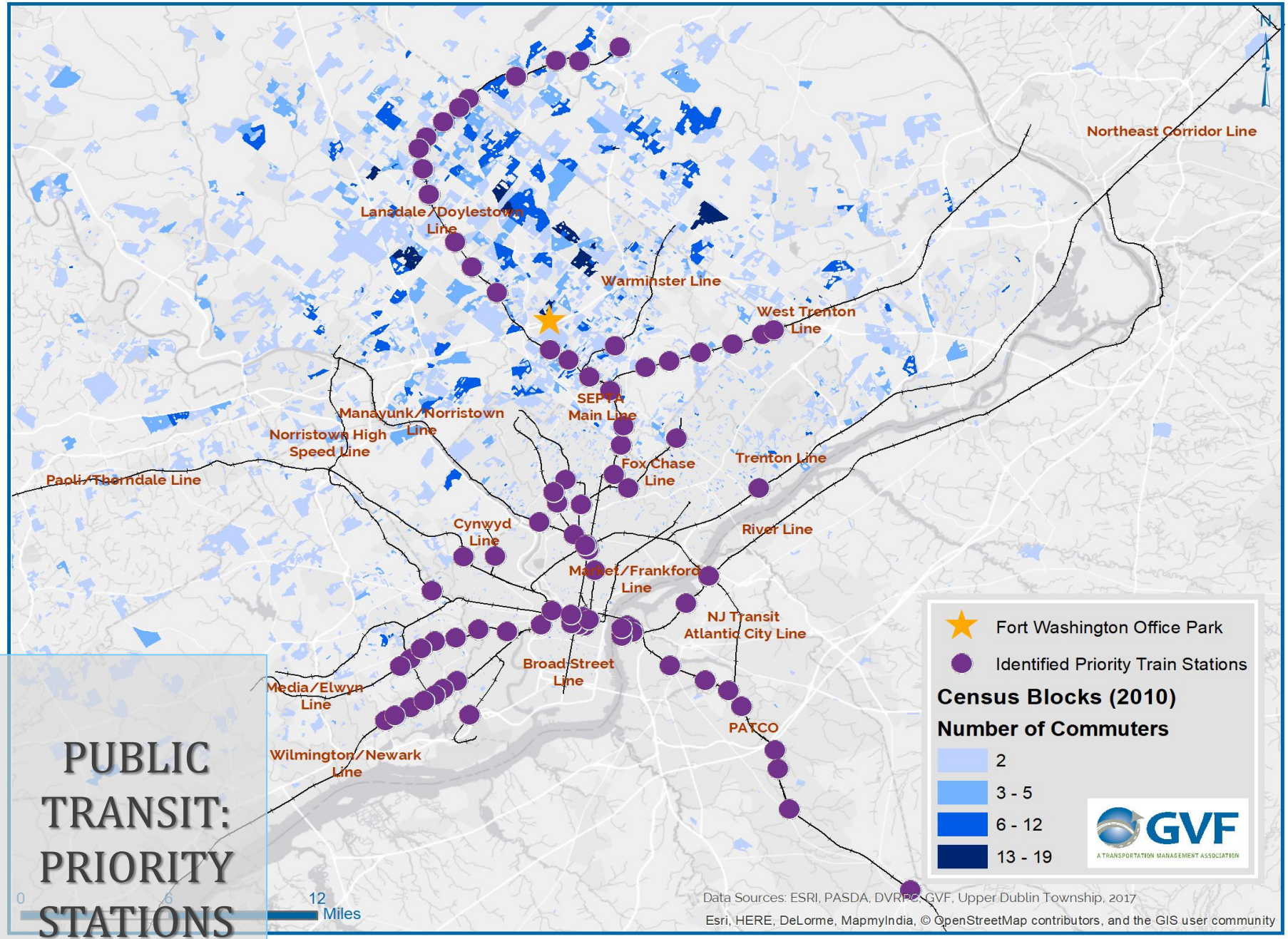
Rail Line	Train Stops	Fort Washington Office Park Locations					
		Western Most Point (Pennsylvania Ave & Commerce Drive)		Center (Camp Hill Rd & Virginia Drive)		Eastern Most (Susquehanna Rd & Virginia Drive)	
		Distance (miles)	Travel Time (driving)	Distance	Travel Time	Distance	Travel Time
Lansdale/ Doylestown	Fort Washington	0.3	3 (walk)*	2.1	6	2.9	9
	Oreland	1.9	4	1.7	5	2.6	7
Warminster Line	Roslyn	5.3	13	4	10	2.6	7
	Ardsley	3.8	9	3.3	8	2.3	5



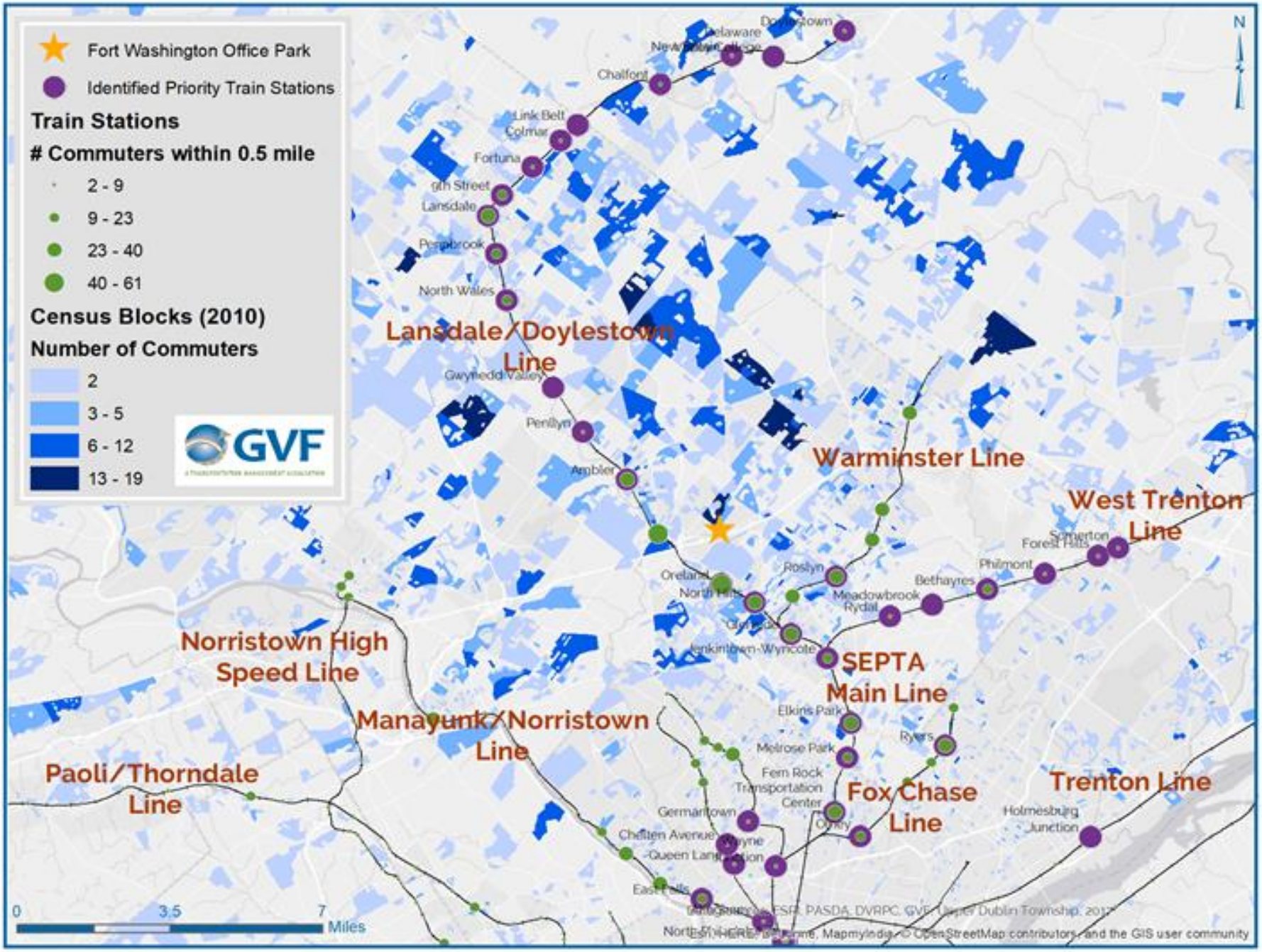
PUBLIC TRANSIT: TRAIN MAP

COMMUTERS TRAIN ACCESS

Distance (from any rail station)	# of Commuters	% of All Commuters
¼ mile (walk)	386	3.50%
½ mile (bike)	1,547	14.06%
1 mile (drive)	5,598	50.89%



PUBLIC TRANSIT: PRIORITY STATIONS


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
GVF
N
Lansdale/Doylestown Line
Warminster Line
West Trenton Line
Norristown High Speed Line
Manayunk/Norristown Line
SEPTA Main Line
Paoli/Thorndale Line
Fox Chase Line
Trenton Line
Chalfont
Link Belt
Colmar
Fortuna
9th Street
Lansdale
North Wales
Gwynedd Valley
Penllyn
Ambler
Oreland
North Hills
Roslyn
Meadowbrook
Rydal
Bethayres
Philmont
Somerton
Forest Hills
Jenkintown-Wyncote
Elkins Park
Melrose Park
Fern Rock Transportation Center
Olney
Rivers
Germantown
Chelten Avenue
Queen Lane
East Falls
Holmesburg Junction
0
3.5
7
Miles
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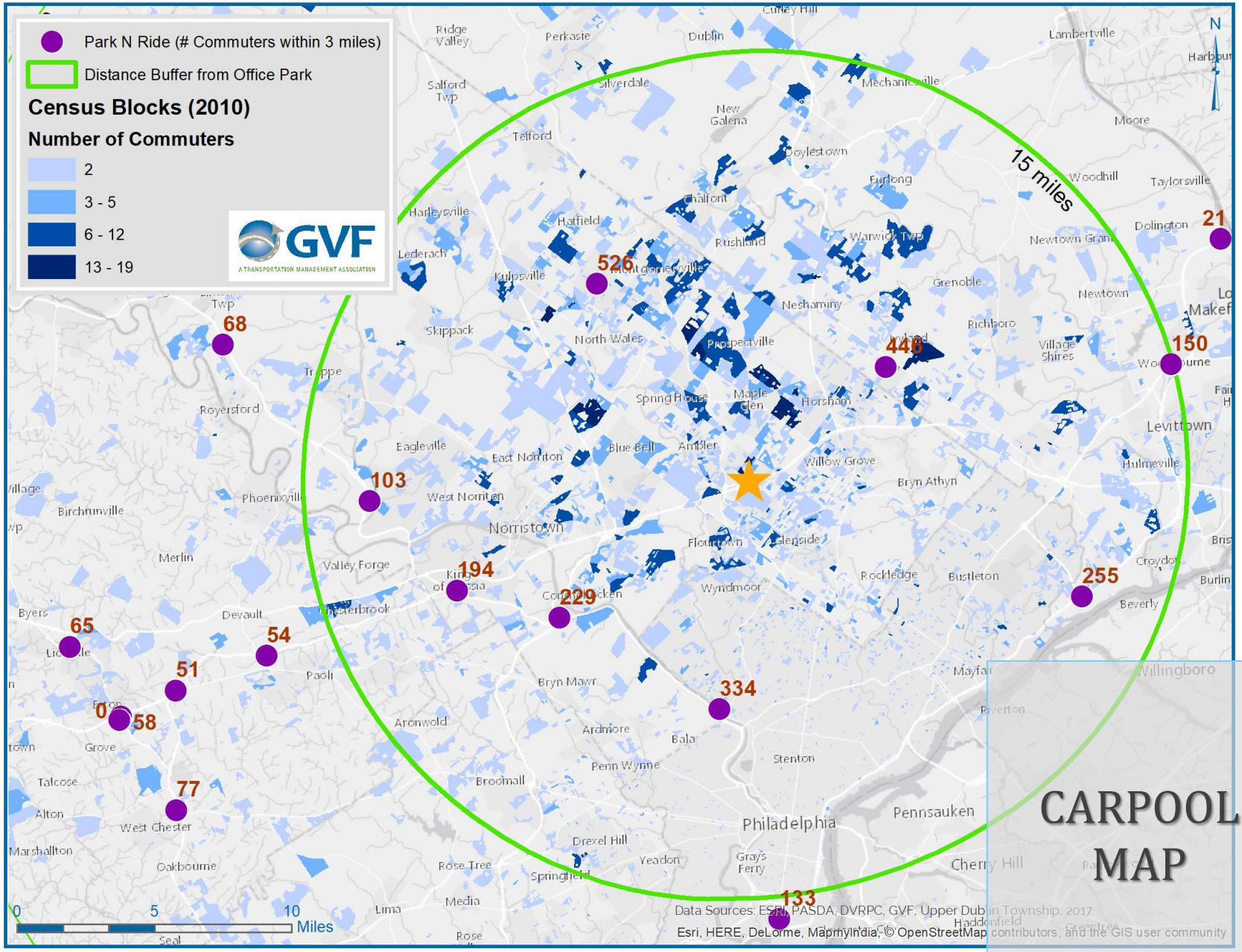
COMMUTERS TRAIN ACCESS

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

CARPOOL & VANPOOL

Distance from Office Park	Number of Commuters	% of All Commuters	Number of Park and Ride Lots
within 15 miles	7,932	72.1%	10
15 to 30 miles	1,612	14.7%	12
30 to 45 miles	320	2.9%	3
45 to 60 miles	56	0.5%	2
60 + miles	30	0.3%	0
NY, NJ, DE, MD unknown	1,049	10%	-


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
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15 miles
68
526
446
150
21
103
194
229
255
65
54
51
0
58
77
334
133
Ridge Valley
Perkasie
Dublin
Lambertville
Salford Twp
Silverdale
Mechanicsville
New Galena
Telford
Doylestown
Moore
Woodhill
Taylorsville
Harleysville
Chalfont
Hatfield
Rushland
Warwick Twp
Dolington
Newtown Gran
Lederach
Kulpsville
Montgomeryville
Grenoble
Newtown
Twp
Skippack
Neshaminy
Richboro
North Wales
Prospectville
Village Shires
Trappe
Spring House
Maple Glen
Horsham
Royersford
Levittown
Eagleville
East Norriton
Blue Bell
Ambler
Willow Grove
Hulmeville
Phoenixville
West Norriton
Bryn Athyn
Norristown
Birchrunville
Merlin
Valley Forge
Flourtown
Glenside
Rockledge
Bustleton
Wyndmoor
Beverly
Byers
Devault
Chesterbrook
Paoli
Bryn Mawr
Mayfair
Willingboro
Aronwold
Ardmore
Bala
Riverton
Penn Wynne
Stenton
Grove
Talcose
Broomall
Alton
West Chester
Pennsauken
Philadelphia
Marshallton
Drexel Hill
Yeadon
Gray's Ferry
Cherry Hill
Oakbourne
Rose Tree
Springfield
Lima
Media
Haddonfield
Seal
Rose
0
5
10
Miles
N
Data Sources: ESRI, PASDA, DVRPC, GVF, Upper Dublin Township, 2017
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CARPOOL MAP

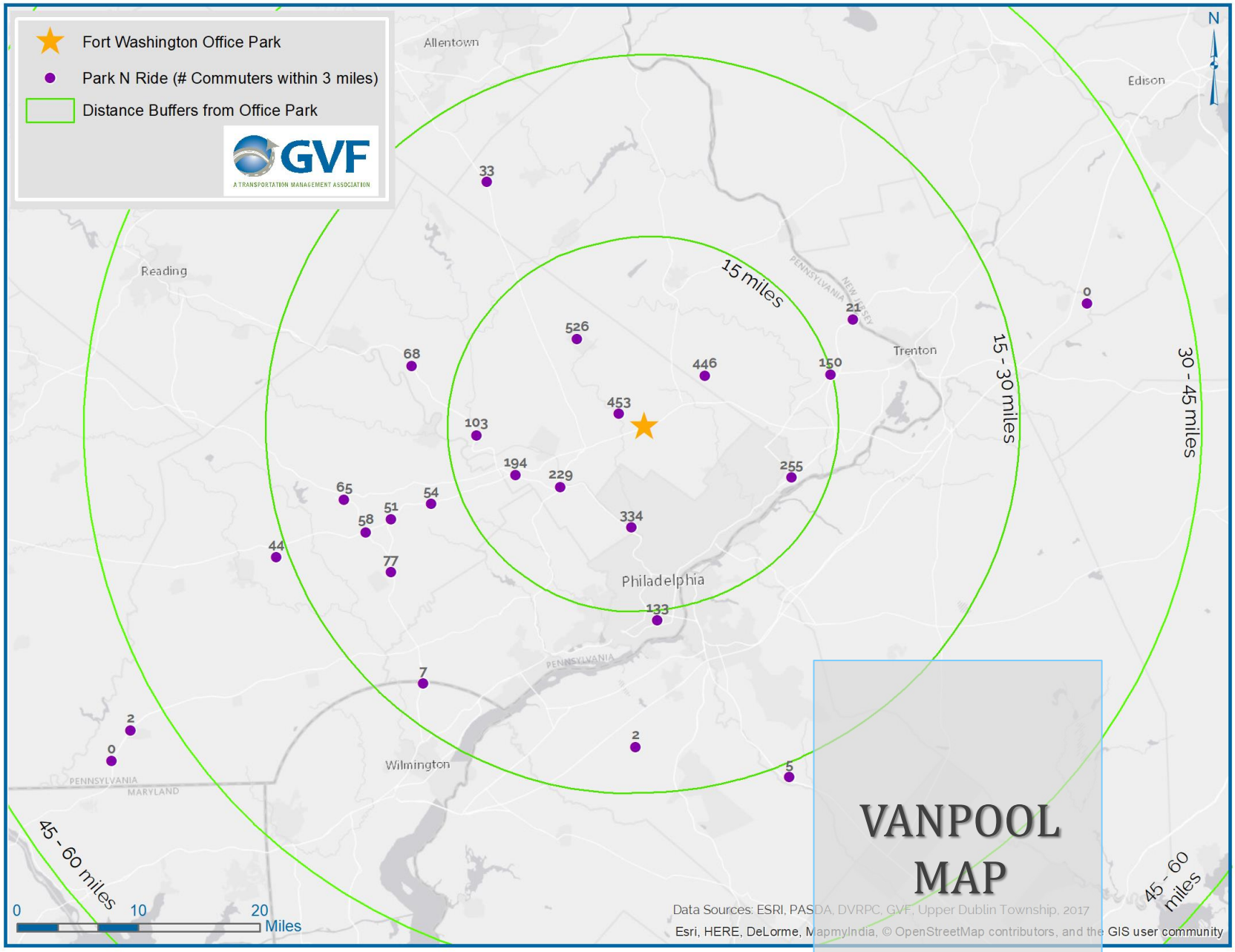
CARPOOL

Park and Ride Location	1 Mile	2 Miles	3 Miles
Lansdale SEPTA Station	82	269	526
Ambler SEPTA Station	133	280	453
SEPTA Warminster Station	51	243	446
Wissahickon SEPTA Transfer Station	75	189	334
Cornwells Heights	26	147	255
Matsonford Road at I-76/I-476 Interchange	42	131	229
South Gulph Road at Bill Smith Boulevard	14	70	194
Woodbourne Station	5	47	150
Egypt Road at New Mill Road, just north of PA 422 Oaks Interchange	7	35	103

CARPOOL

If 10% of employee participated in a carpool it would result in:

# of Passengers	1 Mile	2 Miles	3 Miles
2 passengers	22	71	134
3 passengers	29	94	179
4 passengers	33	106	202


Fort Washington Office Park
Park N Ride (# Commuters within 3 miles)
Distance Buffers from Office Park
GVF
A TRANSPORTATION MANAGEMENT ASSOCIATION
Allentown
Edison
Reading
Trenton
Philadelphia
Wilmington
PENNSYLVANIA
NEW JERSEY
MARYLAND
15 miles
15 - 30 miles
30 - 45 miles
45 - 60 miles
45 - 60 miles
33
68
526
446
150
21
0
453
103
194
229
255
65
54
51
58
334
44
77
133
7
2
0
2
5
N
0
10
20
Miles
Data Sources: ESRI, PASDA, DVRPC, GVF, Upper Dublin Township, 2017
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VANPOOL MAP

VANPOOL

Park and Ride Location	1 Mile	2 Miles	3 Miles
Stadium Complex	12	70	133
Paoli Pike at US 202 Interchange	9	44	77
Lewis Road at US 422 Interchange	7	42	68
PA 113 east of PA 100	9	33	65
Exton SEPTA Station	7	35	58
Matthews Road at PA 29/US 202 Interchange	5	28	54
US 30 at US 202 Interchange, at Northbound on-ramp	0	12	51
Thorndale SEPTA Station	7	16	44
PA Turnpike Quakertown Interchange	12	16	33

VANPOOL

If 10% of employee participated in a vanpool it would result in:

# of Passengers	1 Mile	2 Miles	3 Miles
4 passengers	5	23	47
5 passengers	5	25	50
6 passengers	6	26	52

OPPORTUNITIES

- Use the geo-spatial data to support Township led projects

- Continue developing and implementing projects aimed to encourage walking and biking within Office Park
  - **4.2%** of commuters live **within one mile** of the Office Park and could potentially bike.
  - **5.7%** of commuters live within **walking** distance to the **existing** regional trail network.

- Municipal and County collaboration to enhance roadways and pursue grants related to multi-modal connections

- Educate developers and businesses on transportation options available at the Office Park

OPPORTUNITIES

- Education to employees on their transportation options
- Promote Regional Rail, carpooling and vanpooling as a viable transportation option
- Work with to ensure bicycle and pedestrian facilities
  - Showers, lockers, bike parking, and signage
- Encourage use of SEPTA bus services that provide connections to Office Park and Fort Washington Train Station
- Shuttle services for final mile connections as a complementary service to the SEPTA Bus Route 201

NEXT STEPS

- Development of the TDM Plan
- Public Meeting 2, November 2017

Questions?