



Whitpain Township
COMPREHENSIVE PLAN UPDATE

Board of Supervisors Meeting – September 19, 2023

Project Overview

Need for Update

- Post-Pandemic Work from Home Trends
 - Office vacancies
 - Office to residential conversions
- Route 202 Widening Project
 - Opportunities and challenges
- Updated Demographics



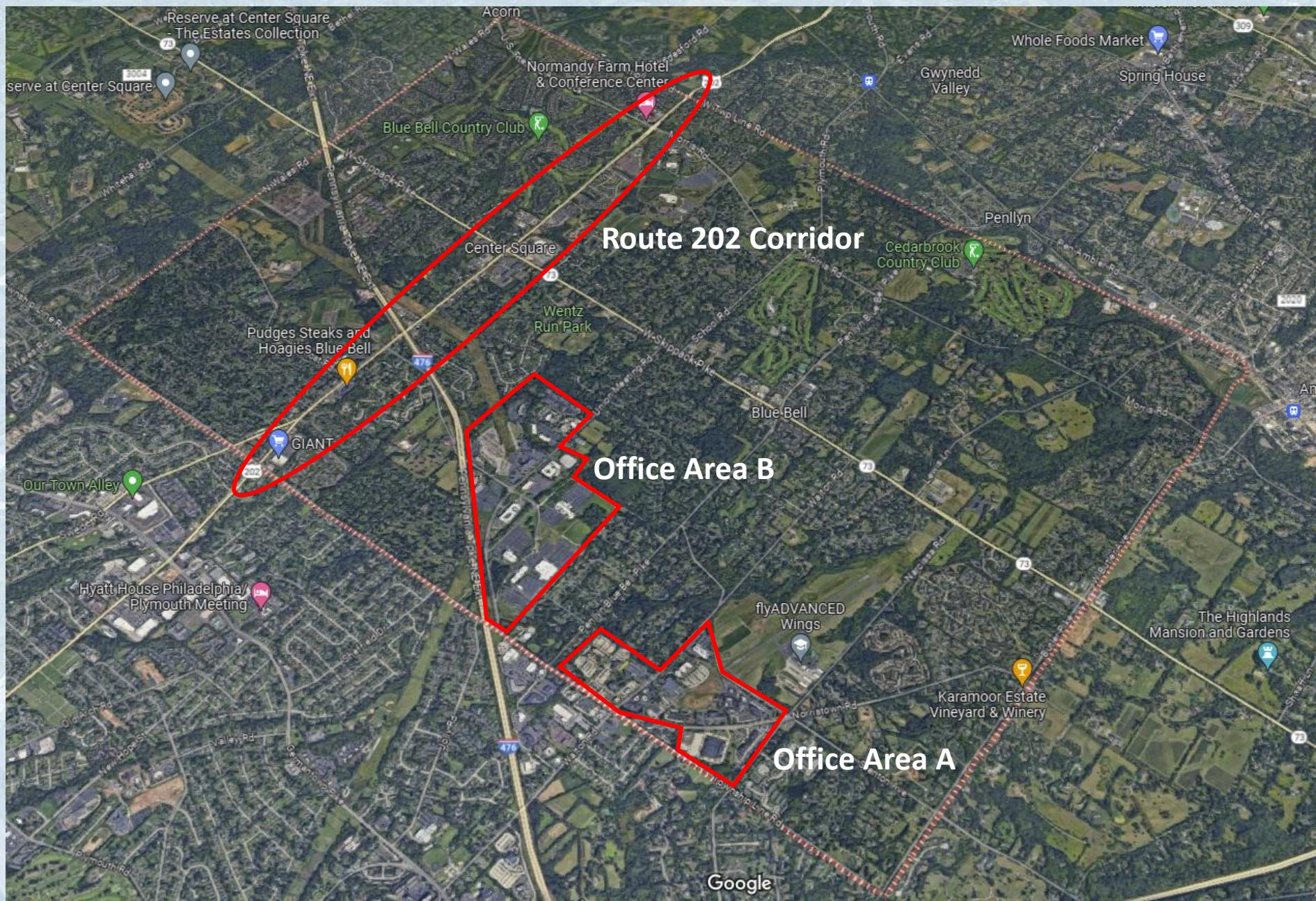
Project Schedule

	Meeting Title	Meeting Date	Meeting Time
2023	Township Staff Meeting #1	Wednesday, March 8	11AM-12PM
	Planning Commission Meeting #1	Tuesday, May 9	6:30PM-8:30PM
	Township Staff Meeting #2	Wednesday, May 24	11AM-12PM
	Township Staff Meeting #3	Wednesday, June 7	11AM-12PM
	Public Meeting #1	Wednesday, September 13	7PM-9PM
	Public Meeting #2	Thursday, September 14	2PM-4PM
	Board of Supervisors Meeting #1	Tuesday, September 19	6PM-8PM
	Planning Commission Meeting #2	Tuesday, October 10	6:30PM-8:30PM
	Township Staff Meeting #4	Friday, October 13	11AM-12PM
	Board of Supervisors Meeting #2	Tuesday, October 17	6PM-8PM
	Board of Supervisors Meeting #3	Tuesday, November 21	6PM-8PM

Developer Meetings

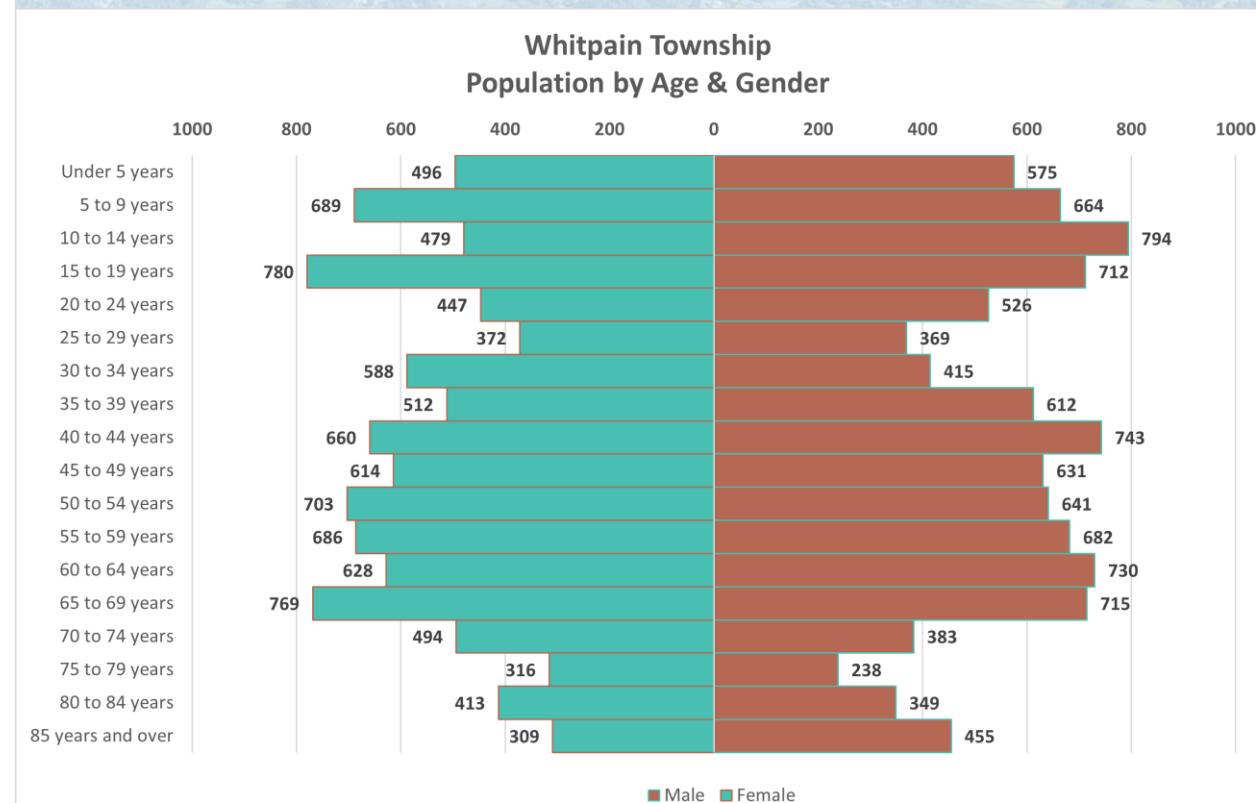
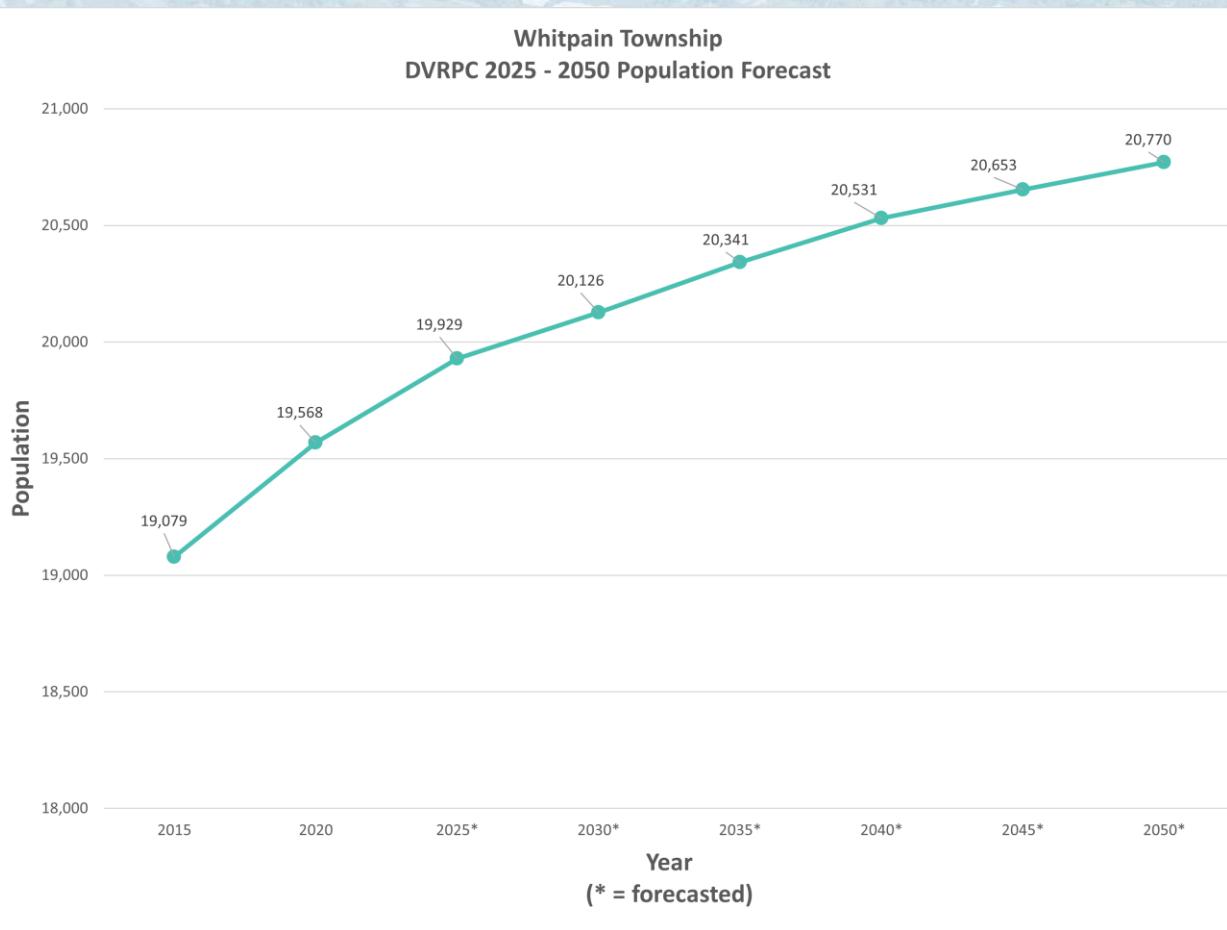
- Toll Brothers
- Cornerstone Tracy
- BET Investments

Project Areas



Demographics: Population

Population is projected to increase by 6% over the next 30 years – Approx. 1,200 persons



Demographic data includes pre-Covid figures

Inventory & Analysis

- Office/Industrial Districts
 - Best Practices/National Trends

Estimated Housing Units from Office-to-Housing Conversions in Metro Areas or Submarkets with the Largest Declines in Office Occupancy Since 2020 Q2



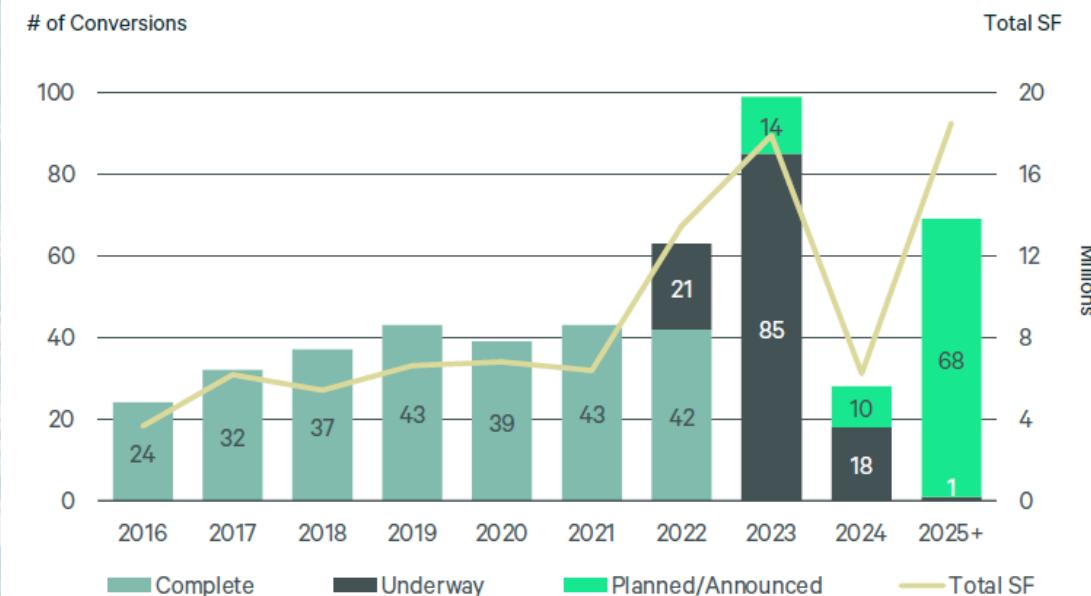
TABLE 2

Multifamily Adaptive Reuse Projects, 2010–2021

Property Type	Number of Buildings	Percent of Buildings	Number of Units	Percent of Units
Office Building	222	25.1%	35,667	31.6%
Factory	196	22.1%	22,128	19.6%
Hotel	127	14.4%	15,491	13.7%
Warehouse	77	8.7%	9,943	8.8%
School	83	9.4%	6,661	5.9%
Other	180	20.3%	23,157	20.5%
TOTALS	885	100.0%	113,047	100.0%

Source: RENTCafé & Yardi Matrix

Figure 1: Office Conversions by Construction Status and Estimated Year of Completion



Office/Industrial Districts: Parcel/Building Analysis



AREA A Total Building Footprint

755,873 SF

AREA B Total Building Footprint

1,157,718 SF

AR, AR-1, R-E, I Districts: Permitted Uses

AR / AR-1 – Administrative and Research District

- Offices
- Banks / Financial Institutions
- Laboratories (AR only)
- Uses by Special Exception (AR only):
 - Educational, Religious, Philanthropic Use
 - Hospital
 - Municipal Use, excluding Dump
- Accessory Uses:
 - Cafeteria
 - Recreation Facilities
 - Barbershop / Beauty Shop
 - Transportation Ticket Office
 - Newsstand, Pharmacy
 - Restaurants (without drive-thru)
 - Limited Storage and Service of Electrical, Pharmaceutical, Optical and Mechanical Components (by Special Exception)

R-E – Research and Engineering District

- Offices
- Laboratories
- Facilities for Research, Engineering, Designing and Related Manufacturing
- Corporate Rental Suites (by Conditional Use)
- Cafeteria and Similar Services for Employees (as Accessory Uses)
- **Limited Storage and Service of Electrical, Pharmaceutical, Optical and Mechanical Components (by Special Exception)**

I – Limited Industrial District

- Light Industrial Use
- Agriculture
- Uses in the R-1 District (Single-Family Detached Dwelling, Farms, Municipal Recreation Use, Municipal Building)
- Dwelling for Watchmen/Caretakers
- Medical Facilities
- Banking Facilities
- Uses by Special Exception
 - Warehousing, retail and wholesale sales of plumbing, lumber and building materials and supplies
 - Truck terminals, bulk cargo facilities, truck or bus storage, garages/repair or contractor storage of equipment
 - Contracting uses
 - Newspaper and book publishing and printing
- Mining
- Offices
- Adult-oriented Establishments (by Conditional Use)
- Medical Marijuana Grower / Processor

Consider Other Permitted Uses?

- Consider other uses as permitted uses
 - Restaurant
 - Brewpub
 - Convenience commercial
 - Personal service
 - Others?



What are the most common hesitations in allowing additional residential uses?

- Traffic
- Effects on the School District

Office/Industrial Districts: Ex. Traffic Analysis

Office Units (avg. 3 story building)	AM Peak Trips	PM Peak Trips
<i>5,740,773 total square feet</i>	5,451	4,788
Total Peak Hour Trips (AM/PM)		10,239

This analysis assumes if all existing buildings were used as office space (88% occupancy).

OnTheMap: Looking at Commuting Patterns

19,034 people work in Whitpain but Live Elsewhere

676 people both work and live in Whitpain

8,326 people live in Whitpain but work elsewhere

Where Workers in Whitpain Live

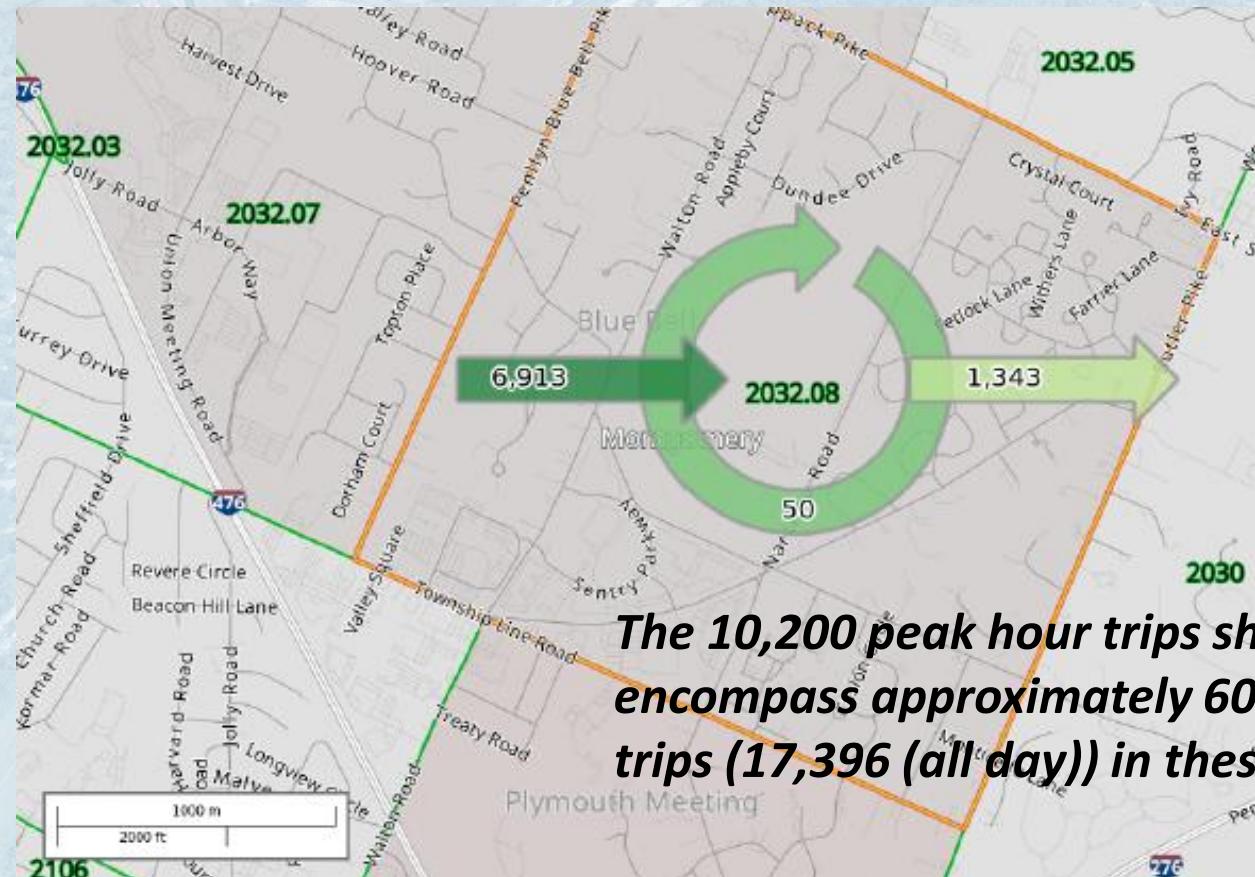
Places (Cities, CDPs, etc.) as Home Destination Area	2020	Count	Share
All Places (Cities, CDPs, etc.)		19,710	100.0
Philadelphia city, PA		2,948	15.0
Norristown borough, PA		310	1.6
Blue Bell CDP, PA		200	1.0
Lansdale borough, PA		195	1.0
King of Prussia CDP, PA		165	0.8
Montgomeryville CDP, PA		158	0.8
Horsham CDP, PA		153	0.8
Conshohocken borough, PA		137	0.7
Plymouth Meeting CDP, PA		135	0.7
Ambler borough, PA		134	0.7
All Other Locations		15,175	77.0



OnTheMap by Census Tract

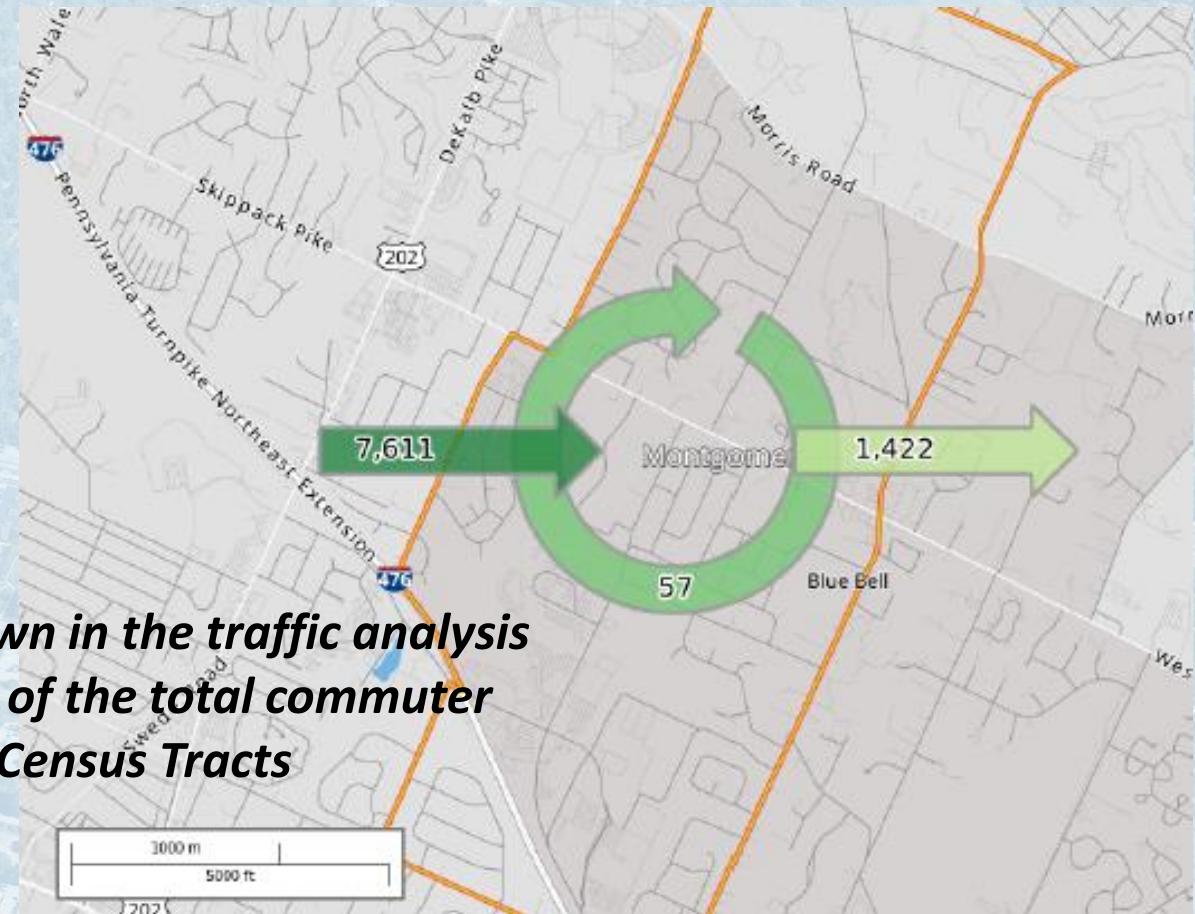
76% of workers residing outside of Whitpain work in these areas.

Area A Census Tract (2032.08)



The 10,200 peak hour trips shown in the traffic analysis encompass approximately 60% of the total commuter trips (17,396 (all day)) in these Census Tracts

Area B Census Tract (2032.07)



Unchanged Scenario: If Office Buildings Remained

- Office vacancies will likely rise
- Possible decrease in Class B/C office rental rates
- Likely marginal increase in workers returning the office
 - Hybrid work as the “new normal”
- Alternative permitted uses (some special exceptions) become more viable under these circumstances
 - E.g. truck terminals, warehousing

Office to Residential Conversion

- Examples of Office to Residential Conversions
 - Towngate North – Alexandria, VA
 - Conversion to Condos, Currently Underway
 - 81 Units
 - 1 – 3 BR
 - 1000-1900 SF
 - Amenities
 - Community Center
 - Gym
 - Co-working Lounge
 - Rooftop Terrace



Conversions / Adaptive Reuse of Existing Buildings: These are difficult to do

- Drawbacks
 - # of units limited to existing footprint and configuration
 - Bringing building up to current residential health and safety standards
 - Costs of conversion
 - Longer approval process related to the uncertainty of adaptive reuse projects in places where they rarely happen
- Developers will more than likely demolish the building and start from new construction

Population Forecast: Likely # of New Residential Units

- An expected increase of ~1,200 people between 2020 – 2050 according to DVRPC
 - ~2.3 people per household (for apartments) = 522 residential units

Population Forecasts (DVRPC)	
Year (*projected)	Population
2015	19,079
2020	19,568
2025*	19,929
2030*	20,126
2035*	20,341
2040*	20,531
2045*	20,653
2050*	20,770

*Includes pre-covid data

Scenario with Population at 3x the DVRPC Forecast

Population Forecasts (DVRPC)	
Year (*projected)	Population
2015	19,079
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2025*	19,929
2030*	20,126
2035*	20,341
2040*	20,531
2045*	20,653
2050*	20,770

- As previously presented, population is projected to grow by 1,200 people between 2020 and 2050
- In this scenario, we assume that DVRPC underestimated the projection by a factor of 3
- This would result in a population increase of approx. 3,600 people by 2050
- At approx. 2.3 people per household, this increase would result in **1,572** additional households
- These new units would result in the following AM / PM Peak Trips:

Assumed Population Increase of 3,600 people	AM Peak Trips	PM Peak Trips
1,572 new households	680	613
Total Peak Hour Trips (AM/PM)		1,293

As a Reminder – Office/Industrial Districts: Traffic Analysis

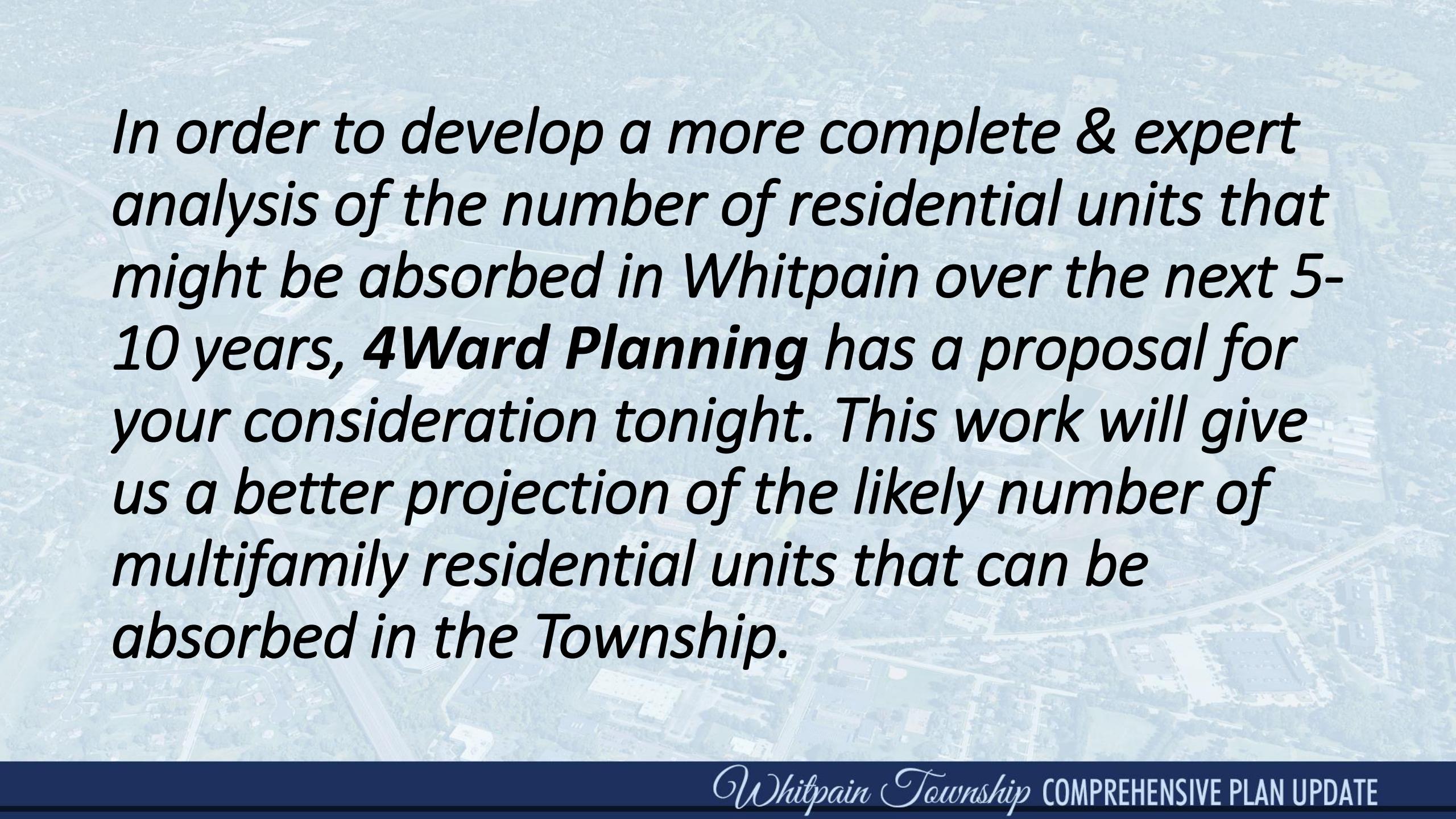
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<i>5,740,773 total square feet</i>	5,451	4,788
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This analysis assumes if all existing buildings were used as office space (88% occupancy).

Traffic Analysis Comparison – Population Forecast vs. Offices

TOTAL PEAK HOUR TRIPS IF POP. GREW BY 3X THE FORECAST	1,293
TOTAL PEAK HOUR TRIPS IF OFFICES REMAIN	10,239

Even with the future population projected at 3x the DVRPC forecast, associated traffic estimates for this residential scenario are much lower than a fully occupied office scenario



In order to develop a more complete & expert analysis of the number of residential units that might be absorbed in Whitpain over the next 5-10 years, 4Ward Planning has a proposal for your consideration tonight. This work will give us a better projection of the likely number of multifamily residential units that can be absorbed in the Township.

Traffic Analysis Comparison - Office to Residential Conversion – Scenario if All Office Space was Converted to Residential Use (Fantasy Scenario)

- In this scenario, we assume density is 20 units/acre for Areas A and B – (explained on the next 2 slides)
- This also assumes an average height of 3 stories for all the residential units
- The # of available housing units at this density would be much greater than household demand

****(NOTE: This is just an extreme scenario and would NEVER happen)****

- Population projections are well below the # of potential residents in converted housing units

Area A: Office to Residential Conversion Traffic Scenario: Possible Number of Units and Peak Hour Traffic *if Every Parcel Was Developed/Redeveloped as Residential* (Fantasy Scenario)

# of Units	Density (160 acres in Office/Industrial Districts)	AM Peak Trips (32 trips per 100 units)	PM Peak Trips (39 trips per 100 units)	Total Peak Hour Trips (AM/PM)
3,200	20 units/acre	1,396	1,248	2,644

- *This scenario assumes if all the office/industrial buildings within the 160 acres of Area A were converted to residential buildings*
- *The number of units presented are highly unlikely to be realized; they are presented to illustrate what a total residential buildout would look like within the existing buildings*
- ***3,200 units (at 20 units/acre) would correspond to an additional 7,328 people, (THIS WILL NEVER HAPPEN)***

Area B: Office to Residential Conversion Traffic Scenario: Possible Number of Units and Peak Hour Traffic *if Every Parcel Was Developed/Redeveloped as Residential* (Fantasy Scenario)

# of Units	Density (290 acres in Office/Industrial Districts)	AM Peak Trips (32 trips per 100 units)	PM Peak Trips (39 trips per 100 units)	Total Peak Hour Trips (AM/PM)
5,800	20 units/acre	2,540	2,262	4,802

- *This scenario assumes if all the office/industrial buildings within the 290 acres of Area B were converted to residential buildings*
- *The number of units presented are highly unlikely to be realized; they are presented to illustrate what a total residential buildout would look like within the existing buildings*
- ***5,800 units (at 20 units/acre) would correspond to an additional 13,282 people, (THIS WILL NEVER HAPPEN)***

Office to Residential Conversion Traffic Scenario – Total Peak Hour Trips for Areas A and B Combined if All Parcels Were Developed Residentially (Fantasy Scenario)

Density	Total Peak Hour Trips (AM/PM)
20 units/acre	7,446

Compared to:

TOTAL PEAK HOUR TRIPS IF POP. GREW BY 3X THE FORECAST	1,293
TOTAL PEAK HOUR TRIPS IF OFFICES REMAIN	10,239

Even with the high numbers of units presented in the previous slides, associated traffic estimates for residential scenarios are much lower than a fully occupied office scenario

Office to Residential Conversion School District Effects

- To mitigate the effect on the School District, zoning could state that 80-90% of new units would have to be 1–2-bedroom units
 - Even with this allocation, there would still be a number of school-age children living in the new units



Zoning/SALDO: Initial Thoughts

- **Conditional Use Overlay District** (Underlying Zoning Remains in Place)
 - Allows for residential use as conditional use.
 - When lots > 5 acres, incorporate some amount of mixed-use (1% + GFA)
 - For Example:
 - A 360,000 SF residential with 300 units
 - Each unit is 1,000 SF on average, and 20% is allocated for internal infrastructure/public space/hallways, etc.
 - The mixed-use space, then, would encompass 3,600+ SF on the ground-floor
 - **Parking** = 2.5 spaces per unit (per Township ordinance)
 - **Residential unit cap per district or districts**
 - Way to control # of units in an area
 - **50% green space would be required**
 - Examine Bonus Provisions

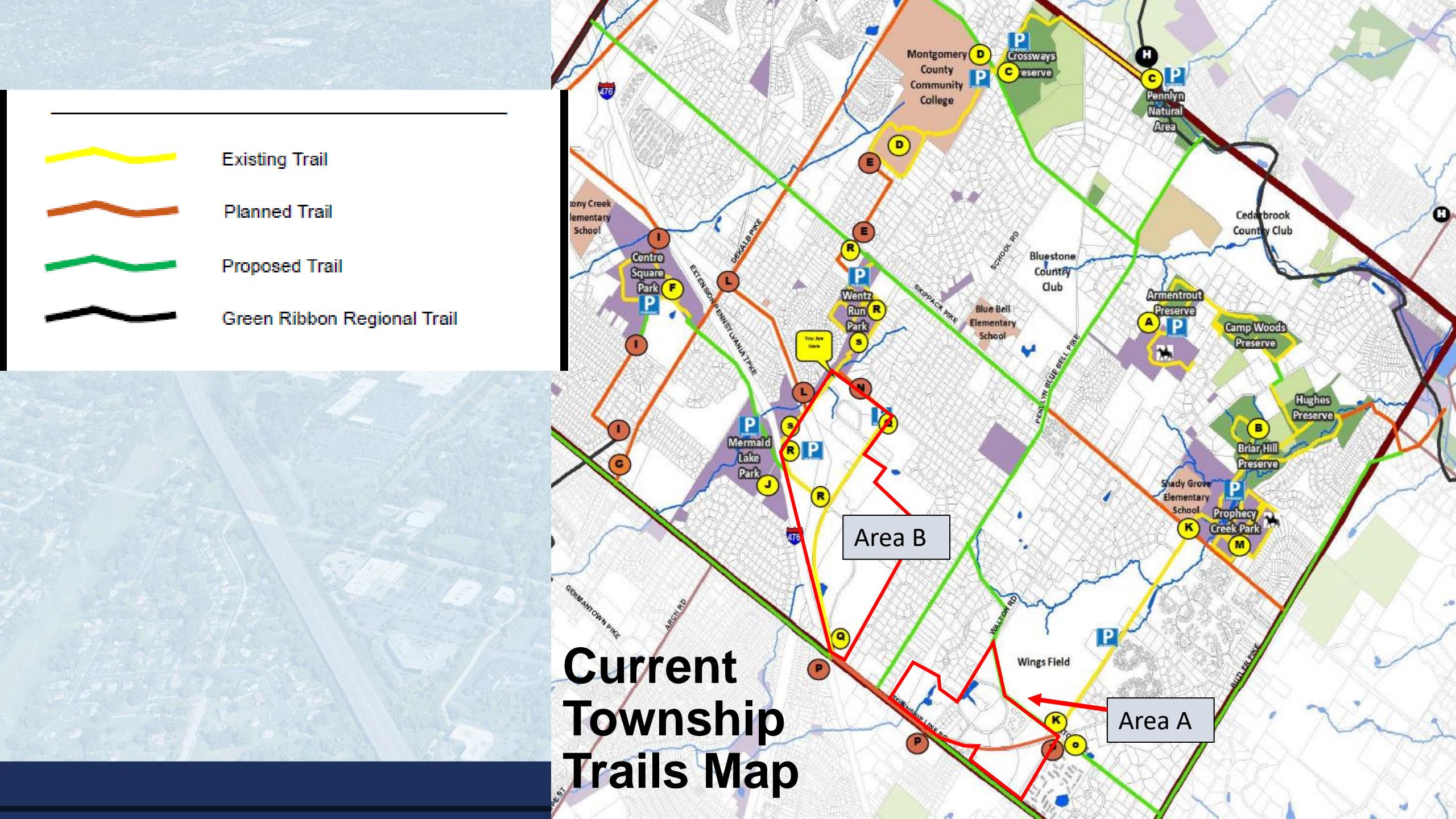
Zoning/SALDO: Initial Thoughts

- **Design Standards**

- Intent
- Design manual / Architectural standards
 - Orientation
 - Primary entrance
 - Exterior materials
 - Vertical / Horizontal articulation
 - Rooflines
 - Proportion of walls to openings
- Site design
- Vehicle access
- Enhanced pedestrian circulation to connect into the Township Trail System (SALDO)

Zoning/SALDO: Initial Thoughts

- **Buffering Standards**
 - Existing:
 - 50 feet if abutting or directly across the street from a residential district
 - 25 feet between administrative and research district and adjacent tracts zoned residential
- **Reduce setback if abutting non-residential use in a residential zone (i.e. airport)**
- **If minimum width cannot be met, increase / strengthen buffering standards as part of the conditional use**
- **Height**
 - If development is adjacent to the Airport Overlay District, height is limited to 40 feet; otherwise; height is limited to 50 feet
 - If additional height is needed, require additional open space / additional amenities



Route 202 Widening Project Review

- Benefits include:
 - Pedestrian access/connectivity
 - 4 travel lanes
 - 5ft bike lanes on both sides
 - 7 upgraded/new traffic signals
 - Stormwater management facilities (inlet systems and infiltration basins)



Before



After

Route 202: Problem Statement

- Challenges include loss of parking / front yard width for several businesses/sites and a lack of streetscaping amenities
 - E.g. landscaping/street trees, signage, lighting, veneers, driveway consolidation/shared access



Liberty Automotive at Yost and Route 202 – Before



Liberty Automotive at Yost and Route 202 – After

Route 202: Opportunities

- Shared parking and shared access easements
- Interconnectivity of adjacent parcels to improve access/circulation
- Leftover PennDOT parcel at Routes 202 and 73
 - Township acquisition?
 - Adjacent ownership acquisition?
- Separate Rt. 202 SALDO?
 - Architectural design standards for businesses that front along the corridor
 - Streetscaping standards that might include lighting, landscaping, amenities, signage/branding



Leftover PennDOT parcel at the SE corner of Route 202 and Route 73

Route 202 Widening: Parcel Analysis

- Abutting Land Uses
 - Commercial: C, C-1, CSC, S-C, VC
 - Institutional: IN
 - Residential: R-1, R-6, R-7, R-9
- Approx. 115 buildings on parcels abutting 202 Corridor
 - Commercial: C (70), C-1 (12), S-C (7), VC (4)
 - Institutional: IN (2)
 - Residential: R-1 (9), R-6 (1), R-7 (3), R-9 (6)

Note: The Corridor also includes some areas that are not directly on Route 202



Route 202 Widening: Permitted Uses

- Commercial
 - Business/professional offices, studio, bank/finance, municipal uses, retail, public transit station, restaurant, personal service/convenience, indoor recreation, single family housing, greenhouse
- Institutional
 - Religious, educational, medical, childcare, municipal, library, cemetery
- Residential
 - Single-family detached, farms/farm buildings, private greenhouses, municipal recreation/buildings, golf course residential community (assoc. amenities), mobile homes

Initial Thoughts: Route 202 – Zoning

- Existing zoning map / district uses are OK / Analyze for missing uses (i.e. brewery)
- Shared access easements
 - A shared driveway between two properties
 - Incentives
 - Easement area will be exempt from impervious coverage calculation
 - Parking requirement will be reduced by the number of spaces replaced by the easement (as an example, if a 360SF shared access driveway was constructed between 2 businesses, parking requirements for each business would be reduced by 2 spaces (1 space = 9.5SF x 19SF)), limited to 2 spaces for lots that are less than 3 acres and 4 spaces for lots greater than 3 acre
 - Similarly, landscaping requirements will be reduced by the amount of landscaping (if any) taken up by the easement
- Shared parking
 - Shared parking between adjacent properties that reduces the number of spaces each property would need to individually provide
 - Incentives
 - Increased building coverage / Decreased green space

Initial Thoughts: Route 202 - SALDO

- **SALDO for the Route 202 Corridor**

- Green and open space
- Streetscaping
 - Reimagine streetscape as a “linear park”
- Site Design
 - Landscape standards
 - Connectivity
 - Design standards

- **“Leftover” PennDOT parcel**

- Township should consider this as a location for placemaking / village identity
- The 2016 Comprehensive Plan identifies this intersection as the heart of Centre Square Village



Linear Park along First Ave. in King of Prussia



Whitpain Township
COMPREHENSIVE PLAN UPDATE

Thank you!