

Neighborhood University

Session 5

Multi-Modal Transportation

October 10, 2019
Westtown Township

Presenters

Robert (Rob) Pingar, P.E.

Westtown Township Manager &
Director of Engineering

Mark Gross

Westtown Township
Director of Public Works

RESTROOMS

REFRESHMENTS

Multi-Modal Transportation

Hour 1 (7:00 ~ 8:00 PM) – ROADS, BRIDGES, TRAILS, TRANSIT

(10 minute break)

HOUR 2 (8:00 - 9:00 PM) – TRAFFIC SIGNALS

Multi-Modal Transportation

Definition

In general - Transportation alternatives to safely and efficiently move people and goods using roads, trails, waterways, and air.

In local government - facilities for automobiles, pedestrians, bicycles, and to a much lesser extent public transit.

Multi-Modal Transportation

Discussion of a comprehensive, coordinated, and effective approaches to transportation in the West Chester area.



Wilmington Pike in 1939

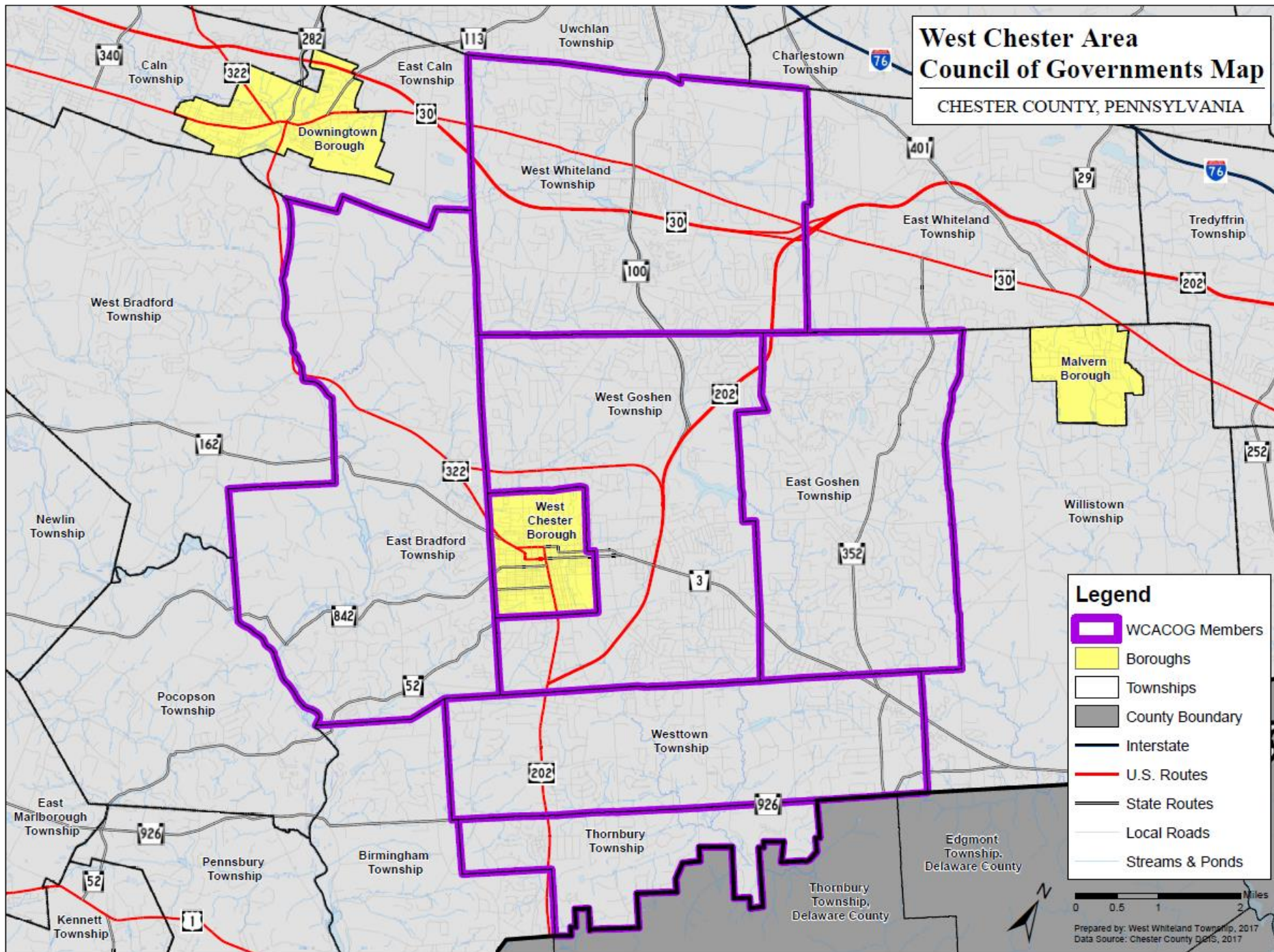
Multi-Modal Transportation

Topics to be covered this evening:

- Township & Borough Responsibilities
- Local Roads & Bridges
- Traffic Controls
- Sidewalks & Trails
- Public Transit (Bus & Rail)
- Intergovernmental Cooperation

West Chester Area Council of Governments Map

CHESTER COUNTY, PENNSYLVANIA



Legend

- WCACOG Members
- Boroughs
- Townships
- County Boundary
- Interstate
- U.S. Routes
- State Routes
- Local Roads
- Streams & Ponds

0 0.5 1 2 Miles

Prepared by: West Whiteland Township, 2017
Data Source: Chester County GIS, 2017



Township & Borough Responsibilities ...

COMMONWEALTH OF PENNSYLVANIA



SECOND CLASS TOWNSHIP CODE

Act of May 1, 1933 (P.L.103, No.69)
Reenacted and Amended November 9, 1995 (P.L.350, No.60)
As Amended

ISBN: 0-8182-0001-4

Prepared and published under authority of Act of
May 29, 1935 (P.L.244, No.102) by the
Local Government Commission
Harrisburg, Pennsylvania
December 31, 2003

2003 EDITION

Township & Borough Responsibilities

- Within the Commonwealth of Pennsylvania, all localities are granted authority to provide for and maintain a network of local roads.
- All townships are subject to the provisions of the **Second Class Township Code**, whereas boroughs such as West Chester are subject to the **Borough Code**.
- **Townships also own and maintain some bridges over watercourses as part of their local road network.** Certain bridges on local roads are owned and maintained by Chester County.



- **Section 2301. Road and Bridge Maintenance, Repair and Construction.**
 - The board of supervisors may purchase or hire materials, equipment, machinery and implements necessary for the **construction, repair and maintenance of roads and bridges.** The bridges shall be deemed to be a part of the road.
- **Section 2304. Power to Lay Out, Open, Widen, Vacate, Et Cetera.**
 - The board of supervisors may by ordinance enact, ordain, survey, lay out, open, widen, straighten, vacate and relay all roads and bridges and parts thereof which are located wholly or partially within the township.
- **Section 2312. Elimination of Curves; Acquisition of Views.**
 - Any township may acquire, by purchase or by the right of eminent domain, any property and lands along or adjacent to any township road that may be necessary to eliminate dangerous curves and widen roads and provide a free and unobstructed view over lands located at or near the intersection of any two roads or highways, or at any curve in any road, for the better protection and safety to the traveling public.

- **Section 2317. Approval of Plans.**

No person shall construct, open or dedicate any road or any drainage facilities for public use or travel without first submitting plans thereof to the board of supervisors for its approval.

- **Section 2324. Protection of Highways from Snowdrifts.**

The board of supervisors may enter private property adjacent to any public road or highway and place thereon a snow fence to within a limit of one hundred feet from the right-of-way line of the public road in order to eliminate snow drifting on the traveled portion of the public road.

- **Section 2327. Traffic Lights and Signals.**

The board of supervisors may provide for the erection, maintenance and operation of traffic lights and traffic signals in accordance with 75 Pa. C.S. (relating to vehicles). (53 P.S. §67327)

- **Section 2330. Bike Paths.**

The board of supervisors may provide for the construction and maintenance of bike paths for the protection or convenience of the traveling public. (53 P.S. §67330)

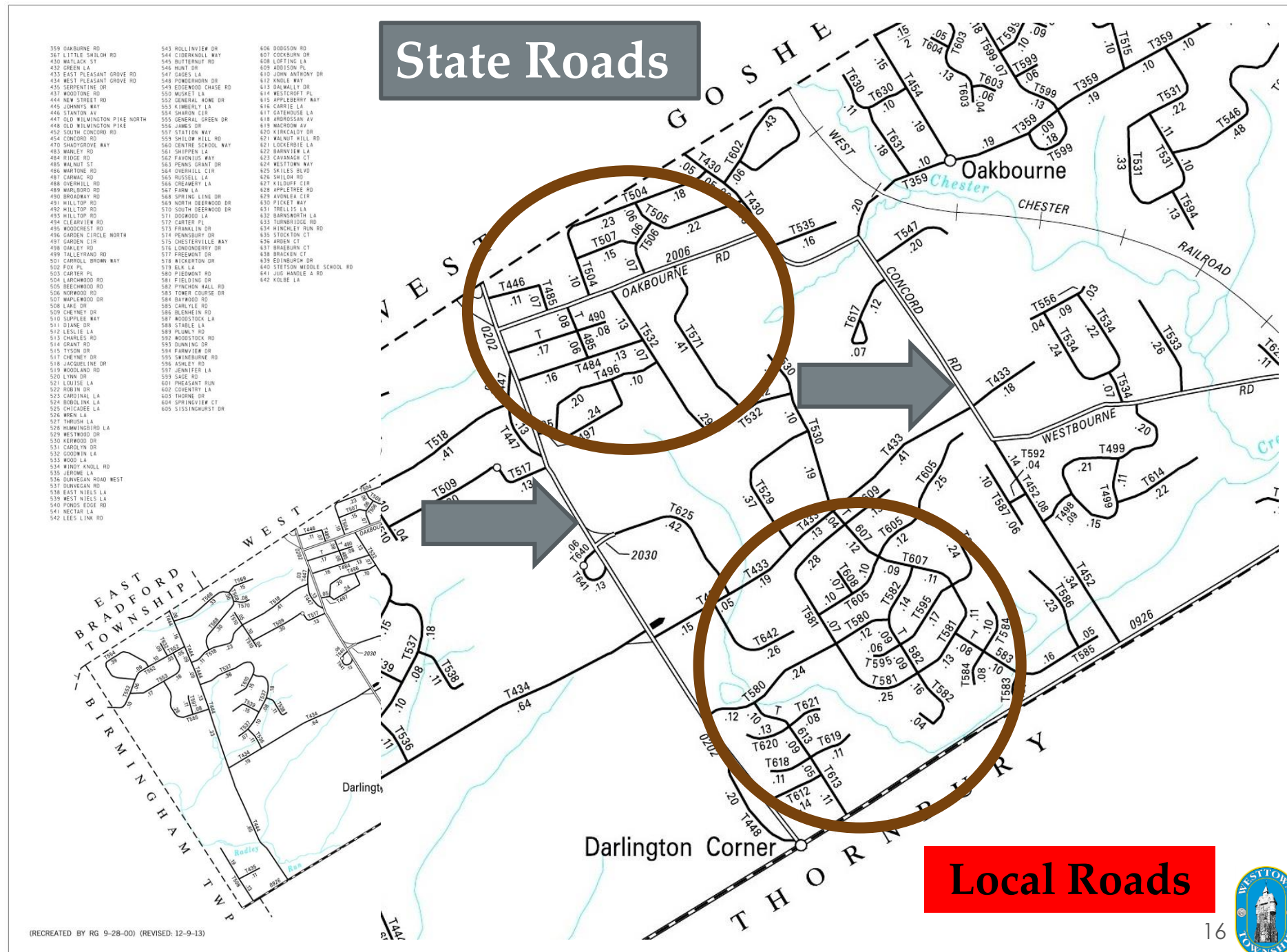
Local Roads & Bridges ...

Local Roads & Bridges



State Roads

- Within Westtown, PennDOT only maintains 10.89 miles of roads while the Township maintains 54.60 miles.
- On this map, all Township roads are indicated with a "T" prefix.



Local Roads



Road Mileage Totals

Within Chester County, approximately 1,000 of the total 4,600 miles of public roads are maintained by PennDOT, while the rest are maintained by local municipalities. **All traffic signals are maintained by local municipalities.**

Municipality	Area (sq. miles)	Local road mileage	State road mileage	Total mileage
Thornbury	3.865	17.34	6.11	23.45
West Chester	1.846	28.46	5.36	33.82
Westtown	8.737	54.60	10.89	65.49
East Bradford	15.15	56.72	18.43	75.15
East Goshen	10.16	61.83	16.68	78.51
West Whiteland	12.92	66.86	27.43	94.29
West Goshen	12	91.15	28.50	119.65

2018 Road Maintenance Budgets

Municipality	Area (sq. miles)	2018 Highways & Roads Budget
East Bradford	15.15	\$590,877
East Goshen	10.16	\$548,083
Thornbury	3.865	\$428,781
West Chester Borough	1.846	\$379,000
West Goshen	12	\$1,076,000
Westtown	8.737	\$1,138,150
West Whiteland	12.92	\$1,688,000

Local Roads - Maintenance

Westtown's General Fund was augmented by a 1.0 mil property tax increase approved by the Board of Supervisors in 2012 that is dedicated to road improvements.



Local Roads - Maintenance

- All maintenance and upkeep of local roads are the responsibility of the locality in which they are located.
- Major projects are identified and scheduled through an annual Road Maintenance Program jointly developed by the Township Director of Public Works, the township engineer and Township Manager.



S. New Street paving as part of the 2017 Road Program in Westtown

Local Roads - Maintenance

- In 2018 Westtown spent \$1,065,000 to mill and pave all or parts of 29 roads, totaling 5.2 miles in length, and make associated curb and drainage improvements.

Funding Type	Allocated monies
General Fund *	\$665,000
Liquid Fuels Funds	\$400,000
TOTAL	\$1,065,000

- Total does not include \$73,150 for engineering and construction.

WESTTOWN TOWNSHIP

Chester County, Pennsylvania

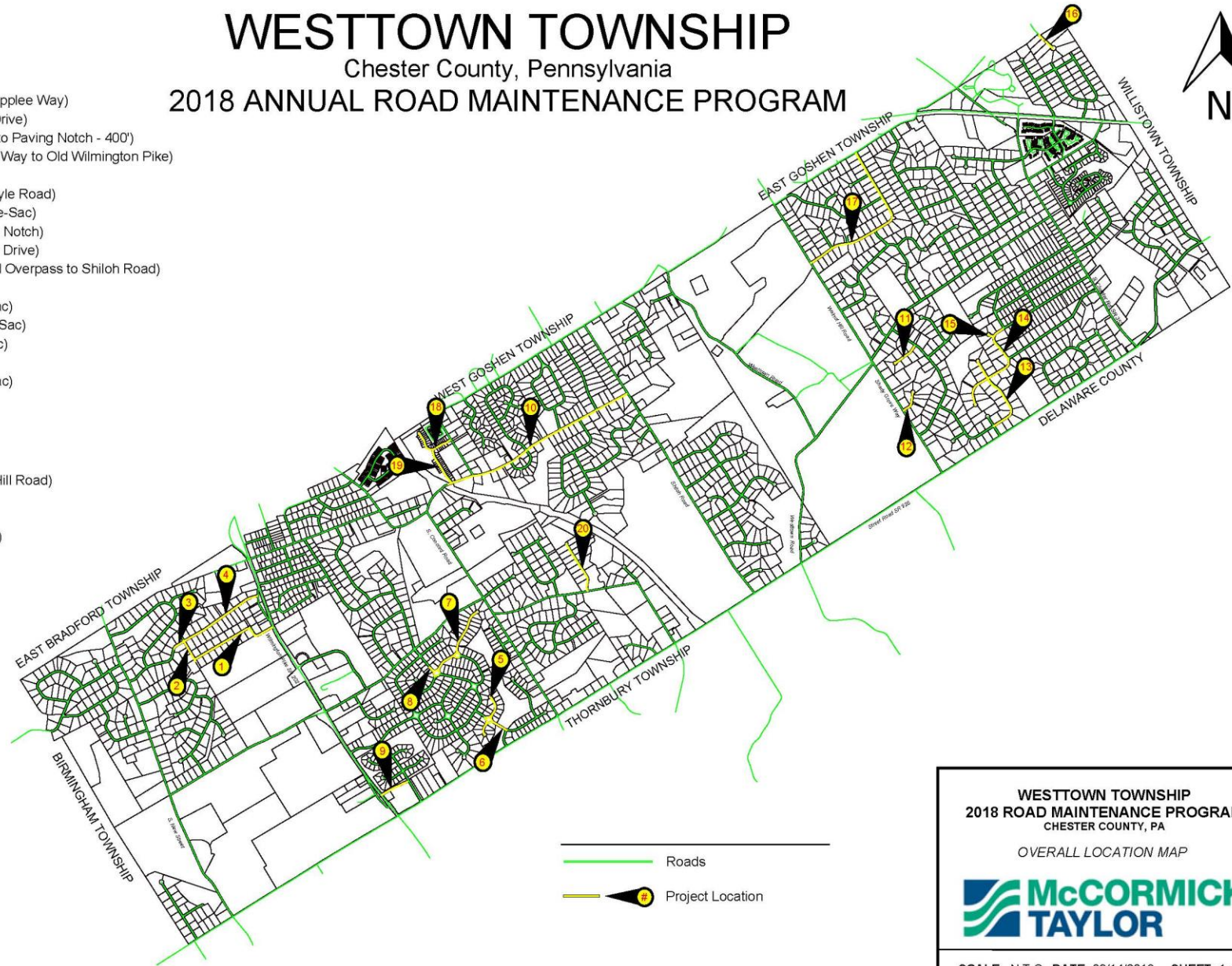
2018 ANNUAL ROAD MAINTENANCE PROGRAM

BASE BID ROADS

1. Cheyney Drive (Southbound Route 202 to Supplee Way)
2. Supplee Way (Cheyney Drive to Jacqueline Drive)
3. Jacqueline Drive (Supplee Way Intersection to Paving Notch - 400')
4. Jacqueline Drive - Spot Repairs (Supplee Way to Old Wilmington Pike)
5. Baywood Road (Cul-De-Sac to Cul-De-Sac)
6. Tower Course Drive (Baywood Road to Carlyle Road)
7. Sissinghurst Drive (Cockburn Drive to Cul-De-Sac)
8. Cockburn Drive (Sissinghurst Drive to Paving Notch)
9. Knoll Way (Northbound Route 202 to Dalmally Drive)
10. Oakbourne Road - Spot Repairs (Railroad Overpass to Shiloh Road)
11. Wren Lane (Robin Drive to Cul-De-Sac)
12. Thrush Lane (Shady Grove Way to Cul-De-Sac)
13. Cardinal Drive (Penns Grant Drive to Cul-De-Sac)
14. Overhill Road (Woodtone Road to Cul-De-Sac)
15. Overhill Circle (Overhill Road to Cul-De-Sac)
16. Pheasant Run Road (Twp Line to Cul-De-Sac)

ADD ALTERNATE ROADS

17. Ponds Edge Road (Manley Road to Walnut Hill Road)
18. Picket Way (S. Concord Road to Cul-De-Sac)
19. Trellis Lane (Oakbourne Road to Picket Way)
20. Wood Lane (Westbourne Road to Cul-De-Sac)



WESTTOWN TOWNSHIP
2018 ROAD MAINTENANCE PROGRAM
CHESTER COUNTY, PA

OVERALL LOCATION MAP

**McCORMICK
TAYLOR**

SCALE: N.T.S. DATE: 03/14/2018 SHEET: 1 of 1

Local Roads - Maintenance

- Road Maintenance primarily consists of applying a 1-1/2" pavement overlay.
- Westtown always mills off the old pavement surface prior to applying the overlay.
- After the old pavement is milled off, the subbase is inspected for failures and base repairs are made before the new surface is applied.



New Roads

- New developments yield new roads, new sidewalks and new trails
- New roads are dedicated to the municipality when the development is 100% completed. Example: Rustin Walk Development near Rustin High School.
- Consequences:
 - More maintenance (snow plowing, pavement markings, and signs)
 - Must hire more public works personnel and equipment
 - Need for more financial resources (tax revenues)



New roadway in Rustin Walk

Bridges

Most local bridges are old. Old bridges are expensive to maintain.

- Semi-annual inspections
- Concrete and steel repairs
- Abutment scour repairs
- Guiderail repairs
- Traffic control signs and pavement markings

Bridges are incredibly expensive to replace!

Westtown owns two bridges:

- S. New Street over Radley Run
- Oakbourne Road Bridge over Goose Creek

S. New Street Bridge



Oakbourne Road Bridge



Traffic Controls

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Signs



Pavement Markings

Centerline



Edge lines



Stop bars



Legends at signalized intersections



Common Complaints

Speeding

Volume

Cut Through

Residents frequently Request or Demand something to control traffic speeds and volumes, and to prevent or diminish cut through traffic.

We have to ask these questions:

Is there a definable problem?

Is there an affordable solution?

Is the solution worse than the problem?

Are there any unintended consequences?

Speed & Volume Control



Statutory Maximum Speed Limits

(PA Vehicle Code § 3362)

35 – Urban District

25 – Residential District

55 – other non-freeway

An engineering and traffic investigation is required to set a maximum speed, with one exception. A 25 MPH speed limit may be established for a road in a residence district that is not a numbered traffic route, and is functionally classified by PennDOT as a local highway.

Unwarranted & Unenforceable Signs



Intersection Improvements

- Safety
- Capacity
- Mobility



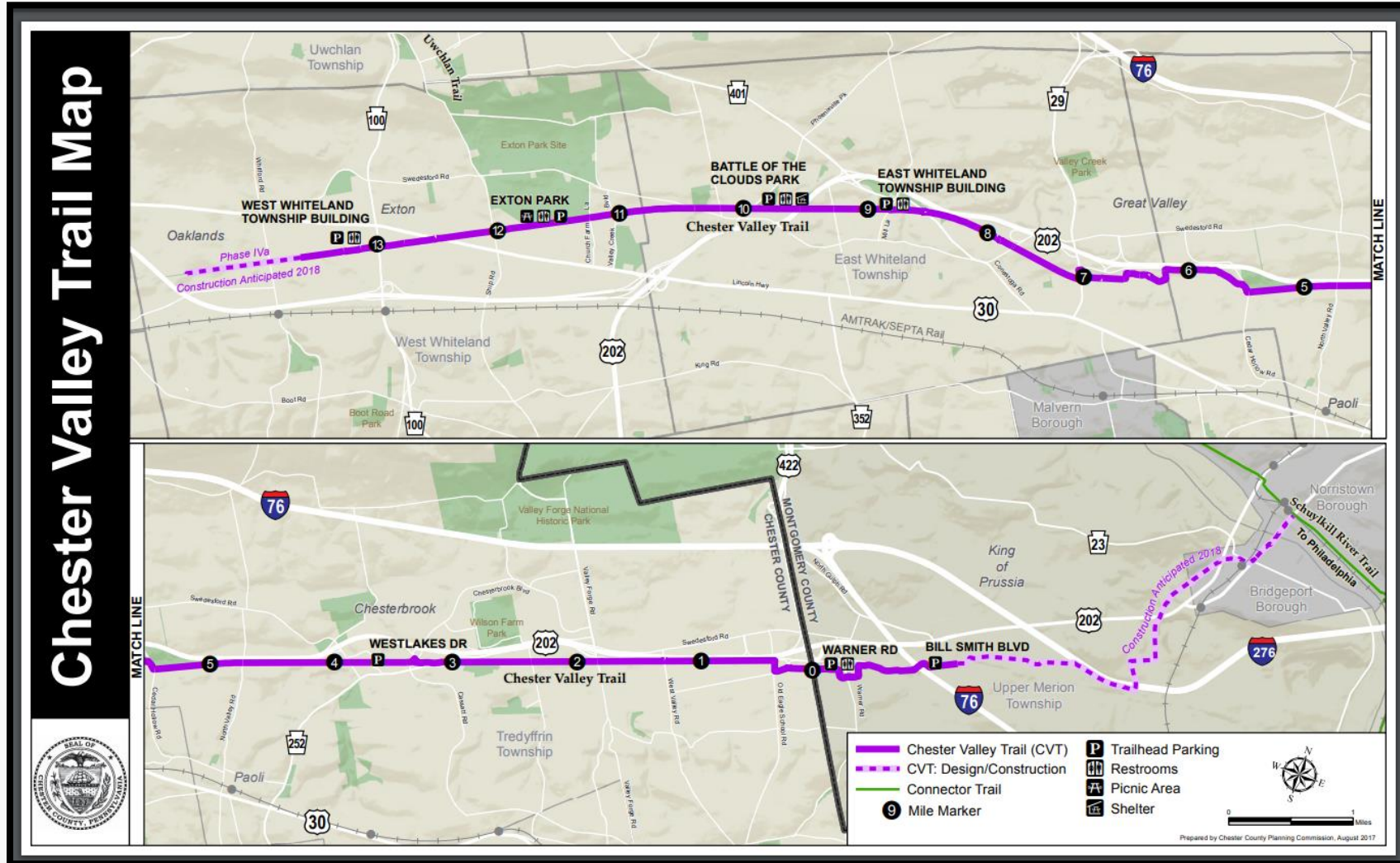
Intersection improvements at access to Bayard Rustin High School

Google

Sidewalks and Trails

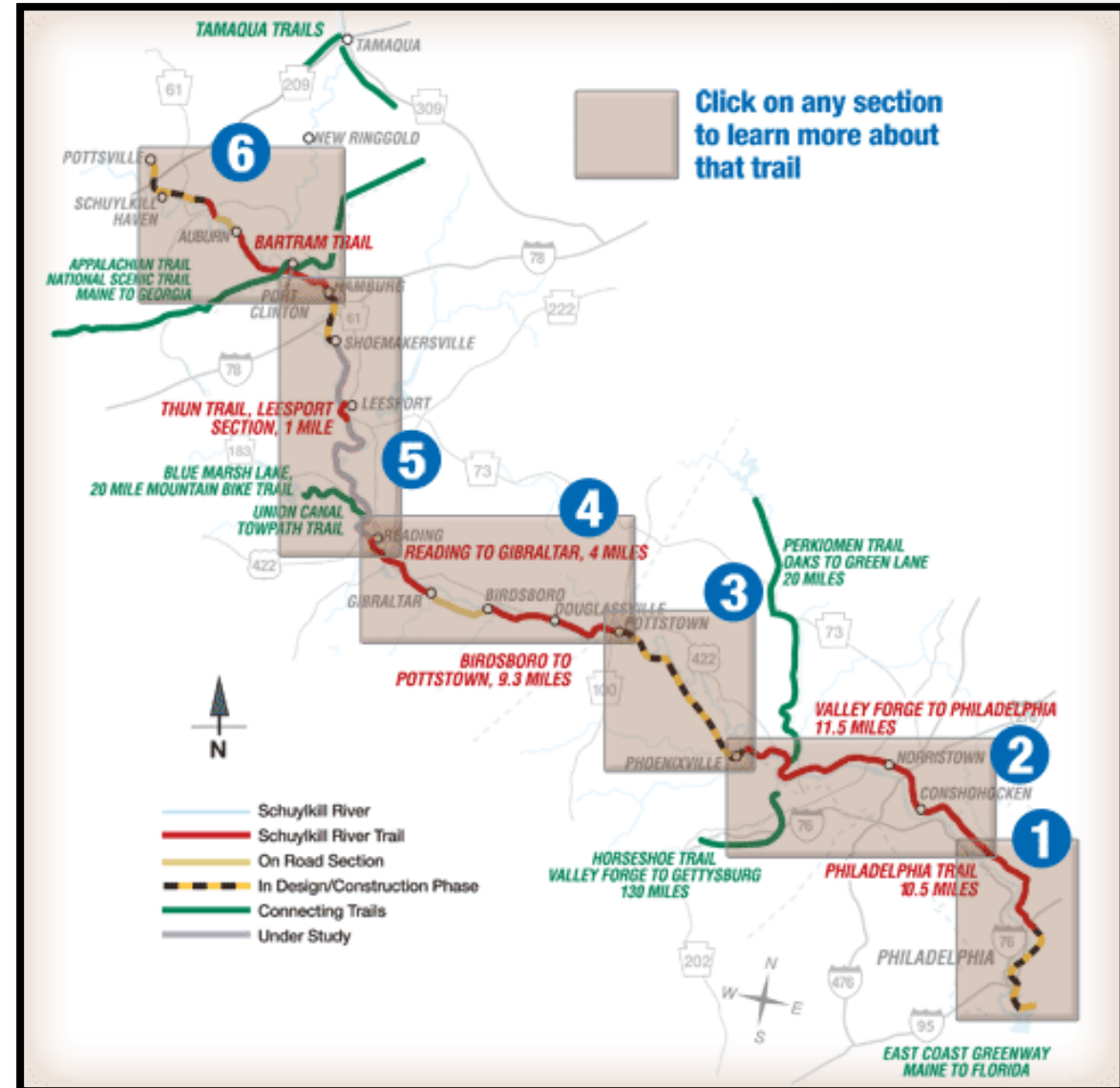
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Existing Network of Multi-Use Trails



Existing Network of Multi-Use Trails

The Schuylkill River Trail



Sidewalks



Trail at Oacourne Park



Sidewalk in Pleasant Grove

Sidewalk and Trail Connections

- Although the Township owns and maintains several trail systems and many residential developments offer pedestrian amenities, accessing them is a challenge for most residents and visitors.
 - Some of the local roads feature sidewalks on one side, but vast majority of streets do not
 - Mixing pedestrians with vehicles always presents a potential for conflict
 - None of the major roads including S. New Street and Routes 202, 926 and 320, have pedestrian amenities.



Community with no sidewalks



Sidewalk along Shiloh Rd across Bayard Rustin High School

Public Transit (Bus & Rail) ...



Public Transit

West Chester Transportation Center

- \$1.2 million project
- Started: October 2004
- Completed: December 2005



Public Transit

Paoli Intermodal Transportation Center

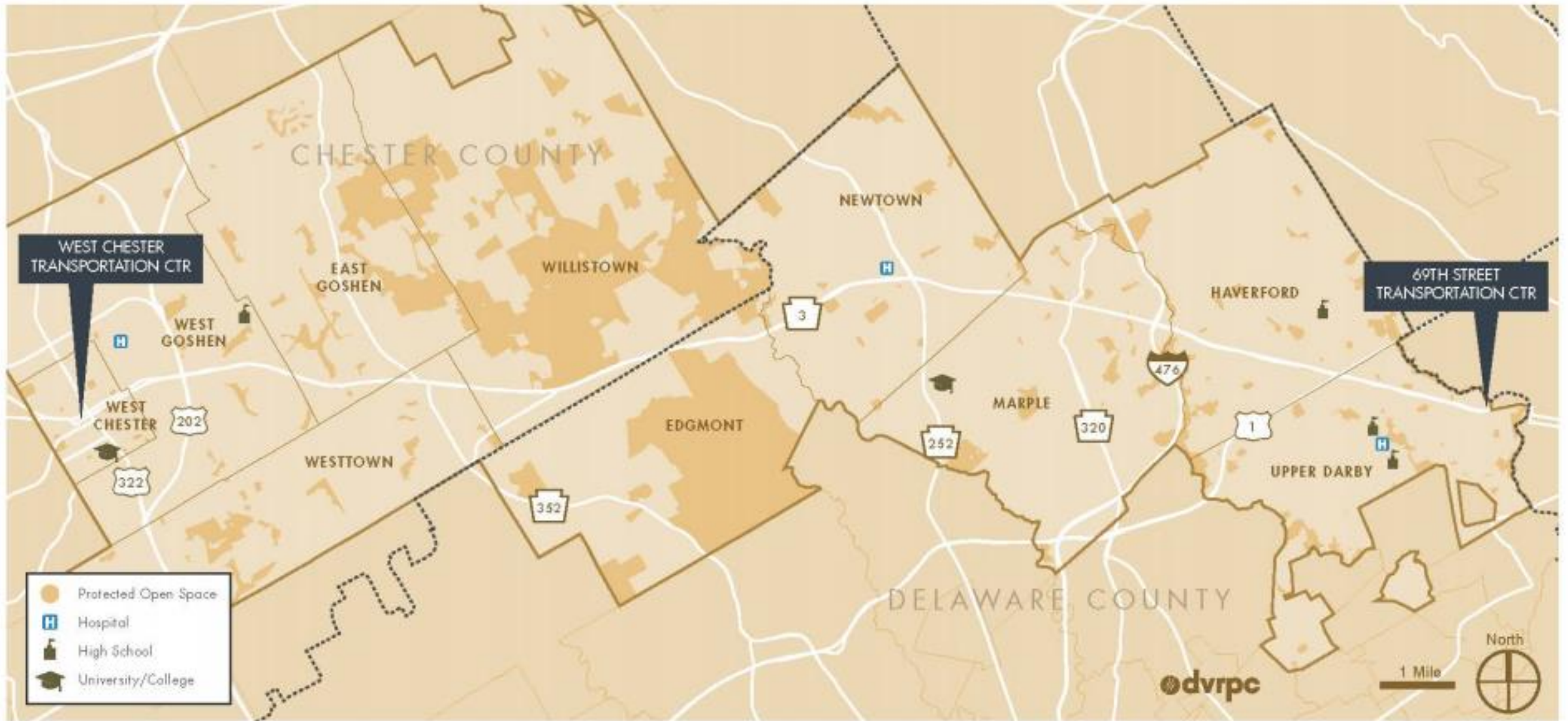
- \$48 million project
- Started: Summer 2016
- Completed: Fall 2019
- Enhancements:
 - A new center high level platform,
 - New elevators, stairs and ramps
 - A pedestrian overpass, parking lot improvements
 - Accessibility improvements to the existing depot
 - Upgrades in rail infrastructure
 - Parking lot improvements



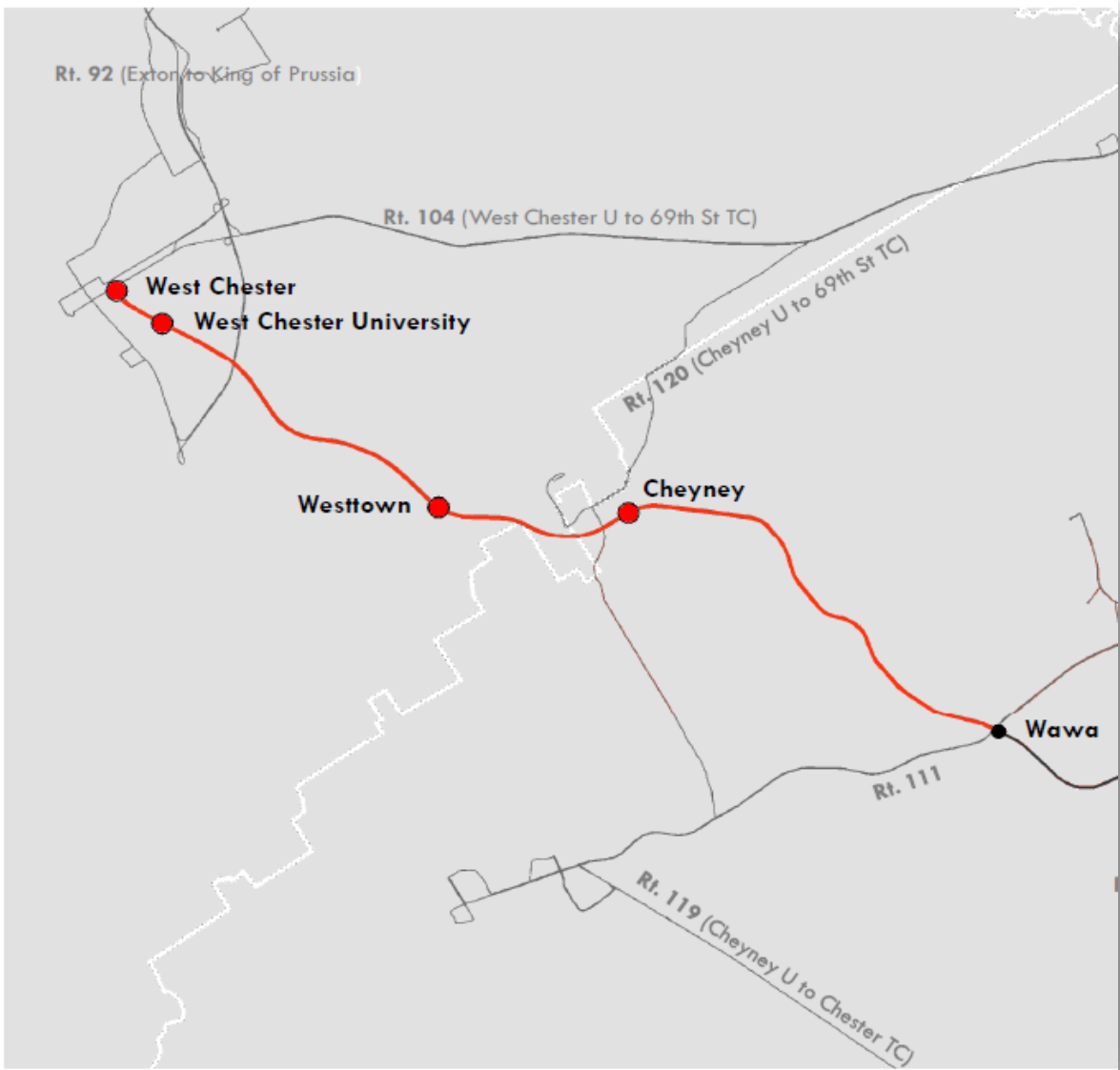
Inter-governmental Cooperation ...

West Chester Pike Coalition

- Is one of the region's most important transportation and economic corridors. Between West Chester Borough and the 69th Street Transportation center, it passes through 10 communities in Chester and Delaware Counties.
- In 2016, the DVRPC conducted ***The Enhanced Bus Service on West Chester Pike Study*** to provide a blueprint for improving the quality of transit service on the corridor.
- **The West Chester Pike Coalition** is a group of corridor stakeholders that has emerged from recent planning efforts along West Chester Pike.
- The coalition is in the process of adopting the Action Plan that identifies specific objectives and actions to improve transportation opportunities, operations and safety along West Chester Pike.



SEPTA Rail Service To West Chester



SEPTA Rail Service To West Chester

- West Chester's last commuter train ran in 1986.
- Currently the tracks are home for the West Chester Railroad and the non-profit, all-volunteer West Chester Railroad Heritage Association runs a few trains throughout the year for nostalgic and historic purposes, travelling from Market Street down to Glen Mills.
- SEPTA is in the process of restoring service on the Media/Elwyn Regional Rail Line from its current terminus at Elwyn Station to Wawa. The budget for this 3-mile service restoration is \$178 million with the construction completed by the end of 2021.
- In 2017, SEPTA and PennDOT have partnered to investigate the feasibility of restoring a 9-mile rail service between Wawa and West Chester.

SEPTA Rail Service To West Chester

- The West Chester Rail Restoration study evaluates potential demand and the engineering, environmental and socioeconomic implications of restoring a cost-effective rail service. The study was completed in March 30, 2018 concluding that the restoration of rail service is feasible. The most cost effective option is the electrification for operation of existing SEPTA regional rail vehicles on a restored single track with passing siding.
- **Cost is approx. \$320 million for single track or \$556 million for double track**
- **Project is unlikely to qualify for federal funding based on capital cost estimate and forecasted ridership**
- **Approx. \$20 million is needed to advance the project to the next phase of planning and engineering. SEPTA does not have the funds available for service expansion for at least the next 10-12 years.**

Questions?