

# East Whiteland Township



## Act 209 – Transportation Impact Fee Study

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Status Update

Board of Supervisors Meeting

February 17, 2018

7pm

# Presentation Overview

- Act 209 – Transportation Impact Fee Study Overview
- Draft Roadway Sufficiency Analysis (RSA)
- Draft Transportation Capital Improvements Plan (TCIP)
- Next Steps

# Act 209 Overview

- Establish Transportation Impact Fee Advisory Committee (TIFAC)
- Designate Transportation Service Area(s) and Study Intersections
- **Land Use Assumptions Report (LUAR)**
  - *Adopted May 10, 2017; Revised September 13, 2017*
- **Roadway Sufficiency Analysis (RSA)**
- **Transportation Capital Improvement Program (TCIP)**
- Adopt Transportation Impact Fee Ordinance

# Act 209 Overview - Process

## Land Use Assumptions Report (LUAR)

- ❑ Identify areas within the TSA with development or redevelopment potential
- ❑ Project ten-year build-out and estimate future development, including:
  - Residential dwelling units
  - Non-residential square footage

## Roadway Sufficiency Analysis (RSA)

- ❑ Conduct traffic counts at study intersections.
- ❑ Analyze peak hour traffic capacity and identify the level of service (LOS) at each study intersection for the following conditions:
  - Existing
  - Future Pass-Through (based on background growth and current land development activity)
  - Future Development (based on LUAR build-out)
- ❑ Identify improvements necessary to achieve a preferred level-of-service at each study intersection in the Existing, Future Pass-Through, and Future Development conditions.

## Transportation Capital Improvements Plan (TCIP)

- ❑ Develop cost estimates and allocate costs for improvements identified in the RSA for the Existing, Future Pass-Through, and Future Development conditions.

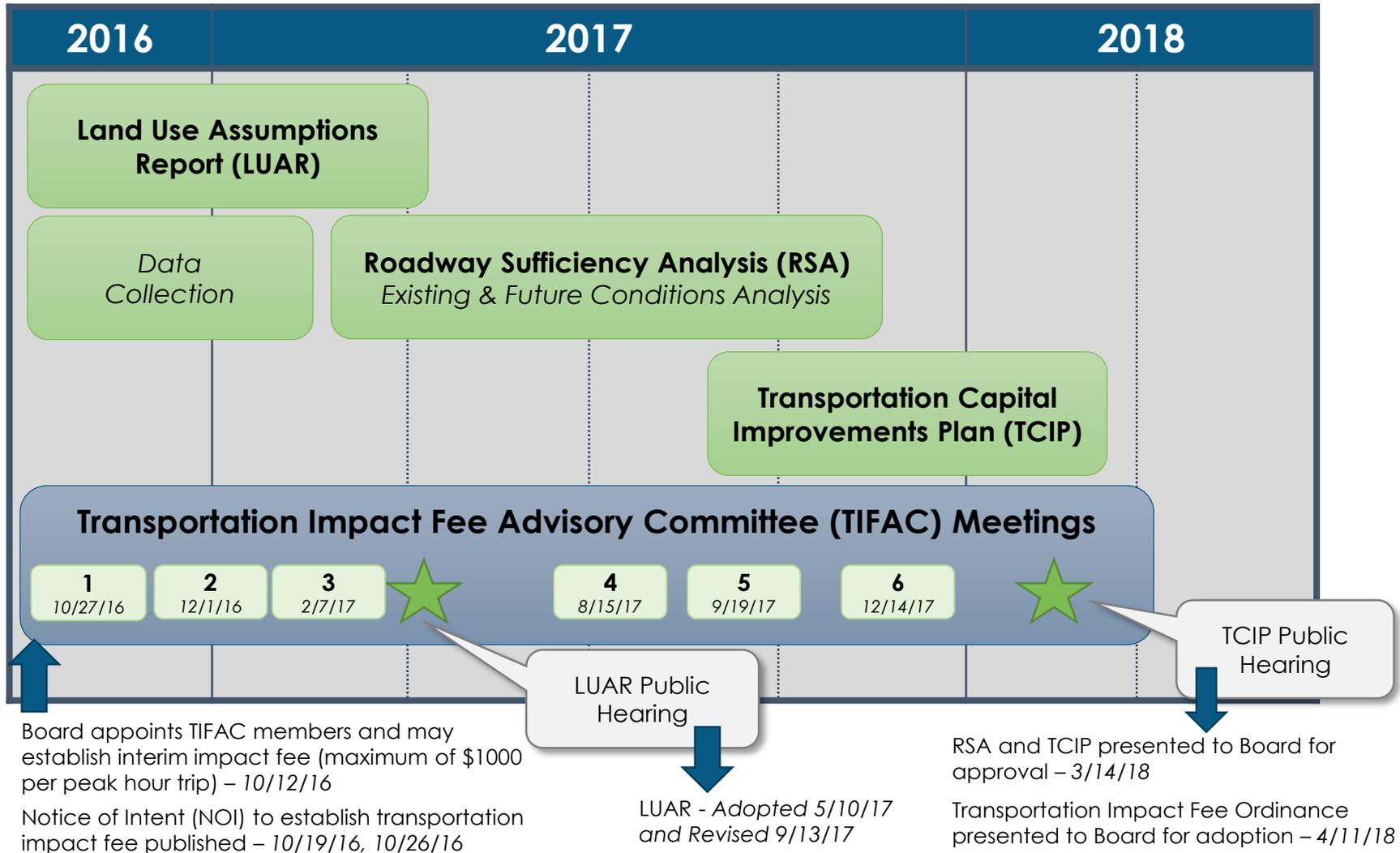
Costs can be allocated to:

  - PennDOT
  - Township
  - Others
  - Developers (for Future Development condition)
- ❑ Calculate the transportation impact (per peak hour trip) based on the costs allocated to developers in the Future Development condition divided by the number of trips generated by development.

**Total Future Development  
Capital Improvements Costs**

**Impact fee =**  $\frac{\text{Total Future Development Capital Improvements Costs}}{\text{New Development Trips}}$

# Act 209 Overview - Schedule

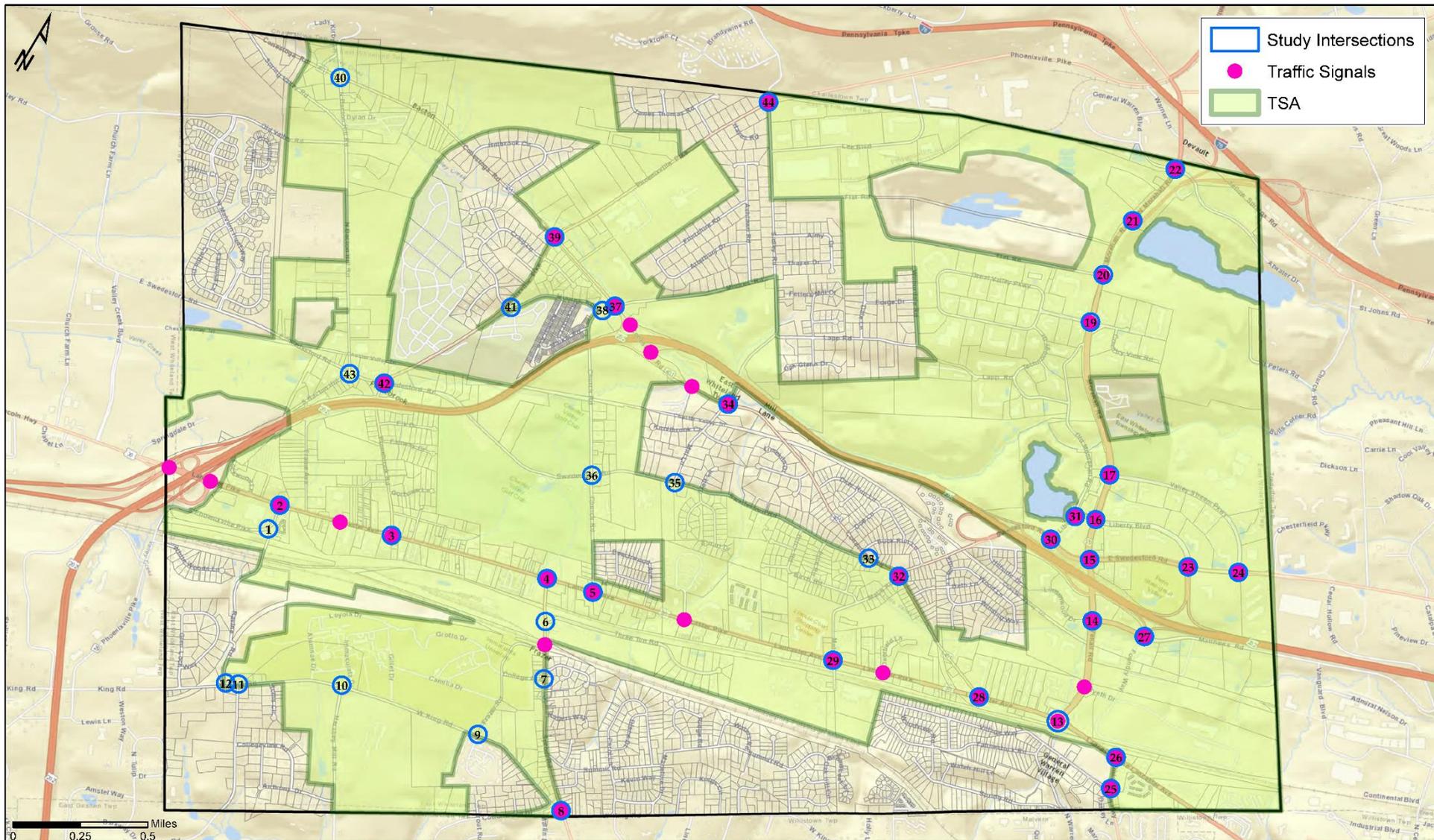


# Transportation Impact Fee Advisory Committee (TIFAC)

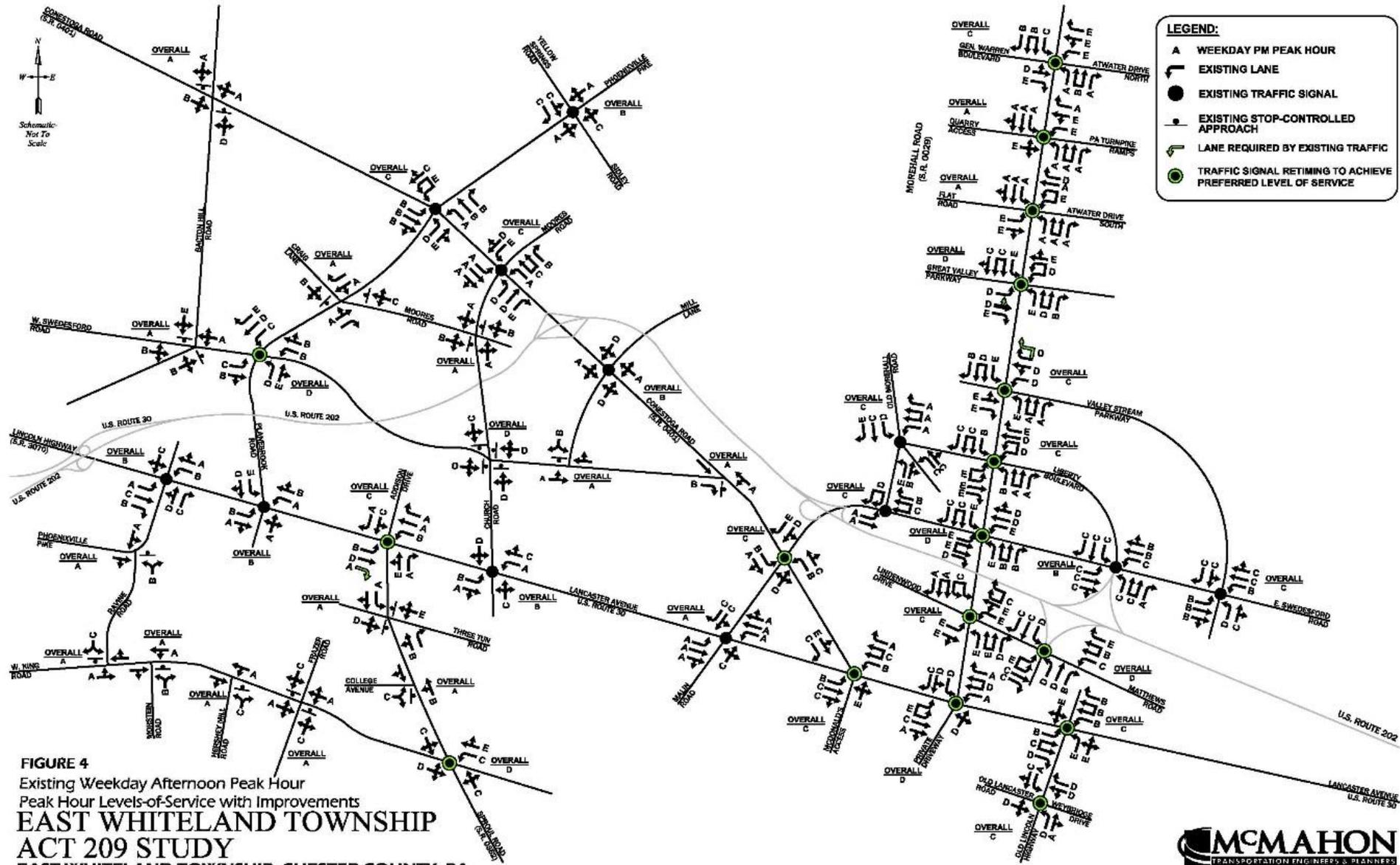
- Appointed by the Board of Supervisors
- Provided input and direction to consultant team for the preparation of the LUAR, RSA, TCIP and impact fee
- Participated in 6 committee meetings
- Served as an advisory body to the Board of Supervisors

Deborah Abel	Kerry Jones
Chuck Barbera	Anthony Nichols
Michael Chain	Timothy Phelps
Peter Fixler	Daniel Sevick
Veronica Holmes	

# Transportation Service Area (TSA) and Study Intersections



# Existing Conditions with Improvements

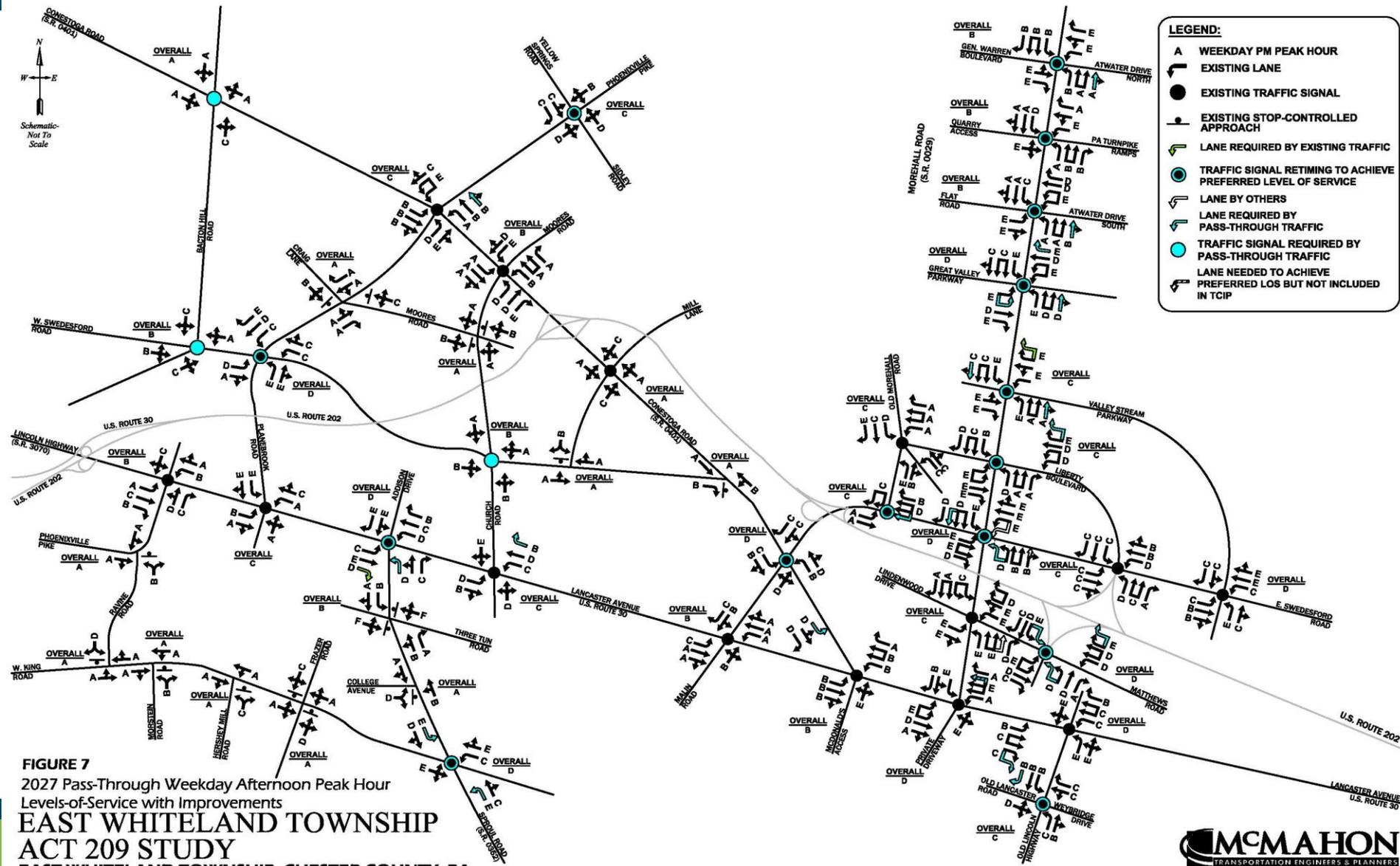


# Future Build-Out Summary and Trip Generation

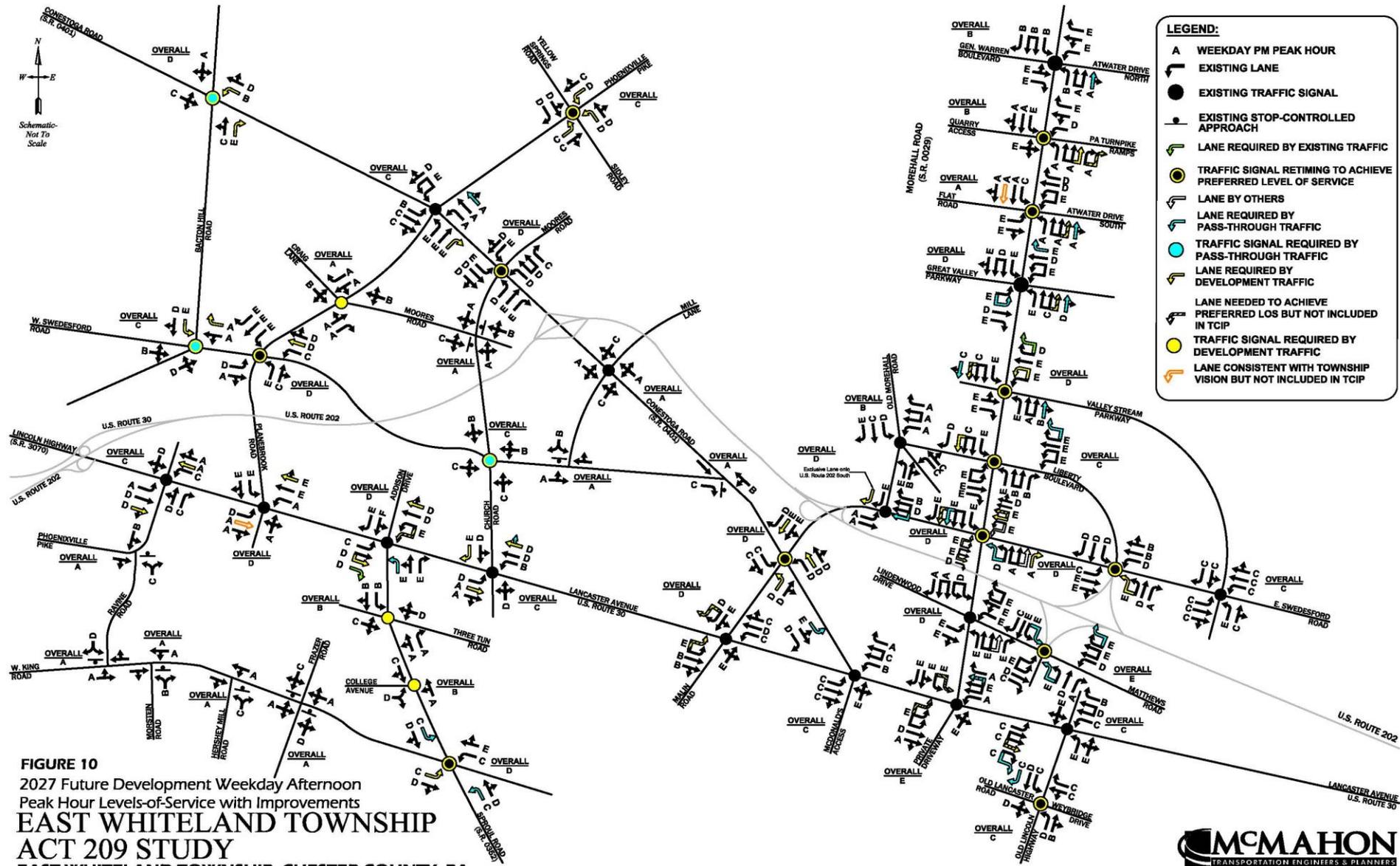
Land Use Classification	10-Year Build-out Projection
Residential	1,010 dwelling units
Non-Residential	3,450,400 square feet

Pass-Through New Trips	Development New Trips	Total New Trips
5,248	6,575	11,823

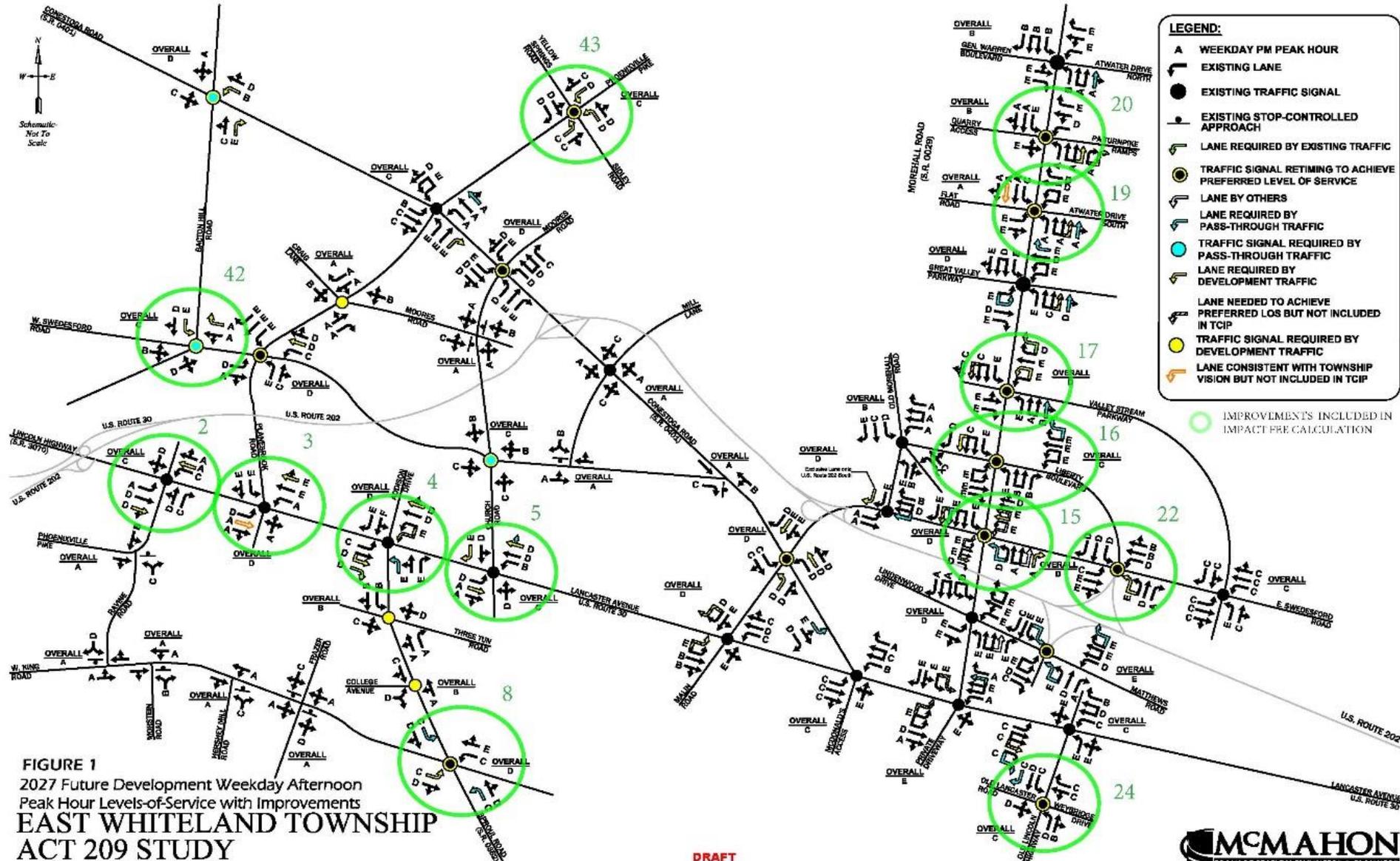
# Future Pass-Through with Improvements



# Future Development Conditions with Improvements



# Development Improvements within Planning Horizon



**FIGURE 1**  
 2027 Future Development Weekday Afternoon  
 Peak Hour Levels-of-Service with Improvements  
**EAST WHITELAND TOWNSHIP**  
**ACT 209 STUDY**  
 EAST WHITELAND TOWNSHIP, CHESTER COUNTY, PA

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# Development Improvements Cost Estimates

Int. No.	Intersection	Description	Total Project Cost	Allocated Funding			Construction Completion
				PennDOT Costs	Others Costs	Developer Costs	
2	Phoenixville Pike & U.S. Route 30	Widen westbound and eastbound Lincoln Highway (U.S. Route 30) to provide an additional through lane. Restripe the existing eastbound right-turn lane as through/right.	\$5,820,200	\$1,455,050	\$0	\$4,365,150	2027
3	Planebrook Road & U.S. Route 30	Widen westbound Lincoln Highway (U.S. Route 30) to provide an additional through lane. Restripe the eastbound right-turn lane as through/right.	\$5,039,300	\$1,259,825	\$0	\$3,779,475	2027
4	Sproul Road (S.R. 0352) & U.S. Route 30	Widen westbound and eastbound Lincoln Highway (U.S. Route 30) to provide an additional through lane. Widen westbound Lincoln Highway to provide an additional left-turn lane. Modify traffic signal phasing.	\$5,165,600	\$1,911,272	\$0	\$3,254,328	2027
5	Church Road & U.S. Route 30	Widen westbound and eastbound Lincoln Highway (U.S. Route 30) to provide an additional through lane. Widen southbound Church Road to provide a right-turn lane.	\$3,731,900	\$932,975	\$0	\$2,798,925	2027
8	Sproul Road (S.R. 0352) & West King Road	Widen eastbound West King Road to provide a left-turn lane. Modify traffic signal phasing.	\$850,000	\$425,000	\$0	\$425,000	2027
15	Morehall Road (S.R. 0029) & Swedesford Road	Widen eastbound Swedesford Road to provide an additional through lane and an additional left-turn lane. Widen northbound Morehall Road (S.R. 0029) to provide an additional right-turn lane. Widen westbound Swedesford Road to provide an additional through lane. Modify traffic signal timings.	\$708,400	\$354,200	\$0	\$354,200	2027
16	Morehall Road (S.R. 0029) & Liberty Blvd	Widen southbound Morehall Road (S.R. 0029) to provide an additional through lane. Modify traffic signal timings.	\$885,900	\$221,475	\$0	\$664,425	2027
17	Morehall Road (S.R. 0029) & Valley Stream Parkway	Widen westbound Valley Stream Parkway to provide an additional left-turn lane. Modify traffic signal phasing.	\$182,400	\$45,600	\$0	\$136,800	2027

# Development Improvements Cost Estimates (cont.)

Int. No.	Intersection	Description	Total Project Cost	Allocated Funding			Construction Completion
				PennDOT Costs	Others Costs	Developer Costs	
19	Morehall Road (S.R. 0029) & Flat Road / Atwater Drive South	Modify traffic signal timings.	\$2,500	\$625	\$0	\$1,875	2027
20	Morehall Road (S.R. 0029) & PA Turnpike Ramps	Widen northbound Morehall Road (S.R. 0029) to provide an additional through lane. Modify traffic signal timings at adjacent coordinated intersections.	\$1,753,300	\$876,650	\$0	\$876,650	2027
22	East Liberty Blvd & East Swedesford Road	Modify traffic signal timings.	\$6,600	\$1,650	\$0	\$4,950	2027
24	Old Lincoln Highway & Old Lancaster Road / Weybridge Drive	Modify traffic signal timings.	\$8,300	\$0	\$0	\$8,300	2027
42	Bacton Hill Road & Swedesford Road	Widen westbound Swedesford Road to provide a right-turn lane. Widen southbound Bacton Hill Road to provide a left-turn lane. Modify traffic signal timings and phasing.	\$1,058,200	\$0	\$0	\$1,058,200	2027
43	Phoenixville Pike & Yellow Springs Road / Sidley Road	Widen northbound and southbound Phoenixville Pike to provide left-turn lanes. Widen westbound Sidley Road to provide a left-turn lane. Modify traffic signal timings and phasing.	\$1,435,900	\$358,975	\$0	\$1,076,925	2027
<b>Totals</b>			<b>\$26,648,500</b>	<b>\$7,843,297</b>	<b>\$0</b>	<b>\$18,805,203</b>	

# Capital Improvements Plan Summary

	PennDOT	Township	Development	Total
Existing Program	\$416,896	\$962,104		\$1,379,000
Pass-Through Program	\$6,603,121	\$16,229,280		\$22,832,400
Development Program	\$7,843,297		\$18,805,203	\$26,648,500
Improvements Beyond Horizon Year				\$8,093,650
	\$14,863,314	\$17,191,384	\$18,805,203	\$58,953,550

Cost Allocations for Roadway Sufficiency Analysis				
Development CIP	Total CIP	% RSA Attributable to Development	RSA Cost	RSA Cost Attributable to Development
\$18,805,203	\$50,859,900	37%	\$50,000	\$18,487

**Total Development Capital Improvements Costs** = \$18,805,203 + \$18,487 = **\$18,823,690**

# Transportation Impact Fee

$$\text{Impact fee} = \frac{\text{Total Development Capital Improvements Costs}}{\text{New Development Trips}} = \frac{\$18,823,690}{6,575} = \$2,862$$

*per PM Peak Hour Trip*

# Next Steps

- RSA and TCIP Available on Township's Website for Public Review
  - Written comments can be sent to [planning@eastwhiteland.org](mailto:planning@eastwhiteland.org)
- Board of Supervisors Meeting – 3/14/18
  - Consider RSA
  - Public Hearing on TCIP
  - Consider TCIP
- Board of Supervisors Meeting – 4/11/18
  - Consider Transportation Impact Fee Ordinance