Agenda

1. Project Overview
2. Level of Service Analysis
3. Draft Improvements
4. Traffic Calming Measures
5. Next Steps
Overall Objective

“Evaluate multi-modal transportation connections within the northeastern section of Tredyffrin Township.”
1. Project Overview

- Project elements:
  1. Enhance the transportation network to provide access for all users and encourage non-vehicular travel
  2. Provide links for pedestrians and bicyclists between key transportation assets and major destinations within the community
  3. Improve access to transit for the community
  4. Promote active transportation to improve the health and well-being of residents
Schedule

Transportation Solutions Building Better Communities

McMAHON
TRANSPORTATION ENGINEERS & PLANNERS

November 2017

- Task A — Project Management
- Task B — Existing Conditions Analysis
- Task C — Multimodal Facilities Conceptual Plan
- Task D — Regional Trail Connections

- Public Involvement
- SAC Meeting #1
- SAC Meeting #2
- SAC Meeting #3
- PennDOT Coordination Meeting
- Public Meeting #1

- Draft/Final Report

August 2018

- Task E — Implementation Plan and Funding Strategy
- SAC Review of Draft Report
- Public Meeting #2

Information and documents available for review and comment online
2. Level of Service Analysis

Turning movement counts completed at 12 intersections.

**Signalized:**
- PA 252 / Walker Road
- PA 252 / Chesterbrook Blvd
- PA 252 / Anthony Wayne Drive
- PA 252 / Swedesford Rd (EB)
- Swedesford / Gateway Driveway
- Swedesford / Valley Road
- Swedesford / 202 Ramps
- Swedesford / Old Eagle School
- W. Valley / 202 Ramps
- Old Eagle School / Devon Park Dr

**Stop Controlled:**
- Gateway Entrance / Anth. Wayne
- W. Valley / Devon Park Drive
GATEWAY MULTIMODAL TRANSPORTATION STUDY

EXISTING PEAK HOUR LEVEL-OF-SERVICE

Legend
- Study Intersections
- Weekday Morning Peak hour—LOS(A)
- Weekday Afternoon Peak Hour—LOS
- Existing Lane/Movement
- Existing Traffic Signal
- Existing Stop Control

Callout Boxes:
1. Valley Forge Rd/Walker Rd
2. Valley Forge Rd/Sullivan Rd
3. Valley Forge Rd/Anthony Wayne Dr
4. Valley Forge Rd/E Swedesford Rd
5. Valley Forge Rd/W Swedesford Rd
6. Anthony Wayne Dr
7. E Swedesford Rd
8. W Valley Rd/E Swedesford Rd
9. W Valley Rd/E Swedesford Rd
10. W Valley Rd/Devon Park Dr
11. Womlesay Dr/E Swedesford Rd
12. Old Eagle School Rd/E Swedesford Rd
13. Old Eagle School Rd/Devon Park Dr

Sources: Esri, HERE, Garmin, Intermap, i-cubed, P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo. © OpenStreetMap contributors and the GIS User Community.
2. Level of Service Analysis

PA 252 / Anthony Wayne Dr
- Overall LOS D during PM Peak
- Northbound through movement LOS F during PM
- Westbound all movements LOS D during AM and PM

Swedesford Road / 202 Ramps
- Overall LOS D during PM Peak
- E/W traffic through movement favored
- Most turning movements perform D or worse

Swedesford Road / Old Eagle School Road
- Overall LOS E during PM Peak
- Similar to Swedesford Road / 202 Ramps

Old Eagle School Road / Devon Park Drive
- Overall LOS D in AM and PM

Devon Park Drive / West Valley Road
- Overall LOS F in PM
3. Draft Proposed Improvements

- Concept Plans
- Bicycle and Pedestrian Connections
  Map – Cross sections
3. Draft Proposed Improvements – Concept Plans

- 3 locations in the study area
- Provide conceptual plan for illustrative purposes
- Could be included in a competitive grant application submission
Concept Plans

Gateway Shopping Center

Install new traffic signal equipment as necessary, including traffic signal supports, pedestrian indicators, push buttons, emergency pre-emption and upgraded vehicle detection.

Potential need for rock wall on wall in area where steep exceeds 1:1 (isometric detail to be completed by existing construction engineer).

E. Swedesford Road

Southbound SR 0202

Northbound SR 0202

End of valley road connection to

LEGEND

New Pedestrian Pedestrian
Facility
Intersection
Existing Lane Collar (2 ft intervals)
Existing Shoulder
Existing Right-of-Way Line
Required Right-of-Way Line

SCALE

Horizontal

0 30 60 FEET

Redevelop connection to

SR 0202.

Value engineered project.

 fares safety.

Required Right-of-Way Line

Required Right-of-Way Line

Required Right-of-Way Line
3. Draft Proposed Improvements – Bicycle and Pedestrian Connections

• Provide multimodal network throughout the study area
• Range from low-cost/short-term implementable to requiring further study and possibly needing grant funding
3. Draft Proposed Improvements – Cross Sections

- 7 locations throughout study area
- Representative of “typical” cross sections
- Detailed engineering studies would be needed to implement in most cases
Location 1

Valley Forge Road Existing (Looking North)
Location 1

Valley Forge Road Future (Looking North)
Location 2

Walker Road A Existing (Looking West)
Location 2

Walker Road A Future (Looking West)
Location 2

Walker Road A Long-term (Looking West)
Location 3

Walker Road B Existing (Looking West)
Location 3

Walker Road B Future (Looking West)
Location 3

Walker Road B Long-term (Looking West)
Location 4

W. Valley Road Existing (Looking North)
Location 4

W. Valley Road Future (Looking North)
Location 5

W Valley Road Existing (Looking North)
Location 5

W Valley Road Future (Looking North)
Location 6

Devon Park Drive Existing (Looking East)
Location 6

Devon Park Drive Future (Looking East)
Location 7

Swedesford Road Existing (Looking West)
Location 7

Swedesford Road Future (Looking West)
4. Traffic Calming Measures

- Roadway design and management strategies meant to balance the mobility needs of motor vehicles and other modes

Strategies:
- Narrowed Lanes
- Bulb-outs / Neckdowns
- Chicanes
- Raised medians
- Diverters
- Road humps, speed tables, cushions
- Rumble strips & other surface treatments
4. Traffic Calming Measures – Gateway Shopping Center Outer Drive

Existing Conditions

• Traffic Volumes* (100 EB, 180 WB)
• Speed Limit – 13 MPH
• Approx. 30’ curb to curb
• Existing speed humps
4. Traffic Calming Measures – Anthony Wayne Drive

Existing Conditions
• Low Traffic Volumes* (17 EB, 52 WB)
• Speed Limit – 25 MPH
• Existing Sidewalk on North Side
• Connection from Valley Forge Road to Wilson Farm Park
4. Next Steps

• Finalize Concept Plans, Map, and Cross-sections
• Get public input
  ○ Meeting?
  ○ Mindmixer?
  ■ Survey?
Conclusion

Questions/Follow-up

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