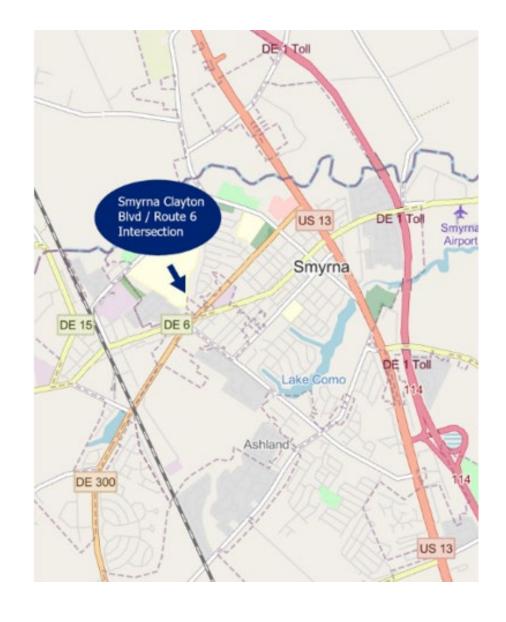
Welcome to the

Smyrna Clayton Blvd Intersection Study

MPO Council July 6, 2023











Study Area & Location

Smyrna Clayton Boulevard / Wheatleys Pond Rd Intersection



- North of Dover and South of Middletown
- Link to US 13 & SR 1 to the East

Purpose & Need

Acute angle of intersection inhibits vehicle turning movements especially eastbound vehicles on Smyrna Clayton Boulevard turning right onto Wheatleys Pond Road.









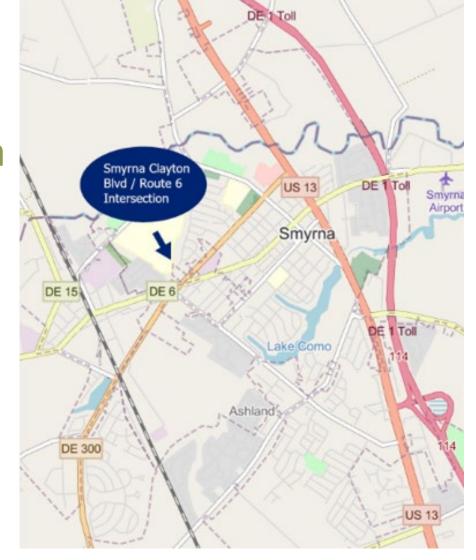


Community Workshop 1 January 30, 2023

Citizens Hose Company, Commerce St, Smyrna 26 Attendees

Plans display included:

Study Area
Project Purpose and Need
Workflow Process
*Turning Movement Counts – AM, PM & Midday Peak Hour
*Crash Type & Severity
*Annual Crashes & Five Year-Year Time of Day Crashes
*Crashes by Location & Type



* 11/30/2017 - 11/30/2022



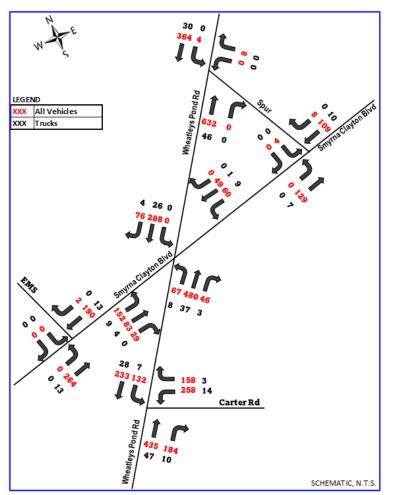




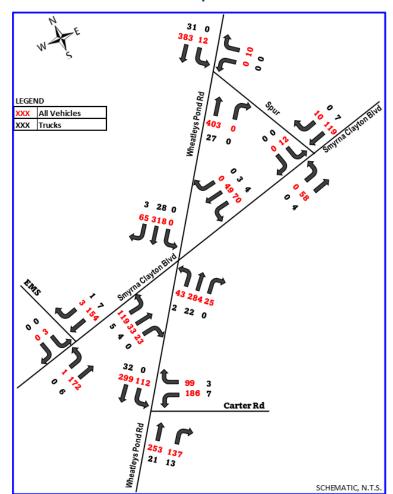


2022 Peak Hour Turning Counts

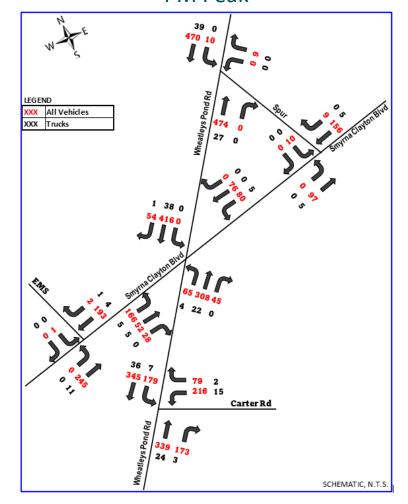
AM Peak



Midday Peak



PM Peak



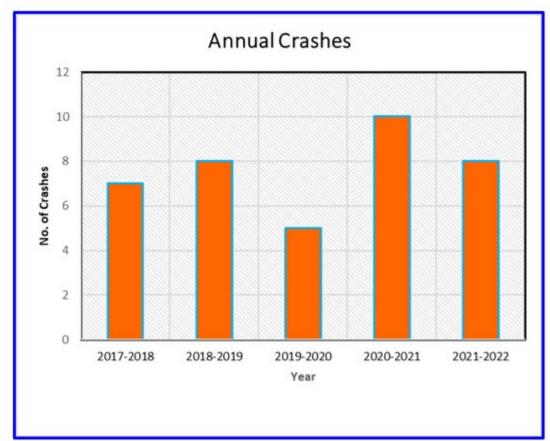


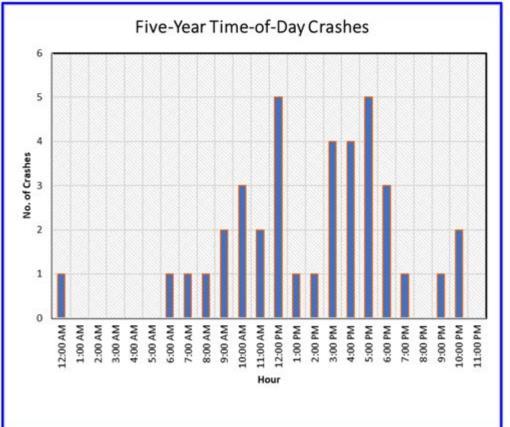






Crash Data Wheatleys Pond Rd & Smyrna / Clayton Blvd





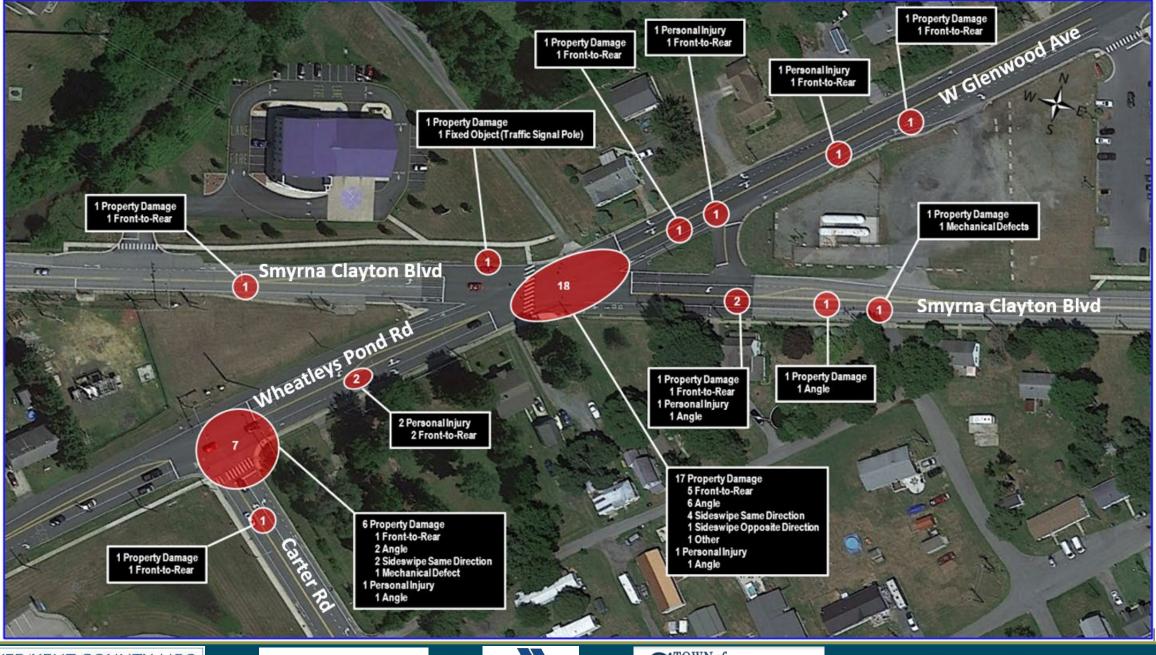
Crash Data 11/30/2017 - 11/30/2022



















Community Workshop 1 January 30, 2023

- 8 Comment Forms Completed & Submitted at Workshop
- 1 Comment form Completed & Submitted to Town
- 77 Responses Received from Online Survey

"The skew discourages the right turn on eastbound SCB and the left turn on northbound WPRD. It impairs sight distance on northbound right turn.

It makes for a wide intersection to bicycle through."











Future Traffic

- Growth Factor of 1% Per Annum (per DelDOT)
- 1.06% Growth Factor Applied to 2022 Traffic to Obtain Opening Year Volumes 2028
- 1.32% Growth Factor Applied to 2022 Traffic to Obtain Design Year Volumes 2050









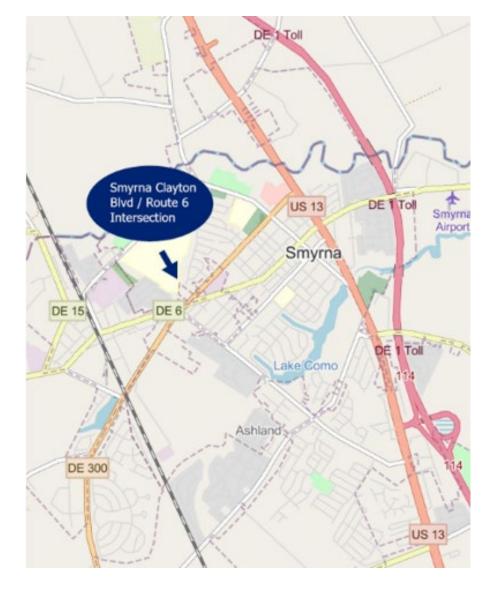
Community Workshop 2 March 30, 2023

Citizens Hose Company, Commerce St, Smyrna 25 Attendees

Plans Display included:

Concept Option 1

Concept Option 2

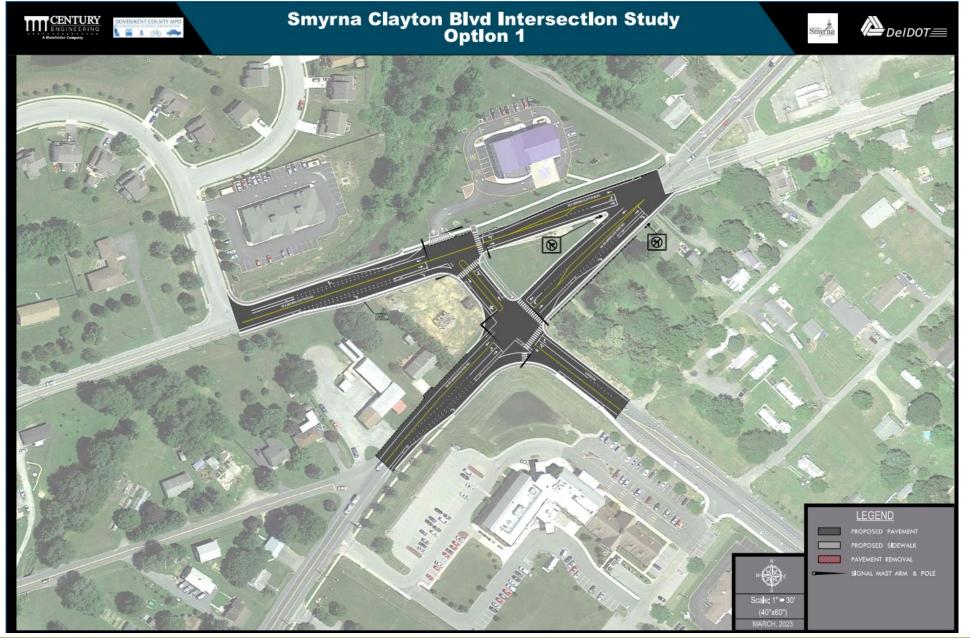










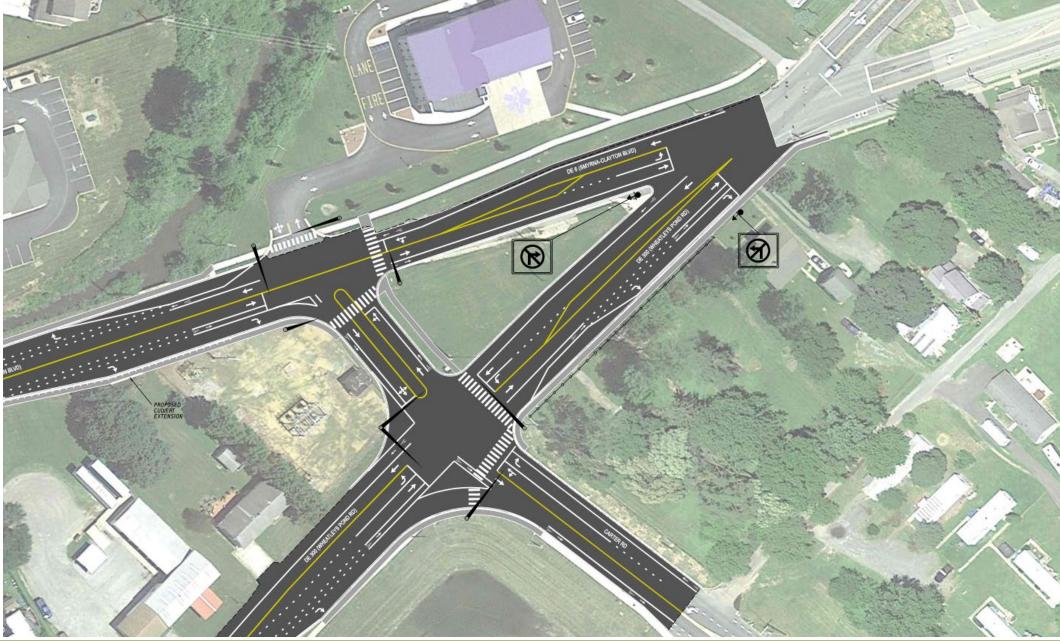




















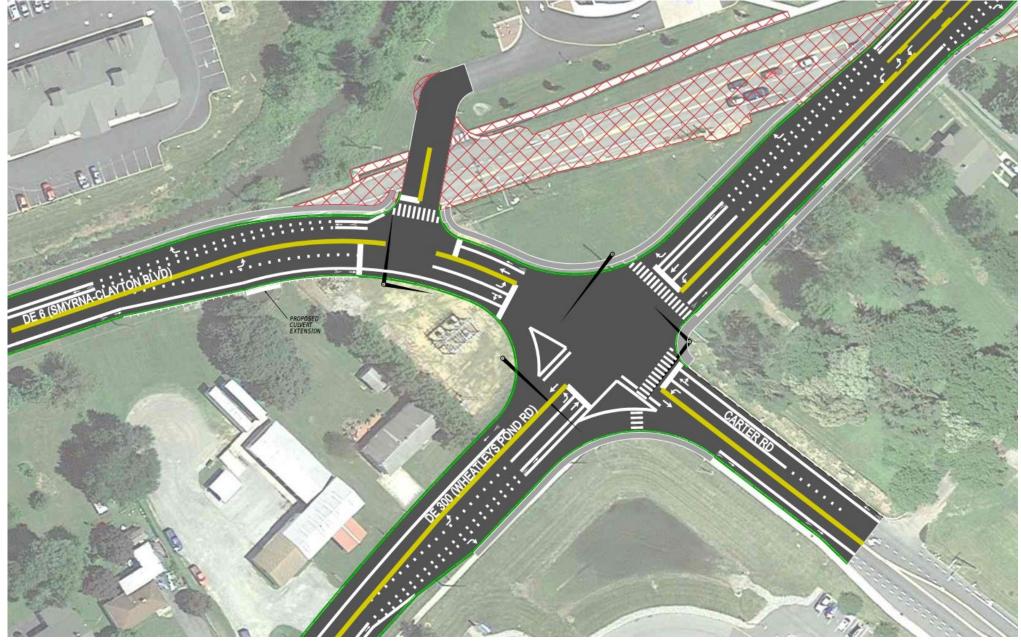




























Community Workshop 2 March 30, 2023

- 12 Comment Forms Completed & Submitted at Workshop
- 1 Online Response to Comment Form (April 10 May 10, 2023)
- 153 Online Responses to Town Survey (May 4 May 19, 2023)













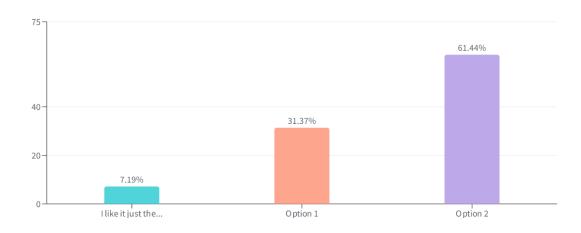
Community Workshop 2 March 30, 2023

- 12 Comment Forms Completed & Submitted at Workshop
 - 3 Favor Option 1
 - 11 Favor Option 2
 - 2 Support Both
 - 4 Unsure (Option 1)
- 1 Online Response to Comment Form (April 10 May 10, 2023)
 - Favor Option 2
- 153 Online Responses to Town Survey (May 4 May 19, 2023)
 - 11 Like it just the way it is
 - 48 Favor Option 1
 - 94 Favor Option 2

QUESTION 01 | PICTURE CHOICE

Which option for improvement of Smyrna/Clayton Blvd Intersection do you prefer?

Answered: 153 Skipped: 4

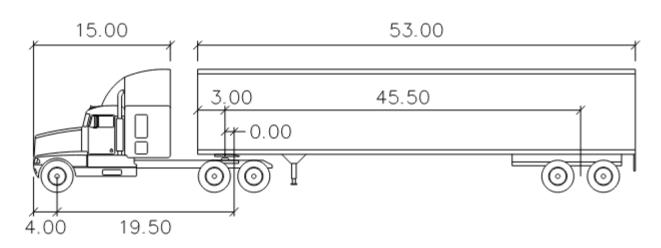












45.00

WB-67

feet

Tractor Width : 8.00 Lock to Lock Time : 6.0
Trailer Width : 8.50 Steering Angle : 28.4
Tractor Track : 8.00 Articulating Angle : 75.0
Trailer Track : 8.50

E-One Cyclone II 95 HP

feet

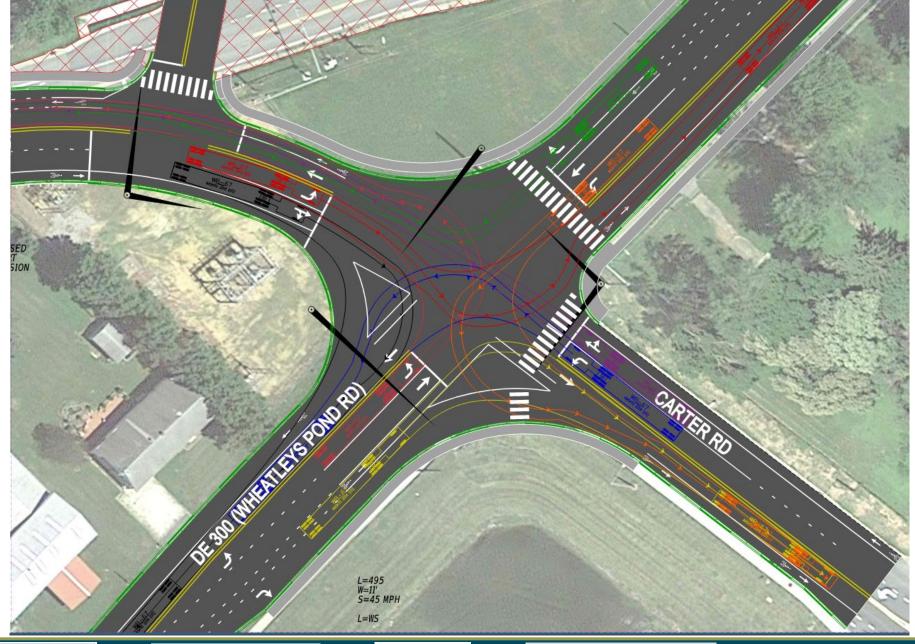
Width : 9.50 Track : 9.35 Lock to Lock Time : 6.0 Steering Angle : 43.4











WB 67 Turning Template SCB/WPR/CR Int

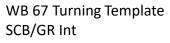










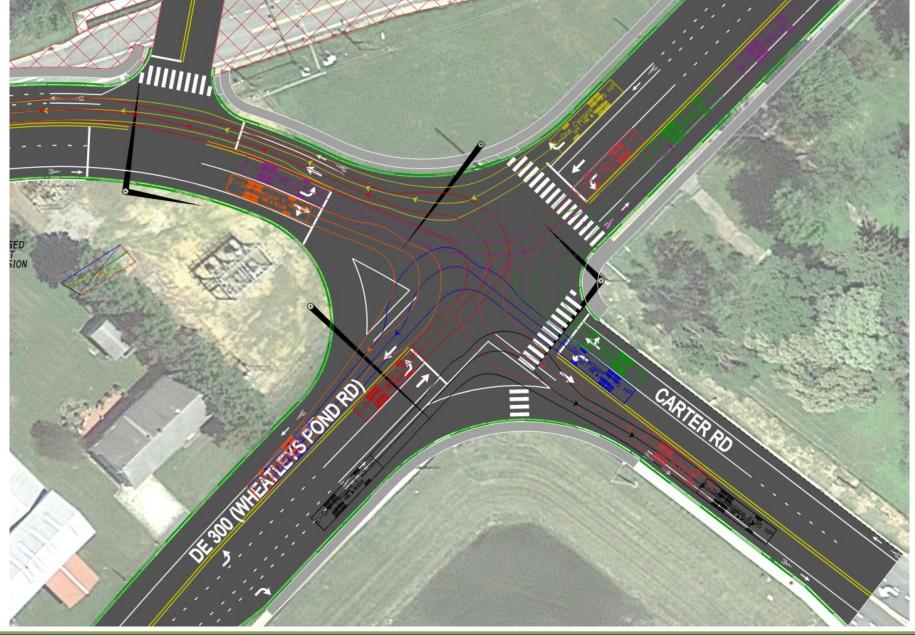












HP 95 Turning Template SCB/WPR/CR Int

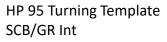




















Recommendation

Option 2 Carried to Design Phase as Preferred Alternative, with Further Coordination with Emergency Responders



Option 2
Preliminary Engineering
\$929,000.00

Right of Way

\$250,000.00

Construction

\$5,695,000.00

Total

\$6,874,000.00

Option 1 Preliminary Engineering

\$486,000.00

Right of Way

\$50,000.00

Construction

\$3,112,000.00

Total

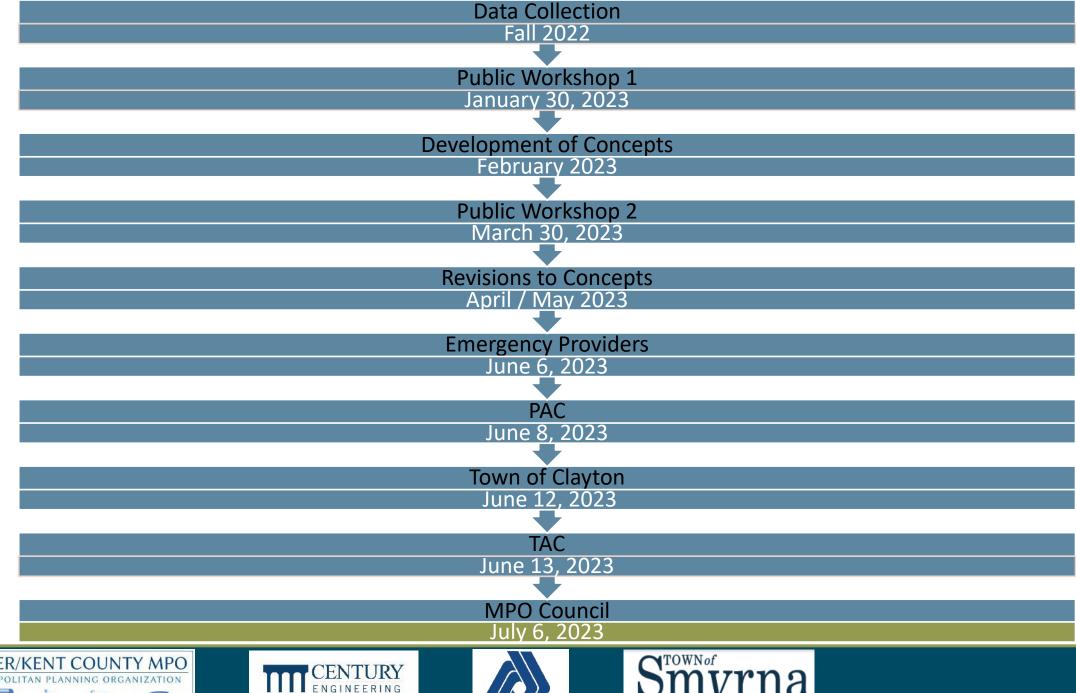
\$3,648.000.00



















Thank you!

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Ted Foglietta

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