

Henlopen TID

Transportation Improvement District

Presented to
Sussex County Council

November 19, 2019



Objectives

- ⦿ Review traffic analysis results
- ⦿ Review recommended transportation improvements
- ⦿ Discuss potential infrastructure fee program
- ⦿ Discuss Next Steps



What we modeled – 2045 Build-out



Legend

Commercial	Henlopen_segments
Residential	MajorRivers
Both	MAINTENANCE_ROADS layer.lyr
Henlopen_TID	SUBURBAN_STREETS layer.lyr
	MUNICIPAL_ROADS layer.lyr



Results – Level of Service



Level-of-Service



Level of Service A

• Free-flow



Level of Service B

• Reasonably Free-flow



Level of Service C

• Stable Operation



Level of Service D

• Borderline



Level of Service E

• Unstable



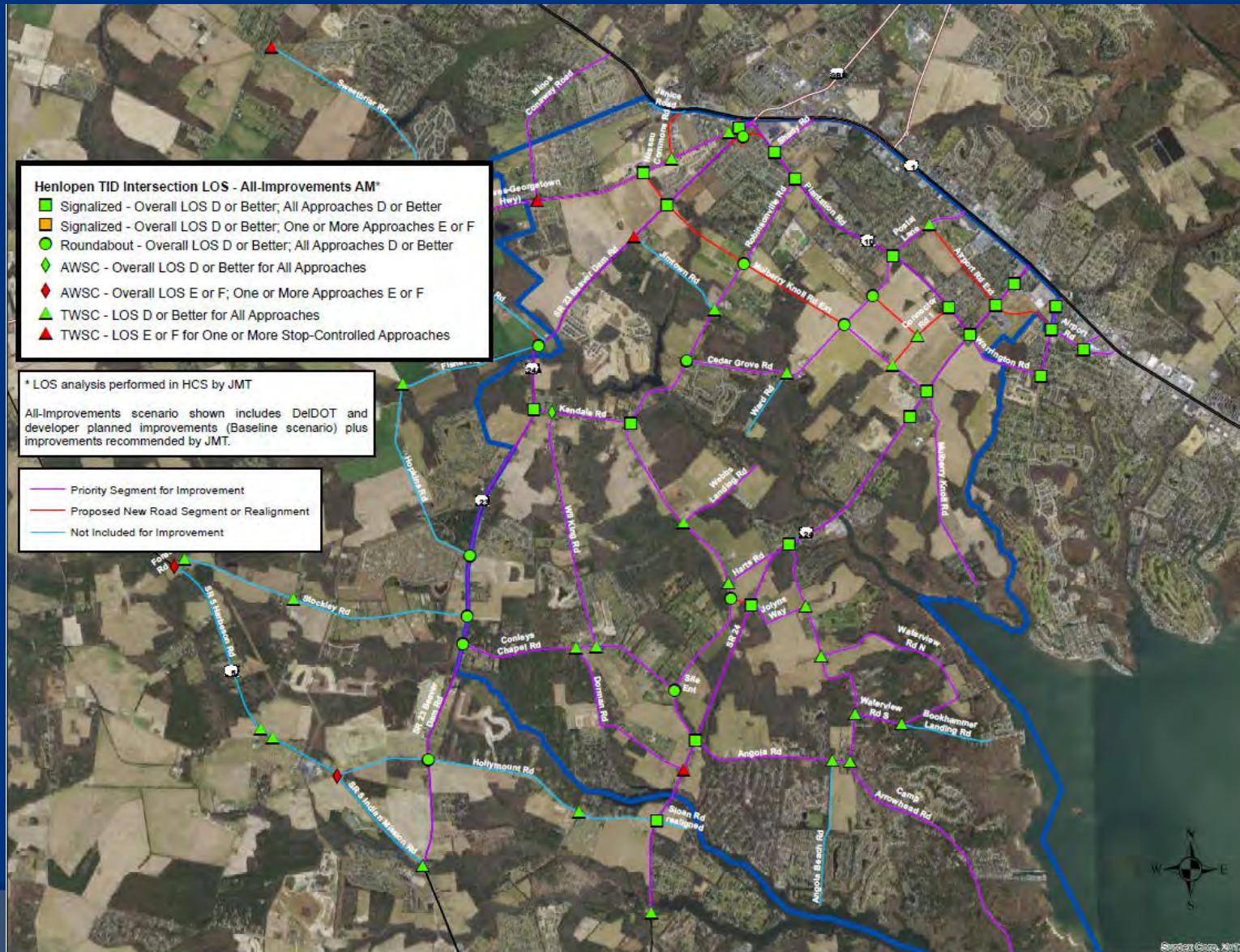
Level of Service F

• Breakdown



Results – Level of Service

All Improvements AM



Service Standards – What is “success” ?

- ⦿ Defined in terms of
 - Levels of Service
 - Lane widths
 - Shoulder widths
 - Sidewalks
 - Transit service
 - Aesthetics
 - Other Considerations
- ⦿ How? A public process



Recommendations – New Connectors

File Edit View Tools Add Help

▼ Search

Search
ex: 1600 Pennsylvania Ave, 20500

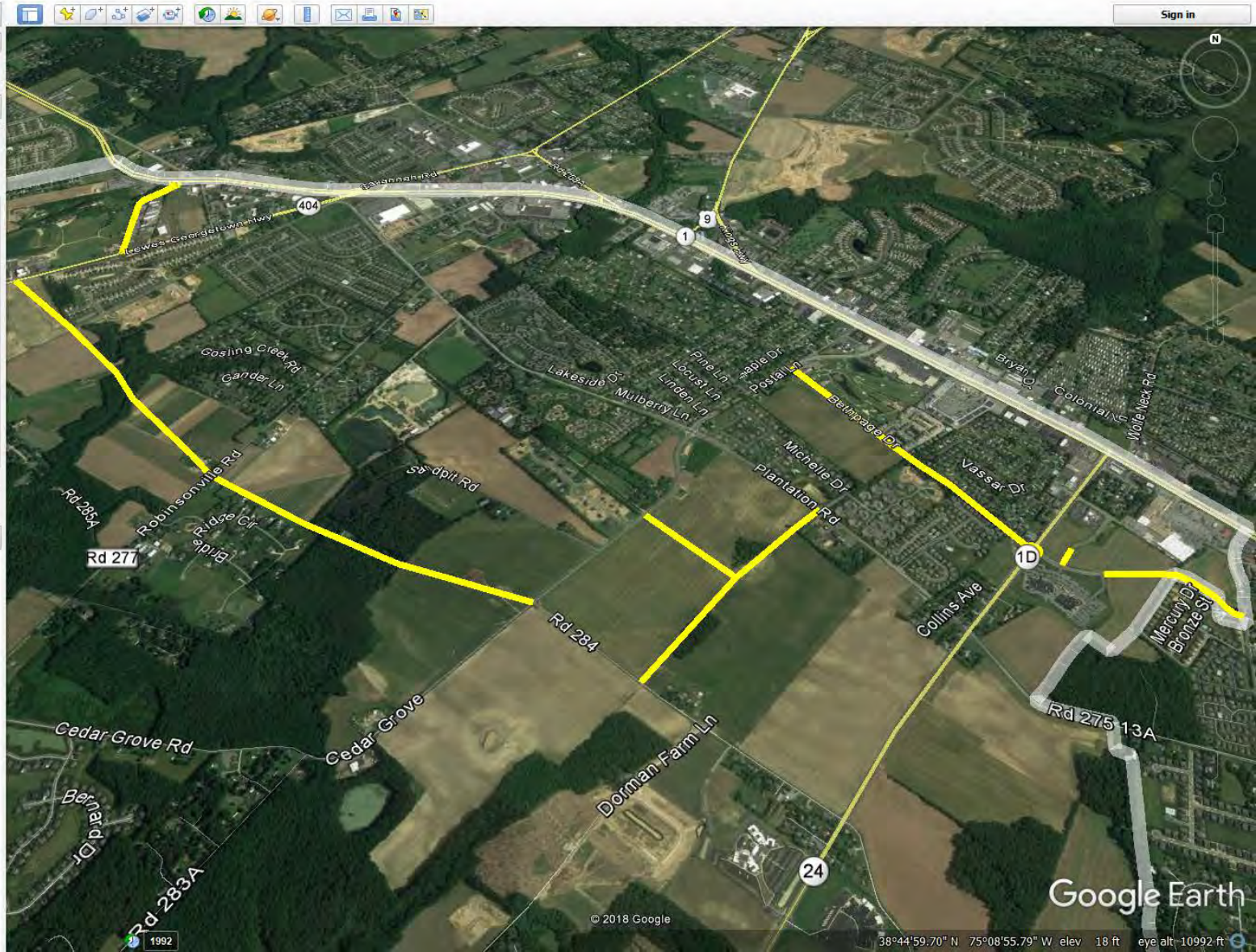
Get Directions History

▼ Places

- ☒ Henlopen TID Boundary
- ☒ Potential TID Projects
 - ☐ Beaver Dam Road Intersection wi...
 - ☐ Camp Arrowhead Road Improve...
 - ☐ Conleys Chapel Road Improvem...
 - ☐ Stockley Road Improvements
 - ☐ SR 5 Indian Mission Road Improv...
 - ☐ Plantation Road Improvements
 - ☐ Shady Road Improvements
 - ☐ Warrington Road Intersection wit...
 - ☐ Airport Road Improvements
 - ☐ Old Landing Road Improvements
 - ☒ Airport Road Extensions
 - ☒ US Route 9 & Mulberry Knoll Roa...
 - ☐ Intersection Improvements at Ol...
 - ☒ Potential Connections
 - ☒ Upgrade of Nassau Commons B...
- ☐ DelDOT Improvements Project
- ☐ Potential Developer Projects
- ☐ Proposed Widening
- ☐ Major Intersection Improvements
- ☐ Minor Intersection Improvements
- ☐ Intersections with Maintained Gen...

▼ Layers

- ☒ Primary Database
- ☒ Upgrade available
- ☐ Announcements
- ☐ Borders and Labels
- ☐ Places
- ☐ Photos
- ☒ Roads
- ☐ 3D Buildings
- ☐ Ocean
- ☐ Weather
- ☐ Gallery
- ☐ Global Awareness
- ☐ More

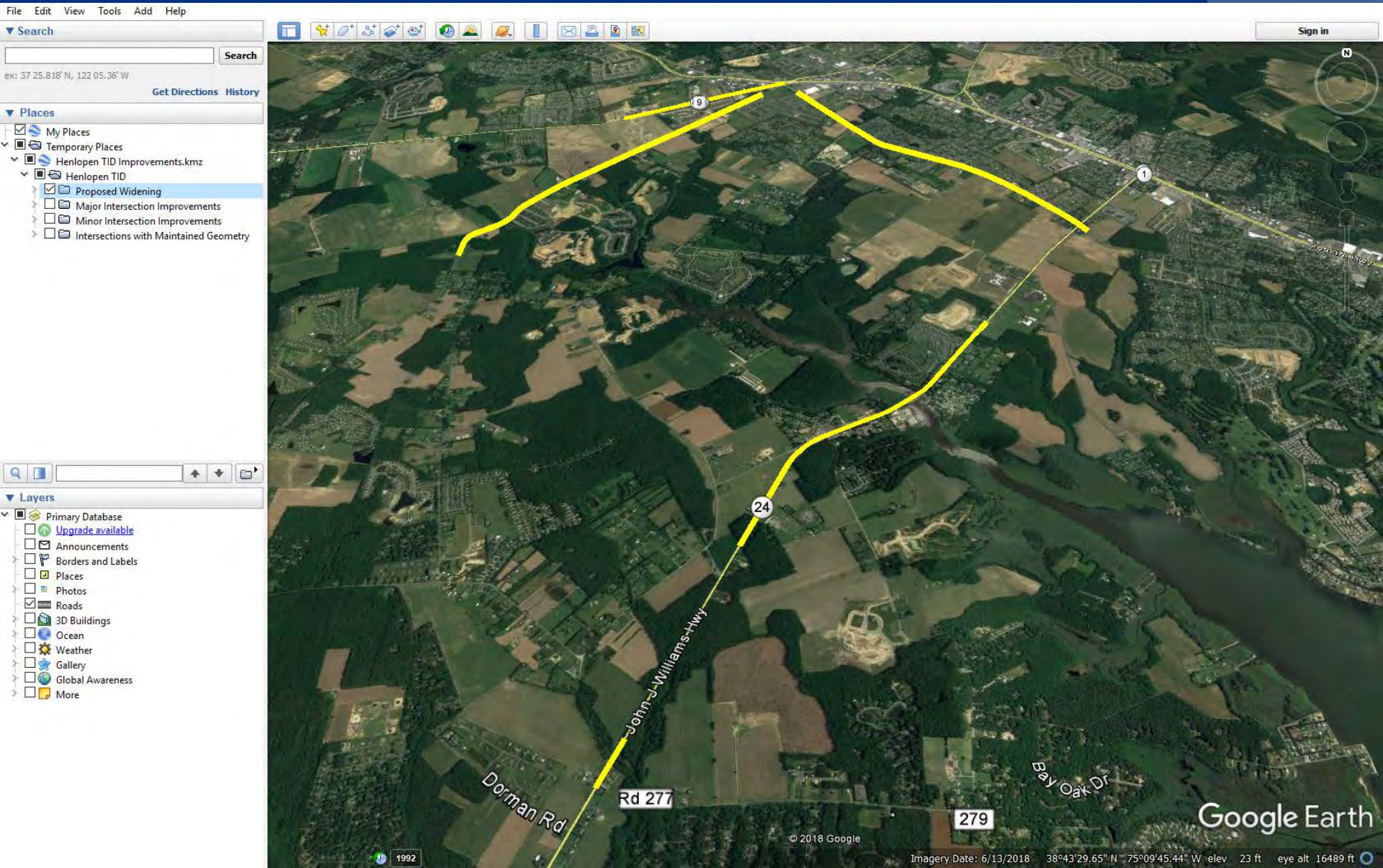


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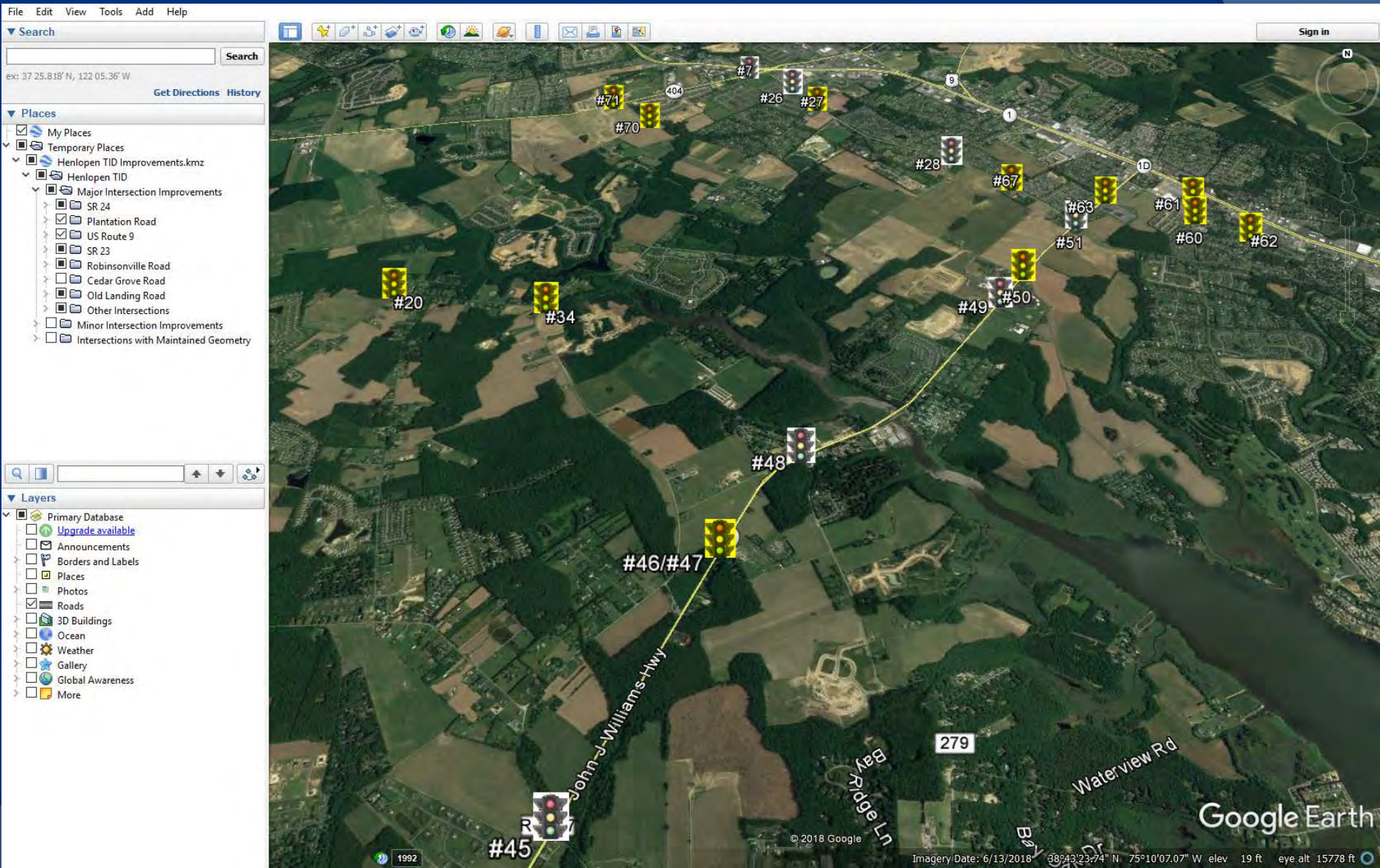
Google Earth

38°44'59.70" N 75°08'55.79" W elev 18 ft eye alt 10992 ft

Recommendations – Proposed Widening



Recommendations – Traffic signals



File Edit View Tools Add Help

▼ Search

Search

ex: 37 25.818° N, 122 05.36° W

Get Directions History

▼ Places

- My Places
- Temporary Places
- Henlopen TID Improvements.kmz
 - Henlopen TID
 - Major Intersection Improvements
 - SR 24
 - Plantation Road
 - US Route 9
 - SR 23
 - Proposed Control Types
 - #70
 - #21/22
 - #20
 - #18
 - #17
 - #19
 - #16
 - #15
 - #25
 - Robinsonville Road
 - Proposed Control Types
 - #69
 - #33

▼ Layers

- Primary Database
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Google Earth

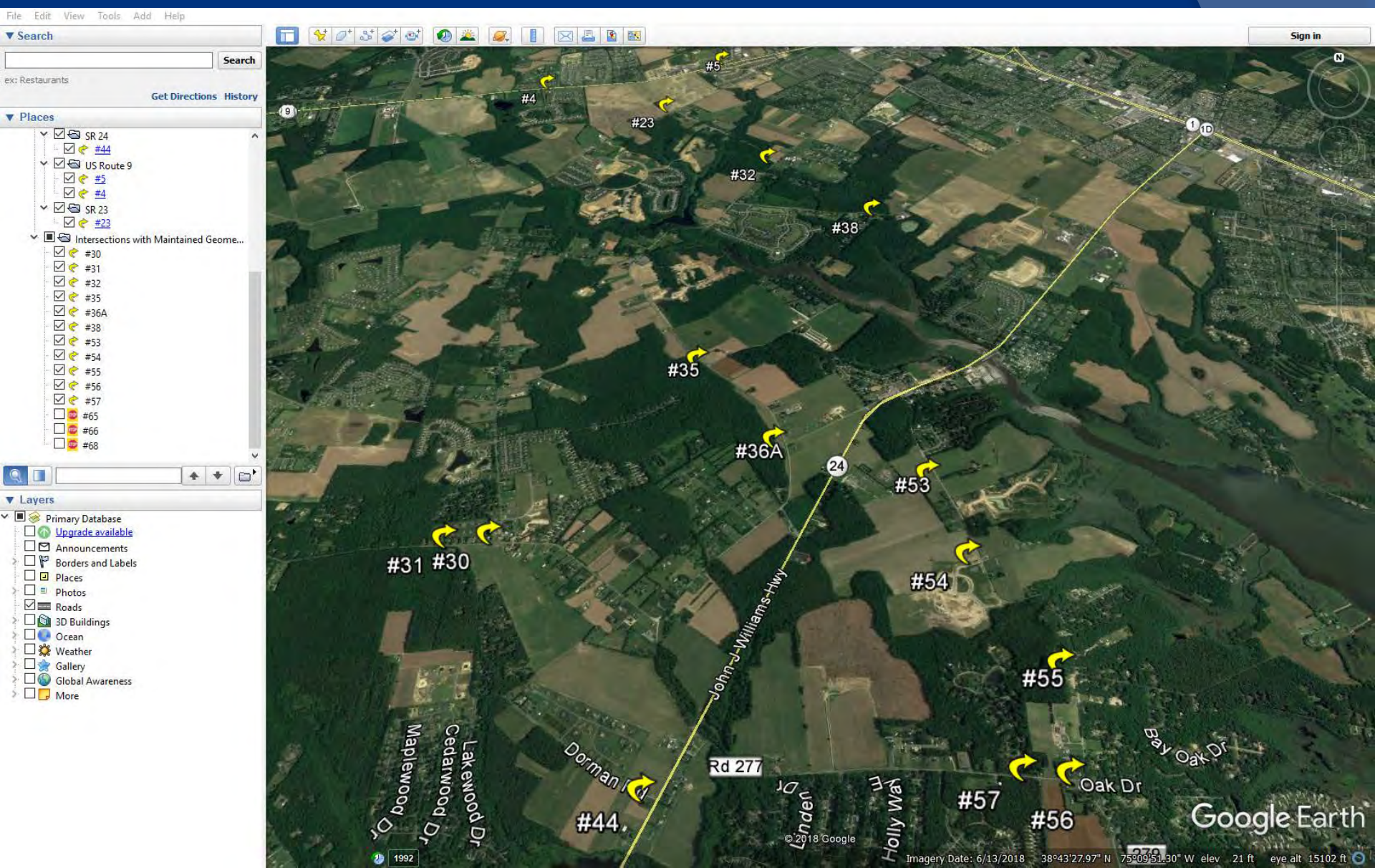
© 2018 Google

Imagery Date: 6/13/2018 38°44'17.59" N 75°10'16.58" W elev. 26 ft eye alt 21662 ft

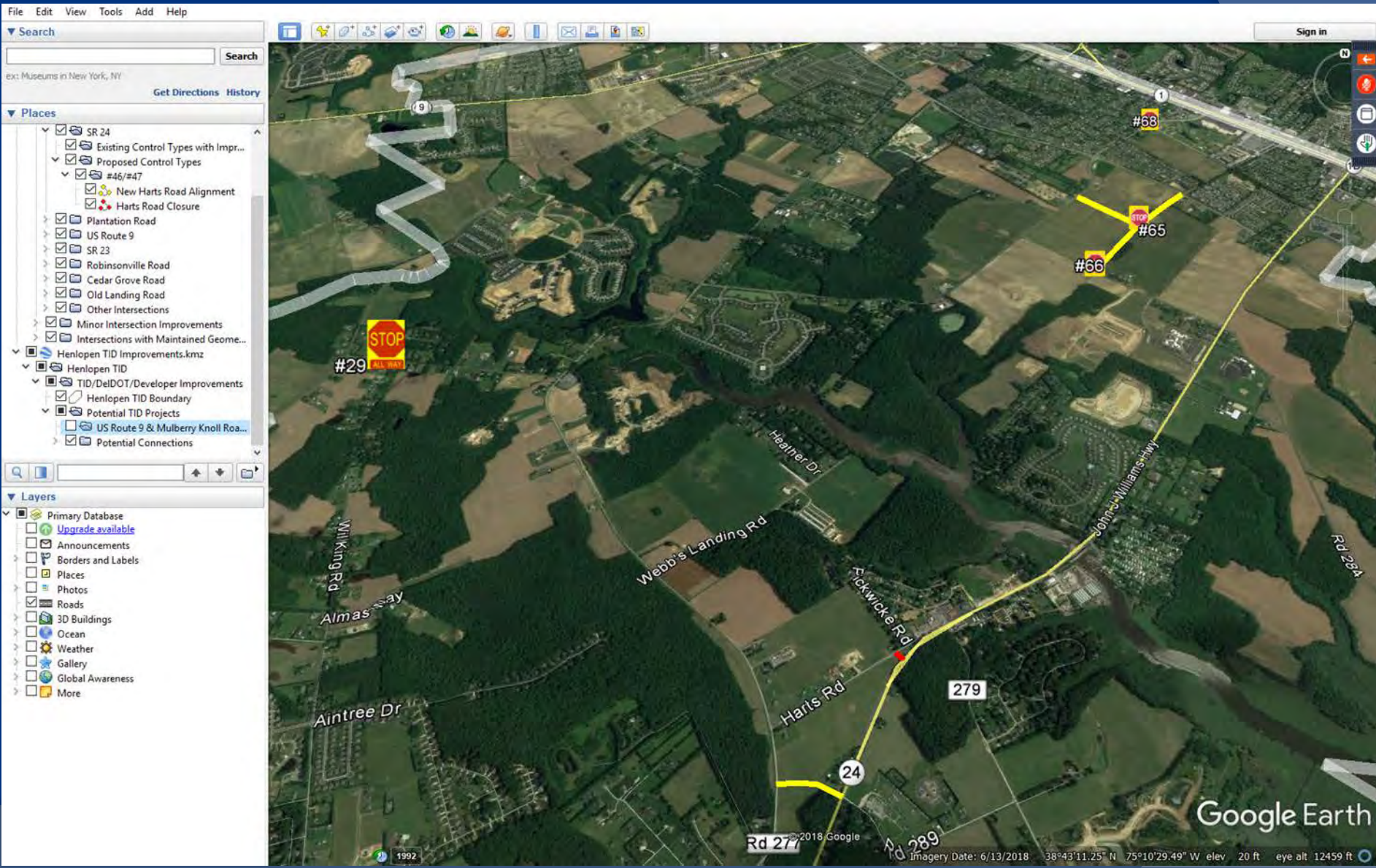
662 ft ○

Imagery Date: 6/13/2018 38°44'17.59" N 75°10'16.58" W elev 26 ft eye alt 21662 ft

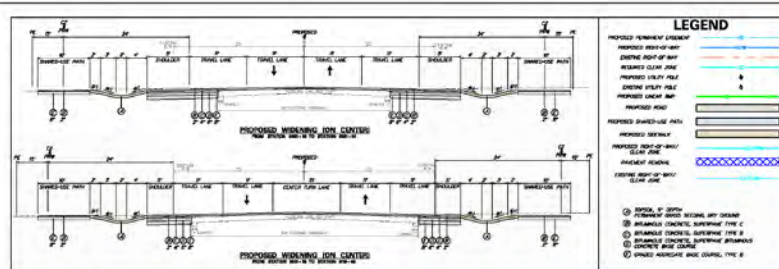
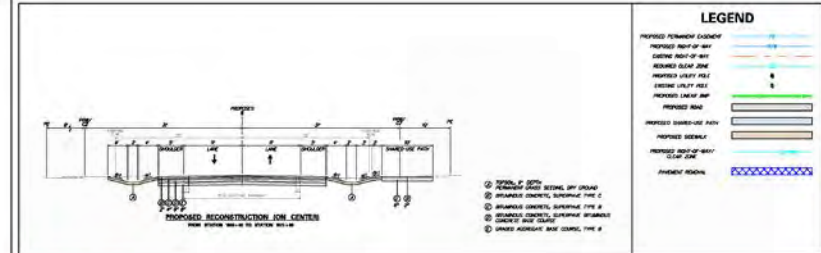
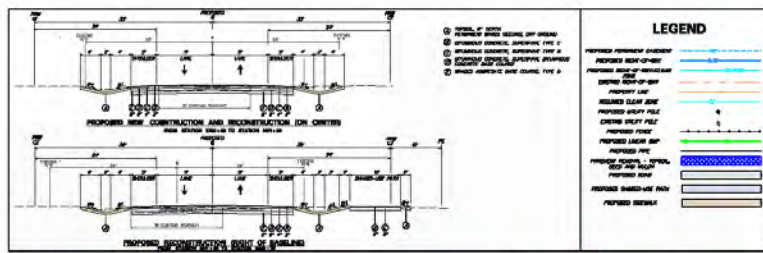
Recommendations – Turn lanes



Recommendations – Other improvements



TID Capital Transportation Program Concept Plan Examples



TID Capital Transportation Program



Henlopen TID CTP Cost Development Report

Table 1: Cost Estimate Along Each Roadway Segment

Segment Number	Road Name	Cost Estimate
1	Minos Conaway Road	\$5,519,250
3	US Route 9	\$19,825,593
13	SR 23 (with Roundabouts)	\$11,468,065
14	SR 23	\$22,410,565
15	Kendale Road	\$3,292,808
16	Wil King Road	\$9,543,170
17	Conleys Chapel Road	\$4,931,755
18	Dorman Road	\$8,816,425
20	SR 24	\$19,973,998
21	SR 24	\$21,812,370
23	Robinsonville Road	\$18,247,953
24	Robinsonville Road	\$14,852,680
28	Plantation Road	\$20,519,863
27	Warrington Road (with Roundabout)	\$4,022,175
28	Shady Road	\$3,455,025
29	Postal Lane	\$4,584,498
30	Old Landing Road	\$8,503,570
31	Cedar Grove Road	\$9,738,320
33	Mulberry Knoll Road	\$11,536,483
33A	Mulberry Knoll Road Extension	\$9,989,178
34	Airport Road (Existing Alignment)	\$5,127,890
	Airport Road Extension (Alternative B)	\$8,377,228
35	Miller Road	\$1,555,798
38	Angola Road	\$4,077,605
38	Jolyns Way	\$4,058,945
39	Harts Road (Shortened)	\$847,810
40	Webbs Landing Road	\$1,753,613
41	Camp Arrowhead Road	\$10,376,953
42	Waterview Road	\$3,471,338
43	New Connector Road 1	\$3,789,295
44	New Connector Road 2	\$2,510,433
45	Airport Road Extension (SR 24 to Postal Lane)	\$4,615,160
48	Nassau Commons Boulevard	\$5,705,888
	Total	\$283,592,710



Next Steps: Establishing an Infrastructure Fee Program

- ◎ Deciding on a Funding Formula
 - What share of the project costs will the TID fund?
 - How will that cost be apportioned among developers and who, precisely, is a developer?
- ◎ Developing a Fee Schedule
 - Making the above apportionment into a set of fees
- ◎ Deciding the Administration
 - Who will collect the fees and when? Who will hold them?
 - How do we handle developers who want to pay “in kind”?



Establishing an Infrastructure Fee Program

Cost Estimate Along Each Roadway Segment		
Segment Number	Road Name	Cost Estimate
1	Minos Conaway Road	\$5,519,250
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46	Nassau Commons Boulevard	\$5,705,898
Total		\$283,592,710
Development contribution percentage		20%
Total Development Contribution		\$56,718,542
Total DelDOT Contribution		\$226,874,168
Development contribution percentage		30%
Total Development Contribution		\$85,077,813
Total DelDOT Contribution		\$198,514,897



Establishing an Infrastructure Fee Program

DeIDOT recommended improvements package	\$283,592,710
Development Share	\$56,718,542
Henlopen Buildout residential units, decreased by 455 for DeIDOT recommended package (exclude Chase Oaks and Windswept)	Henlopen Buildout non-residential sq ft
12,412	1,475,714
fee	fee
\$4,200.00	\$3.10
amount collected	amount collected
\$52,130,400.00	\$4,574,713.40
total collected	\$56,705,113.40
% of need collected	20.00%

DeIDOT recommended improvements package	\$283,592,710
Development Share	\$85,077,813
Henlopen Buildout residential units, decreased by 455 for DeIDOT recommended package (exclude Chase Oaks and Windswept)	Henlopen Buildout non-residential sq ft
12,412	1,475,714
fee	fee
\$6,350.00	\$4.25
amount collected	amount collected
\$78,816,200.00	\$6,271,784.50
total collected	\$85,087,984.50
% of need collected	30.00%



Establishing an Infrastructure Fee Program

Rates based on 20% development contribution

Single Family Detached Residential	\$4,200 per unit	\$4,410 per unit
Single Family Attached Residential	\$3,528 per unit	\$3,704 per unit
Multi-Family Residential	\$3,066 per unit	\$3,219 per unit
Office/Commercial	\$3.10 per square foot	\$3.26 per square foot
Institutional/Industrial	\$1.77 per square foot	\$1.86 per square foot

Rates based on 30% development contribution

Single Family Detached Residential	\$6,350 per unit	\$6,667 per unit
Single Family Attached Residential	\$5,334 per unit	\$5,600 per unit
Multi-Family Residential	\$4,635 per unit	\$4,867 per unit
Office/Commercial	\$4.25 per square foot	\$4.46 per square foot
Institutional/Industrial	\$2.42 per square foot	\$2.54 per square foot

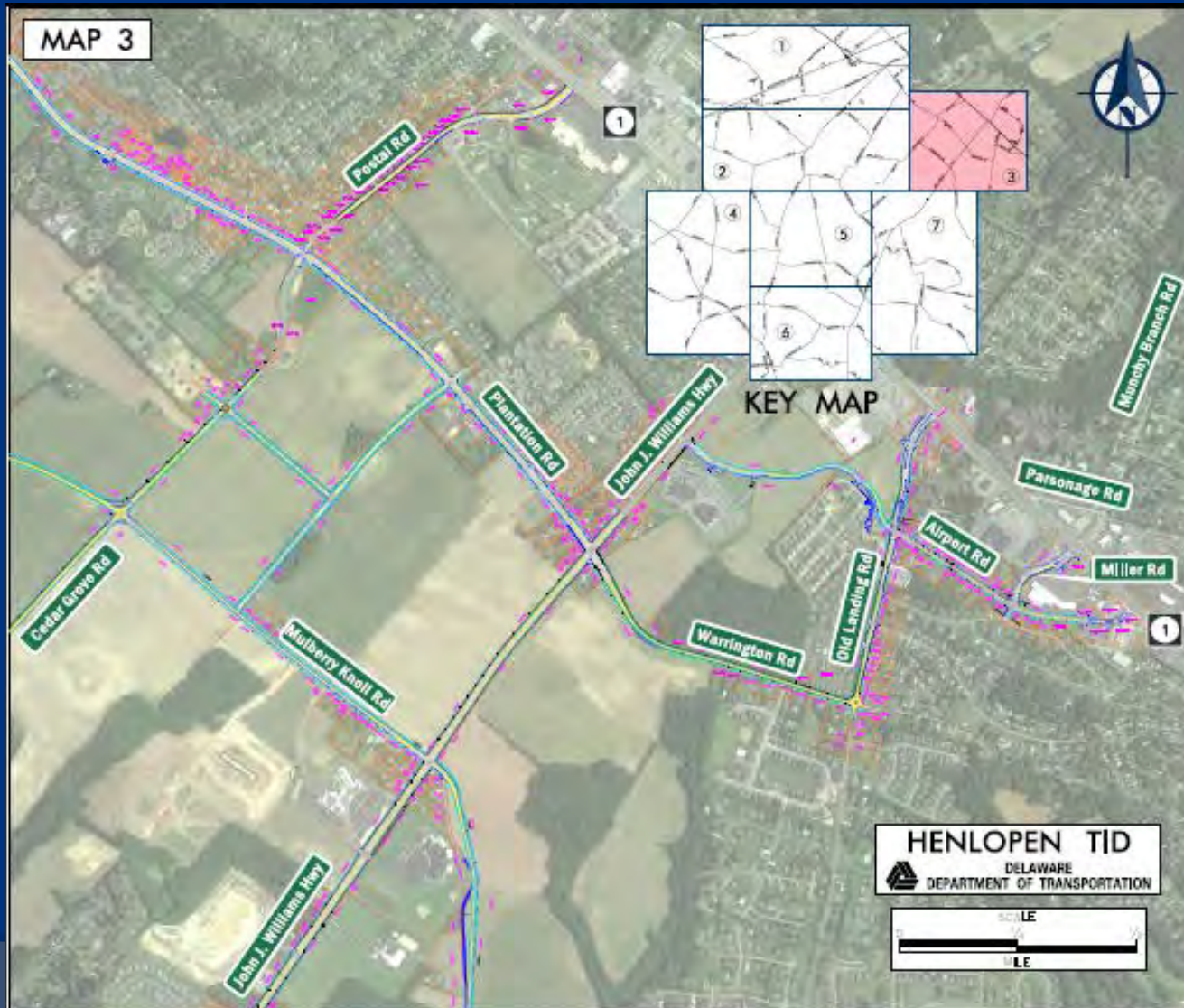


Why Create a TID?

- ⦿ Comprehensive Infrastructure Planning
- ⦿ TID Projects Advance in DeIDOT's CTP
- ⦿ TID Fees Stay Local
- ⦿ Equitable Treatment of Competing Developers
- ⦿ Known Costs for Developers
- ⦿ Expedited Development Reviews



Next Steps: Public Involvement and TID Agreement



Questions?

◎ Please contact:

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