

Lewes Scenic and Historic Byway

Kings Highway-Gills Neck Road Landscape Master Plan

July 29, 2016 Meeting Purpose:
Provide the Byway Committee, the
City and Area Residents an additional
Opportunity to Comment on the Plan

Purpose of the Master Plan

Develop a CONCEPT Master Plan for Kings Highway and Gills Neck Road Defining What the Roadways SHOULD Look Like to Guide DelDOT and the Developers in Planning and Designing Transportation Improvements

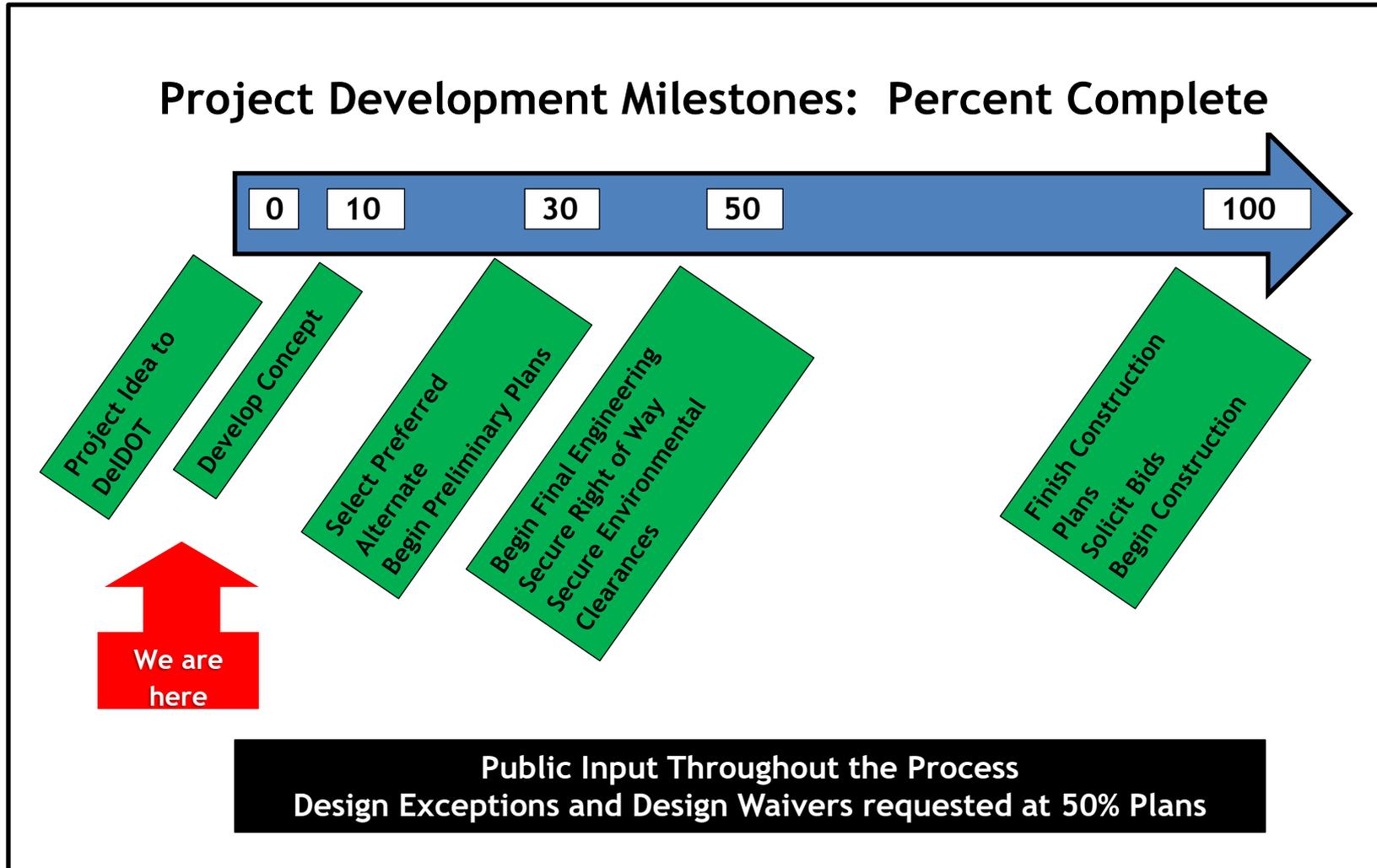


Purpose of the Master Plan

Identify coordinated public and private actions necessary to achieve the desired vision and character

NOTE: The concepts included in the master plan are intended to guide future changes to the corridor and are not intended for design or construction exactly as shown.

From Idea to Reality: The Project Development Process



Status of the Master Plan

- Second Public Meeting Held: 5/12/16
- Major Comments Received to Date:
 - Number of Needed Lanes on Kings Highway
 - Dartmouth Roundabout Configuration
 - Need for Turning Lanes
 - Need for Shade Tree Canopy
 - Maintenance of Landscaping
 - Staging/Funding of Roadway Improvements
 - Accommodating Pedestrians and Bicyclists
 - Environmental Protection; e.g., flooding, drainage, wellhead protection
 - Major 'Likes': Landscaping, Medians, Gills Neck Traffic Calming

Status of the Master Plan (2)

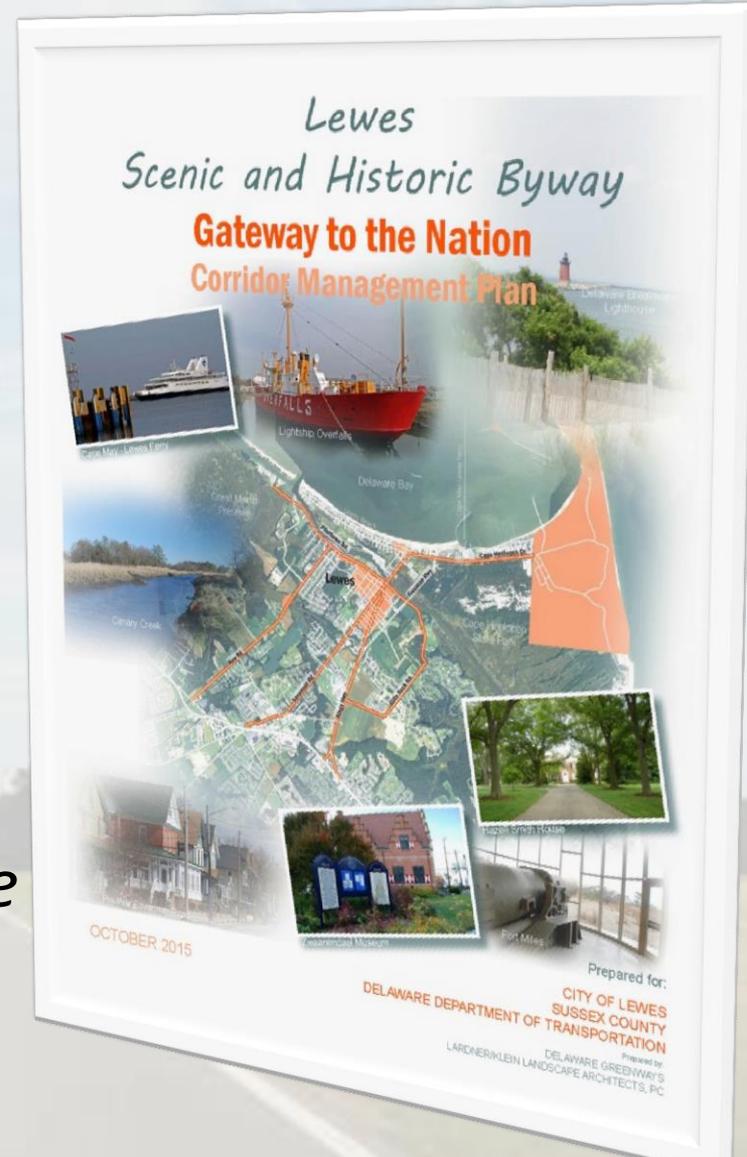
- Today:
 - Review the Plan, concentrating on the comment areas noted
 - Hear/record additional questions/comments
- Next Steps
 - Comment period extended until July 8th
 - Address Comments
 - Submit Report

CMP Goals

Kings Highway: *Guiding Development and Transportation. Use the Byway to help shape the future character of the route that is most likely to undergo the greatest amount of change.*

Gills Neck Road: *Retain the Historic Road Character. The northern two thirds of Gills Neck Road has a distinctive character that needs to be retained in the face of the growth and development of the southern/western third.*

Kings Highway Gills - Neck Road Master Plan



Design Principles from Public Meeting No. 1

1. Design the corridor to reinforce the desired vision of the community
2. Extend the fabric of the City of Lewes rather than the chaos of Coastal Highway
3. Think “Green” - more landscape, more stormwater infiltration, more shade
4. Design Kings Highway and Gills Neck for people of all ages and physical abilities using all modes of travel

1. Design the corridor to reinforce the desired vision of the community

Gateway/Roadway Layout

Fenwick Island



Commercial Signs

Chili's Franchise Sign



2. Extend the fabric of the City of Lewes rather than the chaos of Coastal Highway

Lewes



Coastal Highway



Bring Lewes out to Kings Highway

Don't bring Coastal Highway in

Yes, It CAN be Done

Powder Mill Square, Greenville, DE



Many of the architectural features of the surrounding historic residential neighborhoods have been incorporated into the design of the shopping center.

3. Think “Green” - more landscape, more stormwater infiltration, more shade

South Bethany, DE



Celebration, FL



4. Design Kings Highway and Gills Neck for people of all ages and physical abilities using all modes of travel

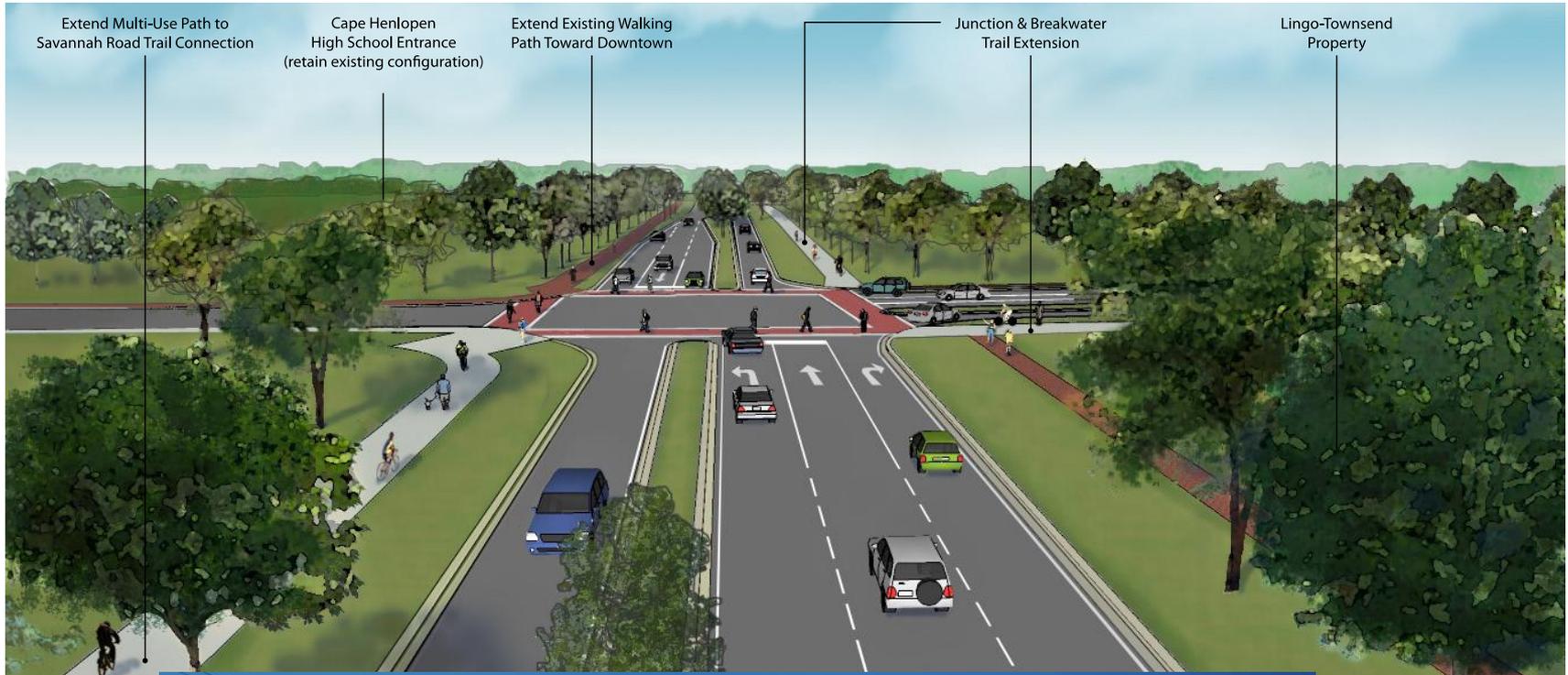
Delaware CSS for Byways

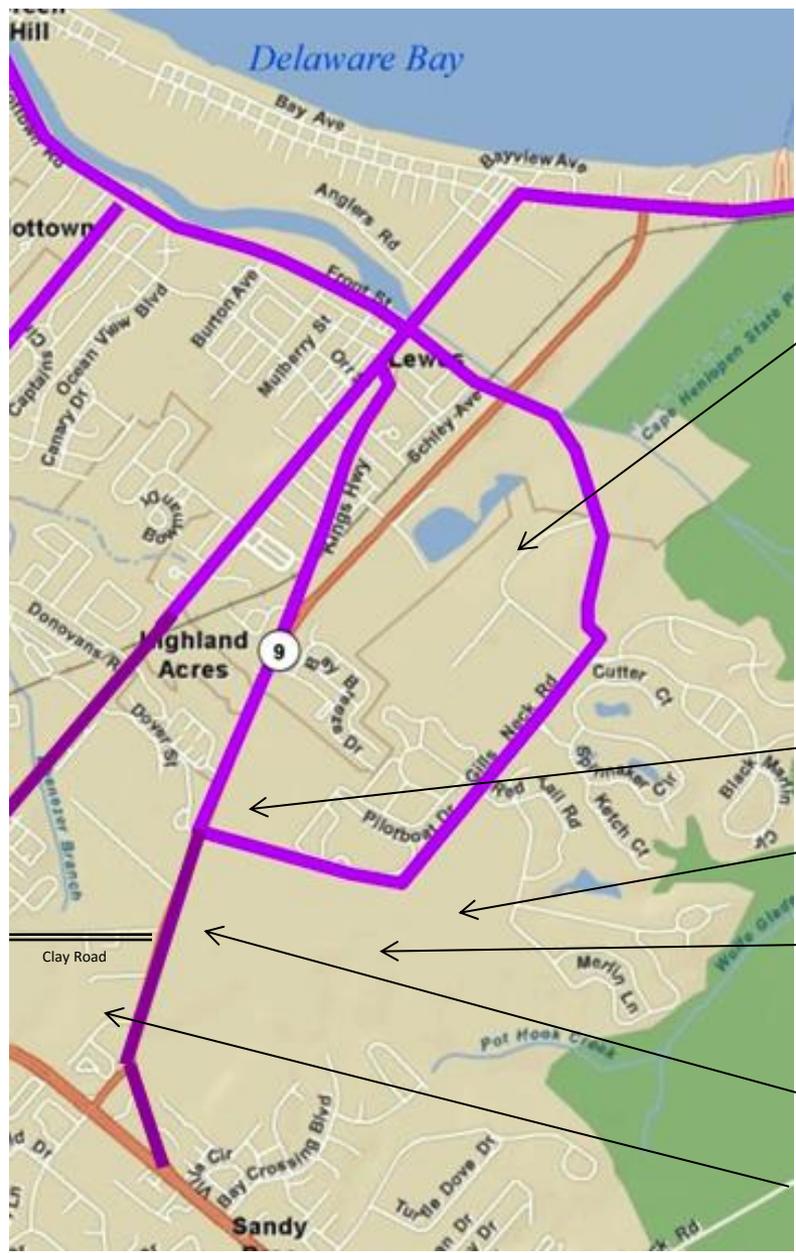


Port Penn, DE (Bayshore Byway)



Desired Character (CMP)





Planned or Potential Developments

Showfield

Developable Land

Senators

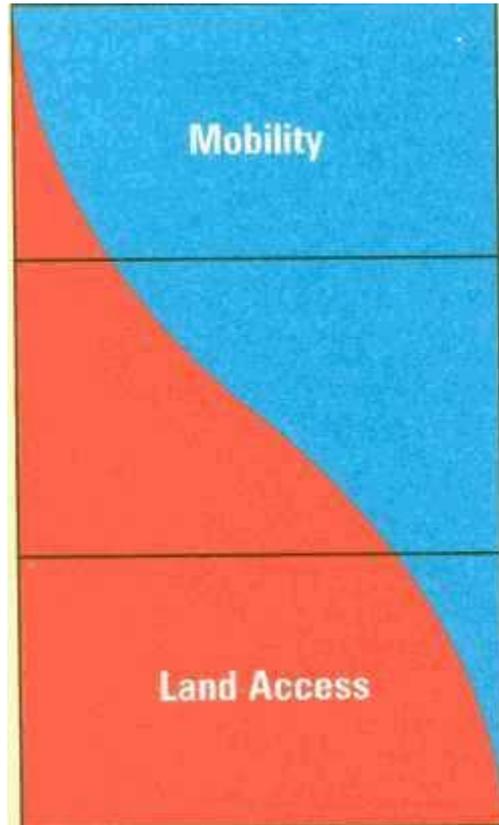
Governors

Proposed Village Center
Developable Land

Legend:
 Approved
 Planned or Potential

Functional Classification

Functional Classification describes the type of traffic service provided



Arterials

- higher mobility
- low degree of access
- big traffic

← **Kings Highway**

Collectors

- balance between mobility and access

Locals

- lower mobility
- high degree of access
- little traffic

← **Gills Neck Road**

Simply put: Big traffic to big roads, little traffic to little roads and that affects the size of the improvements under consideration.

The Byway Designation for Kings Highway Makes a Difference

Typical 4-lane Arterials

- 4-12 foot travel lanes*
- 12 foot turn lanes
- 4 foot inside shoulders before median*
- 10 foot shoulder on right side (also serves as a bike lane)*
- 22 foot median*
- Multi-use pathway/sidewalks

Kings Highway (Byway)

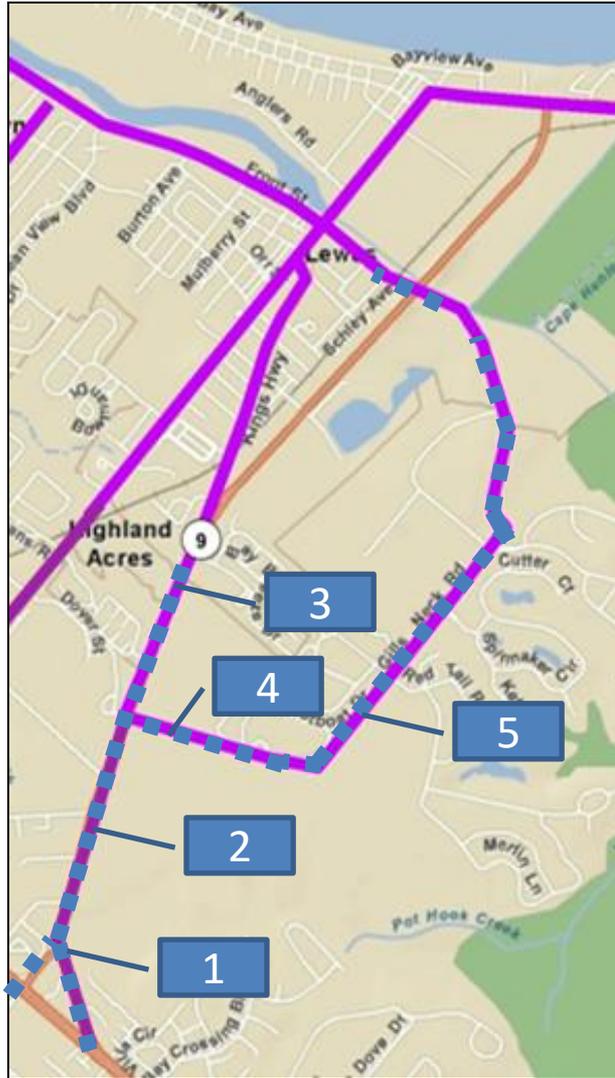
- 4-11 foot travel lanes*
- 10 foot turn lanes
- Curbed median
- 5 foot shoulder on right side (also serves as a bike lane)*
- 18 foot landscaped median*
- Multi-use pathway/sidewalks

***98 feet of roadway,
shoulder and median**



***72 feet of roadway,
shoulder and median**

Index Plan



Map Legend

Lewes Byway Roadway



Improvements Recommended



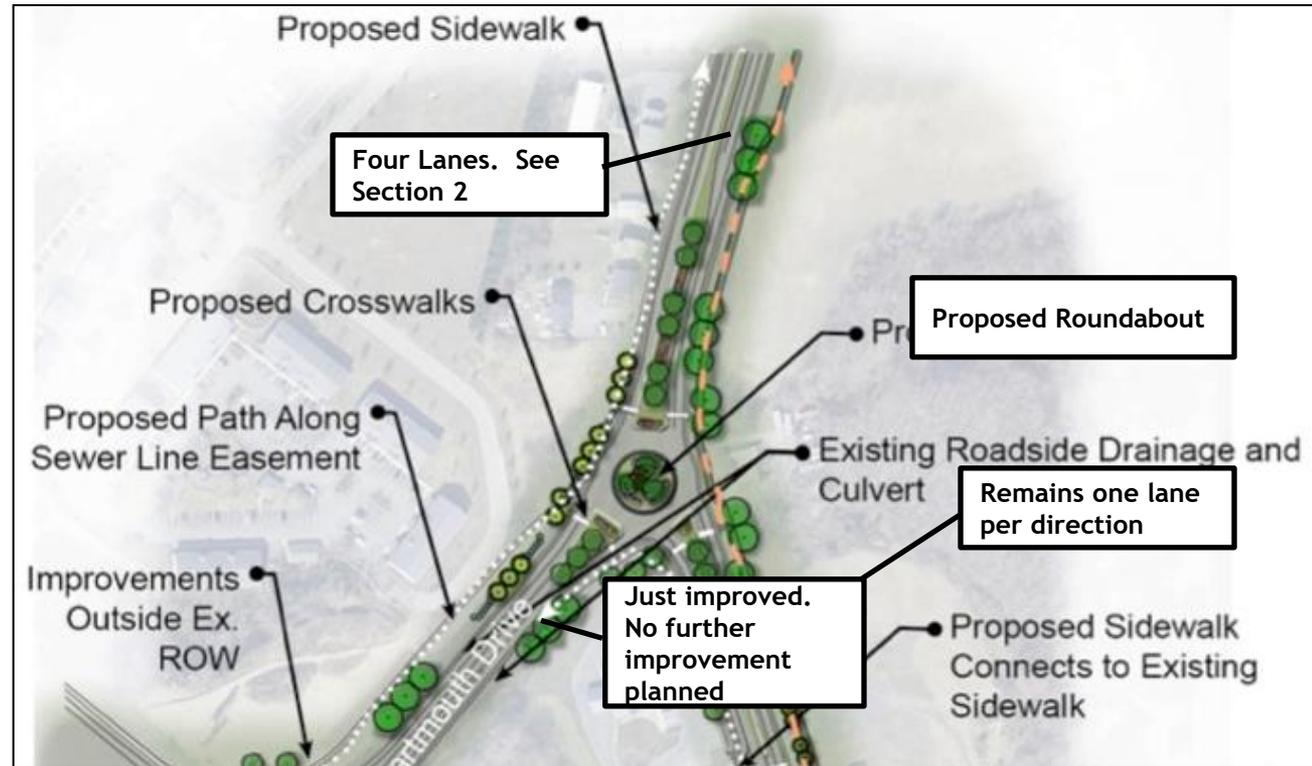
Kings Highway Segments

1. Intersection of Dartmouth Drive and Kings Highway
2. Dartmouth Drive to north of Gills Neck Road
3. North of Gills Neck Road to Freeman Split

Gills Neck Road Segments

4. Intersection of Kings Highway to Cadbury
5. Cadbury to City Line

Section 1: Intersection of Dartmouth Avenue and Kings Highway



Roundabouts require lots of detailed analysis including detailed traffic studies. DelDOT has concluded based upon an earlier analysis a roundabout is the best solution for the intersection. Further analysis is needed for detailed design.

Why Roundabouts?

- **Roundabouts are a safer alternative to traffic signals and stop signs.** The tight circle of a roundabout forces drivers to slow down, and the most severe types of intersection crashes – right-angle, left-turn and head-on collisions – are unlikely.
- **Roundabouts improve traffic flow and are better for the environment.** Research shows that traffic flow improves following conversion of traditional intersections to roundabouts. Less idling, in turn, reduces vehicle emissions and fuel consumption.
- **Roundabouts generally are safer for pedestrians.** Pedestrians walk on sidewalks around the perimeter and cross only one direction of traffic at a time. Crossing distances are relatively short, and traffic speeds are lower than at traditional intersections.

A Roundabout is NOT a Traffic Circle

Converting a traffic circle to a Roundabout



Source: NYSDOT

Traffic Circle
Roadway to be
Removed

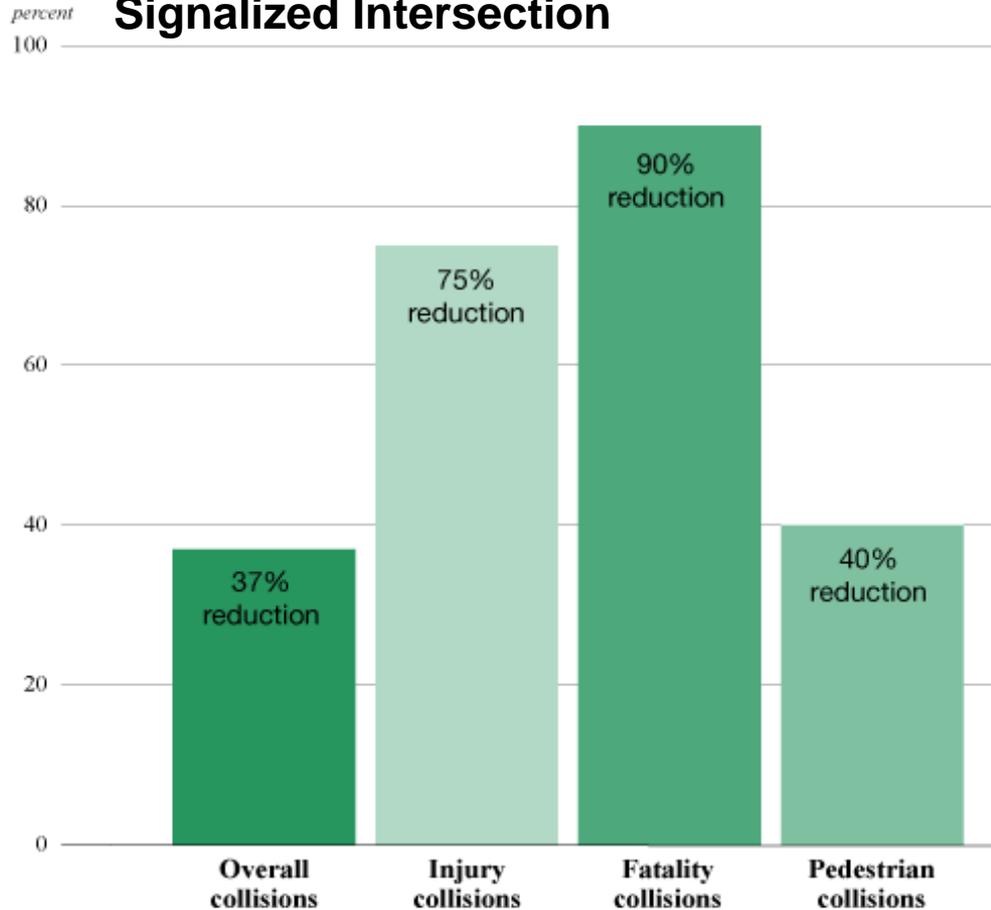
Roundabouts:

- Smaller diameter
- No weaving, yield on entering
- Designated lanes for turning
- Slower, continuous movement
- No gridlock



How Safe Are They?

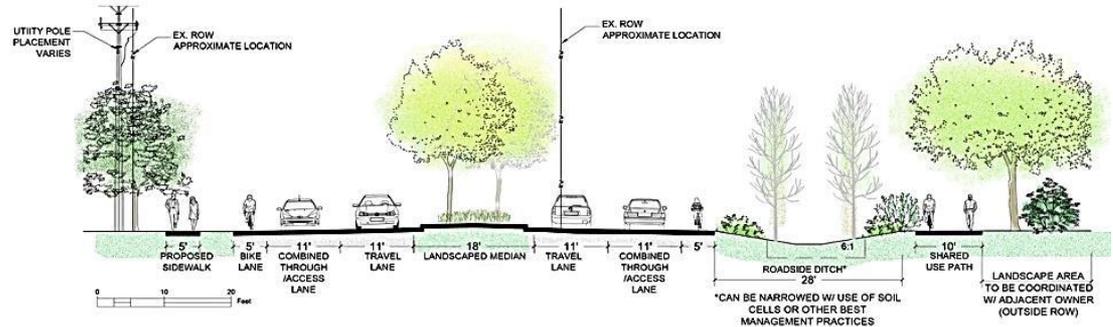
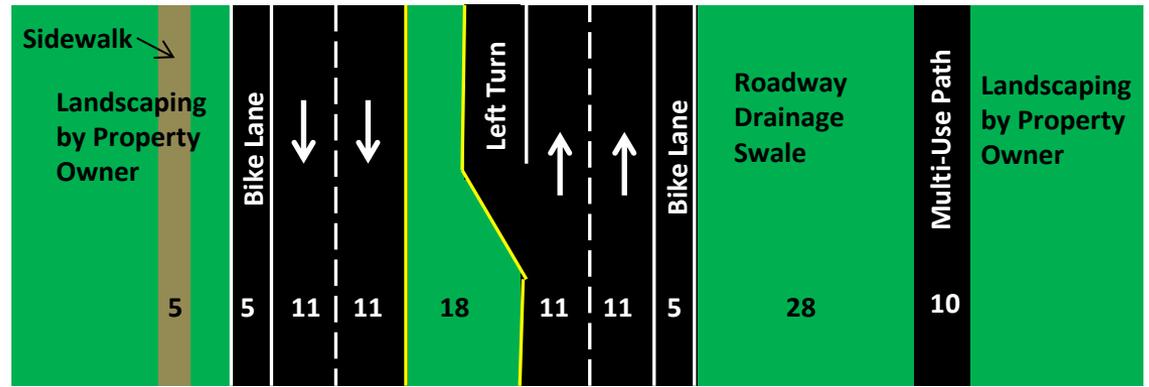
Reduction in Crashes when compared to a Signalized Intersection



Reductions in the number of crashes and in the severity of the crashes is due to slower speeds approaching and within the roundabout.

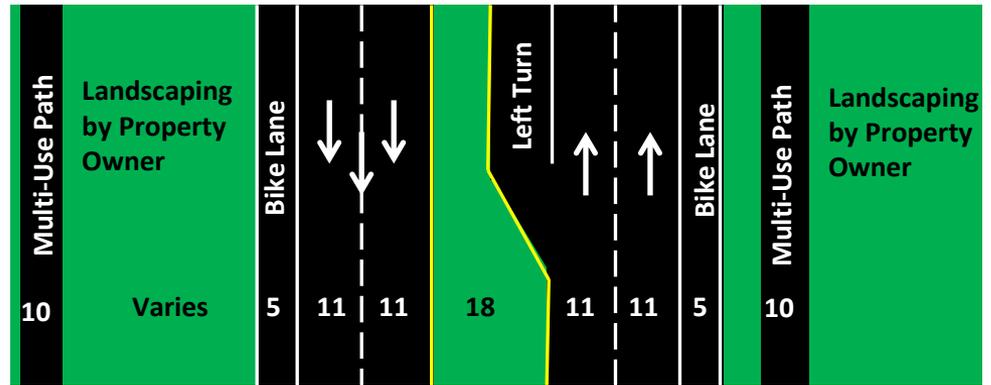
Source: Federal Highway Administration and Insurance Institute for Highway Safety (FHWA and IHS)

Section 2: Dartmouth Drive to Clay Road



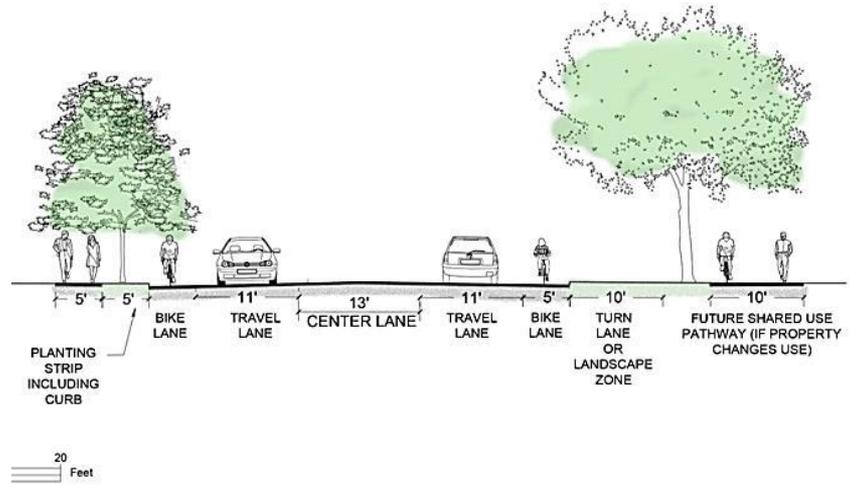
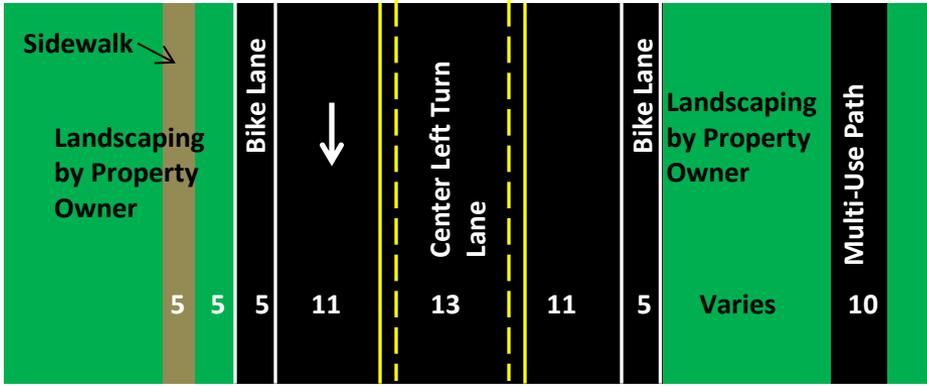
Section 3: Clay Road to Just Past Gills Neck Road

Managing Roadway Drainage in Median Narrows Cross Section and eliminates Drainage Swale.



Section 3: Just Past Gills Neck Road to Freeman Highway Split

Approaching the Freeman Highway Split, the number of lanes into Kings Highway in Lewes and onto the Freeman Highway remains the same as today: **one each way.**



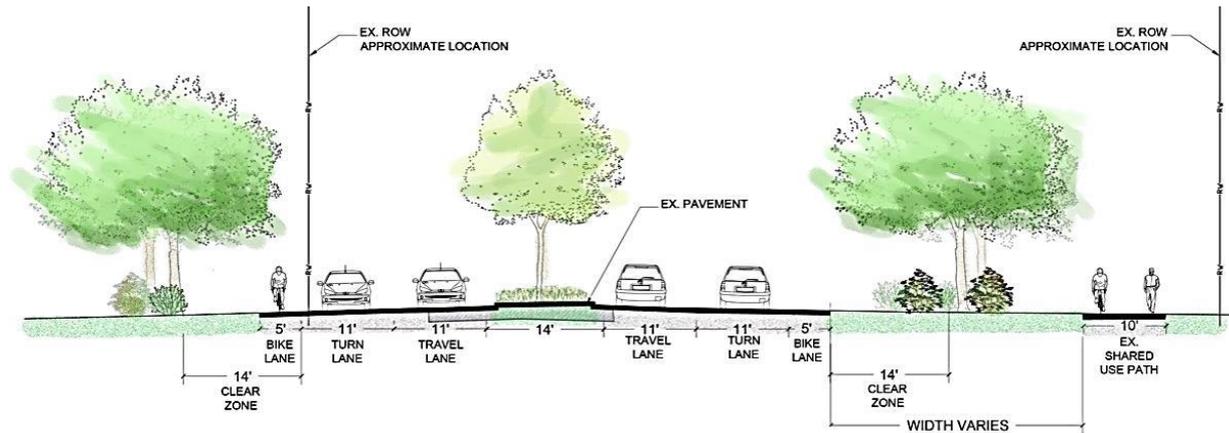
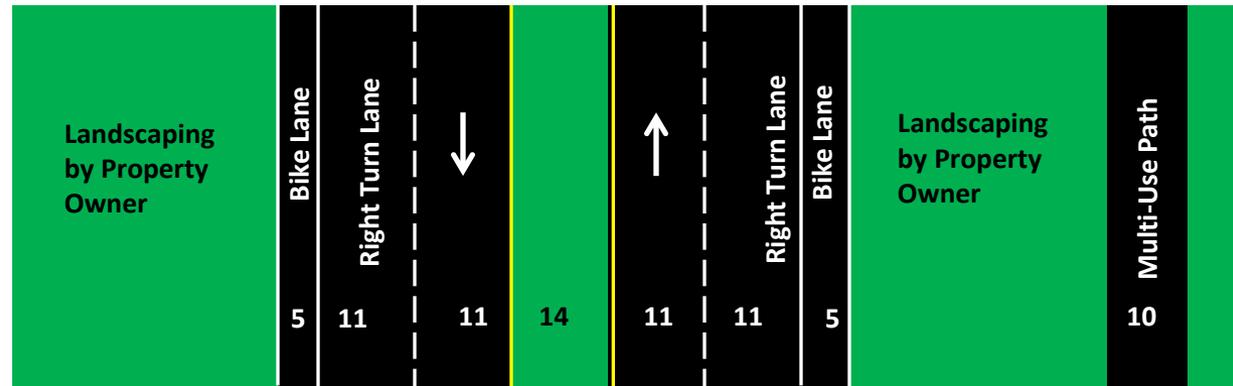
Gills Neck Concept Plan



6. Freeman Hwy./J&B Trailhead
- 5 Hazell Smith / Future Showfield
4. Two Curves/Wolf Pointe
3. J&B Trail Crossing/Hawkseye
2. Curve at Senators
1. Kings Highway to Cadbury

Section 4: Intersection of Kings Highway to Cadbury/Shopping Center Entrance

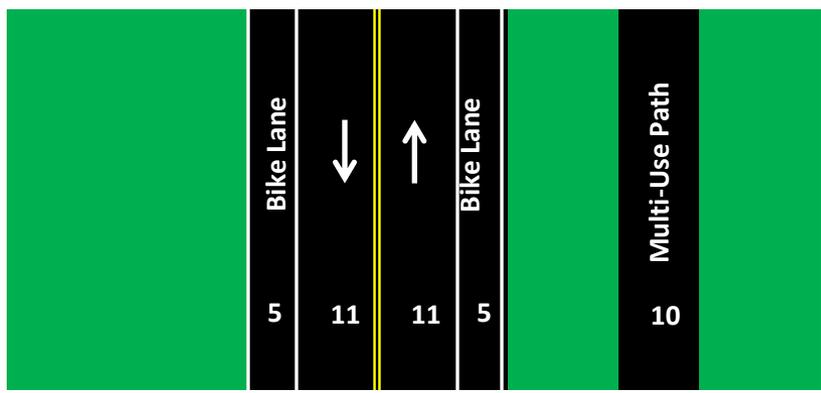
This section provides for the turning lanes for the first set of driveways from Kings Highway. Beyond that it reduces to the two lane section.



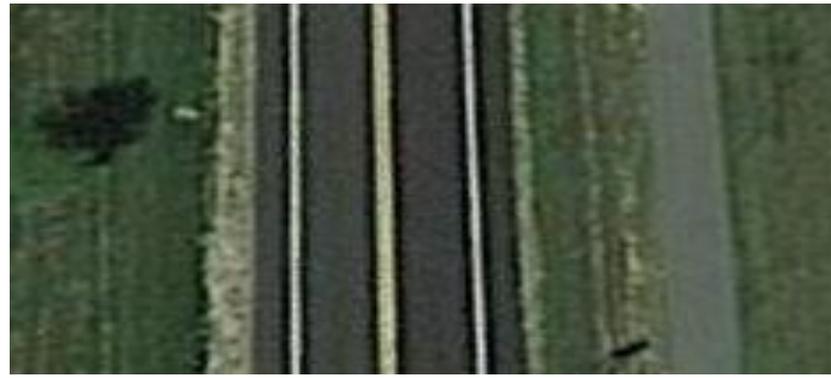
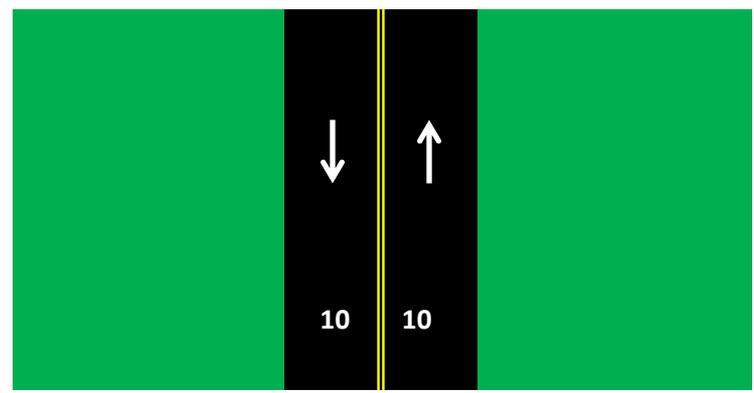
Section 4: Cadbury/Shopping Center Entrance to City Line

Upgrade to Improved Cross Section as Development Occurs

Improved Cross Section



Original Cross Section



Gills Neck Road Traffic Calming

Kings Highway/Gills Neck Road Master Plan

Gills Neck: Curve at Senators



PERSPECTIVE A



PERSPECTIVE B



MEADOW TYPE 1



MEADOW TYPE 2



Gills Neck Road Traffic Calming

Kings Highway/ Gills Neck Road Master Plan

Gills Neck Approaching 1st Curve



TEXTURED PAVEMENT EXAMPLE



MEADOW TYPE 1



MEADOW TYPE 2



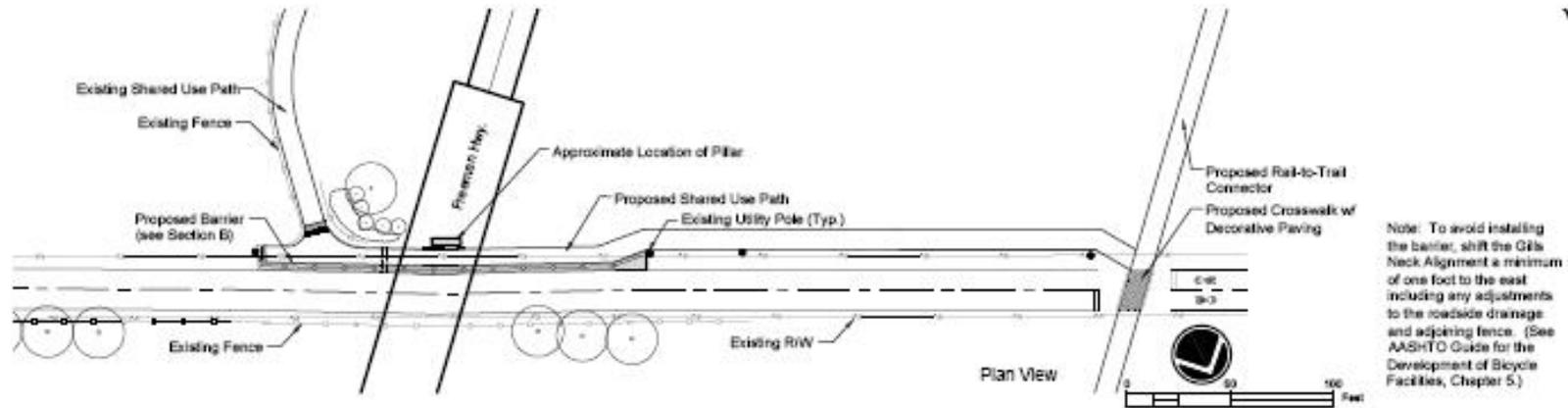
A - VIEW LOOKING NORTHBOUND (TEXTURED PAVEMENT)



PLAN VIEW

LARDNER/KLEIN LANDSCAPE ARCHITECTS, PC

Gills Neck: Freeman Hwy. / J&B Trailhead



A Perspective Looking Northwest
(Timber Railing Option)



Gills Neck: at Canal

- Connect shared use pathway along Gills Neck to combination of City sidewalk and share roadway as interim multi-modal connection to downtown Lewes



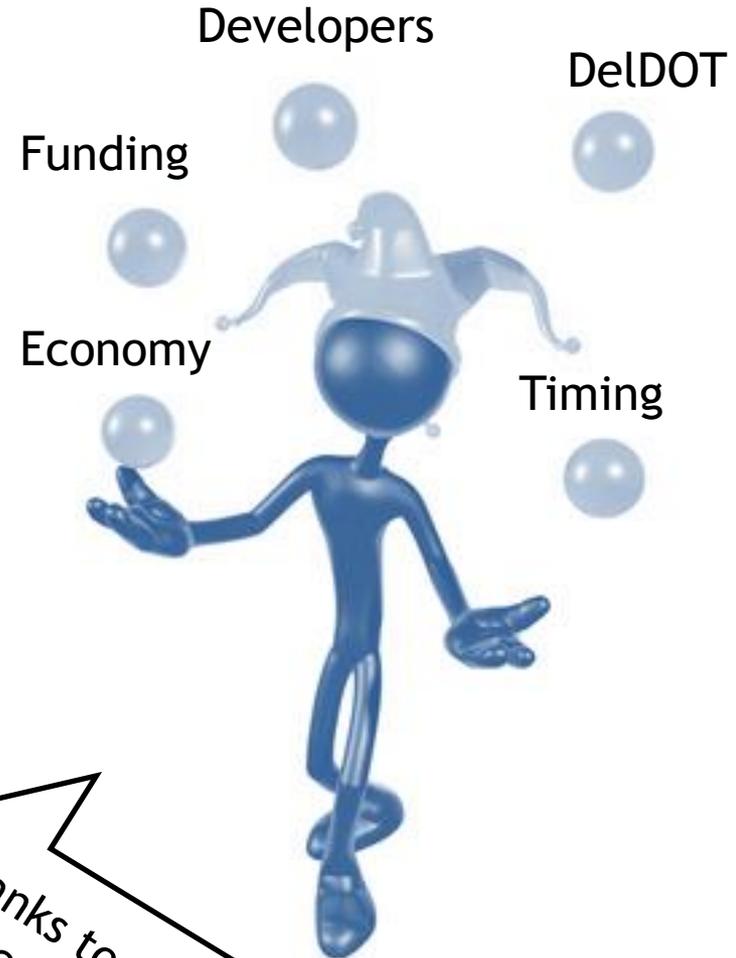
Implementation Knowns and Unknowns

Current Unknowns:

- Pace and scope of development
- DelDOT Capital Plan Priorities
- Transportation Funding Timing and Levels

Current Knowns:

- What the Road SHOULD look like



Implementation

Here is what we know now:

Kings Highway:

1. Roundabout at Dartmouth:
Entered into the Prioritization Process. Could be a Capital Project with a good ranking.
2. Remainder of Kings Highway:
 - a. **Developers** to improve to mitigate their traffic impact.
 - b. **Developers** to dedicate right of way for 4-lane boulevard. Dartmouth to past Gills Neck, 3-lane roadway to Freeman Split
 - c. What the **developers** do not build or dedicate R/W for, **DeIDOT** will assume as a Capital Project when funding becomes available. This also depends upon level of funding and prioritization.

Gills Neck Road:

1. Minor widening and traffic calming to be implemented as **development** happens.
2. Junction and Breakwater Trail/Gills Neck Road Trail Improvement at Freeman Highway Crossing:
Implementation this fall by **DeIDOT**
3. Showfield Improvements by **developer**
 - a. Curve smoothing for sight distance north of entrance
 - b. Adding 5 ft. bike lanes
 - c. Re-landscaping/retention of fence
 - d. J+B Trail constructed through property (by **DeIDOT**).

Next Steps

- Review input from today's meeting
- Prepare Draft Master Plan
- Review with Byway Committee, City and County
- Release Draft Master Plan for public review
- Assuming Public Acceptance:
 - follow up with entry into Prioritization Process,
 - Monitor Development and
 - Update Plan

Questions/Comments?

Email Additional Comments to:
Ann Gravatt, DelDOT Planning
Supervisor

Ann.gravatt@state.de.us

Comment period closes 7/8/16