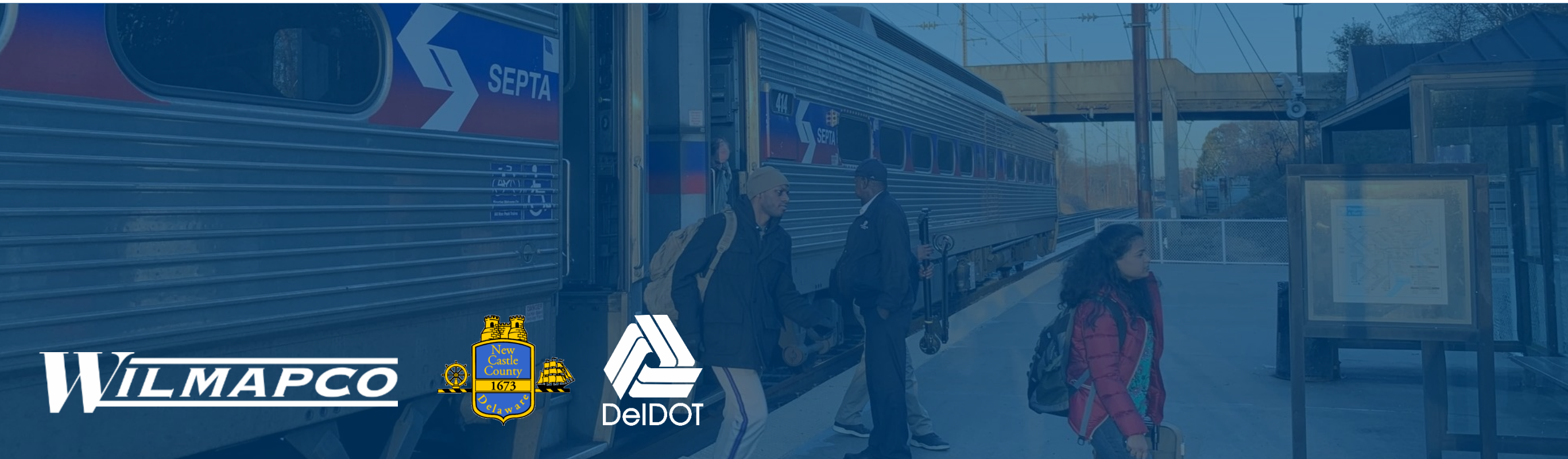


Churchman's Crossing Plan Update

Advisory Committee Meeting #2

May 3, 2021



WILMAPCO





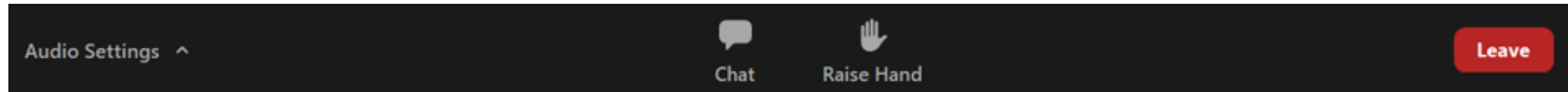
WELCOME!

Advisory Committee Meeting #2 for the Churchman's Crossing Plan Update

Virtual Meeting Housekeeping

Some helpful hints for today's meeting:

- The **Zoom Webinar Menu Bar** (on a computer) appears at the bottom of the Zoom window once the meeting begins. If you don't see the menu bar, move your mouse slightly and the bar will re-appear. The bar disappears after a few seconds when in full-screen mode.



- Note that **you are muted and without video by default.**
- For Advisory Committee members who cannot join via Zoom and dial in via telephone, please email your phone number to Stephanie Everett (severett@rkk.com).

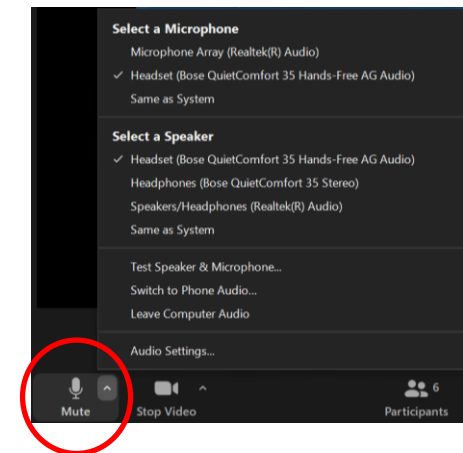
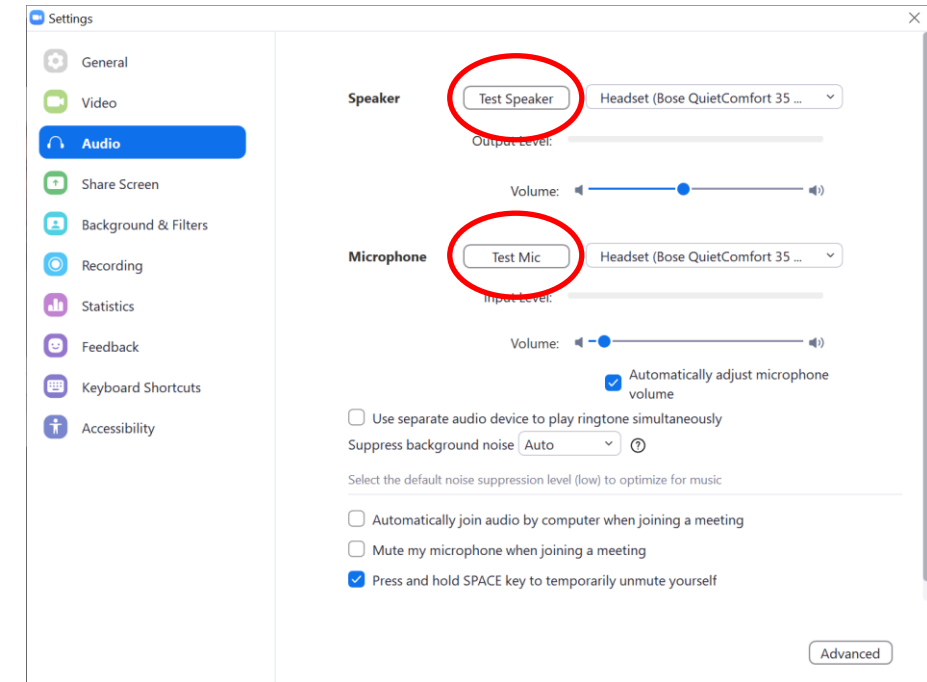
Virtual Meeting Housekeeping

To Check Audio Settings:

- Select the “Audio” option from the menu on the left side of settings.
- Select the “test speaker” and “test mic” options to ensure that your sound is operating correctly.

Use the Zoom Webinar Menu Bar to:

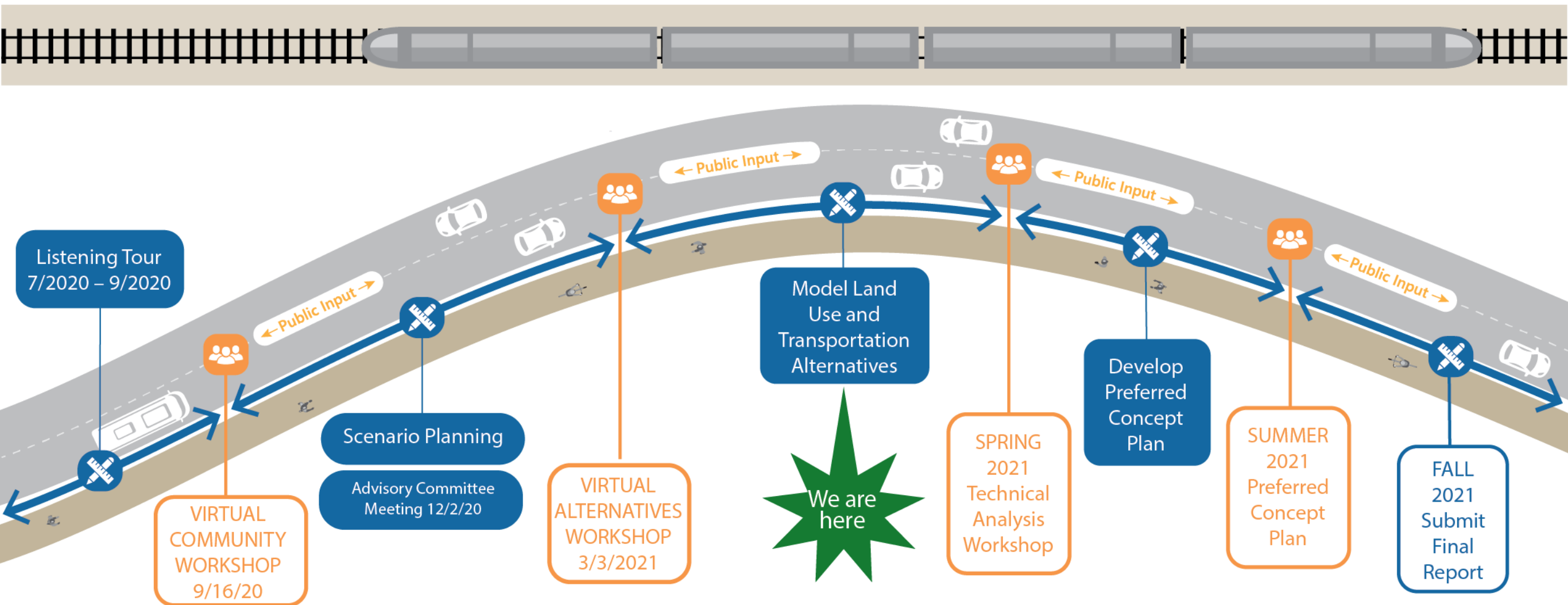
- **Adjust Audio Settings.** Click the upward arrow (^) next to “Audio Settings” to change your computer’s audio preferences (for example, change from headphones to computer speaker).
- **Leave the Meeting.** To leave the virtual meeting, click the “Leave” button.



AGENDA

- Welcome & Overview
- Recommended Land Use Forecast – Balanced Land Use
- Transportation Alternatives
- Evaluation Matrix
 - Discussion
- Potential Implementation Tools
 - Discussion
- Public Comment

Schedule



Management Committee

- Agency Partners

- Wilmington Area Planning Council (WILMAPCO)
- New Castle County Department of Land Use
- Delaware Department of Transportation (DelDOT)

- Consultant Team

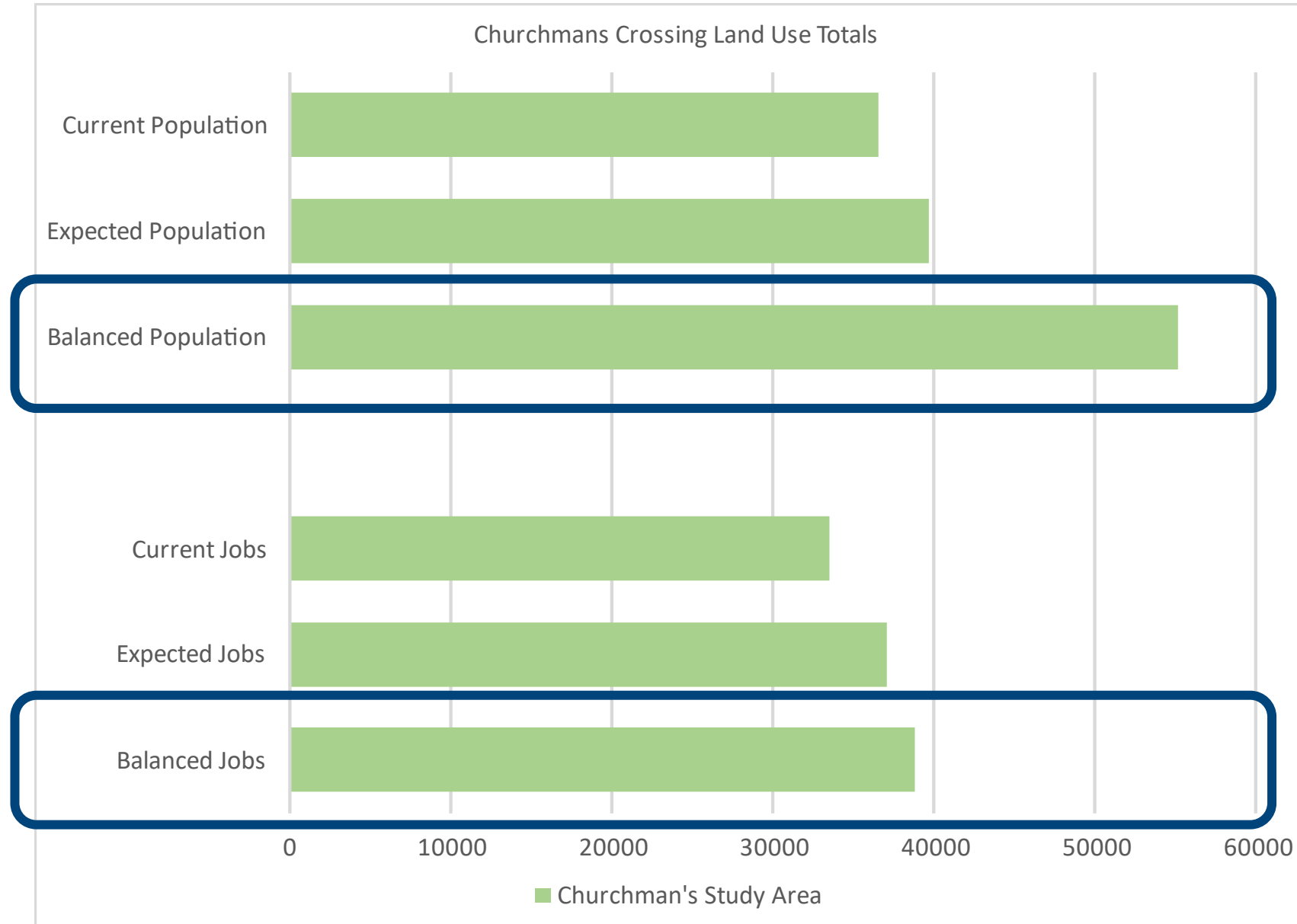
- RK&K
- Kramer & Associates
- Renaissance Planning
- Rybinski Engineering

Advisory Committee

- Bank of America
- Bike Delaware
- Christiana Executive Campus
- Christiana Fire Company
- Christiana Hospital
- Christiana Mall (Brookfield Properties)
- City of Newark
- Civic League for New Castle County
- Committee of 100
- Delaware Department of Natural Resources & Environmental Control (DNREC)
- Delaware Nature Society
- Delaware Office of State Planning
- Delaware Park
- Delaware Transit Corporation (DTC)
- Del-Tech
- J.P. Morgan Chase
- New Castle County Chamber of Commerce
- Rutherford Community
- Shipps Realty LLC
- Village of Christiana

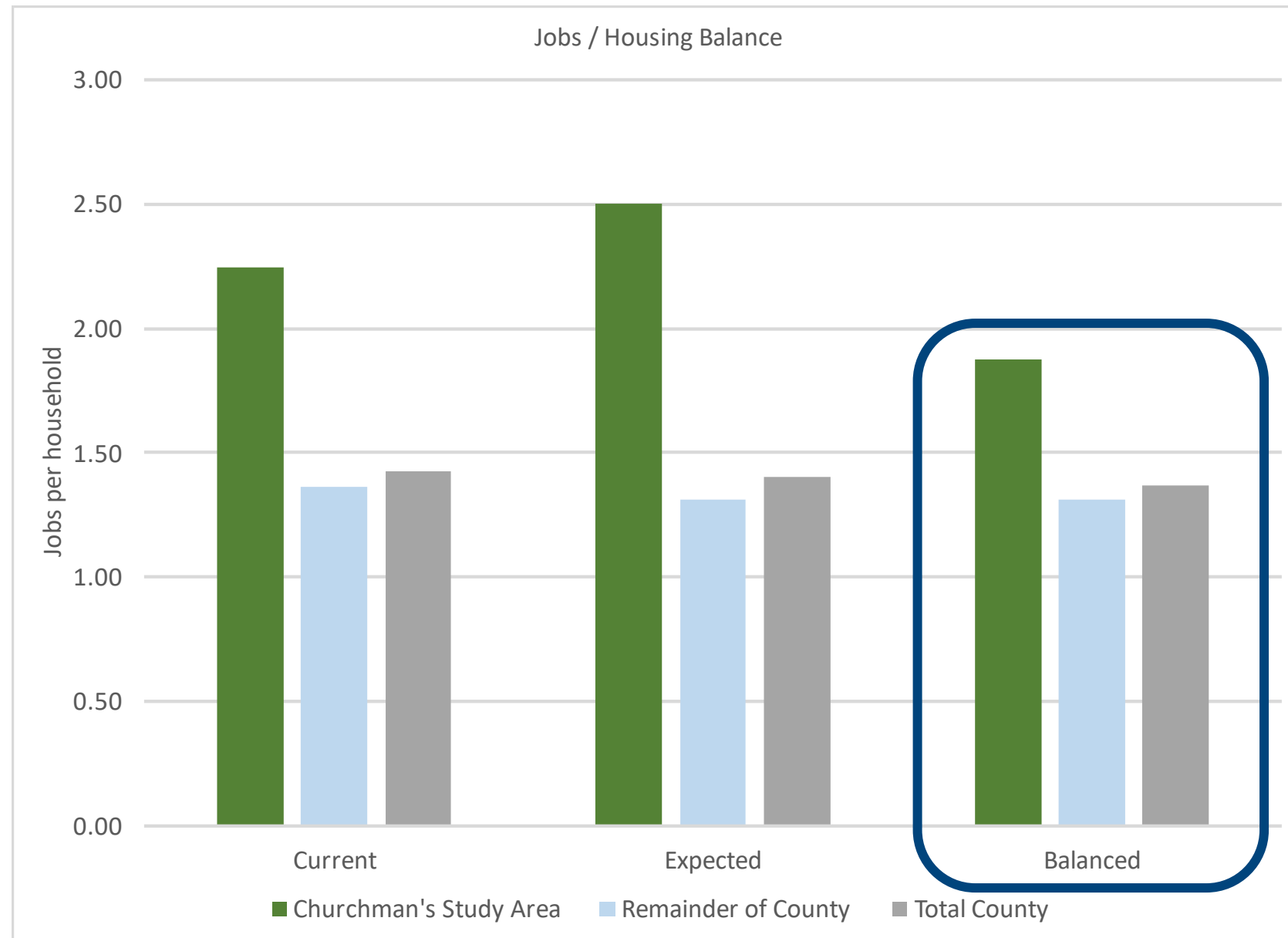
Recommended Land Use Forecast – Balanced Land Use

- **Current**
 - Built / occupied in 2019
- **Expected**
 - Considers growth already in development or expected to occur based on regional econometrics
- **Balanced**
 - Considers strategic intensification of mixed-use centers to improve the mix of uses



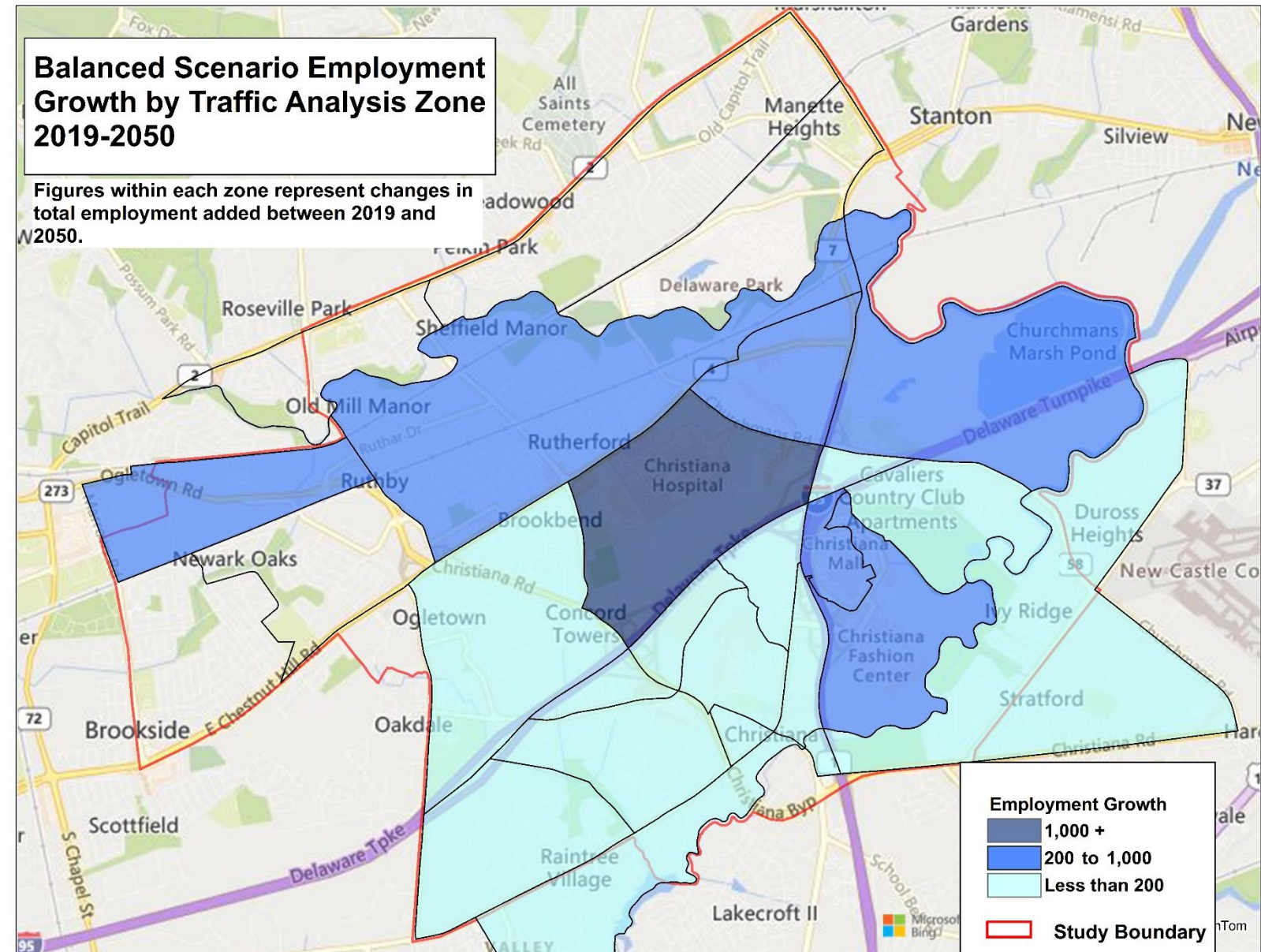
Recommended Land Use Forecast – Balanced Land Use

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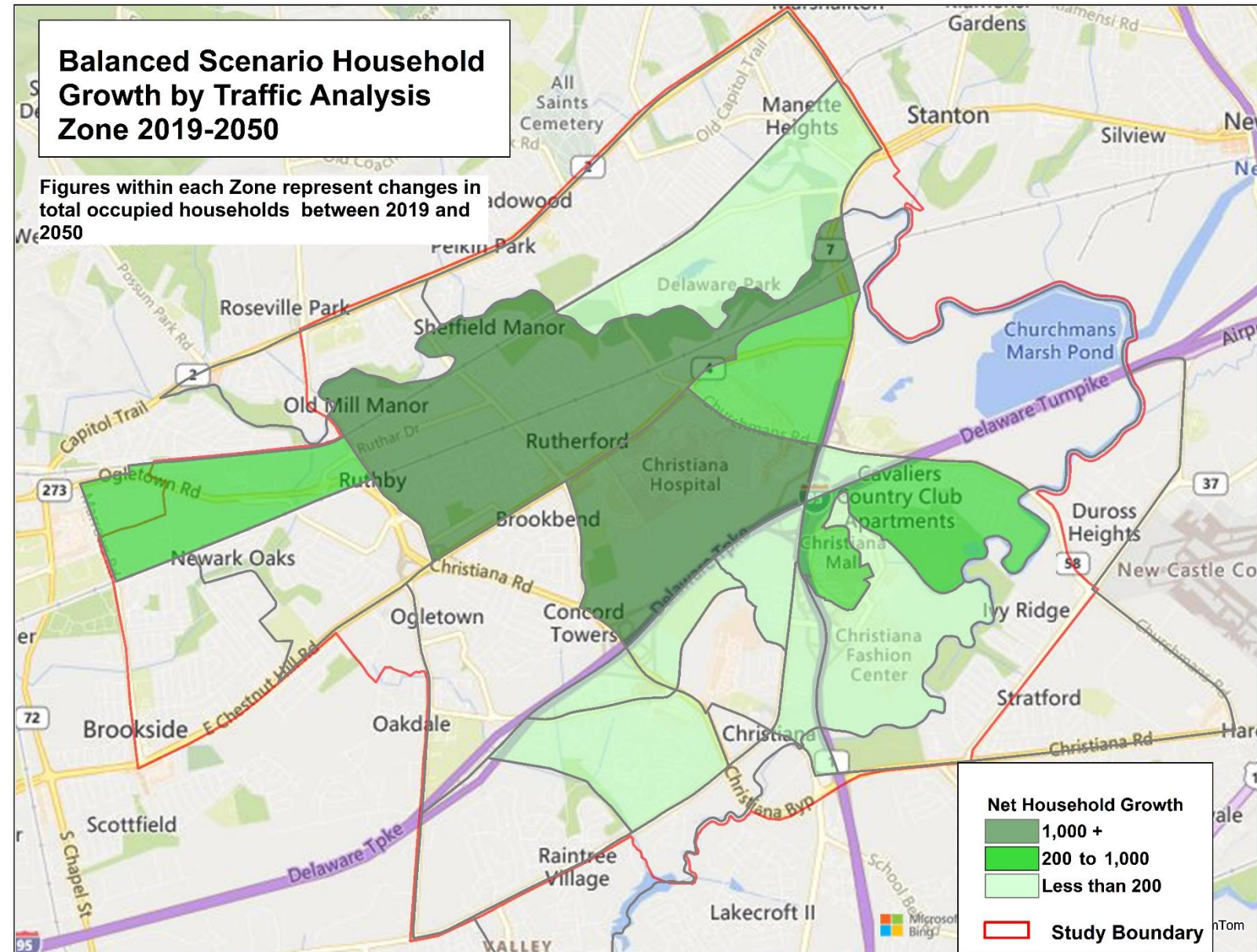
Balanced Land Use – Employment Growth

- Primary employment growth is assumed to be in TAZs surrounding the Hospital, Fairplay Station, and Christiana Mall

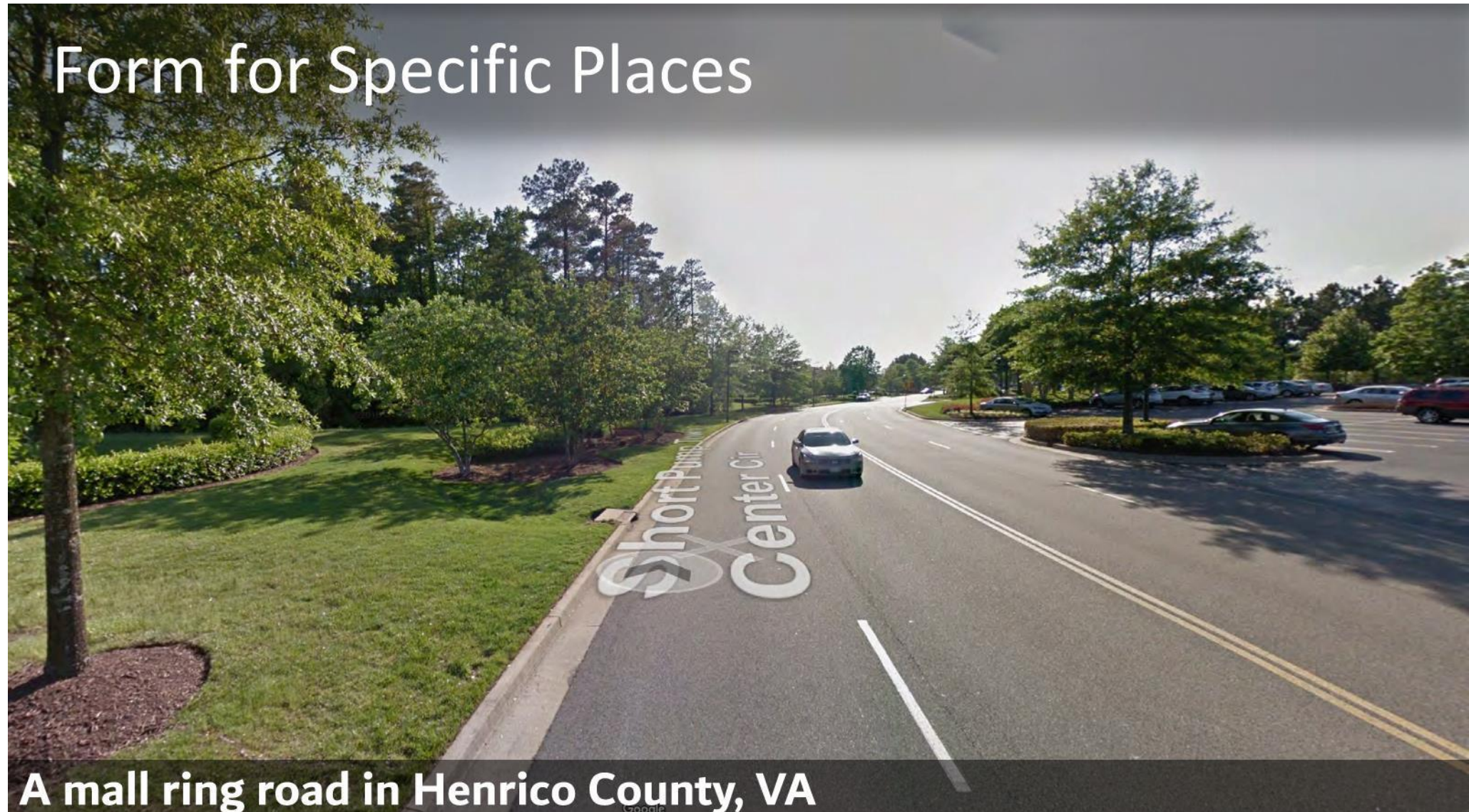


Balanced Land Use – Household Growth

- Primary residential growth is also assumed to be in similar areas as the employment growth
- Increasing residential development part of strategic approach to foster live-near-work policies and reduce commute length



What Balanced Land Use Might Look Like...Baseline



Source: New Castle County Department of Land Use “Deep Dive” Presentation 4/7/2021

What Balanced Land Use Might Look Like...Balanced

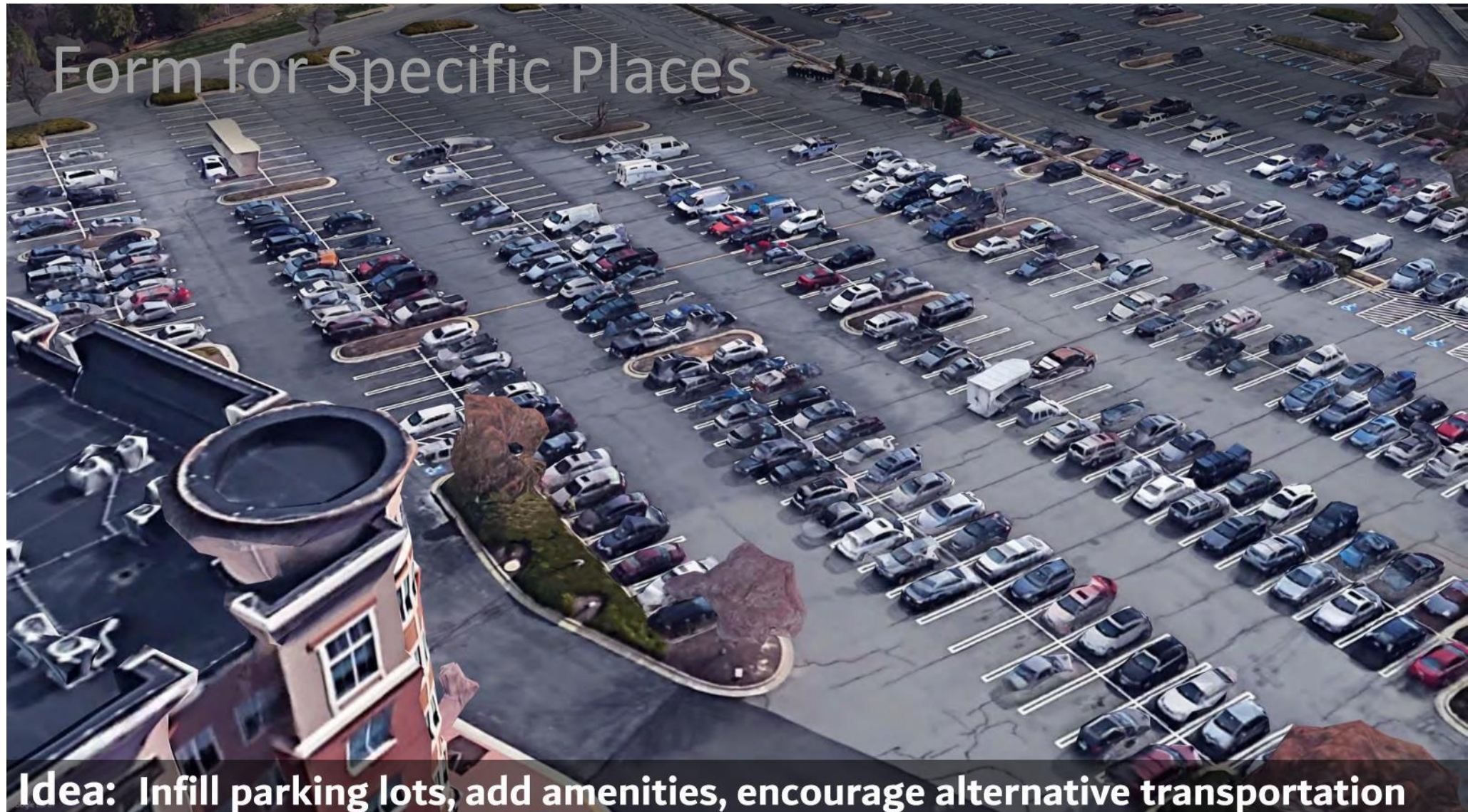


Altered 3D's:

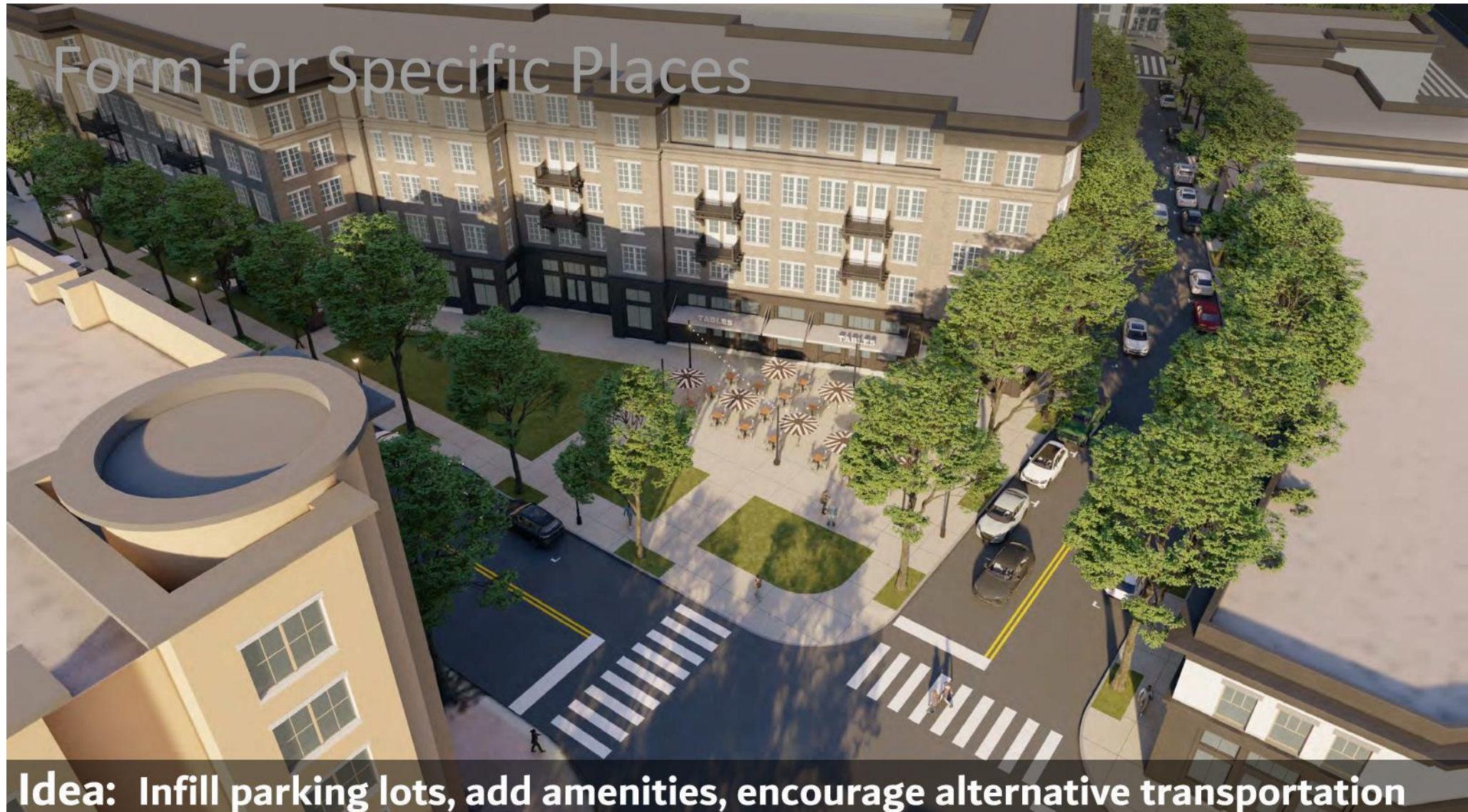
- Density
- Diversity
- Design

Source: New Castle County Department of Land Use "Deep Dive" Presentation 4/7/2021

What Balanced Land Use Might Look Like...Baseline



What Balanced Land Use Might Look Like...Balanced



Form for Specific Places

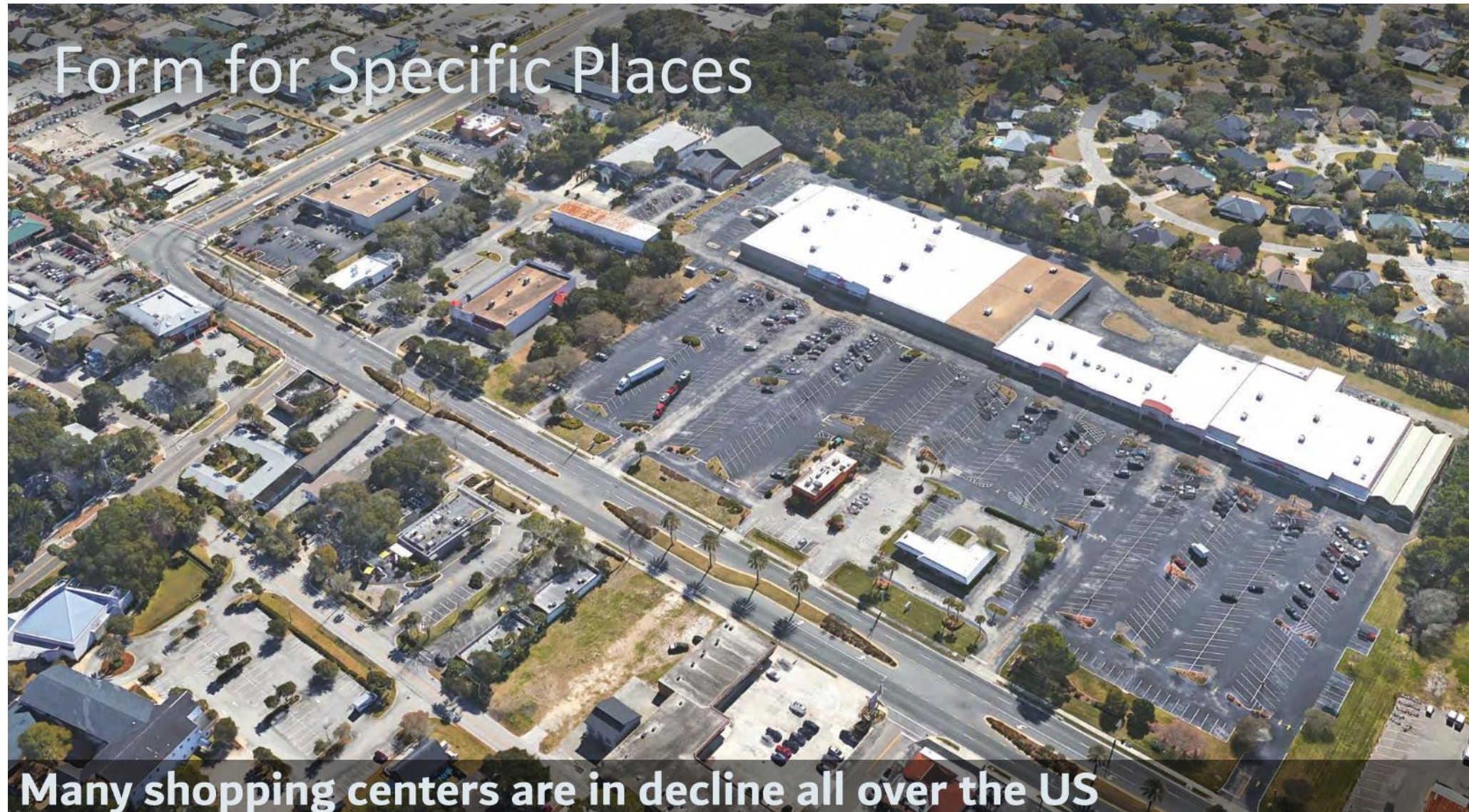
Altered 3D's:

- Density
- Diversity
- Design

Idea: Infill parking lots, add amenities, encourage alternative transportation

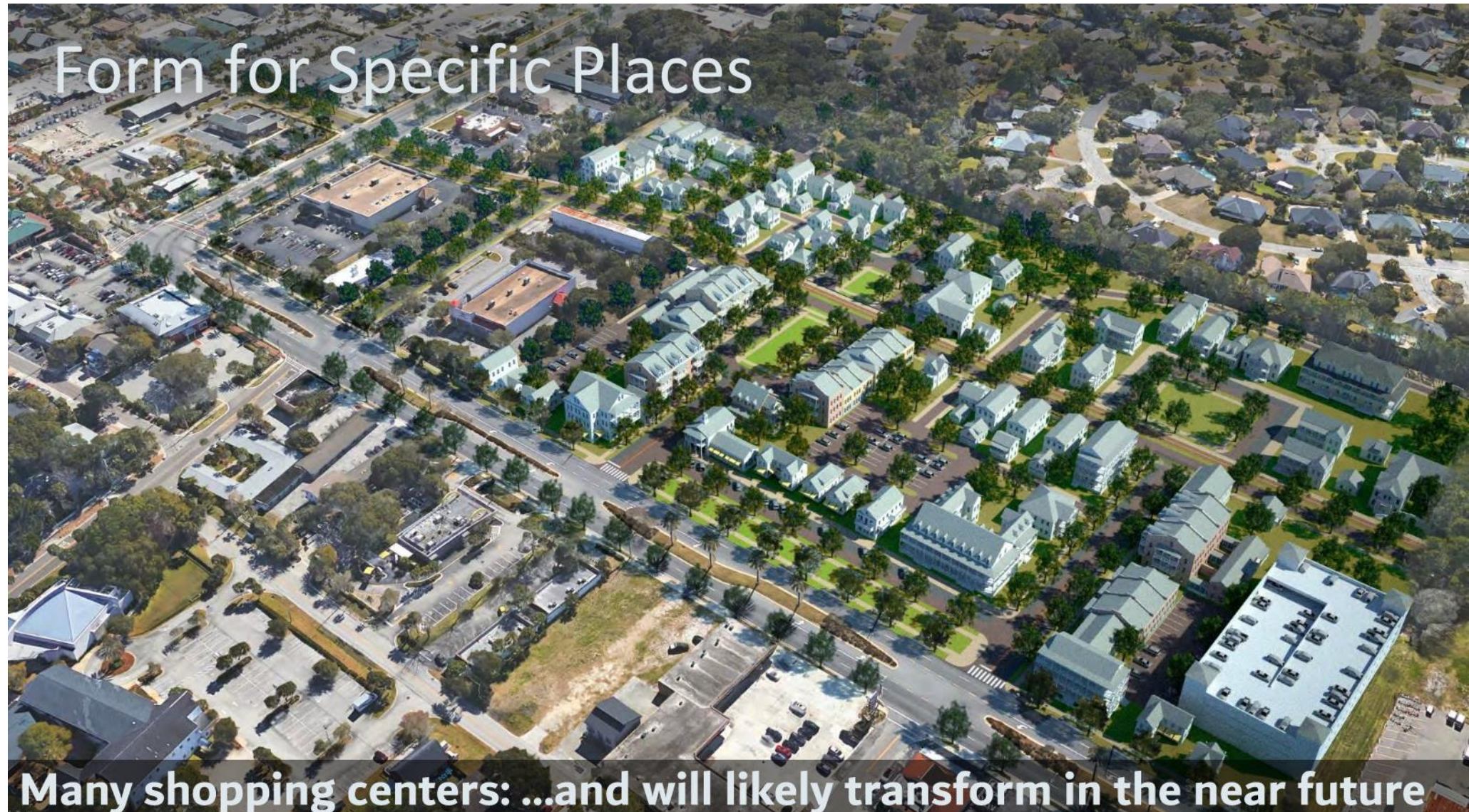
Source: New Castle County Department of Land Use "Deep Dive" Presentation 4/7/2021

What Balanced Land Use Might Look Like...Baseline



Source: New Castle County Department of Land Use “Deep Dive” Presentation 4/7/2021

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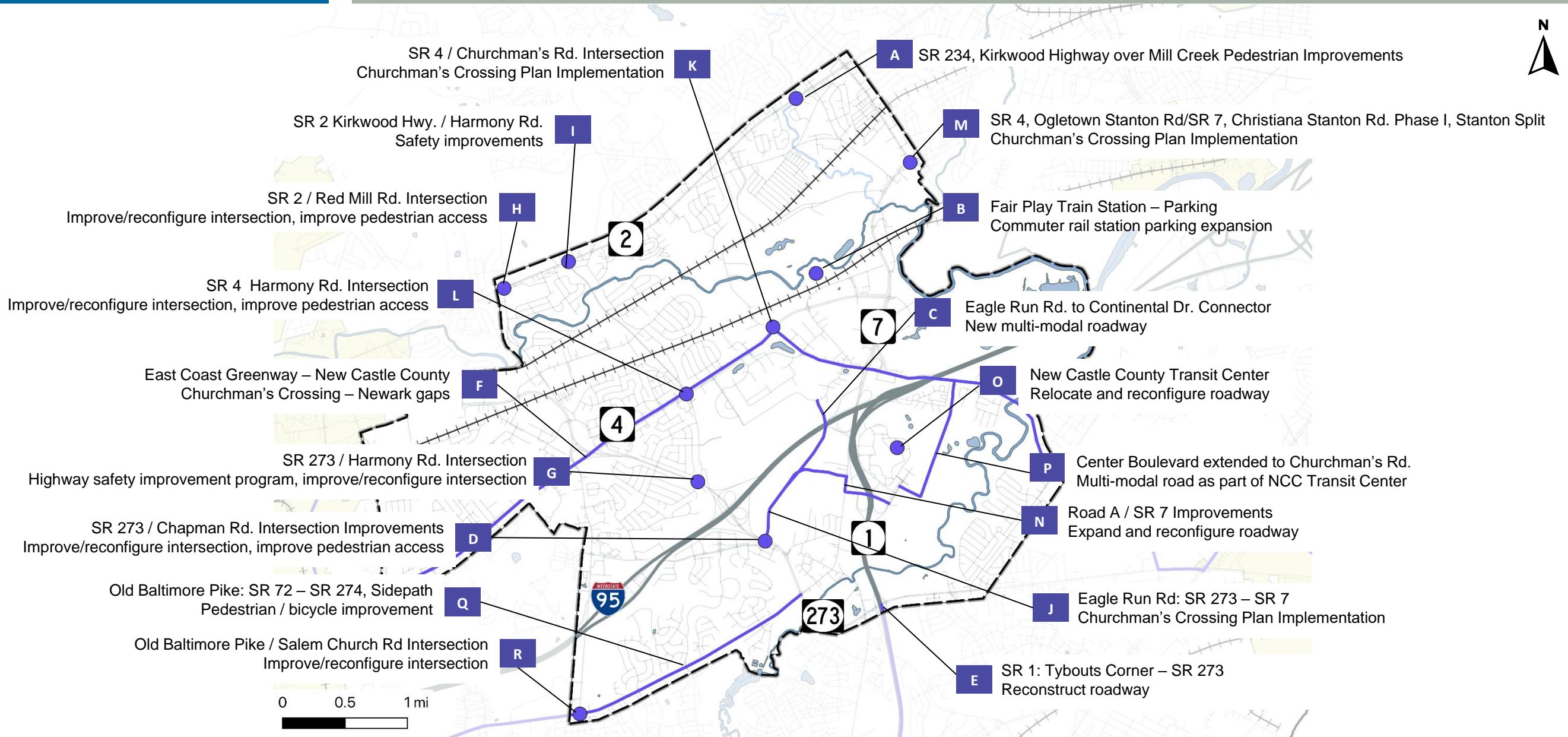


Altered 3D's:

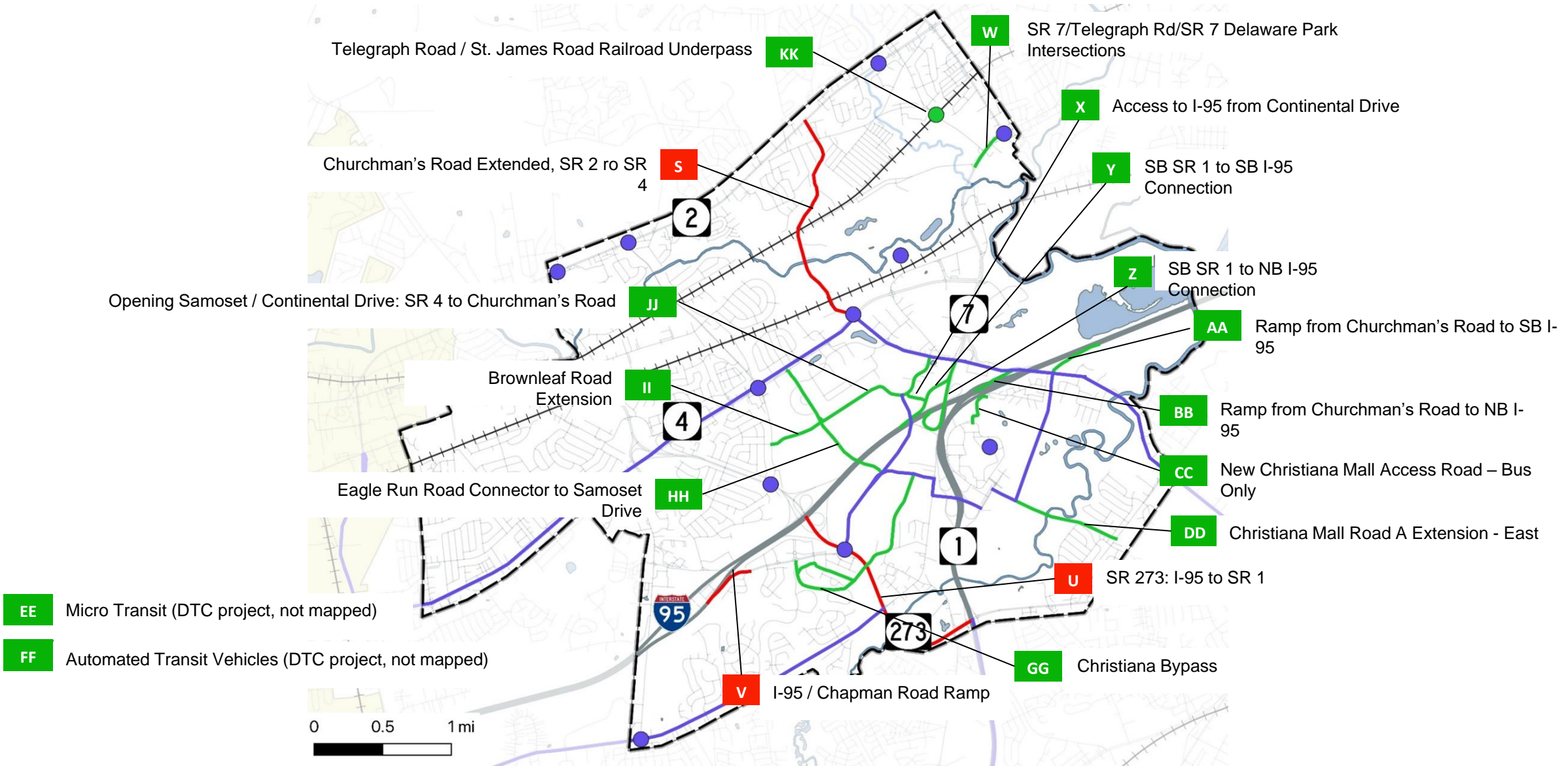
- Density
- Diversity
- Design

Source: New Castle County Department of Land Use "Deep Dive" Presentation 4/7/2021

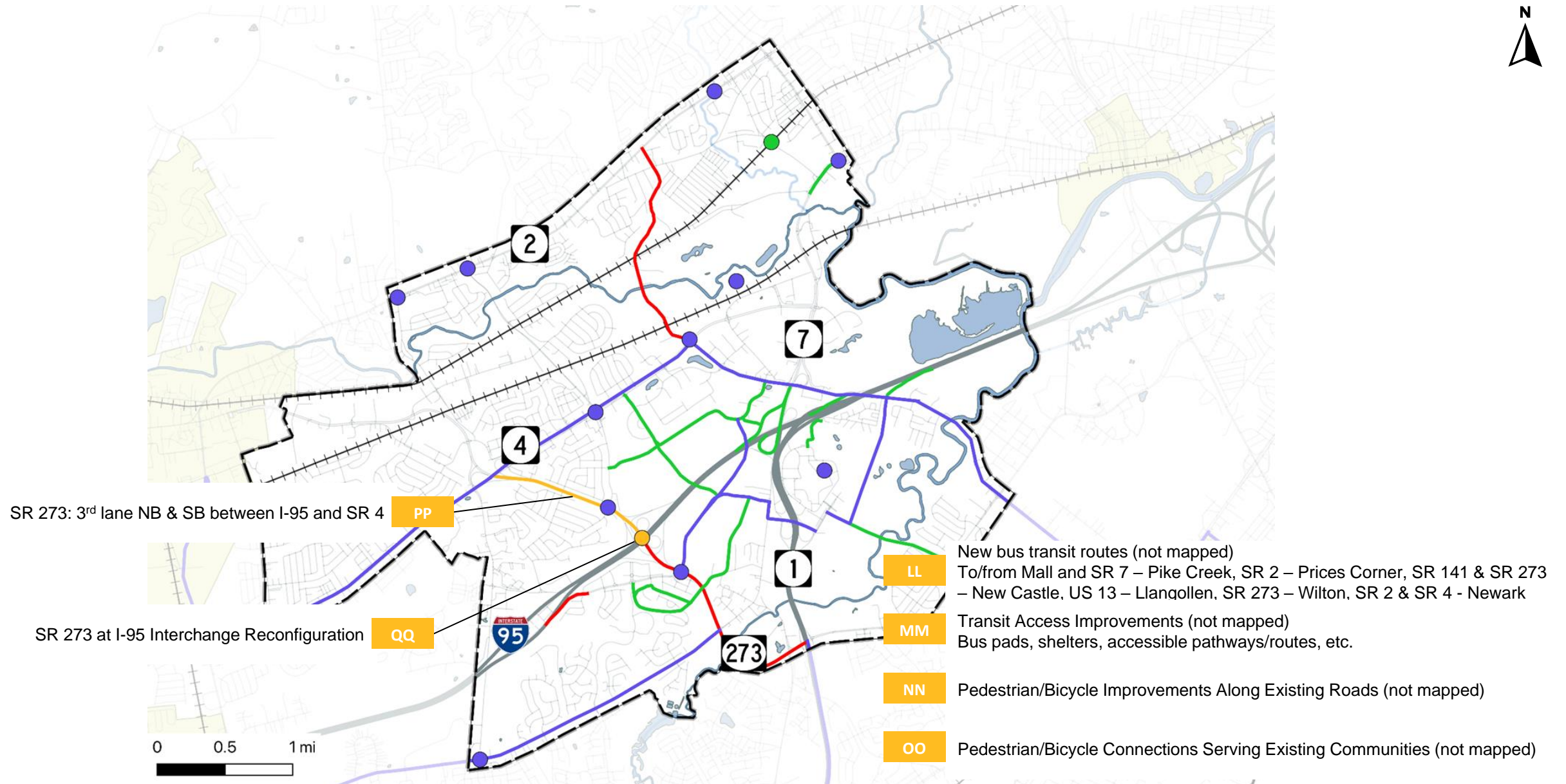
Transportation Alternatives – RTP Financially Constrained List



Transportation Alternatives – RTP Aspirations List + Others



Transportation Alternatives – Additional Projects for Evaluation



Evaluation Matrix



Churchman's Crossing Study PROJECT CRITERIA SUMMARY



		Category																								
		Funded	RTP Aspirations										Additional													
Transportation Improvement Alternative		RTP Financially Constrained Improvements	Churchmans Road Extended, SR 2 to SR 4	SR 273: 3rd lane NB & SB between SR 1 and I-95	Northbound I-95 Ramp to Chapman Road	SR 7 Intersections: SR 7/Telegraph Road, SR 7/Delaware Park Boulevard	Southbound I-95 Access from Continental Drive	Southbound SR 1 to Southbound I-95 Connection	Southbound SR 1 to Northbound I-95 Connection	Northbound I-95 Ramp from Churchmans Road	Southbound I-95 Ramp from Churchmans Road	Christiana Mall Access Road-Bus Only	Christiana Mall Road A Extension - East	Christiana Bypass	Eagle Run Rd. Connector to Samoset Dr. (2nd I-95 Crossing)	Brownleaf Road Extension	Opening Samoset Dr./Continental Dr.: SR 4 to Churchmans Road	Telegraph Road/St. James Road Railroad Underpass	Micro Transit (DTC)	Automated Transit Vehicles (DTC)	New bus transit routes To/from Mail and SR 7 - Pike Creek, SR 2 - Prices Corner, SR 141 & SR 273 - New Castle, US 13 - Liangollen, SR 273 - Wilton, SR 2 & SR 4 - Newark	Transit Access Improvements: Bus pads, shelters, accessible pathways/routes, etc.	Impacts Along	Impacts Serving Areas	Impacts between I-95	Impacts outside I-95
Map		A-R	S	U	V	W	X	Y	Z	AA	BB	CC	DD	GG	HH	II	JJ	KK	EE	FF	LL	MM				
Criteria	Connectivity																									
	Extent of Effect – Person Miles Traveled																									
	Congestion																									
	Transit Enhancement Opportunities																									
	Mode Share																									
	Bicycle & Pedestrian Level of Traffic Stress																									
	Economic Development / Redevelopment Opportunities																									
	Safety																									
	Constructability / Engineering																									
	Natural Environment Impacts																									
	Cultural / Historic Resource Impacts																									

<

Most Beneficial

Neutral

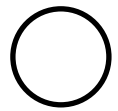
Most Adverse

Advisory Committee Considerations for Meeting #2

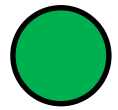
- Discussion Topic #1: Evaluation Criteria
 - Do the criteria capture all necessary elements to consider?
 - Are the evaluation scales understandable and meaningful?

Evaluating Connectivity

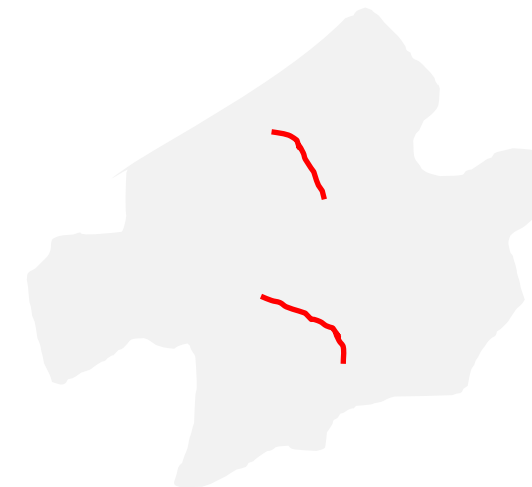
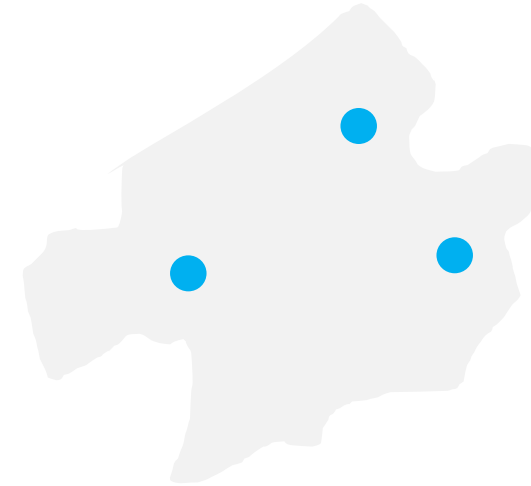
- Does the project create new connections?



No new connections



New high-quality connections



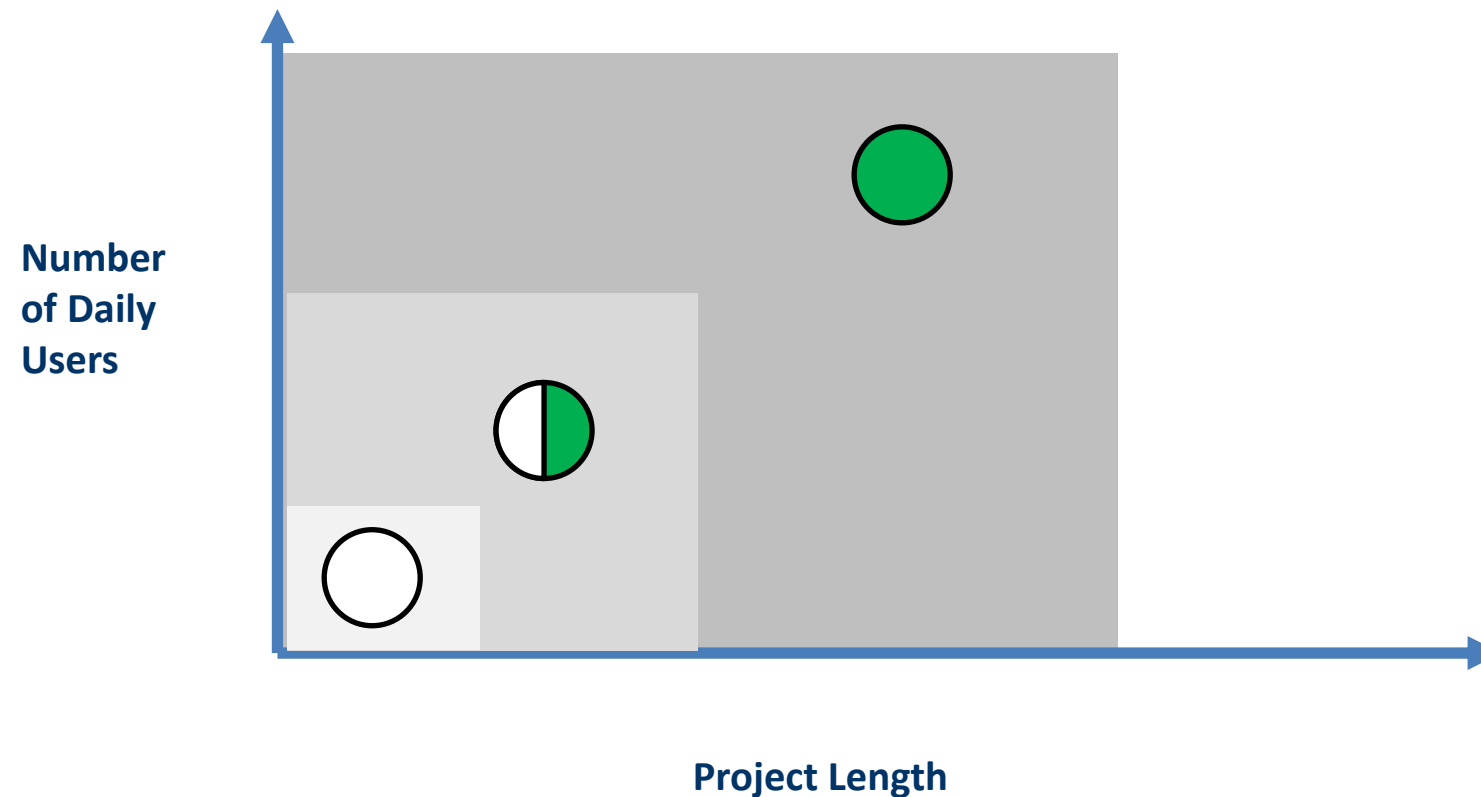
Evaluating Extent of Effect – Person-Miles of Travel

- How many users will benefit from the project? Consider Person-Miles of Travel (PMT)

○ Short length
and/or low
volume

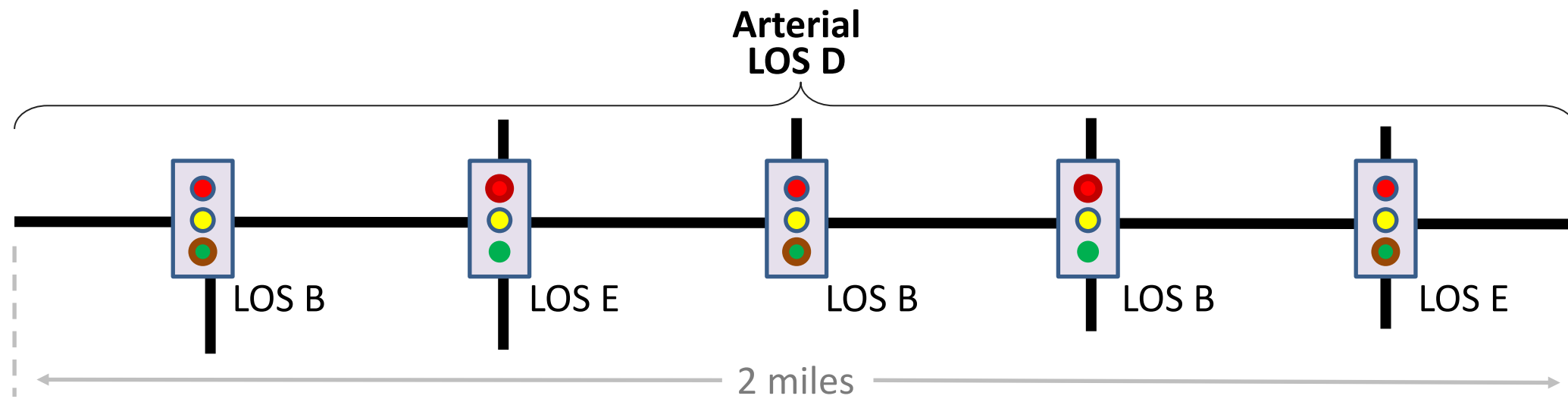


● Long length
and/or high
volume



Evaluating Congestion - Arterial LOS

- 40 MPH posted speed
- 2 miles in length
- Three minor intersections @ 15 seconds of delay (LOS B) each
- Two major intersections @ 75 seconds of delay (LOS E) each
- Total travel time = 180 sec (2 mi @ 40mph) + 195 sec (intersection delay) = 6¼ minutes
- Average speed: 2 miles in 6¼ mins = 19 MPH → LOS D



Evaluating Congestion

- How much traffic is the right amount?



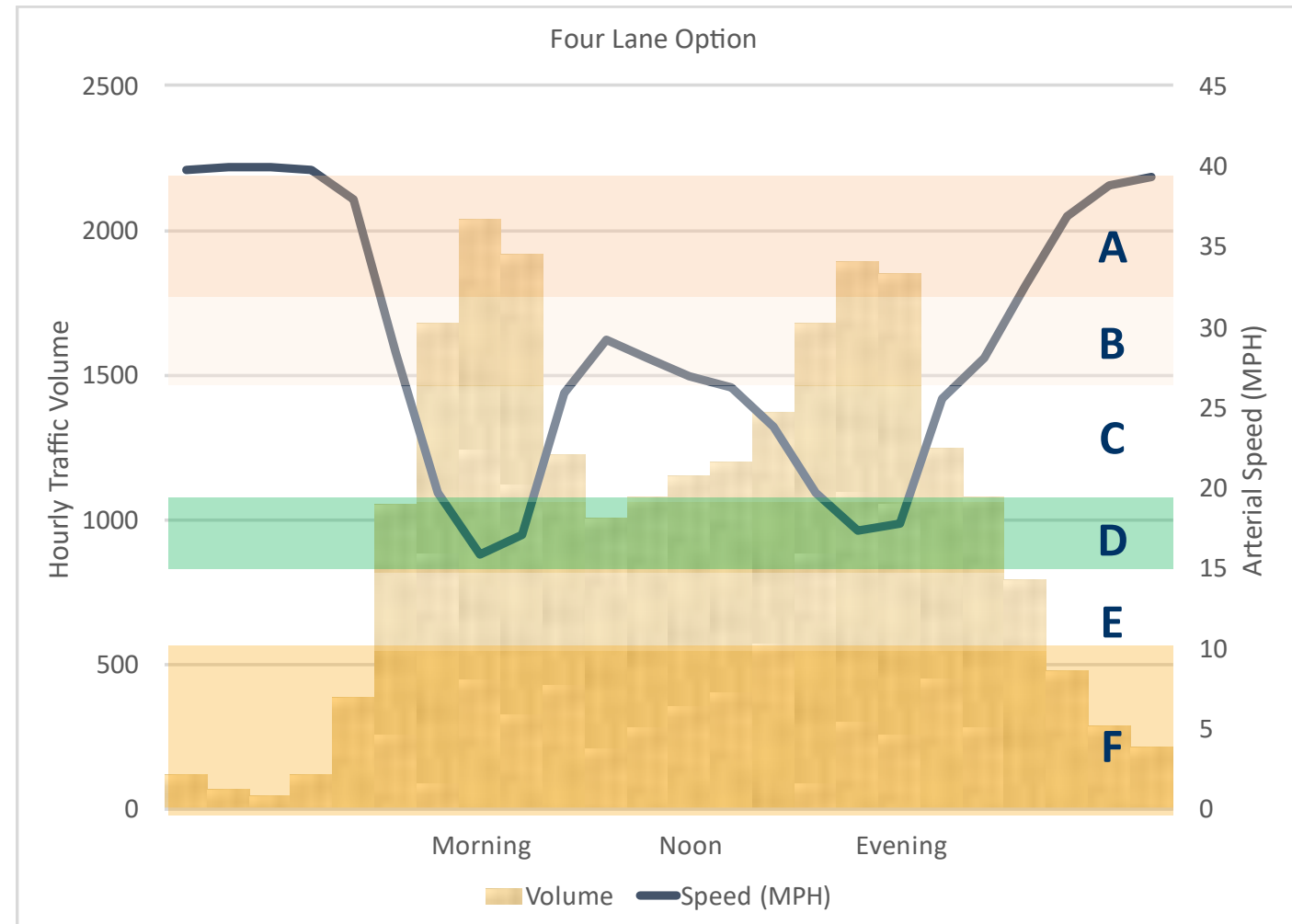
**Arterial Mobility: LOS F
Thriving Economy?**



**Arterial Mobility: LOS A
Struggling Economy?**

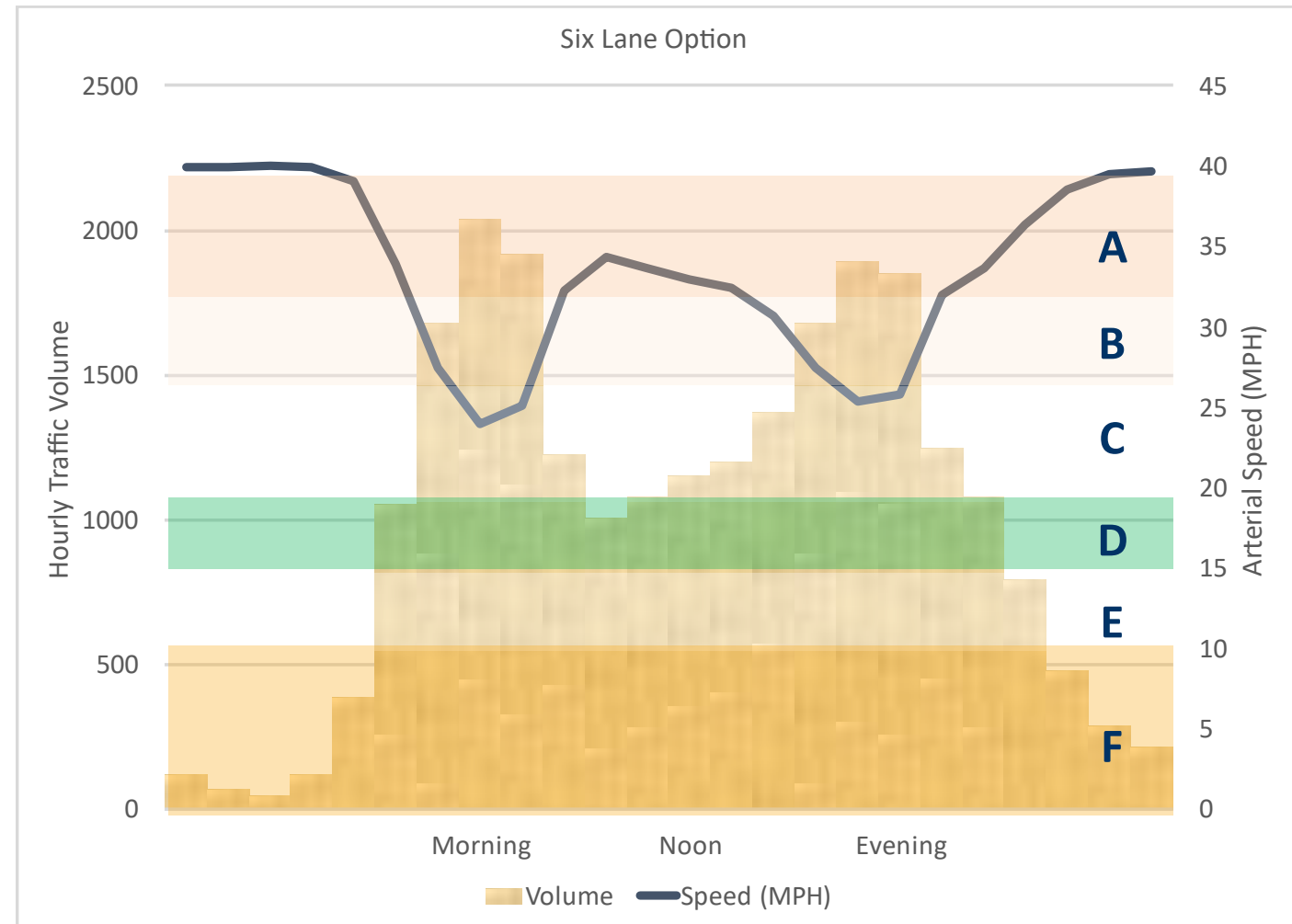
Evaluating Congestion – Hypothetical Example

- How much traffic is the right amount? Consider: Time of Day
- Hypothetical roadway - 4 lanes
- 1 mile in length
- 44,000 daily volume
- LOS D in peak periods
- 1080 daily VHT
- 12 acres of ROW
- 8 acres of pavement
- 75' crosswalk



Evaluating Congestion – Hypothetical Example

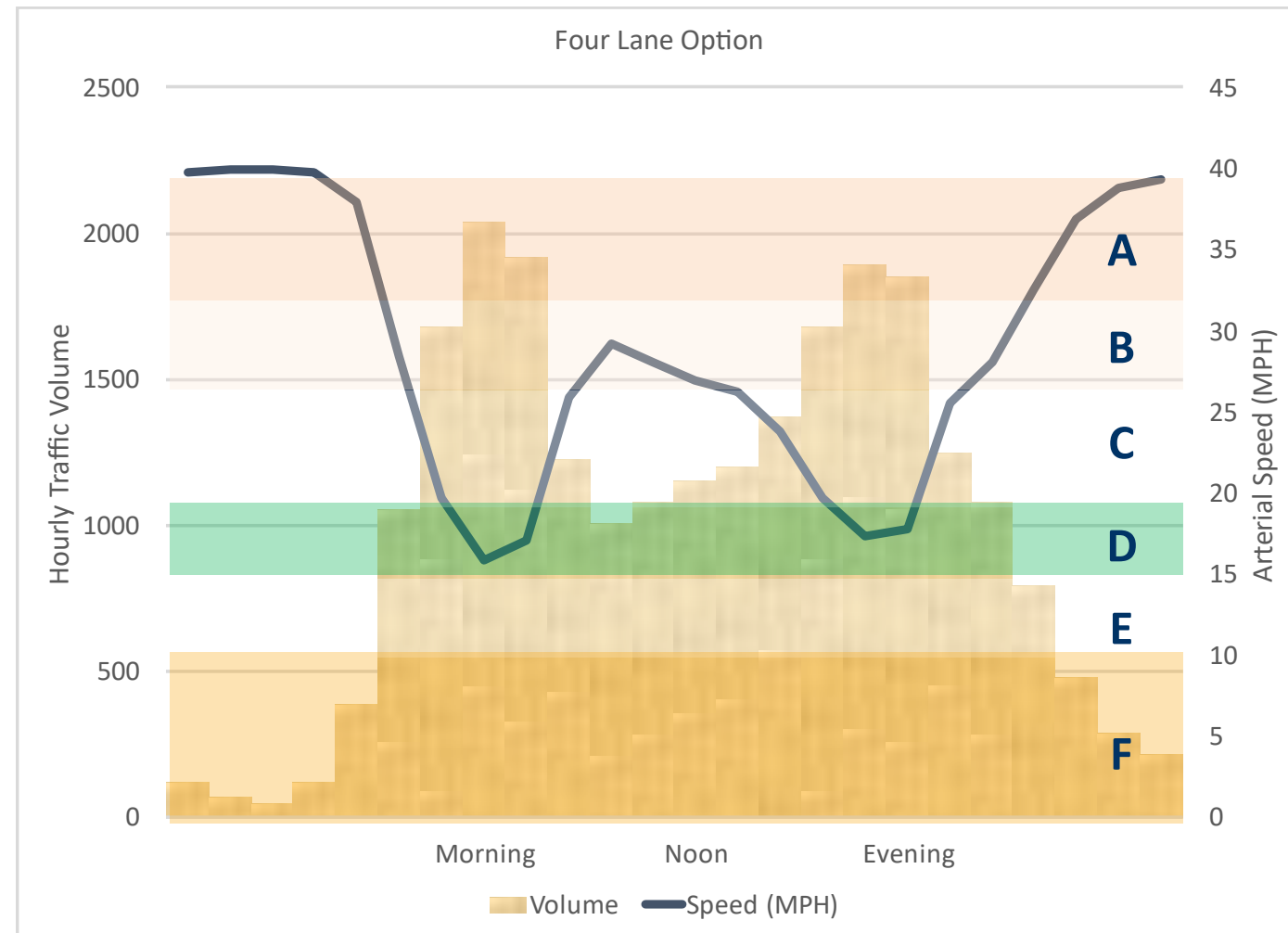
- How much traffic is the right amount? Consider: Time of Day
- Hypothetical roadway - **6** lanes
- 1 mile in length
- 44,000 daily volume
- **LOS C** in peak periods
- 850 daily VHT
- 18 acres of ROW
- 10 acres of pavement
- 100' crosswalk



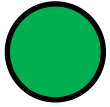

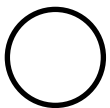

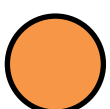
Evaluating Congestion

- How much traffic is the right amount?

- ☐ Neutral: traffic levels likely don't warrant investment
- ☒ Good: the Goldilocks zone
- ☐ Neutral: investment likely doesn't fully address traffic needs



Evaluating Transit Enhancement Opportunities

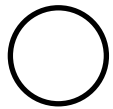
-  Most beneficial: Provides new connections, improves access to transit stops, enhances transit experience (safety, visibility), improves performance
-  Improves performance of existing system in localized areas only
-  Neutral: Minimal impacts to transit operations
-  Negatively impacts transit operations in localized areas only
-  Most negatively impacts transit: Eliminates existing routes or highly used stops, worsens performance

Evaluating Mode Share

- Will the project reduce reliance on driving alone?



Will likely increase percent of drive alone trips

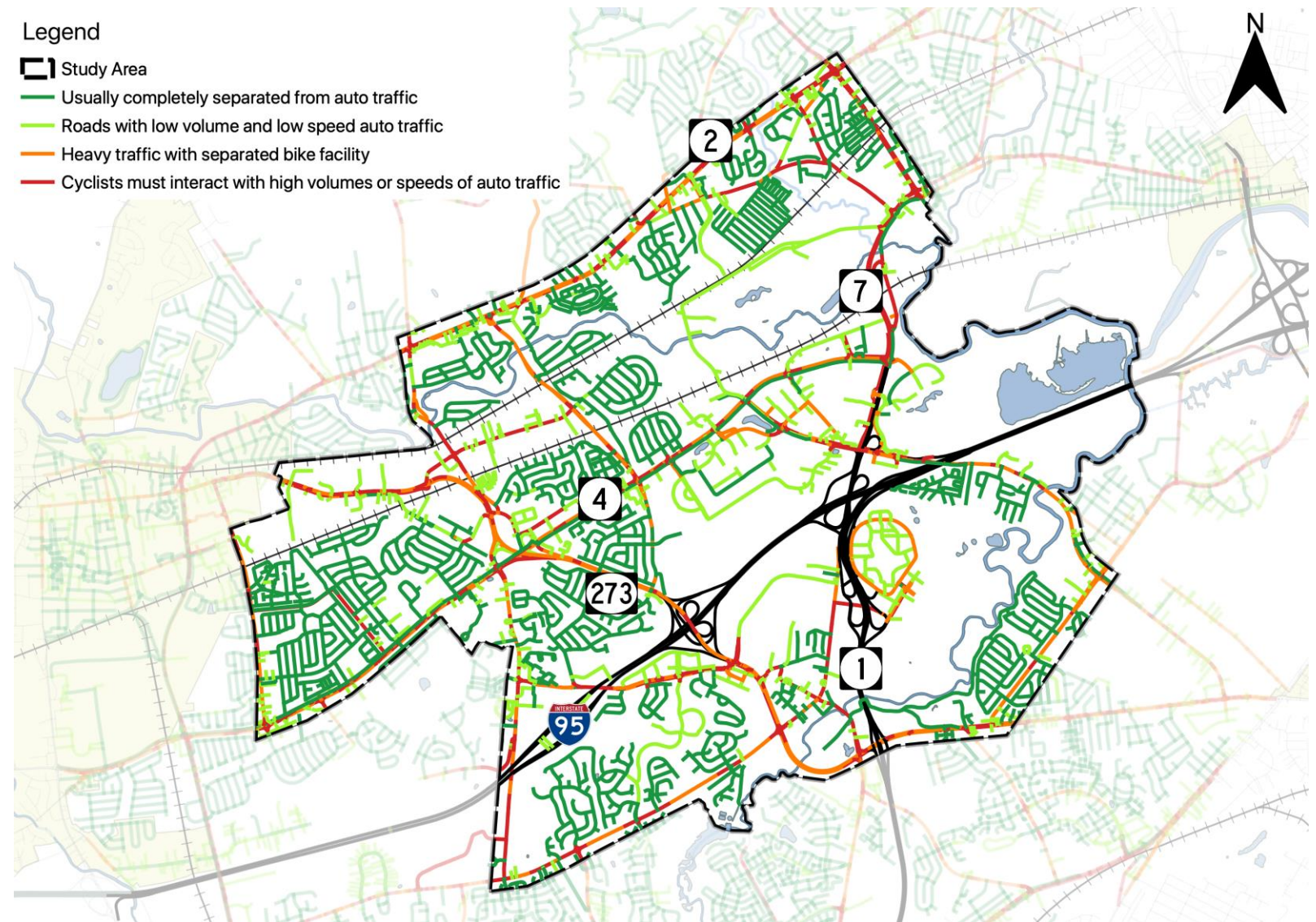


Will likely reduce percent of drive alone trips



Evaluating Bicycle & Pedestrian Level of Traffic Stress

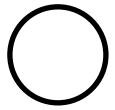
- Bicycle & Pedestrian Level of Traffic Stress Evaluations **in Progress**
- Considers Connectivity to
 - Transit
 - Schools
 - Community Centers
 - Employment Centers
 - Parks



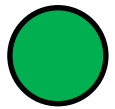
Churchman's Crossing Existing Bicycle Level of Traffic Stress

Evaluating Economic Development / Redevelopment Opportunities

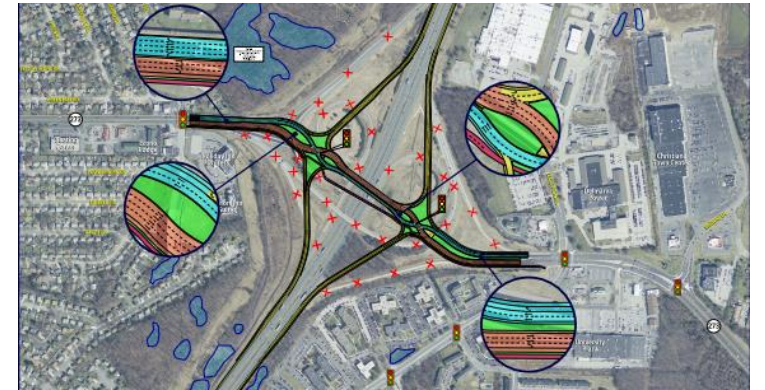
- Does the project help create “location, location, location” for (re)developable properties?



Doesn't add much accessibility value



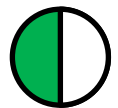
Creates new accessibility value



Evaluating Safety

- Does the proposed improvement address existing safety concerns?

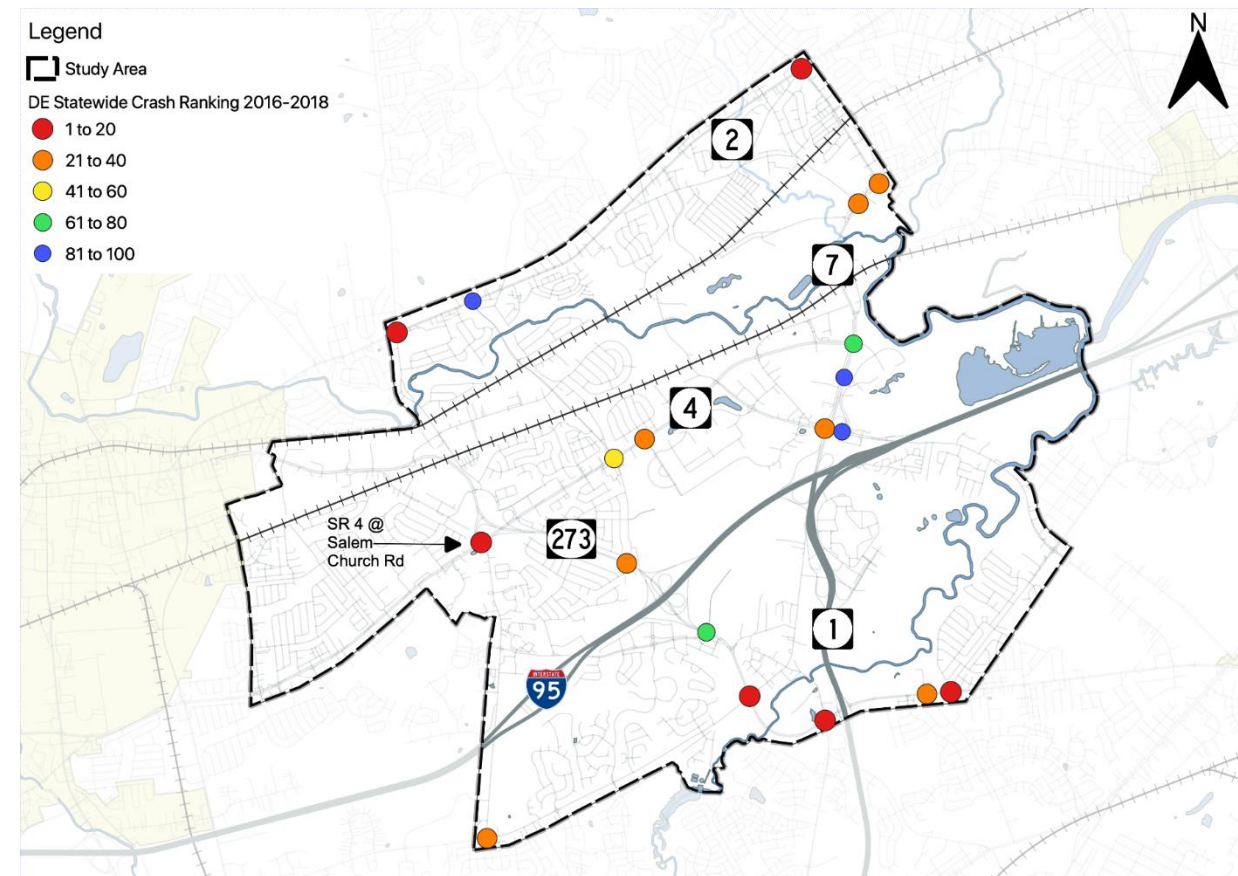
 Positively impacts safety, particularly at intersections ranked worst in DE



 Unknown safety impacts, or does not address existing safety concerns



 Negatively impacts safety, particularly at intersections ranked worst in DE



Delaware Statewide Crash Rankings, 2016 – 2018
(based on number, severity, and cost)

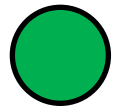
Evaluating Constructability / Engineering

- Are there challenges to constructing the proposed improvement?

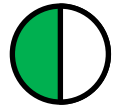
- ☐ Neutral
- ☒ Slightly challenging to build or some impacts to the traveling public during construction
- ☒ Challenging to build or significant impacts to the traveling public during construction

Evaluating Natural Environment Impacts

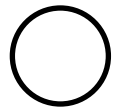
- What impacts are there to streams, wetlands, or flood plains?



Substantially Positive



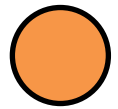
Could be minor positive impacts



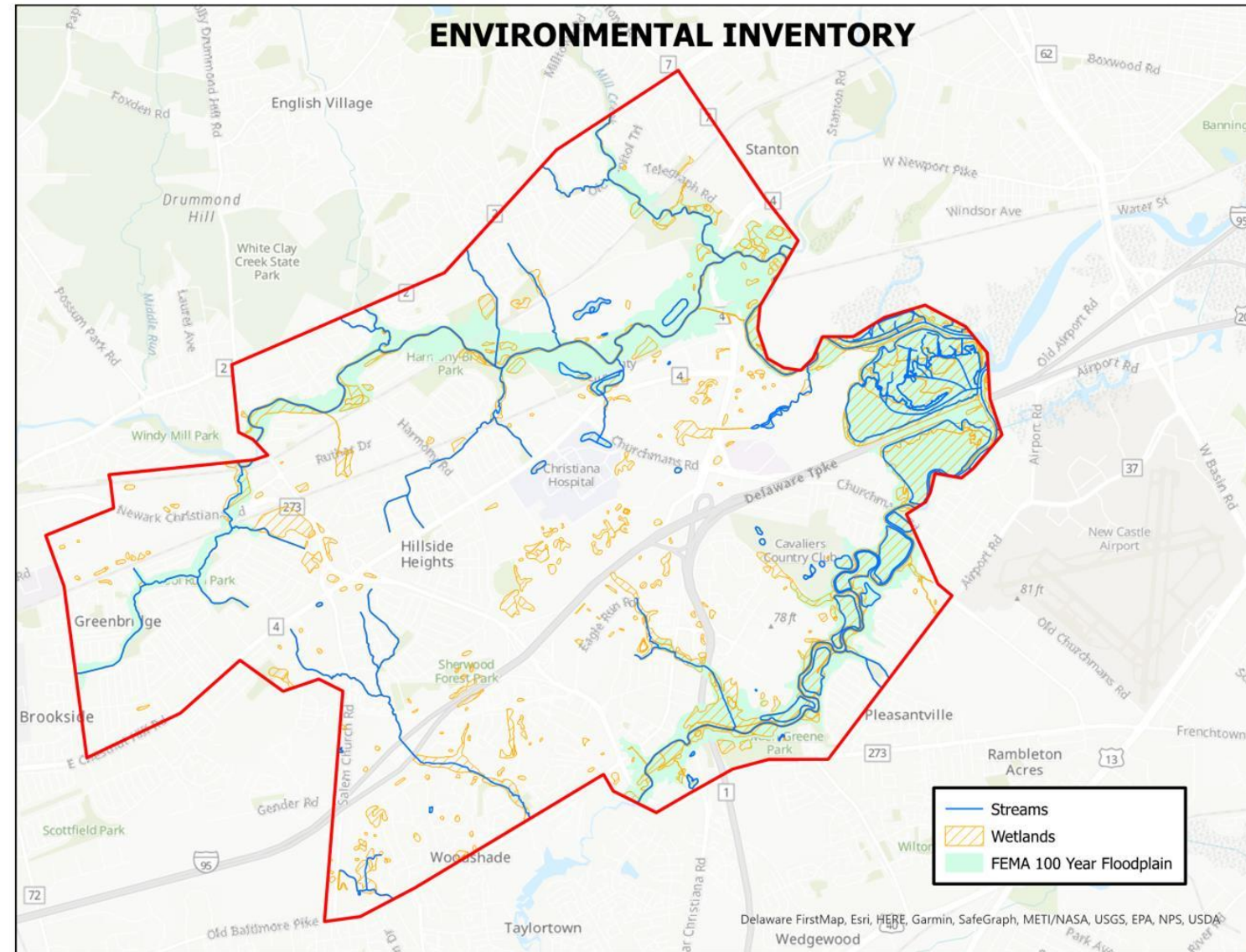
Neutral



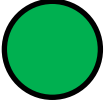

Slightly negative impacts

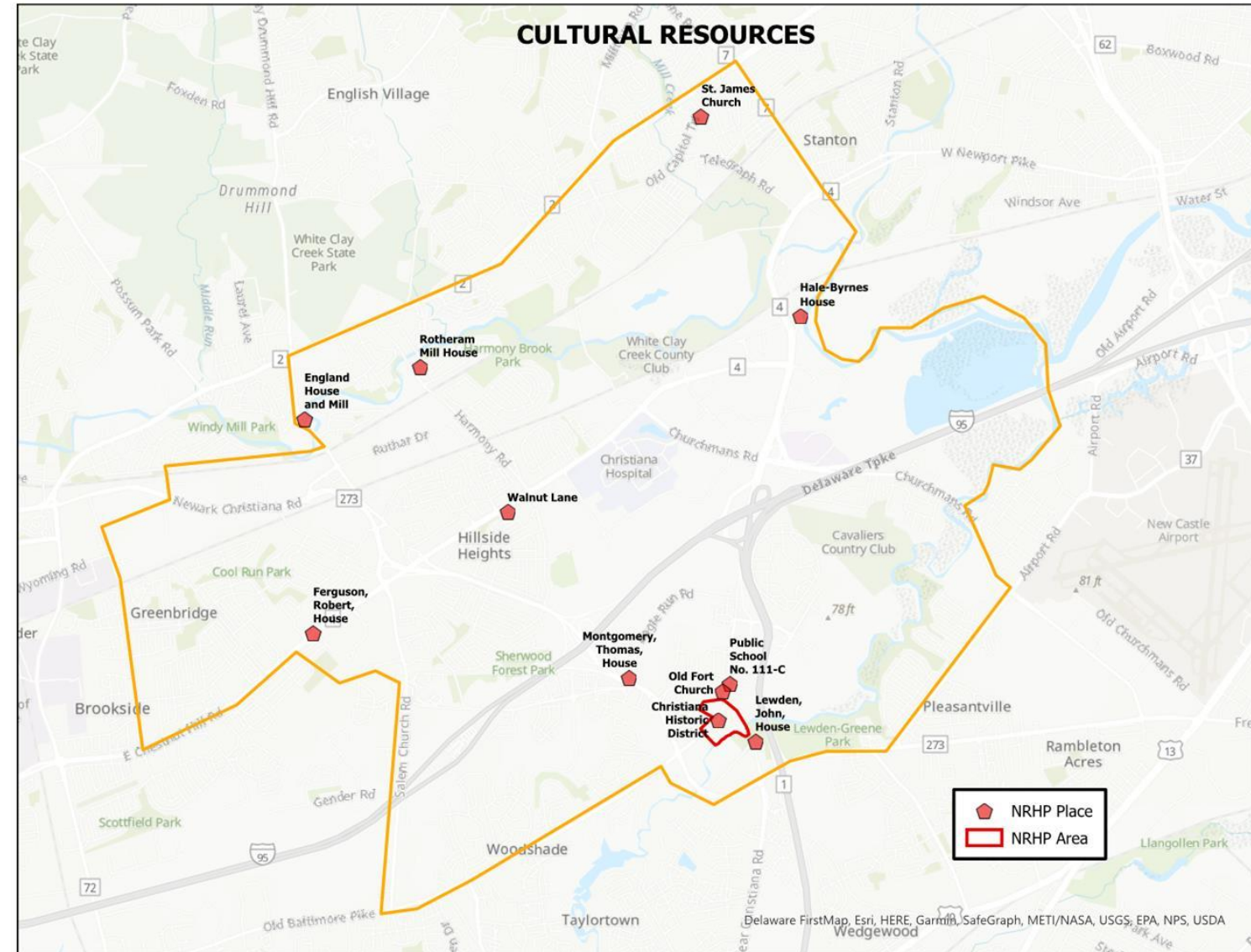


Likely substantial impacts

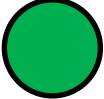
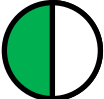
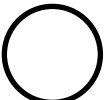

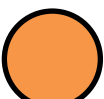


Evaluating Cultural / Historic Resource Impacts

- What impacts are there to cultural and historic resources?
 -  Substantially Positive
 -  Could be minor positive impacts
 -  Neutral
 -  Slightly negative impacts
 -  Likely substantial impacts



Evaluating Noise/Property Impacts

-  Likely substantial positive impacts for noise and direct property impacts
-  Could be minor positive impacts for noise and direct property impacts
-  Neutral
-  Slightly negative impacts for noise and direct property impacts
-  Likely substantial impacts for noise and direct property impacts

Advisory Committee Consideration – Discussion Topic #2

Do these 12 criteria capture all necessary elements to consider?
Are the evaluation scales understandable and meaningful?

- » Connectivity
- » Extent of Effect – Person Miles Traveled
- » Congestion
- » Transit Enhancement Opportunities
- » Mode Share
- » Bicycle & Pedestrian Level of Traffic Stress
- » Economic Development / Redevelopment Opportunities
- » Safety
- » Constructability / Engineering
- » Natural Environment Impacts
- » Cultural / Historic Resource Impacts
- » Noise/Property Impacts

Evaluation Matrix – Analysis Results

- See attached Evaluation Matrix

Potential Implementation Tools

- Several tools can be used to implement a plan, including:
 - » Future land use and zoning
 - » Subdivision and building regulations
 - » Concurrency (adequate public facilities)
 - » **Transportation Improvement Districts (TIDs)**
 - » **Complete Community Enterprise Districts (CCEDs)**

Advisory Committee Considerations for Meeting #2

- Discussion Topic #2: Implementation Tools
 - What are your thoughts on using one, or both, of the potential new implementation strategies, in addition to the “business-as-usual” approach to land use and transportation in Churchman’s Crossing?

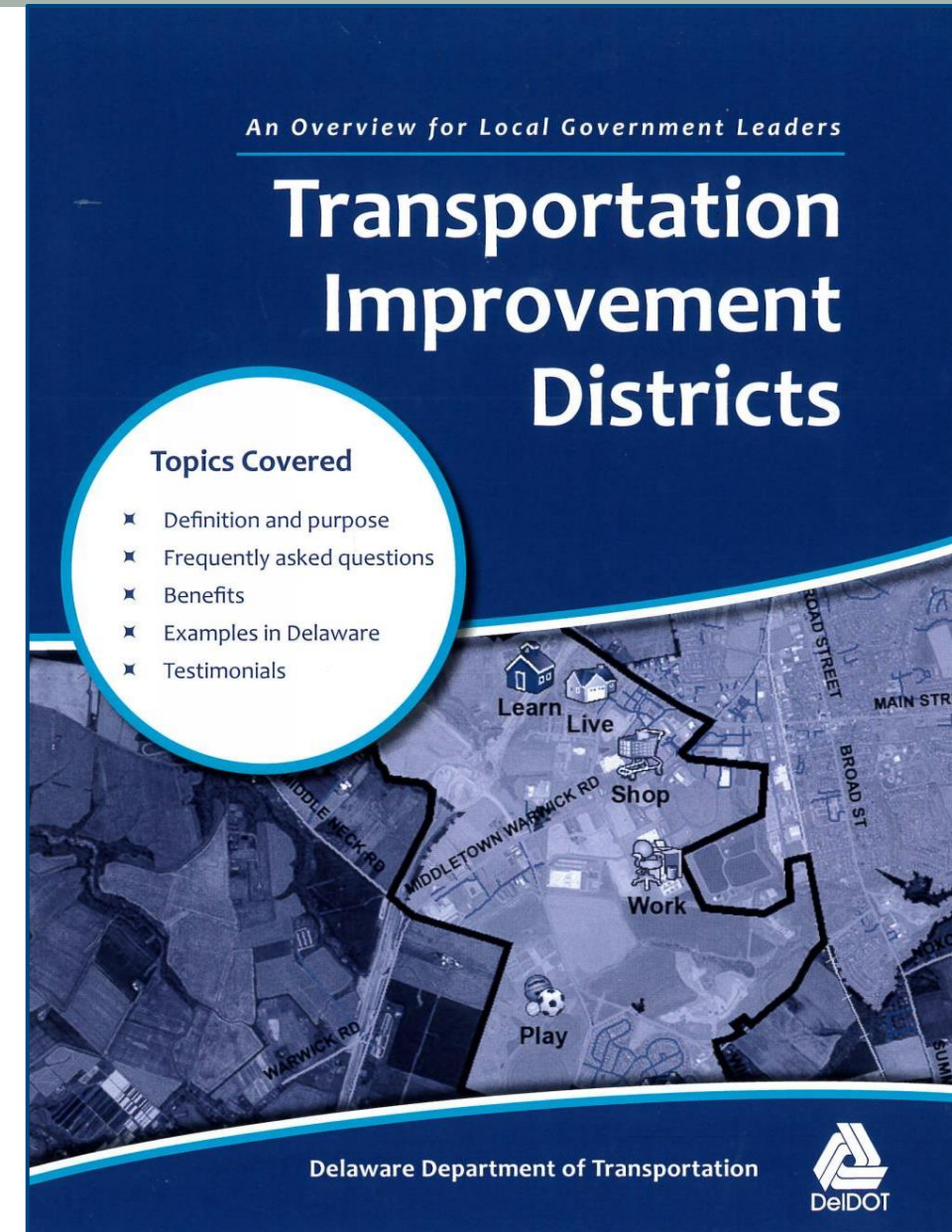
Transportation Improvement District (TID)– What is it?

■ Definition

- A geographic area defined to secure required improvements to transportation facilities in an area
- Described in the DeIDOT's Development Coordination Manual

■ Purpose

- Proactively plan transportation improvements needed to support economic development
- Identify appropriate locations for economic development in a local comprehensive plan
- Outline transportation needs, improvements, schedules, and payment details



Comparison of a TID to a Traffic Impact Study (TIS)

Traffic Impact Study

- Specific development proposal
- Development completion date
- Specific intersections meeting location and impact criteria
- Single development impact

Transportation Improvement District

- Future land use for the TID area
- 20 years into the future
- All key intersections in the TID area
- Cumulative impact



Why Consider a TID?

- Promotes Intergovernmental Coordination
- Establishes Fair-Share Contributions to Transportation Improvements
- Manages Transportation Impacts
- Complements Master Plans
- Supports Sustainable Development and Complete Communities
- Fosters Market-Ready (Re) Development

Where Are TIDs In Delaware?

Where Are There TIDs Now?

DelDOT is participating in several TIDs throughout the state that are either in operation or under development.

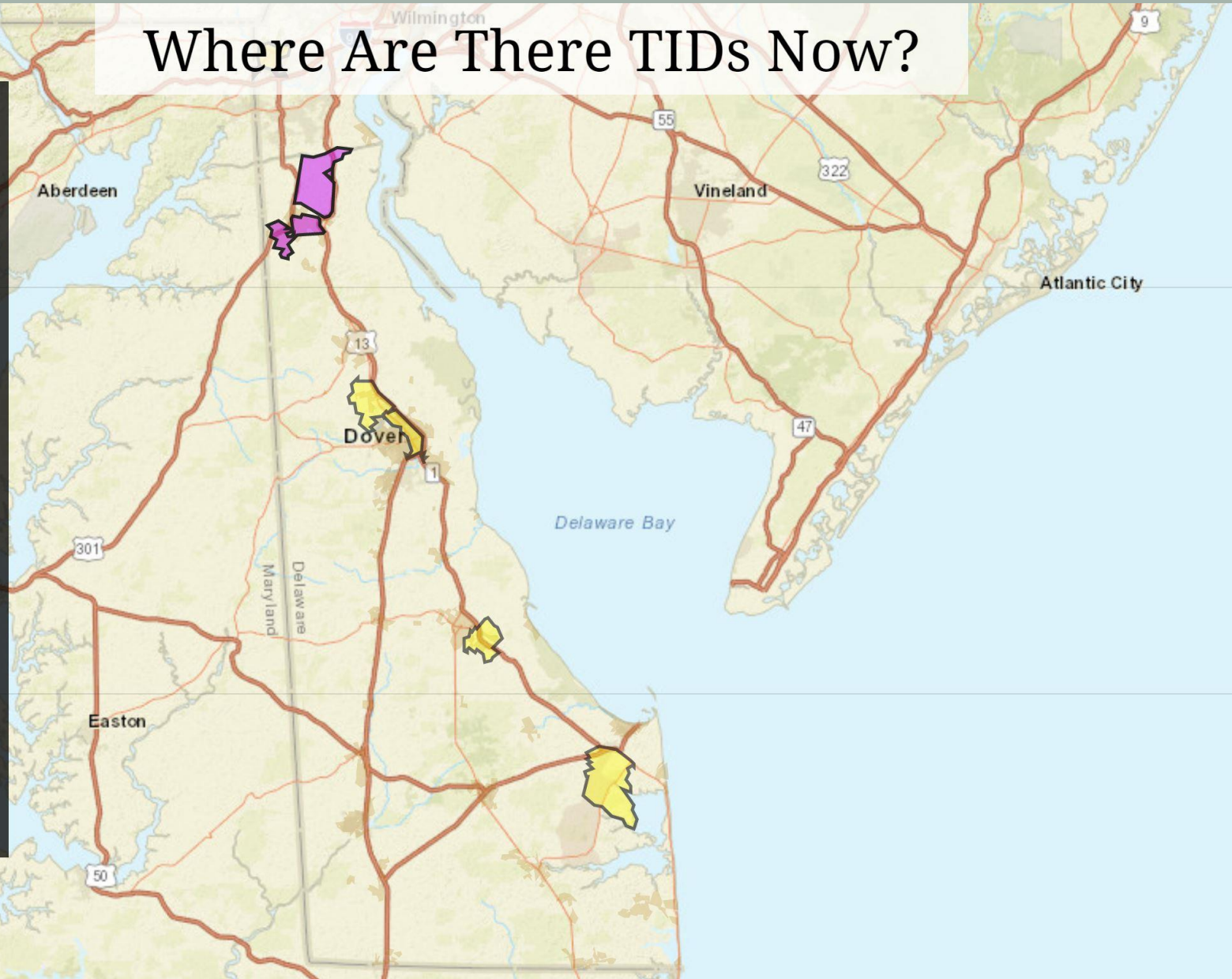
TIDs in operation



TIDs under development



Delaware Municipal Boundaries



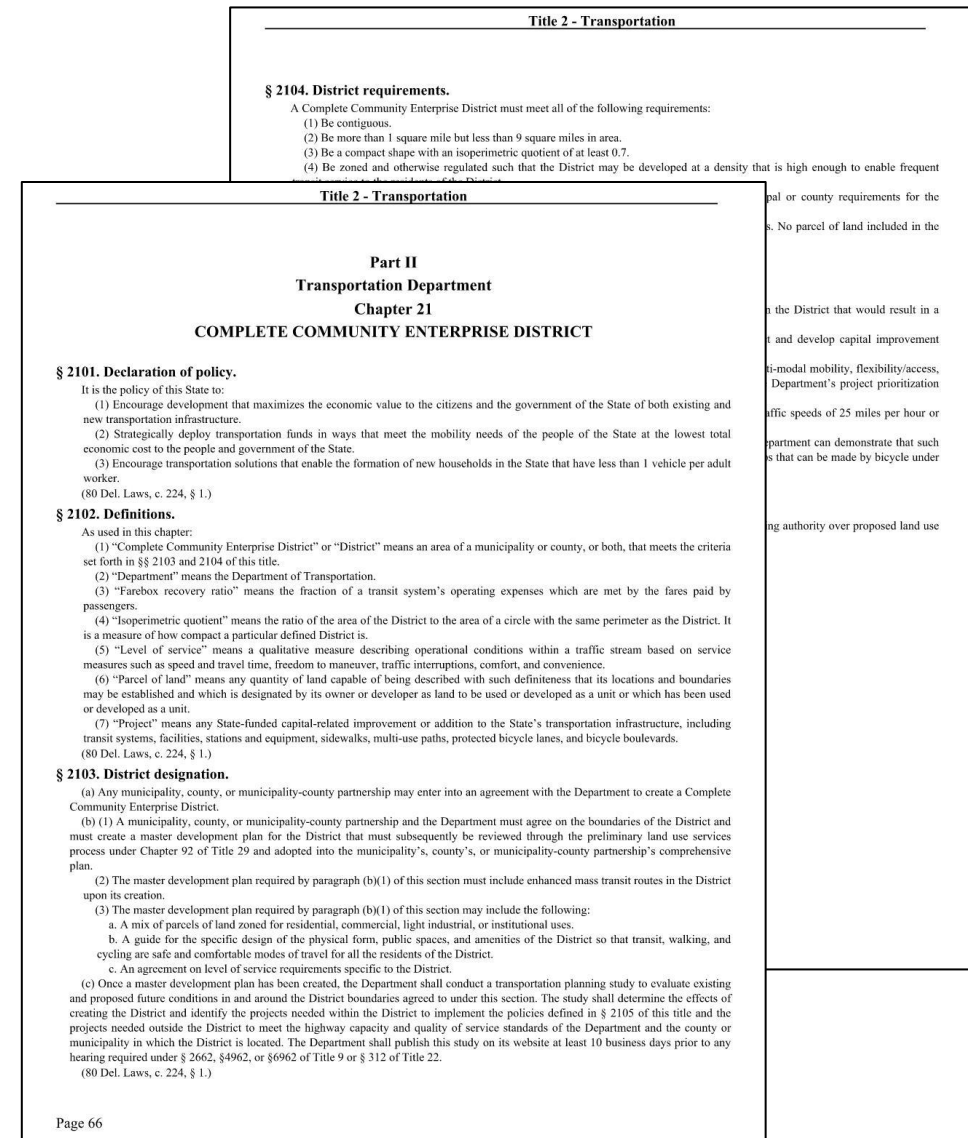
Complete Community Enterprise District (CCED) – What is it?

■ Definition

- A geographic area defined to create transit-oriented development districts
- Defined in Chapter 21 of Title 2 Delaware Code

■ Purpose

- Encourage “complete communities” that are transit-friendly, walkable, and bikeable
- Encourage transportation improvements that can support reduced auto ownership
- Promote economic development



Requirements of a CCED

- Be contiguous and compact
- Be more than 1 square mile but less than 9 square miles
- Zoned at a density high enough to enable frequent transit service
- Contain more area zoned for residential use than commercial uses
- May not contain any parcel zoned commercial regional
- Exempt from any municipal or county parking requirements
- Enhanced Mass Transit Routes
- Reduced Travel Speeds (Goal of 25 mph or less)
- Limited Roadway Capacity Expansion Projects

Why Consider a CCED?

- Promotes Intergovernmental Coordination
- Provides Multi-modal Mobility “Bonus” in DeIDOT Project Scoring
- Fosters Walkable, Bikeable, Transit-rich Development

May be appropriate for a smaller sub-area within Churchman’s Crossing

Advisory Committee Consideration – Discussion Topic #2

What are your thoughts on using one, or both, of the potential new implementation strategies, in addition to the “business-as-usual” approach to land use and transportation in Churchman’s Crossing?

“Business-as-usual” Approach

- » Future land use and zoning
- » Subdivision and building regulations
- » Concurrency (adequate public facilities)

New Tools

- » Transportation Improvement Districts (TIDs)
- » Complete Community Enterprise Districts (CCEDs)

Listening Tour
7/2020 – 9/2020

VIRTUAL COMMUNITY WORKSHOP
9/16/20

Scenario Planning

Advisory Committee Meeting 12/2/20

VIRTUAL ALTERNATIVES WORKSHOP
3/3/2021

We are here

Model Land Use and Transportation Alternatives

SPRING 2021 Technical Analysis Workshop

Develop Preferred Concept Plan

SUMMER 2021 Preferred Concept Plan

FALL 2021 Submit Final Report

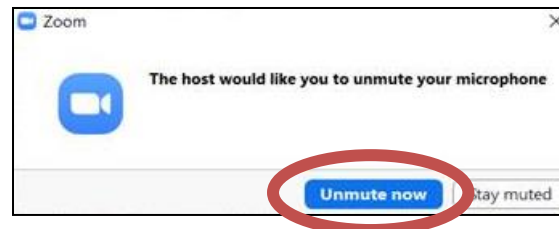
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