

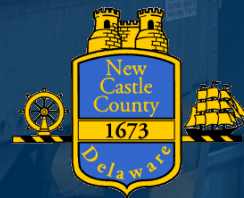
# Churchman's Crossing Plan Update

## Public Workshop #3

June 23, 2021



**WILMAPCO**





# WELCOME!

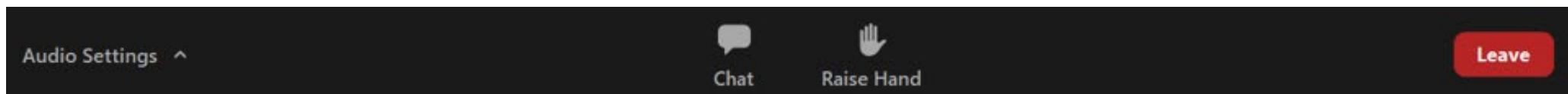
## Public Workshop #3: Churchman's Crossing Plan Update



# Virtual Workshop Housekeeping

## Some helpful hints for tonight's virtual workshop:

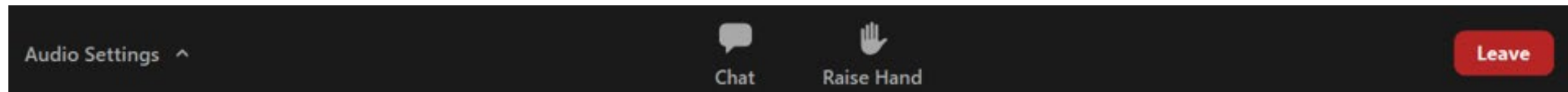
- The **Zoom Webinar Menu Bar** (on a computer) appears at the bottom of the Zoom window once the workshop begins. If you don't see the menu bar, move your mouse slightly and the bar will re-appear. The bar disappears after a few seconds when in full-screen mode.
- Note that **you are muted and without video by default**. You can ask questions via the **Chat** box. The host and panelists will monitor these questions throughout the evening.
- For **dial-in participants**, to participate during the question-and-answer period after the presentation, please press **\*9 to Raise/Lower Hand** and press **\*6 to Mute/Unmute**.



# Virtual Workshop Housekeeping

## With the Zoom Webinar Menu Bar you can do the following:

1. **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).
2. **Chat.** During the presentation, you can submit questions and feedback using the “Chat” feature. The host and panelists will monitor the chat and answer questions following the presentation.
3. **Raise Your Hand.** Use the “Raise Hand” button for audience participation. Once raised, the button will change to “Lower Hand”, which can be selected once you have been recognized.
4. **Leave the Workshop.** To leave the virtual workshop, click the “Leave” button.



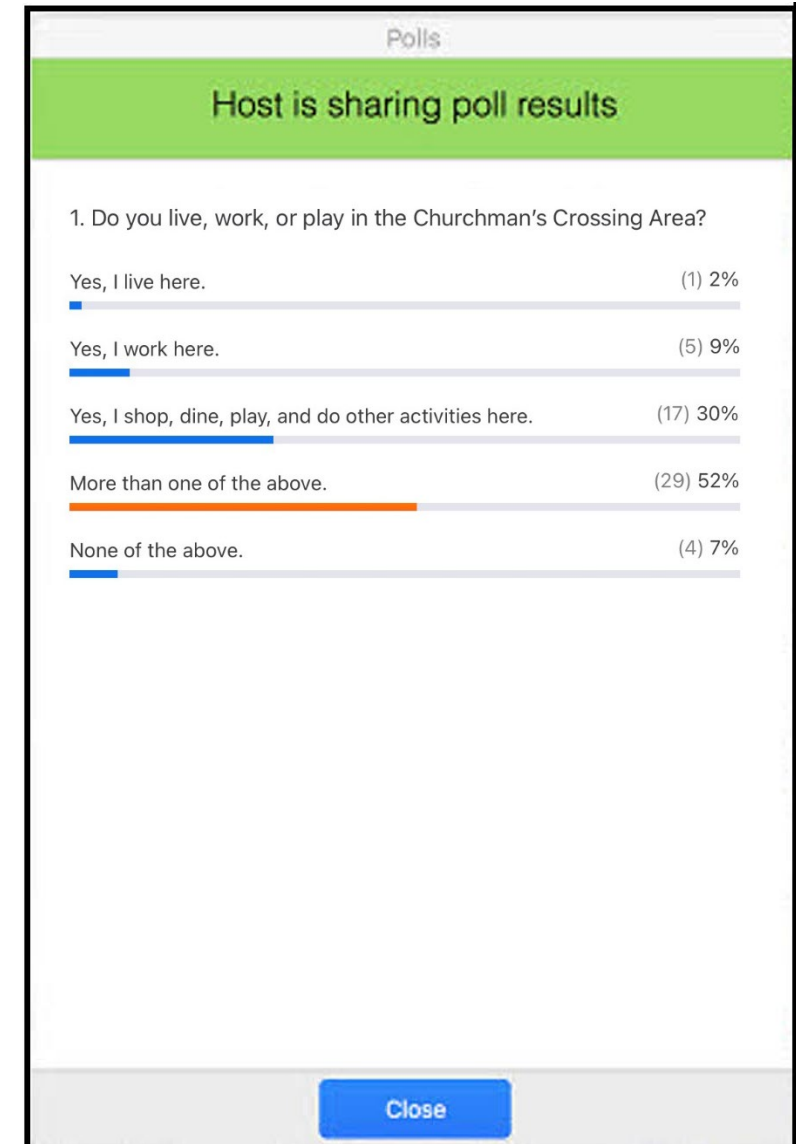


# Poll Questions

We will be posing questions to participants throughout tonight's presentation.

Everyone is encouraged to participate by selecting answers in the pop-up polling window using the Zoom app (not available for dial-in participants).

We will use the results to help develop transportation and land use recommendations.



# Stay Connected

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We are committed to keeping you informed about this important plan update:

- Project website: <http://www.wilmapco.org/Churchmans/>
- Comment form: <https://forms.gle/x6PTVX7pJGkuaEig7>
- For questions, comments, or to sign up for project email updates, email Randi Novakoff at [rnovakoff@wilmapco.org](mailto:rnovakoff@wilmapco.org)
- To reach project co-manager Dave Gula
  - Email: [dgula@wilmapco.org](mailto:dgula@wilmapco.org)
  - Phone: 302-737-6205 ext. 122

# Agenda

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- 5:00 – 5:30pm      *Meeting Sign in/Log in*
- 5:30 – 6:45pm      Presentation
- 6:45 – 7:30pm      Q&A



# Agency Partner Statements / Introductions

Dan Blevins  
WILMAPCO



Marc Cote  
DeIDOT



Andrea Trabelsi, AICP  
New Castle County  
Department of Land Use



# Tonight's Presenters

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Jim Burnett  
RK&K



Mark Tudor  
RK&K



Dan Hardy  
Renaissance Planning





# Purpose of Tonight's Workshop

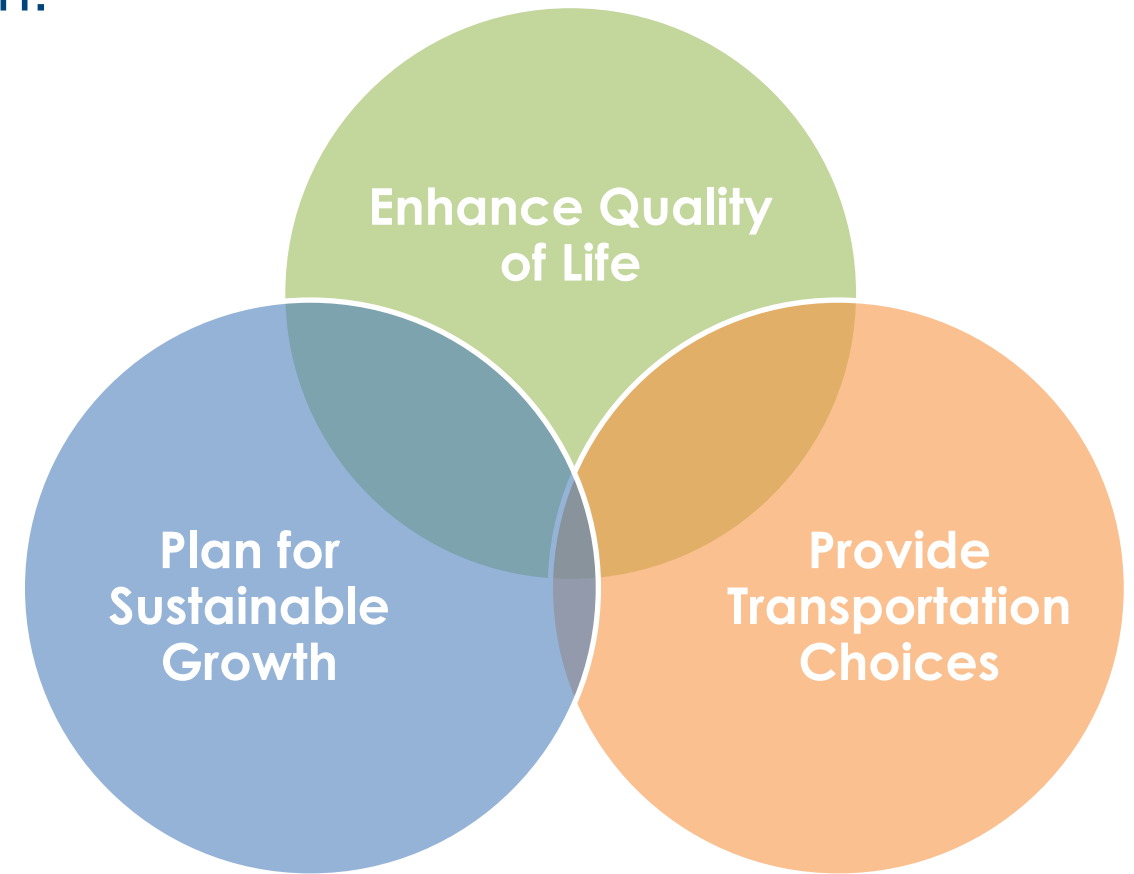
- Provide an overview of the project and update on progress since the last Virtual Workshop held on March 3, 2021
- Present analysis results and preliminary transportation project recommendations
- Share potential implementation strategies
- Seek feedback on preliminary recommendations on the Churchman's Crossing Plan update





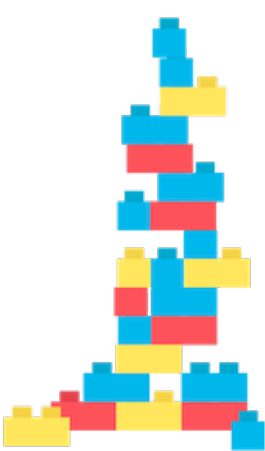
# Churchman's Crossing Plan Update

- Update the original 1997 Churchman's Crossing Study
- Updated plan will include recommendations on:
  - Transportation improvements
  - Land use strategies
- Based on input from:
  - Scenario planning results
  - Public agency partners
  - Advisory Committee
  - Public workshops

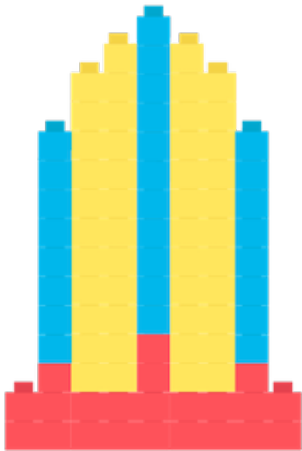


# Why Do We Need to Update the Plan?

- Confirm the guiding vision for the future
- Coordinate development/re-development
- Coordinate and time infrastructure needs
- Leverage resources to maximize results



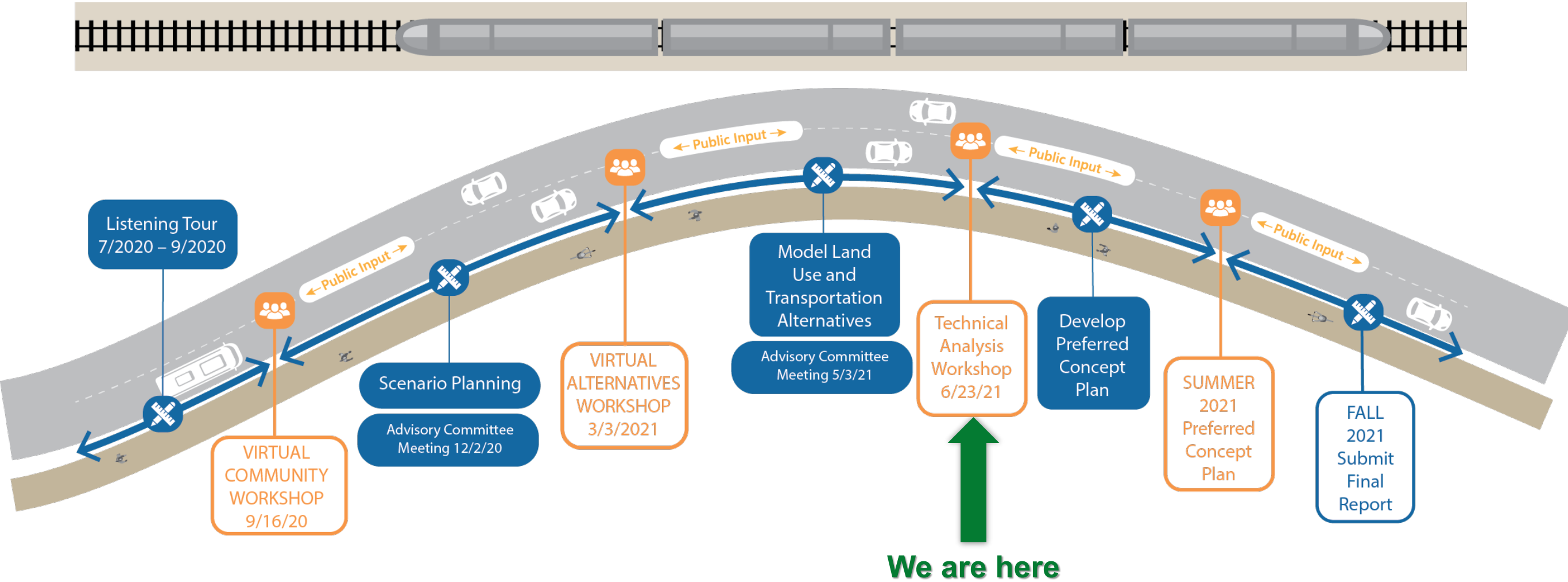
**Without Blueprints**  
Without public involvement



**With Blueprints**  
With public involvement

Without a Plan	With a Plan
<ul style="list-style-type: none"><li>• Public infrastructure / spending may lag or be spent before facilities are needed</li><li>• Re-development/development is haphazard or unpredictable</li><li>• Impacts / consequences are random</li></ul>	<ul style="list-style-type: none"><li>• Public infrastructure / spending is aligned with need (efficient)</li><li>• Re-development/development efforts can benefit from each other with intention and predictability</li><li>• Better understanding of the consequences of actions</li></ul>

# Timeline





# Materials Available on Website

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- Recordings and materials from previous Virtual Public Workshops and Advisory Committee Meetings
- Topic-specific clips
  - Recommended Land Use Forecast – Balanced Land Use
  - Transportation Alternatives for consideration
  - Transportation Project Evaluation Criteria
- Other supporting technical documents
- Comment form

**<http://www.wilmapco.org/Churchmans/>**

# Recommended Land Use Forecast – Balanced Land Use

- **Current**

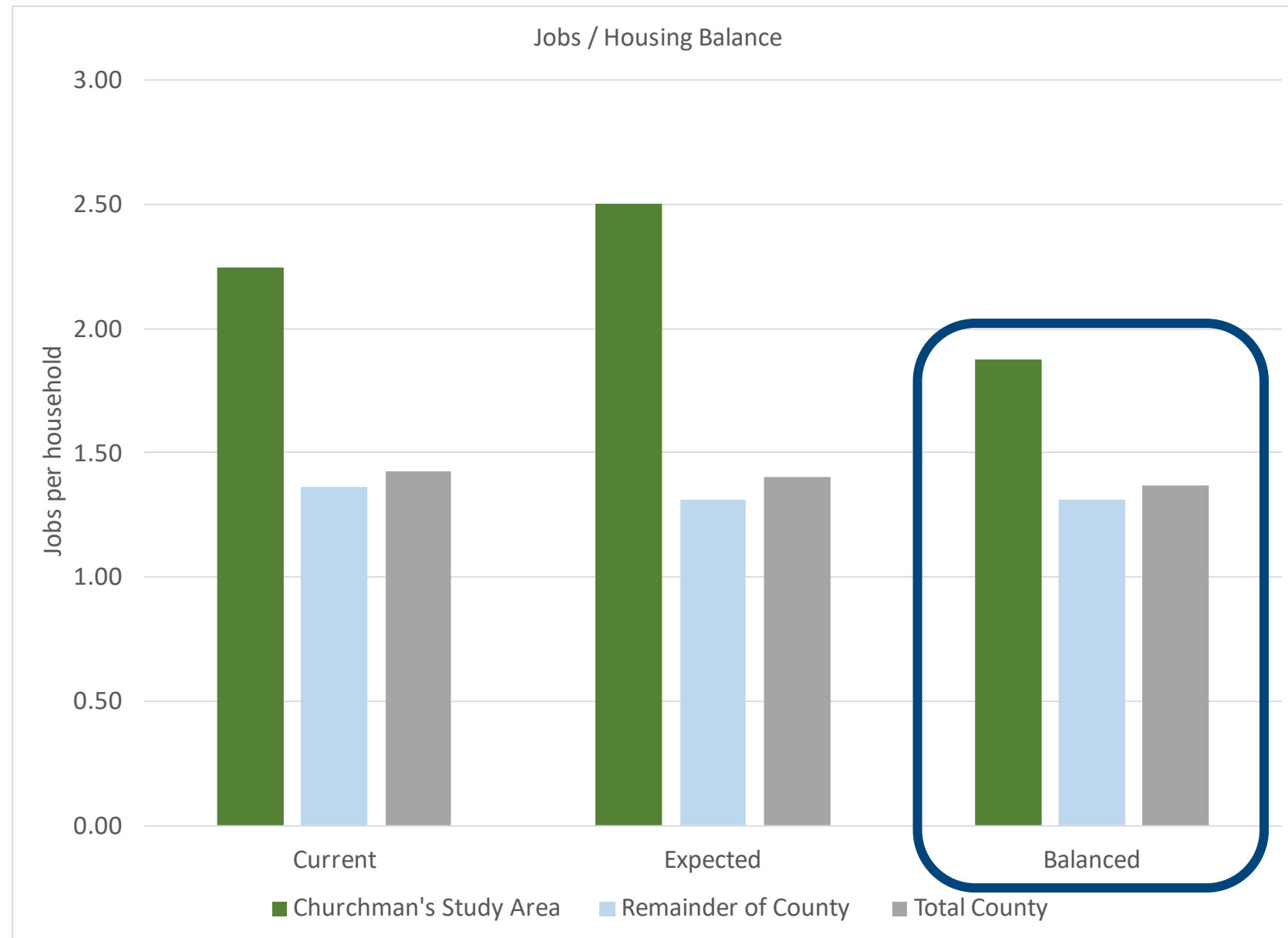
- Built / occupied in 2019

- **Expected**

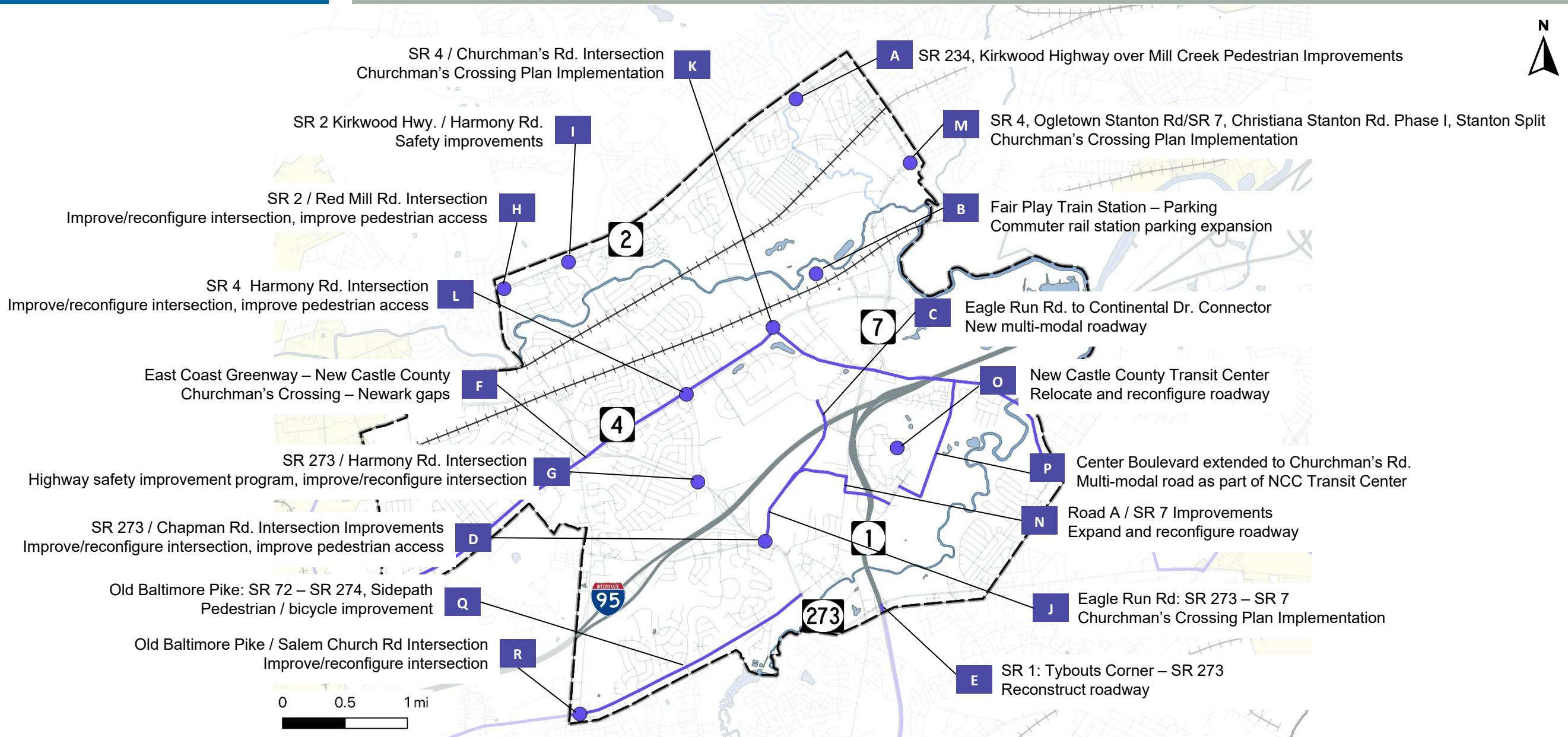
- Considers growth already in development or expected to occur based on regional econometrics

- **Balanced**

- Considers strategic intensification of mixed-use centers to improve the mix of uses

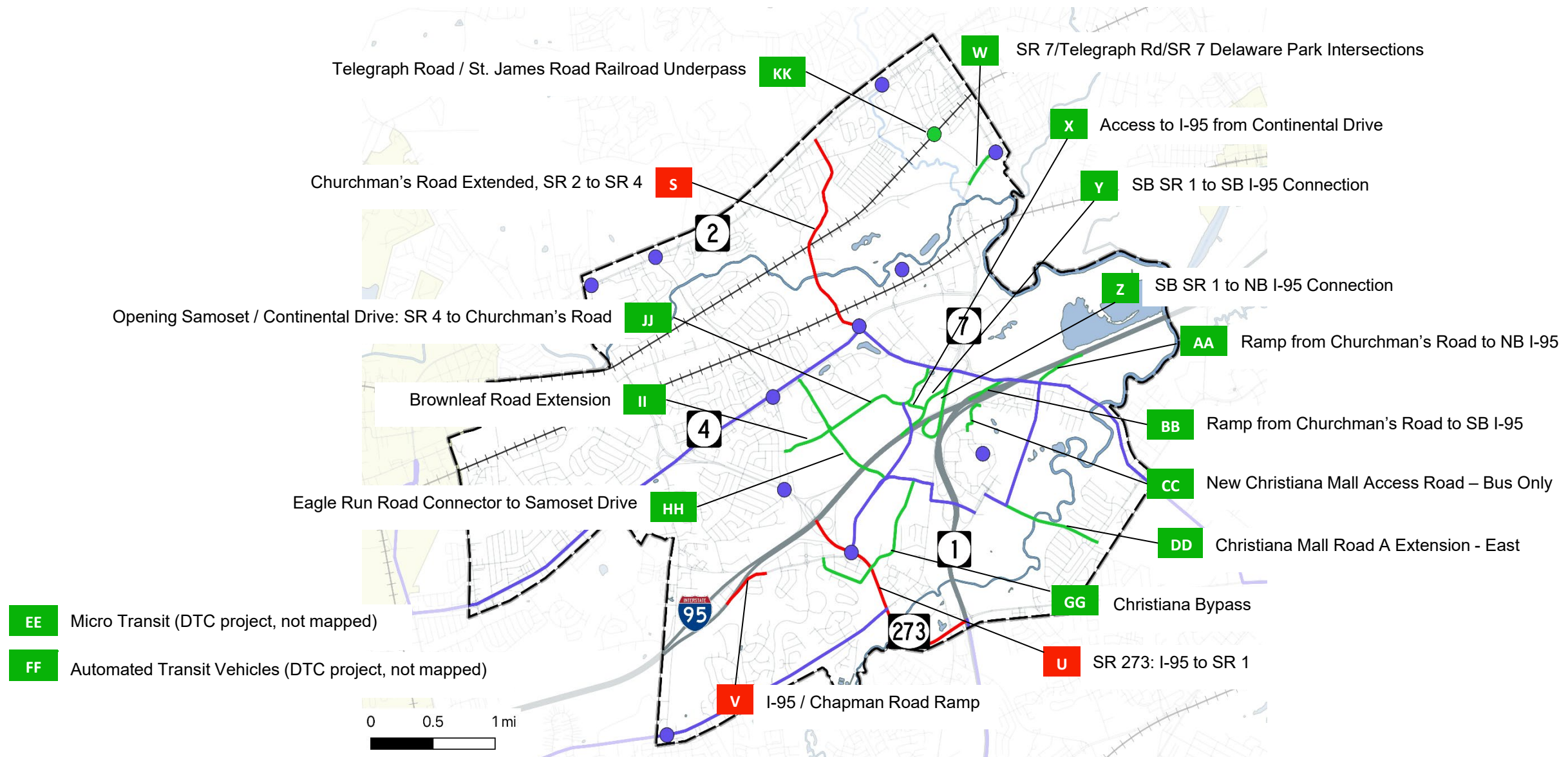


# Transportation Alternatives – RTP Financially Constrained List

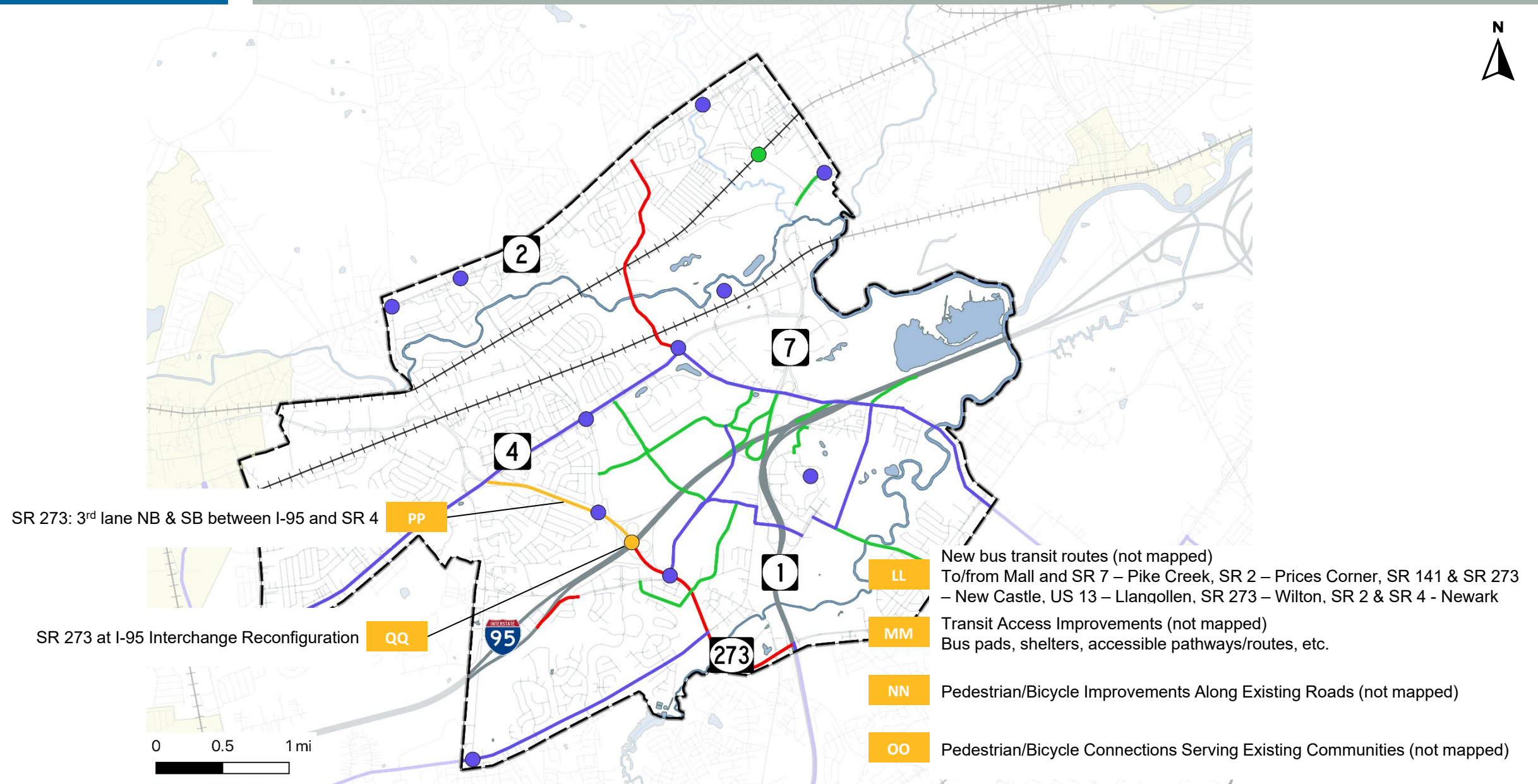




# Transportation Alternatives – RTP Aspirations List + Others



# Transportation Alternatives – Additional Projects for Evaluation



# Evaluation Matrix



## Churchman's Crossing Study PROJECT CRITERIA SUMMARY



		FUNDED	RTP ASPIRATIONS				ADDITIONAL PROJECTS																			
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 Mall and SR 7 - Pike Creek, SR 2 - Prices Corner, SR 141 & SR 273 - New Castle, US 13 - Llangollen, SR 273 - Wilton, SR 2 & SR 4 - Newark	Comments: Bus pads, ways/routes, etc.	Comments: Along roads	Sections Serving communities	SB between I-95	Interchange location
Map		A-R	S	U	V	W	X	Y	Z	AA	BB	CC	DD	GG	HH	II	JJ	KK	EE	FF	LL					
CRITERIA	Connectivity																									
	Extent of Effect – Person Miles Traveled																									
	Congestion																									
	Transit Enhancement Opportunities																									
	Mode Share																									
	Bicycle & Pedestrian Level of Traffic Stress																									
	Economic Development / Re-Development Opportunities																									
	Safety																									
	Constructability / Engineering / Legal																									
	Natural Environment Impacts																									
	Cultural / Historic Resource Impacts																									
	Noise / Property Impacts																									



# Evaluation Criteria

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- **Connectivity**

- Extent of Effect – Person Miles Traveled

- **Congestion**

- Transit Enhancement Opportunities
- Mode Share

- **Bicycle & Pedestrian Level of Traffic Stress**

- Economic Development / Redevelopment Opportunities

- **Safety**

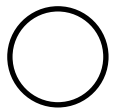
- **Constructability / Engineering / Legal**

- Natural Environment Impacts
- Cultural / Historic Resource Impacts
- Noise / Property Impacts

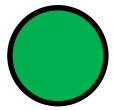


# Evaluating Connectivity

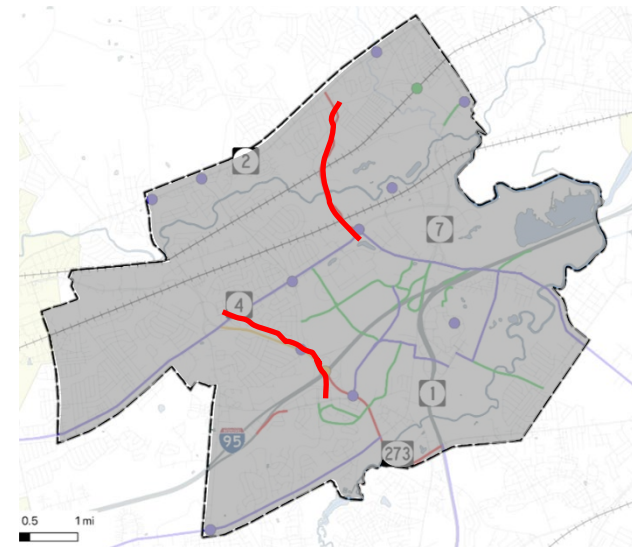
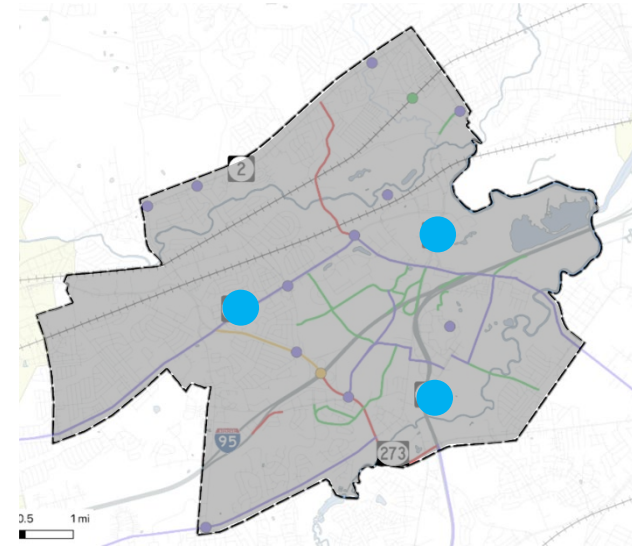
- Does the project create new connections?



No new connections

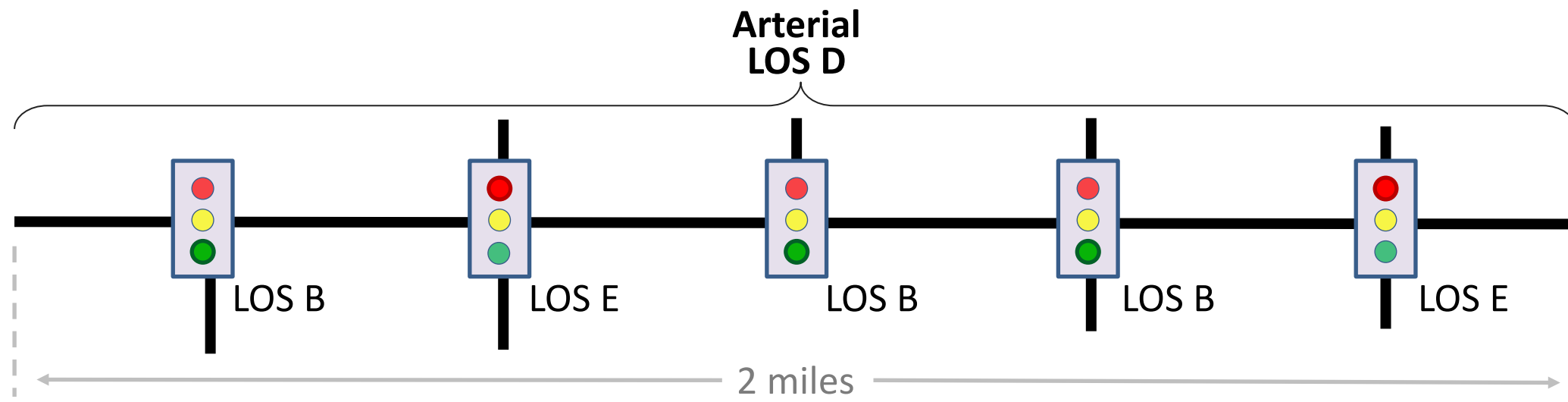


New high-quality connections



# 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?



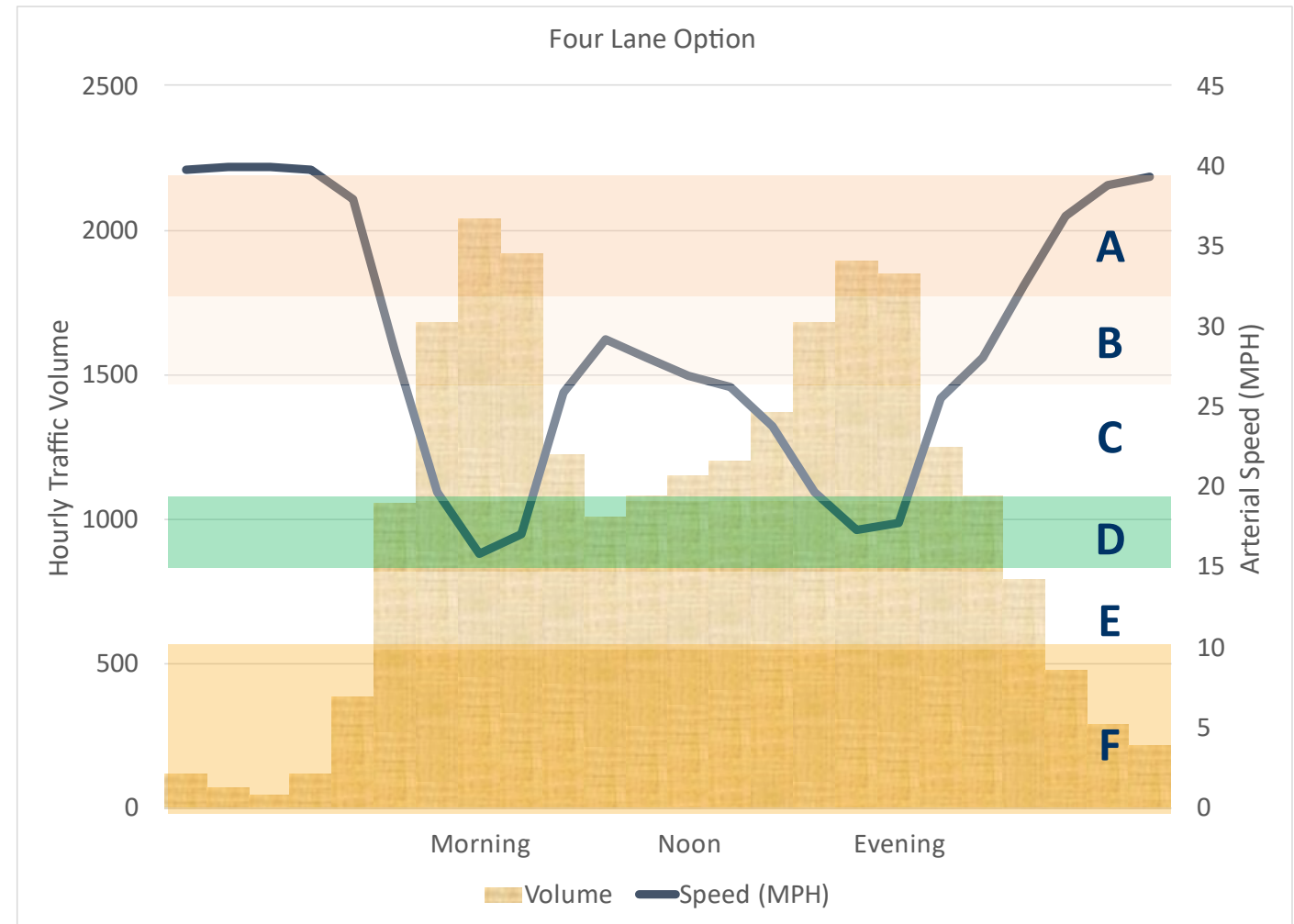
**Arterial Mobility: LOS F  
Thriving Economy?**



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

# Evaluating Congestion – Hypothetical Example

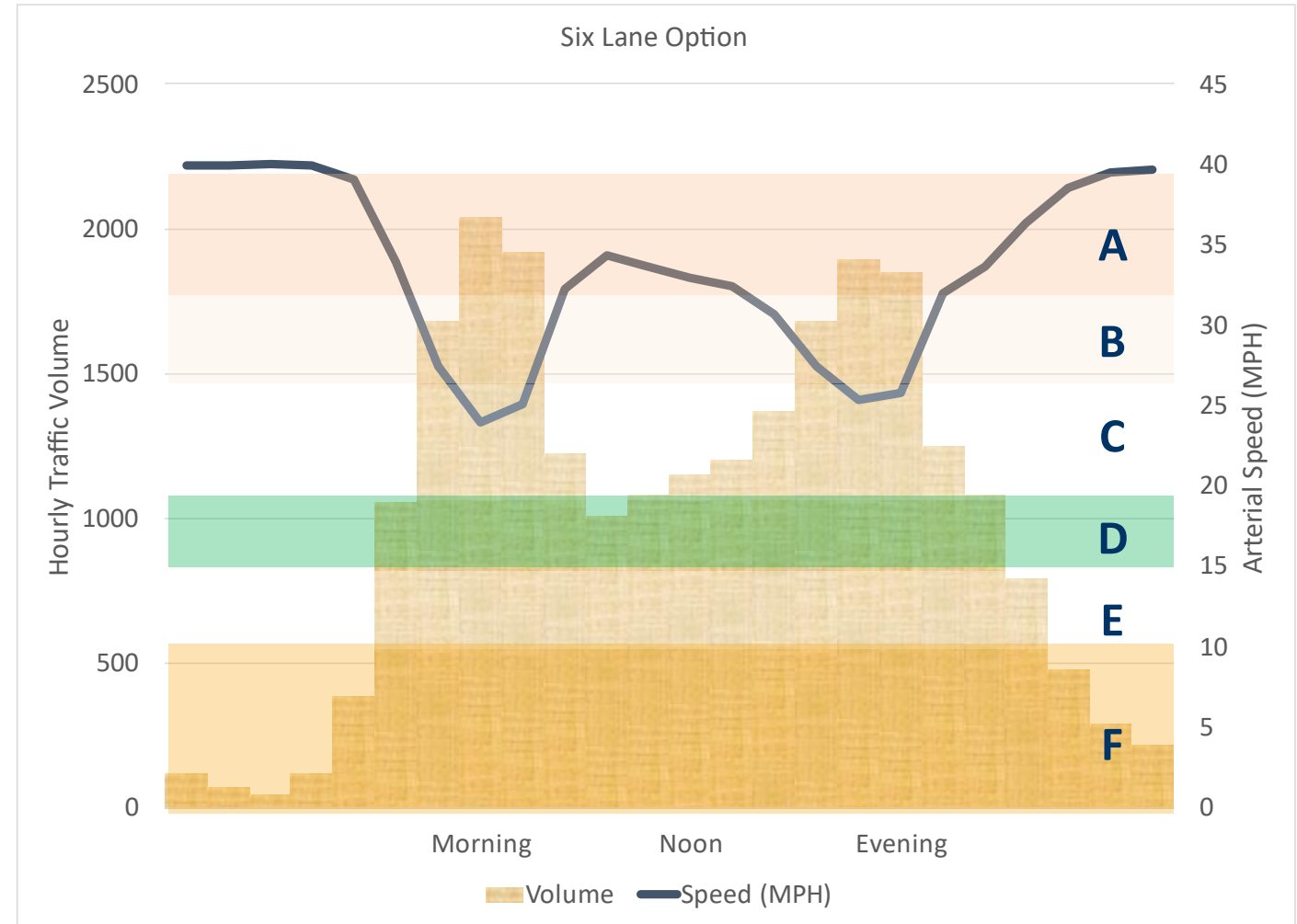
- How much traffic is the right amount? Consider: Time of Day
- Hypothetical roadway - 4 lanes
- 1 mile in length
- 44,000 daily volume
- LOS D in peak periods
- 1080 daily VHT
- 12 acres of ROW
- 8 acres of pavement
- 75' crosswalk





# 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

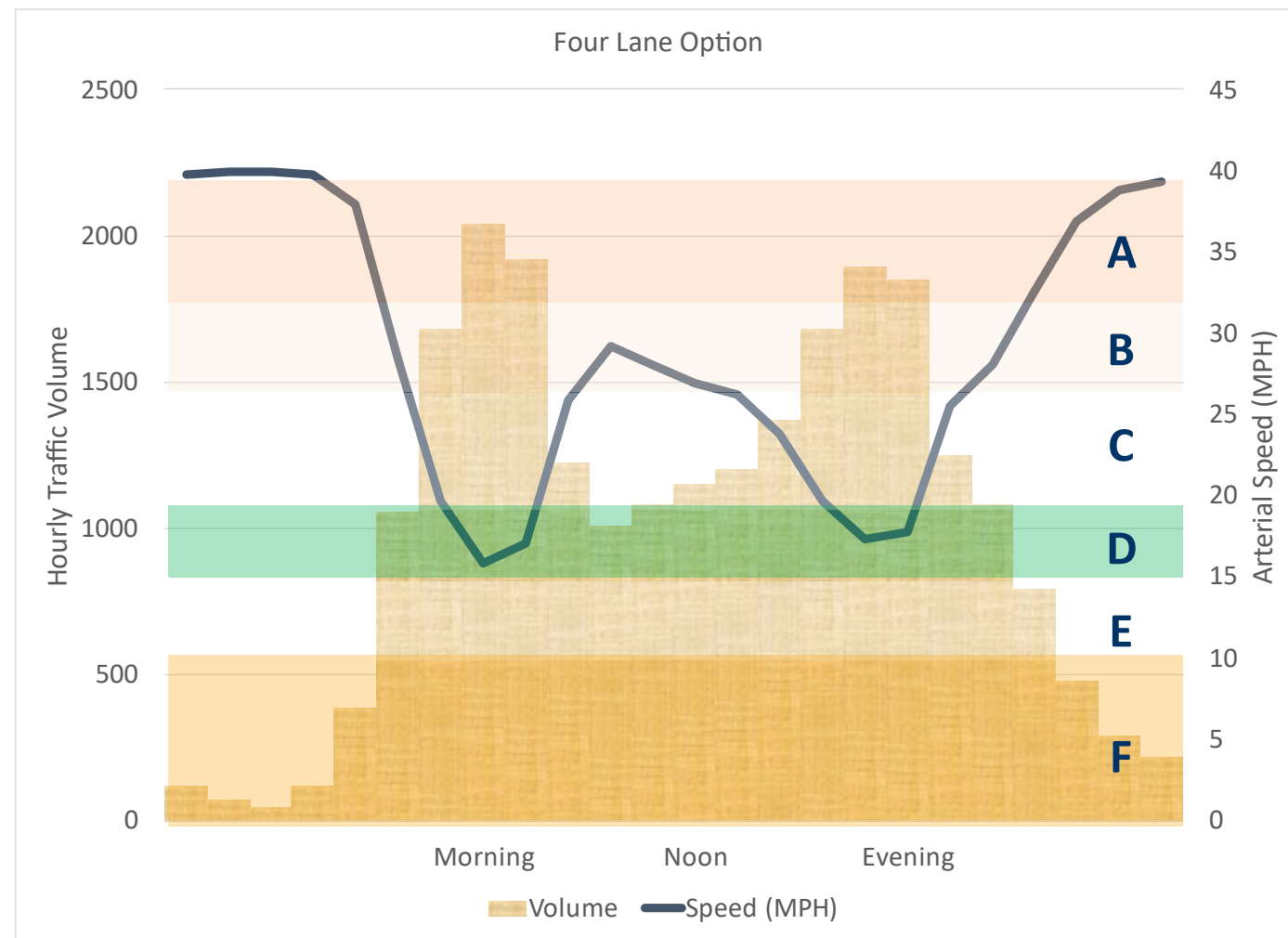




# Evaluating Congestion

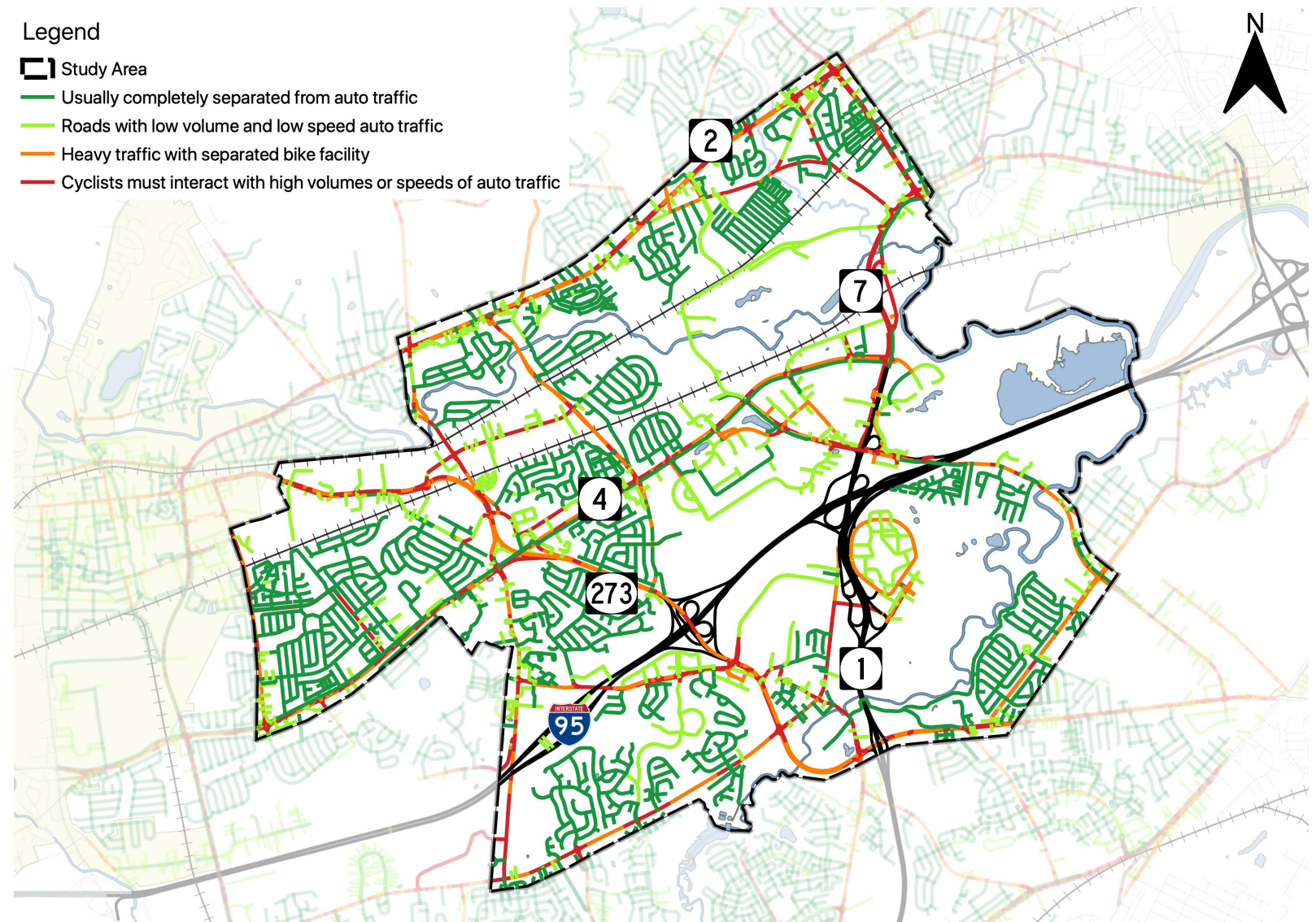
- How much traffic is the right amount?

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



# Evaluating Bicycle & Pedestrian Level of Traffic Stress

- Bicycle & Pedestrian Level of Traffic Stress Evaluations

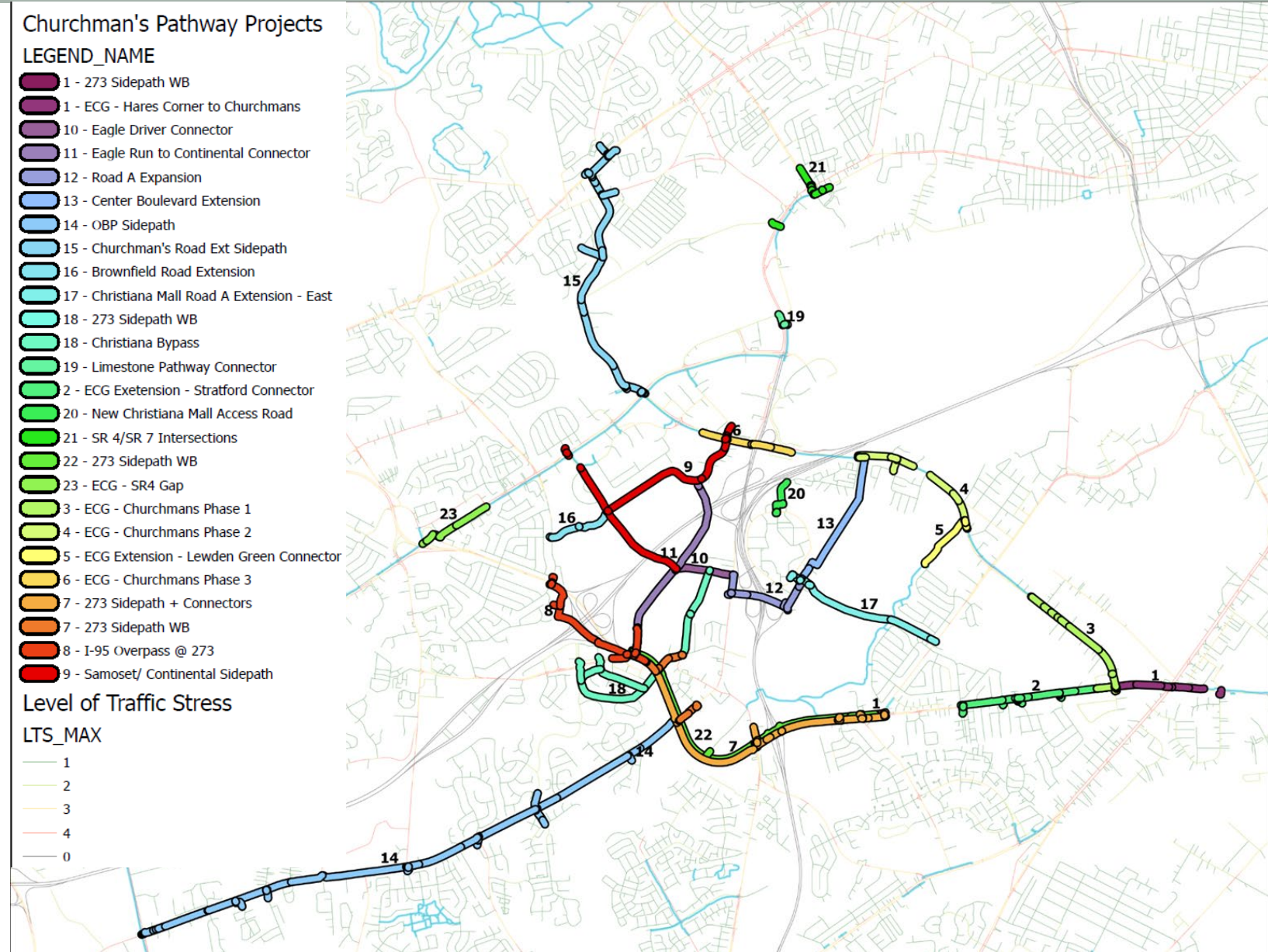


Churchman's Crossing Existing Bicycle Level of Traffic Stress



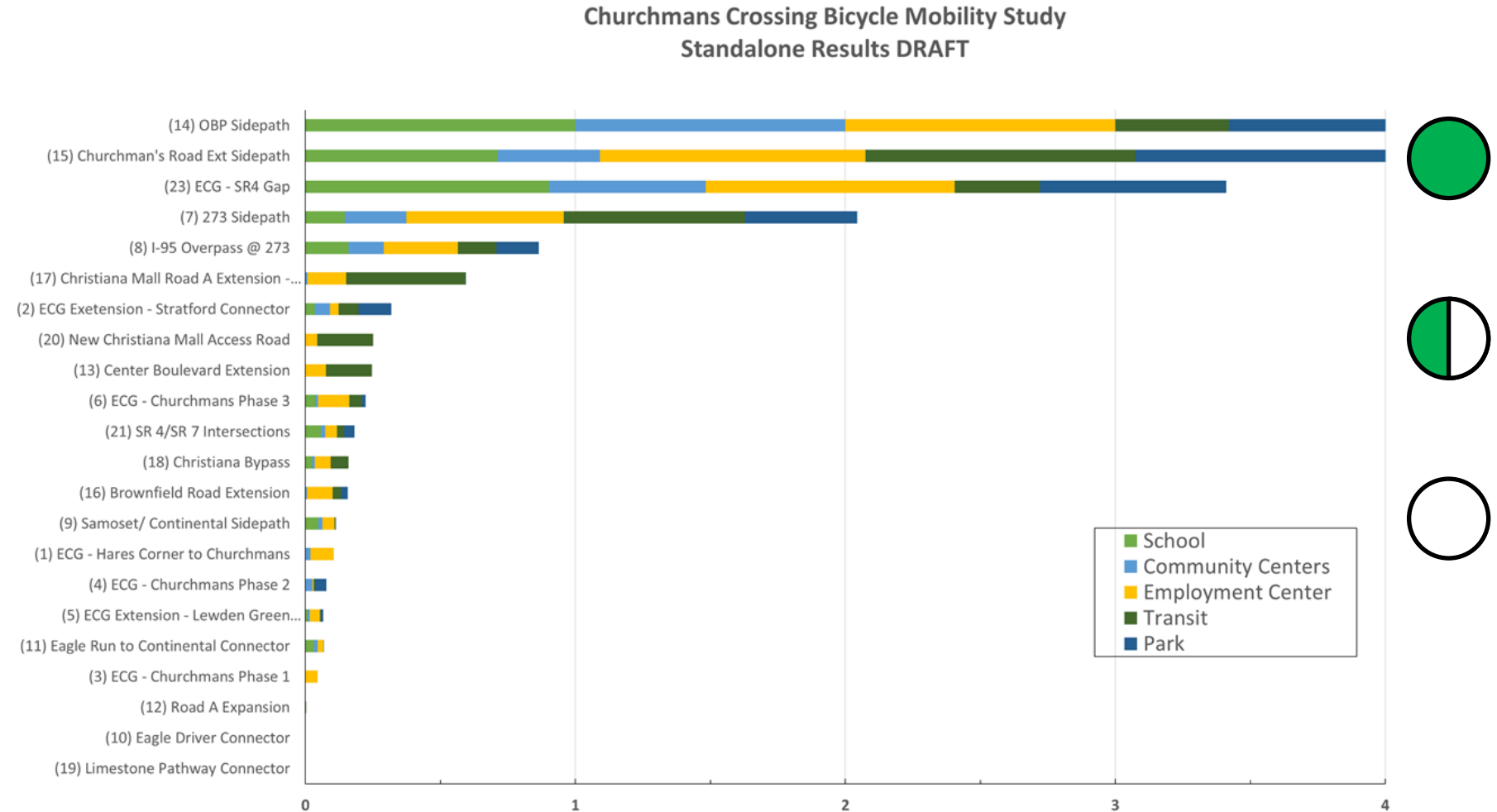
# Evaluating Bicycle & Pedestrian Level of Traffic Stress

- Bicycle & Pedestrian Level of Traffic Stress Evaluations
- Considers connectivity to
  - Schools
  - Community centers
  - Employment centers
  - Transit
  - Parks



# Evaluating Bicycle & Pedestrian Level of Traffic Stress

- Bicycle & Pedestrian Level of Traffic Stress Evaluations
- Considers connectivity to
  - Schools
  - Community centers
  - Employment centers
  - Transit
  - Parks





# 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



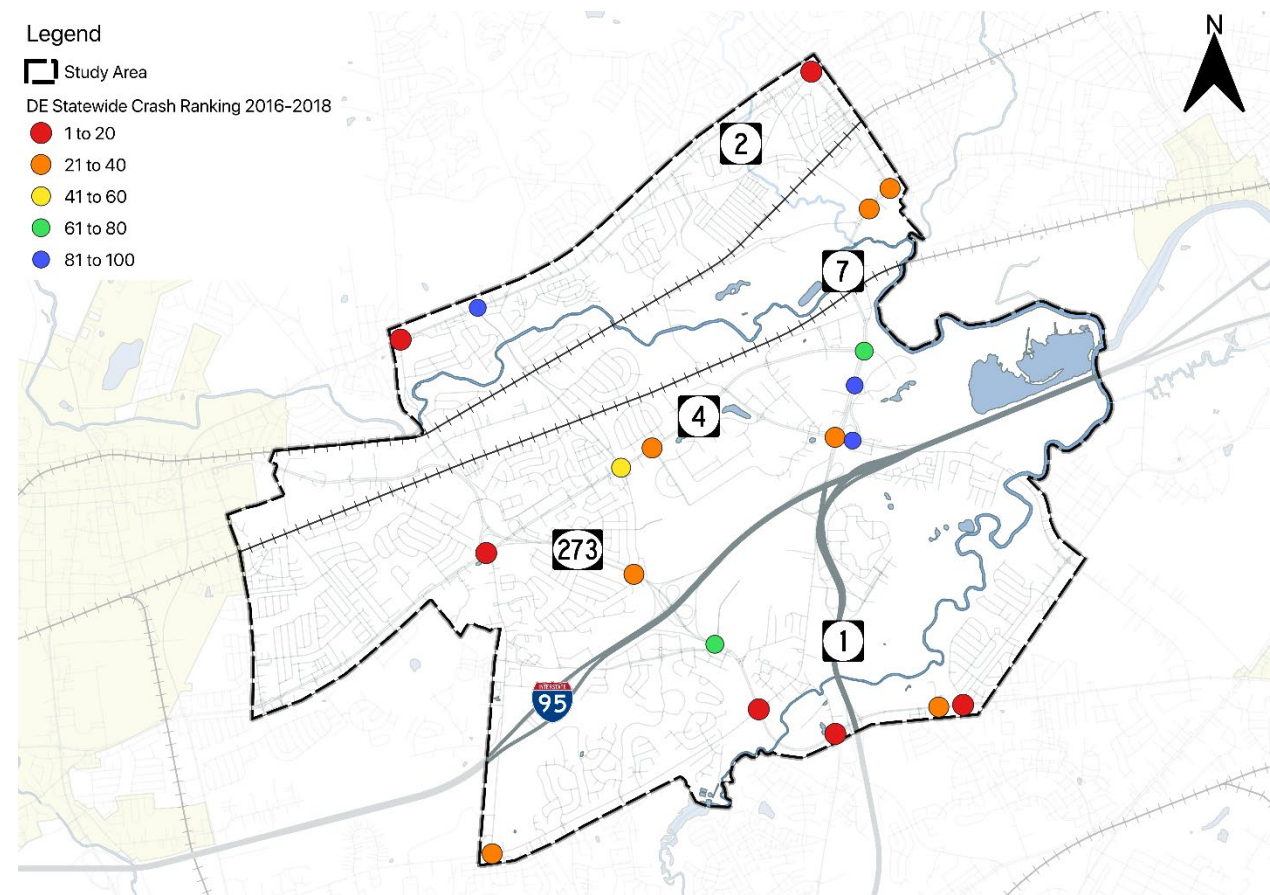
 Negatively impacts safety, particularly at intersections ranked worst in DE

Legend

 Study Area

DE Statewide Crash Ranking 2016–2018

-  1 to 20
-  21 to 40
-  41 to 60
-  61 to 80
-  81 to 100



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

# Evaluating Constructability / Engineering / Legal

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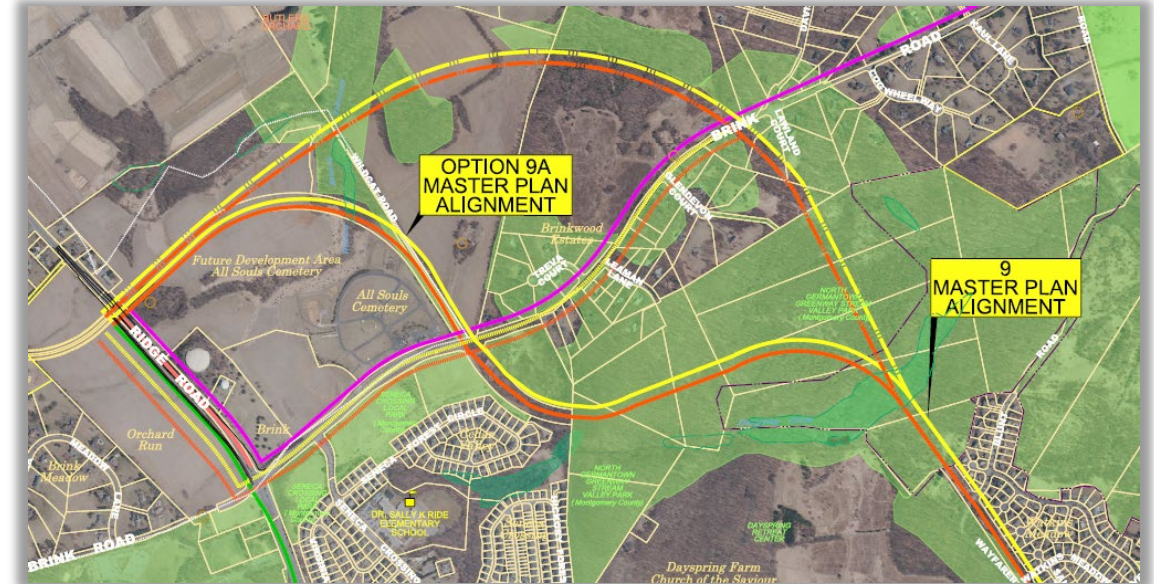
- Are there challenges to constructing the proposed improvement?

- ☐ Neutral
- ☒ Slightly challenging to build, some impacts to the traveling public during construction, potential for legal challenges
- ☒ Challenging to build, major impacts to the traveling public during construction, likely substantial legal challenges

# Considering Resource / Community Impacts

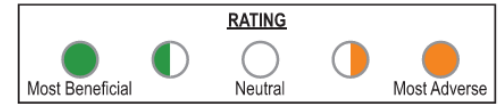
- Transportation Facility Screening (completed) – qualitative assessment
- Transportation Facility Assessment (final study phase) – GIS-level assessment of key resources
- Land Use Assessment (part of NCC@2050 scenario analysis to consider effects of land development regulations and/or incentives)

[NCC@2050 Summer Forum Tickets, Thu, Jul 15, 2021 at 6:00 PM](#)  
[| Eventbrite](#)





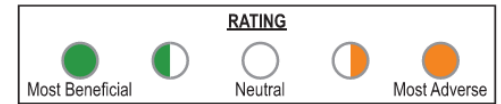
# Evaluation Matrix – Analysis Results



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Map		A-R	S	U	V	W	X	Y	Z	AA	BB	CC	DD	GG	HH	II	JJ	KK	EE	FF	LL	MM	NN	OO	PP	QQ	
CRITERIA	Connectivity		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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	Congestion		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Transit Enhancement Opportunities		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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	Safety		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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	Natural Environment Impacts		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Cultural / Historic Resource Impacts		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Noise / Property Impacts		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Cost		\$377.3M	\$85.0M	\$33.0M	\$3.8M	\$3.7M	\$2.5M	\$11.1M	\$1.9M	\$7.1M	\$25.0M	\$0.9M	\$34.0M	\$19.3M	\$54.0M	\$5.0M	\$7.2M	\$1.9M	\$0.5M	\$1.2M	\$6.0M	\$5.0M	\$10.0M	\$10.0M	\$40.0M	\$37.0M	

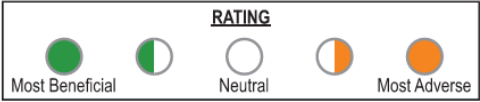


# Evaluation Matrix – Analysis Results



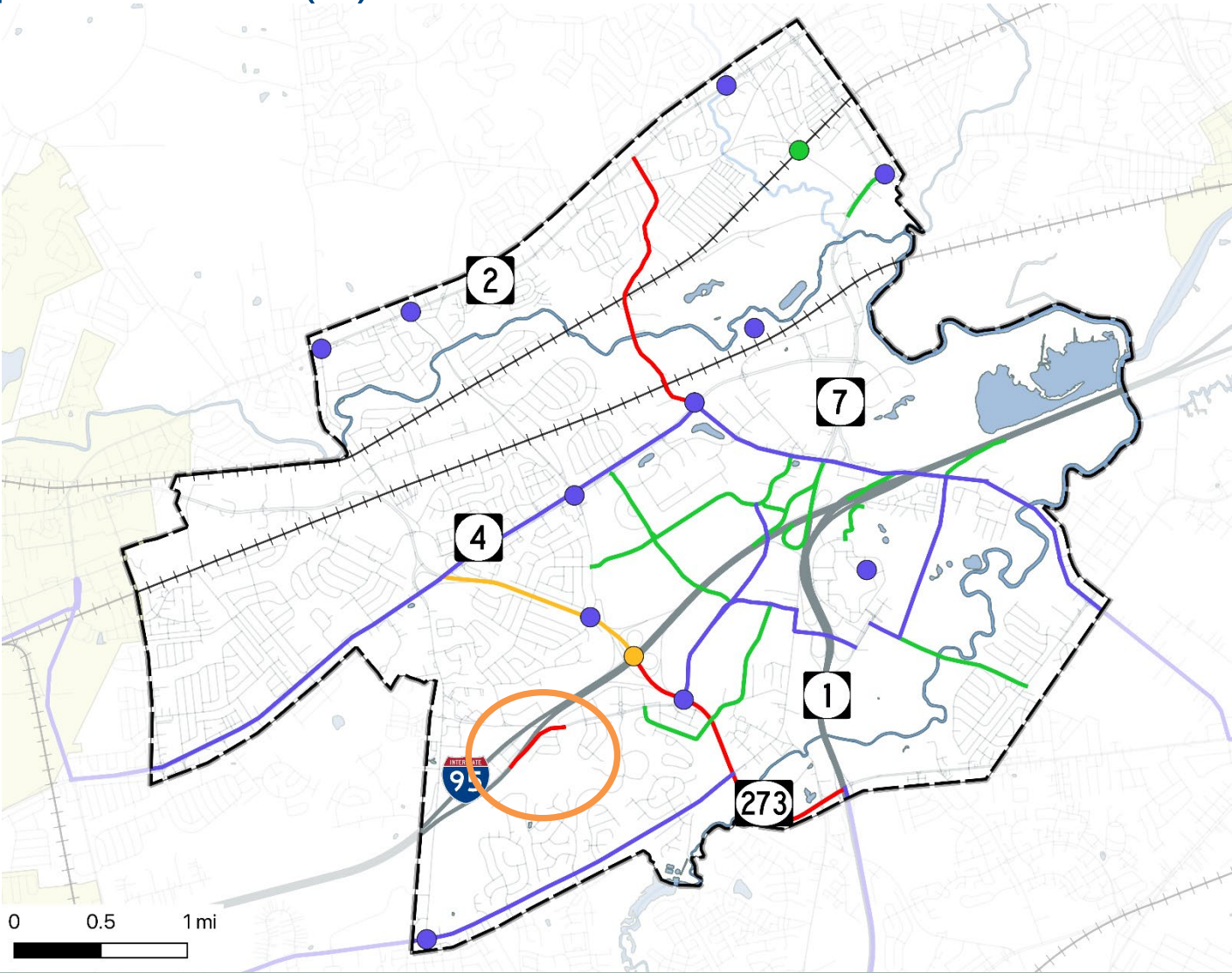
		FUNDED	RTP ASPIRATIONS				ADDITIONAL PROJECTS																			
Transportation Improvement Alternative		RTP Financially Constrained Improvements	Churchmans Road Extended, SR 2 to SR 4	SR 273: 3rd lane NB & SB between SR 1 and I-95	Northbound I-95 Ramp to Chapman Road	SR 7 Intersections: SR 7/Telegraph 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 Mall 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.	Pedestrian/Bicycle Improvements Along Existing Roads	Pedestrian/Bicycle Connections Serving Existing Communities	SR 273: 3rd lane NB & SB between I-95 and SR 4	SR 273 at I-95 Interchange Reconfiguration
Map		A-R	S	U	V	W	X	Y	Z	AA	BB	CC	DD	GG	HH	II	JJ	KK	EE	FF	LL	MM	NN	OO	PP	QQ
CRITERIA	Connectivity		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Extent of Effect – Person Miles Traveled		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Congestion		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Transit Enhancement Opportunities		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Mode Share		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Bicycle & Pedestrian Level of Traffic Stress		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Economic Development / Re-Development Opportunities		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Safety		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Constructability / Engineering / Legal		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Natural Environment Impacts		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Cultural / Historic Resource Impacts		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Noise / Property Impacts		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Cost		\$377.3M	\$85.0M	\$33.0M	\$3.8M	\$3.7M	\$2.5M	\$11.1M	\$1.9M	\$7.1M	\$25.0M	\$0.9M	\$34.0M	\$19.3M	\$54.0M	\$5.0M	\$7.2M	\$1.9M	\$0.5M	\$1.2M	\$6.0M	\$5.0M	\$10.0M	\$10.0M	\$40.0M	\$37.0M

# Evaluation Matrix – Projects Dropped from Consideration



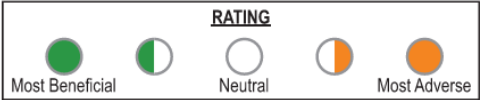
## Northbound I-95 Ramp to Chapman Road (V)

Transportation Improvement Alternative	
Northbound I-95 Ramp to Chapman Road	
Map	V
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
	Cost



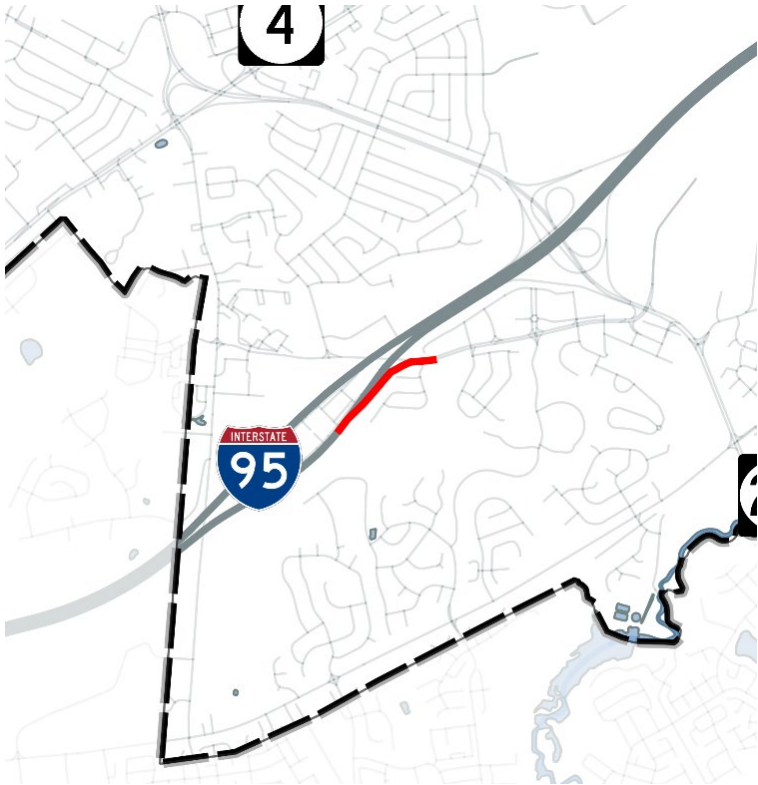


# Evaluation Matrix – Projects Dropped from Consideration



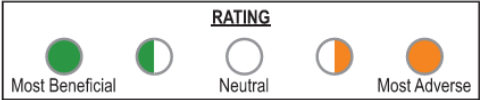
## Northbound I-95 Ramp to Chapman Road (V)

Transportation Improvement Alternative	
Northbound I-95 Ramp to Chapman Road	
Map	V
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	



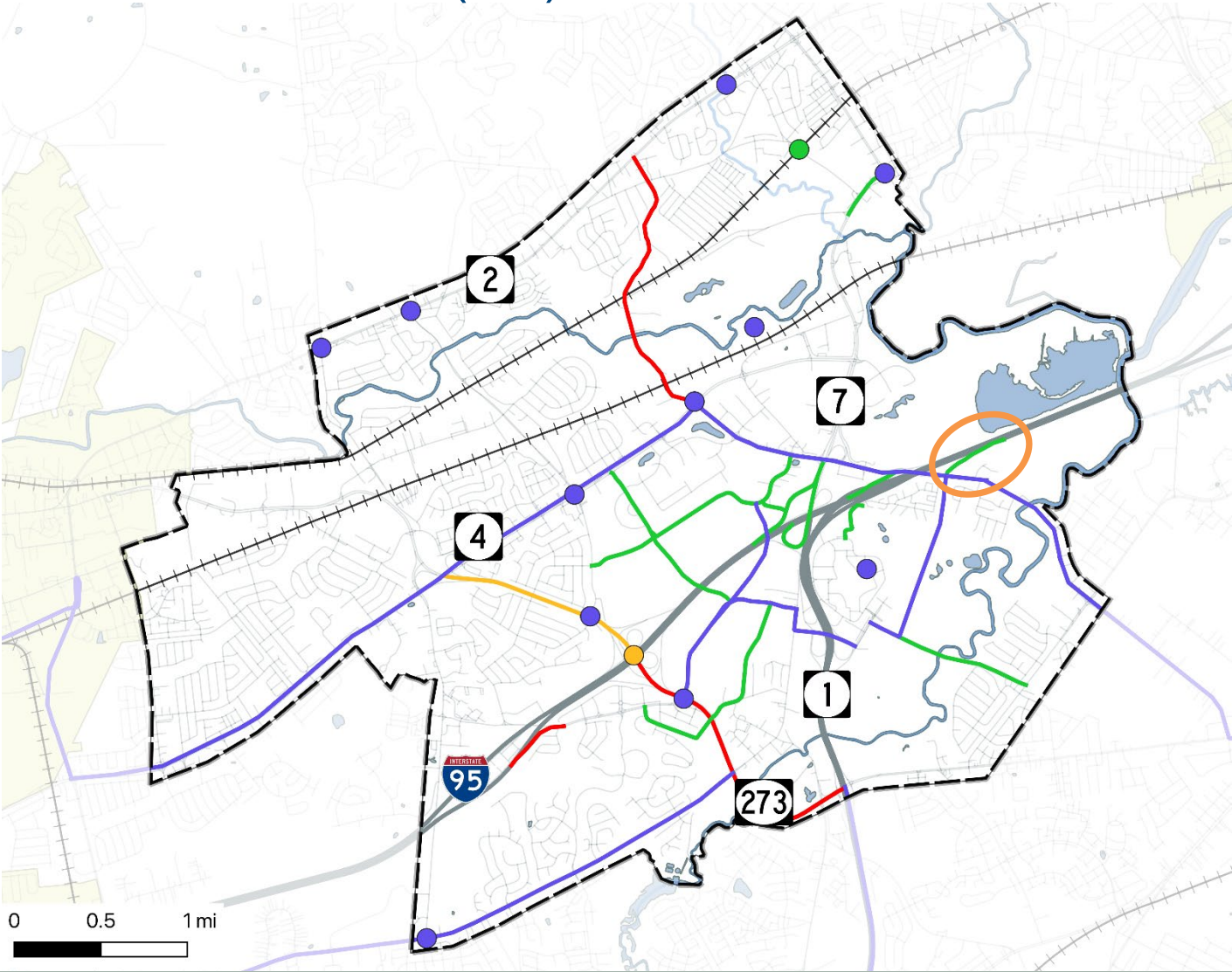
- Creates redundant movement to existing ramp at SR 273
- Projected to carry relatively low daily volume
- Additional interstate ramp between service plaza and SR 273 interchange creates more challenging driving environment for motorists along I-95 corridor

# Evaluation Matrix – Projects Dropped from Consideration



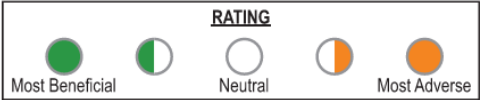
## Northbound I-95 Ramp from Churchman’s Road (AA)

Transportation Improvement Alternative	
Northbound I-95 Ramp from Churchmans Road	
Map	AA
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
	Cost















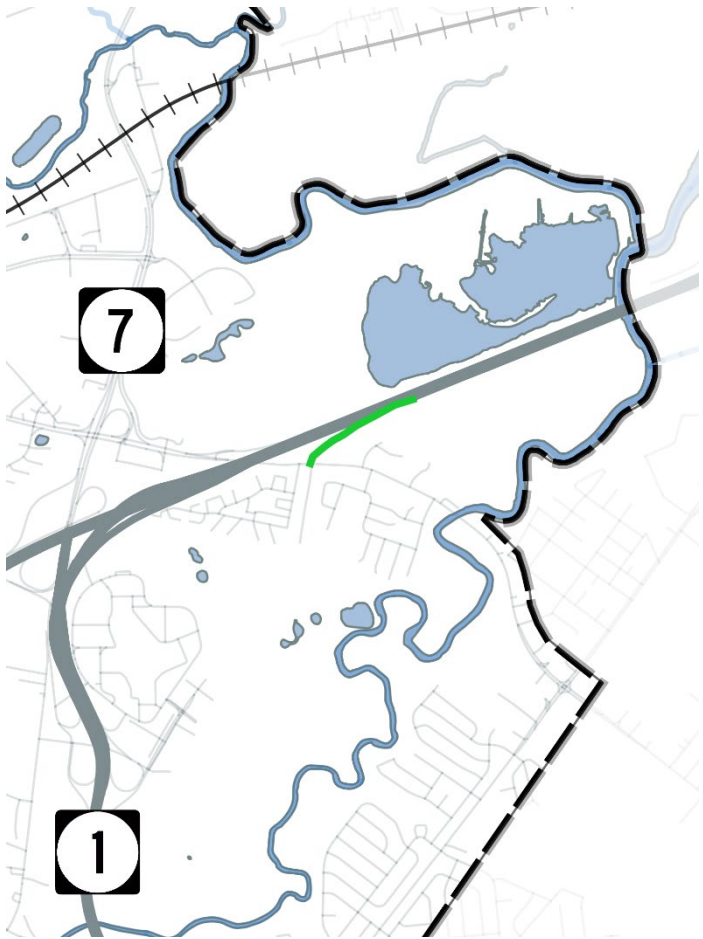


# Evaluation Matrix – Projects Dropped from Consideration



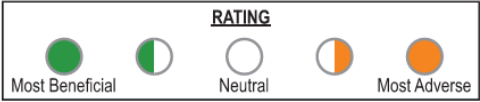
## Northbound I-95 Ramp from Churchman’s Road (AA)

Transportation Improvement Alternative		Northbound I-95 Ramp from Churchmans Road
Map		AA
CRITERIA	Connectivity	
	Extent of Effect – Person Miles Traveled	
	Congestion	
	Transit Enhancement Opportunities	
	Mode Share	
	Bicycle & Pedestrian Level of Traffic Stress	
	Economic Development / Re-Development Opportunities	
	Safety	
	Constructability / Engineering / Legal	
	Natural Environment Impacts	
	Cultural / Historic Resource Impacts	
	Noise / Property Impacts	
Cost		\$7.1M



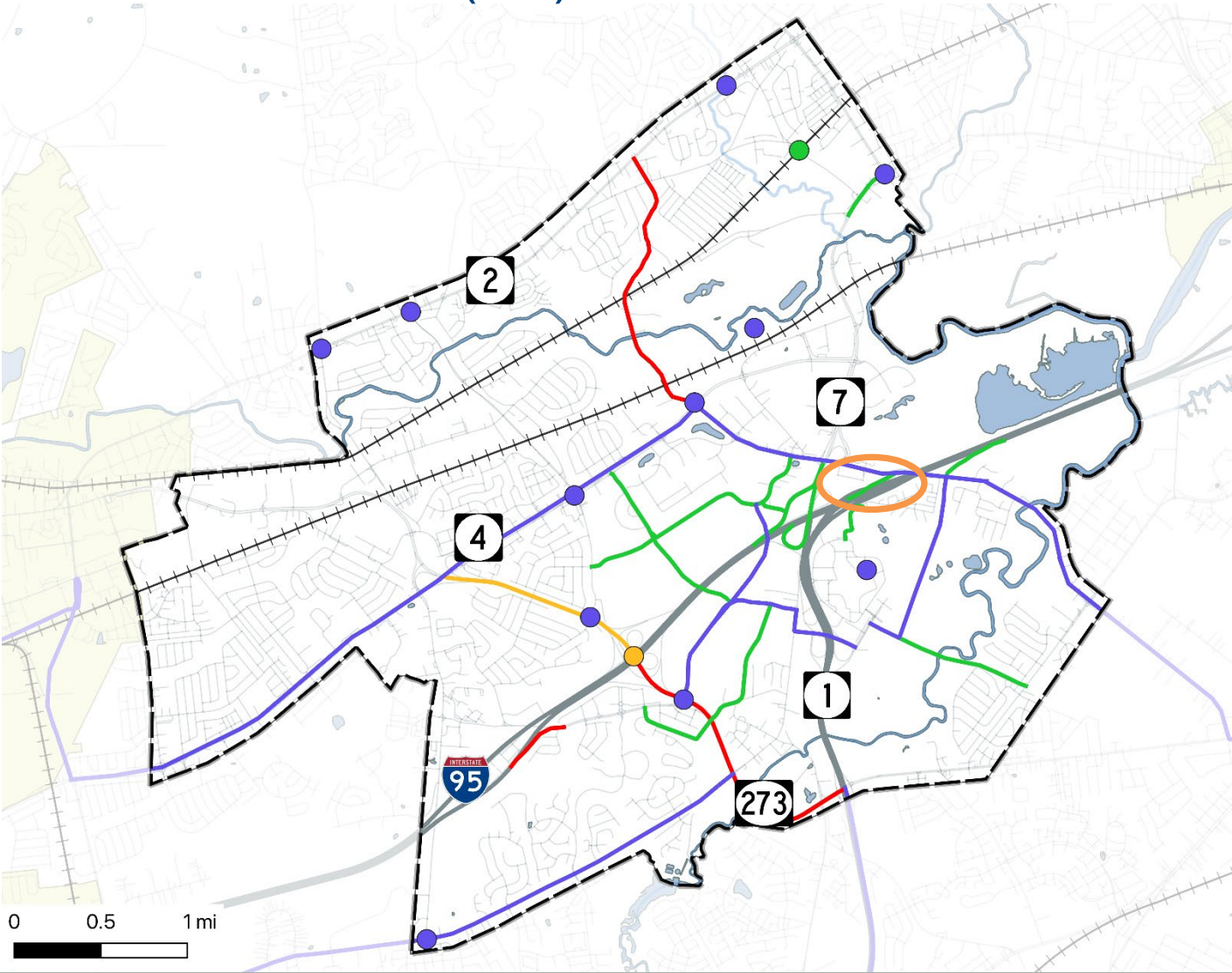
- Provides direct connection from Churchman’s Road east of I-95 and from mall area to I-95, reducing volume at Churchman’s Rd and SR 1 ramp intersections
- Creates new shorter weave between proposed ramp and major split for I-95/I-295
- With additional improvements to address long term needs on I-95, access to I-95 towards Wilmington and I-495 may ultimately be limited

# Evaluation Matrix – Projects Dropped from Consideration

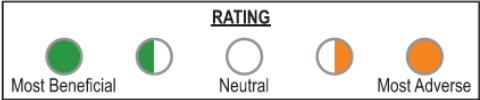


## Southbound I-95 Ramp from Churchman’s Road (BB)

Transportation Improvement Alternative	
Southbound I-95 Ramp from Churchmans Road	
Map	BB
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	
\$25.0M	



# Evaluation Matrix – Projects Dropped from Consideration



## Southbound I-95 Ramp from Churchman's Road (BB)

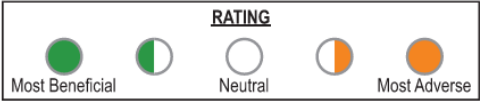
Transportation Improvement Alternative	
Southbound I-95 Ramp from Churchman's Road	
Map	BB
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	
\$25.0M	



- Reconfiguration of I-95 / SR 1 interchange precludes construction of this ramp

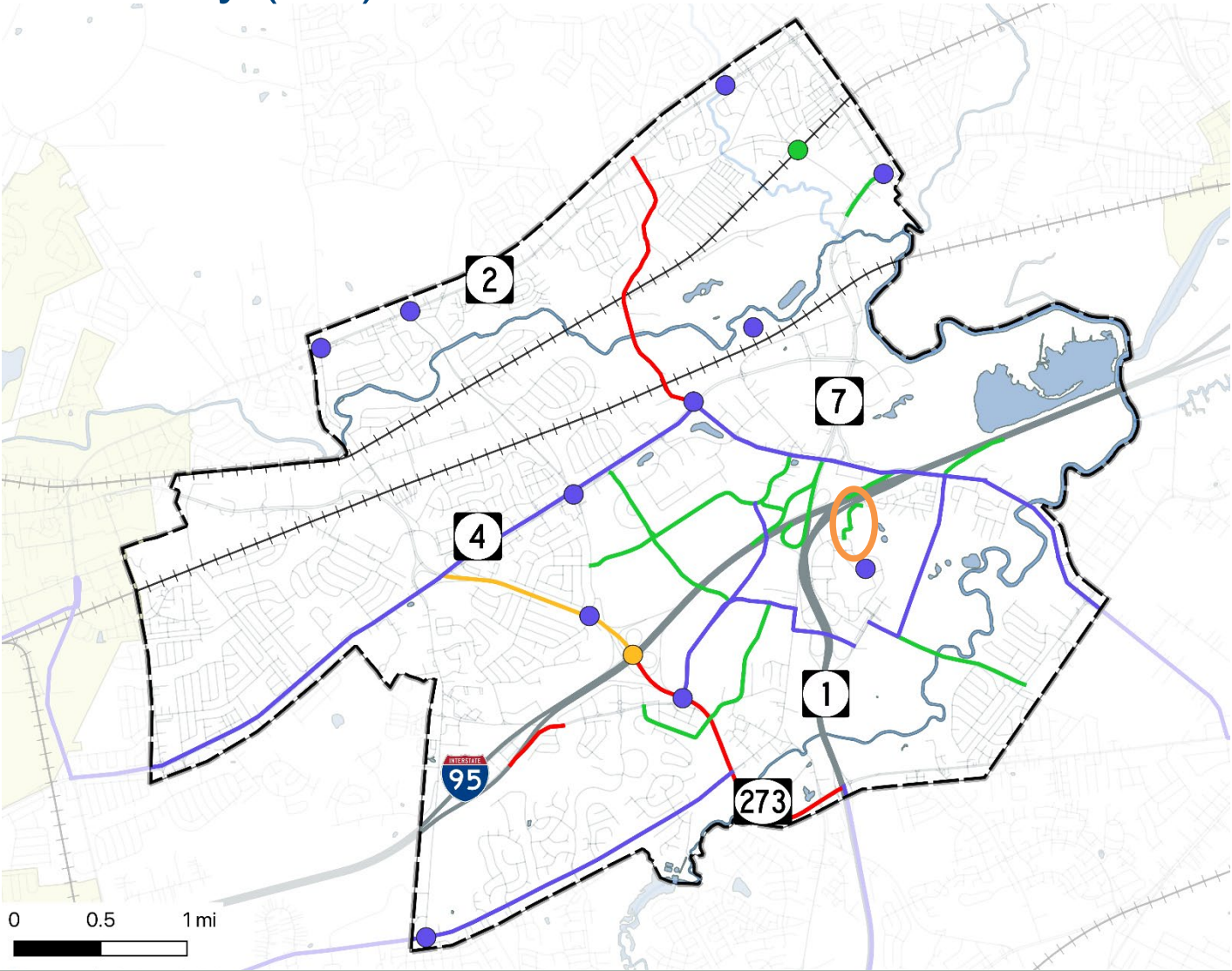


# Evaluation Matrix – Projects Dropped from Consideration

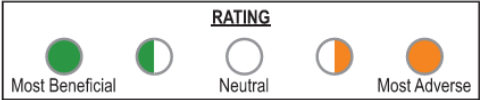


## Christiana Mall Access Road – Bus Only (CC)

Transportation Improvement Alternative	
Map	CC
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	



# Evaluation Matrix – Projects Dropped from Consideration



## Christiana Mall Access Road – Bus Only (CC)

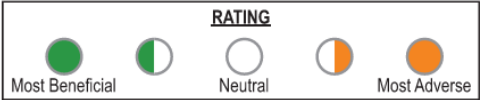
Transportation Improvement Alternative	
Christiana Mall Access Road-Bus Only	
Map	CC
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	
\$0.9M	



- Potentially significant challenges adding access to I-95 ramp
- Provides redundant movement to adjacent uncongested ramp

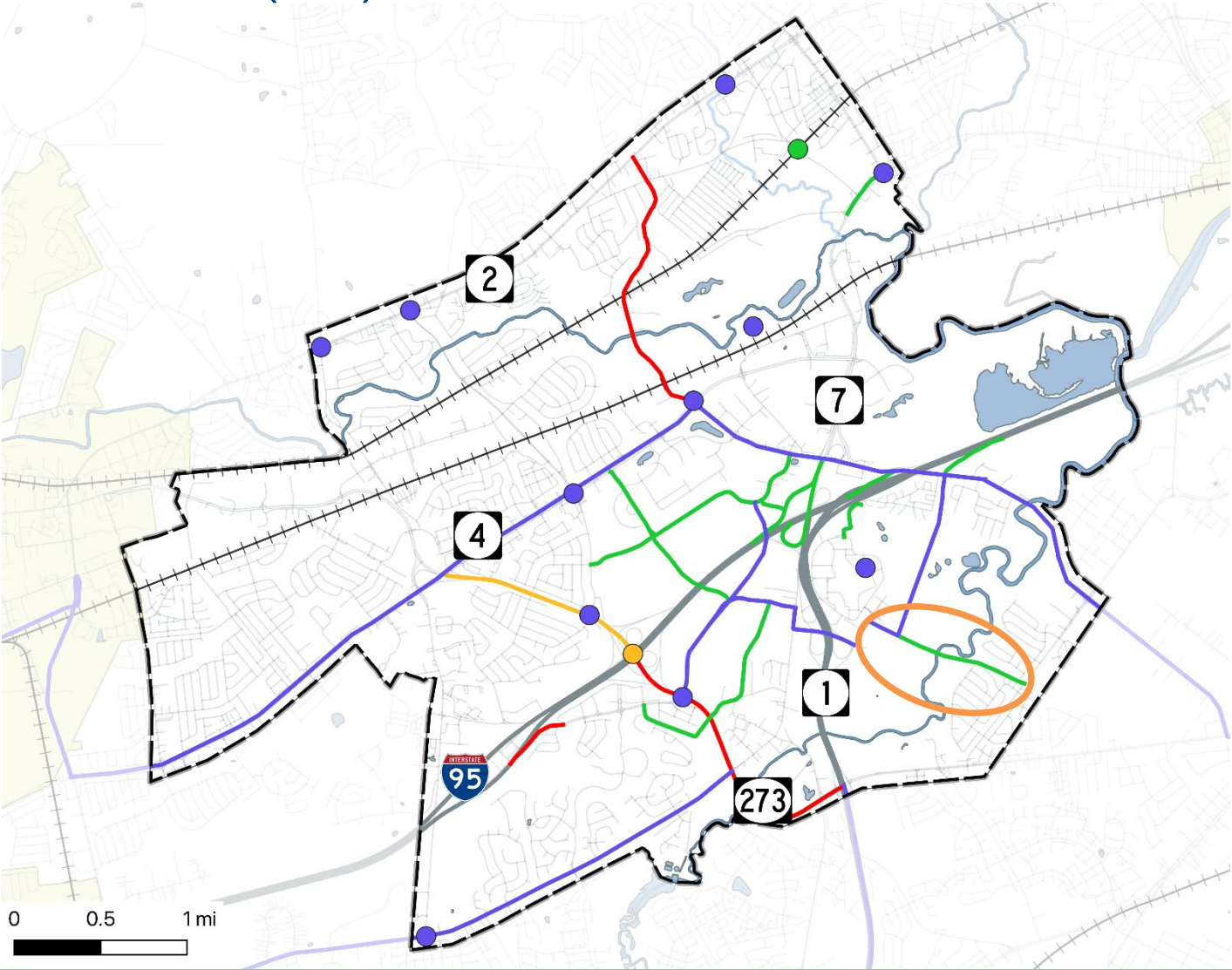


# Evaluation Matrix – Projects Dropped from Consideration



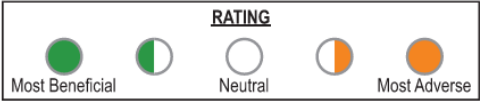
## Christiana Mall Road A Extension – East (DD)

Transportation Improvement Alternative	
Christiana Mall Road A Extension - East	
Map	DD
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	



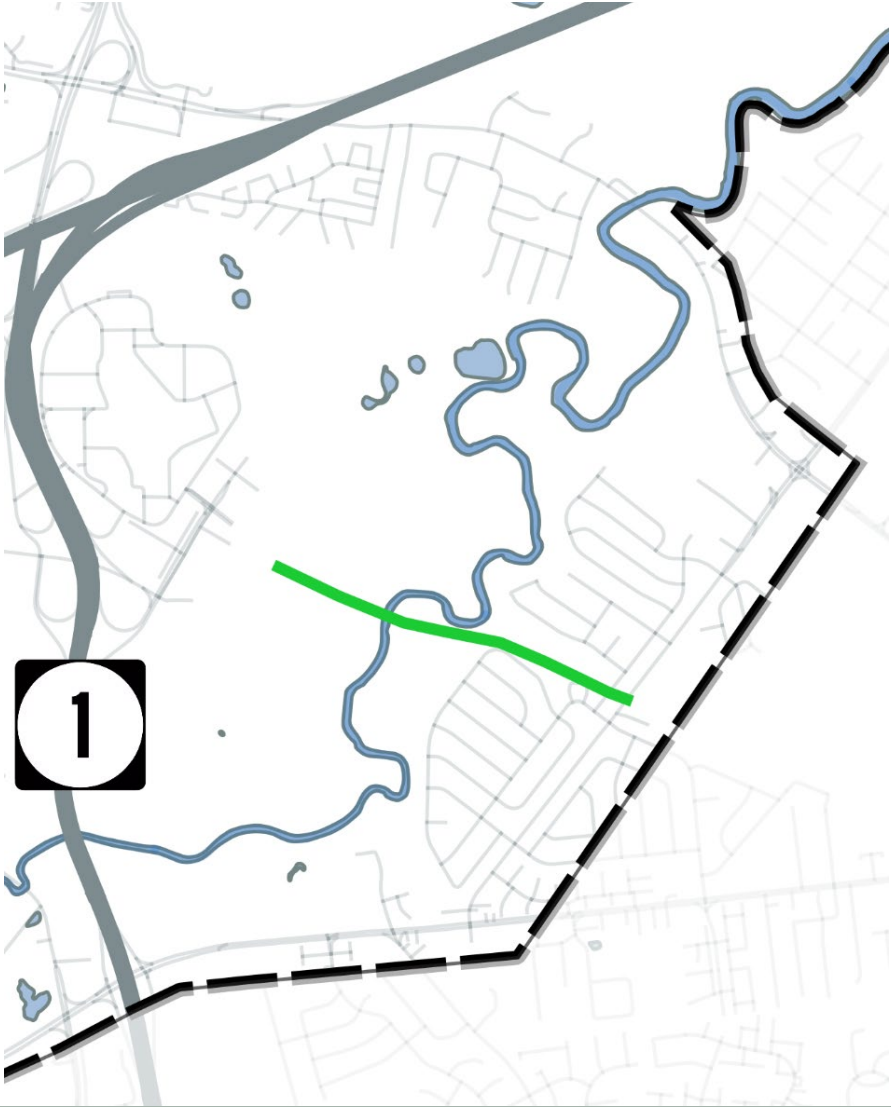


# Evaluation Matrix – Projects Dropped from Consideration



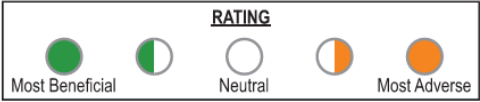
## Christiana Mall Road A Extension – East (DD)

Transportation Improvement Alternative	
Christiana Mall Road A Extension - East	
Map	DD
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	
\$34.0M	



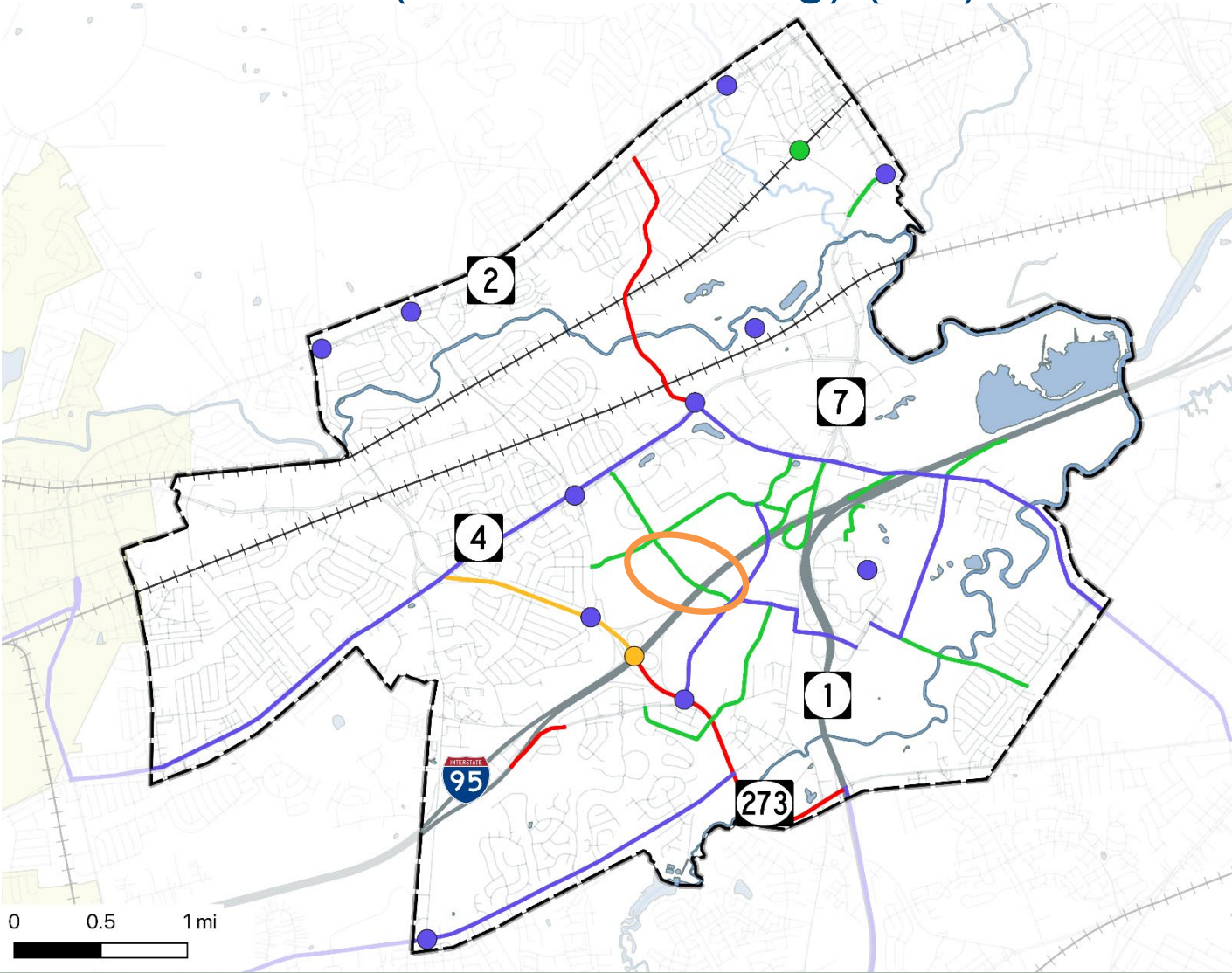
- Provides new multi-modal connections, including an eastern access to the mall area
- Considerable environmental impacts: new crossing of Christina River, floodplain, stream system
- Potential impacts to pre-historic resources
- Potential impacts to community park and adjacent communities west of Airport Road

# Evaluation Matrix – Projects Dropped from Consideration

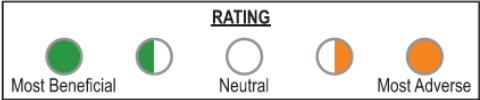


## Eagle Run Road Connector to Samoset Drive (2<sup>nd</sup> I-95 Crossing) (HH)

Transportation Improvement Alternative		Eagle Run Rd. Connector to Samoset Dr. (2nd I-95 Crossing)
Map		HH
CRITERIA	Connectivity	<div></div>
	Extent of Effect – Person Miles Traveled	<div></div>
	Congestion	<div></div>
	Transit Enhancement Opportunities	<div></div>
	Mode Share	<div></div>
	Bicycle & Pedestrian Level of Traffic Stress	<div></div>
	Economic Development / Re-Development Opportunities	<div></div>
	Safety	<div></div>
	Constructability / Engineering / Legal	<div></div>
	Natural Environment Impacts	<div></div>
	Cultural / Historic Resource Impacts	<div></div>
	Noise / Property Impacts	<div></div>
Cost	\$54.0M	

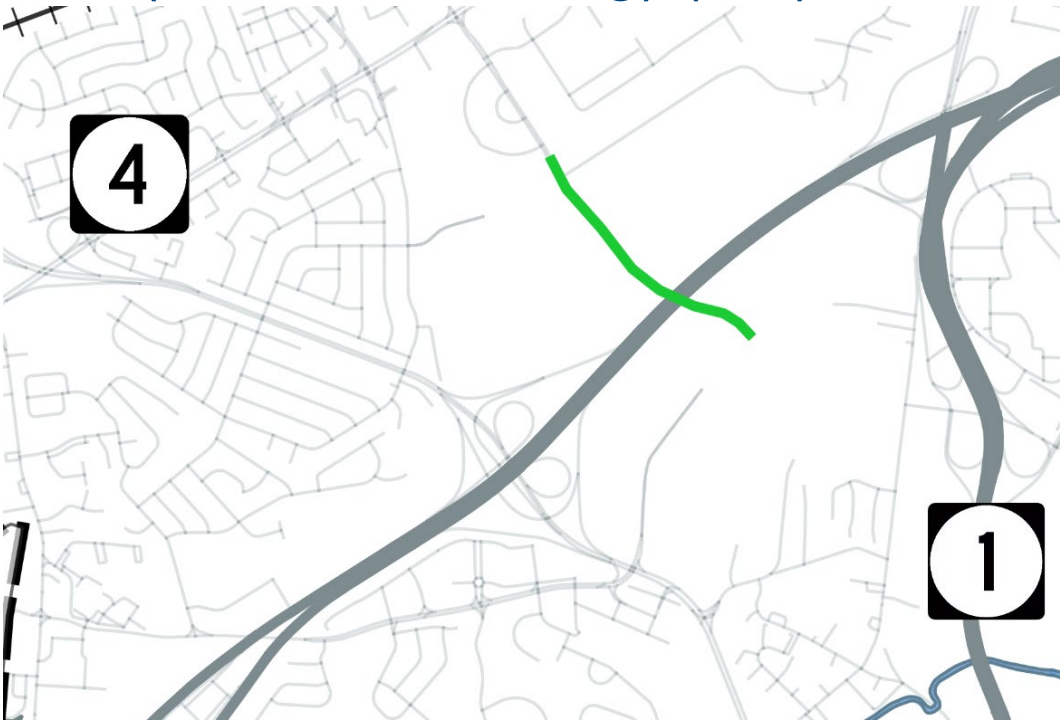


# Evaluation Matrix – Projects Dropped from Consideration



## Eagle Run Road Connector to Samoset Drive (2<sup>nd</sup> I-95 Crossing) (HH)

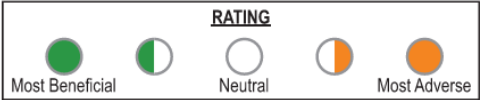
Transportation Improvement Alternative	
Eagle Run Rd. Connector to Samoset Dr. (2nd I-95 Crossing)	
Map	HH
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
Cost	



- Redundant connection across I-95, assuming Eagle Run Road to Continental Drive Connector (Project C) in RTP Financially Constrained list is completed
- Alignment could be considered as alternative for single crossing of I-95

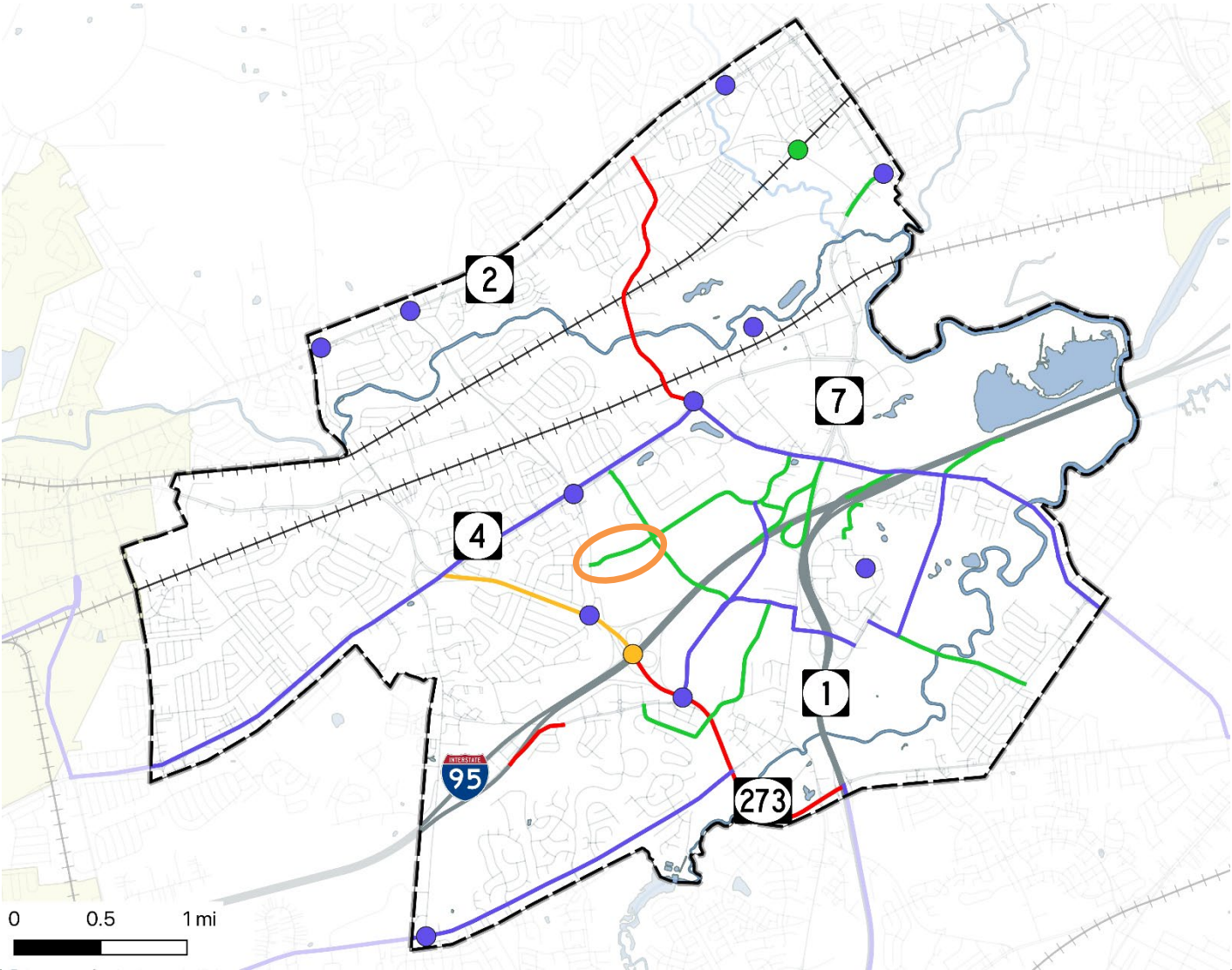


# Evaluation Matrix – Projects Dropped from Consideration

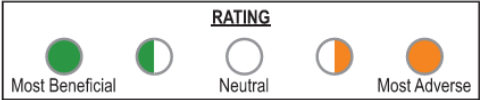


## Brownleaf Road Extension (II)

Transportation Improvement Alternative	
Map	II
CRITERIA	Connectivity
	Extent of Effect – Person Miles Traveled
	Congestion
	Transit Enhancement Opportunities
	Mode Share
	Bicycle & Pedestrian Level of Traffic Stress
	Economic Development / Re-Development Opportunities
	Safety
	Constructability / Engineering / Legal
	Natural Environment Impacts
	Cultural / Historic Resource Impacts
	Noise / Property Impacts
	Cost

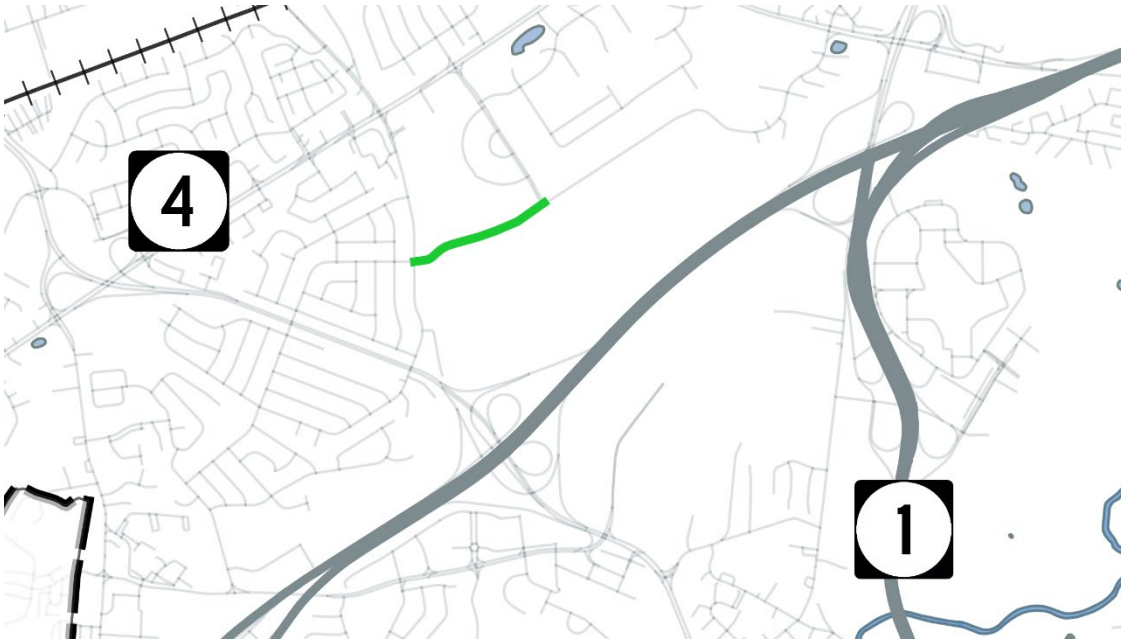


# Evaluation Matrix – Projects Dropped from Consideration



## Brownleaf Road Extension (II)

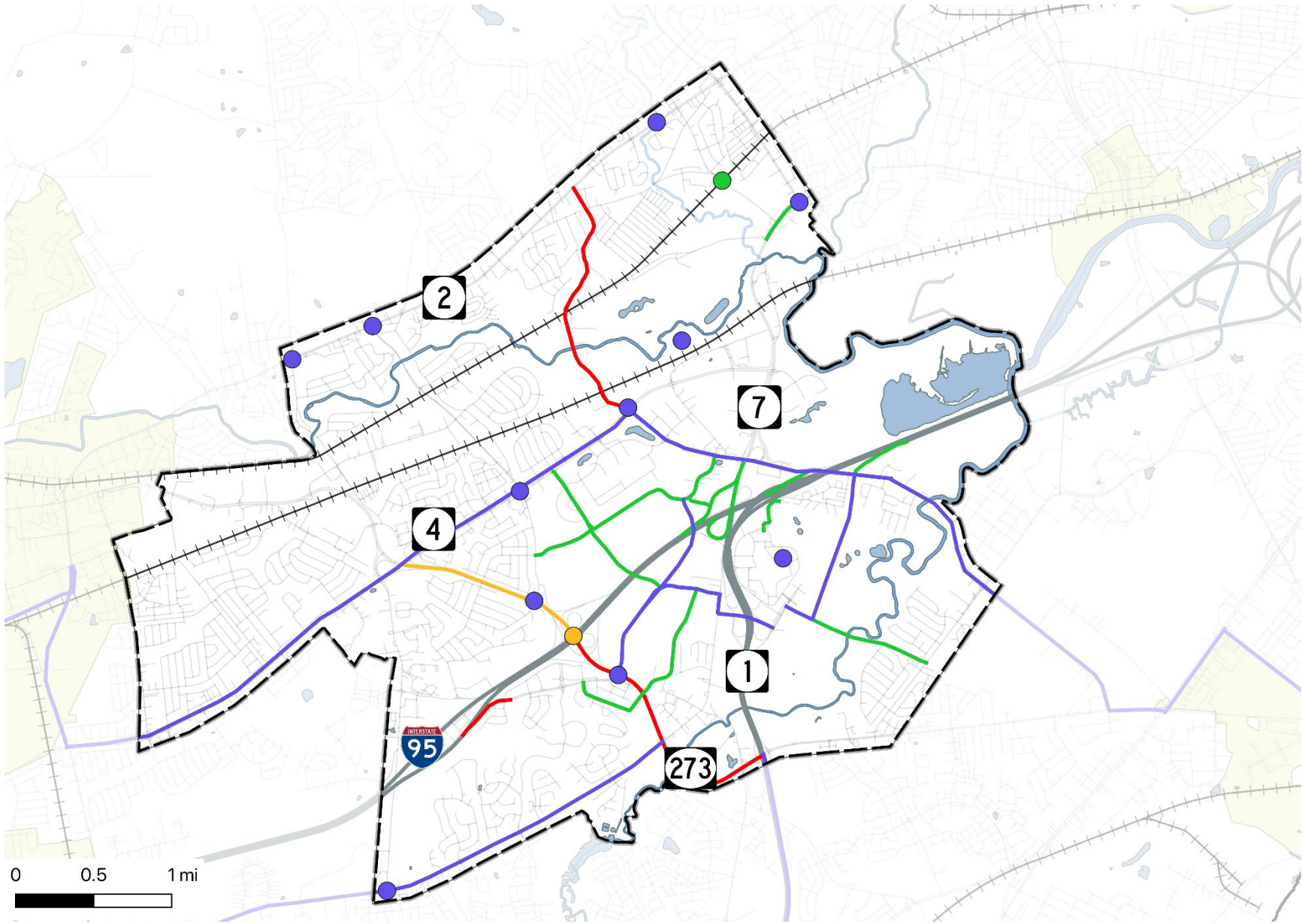
Transportation Improvement Alternative		Brownleaf Road Extension
Map		II
CRITERIA	Connectivity	
	Extent of Effect – Person Miles Traveled	
	Congestion	
	Transit Enhancement Opportunities	
	Mode Share	
	Bicycle & Pedestrian Level of Traffic Stress	
	Economic Development / Re-Development Opportunities	
	Safety	
	Constructability / Engineering / Legal	
	Natural Environment Impacts	
	Cultural / Historic Resource Impacts	
	Noise / Property Impacts	
Cost		\$5.0M



- Provides additional connectivity between neighborhoods west of Harmony Road and hospital area and businesses along Continental Drive
- Connectivity benefits would be influenced by opening of Samoset Drive / Continental Drive (Project JJ) and Eagle Run Road Connector to Samoset Drive over I-95 (Project HH)
- Additional traffic and potentially higher speeds in front of Robert S. Gallaher Elementary School and athletic fields south of school
- NOTE: Pedestrian/bicycle only connection is being retained



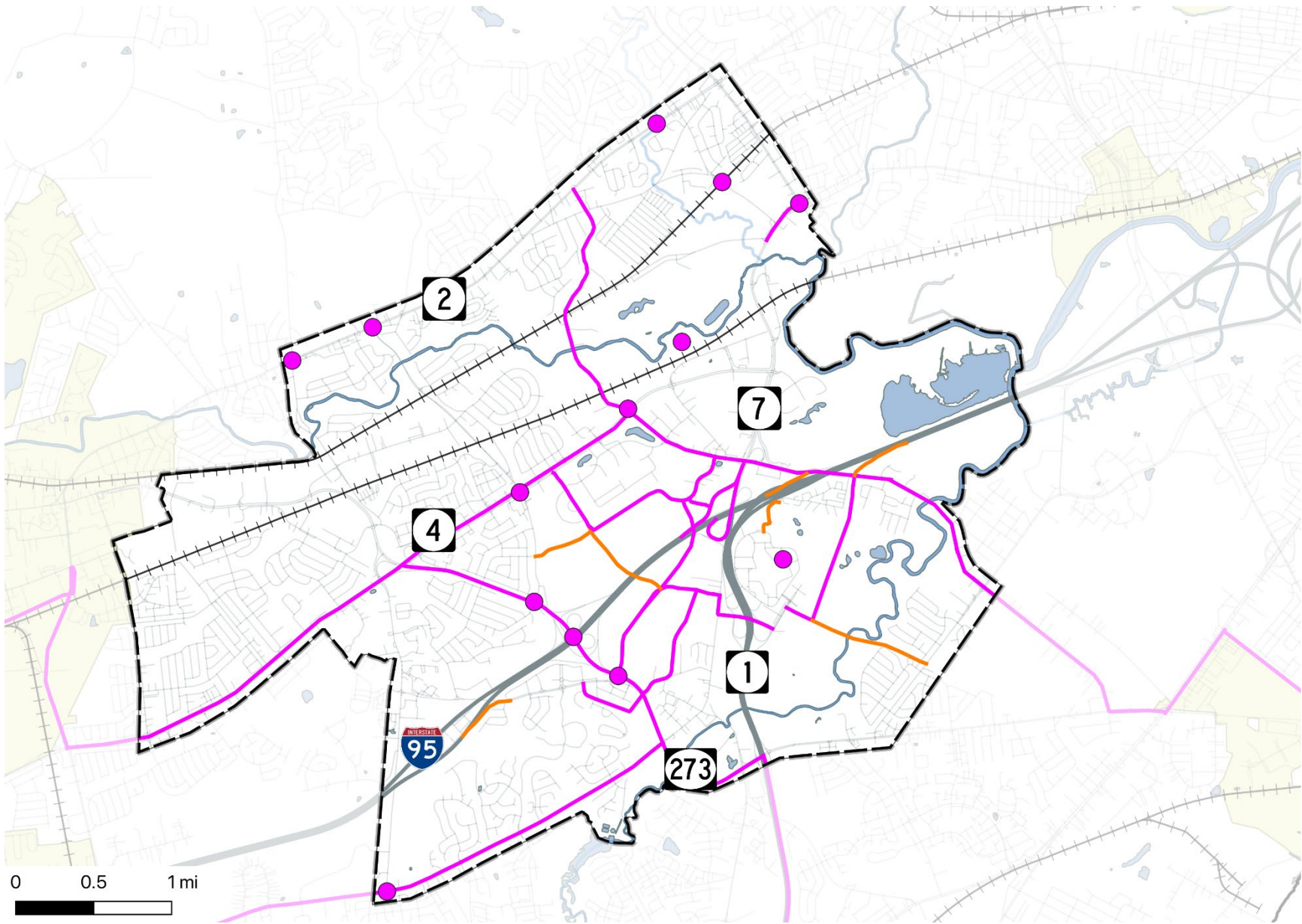
# Preliminary Transportation Project Recommendations



**RTP Financially Constrained**  
**RTP Aspirations**  
**Other projects**  
**Additional projects for evaluation**



# Preliminary Transportation Project Recommendations



**Pink** projects retained  
**Orange** projects dropped

# Preliminary Transportation Project Recommendations Feedback

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We welcome your feedback on projects that are being carried forward or that are being dropped from consideration.

You may provide input by:

- Providing comments or questions in the chat box at any time
- Participating in Q&A following tonight's presentation
- Using the comment form available on the project website

<http://www.wilmapco.org/Churchmans/>

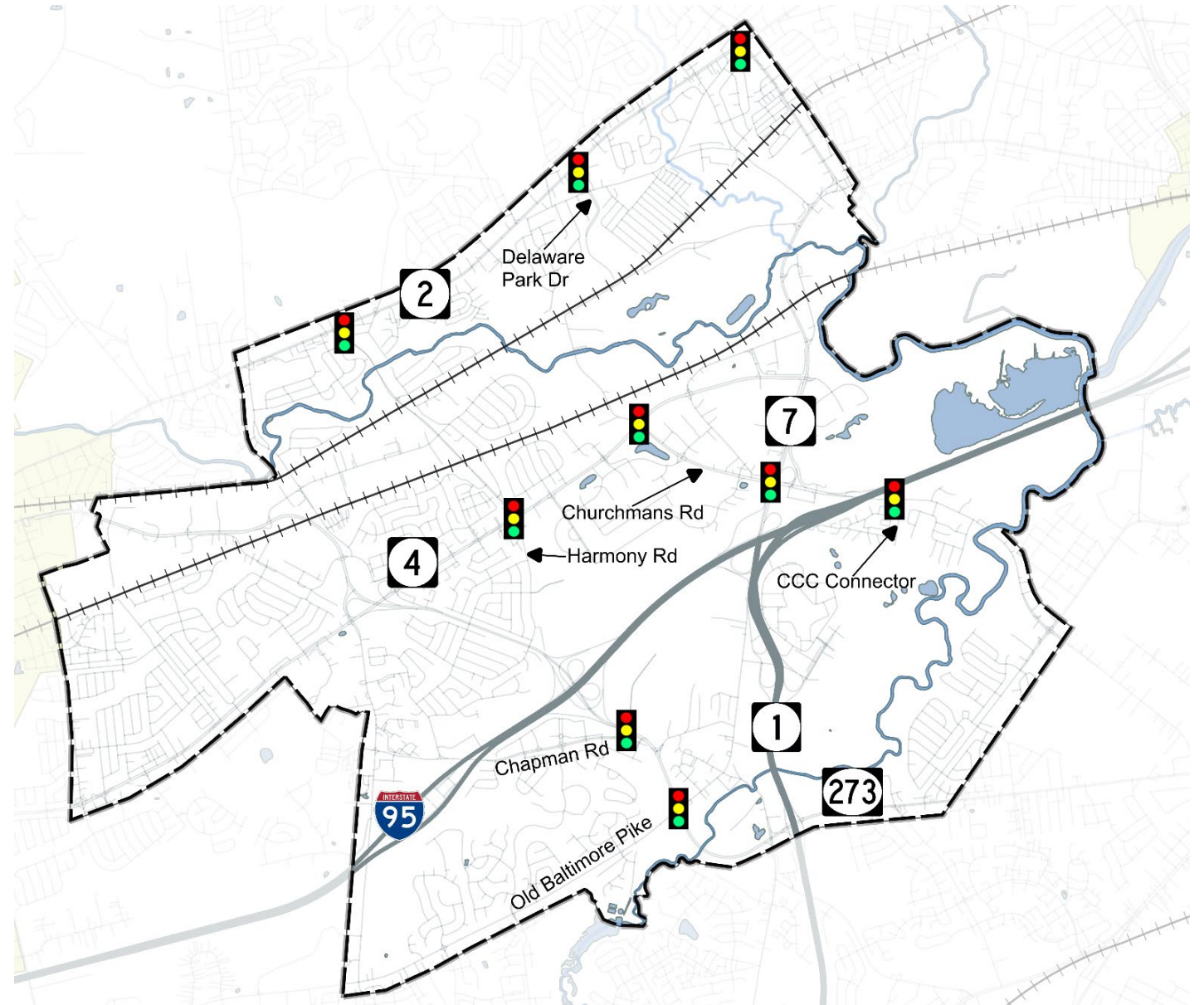
# Preliminary Recommendations Poll Question

- The project team is recommending that the following seven projects be dropped from further consideration. Do you feel that the project team should continue studying any of these projects?
  - Northbound I-95 Ramp to Chapman Road (V)
  - Northbound I-95 Ramp from Churchman's Road (AA)
  - Southbound I-95 Ramp from Churchman's Road (BB)
  - Christiana Mall Access Road – Bus Only (CC)
  - Christiana Mall Road A Extension – East (DD)
  - Eagle Run Road Connector to Samoset Drive (2<sup>nd</sup> I-95 Crossing) (HH)
  - Brownleaf Road Extension (Roadway) (II)
  - None, I agree that all these projects should be dropped



# Intersection Needs

- 101 signalized intersections in Churchman's Crossing
- Identified nine key intersections for detailed evaluation



# Potential Implementation Tools

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- 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)**

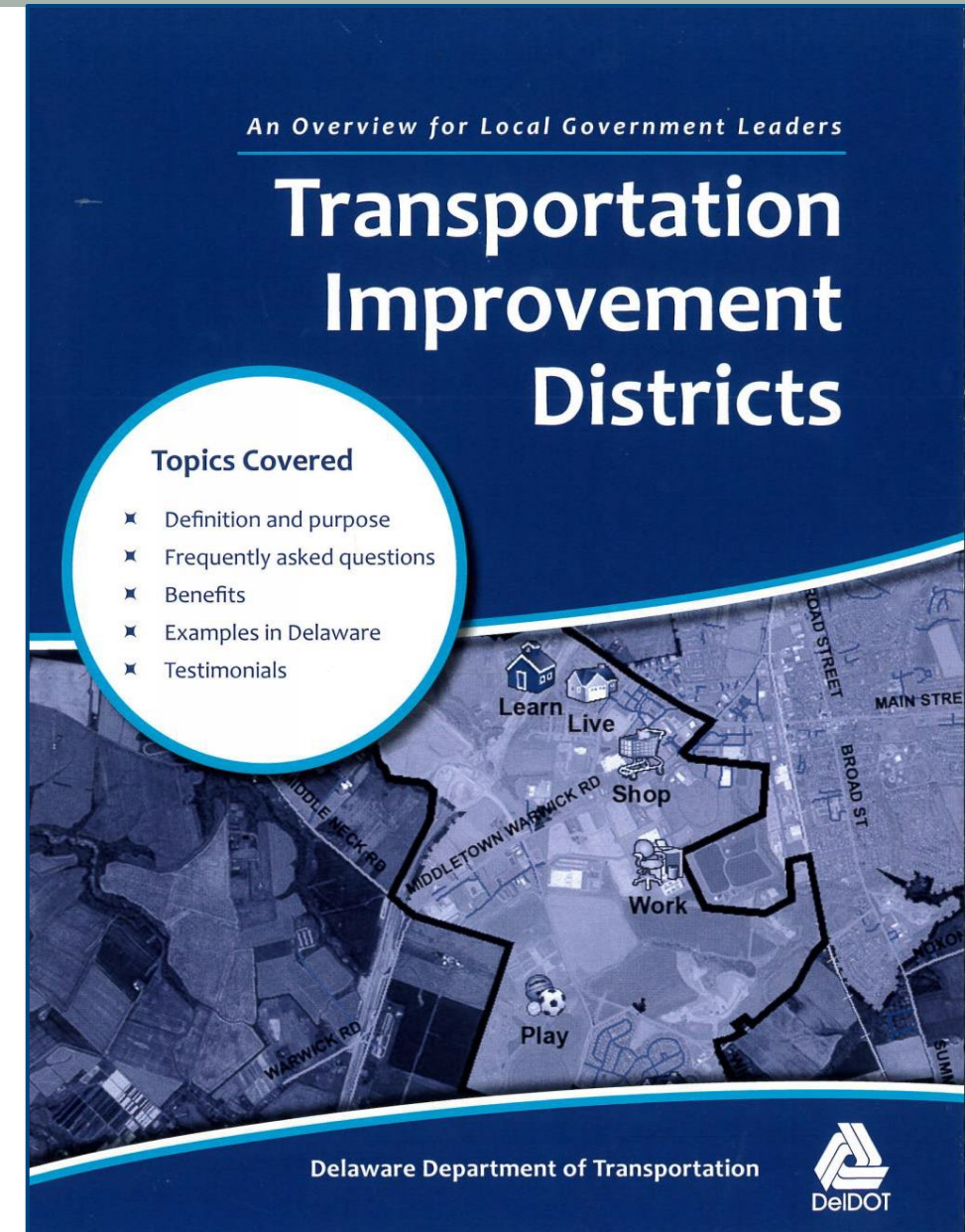
# Transportation Improvement District (TID)– What is it?

## ■ 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



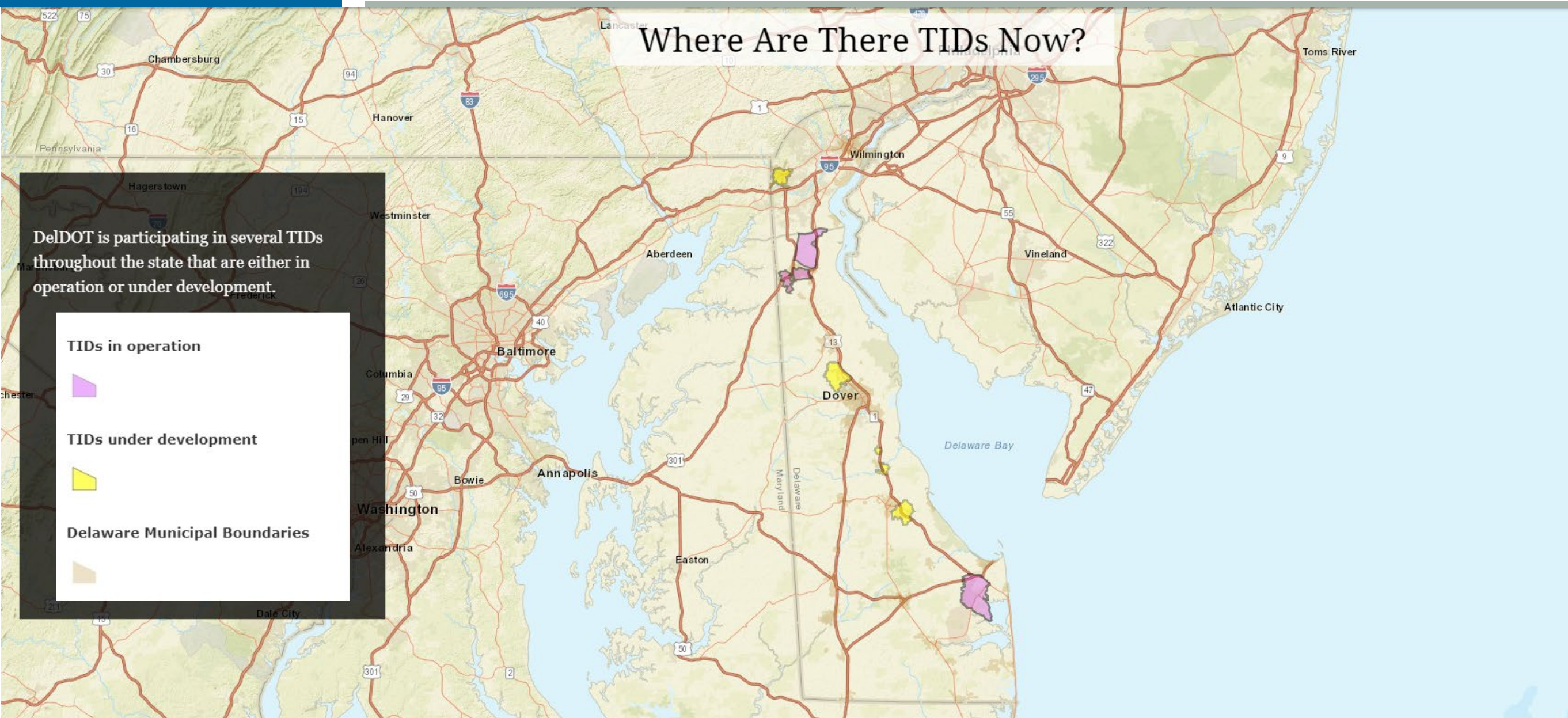
# Why Consider a TID?

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- 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?





# Implementation Strategies Poll Question

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- On a scale of 1 to 5, how do you feel about the following statement?

A Transportation Improvement District (TID) could be an appropriate tool to implement the Churchman's Crossing Plan.

- 5 – I strongly agree
- 4 – I agree
- 3 – Neutral / no opinion / need more information
- 2 – I disagree
- 1 – I strongly disagree

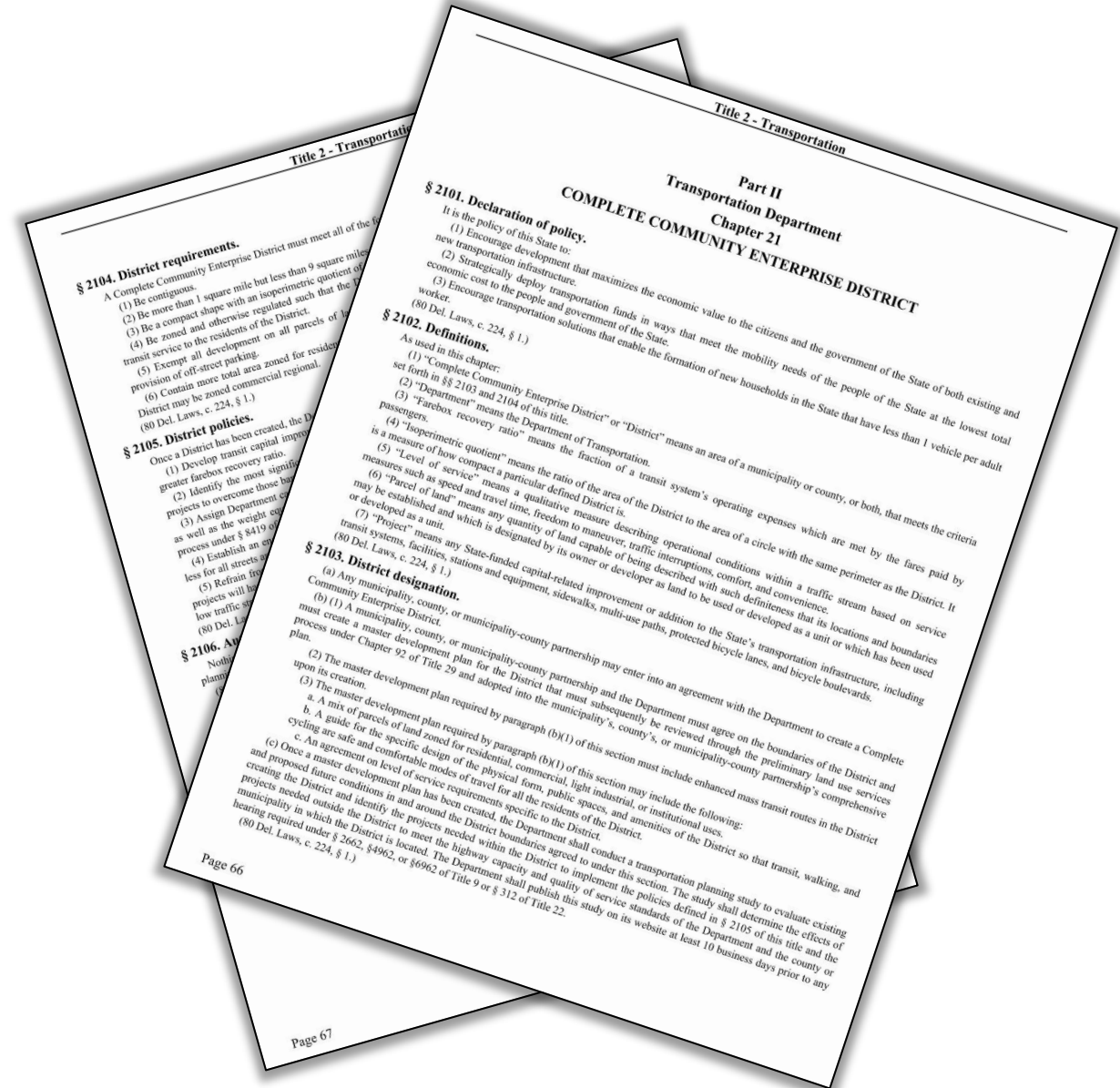
# Complete Community Enterprise District (CCED) – What is it?

## ■ Definition

- A geographic area defined to create transit-oriented development districts
- Defined in Chapter 21 of Title 2 Delaware Code
- Recently revised by House Bill No. 18 Signed 6/3/2021

## ■ 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

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- Be a contiguous and compact shape that is not a linear corridor
- **No more than nine square miles**
- Zoned at a density high enough to enable frequent transit service
- **Contain more area zoned for residential use than commercial uses**
- Exempt from any municipal or county parking requirements
- Include adjacent neighborhoods within ½ mile of a bus or rail stop or existing or planned station
- **Include enhanced mass transit routes**
- Maximize the use of walking and bicycling
- **Reduce travel speeds (goal of 25 mph or less)**
- Limit roadway capacity expansion projects



# Why Consider a CCED?

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- Promotes intergovernmental coordination
- Provides multi-modal mobility “bonus” in DelDOT project scoring
- Fosters walkable, bikeable, transit-rich development

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

# Implementation Strategies Poll Question

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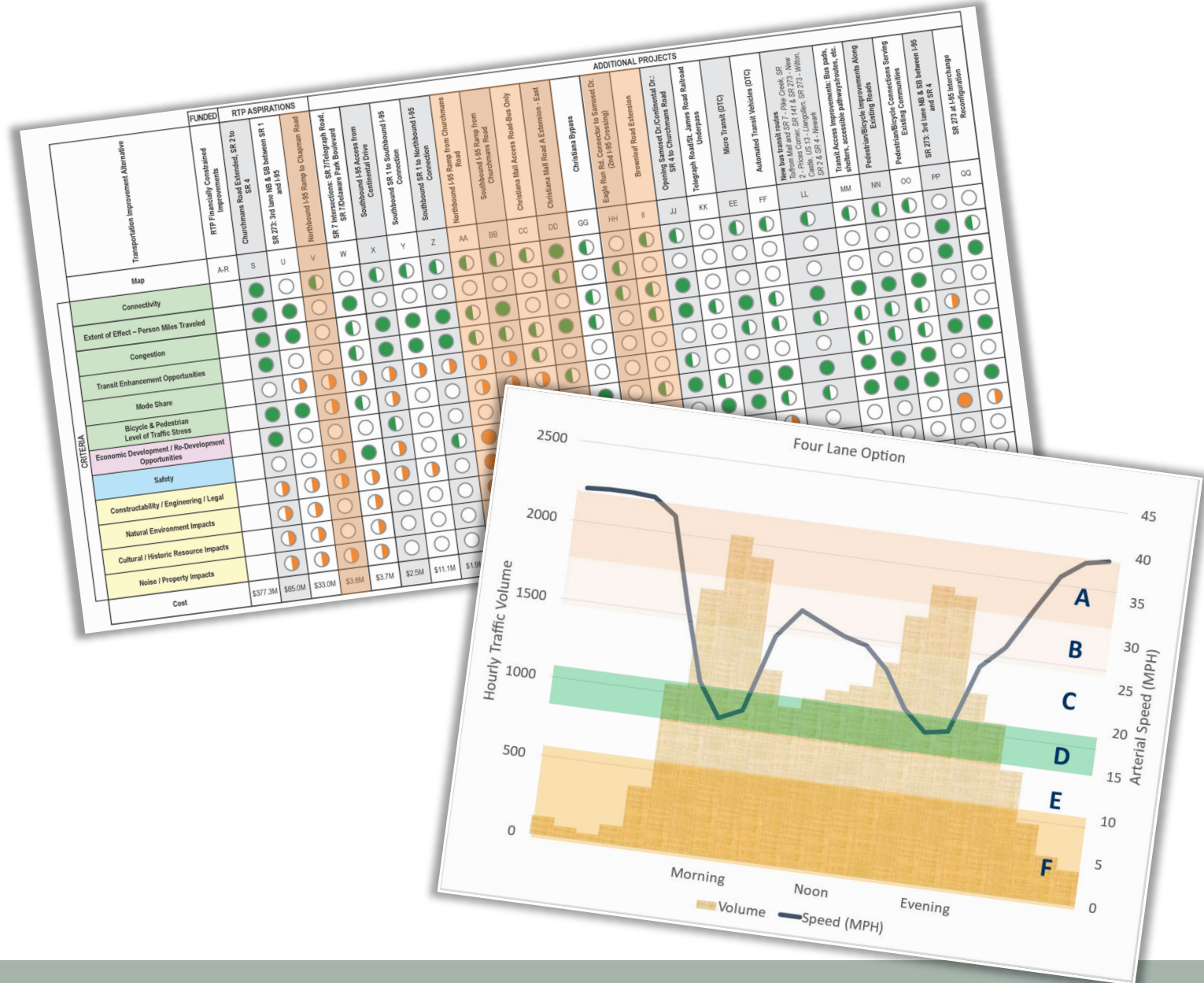
- On a scale of 1 to 5, how do you feel about the following statement:

A Complete Community Enterprise District (CCED) could be an appropriate tool to implement the Churchman's Crossing Plan.

- 5 – I strongly agree
- 4 – I agree
- 3 – Neutral / no opinion / need more information
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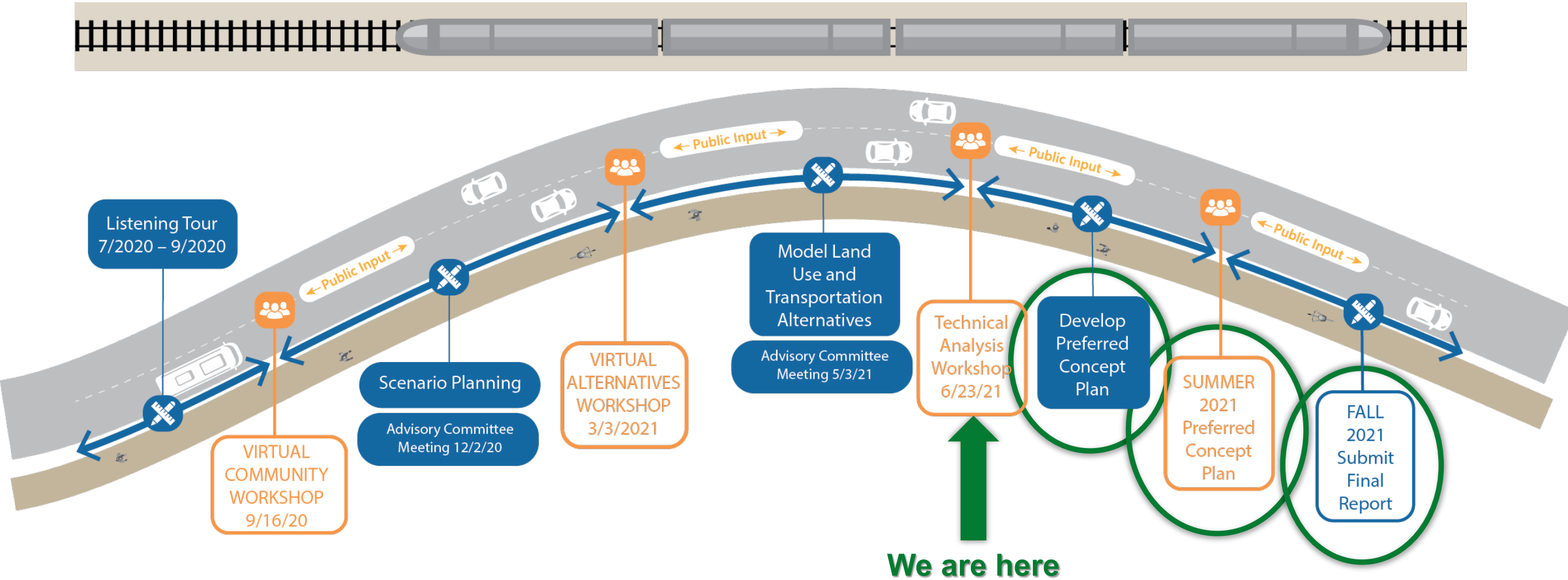
## Next Steps – Develop Preferred Concept Plan

- Final Travel Demand Model Run
  - Includes only “Retained” projects
- Confirm improvements necessary to provide area-wide arterial LOS D
- Refine pedestrian, bicycle, and transit improvement recommendations
- Recommend implementation strategies





# What is Ahead?



# Stay Connected

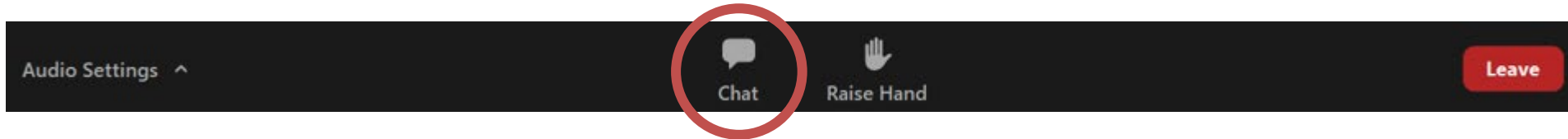
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We are committed to keeping you informed about this important Plan Update:

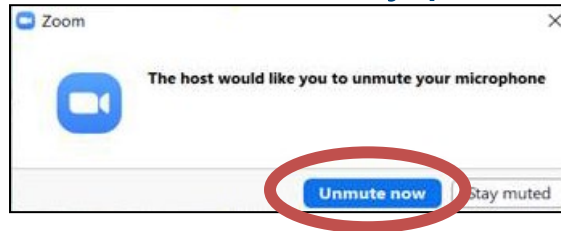
- Project website: <http://www.wilmapco.org/Churchmans/>
- For questions, comments, or to sign up for project email updates, email Randi Novakoff at [rnovakoff@wilmapco.org](mailto:rnovakoff@wilmapco.org)
- To reach co-project manager Dave Gula
  - Email: [dgula@wilmapco.org](mailto:dgula@wilmapco.org)
  - Phone: 302-737-6205 ext. 122

# Questions & Answers

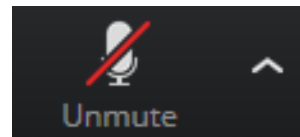
- Please use the “**Chat**” button in the **Zoom Webinar Menu Bar** at any time to enter your question
- The host and panelists are monitoring the Chat box to gather questions



- To speak your question, please raise your hand by using the “**Raise Hand**” button in the **Zoom Webinar Menu Bar**, or by pressing **\*9 when calling in on a phone**
- The host will be notified of who has raised their hand, and will announce your name and ask you to unmute yourself when it is your turn
- Please unmute yourself by clicking “**Unmute now**”, or by pressing **\*6 when calling in on a phone**



- Depending on your settings, you may need to also click “**Unmute**” a second time in the lower left side of the menu bar







# Questions and Answers

To speak your question, please raise your hand by using the **“Raise Hand”** button in the **Zoom Webinar Menu Bar**, or by pressing **\*9** when calling in on a phone

Comments can be submitted via the website at the following link: <https://forms.gle/x6PTVX7pJGkuaEig7>

## Public Workshop #3 : Churchman’s Crossing Plan Update