

Churchman's Crossing Plan Update



WILMAPCO

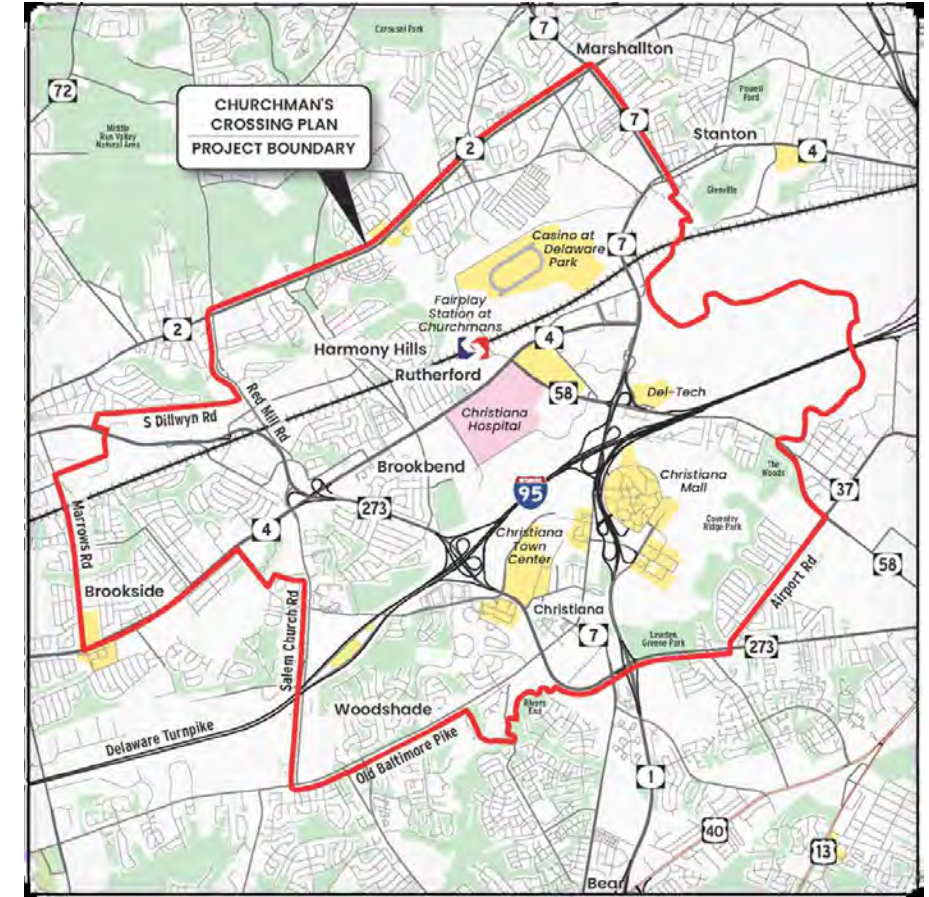


PAC Update

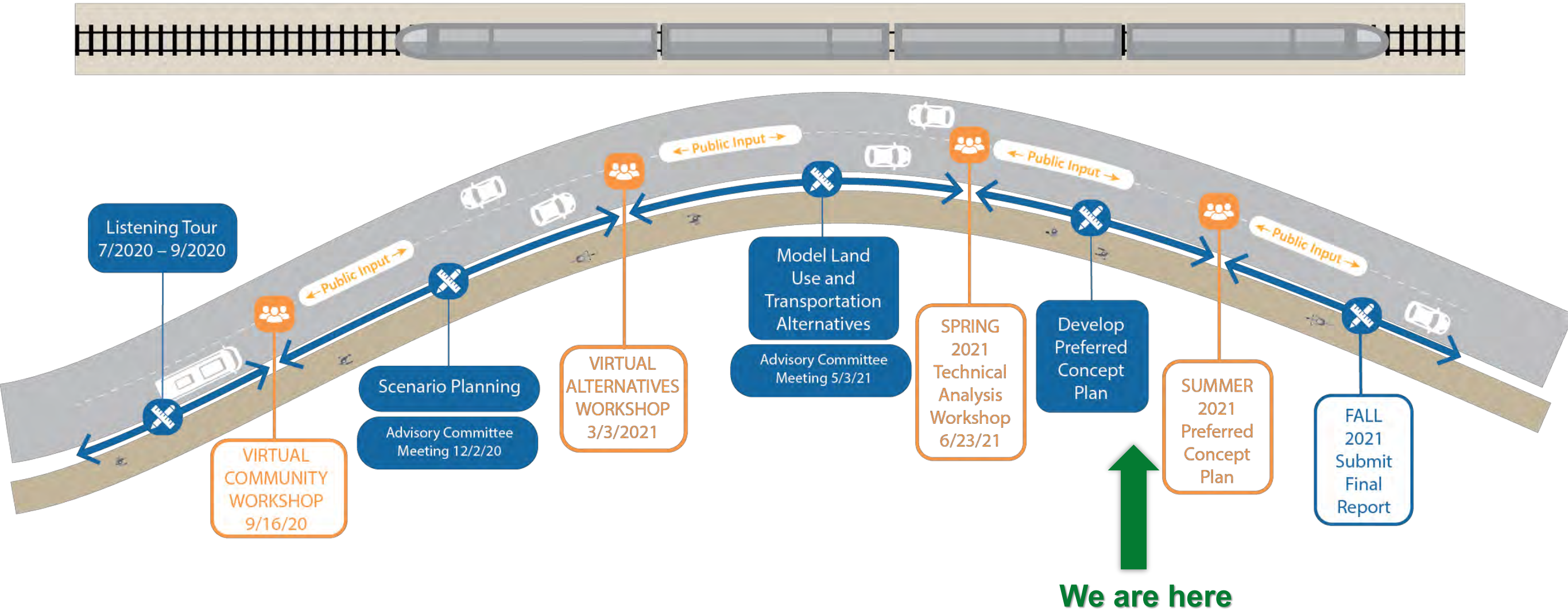
Recent Meetings and Workshops

Since January Council briefing:

- **March 3rd: Public Workshop #2**
 - 99 registered
 - Continued discussion of land use and transportation scenarios
 - Initial modeling results and proposed performance metrics
- **March 12th : The DelDOT-Resource Agency Meeting**
 - PEL discussion
- **May 3rd: Advisory Committee Meeting #2**
 - Recap of March workshop
 - Review of project evaluation criteria
 - Implementation Strategies review
- **June 23rd : Public Workshop #3**
 - 59 registered

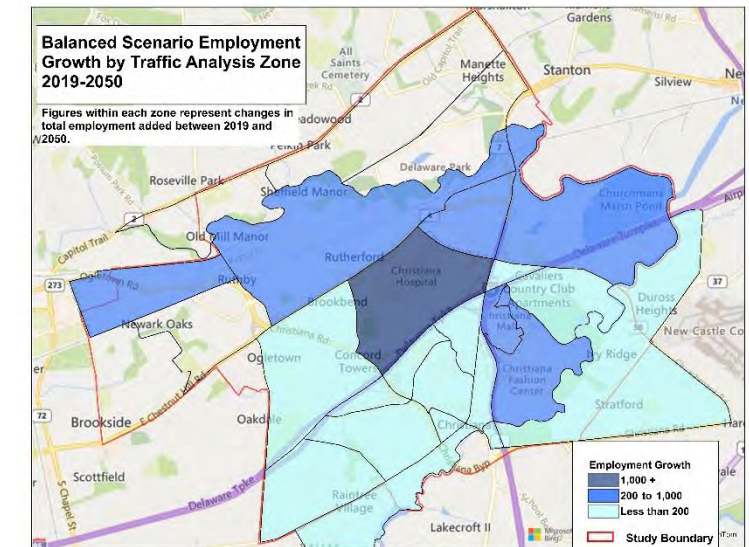
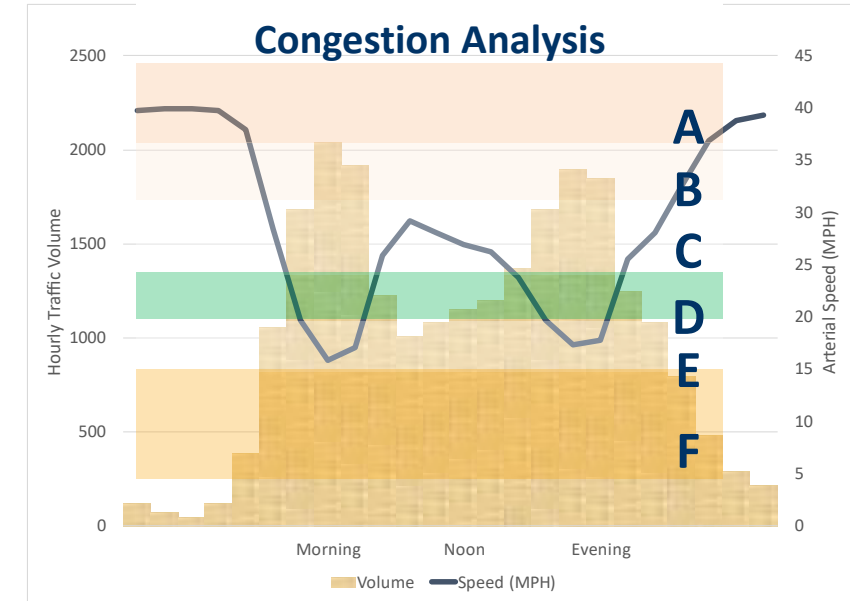


Timeline



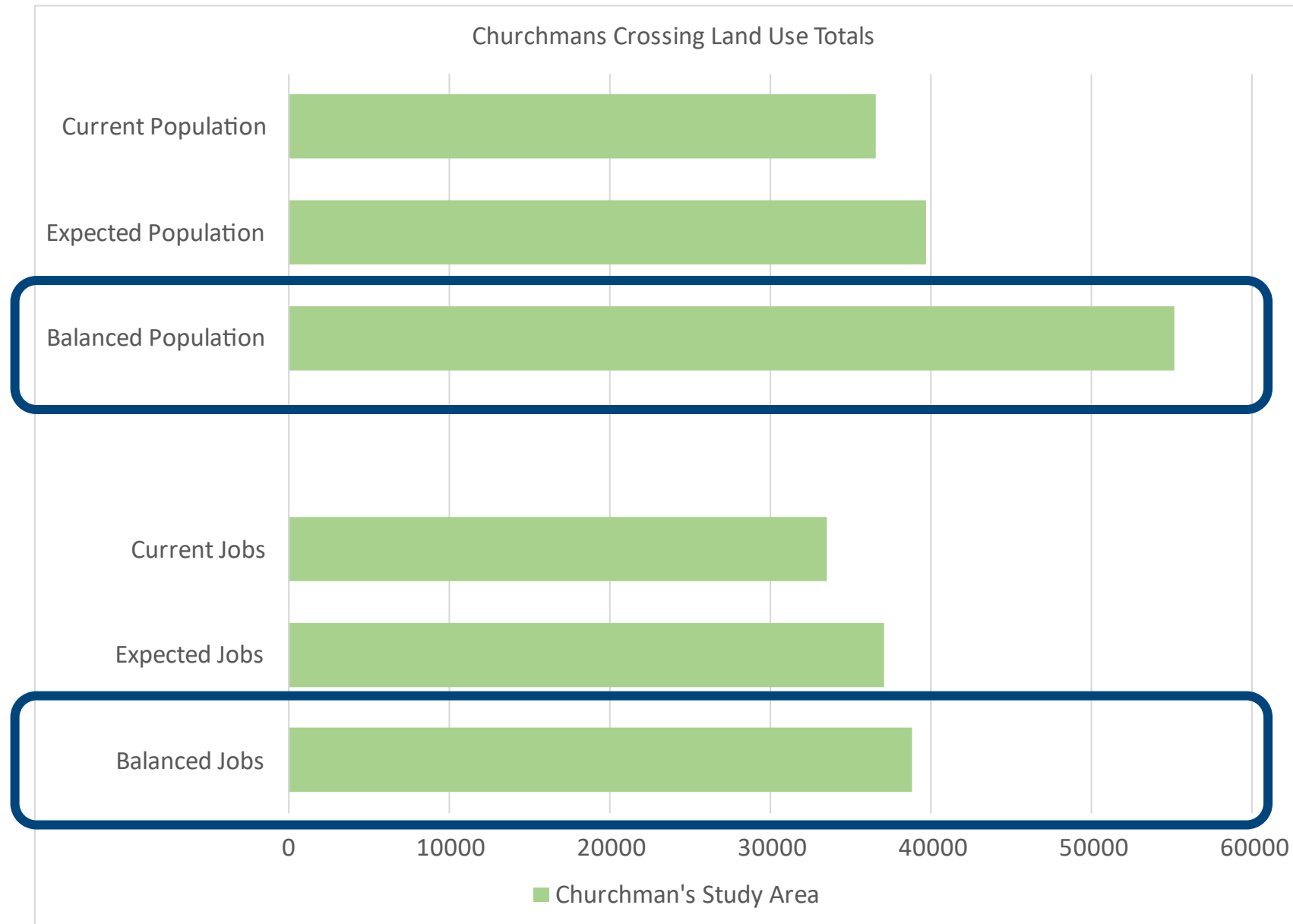
June 23rd Workshop Highlights

- A more “technical” workshop
- Heavy on modeling and analysis results
 - Evaluation of projects using Peninsula Model using “balanced” land use forecast option
- Provided results of project performance based on 12 criteria
- Recommendations on projects being removed from consideration
- Received input on implementation strategies
 - CCED/TID

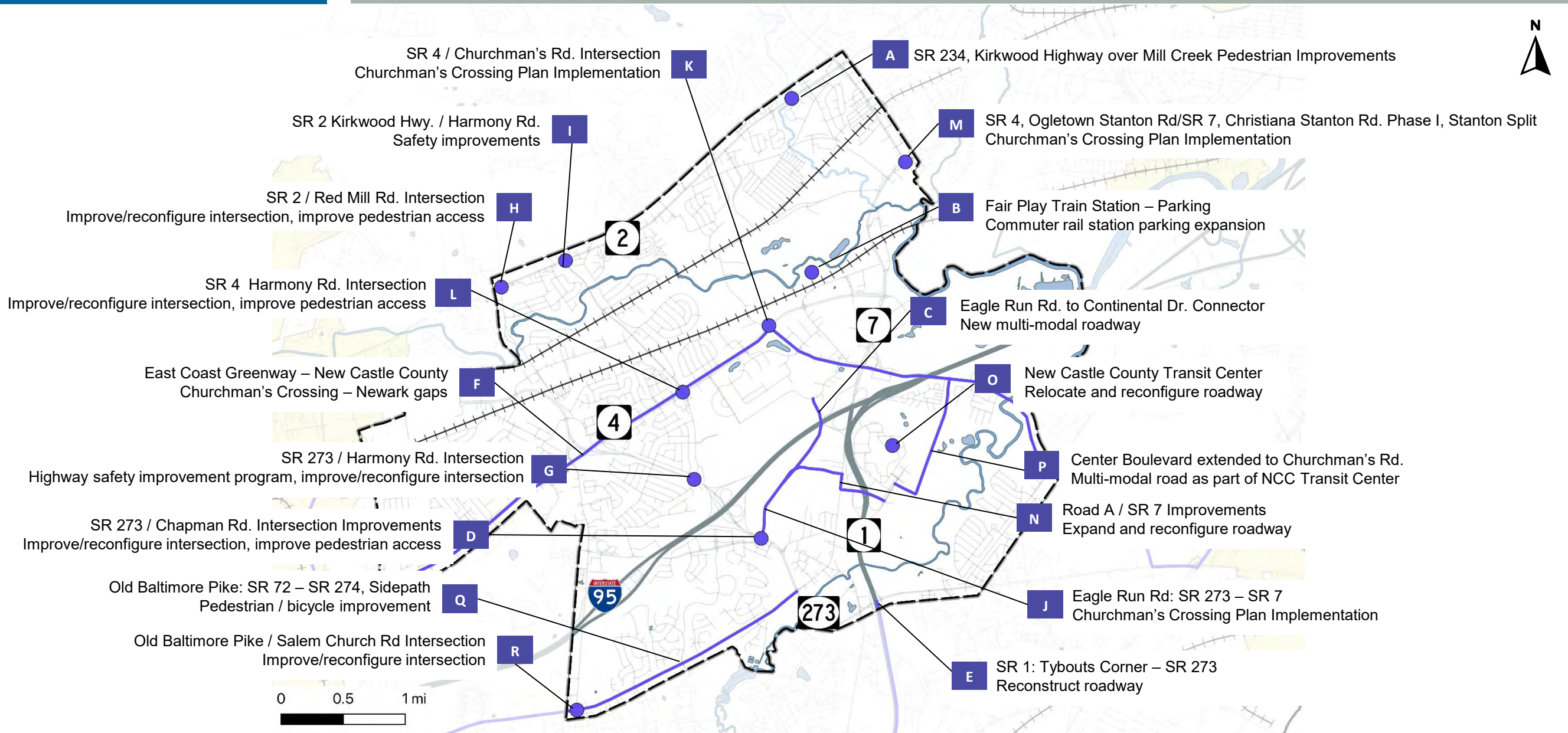


Modeling: Recommended Land Use Forecast – Balanced Land Use

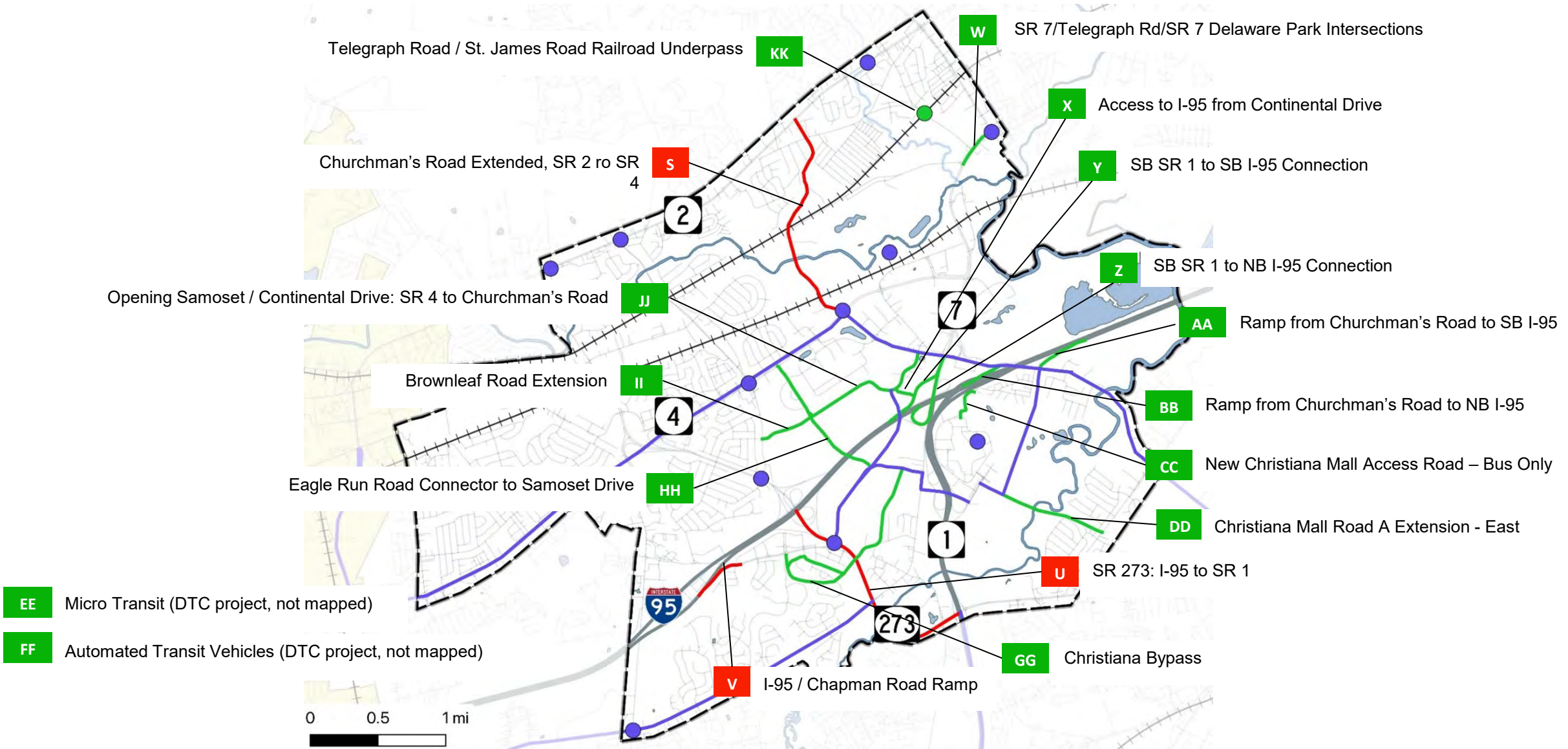
- **Current**
 - Built / occupied in 2019
- **Expected**
 - Considers growth already in development or expected to occur based on regional econometrics
- **Balanced**
 - Considers strategic intensification of mixed-use centers to improve the mix of uses



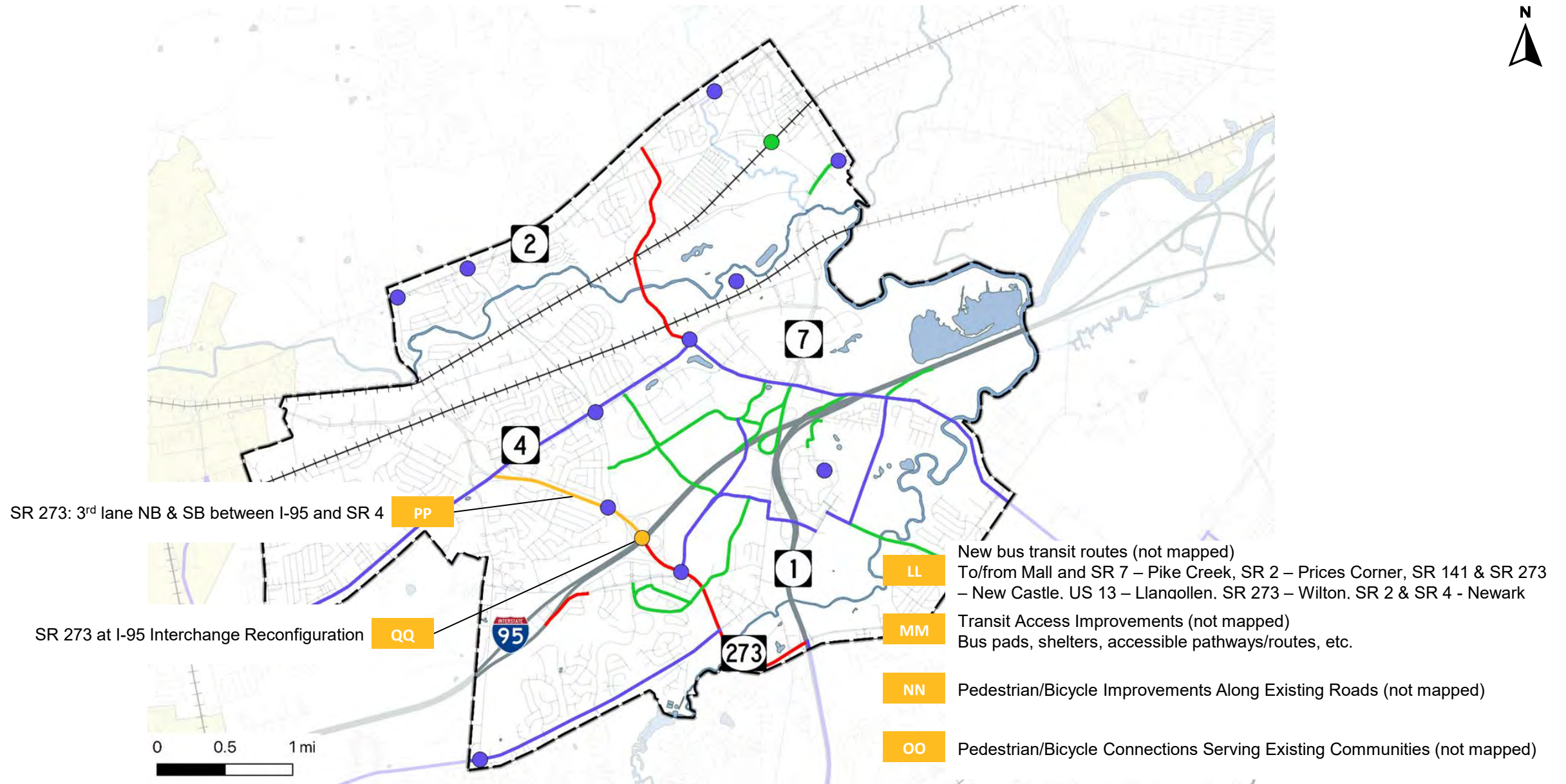
Transportation Alternatives – RTP Financially Constrained List



Transportation Alternatives – RTP Aspirations List + Others



Transportation Alternatives – Additional Projects for Evaluation

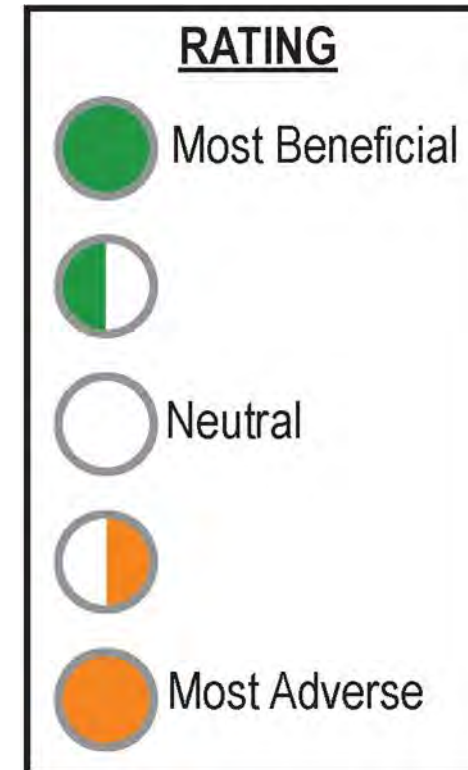


Project Evaluation Criteria

12 Categories

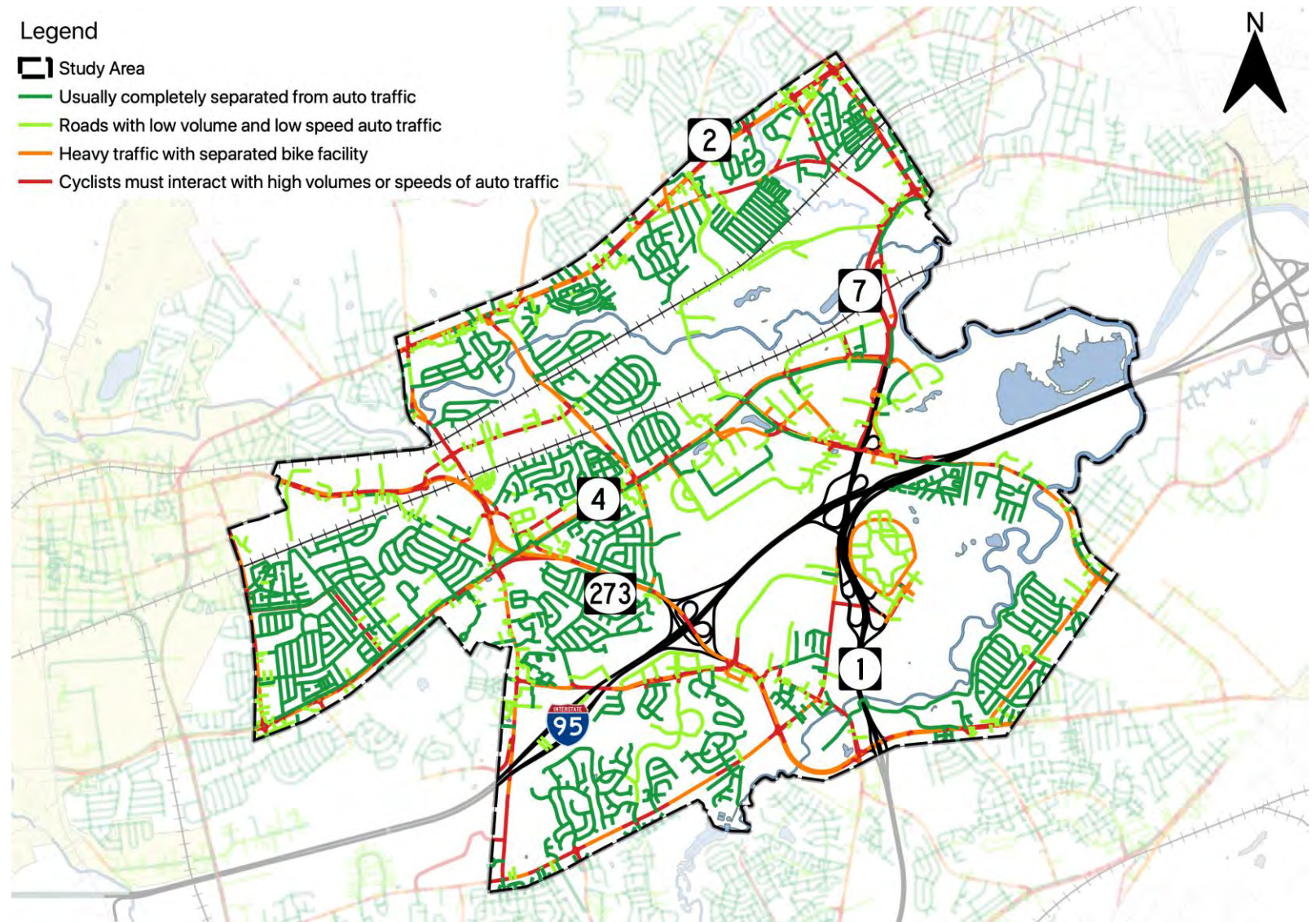
- **Connectivity:** Does project provide good connections?
- **Extent of Effect – Person Miles Traveled**
- **Congestion:** How much traffic is the right amount?
- **Transit Enhancement Opportunities**
- **Mode Share**
- **Bicycle & Pedestrian Level of Traffic Stress**
- **Economic Development / Redevelopment Opportunities**
- **Safety**
- **Constructability / Engineering / Legal:** challenges to constructing the proposed improvement?
- **Natural Environment Impacts**
- **Cultural / Historic Resource Impacts**
- **Noise / Property Impacts**

Project Rating Scale



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

Churchman's Pathway Projects

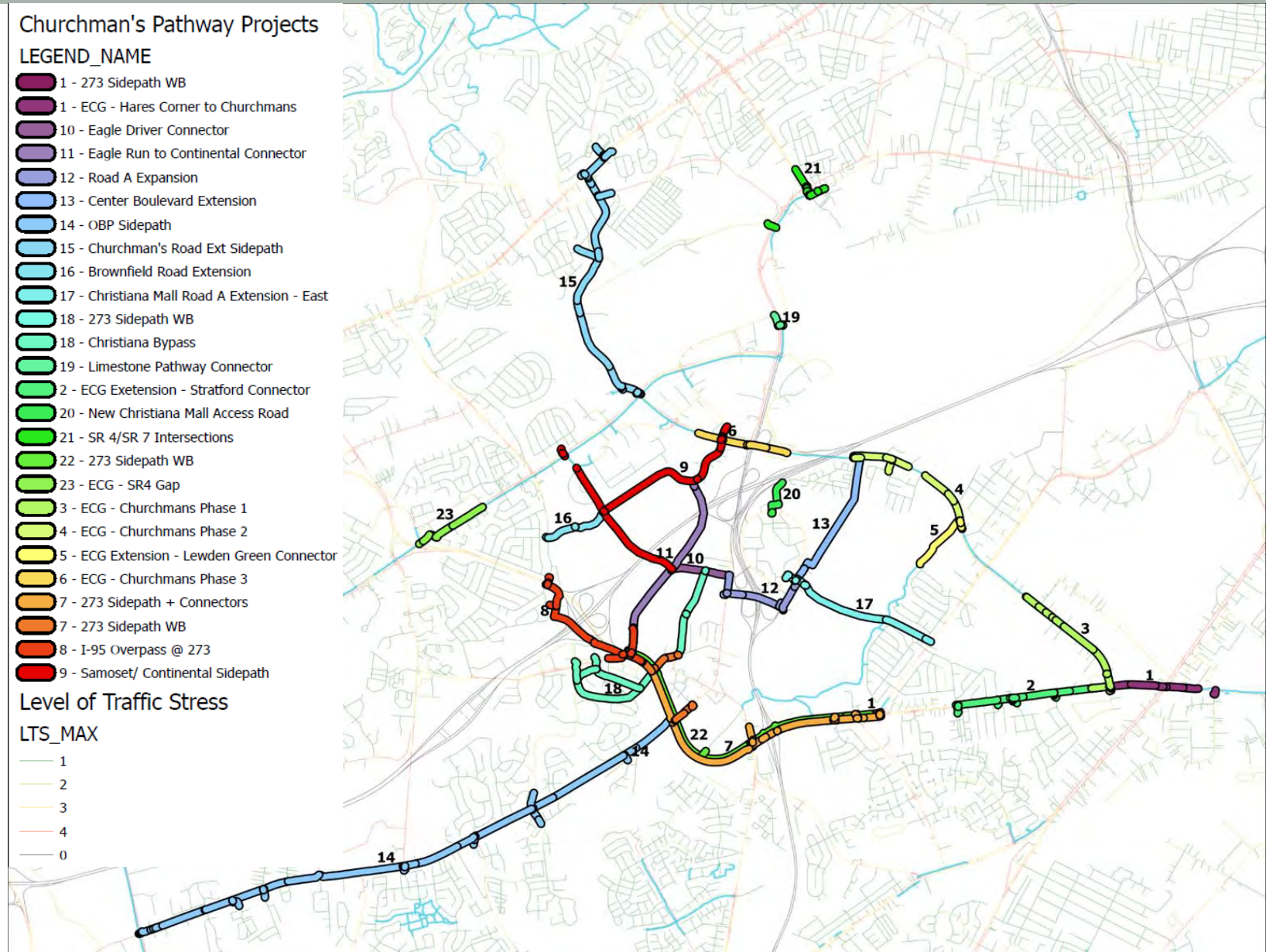
LEGEND_NAME

- 1 - 273 Sidepath WB
- 1 - ECG - Hares Corner to Churchmans
- 10 - Eagle Driver Connector
- 11 - Eagle Run to Continental Connector
- 12 - Road A Expansion
- 13 - Center Boulevard Extension
- 14 - OBP Sidepath
- 15 - Churchman's Road Ext Sidepath
- 16 - Brownfield Road Extension
- 17 - Christiana Mall Road A Extension - East
- 18 - 273 Sidepath WB
- 18 - Christiana Bypass
- 19 - Limestone Pathway Connector
- 2 - ECG Exetension - Stratford Connector
- 20 - New Christiana Mall Access Road
- 21 - SR 4/SR 7 Intersections
- 22 - 273 Sidepath WB
- 23 - ECG - SR4 Gap
- 3 - ECG - Churchmans Phase 1
- 4 - ECG - Churchmans Phase 2
- 5 - ECG Extension - Lewden Green Connector
- 6 - ECG - Churchmans Phase 3
- 7 - 273 Sidepath + Connectors
- 7 - 273 Sidepath WB
- 8 - I-95 Overpass @ 273
- 9 - Samoset/ Continental Sidepath

Level of Traffic Stress

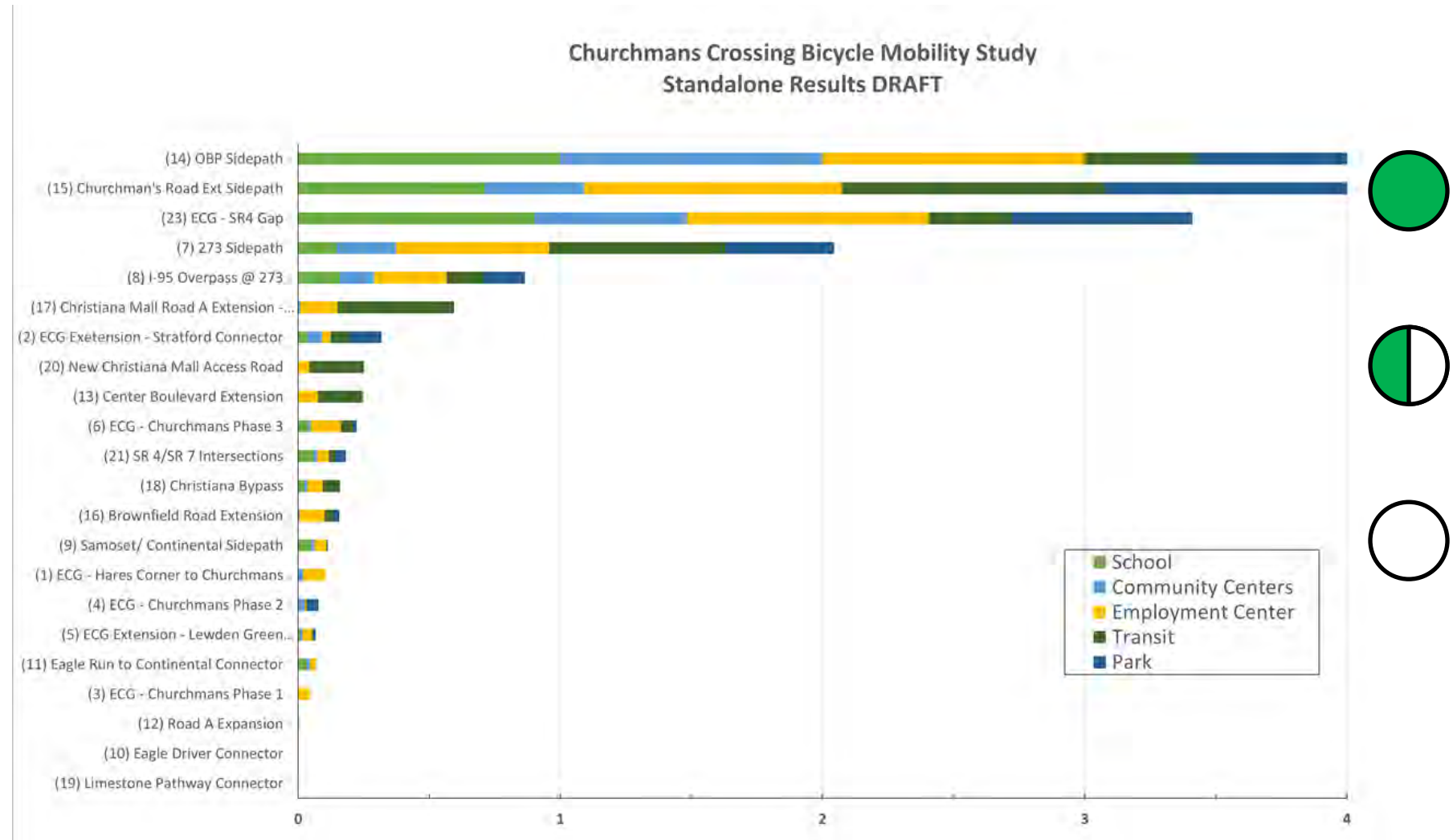
LTS_MAX

- 1
- 2
- 3
- 4
- 0

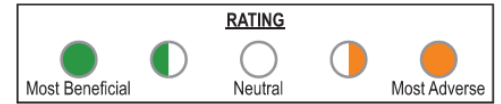


Evaluating Bicycle & Pedestrian Level of Traffic Stress

- Bicycle & Pedestrian Level of Traffic Stress Evaluations
- Considers Connectivity to
 - Schools
 - Community centers
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 - Parks

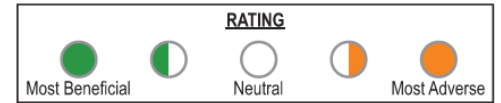


Evaluation Matrix – Analysis Results



		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>	<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>	<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>	<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>	<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>	<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>	<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>	<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>	<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>	<div></div>	<div></div>
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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				\$5.0M	\$10.0M	\$10.0M	\$40.0M	\$37.0M		

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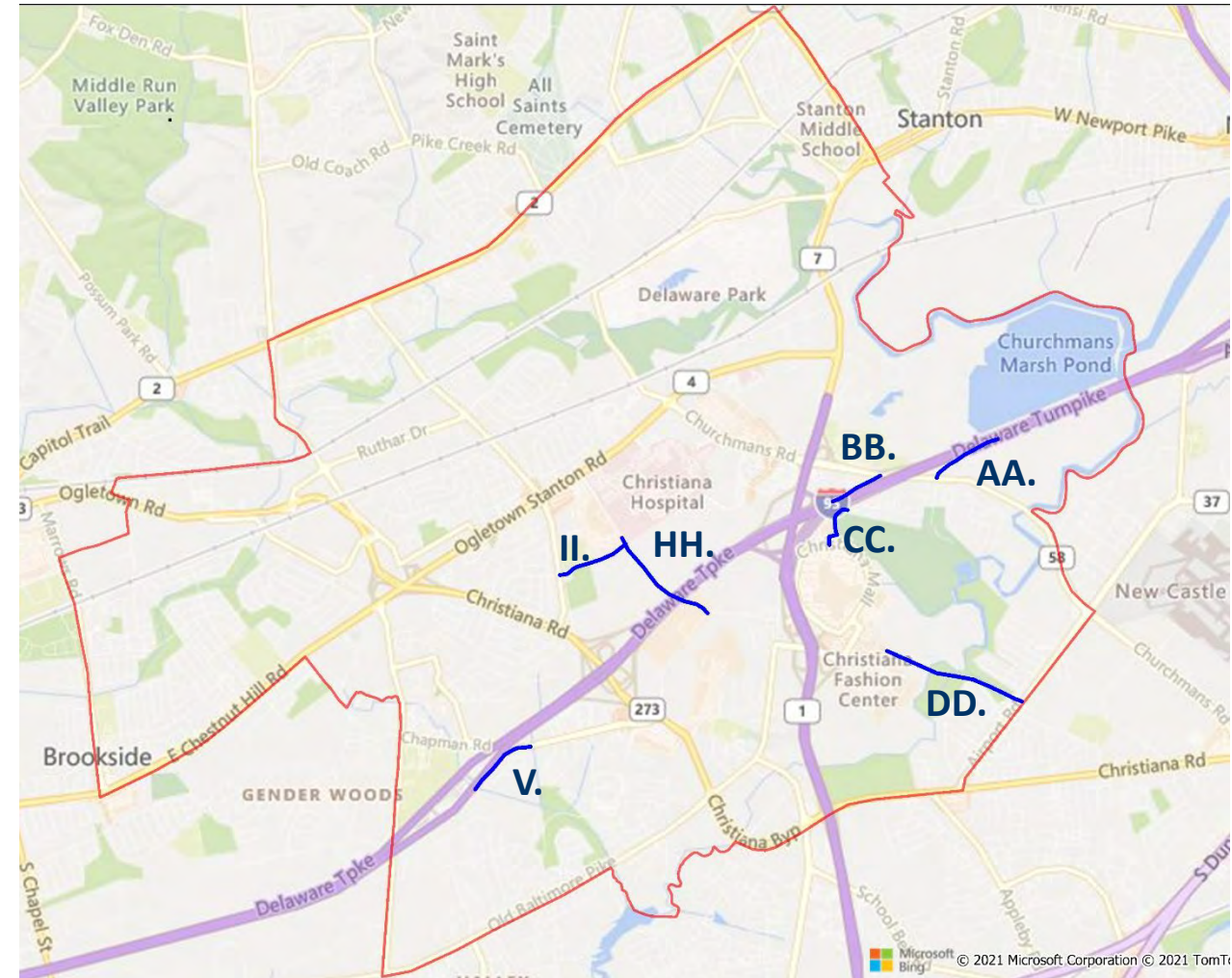


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Preliminary Transportation Project Recommendations

Projects dropped from consideration:

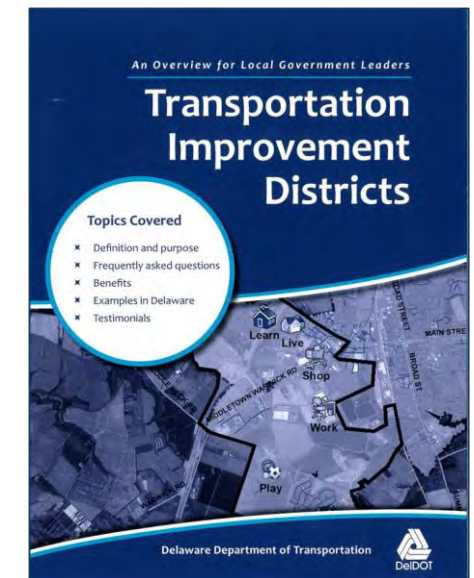
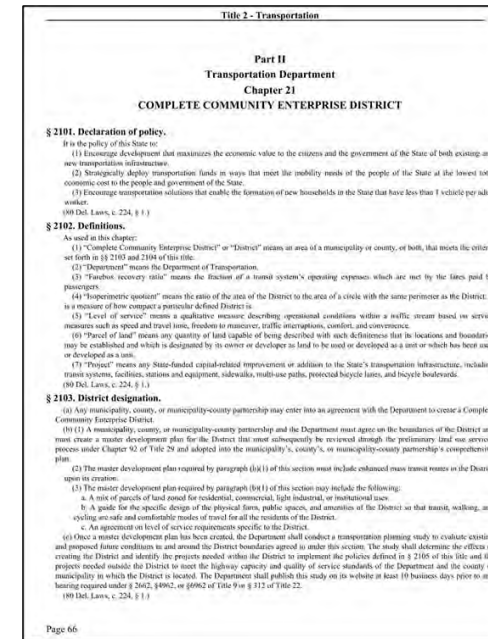
- Northbound I-95 Ramp to Chapman Road (V)
- Northbound I-95 Ramp from Churchman's Road (AA)
- Southbound I-95 Ramp from Churchman's Road (BB)
- Christiana Mall Access Road – Bus Only (CC)
- Christiana Mall Road A Extension – East (DD)
- Eagle Run Road Connector to Samoset Drive (2nd I-95 Crossing) (HH)
- Brownleaf Road Extension (II)
 - Retained bike/ped ONLY recommendation



Potential Implementation Tools

Several tools can be used to implement the plan, including:

- » Future land use and zoning
- » Subdivision and building regulations
- » Concurrency (adequate public facilities)
- » **Transportation Improvement Districts (TIDs)**
- » **Complete Community Enterprise Districts (CCEDs)**



Potential Implementation Tools

Transportation Improvement Districts (TIDs)

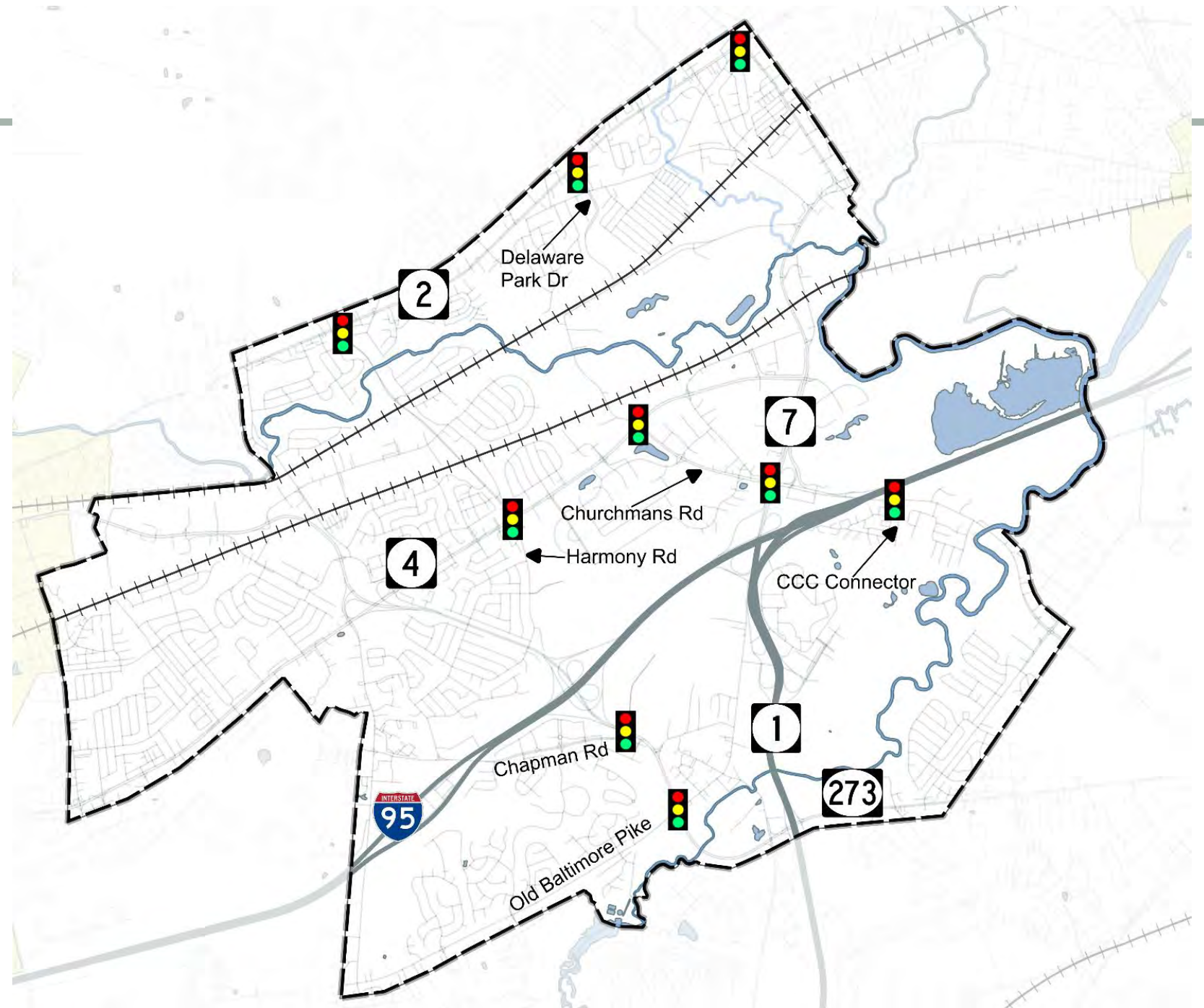
- Proactively plan transportation improvements needed to support economic development
- Identify appropriate locations for economic development in a local comprehensive plan
- Outline transportation needs, improvements, schedules, and payment details

Complete Community Enterprise Districts (CCEDs)

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

Intersection Needs

- 101 signalized intersections in Churchman's Crossing
- Identified 9 key intersections for detailed evaluation (Ongoing)



Ongoing 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

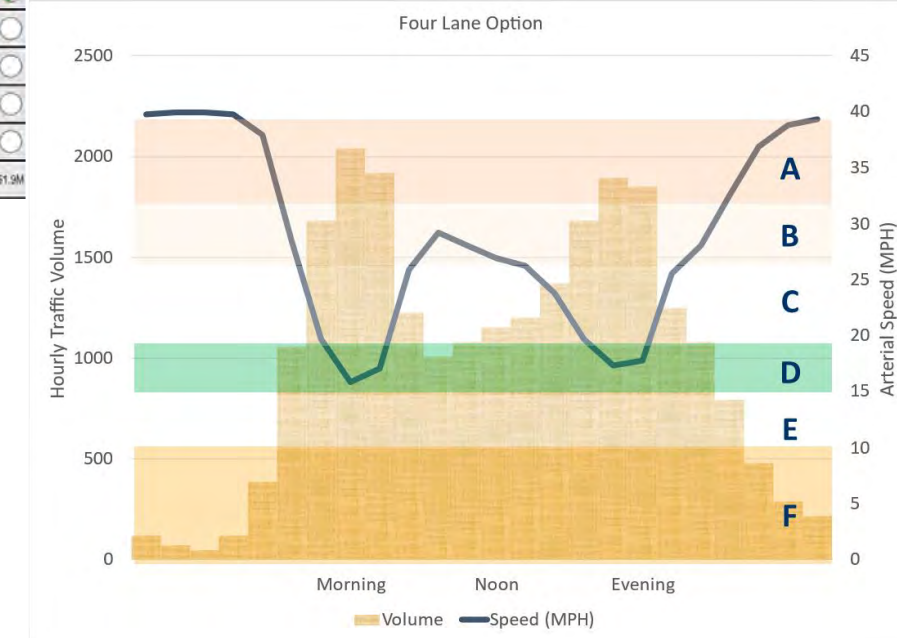
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Four Lane Option

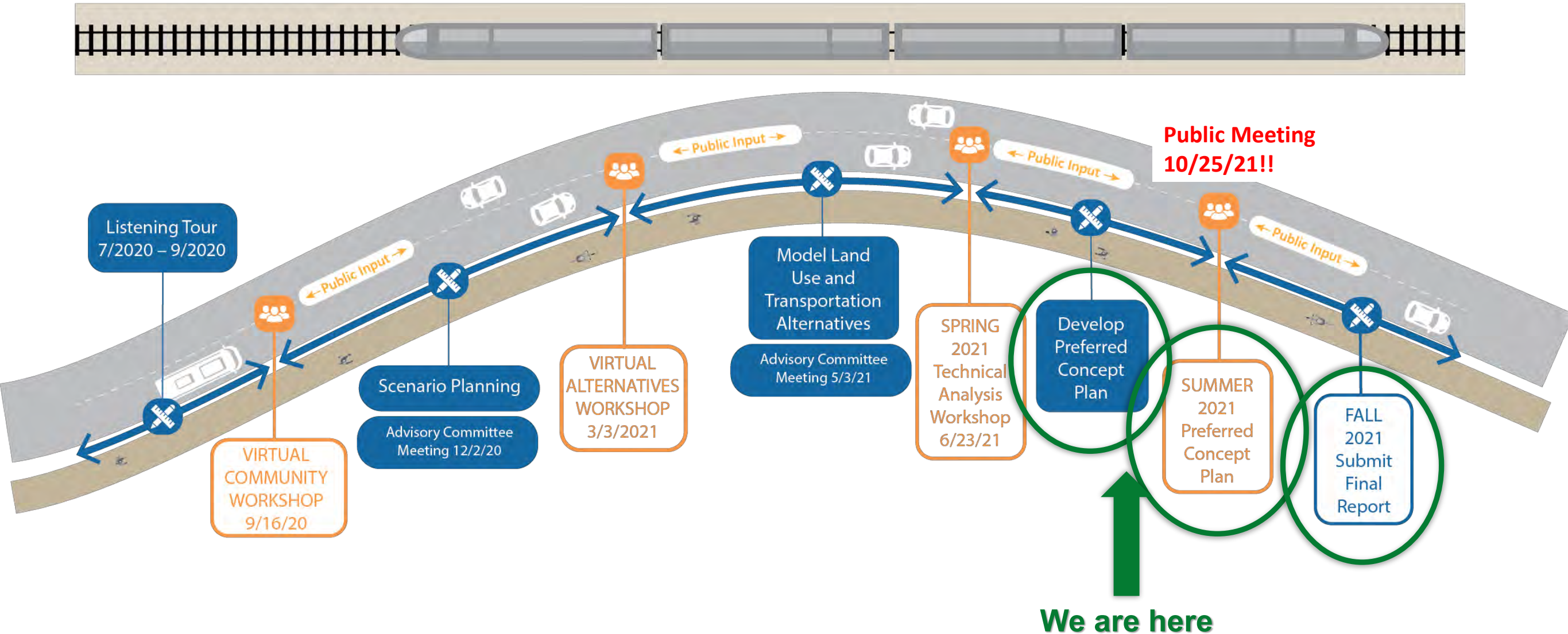
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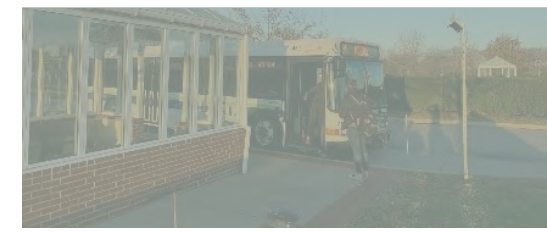
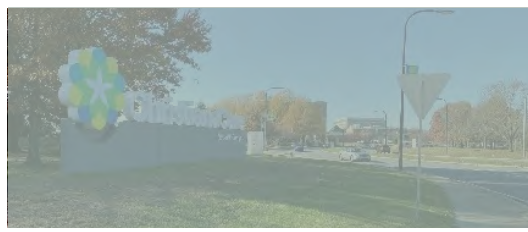
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What is Ahead?





Questions?

www.wilmapco.org/churchmans