Churchman's Crossing Plan Update
Public Workshop #2

March 3, 2021

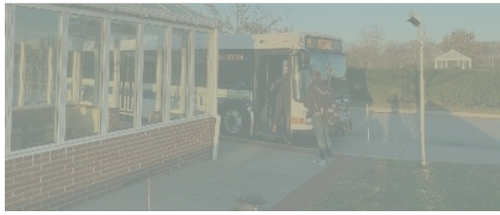


WILMAPCO

New Castle County 1673 Delaware

DelDOT





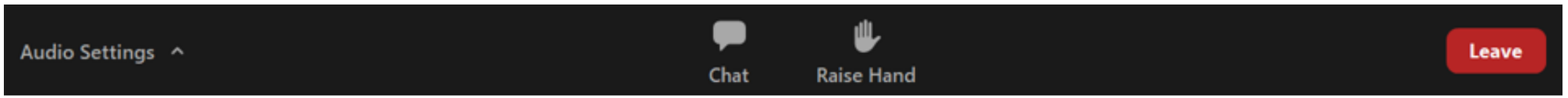
WELCOME!

Public Workshop #2 :
Churchman's Crossing Plan Update

Virtual Workshop Housekeeping

Some helpful hints for tonight's virtual workshop:

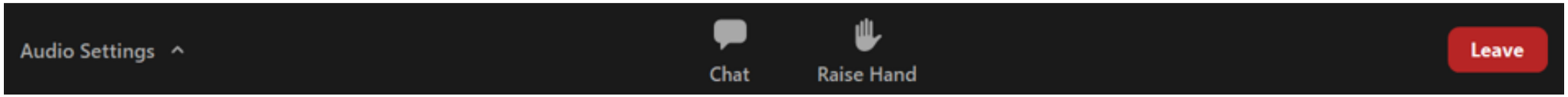
- The **Zoom Webinar Menu Bar** (on a computer) appears at the bottom of the Zoom window once the workshop begins. If you don't see the menu bar, move your mouse slightly and the bar will re-appear. The bar disappears after a few seconds when in full-screen mode.
- Note that **you are muted and without 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.

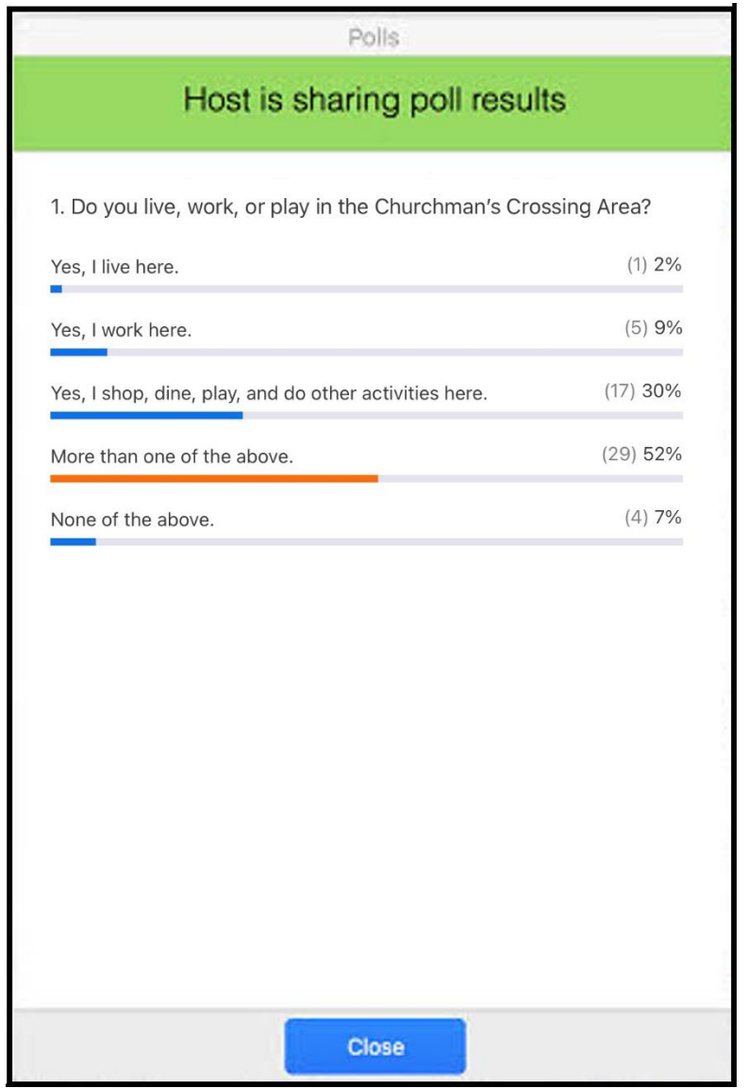


Poll Questions

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

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
- To reach project co-manager Dave Gula
  - —Email: dgula@wilmapco.org
  - —Phone: 302-737-6205 ext. 122

Agenda

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

Agency Partner Statements / Introductions

Dan Blevins
WILMAPCO

Marc Cote
DelDOT

Rich Hall, AICP
New Castle County
Department of Land Use

Tonight's Presenters

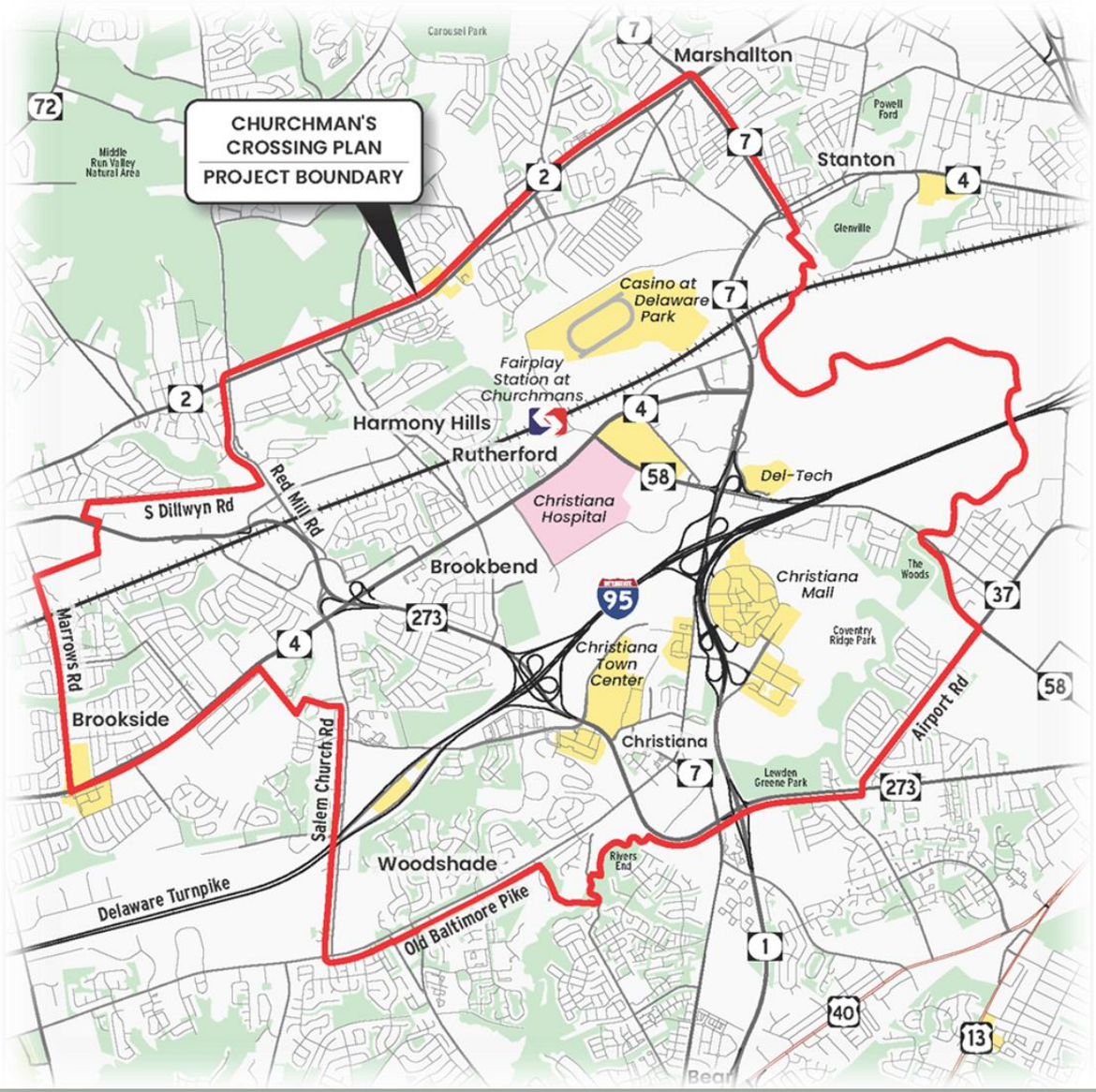
Jim Burnett
RK&K

Mark Tudor
RK&K

Dan Hardy
Renaissance Planning

Poll Question

- How familiar are you with the Churchman's Crossing Plan Update?
  - Attended the 1st workshop and excited to learn more
  - Unable to attend the 1st workshop but have reviewed materials on the web
  - Brand new to this project

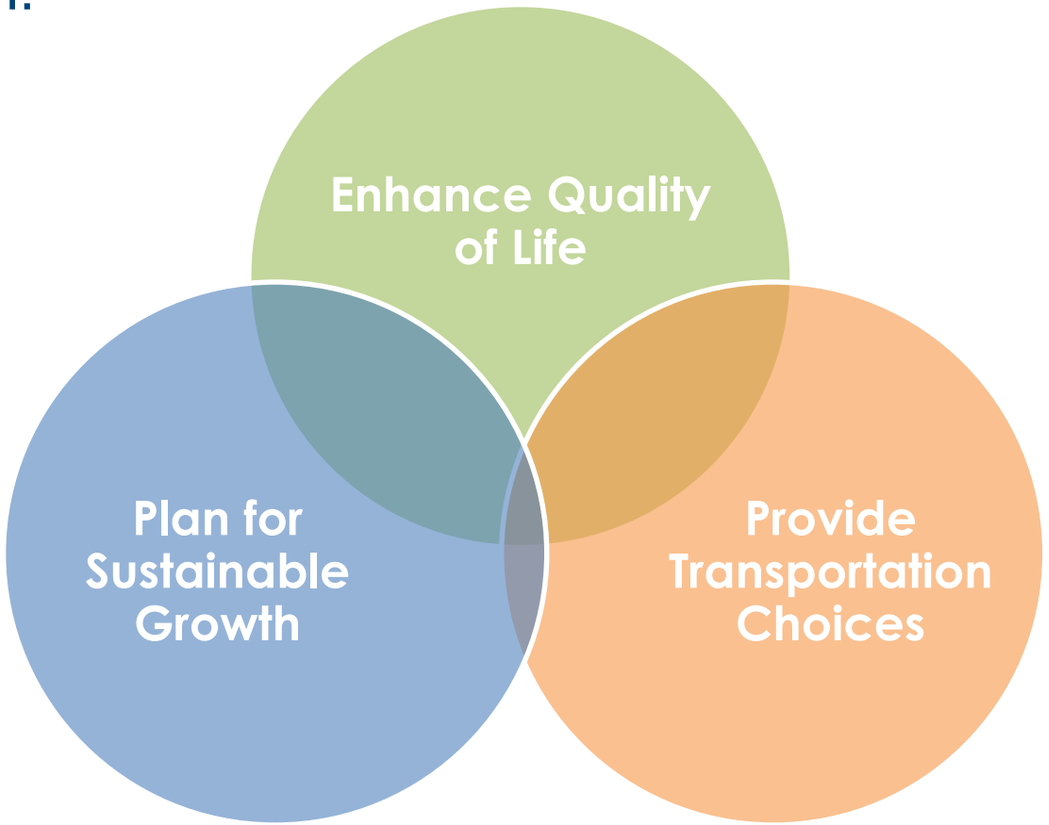


Purpose of Tonight's Workshop

- Provide an overview of the project and update on progress since the 1st Community Workshop held on September 16, 2020
- Discuss transportation and land use scenario planning, and why it's important
- Share preliminary results for the Churchman's Crossing study area
- Welcome input on scenarios to move forward into more detailed analysis of refined alternatives

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

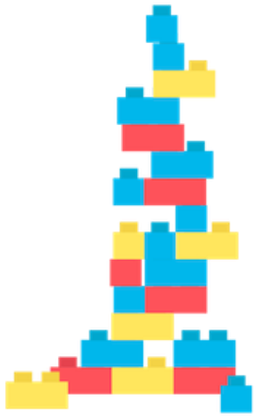


Advisory Committee

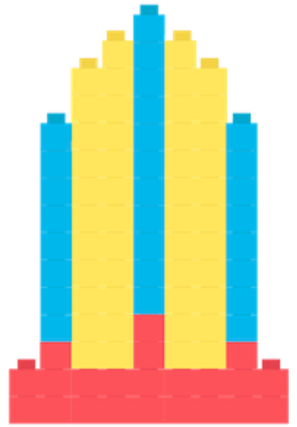
- Bank of America
- Bike Delaware
- Christiana Executive Campus
- Christiana Fire Company
- Christiana Hospital
- Christiana Mall (Brookfield Properties)
- City of Newark
- Civic League for New Castle County
- Committee of 100
- Delaware Department of Natural Resources & Environmental Control (DNREC)
- 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

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



With Blueprints

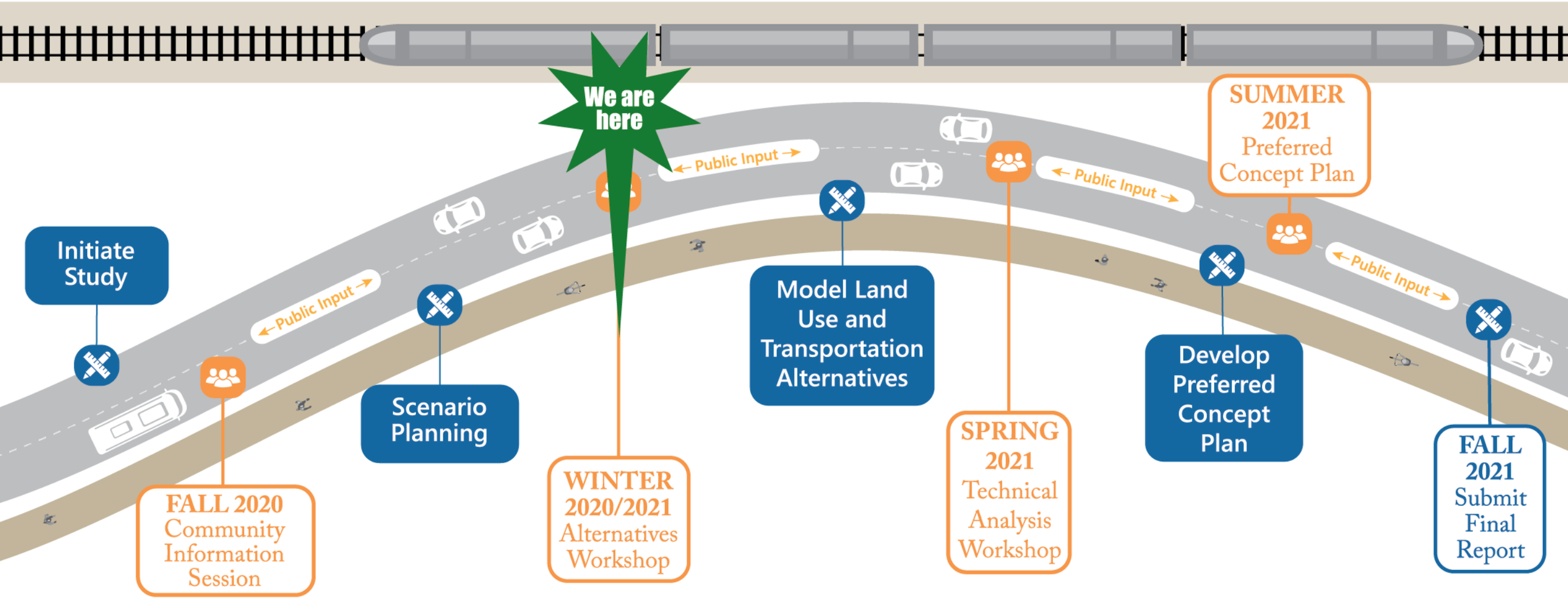
With a Plan	Without a Plan
• Public infrastructure / spending is aligned with need (efficient) • Re-development/development efforts can benefit from each other with intention and predictability • Better understanding of the consequences of actions	• Public infrastructure / spending may lag or be spent before facilities are needed • Re-development/development is haphazard or unpredictable • Impacts / consequences are random

Why Do We Need to Update the Plan?

Transportation and Land Use Plans provide a blueprint for how a community intends to manage change over the course of the next generation, recognizing that:

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

Timeline


We are here
Public Input
Public Input
Public Input
Public Input
Initiate Study
FALL 2020 Community Information Session
Scenario Planning
WINTER 2020/2021 Alternatives Workshop
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

Feedback So Far

Expressed interest in

- Affordable housing
- Flood mitigation
- Green space
- Increased connectivity and shorter trips
- Less traffic and congestion
- Local restaurants and small businesses
- Mixed-use development, including redeveloped parking
- Multi-modal options, including biking, walking, and transit

Some of these will be incorporated in this transportation & land use plan, while others will be addressed by NCC Comprehensive Plan or as part of individual projects.

Feedback So Far

Discussed specific transportation improvements

We are considering these and other improvements. We'll be talking about new connections that have been analyzed during the scenario planning step at this workshop. Specific improvements that have more local transportation benefits will be considered as part of next workshop.

Feedback So Far

Greater consistency in land use decisions made by the county, the TIS process, and DelDOT transportation decisions

Funding for transportation improvements need to be more predictable and equitable between the public and the private

Implementation tools need to address these goals, including mechanisms to help fund needed transportation improvements, such as a Transportation Improvement District (TID) or a Complete Community Enterprise District (CCED)

Scenario Planning – Introduction

- **Purpose**
  - Evaluate land use and transportation trends
    - Where are we headed?
    - Do we like the “business as usual” outcome?
    - What other options should we pursue
    - How will we measure success?
  - Consider both explicit scenario results as well as sensitivity to key assumptions
    - Explicit scenarios help define the bookends
    - Sensitivity tests help describe continuum (area between the bookends)
  - Examining different scenarios helps define actions
    - Common to envision multiple possible futures
    - Particular to a specific future

Scenario Planning – Introduction

- **Screening**
  - Several possible land use and transportation options
  - High level definition (placetype land use allocation, unit-cost facilities)
  - Network level performance measures
- **Outcomes to be applied/presented in future public workshops**
  - Tailored land use assumptions
  - Specific transportation options
  - Network and facility performance measures

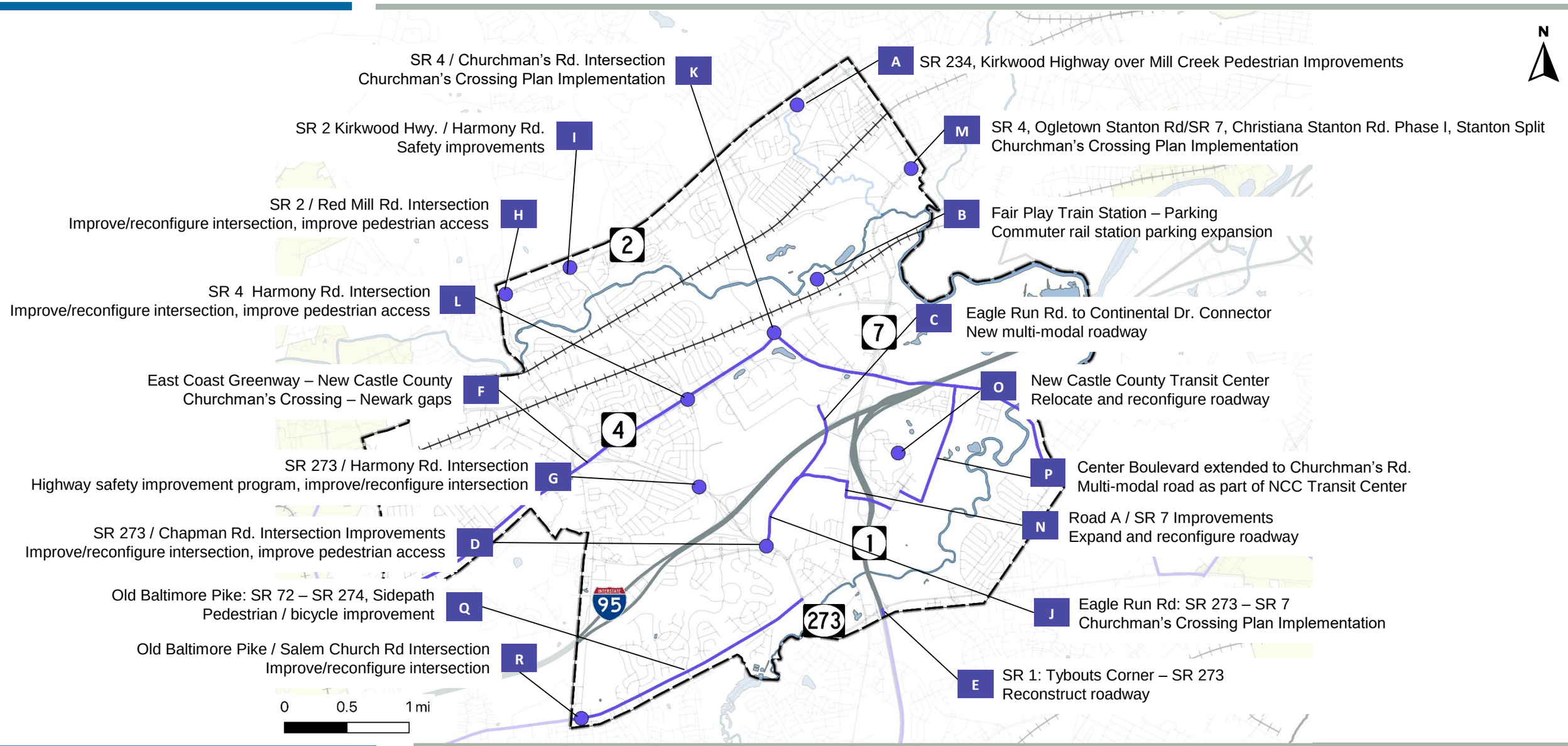
Scenario Planning – "Bookends"

Four bookend scenarios were evaluated to examine sensitivity to land use and transportation changes

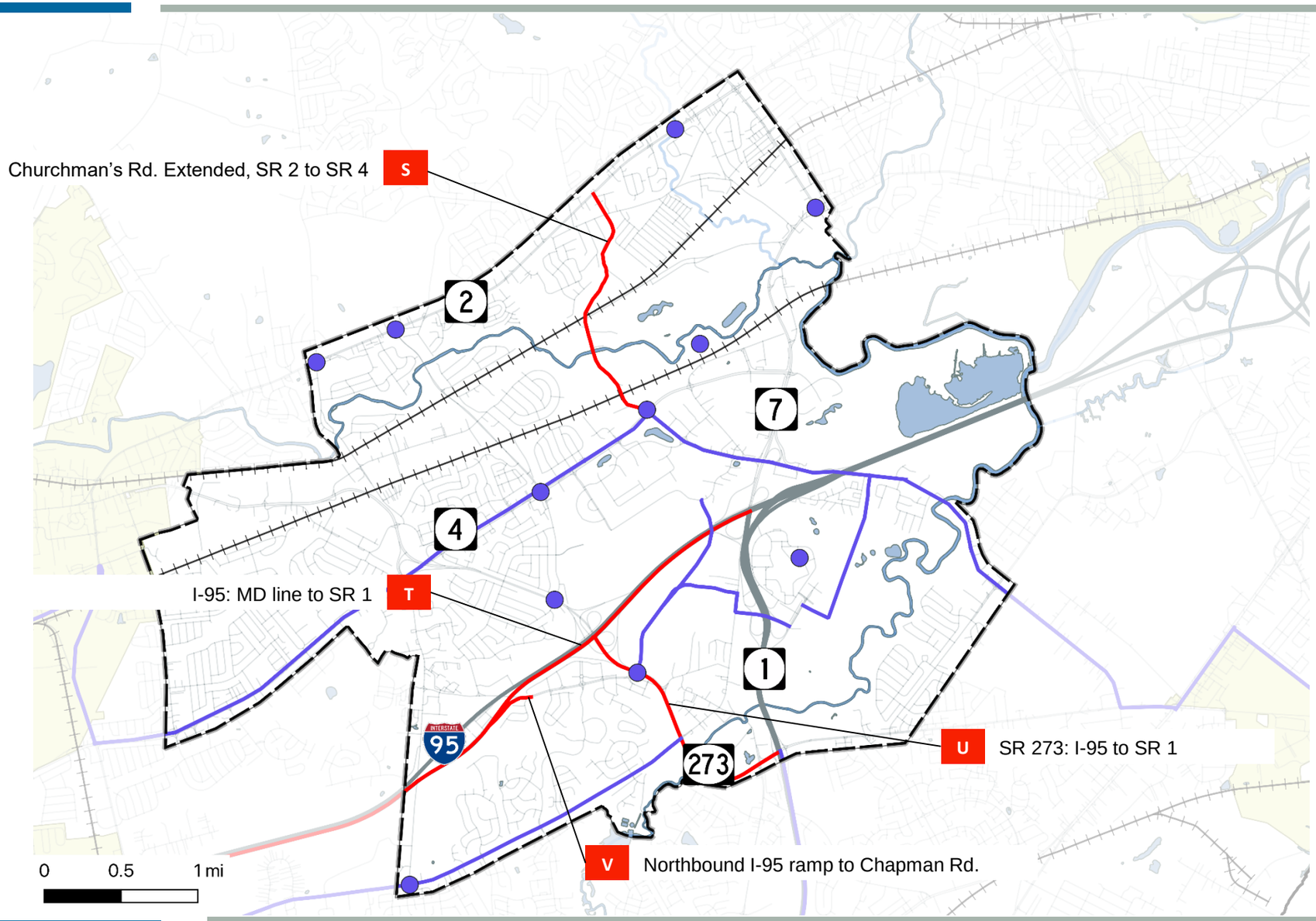
- **Transportation**
  - **Funded** network includes financially constrained projects in the WILMAPCO 2050 Regional Transportation Plan (RTP)
  - **Aspirational** network also includes unfunded RTP projects
- **Land Use**
  - **Expected** Land Use reflects anticipated growth through 2050
  - **Balanced** Land Use increases "3D"s of density, diversity, and design to better utilize transportation system investments

	Transportation	
Land Use	Funded	Aspirational
	Expected	Expected
	Funded	Aspirational
	Balanced	Balanced

Scenario Planning – Funded Transportation Projects



Scenario Planning – Aspirational Transportation Projects



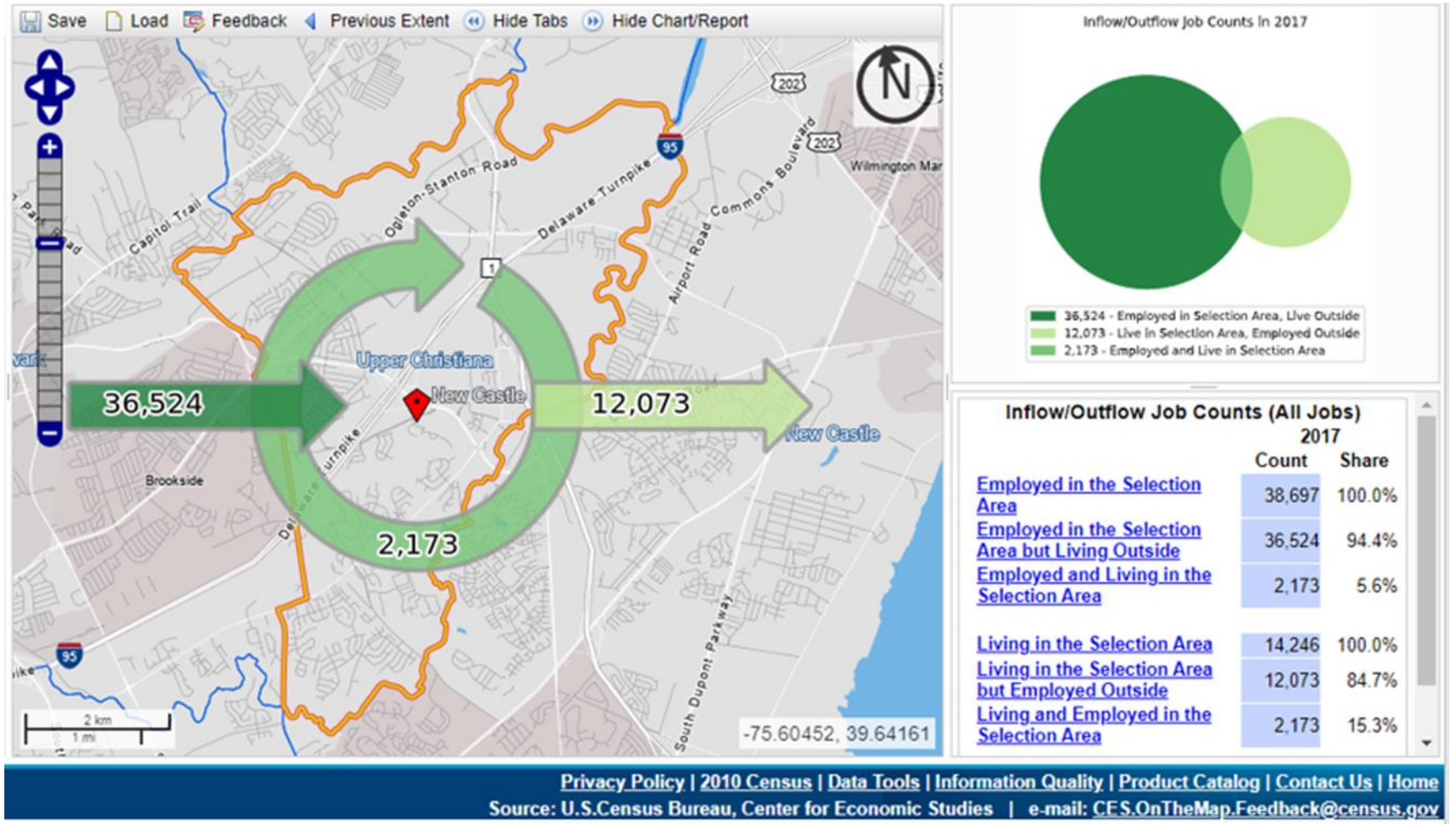
Poll Question – Transportation Scenario "Pre" Question

- Based on what you have seen about the transportation scenarios, do you have a preference for the level of transportation improvements in Churchman's Crossing?
  - Funded Transportation Projects
  - Some level between Funded and Aspirational Transportation Projects
  - Funded + Aspirational Transportation Projects
  - Funded + Aspirational + Other Potential Transportation Projects

We will ask this question again after reviewing the preliminary scenario planning results

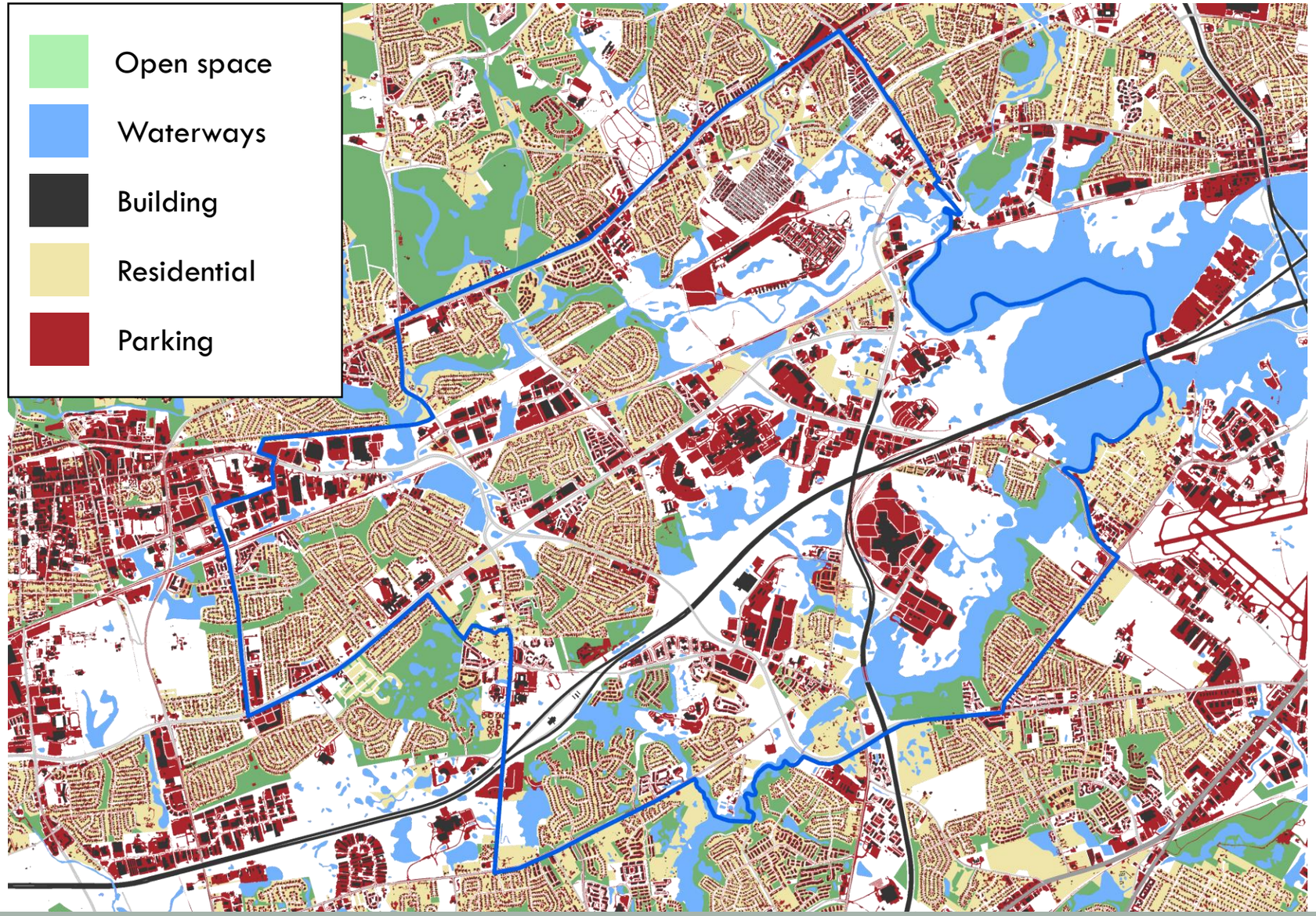
Scenario Planning – Land Use

- Churchman's Crossing is a jobs center
  - Attracts people inbound in the morning and outbound in the evening
- Increasing residential development
  - Could be part of strategic approach to foster live-near-work policies and reduce commute length



Scenario Planning – Land Use

- Opportunities
  - Parking
  - Undeveloped areas
  - Regional accessibility
- Other Considerations
  - Local accessibility
  - Connectivity
  - Market forces

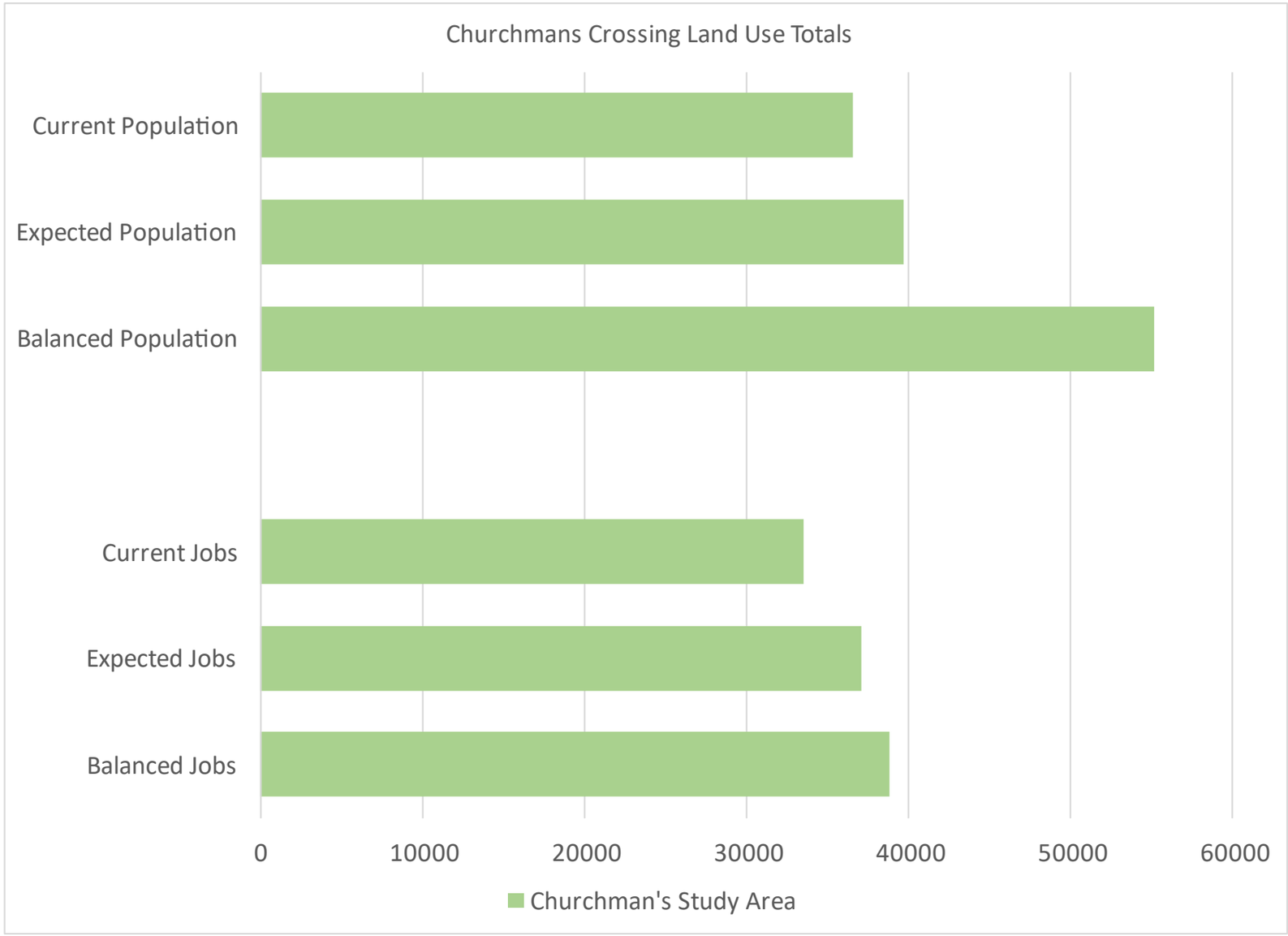


Scenario Planning – Land Use

- Opportunities
  - Parking
  - Undeveloped areas
  - Regional accessibility
- Other Considerations
  - Local accessibility
  - Connectivity
  - Market forces
  - Plans / policies

Scenario Planning – 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



Scenario Planning – Land Use

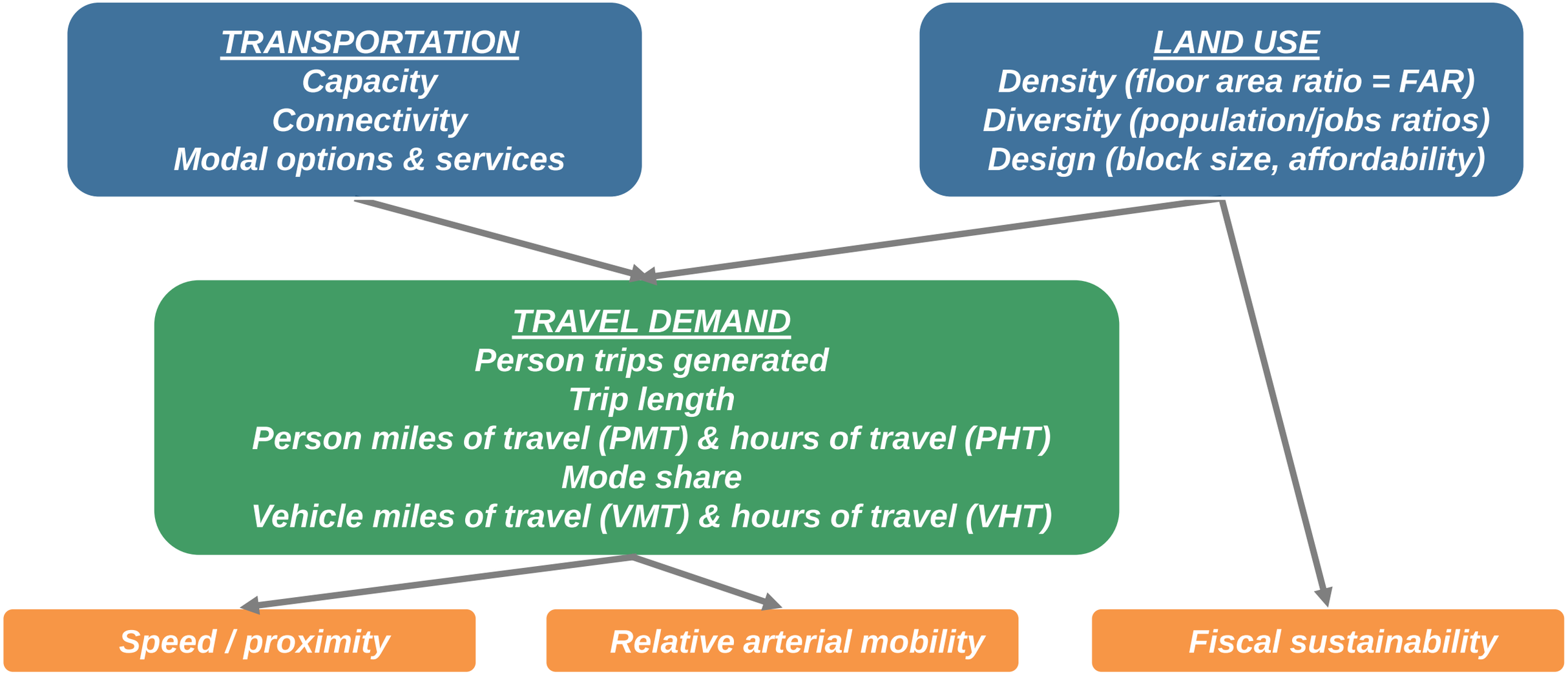
- Current
  - Built / occupied in 2019
- Expected
  - Considers growth already in development or expected to occur based on regional econometrics
- Balanced
  - Considers strategic intensification of mixed-use centers to improve the mix of uses

Poll Question – Land Use Scenario "Pre" Question

- Based on what you have seen about the land use scenarios, do you have a preference for the density, diversity, and design of future land use in Churchman's Crossing?
  - Expected Land Use
  - Somewhere between Expected and Balanced Land Use
  - Balanced Land Use
  - Even more changes to density, diversity, and design

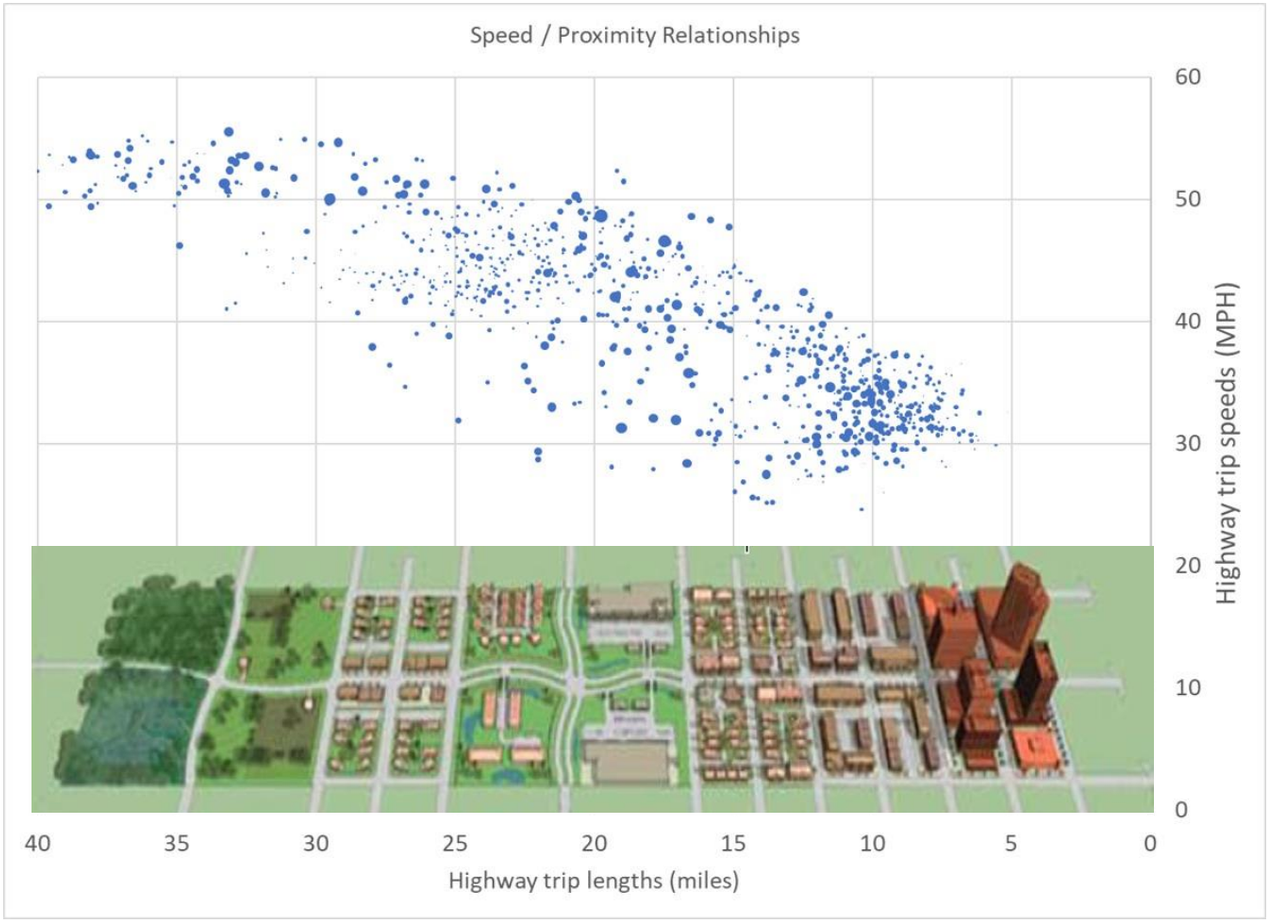
We will ask this question again after reviewing the preliminary scenario planning results

What Are The Screening Metrics?

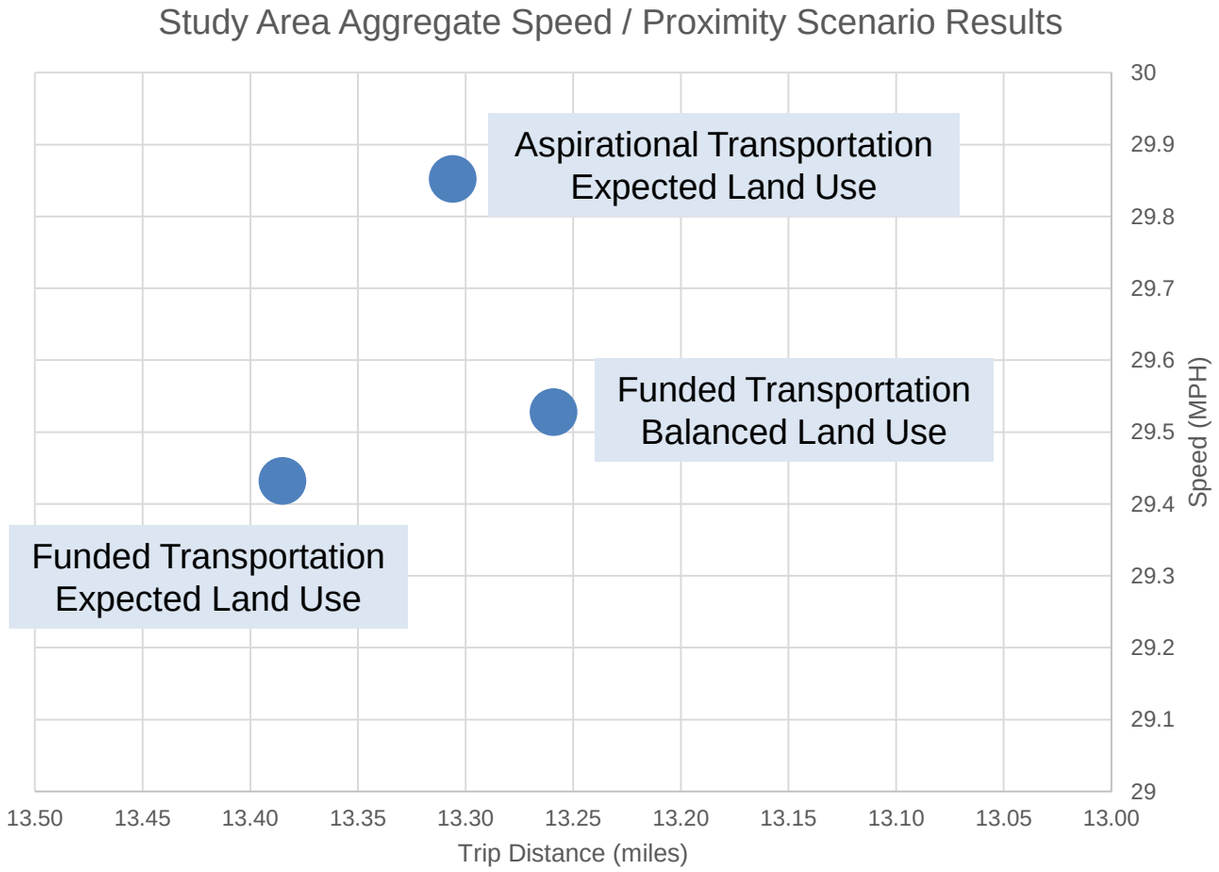


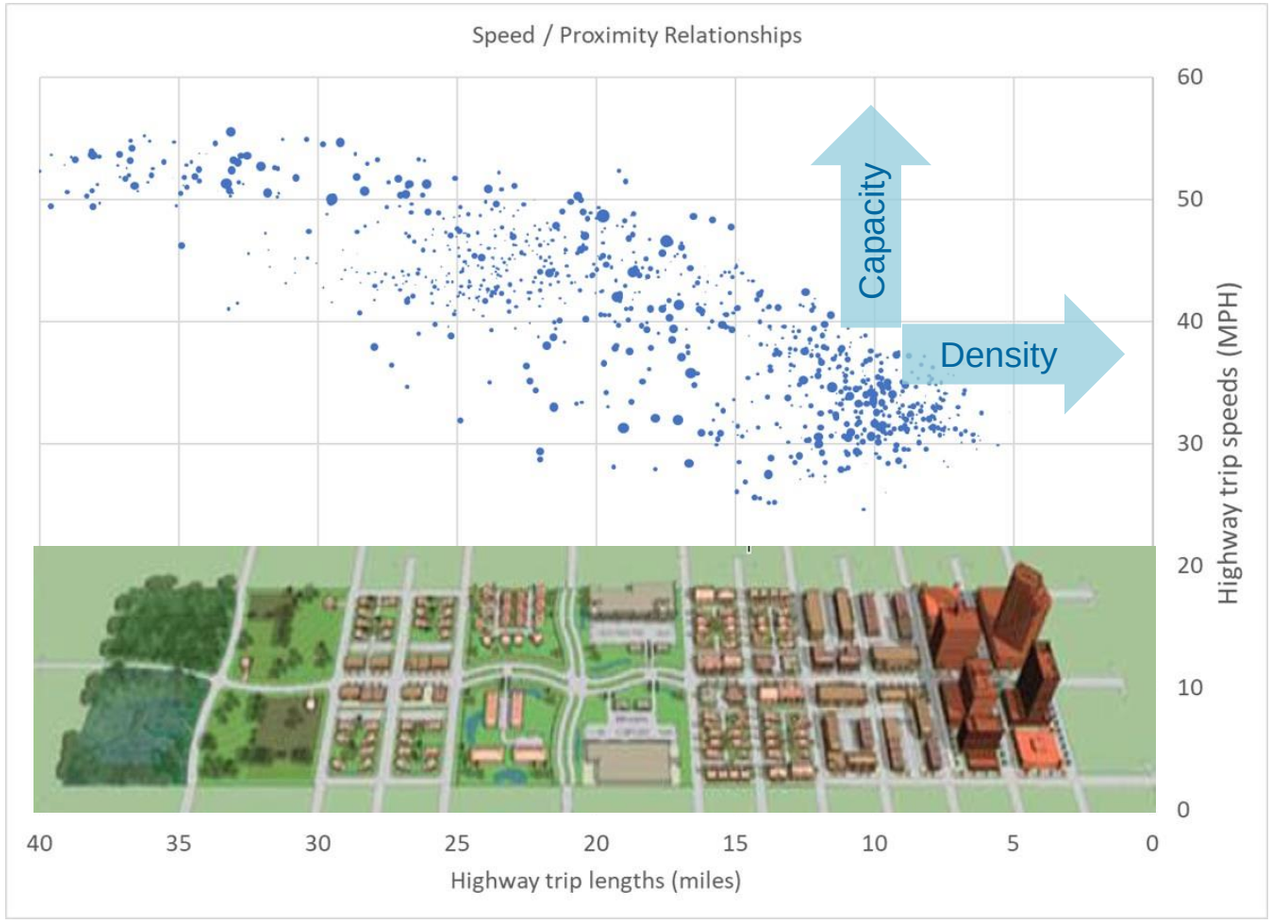
Transportation Screening Metric – Speed & Proximity

- Both speed & proximity are ways to improve mobility
- The importance of speed depends on level of proximity
  - High levels of proximity = speed less important
  - Low levels of proximity = speed more important
- Helps to think in terms of completing trips instead of accumulating mileage
- FHWA considering this as a “multi-modal productivity” measure



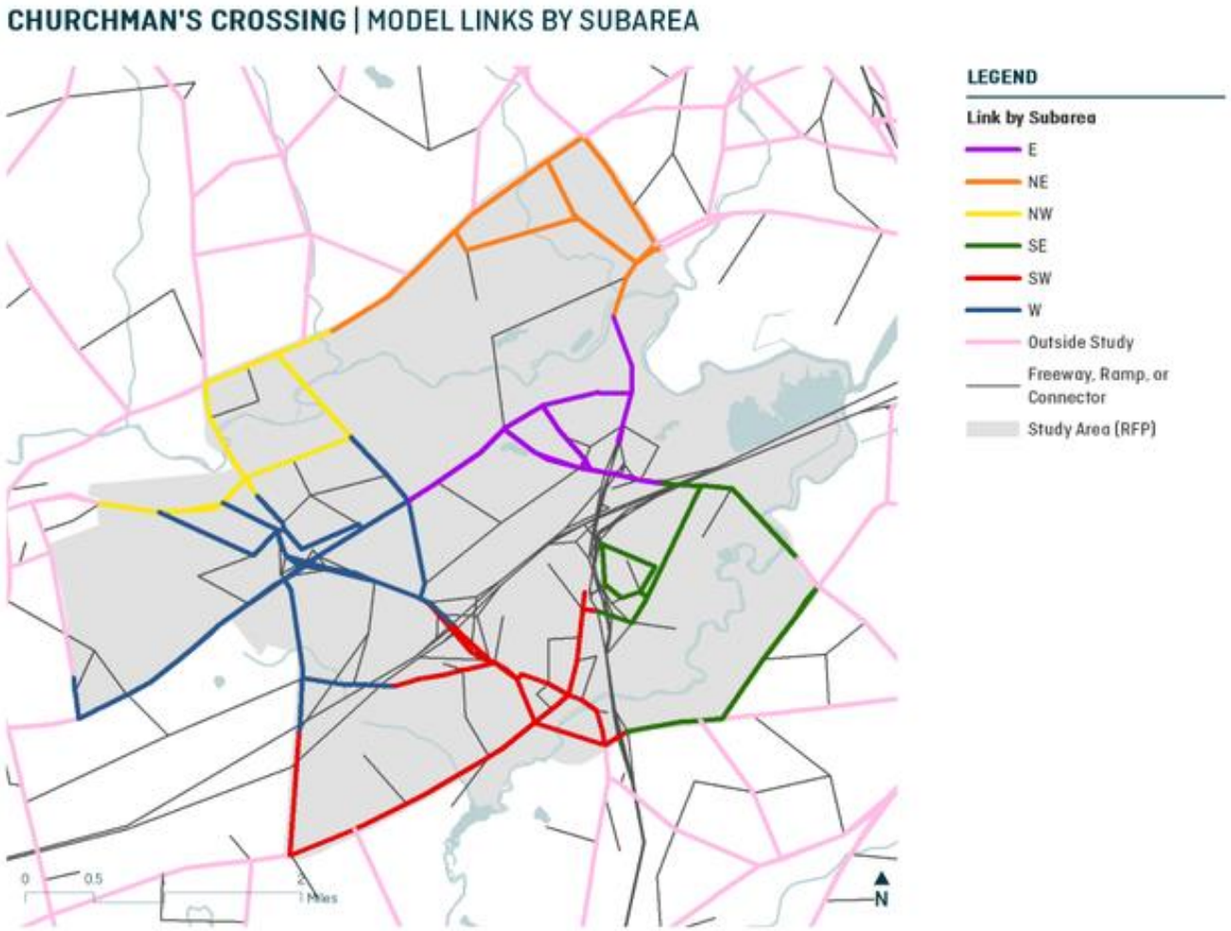
Transportation Screening Metric – Speed & Proximity





Transportation Screening Metric – Relative Arterial Mobility

- Measures the ratio of peak travel speeds to free-flow travel speeds
- Based on Highway Capacity Manual relationships for urban arterial roadway Level of Service (LOS)
- Considers average performance, weighted by vehicle miles of travel (VMT), for the entire network



Transportation Screening Metric – Relative Arterial Mobility

- Churchman's Crossing relative arterial mobility in 2019:
  - Speeds slightly higher in AM than PM
  - Congestion distributed relatively evenly throughout the study area
  - Arterial network performs at LOS C/D in AM and LOS D in PM

2019 Relative Arterial Mobility Analysis

Area	VMT AM	VMT PM	Estimated MPH AM	Estimated MPH PM	MPH @ Freeflow	AM / Freeflow	PM / Freeflow	AM Arterial LOS	PM Arterial LOS
W	38,900	42,400	24.8	21.7	43.7	0.57	0.50	C	D
SW	27,600	28,000	21.3	19.1	44.5	0.48	0.43	D	D
SE	13,600	15,200	25.8	20.0	48.0	0.54	0.42	D	D
NW	22,100	24,100	24.0	19.8	44.3	0.54	0.45	D	D
NE	43,100	47,100	25.8	21.3	45.8	0.56	0.47	C	D
E	28,200	32,400	26.8	22.1	45.3	0.59	0.49	C	D

Transportation Screening Metric – Relative Arterial Mobility

- Adding the extra land use in Balanced Scenario
  - increases area VMT by about 3%
  - drops speeds by about 0.5 MPH
- Adding roadway capacity in Aspirational Scenario
  - increases area VMT by about 1%
  - increases speeds by about 1-2 MPH

AM Peak

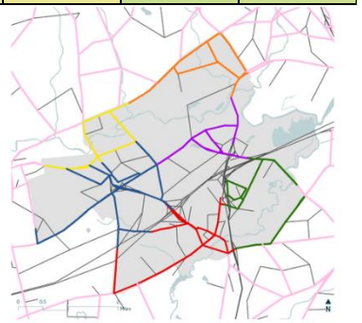
	VMT			
	Funded		Aspirational	
Area	Expected	Balanced	Expected	Balanced
W	48,900	50,000	46,500	47,500
SW	28,900	29,500	34,000	35,600
SE	15,400	15,400	15,000	15,600
NW	24,300	24,600	21,800	22,300
NE	47,900	48,800	55,700	57,300
E	35,300	38,500	38,600	41,700
Subtotal	200,700	206,800	211,600	220,000

	Speed (MPH)			
	Funded		Aspirational	
Area	Expected	Balanced	Expected	Balanced
W	22.1	21.5	23.3	22.6
SW	20.3	19.9	20.6	20.6
SE	24.1	23.9	24.8	25.0
NW	21.7	21.1	24.3	24.0
NE	20.9	20.0	23.4	22.6
E	23.2	22.6	28.6	27.8
Subtotal	21.8	21.2	24.1	23.6

PM Peak

VMT			
Funded		Aspirational	
Expected	Balanced	Expected	Balanced
55,200	56,100	51,500	53,900
31,200	31,900	37,800	40,300
17,800	18,300	17,100	18,200
26,500	27,100	23,400	23,400
55,100	55,600	65,200	67,600
42,400	45,200	44,500	47,600
228,200	234,200	239,500	251,000

Speed (MPH)			
Funded		Aspirational	
Expected	Balanced	Expected	Balanced
18.8	18.4	20.0	19.2
18.3	18.2	19.7	19.4
18.9	18.4	19.6	20.0
16.6	16.4	20.0	20.0
16.2	15.7	19.0	18.6
18.6	17.9	23.5	23.1
17.8	17.4	20.3	20.0



Transportation Screening Metric – Relative Arterial Mobility

- All scenarios have Relative Arterial Mobility LOS of D in AM; a mix of D and E in PM
- From the perspective of Relative Arterial Mobility LOS, the Aspirational scenario performs slightly better
- I-95 widening effects on arterial mobility are negligible

AM Peak

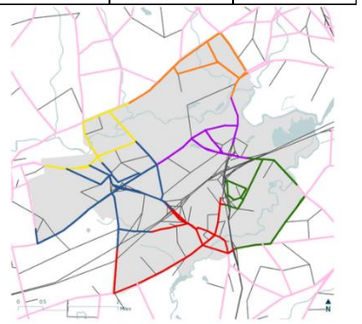
	Congested/Freeflow Speed Ratio			
	Funded		Aspirational	
Area	Expected	Balanced	Expected	Balanced
W	0.51	0.49	0.53	0.52
SW	0.42	0.42	0.39	0.39
SE	0.51	0.50	0.52	0.53
NW	0.49	0.48	0.55	0.54
NE	0.46	0.44	0.48	0.46
E	0.49	0.48	0.55	0.53
Subtotal	0.48	0.46	0.50	0.49

	Arterial Mobility LOS			
	Funded		Aspirational	
Area	Expected	Balanced	Expected	Balanced
W	D	D	D	D
SW	D	D	E	E
SE	D	D	D	D
NW	D	D	D	D
NE	D	D	D	D
E	D	D	C	D

PM Peak

Congested/Freeflow Speed Ratio			
Funded		Aspirational	
Expected	Balanced	Expected	Balanced
0.43	0.42	0.46	0.44
0.38	0.38	0.37	0.37
0.40	0.39	0.41	0.42
0.38	0.37	0.45	0.45
0.35	0.34	0.39	0.38
0.40	0.38	0.45	0.44
0.39	0.38	0.42	0.41

Arterial Mobility LOS			
Funded		Aspirational	
Expected	Balanced	Expected	Balanced
D	D	D	D
E	E	E	E
E	E	D	D
E	E	D	D
E	E	E	E
E	E	D	D



Transportation Screening Metric – Relative Arterial Mobility

- To achieve LOS D everywhere, would require reduction of approximately 10,000 VMT per peak period with the Aspirational / Balanced Scenario
- This reduction relates to about 2% of overall area VMT
- Can achieve LOS D by:
  - Increasing capacity
  - Reducing trips
  - Reducing trip lengths

AM Peak

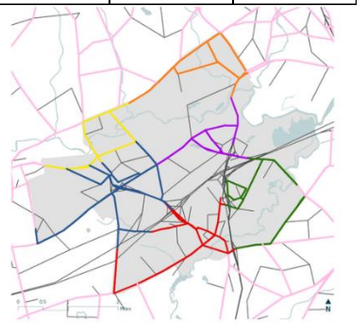
	Congested/Freeflow Speed Ratio			
	Funded		Aspirational	
Area	Expected	Balanced	Expected	Balanced
W	0.51	0.49	0.53	0.52
SW	0.42	0.42	0.39	0.39
SE	0.51	0.50	0.52	0.53
NW	0.49	0.48	0.55	0.54
NE	0.46	0.44	0.48	0.46
E	0.49	0.48	0.55	0.53
Subtotal	0.48	0.46	0.50	0.49

	Arterial Mobility LOS			
	Funded		Aspirational	
Area	Expected	Balanced	Expected	Balanced
W	D	D	D	D
SW	D	D	E	E
SE	D	D	D	D
NW	D	D	D	D
NE	D	D	D	D
E	D	D	C	D

PM Peak

Congested/Freeflow Speed Ratio			
Funded		Aspirational	
Expected	Balanced	Expected	Balanced
0.43	0.42	0.46	0.44
0.38	0.38	0.37	0.37
0.40	0.39	0.41	0.42
0.38	0.37	0.45	0.45
0.35	0.34	0.39	0.38
0.40	0.38	0.45	0.44
0.39	0.38	0.42	0.41

Arterial Mobility LOS			
Funded		Aspirational	
Expected	Balanced	Expected	Balanced
D	D	D	D
E	E	E	E
E	E	D	D
E	E	D	D
E	E	E	E
E	E	D	D



Scenario Planning – Finding #1

- Scenario planning findings provide guidance for more detailed analysis of alternatives in next stage of study

Finding	Implication
1. The study area is close to achieving an area-wide arterial LOS D objective with the funded transportation scenario, and the aspirational transportation scenario performs slightly better	Subsequent tasks will refine location-specific details

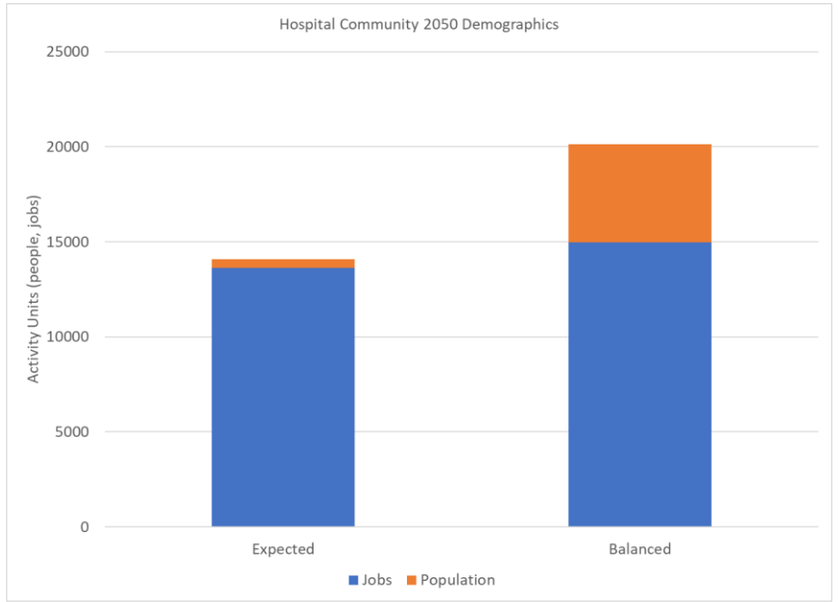
Scenario Planning – Land use "3Ds" reduce demand

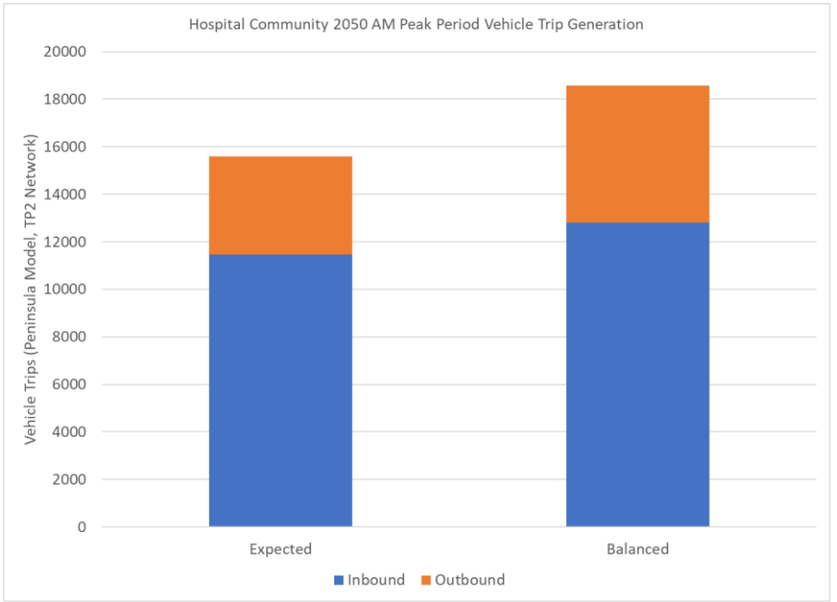
Sensitivity test for Hospital Vicinity – Balanced Scenario:

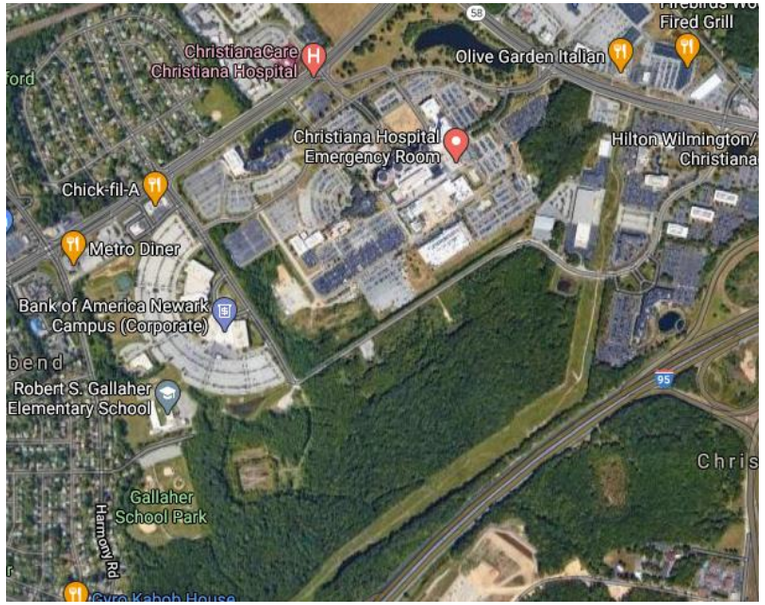
- Increases development footprint by 43%
- Increases traffic footprint by 19% (just Density, without attention to Diversity or Design)

TAZ 151
Suburban Commercial Retrofit
Current: 17 AU/acre, 375 J/HH
Expected: 21 AU/acre, 95 J/HH
Balanced: 29 AU/acre, 8 J/HH

**AU = activity unit (population + jobs)*
J/HH = jobs per household



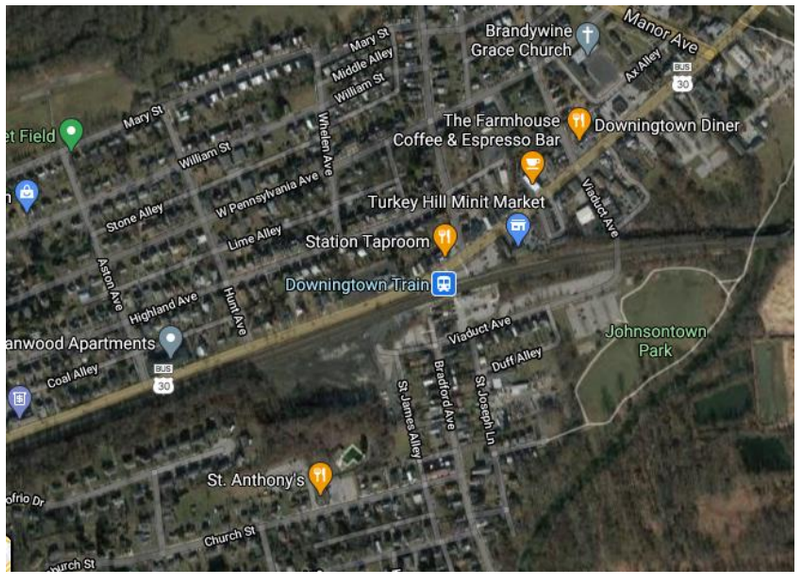




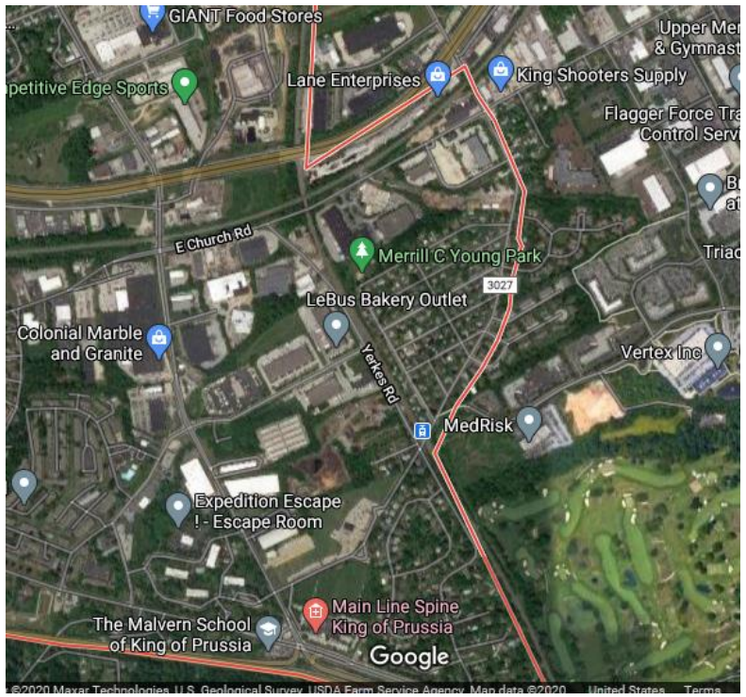
Scenario Planning – Land use “3Ds” reduce demand

How does Hospital Vicinity Density and Diversity compare to SEPTA system examples?

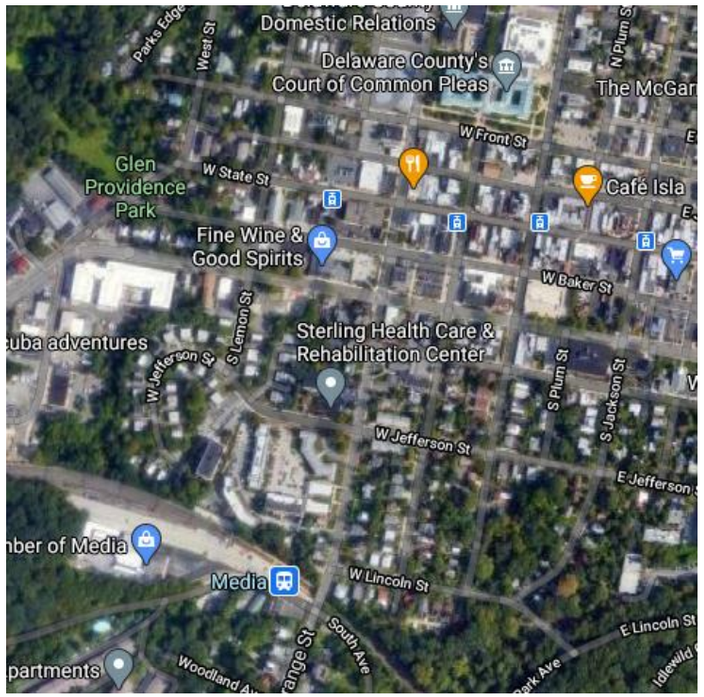
Downingtown
Village Center
10 AU/acre, 1.1 J/HH



King of Prussia (Hughes Park)
Suburban Commercial Retrofit
10 AU/acre, 4.0 J/HH



Media
Urban Town Center
80 AU/acre downtown trolley, 20 J/HH
10 AU/acre at SEPTA, 0.6 J/HH

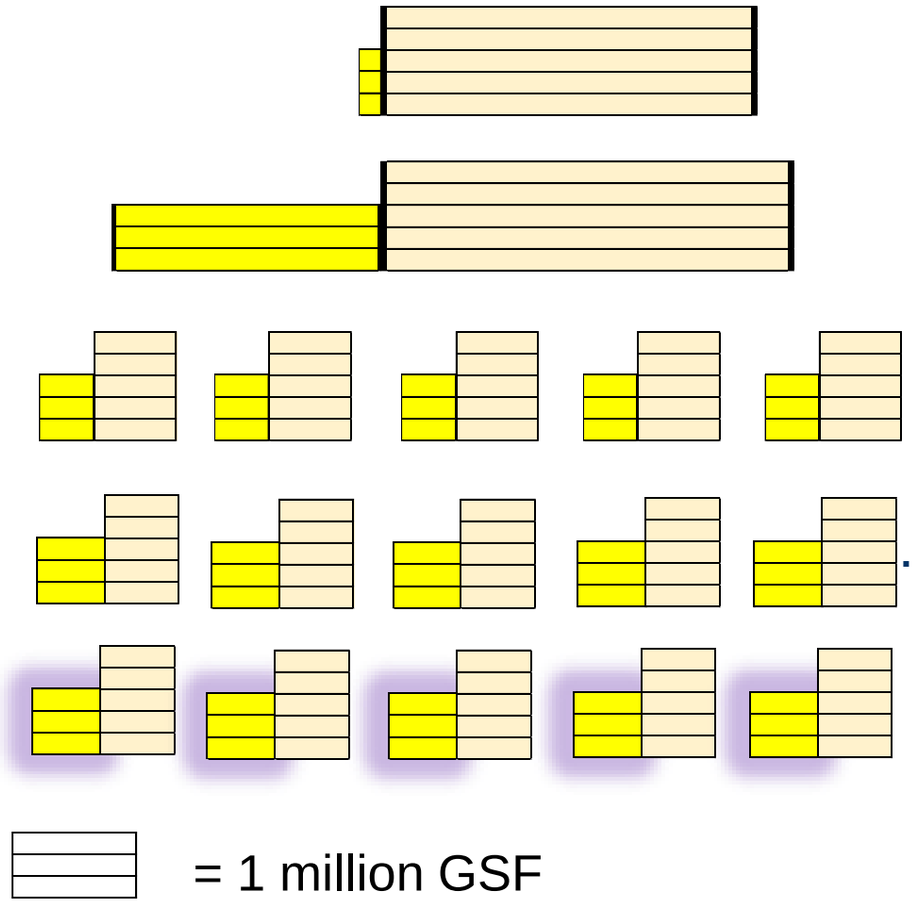


**AU = activity unit (population + jobs)*
J/HH = jobs per household

Scenario Planning – Land use "3Ds" reduce demand

Travel demand is heavily affected by "3D"s of Density, Diversity, and Design

Residential and Commercial space



Expected

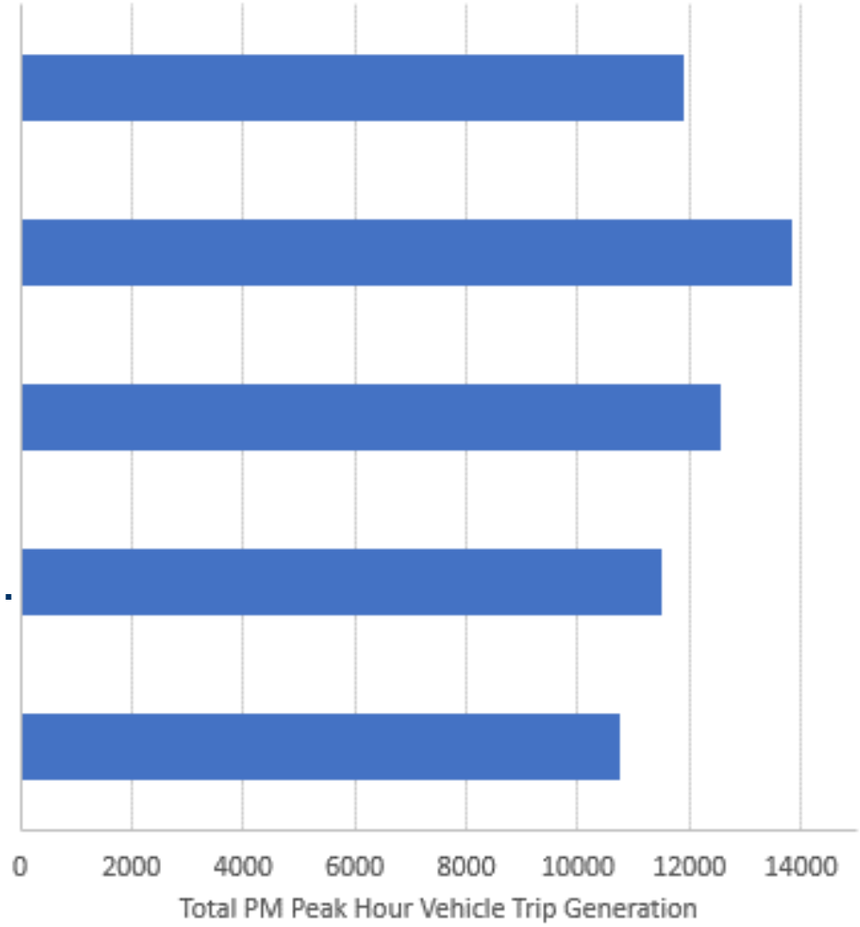
Balanced…

…with better design…

…and all "growth" residential…

…and affordable

PM Peak Vehicle Trips



Scenario Planning – Finding #2

- Scenario planning findings provide guidance for more detailed analysis of alternatives in next stage of study

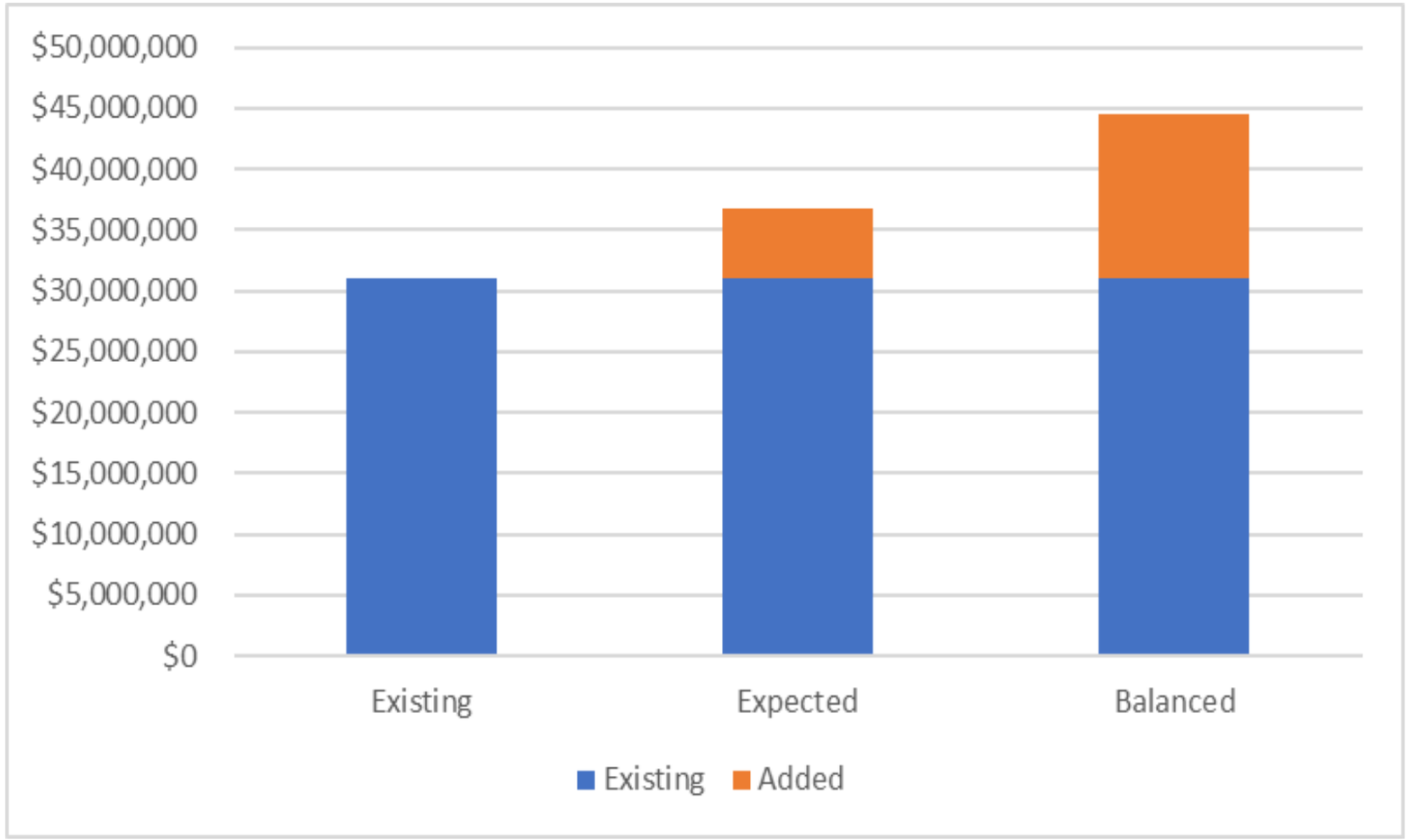
Finding	Implication
1. The study area is close to achieving an area-wide arterial LOS D objective with the funded transportation scenario, and the aspirational transportation scenario performs slightly better	Subsequent tasks will refine location-specific details
2. While transportation improvements are important, so too are the land use "3D"s (density, diversity, design) to meaningfully reduce VMT	Land use / TDM policies are critical to success

Scenario Planning – Solutions Span Multiple Properties

- Local accessibility and connectivity
  - Churchman's Road Extended
  - Eagle Run / Continental Connector
  - Transit spine
- Safety/mobility
- Funding
  - Local / thru trips
  - Alternative funding mechanisms

Scenario Planning – Solutions Span Multiple Properties

- Considering fiscal sustainability
- Higher / better land uses generate tax revenue (and use services)
- Successful transportation implementation elements need to consider capital costs for new projects and operating costs for operations and maintenance



Scenario Planning – Finding #3

- Scenario planning findings provide guidance for more detailed analysis of alternatives in next stage of study

Finding	Implication
1. The study area is close to achieving an area-wide arterial LOS D objective with the funded transportation scenario, and the aspirational transportation scenario performs slightly better	Subsequent tasks will refine location-specific details
2. While transportation improvements are important, so too are the land use "3D"s (density, diversity, design) to meaningfully reduce VMT	Land use / TDM policies are critical to success
3. Land use and transportation solutions will span multiple properties	Consider implementation mechanisms that recognize these synergies

Poll Question – Transportation Scenario "Post" Question

Now that you have seen preliminary scenario planning results … same transportation question:

- Do you have a preference for the level of transportation improvements in Churchman's Crossing?
  - Funded Transportation Projects
  - Some level between Funded and Aspirational Transportation Projects
  - Funded + Aspirational Transportation Projects
  - Funded + Aspirational + Other Potential Transportation Projects

Poll Question – Land Use Scenario "Post" Question

Now that you have seen preliminary scenario planning results … same land use question:

- Do you have a preference for the density, diversity, and design of future land use in Churchman's Crossing?
  - Expected Land Use
  - Somewhere between Expected and Balanced Land Use
  - Balanced Land Use
  - Even more changes to density, diversity, and design

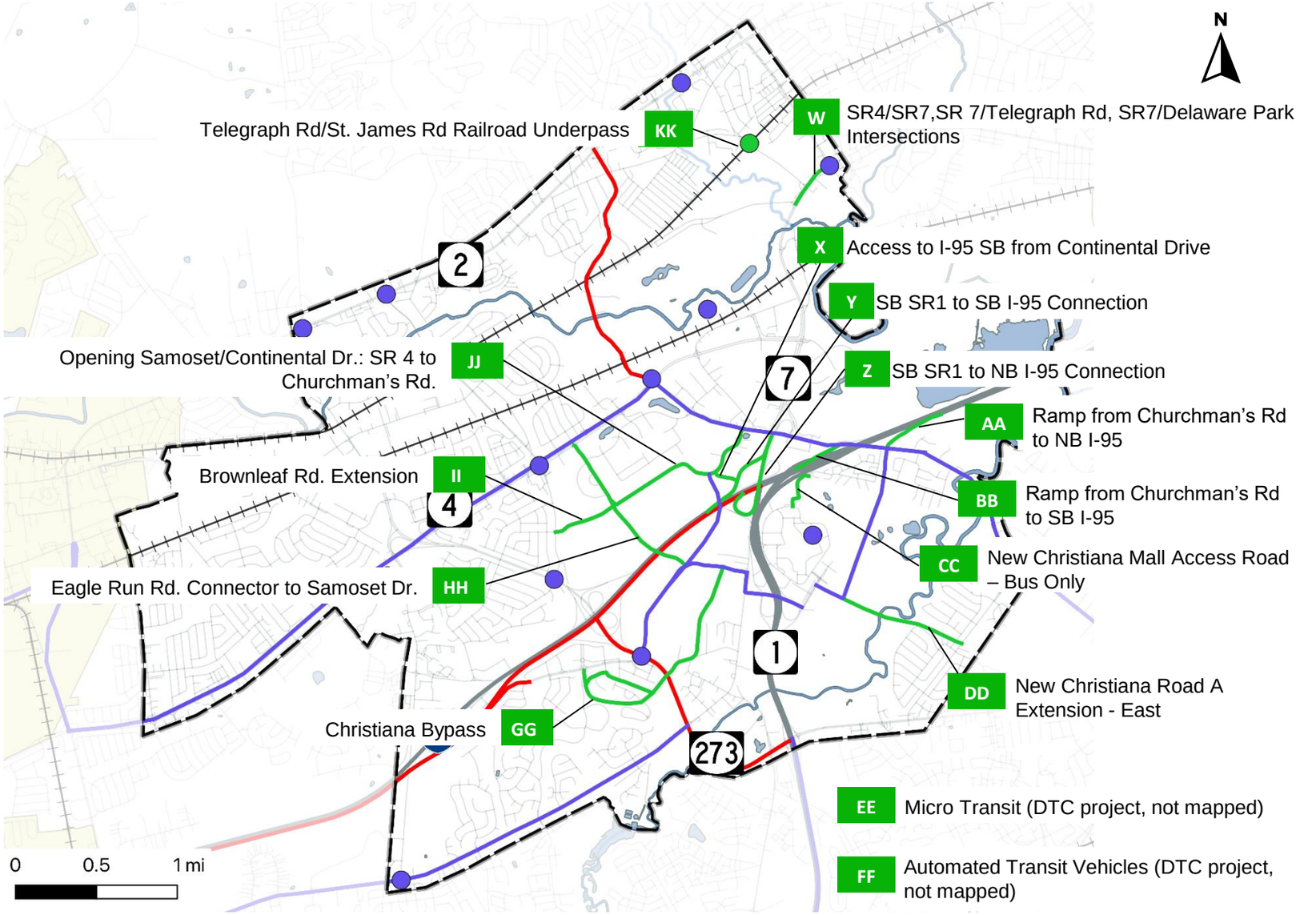
Poll Question – Putting it all together

- Which direction do you think the project should head?
  - Stay in Top Left (“Business as Usual”) – Funded Transportation and Expected Land Use
  - Toward the Right (Focus on Transportation) – Aspirational Transportation and Expected Land Use
  - Toward the Bottom (Focus on Land Use “3D”s) – Funded Transportation and Balanced Land Use
  - Diagonally (Both Transportation and Land Use) – Aspirational Transportation and Balanced Land Use

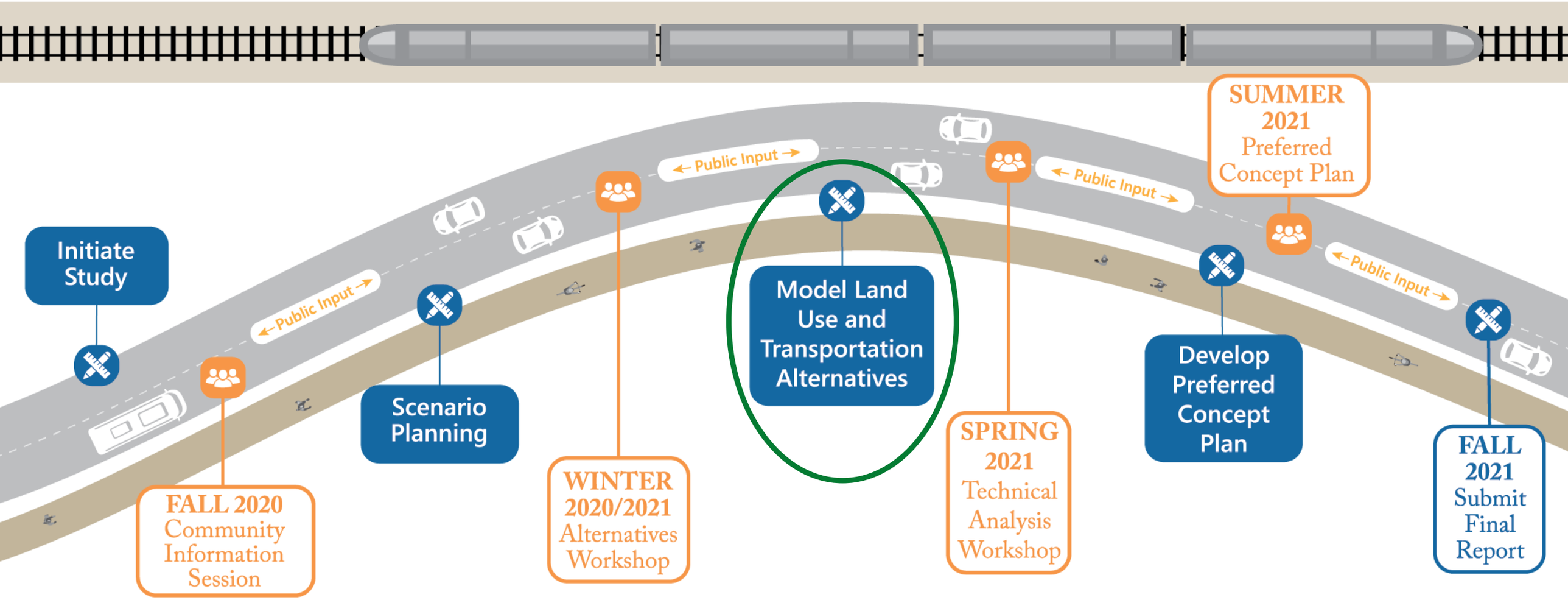
	Transportation	
Land Use	Funded Expected	Aspirational Expected
	Funded Balanced	Aspirational Balanced

Next Steps

- Refine current land use & transportation alternatives with detailed analysis
  - Improvements necessary to provide area-wide arterial LOS D
  - Land use & transit focus along spine from Fairplay Station to the mall



What is Ahead?



Stay Connected

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

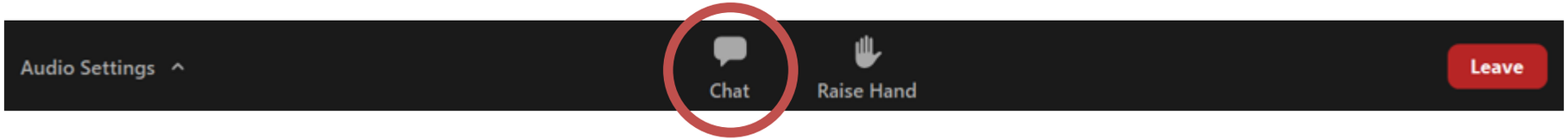
- Project website: http://www.wilmapco.org/Churchmans/
- For questions, comments, or to sign up for project email updates, email Randi Novakoff at rnovakoff@wilmapco.org
- To reach co-project manager Dave Gula
  - —Email: dgula@wilmapco.org
  - —Phone: 302-737-6205 ext. 122

For More Immediate Concerns

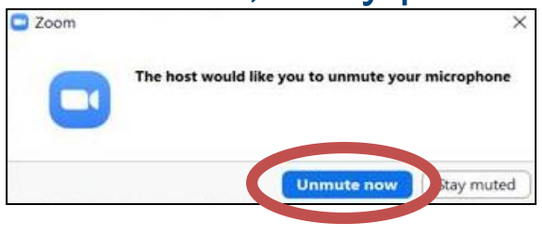
- To report a road condition (such as drainage problems, potholes, traffic signs or signals, streetlights)
  - —Call the TMC at 302-659-4600 or 800-324-8379
  - —Use the “Report an Issue” feature on the mobile app (https://deldot.gov/mobile/ for instructions)
  - —Or visit http://deldot.gov/Traffic/ReportRoadCondition
- To reach New Castle County Department of Land Use
  - —Call 302-395-5400 for Permits/Inspections/Planning and/or 302-395-5555 for Code Enforcement
  - —Or email LandUse@newcastlede.gov

Questions & Answers

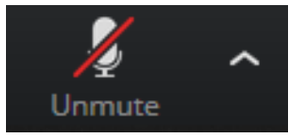
- Please use the “**Chat**” button in the **Zoom Webinar Menu Bar** at any time to enter your question
- The host and panelists are monitoring the Chat box to gather questions



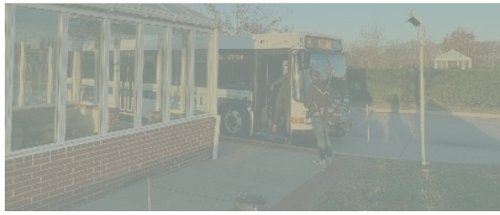
- To speak your question, please raise your hand by using the “**Raise Hand**” button in the **Zoom Webinar Menu Bar**, or by pressing ***9 when calling in on a phone**
- The host will be notified of who has raised their hand, and will announce your name and ask you to unmute yourself when it is your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

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Public Workshop #2 :
Churchman's Crossing Plan Update