



PRESENTATION FOR THE

CONCORD PIKE (US 202) CORRIDOR MASTER PLAN

PUBLIC WORKSHOP #3

December 5, 2019



Concord Pike

Draw your vision below for the the future of the Concord Pike Corrdior.

WISH WE WERE HERE!

Postcard to the Future!
Concord Pike Master Plan

What is your vision for the future of the Concord Pike Corridor?



An aerial photograph of a city, likely New York City, showing a dense grid of buildings and streets. The image is overlaid with a semi-transparent blue filter. A thin white vertical line is positioned on the left side of the frame, intersecting the text.

Project **Overview**

Concord Pike

Constructed as a private toll road in the early 1800's and completed as a state highway in the early 1920's

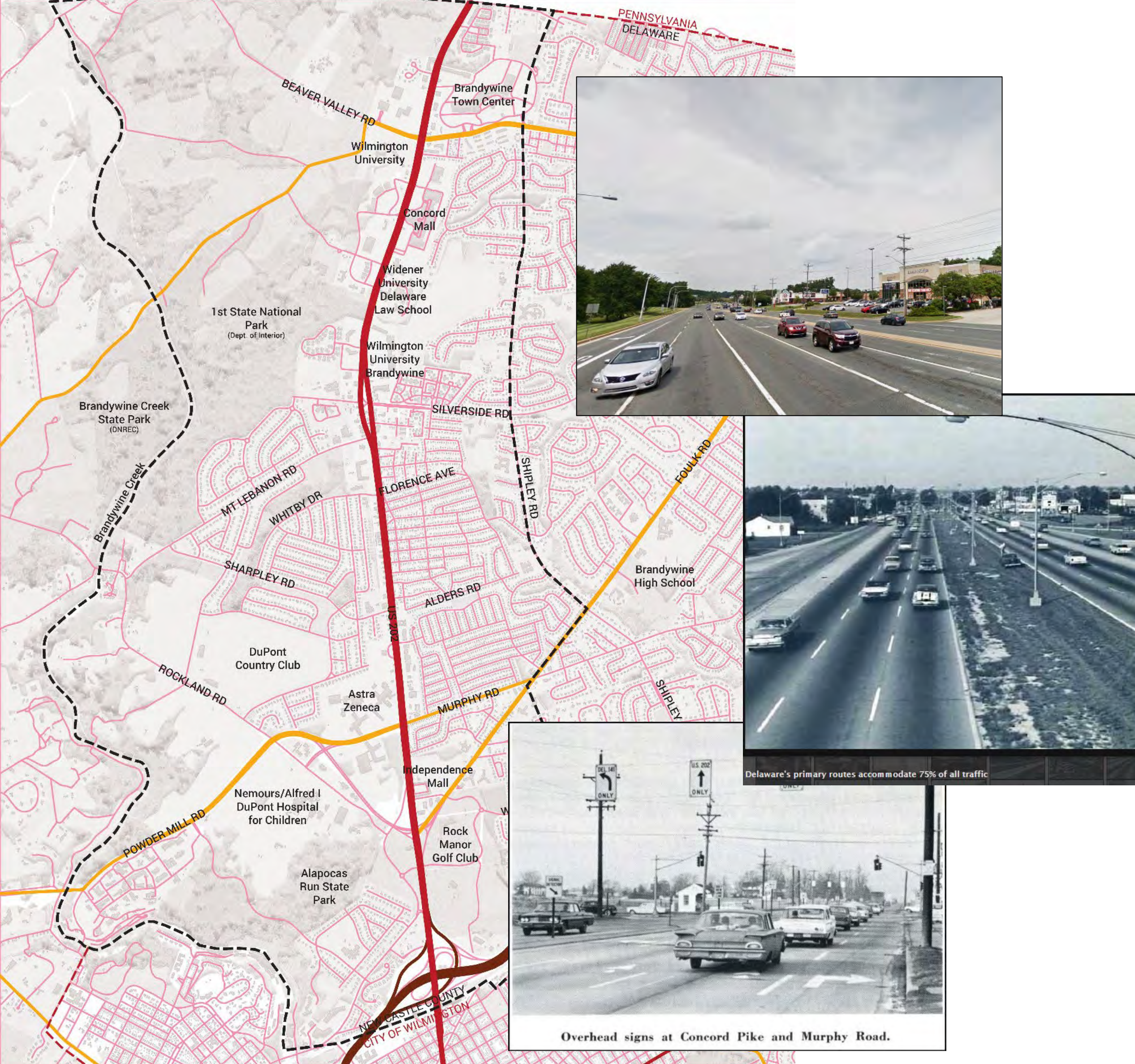
Predominantly a 6-lane arterial
Major commuter route that is heavily commercialized with a mix of retail, restaurants, residential areas, office, and recreational and institutional uses

Traffic Summary

- Between 45,000 and 55,000 vehicles daily
- Road is busy throughout the day with morning and afternoon peaks

Physical Characteristics

- 4 – 8 travel lanes
- Left and right turn lanes at most intersections
- Driveway access for individual businesses
- Abundance of parking
- Limited street network





Goals & Objectives

- Create an attractive, cohesive, and balanced Master Plan
- Integrate land use and transportation
- Identify multi-modal improvements and diversify mode share
- Make corridor more Pedestrian & Bike friendly
- Improve access management & connectivity
- Consider Transportation Demand Management (TDM) and Transportation Investment District (TID) strategies
- Integrate streetscape, wayfinding, & branding
- Protect existing neighborhoods
- Develop implementation strategies

Public Workshop # 3

Goals

This evening, the team will provide:

- **Update on project status; where we are in the process**
- **Overview of Workshop #2 and a summary of Stakeholder Input to date**
- **Overview of the proposed land use scenarios**
- **Transportation overview**
- **Transportation analysis**
- **Get comments and answer questions on Land Use and Transportation Analysis (*Baseline* and *By-Right* under existing zoning)**

Concord Pike Master Plan Activities, so far:

Concord Pike Market Study, 2017

Concord Pike Public Information Session, 6-8 PM, July 25, 2018, Talleyville FC

- Displayed data & demographics for the corridor
- Asked for input on issues and concerns for the corridor
- Nearly 200 attendees

Community Visioning Workshop, 6-8:30 PM, November 14, 2018, Concord HS

- Facilitated small-group discussions regarding development, land use, transportation, open space & amenities
- 100 Attendees

Stakeholder Focus Groups:

- Meetings were held on November 14th, 15th and 16th.
- 36 stakeholders were interviewed separately and in groups to give more detailed feedback regarding strengths, weaknesses, and opportunities for the Concord Pike Corridor

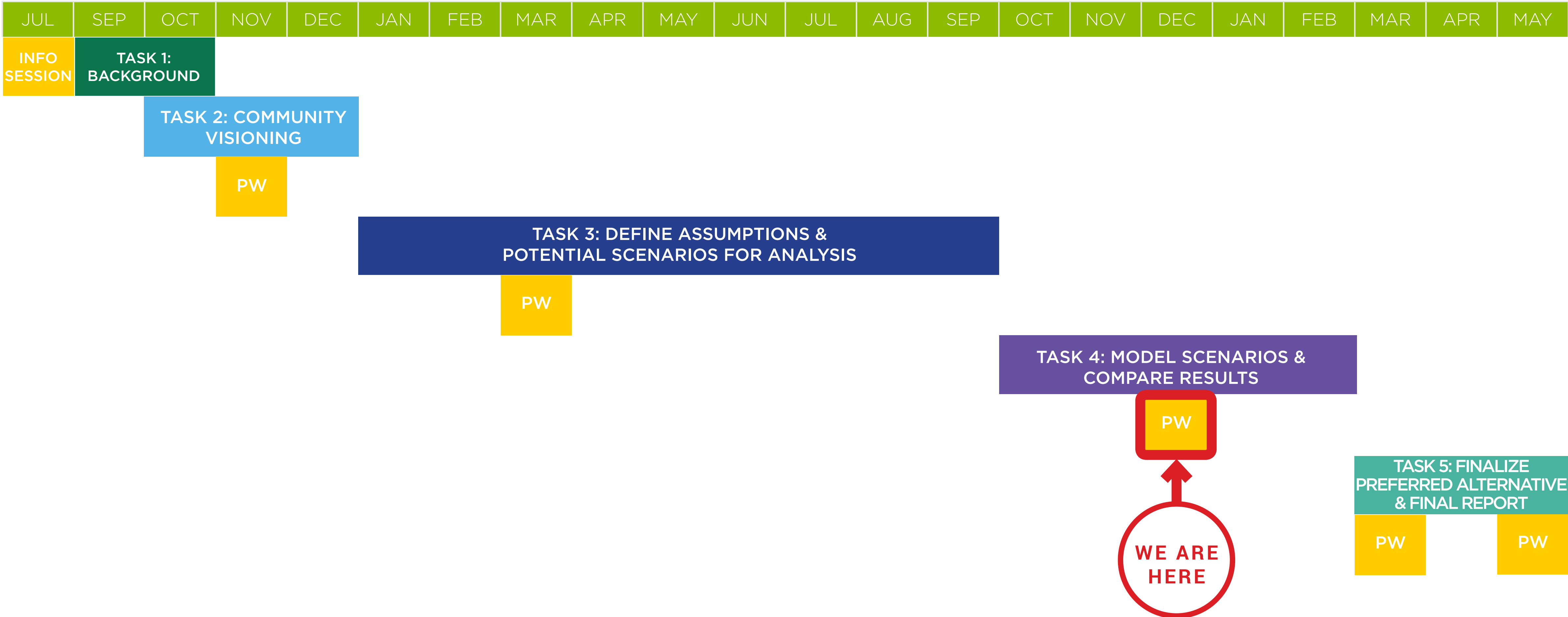
Wiki Map Public Engagement:

- Provide information online to help craft Concord Pike Corridor Master Plan
- Residents shared ideas on how to improve community connections and amenities

Concord Pike Workshop #2, 6-8:30 PM, March 20, 2019, Brandywine HS

- Presented and received feedback on overall Network Plans addressing pedestrian, bicycle, and vehicular connections and a range of land use and transportation alternatives for potential redevelopment areas and key intersections

Project Schedule





Public Workshop #3 Agenda

Doors Open and Sign-in	6:00pm - 6:15pm
Presentation:	6:15pm - 7:00pm
Board Stations and Q&A:	7:00pm - 8:30pm



An aerial photograph of a city, likely San Francisco, is shown with a semi-transparent blue overlay. The image captures a mix of urban architecture, including residential houses and larger commercial buildings, interspersed with green trees. A prominent feature is a large, curved structure, possibly a bridge or a large building, in the upper left quadrant. The overall tone is professional and modern.

What We **Heard** Workshop 2 Summary

Public Workshop #2

POTENTIAL REDEVELOPMENT (FOCUS) AREAS

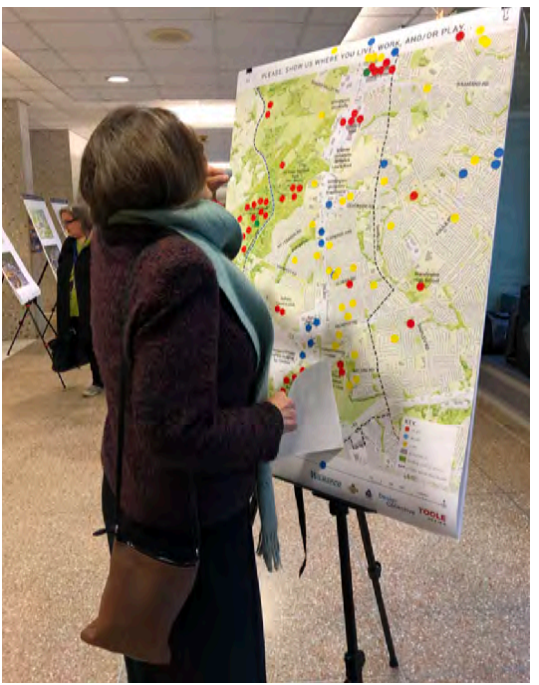
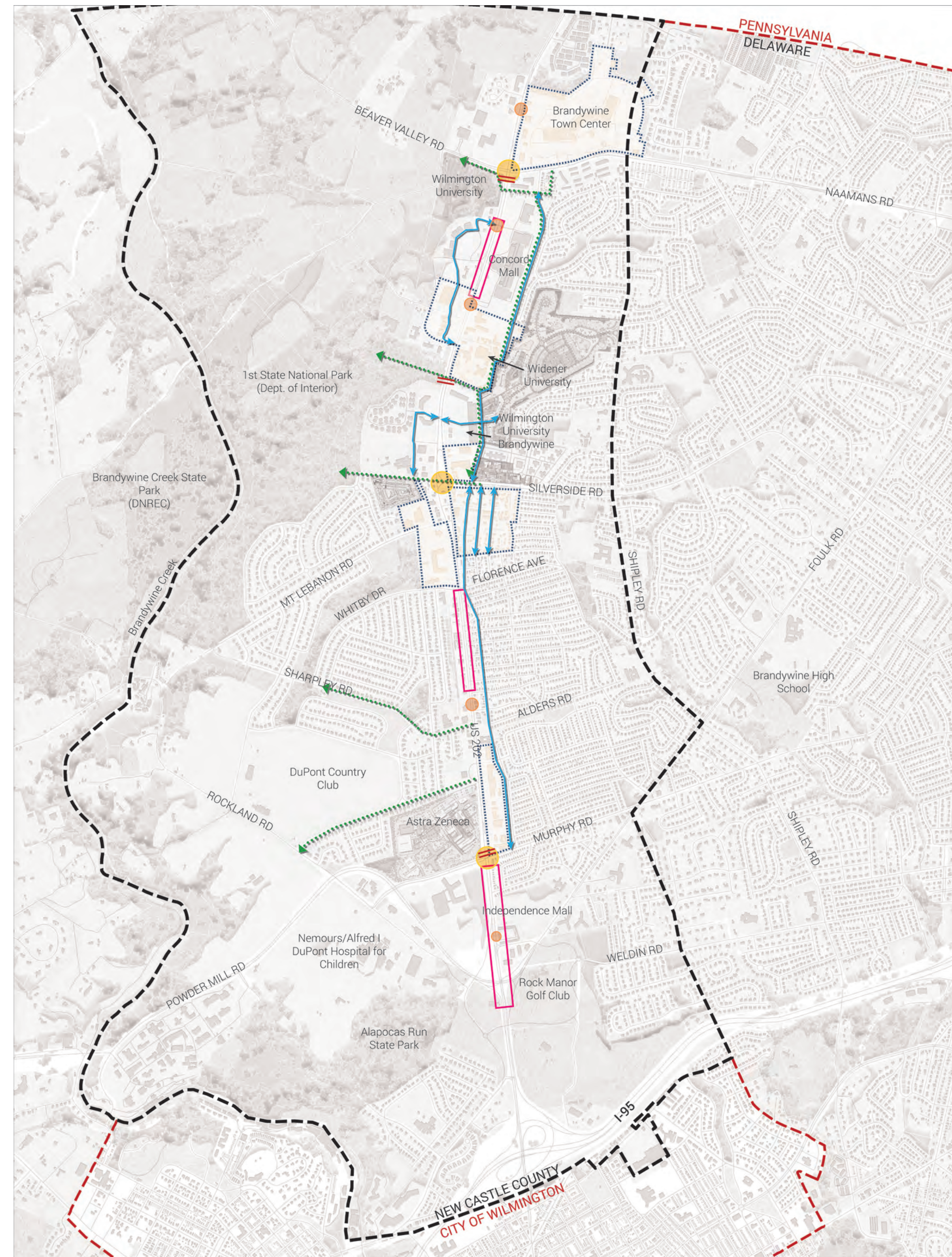
- Fairfax Area, between Murphy Road and Carr Ave.
- Talleyville Area, between Whitby Dr./Florence Ave. and north of Silverside Rd.
- Widener Area, including Widener University to the east and Rocky Run Blvd. to the west
- Brandywine Town Center Area

PRIMARY INTERSECTIONS

- Powder Mill Road / Murphy Road
- Silverside Road
- Beaver Valley Road / Naamans Road

SECONDARY INTERSECTIONS

- Independence Mall Entrance
- McDonald's Entrance, north of Sharpley Rd.
- Concord Mall - South Entrance
- Brandywine Town Center Entrance



Focus Areas: Fairfax

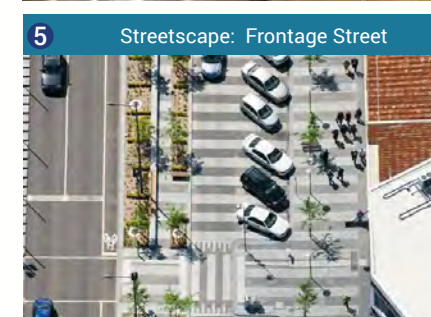
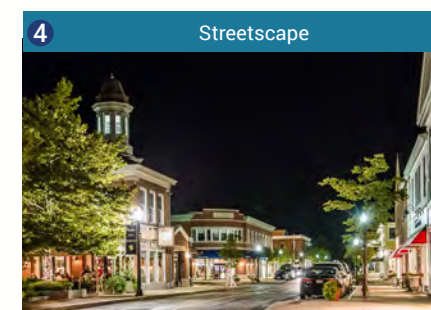
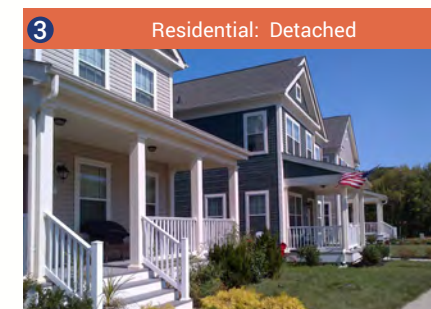
STRENGTHS

- Preferred “Option B”
- Outdoor amenity areas and open spaces
- Multiway concept; consider including on the west side of Concord Pike (US 202) as well as the east side
- Phased redevelopment approach to support existing retail

CONCERNS

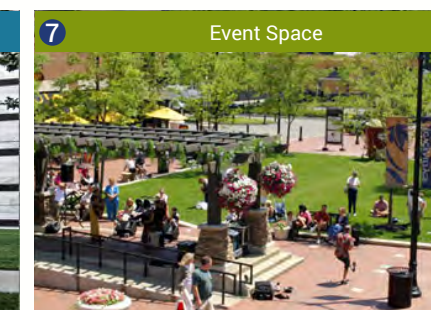
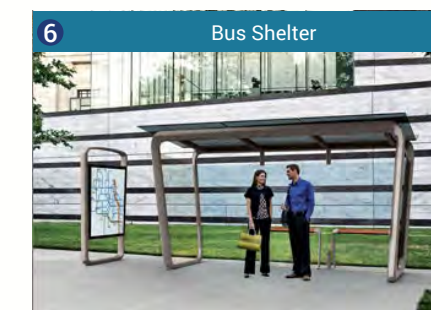
- Impacts of new development on existing neighborhoods and corridor traffic

POTENTIAL REDEVELOPMENT AREAS - FAIRFAX



KEY

- PROPOSED S-F ATTACHED
- PROPOSED S-F DETACHED
- PROPOSED MULTI-FAMILY
- PROPOSED RETAIL
- PROPOSED HOTEL
- PROPOSED OFFICE
- PROPOSED CIVIC
- EXISTING BUILDINGS
- PROPOSED BUS STOPS
- EXISTING BUS STOPS
- REDEVELOPMENT AREA



PRECEDENTS & PROGRAM

		NON-RESIDENTIAL				RESIDENTIAL						
		# of Sto- ries	Retail (SFT)	Hotel (Keys)	Office (SFT)	Civic/ Institutional	# of Stores	Multi-Family (Units)	SFA (Units)	SFD- RL	SFD- FL	Reside- Total
Demo	1	(214,659)		(127)								
Existing												
Proposed	1-2	165,038		25,393		4-5	500	43	27	5		53
TOTAL		165,038		25,393			500	43	27	5		53

Development Assumptions: Multi-Family Efficiency @ 80% and 9000/sf unit; Retail Average Key @ 400/sf; SFA Average Lot Width 22'; SFD Near-Loaded Average Lot Width 40'

OPTION B

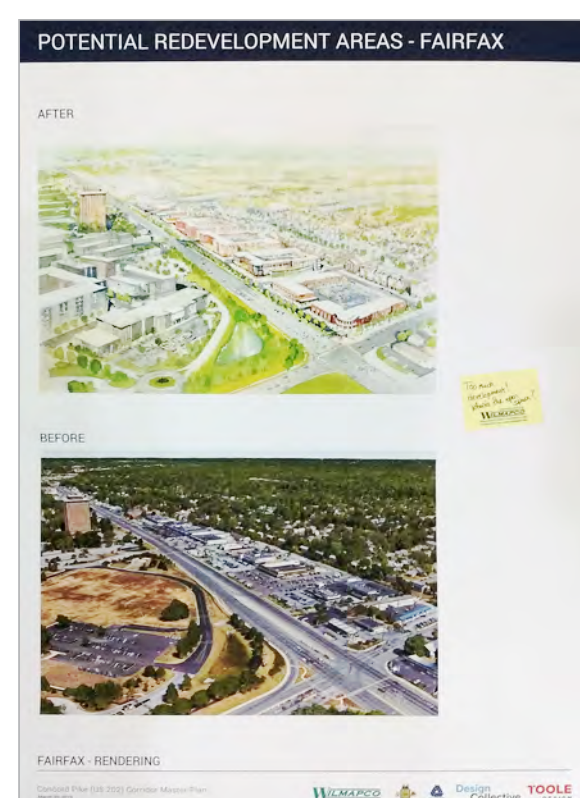
Concord Pike (US 202) Corridor Master Plan
March 20, 2019

WILMAPCO

DelDOT

Design Collective

TOOLE DESIGN



Focus Areas: Talleyville

STRENGTHS

- Preferred “Option B”
- Shared-use path connection; Opportunity to connect to the larger greenway system west of Concord Pike (US 202)
- Civic use associated with the recreational amenities on site
- Senior housing to support aging population
- Safe pedestrian and bicycle at-grade crossings with Silverside Road improvements
- Reconnecting the street network east of Concord Pike (US 202)

CONCERNS

- Added vehicular cut-throughs at the Concord Gallery shopping center



Focus Areas: Widener

STRENGTHS

- Preferred “Phase II”
- Mixed-use development of underutilized parcels along east side of Concord Pike (US 202)
- Retail infill along west side of Concord Pike (US 202)
- Single-family residential provides a range of housing options
- Community Center

CONCERNS

- Too much residential may saturate the market
- Impacts of new development on existing neighborhoods and corridor traffic

POTENTIAL REDEVELOPMENT AREAS - WIDENER U



PHASE II

PRECEDENTS & PROGRAM

Concord Pike (US 202) Corridor Master Plan
March 20, 2019

WILMAPCO

DelDOT

Design Collective

TOOLE DESIGN



Focus Areas: Brandywine Town Center

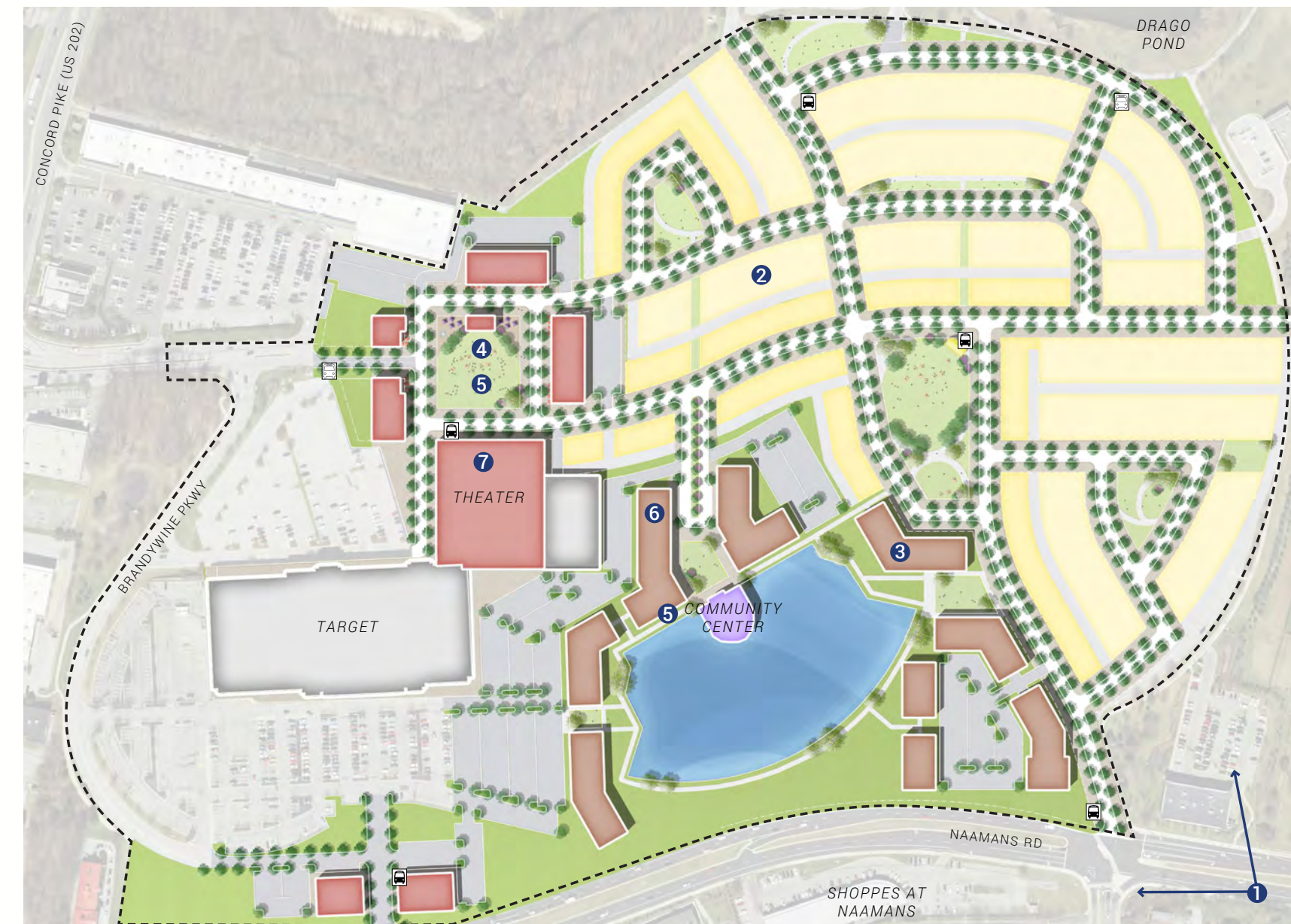
STRENGTHS

- Preferred “Option C”
- Improved streetscapes and retail experience
- Relocation of the existing community center
- Redevelopment of underutilized surface parking
- Opportunity for the bus depot to be better utilized and programmed

CONCERNS

- Desire to keep existing retail; Consider relocating into new development

POTENTIAL REDEVELOPMENT AREAS - BWTC



PRECEDENTS & PROGRAM

	NON-RESIDENTIAL					RESIDENTIAL			
	# of Stor-ies	Retail (SF)	Hotel (Keys)	Office (SF)	Civic/ Institutional (7,631)	# of Stor-ies	Multi-Family (Units)	SFA (Units)	Residential Total
Demo	1-2	(349,462)							
Existing	1-2	146,497							
Proposed	1	120,345			0,642	4	506	182	104
TOTAL		266,842			0,642		506	182	104

Development Assumptions: Multi-Family Efficiency @ 80% and 900sf/unit; Hotel Average Key @ 400sf; SFA Average Lot Width 22'; SFD Rear Loaded Average Lot Width 40'

KEY

- PROPOSED S-F ATTACHED
- PROPOSED S-F DETACHED
- PROPOSED MULTI-FAMILY
- PROPOSED RETAIL
- PROPOSED HOTEL
- PROPOSED OFFICE
- PROPOSED CIVIC
- EXISTING BUILDINGS
- PROPOSED BUS STOPS
- EXISTING BUS STOPS
- REDEVELOPMENT AREA

OPTION C

Concord Pike (US 202) Corridor Master Plan
March 20, 2019



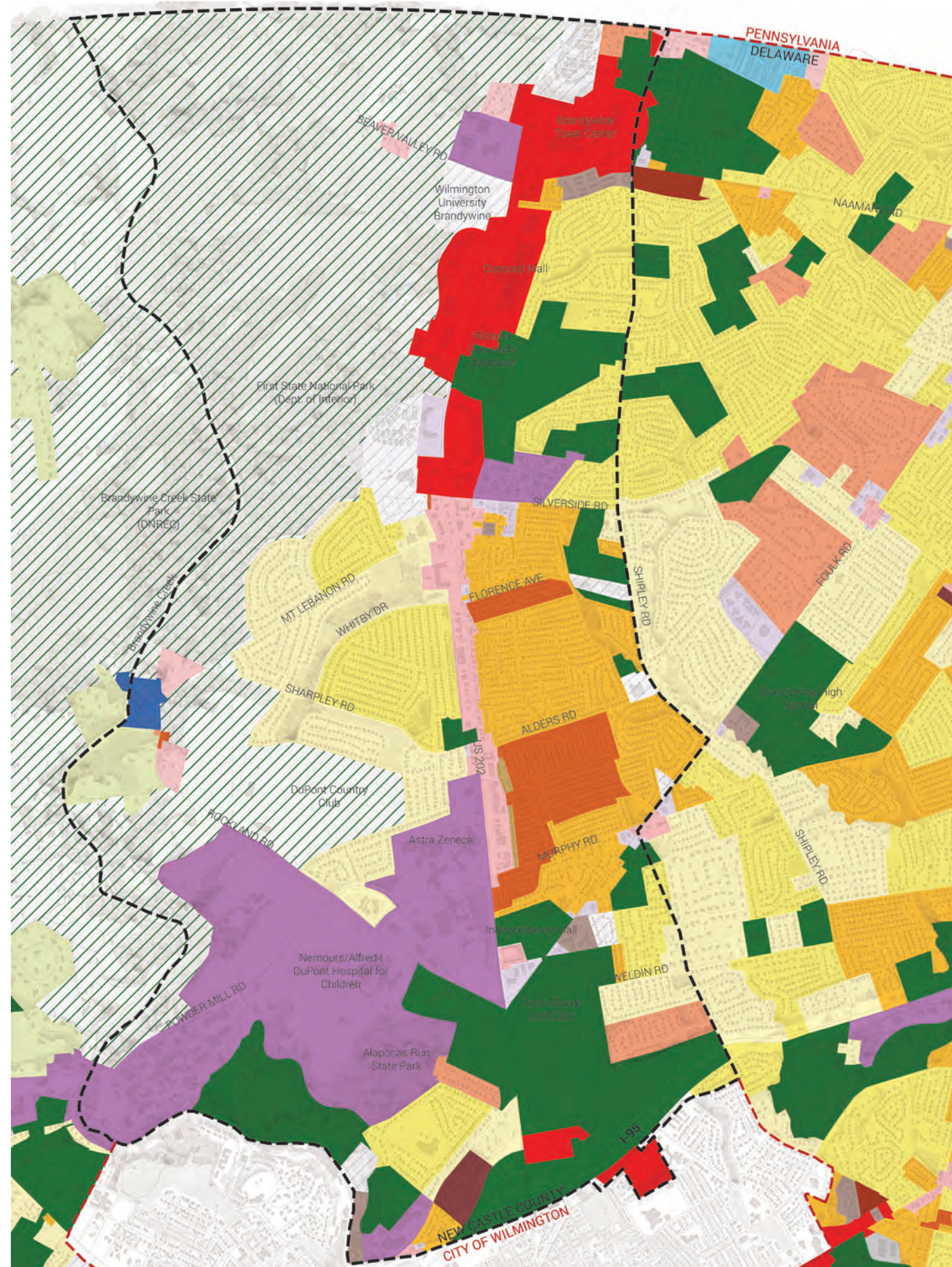
An aerial photograph of a city, showing a mix of residential houses, commercial buildings, and green spaces. The entire image is covered with a semi-transparent blue filter. A thin white vertical line is positioned to the left of the text.

Land Use & Zoning **Overview**

Zoning Recommendations: Background

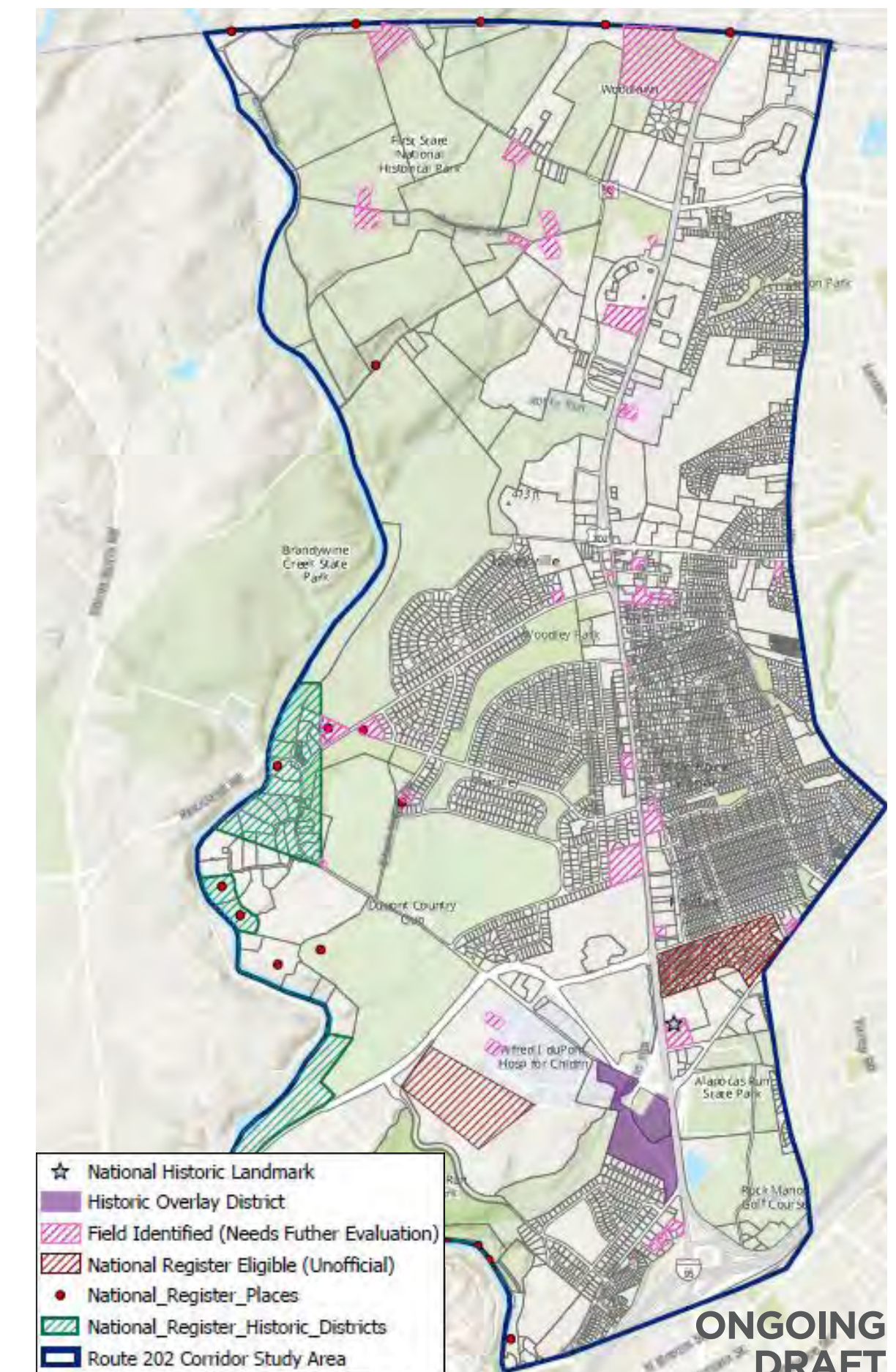
EXISTING ZONING

- Commercial Regional (CR), Commercial Neighborhood (CN), and Office Regional (OR) line Concord Pike (US 202) and promote commercial services and employment centers
- Neighborhood Conservation (NC) districts are along the east side promoting neighborhoods and planned districts
- Suburban Estate (SE) district is along the west side, intended to encourage large, single-family lots and preserve natural views



HISTORIC INVENTORY

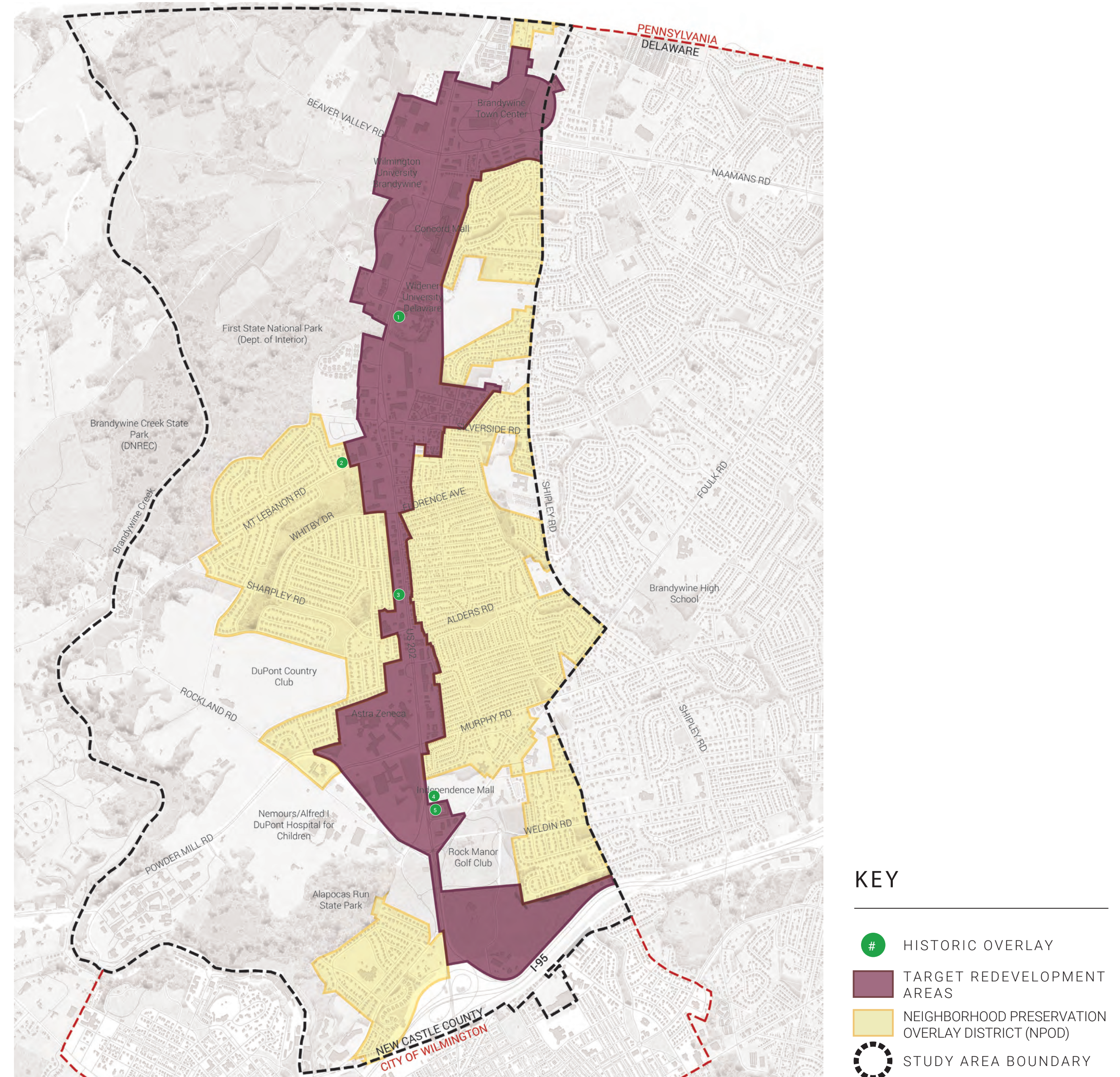
- Identifies candidate parcels for Historic Overlay Districts (H)



Zoning Recommendations: Overview

Based on New Castle County's Unified Development Code

1. Establish Target Redevelopment Areas (TRA)
 - » Mixed-use development
 - » Pedestrian-friendly, multi-modal streets
 - » On-site surface or structured parking that is screened
2. Designate Neighborhood Preservation Overlay Districts (NPOD)
 - » Protects residential neighborhoods adjacent to Target Redevelopment Areas
 - » Protects the character of existing neighborhoods
 - » Emphasizes compatible building heights, setbacks, massing, building orientation, etc.
3. Identify Potential Parcels for Historic Overlay
 - » Requires historic design review when development or redevelopment is considered
 - » Properties identified by New Castle County as potential candidates:
 - 1 Widener House
 - 2 Mt. Lebanon Road House
 - 3 Charcoal Pit
 - 4 Granite Corinthian Masonic Lodge #34
 - 5 Independence Mall



Land-Use Scenarios

- Developed based on input from Workshop 2, using the preferred plan options for the Focus Areas as a starting point
- Included program from the refined, preferred Focus Areas plans, along with current development under construction/approved
- Followed *New Castle County Unified Development Code – Article 5* methodology
- Aligns with the County’s population consortium projections
- Being used for the Traffic Modeling

THE 3 LAND-USE SCENARIOS ARE:

1. Scenario 1 Existing Zoning: A Land Use Scenario with by-right development projected for the Focus Areas parcels, along with the current/approved development;
2. Scenario 2 Proposed Zoning – Low: A Land Use Scenario with low-intensity (conservative) development projected for the Focus Areas parcels under the proposed mixed-use zoning, along with the current/approved development; and
3. Scenario 3 Proposed Zoning – High: A Land Use Scenario with higher-intensity development projected for Focus Areas parcels under the proposed mixed-use zoning, along with the current/approved development;

An aerial photograph of a city street grid, overlaid with a semi-transparent blue filter. The image shows a dense network of streets, buildings, and green spaces. A prominent vertical white line is positioned on the left side of the image, intersecting the text.

Transportation **Overview**

Corridor Overview

AUTO-ORIENTED NATURE:

- Speeding on corridor, many crashes
- Carries regional and local traffic
- Good quality transit service, difficult to access bus stops
- Difficult to cross as a pedestrian
- Unsuitable for biking



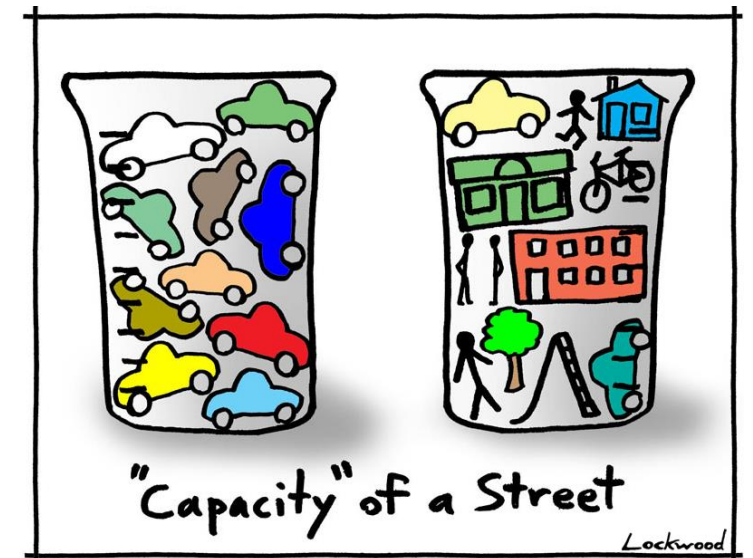
Vision for the Corridor & Our Approach

WHAT WE HAVE HEARD

- Create more walkable environments, both in between the businesses on Concord Pike and to/within surrounding neighborhoods
- Establish strategies to reduce speeding and relieve heavy traffic
- Incorporate additional pedestrian and bicycle trails and crossings

WE ARE TAKING A MULTIMODAL APPROACH

- Considers all modes: Walking, Taking the Bus, Biking, and Driving
- The capacity or value of a street is more than the number of cars – it can also encourage pedestrian activity, enhance connections to surrounding land uses, and support economic vitality.



Walking

POTENTIAL IMPROVEMENTS:

- Additional Roadway Connections and Ped/Bike Connections
- Treatments at signalized intersections
 - Additional crosswalks at signalized intersections
 - Treatments to slow down turning vehicles
 - Signal timing strategies

PEDESTRIAN TREATMENTS AT SIGNALIZED INTERSECTIONS

INTERSECTION DESIGN



Redesigned Slip Lanes

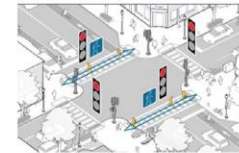
- Width and angle designed to slow down motor vehicles to reduce severity of conflicts with pedestrians
- Providing a raised crosswalk in the slip lane further reinforces pedestrian priority



Tighter Corner Radii and Truck Aprons

- Used to decrease the effective radius available for motor vehicle turn movements by forcing sharper turns
- Reduce vehicle turning speeds
- Extend waiting areas for pedestrians crossing
- Mountable truck aprons can be implemented to visually narrow the intersection while accommodating larger vehicles

TRAFFIC SIGNALS



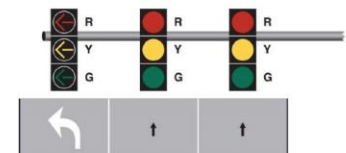
Leading Pedestrian Intervals

- Give the pedestrian WALK signal three to seven seconds before drivers traveling in the same direction are given the green signal
- Increase visibility of crossing pedestrians
- Reduce conflicts between pedestrians and motorists



No Turn on Red Restrictions

- Restrict drivers from turning right when the light is red
- Reduce conflicts between people crossing and people driving



Signal Phasing and Timing Strategies

- Various options provide improved safety for pedestrians:
- Shorter cycle lengths (off peak) reduce delay for all users; may decrease instances of pedestrians crossing against the signal
 - Protected-only left-turns (i.e. green arrow only) reduce potential conflicts between pedestrians crossing with the signal and left turning drivers who are usually focused on gaps in on-coming traffic
 - Flashing yellow arrow for right-turns may increase driver yielding to crossing pedestrians

CROSSINGS



High Visibility Crosswalks

- Help guide pedestrians to locations where they should cross the street
- The continental striping pattern above is more visible to drivers than narrow parallel lines
- Crosswalks should be marked on all legs of signalized intersections



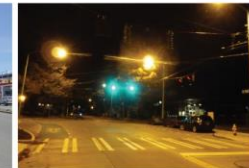
Median Refuge Islands

- Raised areas in the middle of the street at intersections
- Provide a designated place for people walking and biking to wait for an opportunity to cross the other half of the street



Bus Stop Access

- Bus stops with high ridership numbers need appropriate pedestrian infrastructure to facilitate access from the bus stop to the final destination as well as the other side of the street for return trips



Pedestrian-scale Lighting

- When implemented at intersections, increases visibility of pedestrians crossing to people driving
- Increases safety for people walking, biking and driving at night and during dawn/twilight hours
- Provides wayfinding support

Taking the Bus

PLANNED AND POTENTIAL IMPROVEMENTS:

- Recent service improvements
- Upcoming service improvements – Spring 2020
- Looking ahead
 - Keep buses on Route 202
 - Signal improvements for buses
 - Improving access to bus stops



Biking

APPROACH:

- Refine proposed Ped/Bike Connections presented at Public Workshop #2
- Coordinate with DeIDOT on Level of Traffic Stress Analysis
 - Evaluate existing conditions
 - Complete before/after analysis

TRANSPORTATION: BICYCLE LEVEL OF TRAFFIC STRESS



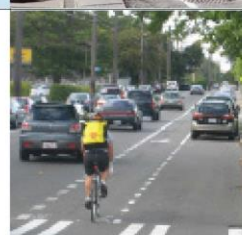
What is Level of Traffic Stress (LTS)?

Bicycle LTS analysis uses factors such as the speed of traffic, volume of traffic, and the number of lanes to rate roadways on a scale of 1 to 4, where 1 is a low-stress place to ride and 4 is a high-stress place to ride.

It analyzes the total connectivity of a network to evaluate how many destinations can be accessed using low-stress routes. The set of criteria by which road segments can be classified by four levels of traffic stress are defined and illustrated in the accompanying graphic.

What are Low-Stress Bicycle Networks?

Low-stress bicycle networks refers to the idea that continuous, connected bicycle networks can be planned to make bicycling safer, more comfortable, and appealing to a broader segment of the population--not just experienced riders. To ensure that people are able to take advantage of low-stress cycling conditions, a network should be classified according to user tolerance and likelihood of use.

Level of Traffic Stress	Description	Example
1	Safe for children to use Usually completely separated from auto traffic	
2	Tolerated by most mainstream adult populations of cyclists Roads with low volume and low speed auto traffic	
3	Tolerated by riders who are enthused and confident Heavy traffic with separated bike facility	
4	Only tolerated by strong and fearless riders Cyclists must interact with high volumes or speeds of auto traffic	

An aerial photograph of a city street grid, overlaid with a semi-transparent blue filter. The image shows a dense network of streets, buildings, and green spaces. A prominent white vertical line is positioned to the left of the text.

Motor Vehicle **Analysis**

Driving – Questions to Answer

LOOKING AHEAD 30 YEARS...

How will intersections along the corridor operate for motor vehicles with re-development consistent with existing zoning?

Driving – Questions to Answer

LOOKING AHEAD 30 YEARS...

How will intersections along the corridor operate for motor vehicles with re-development consistent with existing zoning?

How would additional roadway connections change the results?

Driving – Questions to Answer

LOOKING AHEAD 30 YEARS...

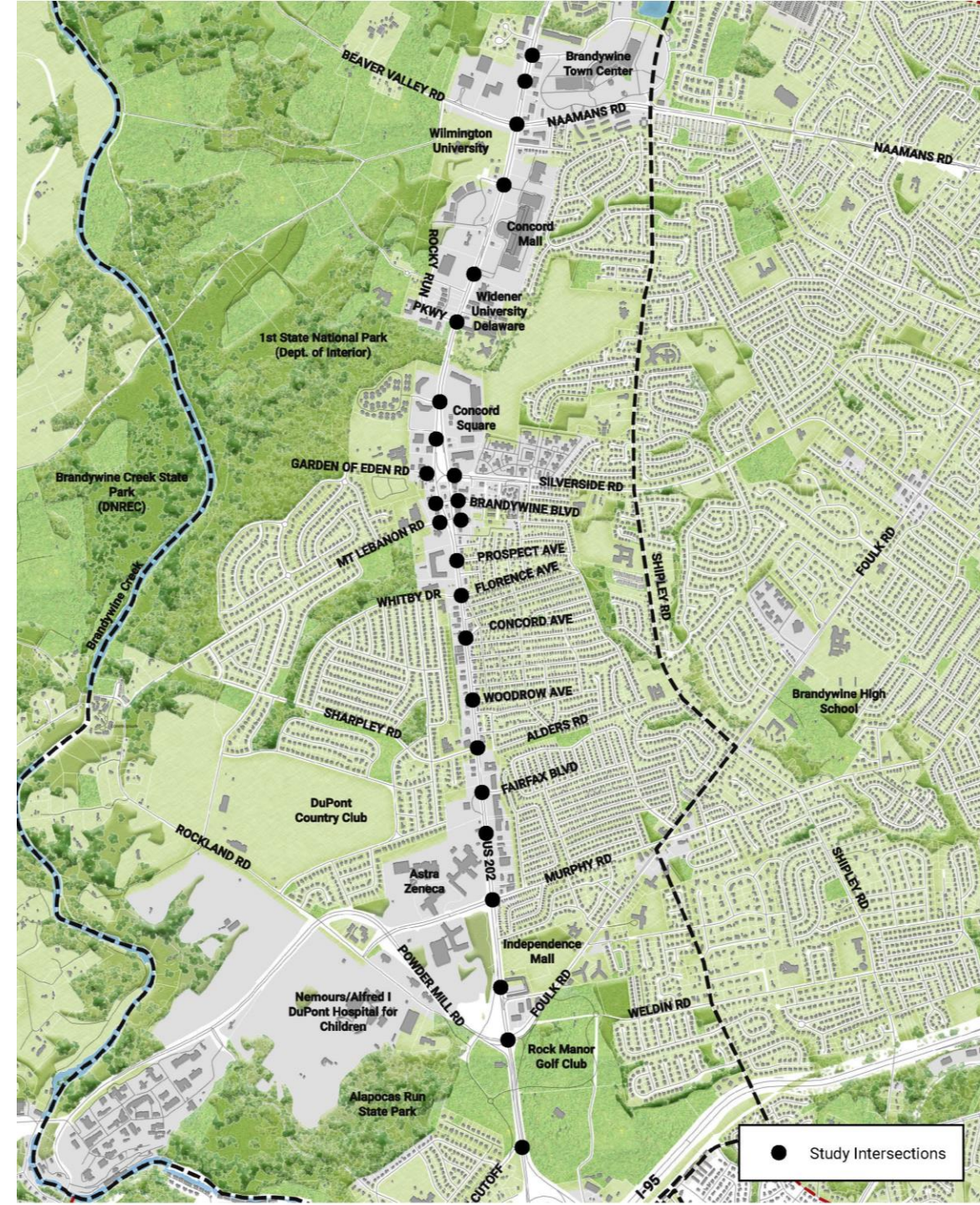
How will intersections along the corridor operate for motor vehicles with re-development consistent with existing zoning?

How would additional roadway connections change the results?

What if we also add ped/bike connections?

Driving – Analysis Approach

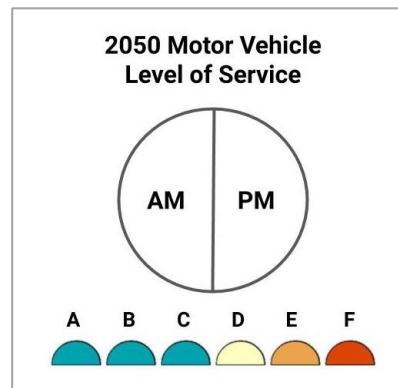
- All signalized intersections along corridor
- Close coordination with DeIDOT staff
- Evaluated several transportation scenarios using Level of Service to answer questions



Baseline or “No Build”

ASSUMPTIONS:

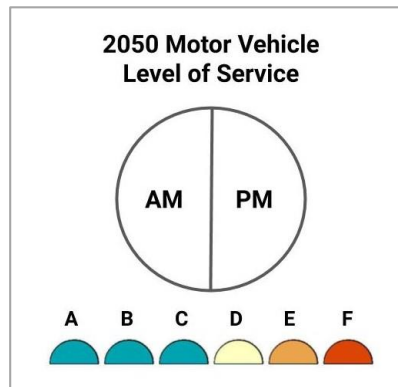
- Increase in through vehicle trips on Concord Pike (Route 202)



“By-Right” Development

ASSUMPTIONS & RESULTS:

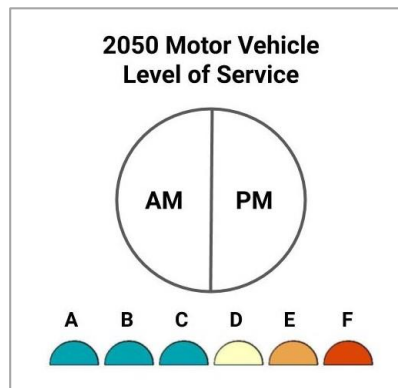
- Redevelopment consistent with existing zoning
 - Estimated net increase in vehicle trips
 - Added these vehicle trips to study intersections
- With these changes, there will be an increase in congestion for motorists at a few intersections



With Additional Roadway Connections

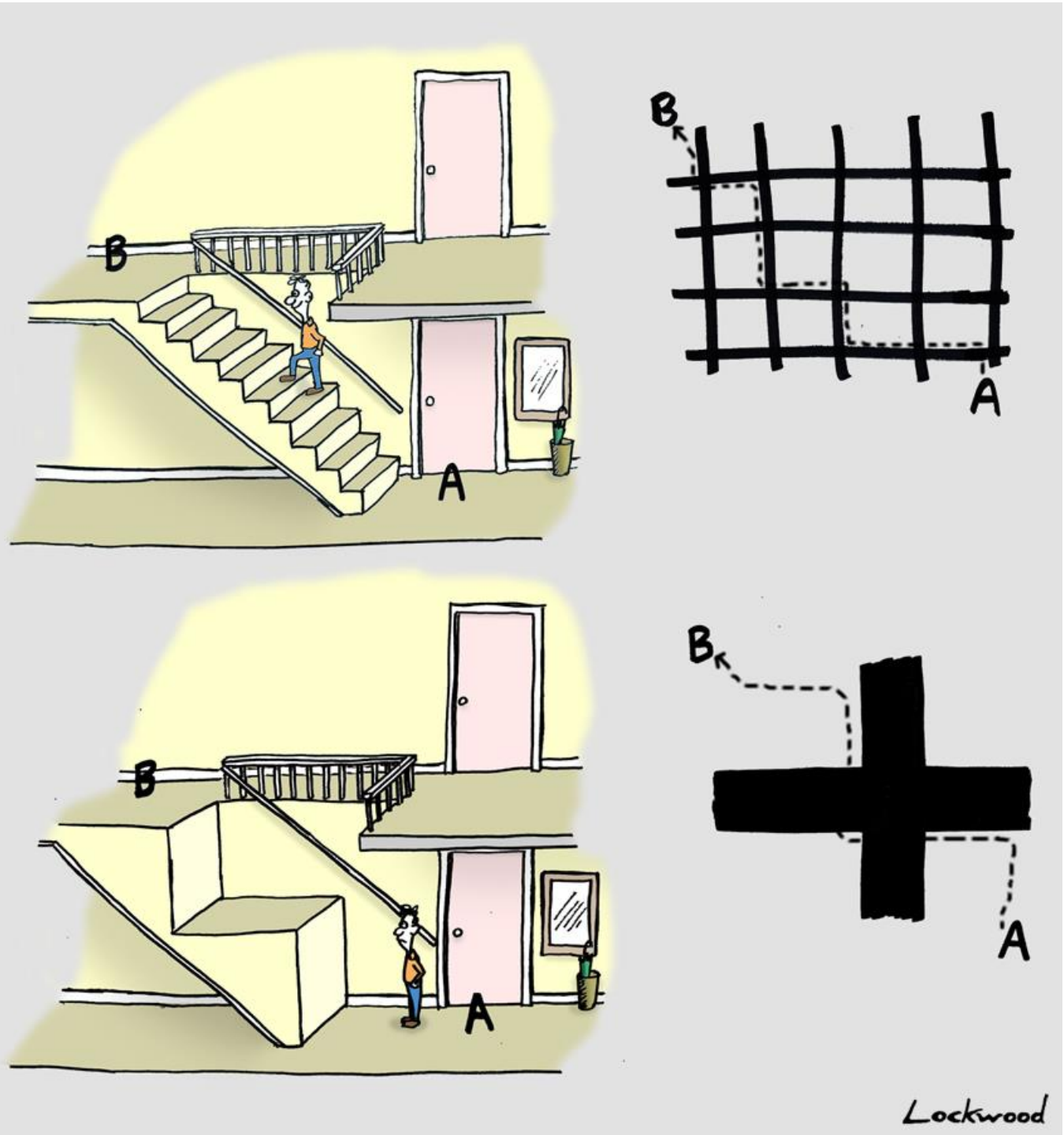
ASSUMPTIONS & RESULTS:

- Additional roadway connections
 - Provide additional route choices for local trips
 - Vehicles shifted to less congested intersections
- With these changes, there will be a decrease in congestion for motorists at several intersections



Roadway Connections

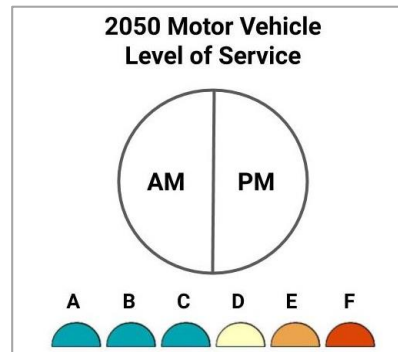
- Allow for smaller, more efficient intersections
- Make streets and intersections more walkable
- With mixed-use development, encourage walking between buildings



With Additional Ped/Bike Connections

ASSUMPTIONS & RESULTS:

- Additional pedestrian and bicycle connections
 - Make walking, biking, and taking the bus easier
 - Vehicle trip estimates reduced by assuming more people walk, bike and take the bus
- With these changes, there will be a decrease in congestion for motorists at several intersections



Pedestrian and Bicycle Connections

- Combination of side paths, neighborhood connections, and bike lanes in study area
- Allow more people to walk and bike to destinations
- Better pedestrian access and connectivity supports transit



An aerial photograph of a city, likely New York City, is shown with a semi-transparent blue overlay. A thin white vertical line is positioned on the left side of the image, intersecting the text. The text "Next Steps" is written in a white, sans-serif font, centered horizontally and partially overlaid by the white line.

Next Steps

Next Steps:

- All Workshop materials and a survey will be on the WILMAPCO project page by Monday, December 9 – ***Tell your friends!***
- Complete the traffic analysis on proposed land use scenarios
- Complete DelDOT's Bicycle Level of Traffic Stress (LTS) analysis
- Workshop #4 to present:
 - Results of transportation analysis (all scenarios)
 - Preliminary recommendations
- Recommend preferred land use scenario
- Develop draft report for public review
- Final public workshop – Review of final recommendations – Draft Master Plan
- Finalize Concord Pike Master Plan for NCC and WILMAPCO approval processes



Board Stations

Board Stations and Q&A: 7:00pm - 8:30pm

- Each Station will have a facilitator
- We will record questions and answers
- 5 Stations:
 1. Land Use & Zoning
 2. Transportation Modeling (long tables)
 3. Traffic and Cross Sections
 4. Transit & Walking
 5. LTS & Treatment
- Goals:
 1. Review the boards;
 2. Ask Questions/Receive Answers; and
 3. Let us know your feedback



Concord Pike Master Plan Workshop #3

