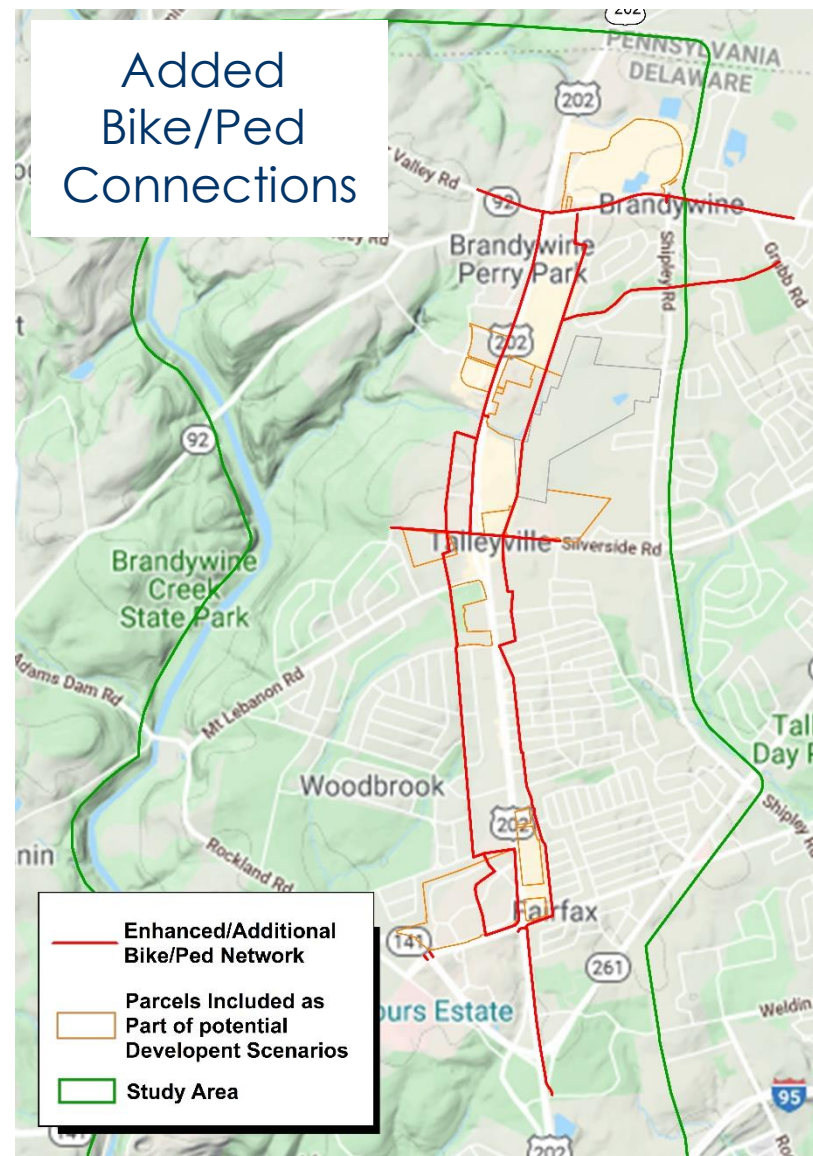
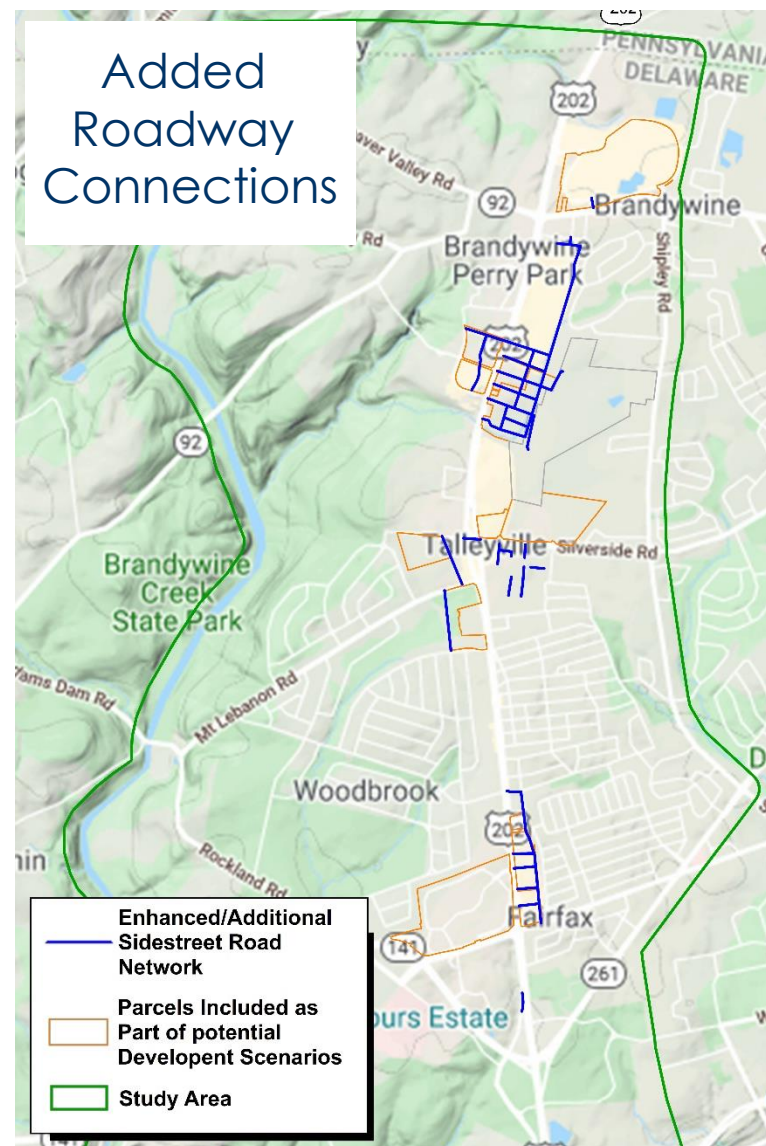


Transportation & Land Use Alternative Analysis

Approach: Analyze existing, or "by-right", zoning and proposed zoning land use scenarios (of varying development intensity) in combination with changes to the transportation system previously proposed in March 2019. This included added street and bike/ped connections along the corridor. The land use scenario with existing zoning is presented today. Proposed zoning will be presented at a future public workshop.

Transportation Scenarios and Analysis Assumptions:

Scenarios were developed with varied levels of additional roadway and bike/ped infrastructure based on proposals made at the March 20th workshop.



Key traffic analysis assumptions include:

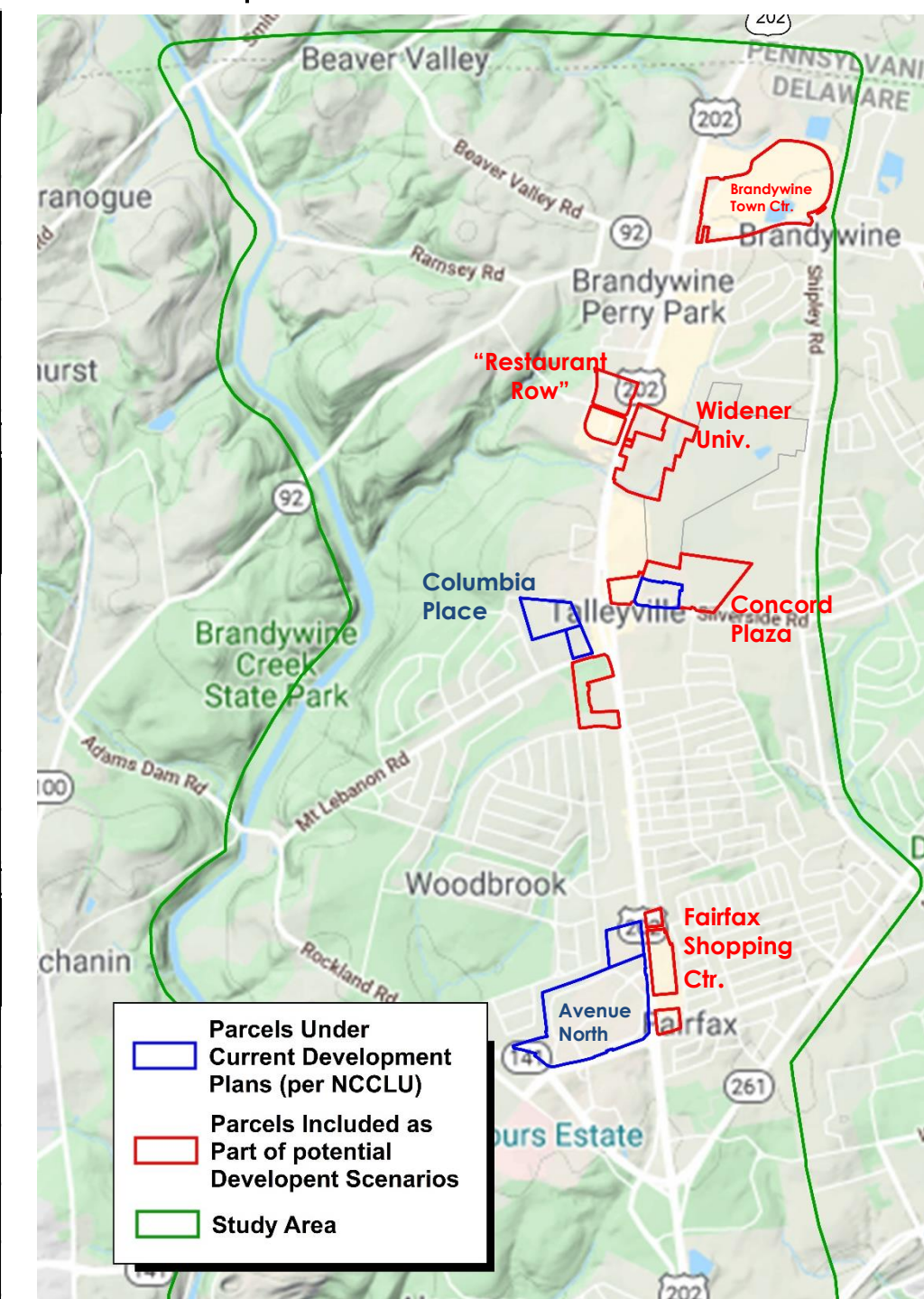
- Conditions for each will be analyzed with a future year of 2050
- A 13% increase in background traffic growth (through-trips) by motor vehicle trips on Route 202 from 2019-2050
- Site-level vehicle trips were generated for each land use alternative
- Analysis performed using Synchro software commonly used in traffic impact studies
- Added roadway connections provide more local route options, allowing alternatives from less congested intersections.
- Added bike/ped connections make walking, biking, and transit more viable options. With these new connections, 13% of new office trips and up to 30% of new residential trips were assumed to walk, bike, or take transit.

Land Development:

3 land use alternatives were developed to simulate traffic impacts of varied levels of growth. Scenario 1 includes a total of all active land use plans (per NCCLU, shown in BLUE on map) and development at several sites along the corridor (shown in RED on map) per existing zoning. Scenarios 2 and 3 are "what if" possibilities of proposed zoning, both a "low" and "high" growth scenario at several sites along the corridor (also shown in RED).

Land Use Scenario Components

<p>Scenario #1: "By-Right" Land Development Scenario</p> <ul style="list-style-type: none"> -282,000 s.f new retail -1,672 new residential units -603 net new hotel rooms -534,000 s.f. new office space -Loss of 19,000 s.f. Civic/ Institutional uses
<p>Scenario #2: Proposed Zoning - "Low Growth" Land Use Scenario</p> <ul style="list-style-type: none"> -204,000 s.f new retail -3,248 new residential units -753 net new hotel rooms -Loss of 31,000 s.f. office space -5,500 s.f. new Civic/Institutional uses
<p>Scenario #3: Proposed Zoning - "High Growth" Land Use Scenario</p> <ul style="list-style-type: none"> -238,000 s.f new retail -4,178 new residential units -753 net new hotel rooms -191,000 s.f. new office space -18,000 s.f. new Civic/Institutional uses



Traffic Analysis Results & Comparison

The charts below display the traffic analysis results when comparing each of the 3 land use scenarios with each of the 3 transportation infrastructure alternatives

Peak Hour Level of Service	Existing LOS (2019)		Future Year (2050)								
	Existing Land Uses Remain		Baseline Growth "No Build"		With "By-Right" Development				Proposed Zoning "Low"	Proposed Zoning "High"	
Land Use Scenario	Existing Transportation Infrastructure		Existing Transportation Infrastructure		Existing Transportation Infrastructure		Additional Roadway Connections		Additional Roadway Connections and Pedestrian/ Bicycle Connections		Existing Transportation Infrastructure, Additional Roadway Connections, and Pedestrian/Bicycle Connections
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
US 202 & Brandywine Pkwy	A	B	B	B	C	C	B	C	C	D	To be evaluated in Winter 2020
US 202 & Chubb Ent	A	A	A	A	A	A	A	A	A	A	
US 202 & SR 92 Naamans Rd	C	D	C	D	C	E	C	E	C	E	
US 202 & Concord Mall North	A	B	A	B	B	B	B	B	A	B	
US 202 & Concord Mall South	A	A	A	B	A	A	A	A	A	A	
US 202 & Rocky Run Pkwy/Widener U	D	D	D	D	A	C	B	D	B	C	
US 202 & Righter Pkwy/Concord Sq.	C	C	C	C	A	B	A	B	A	B	
US 202 SB & NB U-turn	B	B	B	B	B	B	B	A	B	B	
US 202 NB & Silverside Rd	C	C	C	E	D	E	C	E	C	E	
US 202 SB & Garden of Eden Rd	C	B	C	B	D	C	C	B	B	B	
US 202 NB & Brandywine Blvd	A	A	A	B	A	C	A	D	A	B	
US 202 SB & Brandywine Blvd	A	A	A	A	A	A	A	A	A	A	
US 202 NB & Mt Lebanon Rd	B	C	B	E	C	E	C	E	C	E	
US 202 SB & Mt Lebanon Rd	B	C	B	C	C	C	C	D	C	D	
US 202 & Prospect Ave	A	B	B	B	B	E	B	B	B	B	
US 202 & Whitby Rd/Florence Ave	D	D	D	D	C	C	C	D	C	D	
US 202 & Concord Ave	B	C	B	C	A	A	A	A	A	A	
US 202 & Woodrow Ave	A	A	A	A	A	A	A	A	A	A	
US 202 & Sharpley Rd	B	B	B	B	B	C	B	C	B	B	
US 202 & Fairfax Blvd	C	C	D	E	B	E	B	D	B	C	
US 202 & AZ Ent/Fairfax Shopping Ctr	D	C	E	D	E	D	D	D	D	C	
US 202 & Powder Mill Rd/Murphy Rd	D	E	D	E	D	F	D	F	D	E	
US 202 & Independence Mall	A	A	A	A	A	A	A	A	A	A	
US 202 & Foulk Rd	C	B	C	B	C	B	C	B	C	B	
US 202 & Augustine Cutoff	A	A	A	A	A	A	A	B	A	B	

General Conclusions:

- With some sites along the corridor re-develop according to the current zoning, there will be an increase in congestion for motorists at a few intersections.
- Additional roadway connections give motorists additional route choices and result in decreased congestion for motorists at several intersections, particularly in the afternoon peak hour.
- Additional pedestrian and bicycle connections make walking, biking, and taking the bus easier and result in decreased congestion for motorists at several intersections.