Maple Avenue Corridor

Multimodal Transportation and Land Use Study



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Future Mobility Assessment Briefing Town Council Work Session June 10, 2019



Agenda

- Study Purpose
- Existing Conditions Refresher
- Future Conditions
- Summary and Next Steps
- Discussion



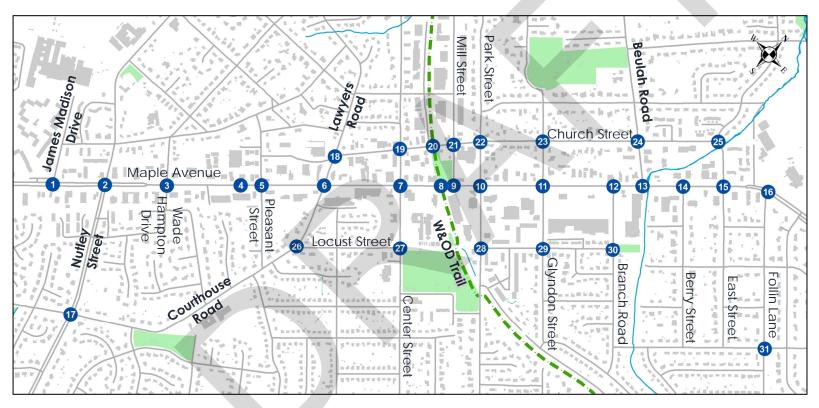
Study Purpose



Purpose and Objectives

- Analyze current and future multimodal transportation conditions
- Develop near- and mid-term recommendations along Maple Avenue for all modes of transportation in coordination with existing and future land uses

Study Area



Schedule

Winter 2019 Existing Conditions

Spring 2019

Future Conditions



Develop Recommendations

Existing Conditions Refresher



Existing Mobility Findings

Pedestrian Network

- Fairly complete sidewalk network with a few segments of missing sidewalks
- Narrow sidewalk widths
- Driveways / parking lots present conflict points
- W&OD Trail

Bicycle Network

- Lack of dedicated facilities
- High traffic volumes
- More comfortable conditions on side streets

Transit Network

- Relatively low transit service frequency
- Lack of local / circulator service

Auto Network

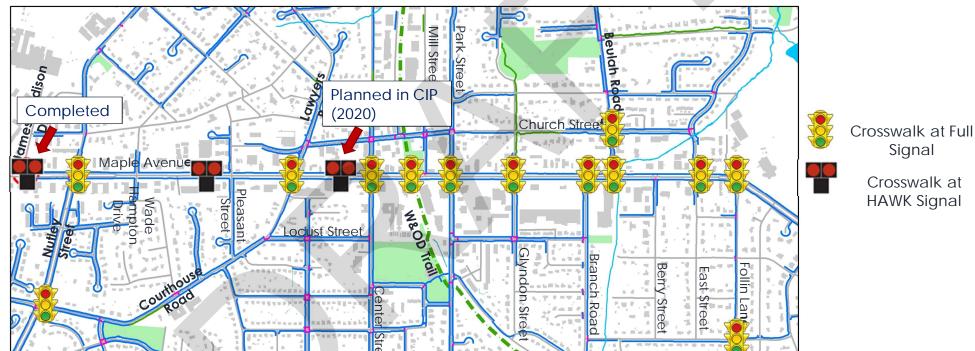
- Most intersections operate at acceptable LOS
- Demand at specific turning movements exceeds available green time
- Significant Delays turning to and from unsignalized side streets

Safety

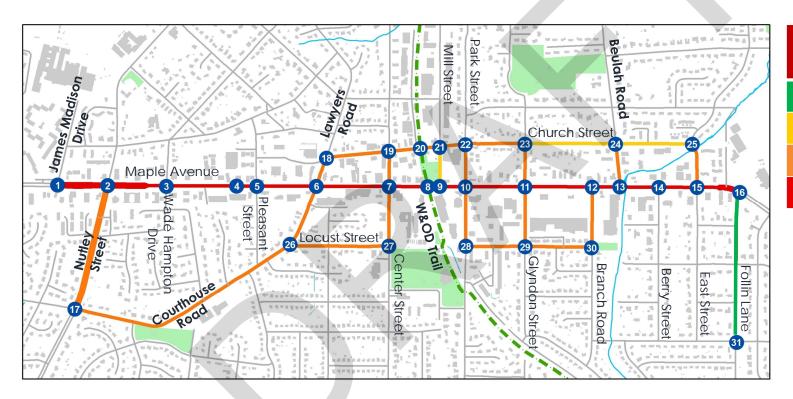
- Number of full access commercial entrances along Maple Avenue
- Congested conditions increase the risk of certain types of crashes

Pedestrian Network





Bicycle Network

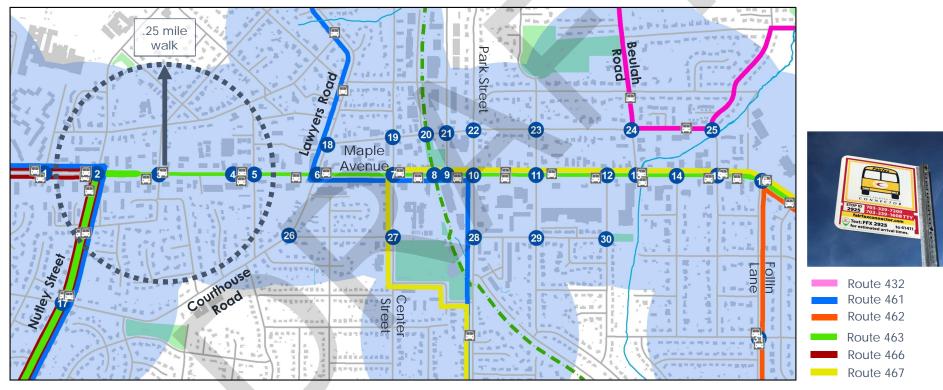






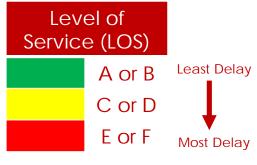
Transit Network



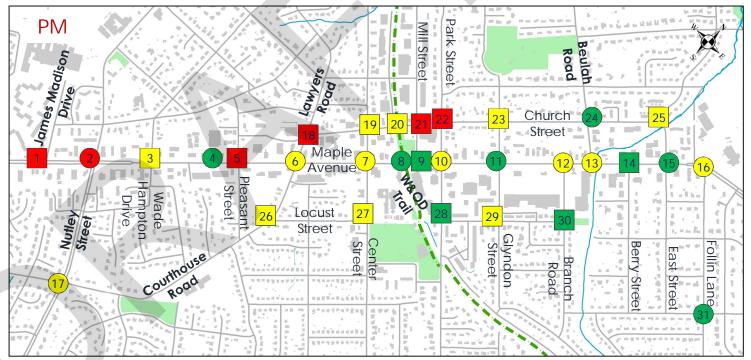


Auto Network



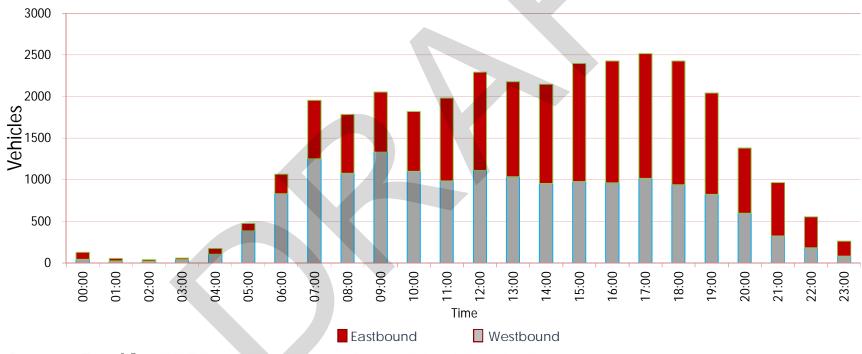


- # Signalized Intersection
- # Unsignalized Intersection



Weekday Traffic Patterns – Maple Avenue





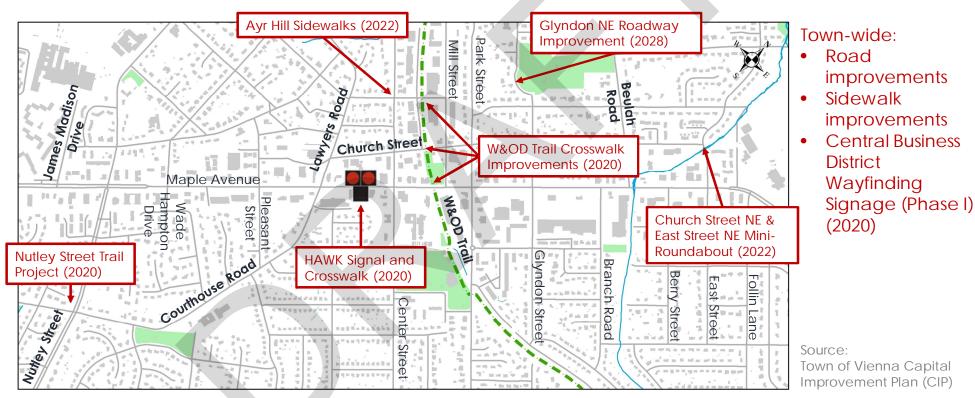
VDOT Average Daily Traffic Volume	Maple Avenue West/East of Nutley	Year over Year Change	Church Street West/East of Beulah	Year over Year Change
Average Daily (2009)	28,000/34,000	1	5,900/4,100	/
Average Daily (2010)	30,000/36,000	1	6,000/4,100	1 / -
Average Daily (2011)	30,000/36,000	—/—	6,000/4,200	_ / 1
Average Daily (2012)	26,000/33,000	1	6,400/4,600	1 1
Average Daily (2013)	26,000/32,000	— /	6,300/4,600	· / —
Average Daily (2014)	26,000/33,000	_/ _	6,200/4,500	√ / √
Average Daily (2015)	25,000/34,000	1 1	5,900/4,500	<u> </u>
Average Daily (2016)	26,000/30,000	1/ -	5,900/4,500	/
Average Daily (2017)	27,000/30,000	1 -	6,000/4,600	1 1
Average Daily (2018)	25,000/30,000	<u>_</u> / —	5,900/4,900	J / 1

Future Conditions





Programmed Mobility Improvements



Modeling the Future

- Regional Trips
- Development Related Trips
- Local mode share shifts



Regional Context - Tysons

- 5.54 million square feet of development planned or in process
- Emphasis on
 - Accommodating automobiles more efficiently
 - Giving "people choices for making trips to, from, within and through Tysons
 - Promoting a "balanced transportation system"
- 22 percent public transportation mode share goal by 2030
 - Mix of Local, Express/BRT, and Circulator service
- 45 percent TDM reduction goal for office developments within 1/8th mile of Metro
- Relieving bottlenecks (widening Rt. 123 from 4 to 6 lanes between Leesburg Pike and Old Courthouse Road

Regional Context – MWCOG Travel Demand Model

 Forecasting model based on the supply network and demand of transportation option

 Relates travel patterns to socioecomic factors (population, employment, households)

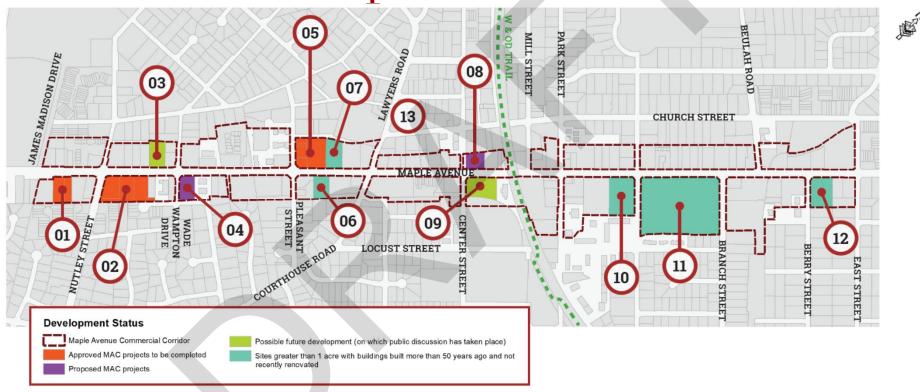
 Model indicates no travel growth along Maple Avenue



Potential Mixed-Use Development Future

- Included all approved and under review MAC projects
- Assumed redevelopment of additional properties within MAC boundary
 - 5 Sites greater than one acre with buildings > 50 years old and not recently renovated
 - 3 Site on which public discussion regarding development has Occurred
- Assumed a mix of retail, restaurant, multifamily
- Included potential public parking facilities

Potential Development Future



Future Mobility

- 1.3 miles of street frontage along potential development sites
- 13 bus stops adjacent to planned and potential development sites
- 42 driveways potentially subject to access management improvements



Summary and Next Steps



Public Workshop Overview

- When
 - Wednesday June 12, 2019
- Where
 - Town Hall, Council Room
- Format
 - Presentation
 - Small Group Workshop
 - Purpose:
 - Validate the future scenario
 - Identify community priorities for potential improvements and recommendation

Next Steps

- What's to come
 - Future conditions workshop and priority-setting
 - Transportation improvements development
 - Recommendations

Discussion



