I-66 Transit/TDM Plan Update

CTB Workshop – December 10, 2019

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I-66 Transit/TDM Plan Update

- Goal of the I-66 project is to transform Northern Virginia's Interstate 66 into a <u>multimodal corridor that moves more people, provides reliable trips and offers new travel options</u>
- Original strategies were developed 2014-2016 with the intent to update prior to initial implementation, based on updated assumptions

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What Are The Goals?

- Increased mobility and maximize person throughput in the corridor through the identification of new transportation alternatives, including transit and TDM service improvements

- Coordination of projects that are funded by the two funding mechanisms, ***I-66 Commuter Choice*** and ***Transform 66 Outside the Beltway*** to achieve efficiency and reliability of travel along the corridor

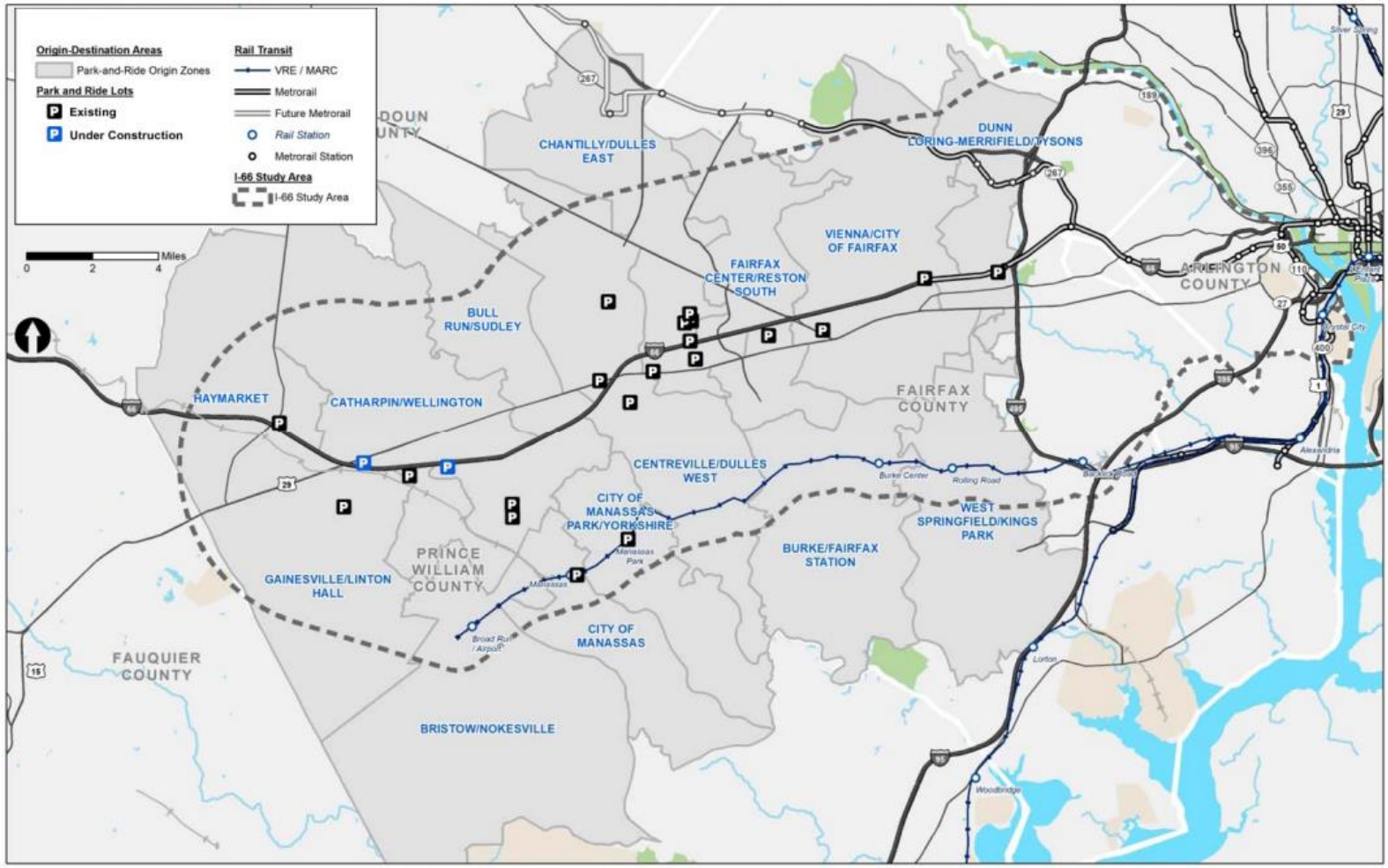
- Evaluate the future mix of transit strategies to increase travel options and intermodal connectivity, as well as, reduce congestion in the corridor

What is different?

- Extended the study corridor to include I-66 Inside the Beltway
  - Impact of I-66 Commuter Choice on multimodal options in the corridor
  - Partnership with NVTC to coordinate services that could be funded with one or both funding programs

- Updated base assumptions with more current information –
  - Newer regional model – updated land use and travel patterns
  - Ability to support expanded commuter rail service
  - Information from the implementation of projects through I-66 Commuter Choice

Study Area



The I-66 Corridor in this plan extends from Haymarket on the west to Washington, D.C. in the east.

Service Recommendations from the Previous Plan

Transit Recommendations From Previous Plan

Opening Year 2021

- **New Services**
  - Haymarket to DC
  - Gainesville to Reston
  - Manassas to Merrifield
  - Fairfax Center to DC
  - Westfields to Vienna
- **Existing Service Enhancements**
  - Gainesville to Tysons
  - Gainesville to DC, via EFC
  - Manassas to Tysons
  - Manassas to DC

2025

- **New Routes**
  - Gainesville to Westfields
  - Gainesville to Herndon-Monroe via Innovation Center
  - Gainesville to Merrifield
  - Centreville to DC
- **Service Modifications**
  - Gainesville to Tysons – increase frequency
  - Gainesville to DC – increase frequency

2030

- **New Routes**
  - Manassas to Reston
  - Fairfax Center to Westfields
- **Service Modifications**
  - Haymarket to DC – increase frequency
  - Gainesville to Tysons – increase frequency
  - Manassas to DC – increase frequency

2035

- **New Routes**
  - Haymarket to Tysons
  - Gainesville to Chantilly/US 50
  - Gainesville to Chantilly/Herndon
  - Centreville to Tysons
  - Stringfellow to Vienna (existing Fairfax Connector service)
  - Stringfellow to Mark Center
- **Service Modifications**
  - Gainesville to Westfields – increase frequency
  - Gainesville to Herndon, via Innovation Center – increase frequency
  - Manassas to Tysons – increase frequency

2040

- **New Routes**
  - None
- **Service Modifications**
  - Haymarket to Tysons – increase frequency
  - Gainesville to Chantilly/US50- increase frequency
  - Gainesville to Chantilly/Herndon – increase frequency
  - Manassas to Reston – increase frequency
  - Centreville to Tysons – increase frequency

Recommendations moved about 900,000 people by bus/TDM annually in 2030

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Draft Service Recommendations

Draft Transit Recommendations

Route (Origin/Destination)	2022 Service			2030 Service			2045 Service		
	Headway	Peak Trips	Annual Ridership	Headway	Peak Trips	Annual Ridership	Headway	Peak Trips	Annual Ridership
Stringfellow-Pentagon	10	54	268,500	5	106	632,000	5	116	810,000
Gainesville-Pentagon	30	12	90,000	15	16	141,000	15	16	171,000
Manassas-Tysons	20	16	112,400	13	46	394,000	13	36	367,000
Stringfellow-Tysons	10	48	242,600	6	88	530,000	5	106	741,000
Stringfellow-L'Enfant Plaza	16	34	169,000	8	60	353,000	10	52	364,000
Haymarket-Ballston/Rosslyn	40	8	60,900	40	8	75,000	40	10	99,000
Manassas-L'Enfant Plaza (Downtown DC in 2030)	30	17	125,900	15	42	373,000	15	34	350,000
Gainesville-L'Enfant Plaza (Haymarket-Downtown DC in 2030)	35	14	104,600	15	38	330,000	20	26	259,000
Fairfax Center-Downtown DC	20	25	122,500	8	62	372,000	10	56	383,000
Manassas-Reston	20	20	142,300	16	34	290,000	16	30	304,000
Fairfax Center-East Falls Church	20	16	78,200	16	18	113,000	20	16	109,000
Gainesville-Tysons (Haymarket in 2045)	40	8	51,200	20	18	163,000	20	24	237,000
TOTAL BUS		272	**1,568,100**		536	**3,766,000**		522	**4,194,000**
VRE Manassas Line (Broad Run - Union Station)			1,963,500			4,090,200			5,084,700
TOTAL BUS & RAIL			**3,531,600**			**7,856,200**			**9,278,700**

Annual Ridership
3.7 million bus riders
4 million rail riders
In 2030

Draft Transit Recommendations – Currently funded by I-66 Commuter Choice

		2022 Service		2030 Service		2045 Service	
Commuter Bus Route (Origin-Destination)	**Service Provider**	**Headway (Peak Trips)**	**Annual Ridership**	**Headway (Peak Trips)**	**Annual Ridership**	**Headway (Peak Trips)**	**Annual Ridership**
Stringfellow-Vienna Metro-Pentagon	Fairfax Connector	10 min 54 trips	268,500	5 min 106 trips	632,000	5 min 116 trips	810,000
Gainesville-Pentagon	OmniRide	30 min 12 trips	90,000	15 min 16 trips	141,000	15 min 16 trips	171,000
Stringfellow-L'Enfant Plaza (DC)	Fairfax Connector	16 min 34 trips	169,000	8 min 60 trips	353,000	10 min 52 trips	364,000
Haymarket-Ballston/Rosslyn	OmniRide	40 min 8 trips	60,900	40 min 8 trips	75,000	40 min 10 trips	99,000
Gainesville-L'Enfant Plaza (DC) *(Extend to Haymarket in 2030)*	OmniRide	35 min 14 trips	104,600	15 min 38 trips	330,000	20 min 26 trips	259,000
Fairfax Center-Downtown DC	Fairfax Connector	20 min 25 trips	122,500	8 min 62 trips	372,000	10 min 56 trips	383,000
Gainesville-Tysons *(Extend to Haymarket in 2045)*	OmniRide	40 min 8 trips	51,200	20 min 18 trips	163,000	20 min 24 trips	237,000
TOTAL BUS			**866,700**		**2,066,000**		**2,323,000**

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Draft Transit Recommendations for I-66 Outside the Beltway funding

		2022 Service		2030 Service		2045 Service	
Commuter Bus Route (Origin-Destination)	**Service Provider**	**Headway (Peak Trips)**	**Annual Ridership**	**Headway (Peak Trips)**	**Annual Ridership**	**Headway (Peak Trips)**	**Annual Ridership**
Manassas-Tysons	OmniRide	20 min 16 trips	112,400	13 min 46 trips	394,000	13 min 36 trips	367,000
Stringfellow-Tysons	Fairfax Connector	10 min 48 trips	242,600	6 min 88 trips	530,000	5 min 106 trips	741,000
Manassas-L'Enfant Plaza (DC) *(Extend to Downtown DC in 2030)*	OmniRide	30 min 17 trips	125,900	15 min 42 trips	373,000	15 min 34 trips	350,000
Manassas-Reston	OmniRide	20 min 20 trips	142,300	16 min 34 trips	290,000	16 min 30 trips	304,000
Fairfax Center-East Falls Church Metro	Fairfax Connector	20 min 16 trips	78,200	16 min 18 trips	113,000	20 min 16 trips	109,000
TOTAL BUS			**701,400**		**1,700,000**		**1,871,000**
VRE Manassas Line *(Broad Run-Union Station)*	Virginia Railway Express		1,963,500		4,090,200		5,084,700
TOTAL BUS & RAIL			**2,664,900**		**5,790,200**		**6,955,700**

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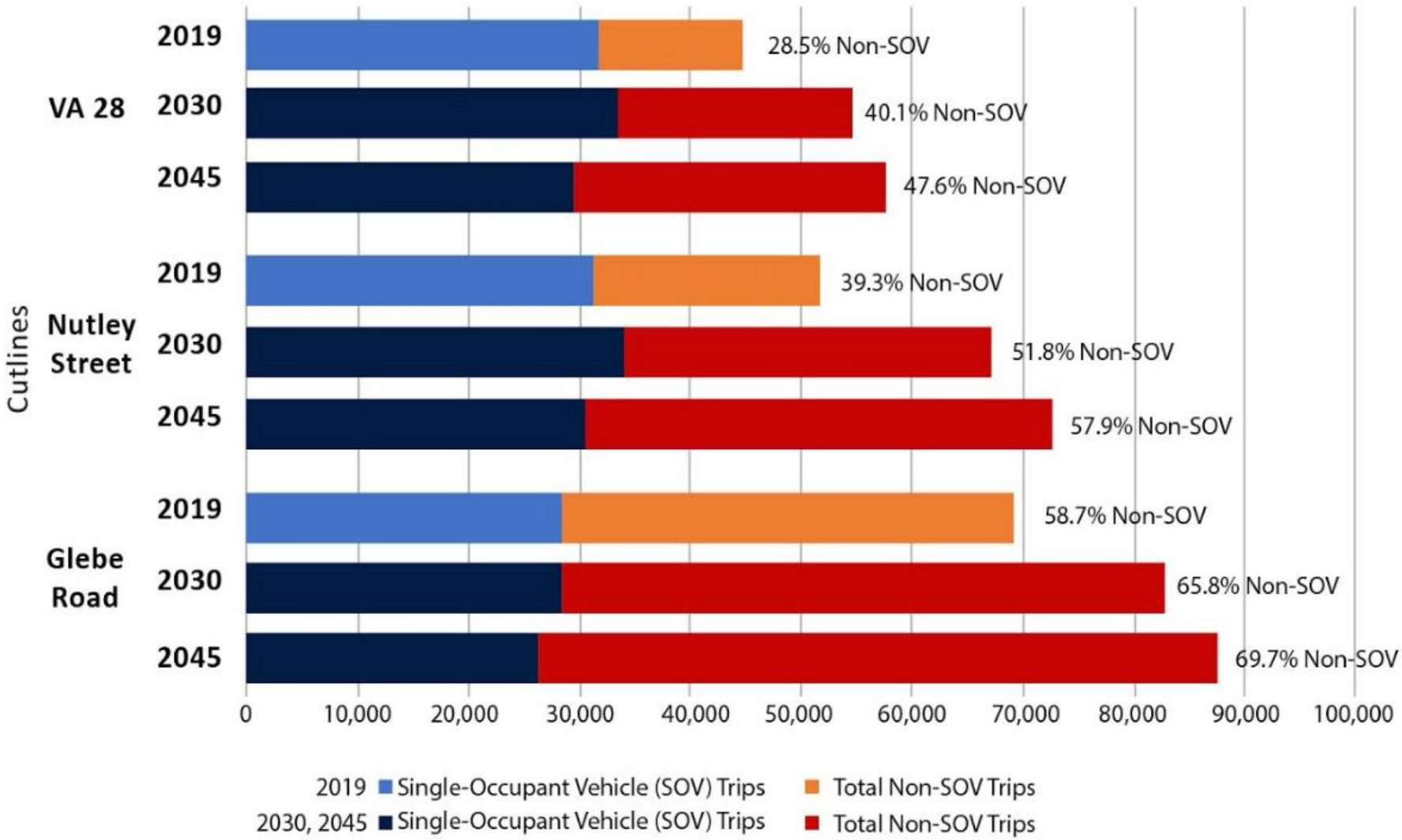
Impact of Draft Recommendations

Persons Moved on Eastbound I-66
Current (2019) and Future Conditions with Investment (2030, 2045)



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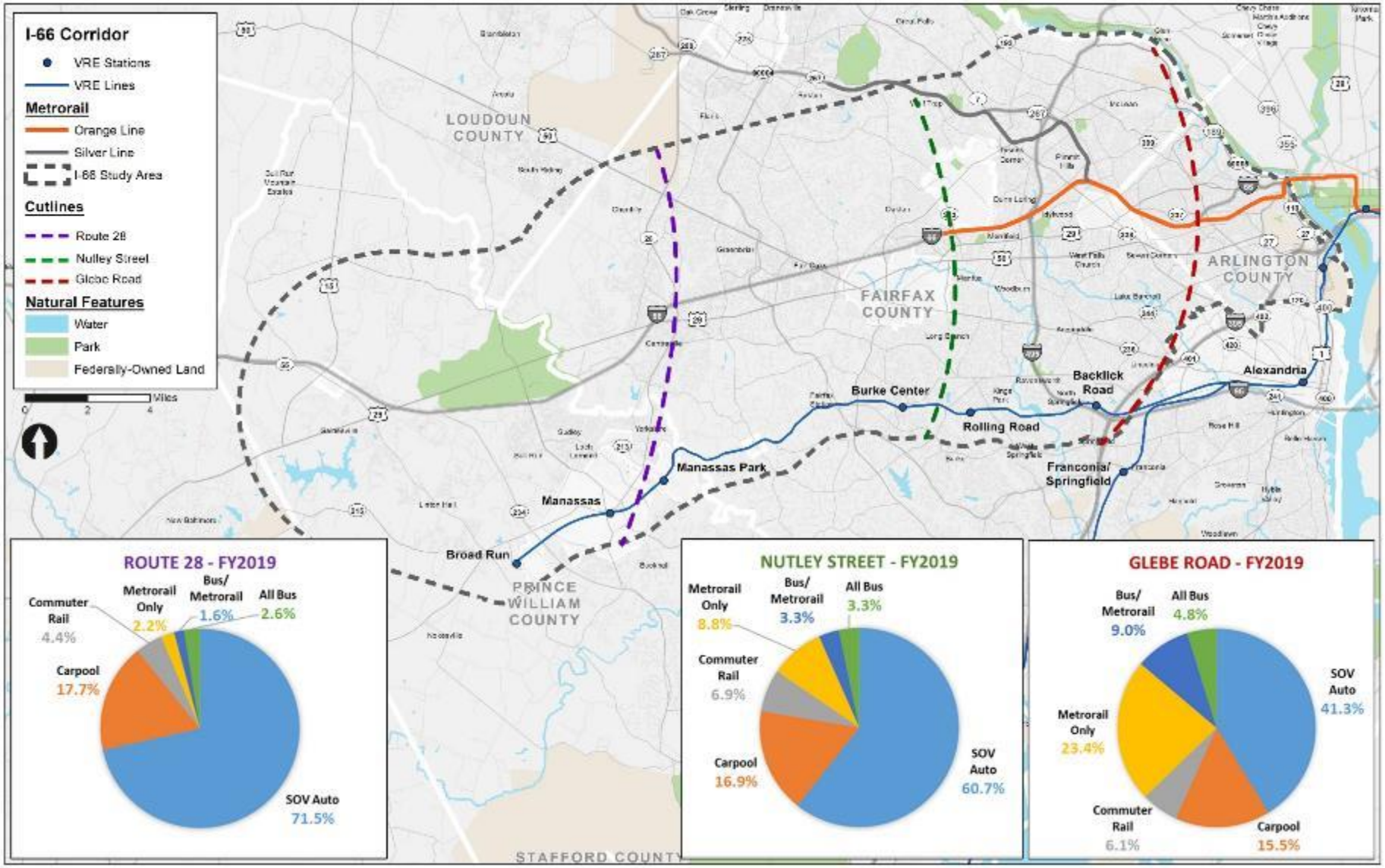
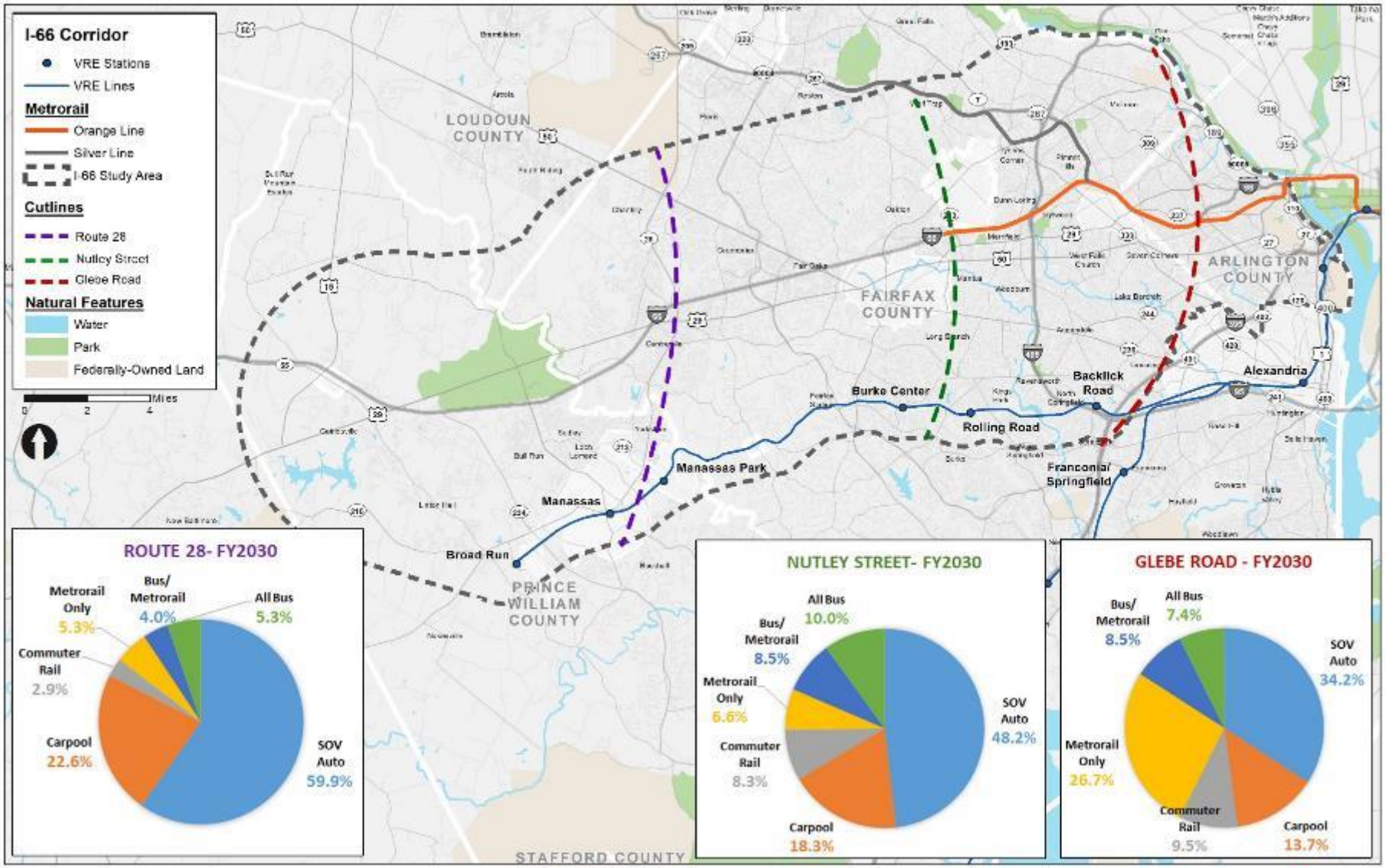
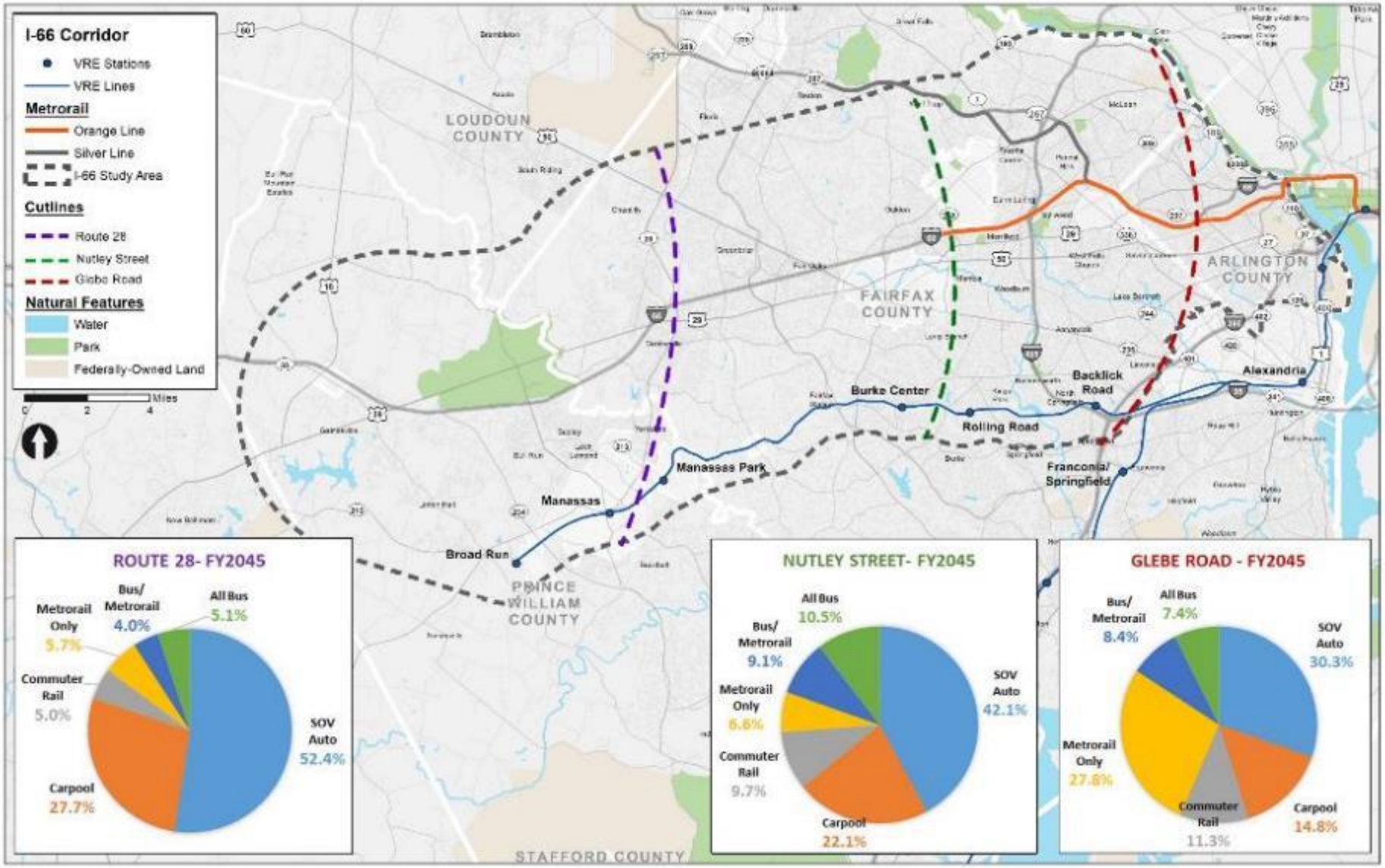
Mode Split - 2019



Mode Split - 2030



Mode Split - 2045



Impact of Revised Recommendations on Person Throughput

Annual Peak Period Ridership: Draft Transit Plan			
	2022 Service	**2030 Service**	**2045 Service**
Total Bus Service	1,568,100	3,766,000	4,194,000
Total Rail (VRE Manassas Line)	1,963,500	4,090,200	5,084,700
Total Bus & Rail	3,531,600	7,856,200	9,278,700

Annual Peak Period Ridership: Previous Plan*		
	2025 Service	**2040 Service**
Bus Service Recommendations	813,120	986,040

*Daily peak period ridership was used in previous plan and has been converted to annual peak period ridership

Next Steps

- Completion of plan/coordination with stakeholders
- Service demands change over time – continual need for evaluation and adjustment of services
- Availability of technology to assist in first/last mile solutions will evolve over time – RM3P and other projects will inform future services

I-495/American Legion Bridge Transit/TDM Study

I-495/American Legion Bridge Transit/TDM Study

The American Legion Bridge provides the only direct connection between the region's most populous counties.

The goal of the I-495/American Legion Bridge Transit/TDM Study is to:

Identify a range of current and future multimodal solutions that can be implemented to reduce highway and transit congestion and improve overall mobility within the corridor.

Study Process

- Evaluate forecasted changes in land use, population, households, and employment
- Review existing and projected travel patterns
- Identify opportunities to move more people through transit and transportation demand management
- Develop optimized slate of multimodal recommendations

Next Steps

- Identify and coordinate with stakeholders
- Finalize project scope and secure consultant resources
- Kick-off meeting – early 2020
- Align transit/TDM recommendations with project development milestones

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