

Figure 4-1: Recommendations Map

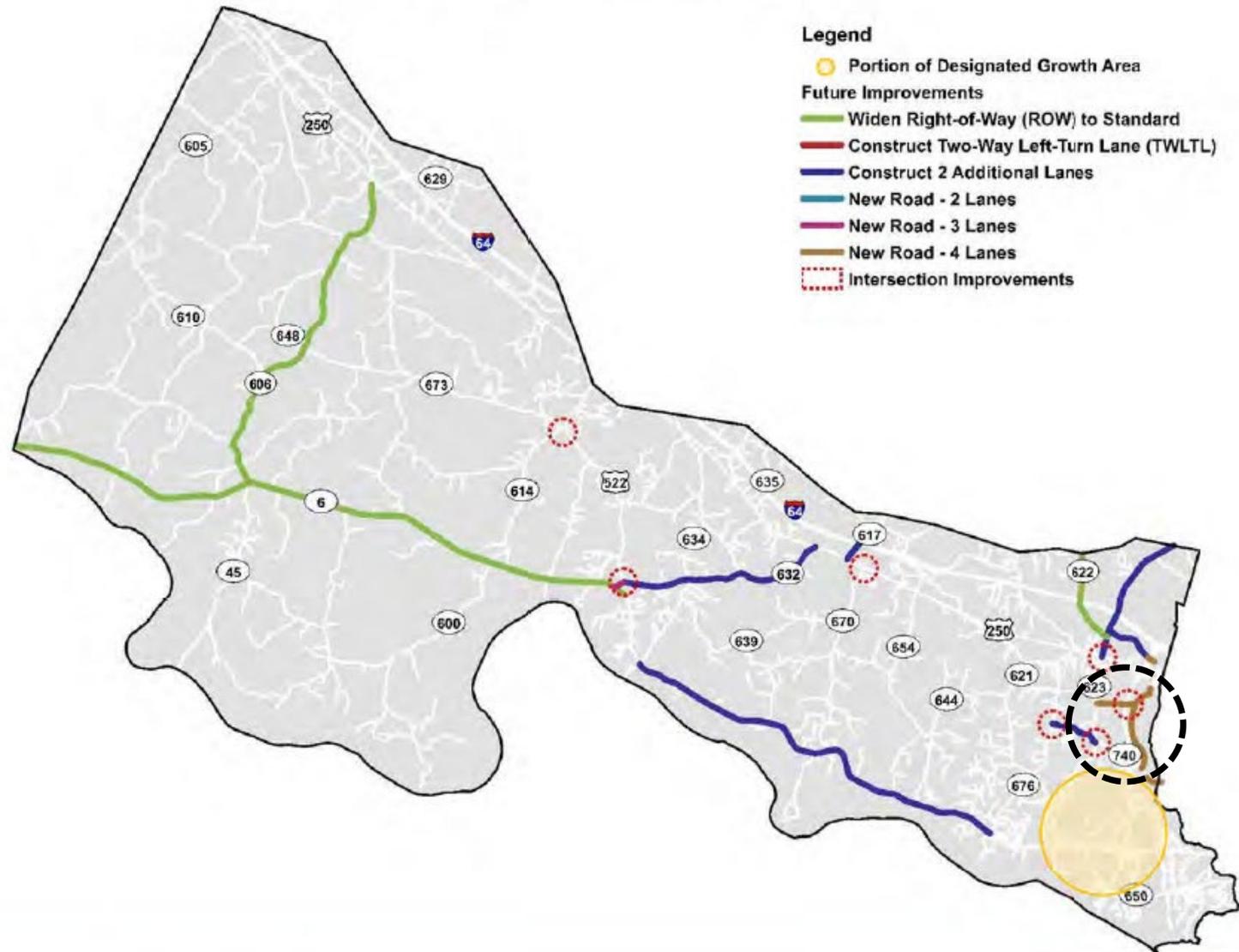


Table 5-5: East Service Area Long-Term Improvements

East Service Area								
Project Name	Project Limits		Roadway & Bridge Costs	Additional Contingency	Utilities	Right-of-Way	CEI	Total Cost
	From	To						
Tuckahoe Creek Parkway (Route 740) and Intersection	Hermitage Road	Hockett Road	\$ 8,185,000	\$ 816,500	\$ 2,041,250	\$ 2,041,250	\$ 1,224,750	\$ 14,288,750
Rockville Road (Route 622)	Hanover County Line	Ashland Road	\$ 4,074,700	\$ 407,470	\$ 1,018,675	\$ 1,018,675	\$ 611,205	\$ 7,130,725
Ashland Road (Route 623)	Broad Street Road	I-64	\$ 13,688,000	\$ 1,368,800	\$ 3,422,000	\$ 3,422,000	\$ 2,053,200	\$ 23,954,000
Ashland Road (Route 623)	I-64	Hanover County Line	\$ 11,085,000	\$ 1,108,600	\$ 2,771,500	\$ 2,771,500	\$ 1,662,900	\$ 19,400,500
Hockett Road Realignment	Hockett Road	Broad Street Road	\$ 1,915,100	\$ 191,510	\$ 478,775	\$ 478,775	\$ 287,265	\$ 3,351,425
Three Chopt Road Extension	Ashland Road	East of Route 288	\$ 33,895,800	\$ 3,389,580	\$ 8,473,950	\$ 8,473,950	\$ 5,084,370	\$ 59,317,650
Hockett Road to Future Wilkes Ridge Parkway Extension and New Route 288 Interchange	Hockett Road	Future Wilkes Ridge Parkway	\$ 8,820,000	\$ 882,000	\$ 2,205,000	\$ 2,205,000	\$ 1,323,000	\$ 15,435,000
Wilkes Ridge Parkway Extension	Wilkes Ridge Parkway (Existing)	Tuckahoe Creek Parkway	\$ 15,435,000	\$ 1,543,500	\$ 3,858,750	\$ -	\$ 2,315,250	\$ 23,152,500
Tuckahoe Creek Parkway (Route 740) Extension and Bridge	Tuckahoe Creek Parkway (Existing)	Ridgefield Parkway (Henrico County)	\$ 14,725,900	\$ 1,472,590	\$ 3,681,475	\$ 3,681,475	\$ 2,208,885	\$ 25,770,325
River Road West (Route 6)	Hermitage Road	Hockett Road	\$ 4,678,700	\$ 467,870	\$ 1,169,675	\$ 1,169,675	\$ 701,805	\$ 8,187,725
Total East Service Area =								\$ 199,988,600
Total All Service Areas =								\$ 443,427,075

5.3.2 Long-Term Improvement Prioritization

The long-term improvements were further prioritized based on a combination of projected traffic volumes, V/C ratios, and safety conditions. It is noted that some projects under long-term (i.e. Fairground Intersection and Extension, Hockett Realignment, etc.) were included for cost estimating purposes, however they are currently underway. Therefore, there are approximately fifteen (15) long-term improvement projects to consider for prioritization. When examining the projected traffic volumes, v/c ratios and safety issues, it was determined that approximately seven (7) long-term improvements are of top priority. The remaining are currently on a relatively level basis to one another. It should be further noted that these are long-term improvements and their priority can change over time. Traffic demands may vary from those originally anticipated should there be including changes in development patterns, employment numbers, population projections, etc.

1. Oilville Road (Route 617) from Broad Street Road to I-64 (Central Service Area)
2. Ashland Road (Route 623) from Broad Street Road to I-64 (East Service Area)
3. Fairground Road (Route 632) from Broad Street Road to Sandy Hook Road (Central Service Area)
4. Tuckahoe Creek Parkway (Route 740) and Intersection from Hermitage Road to Hockett Road (East Service Area)
5. Three Chopt Road Extension from Ashland Road to East of Route 288 (East Service Area)
6. Ashland Road (Route 623) from I-64 to Hanover County Line (East Service Area)
7. River Road West (Route 6) from Maidens Road to Hermitage Road (Central Service Area)

Project Description			
Project Name:	Hockett Road to Future Wilkes Ridge Parkway Extension and New Route 298 Interchange	Date:	September 2018
Project Limits From:	Hockett Road	To:	Future Wilkes Ridge Parkway
NTP Functional Classification:	Major Collector	Length (mi.):	1.20
Existing Lanes / Proposed Lanes:	New Road / 4 lanes	Divided:	Yes
Recommendations:	4-lane, divided roadway Conduct study on new Interchange on Route 298 (Interchange Justification Report) Note: Pursuing TPO funding for study	Justification Criteria:	

Traffic Data			
	AADT	Volume/Capacity (V/C) Ratio	Level of Service (LOS)
Existing	-	-	-
2040 No-Build (w/o Improvements)	-	-	-
2046 Build (w/Improvements)	5,100	0.15	A

Planning Level Costs	
Description	Costs
Roadway Typical Section DS-3	\$6,820,000
Interchange	TBD upon study of configuration
Multi-modal Facility - Paved (4' both sides)	\$0
Shared Use Path - Paved (12' one side)	\$0
Bridge #1	\$0
Bridge #2	\$0
Bridge #3	\$0
Roadway & Bridge Subtotal	\$6,820,000
Additional Contingency (16%)	\$892,900
Utilities (25%)	\$2,395,000
Right-of-Way (25%)	\$2,395,000
CGI (14%)	\$1,323,000
Grand Total	\$15,435,000

Cost Inputs			
Project Length (Miles)	1.20		
Shoulder Length (Miles)	2.00		
Multi-modal Facility (Miles)	2.00		
Shared Path Length (Miles)	2.00		
Bridge #1 Length (Feet)	0	Bridge #1 Width (Feet)	0
Bridge #2 Length (Feet)	0	Bridge #2 Width (Feet)	0
Bridge #3 Length (Feet)	0	Bridge #3 Width (Feet)	0

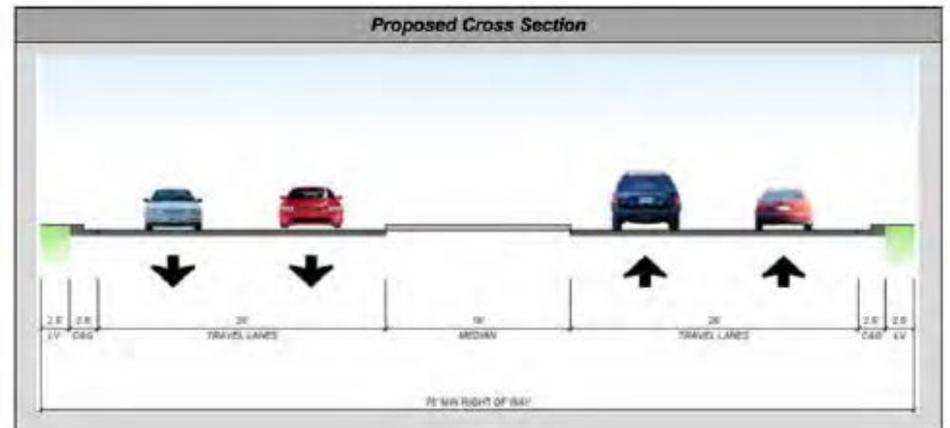
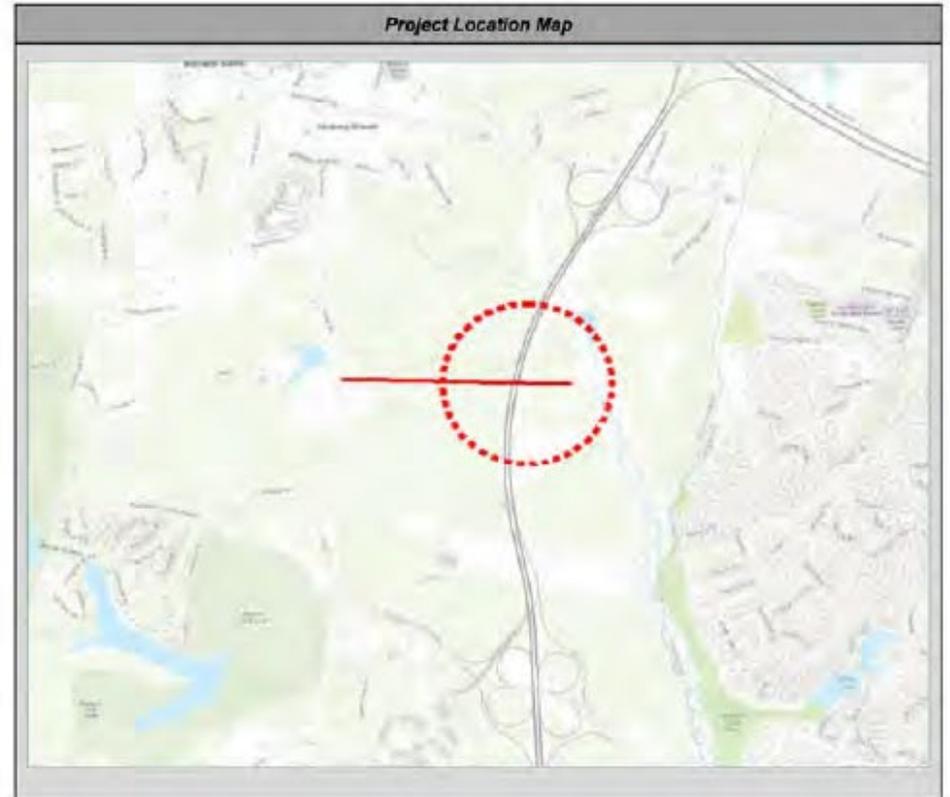
Funding	
SMART SCALE	
Revenue Sharing	
RSTP	
SDTP	
HSP	
TAP	
Private Investment	

Specific Assumptions

- A rural section was used to estimate the cost based on the undeveloped nature of the area and also due to the seemingly high cost of an urban section

General Assumptions

- Minimum roadway standards shall be in accordance with the VDOT Road Design Manual standards
- Costs are based on VDOT's TRD Statewide Planning Level Cost Estimates
- Cost is 2018 dollars
- Costs include 25% for PE & Construction Contingencies
- Annual inflation rate is 3.0% annually
- No lighting, streetscape, signalization, storm water management or utility adjustments are included



Project Description			
Project Name:	Wilkes Ridge Parkway Extension	Date:	September 2018
Project Limits From:	Wilkes Ridge Parkway (Existing)	To:	Tuckahoe Creek Parkway
NTP Functional Classification:	Major Collector	Length (mi.):	2.10
Existing Lanes / Proposed Lanes:	New Road / 4 lanes	Divided:	Yes
Recommendations:	4-lane, divided roadway	Justification Criteria:	
	Construct multi-modal facility		

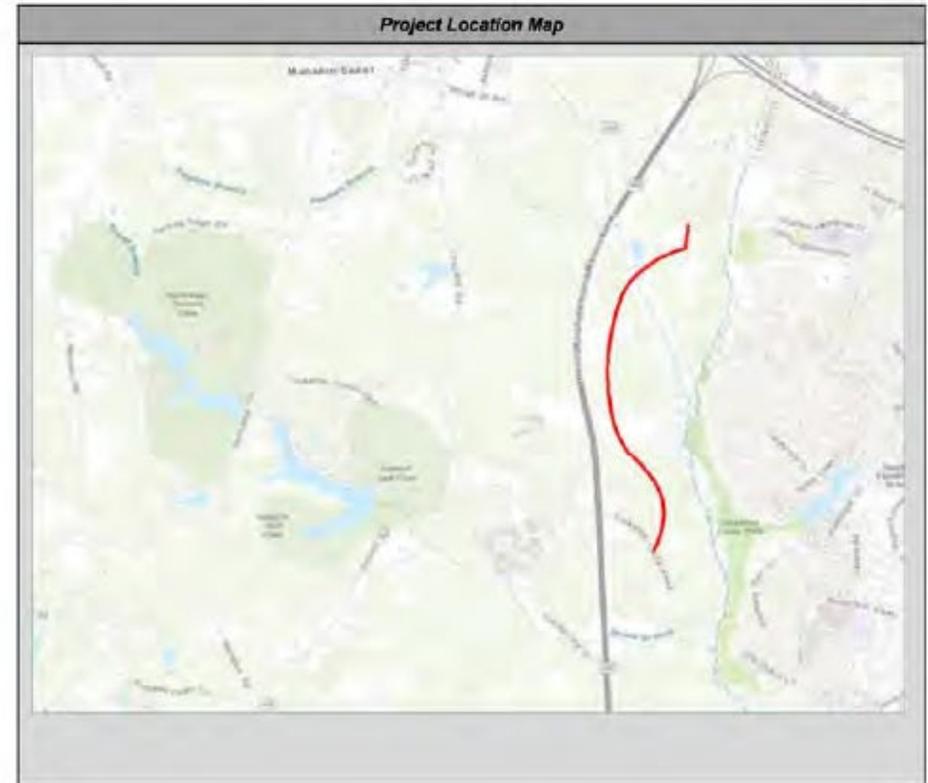
Traffic Data			
	AAOT	Volume/Capacity (V/C) Ratio	Level of Service (LOS)
Existing	-	-	-
2040 No-Build (w/o improvements)	-	-	-
2040 Build (w/ improvements)	1,100	0.03	A

Planning Level Costs	
Description	Costs
Roadway Typical Section (S-3)	\$15,435,200
Shoulders - Paved (4' both sides)	\$0
Multi-modal Facility - Paved (4' both sides)	\$0
Shared Use Path - Paved (10' one side)	\$0
Bridge #1	\$0
Bridge #2	\$0
Bridge #3	\$0
Roadway & Bridge Subtotal	\$15,435,200
Additional Contingency (16%)	\$1,543,500
Utilities (25%)	\$3,858,750
Right-of-Way (25%)	\$0
CEI (16%)	\$2,310,550
Grand Total	\$23,148,000

No ROW assumed

Cost Inputs			
Project Length (Miles)	2.10		
Shoulder Length (Miles)	8.00		
Multi-modal Facility (Miles)	8.00		
Shared Path Length (Miles)	8.00		
Bridge #1 Length (Feet)	0	Bridge #1 Width (Feet)	8
Bridge #2 Length (Feet)	0	Bridge #2 Width (Feet)	8
Bridge #3 Length (Feet)	0	Bridge #3 Width (Feet)	8

Funding	
SMART SCALE	
Revenue Sharing	
SETP	
SDVT	
HSP	
TAP	
Private Investment	

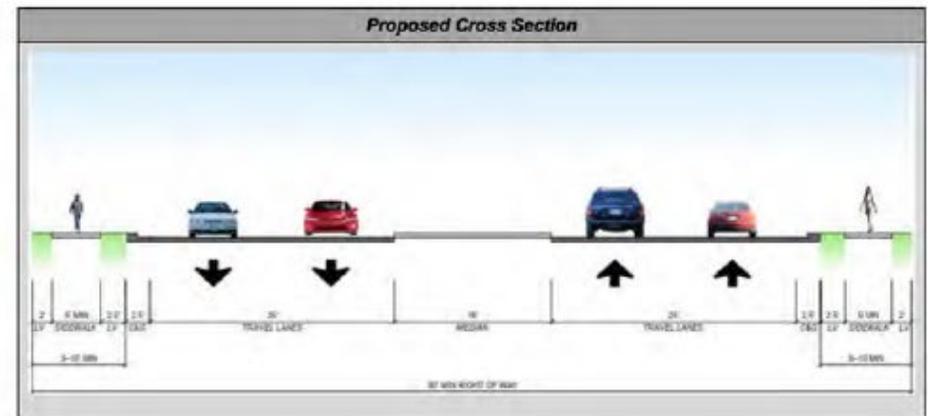


Specific Assumptions

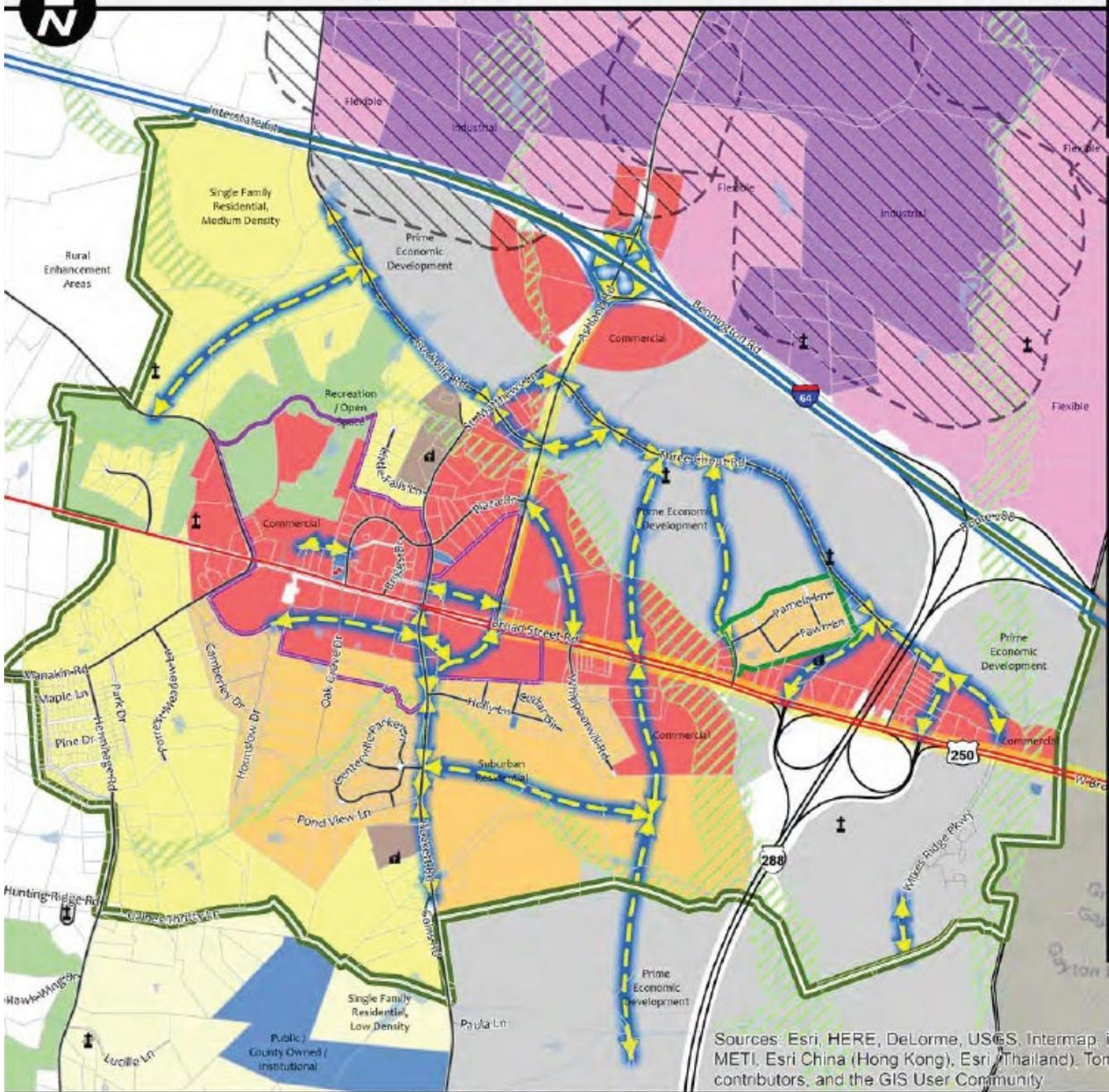
- A rural section was used to estimate the cost based on the undeveloped nature of the area and also due to the seemingly high cost of an urban section

General Assumptions

- Minimum roadway standards shall be in accordance with the VDOT Road Design Manual standards
- Costs are based on VDOT's TMPD Statewide Planning Level Cost Estimates
- Cost in 2018 dollars
- Costs include 3% for PE & Construction Contingencies
- Annual inflation rate is 3.6% annually
- No lighting, streetlights, signalization, storm water management or utility adjustments are included



2035 Comp Plan Map - 1 - Land Use - Centerville Village



Legend

2035 Land Use Parcels

- Commercial
- Flexible
- Industrial
- Prime Economic Development
- Semi-Public
- County / State / Institutional
- Single Family Residential, Low Density
- Single Family Residential, Medium Density
- Suburban Residential
- Recreation / Open Space
- Rural Enhancement Areas
- Goochland County Parcel Boundary
- Village Boundary
- Bellview Gardens Buffer
- Centerville Village Core
- Cemetery
- Church
- Fire / EMS Buildings
- Future Transportation *
- Arterial Management Plan (AMP)
- I-64
- US Route
- State Route
- Secondary Route
- Secondary Roads
- Quarry - 1000' Buffer
- Surface Water Bodies
- Streams
- 100yr Flood Plain

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri Thailand, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community