



# Tier 1 Recommendations October 30, 2017





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## **Bristol District**



	Tier 1 District Needs				
Need	Need Description				
	Within the Bristol MPO, the I-81 interchanges in Abingdon have safety issues,				
B.2	particularly at Exits 14, 17, and 19.				
	Within the Bristol District, the Wise County UDA has safety, mode choice, local access,				
В.9	and circulation issues within the town of Wise.				
	Within the Bristol District, the I-81/US 11 corridor has safety, congestion,				
B.10	reliability, and bottleneck issues, as well as a lack of parallel facilities.				
	Within the Bristol District, the US 460 corridor has safety and congestion issues, with				
B.12	limited connections across state lines, and limited interregional transit connections.				
	Within the Bristol District, the I-77 corridor has congestion and reliability issues,				
	related to seasonal travel, between North Carolina and I-81 and I-81 to West Virginia.				
	Safety issues and limited interregional transit connections exist throughout the I-77				
B.13	corridor.				



	Funded Projects
Need(s)	Project Name
В.2	I-81 Interchange Improvements at Exit 14 (2017-2022 SYIP), CST underway
	I-81 Interchange Improvements at Exit 17 (2017-2022 SYIP, SMART SCALE),
В.2	CST 2021
	I-81 Interchange Improvements at Exit 19 (2017-2022 SYIP, SMART SCALE),
B.2	CST 2021/2022
	Route 23 Business (Norton Road) Reconstruction - Phase I (0.38 miles) (2017-2022
В.9	SYIP), CST 2020/2021
	Design and construction of Phase 2 of the streetscape improvements from Railroad
	Avenue to Nottingham Avenue in Downtown Wise (Transportation Alternatives,
В.9	FY 16)
	Add lane on I-77 (south) at Exit 80 (from .23 mi, east of SB I-81 off-ramp to 1.2 mi.
B.10	east of SB I-81 off-ramp) (FY 2017-2022 SYIP, SMART SCALE), CST 2019-2020
	I-81 extend acceleration lane (Exit 72) to deceleration lane (Exit 73),
B.10	(FY2017-2022 SYIP), CST 2019
B.10	Lee Highway Widening - Exit 5 Phase 1B (FY 2017-2022 SYIP, SMART SCALE), CST 2021
B.10	Lee Highway Widening - Exit 5 Phase 2 (FY 2017-2022 SYIP, SMART SCALE), CST 2021
B.10	Connector Road - Phase 2 (FY 2017-2022 SYIP, SMART SCALE), CST 2018
B.10	US 11 Shoulder Initiative (Washington County), CST 2020
	Intersection Improvements and Access Management - US 11/VA 140 and
B.10	intersection improvements - US 11/US 19 (2018-2023 SYIP, SMART SCALE)
	I-81 Exit 35 (State Route 107) Interchange Modifications (Smyth) (2018-2023 SYIP,
B.10	SMART SCALE)
	Completion of US 460 Connector (Phase 1 & Phase 2), and Coalfields Expressway
B.12	(Hawks Nest) (2017-2022 SYIP)
	460 Corridor Q Poplar Creek Phase A from east end of Hawks Nest Section to Rt. 604
B.12	(2017-2022 SYIP)
	US 460 Shoulder Initiative (Buchanan and Tazewell Counties, including US 19/US 460
B.12	overlap), CST 2017/2018



	Project Recommendations					
ID	Tier 1 Need(s)	Project Name	Jurisdiction	Туре	Cost (\$M)	Page
BD1	B.2	French Moore Jr. Boulevard	Washington	Highway,		
DD1	0.2	Extension	County	Pedestrian	\$36.70	1
BD2	В.2	Comprehensive Interchange Capacity/Arterial Operational Study - Abingdon Area (I-81 and arterial network, Exit 14 through Exit 22)	Washington County	Highway	\$0.25 (study only)	3
BD3	В.9	Route 23 Business (Norton Road) Reconstruction in Wise - Phase 2 (1.9 miles)	Wise County	Highway, Bicycle, Pedestrian	\$11.00	5
BD4	B.9	UDA planning grant for the Town of Wise and other grants for bike/pedestrian enhancements	Wise County	Highway, Bicycle, Pedestrian	0.25 (study & grants)	7
BD5	В.9	Innovation Highway (Phase 1)	Wise County	Highway	\$77.75	8
BD6	B.10	I-81 Exit 81, Exit 80, Exit 77 Improvements and incident quick clearance program	Wythe County	Highway	\$114.70	10
BD7	B.10	US 11 widening - Hillman Highway and Empire Drive	Washington County	Highway	\$13.37	12
BD8	B.10	US 11 Improvement - Alexis Dr. to Old Airport Road	Bristol City	Highway, Bicycle, Pedestrian	\$21.24	14
BD9	B.10	Enhanced ITS/ATMS on I-81 and US 11 throughout the Bristol/Abingdon area (TN state line to Exit 29)	Bristol City, Washington County	Highway	\$5.00	16
BD10	B.10	Enhanced ITS/ATMS on I-81 and US 11 from Rural Retreat (Exit 60) to Pulaski (Exit 89)	Wythe County	Highway	\$5.00	18
BD11	B.10	US 11 widening - Highlands Center to I-81 Exit 10	Washington County	Highway, Bicycle, Pedestrian	\$116.47	20
BD12	B.12	US Route 460 Intersection Improvements in Tazewell and Buchanan Counties	Tazewell and Buchanan Counties	Highway	\$14.60	22
BD13	B.12	Coalfields Expressway Route 121/460 Poplar Creek Phase B	Buchanan County	Highway	\$214.27	24
BD14	B.12	US 460 Safety and Intersection Improvement Program - Grundy to KY State Line	Buchanan County	Highway	\$2.00	25
BD15	B.12	US 460 Safety and Intersection Improvement Program - Richlands	Tazewell County	Highway	\$2.40	27



ID	Tier 1 Need(s)	Project Name	Jurisdiction	Туре	Cost (\$M)	Page
		Study of Regional and				
BD16	B.10 / B.12 /	Interregional Transit Needs and			TBD	
BDIO	B.13	Opportunities in Southwest			(study	
		Virginia	Multiple	Transit	only)	29
0017	D 12	I-77 Northbound Truck Climbing				
BD17	BD17 B.13	Lane	Wythe County	Highway	\$10.75	30
0010	D 12	US Route 52 Intersection Safety				
BD18	B.13	Enhancements	Bland County	Highway	\$3.87	32
0010	D 12	I-77 Exit 41 Interchange				
BD19	B.13	Modifications (Wytheville)	Wythe County	Highway	\$10.03	34
		Variable Speed Limit System				
BD20	B.13	and comprehensive ITS/ATMS				
		Strategies on I-77	Bland County	Highway	\$7.00	36



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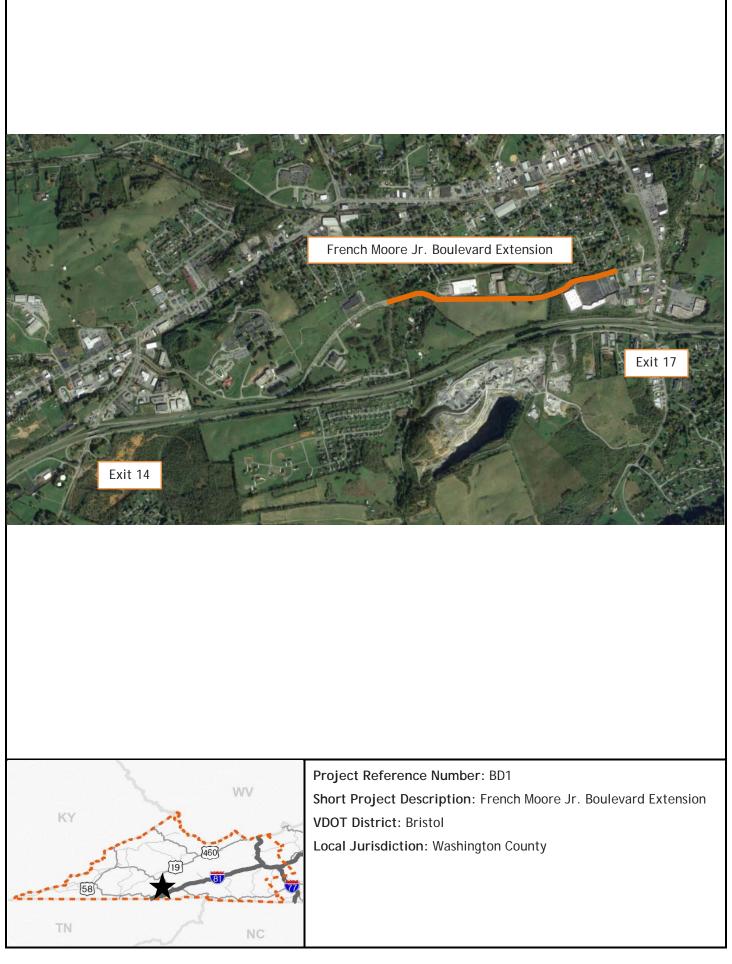
## **Bristol District**

## **Project Sheets**





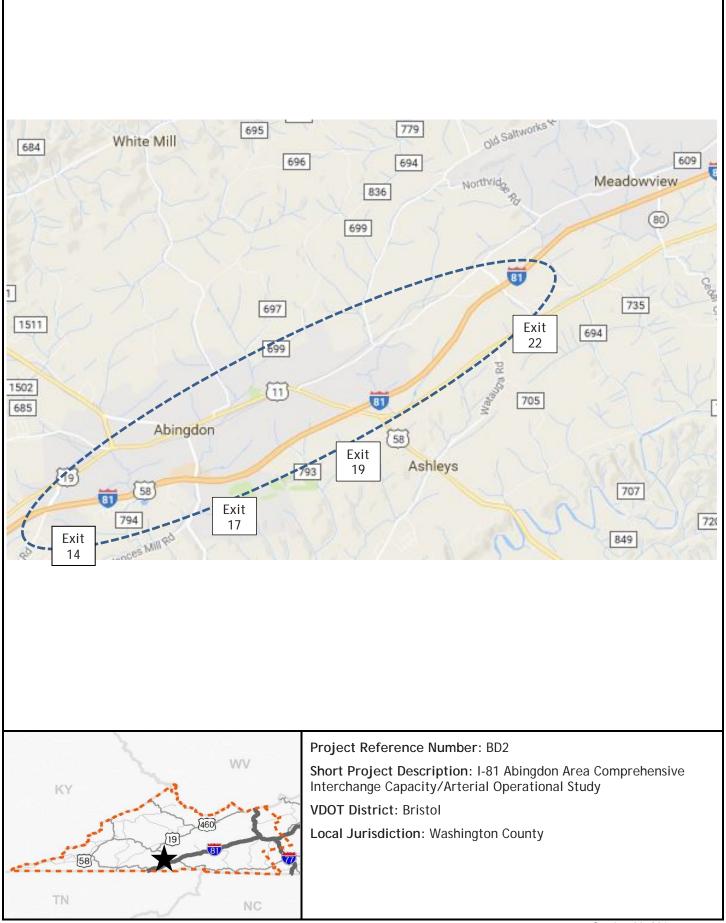
Recommendation Details		Project Reference Number BD1				
Short Description						
French Moore Jr. Boulevard Extension						
District		Local Jurisdiction				
Bristol		Washington County				
VMTP Need Type (Place X in all applica X Corridor of Statewide Significanc	VMTP Need Type (Place X in all applicable boxes)         X       Corridor of Statewide Significance         Regional Network       UDAs					
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)				
Crescent Corridor (I-81), B1.A, C, D						
Project Status:	SMART Scale	Round 2 application (not funded)				
Recommendation Features						
Type (Place X in all applicable boxes)						
X Highway X Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Demand Manager				
Detailed Description of Improvements						
economic development on adjacent	Urban roadway extension creating an alternate route to I-81 and US 11 between Exit 14 and Exit 17 near Abingdon, including alternate access to Virginia Highlands Community College and Higher Education Center. The project should also help promote economic development on adjacent properties. The ROW acquired with the project will allow for an eventual 4 lane with a median section. Initial design is 2 travel lanes with a two-way left turn lane and 5' sidewalks.					
Potential Funding Sources (Place X in all applicable boxes)						
X SMART SCALE TAP	CMAQ HSIP	Prescoping Other:				
Estimated Project Cost (in \$M)	\$36.70	Right of Way Required for Project X				
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project						
	Comm	ents (for future potential projects resulting from study)				
Safety	New co	prridor design with low speeds and a 5' sidewalk.				
Congestion Mitigation	Project provide	e an alternative route, diverting trips from I-81 and US 11.				
Accessibility	Project will enhanc	e accessibility to the Virginia Highlands Community College.				
Land Use		Not applicable within this region.				
Environment	Future project will hav	ve an environmental footprint and may help reduce emissions.				
Economic Development	Project could enhance	e access for future development and improve corridor reliability				







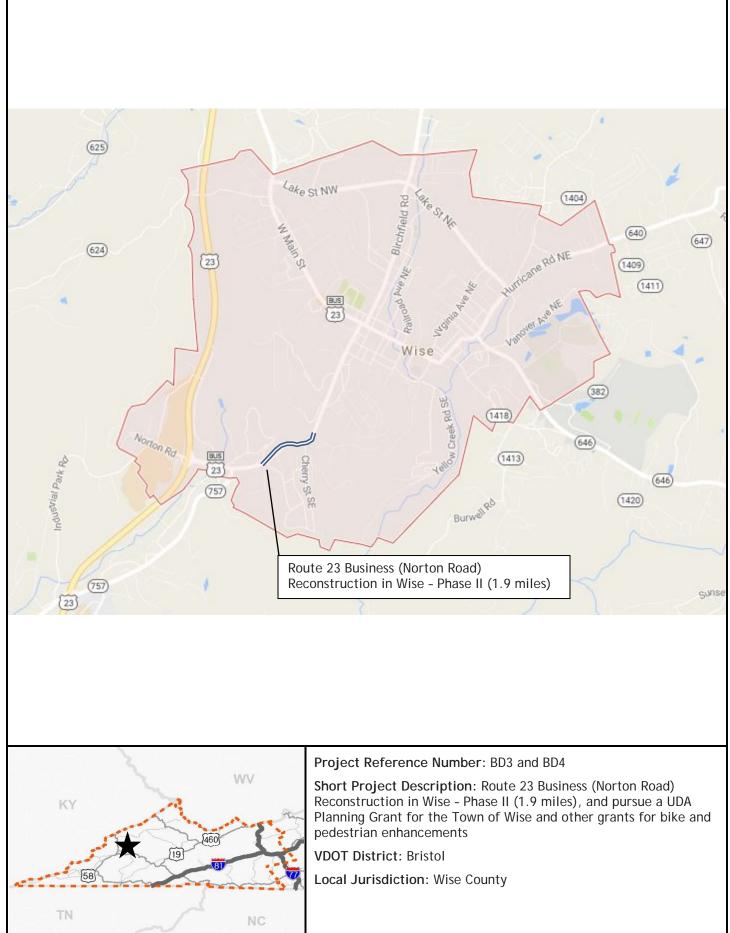
Recommendation Details		Project Reference Number	BD2			
Short Description						
I-81 Abingdon Area Comprehensive Interchange Capacity/Arterial Operational Study						
District	Lo	cal Jurisdiction				
Bristol	١	Nashington County				
VMTP Need Type (Place X in all applica X Corridor of Statewide Significanc		Network UDAs X	Safety			
Needs Addressed from VMTP Need	s Assessment (List needs as nu	umbered in reports)				
Crescent Corridor (I-81), B1.A, C, D. Reg	· · · · · · · · · · · · · · · · · · ·					
Project Status:	New, uni	querecommendation				
Recommendation Features						
Type (Place X in all applicable boxes)						
X Highway X Bike/Pedestrian	Bus Transit Rail	Transit Freight Rail Travel Dem	nand Manageme			
Detailed Description of Improvements						
represents an interim fix given extensive interchange improvement only adds n design/operations of all interchanges t roads between all interchanges to serv	e retail growth nearby that wi ew capacity to the southside ogether, the crossing arterial e local trips in the area. Curre	f Exit 14 through Exit 22 Area - The Exit 19 imp Il pressure interchange performance. The Exi- of the interchange. The study should evalua routes, and include the potential for conne- ently VDOT is leading a frontage road pre-so tudies should be funded for implementation	kit 17 ate the ultimate cting frontage coping study			
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE	CMAQ XHSIP XPres	coping Other:				
Estimated Project Cost (in \$M)	\$0.25 (study only)	Right of Way Required for Project $X$ (	TBD by study)			
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments (for future potential projects resulting from study)						
Safety	Future pro	pjects will improve safety at interchanges				
Congestion Mitigation	Future	projects could impact recurring delay.				
Accessibility		act regional accessibility to jobs, mainly loca	al benefits.			
Land Use	1	Not applicable within this region.				
Environment	Future project could have a	an environmental footprint and may help re-	duce emissions.			
Economic Development	Project could enhance acc	cess for future development and improve co	orridor reliability.			







Recommendation Details		Project Reference Number	BD3			
Short Description						
Route 23 Business (Norton Road) Reconstruction in Wise - Phase 2 (1.9 miles)						
District		Local Jurisdiction				
Bristol		Wise County				
	VMTP Need Type (Place X in all applicable boxes)         Corridor of Statewide Significance       Regional Network       X       UDAs       Safety					
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)				
Town of Wise UDA						
Project Status:	SMART Scale	Round 2 application (not funded)				
Recommendation Features						
Type (Place X in all applicable boxes)						
X Highway X Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Den	nand Manageme			
Detailed Description of Improvements		o provide a four lane facility with an additional				
the University of Virginia's College at Wi Route 23 Business reconstruction project	se. The project would be t and would go east app	e is the primary corridor from US 23 into the Towr gin 0.02 miles west of Awan Street at the end of proximately 0.36 mile to 0.18 mile east of Cherry widing access to vacant property within the Wis	Phase I of the Street. The			
Potential Funding Sources (Place X in all applicable boxes)	:maq Thsip T	Prescoping Other:				
Estimated Project Cost (in \$M)	\$ 11.00	Right of Way Required for Project				
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments						
Safety	Proje	ct will improve safety by adding turning lanes				
Congestion Mitigation	Projec	will improve throughput and decrease delays				
Accessibility	-	unlikely to impact regional accessibility to jobs.				
Land Use		Not applicable within this region.				
Environment	The project has mir	or environmental footprint and can help reduc	e emissions.			
Economic Development	The proje	ct will improve address travel time reliability issue	es.			





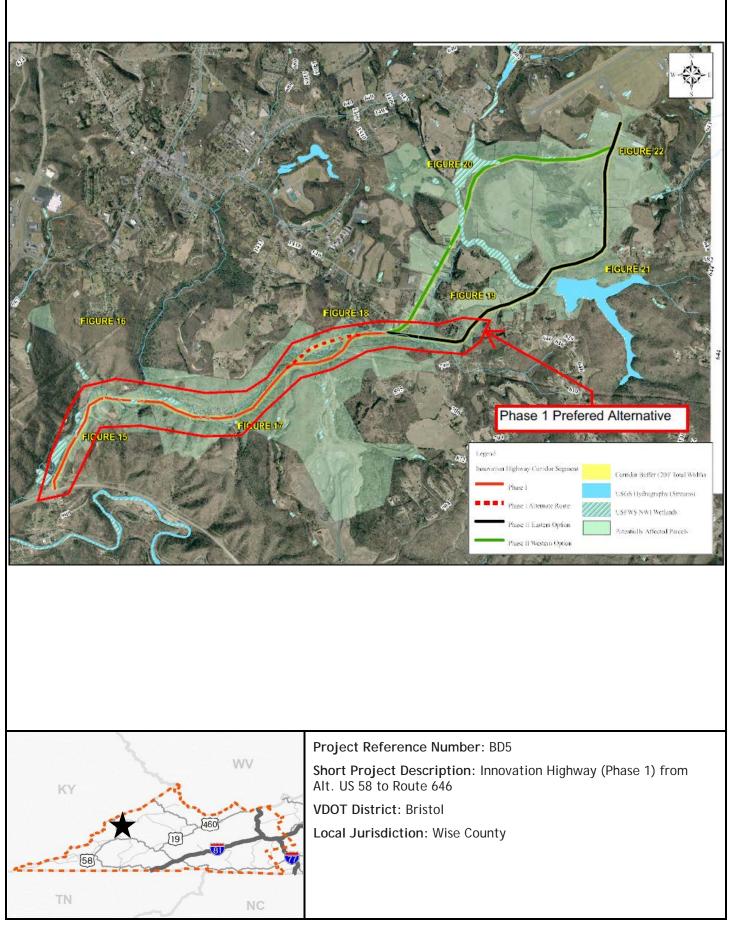


Recommendation Details		Project Reference Number	BD4			
Short Description Pursue a UDA planning grant for the Town of Wise and other grants for bike/pedestrian enhancements						
District		Local Jurisdiction				
Bristol		Wise County				
	VMTP Need Type (Place X in all applicable boxes)         Corridor of Statewide Significance       Regional Network       X       UDAs       Safety					
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)				
Town of Wise UDA						
Project Status:	New	unique recommendation				
further Transportation Alternatives gran gaps in the network within the UDA are destinations within and adjacent to the implementation through SMART Scale, Potential Funding Sources (Place X in all applicable boxes) X SMART SCALE X TAP 00	wn of Wise, focusing on o ts or revenue sharing op a, connect to the UVA C Wise UDA. Ultimately th TAP, or HSIP.	developing a network of bicycle and pedestrian ions for additional bike/pedestrian enhanceme ollege at Wise campus, and connect to other ir e recommendations of this planning grant could Prescoping Other:	ents in Wise to fill mportant			
Estimated Project Cost (in \$M) \$0.25 (study / grants) Right of Way Required for Project If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project						
		or future bicycle and pedestrian improvements within	Wise)			
Safety	Project	will improve safety for pedestrians and bicyclists	ŝ			
Congestion Mitigation		Project will not impact recurring delay.				
Accessibility	Project	unlikely to impact regional accessibility to jobs.				
Land Use		Not applicable within this region.				
Environment	The project has min	nor environmental footprint and can help reduc	e emissions.			
Economic Development	T	ne project will not address reliability issues.				





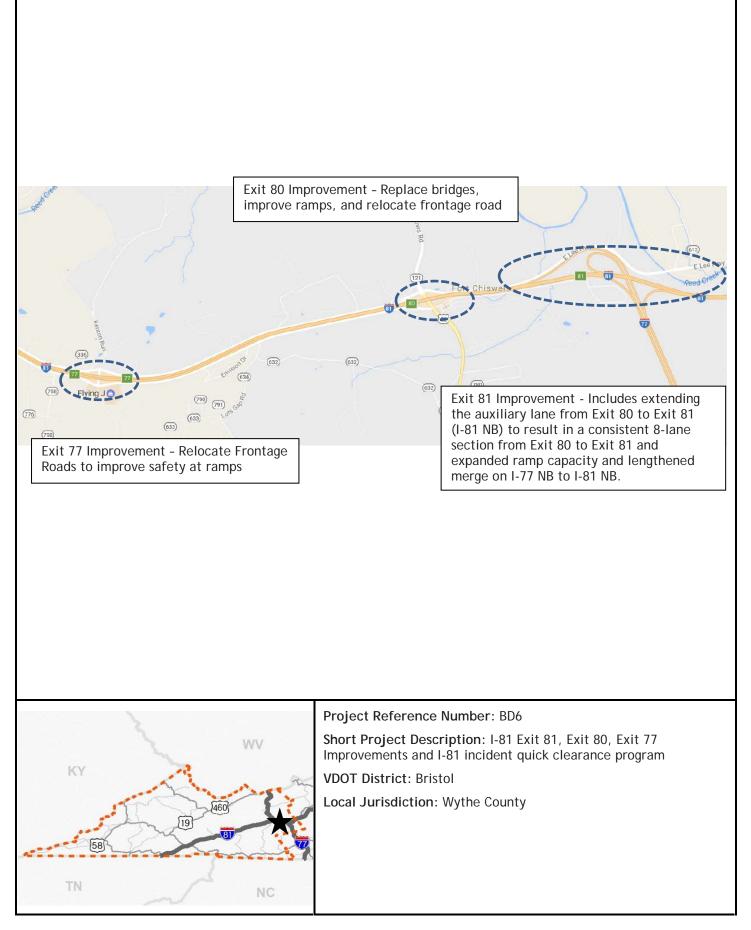
<b>Recommendation Details</b>		Project Reference Number	BD5			
Short Description						
Innovation Highway (Phase 1)						
District	<u>l</u>	ocal Jurisdiction				
Bristol		Wise County				
VMTP Need Type (Place X in all applica	ble boxes)					
X Corridor of Statewide Significance	x     Corridor of Statewide Significance     Regional Network     x     UDAs     Safety					
Needs Addressed from VMTP Need	s Assessment (List needs as	numbered in reports)				
US 58 CoSS J1 Segment, Need B; Wise L	DA					
Project Status:	SMART Scale Ro	ound 2 application (not funded)				
Recommendation Features						
Type (Place X in all applicable boxes)						
X Highway Bike/Pedestrian	Bus Transit Ra	il Transit Freight Rail Travel Dem	nand Manageme			
Detailed Description of Improvements						
proposed SMART Scale, Round 2 project and SR 646 for approximately 2.7 miles	et is just for the Phase 1 sect and is the most critical nea cent properties. The propos	In of Wise, the city of Norton, and located in Wise, the city of Norton, and located in Wise, which has the roadway extending betwee ar-term need. The roadway is proposed as a seed roadway will initially be built with a two-lar cquired as part of this project.	en Alt. US 58 econdary			
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE         TAP         C         Estimated Project Cost (in \$M)	CMAQ XHSIP Pro	escoping Other: Right of Way Required for Project X				
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments (for future potential projects resulting from study)						
Safety	Project will im	prove safety through a new, alternative corric	lor.			
Congestion Mitigation	Proje	ct will minimally impact recurring delay.				
Accessibility	Project will	positively impact regional accessibility to jobs	S.			
Land Use		Not applicable within this region.				
Environment	The project does have an	environmental footprint and will minimally re-	duce emissions.			
Economic Development	Projec	ct will enhance access to Wise from US 58				







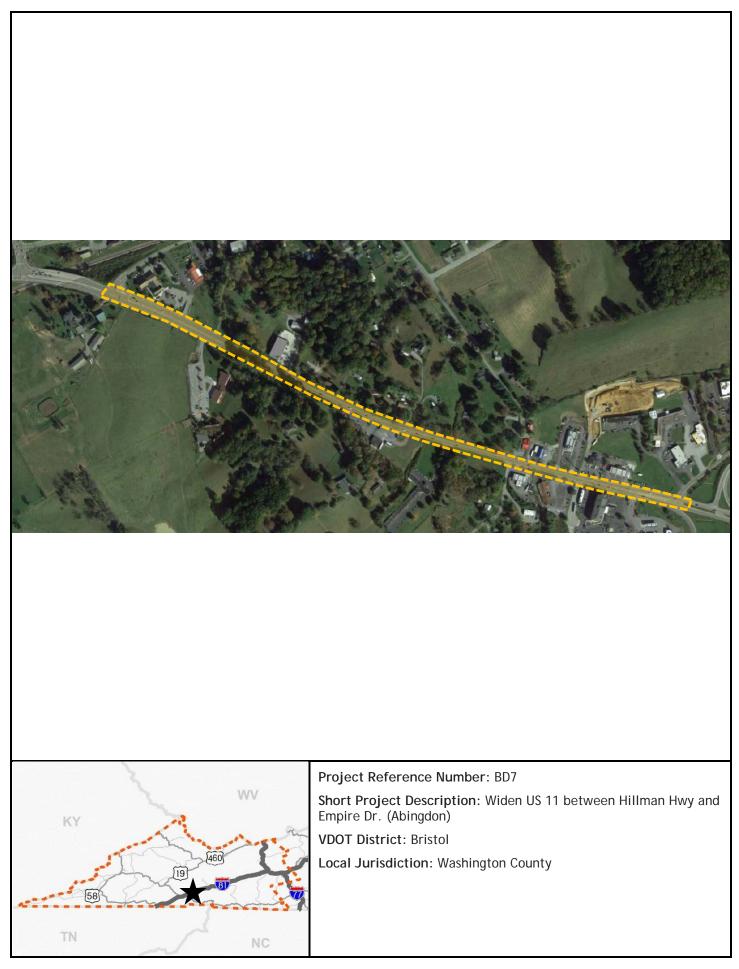
Recommendation Details		Project Reference Number	BD6			
Short Description I-81 Exit 81, Exit 80, Exit 77 Improvements and incident quick clearance program						
District	ſ	Local Jurisdiction				
Bristol		Wythe County				
	VMTP Need Type (Place X in all applicable boxes)         x       Corridor of Statewide Significance         x       Regional Network         UDAs       x					
Needs Addressed from VMTP Need	s Assessment (List needs a	as numbered in reports)				
Crescent Corridor (I-81) Need: B1.M, B1	.0					
Project Status:	Modified recommen	dation from existing planning document				
<b>Recommendation Features</b>						
Type (Place X in all applicable boxes)						
X Highway Bike/Pedestrian	Bus Transit	ail Transit Freight Rail Travel Dem	and Manageme			
Detailed Description of Improvements	ique projects within the l	-81/I-77 overlap section in addition to a I-81 cor	rider wide			
incident quick clearance program. The Exit 77 relocate frontage roads and imp 80 include extending the auxiliary lane 81, with expanded ramp capacity and	three projects include: ( prove intersection and ran from Exit 80 to Exit 81 (I-8 lengthened merge on I-7	<ol> <li>Exit 80, replace overhead bridges and impro np safety; and (3) additional improvements at E NB) to result in a consistent 8-lane section from 7 NB to I-81 NB. Implementation of an incident h crashes, particularly in this high-volume section</li> </ol>	ve ramps; (2) Exit 81 and Exit Exit 80 to Exit quick			
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE	:maq Hsip F	Prescoping X Other: INFF	RA			
Estimated Project Cost (in \$M)	\$ 114.70	Right of Way Required for Project				
If Applicable: Smart Scale Project Based on Qualitative Review of Project						
		Comments				
Safety	Pr	oject will improve safety at interchanges				
Congestion Mitigation	Pro	ject will minimally impact recurring delay.				
Accessibility	Project	unlikely to impact regional accessibility to jobs.				
Land Use		Not applicable within this region.				
Environment	The project has min	or environmental footprint and can help reduce	e emissions.			
Economic Development	The project will i	mpact high-truck volumes and address reliabilit	y issues.			







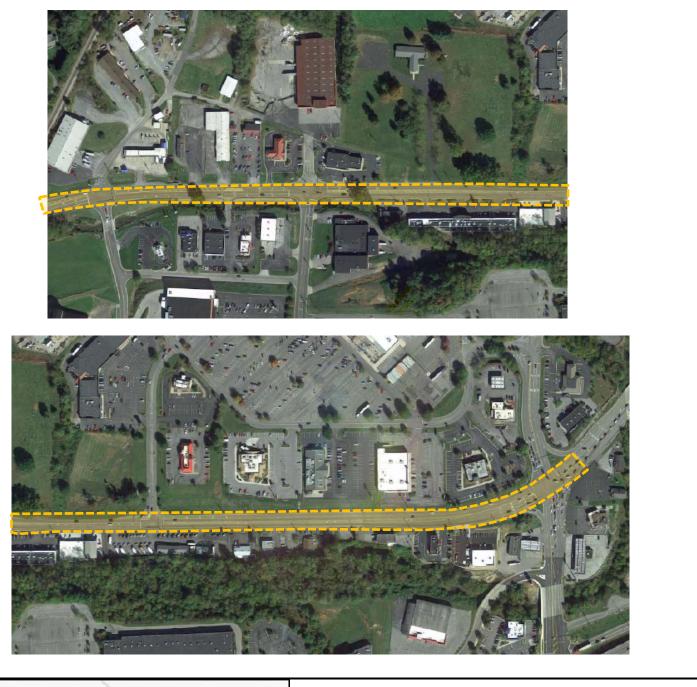
Recommendation Details		Project Reference Number BD7				
Short Description						
Widen US 11 between Hillman Highway	y and Empire Drive					
District		Local Jurisdiction				
Bristol		Washington County				
VMTP Need Type (Place X in all applica	VMTP Need Type (Place X in all applicable boxes)					
X Corridor of Statewide Significance	e X Regio	unal Network UDAs Safety				
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)				
Bristol Area Regional Network						
Project Status:	SMART Scale	Round 2 application (not funded)				
Recommendation Features						
Type (Place X in all applicable boxes)						
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Demand Manage	emer			
Detailed Description of Improvements						
lane (IWLIL)) to improve traffic operation	ons, and access manag	ement and safety by reducing entrances and conflict points.				
Potential Funding Sources (Place X in all applicable boxes)						
	CMAQ HSIP	Prescoping Other:				
Estimated Project Cost (in \$M)	\$ 13.37	Right of Way Required for Project X				
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments						
Safety	Proiect w	II improve intersection safety and reduce conflicts.				
Congestion Mitigation		oject will minimally impact recurring delay.				
Accessibility		unlikely to impact regional accessibility to jobs.				
-						
Land Use	<b>TI</b>	Not applicable within this region.				
Environment	· ·	nor environmental footprint and can help reduce emissions.				
Economic Development	The project will address	s reliability issues and improve access to corridor development	ıt.			







Recommendation Details		Project Reference Number	BD8			
Short Description						
US 11 Improvement Alexis Dr. to Old Airport Road (Bristol City)						
District		Local Jurisdiction				
Bristol		Bristol City				
VMTP Need Type (Place X in all applica	ble boxes)					
X Corridor of Statewide Significance	XCorridor of Statewide SignificanceXRegional NetworkUDAsSafety					
Needs Addressed from VMTP Need	s Assessment (List needs a	is numbered in reports)				
Crescent Corridor Segment B1, Needs E	3, M, and O					
Project Status:	Modified recommen	dation from existing planning document				
Recommendation Features						
Type (Place X in all applicable boxes)						
X Highway X Bike/Pedestrian	Bus Transit	ail Transit Freight Rail Travel Dem	nand Manageme			
Detailed Description of Improvements						
project. The project limits are from Alex	is Drive in the west to Old	' median and a 10' shared use path along the I Airport Road in the east. VDOT is currently work n intersection and access management improv	king with Bristol			
Potential Funding Sources (Place X in all applicable boxes)	:maq —hsip —f	rescoping Other:				
Estimated Project Cost (in \$M)	\$ 21.24	Right of Way Required for Project				
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project						
		Comments				
Safety	Project will	improve intersection safety and reduce conflic	ets.			
Congestion Mitigation	Pro	ject will minimally impact recurring delay.				
Accessibility	Project	unlikely to impact regional accessibility to jobs.				
Land Use		Not applicable within this region.				
Environment	The project has min	or environmental footprint and can help reduce	e emissions.			
Economic Development	The project will address	reliability issues and improve access to corridor	development.			



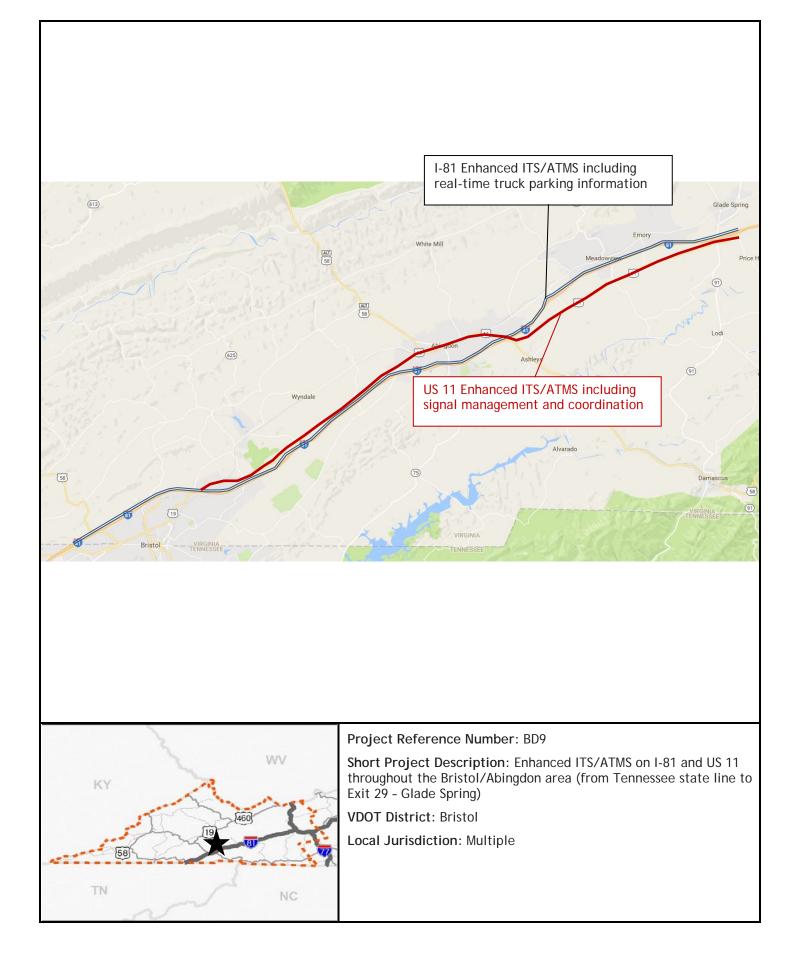


Project Reference Number: BD8
Short Project Description: US 11 Improvements Alexis Dr. to Old Airport Road (Bristol City)
VDOT District: Bristol
Local Jurisdiction: Bristol City





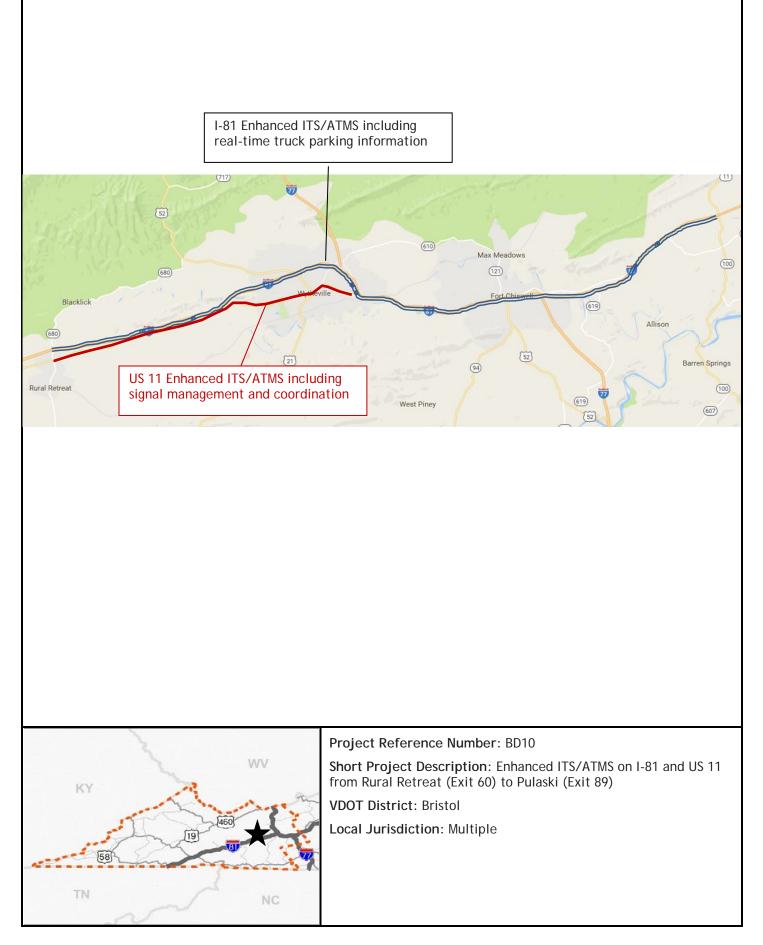
Recommendation Details		Project Reference Number	BD9
Short Description Enhanced ITS/ATMS on I-81 and IIS 11 t	hroughout the Bristol/Abi	ngdon area (from Tennessee state line to Exit 29	- Glade Spring)
	inoughout the bistoir to		Glade spiritg)
District Bristol		Local Jurisdiction Multiple	
VMTP Need Type (Place X in all applica	ble boxes)	manpio	
X Corridor of Statewide Significance		nal Network UDAs	Safety
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)	
Crescent Corridor (I-81) Need: B1.M, B1	.0		
Project Status:	New	unique recommendation	
Recommendation Features			
Type (Place X in all applicable boxes)			
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Den	nand Manageme
Detailed Description of Improvements			
Expanded and enhanced ITS/ATMS on I-81 and US 11 from Exit 1 to Exit 29. The ITS should be designed to provide travel time information and route highlights when I-81 is congested or during incidents. The ATMS should be designed to enable improved performance of signalized intersections on connecting roadways between I-81 and US 11 and on US 11. This recommendation would also coordinate with the incident quick clearance program along the I-81 corridor including vehicle staging and incentives for quick clearance. In addition, the ITS should be linked to truck parking utilization information to provide real-time information to trucks operating on I-81.			
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE	cmaq hsip X	Prescoping X Other: Funding to deplo and develop new 511 Virgir	applications in
Estimated Project Cost (in \$M)	\$ 5.00	Right of Way Required for Project	
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project			
		Comments	
Safety		mpact safety, but will reduce delays associated	with incidents.
Congestion Mitigation		pject will minimally impact recurring delay.	
Accessibility	Project	unlikely to impact regional accessibility to jobs.	
Land Use		Not applicable within this region.	
Environment	The project has min	nor environmental footprint and can help reduce	e emissions.
Economic Development	The project will	impact high-truck volumes and address reliabilit	y issues.







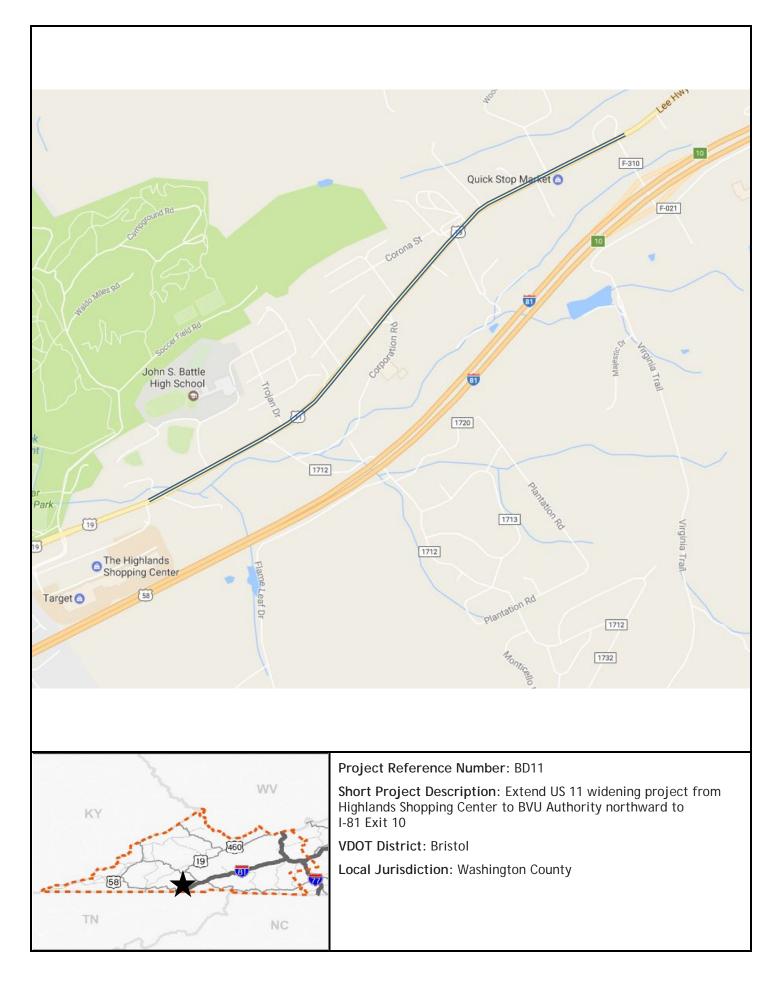
Recommendation Details		Project Reference Number	BD10
Short Description			
Enhanced ITS/ATMS on I-81 and US 11 f	om roughly from Rural R	etreat (Exit 60) to Pulaski (Exit 89)	
District		Local Jurisdiction	
Bristol		Multiple	
VMTP Need Type (Place X in all applica	ble boxes)		_
X Corridor of Statewide Significance	e <b>x</b> Regio	nal Network UDAs	Safety
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)	
Crescent Corridor (I-81) Need: B1.M, B1	.0		
Project Status:	New	, unique recommendation	
Recommendation Features			
Type (Place X in all applicable boxes)			
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Dem	nand Manageme
	1 91 and US 11 from Dura	Dotroat (Evit 60) to Dulaski (Evit 90). The ITS should	d be designed
Expanded and enhanced ITS/ATMS on I-81 and US 11 from Rural Retreat (Exit 60) to Pulaski (Exit 89). The ITS should be designed to provide travel time information and route highlights when I-81 is congested or during incidents. The ATMS should be designed to enable improved performance of signalized intersections on connecting roadways between I-81 and US 11 and on US 11. This recommendation would also coordinate with the incident quick clearance program along the I-81 corridor including vehicle staging and incentives for quick clearance. In addition, the ITS should be linked to truck parking utilization information to provide real-time information to trucks operating on I-81.			
Potential Funding Sources         (Place X in all applicable boxes)         X         SMART SCALE	CMAQ HSIP	Prescoping X Other: applications in 5	d develop new
Estimated Project Cost (in \$M)	\$ 4.00	Right of Way Required for Project	
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments			
Safety	Project will minimally i	mpact safety, but will reduce delays associated	with incidents
Congestion Mitigation		oject will minimally impact recurring delay.	
Accessibility	Project	unlikely to impact regional accessibility to jobs.	
Land Use		Not applicable within this region.	
Environment	The project has min	nor environmental footprint and can help reduc	e emissions.
Economic Development	The project will	impact high-truck volumes and address reliabilit	ty issues.







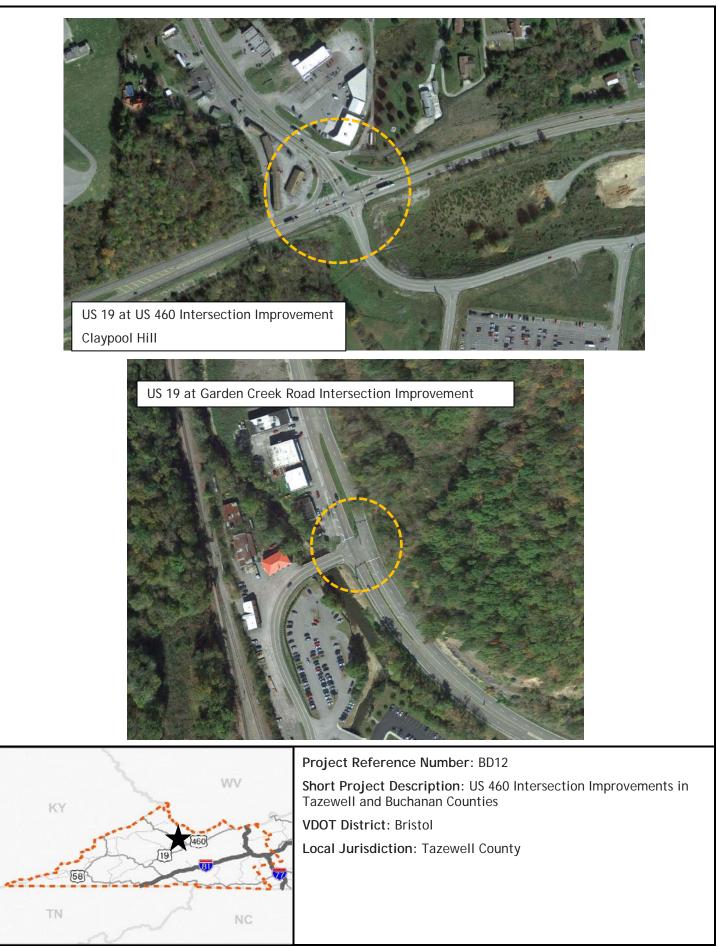
Recommendation Details	Project Reference Number BD11		
Short Description US 11 widening project from Highlands S	opping Center to I-81 Exit 10		
District	Local Jurisdiction		
Bristol	Washington County		
VMTP Need Type (Place X in all applicate			
X Corridor of Statewide Significance	X   Regional Network   UDAs   Safety		
Needs Addressed from VMTP Needs	ssessment (List needs as numbered in reports)		
Crescent Corridor (I-81) Need: B1.M, B1.0			
Project Status:	SMART Scale Round 2 application (not funded)		
Recommendation Features			
Type (Place X in all applicable boxes)			
X Highway X Bike/Pedestrian	Bus Transit Rail Transit Freight Rail Travel Demand Manageme		
Detailed Description of Improvements	to $1.4$ miles of US 11 from location beginning 400 ft wast of the Drestonwood $Dr/D/U$		
	tely 4.4 miles of US 11 from location beginning 400 ft west of the Prestonwood Dr (BVU intersection in the east, which provides access to I-81 via Exits 10 and 13. All widening		
	ccur on the south side of the existing alignment. In addition, Old Dominion Road and red to create a conventional 4-legged signalized intersection.		
	ieu to create a conventional r logged signalized intersection.		
Potential Funding Sources (Place X in all applicable boxes)			
	AQ HSIP Prescoping Other:		
Estimated Project Cost (in \$M)	\$ 116.47     Right of Way Required for Project     X		
If Applicable: Smart Scale Project Feasibility			
Based on Qualitative Review of Project			
	Comments		
Safety	Project will improve safety at intersections.		
Congestion Mitigation	Project will minimally impact recurring delay.		
Accessibility	Project unlikely to impact regional accessibility to jobs.		
Accessibility Land Use	Project unlikely to impact regional accessibility to jobs. Not applicable within this region.		
ř L			







Recommendation Details		Project Reference Number	BD12	
Short Description				
US Route 460 Intersection Improvement	s in Tazewell and Bucha	nan Counties		
District		Local Jurisdiction		
Bristol		Tazewell County		
VMTP Need Type (Place X in all applica	ble boxes)			
X Corridor of Statewide Significance	e Regio	nal Network UDAs X	Safety	
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)		
Heartland Corridor E1, Needs C and G				
Project Status:	SMART Scale	Round 2 application (not funded)		
Recommendation Features				
Type (Place X in all applicable boxes)				
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Den	nand Manageme	
Detailed Description of Improvements				
There are two different projects included within this recommendation. The first project will improve the existing intersection between US 460 and US 19 in Claypool Hill, Virginia. The proposed project will include improvements to the intersection to accommodate increased traffic volumes and future growth. The project will include reconstruction of the existing intersection with widening the roadway, adding lanes, modifying existing turn lanes, and modifying the traffic signal. The second project will increase sight-distance to the US 460 at Garden Greek Rd. intersection for northbound traveling vehicles on US 460 so they can safely react to the traffic signal. The geometry of the horizontal curve alignment severely restricts the ability of drivers to see the signalized intersection.				
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE       TAP	MAQ XHSIP X	Prescoping Other:		
Estimated Project Cost (in \$M)	\$ 14.6	Right of Way Required for Project X		
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments				
Safety	Dr	pject will improve safety at the intersection		
-				
Congestion Mitigation		pject will minimally impact recurring delay.		
Accessibility	Project	unlikely to impact regional accessibility to jobs.		
Land Use		Not applicable within this region.		
Environment	The project has mi	nor environmental footprint and can help reduc	e emissions.	
Economic Development		The project will address reliability issues.		





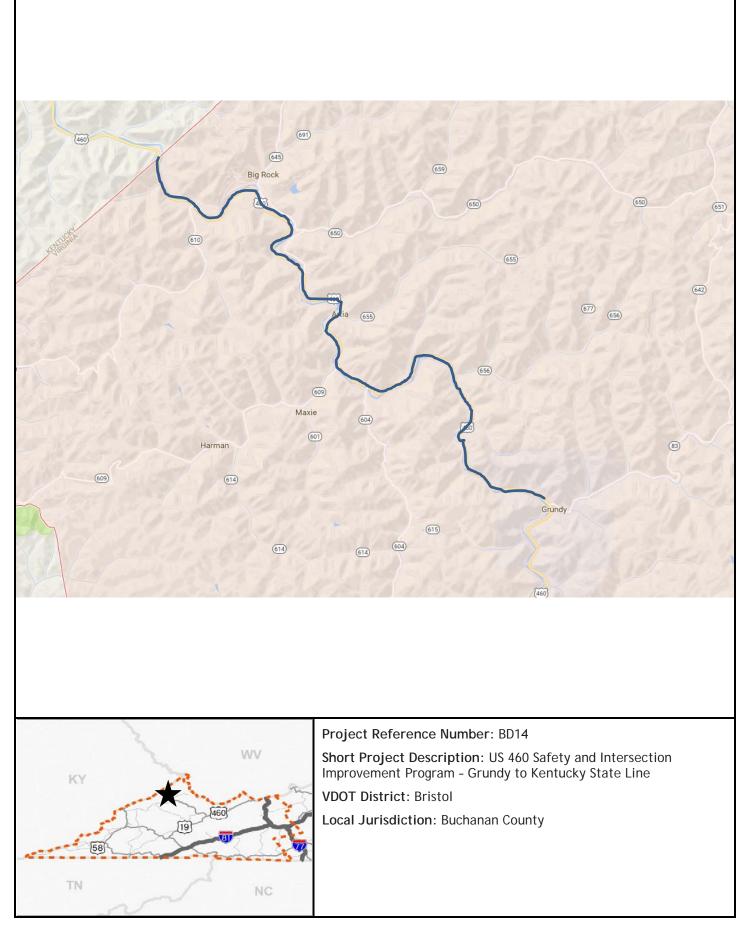


Recommendation Details		Project Reference Number	BD13
Short Description			
Coalfields Expressway Route 121/460 Pe	oplar Creek Phase B		
District		Local Jurisdiction	
Bristol		Buchanan County	
VMTP Need Type (Place X in all application X) Corridor of Statewide Significance		nal Network UDAs	Safety
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)	
Heartland Corridor E1, Needs A and B			
Project Status:	SMART Scale	Round 2 application (not funded)	
Recommendation Features			
Type (Place X in all applicable boxes)			
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Dema	and Managemei
Detailed Description of Improvements	action of Douto 121/460	Poplar Crock (Phase P) of the Carridar O project I	bis socian of
This proposed project is for a 1.6-mile section of Route 121/460 Poplar Creek (Phase B) of the Corridor Q project. This section of highway, located in Buchanan County, will consist of two-lane limited access highway, with wide truck climbing lanes, as required, on a new alignment. The new highway will connect to the new alignment of US 460 that is currently under construction (Phase A) and will extend to existing US 460, approximately 1.5 miles north of Grundy, with a new interchange. Two park-and-ride lots will also be added. The new highway will utilize an existing comprehensive agreement with VDOT's private sector partners to reduce project costs by dedicating ROW, utilizing natural resources during excavation as well as the use of large scale earth moving equipment.			
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE	cmaq hsip	Prescoping X Other: ROW dedi	cation
Estimated Project Cost (in \$M)	\$ 214.27	Right of Way Required for Project X	
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project			
C-C-L		Comments	
Safety		Project will improve safety	
Congestion Mitigation		oject will minimally impact recurring delay.	
Accessibility	Project	unlikely to impact regional accessibility to jobs.	
Land Use		Not applicable within this region.	
Environment	The project could	d have environmental impacts due to the new alig	gnment.
Economic Development	The project wi	I address reliability issues and enhance freight mo	obility.





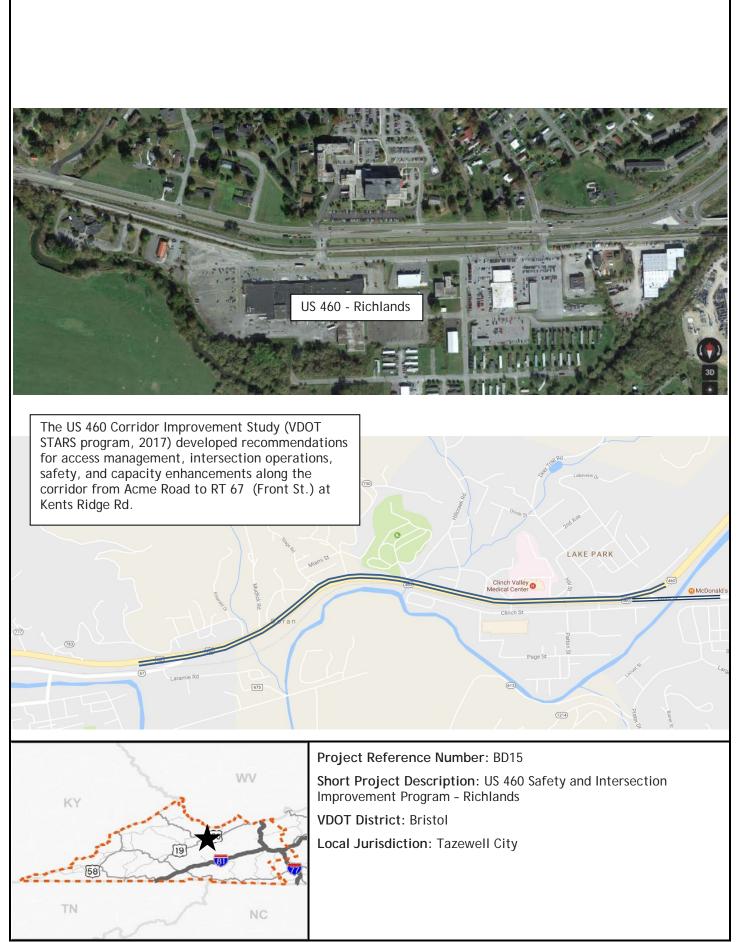
Recommendation Details		Project Reference Number	BD14
Short Description			
US 460 Safety and Intersection Improve	ment Program - Grundy	to Kentucky State Line	
District		Local Jurisdiction	
Bristol		Buchanan County	
VMTP Need Type (Place X in all applica X Corridor of Statewide Significanc		onal Network UDAs X	Safety
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)	
Heartland Corridor (US 460) Need: E1.B			
Project Status:	New	, unique recommendation	
Recommendation Features			
Type (Place X in all applicable boxes)			
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Den	nand Manageme
Detailed Description of Improvements			
Comprehensive safety and intersection capacity improvements along this 13 mile corridor. The US 460 corridor from just east of Grundy to the state line is a 2-lane facility. This cross-section creates a number of safety and congestion issues at intersections. A comprehensive corridor safety and intersection performance program is recommended to study implement improvements in critical areas. Ultimately the recommendations of this study (potentially conducted through STARS) could be funded for implementation through SMART Scale or HSIP.			
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE       TAP       CMAQ       X HSIP       Prescoping       X Other:       Initial Study through STARS			
Estimated Project Cost (in \$M)	\$ 2.00	Right of Way Required for Project	
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project			
		Comments	
Safety	Project could	d address multiple safety concerns within the co	rridor.
Congestion Mitigation	Recurr	ng congestion is not an issue within the corridor.	
Accessibility	Project indirectly w	ould support access to employment by improvir	ng reliability.
Land Use		Not applicable within this region.	
Environment	No surface	environmental impact and minimal emissions be	nefit.
Economic Development	Improved sa	afety will enhance reliability for commercial vehi	icles.







Recommendation Details		Project Reference Number	BD15
Short Description	ment Drearem Dichland		
US 460 Safety and Intersection Improve	ment Program - Richland		
District		Local Jurisdiction	
Bristol		Tazewell County	
VMTP Need Type (Place X in all applica X Corridor of Statewide Significance		nal Network UDAs X	Safety
Needs Addressed from VMTP Need	s Assessment (List needs a	as numbered in reports)	
Heartland Corridor (US 460) Need: E1.A	, C, D, F, G		
Project Status: Rec	ommendation recently	within a regional or local planning docum	nent
Recommendation Features			
Type (Place X in all applicable boxes)			
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Dem	nand Manageme
Detailed Description of Improvements	completed in mid-2017	developed a suite of recommendations of add	ress safety and
The US 460 Corridor Improvement Study completed in mid-2017 developed a suite of recommendations of address safety and intersection performance issues along US 460 and RT 67 in Richlands. Short-term recommendations include access management, signal retimings and communication improvement, one-way street conversion, and other intersection geometry improvements. Longer term improvements include a new grade separated railroad crossing and at-grade intersection at Rockbridge Ave., new frontage road crossing of the Clinch River, and other at-grade railroad crossing improvements. The short-term improvements are estimated at \$2.4 million, while the longer term improvements total \$17.7 million.			
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE         TAP         Estimated Project Cost (in \$M)	CMAQ X HSIP 1	Prescoping Other: Right of Way Required for Project X	
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project			
		Comments	
Safety	Significant oppo	rtunity for large safety benefits in a top 100 PSI le	ocation.
Congestion Mitigation	Depending on ultima	e design, project could significantly reduce de	ay on US 460.
Accessibility	Minimal	enhanced access to employment in Richlands.	
Land Use		Not applicable within this region.	
Environment	Potential en	vironmental footprint and minimal emission imp	act.
Economic Development	Project could enhance	access for future development and improve co	prridor reliability.





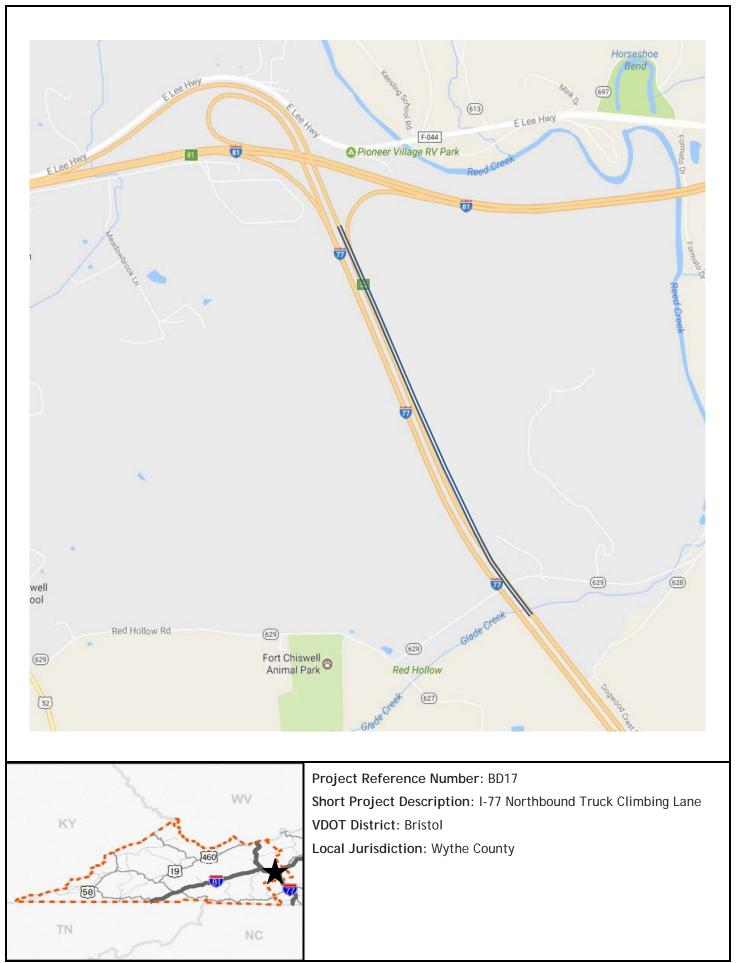


Recommendation Details		Project Reference Number	BD16	
Short Description				
Study of Regional and Interregional Tra	nsit Needs and Opportuni	ties in Southwest Virginia		
District		Local Jurisdiction		
Bristol		Multiple		
VMTP Need Type (Place X in all application of Statewide Significance)		al Network UDAs	Safety	
Needs Addressed from VMTP Need	s Assessment (List needs a	s numbered in reports)		
Project Status: Rec	ommendation recently	within a regional or local planning docum	nent	
<b>Recommendation Features</b>				
Type (Place X in all applicable boxes)				
Highway Bike/Pedestrian	X Bus Transit X R	ail Transit 🛛 Freight Rail 🗌 Travel Dem	and Managemer	
Detailed Description of Improvements				
need for intercity services on a regional Roanoke could be studied to see if the study should consider the potential for the I-81 and I-77 corridors, Roanoke/Ra	I level". Intercity rail conne re are demonstrable bene expanded Four County Tra dford/Blacksburg, Abingd	xtension of service to outlying trip generators, e ectivity through potential future Amtrak extension effits including ridership and financial support. In ansit or new services linking Buchanan and Taze on/Bristol, and throughout the Kingsport region hases could be funded through SMART Scale o	on from addition, this ewell County to (e.g. linking	
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE         TAP         C         Estimated Project Cost (in \$M)	CMAQ HSIP XP	rescoping X Other: Other discre- funding o		
	TDD (study offiy)	Right of Way Required for Project		
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project				
		Comments		
Safety		No net impact on safety anticipated.		
Congestion Mitigation	Minima	I impact from vehicle trip diversion to transit.		
Accessibility	Potential for significant	benefit, particularly for employment access fro	om rural areas.	
Land Use		Not applicable within this region.		
Environment	lo surface environmental i	mpact with potential emission reductions (dive	rted vehicle trips	
Economic Development	New/expanded transit s	ervice may enhance access to current and fut	ure employers.	





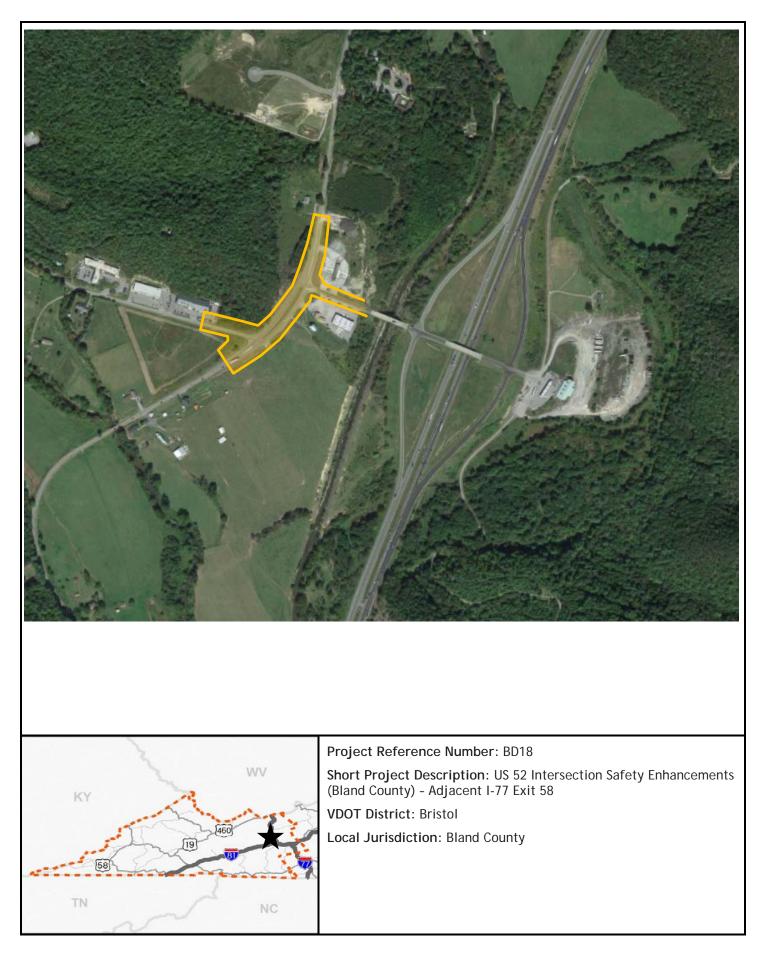
Recommendation Details		Project Reference Nu	umber BD17	
Short Description				
I-77 Northbound Truck Climbing Lane				
District		Local Jurisdiction		
Bristol		Wythe County		
VMTP Need Type (Place X in all applica	ible boxes)			
X Corridor of Statewide Significanc	e Regio	nal Network UDAs	<b>x</b> Safety	
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)		
Western Mountain Corridor (I-77): L1				
Project Status:	SMART Scale	Round 1 application (not funded)		
Recommendation Features				
Type (Place X in all applicable boxes)				
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail	Iravel Demand Manageme	
Detailed Description of Improvements				
Northbound climbing lane on I-77 from approximately 1.05 miles south of I-77 & northbound traffic by allowing slower to	k I-81 system to system int	erchange (Exit 32). Improving operation	0	
Potential Funding Sources (Place X in all applicable boxes)				
X SMART SCALE TAP	CMAQ X HSIP	Prescoping X Other:	INFRA	
Estimated Project Cost (in \$M)	\$ 10.75	Right of Way Required for Proje	ect X	
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments				
Safety	No	specific safety issues within the project	t limits.	
Congestion Mitigation	Project v	ill reduce delay and increase through	iput on I-77.	
Accessibility	·	change expected in employment ac		
Land Use		Not applicable within this region.		
Environment	Potential er	ivironmental footprint and minimal em	nission impact.	
Economic Development		eight movement and should address t		







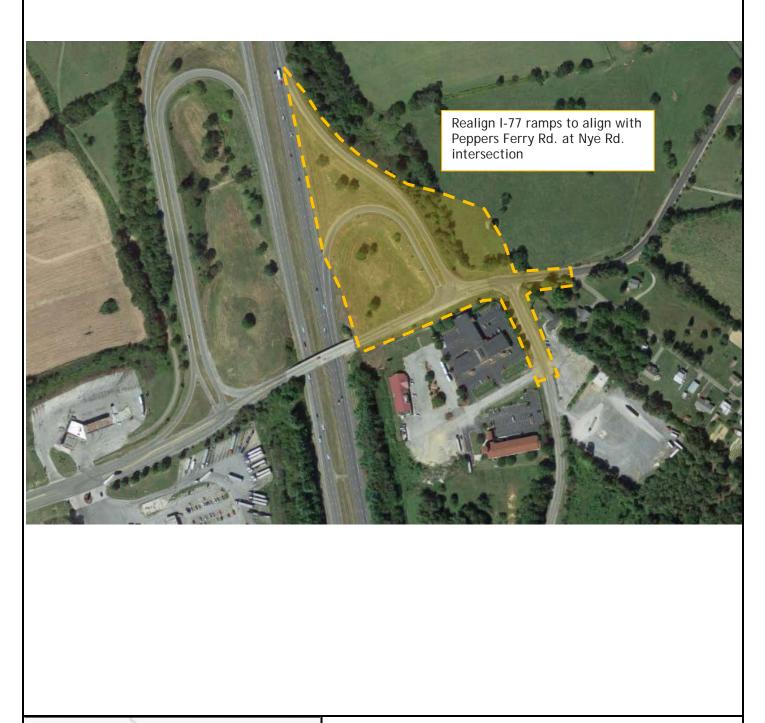
Recommendation Details		Project Reference Number	BD18	
Short Description				
US Route 52 Intersection Safety Enhance	ements (Bland County)			
District		Local Jurisdiction		
Bristol		Bland County		
VMTP Need Type (Place X in all application of Statewide Significance)		al Network UDAs X	Safety	
Needs Addressed from VMTP Need	s Assessment (List needs a	as numbered in reports)		
Mountain Corridor Segment L2, Need F				
Project Status:	SMART Scale	Round 2 application (not funded)		
Recommendation Features				
Type (Place X in all applicable boxes)				
X Highway Bike/Pedestrian	Bus Transit	ail Transit Freight Rail Travel Dem	nand Manageme	
Detailed Description of Improvements				
section to accommodate a two-way le length necessary for left-turning vehicle	eft turn lane (TWLTL). The T es without impacting the t stance issues that are pre	f Route 666 and Grapefield Rd. US 52 will be wid MLTL will provide the area needed to delineate hrough traffic lane. The addition of the right-tur sent for the eastbound approach to the interse	the storage n lane will	
Potential Funding Sources (Place X in all applicable boxes)				
X SMART SCALE TAP	CMAQ HSIP F	rescoping Other:		
Estimated Project Cost (in \$M)	\$ 3.87	Right of Way Required for Project X		
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments				
Safety	Prc	ject will improve safety along the corridor		
Congestion Mitigation		ject will minimally impact recurring delay.		
Accessibility		unlikely to impact regional accessibility to jobs.		
Land Use		Not applicable within this region.		
Environment	The project has min	or environmental footprint and can help reduce	e emissions.	
Economic Development	1	he project will address reliability issues.		







Recommendation Details		Project Reference Number	BD19	
Short Description				
I-77 Exit 41 Interchange Modifications	(Wytheville)			
District		Local Jurisdiction		
Bristol		Wythe County		
VMTP Need Type (Place X in all applica	ble boxes)			
X Corridor of Statewide Significanc	e Region	al Network UDAs	Safety	
Needs Addressed from VMTP Need	s Assessment (List needs a	s numbered in reports)		
Western Mountain Corridor Segment L2	, "Need D"			
Project Status:	SMART Scale F	cound 2 application (not funded)		
Recommendation Features				
Type (Place X in all applicable boxes)				
X Highway Bike/Pedestrian	Bus Transit R	ail Transit Freight Rail Travel Dem	nand Managemei	
Detailed Description of Improvements				
The proposed project will realign the existing I-77 northbound on and off ramps to the intersection of Peppers Ferry Road at Nye Road. This project will provide better access to/from the I-77 interstate and provide safer conditions by realigning the existing ramps and modifying their geometry. This will help reduce the number of crashes that occur at this location and provide access to the Town's Community Center/Meeting Center, Community College, Wythe County Progress Park, truck stops, restaurants & motels.				
Potential Funding Sources         (Place X in all applicable boxes)         X SMART SCALE       TAP         CMAQ       HSIP         Prescoping       Other:				
Estimated Project Cost (in \$M)	\$ 10.03	Right of Way Required for Project X		
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments				
Safety	Proj	ect will improve safety at the interchange		
Congestion Mitigation		ect will minimally impact recurring delay.		
Accessibility	-	inlikely to impact regional accessibility to jobs.		
Land Use	,	Not applicable within this region.		
Environment	The project has mine	or environmental footprint and can help reduce	e emissions	
		· · ·	5 61110510110.	
Economic Development		he project will address reliability issues.		





Project Reference Number: BD19

Short Project Description: I-77 Exit 41 Interchange Modifications (Wytheville)

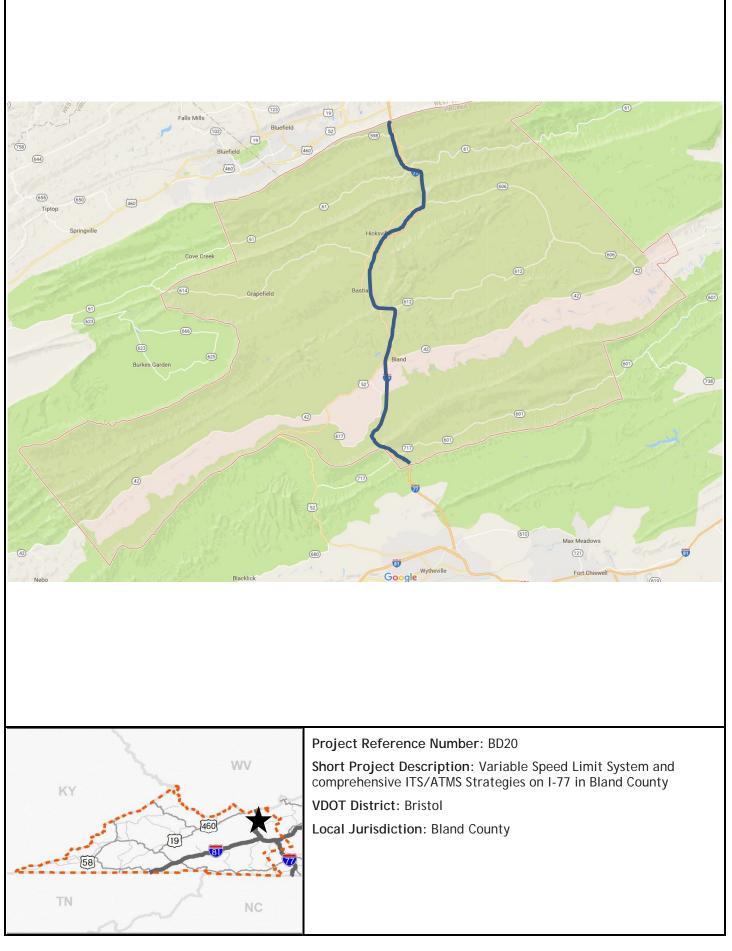
VDOT District: Bristol

Local Jurisdiction: Wythe County/Wytheville





<b>Recommendation Details</b>		Project Reference Number	BD20
Short Description			
Variable Speed Limit System and com	orehensive ITS/ATMS Stra	regies on I-77 in Bland County	
District		Local Jurisdiction	
Bristol		Bland County	
VMTP Need Type (Place X in all applicable boxes)       X     Corridor of Statewide Significance       Regional Network     UDAs			
Needs Addressed from VMTP Need	s Assessment (List needs	as numbered in reports)	-
Western Mountain Corridor L2. G, H, I			
Project Status: Partially fu	nded in 2017-2022 SYIF	e (e.g. PE or ROW only, but not complete co	onstruction)
Recommendation Features			
Type (Place X in all applicable boxes)			
X Highway Bike/Pedestrian	Bus Transit	Rail Transit Freight Rail Travel Den	nand Managemei
Detailed Description of Improvements	prohoneitro ITC/ATMS Strat	agios (cignogo, lighting, long, control) on 1.77 in [	Pland County
Variable Speed Limit System and comprehensive ITS/ATMS Strategies (signage, lighting, lane control) on I-77 in Bland County (including tunnels) (implementation and expansion of the partially funded SYIP pipeline projects). Apply best practice similar to I-77 in Carroll County (http://www.virginiadot.org/projects/salem/interstate_77_safety_improvementscarroll_county.asp ). There are ongoing fire safety related projects within the tunnels funded through different sources.			
Potential Funding Sources (Place X in all applicable boxes)			
X SMART SCALE TAP	CMAQ X HSIP	Prescoping X Other: Interstate/NHS	maintenance
Estimated Project Cost (in \$M)	\$ 7.00	Right of Way Required for Project	
If Applicable: Smart Scale Project Feasibility Based on Qualitative Review of Project Comments			
Safety	Pr	pject will improve safety along the corridor	
Congestion Mitigation		ect will significantly impact recurring delay.	
Accessibility		unlikely to impact regional accessibility to jobs.	
Land Use		Not applicable within this region.	
Environment	The project has mi	nor environmental footprint and can help reduc	e emissions.
Economic Development		The project will address reliability issues.	







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