

Local•Global•Mobile

## Tier 1

Recommendations
October 30, 2017


Office of
INTERMODAL
Planning and Investment


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Bristol District
 $\square$ BRISTOL

Need Tier


## Tier 1 District Needs

Need
Need Description
Within the Bristol MPO, the I-81 interchanges in Abingdon have safety issues,

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

## Funded Projects

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

Project Recommendations

| ID | Tier 1 <br> Need(s) | Project Name | Jurisdiction | Type | Cost (\$M) | Page |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BD1 | B. 2 | French Moore Jr. Boulevard Extension | Washington County | Highway, Pedestrian | \$36.70 | 1 |
| BD2 | B. 2 | Comprehensive Interchange Capacity/Arterial Operational Study - Abingdon Area (I-81 and arterial network, Exit 14 through Exit 22) | Washington County | Highway | $\begin{gathered} \$ 0.25 \\ \text { (study } \\ \text { only) } \\ \hline \end{gathered}$ | 3 |
| BD3 | B. 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 | $\begin{gathered} 0.25 \\ \text { (study \& } \\ \text { grants) } \end{gathered}$ | 7 |
| BD5 | B. 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 <br> Need(s) | Project Name | Jurisdiction | Type | Cost (\$M) | Page |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BD16 | $\begin{aligned} & \text { B. } 10 \text { / B. } 12 \text { / } \\ & \text { B. } 13 \end{aligned}$ | Study of Regional and Interregional Transit Needs and Opportunities in Southwest Virginia | Multiple | Transit | TBD <br> (study <br> only) | 29 |
| BD17 | B. 13 | I-77 Northbound Truck Climbing Lane | Wythe County | Highway | \$10.75 | 30 |
| BD18 | B. 13 | US Route 52 Intersection Safety Enhancements | Bland County | Highway | \$3.87 | 32 |
| BD19 | B. 13 | I-77 Exit 41 Interchange Modifications (Wytheville) | Wythe County | Highway | \$10.03 | 34 |
| BD20 | B. 13 | Variable Speed Limit System and comprehensive ITS/ATMS Strategies on I-77 | Bland County | Highway | \$7.00 | 36 |



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# Bristol District 

Project Sheets

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
French Moore Jr. Boulevard Extension

District
Bristol

Local J urisdiction

## Washington County

VMTP Need Type (Place X in all applicable boxes)
$\square$


UDAs $\square$ Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Crescent Corridor (I-81), B1.A, C, D
Project Status:
SMARTScale Round 2 application (not funded)

## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
Urban roadway extension c reating an alternate route to $1-81$ and US 11 between Exit 14 and Exit 17 near Abingdon, including altemate access to Virginia HighlandsCommunity College and Higher Educ ation 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 tum lane and 5 ' sidewalks.

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in \$M)
\$36.70
Right of Way Required for Project $\mathbf{X}$

## If Applicable: Smart Sc ale Project Feasibility

Based on Qualitative Review of Project
Comments (for future potential projects resulting from study)

| Safety | New corridor design with low speeds and a 5' sidewalk. |
| :---: | :---: |
| Congestion Mitigation | Project provide an altemative route, diverting trips from I-81 and US 11. |
| Accessibility | Project will enhance accessibility to the Virginia Highlands Community College. |
| Land Use | Not a pplicable within this region. |
| Environment | Future project will have an environmental footprint and may help reduce emissions. |
| Economic Development | Project could enhance access for future development and improve comidor relia bility. |



## VTrans2040 Multimodal Transportation Plan (VMTP) 2025 Tier 1 Rec ommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
I-81 Abingdon Area Comprehensive Interchange Capacity/Arterial Operational Study

District

## Bristol

Local J urisdiction
Wa shington County

VMTP Need Type (Place X in all applicable boxes)


Comidor of Statewide Signific ance


UDAs X Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Crescent Corridor (I-81), B1.A, C, D. Regional Network - Bristol Area
Project Status:
New, unique recommendation

## Rec ommendation Features

Type (Place X in all applicable boxes)


Detailed Description of Improvements
Comprehensive Interchange Capacity/Arterial Operational Study of Exit 14 through Exit 22 Area - The Exit 19 improvement represents an interim fix given extensive retail growth nearby that will pressure interchange performance. The Exit 17 interchange improvement only adds new capacity to the southside of the interchange. The study should evaluate the ultimate design/operations of all interc hanges together, the crossing arterial routes, and include the potential forconnecting frontage roads between all interchangesto serve local trips in the area. Currently VDOTisleading a frontage road pre-scoping study evaluating opportunities along I-81. Recommendations from these studies should be funded for implementation through SMART Scale or HSIP.

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in $\$ \mathrm{M}$ ) $\$ 0.25$ (study only $\quad$ Right of Way Required for Project $\quad \mathbf{X}$ (TBD by study)

## If Applicable: Smart Scale Project Feasibility

Based on Qualitative Review of Project
Comments (for future potential projects resulting from study)
Safety
Congestion Mitigation
Future projects will improve safety at interchanges

Accessibility
Future projects could impact recuring delay.

> Project unlikely to impact regional ac cessibility to jobs, ma inly loc al benefits.

Land Use
Not a pplicable within this region.
Environment
Future project could have an environmental footprint and may help reduce emissions.
Economic Development
Project could enhance access forfuture development and improve comidor relia bility.


Office of

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number

## Short Description

Route 23 Business (Norton Road) Reconstruction in Wise - Phase 2 ( 1.9 miles)
District
Local J urisdiction

## Bristol

Wise County
VMTP Need Type (Place X in all applicable boxes)
$\square$ Comidor of Statewide Significance $\square$ Regional Network
x UDAs $\square$ Safety
NeedsAddressed from VMTP NeedsAssessment (List needs as numbered in reports)
Town of Wise UDA
Project Status:
SMARTScale Round 2 application (not funded)

## Rec ommendation Features

Type (Place X in all applicable boxes)


Detailed Description of Improvements
This project consists of widening the existing two-lane roadway to provide a four lane facility with an additional center dual left tum lane and bicycle and pedestrian accomodations. This route is the primary comidorfrom US 23 into the Town of Wise and to the University of Virginia 's College at Wise. The project would begin 0.02 miles west of Awan Street at the end of Phase I of the Route 23 Business reconstruction project and would go east a pproximately 0.36 mile to 0.18 mile east of Chemy Street. The project provides opportunity foreconomic development by providing access to vacant property within the Wise urban development area.

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in \$M)


Right of Way Required for Project


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety
Project will improve safety by adding tuming lanes
Congestion Mitigation
Accessibility
Project will improve throughput and decrease delays

Land Use Project unlikely to impact regional accessibility to jobs.

Environment
Not a pplicable within this region.
The project has minor environmental footprint and can help reduce emissions.
Economic Development
The project will improve address travel time reliability issues.


Project Reference Number: BD3 and BD4
Short Project Description: Route 23 Business (Norton Road)
Reconstruction in Wise - Phase II (1.9 miles), and pursue a UDA Planning Grant for the Town of Wise and other grants for bike and pedestrian enhancements
VDOT District: Bristol
Local J urisdiction: Wise County

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number

## Short Description

Pursue a UDA planning grant for the Town of Wise and othergrants forbike/pedestrian enhancements
District
Local J urisdiction

## Bristol

Wise County
VMTP Need Type (Place X in all applicable boxes)
$\square$ Comidor of Statewide Signific ance
x UDAs $\square$ Safety
Needs Addressed from VMTP Needs Assessment (List needsas numbered in reports)
Town of Wise UDA
Project Status:
New, unique recommendation

## Recommendation Features

Type (Place X in all applicable boxes)


Detailed Description of Improvements
Pursue a UDA planning grant for the Town of Wise, foc using on developing a network of bicycle and pedestrian facilities. Pursue further Transportation Altematives grants or revenue sha ring options for additional bike/pedestrian enhancements in Wise to fill gaps in the network within the UDA area, connect to the UVA College at Wise campus, and connect to other important destinations within and adja cent to the Wise UDA. Ultimately the recommendations of this planning grant could be funded for implementation through SMART Sc ale, TAP, or HSIP.

## Potential Funding Sources

(Place X in all applicable boxes)
$\square$ XIMARTSCALE $\quad \mathrm{X}$ TAP $\quad \square$ CMAQ $\quad \mathrm{X}$ HSIP $\quad \square$ Prescoping $\quad \square$ Other: $\square$

Estimated Project Cost (in $\$ \mathrm{M}$ ) $\quad \$ 0.25$ (study / grants) Right of Way Required for Project $\square$

## If Applicable: Smart Scale Project Feasibility

Based on Qualitative Review of Project
Comments (for future bicycle and pedestrian improvements within Wise)
Safety
Project will improve safety for pedestria ns a nd bicyc lists
Congestion Mitigation
Project will not impact rec urning delay.
Accessibility
Project unlikely to impact regional a ccessibility to jobs.
Land Use
Not a pplicable within this region.
Environment
The project has minor environmental footprint and can help reduce emissions.
Economic Development
The project will not address relia bility issues.

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Rec ommendation Details

Project Reference Number
Short Description
Innovation Highway (Phase 1)

District

## Bristol

Local J urisdiction
Wise County

VMTP Need Type (Place $X$ in all applicable boxes)
Regional Network
x UDAs $\square$ Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports) US 58 CoSSJ 1 Segment, Need B; Wise UDA

Project Status:
SMART Scale Round 2 a pplication (not funded)

## Recommendation Features

Type (Place X in all applicable boxes)


Detailed Description of Improvements
Innovation Highway is a 4.5 mile, proposed two-lane roadway partially on new alignment connecting the Lonesome Pine Regional Business \& Technology Park with Alt. US 58 east of the town of Wise, the city of Norton, and located in Wise County. The proposed SMARTScale, Round 2 project is just for the Phase 1 section, which has the roadway extending between Alt. US 58 and SR 646 for approximately 2.7 miles and is the most critic al near-term need. The roadway is proposed as a secondary highway permitting full access to adjacent properties. The proposed roadway will initially be built with a two-lane typical section, but ROW for the ultimate four-lane configuration will be acquired as part of this project.

## Potential Funding Sources

(Place X in all applicable boxes)
 Estimated Project Cost (in $\$ \mathrm{M}$ ) $\quad \$ 77.75 \quad$ Right of Way Required for Project $\quad \mathbf{x}$

## If Applicable: Smart Sc ale Project Feasibility

Based on Qualitative Review of Project
Comments (forfuture potential projects resulting from study)
Safety
Congestion Mitigation
Project will improve safety through a new, altemative comidor.

Accessibility
Project will minima lly impact recuming delay.

Land Use
Project will positively impact regional ac cessibility to jobs.

Environment
Not a pplicable within this region.
The project does have an environmental footprint and will minimally reduce emissions.
Economic Development
Project will enhance access to Wise from US 58


Project Reference Number: BD5
Short Project Description: Innovation Highway (Phase 1) from
Alt. US 58 to Route 646
VDOT District: Bristol
Local J urisdiction: Wise County

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## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Rec ommendation Details

Project Reference Number

## Short Description

I-81 Exit 81, Exit 80, Exit 77 Improvements and incident quick clearance program

District
Bristol

Local J unisdiction

## Wythe County

VMTP Need Type (Place X in all applicable boxes)


Comidor of Statewide Signific ance

UDAs
X Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Cresc ent Corridor (I-81) Need: B1.M, B1.O
Project Status:
Modified recommendation from existing planning document

## Recommendation Features

Type (Place X in all applicable boxes)


Detailed Description of Improvements
The recommendation includes three unique projects within the I-81/I-77 overlap section in addition to a I-81 comidor-wide incident quick clearance program. The three projects include: (1) Exit 80, replace overhead bridges and improve ramps; (2) Exit 77 relocate frontage roads and improve intersection and ramp safety; and (3) additional improvements at Exit 81 and Exit 80 include extending the auxiliary lane from Exit 80 to Exit 81 (I-81 NB) to result in a consistent 8 -la ne section from Exit 80 to Exit 81, with expanded ramp capacity and lengthened merge on I-77 NB to I-81 NB. Implementation of an incident quick clearance program will assist in alleviating delays associated with crashes, particularly in this high-volume section (refer to BD10 for further details).

## Potential Funding Sources

(Place X in all applicable boxes)
$\square$ XIMARTSCALE $\quad \square$ TAP $\quad \square$ CMAQ $\quad \square$ HSIP $\quad \square$ Prescoping $\quad$ X Other: $\quad$ INFRA

Estimated Project Cost (in \$M)


Right of Way Required for Project


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety

| Project will improve safety at interc hanges |
| :---: |
| Project will minimally impact recuring delay. |
| Project unlikely to impact regional accessibility to jobs. |
| Not a pplica ble within this region. |
| The project has minor environmental footprint and can help reduce emissions. |
| The project will impact high-truck volumes and add ress relia bility issues. |



Project Reference Number: BD6
Short Project Description: I-81 Exit 81, Exit 80, Exit 77 Improvements and I-81 incident quick clearance program
VDOT District: Bristol
Local J urisdiction: Wythe County

## VTrans2040 Multimodal Transportation Plan (VMTP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

Recommendation Details
Short Description

District

## Bristol

VMTP Need Type (Place X in all applicable boxes)

Comidor of Statewide Signific ance


Regional Network


UDAs

Local J urisdiction

## Washington County

$\square$

Needs Addressed from VMTP Needs Assessment (List needsas numbered in reports)

## Bristol Area Regional Network

Project Status:
SMARTScale Round 2 application (not funded)

## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
Project widens section of US 11/Lee Hwy from 3-lane to a 5-lane typic al section (4 travel lanes and a center two-way left-tum la ne (TWLTL)) to improve traffic operations, and access management and safety by reducing entrances and conflict points.

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in \$M)


Right of Way Required for Project


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project

> Comments

| Safety | Project will improve intersection safety and reduce conflicts. |
| :---: | :---: |
| Congestion Mitigation | Project will minima lly impact recuring delay. |
| Accessibility | Project unlikely to impact regional accessibility to jobs. |
| Land Use | Not a pplicable within this region. |
| Environment | The project has minor environmental footprint and can help reduce emissions. |
| Economic Development | The project will address reliability issues a nd improve access to comidor development. |



Project Reference Number: BD7
Short Project Description: Widen US 11 between Hillman Hwy and Empire Dr. (Abingdon)
VDOT District: Bristol
Local J urisdiction: Washington County

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
US 11 Improvement Alexis Dr. to Old Airport Road (Bristol City)

District

## Bristol

Local J urisdiction
Bristol City

VMTP Need Type (Place X in all applicable boxes)
$\mathbf{X}$ Comidor of Statewide Significance


UDAs

Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Crescent Corrid or Segment B1, Needs B, M, and O
Project Status:
Modified recommendation from existing planning document

## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
This SMARTSc ale Round 2 project concept will widen approximately 3,600' of Lee Highway from the existing two lane roadway with a center left-tum lane to a four lane urban section with a 16' median and a 10' shared use path along the length of the project. The project limits a re from Alexis Drive in the west to Old Aiport Road in the east. VDOTis currently working with Bristol on a altemative, lower cost a pproach for this comidor foc used on intersection a nd access ma na gement improvements.

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in \$M)


Right of Way Required for Project $\square$

If Applicable: Smart Scale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety

| Project will imp rove intersection safety a nd reduce conflicts. |
| :---: |
| Project will minimally impact recuming delay. |
| Project unlikely to impact regional accessibility to jobs. |
| Not a pplicable within this region. |
| The project has minor environmental footprint and can help reduce emissions. |
| The project will address reliability issues and improve access to comidor development. |



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## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Rec ommendation Details

Project Reference Number

## Short Description

Enhanced ITS/ATMS on I-81 and US 11 throughout the Bristol/Abingdon area (from Tennessee state line to Exit 29 - Glade Spring)
District
Local J urisdiction
Bristol
Multiple
VMTP Need Type (Place X in all applicable boxes)
Comidor of Statewide Signific ance
$\square$ UDAs

Needs Addressed from VMTP NeedsAssessment (List needs as numbered in reports)
Crescent Corridor (I-81) Need: B1.M, B1.O
Project Status:
New, unique recommendation

## Recommendation Features

Type (Place X in all applic able boxes)
$\mathbf{X}$ Highway $\square$ Bike/Pedestrian $\square$ Bus Transit $\square$ Rail Transit $\square$ Freight Rail $\square$ Travel Demand Managemen
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 orduring incidents. The ATMS should be designed to enable improved performance of signa lized 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 l-81 coridor 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)


## If Applicable: Smart Scale Project Feasibility

Based on Qualitative Review of Project

|  | Comments |
| :---: | :---: |
| Safety | Project will minimally impact safety, but will reduce delays associated with incidents. |
| Congestion Mitigation | Project will minima lly impact recuming delay. |
| Accessibility | Project unlikely to impact regional a ccessibility to jobs. |
| Land Use | Not applicable within this region. |
| Environment | The project has minor environmental footprint and can help reduce emissions. |
| Economic Development | The project will impact high-truck volumes and a ddress relia bility issues. |



## VTrans2040 Multimodal Transportation Plan (VMTP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
Enhanced ITS/ATMS on I-81 and US 11 from roughly from Rural Retreat (Exit 60) to Pulaski (Exit 89)

District
Bristol

Local J urisdiction
Multiple

VMTP Need Type (Place $X$ in all applicable boxes)
Comidor of Statewide Signific ance


UDAs $\square$ Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Crescent Corridor (I-81) Need: B1.M, B1.O
Project Status:
New, unique recommendation

## Recommendation Features

Type (Place X in all applic able boxes)
$\mathbf{X}$ Highway $\square$ Bike/Pedestrian $\square$ Bus Transit $\square$ Rail Transit $\square$ Freight Rail $\square$ Travel Demand Managemen
Detailed Description of Improvements
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 l-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 comidorincluding vehic le 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 l-81.

## Potential Funding Sources

(Place $X$ in all applicable boxes)


## If Applicable: Smart Scale Project Feasibility

Based on Qualitative Review of Project

## Comments

Safety
Project will minimally impact safety, but will reduce delays assoc ia ted with inc idents.
Congestion Mitigation
Accessibility
Project will minima lly impact recuming delay.
Project unlikely to impact regional accessibility to jobs.
Land Use
Not a pplicable within this region.
Environment
The project has minor environmental footprint and can help reduce emissions.
Economic Development The project will impact high-truck volumes and address relia bility issues.


## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
US 11 widening project from Highlands Shopping Center to I-81 Exit 10

District

## Bristol

Local J urisdiction

## Wa shington County

VMTP Need Type (Place X in all applicable boxes)
Comidor of Statewide Signific ance


UDAs $\square$ Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Crescent Corridor (I-81) Need: B1.M, B1.O
Project Status:
SMART Scale Round 2 application (not funded)

## Recommendation Features

Type (Place X in all a pplic able boxes)


Detailed Description of Improvements
This project proposes to widen a pproximately 4.4 miles of US 11 from loc ation beginning 400 ft west of the Prestonwood $\operatorname{Dr}$ (BVU Authority) intersection in the west to F-310 intersection in the east, which provides access to I-81 via Exits 10 and 13 . All widening a nd bike/pedestrian improvements will occur on the south side of the existing alignment. In addition, Old Dominion Road and Battle Hill Drive approaches will be realigned to create a conventional 4-legged signalized intersection.

## Potential Funding Sources

(Place $X$ in all applicable boxes)


Estimated Project Cost (in \$M)
$\$ 116.47$
Right of Way Required for Project


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety

| Project will improve safety at intersections. <br> Project will minima lly impact recuming delay. <br> Project unlikely to impact regional accessibility to jobs. <br> Not a pplicable within this region. <br> The project has minor environmental footprint and can help reduce emissions. <br> The project will address reliability issues a nd improve access to development. |
| :--- |



## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number

## Short Description

US Route 460 Intersection Improvements in Tazewell and Buc hanan Counties
District

## Bristol

VMTP Need Type (Place $X$ in all applicable boxes)
$\square$ Comidor of Statewide Significance $\square$ Regional Network

UDAs

Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Heartland Comidor E1, NeedsC and G
Project Status:
SMARTScale Round 2 application (not funded)

## Recommendation Features

Type (Place X in all applic able boxes)


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 tum lanes, and modifying the traffic signal. The second project will inc rease 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 signa lized intersection.

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in \$M)
\$ 14.6
Right of Way Required for Project


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety

| Project will improve safety at the intersection <br> Project will minima lly impact recuring delay. <br> Project unlikely to impact regional accessibility to jobs. <br> Not a pplicable within this region. <br> The project has minor environmental footprint and can help reduce emissions. <br> The project will address reliability issues. <br> Ther |
| :--- |



## VTrans2040 Multimodal Transportation Plan (VMTP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number

## Short Description

Coalfields Expressway Route 121/460 Poplar Creek Phase B

District
Bristol

Local J urisdiction

## Buchanan County

VMTP Need Type (Place X in all applicable boxes)


Comidor of Statewide Significance $\square$ Regional Network


UDAs $\square$ Safety
Needs Addressed from VMTP Needs Assessment (List needsas numbered in reports)
Heartland ComidorE1, Needs A and B
Project Status:
SMART Scale Round 2 a pplication (not funded)

## Recommendation Features

Type (Place X in all applic able boxes)
$\mathbf{X}$ Highway $\square$ Bike/Pedestrian $\square$ Bus Transit $\square$ Rail Transit $\square$ Freight Rail $\square$ Travel Demand Managemen
Detailed Description of Improvements
This proposed project is for a 1.6-mile section of Route $121 / 460$ PoplarCreek (Phase B) of the Coridor 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 $G$ rundy, with a new interchange. Two park-a nd-ride lots will a lso be added. The new highway will utilize an existing comprehensive agreement with VDOT sprivate sector partners to reduce project costs by dedic ating 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)
$\square$ XIMARTSCALE $\quad \square$ TAP $\quad \square$ CMAQ $\quad \square$ HSIP $\quad \square$ Prescoping $\quad$ X Other: $\quad$ ROW dedication

Estimated Project Cost (in \$M)
\$ 214.27
Right of Way Required for Project

## If Applicable: Smart Scale Project Feasibility

Based on Qualitative Review of Project
Comments

| Safety |
| :--- |
| Congestion Mitigation |
| Accessibility |
| Land Use |
| Environment |
| Economic Development will imp rove sa fety |
| Project unlikely to impact regional a ccessibility to jobs. |

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
US 460 Sa fety and Intersection Improvement Program - Grundy to Kentucky State Line

District
Bristol

Local J urisdiction

## Buchanan County

VMTP Need Type (Place $X$ in all applicable boxes)
$\square$ Comidor of Statewide Signific ance $\square$ Regional Network


UDAs
X Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Heartland Comidor (US 460) Need: E1.B
Project Status:
New, unique recommendation

## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
Comprehensive safety and intersection capacity improvements a long this 13 mile comidor. The US 460 comidorfrom 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 critic al a reas. Ultimately the rec ommendations of this study (potentially conducted through STARS) could be funded for implementation through SMARTScale or HSIP.

## Potential Funding Sources

(Place X in all applicable boxes)
$\square$ XMARTSCALE $\quad \square$ TAP $\quad \square$ CMAQ $\quad$ X HSIP $\quad \square$ Prescoping $\quad X$ Other: $\quad$ Initial Study through STARS

Estimated Project Cost (in \$M)


Right of Way Required for Project

## If Applicable: Smart Sc ale Project Feasibility

Based on Qualitative Review of Project
Comments

| Safety | Project could address multiple sa fety concems within the comidor. |
| :--- | :--- |
| Congestion Mitigation | Recuming congestion is not an issue within the comidor. |
| Accessibility | Project indirectly would support access to employment by improving relia bility. |
| Land Use | Not applic able within this region. |
| Environment | No surface environmental impact and minimal emissions benefit. |
| Economic Development | Improved sa fety will enhance relia bility for commercial vehicles. |
|  |  |



Office of
INTERMODAL
Planning and Investment

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
US 460 Safety and Intersection Improvement Program - Richlands

District
Bristol

Local J urisdiction
Tazewell County

VMTP Need Type (Place X in all applicable boxes)


Comidor of Statewide Significance $\square$ Regional Network


UDAs
X Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Heartland Coridor (US 460) Need: E1.A, C, D, F, G
Project Status:
Recommendation recently within a regional or local planning document

## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
The US 460 C orrid or Improvement Study completed in mid-2017 developed a suite of recommendations ot address safety and intersection performance issues along US 460 and RT 67 in Richlands. Short-term recommendations include access ma na gement, signal retimings a nd communic ation 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 fronta ge road crossing of the Clinch River, a nd other at-gra de railroad crossing improvements. The shortterm 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)


Estimated Project Cost (in \$M)
\$ 2.40
Right of Way Required for Project


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety
Congestion Mitigation
Accessibility
Land Use
Environment
Signific ant opportunity for large safety benefits in a top 100 PSI location.
Depending on ultimate design, project could signific antly reduce delay on US 460.
Minimal enhanced access to employment in Ric hla nds.
Not applicable within this region.
Potential environmental footprint and minimal emission impact.
Economic Development
Project could enhance access forfuture development and improve coridor relia bility.


The US 460 Corridor Improvement Study (VDOT STARS program, 2017) developed recommendations for access management, intersection operations, safety, and capacity enhancements along the corridor from Acme Road to RT 67 (Front St.) at Kents Ridge Rd.


Project Reference Number: BD15
Short Project Description: US 460 Safety and Intersection
Improvement Program - Richlands
VDOT District: Bristol
Local J urisdiction: Tazewell City

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Rec ommendation Details

Project Reference Number

## Short Description

Study of Regional and Interregional Transit Needs and Opportunities in Southwest Virginia

District
Bristol

Local J urisdiction
Multiple

VMTP Need Type (Place X in all applicable boxes)
$\square$ Comidor of Statewide Significance


UDAs

Needs Addressed from VMTP Needs Assessment (List needsas numbered in reports)
$\square$

## Recommendation Features

Type (Place X in all applicable boxes)


Detailed Description of Improvements
The Bristol MPO 2040 Plan notes that "there exists a potential for extension of service to outlying trip generators, espec ia lly the need for intercity services on a regional level". Intercity rail connectivity through potential future Amtrak extension from Roa noke could be studied to see if there are demonstrable benefits including ridership a nd financial support. In addition, this study should consider the potential for expanded Four County Transit or new services linking Buchanan and Tazewell County to the I-81 and I-77 comidors, Roanoke/Radford/Blacksburg, Abingdon/Bristol, and throughout the Kingsport region (e.g. linking MEOC to CATS service). Ultimate service expansion/vehicle purchasescould be funded through SMARTSc ale orotherFTA programs.

## Potential Funding Sources

(Place X in all applicable boxes)

| X SMARTSCALE | $\square$ TAP | CMAQ | HSIP | X Prescoping | X Other. |  | Other disc retionary FTA funding orgrants |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Estimated Project Cost (in \$M)

```
TBD (study only)
```

Right of Way Required for Project $\square$

If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety
No net impact on sa fety antic ipated
Congestion Mitigation
Minimal impact from vehicle trip diversion to transit.
Accessibility
Potential for signific ant benefit, partic ularly for employment ac cess from rural areas.
Land Use
Not a pplicable within this region.
Environment
o surface environmental impact with potential emission reductions (diverted vehicle trips
Economic Development
New/expanded transit service may enhance access to current and future employers.

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Rec ommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
I-77 Northbound Truck C limbing Lane

District
Bristol

Local J urisdiction
Wythe County

VMTP Need Type (Place $X$ in all applicable boxes)
$\square$ Regional Network
UDAs
x Safety
Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Westem Mounta in Comidor (I-77): L1
Project Status:
SMARTScale Round 1 application (not funded)

## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
Northbound climbing lane on I-77 from VA 629 underpa ss to I-81 interchange (Exit 32). Construct climbing lane on I-77 North for a pproximately 1.05 miles south of I-77 \& I-81 system to system interchange (Exit 32). Improving operational characteristic of northbound traffic by allowing slower trucks an additional lane to navigate the grade.

## Potential Funding Sources

(Place X in all applicable boxes)


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments



## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

## Recommendation Details

Project Reference Number
Short Description
US Route 52 Intersection Safety Enhancements (Bland County)

District

## Bristol

Local J urisdiction
Bland County

VMTP Need Type (Place $X$ in all applicable boxes)
$\square$ Comidor of Statewide Signific ance $\square$ Regional Network

UDAs


Needs Addressed from VMTP Needs Assessment (List needs as numbered in reports)
Mountain Comidor Segment L2, Need F
Project Status:
SMARTScale Round 2 application (not funded)

## Recommendation Features

Type (Place X in all applicable boxes)


Detailed Description of Improvements
This project will a ddress safety issues a long US 52, in the vic inity of Route 666 and Grapefield Rd. US 52 will be widened along this section to accommodate a two-way left tum lane (TWLTL). The TWLTL will provide the a rea needed to delineate the storage length necessary forleft-tuming vehic les without impacting the through traffic lane. The addition of the right-tum lane will mitigate horizontal and vertical sight-distance issues that are present for the eastbound approach to the intersection, due to the steep cut slope along the western side of US 52 .

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in \$M)
\$ 3.87
Right of Way Required for Project


If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety

| Project will improve safety a long the comidor <br> Project will minimally impact recuring delay. <br> Project unlikely to impact regional accessibility to jobs. <br> Not a pplicable within this region. <br> The project has minor environmental footprint and can help reduce emissions. <br> The project will address relia bility issues. <br> Ther |
| :--- |



Project Reference Number: BD18
Short Project Description: US 52 Intersection Safety Enhancements
(Bland County) - Adjacent I-77 Exit 58
VDOT District: Bristol
Local J urisdiction: Bland County

## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments



## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
The proposed project will realign the existing l-77 northbound on a nd off ramps to the intersection of Peppers Fery Road at Nye Road. This project will provide better accessto/from the l-77 interstate and provide saferconditions by realigning the existing ramps and modifying their geometry. This will help reduce the number of crashes that occurat this location and provide access to the Town's Community Center/Meeting Center, Community College, Wythe County Progress Park, truck stops, resta urants \& motels.

## Potential Funding Sources

(Place X in all applicable boxes)


Estimated Project Cost (in \$M)


Right of Way Required for Project


If Applic able: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project

## Comments

| Safety |
| :--- |
| Congestion Mitigation |
| Accessibility |
| Land Use |
| Environment will improve safety at the interc hange |
| Economic Development |



## VTrans2040 Multimodal Transportation Plan (VMIP) 2025 Tier 1 Recommendation Profile

## Based on Analysis of VMTP Needs Assessments

| Recommendation Details |  |  | BD20 |
| :---: | :---: | :---: | :---: |
| Short Description |  |  |  |
| Variable Speed Limit System and comprehensive ITS/ATMS Strategies on I-77 in Bland County |  |  |  |
| District |  | Local J urisdiction |  |
| Bristol |  | Bland Co |  |
| VMTP Need Ty $\square$ Comidor of | Xin all applicab Significance | Regional Network | Safety |
| NeedsAddressed from VMTP Needs Assessment (List needs as numbered in reports) |  |  |  |
| Westem Mounta in Comidor L2. G, H, I |  |  |  |
| Project Status: | Partially funded in 2017-2022 SYIP (e.g. PE or ROW only, but not complete construction) |  |  |

## Recommendation Features

Type (Place X in all applic able boxes)


Detailed Description of Improvements
Varia ble Speed Limit System and comprehensive ITS/ATMS Strategies (signage, lighting, la ne control) on I-77 in Bla nd County (including tunnels) (implementation and expansion of the partially funded SYIP pipeline projects). Apply best practice similar to I-77 in C arroll County ( http://www.virginiadot.org/projects/salem/interstate_77_safety_improvements_-_carroll_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 SMARTSCALE $\quad \square$ TAP $\square$ CMAQ $\quad$ X HSIP $\square$ Prescoping $\quad X$ Other: $\quad$ Interstate/NHS maintenance

Estimated Project Cost (in \$M)


Right of Way Required for Project $\square$

If Applicable: Smart Sc ale Project Feasibility
Based on Qualitative Review of Project
Comments
Safety

| Project will improve safety a long the coridor |
| :---: |
| Project will significa ntly impact recuming delay. |
| Project unlikely to impact regional accessibility to jobs. |
| Not applicable within this region. |
| The project has minor environmental footprint and can help reduce emissions. |
| The project will address reliability issues. |
| Ther |



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