CVLRTP 2040 - PERFORMANCE BASED PLANNING

BACKGROUND

The Central Virginia Metropolitan Planning Organization is charged with the creation of two primary documents: the Transportation Improvement Program (TIP), which budgets for transportation projects to be implemented over a 5-year period, and the Long Range Transportation Plan (LRTP). All federal funding for transportation projects and programs in these urbanized areas and surrounding counties are channeled through the planning process implemented by the MPO. The LRTP looks ahead three decades to assess transportation projects vital to the region. The LRTP considers all modes of transportation, and must be updated every five years.

The last update of the Long Range Transportation Plan was published in October 2010 and planned for transportation projects and programs through the year 2035. This CVLRTP 2040 update is built upon the 2035 Plan and other recent planning initiatives in Region 2000. It is also intended to align with emerging state and federal policy and legislative changes and to forge a strong transportation policy framework for the coming decades. The basic required elements of an LRTP include safety analysis, traffic analysis, identification of potential projects, environmental mapping, funding projections, and prioritization. This analysis culminates in a final constrained and vision plan list of transportation planning projects.

STATE & FEDERAL POLICIES

The new federal transportation law, known as MAP-21, mandates a performance-driven, outcome-based transportation planning process that has significant implications for the transportation planning process. MAP-21 requires the states to set targets, which will help the FHWA make progress towards its national goals. Before MAP-21 is fully implemented in 2016, states will need to coordinate with metropolitan planning organizations to set specific, measurable performance targets and report on their progress towards reaching the targets.

Virginia is in the midst of an evolution from agency-level linkages and prioritization efforts to a more unified statewide approach to be implemented under new legislation, House Bill 2 (HB2). Signed into law in March of 2014, HB2 provides for the development of a prioritization process for projects funded by the Commonwealth Transportation Board. The law mandates that "such prioritization shall weight factors such as congestion mitigation, economic development, accessibility, safety, and environmental quality and be applied within each highway construction district." HB2 establishes the screening process for projects before prioritization. To receive state or federal highway funds, projects must demonstrate that they meet a capacity need identified in the statewide transportation plan VTrans2040. OIPI and VDOT are currently in the process of finalizing the project prioritization framework to implement HB2.

ECONOMIC DEVELOPMENT LINKAGES

One important new development in the 2040 LRTP planning process has been the integration of the transportation planning process with regional economic development initiatives and planning priorities. CVLRTP 2040 presented an opportunity to align the MPOs transportation planning efforts with regional economic plans and priorities. Virginia's Region 2000 Partnership is the primary consortium of economic interests and stakeholders within the 2,000 square miles that surround Lynchburg, Virginia. Region 2000 was established to coordinate regional programs and activities that will improve the region's economic opportunities and livability for its residents, businesses, institutions, and local governments.

One of the primary products of the Region 2000 Partnership is the Comprehensive Economic Development Strategy (CEDS). The inclusion of a project in the CEDS is a prerequisite to apply for federal project and program funding for economic development. The CVLTRP 2040 was integrated with existing CEDS goals, to incorporate project evaluation metrics that benefit both the regional transportation system and the regional economy. Specific metrics for economic performance were included in the framework of the CVLRTP and were weighted strongly in the final factor weighting. In general, the purpose of incorporating regional economic development priorities into the CVLRTP 2040 performance-based planning process is to ensure that transportation projects that best position our region for economic success are prioritized for funding.

PERFORMANCE BASED PLANNING

Transportation policy and planning is becoming increasingly based on a performance-driven, outcome-based approaches, as opposed to politically-driven project selection processes. The majority of Virginia's MPOs are incorporating performance-based planning and programming into their long range transportation planning processes. One of the goals of CVLRTP 2040 is to align with this trend and develop a clear and transparent framework for project evaluation that has broad support from the leaders in the Region. Performance management provides a means to efficient investment through increased accountability and transparency, and through improved project decision-making.

Performance-based planning can be used to evaluate an entire transportation system or to evaluate individual projects. Planners can measure regional delay, enhance regional evaluation time, and leverage system-wide funding when performance metrics are applied to an entire transportation system. Measures relating to reductions in Level of Service on a particular roadway, cost-effectiveness of a project, or overall project readiness all allow planners to compare individual projects objectively and prioritize them based on regional goals and objectives.

FROM GUIDING PRINCIPLES TO GOALS

HOW THESE WERE DEVELOPED:

GUIDING

PRINCIPLES

Our people enjoy a

strong sense of

community.

Our businesses thrive and prosper

Our natural beauty flourishes.

Our region is

accessible to businesses and

visitors from

around the world.

framework around which the whole Evaluation Process was organized.

he Guiding Principles and Goals have remained consistent with the prior Transportation Plan (CVLRTP 2025). However, in this update, the uiding Principles were developed into an overarching Vision Statement for the whole Region. This Vision Statement was then broken down into a series of four basic Vision Themes that in turn were related to the original LRTP Goals. These Vision Themes and Goals became the

VISION STATEMENT

"Our Region will be accessible to visitors and businesses from around the world, with a prosperous economy, flourishing natural beauty and strong and safe communities accessible to all."

VISION THEMES





Our communities are safe and accessible to people of all ages and abilities.

1. Make it Safe Promote transportation safety and security for motorized and non-motorized travelers.

2. Make it Function Ensure that the existing transportation system is maintained.

3. Make it Flow Improve mobility and connectivity for people and freight, across all travel modes.

6. Promote Vitality Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

developed accordingly.

4. Make it Accessible

5. Make it Efficient

GOALS

transportation for people of all ages and abilities.

Promote equal access to all modes of

Maximize transportation operations and

efficiency of key corridors such as Route 29 in

the region and between regions. The Route 29

corridor is a vital economic artery for the region

and the state and must be managed and

7. Sustain Quality Support and enhance environmental resilience, energy conservation, and community quality of life.

8. Coordinate Investments Ensure consistency with local and state plans and goals for land use, environmental preservation, and economic development.

9. Balance Priorities Balance cross-jurisdictional transportation needs and concerns.



Congestion

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Traffic Volume

Freight

\$₫

Alternative

Transportation

Accident Rate

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Safety Features

Economio Development Plans

Commuter Travel

.Udda

Cultural and

Environmento Resources

VEN

Corridor Beautification

Right of Way Sufficiency

Functional Classification

Plan Coordination

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Distribution of Benefits

The predicted number of vehicles using the project corridor in 2040

semi-trucks

The types of non-auto transportation infrastructure—such as bicycle lanes, sidewalks, or transit stops—that are improved or added as a part of the project

2011-2013

concern

the region

The role of the project corridor in the region's commuter travel network

Employment Density The density of jobs per acre in the properties surrounding the project location

The proximity of the project location to sensitive cultural and environmental resources such as historic landmarks, parks, rivers, streams, and endangered species habitat

road corridor

proiect

The functional classification of the project corridor as designated by the Virginia Department of Transportation to describe its role in the road network

The number of different local, regional, or state planning documents that have recommended the project

The number of localities in the CVMPO that will directly benefit from the project's mprovements



CENTRAL VIRGINIA LONG RANGE TRANSPORTATION PLAN

In cooperation with









WHAT WAS MEASURED:

Below are the fifteen specific Performance Factors that were used to rate projects under the CVLRTP Project valuation process. Each of the measures derive directly from one of the overarching Goals that were continued from the prior update (CVLRTP2035). The Performance Factors were selected carefully, not only for their relevance to project goals but also based on availability of data.

The predicted level of traffic congestion at the project location in 2040

The percentage of vehicles on the road that are classified as heavy trucks, such as

The number of accidents per mile that were reported at the project location from

Major project features that are designed or included to specifically address a safety

Recommendations for the project provided by official economic development plans for

Project features that will directly or indirectly improve the "streetscape" appearance of the

The amount of additional right of way that would need to be acquired to complete the

AUGUST 2015

the Virginia Department of Transportation

the Federal Highway Administration

the Federal Transit Administration

Developed by The Central Virginia Metropolitan Planning Organiza

the Virginia Department of Rail and Public Transportation





HOW PROJECTS WERE EVALUATED:

according to the region's transportation Goals. As shown below, the Performance Factors were first grouped into five broad "Vision Themes," and weights reflecting relative importance were assigned to each group. Next, the Performance Factors within each Vision Theme were assigned sub-weights according to their importance to the Goal related to that Vision Theme. Using this framework, "Project Benefit Scores" for every proposed project in the MPO were developed as shown in the tables that follow.

After identifying the fifteen transportation Performance Factors, the CVMPO Technical Committee weighted the relative importance of each

Theme	Goals	Weight		
Mobility and Accessibility: Provide a transportation system that facilitates the efficient movement of people and goods.	Make it flow, Make it Accessible	20%		
Safety: Provide a safe and secure transportation system.	Make it Safe	25%		
Economy: Retain and increase business and employment opportunities.	Promote Vitality, Make it Efficient	25%		
Community and Nature: Improve the quality of life and protect the environment.	Sustain Quality	15%		
Efficiency: Preserve the existing transportation system and promote efficient system management.	Make it Function, Coordinate Investments, Balance Priorities	15%		
	Total:	100%		
Theme	Performance Measures	Weight Relative to Goa		
Mobility and Accessibility: Provide a	A. Congestion B. Traffic Volume	37% 23%		
transportation system that facilitates the efficient movement of people and	C. Freight	20%		
goods.	D. Alternative Transportation	20%		
	Total:	100%		
Safety: Provide a safe and secure	A. Accident Rate	61%		
transportation system.	B. Safety Features	39%		
	Total:	100%		
Economy: Retain and increase	A. Economic Development Plans	25%		
business and employment opportuni-	B. Commuter Travel	44%		
ties.	C. Surrounding Employment Density	31%		
	Total:	100%		
Community and Nature: Improve the	A. Congestion	30%		
quality of life and protect the	B. Corridor Beautification	30%		
environment.	C. Right of Way Sufficiency	40%		
	Total:	100%		
Efficiency: Preserve the existing	A. Functional Roadway Classification	20%		
transportation system and promote	B. Plan Coordination	38%		
efficient system management.	C. Distribution of Benefits	42%		
	Total:	100%		

							ON PLAN		ר ר		TC	ID	Rank	Jurisdiction	Route #	Route Name	From	То	Project Description				Readiness Rating
						VISI						64	19	Campbell	29	US 29 So. Bypass (E. Alternative)	S of Rt 24	E Lynchburg Salem Turnpike (US 460)	New 4 lane limited access facility				Low
	ID Rank	Jurisdiction	Route #	Route Name	From	То	Project Description	Estimated Cost	Benefit Score	Benefit - Cost	Readiness Rating	65	24	Campbell	29	Wards Rd	Calohan Rd (Rt 685)	City of Lynchburg corp limits	Widen road (rural 6 lane with median)	\$63,784,500 6	9.92 M	edium	Low
	30 4	Amherst	29	South Amherst Hwy	Amherst St (Rt 163)	S Coolwell Rd (Rt 604)	Traffic Opps/ Signal Coordination	\$1,625,500	79.97	High	Medium	66	29	Campbell y	29	Wards Rd	Colonial Highway (Rt 24)	Calohan Rd (Rt 685)	Widen road (rural 6 lane with median)	\$23,486,000 6	3.31 M	edium I	Low
	31 12	Amherst	29	South Amherst Hwy	Amherst St (Rt 163)		Add ramp to complete interchange	\$12,000,000	78.63	High	Low	67	10	Campbell	29	Wards Rd	S of Calohan Rd (Rt 685)	City of Lynchburg Corp Limits	Access mgmt, traffic ops, safety improvements	\$10,000,000 7	3.18 Hi	igh I	Medium
	32 46	Amherst	29	Monacan Parkway	Izaak Walton Rd (Rt 663)		New access ramps	\$10,000,000	53.20	Low	Low	68	5	Campbell	29	Wards Rd	English Tavern Rd (Rt 738)	Terminal Dr	Access Management	\$4,000,000 8	2.72 Hi	igh I	Medium
	33 41	Amherst	60	Richmond Highway	US 29 Bypass	Rt 606W	2 lane imprwovements	\$9,349,000	54.05	Medium	Low	69	23	Campbell	460	East Lynchburg Salem Turnpike	Waterlick Rd (Rt 622)	Campbell Ave (Rt 501)	Increase to 6 lanes	\$173,356,000 7	L.48 M	edium	Low
	34 37	Amherst	60	Richmond Highway	Rt 606W	CVMPO Boundary	2 lane improvements	\$14,904,000	57.81	Low	Low	70	2	Campbell	460	Timberlake Rd	Waterlick Rd (Rt 622)		Median & turn lane improvements, add lanes	\$2,344,000 8	2.51 Hi	igh I	Low
	35 38	Amherst	130	Elon Rd	NS Railroad	S. Amherst Highway (US 29 Bus)	Widen to four lanes	\$40,556,500	57.28	Low	Low	71	36	Campbell	501	Campbell Highway	Village Rd (Rt 24)	Suburban Rd (Rt 680)	Widen to 4 lanes	\$27,387,500 5	9.24 Lo	ow I	Low
	36 30	Amherst	163	South Amherst Hwy	River Rd (Rt 685)	US 29 Business	Widen to 4 lanes with bike lane	\$34,153,000	61.30	Medium	Low	72	26	Campbell	622	Waterlick Rd	Bedford County Corp Limit	Rainbow Forest Dr (Rt 1520)	Widen to 4 lanes	\$23,480,500 6	8.26 M	edium I	Low
	37 55	Amherst	210	Colony Rd	Rt 163	Rt 1034	2 lane reconstruction with shoulder	\$2,815,000	48.00	Medium	Low	73	33	Campbell	622	Waterlick Rd	Timberlake Rd (US 460)	Leesville Rd (Rt 682)	Widen to 4 lanes	\$20,889,000 6	0.94 M	edium	Low
	38 45	Amherst	622	New Wright Shop Rd	Colony Rd (Rt 210)	Dixie Airport Rd (Rt 677)	Reconstruct 2 lane road	\$19,657,000	53.24	Medium	Low	74	48	Campbell	681	Sunburst Rd	Richmond Highway (US 460)	Waterlick Rd (Rt 622)	Reconstruct 2 lane roadway	\$21,736,000 5	2.23 La	wc	Low
	39 65	Amherst	652	Cedar Gate Rd	Rt 657	Rt 675	2 lane reconstruction	\$6,271,000	43.56	Low	Low	75	51	Campbell	682	Leesville Rd	City of Lynchburg corp limits	Richmond Highway (US 460)	Widen to 4 lanes	\$41,663,500 5	1.80 M	edium	Low
	40 60	Amherst	661	Old Stage Rd	Sweet Briar Ln (Rt 624)	London Ln	2 lane improvements	\$2,849,000	45.83	Low	Low	76	44	Campbell	726	Mt. Athos Rd	Richmond Highway (US 460)	Babcock and Wilcox	Upgrade existing 2 lane road	\$13,614,000 5	3.29 M	edium	Low
	41 64	Amherst	663	Izaak Walton Rd	Glade Rd (Rt 130)	S Coolwell Rd (Rt 604)	Reconstruct 2 lane roadway	\$25,651,000	45.30	Low	Low	77	7	Campbell	738	English Tavern Rd	Suburban Rd (Rt 680)	Wards Rd (US 29)	Widen to 24 ft	\$13,376,000 4	7.16 M	edium	Low
	42 67	Amherst	675	Winesap Rd	Rt 652	Rt 795	Widen pavement to 22 ft	\$17,671,000	42.06	Low	Low	78	54	Campbell	738	English Tavern Rd	Wards Rd (US 29)	Suburban Rd (Rt 680)	Widen to 24 ft	\$10,032,000 4	B.65 M	edium	Low
	43 59	Amherst	677	Dixie Airport Rd	Amelon Rd (Rt 699)	Galts Mill Rd (Rt 622)	Reconstruct 2 lane roadway	\$10,255,500	45.90	Medium	Low	79	15	Lynchburg	29	Lynchburg Expwy	Main St/Church St		Improve interchange	\$2,700,000 74	4.71 Hi	igh I	Low
¥	44 47	Amherst	682	Woody's Lake Rd	South Amherst Hwy (US 29 Bus)	End	Reconstruct roadway	\$7,202,500	52.64	Low	Low	80	9	Lynchburg	29	Lynchburg Expwy	Miller St/Robbin Rd		Improve interchange	\$200,000 74	1.66 Hi	igh I	Medium
	45 53	Amherst	685	River Rd	NS Railroad	Rt 163	Reconstruct 2 lane roadway	\$21,459,500	48.94	Low	Low	81	16	Lynchburg	29	Lynchburg Expwy	Kemper St/ Campbell Ave		Improve interchange	\$14,900,000 7	6.21 Hi	igh I	Low
	46 52	Amherst	685	River Rd	Rt 130	NS Railroad	Reconstruct 2 lane roadway	\$26,877,000	50.45	Low	Low	82	13	Lynchburg	29	Lynchburg Expwy	James St/Stadium Rd		Improve interchange	\$12,220,000 7	6.21 Hi	igh I	Low
	47 63	Amherst	795	Winridge Rd	Rt 130	Rt 675	Reconstruct 2 lane roadway	\$9,429,000	45.46	Low	Low	83	7	Lynchburg	29	Lynchburg Expwy	Odd Fellows Rd		Improve interchange	\$7,320,000 8	3.67 Hi	igh I	Low
	48 56	Amherst		(New Road)	S. Amherst Highway (US 29 Bus)	Fernwood Dr	New 2 lane connector road	\$6,232,000	47.56	Low	Low	84	8	Lynchburg	29/501	Lynchburg Expwy	Candlers Mountain Rd (Rt		Improve interchange	\$16,220,000 9	2.71 Hi	igh I	Low
	49 1	Bedford	221	Forest Rd	Gristmill Dr (Rt 1426)	Graves Mill Rd (Rt 126)	Access Mgmt and Intersection Improvements	\$3,140,000	79.92	High	Medium	85	40	Lynchburg	163	5th St	Jackson St	Taylor St	Streetscape improvements	\$2,000,000 5	5.47 Hi		
	50 27	Bedford	460	E Lynchburg Salem	Goode Rd (Rt 668)	Thomas Jefferson Rd (Rt 811)	Construct paved shoulder and access management	\$8,000,000	64.67	High	Low	86	31	Lynchburg	163	5th St	Taylor St	NS Railway Bridge	Reconstruct road and ped, add streetscape	\$2,000,000 6	1.23 Hi	igh I	Low
	51 39	Bedford	501	Boonsboro Rd	Winding Creek Ln (Rt 647)		Relocate intersection, construct turn lane	\$1,625,500	56.89	Medium	Low	87	17	Lynchburg	163	Memorial Ave	NS Railway	Langhorne Ave	Reconstruct road and ped, add streetscape	\$2,000,000 6	8.89 Hi	igh I	Low
	52 68	Bedford	621	Cottontown Rd	Hooper Rd (Rt 662)	Hawkins Mill Rd (Rt 660)	Reconstruct 2 lane roadway	\$12,793,000	42.06	Low	Low	88	14	Lynchburg	221	Lakeside Dr	Lynchburg Expwy (Rt 501)	Forest Brook Rd	Widen to 4 lanes	\$19,211,175 8	0.09 M	edium I	Low
	53 66	Bedford	621	Cottontown Rd	Coffee Rd (Rt 644)	Hooper Rd (Rt 662)	Reconstruct 2 lane roadway	\$28,660,000	43.56	Low	Low	89	11	Lynchburg	460/29	Richmond Highway	Campbell Ave (Rt 501)	Monacan Parkway (US 29)	Widen to 6 lane limited access hwy	\$39,927,900 8	2.70 M	edium	Low
	54 34	Bedford	622	Waterlick Rd	Thomas Jefferson Rd (Rt 811)	Campbell County Corp Limits	Widen to 4 lanes	\$19,211,500	60.72	Medium	Low	90	3	Lynchburg	501	Lynchburg Expwy	S of Rt 221	Northwest Expressway (Rt 501)	New 4 lane road (One way pairs)	\$37,383,000 9	1.16 Hi	igh I	High
	55 69	Bedford	622	Everett Rd	Kensington Pkwy	Gladden Cir (Rt 646)	Reconstruct 2 lane roadway	\$14,330,000	42.06	Low	Low	91	6	Lynchburg	501	Candlers Mtn Rd	Richmond Highway (US 460)	Lynchburg Expressway (US 29)	Widen to 6 lanes	\$23,068,000 8	9.37 Hi	igh I	Low
	56 58	Bedford	623	Turkey Foot Rd	Thomas Jefferson Rd (Rt 811)	Campbell County Corp Limits	Widen pavement to 24 ft	\$9,030,000	46.67		Low	92	20	Lynchburg	501	Northwest Expwy	Old Forest Rd	Wiggington Rd (Rt 620)	Widen to 4 lanes	\$27,652,950 7).49 Hi	igh I	Low
	57 62	Bedford	644	Coffee Rd	Elk Valley Rd (Rt 665N)	Lynchburg Corp Limit	Reconstruct 2 lane roadway	\$45,140,500	45.50	Low	Low	93	22	Lynchburg	501	Campbell Ave	Edmunds St	Florida Ave	Roundabouts, Road Diet, Rail to Trail	\$6,100,000 6	6.83 Hi	igh I	Low
	58 61		659	Hawkins Mill Rd	Old Farm Rd (Rt 660)	Lynchburg Corp Limits	Reconstruct 2 lane roadway	\$9,783,000	45.66	Low	Low			Lynchburg	670	Candlers Mtn Rd	Mayflower Dr (Rt 128)	Richmond Highway (US 460)	Widen to 4 lanes	\$17,283,000 6	8.86 M	edium	Low
	59 70	Bedford	663	Perrowville Rd	Quail Ridge Rd (Rt 1431)	Coffee Rd (Rt 644)	Reconstruct 2 lane roadway	\$15,047,000	42.06	Low	Low	95	21	Lynchburg		Downtown Streets			Implement downtown complete streets	\$50,000,000 7	2.79 M	edium	Low
	60 35		811	Thomas Jefferson Rd	Forest Rd (Rt 221)	Waterlick Rd (Rt 622)	Widen to 4 lanes	\$34,153,000				96	28	Lynchburg		Odd Fellows Rd	Richmond Hwy (US 460)	Lynchburg Expressway (US 29)	Roundabouts, bridge replacement, corridor balance	\$13,000,000 6	3.91 M	edium	Low
-	61 49		811	Thomas Jefferson Rd	Waterlick Rd (Rt 622)	Great Oak Rd (Rt 704)	Widen to 4 lanes	\$49,095,000			Low	97	32	Lynchburg		Wards Ferry Rd	Harvard St.		Construct Roundabout	\$1,100,000 6	1.15 Hi	igh I	Low
	62 50	Bedford	811	Thomas Jefferson Rd	Great Oak Rd (Rt 704)	US 460	Widen to 4 lanes	\$25,615,000			Low	98	43	Lynchburg		Wards Ferry Rd	Atlanta Ave		Add turn lanes	\$495,000 5	3.42 Hi	igh I	Low
	63 18	Campbell County	29	US 29 So. Bypass (W. Alternative)	S of Rt 24	Richmond Highway (US 460)	New 4 lane limited access facility	\$244,951,000	75.06	Low	Low	99	42	Lynchburg		New Road	Campbell Ave (Rt 501)	Odd Fellows Rd	Construct new roadway	\$10,000,000 5	3.56 Lo	wc	Low

CONSTRAINED PROJECT LIST:

The table below shows the fiscally-constrained projects for the MPO, based on estimations of future state and local transportation funding. All the projects included on the CVLRTP 2040 Update Constrained List are those that are identified in the VDOT FY 2016 Six Year Improvement Program (SYIP).

ID	Jurisdiction	Route #	Project Description	Estimated Cost	
1	Amherst County	29	Business 29 - Shoulder Widening	\$3,700,000	
2	Amherst County	681	Replace bridge over Williams Run (Fed ID #01524)	\$2,183,000	
3	Amherst County		Town of Amherst - Depot Relocation and Renovation	\$1,749,000	
4	Bedford County	221	Rt 221 Bedford County - Bike and Ped Safety Improvements	\$2,550,000	
5	Bedford County	621	Rt 621 over Ivy Creek (Str. ID 02707) - Bridge Replacement	\$3,542,000	
6	Bedford County	622	Rt 622 over NS RR (Str. 02708) - Bridge Replacement	\$3,380,000	
7	Bedford County	666	Rt 666 over NS RR (Str. 02780)	\$3,873,000	
8	Bedford County	668	Rt 668 over NSRR (Str. 02785) - Bridge Replacement	\$5,058,000	
9	Bedford County		Extend Corporate Park Dr.	\$1,000,000	
10	Campbell County	29	Bridge and approach over NS RR, northbound lanes (Fed ID #04144)	\$10,110,000	
11	Campbell County	29	Rte 29 - Right turn lane at Rte 688 (Patterson Rd)	\$252,000	
12	Campbell County	460	Rte 460 Right turn lane at Rte 752 (Mt Olivet Church Rd)	\$208,000	
13	Campbell County	907	FR-907 - Complete Liberty Mtn Rd and 1st phase Mtn Lake Rd	\$5,428,000	
14	City of Lynchburg	29	Bridge and approach over NSRR, NB & SB lanes (Fed ID #20579 & #20580)	\$11,161,000	
15	City of Lynchburg	29/460	Odd Fellows Rd Interchange and Extension	\$38,538,000	
15	City of Lynchburg	29/460	Odd Fellows Rd Interchange and Extension Debt Service	\$36,841,000	
16	City of Lynchburg	29/460	Rte 29/460 Access Management	\$19,092,000	
17	City of Lynchburg	163	Rte 163 - Reconstruction	\$3,000,000	
18	City of Lynchburg	163	Intersection Improvement - Lakeside/Park/Memorial	\$1,530,000	
19	City of Lynchburg	221	Rte 221 - Intersection Improvements	\$47,921,000	
20	City of Lynchburg	221	Rte 221 - Intersection Improvement	\$1,600,000	
21	City of Lynchburg	460	Timberlake Ramp/Intersection Improvements	\$3,790,000	
22	City of Lynchburg	501	Main Street bridge replacement	\$5,076,000	
23	City of Lynchburg	6056	Greenview Dr: Widen from 2-4 lanes	\$16,443,000	
23	City of Lynchburg	6056	Greenview Dr: Widen from 2-4 lanes Debt Service	\$14,467,000	
24	City of Lynchburg		Midtown Connector - New 2 lane with flush median, curb and gutter, sidewalk	\$26,703,000	
25	City of Lynchburg		Wards Ferry Rd widening	\$2,002,000	
26	City of Lynchburg		Construct new roadway access to Liberty University Facilities (Phase 1)	\$2,500,000	
27	City of Lynchburg		Construct new roadway access to Liberty University Facilities (Phase 2)	\$3,200,000	
28	City of Lynchburg		Lynchpin Industrial Park Sidewalk	\$234,000	
29	City of Lynchburg		Riverside Park Master Plan	\$1,266,000	
NA	City of Lynchburg		Citywide - Pavement Overlay	\$3,000,000	
NA	MPO-Wide		Safety/traffic operations/transportation system mgmt: General improvements to traffic safety and operations; individual projects are generally low cost		
NA	MPO-Wide		Transportation Enhancments: Expand transportation choices through safe bicycle and pedestrian facilities, scenic routes, and beautification	e Determined on an annual basis	
NA	MPO-Wide		Improvements to increase safety at locations where roads and railroads cross		
NA	MPO-Wide		General system maintenance: Roadway maintenance funds on an MPO-wide basis		

		LIST OF TOP SCORED PROJE	IST OF TOP SCORED PROJECTS FROM EVALUATION PROCESS	
Project ID	Project Description	Economic Linkage	Relationship to CEDS Plan	Transportation Issues
49	Route 221, Forest Rd - From Gristmill Dr (Rt 1426) To Graves Mill Rd (Rt 126) - Access Management and Intersection Improvements	Forest Road in Bedford County is an important connector between Bedford and Lynchburg. The Forest activity center has seen some of the highest growth in the region. Workers who commute to the area, or along Forest Road from regional destimations would benefit from improvements in safety and reliability.	Relates to CEDS GOAL 1: Develop and maintain a knowledge based workforce to meet the needs and opportunities of a 21st century innovation economy; and CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters	The project area is a 0.2 mile primarily commercial strip along Forest Road from Graves Mill Road to Gristmill Drive that has numerous safety and operational issues. Improvements to the busy Forest Road/Graves Mill Road area would improve safety and travel time reliability by reducing congestion.
70	Rt. 460, Timberlake Rd. at Waterlick Rd [Rt 622]	The intersection of Timberlake Road and Waterlick Road in Campbell County is in a primarily commercial area that serves several surrounding neighborhoods as well as the City of Lynchburg as a whole.	Relates to CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters; and CEDS GOAL 4: Promote and enhance inter-regional transportation systems.	The intersection of Timberlake Road and Waterlick intersection has safety and operational issues, whose improvement could bring benefits to adjacent neighborhoods and improve the efficiency of Rt. 460 carrying considerable traffic volumes in this area.
06	Rt. 501, Lynchburg Expressway, From S. of Rt 221 To Northwest Expressway (Rt 501) - New 4-lane road (One way pairs)	The Lynchburg Expressway is an important arterial circling the City of Lynchburg. Improvements to travel time and reliability will greatly facilitate regional network connectivity and support numerous local businesses and centers of employment around Lynchburg.	Relates to CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters; and CEDS Primary Highways PROJECT 4: U.S. 501 Corridor Improvements.	This project will add four lanes for northbound traffic to the Lynchburg Expressway extending it across Rt. 221. The addition of a new roadway allowing for quicker travel along the Lynchburg Expwy will also increase safety and reduce congestion at the existing intersection of the Lynchburg Expwy and Rt. 221.
30	Route 29, South Amherst Highway - From Amherst St (Rt 163) to S. Coolwell Rd (Rt 604) - Traffic Operations/ Signal Coordination	This portion of Rt. 29 is a key connector between local activity centers in Amherst County, connecting commercial uses along old Rt. 29 with the centers of Madison Heights, Elon Road and the town of Amherst.	Relates to CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters; and CEDS GOAL 4: Promote and enhance inter-regional transportation systems.	Frequent curb cuts and long waits at signals contribute to intermittent congestion along this portion of the corridor. Improving signal timing and other operational improvements will enhance travel and access to local commercial uses along the corridor.
89	Route 29, Wards Rd - From English Tavern Rd (Rt 738) To Terminal Dr Access Management	This rural segment of Wards Road is along a major commuting route connecting Campbell County to the Lynchburg Airport, Liberty University, Rt. 29, and the City of Lynchburg. Preserving reliable travel on this crucial link is important for regional mobility.	Relates to CEDS GOAL 1: Develop and maintain a knowledge based workforce to meet the needs and opportunities of a 21st century innovation economy; and overall CEDS emphasis on the importance of Lynchburg airport and the importance of transportation infrastructure to support key industry sectors.	Frequent curb cuts and increasing volumes threaten efficient throughput on this important stretch of Rt. 29. Improving access management along this portion of Wards Road will improve safety and efficiency for regional commuter travel patterns
91	Rt. 501, Candlers Mountain Rd. From Richmond Highway (US 460) To Lynchburg Expressway (US 29) - Widen to 6 lanes	Candlers Mountain Road connects the Lynchburg Expressway to Rt. 29. The area along Candlers Mountain Road is an employment hub with primarily industrial and commercial zoning, Many businesses in the Candlers Mountain Road area rely on extensive freight shipments.	Relates to CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters; and CEDS GOAL 2/ OBJECTIVE 2.2 Retain and expand existing technology based businesses in the region.	The widening of the road could increase the possibility of business expansion and reduce delays. Additionally, increasing the roadway to six lanes could reduce congestion, increasing travel time reliability for workers commuting from areas of the City of Lynchburg and surrounding counties.
83	Rt. 29, Lynchburg Expressway at Odd Fellows Rd - Improve interchange	Odd Fellows Road serves industrial traffic as an entrance to the City of Lynchburg's Industrial Park, as well as other commercial properties in the immediate area. Presently, Odd Fellows Road dead ends south of Mayflower Drive but its extension with a new interchange will greatly facilitate business access in the area.	Relates to CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters; and CEDS Primary Highways PROJECT 2: U.S. 29/460 Interchange with Odd Fellows Road.	Currently, this stretch of the Lynchburg Expressway is congested and experiencing a higher accident rate than other segments of US 29 and US 460 within region. Interchange improvements will greatly facilitate both intra- and inter-regional travel.
84	Rt. 29/501, Lynchburg Expressway at Candlers Moun- tain Rd (Rt 501) - Improve interchange	The US 501 improvements, will allow for safe and efficient movement of people and freight from the North Carolina border to US Interstate 81. The improvements help ensures access to markets and opportunities north and south of Central Virginia.	Relates to CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters; and CEDS Primary Highways PROJECT 1: U.S. 29/460 Access Management Improvements.	Currently, this stretch of the Lynchburg Expressway is congested and experiencing a higher accident rate than other segments of US 29 and US 460 within region. Interchange improvements will greatly facilitate both intra- and inter-regional travel.
08	Rt. 29, Lynchburg Expressway at Miller St/Robbin Rd - Improve interchange	Rt.29/460 connectivity is imperative to ensure that regional businesses have ready access to external markets and opportunities needed to succeed. Proposed improvements to the US 29 and US 460 corridors will help ensure access to markets and opportunities north and south of Central Virginia.	Relates to CEDS GOAL 3: Ensure the region has well-planned, state-of-the-art infrastructure to facilitate the growth of high-wage industry clusters; and CEDS Primary Highways PROJECT 1: U.S. 29/460 Access Management Improvements.	Currently, this stretch of the Lynchburg Expressway is congested and experiencing a higher accident rate than other segments of US 29 and US 460 within region. Interchange improvements will greatly facilitate both intra- and inter-regional travel.
67	Route 29, Wards Rd - From S. of Calohan Rd (Rt 685) To City of Lynchburg Corp. Limits - Access Mgmt, traffic ops, Safety improvements	Wards Road is a primary connector between Campbell and areas to the south, the Lynchburg employment hub, Liberty University, and the growing education/technology sector in the region. Protecting access and improving reliability on Wards Road is vital to serving both the local and regional economy in the area.	Relates to CEDS GOAL 1: Develop and maintain a knowledge-based workforce to meet the needs and opportunities of a 21st century economy; and CEDS OBJECTIVE 2.1: Recruit businesses in high-wage, targeted industry clusters; through improving access to these existing sectors via Wards Road.	This project will improve safety along the corridor through traffic operations and access management. A safer and more efficient Wards Road will facilitate both local travel markets to retail and services and regional travel markets to employment hubs such as Liberty and Lynchburg.
NOTE: The Tc	op Scoring Projects listed above represent those projects tha	NOTE: The Top Scoring Projects listed above represent those projects that scored the highest on a combined scale that included overall project benefit score, benefit-to-cost score and project readiness score.	core and project readiness score.	

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