

Chapter 9: Constrained Long Range Plan Overview

Funding Sources	139
Project Cost Estimates	142
Funding Projections	143
Project Prioritization	146
Constrained Project List	147
Visioning List (Unconstrained Project List)	147

List of Figures

- [Figure 9-1:](#) CAT FY 2012 Projected Revenue Sources
- [Figure 9-2:](#) JAUNT FY 2012 Revenue Sources
- [Figure 9-3:](#) Year of Expenditure

List of Tables

- [Table 9-1.](#) CAT FY 2012 Projected Revenue Sources
- [Table 9-2.](#) JAUNT FY 2012 Revenue Sources
- [Table 9-3.](#) Roadway Projects Cost Estimates
- [Table 9-4.](#) Transit Projects Cost Estimates
- [Table 9-5.](#) Non-Maintenance and Maintenance Allocations
- [Table 9-6.](#) Funding Allocations
- [Table 9-7.](#) Unconstrained Projects Cost Estimates

When the Intermodal Surface Transportation Efficiency Act (ISTEA) was passed in 1991, it not only allocated funding for transportation programs, it required that MPOs demonstrate that transportation projects included in their LRTP were reasonably expected to receive funding. Ensuing reauthorization bills, TEA-21 in 1998, SAFETEA-LU in 2005, and most recently Moving Ahead for Progress in the 21st Century (MAP-21) in 2012, maintained this mandate. As a result, the LRTP must include a financial plan that estimates the revenues for transportation improvements a region expects to receive over the life of the plan. The total estimated cost of the transportation improvement projects in the plan cannot exceed the region's anticipated funding. It is not uncommon for a region to identify transportation needs and projects that surpass its expected revenue. As this occurs, the projects are prioritized and those that are expected to receive funding are placed on the Constrained Project List while those that cannot be funded are placed on the Visioning List or Unconstrained Project List. If additional funding becomes available at a later date, projects on the Visioning List are eligible to receive that funding.

► Funding Sources

Funding is available from different entities including federal, state, and local governments. The majority of funds available in Virginia typically come from federal sources. The State administers these funds for roadway construction, bicycle/pedestrian and transit facilities, and major planning and/or environmental studies through a variety of programs.

Roadways

Funding to build and maintain roadways in the Charlottesville-Albemarle MPO region comes primarily from the subsequently listed federal, state, and local sources.

» *Federal Funding Sources*

As previously mentioned, MAP-21 is the current federal legislation that authorizes funding for state transportation programs. While the prior legislation, SAFETEA-LU, provided funding to a number of programs, MAP-21 has reduced the number of programs to five major core programs:

National Highway Performance Program (NHPP) Funds

MAP-21 expanded the National Highway System (NHS) to include principal arterial roadways that were not originally part of the NHS. The Enhanced National Highway System is now comprised of the interstate system, all principal arterials, and bridges on the NHS. The NHPP provides funding for construction, reconstruction, or operational improvement of portions of the highway; inspection costs for NHS infrastructure including bridges; bicycle and pedestrian infrastructure; safety improvements on the NHS; environmental restoration within NHS corridors; intelligent transportation system (ITS) improvements; and the construction of bus terminals servicing the NHS.

Surface Transportation Program (STP) Funds

The Surface Transportation Program continues to be the most flexible federal-aid highway program and provides the greatest financial support to local agencies. Projects eligible for funding include, but are not limited to, construction, reconstruction, or operational improvement for highways and local access roads; bridge projects on public roads and construction of bridges on federal-aid highways; highway and transit safety infrastructure improvements; bicycle and pedestrian infrastructure including recreational trails; and environmental restoration.

Congestion Mitigation and Air Quality (CMAQ) Funds

The Congestion Mitigation and Air Quality program continues to provide funding to State and local governments for areas that are not in compliance with the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter or for areas that were previously nonattainment areas but are now in compliance. The Charlottesville-Albemarle MPO is not eligible for this funding as our community currently attains air quality standards set by the Environmental Protection Agency.

Highway Safety Improvement Program (HSIP) Funds

The Highway Safety Improvement Program (HSIP) allocates funds to decrease the number of traffic fatalities and injuries on public roads. Projects eligible

for this funding include public road strategies, activities or projects that align with the State Strategic Highway Safety Plan (SHSP) to mitigate hazardous roads or resolve highway safety problems.

Transportation Alternatives (TA) Program

MAP-21 created the Transportation Alternatives Program to encompass preceding programs including Transportation Enhancements, Safe Routes to School, and Recreational Trails. Projects eligible for this funding include, but are not limited to, the planning, design, and construction of on- and off-road trails for non-motorized transportation; converting abandoned railroad corridors for non-motorized trails; and environmental mitigation activities.

» State Funding Sources

Virginia uses both sales and transportation-related taxes to fund highways and public transportation programs through the Commonwealth Transportation Fund (CTF). In addition, revenue bonds are authorized by the General Assembly for certain transportation projects. The Priority Transportation Fund, established by the Virginia Transportation Act of 2000, allocates funding from the General Fund revenues to transportation projects.

» Local Funding Sources

Local funding primarily comes from bonds and the general fund for transportation improvements. Bonds provide a dedicated funding source with a long range payment period for large-scale capital projects. In contrast, the City of Charlottesville and Albemarle County's general fund is used to fund highway operation and maintenance. Due to limited funding, transportation projects compete with other localities. Local funding is also used to match federal and state funding for local transportation projects. Local funding is not accounted for in the fiscal-constraint process because it is too difficult to estimate for the life of the Long Range Transportation Plan.

Transit

The construction, maintenance, and operation of public transportation projects are also predominantly funded from federal, state, and local sources.

» Federal Funding Sources

MAP-21 not only changed the way federal funding was allocated for roadway projects, public transportation pro-

grams were similarly consolidated into other programs. The programs listed are those that Charlottesville Area Transit (CAT) and JAUNT qualify for, based on the services they provide:

Urbanized Area Formula Program (5307)

The Urbanized Area Funding Program allocates federal funding to urbanized areas (i.e. areas with a population of 50,000 or more) for transit capital and operating assistance. Projects eligible for this funding include planning, engineering design, and evaluation of transit projects and other technical transportation-related studies; capital projects; job access and reverse commute (JARC) projects; and operating costs in areas with a population of fewer than 200,000 people. All preventative maintenance and some Americans with Disabilities Act (ADA) complementary paratransit service costs qualify as capital costs. Both CAT and JAUNT receive federal funding from this program.

Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310)

The Enhanced Mobility of Seniors and Individuals with Disabilities Program allocates funding to provide increased transportation options to seniors and those with disabilities who are transit-dependent. This service surpasses the standard public transportation services and the complementary paratransit services outlined by the ADA. Projects eligible for this funding include public transportation projects that meet the needs of seniors or individuals with disabilities; exceed the requirements of ADA; or improve access to fixed-route service and reduce dependence of individuals with disabilities on complementary paratransit service. JAUNT's Transit Development Plan for FY 2012-2017 cites federal funding from the New Freedom Program, FTA Section 5317, which was consolidated into this program.

Formula Grants for Rural Areas (Section 5311)

The Rural Areas Program allocates federal funding for capital, planning, and operating assistance to states in an effort to supplement public transportation for rural areas with a population of fewer than 50,000 people, and where residents typically depend on public transportation. JAUNT receives federal funding from this program.

» State Funding Sources

The Commonwealth Transportation Fund (CTF) obtains revenues from various federal and state sources. The Department of Taxation develops Virginia's official revenue forecast, which is used to determine major state revenues. The Virginia Department of Rail and Public Transportation (DRPT) estimates the federal revenues from the Federal Transit Administration (FTA). Allocations are made to the Construction Fund, Mass Transit Fund, Airport Fund, and Port Fund, all of which receive capital from the main Transportation Trust Fund in amounts that are based on a formula outlined by the Code of Virginia. The Mass Transit Fund, administered by DRPT, finances transit operations, capital, and special programs.

» Local Funding Sources

The majority of CAT's funding comes from local sources including the City of Charlottesville and Albemarle County. Albemarle County funds all of Route 5 and Route 10, half of Route 3, and 46% for Route 11. UVA also provides funding for the Fare-Free Access program and the Free Trolley. Similarly, the largest portion of JAUNT's funding is from local sources. While the City of Charlottesville and Albemarle County are its most significant local contributors, local funding also comes from the surrounding counties it serves, including Buckingham, Fluvanna, Louisa, and Nelson.

» Operating Revenues

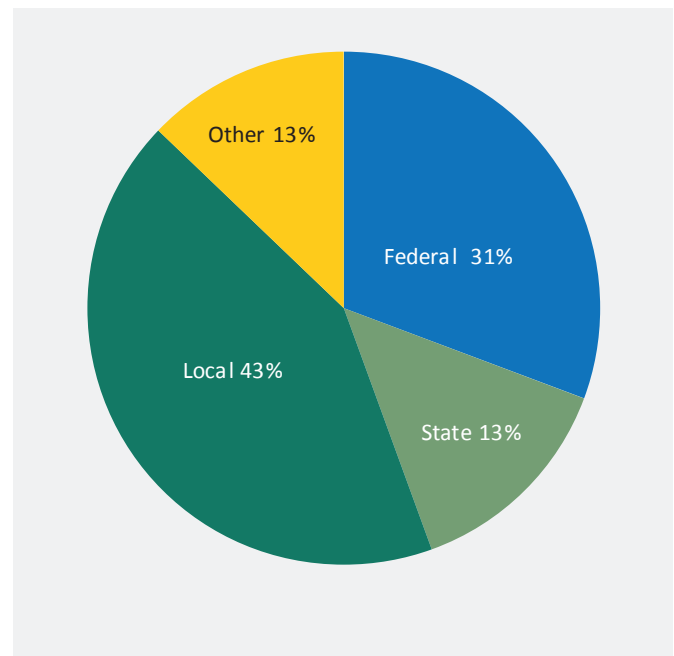
Farebox revenues collected from passengers account for less than 10% of both CAT's and JAUNT's funding. As such, CAT and JAUNT rely heavily on federal, state, and local subsidies to provide service to the region.

Charlottesville Area Transit (CAT) had a budget of just over \$6 million for FY 2012. Amounts and sources of revenues for CAT in 2012 are detailed in [Table 9-1](#). JAUNT had a budget of just over \$5 million for FY 2012. Amounts and sources of revenues for JAUNT in 2012 are detailed in [Table 9-2](#).

CAT FY 2012 Projected Revenue Sources (Table 9-1)

Federal	\$1,848,780
Urbanized Area Formula Program (5307)	\$1,848,780
State	\$825,612
State Mass Transit Fund	\$825,612
Local	\$2,571,112
City of Charlottesville	\$1,923,108
Albemarle County	\$648,004
Other Revenue Sources	\$772,908
Farebox Revenues	\$440,000
UVA Fare-Free ID Access	\$145,000
UVA Free Trolley	\$60,000
Advertising	\$75,000
Rent	\$52,908
Total Revenue	\$6,018,412

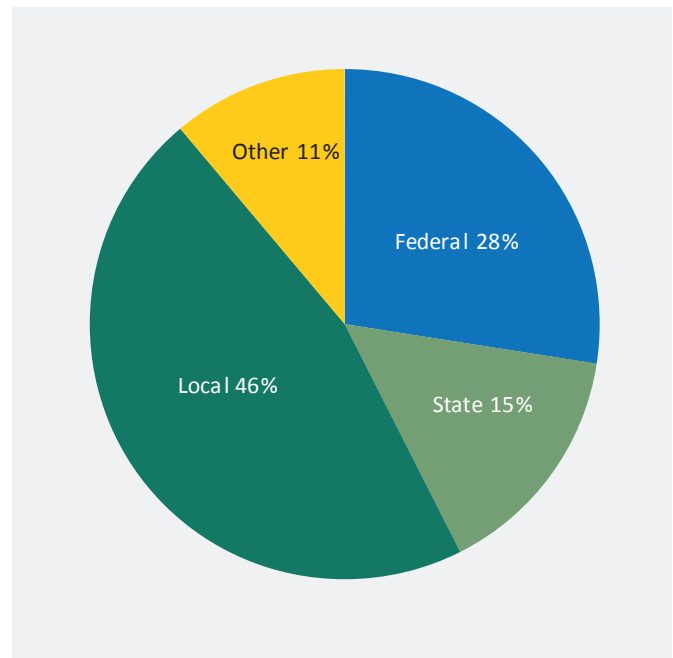
CAT FY 2012 Projected Revenue Sources (Figure 9-1)



JAUNT FY 2012 Revenue Sources (Table 9-2)

Federal	\$1,377,030
Urbanized Area Formula Program (5307)	\$513,000
Formula Grants for Rural Areas (5311)	\$864,030
State	\$754,510
Formula Assistance Funds (5307)	\$429,710
Formula Assistance Funds (5311)	\$324,800
Local	\$2,322,070
City of Charlottesville - Urban	\$832,440
City of Charlottesville - Rural	\$22,520
Albemarle County - Urban	\$772,480
Albemarle County - Rural	\$253,710
Nelson County	\$105,150
Fluvanna County	\$104,460
Louisa County	\$197,460
Buckingham County	\$30,860
Other	\$2,990
Other	\$558,180
Farebox Revenues	\$554,580
MPO Funding	\$3,600
Total Revenue	\$5,011,790

JAUNT FY 2012 Revenue Sources (Figure 9-2)



► Project Cost Estimates

Chapter 7 discussed twenty-one capacity-building candidate projects (ten roadway and eleven transit projects) that were initially considered for inclusion in the LRTP. (Refer to [Table 7-1](#), the Candidate Project List). Each of these roadway projects underwent an early study to assess what impacts they were expected to have on congestion in 2040. The candidate transit projects were also evaluated based on their anticipated daily ridership. Projects that appeared to benefit the community were further considered for inclusion in the Long Range Transportation Plan. This included six of the ten candidate roadway projects and eight of the eleven transit candidate transit projects.

Planning-level cost estimates were prepared for these fifteen projects prior to receiving the revenue forecast from VDOT. This was done to provide staff and decision-makers

with an opportunity to evaluate the anticipated benefits of a project against its estimated cost. The list of non-capacity improvements was extensive, however, making the development of cost estimates time-prohibitive.

Cost estimates for non-capacity projects (bridges, intersections, and bicycle/pedestrian improvements), therefore, were developed only after the public, staff, and other stakeholders had an opportunity to reduce the number of projects being considered during the prioritization process.

Roadways

Roadway cost estimates were prepared using VDOT’s Statewide Planning Level Cost Estimate template. Although the list was initially narrowed to seven roadway projects, additional roadway improvements were added for consideration in the LRTP as the scenarios were studied. Throughout the scenario assessment process, eleven different roadway projects were evaluated with corresponding cost estimates. [Table 9-3](#) shows the estimated cost for all eleven roadway projects considered for inclusion in the LRTP. Projects listed in **bold** are those that were added during the scenario assessment process.

Roadway Projects Cost Estimates (Table 9-3)

ROADWAY PROJECTS	EXISTING ESTIMATE (IN MILLIONS OF DOLLARS)
US 29/US 250 Widening	\$86.2
I-64/US 29 Interchange	\$123.3
US 250 - Shadwell Widening	\$57.8
I-64/US 250 Interchange	\$71.4
Berkmar Drive Extended	\$36.4
US 250 - Pantops Widening	\$44.4
Black Cat Road Geometric Improvements	\$6.1
Milton Road Geometric Improvements	\$15.7
5th Street Extended Widening	\$31.1
Eastern Connector (4-lane)	\$144.5
Western Bypass Extension	\$128.9
Total Estimate	\$745.8

Public Transportation

Due to the absence of a template for estimating transit costs, staff developed a worksheet that would generate costs, accounting for operating, overhead, and maintenance costs, as well as capital and revenue. The best tools available to MPO staff were used to generate these cost estimates during the development and assessment of these projects. The values calculated were subject to change (and did change for some projects) as projects were better defined throughout this process.

Although the list was initially narrowed to eight transit projects, additional transit routes were added for consideration in the LRTP and four of the initial routes were modified

during this process. Throughout the scenario assessment process, nine distinct transit projects were evaluated with corresponding cost estimates. [Table 9-4](#) shows the estimated cost for all nine transit projects considered for inclusion in the LRTP. Projects listed in **bold** are those that were added during the scenario assessment process. Projects listed in *italics* are those that were modified during the scenario assessment process.

Transit Projects Cost Estimates (Table 9-4)

TRANSIT PROJECTS	EXISTING ESTIMATE (IN MILLIONS OF DOLLARS)
<i>Multimodal US 29 & BRT on US 29: NGIC to Downtown</i>	\$73.3
<i>Crozet peak-hour Service</i>	\$9.6
<i>Route 10 transit-only lane on US 250/ Free Bridge</i>	\$10.1
Route 5 extension to UVA Health Center	\$2.6
<i>Airport route</i>	\$51.6
Ivy Road Transit Route	\$18.1
Pantops - US 29 Transit Route	\$47.1
Double Existing CAT Service	\$254.2
Meadow Creek Parkway Route	\$25.6
Total Estimate	\$492.2

Funding Projections

VDOT receives funding from both the state and federal governments to be allocated to the MPO for projects included in the LRTP. This funding is mostly geared toward a variety of roadway improvements, however, some of this funding can be used for transit and bike and pedestrian improvements. This funding is estimated for the LRTP process based on existing state and federal revenues.

To develop these funding estimates VDOT reviews anticipated state and federal revenues and extrapolates these revenues over the life of the Long Range Transportation Plan. For state revenues, VDOT works with the Virginia Department of Taxation to determine the growth rate for each revenue source. The average growth for all state revenue sources was 2.1% annually. For federal revenues, the forecasts anticipate no growth due to the current uncertainty regarding transportation funding at the federal level.

Revenues were forecasted for the entire state and then split out by each Metropolitan Planning Organization. These splits were determined by MPO populations. The anticipated revenue for the entire state totals to \$219 billion dollars; the Charlottesville-Albemarle MPO's allocation of that revenue is \$565 million dollars. The Charlottesville-Albemarle MPO received its funding forecast on December 17th 2013. This funding estimate is an increase from the previous Long Range Transportation Plan. (The total available funds projected from the previous Long Range Transportation Plan, UnJAM 2035, were estimated at \$390.8 million).

The estimated funding is broken into two broad categories: Non-Maintenance and Maintenance allocations. Maintenance allocations do not fund the projects laid out in this plan; only the non-maintenance allocations are relevant. Maintenance allocations must, however, be accounted for within the LRTP to ensure appropriate fiscal constraint. Maintenance allocations for the 2040 LRTP fall under a single category and are derived from state and federal funding as detailed in [Table 9-5](#). Maintenance allocations are outlined from 2014-2019 for the SYIP, and from 2020-2040 for the remainder of the LRTP, and can be applied to projects including roadways, bridges, intersections, and bike and pedestrian infrastructure.

Non-Maintenance Allocations

The non-maintenance allocations are broken into three general categories:

1. Other Administrative Programs – State funding that supports the following programs:
 - a. Administrative and Support Services
 - b. Environmental Monitoring and Evaluation
 - c. Construction Management
 - d. Ground Transportation Planning and Research
2. Construction (Non-Formula) – Federal, State, and Local funds that can be used for bridge, interstate, and primary roadway projects.
3. Construction (Formula) – State funding that can be used for primary, secondary, and urban projects. Projects located in the City of Charlottesville typically come from this funding source.

[Table 9-5](#) lists the Non-Maintenance allocations for the 2014-19 SYIP as well as the 2040 LRTP.

Non-Maintenance and Maintenance Allocations (Table 9-5)

NON-MAINTENANCE ALLOCATIONS	FY 2014-19 SYIP TOTAL	FY 2020-40 LRTP TOTAL	CLRP TOTAL
Other Administrative Programs			
State	\$12,670,570	\$58,395,598	\$71,066,168
Total Other Administrative Programs	\$12,670,570	\$58,395,598	\$71,066,168
Construction (Non-Formula)			
Federal	\$145,314,694	\$235,362,608	\$380,677,302
State	\$12,561,122	\$7,528,463	\$20,089,585
Local	\$26,427	\$1,240,496	\$1,266,923
Total Construction (Non-Formula)	\$157,902,243	\$244,131,567	\$402,033,810
Construction (Formula)			
State	\$5,605,236	\$263,123,904	\$268,729,140
Total Construction (Formula)	\$5,605,236	\$263,123,904	\$268,729,140
Total Non-Maintenance	\$176,178,049	\$565,651,069	\$741,829,118
MAINTENANCE ALLOCATIONS			
State	\$14,099,221	\$70,100,634	\$84,199,854
State/Federal	\$163,756,241	\$807,847,104	\$971,603,345
Total Maintenance	\$177,855,462	\$877,947,738	\$1,055,803,199
Charlottesville Total	\$ 354,033,510	\$ 1,443,598,807	\$ 1,797,632,317

The MPO has distributed the funding shown in [Table 9-5](#) as the Total Non-Maintenance funding for the FY2020-40 LRTP over five major project categories: Roadways, Intersections, Bridges, Enhancements (Bicycle/Pedestrian), and Preliminary Engineering (PE) Studies.

Roadways

The Preferred Scenario identified five roadway projects for inclusion in the 2040 LRTP. Two additional projects were added at the request of the County and committees, raising the total to seven roadway projects. The funding allocated to roadway projects was determined by first deducting the revenue necessary for bridges, and then subtracting the apportionments for intersections and bicycle/pedestrian improvements. The result is approximately \$312.6 million available for roadway improvement projects. (Refer to Appendix A: Roadway Projects).

Intersections

The LRTP includes one specified intersection improvement, and a general line-item funding additional intersection improvements to be determined at a later date, after additional studies can be conducted. Approximately \$54 million has been allocated for intersection improvements. This allocation was estimated by taking the “Group 3: Construction-Safety/ITS/Operational Improvements” construction total from the FY12-15 Transportation Improvement Program (TIP) for FY15 of \$2.7 million and applying that same value annually for the twenty-year life of the plan. In other words, \$2.7 million per year for twenty years yields \$54 million for safety/intersection improvements. (Refer to Appendix A: Intersection Projects).

Bridges

VDOT developed a list of fifteen bridges that must be included in the plan, based on their sufficiency rating. Given the critical nature of these projects, the total cost was estimated (\$139.5 million) and allocated to bridge improvements. (Refer to appendix A: Bridge Projects).

Bicycle and Pedestrian

A list of forty-five bicycle and pedestrian improvements was developed for inclusion in the LRTP. These projects were priorities identified not only by the public at the outreach event on October 23rd, 2013, but also by the City and MPO staff. Approximately \$52 million has been allocated for bicycle and pedestrian improvements. This allocation was estimated by taking the “Group 4: Construction-Transportation Enhancements/Byway/Non-Traditional” Total Cost of construction over the four years from the FY12-15 Transportation Improvement Program (TIP) of \$10.3 million and calculating the average annual cost of \$2.6 million. The \$2.6 million annual cost was assumed to be the annual cost for the twenty-year

life of the plan. In other words, \$2.6 million per year for twenty years yields \$52 million for bicycle and pedestrian improvements. (Refer to Appendix A: Bike and Pedestrian Projects).

Preliminary Engineering (PE) Studies

Three projects are listed in the PE Studies category, and \$7,192,000 have been allocated to their studies. These projects include the widening of U.S. 29/250 bypass from Barracks Road to I-64, the widening of U.S. 250 from I-64 to N. Milton Road, and the roadway portion of Berkmar Drive Extended. (Refer to Appendix A: Roadway Projects).

Table 9-6 lists the funding allocated to each type of project from the revenue forecast.

Funding Allocations (Table 9-6)

PROJECT TYPE	FUNDING ALLOCATED
Roadways	\$312,627,138
Bridges	\$139,536,000
Intersections	\$54,000,000
Bicycle/Pedestrian	\$51,984,000
PE Studies	\$7,192,000
Total (Inflated to YOE)	\$565,339,138
Revenue Forecast	\$565,339,138
Balance	\$0

Public Transportation

Although limited funding administered by VDOT may be used on transit projects, funding for public transportation primarily comes from sources other than roadway improvement projects funds, and is not included in the \$565.6 million estimated by VDOT. The MPO does not presently have an estimate for how much funding will be available for these projects. It is challenging to develop a revenue forecast for transit projects due to their funding structure.

*The MPO does have an overall estimate for how much funding our regional transit providers, CAT and JAUNT, anticipate receiving in operating and capital funding over the life of the long range transportation plan. This funding is solely for the purpose of maintaining existing operating service and capital purchases for that service. This estimate does not apply to the development of new projects which is the purpose of funding in the long range transportation plan. The MPO is currently working with local transit providers, and FHWA, to determine the most appropriate approach for incorporating this funding amount into the plan.

► Project Prioritization

Overall, one hundred projects were considered for inclusion in the Long Range Transportation Plan. Given the limited funding the MPO expects to receive, not all of the projects can be built over the life of this plan, which will run from 2020 to 2040. Therefore, projects were prioritized so that funding could be allocated according to which projects are most necessary for the region. The prioritization of projects is based on two key elements: 1) how each project performed when it was analyzed as part of the project scenarios; and 2) the planning-level cost estimates.

The scenario analysis of the capacity projects outlined in Chapter 7 assessed the performance of each of the projects listed in Tables 9-3 and 9-4. A series of sixteen performance measures were used in this process to study the mobility, environmental, economic, and community impacts of each project, as discussed in Chapter 5. This analysis was the fundamental method used to prioritize the projects, enabling decision-makers to reduce the list of twenty-one roadway and transit projects to eight projects in the Preferred Scenario (five roadway and three transit projects). The County and VDOT each added a roadway project, bringing the total to ten capacity-building projects.

The planning-level cost estimates indicate that the available funding would not be sufficient to construct all of the projects considered for inclusion in the plan, even if they were developed in 2014. Table 9-7 shows the total cost estimates from each of the finalized capacity and non-capacity projects lists, excluding transit projects, given that those come from a different funding source.

Unconstrained Projects Cost Estimates (Table 9-7)

PROJECT CATEGORY	NUMBER OF PROJECT	ESTIMATED COST	FUNDING ALLOCATED	BALANCE
Roadway Projects	7	\$448.1	\$311.8	\$135.5
Transit Projects	3	\$93.0		
Safety (Intersection) Projects	5	\$10.8	\$54.0	\$43.2
Bike/Ped Projects	69	\$76.9	\$52.0	\$24.9
Bridges	16	\$147.8	\$147.8	\$8.3
Total Cost**	100	\$683.6	\$565.6	\$125.5

*The Funding Allocated for Roadway Projects does not include the \$7.1 million allocated to PE studies
 **The total cost does not include Transit Projects which are not fiscally-constrained

It is important to note that the Estimated Cost indicates what the projects would cost if they were constructed in 2014. However, projects that are already funded and will be implemented immediately, between 2014 and 2019, are included in the State’s Six-Year Improvement Program (SYIP). (Refer to Figure 9-3). This generally means that the year 2020 is the earliest that funding can be allocated to non-SYIP projects, making it impossible for any of the project costs to be as low as the Estimated Cost indicates.

Year of Expenditure (Figure 9-3)



For the purpose of this plan, projects were divided into three categories for the year of expenditure (YOE): Short-Term, Mid-Term, and Long-Term. Short-Term projects are those that would begin implementation immediately after the SYIP projects are developed, i.e. between 2020 and 2026. Mid-Term projects are those that would begin implementation following the Short-Term projects, or between 2027 and 2034. Long-Term projects are those that would begin implementation subsequent to the Mid-Term projects, or between 2035 and 2040. The cost for each project was inflated based on its expected year(s) of expenditure.

In addition to determining how soon each project would be constructed over the span of the 20-year LRTP, roadway projects were broken into phases. The roadway phasing included Preliminary Engineering, Right-of-Way, and Construction. This allowed the cost estimates to more accurately reflect the expected cost of building the project. It also allowed large-scale and costly projects to be broken into phases, providing an opportunity to, at a minimum, start work on a project without needing the full funding of construction up front. For example, the US 29/US 250 Widening project is expected to be very costly and would absorb a large portion of the roadway funds. Additional funding can remain available to invest in other roadway projects if only the Preliminary Engineering and Right-of-Way phases commence during the span of this plan, and Construction is added in the pursuant LRTP. In a similar manner, transit costs for operations, capital, and infrastructure were each estimated based on the year of

expenditure. For example, the Route 10 improvements require a widening of US 250 and adding a transit-only lane, as well as increasing the frequency of service. If CAT wanted to begin increasing service prior to the completion of the transit-only lane on US 250, the cost estimate can reflect funding the infrastructure costs of this improvement subsequent to the operations and capital costs. As a result, the projects were prioritized based on how soon decision-makers wanted to see them built, as well as by which projects were deemed more imperative than other projects.



▶ **PROJECT PHASE:**

- **Preliminary Engineering** entails studying and designing the project for development.
- **Right-of-Way** allows the property to be acquired to construct the project.
- **Construction** is the phase where the project is built.

▶ Constrained Project List

The Constrained Project List is restricted to the projects that the Charlottesville-Albemarle region expects to be able to fund with the estimated revenue between 2020 and 2040. While other projects included in the Preferred Scenario are important to the region, sufficient funding will not be available to construct all of them during the life of this plan. As a result, staff worked with the community and the MPO committees to prioritize which projects should be implemented by 2040. Those projects that could not be funded were placed on the Visioning List, or Unconstrained Project List. If additional funding becomes available in the future, projects on the Visioning List are eligible to receive that funding. The 2040 Charlottesville-Albemarle MPO's Constrained Long Range Plan (CLRP) contains (72) projects and is Appendix A* of this document.

*The Constrained Project List in Appendix A also shows projects that are already fully-funded in the SYIP. These projects need to be in the 2040 LRTP, but they do not take away from the \$565 million available for the 2040 LRTP Fiscal Constraints.

▶ Visioning List (Unconstrained Project List)

The Visioning List, or Unconstrained Project List, is comprised of projects that were not reasonably expected to receive funding between 2020 and 2040, but remain priorities to the community. If additional funding becomes available in the future, projects on this list are eligible to receive that funding and may be implemented sooner than expected. The 2040 Charlottesville-Albemarle MPO's Visioning List contains (73) projects listed in Appendix A of this document.