

# *APPENDIX E*

---

## *Eight Core Programs of the STIP and 2016 Program Charts*

***THIS PAGE  
LEFT BLANK INTENTIONALLY***

# West Virginia 2016-2021 STIP

---

---

## EIGHT CORE PROGRAMS OF THE STIP

The Six-Year Statewide Transportation Improvement Program (STIP) continues to evolve as efforts are made to improve the management and reporting of the program. The 2016-2021 STIP is organized so that all programmed projects will fall within one of the designated seven core programs. The goal is to better manage assets with less emphasis on the type of funding. These core programs will be refined over time to better analyze and manage the STIP. The core programs are as follows:

- Bridge Program
- Community Development and Connectivity Program
- Localized Mobility Improvement Program
- Planning and Workforce Development Program
- Regional Mobility Program
- Resurfacing Program
- Traffic Program
- Transit Program

For each individual core program, a “pie” chart has been developed to show how each core program relates to the entire STIP (see Figures #7 to #13). As discussed below, each of the core programs are further subdivided into subcategories to simplify the monitoring of funds. Each of the subcategories is shown in the corresponding bar chart. Estimated core program amounts are shown in total dollars; which includes federal dollars and the State match.

The FFY 2016 STIP has an estimated total budgeted program of \$453,639,648.

## THE STATEWIDE LONG RANGE PLAN

The Statewide Long Range Plan is the West Virginia Department of Transportation’s (WVDOT) plan for transportation investment and decision making. The Plan is an important first step in charting a direction for WVDOT and the State.

The planning process was initiated in early August 2008 and was completed in the summer of 2010. As part of the project plan, visions and goals were developed by working with a policy committee composed of representatives from all modes of transportation and other agencies with a major vested interest. The vision, as it pertains to West Virginia, is for: *A well-maintained and modern multi-modal transportation system.*

The development process inventoried the State’s overall modal infrastructure and identified the physical assets under the control of each agency of the WVDOT. It reviewed historic funding expenditure types and levels corresponding with each revenue source and mode and used this information to develop a 25-year revenue forecast. An estimate of future transportation needs for each modal agency has been developed and has been compared to

# **West Virginia 2016-2021 STIP**

---

---

those needs. In addition, the unfunded projects were prioritized by utilizing a benefit-to-cost ratio.

## **BRIDGE PROGRAM (FIGURE #7)**

The Bridge Program accounts for 15% (\$86,919,989) of the FFY 2016 STIP estimated total budgeted program. The Bridge Program is subdivided into five categories:

- Inspections (\$3,750,000)
- Bridge Replacement (\$39,557,369)
- Bridge Rehabilitation (\$25,030,400)
- Bridge Concrete Overlays/Sealers (\$12,832,120)
- Bridge Clean & Paint (\$3,750,000)

The goal of this program, with the exception of the Bridge Replacement subprogram, is to maintain the existing highway infrastructure. The WVDOH follows a set schedule for interim/periodic inspections of all bridges within the state's system. Information obtained during these inspections will lead to recommended improvements that fall within the other subprograms in the Bridge Program.

Roads are crucial to the mobility of the nation; however, one deficient bridge, if it impedes traffic, can render miles of highway useless. Therefore, it is necessary to have ample funds available to replace such structures to avoid delays or detours.

## **COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM (FIGURE #8)**

The Community Development and Connectivity Program accounts for 2% (\$13,803,035) of the FFY 2016 STIP estimated total budgeted program and is subdivided into three categories:

- Other Federal (\$600,000)
- Community Development (\$2,669,636)
- Bike and Pedestrian Projects (\$9,524,687)

This program is more “localized” and the surrounding community typically feels a direct connection and/or benefit from this program.

The Bike and Pedestrian Projects can include the construction of motorized and non-motorized trails, construction of pedestrian bridges, sidewalks and crosswalks, and improvements to existing bike and pedestrian trails and facilities.

The Community Development subprogram covers the costs associated with public education from development of brochures to bicycle safety programs, congestion mitigation and air quality work, as well as, other miscellaneous activities.

# **West Virginia 2016-2021 STIP**

---

---

## **LOCALIZED MOBILITY IMPROVEMENT PROGRAM (FIGURE #9)**

The Localized Mobility Improvement Program funds projects that are associated with safety improvements, reduction of congestion, urban sprawl issues, and the improvement of air quality. The program accounts for 25% (\$146,140,000) of the FFY 2016 STIP estimated total budgeted program and is subdivided into five categories:

- Slide Correction (\$4,265,000)
- Road/Curve Improvement (\$7,848,000)
- New Road/Bridge Construction (\$92,587,700)
- New Lane Construction (\$19,900,000)
- Add Auxiliary Lane (\$29,072,300)

## **PLANNING AND WORKFORCE DEVELOPMENT PROGRAM (FIGURE #10)**

The Planning and Workforce Development Program accounts for 2% (\$13,391,356) of the FFY 2016 STIP estimated total budgeted program. The program is subdivided into three categories:

- Workforce Development (\$532,000)
- Training (\$351,647)
- Statewide Planning and Research Program (\$10,647,160)
- Metropolitan Planning Program (\$2,087,500)

The Workforce Development subprogram covers the cost associated with funding interagency positions, such as United States Army Corps of Engineers (USACE), US Fish & Wildlife Service (USFWS) and the WV State Historic Preservation Office (WVSHPO). The Training subprogram is the annual budget that is allocated to train and educate the Workforce. The Statewide Planning and Research Program is the federally mandated program that states follow to cooperatively, continuously and comprehensively make transportation investment decisions.

## **REGIONAL MOBILITY PROGRAM (FIGURE #11)**

The Regional Mobility Program accounts for 22% (\$129,090,500) of the FFY 2016 STIP estimated total budgeted program. This program is subdivided into three categories:

- New Road/Bridge Construction (\$34,534,500)
- APD Program (\$94,556,000)

As for New Road Construction, the Regional Mobility Program focuses on expansion and new corridors, such as Corridor H, Coalfields, WV 10, etc.

Unlike the program funds described in Section 5 of this report, the receipt of “special” federal-aid cannot be predicted with any certainty. These funds typically came in the form of

# **West Virginia 2016-2021 STIP**

---

---

“earmarks” contained in yearly federal appropriations bills (which can be used by WVDOH only for the specific project described). Matching ratios for discretionary funds frequently are specified in legislation. In the past, much of the discretionary funding received by the WVDOH required no state match (i.e., 100/0 matching ratio); however, more recent funding has required the standard 80/20 match. National funding needs for the war on terror and recent natural disasters along with MAP-21 have severely limited, if not eliminated, the amounts of discretionary funding available for transportation purposes.

WVDOH owns/maintains a total of six APD corridors (D, E, G, H, L, and Q) which total 425 miles that are situated within West Virginia. The construction of five of the corridors (D, E, G, L and Q) has already been completed. Corridor H, the longest corridor in the State at approximately 140 miles, is roughly 76% complete with 91 miles open to traffic and another 10 miles under construction. The remaining, yet-to-be constructed 32 miles will traverse some of the most difficult terrain in the State; as the result, it is anticipated that it will cost nearly \$300 million to finish.

## **RESURFACING PROGRAM (FIGURE #12)**

The Resurfacing Program accounts for 21% (\$119,888,071) of the FFY 2016 STIP estimated total budgeted program. This program is subdivided into three categories:

- Fed Aid Other Resurfacing (\$55,825,071)
- FAI (\$34,866,000)
- APD Program (\$25,000,000)

The various subprograms are determined by the road classifications. Interstate systems (I-64, I-70, I-77, I-79, I-81, and I-470) are covered in the FAI (Federal Aid Interstate) program, whereas Appalachian Corridors (D, G, H, L, and Q) along with I-68, which is also known as Corridor E, are accounted for in the APD program. All other federal-aid roadway systems fall within the Fed Aid Other Resurfacing subprogram. For FFY 2016, the WVDOH will have a separate program for Pavement Preservation and Alternative Methods. This program will fund approximately \$20 million worth of alternative methods situated on the Interstate, APD, and Fed Aid Other systems.

## **TRAFFIC PROGRAM (FIGURE #13)**

The Traffic Program accounts for 8% (\$46,489,203) of the FFY 2016 STIP estimated total budgeted program. The Traffic Program is subdivided into five categories:

- Traffic Signals (\$4,885,000)
- Striping (\$14,228,378)
- Signing (\$3,900,000)
- Safety Improvement (\$15,678,025)
- RR Signals (\$2,268,725)
- Lighting (\$4,050,000)

# ***West Virginia 2016-2021 STIP***

---

---

The Traffic Program subprograms are self explanatory and ultimately focus on public safety.

## **PUBLIC TRANSIT (FIGURE #14)**

Funding for public transit systems in West Virginia is a combination of federal, state and local funding sources. Federal Transit Administration's (FTA) funding provides the critical majority of the state's transit system's funding. State government, through the West Virginia Division of Public Transit (WVDPT) also provides approximately 2.4 million dollars yearly in General Revenue state funding to support public transit in the form of operating assistance to rural transit systems and capital assistance to both rural and urban systems.

Public Transit accounts for 5% (\$25,680,962) of the FFY 2016 STIP estimated total budgeted program. Transit Programs administered by the State of West Virginia's Division of Public Transit or WVDPT consist of six categories:

- Section 5304 – Statewide Transportation Planning Program (\$534,767)
- Section 5307 – Urbanized Area Formula Grants (\$9,341,639)
- Section 5310 – Enhanced Mobility of Seniors and Individuals with Disabilities (\$2,014,422)
- Section 5311 – Rural Area Formula (\$9,719,735)
- Section 5329 – Safety Oversight (\$239,307)
- Section 5337 – State of Good Repair (Morgantown /PRT) (\$875,945)
- Section 5339 – Bus and Bus Facilities (\$1,948,422)

The Section 5304 Statewide Transportation Planning Program provides funding to support cooperative, continuous, and comprehensive planning for making transportation investment decisions in metropolitan areas and statewide.

The Section 5307 program provides grants to Urbanized Areas (UZA) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances. These funds constitute a core investment in the enhancement and revitalization of public transportation systems in the nation's urbanized areas, which depend on public transportation to improve mobility and reduce congestion.

The Section 5310 program is designed to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expanding transportation mobility options. This program supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities.

The Section 5311 program provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000, where many residents often rely on public transit to reach their destinations.

## ***West Virginia 2016-2021 STIP***

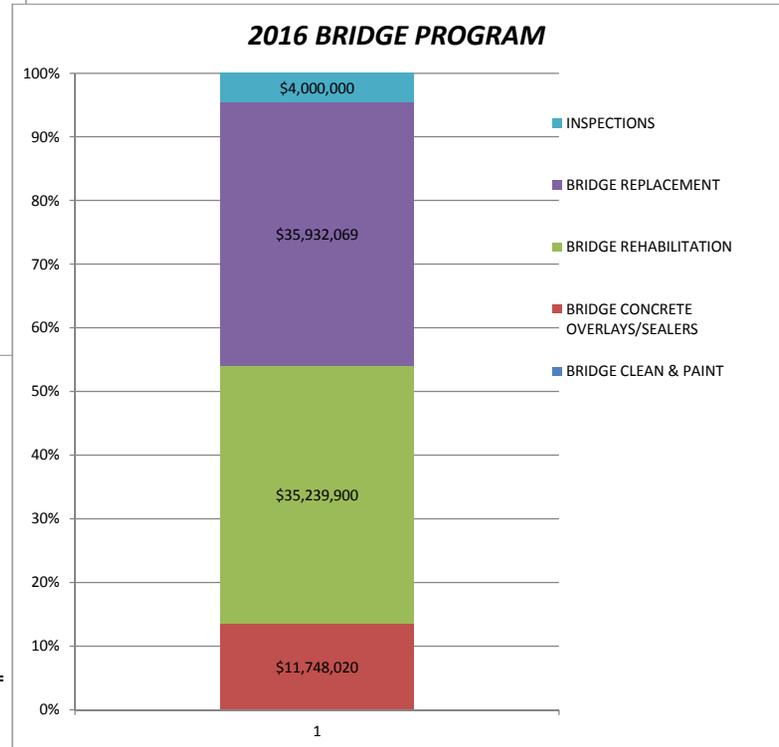
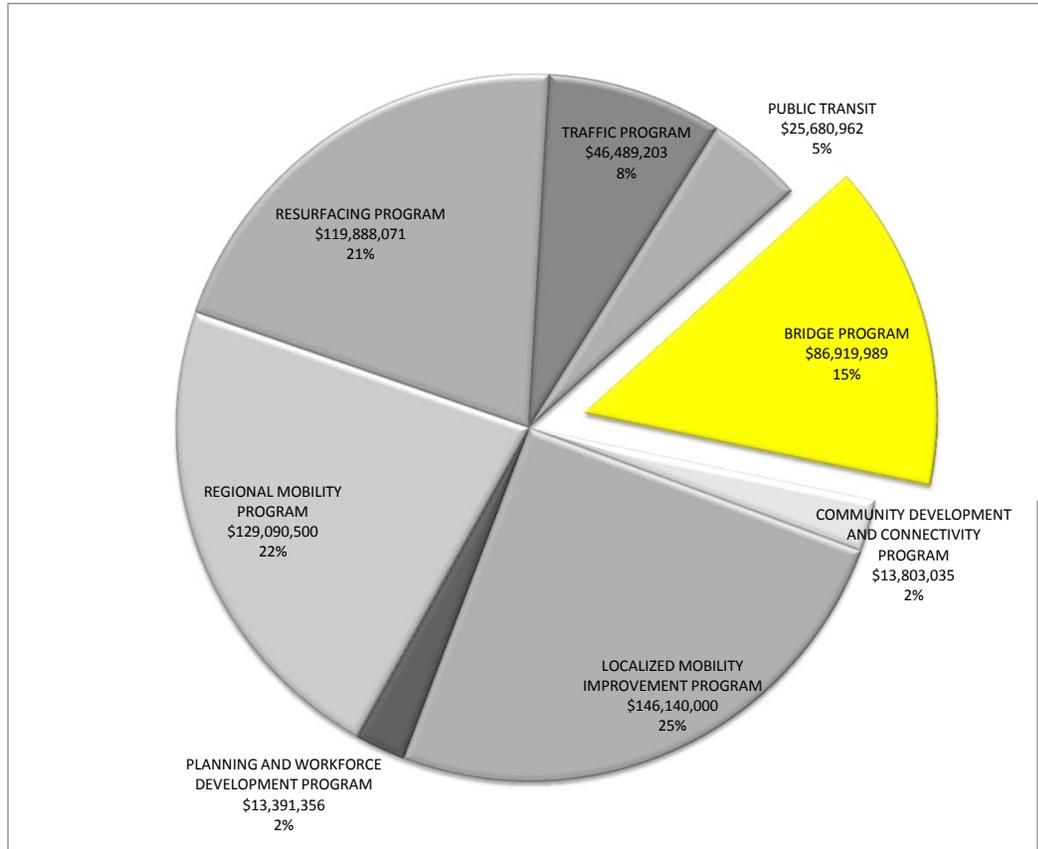
---

---

Section 5329 grants FTA the authority to establish and enforce a new comprehensive framework to oversee the safety of public transportation throughout the United States as it pertains to heavy rail, light rail, buses, ferries, and streetcars. The law requires, among other things, that FTA update the State Safety Oversight (SSO) program to ensure that rail transit systems are meeting basic, common-sense safety requirements. The State of WV has one system that qualified under the Section 5329 program and is the Personal Rapid Transit (PRT) in Morgantown which is operated by West Virginia University.

Section 5337 State of Good Repair is a new formula-based program that is FTA's first stand-alone initiative written into law that is dedicated to repairing and upgrading the nation's rail transit systems along with high-intensity motor bus systems that use high-occupancy vehicle lanes, including bus rapid transit (BRT). The PRT system in Morgantown is the lone sub-recipient of these funds in the state.

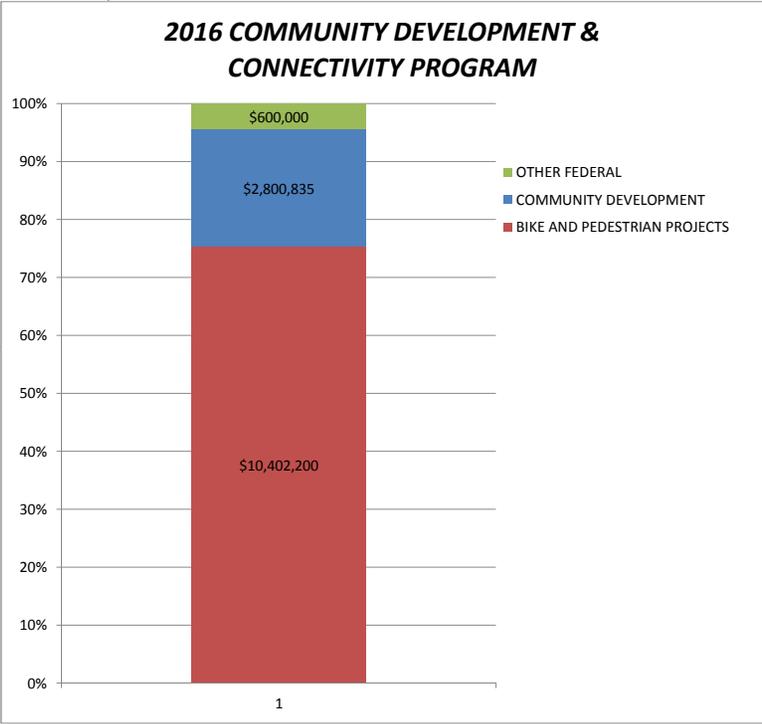
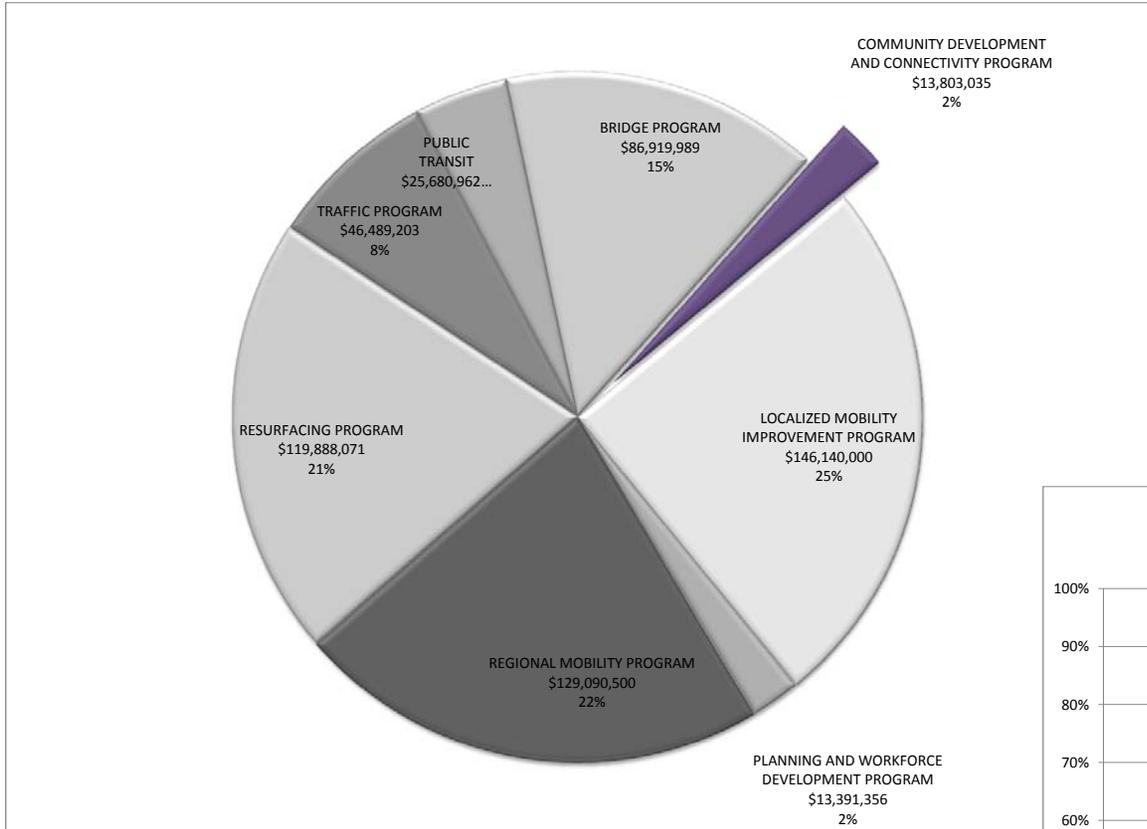
Section 5339 Provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.



**FIGURE #7**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

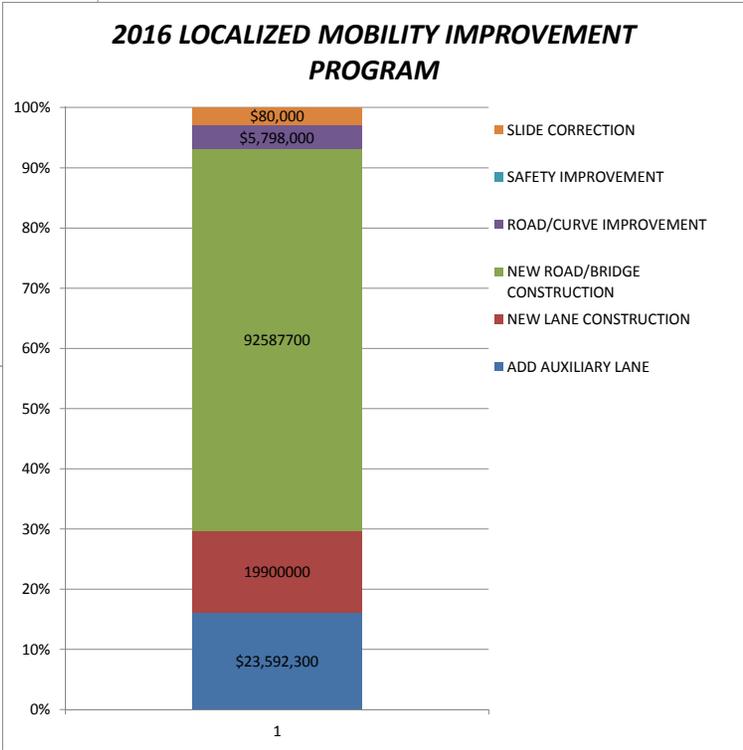
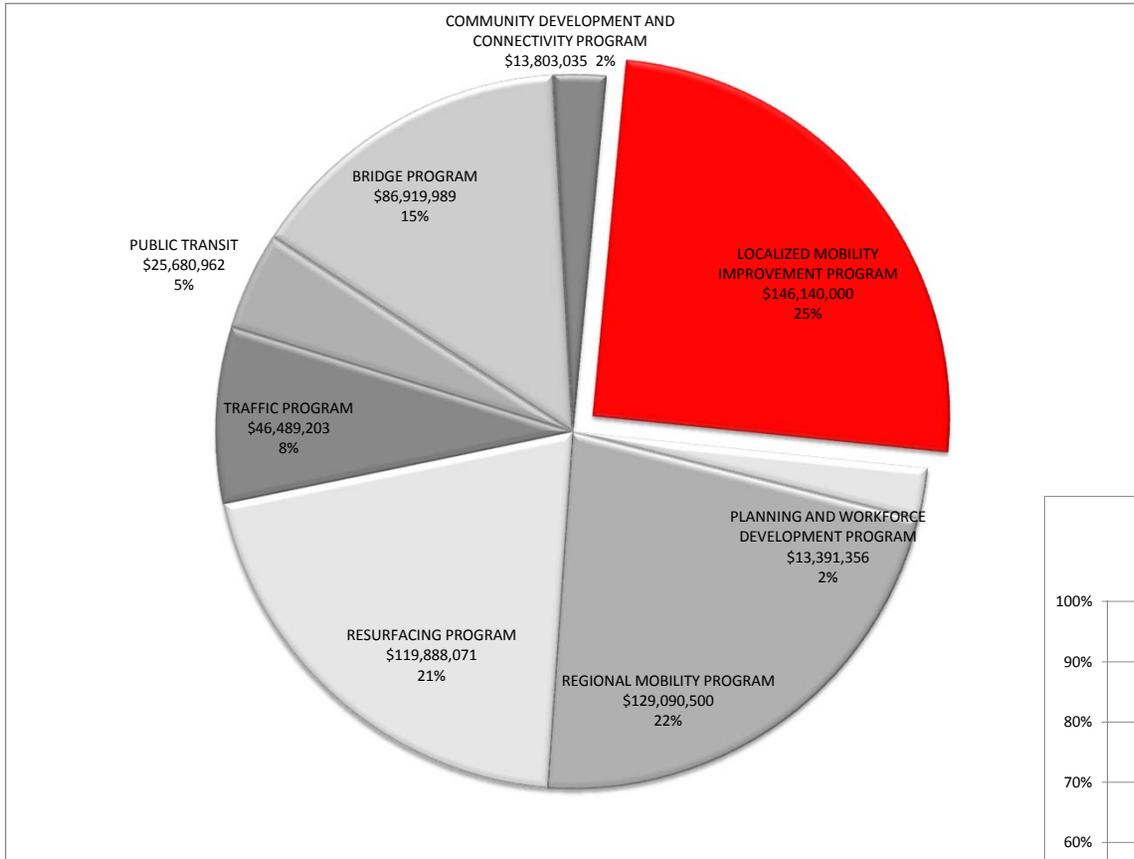
BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL HIGHWAYS PROGRAM</b>	<b>\$555,722,154</b>
<b>TOTAL PUBLIC TRANSIT PROGRAM</b>	<b>\$25,680,962</b>



**FIGURE #8**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

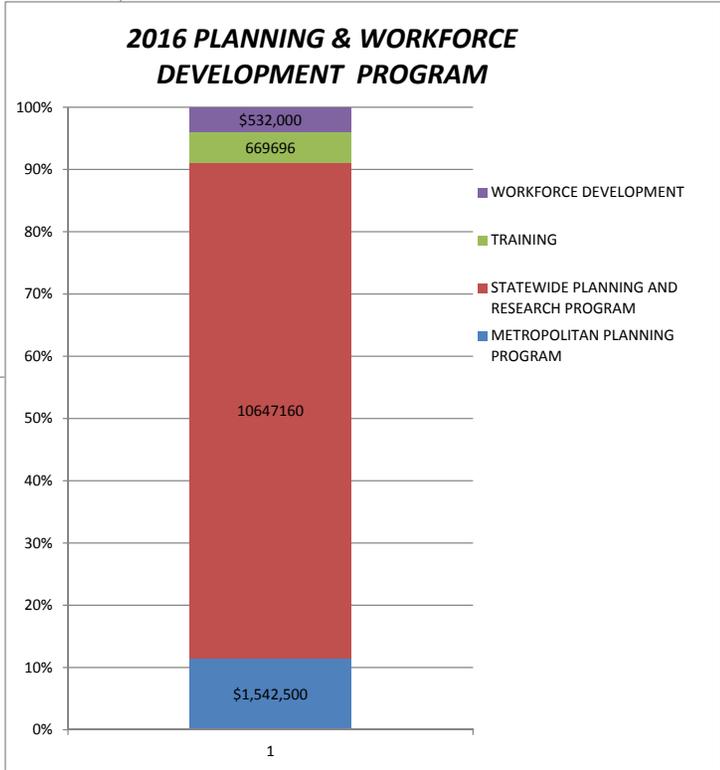
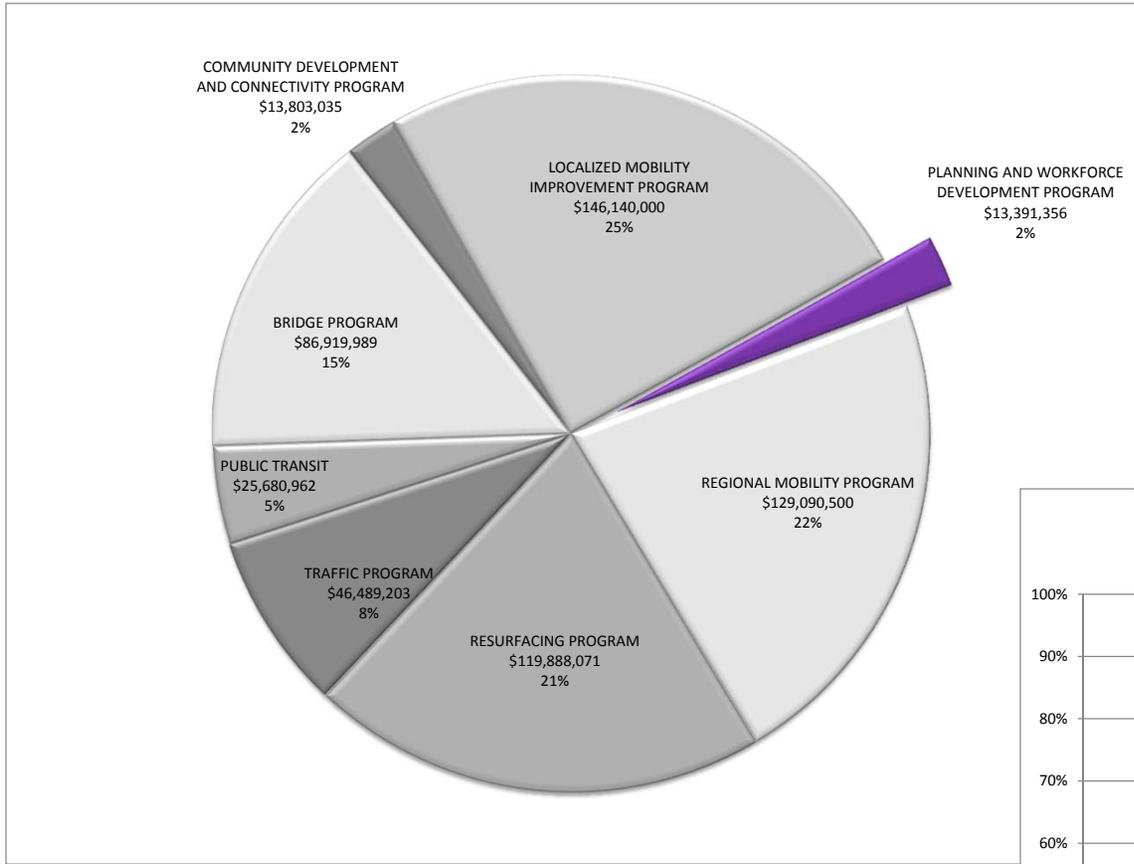
BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL HIGHWAYS PROGRAM</b>	<b>\$555,722,154</b>
<b>TOTAL PUBLIC TRANSIT PROGRAM</b>	<b>\$25,680,962</b>



**FIGURE #9**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

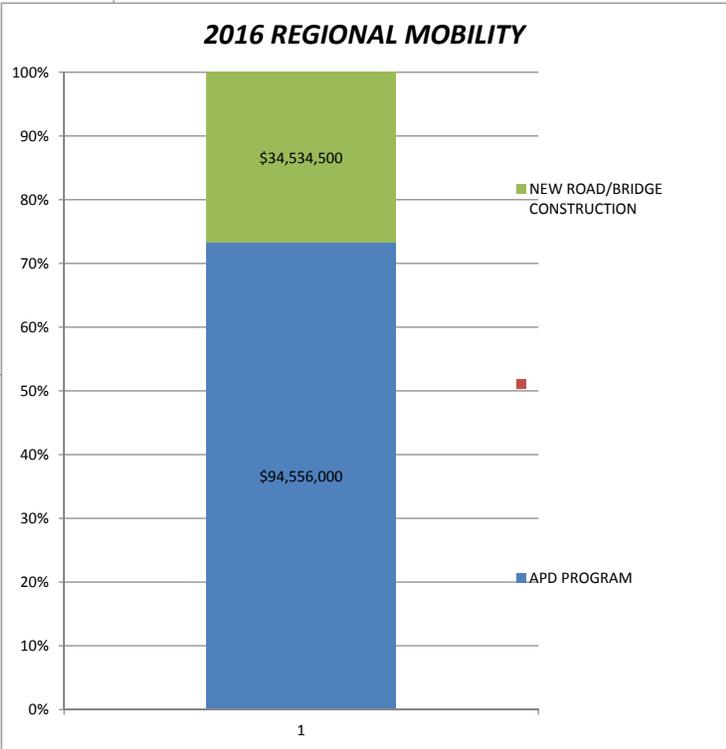
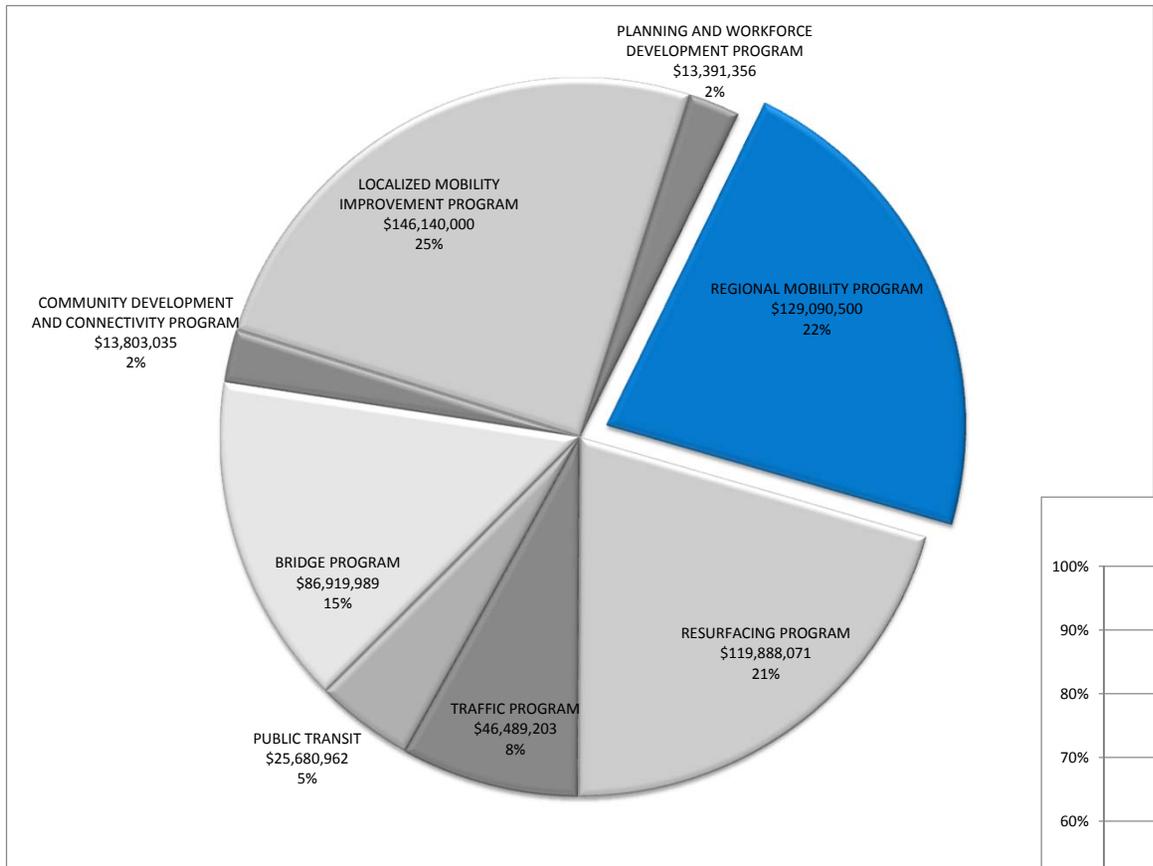
BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL PROGRAM</b>	<b>\$555,722,154</b>
TOTAL PUBLIC TRANSIT PROGRAM	\$25,680,962



**FIGURE #10**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

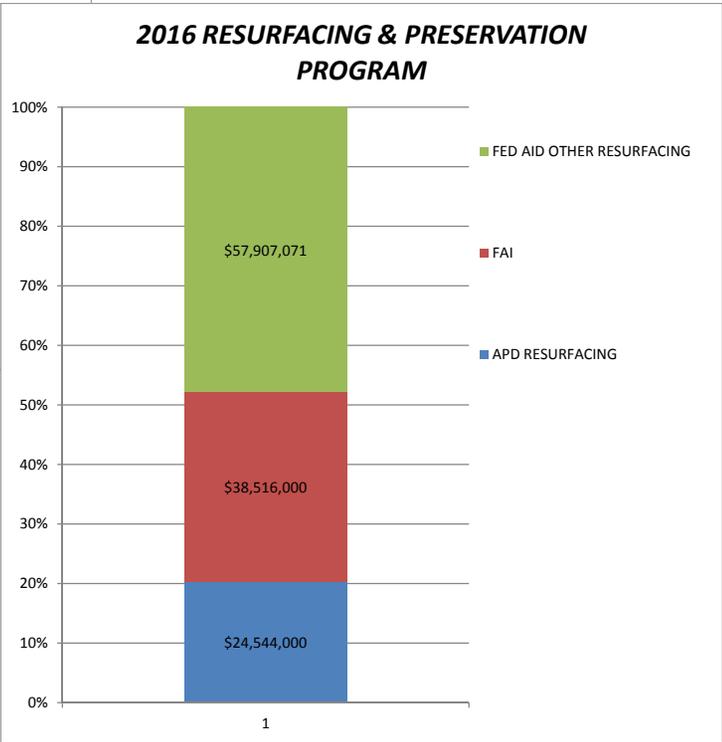
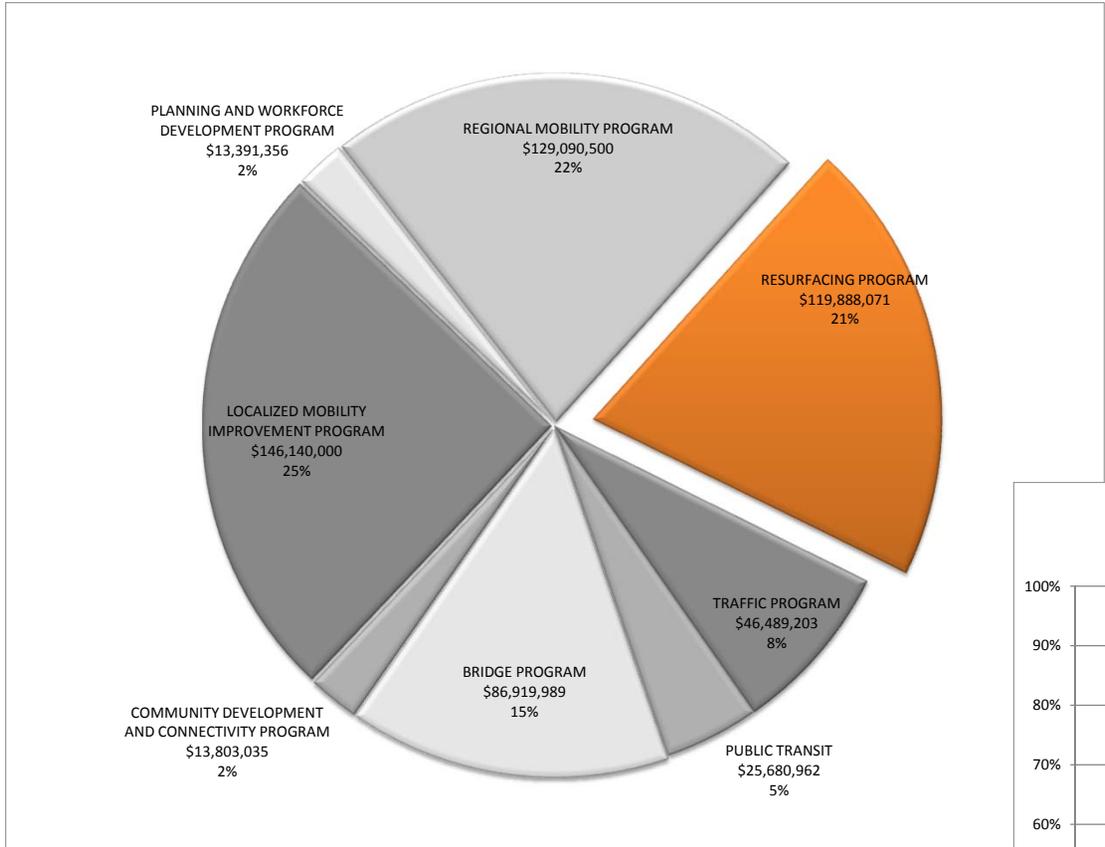
BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL PROGRAM</b>	<b>\$555,722,154</b>
TOTAL PUBLIC TRANSIT PROGRAM	\$25,680,962



**FIGURE #11**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

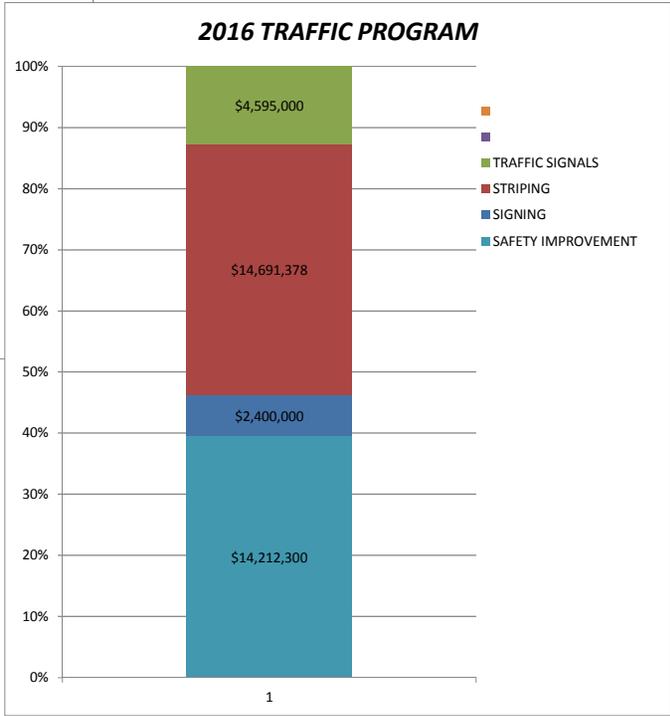
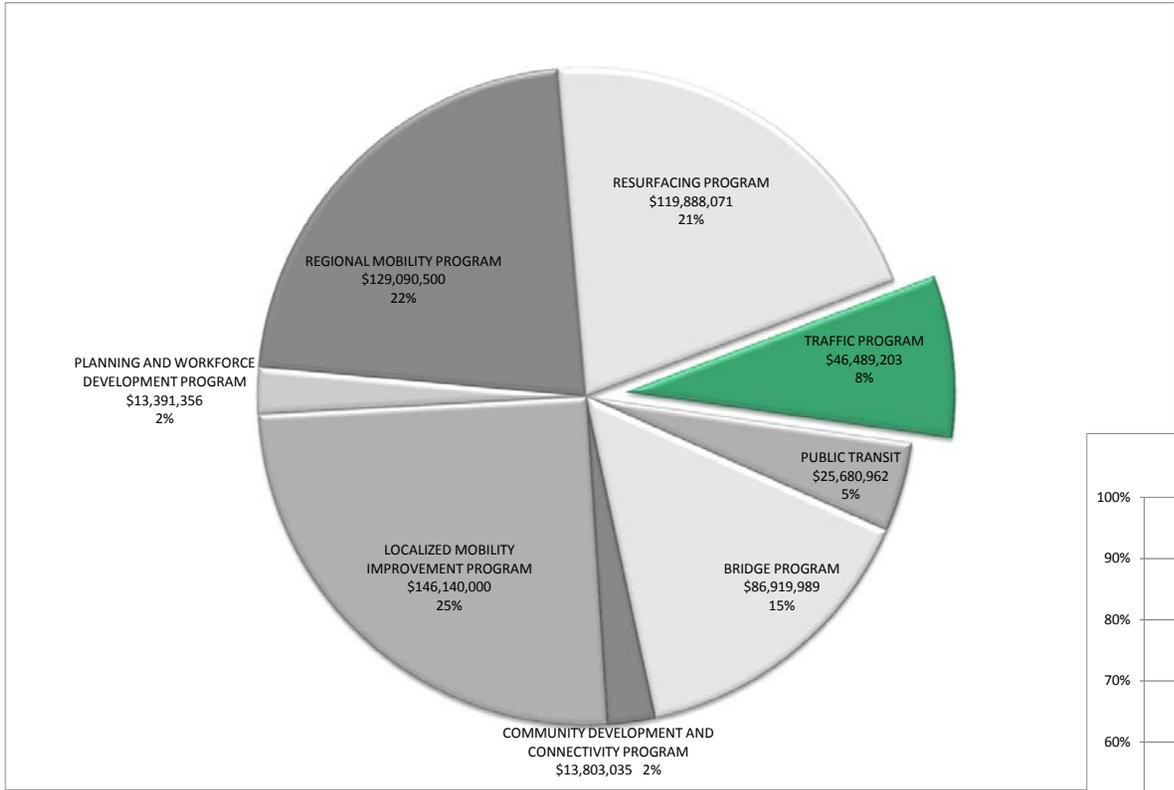
BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL PROGRAM</b>	<b>\$555,722,154</b>
<b>TOTAL PUBLIC TRANSIT PROGRAM</b>	<b>\$25,680,962</b>



**FIGURE #12**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

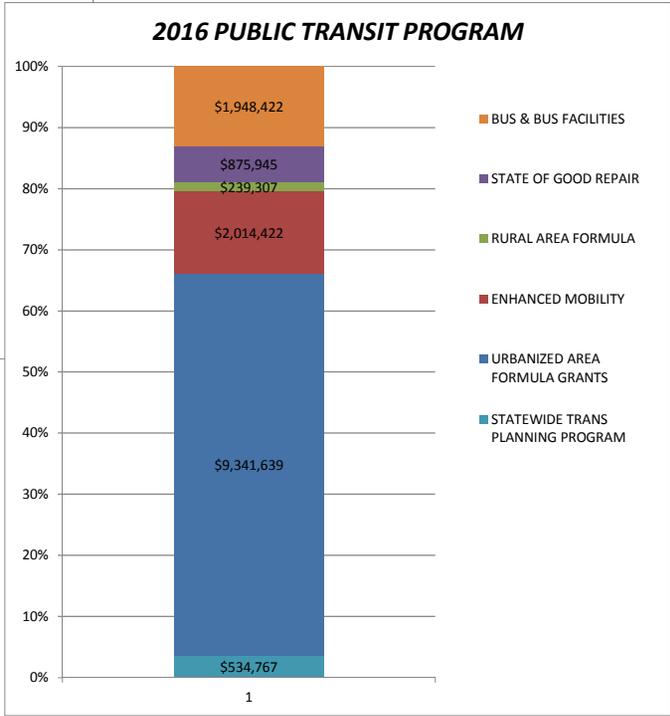
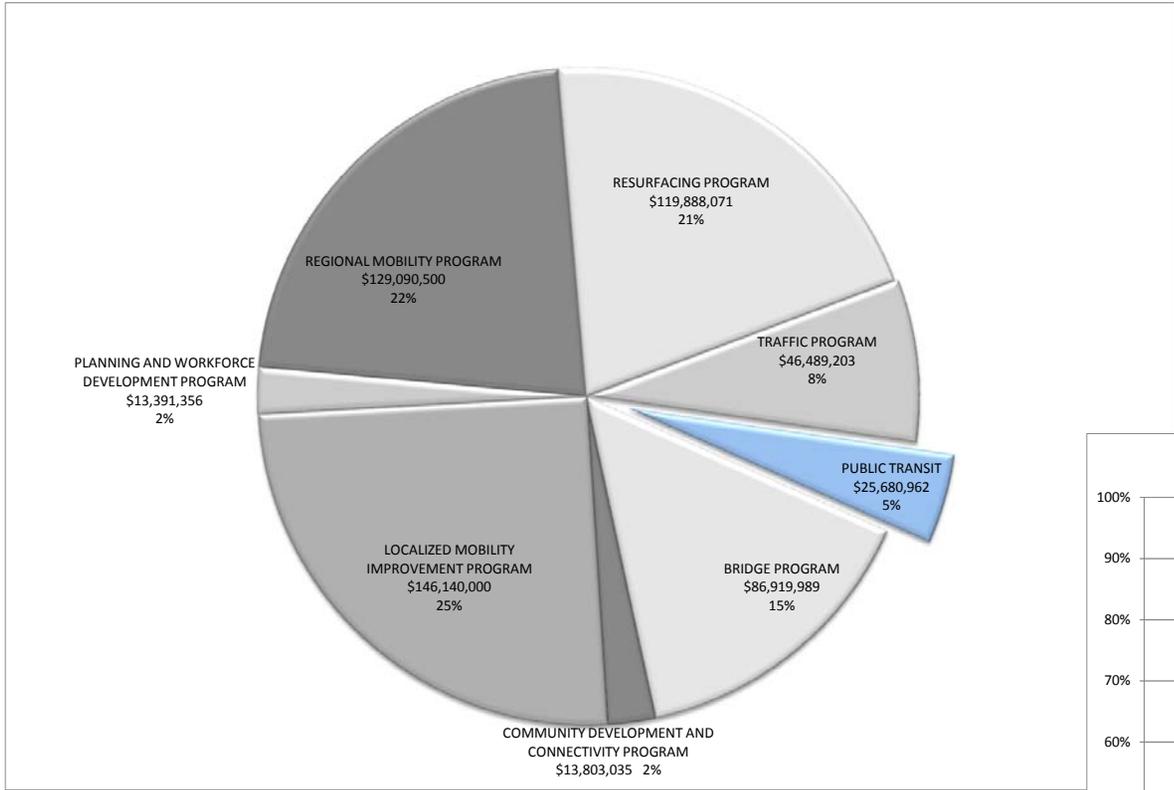
BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL PROGRAM</b>	<b>\$555,722,154</b>
TOTAL PUBLIC TRANSIT PROGRAM	\$25,680,962



**FIGURE #13**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL PROGRAM</b>	<b>\$555,722,154</b>
<b>TOTAL PUBLIC TRANSIT PROGRAM</b>	<b>\$25,680,962</b>



**FIGURE #14**

2016-2021 BALANCED PROGRAM -  
TOTAL ESTIMATED DOLLARS

BRIDGE PROGRAM	\$86,919,989
COMMUNITY DEVELOPMENT AND CONNECTIVITY PROGRAM	\$13,803,035
LOCALIZED MOBILITY IMPROVEMENT PROGRAM	\$146,140,000
PLANNING AND WORKFORCE DEVELOPMENT PROGRAM	\$13,391,356
REGIONAL MOBILITY PROGRAM	\$129,090,500
RESURFACING PROGRAM	\$119,888,071
TRAFFIC PROGRAM	\$46,489,203
<b>TOTAL PROGRAM</b>	<b>\$555,722,154</b>

TOTAL PUBLIC TRANSIT PROGRAM \$25,680,962