FY 2024-2027

Transportation Improvement Program

TIP

December 2023

Regional Intergovernmental Council

Kanawha-Putnam Metropolitan Planning Organization

Charleston, WV Urban Area

315 D Street

South Charleston, WV 25303

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Introduction

As a condition of receiving Federal capital or operating assistance for transportation planning, improvements, or operations, the Charleston, WV urbanized area must maintain a continuing, cooperative, and comprehensive planning process that results in plans and programs consistent with the comprehensively planned development of the urbanized area. The Transportation Improvement Program (TIP) is a multi-modal transportation document required by the United States Department of Transportation (DOT) to fulfill the objectives of the Metropolitan Transportation Planning (MTP) Process. For the purposes of conducting regional comprehensive transportation planning and implementing transportation improvements, the Charleston, WV Metropolitan Planning Area includes all of Kanawha and Putnam counties.

The Fiscal Year 2024-2027 TIP for the Charleston, West Virginia Metropolitan Area includes transit and highway improvement or maintenance projects to be implemented from FY 2024 through FY 2027. The fiscal year, followed by the State of West Virginia and the Regional Intergovernmental Council Metropolitan Planning Organization (RIC MPO), begins on July 1, and ends on June 30. The TIP is prepared in cooperation with the US Department of Transportation's Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the West Virginia Department of Transportation (WVDOT), the Kanawha Valley Regional Transportation Authority (KRT), and local communities.

Federal code regarding the planning and implementation of federally funded transportation projects includes provisions regarding the preparation of the TIP and the program's contents. These provisions encompass project selection, project prioritization, a financial plan demonstrating that funding can reasonably be expected to be available, and an opportunity for public comment prior to approval.

RIC Planning Area

The Region 3 Planning and Development Council, known as the B-C-K-P Regional Intergovernmental Council, (RIC) consists of Boone, Clay, Kanawha and Putnam counties and its municipalities and citizens. On December 5, 1973, the RIC assumed responsibility for coordinating transportation planning in Region 3 as the Charleston Urban Area is fully contained within Kanawha and Putnam counties.

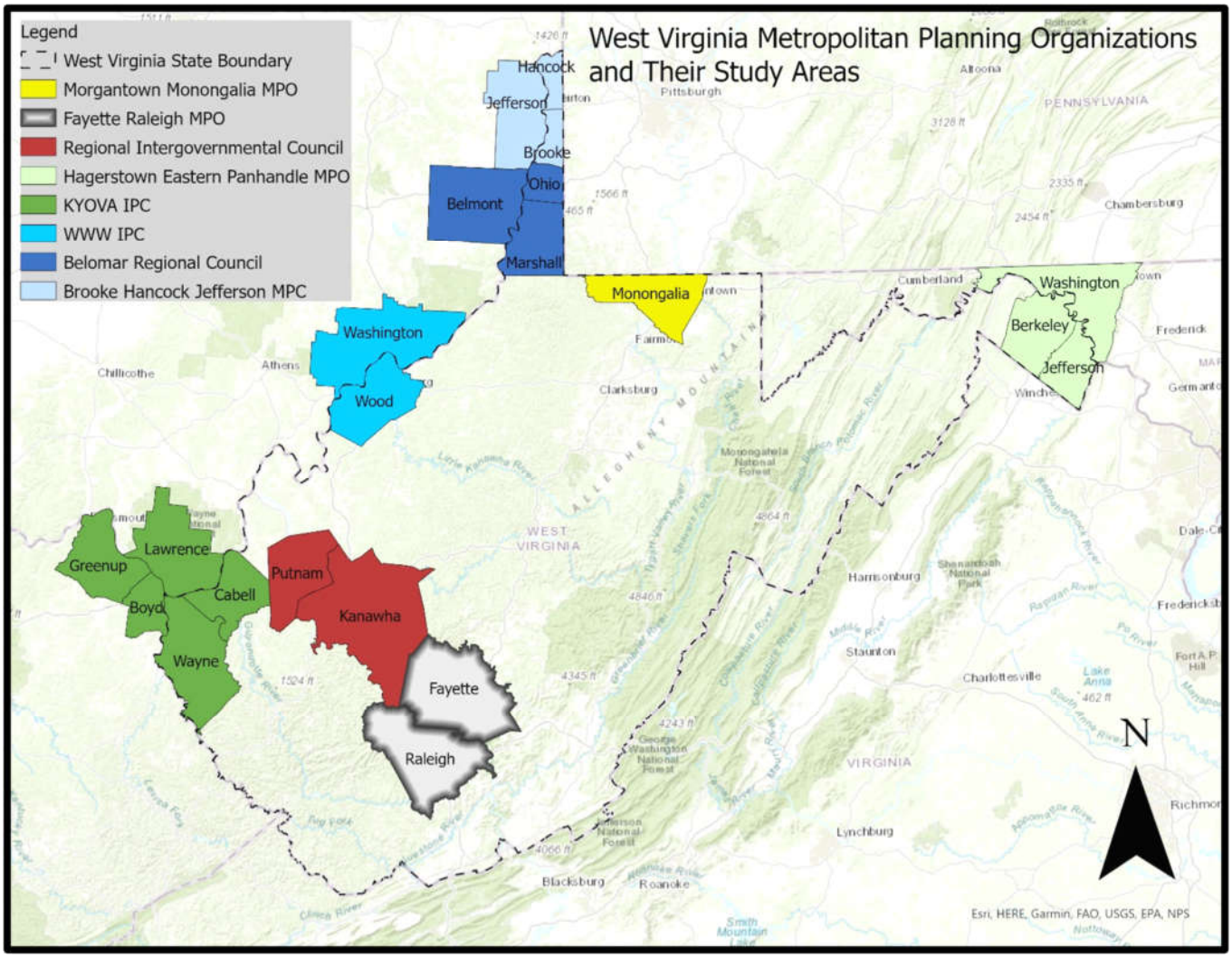
Titles 23 and 49 of the United States Code (23 U.S.C. 134 (k) (I) (A) and 49 U.S.C. 5303 (k) (I) (A) requires the Secretary of Transportation to designate urbanized areas over 200,000 population as Transportation Management Areas (TMA). It can also be designated by special request from the state Governor or by the designated MPO for the urbanized area.

On July 16, 2012, the U.S. Census Bureau released its urbanized area delineations from the 2010 Census. The Huntington, WV-KY-OH urbanized area exceeded the 200,000-population threshold signifying a new TMA which included portions of Cabell, Putnam, and Wayne counties in WV, portions of Boyd and Greenup counties in KY, and part of Lawrence County, OH.

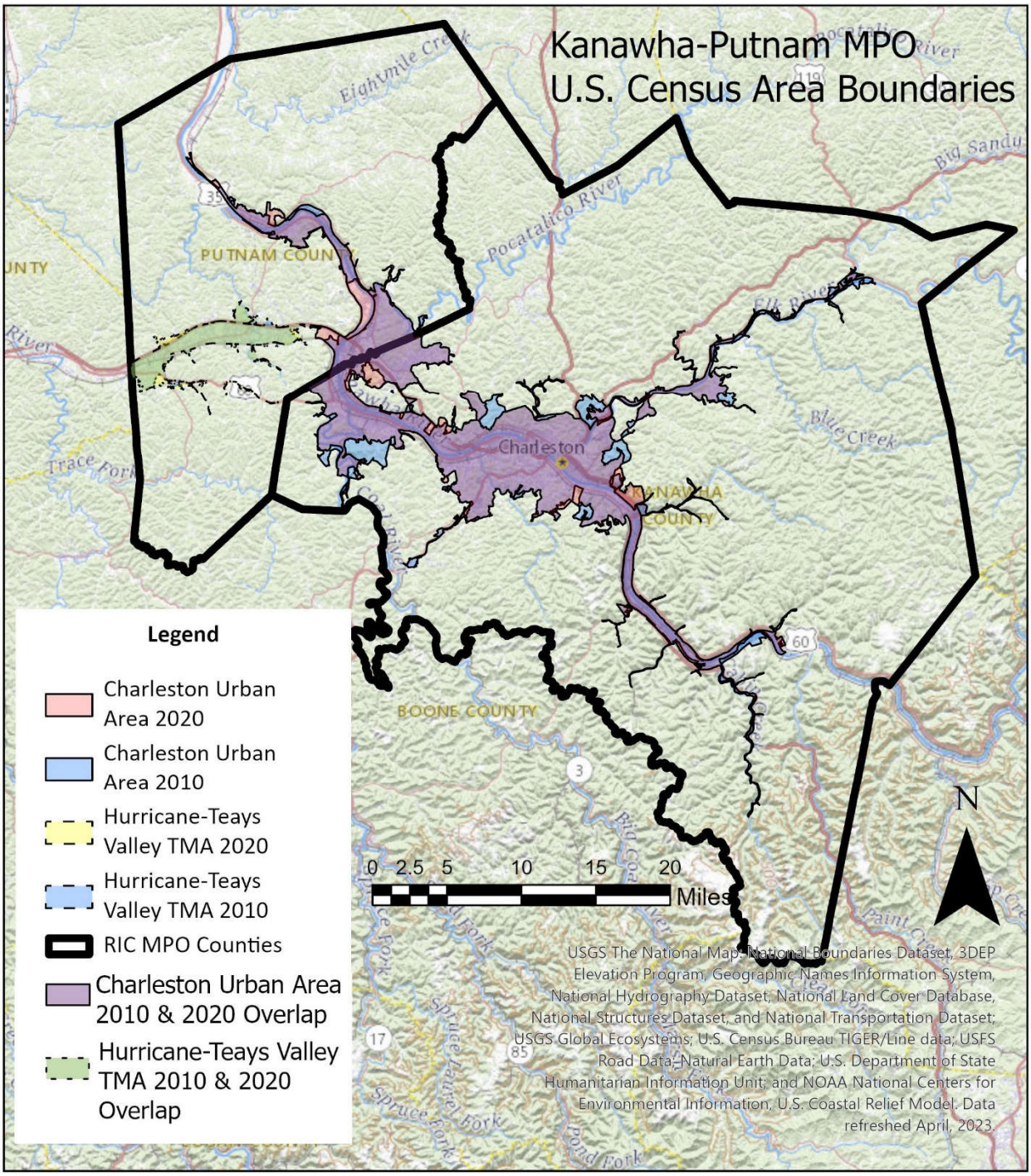
The KYOVA Interstate Planning Commission began to oversee the transportation planning activities in the Huntington, WV-KY-OH TMA on July 1, 2013, except for the TMA portion in Putnam County, WV. The Regional Intergovernmental Council (RIC) Metropolitan Planning Organization located in South

Charleston, WV retains all transportation planning responsibility for the Putnam County portion of the Huntington, WV-KY-OH TMA.

Below is a map of all the metropolitan planning organizations in the state of West Virginia and their study areas.



Below is a map of the Charleston Urban Area and the Hurricane-Teays Valley portion of the Huntington TMA, and the respective changes of those boundaries based on the 2010 and 2020 Census. According to the U.S. Census Bureau Urban Area Data, the entire Huntington TMA, including the Hurricane-Teays Valley TMA portion, had a population of 202,637 in 2010, which declined by 2,480 to 200,157 by 2020. The total land area was 130.34 mi^2 in 2010, which declined by 1.47 mi^2 to 128.87 mi^2 in 2020. The Charleston, WV Urban Area had a population of 153,199, which declined by 12,241 to 140,958 by 2020. As a result, the total land area in 2010 was 98.21 mi^2, which declined by 5.29 mi^2 in 2020 to 92.92 mi^2.



Purpose

The primary purpose of RIC's Transportation Improvement Program (TIP) is to provide a mechanism for enabling local input into the use of federal funds for surface transportation and public transit projects, determine regional transportation priorities, and demonstrate a short-range transportation vision for the region. Metropolitan Planning Organizations prepare a fiscally constrained document that promotes continued investment in the existing infrastructure, emphasizes public involvement in the transportation planning process, introduces new transportation technologies, develops alternative transportation, introduces alternative funding strategies, and offers a pragmatic approach to new construction projects. All TIP projects are consistent with RIC's 2050 Metropolitan Transportation Plan (MTP). Since this plan is fiscally constrained all projects shown are anticipated to be authorized over the selected years of the TIP.

TIP Content

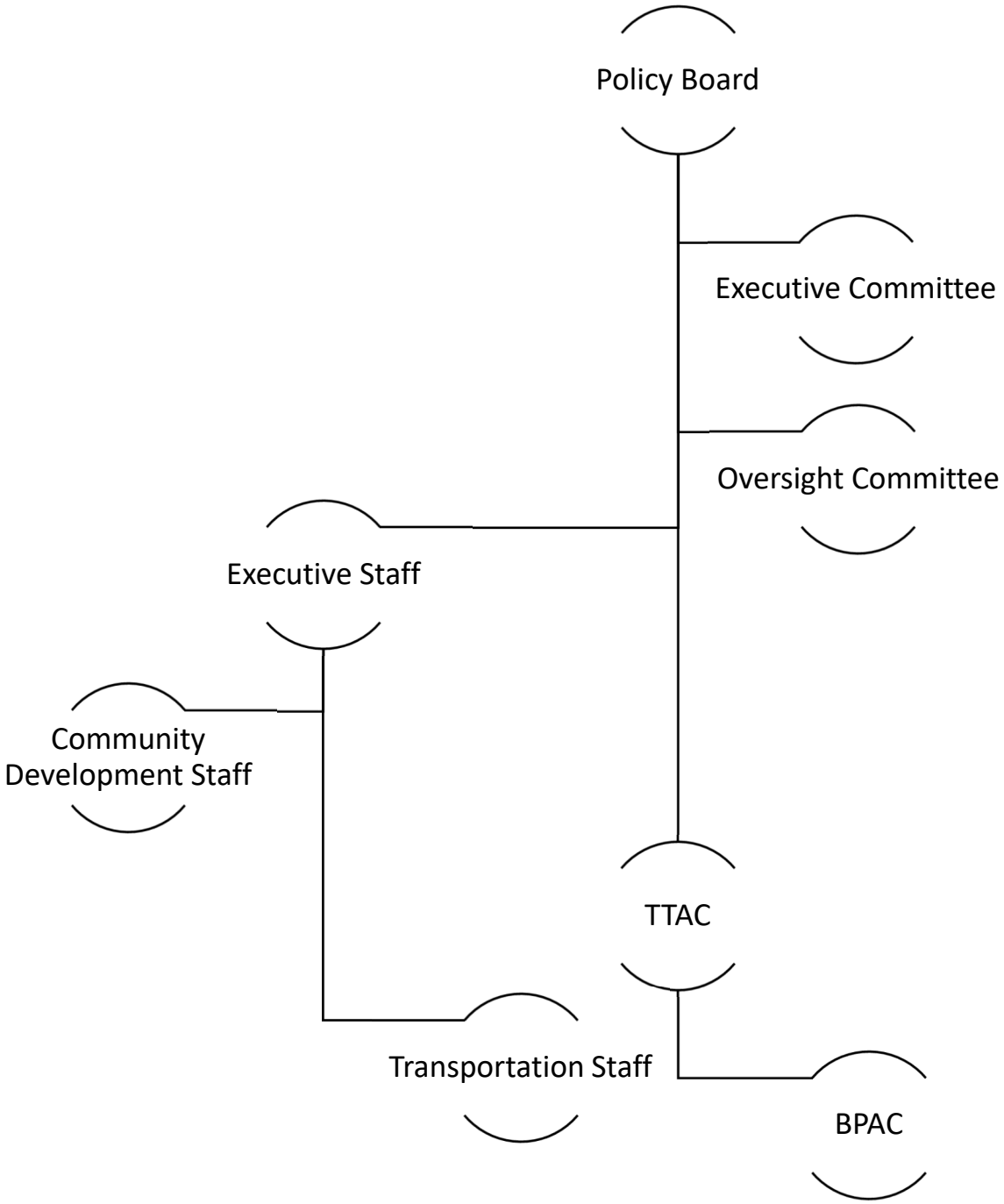
Improvements to be included in the TIP originate from WVDOT project lists, KRT's capital program, and RIC's Metropolitan Transportation Plan (MTP). These projects consist of highway, transportation alternative projects, and transit operating and capital projects. All projects that receive full or partial federal funding are in the TIP. Large regionally significant state or locally funded projects may also be found in the TIP. The complete highway project listing for 2024-2027 can be found in Section 2 of this document. The transit project listing can be found in Section 3. For informational purposes, 2023 projects are included in the project listing until it can be confirmed that the obligation on those projects has closed or changed.

TIP Process and RIC Organization

Projects included in RIC's FY 2024-2027 TIP are endorsed by the West Virginia Department of Transportation and approved by various committees providing input into RIC's decision-making process. The Transportation Technical Advisory Committee (TTAC) monitors the activities of RIC's transportation planning staff and reviews the technical procedures and standards for conducting the process. Members of the public, as well as private transit operators, are also given an opportunity to provide input into the TIP. RIC details public involvement procedures in its Public Participation Plan.

Recommendations from the TTAC regarding the TIP are approved or disapproved for presentation to the Regional Intergovernmental Council's Policy Board, which is responsible for the overall policy, guidance, and direction for the Metropolitan Transportation Planning Process in the Charleston, West Virginia Urbanized Area. The policy board's voting membership consists of the mayors and county commissioners of each of the municipalities and counties that comprise the total RIC Planning Area. In addition, the voting membership includes one citizen from each county and the City of Charleston, two minority interest representatives, citizens appointed by the RIC policy board, and one member each from the KRT and the WVDOT. The members approve or disapprove any projects presented to them and have the authority to propose any projects they believe should be included in the TIP. They can also recommend a change in priorities for the projects presented for their approval. However, any projects submitted for approval are subject to endorsement by the West Virginia Department of Transportation. The RIC Policy Board makes the final decision on the document to be submitted to the West Virginia Department of Transportation for their final review. Other supplemental committees to RIC operations are the

Oversight Committee, the Executive Committee, and the Bicycle and Pedestrian Advisory Committee (BPAC). The Oversight Committee monitors the budget and approves large purchases. The Executive Committee makes policy and staffing recommendations to the Executive Staff and Policy Board. The BPAC, a subcommittee of the TTAC, oversees the implementation of and recommends changes to RIC planning activities that involve vulnerable road users such as bicyclists and pedestrians. Below is an illustration of the Regional Intergovernmental Council's Organizational Chart:



TIP Amendments/Administrative Adjustments

Amendments to the TIP are usually made quarterly, except for the rare need to call a special meeting or conduct a proxy vote. An amendment to the TIP requires compliance with 23 CFR 450 including the public involvement procedures, air quality conformity and fiscal constraint.

In the event of a minor project change in the TIP, an administrative adjustment may be performed. The following actions are eligible as administrative adjustments to the TIP:

- A minor change in project description that does not change the Air Quality conformity finding or change the project scope; or
- Shifting programmed funds between projects (i.e., funding sources and projects already identified in the TIP); or
- Moving programmed projects from year to year within an approved TIP, except those that cross Air Quality horizon years; or
- A cost change to a groupable project that is less than $10,000,000 and doesn't change the groupable highway program size by more than 10%; or
- A change to a project that is considered groupable as long as the change does not make it not groupable.

Administrative adjustments shall be tracked by RIC staff and made available to appropriate committees through electronic communication and/or a written display of changes. Since administrative adjustments do not require RIC Policy Board approval, no notice is required to be given to the RIC Policy Board or the public prior to approval. They shall, however, be presented to the TTAC and RIC Policy Board for review and comment.

Groupable Projects

The West Virginia Association of Metropolitan Planning Organizations (WVAMPO) in coordination with the West Virginia Department of Transportation have developed a proposed system of Groupable and Non-groupable projects for the TIP and the STIP. Upon adoption of this TIP by the RIC Policy Board, groupable projects will not require approval from the MPO Policy Boards nor require Air Quality analysis since they do not add capacity to the existing highway system. The absence of these requirements will lessen the administrative burden on both the MPO and the WVDOT.

Projects with a phase cost larger than $10,000,000, safety projects, new signal projects, new travel lane additions, new roads or new bridges, expansion projects that add capacity, projects that affect air quality, and regionally significant non-federal aid projects are considered not groupable. All other projects will be considered groupable under the STIP/TIP procedures. The TTAC will continue to review changes to the TIP, but no formal approval by the TTAC or Policy Board will be required. Any project that adds capacity, or is regionally significant, will be part of the non-Groupable Project list and will require approval from the MPO Policy Board and will follow the typical TIP amendment schedule detailed on page 15.

A major change to a groupable project will require an amendment to the STIP/TIP. It is defined as follows:

- Adding, deleting, or moving across federal fiscal years a number of projects with a sum cost greater than 10% of the STIP highway program size, which is found in the STIP document; or
- A major change of project scope, such as a change that is inconsistent with the National Environmental Policy Act (NEPA) documentation or will change the NEPA determination, or a change that affects the approved Air Quality conformity finding; examples include changing the number of through lanes, adding/deleting non-motorized facilities, changing mode (FTA – rolling stock or facility type), changing capital category (FTA), and may include changing termini which changes the project from groupable to not groupable; or
- Any change requiring a new regional air quality conformity finding which changes the project from groupable to not groupable; or
- A greater than $10,000,000 cost increase or cost decrease in a phase of a project listed in the current STIP/TIP which changes the project from groupable to not groupable.

For non-groupable projects, an amendment is any major change in the approved TIP. It is defined as follows:

- Adding or deleting any safety project; or
- Adding or deleting any project that adds new traffic signals; or
- Adding or deleting any project that affects air quality; or
- Adding or deleting any project that changes traffic capacity of a road or bridge; or
- Adding or deleting any expansion project; or
- Adding or deleting any regionally significant, non-federal aid project; or
- Major change in scope of work or cost changes greater than $2,000,000 or 10% of the project's total STIP program size, whichever is greater.

Planning Requirements and Statutory Provisions

1. Annual listing of projects (23U.S.C. 135(g)(5); 49 U.S.C. 5303(g)(5):
"An annual listing of projects for which Federal funds have been obligated in the preceding year shall be published or otherwise made available by the metropolitan planning organization for public review. The listing shall be consistent with categories identified in the Transportation Improvement Program."

2. Sharing of revenue estimates for TIP's and Plan's (23 U.S.C. 134 (i)(2)(E)(iii) and (23 U.S.C.)134(j)(1)(C); 49 U.S.C. 5303(i)(2)(E)(iii) and (j)(1)(C)
"For the purpose of developing the transportation plan, the metropolitan planning organization, transit operator, and State shall cooperatively develop estimates of funds that will be available to support plan implementation."
"For the purpose of developing the TIP, the metropolitan planning organization, public transportation agency, and the State shall cooperatively develop estimates of funds that are reasonably expected to be available to support program implementation".

3. State consultation with local officials in non-metropolitan areas (23 U.S.C. 135 (f)(2)(B)(i)(g)(2)(B)(i); 49 U.S.C. 5304(f)(2)(B)(i), (g)(2)(B)(i):

"With respect to non-metropolitan areas, the statewide transportation plan shall be developed in cooperation with affected non-metropolitan officials with responsibility for transportation or, if applicable, through regional planning organizations…"

4. Consultation with transit users and freight shippers and service providers (23 U.S.C. 134(i)(6)(A) and 49 U.S.C. 5303(i)(6)(A):
"Each metropolitan planning organization shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan."

5. Federal planning finding for STIP (23 U.S.C. 135(g)(8);49 U.S.C. 5304(g)(8):
"A finding shall be made by the Secretary at least every 4 years that the transportation planning process through which statewide transportation plans and programs are developed is consistent with this section 134."

Performance-Based Planning and Programming
State Department of Transportation and Metropolitan Planning Organization agencies are required to establish performance targets for the national performance areas pertaining to safety, infrastructure conditions, and system performance.

Title 23 of United States Code Chapter 1 Section 150 guides the general requirements and national goals for regional transportation agencies, such as the Regional Intergovernmental Council (RIC), to make decisions based on the development and monitoring of performance-based data. The national goals of the Federal-aid program are:

1) Safety
2) Infrastructure condition
3) Congestion reduction
4) System reliability
5) Freight movement and economic vitality
6) Environmental sustainability
7) Reduced project delivery delays

In summary, the code requires state DOTs and MPOs to establish and report on performance targets that allow decision makers to:

- Assess the National Highway Performance Program with measures that evaluate:
    - the condition of pavements on the Interstate System;
    - the condition of pavements on the National Highway System;
    - the condition of bridges on the National Highway System;
    - the performance of the Interstate System; and
    - the performance of the National Highway System.
- Assess the Highway Safety Improvement Program with measures that evaluate:

- serious injuries and fatalities per vehicle mile traveled; and
- the number of motorized and non-motorized serious injuries and fatalities.

- Assess the Congestion Mitigation and Air Quality Program with measures that evaluate:
  - traffic congestion; and
  - on-road mobile source emissions.
- Assess freight movement on the Interstate System.

PM1 - Safety

In compliance, the RIC policy board adopted the WVDOTs performance targets on the following measures for the Highway Safety Improvement Program (PM 1) on December 14th, 2017, on December 13th, 2018, December 12^{1h} 2019, and December 10th, 2020:

- Number of fatalities;
- Number of serious injuries;
- Fatality rate per hundred million vehicle miles traveled (HMVMT);
- Serious injury rate per HMVMT;
- Number of non-motorized fatalities and serious injuries.

PM2 – Pavement and Bridge

Additionally, the RIC policy board adopted the WVDOT's performance targets on the following measures for Pavement and Bridge Condition Performance (PM 2) on March 9th, 2023:

- Assess the condition of pavements on the Interstate System and on the Non-Interstate National Highway System (NHS).
- Assess the condition of bridges carrying NHS.

PM3 – System Performance, Freight, Congestion, and Air Quality

The RIC policy board adopted the WVDOT's performance targets on the following measures for System Performance, Freight on June 14, 2018, and December 10th, 2020, and CMAQ (PM 3) on March 9th, 2023:

- Assess the performance of the Interstate and Non-Interstate NHS.
- Assess freight movement on the Interstate System.
- Assess traffic congestion and on-road mobile source emissions for carrying out the Congestion Mitigation and Air Quality Improvement Program (CMAQ).

Transit Performance Measures

The Kanawha Valley Regional Transportation Authority (KRT) is responsible for state of good repair (SGR) and safety performance targets. KRT is classified by the Federal Transit Administration as a Tier II provider.

Transit Asset Management Plan (TAM) - Tier II providers may develop their own plans or participate in a Group Plan, which is compiled by a Group Plan Sponsor. KRT was invited by the West Virginia Division of Public Transit (WVDPT) to participate in the statewide Group TAM plan and opted to do so.

KRT has designated its Executive Director as the Accountable Executive to ensure that the necessary resources are available to carry out the TAM plan.

The TAM Plan asset inventory includes assets that are used in the provision of public transit. This includes (except for equipment) assets that are owned by a third party or shared resources. The inventory must include all service vehicles, and any other owned equipment assets over $50,000 in acquisition value. Agencies only need to include condition assessment for assets for which they have direct capital responsibility.

Targets have been set by KRT and the WVDPT for each applicable asset class for the coming year and are updated annually in the fall. To the extent feasible, targets are supported by data such as the most recent condition data and reasonable financial projections for the future, but the overall end goal is to be in a system-wide State of Good Repair (SGR).

A TAM plan must be updated in its entirety at least every 4 years, and it must cover a horizon period of at least 4 years. The RIC supported the performance targets set by the WVDOT Division of Public Transit in the Group Asset Management Plan on December 8th, 2022.

The WVDPT reports annually to FTA's National Transit Database (NTD). This submission should include: (1) projected targets for the next fiscal year; (2) condition assessments and performance results; and (3) a narrative report on changes in transit system conditions and the progress toward achieving previous performance targets. KRT is responsible for submitting the TAM asset inventory SGR report to the WVDPT (thru its AVIS system) by July 31st of each fiscal year to allow the WVDPT to comply with Annual NTD reporting requirements.

Public Transportation Agency Safety Plan (PTASP) - KRT is required to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS). It establishes performance measures to improve the safety of public transportation systems that receive federal financial assistance. The plan must include safety performance measures (fatalities, injuries, safety events and system reliability) selected by FTA that are intended to provide "state of the industry" high-level measures and help focus individual agencies on the development of specific performance indicators and measurable targets relevant to their operations.

KRT also must certify they have a safety plan in place to meet the requirements. The KRT Board of Members adopted the Authority's PTASP on November 21, 2019. The plan must be updated and certified by the transit agency annually. Targets set in the most recently adopted KRT PTASP were adopted by the RIC Policy Board on December 8th, 2022.

All performance targets adopted by RIC for PM1, PM2, PM3, and transit can be viewed in Section 5 of this document.

Implementation

The Regional Intergovernmental Council, in collaboration with the WVDOH, FHWA, KRT, and other interagency regional partners have developed the 2050 Metropolitan Transportation Plan (MTP). The six guiding statements, listed below, the Congestion Management Process of the MTP, and the seven national policy goals, listed above, are the foundation and framework for selecting projects for performance-based planning and programming in the TIP. The TIP, therefore, is the vehicle for implementation of the MTP. Each project in the TIP seeks to work through a guiding statement towards a given performance target. The guiding statement and performance measure associated with each project is listed below each project in the Highway Improvement Project List in Section 2. The guiding statements of the MTP are discussed below.

Culture and Environment

- Preserve and sustain the natural and built environments.

Economic Vitality

- Promote economic development through targeted transportation investments.

Land Use and Transportation Integration

- Improve the integration of land use and transportation.

Mobility and Accessibility

- Promote an efficient, interconnected, and accessible transportation network.

Safety and Security

- Improve the travel safety and security in the Greater Kanawha Valley

System Preservation and Efficiency

- Support and strengthen the current transportation network.

STIP/TIP Subprogram Information

West Virginia's STIP, and therefore RIC's TIP, is divided into eight generalized programs based upon a combination of the nature of the work being conducted, the asset being impacted, the performance measure being addressed, etc. Invariably, most projects have elements that would enable them to be placed in multiple programs. WVDOT Programing Division staff will assign each project to the program that best reflects its primary intent from information supplied during project initiation. The eight programs of the STIP are:

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

Bridge Program

The Bridge program contains projects that have the primary emphasis of helping maintain or improving the condition of the State's bridge assets. In order for a project to be assigned to this program, the primary asset being worked on must meet the federal definition of a bridge (i.e., primary work on drainage structures (less than 20') and minor culverts without BARS numbers would be in other programs). Projects in this program would generally be intended to address or impact National Performance Measure 2 (PM 2), which addresses the condition of Pavement and Bridge infrastructure. Bridge projects for Condition Based and Cyclical Maintenance, Preservation, Rehabilitation, and Replacement of existing structures as outlined in the State's Transportation Asset Management Plan (TAMP), as well as Bridge Inspections and in some cases the construction of new bridges would be included in this program. If eligible for grouping, projects in this program could include, but are not limited to deck overlays/sealing, bridge inspections, cleaning and painting structures, substructure repair, superstructure replacement or total replacement of the existing structure.

Pavement Program

The Pavement program contains projects to help maintain or improve the condition of the State's pavement assets. Projects in this program would be intended to address National Performance Measure 2 (PM 2), which addresses the condition of Pavement and Bridge infrastructure. Pavement Projects classified as Preventative Maintenance, Preservation, Rehabilitation, Replacement or Reconstruction would be included, if eligible. Projects in this program could include, but are not limited to Microsurfacing, Minor Hot Mix Asphalt (HMA) overlays, Major diamond grinding with Concrete Pavement Rehabilitation (CPR) and Full depth replacement of HMA or Portland Cement Concrete (PCC) pavements. It should be noted that any project for the construction of new roads and interchanges or adding pavement as part of the construction of a new roadway is specifically excluded from this program.

Traffic Program

The Traffic program contains projects for initiatives that not only maintain and improve the State's existing signing, lighting and railroad and traffic signal assets, but also initiatives to address spot safety problems that have been identified or which have a significant safety element. Projects contained within the Traffic Program would typically be intended to maintain or improve the overall safety of the State's transportation network and address National Performance Measure 1 (PM 1), which addresses the Safety of the transportation network. If eligible, grouped projects in this program could include but are not limited to, sign and signal renovation/and or replacements, High Friction Surface Treatments (HFST), Roadway Departure projects or updates to railroad grade crossing infrastructure and Roadway striping. It should be noted that any projects for new traffic signals regardless of cost in MPO counties are considered non-groupable.

Localized Mobility Program

The Localized Mobility program often funds projects that are designed to reduce spot congestion issues, improve air quality, address urban sprawl issues, and address roadside safety issues caused by landslides. Projects contained within the Localized Mobility Program, would typically be intended to address National Performance Measure 3 (PM 3), which addresses the reliability of the transportation

system, freight and congestion mitigation and air quality. As with other programs some of the actions required to address these issues may have high costs, involve adding capacity or constructing a new road, therefore some of the work conducted within this Program would not be groupable. If eligible, grouped projects in this program could include, but are not limited to slide correction, construction of auxiliary lanes and minor road and curve improvements.

Community Development and Connectivity Program

The Community Development and Connectivity Program is comprised primarily of the State's nontraditional grant initiatives in conjunction with projects associated with federal lands (federal lands access program, Transportation Alternative and Recreational Trail Programs). Projects contained within the Community Development and Connectivity Program, would typically be intended to address National Performance Measure 3 (PM 3). The program advances projects that preserve or enhance the State's bicycle and pedestrian infrastructure, as well as preserving and expanding access to motorized and non-motorized trail facilities statewide. Pedestrian and bicycle projects are typically associated with sidewalks, crosswalks, ADA compliant ramps, the addition of bicycle lanes or other improvements that improve modal choice. Trail projects, from maintenance and enhancement of existing trails (adding public facilities, parking, signage, etc.) to the creation of new trail facilities statewide, are included under this program.

Planning and Workforce Development Program

The Planning and Workforce Development Program covers not only projects that are intended to ensure federal requirements associated with statewide and metropolitan planning are adhered to, but also transportation related research, funding of interagency positions and federally sponsored training. Projects falling within this program are generally technical in nature and generally result in no physical construction. As such, it is assumed that all work conducted would be of a "groupable" nature. Projects in this category would include any work covered in the federally required Statewide Planning and Research Work Program and Unified Planning Work Programs (UPWP's) and programs approved by FHWA. Since no physical construction occurs on projects in this program performance measures are not generally directly affected.

Transit Program

The Transit Program covers all projects that are overseen and submitted by the West Virginia Division of Public Transit (WVDPT) for approval by FTA. Funding for these initiatives is a combination of federal, state, and local sources. Projects in this category would be intended to address Transit Performance Measures, which address the reliability of the transportation system, freight and congestion mitigation and air quality. Projects in this program cover both operating assistance and capital assistance for the state's rural and urban transit systems. It is assumed that all projects within this program would be groupable, since they do not involve physical construction of highway facilities.

Regional Mobility Program

The Regional Mobility Program incorporates individual projects that make up portions of corridor length expansion and improvement efforts statewide. Due to the size, scope and overall importance of these projects, no project falling within this program will be considered eligible for grouping. Projects

contained within the Regional Mobility Program would typically be intended to address National Performance Measure 3 (PM 3). Most of the State's Regional Mobility projects are located on NHS facilities. In addition to the expansion and improvement projects mentioned above, any project that cannot readily be assigned to one of the other seven core programs will be added to the Regional Mobility Program and treated as not groupable.

System Performance Report

RIC has created and maintains a System Performance Report to optimize transportation investments. RIC monitors performance measures and implementation of the Transportation Performance Management (TPM) framework into the planning process. This report serves as a component of the Congestion Management Process (CMP) from the most recent MTP update, the 2050 Metropolitan Transportation Plan. FHWA defines a CMP as, "a systematic approach collaboratively developed and implemented throughout a metropolitan region, that provides for the safe and effective management and operation of new and existing transportation facilities through the use of demand reduction and operational management strategies". The RIC System Performance Report will be updated annually or on an as-needed basis during the interim years of the 4-year metropolitan transportation plan update cycle. A report of this nature aids in assessing the efficiency of the existing transportation system and provides guidance to implement performance-based planning into transportation planning activities while supporting FHWA's TPM and Performance-Based Planning and Programming framework to the maximum extent practicable.

Financial Feasibility

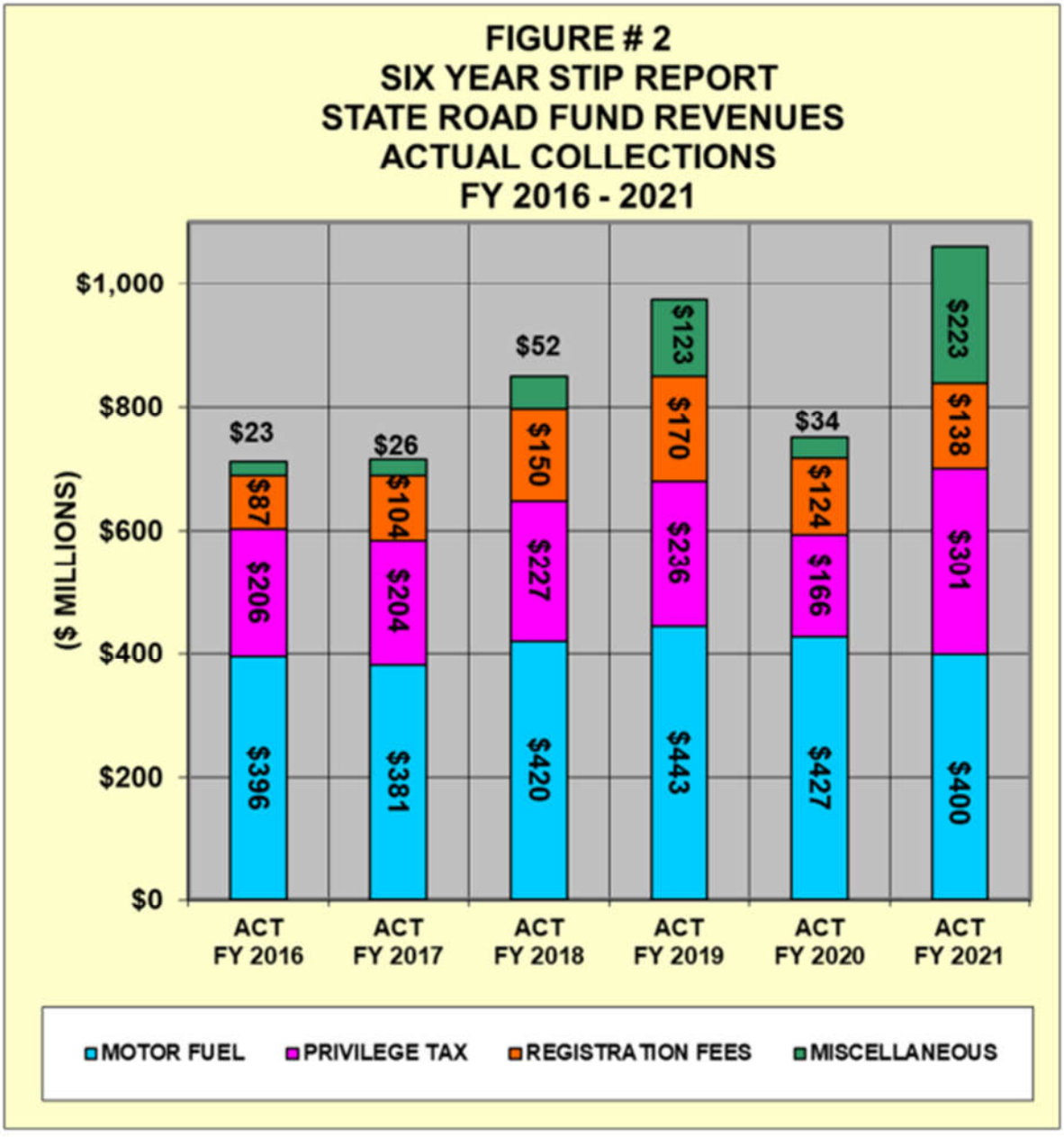
The FY 2024-2027 TIP is a cost constrained document. All highway projects listed in the TIP have been programmed by the WV Division of Highways and are reasonably expected to be funded as programmed within the time frame of the TIP. While the RIC MPO's MTP and TIP are driven by the public, policy board, and stakeholders – realistically, the state of West Virginia remains the primary stakeholder to keep the document financially feasible. There are many reasons for this. One reason is that in the RIC region there are no county level departments of transportation, road budgets, maintenance, or ownership of streets or roads. On the city level, while street departments exist, they share planning and engineering staff across disciplines. Still, cities and towns can leverage federal dollars with assistance from the state, the MPO, or independently, but few do without administrative and technical project support from the State of West Virginia through the West Virginia Department of Transportation and the West Viriginia Division of Highways. The WVDOT is historically the only organization with adequate staff and resources to continuously meet the complexities required to leverage federal dollars for highways.

The federal government primarily uses the national highway functional classification system of roadways as the basis for determining which facilities are eligible for federal-aid. Due to the national focus on these roadways, except under special circumstances, roads that are functionally classified as Rural Minor Collector, Rural Local Service, or Urban Local Service are not eligible for federal-aid. Throughout the State, only 27% (10,477 miles) of West Virginia's certified public highway mileage (38,850 miles) are traditionally eligible for federal-aid.

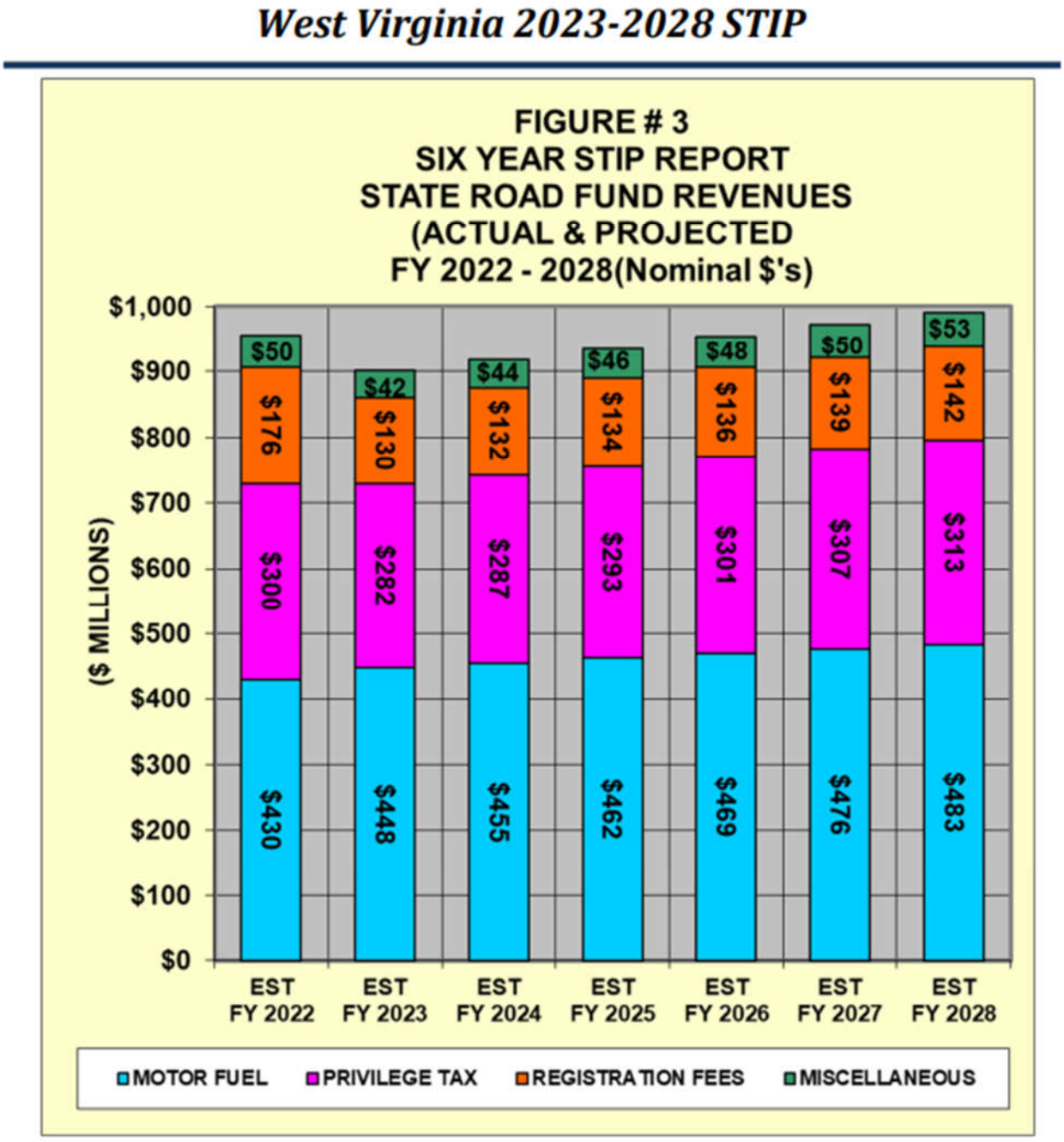
A map of the national highway functional classification system if available online through the WVDOT open data portal.
(https://data-wvdot.opendata.arcgis.com/datasets/cd84644b6c4d4245a175a3e73402185b_0/explore)

The remaining 73% (28,373 miles) must be funded entirely by the governmental entity having jurisdiction over those highways. In West Virginia, where the WVDOH has statutory responsibility for almost all roads (i.e. 34,961 miles, or 90% of the certified mileage, which excludes 1,316 miles of roadways classified as Primitive), almost all maintenance, improvements, and construction initiatives on the 28,373 miles of Non-FA-Eligible roadways are funded with 100% State revenues. In addition to the previously listed classifications, the federal government also prohibits use of federal-aid funds for specific activities. Federal funds may not be typically used to pay for the top three mandated priorities of the WVDOH (Debt Service, Administrative Support, and Routine Maintenance expenditures). As a result, not only are almost all roadways under the WVDOH jurisdiction not eligible for federal assistance, but neither are its top three mandated priorities. It should be noted that in response to the pandemic the federal government passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act. One aspect of the CARES Act made approximately $106.7 million in funds available to the WVDOH for many eligible activities performed by the Agency. The WVDOH has been using these resources to offset its required Debt Service payments, essentially freeing up those State Road Fund resources for other purposes and to compensate for the short-term downturn in State revenue. The CARES Act funds are exhausted by FFY 2022, and like the one-time revenue infusions provided by the Legislature cannot be factored into future revenue projections. With nearly 39,000 miles of public roadways, West Virginia is one of only four states (Delaware, North Carolina, and Virginia are the others) in which there is no county and almost no township ownership of highways. As a result, the WVDOH has statutory authority for the construction, improvement, and maintenance of almost all public highway miles (34,961 miles or 90%) in the State, which is one of the highest percentages in the nation. Furthermore, despite its relatively small size, the WVDOH is responsible for the sixth-largest state-maintained highway network in the nation. The activities of the WVDOH are funded almost exclusively from the State Road Fund, which receives its funding from State revenue collections and federal reimbursement. The State revenue component of the State Road Fund is derived from motor fuel taxes, registration fees, privilege taxes, and miscellaneous income levied and generated at the State level. The federal component is derived from federal-aid reimbursements available to the State through national federal-aid highway legislation. Federal-aid highway funds are generated predominantly by motor fuel taxes and fees levied at the national level and are deposited in the Highway Trust Fund. To help highway departments plan and schedule projects, Congress will typically pass legislation that authorizes the expenditure of federal-aid funds over a multi-year period and specifies how those funds are to be distributed among the states. The current multi-year federal reauthorization legislation as mentioned previously is the Infrastructure Investment and Jobs Act (IIJA), which was signed into law on November 15, 2021, adds to the prior multi-year legislation (FAST). The IIJA covers FFY 2022-2026. As such, two of the six years covered in the WVDOT's FFY 2023-2028 STIP will have to be based solely on assumptions regarding the potential size and scope of any federal transportation program after FFY 2026. To this end, it is assumed the federal government will continue to invest in highway and transit initiatives at the same level as IIJA. Given the uncertainty that exists surrounding the level of federal support in the outer years and the direct impact it will have on West Virginia's STIP, conservative assumptions are made.

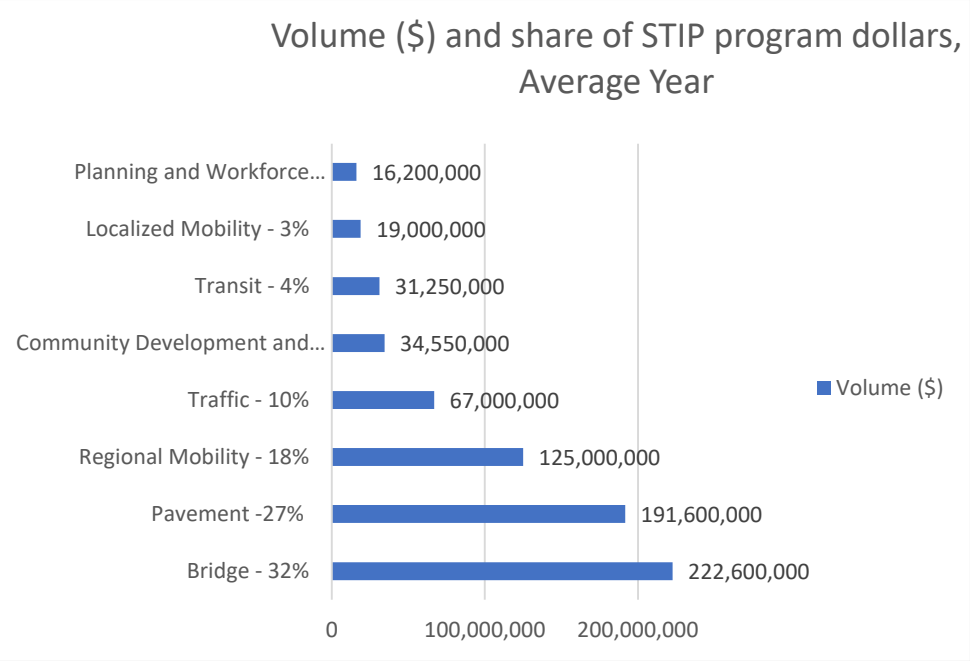
The State Road Fund collected $1.062 billion in State revenue for State Fiscal Year (FY) 2021. The revenues were generated from four basic categories: Motor Fuel Taxes, Registration Fees, Privilege Taxes, and Miscellaneous Revenues. The chart below illustrates the total collections from the State Road Fund for FY 2016 - FY 2021.



The below chart illustrates actual and projected State Road Fund revenues for FY 2022 – FY 2028.



These funds are implemented through performance-based planning and programming. The chart below illustrates the average year projected STIP obligations from FY 2023 - FY 2028. The RIC MPO will provide the projected program-based funding summary for the RIC MPO based on TIP obligations in the Highway Project List. The RIC MPO should expect a similar apportionment by program percentage, with the volumes scaling down to a population-based apportionment. According to data from the 2020 U.S. Census, Kanawha County had a population of 180,745 and Putnam County had a population of 57,440, with a RIC MPO total of 238,185 people. That is approximately 13% of the state of West Virginia's population of 1,793,716. As a result, the RIC MPO should reasonably estimate expected program and funding type volumes at a minimum of 13% of those displayed in the STIP.



The Kanawha Valley Regional Transportation Authority (KRT), the public transit provider for Kanawha County, WV, certifies that, pursuant to FTA Circular 7008.1, it has the financial capacity to carry out programs and projects included in RIC's TIP. While KRT has experienced recent increases in operating costs, due largely to inflation and increased fuel costs; the Authority has been able to absorb these increases because of:

- management practices to curtail unproductive service;
- annual fuel program administration which takes advantage of long-term fuel contracts; and
- the historic average increases (2% per year) in the local funding generated annually through revaluations of property taxes.

KRT's current excess levy is in effect until June 30, 2024. Renewal of the levy was approved May 2022 and provides funding from July 1, 2024, through June 30, 2029. The levy receipts should assure financial stability over the next fiscal year. KRT expects federal funding levels to remain at current levels. KRT's financial stability over the period of RIC's TIP is assured. The Public Transit Improvement Plan Justifications and Project List can be viewed in Section 3 of this document.

Transit projects are dependent on future Section 5307 and 5310 (formula) funding at current levels and Section 5309 (discretionary) funding which can reasonably be anticipated. Programmed federal funding by type and fiscal year are shown on the table in Section 4.

Explanation of Acronyms

	Federal Funding Category	Federal Portion	Local Portion*
ACHP	Advance Construction High Priority	80%	20%
ACST	Advance Construction	80%	20%
AUG REDI	August Redistribution	TBD	
BR	Bridge Replacement and Rehabilitation	80%	20%
CMAQ	Congestion Mitigation and Air Quality	80-90%	10-20%
CMAQ 2.5	Congestion Mitigation and Air Quality, PM 2.5	80%	20%
CRP	Carbon Reduction Program	80-100%	0-20%
ER	Emergency Relief Program	80-100%	0-20%
HSIP	Highway Safety Improvement Program	80-90%	10-20%
NHFP	National Highway Freight Program	80-90%	10-20%
NHPP	National Highway Performance Program	80-90%	10-20%
NHPP-EXE	National Highway Performance Program (Exempt)	90%	10%
NHS	National Highway System	80%	20%
NRT	Recreational Trails	80%	20%
RR/HWY XI	Railroad Crossings/ Highway Crossings	90%	10%
Section 5307	FTA Formula (Operating/Capital)	50/80%	50/20%
Section 5309	FTA Discretionary Capital Grant	80%	20%
Section 5310	FTA Elderly/Handicapped Capital Grants	80%	20%
Section 5339	Bus and Bus Facilities Program	50%	50%
STBG	Surface Transportation Block Grant Program	80-90%	10-20%
STP	Surface Transportation Program	80%	20%
STP-OFF	Surface Transportation Program - Off System Bridge	80%	20%
TAP	Transportation Alternatives Program	80-90%	10-20%
-(# POP)	Population Range	80-90%	10-20%
-FLEX	Flexible Funds	80-90%	10-20%
-TMA	Transportation Management Area	80%	20%
HIP	Highway Infrastructure Program	80%	20%

*The maximum share of project costs that may be funded with Federal-aid highway funds (the “Federal share”) varies based upon the Federal-aid program from which the project receives funding.

In some cases, the Federal share is also adjusted based on related statutory provisions. See (23 U.S.C. 120)

	Phase of Work / Other
ENG	Engineering
ROW	Right of Way
CON	Construction
FS	Feasibility Study
EIS	Environmental Impact Statement
BMP/mi	Beginning Mile Point/miles (unit)

	Project Name/ Type of Work
BR	Bridge
C&P	Clean & Paint
O/L	Overlay
INSP	Inspection
I/C	Interchange
TPK	Turnpike
N/S/E/WB	North/South/East/West Bound

	Agency
WVDOT	West Virginia Department of Transportation
WVDOH	West Virginia Division of Highways
KRT	Kanawha Valley Regional Transportation Authority
FHWA	Federal Highway Administration
USDOT	United States Department of Transportation

RIC TIP/TIP Amendments and Public Involvement Schedule

Schedule (calendar days)	Activity
30 days before RIC Policy Board meeting	RIC staff requests draft TIP amendment project data from WV DOH Planning Division.
15 days before RIC Policy Board meeting	Publication of legal notice in the Charleston Gazette-Mail and social media notifying public of new TIP document or TIP amendments.
15 days before RIC Policy Board meeting	New TIP document or TIP amendments distributed to air quality conformity interagency consultation group for concurrence.
Two days before RIC Policy Board meeting	Proposed TIP or TIP amendments presented to the RIC Transportation Technical Advisory Committee (TTAC) for review, comment, and recommendation
The day of the RIC Policy Board meeting	New TIP or TIP amendments presented to RIC Policy Board for adoption at quarterly RIC Policy Board meeting
One day after the RIC Policy Board meeting	The adopted TIP or TIP Project amendments list is submitted to the WVDOT Secretary for approval
Approximately 30 days after TIP or TIP amendments adoption	Notice of approval of new RIC TIP or TIP amendments is distributed by WVDOT Secretary to RIC, FHWA, FTA and WVDEP.
Approximately 30 days after TIP or TIP amendments adoption	Notice is issued by WVDOH that RIC TIP Amendments have been added to the Statewide Transportation Improvement Program (STIP) project list

Public Involvement

The public is notified through legal advertisements and social media of any new amendments to the TIP or new TIP adoptions at least fifteen days before the RIC Policy Board meeting. Throughout RICs transportation planning process there are many opportunities for public involvement that are detailed in RIC's Public Participation Plan, which is available at the RIC office, or can be viewed on RIC's website, www.wvregion3.org. KRT uses the TIP development process of the RIC MPO to satisfy the public hearing requirements of 49 U.S.C. Section 5307(b). The TIP public notice of public involvement activities and time established for public review and comment on the TIP satisfies the program-of-projects requirements of the Urbanized Area Formula Program.

Environmental Justice

Environmental Justice is the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, income, national origin, or educational level with respect to the development, implementation and enforcement of environmental laws, regulations, and policies. RIC identifies minority and low-income population groups to contribute to the evaluation and assessment of any plan or program produced by RIC or by consultants under contract for RIC. By ensuring opportunities for minority and low-income communities to influence the transportation planning and decision-making processes through enhanced engagement and meaningful input, the MPO serves as a policy mechanism to mitigate or prevent disproportionately high and adverse effects of transportation projects on minority and low-income communities. Members of minority and low-income communities have an opportunity to influence project decisions with their input. More information on RICs Environmental Justice and Public Participation may be found within the Public Participation Plan and Title VI Plan on RIC's website, www.wvregion3.org.

Interagency Consultation

In order to ensure that all transportation improvement projects contained within RIC's TIP do not adversely affect regional air quality, an interagency consultation process is maintained by RIC staff with participation by a representative from the Federal Highway Administration, the Federal Transit Administration, the West Virginia Department of Environmental Protection-Division of Air Quality, the West Virginia Department of Transportation and the United States Environmental Protection Agency. All proposed amendments to RIC's TIP shall be distributed to each representative for review and comment at least 15 days prior to the date of a RIC Policy Board meeting. Comments from each representative or one designee may be submitted to the RIC in writing at least three days before the RIC Policy Board meeting. If there is an opinion of no adverse effects regarding air quality, an email stating that there are no adverse effects from the appointed designee will be sufficient. If no response is given or received by the deadline, then no adverse effects on air quality are assumed.

Air Quality Conformity

The Charleston Metropolitan Planning Area (Kanawha and Putnam counties) is currently designated as a maintenance area for the PM 2.5 (particulate matter, 2.5 microns) air pollutant component. On April 30, 2014, the Environmental Protection Agency determined that PM 2.5 mobile emissions are not a significant contributor of air pollution within the planning area. As a result, no regional mobile source emissions modeling analysis is required. The requirement to demonstrate air quality conformity per the

requirements of 40 CFR 93.109 (f) still applies. Additionally, federally funded transportation improvement projects within the planning area are still subject to project level transportation conformity analysis requirements.

The revocation of the 1997 eight-hour ozone standard and the final rule for implementing the 2008 ozone national ambient air quality standards (NAAQS) (the "2008 ozone NAAQS") became final on April 6, 2015. As a result, the Charleston Metropolitan Planning Area is no longer required to conduct mobile source air quality conformity determinations for the 1997 eight-hour ozone standard. In April 2018 the EPA revoked the 1997 revocation of the eight-hour ozone standard. Please see Section 6 for the updated Air Quality Conformity Analysis Report for the region from September 2018.

Digital TIP Map and Equity View

RIC has made available a Digital TIP Map for Kanawha and Putnam Counties. This map is a general representation of project locations in the region from the Transportation Improvement Program Project Listing. The map is updated following each quarterly Policy Board meeting and approval of new TIP amendments and adjustments to reflect any changes. The purpose of this map is to provide supplemental information to constituents regarding how federal funding is being spent in their area. The map can be viewed by visiting RIC's website, www.wvregion3.org and scrolling over the "Transportation" button, by scrolling to or selecting the "Transportation Improvement Program," and selecting the button or hyperlink for "Interactive TIP Map." It can also be accessed by entering the following URL into your web browser: https://arcg.is/15u8L40

RIC has developed its efforts to provide information that may assist the public or interagency partners in analyzing the contents of the TIP and how those project types, dollars spent, and their locations, either positively or negatively, impact the communities within close geographic proximity to the project locations. Project locations, along with the corresponding data, will be presented online for consumption by the public. These locations will be layered with latest data from the U.S. Census Bureau's 5-Year (5Y) American Community Survey (ACS) data that describe traditionally underserved communities, including limited English proficiency, minority, and poverty by census tract. The map can be viewed by visiting RIC's website, www.wvregion3.org and scrolling over the "Transportation" button, by scrolling to or selecting the "Transportation Improvement Program," and selecting the button or hyperlink for "Interactive Equity View." It can also be accessed by entering the following URL into your web browser: https://arcg.is/1rqLz50

Internet users interested in doing a more detailed analysis are directed to use the U.S. Department of Transportation – Federal Highway Administration, Planning, Environment, Realty (HEP) Screening Tool for Equity Analysis of Projects (STEAP). Estimated project locations provided by RIC using the Digital TIP Map or the TIP Equity Analysis Maps can be used to draw "buffer lines" on project locations, so that more precise location-based equity sensitive data can be displayed. The tool can be found by clicking the following link or adding the URL to the browser: https://hepgis.fhwa.dot.gov/fhwagis/buffertool/

Other data visualization tools recommended for use are the U.S. Census Bureau Data Equity Tools, the EPA EJScreen, the Housing and Urban Development (HUD) Location Affordability Indicator Tool,

USDOT's Transportation Disadvantaged Census Tracts (Historically Disadvantaged Communities), and the White House Council on Environmental Equity: Climate and Economic Justice Screening Tool (CEJST). Search for these items on any major search engine web browser to discover more.

Section 2: Highway Improvement Project List

Kanawha County

FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group/ Not	PM**
2023	2023	12/14/2023	NHPP	OTHER	CO60/63	35th Street (Kaufman Mem.) Ramps A/B	6 Year Bridge Inspection	T620060630001100	NHPP6063008D	0.01	0.11	983,732	786,986		Bridge	G	2
2023	2023	12/14/2023	NHPP	OTHER	CO60/62	36th Street (Bob Basil Mem.) Ramps D/C	6 Year Bridge Inspection	T62006620001400	NHPP6062006D	0.01	0.14	973,994	779,195		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I64	Academy Drive Overpass Bridge	Bridge Rehabilitation	S32064505100	STBG0064444D	0.02	50.51	150,000	135,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I64	Academy Drive Overpass Bridge	Bridge Rehabilitation	S32064505100	STBG0064445D	0.02	50.51	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	STBG-FLEX	ENG	CO7903	Bear Hollow Creek Culvert	Culvert Repair	S32070397500	STBG7903025D	0.02	9.75	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	CO7903	Bear Hollow Creek Culvert	Culvert Repair	S32070397500	STBG7903026D	0.02	9.75	5,000	4,000		Bridge	G	2
2024	2024	12/14/2023	NHPP	CON	I79	Big Chimney - Frame Road	Resurface	S3207956800	STBG0079158D	4.38	5.68	10,000,000	9,000,000		Resurface	G	2
2023	2023	12/14/2023	HWI-BR	ENG	US119	Captain Benjamin D Tiffner Mem. Bridges NB & SB	Deck Overlay/Joint Replacement	S320119139700	NHPP0119532D	0.06	6.64	225,000	180,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	US119	Captain Benjamin D Tiffner Mem. Bridges NB & SB	Deck Overlay/Joint Replacement	S320119139700	NHPP0119533D	0.06	6.64	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	TAP	CON	NA	Cedar Grove Sidewalk	Sidewalk	U320CEDAR200	TAP2021452D	0	0	362,021	289,617		Community Development	G	3
2023	2023	12/14/2023	HWI-BR	ENG	FANS1038	Charleston City Bridge Bundle	Bridge Repair	S3203800400	STBG1038001DBC	0.69	0.04	2,182,500	2,182,500		Bridge	G	2
2023	2023	12/14/2023	NHPP	ENG	I77	Charleston Interstate Signing Renovation 02 I-77	Signing	U32077953400	STBG0077106D	5.68	95.34	700,000	700,000		Traffic	G	1
2024	2024	12/14/2023	TAP	ENG	NA	Charleston Greenbrier Street	Design Multi-Modal Project	U320CHAS4800	TAP2015274D	_	_	150,000	120,000		Community Development	G	3
2024	2024	12/14/2023	STBG	CON	WV622	Institute-Cross Lanes	Resurface	S32062200000	STBG0622037D	2	0	744,000	595,200		Resurface	G	3
2024	2024	12/14/2023	NHPP	OT	I77	Boyhood Home of Booker T Washington (Auth AC)	Inspection	T62077958100	NHPPNBIS427D	0.15	95.81	132,000	118,800		Community Development	G	2
2024	2024	12/14/2023	TAP	CON	NA	Charleston Washington Street W Streetreetscape 2012	Construct Sidewalk	U320CHAS202	TEA2012630D	_	_	245,772	196,618		Community Development	G	3
2024	2024	12/14/2023	HWI-BR	ENG	CO83/3	Gallagher Bridge	Bridge Replacement	S32083310600	STBG303001D	0.02	1.06	300,000	240,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	CO32/3	Tupper Creek Pony Truss	Bridge Rehabilitation	S32032302900	STBG3203001D	0.03	0.29	300,000	2,700,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	US19	Chief Master SGT George Wallace Hedrick JR Mem. Bridge SB	Deck Overlay/Joint Replacement	S32011910600	NHPP0119528DBC	0.12	1.06	150,000	150,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	US19	Chief Master SGT George Wallace Hedrick JR Mem. Bridge SB	Deck Overlay/Joint Replacement	S32011910600	NHPP0119529D	0.12	1.06	10,000	9,000		Bridge	G	2
2024	2024	12/14/2023	NHPP	CON	US119	Corridor G Lighting (Auth AC)	Update Lighting	U320119155200	NHPP0019569D	1.74	15.51	4,121,743	4,121,743		Traffic	G	1
2023	2023	12/14/2023	NRT	CON	NA	Elk River Clendenin Trailhead	Design/Construct Trailhead	U320ELKR200	NRT2317004D	_	_	110,000	88,000		Community Development	G	3
2023	2023	12/14/2023	HWI-BR	ENG	CO47	Elk River Veterans Bridge	Bridge Repair	S3204728900	STBG0047059D	0.08	2.89	100,000	80,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	C047	Elk River Veterans Bridge	Bridge Repair	S3204728900	STBG0047060D	0.08	2.89	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I64	Finney Branch OP	Bridge Repair	S32064509800	STBG0064456D	0.05	50.98	100,000	90,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I64	Finney Branch OP	Bridge Repair	S32064505800	STBG0064457D	0.05	50.58	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	CO60/64	First Avenue Overpass 2560 +1	Bridge Repair	S320606402000	STBG6064002D	0.02	0.2	750,000	600,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I64	Fort Hill Bridge Ramp C	Bridge Repair	S3206400000	NHPP0064447D	1.15	0	300,000	270,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I64	Fort Hill Bridge Ramp C	Bridge Repair	S3206400000	NHPP0064448D	1.15	0	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I79	Gabe's Creek Bridge	Bridge Repair	S32079159700	STBG79156D	0.07	15.97	50,000	45,000		Bridge	G	2

Kanawha County																	
FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group/ Not	PM**
2023	2023	12/14/2023	HWI-BR	ENG	CO62/12	Georges Creek Bridge	Bridge Replacement	S320601268500	STBG6012001D	0.01	6.85	50,000	40,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	CO60/12	Georges Creek Bridge	Bridge Replacement	S320601268500	STBG6012002D	0.01	6.85	20,000	16,000		Bridge	G	2
2023	2023	12/14/2023	TAP	CON	NA	Grosscup Ave Sidewalks	Replace Sidewalks	U320GROSS100	TAP2019223D	_	_	75,000	60,000		Community Development	G	3
2023	2023	12/14/2023	TAP	ENG	NA	Grosscup Ave Sidewalks	Replace Sidewalks	U320GROSS100	TAP2019222DTC	_	_	30,000	30,000		Community Development	G	3
2024	2024	12/14/2023	NRT	CON	NA	Hatfield-McCoy-Kanawha Co. Trailhead Facility	Construct Trailhead Facility	U320HATFI200	NRT2018195D	_	_	75,000	60,000		Community Development	G	3
2023	2023	12/14/2023	HWI-BR	ENG	I64	I-64 Central Avenue OP	Bridge Repair	S32064551700	STBG0064441D	0.02	55.17	250,000	225,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I64	I-64 Central Avenue OP	Bridge Repair	S32064551700	STBG0064442D	0.02	55.17	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	TAP	ROW	I77	I-77 Belle Ramp Over Piedmont & Railroad	Rehabilitation	S32077956600	NHPP0073491D	0.04	95.65	275,000	247,500		Bridge	G	2
2023	2023	12/14/2023	NHPP	ROW	I77	I-77 Belle Ramp Over US 60	Rehabilitation	S32077957100	NHPP0073494D	0.03	95.7	175,000	140,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I77	I-77 Pocatalico River Bridges	Bridge Repair	S320771145900	STBG0077140D	0.05	114.59	380,000	342,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I77	I-77 Pocatalico River Bridges	Bridge Repair	S320771145900	STBG0077141D	0.06	114.59	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I77	I-77 Spring Street Overpass Overpass NB & SB	Bridge Repair	S32077101800	STBG077143D	0.01	101.18	100,000	90,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I79	I-79 Clendenin I/C Bridges NB & SB	Bridge Repair	S32079192200	STBG0079112D	0.04	19.22	250,000	225,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I79	I-79 Clendenin I/C Bridges NB & SB	Bridge Repair	S32079192200	STBG0079113D	0.04	19.22	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	CO64/14	Joseph Homer Lloyd Bridge	Bridge Repair	S320601436400	STBG6013007D	0.02	3.64	75,000	60,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	CO64/14	Joseph Homer Lloyd Bridge	Bridge Repair	S320601436400	STBG6014007D	0.02	3.64	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	CO60/63	Kanawha City Bridge Bundle	Bridge Repair	S320606300600	NHPP6063009D	0.77	0.06	2,637,000	2,109,600		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	CO6018	Larry Conley Mem. Bridge	Rehabilitation; C & P	S320-060/180.0400	STBG6018007D	0.05	0.04	150,000	120,000		Bridge	G	2
2023	2023	12/14/2023	STBG-OFF	ENG	CO6018	Larry Conley Mem. Bridge (AC Payback)	Rehabilitation; C & P	S320060180.0400	STBG6018002D	0.05	0.04	40,000	32,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	US60	Malden OP Bridge 1718	Bridge Repair	S32060234700	NHPP60424D	0.01	23.47	50,000	40,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	US60	Malden OP Bridge 1718	Bridge Repair	S32060234700	NHPP0060425D	0.01	23.47	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	CO60	Norbert E Eagloski Mem. Bridge	Bridge Repair	S320601424700	STBG6014009D	0.02	2.47	80,000	64,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	CO60	Norbert E Eagloski Mem. Bridge	Bridge Repair	S320601424700	STBG6014010D	0.02	2.47	100,000	80,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I79	North 77 & 79 Bridge Bundle	Bridge Repair	S3207902000	STBG0079103D	0.4	0.2	1,411,676	1,129,341		Bridge	G	2
2023	2023	12/14/2023	NHPP	CON	US119	Oakwood Road - WV61	3' Micro On Joints	S3201190162700	NHPP0119468D	1.22	16.26	150,000	120,000		Resurface	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I79	PFC Clayton Andrew Craft Mem. Bridge NB	Bridge Repair	S32079154600	STBG0079120D	0.08	15.46	50,000	45,000		Bridge	G	2
2023	2023	12/14/2023	NHPP	CON	US119	Ruth - Davis Creek	3 Ft W Micro Joint	S320119114300	NHPP0119480D	2.55	11.43	300,000	240,000		Resurface	G	2
2023	2023	12/14/2023	HWI-BR	ENG	CO60/64	Second Avenue Overpass 2561	Bridge Repair	S320606401500	STBG6064005D	0.02	0.15	250,000	200,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	CO60/64	Second Avenue Overpass 2561	Bridge Repair	S320606401500	STBG6064006D	0.02	0.15	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	STBG <5k POP	ROW	CO39	Shady Sadie's Bridge	Bridge Replacement	S320039000050021	STBG0039420D	0.03	0.05	50,000	40,000		Bridge	G	2

Kanawha County

FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group/ Not	PM**
2023	2023	12/14/2023	HWI-BR	ENG	CO61/13	South Charleston Bridge Bundle	Bridge Rehabilitation	S320611300300	STBG6113001D	0.86	0.03	2,124,191	1,699,353		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	US119	Steven Wayne Smith Mem. Bridge SB	Deck Overlay/Joint Replacement	S32011966400	NHPP0119538D	0.15	6.64	200,000	160,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	US119	Steven Wayne Smith Mem. Bridge SB	Deck Overlay/Joint Replacement	S32011966400	NHPP0119539D	0.02	6.64	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	STBG-OFF	ENG	CO59	Thorofare Culvert	Culvert Repair	S3205909800	STBG0059011D	0.01	0.98	40,000	32,000		Bridge	G	2
2023	2023	12/14/2023	STBG-OFF	ROW	CO59	Thorofare Culvert	Culvert Repair	S3205909800	STBG0059012D	0.01	0.98	10,000	8,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	WV817	Tompkins Crossing Bridge	Bridge Repair	S3208112300	NHPP817008D	0.07	1.23	300,000	240,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	WV817	Tompkins Crossing Bridge	Bridge Repair	S3208112300	NHPP0817009D	0.07	1.23	200,000	160,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	CON	CO09	Tornado Bridge	LMC Overlay	S320961900	STP0009238DTC	0.07	6.19	4,839,015	4,839,015		Bridge	G	2
2023	2023	12/14/2023	NHPP	ENG	I77	Tuppers Creek Road-Jackson County Line	Reconstruction	S320771100600	NHPP0077110D	7.44	110.06	30,000	27,000		Community Development	NG	2
2024	2024	12/14/2023	HWI-BR	ENG	WV61	Upper Kanawha Valley Bridge Bundle	Bridge Repair	S3206100800	STBG0061428D	0.98	0.08	2,305,826	1,844,661		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	I79	US Army SFC Guy R Hively Mem. Bridge	Bridge Repair	S3207992000	STBG0079123D	0.06	9.2	600,000	540,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I79	US Army SFC Guy R Hively Mem. Bridge	Bridge Repair	S3207992000	STBG0079124D	0.06	9.2	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	STBG-FLEX	CON	WV817	WV817 Drainage	Replace Drainage	S32081709500	STP0817005DTC	0.07	0.95	250,000	250,000		Bridge	G	3
2024	2024	12/14/2023	HWI-BR	CON	I64	Academy Drive Overpass Bridge	Bridge Rehabilitation	S32064505100	STBG0064446D	0.02	50.51	950,000	855,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	CO7903	Bear Hollow Creek Culvert	Culvert Repair	S32070397500	STBG7903027D	0.02	9.75	60,000	48,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	US119	Captain Benjamin D Tiffner Mem. Bridges NB & SB	Deck Overlay/Joint Replacement	S320119139700	NHPP0119534D	0.06	6.64	1,600,000	1,280,000		Bridge	G	2
2024	2024	12/14/2023	STBG 50-200k POP	CON	I77	Charleston Interstate Signing Renovation 01	Signing	U32064530000	STBG0064412D	5.57	53	8,000,000	7,200,000		Traffic	G	1
2024	2024	12/14/2023	NHPP	CON	I77	Charleston Interstate Signing Renovation 02 I-77	Signing	U32077953400	STBG077107D	5.68	95.34	10,000,000	9,000,000		Traffic	G	1
2024	2024	12/14/2023	STBG 50-200k POP	CON	I77	Charleston Interstate Signing Renovation 03	Signing	U320771000	STBG0077109D	4.5	101	5,000,000	4,500,000		Traffic	G	1
2024	2024	12/14/2023	HWI-BR	CON	WV61	Chelyan Ramp Bridge	Bridge Repair	S3206100800	STBG0061430D	0.02	0.08	150,000	120,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	WV61	Chelyan Ramp Bridge	Bridge Repair	S3206100800	STBG0061428D	0.02	0.08	30,000	24,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	WV61	Chelyan Ramp Bridge	Bridge Repair	S3206100800	STBG0061429D	0.02	0.08	1,000	800		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	US19	Chief Master SGT George Wallace Hedrick JR Mem. Bridge SB	Deck Overlay/Joint Replacement	S32011910600	NHPP0119530D	0.12	1.06	1,600,000	1,440,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	CO47	Elk River Veterans Bridge	Bridge Repair	S3204728900	STBG0047061D	0.08	2.89	800,000	640,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	NA	Elkview Historical Bridge	Dismantle	S320EVHBD0100	STBG2024034D	0.02	0.08	500,000	400,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	NA	Elkview Historical Bridge	Dismantle	S320EVHBD0100	STBG2024035D	0.02	0.08	125,000	100,000		Bridge	G	2
2024	2024	12/14/2023	HWI-OFF	ENG	NA	Farnsworth Drive Bridge	Bridge Rehabilitation	S320FADB0100	STBG2023160D	0.02	0.12	600,000	480,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I64	Finney Branch OP	Bridge Repair	S32064509800	STBG0064458D	0.05	50.98	1,500,000	1,350,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	CO60/64	First Avenue Overpass 2560 +1	Bridge Repair	S320606402000	STBG6064003D	0.02	0.2	200,000	160,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I64	Fort Hill Bridge Ramp C	Bridge Repair	S3206400000	NHPP0064449D	1.15	0	2,500,000	2,250,000		Bridge	G	2

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2024	2024	12/14/2023	HWI-BR	CON	I79	Gabe's Creek Bridge	Bridge Repair	S32079159700	STBG0079152D	0.07	15.97	5,500,000	4,950,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	CO60/12	Georges Creek Bridge	Bridge Replacement	S320601268500	STBG6012	0.01	6.85	300,000	240,000		Bridge	G	2
2024	2024	12/14/2023	HWI	ENG	I77	I-77 Charleston Bridge Bundle	Bridge Rehabilitation	S32077994600	NHPP0077120D	0.2	99.46	1,074,000	966,600		Bridge	G	2
2024	2024	12/14/2023	NHPP	CON	US60	Glasgow - Hugheston Road	Resurfacing (1.5")	S320060367100	NHPP0060365D	2.9	36.71	850,000	680,000		Resurface	G	2
2024	2024	12/14/2023	NRT	CON	NA	Hatfield-McCoy-Kanawha Co. Trail System	Construct Trail	U320HATFI100	NRT2014201D	_	_	100,000	80,000		Community Development	G	3
2024	2024	12/14/2023	HWI	ENG	FANS1656	South Side CSX Ramp	Bridge Rehabilitation	S320SCSXR0100	STBG2023125DBC	0.02	0	50,000	50,000		Bridge	G	2
2024	2024	12/14/2023	STBG 5-50K POP	CON	CO23/0	Connell Road	1" Resurface	S320-023/0.000023	STBG0023056D	2.42	0	750,000	600,000		Resurface	G	2
2024	2024	12/14/2023	STBG-FLEX	CON	WV61	Montgomery Pratt (Auth AC)	Resurface	S320-061/000.000023	STBG0061432D	4.6	0	1,716,417	1,373,134		Resurface	G	2
2024	2024	12/14/2023	NRT	ENG	NA	Hatfield-McCoy-Kanawha Co. Trailhead Facility	Construct Trailhead Facility	U320HATFI200	NRT2018088DTC	_	_	30,000	30,000		Community Development	G	3
2024	2024	12/14/2023	HWI-BR	CON	I64	I-64 Central Avenue OP	Bridge Repair	S32064551700	STBG0064443D	0.02	55.17	3,000,000	2,700,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I77	I-77 Belle Ramp Over Piedmont & Railroad	Rehabilitation	S32077956600	NHPP0073492D	0.04	95.65	5,500,000	4,400,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I77	I-77 Belle Ramp Over US 60	Rehabilitation	S32077957100	NHPP0073495D	0.03	95.7	4,000,000	3,200,000		Bridge	G	2
2024	2024	12/14/2023	STBG	OT	US60	Second Avenue Overpass (Auth AC)	Inspection	T6206001500	STBGNBIS428D	0.1	0.15	24,654	19,723		Community Development	G	2
2024	2024	12/14/2023	HWI-BR	ENG	I77	I-77 NB Bridge Ramp	Bridge Repair	S3207705500	STBG0077160D	0.02	0.55	50,000	45,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	I77	I-77 NB Bridge Ramp	Bridge Repair	S3207705500	STBG007716D	0.02	0.55	1,000	900		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I77	I-77 Pocatalico River Bridges	Bridge Repair	S320771145900	STBG0077142D	0.05	114.59	3,000,000	2,700,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	I77	I-77 Spring Street Overpass Overpass NB & SB	Bridge Repair	S320771011800	STBG077144D	0.01	101.18	1,000	900		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I79	I-79 Clendenin I/C Bridges NB & SB	Bridge Repair	S32079192200	STBG0079114D	0.04	19.22	1,200,000	1,080,000		Bridge	G	2
2024	2024	12/14/2023	NHPP	CON	US60	Iowa Street +5	Design/Build ADA Ramps	S320600076200	NHPP0060377D	0.27	7.62	459,000	367,200		Community Development	G	3
2024	2024	12/14/2023	HWI-BR	CON	CO60/14	Joseph Homer Lloyd Bridge	Bridge Repair	S320601436400	STBG6014008D	0.02	3.64	600,000	480,000		Bridge	G	2
2024	2024	12/14/2023	STBG-OFF	CON	CO6018	Larry Conley Mem Bridge	Rehabilitation; C & P	S320060/180.0400	STBG6018003D	0.05	0.04	1,200,000	320,000		Bridge	G	2
2024	2024	12/14/2023	STBG 50-200K POP	CON	US60	Lee Street	Design/Build ADA Ramps	S320600160100	STP0060369D	1.18	16	333,000	266,400		Community Development	G	3
2024	2024	12/14/2023	HWI-BR	ENG	FANS1063	Louden Heights Bridge	Design Study-Replacement	S3206300900	STBG1063001DBC	0.02	0.09	550,000	550,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	US60	Malden OP Bridge 1718	Bridge Repair	S32060234700	NHPP0060426D	0.01	23.47	300,000	240,000		Bridge	G	2
2024	2024	12/14/2023	OTHER-FED	CON	I 64	Montrose - Oakwood	Replace Drainage Structure	S320640555700	NFA2517008D	3.55	55.57	2,400,000	0		Resurface	NG	3
2024	2024	12/14/2023	HWI-BR	ENG	I79	Newhouse Road Overpass Bridge +1	Bridge Repair	S3207902000	STBG0079149D	0.03	0.2	30,000	27,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	I79	Newhouse Road Overpass Bridge +1	Bridge Repair	S3207902000	STBG0079150D	0.03	0.2	1,000	900		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	CO60	Norbert E Eagloski Mem. Bridge	Bridge Repair	S320601424700	STBG6014011D	0.02	2.47	400,000	320,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	I79	PFC Clayton Andrew Craft Mem. Bridge NB	Bridge Repair	S32079154600	STBG0079121D	0.08	15.46	1,000	900		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	FANS1038	Quarrier Street Bridge	Bridge Repair	S3203800400	STBG1038001DBC	0.02	0.04	400,000	400,000		Bridge	G	2

Kanawha County																	
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2024	2024	12/14/2023	HWI-BR	ENG	WV622	Rocky Fork Channel Beam Br	Replace Bridge	S32062255100	STP0622030D	0.01	5.51	775,000	620,000		Bridge	G	2
2024	2024	12/14/2023	HWI-OFF	ENG	NA	School Street Bridge	Design Study-Replacement	S220SSBR100	STBG2023141D	0.02	0.17	550,000	550,000		Bridge	G	2
2024	2024	12/14/2023	HWI-OFF	ENG	NA	Scraggs Drive Bridge	Bridge Repair	S320SDBR0100	STBG2023218D	0.02	0.2	50,000	50,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	CO64/60	Second Avenue Overpass 2561	Bridge Repair	S3206066401500	STBG6064007D	0.02	0.15	1,000,000	800,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	CO39	Shady Sadie's Bridge	Bridge Replacement	S320039000050021	STBG0039421D10/28	0.03	0.05	2,400,000	1,920,000		Bridge	G	2
2024	2024	12/14/2023	HWI-OFF	ENG	NA	South Ruffner Slab	Bridge Repair	S320SRUF0100	STBG2023138D	0.02	0.07	50,000	50,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	US119	Steven Wayne Smith Mem. Bridge SB	Deck Overlay/Joint Replacement	S32011966400	NHPP0119540D	0.15	6.64	2,000,000	1,600,000		Bridge	G	2
2024	2024	12/14/2023	STBG-OFF	CON	CO59	Thorofare Culvert	Culvert Repair	S3205909800	STBG0059013D	0.01	0.98	75,000	60,000		Bridge	G	2
2024	2024	12/14/2023	NHPP-BR	CON	WV817	Tompkins Crossing Bridge	Bridge Repair	S3208112300	NHPP0817010D	0.07	1.23	1,200,000	960,000		Bridge	G	2
2024	2024	12/14/2023	NHPP	CON	I77	Tuppers Creek - Pocatalico	Resurface (Superpave)	S320771100600	NHPP0773483D	3.32	110.06	4,350,000	3,480,000		Resurface	G	2
2024	2024	12/14/2023	NHPP	CON	I77	Tuppers Creek Road-Jackson County Line (AC Payback)	Reconstruction	S320771100600	NHPP0077118D	7.44	110.06	22,000,000	17,600,000		Community Development	NG	2
2024	2024	12/14/2023	CMAQ 2.5	CON	US119	US119 North Traffic Signlas (10)	Traffic Signal Renovation	U320-119/009.890023	CMAQ0119571D	7.27	9.89	3,000,000	2,400,000		Community Development	G	1
2024	2024	12/14/2023	NHPP	CON	I77	Tuppers Creek Road-Jackson County Line (Auth AC)	Reconstruction	S320771100600	NHPP0077118D	7.44	110.06	22,000,000	17,600,000		Community Development	NG	2
2025	2025	12/14/2023	HWI-OFF	ENG	NA	Upper Marmet Bridge	Design Study-Replacement	S220UMBR00100	STBG2023079D	0.02	0.02	550,000	550,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I79	US Army SFC Guy R Hively Mem. Bridge	Bridge Repair	S3207992000	STBG0079125D	0.06	9.2	3,300,000	2,970,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	I77	US Army SFC Guy R Hively Mem. Bridge	Bridge Repair	S320771061100	STBG0077157D	0.06	106.11	40,000	36,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	CO43	US Army SP5 Johnnie Marvin Ayers Mem. Bridge	Bridge Repair	S3204313100	STBG00473140D	0.43	1.31	10,000	8,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	CO43	US Army SP5 Johnnie Marvin Ayers Mem. Bridge	Bridge Repair	S3204313100	STBG00473141D	0.43	1.31	1,000	800		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	I77	US Army SSG Hobert G. "Hobie" Underwood Mem. Bridge	Bridge Repair	S320771061100	STBG0077158D	0.06	106.11	1,000	900		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	WV61	Vice Admiral TJ Lopez Bridge	Bridge Repair	S3206101400	STBG0061425D	0.166	0.14	400,000	320,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	WV61	Vice Admiral TJ Lopez Bridge	Bridge Repair	S3206101400	STBG0061425D	0.166	0.14	10,000	8,000		Bridge	G	2
2024	2024	12/14/2023	STBG-FLEX	CON	CO64/03	Washington Street +2	Design/Build ADA Ramps	S32064030000000	STP0643003D	0.41	0	387,000	309,600		Community Development	G	3
2024	2024	12/14/2023	STBG 50-200K POP	CON	US60	Washington Street E +1	Design/Build ADA Ramps	S320600165300	STP0060376D	2.11	16.53	1,368,000	1,094,400		Community Development	G	3
2025	2025	12/14/2023	NHPP	CON	I79	Access Road - Willis Creek	Resurface (Double Micro)	S320 79 1330 00	NHPP0791134D	2.2	13.3	750,000	600,000		Resurface	G	2
2025	2025	12/14/2023	NHPP	CON	WV 622	Big Tyler Road	Design/Build ADA Ramps	S3206220021600	STP0062033D	1.63	2.16	666,000	532,800		Community Development	G	3
2025	2025	12/14/2023	HWI-BR	ENG	FANS1069	Central Avenue Overpass	Bridge Rehabilitation	S3200690000100	STBG1069001D	0.02	0.01	250,000	200,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	NA	Elkview Historical Bridge	Dismantle	S320EVHBD0100	STBG2025034D	0.02	0.08	1,500,000	1,200,000		Bridge	G	2
2026	2026	12/14/2023	HWI-OFF	ROW	NA	Farnsworth Drive Bridge	Bridge Rehabilitation	S320FADB0100	STBG2023161D	0.02	0.12	100,000	80,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	CO60/64	First Avenue Overpass 2560 +1	Bridge Repair	S320606402000	STBG6064004D	0.02	0.2	1,200,000	960,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	ENG	WV114	Greenbrier Street Bridge	Bridge Repair	S32011403400	NHPP0114034D	0.02	0.34	50,000	40,000		Bridge	G	2

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FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group/ Not	PM**
2025	2025	12/14/2023	HWI-OFF	ENG	NA	Hubbard Road Bridge	Rehabilitation	S320HRBR0100	STBG2023169D	0.02	0.18	400,000	320,000		Bridge	G	2
2025	2025	12/14/2023	HWI-OFF	ROW	NA	Hubbard Road Bridge	Rehabilitation	S320HRBR0100	STBG2023170D	0.02	0.18	10,000	8,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ENG	CO119/16	Newhouse Branch Road Study	Design Study	U2201191600000	STBG01191016D	0.92	0	175,000	140,000		Community Development	G	2
2025	2025	12/14/2023	NHPP	ENG	I64	I-64 South Charleston WV ON Ramp D	Bridge Repair	S3206400000	STBG0064434D	0.04	0	400,000	360,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	ROW	I64	I-64 South Charleston WV ON Ramp D	Bridge Repair	S3206400000	STBG0064435D	0.04	0	100,000	90,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	I77	I-77 NB Bridge Ramp	Bridge Repair	S3207705500	STBG077162D	0.02	0.55	150,000	135,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	CON	I77	I-77 Spring Street Overpass NB & SB	Bridge Repair	S320771011800	STBG077145D	0.01	101.18	300,000	270,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ENG	I79	I-79 Bridge NO 2572 SB	Bridge Rehabilitation	S3207901000	STBG0079106D	0.02	0.1	400,000	360,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ROW	I79	I-79 Bridge NO 2572 SB	Bridge Rehabilitation	S3207901000	STBG0079107D	0.02	0.1	10,000	9,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ENG	FANS1054	Kanawha Boulevard Bridge	Bridge Rehabilitation	S3200540000100	NHPP1054002D	0.02	0.01	1,000,000	800,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	CON	CO12	Kanawha Turnpike +2	Design/Build ADA Ramps	S320120042800	STP0012060D	1.81	4.28	468,000	374,400		Community Development	G	3
2025	2025	12/14/2023	NHPP	ENG	CO60/63	Kaufman Mem. 35th Street Bridge +2	Bridge Repair	S320606300600	NHPP6063009D	0.4	0.06	200,000	160,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	CON	US119	Lincoln County Line-WV214	Resurface (Double Micro)	S320119058000	NHPP0119466D	5.55	5.79	1,850,000	1,480,000		Resurface	G	2
2025	2025	12/14/2023	HWI-BR	ENG	WV25	Littlepage Bridge	Replace Bridge	S320250125900	HWI0025168D	0.03	12.59	700,000	640,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	CON	US60	MacCorkle Avenue +1	Designed/Build ADA Ramps	S320600091900	NHPP0060370D	3.79	9.19	648,000	518,400		Community Development	G	3
2025	2025	12/14/2023	HWI-BR	CON	I79	Newhouse Road Overpass Bridge +1	Bridge Repair	S3207902000	STBG0079151D	0.03	0.2	200,000	180,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	I79	PFC Clayton Andrew Craft Mem. Bridge NB	Bridge Repair	S32079154600	STBG0079122D	0.08	15.46	100,000	90,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ROW	FANS1038	Quarrier Street Bridge	Bridge Repair	S3203800400	STBG1038002DBC	0.02	0.04	100,000	100,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ROW	WV622	Rocky Fork Channel Beam Bridge	Replace Bridge	S32062255100	STP0622031D	0.01	5.51	734,000	587,200		Bridge	G	2
2025	2025	12/14/2023	HWI-OFF	ROW	NA	Scraggs Drive Bridge	Bridge Repair	S320SDBR0100	STBG2023219D	0.2	0.02	10,000	10,000		Bridge	G	2
2025	2025	12/14/2023	HWI-OFF	ROW	NA	South Ruffner Slab	Bridge Repair	S320SRUF0100	STBG2023139D	0.2	0.07	10,000	10,000		Bridge	G	2
2025	2025	12/14/2023	STBG-FLEX	CON	FANS1025	South Side Bridge +1	Rehabilitation	S3200250000000	STBG1025003D	0.2	0	5,500,000	4,400,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ENG	FANS1025	South Side Bridge +1	Bridge Rehabilitation	S3202500000	STBG1025001DBC	0.02	0	600,000	600,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ENG	FANS1025	South Side Bridge +1	Rehabilitation	S3200250000000	STBG1025001D	0.2	0	600,000	640,000		Bridge	G	2
2025	2025	12/14/2023	HWI-OFF	ENG	NA	Third Avenue Overpass +1	Design Study-Replacement	S220TAOVP0100	STBG2023152D	0.04	0.02	1,000,000	1,000,000		Bridge	G	2
2025	2025	12/14/2023	HWI	ROW	FANS1656	South Side CSX Ramp	Bridge Rehabilitation	S320SCSXR0100	STBG2023126DBC	0.02	0	10,000	10,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ENG	WV62	Tyler Creek Slab	Bridge Replacement	S3206206300	STBG0062874D	0.02	0.63	600,000	480,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ROW	WV62	Tyler Creek Slab	Bridge Replacement	S3206206300	STBG0062875D	0.02	0.63	100,000	80,000		Bridge	G	2
2025	2025	12/14/2023	HWI-OFF	ENG	NA	Upper Marmet Bridge	Bridge Replacement	S320UMBR00100	STBG2023225D	0.02	0.02	600,000	600,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	CO43	US Army SP5 Johnnie Marvin Ayers Mem. Bridge	Bridge Repair	S3204313100	STBG00473142D	0.43	1.31	150,000	120,000		Bridge	G	2

Kanawha County

FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group/ Not	PM**
2025	2025	12/14/2023	HWI-BR	CON	I77	US Army SSG Hobert G. "Hobie" Underwood Mem. Bridge	Bridge Repair	S320771061100	STBG077159D	0.06	106.11	200,000	180,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	WV61	Vice Admiral TJ Lopez Bridge	Bridge Repair	S3206101400	STBG0061427D	0.166	0.14	750,000	600,000		Bridge	G	2
2026	2026	12/14/2023	HWI-OFF	CON	NA	Hubbard Road Bridge	Rehabilitation	S320HRBR0100	STBG2023171D	0.02	0.18	800,000	680,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	I79	Little Sandy Creek Bridge 8.48 SB	Bridge Repair	S3207984800	STBG0079104D	0.02	8.48	10,000	9,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ENG	CO27	Kanawha Two Mile Bridge 2878	Bridge Replacement	S3202706700	STBG0027062D	0.05	0.67	300,000	240,000		Bridge	G	2
2026	2026	12/14/2023	HWI-OFF	CON	NA	Scraggs Drive Bridge	Bridge Repair	S320SDBR0100	STBG2023220D	0.02	0.2	200,000	200,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ENG	CO27	Kanawha Two Mile Bridge 2878	Design Study - Replacement	S2202706700	STBG0027055D	0.05	0.67	300,000	240,000		Bridge	G	2
2026	2026	12/14/2023	HWI-OFF	CON	NA	South Ruffner Slab	Bridge Repair	S320SRUF0100	STBG2023140D	0.02	0.07	200,000	200,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	FANS1054	Kanawha Boulevard Bridge	Bridge Rehabilitation	S3200540000100	NHPP1054003D	0.02	0.01	100,000	80,000		Bridge	NG	2
2026	2026	12/14/2023	HWI-BR	ROW	FANS1069	Central Avenue Overpass	Bridge Rehabilitation	S32006900000100	STBG1069002D	0.02	0.01	100,000	80,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	CO60/64	Montrose Drive I-64 Overpass	Bridge Rehabilitation	S320606402500	STBG6064009D	0.03	0.25	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	CO27	Kanawha Two Mile Bridge 2878	Bridge Replacement	S3202706700	STBG0027063D	0.05	0.67	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	CO61/13	Kanawha Turnpike I-64 Overpass	Bridge Rehabilitation	S320611300300	STBG6113002D	0.05	0.03	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-OFF	ROW	NA	Upper Marmet Bridge	Bridge Replacement	S320UMBR00100	STBG2023226D	0.02	0.02	100,000	100,000		Bridge	G	2
2026	2026	12/14/2023	HWI-OFF	CON	NA	Farnsworth Drive Bridge	Bridge Rehabilitation	S320FADB0100	STBG2023162D	0.02	0.12	3,600,000	2,880,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	CO32/3	Tupper Creek Pony Truss	Bridge Rehabilitation	S32032302900	STBG3203002D	0.03	0.29	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	I64	Army Cpl Kenneth R Hess Bridges EB & WB	Bridge Repair	S32064543700	STBG0064432D	0.04	54.37	200,000	180,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	WV94	Marmet CSX Overpass	Bridge Rehabilitation	S3209470000	STBG0094180D	0.03	7	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	WV214	Greenbrier Underpass	Bridge Rehabilitation	S32021404200	STBG0114038D	0.03	0.42	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	I77	Stadium Place OP	Bridge Rehabilitation	S32077994600	STBG0077122D	0.02	99.46	100,000	90,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	WV25	Littlepage Bridge	Replace Bridge	S320250125900	HWI0025169D	0.03	12.59	1,000,000	1,000,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	WV601	Jefferson Road Bridge NB	Bridge Rehabilitation	S32060113300	STBG0601013D	0.03	1.33	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	WV114	Greenbrier Street Bridge	Bridge Repair	S32011403400	NHPP0114035D	0.02	0.34	10,000	8,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	CO60/62	Bob Basil Mem. Bridge +2	Bridge Repair	S320606201400	NHPP6062008D	0.37	0.14	500,000	400,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	CO85	Bufflick Fork Culvert	Bridge Rehabilitation	S3208513000	STBG0085086D	0.01	1.3	1,000	800		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	CON	FANS1038	Quarrier Street Bridge	Bridge Repair	S3203800400	STBG1038003DBC	0.02	0.04	4,200,000	4,200,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	FANS1025	South Side Bridge	Bridge Rehabilitation	S3202500000	STBG1025002DBC	0.02	0	200,000	200,000		Bridge	G	2
2026	2026	12/14/2023	HWI	CON	FANS1066	South Side CSX Ramp	Bridge Rehabilitation	S320SCSXR0100	STBG2023127DBC	0.02	0	200,000	200,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	WV61	Slaughter Creek Bridge	Bridge Rehabilitation	S32061115000	STBG0061420D	0.02	1.5	1,000	800		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	US119	T-5 Leon Whitlock & PFC Forrest Wilson Mem. Bridge	Bridge Rehabilitation	S320119557D	NHPP0119557D	0.06	13.77	50,000	40,000		Bridge	G	2

Kanawha County

FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group/ Not	PM**
2027	2027	12/14/2023	HWI-BR	CON	WV62	Tyler Creek Slab	Bridge Replacement	S3206206300	STBG0062876D	0.02	0.63	800,000	640,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	US60	Earl Henry Curnutte Bridge	Bridge Rehabilitation	S3206033200	NHPP0060414D	0.12	3.32	250,000	200,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	WV622	Rocky Fork Channel Beam Bridge	Replace Bridge	S32062255100	STP0622032D	0.01	5.51	3,900,000	3,120,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	I79	Access Road "E" Underpass	Bridge Rehabilitation	S32079142100	STBG0079154D	0.01	14.21	1,000	900		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	I79	Access Road "E" Underpass	Bridge Rehabilitation	S32079142100	STBG0079153D	0.01	14.21	80,000	72,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	US119	T-5 Leon Whitlock & PFC Forrest Wilson Mem. Bridge	Bridge Rehabilitation	S320119137700	NHPP0119558D	0.06	13.77	1,000	800		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	US60	Earl Henry Curnutte Bridge	Bridge Rehabilitation	S3206033200	NHPP0060415D	0.12	3.32	1,000	800		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	US60	Lee Street Bridge	Bridge Rehabilitation	S32060165700	STBG0060418D	0.09	16.57	1,000	800		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	I77	Kanawha Turnpike I-64 Overpass	Bridge Rehabilitation	S320611300300	STBG6113003D	0.05	0.03	1,300,000	1,040,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	I77	Boyhood Home of Booker T Washington	Bridge Repair	S32077958100	STBG0077155D	0.12	95.81	200,000	180,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	CO21	Kanawha Two Mile Bridge 1536	Design Study	S2202126700	STBG0021927D	0.01	2.67	100,000	80,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	WV214	Greenbrier Underpass	Bridge Rehabilitation	S32021404200	STBG0114039D	0.03	0.42	1,700,000	1,360,000		Bridge	G	2
2027	2027	12/14/2023	NHPP	CON	WV114	Greenbrier Street Bridge	Bridge Repair	S32011403400	NHPP0114036D	0.02	0.34	1,800,000	1,440,000		Bridge	G	2
2027	2027	12/14/2023	NHPP	CON	I64	I-64 South Charleston WV ON Ramp D	Bridge Repair	S3206400000	STBG0064436D	0.04	0	2,249,353	2,024,418		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	I77	US Army PFC Teddy Ray Chandler Mem. Bridge +1	Bridge Rehabilitation	S32077981000	STBG0077125D	0.02	98.1	100,000	90,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	I79	I-79 Bridge NO 2672 NB	Bridge Rehabilitation	S32079106400	STBG0079147D	0.04	10.64	1,000	900		Bridge	G	2
2027	2027	12/14/2023	NHPP	ROW	CO60/63	Kaufman Mem. 35th Street Bridge +2	Bridge Repair	S320606300600	NHPP6063010D	0.4	0.06	500,000	400,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	I64	Army Cpl Kenneth R Hess Bridges EB & WB	Bridge Repair	S32064543700	STBG0064433D	0.04	54.37	12,000,000	10,800,000		Bridge	NG	2
2027	2027	12/14/2023	HWI-BR	ROW	I79	PFC Clayton Andrew Craft Mem. Bridge SB	Bridge Repair	S32079154600	STBG0079144D	0.11	15.46	1,000	900		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	CO60/64	Montrose Drive I-64 Overpass	Bridge Rehabilitation	S320606402500	STBG606401D	0.03	0.25	2,500,000	2,000,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	FANS1037	Virginia Street Bridge	Bridge Repair	S3203700200	STBG1037001DBC	0.02	0.02	10,000	10,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	FANS1037	Virginia Street Bridge	Bridge Repair	S3203700200	STBG1037001DBC	0.02	0.02	200,000	200,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	US60	US 60 Washington Street Bridge	Bridge Replacement	S3206055900	STBG0060421D	0.01	5.59	1,000	800		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	CO27	Kanawha Two Mile Bridge 2878	Bridge Replacement	S3202706700	STBG0027064D	0.05	0.67	5,000,000	4,000,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	WV25	Littlepage Bridge	Replace Bridge	S320250125900	HWI0025170D	0.03	12.59	3,750,000	3,000,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	CO85	Bufflick Fork Culvert	Bridge Rehabilitation	S3208513000	STBG0085087D	0.01	1.3	100,000	80,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	CO27	Left Fork Kanawha Two Mile Bridge No 2877	Bridge Rehabilitation	S3202700400	STBG0027056D	0.02	0.04	90,000	72,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	WV94	Marmet CSX Overpass	Bridge Rehabilitation	S3209470000	STBG0094181D	0.03	7	1,800,000	1,440,000		Bridge	G	2
2027	2027	12/14/2023	HWI-OFF	CON	NA	Upper Marmet Bridge	Bridge Replacement	S320UMBR00100	STBG2023228D	0.02	0.02	1,000,000	1,000,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	CO27	Left Fork Kanawha Two Mile Bridge NO 2877	Bridge Rehabilitation	S3202700400	STBG0027057D	0.02	0.04	1,000	800		Bridge	G	2

Kanawha County																	
FFY	**Origin FFY**	**Origin Date**	**Fund Type**	**Phase**	**Route**	**Project Name**	**Type of Work**	**State Project #**	**Federal Project #**	**Length (mi)**	**Beg. MP**	**Total Phase $ Amount**	**Federal $ Amount**	**Comment**	**Project Program***	**Group/ Not**	**PM****
2027	2027	12/14/2023	HWI-BR	ROW	WV61	Rush Creek No 3083	Bridge Rehabilitation	S32061179500	STBG0061423D	0.02	17.95	1,000	800		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	FANS1069	Central Avenue Overpass	Bridge Rehabilitation	S3200690000100	STBG1069003D	0.02	0.01	400,000	320,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	WV61	Rush Creek No 3083	Bridge Rehabilitation	S32061179500	STBG0061422D	0.02	17.95	50,000	40,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	CO32/3	Tupper Creek Pony Truss	Bridge Rehabilitation	S32032302900	STBG3203003D	0.03	0.29	1,000,000	800,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	WV601	Jefferson Road Bridge NB	Bridge Rehabilitation	S32060113300	STBG0601014D	0.03	1.33	500,000	400,000		Bridge	G	2
2027	2027	12/14/2023	HWI-OFF	ENG	NA	School Street Bridge	Bridge Replacement	S320SSBR200	STBG202308D	0.02	0.17	250,000	250,000		Bridge	G	2

Kanawha County Justifications

FFY	FUND	PHASE	NAME	GUIDING STATEMENT
2024	STBG	CON	Institute-Cross Lanes	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024	NHPP	OT	Boyhood Home of Booker T Washington (Auth AC)	Culture & Environment: Preserves a culturally and regionally significant location.
2024	HWI-BR	ENG	Gallagher Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024 2026 2027	HWI-BR	ENG ROW CON	Tupper Creek Pony Truss	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024	HWI	ENG	I-77 Charleston Bridge Bundle	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024 2025 2026	HWI	ENG ROW CON	South Side CSX Ramp	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024	STBG 5-50K POP	CON	Connell Road	System Preservation & Efficiency: Preserves a critical element of the existing transportation network. Safety & Security: Resurfacing roads serve to make travel safer for users of the road.
2024	STBG-FLEX	CON	Montgomery Pratt (Auth AC)	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024	STBG	OT	Second Avenue Overpass (Auth AC)	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024	CMAQ 2.5	CON	US119 North Traffic Signlas (10)	System Preservation & Efficiency: Preserves roadway signage. Safety & Security: Signage will improve driver safety with access to information.
2025	HWI-BR	ENG	Newhouse Branch Road Study	Safety & Security: Study will better help in making the road safer by highlighting issues of transportation network.
2025 2026 2027	HWI-BR	ENG ROW CON	Littlepage Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2024	NHPP	CON	Charleston Interstate Signing Renovation 02 I-77	System Preservation & Efficiency: Preserves roadway signage. Safety & Security: Signage will improve driver safety with access to information.
2026 2027	HWI-BR	ROW CON	Army Cpl Kenneth R Hess Bridges EB & WB	System Preservation & Efficiency: Preserves a critical element of the existing transportation network. Culture & Environment: Preservers a culturally and regionally significant bridge.
2026	HWI-OFF	CON	Hubbard Road Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-BR	ROW	Little Sandy Creek Bridge 8.48 SB	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ENG ROW CON	Kanawha Two Mile Bridge 2878	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-OFF	CON	Scraggs Drive Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.

Kanawha County Justifications

FFY	FUND	PHASE	NAME	GUIDING STATEMENT
2026	HWI-OFF	CON	South Ruffner Slab	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-BR	ROW	Kanawha Boulevard Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ROW CON	Central Avenue Overpass	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ROW CON	Montrose Drive I-64 Overpass	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ROW	Kanawha Turnpike I-64 Overpass	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-OFF	ROW CON	Upper Marmet Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-OFF	CON	Farnsworth Drive Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ROW CON	Marmet CSX Overpass	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ROW CON	Greenbrier Underpass	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-BR	ROW	Stadium Place OP	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ROW CON	Jefferson Road Bridge NB	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR NHPP	ROW CON	Greenbrier Street Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-BR	ROW	Bob Basil Mem. Bridge +2	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ROW CON	Bufflick Fork Culvert	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-BR	CON	Quarrier Street Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-BR	ROW	South Side Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW	Slaughter Creek Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ENG ROW	T-5 Leon Whitlock & PFC Forrest Wilson Mem. Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.

Kanawha County Justifications

FFY	FUND	PHASE	NAME	GUIDING STATEMENT
2027	HWI-BR	CON	Tyler Creek Slab	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ENG ROW	Earl Henry Curnutte Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	CON	Rocky Fork Channel Beam Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ENG ROW	Access Road "E" Underpass	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW	Lee Street Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW	Boyhood Home of Booker T Washington	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ENG	Kanawha Two Mile Bridge 1536	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	NHPP	CON	I-64 South Charleston WV ON Ramp D	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW	US Army PFC Teddy Ray Chandler Mem. Bridge +1	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW	I-79 Bridge NO 2672 NB	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	NHPP	ROW	Kaufman Mem. 35th Street Bridge +2	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW	PFC Clayton Andrew Craft Mem. Bridge SB	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW CON	Virginia Street Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW	US 60 Washington Street Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ENG ROW	Left Fork Kanawha Two Mile Bridge No 2877	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ENG ROW	Rush Creek No 3083	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-OFF	ENG	School Street Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.

Putnam County

FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group / Not	PM**
2024	2024	12/14/2023	TAP	ENG	NA	Buffalo Main Street	Design Sidewalks	U340BUFFA200	TAP2020240D	-	-	75,000	60,000		Community Development	G	3
2023	2023	12/14/2023	STBG <5K POP	CON	WV62	Buffalo Road (AC Payback) (Split Funded)	Resurfacing (1.5")	S34062188200	ACSTP0062865D	3.08	18.82	586,192	468,954		Resurface	G	2
2024	2024	12/14/2023	TAP	ENG	NA	County Park Drive	New Sidewalk, Walking Bridge	U340CTYPK100	TAP2020228D	-	-	75,000	60,000		Community Development	G	3
2023	2023	12/14/2023	HWI-BR	ENG	NA	Deputy Sheriff Jonathan Janey Mem. Bridge	Bridge Repair	S34064362400	STBG0064459D	0.03	36.24	300,000	270,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I64	Deputy Sheriff Jonathan Janey Mem. Bridge	Bridge Repair	S34064362400	STBG0064460D	0.03	36.24	1,000	900		Bridge	G	2
2023	2023	12/14/2023	HSIP	CON	CO21	Grandview Ridge Guardrail	Install Guardrail	U340210012200	HSIP0021418D	3.65	1.22	128,000	115,200		Traffic	G	1
2024	2024	12/14/2023	HWI-OFF	CON	CR25	Hulbert Heights Bridge	Rehabilitation; C & P	S340025/080.250022	STBG2508003D	0.28	0.25	990,974	792,780		Bridge	G	2
2023	2023	12/14/2023	STBG-OFF	ENG	CR25	Hulbert Heights Bridge (AC Payback)	Rehabilitation; C & P	S340025/080.250022	STBG2508002D	0.28	0.25	30,000	24,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	WV34	Hurricane Railroad OP	Bridge Repair	S3403499300	STBG0034098D	0.04	9.93	50,000	40,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	WV34	Hurricane Railroad OP	Bridge Repair	S3403499300	STBG0034099D	0.04	9.93	80,000	64,000		Bridge	G	2
2023	2023	12/14/2023	NHPP	CON	I64	Hurricane Rest Area (EB)	Construct Restrooms, Ren Facility	S340640346000	NHPP0641390DTC	0	34.6	3,000,000	3,000,000		Regional Mobility	NG	3
2023	2023	12/14/2023	NHPP	CON	I64	Hurricane Rest Area (WB)	Construct Restrooms, Ren Facility	S340640345000	NHPP0641389DTC	0	34.5	3,000,000	3,000,000		Regional Mobility	NG	3
2023	2023	12/14/2023	STBG 50-200K POP	CON	WV34	Hurricane Road	Resurfacing (1.5")	S340340168100	STP0034085D	0.72	16.81	599,626	479,701		Resurface	G	2
2024	2024	12/14/2023	STBG-TMA	CON	NA	Hurricane Sidewalks	Construct Sidewalk	U340HURRI800	STPG2016294D	_	_	276,000	220,800		Community Development	G	3
2024	2024	12/14/2023	STBG-TMA	ROW	CO34/14	Mount Vernon Road Sidewalk	Sidewalks	U340341400100	STPTMA??D	1.75	0	1,500,000	1,200,000		Community Development	G	3
2023	2023	12/14/2023	HWI-BR	CON	WV64	PFC Herman Daner Rogers Mem Bridge	Rehabilitation; C & P	S34034149800	STBG0034094D	0.03	14.98	751,210	600,968		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ENG	WV62	Plymouth Bridge	Bridge Replacement	S3406263700	STBG0062880D	0.02	6.37	550,000	440,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	WV62	Plymouth Bridge	Bridge Replacement	S3406263700	STBG0062881D	0.02	6.37	250,000	200,000		Bridge	G	2
2024	2024	12/14/2023	STBG-FLEX	CON	WV34	Teays Valley - Winfield (AC Payback)	Resurface	S340-034/0014.360023	STBG0034101D	2.99	2.99	2,569,488	2,055,591		Resurface	G	2
2024	2024	12/14/2023	TAP	CON	NA	Teays Valley Sidewalks 2015	Construct Sidewalk	U340TEA/YS100	TAP2015063D	_	_	300,000	240,000		Community Development	G	3
2023	2023	12/14/2023	HWI-BR	ENG	CO25/02	US Army SP4 Harold Skip Grueser Mem. Bridge	Bridge Repair	S34025201300	STBG2502002D	0.02	0.13	300,000	240,000		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	CO25/02	US Army SP4 Harold Skip Grueser Mem. Bridge	Bridge Repair	S34025201300	STBG2502003D	0.02	0.13	10,000	8,000		Bridge	G	2
2024	2024	12/14/2023	NHPP-BR	CON	I64	US35/I-64 I/C - Nitro I/C (D/B)(GO Bond)(AC Payback)	Upgrade to 6 Lanes	U340640413700	NHPP0641399	3.79	41.37	11,000,000	11,000,000		Regional Mobility	NG	3
2023	2023	12/14/2023	HWI-BR	ENG	I64	Wave Pool Bridge EB	Bridge Repair	S34064346100	STBG0064450D	0.03	34.61	25,000	22,500		Bridge	G	2
2023	2023	12/14/2023	HWI-BR	ROW	I64	Wave Pool Bridge EB	Bridge Repair	S34064346100	STBG0064451D	0.03	34.61	10,000	9,000		Bridge	G	2
2023	2023	12/14/2023	STBG 5-50K POP	CON	WV817	Winfield Road	Design/Build ADA Ramps	S340 817 01087 00	STP0817007D	0.84	10.87	252,000	201,600		Community Development	G	3
2023	2023	12/14/2023	TAP	ENG	NA	Winfield Sidewalk System	Design Sidewalks	U340WINFI300	TAP2020239D	-	-	59,290	47,432		Community Development	G	3
2024	2024	12/14/2023	TAP	CON	NA	Poca Laurel Avenue Sidewalk Extension	Construct Sidewalk	U340-POC/AS-1.00	TAP2022116D	-	-	285,000	228,000		Community Development	G	3
2024	2024	12/14/2023	TAP	ENG	NA	Winfield Sidewlak System (AC Payback)	Design Sidewalks	U340WINFI300	TAP2020239D	-	-	65,681	52,545		Community Development	G	3

Putnam County

FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group / Not	PM**
2024	2024	12/14/2023	CMAQ 2.5	CON	WV62	WV62 and Eighteen Mile Upgrade	Add Turn Lanes	S340062002120022	STBG0062864D	0.4	21.2	1,000,000	800,000		Traffic	G	3
2023	2023	12/14/2023	STBG<5K POP	ROW	WV62	WV62 and Eighteen Mile Upgrade (Split Funded)	Add Turn Lanes	S340062002120022	STBG0062863D	0.4	21.2	31,046	15,163		Community Development	G	1
2023	2023	12/14/2023	STBG-FLEX	ROW	WV62	WV62 and Eighteen Mile Upgrade (Split Funded)	Add Turn Lanes	S340062002120022	STBG0062863D	0.4	21.2	24,837	18,954		Community Development	G	1
2023	2023	12/14/2023	CMAQ <5k POP	ROW	WV869	WV869/WV817 Connector Road and I/S Improvements	Reconfigure Buffalo Connection	U340869IC00000	STBG2023148D	-	-	25,000	20,000		Traffic	G	1
2023	2023	12/14/2023	HWI-BR	ENG	WV25	Armour Creek Bridge	Bridge Replacement	S3400250004600	STBG0025145D	0.01	0.46	600,000	480,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	I64	Deputy Sheriff Jonathan Janey Mem. Bridge	Bridge Repair	S34064362400	STBG0064461D	0.03	36.24	1,000,000	900,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ENG	CO19	Hurricane Creek Bridge	Replace Bridge	S3401985400	STP0019490D	0.03	8.54	900,000	720,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ROW	CO19	Hurricane Creek Bridge	Replace Bridge	S34019 85400	STP0019491D	0.03	8.54	112,500	90,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	CON	WV34	Hurricane Railroad OP	Bridge Repair	S3403499300	STBG0034100D	0.04	9.93	400,000	320,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	WV62	Plymouth Bridge	Bridge Replacement	S3406263700	STBG0062882D	0.02	6.37	1,600,000	1,280,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	I64	Sovine Road Bridge EB	Bridge Repair	S34064331300	STBG0064476D	0.03	33.13	25,000	22,500		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ROW	I64	Sovine Road Bridge EB	Bridge Repair	S34064331300	STBG0064477D	0.03	33.13	1,000	900		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	ENG	WV34	US ARMY CPL Roy E Clark Mem. Bridge	Bridge Repair	S3403494500	STBG0034095D	0.02	9.45	300,000	240,000		Bridge	G	2
2024	2024	12/14/2023	HWI-BR	CON	CO25/02	US Army SP4 Harold Skip Grueser Mem. Bridge	Bridge Repair	S34025201300	STBG2502004D	0.02	0.13	750,000	600,000		Bridge	G	2
2024	2024	12/14/2023	NHPP	CON	I64	US35/I-64 I/C - Nitro I/C (D/B)(GO Bond)(AC Payback)	Upgrade to 6 Lanes	U340640413700	NHPP0641399	3.79	41.37	9,520,435	9,520,435		Regional Mobility	NG	3
2024	2024	12/14/2023	HWI-BR	CON	I64	Wave Pool Bridge EB	Bridge Repair	S34064346100	STBG0064452D	0.03	34.61	75,000	67,500		Bridge	G	2
2024	2024	12/14/2023	TAP	CON	NA	Winfield Downtown Streetscape	Design/Construct Sidewalk	U340WINFI200	TAP2015256D	_	_	294,650	294,650		Community Development	G	3
2025	2025	12/14/2023	HWI-BR	ROW	WV25	Armour Creek Bridge	Bridge Replacement	S340025/000.460022	STBG0025146D	0.01	0.46	100,000	80,000		Bridge	G	2
2025	2025	12/14/2023	CRP 5-50K POP	CON	WV62	Bancroft Road +1	Design/Build ADA Ramps	S340620058500	STP???D	0.4	5.85	351,000	280,800		Community Development	G	3
2025	2025	12/14/2023	HWI-OFF	ENG	NA	Conner Street Bridge	Substructure Rehabilitation	S340CSB0100	STBG2023163D	0.02	0.01	300,000	240,000		Bridge	G	2
2025	2025	12/14/2023	HWI-OFF	ROW	NA	Conner Street Bridge	Substructure Rehabilitation	S340CSB0100	STBG2023164D	0.02	0.01	300,000	240,000		Bridge	G	2
2025	2025	12/14/2023	STBG 5-50K POP	CON	US60	Fat Katz Lake Road	Resurfacing (1.5")	S3400600000000	STP0060364D	1.94	0	400,000	48,000		Resurface	G	2
2025	2025	12/14/2023	HWI-BR	ENG	CO19	Hurricane Creek Bridge	Replace Bridge	S3401985400	STP0019490D	0.03	8.54	900,000	720,000		Bridge	G	2
2025	2025	12/14/2023	HWI-BR	ROW	CO19	Hurricane Creek Bridge	Replace Bridge	S3401985400	STP0019491D	0.03	8.54	112,500	90,000		Bridge	G	2
2025	2025	12/14/2023	CRP 5-50K POP	CON	CO19	Hurricane Creek Road +3	Design/Build ADA Ramps	S340190000100	STP0019500D	0.57	0	198,000	158,400		Community Development	G	3
2025	2025	12/14/2023	CRP 5-50K POP	CON	WV34 AL	Main Street	Design/Build ADA Ramps	S340A3400124 00	STP0034087D	0.47	1.24	153,000	122,400		Community Development	G	3
2025	2025	12/14/2023	STBG-TMA	CON	CO34/14	Mount Vernon Road Sidewalk	Sidewalks	U340341400100	STPTMA0034093D	1.75	0	3,000,000	2,400,000		Community Development	G	3
2025	2025	12/14/2023	HWI-BR	CON	I64	Sovine Road Bridge EB	Bridge Repair	S34064331300	STBG0064478D	0.03	33.13	100,000	90,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	CON	CO33	Teays Valley Road	Design/Build ADA Ramps	S340330000000	STP0033432D	0.46	0	63,000	50,400		Community Development	G	3

Putnam County

FFY	Origin FFY	Origin Date	Fund Type	Phase	Route	Project Name	Type of Work	State Project #	Federal Project #	Length (mi)	Beg. MP	Total Phase $ Amount	Federal $ Amount	Comment	Project Program*	Group / Not	PM**
2025	2025	12/14/2023	NHPP-EXEMPT	CON	US35	US35	Resurfacing (1.5")	S340350002700	NHPP0035225DTC	2.49	0.27	2,400,000	2,400,000		Resurface	G	2
2025	2025	12/14/2023	HWI-BR	ROW	WV34	US Army CPL Roy E Clark Mem. Bridge	Bridge Repair	S3403494500	STBG0034096D	0.02	9.45	20,000	16,000		Bridge	G	2
2025	2025	12/14/2023	CMAQ 2.5	CON	WV869	WV869/WV817 Connector Road and I/S Improvements	Reconfigure Buffalo Connection	U340869IC00000	STBG2023020D	-	-	5,700,000	4,560,000		Traffic	G	1
2026	2026	12/14/2023	HWI-OFF	ROW	NA	Park Road Bridge	Bridge Replacement	S340PRB0100	STBG2023216D	0.02	0.01	10,000	10,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ROW	CO35/15	Rock Branch Pipe Culvert	Bridge Rehabilitation	S340351500700	STBG3515002D	0.01	0.07	1,000	800		Bridge	G	2
2026	2026	12/14/2023	STBG-OFF	ENG	CO35	Rock Branch Pipe Culvert Repair	Install Riprap, remove debris	S3400351500700	STBG3515001D	0.01	0.07	20,000	16,000		Bridge	G	2
2026	2026	12/14/2023	HWI-OFF	ENG	NA	Park Road Bridge	Bridge Replacement	S340PRB0100	STBG2023215D	0.02	0.01	400,000	400,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	CON	WV34	US ARMY CPL Roy E Clark Mem. Bridge	Bridge Repair	S3403494500	STBG0034097D	0.02	9.45	800,000	640,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ENG	CO35/15	Rock Branch Pipe Culvert	Bridge Rehabilitation	S340351500700	STBG3515001D	0.01	0.07	20,000	16,000		Bridge	G	2
2026	2026	12/14/2023	HWI-BR	ENG	WV869	Jonathon David Higginbotham Mem. Bridge	Design Study - Rehabilitation	S24086902700	STBG0869001D	0.31	0.27	300,000	240,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	WV62	Robertsburg Bridge	Bridge Repair	S32062233200	STBG0062886D	0.04	23.32	75,000	60,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	NA	Hurricane City Park Bridge	Bridge Repair	S340HCPB0100	STBG2023246DBC	0.02	0.01	10,000	10,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	NA	Hurricane City Park Bridge	Bridge Repair	S340HCPB0100	STBG2023247DBC	0.02	0.01	550,000	550,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	CO35/15	Rock Branch Pipe Culvert	Bridge Rehabilitation	S340351500700	STBG3515003D	0.01	0.07	60,000	48,000		Bridge	G	2
2027	2027	12/14/2023	HWI-OFF	CON	NA	Conner Street Bridge	Substructure Rehabilitation	S340CSB0100	STBG2023165D	0.02	0.01	300,000	240,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ENG	WV869	Jonathon David Higginbotham Mem. Bridge	Bridge Rehabilitation	S34086902700	STBG0869002D	0.31	0.27	300,000	240,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	WV62	Robertsburg Bridge	Bridge Repair	S34062233200	STBG0062887D	0.04	23.32	1,000	800		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	CO19	Hurricane Creek Bridge	Replace Bridge	S3401985400	STP0019492D	0.03	8.54	2,250,000	1,800,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	CON	WV25	Armour Creek Bridge	Bridge Replacement	S340-000.460022	STBG0025147D	0.01	0.46	1,100,000	880,000		Bridge	G	2
2027	2027	12/14/2023	HWI-BR	ROW	WV869	Jonathon David Higginbotham Mem. Bridge	Bridge Rehabilitation	S34086902700	STBG869003D	0.01	0.27	1,000	800		Bridge	G	2

Putnam County Justifications

FFY	FUND	PHASE	NAME	GUIDING STATEMENT
2024	TAP	CON	Poca Laurel Avenue Sidewalk Extension	Economic Vitality: Improves walkability in a way that connects residents to businesses. Mobility & Accessibility: Creates an accessible pedestrian public right of way. Safety & Security: Serves to separate and protect pedestrian travelers from motor vehicle traffic.
2024	TAP	ENG	Winfield Sidewlak System (AC Payback)	Economic Vitality: Improves walkability in a way that connects residents to businesses. Mobility & Accessibility: Creates an accessible pedestrian public right of way. Safety & Security: Serves to separate and protect pedestrian travelers from motor vehicle traffic.
2026	STBG-OFF	ENG	Rock Branch Pipe Culvert Repair	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-OFF	ENG ROW	Park Road Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026	HWI-BR	CON	US ARMY CPL Roy E Clark Mem. Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ENG ROW CON	Rock Branch Pipe Culvert	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2026 2027	HWI-BR	ENG ROW	Jonathon David Higginbotham Mem. Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ENG ROW	Robertsburg Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	ROW CON	Hurricane City Park Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-OFF	CON	Conner Street Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	CON	Hurricane Creek Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.
2027	HWI-BR	CON	Armour Creek Bridge	System Preservation & Efficiency: Preserves a critical element of the existing transportation network.

Districtwide																
FFY	**Origin FFY**	**Origin Date**	**Fund Type**	**Phase**	**Route**	**Project Name**	**Type of Work**	**State Project #**	**Federal Project #**	**Length (mi)**	**Beg. MP**	**Total Phase $ Amount**	**Federal $ Amount**	**Comment**	**Project Program***	**Group / Not**	**PM****
2023	2023	12/14/2023	HSIP	CON	NA	D-1 Recall Striping (AC Payback) (Split Funded)	Pavement Markings (PAINT)	S381RECAL2300	STP2023007D	-	-	100,000	100,000		Traffic	G	1
2023	2023	12/14/2023	STBG-FLEX	CON	NA	D-1 Recall Striping (AC Payback) (Split Funded)	Pavement Markings (PAINT)	S381RECAL2300	STP2023007D	-	-	339,083	207,358		Traffic	G	1
2024	2024	12/14/2023	HSIP	CON	WV3	D1 Roadway Departure +8	Signing : Delineators	S381STRIP2300	HSIP2023025D	-	-	2,700,000	2,430,000		Traffic	G	1
2023	2023	12/14/2023	STBG-FLEX	ENG	NA	FY 24 SF Bridge Inspect - D1 (Split Funded)	Bridge Inspection BY SF	T681NBIS2400	NHST2024511D	-	-	750,000	600,000		Bridge	G	2
2023	2023	12/14/2023	STBG-OFF	ENG	NA	FY 24 SF Bridge Inspect - D1 (Split Funded)	Bridge Inspection BY SF	T681NBIS2400	NHST2024511D	-	-	750,000	600,000		Bridge	G	2
2023	2023	12/14/2023	PL	OTH	NA	FY24 RIC MPO	Highway planning & research	T699SPR2406	SPR2023277D	-	-	642,500	514,000		Planning	G	NA
2023	2023	12/14/2023	STBG-FLEX	CON	NA	Roadway Striping (D1)	Insert Pavement Mark (PAINT)	S381STRIP2400	STP2024002D	-	-	1,165,724	652,805		Traffic	G	1
2024	2024	12/14/2023	STBG-FLEX	CON	NA	D-1 Recall Striping	Pavement Markings (PAINT)	S381RECAL2400	STP2021010D	-	-	267,908	187,535		Traffic	G	1
2024	2024	12/14/2023	HWI-BR	ENG	NA	FY 25 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2500	NHST2025016D	-	-	800,000	640,000		Bridge	G	2
2024	2024	12/14/2023	STBG-OFF	ENG	NA	FY 25 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2500	NHST2025016D	-	-	800,000	640,000		Bridge	G	2
2024	2024	12/14/2023	STBG-FLEX	CON	NA	Roadway Striping (D1)	Insert Pavement Mark (PAINT)	S381STRIP2400	STP2024002D	-	-	1,165,724	652,805		Traffic	G	1
2024	2024	12/14/2023	STBG-FLEX	CON	NA	Roadway Striping (D1)	Insert Pavement Mark (PAINT)	S381STRIP2400	STP2024002D	-	-	1,165,724	652,805		Traffic	G	1
2025	2025	12/14/2023	STBG-FLEX	CON	NA	D-1 Recall Striping	Pavement Markings (PAINT)	S381RECAL2500	STP2021010D	-	-	281,303	196,912		Traffic	G	1
2025	2025	12/14/2023	STBG-FLEX	ENG	NA	FY 26 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2500	NHST2026012D	-	-	800,000	640,000		Bridge	G	2
2025	2025	12/14/2023	STBG-OFF	ENG	NA	FY 26 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2500	NHST2026012D	-	-	800,000	640,000		Bridge	G	2
2025	2025	12/14/2023	NHPP	CON	I64	I-64 Signing Hurricane-Dunbar	Renovate Signing	S340640340000	NHPP0641361DTC	19	34	1,200,000	1,200,000		Traffic	G	1
2025	2025	12/14/2023	STBG-FLEX	CON	NA	Roadway Striping (D1)	Insert Pavement Mark (PAINT)	S381STRIP2500	STP2025006D	-	-	1,165,724	652,805		Traffic	G	1
2026	2026	12/14/2023	STBG-FLEX	ENG	NA	FY 27 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2700	NHST2027012D	-	-	800,000	640,000		Bridge	G	2
2026	2026	12/14/2023	STBG-FLEX	CON	NA	D-1 Recall Striping	Pavement Markings (PAINT)	S381RECAL2600	STP2021010D	-	-	231,400	162,000		Traffic	G	1
2026	2026	12/14/2023	STBG-OFF	ENG	NA	FY 27 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2700	NHST2027012D	-	-	800,000	640,000		Bridge	G	2
2027	2027	12/14/2023	STBG-FLEX	ENG	NA	FY28 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2800	NHST2028012D	-	-	800,000	640,000		Bridge	G	2
2027	2027	12/14/2023	STBG-OFF	ENG	NA	FY28 SF Bridge Inspect - D1	Bridge Inspection BY SF	T681NBIS2800	NHST2028012D	-	-	800,000	640,000		Bridge	G	2
2027	2027	12/14/2023	STBG-FLEX	CON	NA	D-1 Recall Striping	Pavement Markings (PAINT)	S381RECAL2700	STP2021010D	-	-	281,303	196,912		Traffic	G	1
2027	2027	12/14/2023	STBG-FLEX	CON	NA	Roadway Striping (D1)	Insert Pavement Mark (PAINT)	S381STRIP2700	STP2025006D	-	-	1,165,724	652,805		Traffic	G	1

Districtwide Justifications

FFY	FUND	PHASE	NAME	GUIDING STATEMENT
2026	STBG-FLEX STBG-OFF	ENG	FY 27 SF Bridge Inspect - D1	System Preservation: Seek to evaluate the conditon of bridges.
2026	STBG-FLEX	CON	D-1 Recall Striping	System preservation: Preserves roadway striping.
2027	STBG-FLEX STBG-OFF	ENG	FY28 SF Bridge Inspect - D1	System Preservation: Seek to evaluate the conditon of bridges.
2027	STBG-FLEX	CON	D-1 Recall Striping	System preservation: Preserves roadway striping.
2027	STBG-FLEX	CON	Roadway Striping (D1)	System preservation: Preserves roadway striping.

EIGHT CORE PROGRAMS (GROUPS)*

1) BRIDGE PROGRAM
2) COMMUNITY DEVELOPMENT and CONNECTIVITY PROGRAM
3) LOCALIZED MOBILITY IMPROVEMENT PROGRAM
4) PLANNING AND WORKFORCE DEVELOPMENT PROGRAM
5) RESURFACING PROGRAM
6) TRAFFIC PROGRAM
7) REGIONAL MOBILITY PROGRAM
8) TRANSIT PROGRAM

PERFORMANCE MEASURES**

PM1 - Safety

· Number of fatalities;
· Number of serious injuries;
· Fatality rate per HMVMT;
· Serious injury rate per HMVMT;
· Number of non-motorized fatalities and serious injuries.

PM2 - Pavement and Bridge

· Assess the condition of pavements on the Interstate System and on the Non-Interstate National Highway System (NHS)
· Assess the condition of bridges carrying the Non-Interstate NHS.

PM3 - System Performance, Freight, Congestion and Air Quality

· Assess the performance of the Interstate and Non-Interstate NHS.
· Assess freight movement on the Interstate System.
· Assess traffic congestion and on-road mobile source emissions for carrying out the Congestion Mitigation and Air Quality Improvement Program (CMAQ).

Section 3: Public Transit Improvement Plan and Project List

Kanawha Valley Regional Transportation Authority (KVRTA) - Charleston, WV 2024 - 2027 Transportation Improvement Plan
MPO - Region III - Regional Intergovernmental Council (RIC)

				2022		2023		2024		2025		2026		2027	
Project Description	**Source**	***Fed. (1000's)***	***Local (1000's)***	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**
Operating Assist.(Salaries/Wages & Fringes)	5307	*17,563.0*	*17,563.0*	***Rescue Act Funds***		3,563.0	3,563.0	3,500.0	3,500.0	3,500.0	3,500.0	3,500.0	3,500.0	3,500.0	3,500.0
Rolling Stock	5307	3,213.5	1,083.4	1,613.5	403.4	0.0	0.0	400.0	80.0	400.0	200.0	400.0	200.0	400.0	200.0
Rolling Stock	5339	1,827.0	518.0	752.0	188.0	420.0	105.0	235.0	45.0	120.0	30.0	180.0	120.0	120.0	30.0
Purchase Support Vehicles	5307	*0.0*	*0.0*												
Purchase Support Vehicles	*5339*	*135.0*	*33.8*	23.0	5.8			32.0	8.0	28.0	7.0			52.0	13.0
Building Rehabilition	*5339*					200.0	50.0								
Building -Construction	*5339*					1,545.1	382.2								
Planning Assistance	5307	*0.0*	*0.0*				0.0								
Associated Capital Items	5307	*104.0*	*26.0*	32.0	8.0	16.0	4.0	16.0	4.0	16.0	4.0	12.0	3.0	12.0	3.0
Capital Lease ADP/Software	5307	*0.0*	*0.0*												
ADP/Hardware and or Software	5307	*200.0*	*50.0*	40.0	10.0	80.0	20.0							80.0	20.0
Communications Equipment	5307	*80.0*	*20.0*					80.0	20.0						
Garage and Preventative Maint. Equip	5307	*110.0*	*27.5*	20.0	5.0	20.0	5.0	10.0	2.5	20.0	5.0	20.0	5.0	20.0	5.0
Construction & Renovations	5307	*20.0*	*5.0*	20.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bus Stations/Stops/Terminals	5307	*50.0*	*12.5*			20.0	5.0			10.0	2.5			20.0	5.0
Surveillance / Security Equipment	5307	*72.0*	*18.0*	12.0	3.0	12.0	3.0	12.0	3.0	12.0	3.0	12.0	3.0	12.0	3.0
Totals		23,374.5	19,357.2	2,512.5	628.2	5,876.1	4,137.2	4,285.0	3,662.5	4,106.0	3,751.5	4,124.0	3,831.0	4,216.0	3,779.0

Submitted to RIC
November 16 2023

			2022		***2023***		***2024***		***2025***		***2026***		***2027***	
Source	***Fed. (1000's)***	***Local (1000's)***	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**
5307	17,563	17,563	0	0	3,563	3,563	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
5307	3,214	1,083	1,614	403	0	0	400	80	400	200	400	200	400	200
5307	636	159	124	31	148	37	118	30	58	15	44	11	144	36
5339	1,962	552	775	194	2,165	537	267	52	148	37	180	120	172	43
	23,375	19,357	2,513	628	5,876	4,137	4,285	3,662	4,106	3,752	4,124	3,831	4,216	3,779

Kanawha Valley Regional Transportation Authority		2021 (Actual)		2022 (Actual)		2023		2024		2025		2026		2027		2028	
Charleston, WV	**Source**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**	**Federal**	**Local**
Operating Assistance																	
Operating Assistance	***5307, CMAQ, 5310***	CARES Act Funds		American Rescue Plan Act Funds		$3,563,000	$3,563,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000
Capital Assistance																	
Revenue Rolling Stock Replacement	***5307,5339, 5339 Discretionary 5310,***	$3,529,900	$882,475	$2,365,500	$591,375	$257,676	$64,419	$635,000	$158,750	$520,000	$130,000	$580,000	$145,000	$520,000	$130,000	$580,000	$145,000
Revenue Rolling Stock Expansion	***5307,5339, 5339 Discretionary 5310***																
Support Vehicles	***5307,5339, 5339 Discretionary***	$22,400	$5,600	$23,000	$5,750	$0	$0	$32,000	$8,000	$28,000	$7,000	$0	$0	$52,000	$13,000	$48,000	$12,000
Buildings - A&E	***5307,5339, 5339 Discretionary***	$0	$0	$0	$0	$200,000	$50,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Buildings - Construction	***5307,5339, 5339 Discretionary***	$0	$0	$0	$0	$1,545,153	$386,288	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Buildings Rehabilitation	***5307,5339, 5339 Discretionary***	$0	$0	$0	$0	$200,000	$50,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Computers - Hardware	***5307,5339, 5339 Discretionary***	$34,000	$8,500	$32,000	$8,000	$80,000	$20,000	$0	$0	$40,000	$10,000	$40,000	$10,000	$40,000	$10,000	$40,000	$10,000
Computers - Software	***5307,5339, 5339 Discretionary***	$25,000	$6,250	$40,000	$10,000	$0	$0	$0	$0	$40,000	$10,000	$40,000	$10,000	$40,000	$10,000	$40,000	$10,000
Maintenance	***5307,5339, 5339 Discretionary***	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Office Equipment	***5307,5339, 5339 Discretionary***	$10,000	$2,500	$0	$0	$0	$0	$16,000	$4,000	$4,000	$1,000	$12,000	$3,000	$12,000	$3,000	$12,000	$3,000
Planning	***5307,5339, 5339 Discretionary***	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Radios	***5307,5339, 5339 Discretionary***	$0	$0	$0	$0	$0	$0	$80,000	$20,000	$0	$0	$0	$0	$0	$0	$0	$0
Security	***5307,5339, 5339 Discretionary***	$60,000	$15,000	$12,000	$3,000	$24,000	$6,000	$12,000	$3,000	$12,000	$3,000	$4,000	$1,000	$12,000	$3,000	$4,000	$1,000
Shelters	***5307,5339, 5339 Discretionary***	$125,600	$31,400	$0	$0	$4,000	$1,000	$0	$0	$10,000	$2,500	$0	$0	$20,000	$5,000	$10,000	$2,500
Shop Equipment	***5307,5339, 5339 Discretionary***	$20,000	$5,000	$20,000	$5,000	$20,000	$5,000	$10,000	$2,500	$20,000	$5,000	$20,000	$5,000	$20,000	$5,000	$20,000	$5,000

KVRTA – (FY 2024-2027) Transportation Improvement Program (TIP) Justifications

New justification changes are highlighted in yellow. Other changes in supporting documentation reflect the reallocation of funding sources to reconcile previously approved TIP projects.

***Operating & Planning Assistance, FY 2024-2027*:** (Ongoing) Section 5307: allocations for operating assistance and expenses (Salaries, Wages & Fringes) incurred by KVRTA for transit service in the service area.

***Purchase 30 ft. & 35 ft. Buses, FY 2024-2027*:** Section 5307, 5339, &/or Other: funds secured by KVRTA or State of West Virginia for the replacement and or expansion of the existing fleet. Vehicles that will be replaced will, at the time of replacement, have met or exceeded FTA's useful life requirements.

Effect on TAM/PTASP – the replacement of older fleet assets will improve the overall State of Good Repair (SGR) and increase system reliability.

***Purchase < 30 ft. Buses, FY 2024-2027*:** 5307, 5339, &/or Other: funds secured by KVRTA or State of West Virginia for the replacement and/or expansion of existing fleet. Vehicles that will be replaced will, at the time of replacement, have met or exceeded FTA's useful life requirements.

Effect on TAM/PTASP – the replacement of older fleet assets will improve the overall State of Good Repair (SGR) and increase system reliability.

***Purchase ADA Converted Lift Equipped Vehicles, FY 2024-2027*:** Section 5307, 5339, &/or Other: funds secured by KVRTA or State of West Virginia for the replacement and/or expansion of existing fleet. Vehicles that will be replaced will, at the time of replacement, have met or exceeded FTA's useful life requirements. KVRTA has programmed the replacement of these vehicles as follows, utilizing Section 5339 funding: **(3) vehicles in FY 2024, and utilizing Section 5307 funding: (6) vehicles in FY 2024. The original request was (2) 35' buses. KVRTA is implementing micro-transit services and will expand its fleet for ADA vans, accordingly.**

Effect on TAM/PTASP – the replacement of older fleet assets will improve the overall state of good repair and increase system reliability.

***Purchase Support Vehicle, FY 2024-2027*:** Section 5307, 5339 or Other: funds for the replacement and or expansion of existing support fleet. Vehicles that will be replaced will, at the time of replacement, have met or exceeded FTA's useful life requirements. KVRTA has programmed the replacement of these vehicles as follows: utilizing Section 5339 funding for **FY 2024, FY 2027, & FY 2028. The original request was for FY 2023. KVRTA is delaying the purchase of (1) new support vehicle for FY 2024.**

Effect on TAM/PTASP – the replacement of older fleet assets will improve the overall state of good repair (SGR) and increase system reliability.

***Associated Capital Maintenance Items, Shop & Misc. Equipment, FY 2024-2027*:** Section 5307, 5339 &/or Other: funds to be used for the replacement and/or expansion of KVRTA's equipment inventory including, but not limited to: spare engines, new farebox system (FY 2024), on-bus video monitors, transmissions, tire re-grooving equipment continuation of the placement of vehicle and office equipment, copiers, phone systems, cash registers, and money counting equipment to ensure efficient operations. Specific items will be identified in grant applications based on need.

***Misc. ADP Hardware and/or Software, FY 2024-2027*:** Section 5307, 5339 &/or Other: funds to be used for the replacement and or expansion of KVRTA's existing computer hardware and software systems including, but not limited to: on-bus video monitors, network systems, server, printers, standalone computers, portable computers, fleet fueling systems, automated notification system for paratransit, and other computerized systems in KVRTA's Administration, Operations and Maintenance Divisions.

***Passenger Shelters & Station Improvements, FY 2024-2027*:** Section 5307, 5339 &/or Other: funds secured by KVRTA or State of West Virginia for the replacement, renovation or expansion of KVRTA bus shelters and stations located throughout the service area.

***Misc. Renovations, FY 2024-2027*:** Section 5307, 5339 &/or Other: funds secured by KVRTA or State of West Virginia for renovation and maintenance of the facilities located at 1550 Fourth Avenue to ensure the facilities are kept up to code and provide a safe and efficient working environment. KVRTA has programmed funding annually for repairs and renovations to its existing facilities which were constructed in the 1950's. Projects under consideration are improved lighting, replacement of doors, upgrading ventilation, installing catwalks on above ground fuel tanks, carpeting, painting facilities, etc. Section 5307, 5339 &/or other funds secured by KVRTA or State of West Virginia for construction of a new facility at the current 1550 Fourth Avenue location. Specific items will be identified in grant applications based on need.

***Purchase Surveillance & Security Equipment, FY 2024-2027*:** Section 5307, 5339 &/or Other: funds for the replacement and or expansion of existing surveillance and security equipment currently employed by KVRTA to ensure passenger and employee safety throughout the system. KVRTA has programmed annual funding for the replacement of cameras (on buses and in facilities), recording equipment upgrades to the security system, and video monitors. Specific items will be identified in grant applications based on need.

***Misc. Communications Equipment, FY 2024-2027*:** Section 5307 &/or Other: funds to be used for the replacement and/or expansion of KVRTA's existing communications

equipment systems on vehicles and in our facilities, including, but not limited to: radios, modems, routers, etc., and other communications devices to increase efficiency and improve passenger amenities. **KVRTA has programmed the replacement of Radios from FY 2023 to FY 2024.**

Section 4: Federal Financial Summary

Federal Highway Summary by Fund Type					
Kanawha County					
Funding Type	**2024**	**2025**	**2026**	**2027**	**Fund Total**
CMAQ 2.5	3,000,000				$ 3,000,000
CRP <5K POP					$ -
CRP 5-50K POP					$ -
CRP 50-200K POP					$ -
HSIP					$ -
HWI	1,124,000	10,000	200,000		$ 1,334,000
HWI-BR	44,137,826	12,319,000	7,028,000	35,890,000	$ 99,374,826
HWI-OFF	1,200,000	2,130,000	4,900,000	1,250,000	$ 9,480,000
NHPP	73,912,743	5,432,000		4,549,353	$ 83,894,096
NHPP-BR	1,200,000				$ 1,200,000
NHPP-EXEMPT					$ -
NRT	205,000				$ 205,000
OTHER					$ -
OTHER-BOND					$ -
OTHER-FED	2,400,000				$ 2,400,000
RR/HWY XI					$ -
STBG	768,654				$ 768,654
STBG <5K POP					$ -
STBG 5-50K POP	750,000				$ 750,000
STBG 50-200K POP	14,701,000				$ 14,701,000
STBG-FLEX	2,103,417	5,500,000			$ 7,603,417
STBG-OFF	1,275,000				$ 1,275,000
STP					$ -
STP-OFF					$ -
TAP	395,772				$ 395,772
TAP <5K POP					$ -
TAP 5-50K POP					$ -
TAP 50-200K POP					$ -
TAP-FLEX					$ -
Annual Total	**$147,173,412**	**$25,391,000**	**$12,128,000**	**$41,689,353**	**$ 226,381,765**

Federal Highway Summary by Fund Type					
Putnam County					
Funding Type	**2024**	**2025**	**2026**	**2027**	**Fund Total**
CMAQ 2.5	1,000,000	5,700,000			$ 6,700,000
CRP <5K POP					$ -
CRP 5-50K POP		702,000			$ 702,000
CRP 50-200K POP					$ -
HSIP					$ -
HWI-BR	4,001,000	2,645,000	1,121,000	4,347,000	$ 12,114,000
HWI-OFF	990,974	600,000	410,000	300,000	$ 2,300,974
NHPP	9,520,435	63,000			$ 9,583,435
NHPP-BR	11,000,000				$ 11,000,000
NHPP-EXEMPT		2,400,000			$ 2,400,000
NRT					$ -
OTHER					$ -
OTHER-FED					$ -
STBG					$ -
STBG <5K POP					$ -
STBG 5-50K POP		400,000			$ 400,000
STBG 50-200K POP					$ -
STBG-FLEX	2,569,488				$ 2,569,488
STBG-TMA	1,776,000	3,000,000			$ 4,776,000
STBG-OFF			20,000		$ 20,000
STP					$ -
STP-OFF					$ -
STP-TMA					$ -
TAP	1,095,331				$ 1,095,331
TAP <5K POP					$ -
TAP 5-50K POP					$ -
TAP 50-200K POP					$ -
TAP-FLEX					$ -
TAP-TMA					$ -
Annual Total	**$31,953,228**	**$15,510,000**	**$1,551,000**	**$4,647,000**	**$ 53,661,228**

Federal Highway Summary by Fund Type					
Districtwide					
Funding Type	**2024**	**2025**	**2026**	**2027**	**Fund Total**
HSIP	2,700,000				$ 2,700,000
HWI-BR	800,000				$ 800,000
PL					$ -
NHPP		1,200,000			$ 1,200,000
STBG					$ -
STBG-FLEX	2,599,356	2,247,027	1,031,400	2,247,027	$ 8,124,810
STBG-OFF	800,000	800,000	800,000	800,000	$ 3,200,000
Annual Total	**$6,899,356**	**$4,247,027**	**$1,831,400**	**$3,047,027**	**$ 12,977,783**

Regional Intergovernmental Council					
RIC Annual Total	**$186,025,996**	**$45,148,027**	**$15,510,400**	**$49,383,380**	**$ 293,020,776**

Federal Highway Summary by Program Type

Kanawha County

Project Program Type	2024	2025	2026	2027	Project Program Total
Bridge	48,936,826	20,834,000	12,128,000	41,689,353	$ 123,588,179
Community Development	50,304,426	1,957,000			$ 52,261,426
Resurface	20,810,417	2,600,000			$ 23,410,417
Regional Mobility					$ -
Traffic	27,121,743				$ 27,121,743
Annual Total	**$147,173,412**	**$25,391,000**	**$12,128,000**	**$41,689,353**	**$ 226,381,765**

Federal Highway Summary by Program Type

Putnam County

Project Program Type	2024	2025	2026	2027	Project Program Total
Bridge	4,991,974	3,245,000	1,551,000	4,647,000	$ 14,434,974
Community Development	2,871,331	3,765,000			$ 6,636,331
Resurface	2,569,488	2,800,000			$ 5,369,488
Regional Mobility	20,520,435				$ 20,520,435
Traffic	1,000,000	5,700,000			$ 6,700,000
Annual Total	**$31,953,228**	**$15,510,000**	**$1,551,000**	**$4,647,000**	**$ 53,661,228**

Federal Highway Summary by Program Type

Districtwide

Project Program Type	2024	2025	2026	2027	Project Program Total
Bridge	1,600,000	1,600,000	1,600,000	1,600,000	$ 6,400,000
Community Development					$ -
Resurface					$ -
Regional Mobility					$ -
Traffic	5,299,356	2,647,027	231,400	1,447,027	$ 9,624,810
Annual Total	**$6,899,356**	**$4,247,027**	**$1,831,400**	**$3,047,027**	**$ 12,977,783**

Regional Intergovernmental Council

RIC Annual Total	**$186,025,996**	**$45,148,027**	**$15,510,400**	**$49,383,380**	**$ 293,020,776**

KVRTA - Charleston, WV - FY 2024 - 2027 Transportation Improvement Program - Transit Projects

Submitted to RIC 11/16/2032

	Actual	Actual				
FUNDING PROGRAM	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Total Federal Programmed - 5307	1,737.5	3,673.0	4,110.0	3,958.0	4,016.0	4,036.0
Total Federal Programmed - 5339	775.0	1,965.2	0.0	148.0	180.0	172.0
COVID Relief	7,426.9	0.0	0.0	0.0	0.0	0.0
Total Local Programmed	628.1	4,085.0	3,702.0	3,666.5	3,674.0	3,779.0
Total Funds Programmed	***10,567.5***	***9,723.2***	***7,812.0***	***7,772.5***	***7,870.0***	***7,987.0***

Sources of Funding

Carryover 5307 Funding from prior years	0.0	2,182.0	2,009.0	1,399.0	941.0	425.0
New FFY 5307 Apportionment	3919.5	3,500.0	3,500.0	3,500.0	3,500.0	3,500.0
CRRSSA Act (Operating only)	0.0	0.0	0.0	0.0	0.0	0.0
ARP Act (Operating only)	7,426.9	0.0	0.0	0.0	0.0	0.0
Carryover 5339 (Capital only)	697.0	697.0	-977.7	-687.2	-541.8	-425.5
5339 (Capital only)	290.5	290.5	290.5	293.4	296.3	299.3
5339 (Capital Only WVDPT pass-thru grant)	0.0	0.0	0.0	0.0	0.0	0.0
Federal Funds Available	**12,333.9**	**6,669.5**	**4,821.8**	**4,505.2**	**4,195.5**	**3,798.8**

KVRTA Local Match Required	**628.1**	**4,085.0**	**3,702.0**	**3,666.5**	**3,674.0**	**3,779.0**
Add. Funding From Capital Reserve						
Federal Carryover Unrestricted (5307)	2,182.0	2,009.0	1,399.0	941.0	425.0	-111.0
Federal Carryover Capital Only (5339)	697.0	-977.7	-687.2	-541.8	-425.5	-298.2
Total Carryover	***2,879.0***	***1,031.3***	***711.8***	***399.2***	***(0.5)***	***(409.2)***

FEDERAL TRANSIT FUNDING SUMMARY BY CATEGORY (1,000'S)

November, 16 2023

Section 5: Performance Targets

Measure	Goal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2035	2040	2045	2050
Annual VMT	*Actual Annual Vehicle Miles*	*190.723*	*194.473*	*190.766*	*160.541*	*160.793*	*153.070*								
	Estimated Annual Vehicle Miles (Assuming 0.44% Growth)	*196.254*	*191.563*	*195.329*	*191.605*	*183.420*	*161.515*	*147.878*	*154.419*	*155.099*	*158.541*	*162.060*	*165.657*	*169.333*	*173.092*
Fatalities	*Actual Annual Number*	*304*	*294*	*260*	*267*	*280*	*265*								
	Target to Reach Zero Fatalities by 2050 (Based on 2021)	*263*	*294*	*284*	*253*	*245*	*249*	*241*	*246*	*237*	*189*	*142*	*95*	*47*	*0*
Fatality Rate	*Fatality Rate*	*1.59*	*1.51*	*1.36*	*1.66*	*1.74*	*1.73*								
	Target Fatality Rate for Zero Fatalities by 2050 (Assumed 0.44% VMT Growth)	*1.34*	*1.54*	*1.48*	*1.38*	*1.34*	*1.54*	*1.63*	*1.59*	*1.53*	*1.19*	*0.88*	*0.57*	*0.28*	*0.00*
Serious Injuries	*Actual Annual Number*	*1063*	*1007*	*906*	*805*	*766*	*815*								
	Target to Reach Goal of 66% Reduction by 2050 (Based on 2021)	*1131*	*1019*	*964*	*868*	*830*	*742*	*705*	*775*	*755*	*655*	*555*	*455*	*355*	*255*
Rate of Serious Injury	*Serious Injury Rate*	*5.574*	*5.178*	*4.749*	*5.014*	*4.764*	*5.324*								
	Target to Reach Goal of 66% Reduction by 2050 (Assumed 0.44% VMT Growth)	*5.761*	*5.318*	*5.031*	*4.753*	*4.525*	*4.592*	*4.768*	*5.019*	*4.868*	*4.132*	*3.426*	*2.748*	*2.098*	*1.475*
Bike & Ped Fatal & Serious Injuries	*Actual Annual Number*	*86*	*103*	*93*	*72*	*83*	*94*								
	Target to Reach Goal of 66% Reduction by 2050 (Assumed 0.44% VMT Growth)	*99*	*80*	*97*	*87*	*81*	*64*	*70*	*89*	*87*	*75*	*63*	*51*	*40*	*28*

Safety Performance Measure	Goal	Safety Performance Target Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2035	2040	2045	2050
		Baseline for Safety Performance Target Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2037	2042	2047	2052
		5 Year Time Period	2013-2017	2014-2018	2015-2019	2016-2020	2017-2021	2018-2022	2019-2023	2020-2024	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
Annual VMT	*NA*	*Avg Actual VMT*	*193.575*	*194.005*	*193.925*	*186.380*	*179.459*	*171.928*								
		Avg VMT (Including Estimates)	*194.681*	*193.423*	*194.837*	*192.592*	*183.985*	*173.618*	*163.782*	*156.513*	*155.425*	*157.158*	*160.646*	*164.212*	*167.856*	*171.582*
Fatalities	*Zero Fatalities by 2050 (from 2021)*	*Actual 5-Year Average*	*289.0*	*281.4*	*279.0*	*278.8*	*281.0*	*273.2*								
		Target 5-Year Average	*288.8*	*281.8*	*274.2*	*271.4*	*263.7*	*262.1*	*262.1*	*262.7*	*256.6*	*208.2*	*160.9*	*113.6*	*66.2*	*18.9*
		Target Met/Not Met	*Not Met*	*Met*	*Not Met*	*Not Met*	*Not Met*	*Not Met*								
		Better than Baseline?	*Yes*	*Yes*	*Yes*	*Yes*	*No*	*Yes*								
		Met or Made Significant Progress	*Yes*	*Yes*	*Yes*	*Yes*	*No*	*Yes*								
Fatality Rate	*Zero Fatalities by 2050 (from 2021)*	*Actual 5-Year Average*	*1.494*	*1.451*	*1.439*	*1.502*	*1.575*	*1.602*								
		Target 5-Year Average	*1.443*	*1.456*	*1.470*	*1.465*	*1.457*	*1.558*	*1.692*	*1.682*	*1.648*	*1.325*	*1.002*	*0.692*	*0.395*	*0.111*
		Target Met/Not Met	*Not Met*	*Not Met*	*Met*	*Not Met*	*Not Met*	*Not Met*								
		Better than Baseline?	*Yes*	*Yes*	*Yes*	*No*	*No*	*No*								
		Met or Made Significant Progress	*Yes*	*Yes*	*Yes*	*No*	*No*	*No*								
Serious Injuries	*66% Reduction in Serious Injuries by 2050 (from 2021)*	*Actual 5-Year Average*	*1260.6*	*1169.0*	*1081.4*	*992.2*	*909.4*	*859.8*								
		Target 5-Year Average	*1367.6*	*1211.3*	*1123.5*	*1040.1*	*1002.4*	*926.4*	*854.8*	*791.2*	*781.2*	*695.1*	*595.1*	*495.2*	*395.2*	*295.3*
		Target Met/Not Met	*Met*	*Met*	*Met*	*Met*	*Met*	*Met*								
		Better than Baseline?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*								
		Met or Made Significant Progress	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*								
Serious Injury Rate	*66% Reduction in Serious Injuries by 2050 (from 2021)*	*Actual 5-Year Average*	*6.514*	*6.026*	*5.570*	*5.311*	*5.056*	*5.006*								
		Target 5-Year Average	*6.533*	*6.036*	*5.629*	*5.326*	*5.023*	*5.634*	*5.972*	*5.030*	*4.994*	*4.424*	*3.706*	*3.017*	*2.356*	*1.722*
		Target Met/Not Met	*Met*	*Met*	*Met*	*Met*	*Not Met*	*Met*								
		Better than Baseline?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*								
		Met or Made Significant Progress	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*								
Bike & Ped Fatal & Serious Injuries	*66% Reduction in Fatal & Serious Injuries by 2050 (from 2021)*	*Actual 5-Year Average*	*93.8*	*96.8*	*97.2*	*91.6*	*87.4*	*89.0*								
		Target 5-Year Average	*98.0*	*89.2*	*91.6*	*91.5*	*86.2*	*80.9*	*74.9*	*86.0*	*89.0*	*79.8*	*67.9*	*56.1*	*44.2*	*32.4*
		Target Met/Not Met	*Met*	*Not Met*	*Not Met*	*Not Met*	*Not Met*	*Not Met*								
		Better than Baseline?	*Yes*	*Yes*	*No*	*Yes*	*Yes*	*Yes*								
		Met or Made Significant Progress	*Yes*	*Yes*	*No*	*Yes*	*Yes*	*Yes*								

Past Performance Measure - Will Not Change

Actual Finalized Numbers

Safety Performance Measure	*Goal*	**Safety Performance Target Year**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
		Baseline for Safety Performance Target Year	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2032**	**2037**	**2042**	**2047**	**2052**
		5 Year Time Period	**2013-2017**	**2014-2018**	**2015-2019**	**2016-2020**	**2017-2021**	**2018-2022**	**2019-2023**	**2020-2024**	**2021-2025**	**2026-2030**	**2031-2035**	**2036-2040**	**2041-2045**	**2046-2050**
Estimation of State FHWA Required SPMs Met or Making Significant Progress	*4 out of 5 SPMs Met or Making Significant Progress*	***Fatalities***	***Yes***	***Yes***	***Yes***	***Yes***	***No***	***Yes***								
		Fatality Rate/100 Million VMT	***Yes***	***Yes***	***Yes***	***No***	***No***	***No***								
		Serious Injuries	***Yes***	***Yes***	***Yes***	***Yes***	***Yes***	***Yes***								
		Serious Injury Rate/100 Million VMT	***Yes***	***Yes***	***Yes***	***Yes***	***Yes***	***Yes***								
		Non-Motorist Fatalities and Serious Injuries	***Yes***	***Yes***	***No***	***Yes***	***Yes***	***Yes***								
		Met or Made Significant Progress	***Yes***	***Yes***	***Yes***	***Yes***	***No***	***Yes***								

WVDOH 2023 & 2025 Pavement, Bridge, & System Performance and Freight Performance

Table 1. Performance and Performance Targets

Performance Measure	2021 Performance	4-Year Target (2021)	2-Year Target (2023)	4-Year Target (2025)
Pavement Performance Measures				
Percentage of Pavements of the Interstate System in Good Condition	73.8%	75.0%	72.0%	70.0%
Percentage of Pavements of the Interstate System in Poor Condition	0.4%	4.0%	4.0%	4.0%
Percentage of Pavements of the Non-Interstate NHS in Good Condition	46.5%	45.0%	43.0%	42.0%
Percentage of Pavements of the Non-Interstate NHS in Poor Condition	0.9%	5.0%	5.0%	5.0%
Bridge Performance Measures				
Percentage of NHS Bridge Deck Area Classified in Good Condition	10.1%	11.0%	11.5%	12.0%
Percentage of NHS Bridge Deck Area Classified in Poor Condition	14.1%	13.0%	14.0%	13.0%
System Performance and Freight Measures				
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	99.9%	96.0%	97.0%	96.0%
Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	95.4%	87.0%	93.0%	92.0%
Interstate Truck Travel Time Reliability (TTTR) Index	1.21	1.40	1.35	1.40

Safety Performance Category	Target
Fatalities Total number of NTD-reportable fatalities Rate per total VRM by mode	 0 annually Less than .05 per 1,000,000 VRM
Injuries Total number of NTD-reportable injuries Rate per total VRM by mode	 Less than 22 injuries per year Less than 10 major/minor injuries per 1,000,000 VRM
Safety events Total number of NTD-reportable events	 Less than 22 major/minor reportable events per year
Rate per total VRM by mode	Less than 10 major/minor reportable events per 1,000,000 VRM
System reliability (measured as revenue miles operated divided by the number of major mechanical failures)	Distance between Major Failures: Greater than 80,000 miles Distance between Minor Failures: Greater than 3,000 miles

Safety performance targets for **Demand Response Service**, informed by the safety performance measures established by the National Public Transportation Safety Plan, include:

Safety Performance Category	Target
Fatalities Total number of NTD-reportable fatalities Rate per total VRM by mode	 0 annually Less than .05 per 500,000 VRM
Injuries Total number of NTD-reportable injuries Rate per total VRM by mode	 Less than 5 injuries per year Less than 5 major/minor injuries per 250,000 VRM
Safety events Total number of NTD-reportable events Rate per total VRM by mode	 Less than 5 major/minor reportable events per year Less than 5 major/minor reportable events per 250,000 VRM
System reliability (measured as revenue miles operated divided by the number of major mechanical failures)	Distance between Major Failures: Greater than 80,000 miles Distance between Minor Failures: Greater than 3,000 miles

Category	Class	Performance Measure	2024 Target	2023 Actual	Action	Action Owner	Dependency	2022	Actual 2023	2024 Targets
Rolling Stock	12 Year/500K Miles	SGR %	95%	94%	Continue working with sub grantees to maintain robust maintenance program	WVDOT & Subgrantee	TAM Plan	78%	94%	95%
	10 Year/350K Miles	SGR %	89%	87%	Evaluate SGR of trolleys	Subgrantee		83%	87%	89%
	7 Year/200K Miles	SGR %	75%	70%	Evaluate SGR of trolleys and prioritize replacements for "bad" and "poor" rated vehicles	WVDOT & Subgrantee	TAM Plan	86%	70%	75%
	5 Year/150K Miles	SGR %	73%	71%	Prioritize replacements for "bad" and "poor" rated vehicles	WVDOT & Subgrantee	TAM Plan	72%	71%	73%
	4 Year/100K Miles	SGR %	79%	77%	Prioritize replacements for "bad" and "poor" rated vehicles	WVDOT & Subgrantee	TAM Plan	76%	77%	79%
					Enhance existing asset management tool to include PM reporting	WVDOT	AVIS			
					Conduct analysis of fleet maintenance practice for identified systems	WVDOT	WVDOT System Reviews			
Facility	Admin, Maintenance, Storage	SGR %	75%	70%	Maintain SGR for all facilities	WVDOT	WVDOT System Reviews AVIS	100%	70%	75%
	Transfer Center	SGR %	100%	100%				100%	100%	100%
Equipment	Support Vehicles	SGR %	40%	39%	Support vehicles not in consistent support service are brought into SGR or disposed	WVDOT & Subgrantee	WVDOT System Reviews AVIS	76%	39%	40%
	Maintenance Equip	SGR %	35%	30%	Maintain SGR for all equipment			63%	30%	35%

Definition of State of Good Repair (SGR)

WVDOT defines SGR as a system meeting the following criteria: --- All assets are functioning at their ideal capacity within their design life. --- The state's asset management system, AVIS, includes consistent, accurate and relatively current information on the status of each capital asset covered by the TAM. --- Each system has a maintenance program to ensure maintenance is performed per manufacturer requirements and intervals. ---No rolling stock assets are placed in revenue service with identified safety defects.

Performance Measure	2021 Performance	4-Year Target (2021)	2-Year Target (2023)	4-Year Target (2025)
CMAQ Measures (only applicable to MPOs in designated maintenance areas)				
Total Emission Reductions: PM2.5	0.151	0.092	0.090	0.090
Total Emission Reductions: NOx precursor	1.816	-	**1.000**	**1.000**

Section 6: Air Quality Conformity Analysis Report

Air Quality Conformity Analysis Report

Kanawha-Putnam 2018-2021 TIP and 2045 Regional Transportation Plan

National Ambient Air Quality Standards (NAAQS) Addressed:

- 1997 8-Hour Ozone (Maintenance)

Prepared By:

Regional Intergovernmental Council (RIC)
and
West Virginia Department of Transportation

Public Review: **August 28th – September 13th, 2018**
MPO Approval: **September 13th, 2018**

September 2018

Overview

This report provides an analysis of the air quality implications of the Regional Intergovernmental Council (RIC) 2018-2021 Transportation Improvement Program (TIP) and 2045 Long Range Transportation Plan (LRTP). The analysis demonstrates transportation conformity under the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS). The air quality conformity analysis reflects an assessment of the regionally significant, non-exempt transportation projects included in the TIP and LRTP.

This document ensures that the findings meet all current criteria established by the U.S. Environmental Protection Agency (EPA) for the applicable NAAQS. A conformity determination has been completed to provide a regional forecast of emissions based on planned air quality significant projects and the latest available planning assumptions.

Background on Transportation Conformity

Transportation conformity is a way to ensure that federal funding and approval are awarded to transportation activities that are consistent with air quality goals. Under the Clean Air Act (CAA), transportation and air quality modeling procedures must be coordinated to ensure that the TIP and the LRTP are consistent with the area's applicable State Implementation Plan (SIP). The SIP is a federally approved and enforceable plan by which each area identifies how it will attain and/or maintain the health-related primary and welfare-related secondary NAAQS.

In order to receive transportation funding and approvals from the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA), state and local transportation agencies must demonstrate that the plans, programs, or projects meet the transportation conformity requirements of the CAA as set forth in the transportation conformity rule. Under the transportation conformity rule, transportation plans are expected to conform to the applicable SIP in nonattainment or maintenance areas. The integration of transportation and air quality planning is intended to ensure that transportation plans, programs, and projects will not:

- Cause or contribute to any new violation of any applicable NAAQS.
- Increase the frequency or severity of any existing violation of any applicable NAAQS.
- Delay timely attainment of any applicable NAAQS, any required interim emissions reductions, or other NAAQS milestones.

The transportation conformity determination includes an assessment of future highway emissions for defined analysis years. Emissions are estimated using the latest available planning assumptions and available analytical tools, including EPA's latest approved on-highway mobile sources emissions model, the Motor Vehicle Emission Simulator (MOVES). The conformity determination provides a tabulation of the analysis results for applicable precursor pollutants, showing that the required conformity test was met for each analysis year.

Report Contents

This document includes a summary of the methodology and data assumptions used for the conformity analysis. As shown in **Exhibit 1**, attachments containing additional detail have been provided with the document. In addition, modeling input and output files have been reviewed by EPA Region III and the West Virginia Department of Environmental Protection (WVDEP).

EXHIBIT 1: SUMMARY OF ATTACHMENTS

Attachment	Title	Description
A	Project List	Provides a list of regionally significant highway projects that have been updated or added to LRTP
B	Air Quality Interagency Consultation and Data Checklist	Provides consultation meeting minutes and an air quality data checklist
C	Detailed Emission Results	Provides a detailed summary of emissions by roadway type, source type and emission process.
D	MOVES Sample Run Specification	Provides example MOVES data importer (XML) and run specification (MRS) files.

National Ambient Air Quality Standard Designations

The CAA requires the EPA to set NAAQS for pollutants considered harmful to public health and the environment. A nonattainment area is any area that does not meet the primary or secondary NAAQS. Once a nonattainment area meets the standards and additional redesignation requirements in the CAA [Section 107(d)(3)(E)], EPA will designate the area as a maintenance area.

The RIC MPO region (Kanawha and Putnam counties) is currently designated as part of the *Charleston, WV* maintenance area under both the 1997 8-hour ozone and 2006 24-hour $PM_{2.5}$ NAAQS. The region is in attainment of the 2008 8-hour ozone, 2015 8-hour ozone, and 2012 annual $PM_{2.5}$ NAAQS. Transportation conformity requires nonattainment and maintenance areas to demonstrate that all future transportation projects will not prevent an area from reaching its air quality attainment goals.

1997 and 2008 8-hour Ozone NAAQS

Ozone is formed by chemical reactions occurring under specific atmospheric conditions. Precursor pollutants that contribute to the formation of ozone include volatile organic compounds (VOC) and oxides of nitrogen (NO_X), both of which are components of vehicle exhaust. VOCs may also be produced through the evaporation of vehicle fuel, as well as by displacement of vapors in the gas tank during refueling. By controlling VOC and NO_X emissions, ozone formation can be mitigated. Both precursor pollutants are analyzed in the transportation conformity process.

The EPA published the 1997 8-hour ozone NAAQS on July, 18, 1997 (62 FR 38856), with an effective date of September 16, 1997. An area was in nonattainment of the 1997 8-hour ozone NAAQS if the 3-year average of the individual fourth highest air quality monitor readings, averaged over 8 hours throughout the day, exceeded the NAAQS of 0.08 parts per million (ppm). On May 21, 2013, the EPA published a rule revoking the 1997 8-hour ozone NAAQS, for the purposes of transportation conformity, effective one year after the effective date of the 2008 8-hour ozone NAAQS area designations (77 FR 30160).

The EPA published the 2008 8-hour ozone NAAQS on March 27, 2008 (73 FR 16436), with an effective date of May 27, 2008. EPA revised the ozone NAAQS by strengthening the standard to 0.075 ppm. Thus, an area is in nonattainment of the 2008 8-hour ozone NAAQS if the 3-year average of the individual fourth highest air quality monitor readings, averaged over 8 hours throughout the day, exceeds the NAAQS of 0.075 ppm. The Charleston, WV area was designated as an attainment area under the 2008 8-hour ozone NAAQS, effective July 20, 2012 (77 FR 30088).

On February 16, 2018 the D.C. Circuit reached a decision in *South Coast Air Quality Management District v. EPA*, Case No. 15-1115. In that decision, the court vacated major portions of the final rule that established procedures for transitioning from the 1997 ozone NAAQS to the stricter 2008 ozone NAAQS. While the implications of this ruling are being decided, this conformity determination addresses transportation conformity to the 1997 8-hour ozone NAAQS.

2006 24-Hour PM2.5 NAAQS

Fine particulate matter (PM2.5) can be emitted directly into the atmosphere (sources include exhaust and dust from brake and tire wear) or formed in the atmosphere by combinations of precursor pollutants (secondary formation). Sulfates and nitrates are two types of pollutants that contribute to secondary formation. Sulfate emissions are a result of power plant and industry emissions, while nitrate emissions result from automobiles, power plants, and other combustion sources. Scientific studies have shown a significant correlation between exposure to fine particulates and severe health issues such as heart disease, lung disease, and premature death.

On December 18, 2006, the EPA issued the 2006 PM2.5 standard that tightened the 24-hour fine particle standard from 65 µg/m3 to 35 µg/m3. As part of the 2012 $PM_{2.5}$ standard (issued January 15, 2013), the EPA affirmed the 24-hour $PM_{2.5}$ threshold set in 2006, maintaining a value of 35 µg/m3. The Charleston area (Kanawha and Putnam counties) was designated as a nonattainment area under the 2006 24-hour $PM_{2.5}$ standard. The area was redesignated to an attainment area on April 30, 2014.

In 2012, the West Virginia Department of Environmental Protection (WVDEP) initiated the process to redesignate the Charleston area to reflect a finding of insignificance for highway sources for the 2006 24-hour $PM_{2.5}$ standard. The redesignation request for a finding of mobile source insignificance was approved. The federal requirements—40 CFR 93.109(f)—stipulate that areas designated as attainment with SIP insignificant motor vehicle emissions findings are not required to satisfy a regional emissions analysis for §93.118 and/or §93.119 for a given pollutant/precursor and NAAQS. Instead, areas with SIP insignificance findings adopt a qualitative conformity determination for regional transportation plans and

TIPs. Although the area is designated as attainment and there is a finding of insignificance, this does not preclude RIC from complying with the other still-effective requirements of the transportation conformity rule, such as interagency consultations, hot spot analyses as necessary, latest planning assumptions, public participation, etc.

Interagency Consultation

As required by the federal transportation conformity rule, the conformity process includes a significant level of cooperative interaction among the federal, state, and local agencies. For this air quality conformity analysis, an interagency consultation conference call including EPA, FHWA, RIC, WVDEP and WVDOH was conducted on June 19, 2018 to review all input planning assumptions, methodologies and analysis years. **Exhibit 2** summarizes key decisions made by the interagency consultation group.

EXHIBIT 2: INTERAGENCY CONSULTATION DECISIONS

Item	Decision
Traffic Forecasts	Use of RIC TransCAD regional travel model as used for 2045 LRTP
EPA Emission Model	MOVES2014a
Ozone Conformity Test	Analysis for Kanawha and Putnam Counties Compare to 2018 Maintenance Plan budgets Analysis Years: 2018, 2025, 2035, 2045

Analysis Methodology and Data

This transportation conformity analysis was conducted using EPA's MOVES model. MOVES is an upgrade to EPA's modeling tools and replaces MOBILE6.2 as the official model for estimating emissions from highway vehicles for SIP emission inventories and transportation conformity (75 FR 9411), effective March 2, 2010. MOVES2014a has been used for this conformity determination and is the latest approved model version for SIP and transportation conformity purposes (79 FR 60343).

Planning assumptions are updated following EPA and FHWA joint guidance (EPA420-B-08-901) that clarifies the implementation of the latest planning assumption requirements in 40 CFR 92.110. This analysis utilizes the latest available traffic, vehicle fleet and environmental data to estimate regional highway emissions. The analysis methodology and data inputs for this analysis were developed through interagency consultation and used available EPA guidance documents that included:

- *Policy Guidance on the Use of MOVES2014 for State Implementation Plan Development, Transportation Conformity, and Other Purposes*, US EPA Office of Air and Radiation, EPA-420-B-14-008, July 2014.
- *MOVES2014 and MOVES2014a Technical Guidance: Using MOVES to Prepare Emission Inventories in State Implementation Plans and Transportation Conformity.* US EPA Office of Air and Radiation, and Office of Transportation and Air Quality, EPA-420-B-15-093, November 2015.

- *MOVES2014a User Guide*, US EPA Office of Transportation and Air Quality, EPA-420-B-15-095, November 2015.

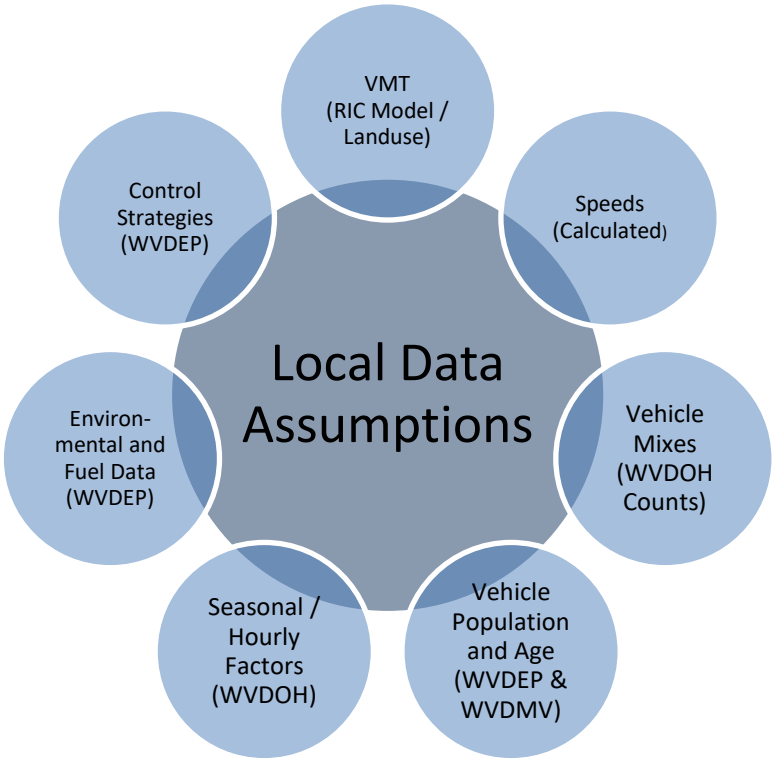
A mix of local and national default (internal to MOVES) data is used in the analysis. As illustrated in **Exhibit 3**, local data has been used for data items that have a significant impact on emissions, including: vehicle miles of travel (VMT), vehicle population, congested speeds, and vehicle type mix, as well as environmental and fuel assumptions. Local data inputs to the analysis process reflect the latest available planning assumptions using information obtained from the WVDOH, WVDEP, RIC and other local/national sources.

The methodology used for this analysis is consistent with resources used for past SIP inventories and other regional planning analyses. This includes the use of the regional travel demand model and custom post-processing software (PPSUITE) to calculate hourly speeds and prepare key traffic input files to the MOVES2014a emission model.

PPSUITE consists of a set of programs that perform the following functions:

- Analyzes highway operating conditions.
- Calculates highway speeds.
- Compiles VMT and vehicle type mix data.
- Prepares MOVES runs and processes MOVES outputs.

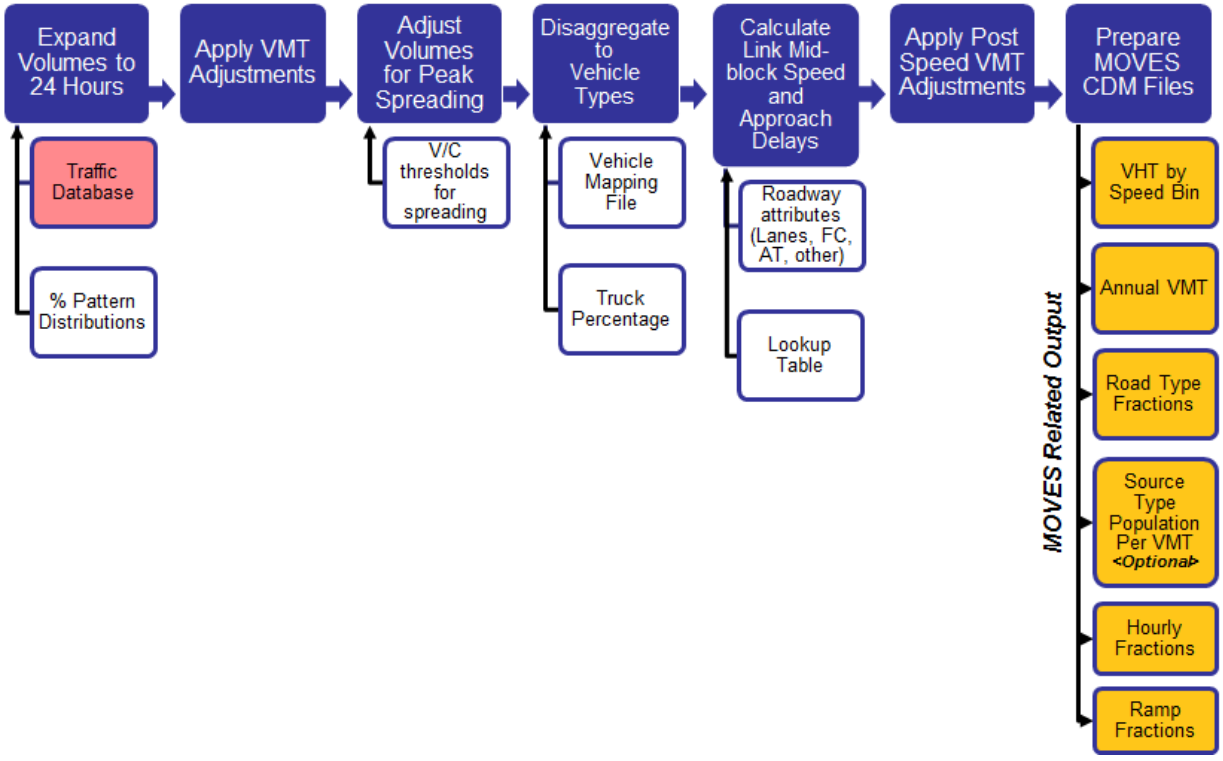
EXHIBIT 3: LOCAL DATA INPUTS USED FOR CONFORMITY RUNS



PPSUITE is a widely used and accepted tool for estimating speeds and processing emissions rates. The PPSUITE tool has been used for developing on-highway mobile source inventories in SIP revisions, control strategy analyses, and conformity analyses in other states. The software was developed to utilize accepted transportation engineering methodologies. The PPSUITE process is integral to producing traffic-related input files to the MOVES emission model. **Exhibit 4** summarizes the key functions of PPSUITE within the emission calculation process. Other MOVES input files are prepared externally to the PPSUITE software, including vehicle population, vehicle age, environmental and fuel input files.

The CENTRAL software is also used in this analysis. CENTRAL is a menu-driven software platform that executes the PPSUITE and MOVES processes in batch mode. The CENTRAL software allows users to execute runs for a variety of input options and integrates custom MySQL steps into the process. CENTRAL provides important quality control and assurance steps, including file naming and storage automation.

EXHIBIT 4: EMISSION CALCULATION PROCESS

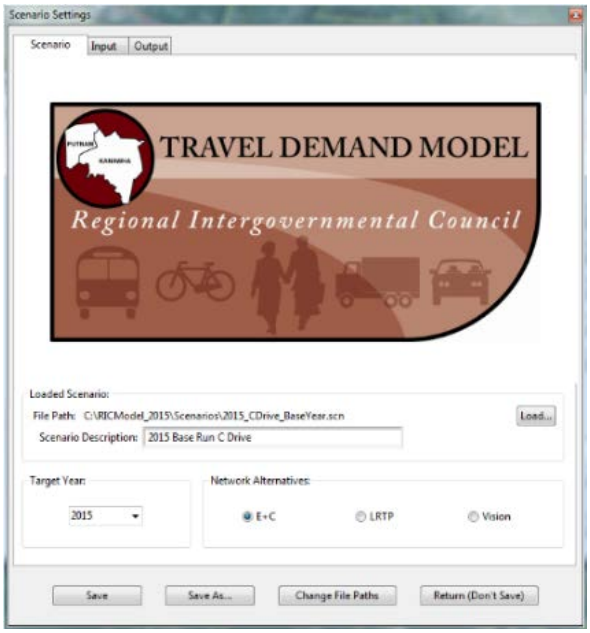


Description of Emission Modeling Input Data and Sources

A large number of inputs to MOVES are needed to fully account for the numerous vehicle and environmental parameters that affect emissions. These inputs include traffic flow characteristics, vehicle descriptions, fuel parameters, I/M program parameters and environmental variables. MOVES includes a default national database of meteorology, vehicle fleet, vehicle activity, fuel and emission control program data for every county; EPA, however, cannot certify that the default data is the most current or best available information for any specific area. As a result, local data, where available, is recommended for use when conducting a regional conformity analysis. A mix of local and default data is used for this analysis. These data items are discussed in the following sections.

Roadway Data

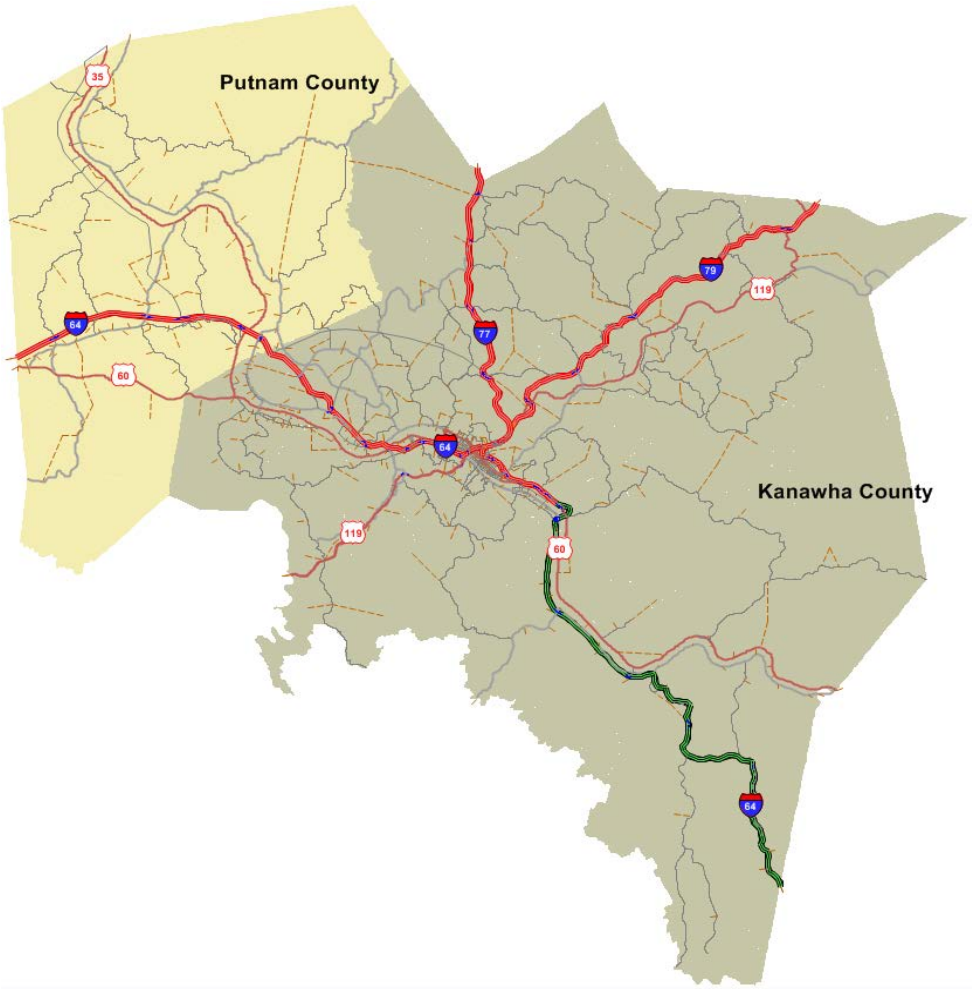
The roadway data input to emissions calculations for this conformity analysis is based on information from the RIC regional travel demand model. The travel model estimates roadway volumes based on input demographic forecasts and expected changes to the transportation roadway network. The RIC travel demand model follows the basic "four-step" travel demand forecasting process and utilizes the TransCAD (Version 7.0) software platform. Given the small portion of daily travel carried by the bus system in the Charleston region, a separate mode choice or transit model is not included. Auto-occupancy factors are used to convert person trips into vehicle trips.



The model is driven by socio-economic and transportation network data. These data include items such as zonal population, households, income, school enrollment, and employment by type for over 400 zones defined in the region.

Transportation network data, as illustrated in **Exhibit 5**, includes facility type, length, and speed limit for each of the highway links in the region. The highway network database contains attributes for each individual line in the line layer and includes all attributes needed to perform a traffic assignment.

EXHIBIT 5: RIC REGIONAL TRAVEL DEMAND MODEL



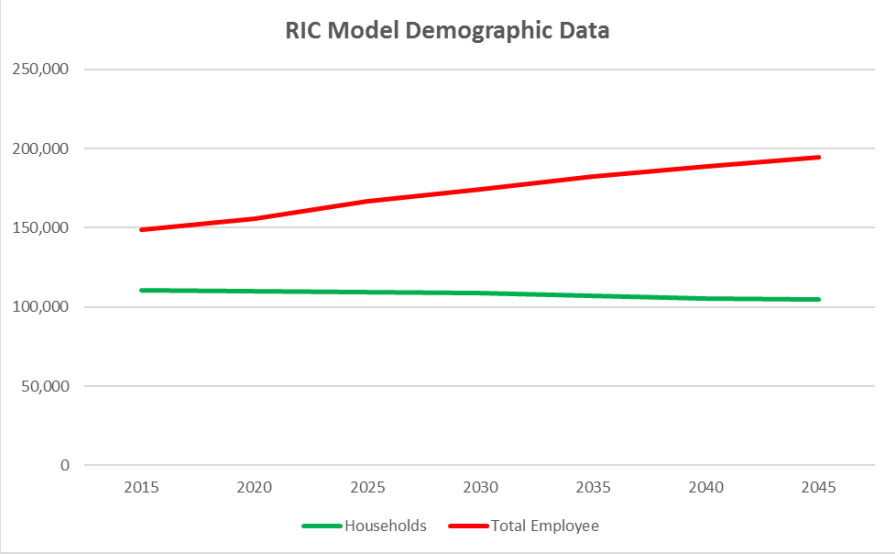
Demographic Forecasts

Forecast traffic volumes from the regional travel model are based on the demographics input to the model. Demographic data for the RIC model was obtained from several sources, including the U.S. Census, and InfoUSA (a commercial provider of employment data), RIC Staff, and the previous model socioeconomic data. The previous model utilized 2010 Census data to develop the 2010 household totals by TAZ. Information from the 2010 Census and the American Community Survey (ACS) helped in developing household totals by household size and number of workers. This information was used for the development of the 2015 socioeconomic data. **Exhibit 6** summarizes the demographics for the 2015 base year and 2045 horizon year of the LRTP. Demographics for other analysis years were forecasted using interpolation. **Exhibit 7** shows the demographic trends in the model region. The region is forecasted to have lower population but higher employment in future.

EXHIBIT 6: DEMOGRAPHIC GROWTH ASSUMPTIONS TO THE TRAVEL MODEL

County	Year	Population	Employment
Kanawha County	2015	194,750	128,834
	2045	176,855	161,106
Putnam County	2015	60,860	20,252
	2045	69,260	33,684
Total	**2015**	**255,610**	**149,086**
	2045	**246,115**	**194,790**

EXHIBIT 7: DEMOGRAPHIC TRENDS



The travel model network and assigned traffic volumes are processed by the PPSUITE post processor to prepare the traffic inputs needed to the MOVES emission model. The following information is extracted from the model for emission calculations:

- lanes
- roadway capacity
- distance
- weekday traffic volume
- area type code
- facility class code

The lane values, capacities, area type, and facility class are important inputs for determining the congestion and speeds for individual highway segments. The PPSUITE processing software allows for many additional variables other than those available in the regional travel model. Using these variables

improves the calculation of congested speeds. Such variables include information regarding free-flow speeds, traffic signal and control parameters, and volume-delay functions. This data is determined from lookup tables based on the model link's area type and facility class. Much of the lookup table data was developed from information contained in the Highway Capacity Manual.

Other Supporting Traffic Data

Other traffic data is used to adjust and disaggregate traffic volumes. Key sources used in these processes include the following:

- *Highway Performance Monitoring System (HPMS VMT)*: According to EPA guidance, baseline inventory VMT computed from the regional model must be adjusted to be consistent with HPMS VMT totals. The VMT contained in the HPMS reports are considered to represent average annual daily traffic (AADT), an average of all days in the year, including weekends and holidays. Adjustment factors were calculated for 2017 as part of the model's validation process. These factors are used to adjust locally modeled roadway data VMT to be consistent with the reported HPMS totals and are applied to all county and facility group combinations within the region. These adjustments are important for accounting for missing local roadway VMT that is not represented within the regional travel model.
- *Seasonal Factors*: The traffic volumes estimated from the regional travel demand model are adjusted to summer condition, using seasonal adjustment factors. July weekday seasonal factors were applied to the AADT for ozone analyses. Seasonal adjustment factors were obtained from the WVDOH. The factors are based on data processing of West Virginia's permanent traffic count stations. The seasonal factors are also used to develop the MOVES daily and monthly VMT fraction files, allowing MOVES to determine the portion of annual VMT that occurs in each month of the year.
- *Hourly Patterns*: Speeds and emissions vary considerably depending on the time of day. Therefore, it is important to estimate the pattern by which roadway volume varies by hour of the day. Pattern data is in the form of a percentage of the daily volumes for each hour. Distributions are provided for all the counties within the region and by each facility type grouping. This data was not directly available from WVDOH but was determined through an assessment of available data in other states. The same factors are also used to develop the MOVES hourly fraction file.

Vehicle Class Data

Emission rates within MOVES also vary significantly by vehicle type. MOVES produces emission rates for thirteen MOVES vehicle source input types. VMT, however, is input to MOVES by five HPMS vehicle groups (note that passenger cars and light trucks are grouped for input to MOVES2014a). **Exhibit 8** summarizes the distinction between each classification scheme.

EXHIBIT 8: MOVES SOURCE TYPES AND HPMS VEHICLE GROUPS

SOURCE TYPES	
11	Motorcycle
21	Passenger Car
31	Passenger Truck
32	Light Commercial Truck
41	Intercity Bus
42	Transit Bus
43	School bus
51	Refuse Truck
52	Single Unit Short-haul Truck
53	Single Unit Long-haul Truck
54	Motor Home
61	Combination Short-haul Truck
62	Combination Long-haul Truck

HPMS Class Groups	
10	Motorcycle
25	Passenger Car
25	Passenger/Light Truck
40	Buses
50	Single Unit Trucks
60	Combination Trucks

For this regional inventory, vehicle type pattern data was developed for each county and facility class combination based on WVDOH classification counts and internal MOVES defaults. As the first step, WVDOH truck count data was used to develop percentage splits of the total volume to the following vehicle groups: (1) autos and (2) heavy trucks and buses. MOVES default VMT by HPMS vehicle type (for Kanawha and Putnam counties) were then used to split the vehicle groups (autos and trucks) into the HPMS vehicle classes needed by MOVES.

The vehicle type percentages are also provided to the capacity analysis section of PPSUITE to adjust the speeds in response to trucks. That is, a given number of larger trucks take up more roadway space than a given number of cars, and this is accounted for in the speed estimation process by adjusting capacity using information from the Highway Capacity Manual.

Vehicle Ages

Vehicle age distributions are input to MOVES for each county by the thirteen source types. The distributions reflect the percentage of vehicles in the fleet up to 31 years old. The vehicle age distributions were prepared by WVDEP based on information obtained from West Virginia Division of Motor Vehicle (WVDMV) 2016 registration data. MOVES default values were used for source types 41, 42, 43, 51, 52, 53, 61, and 62, which includes all heavy trucks and buses.

Vehicle Population

The information on the vehicle fleet including the number and age of vehicles impacts forecasted start and evaporative emissions within MOVES. Similar to vehicle ages, MOVES requires the population of vehicles by the thirteen source type categories. The vehicle population data were prepared by WVDEP for year 2016. Since regional population and households are not forecast to increase, the base year vehicle population data was also used for all future analysis years.

Environmental and Fuel Characteristics

Information on environmental, fuel, vehicle technology and other control strategy assumptions were determined based on a review of MOVES2014a default information and other available local data. MOVES2014a default temperature and humidity values as well as MOVES2014a default fuel assumptions were used for the region. Key fuel assumptions include:

- RVP=9.7 for E10 fuel; RVP=8.7 for E15 fuel.
- A 95.7% market share of E10 and a 4.3% market share of E15 in 2018.
- A 90.2% market share of E10 and a 9.8% market share of E15 in 2025.
- A 74.7% market share of E10 and a 25.3% market share of E15 in 2035.
- A 61.9% market share of E10 and a 38.1% market share of E15 in 2045.

Other Vehicle Technology and Control Strategies

West Virginia does not have a vehicle inspection maintenance program and there are no state vehicle technology strategies included in the highway emissions inventory. Current federal vehicle emissions control and fuel programs are incorporated into the MOVES2014a software. These include the National Program standards covering model year vehicles through 2025. Modifications of default emission rates are required to reflect the early implementation of the National Low Emission Vehicle Program (NLEV) program in West Virginia. To reflect these impacts, EPA has released instructions and input files that can be used to model these impacts. This inventory utilized the October 2014 version of the files (https://www.epa.gov/moves/tools-develop-or-convert-moves-inputs).

Analysis Process Details

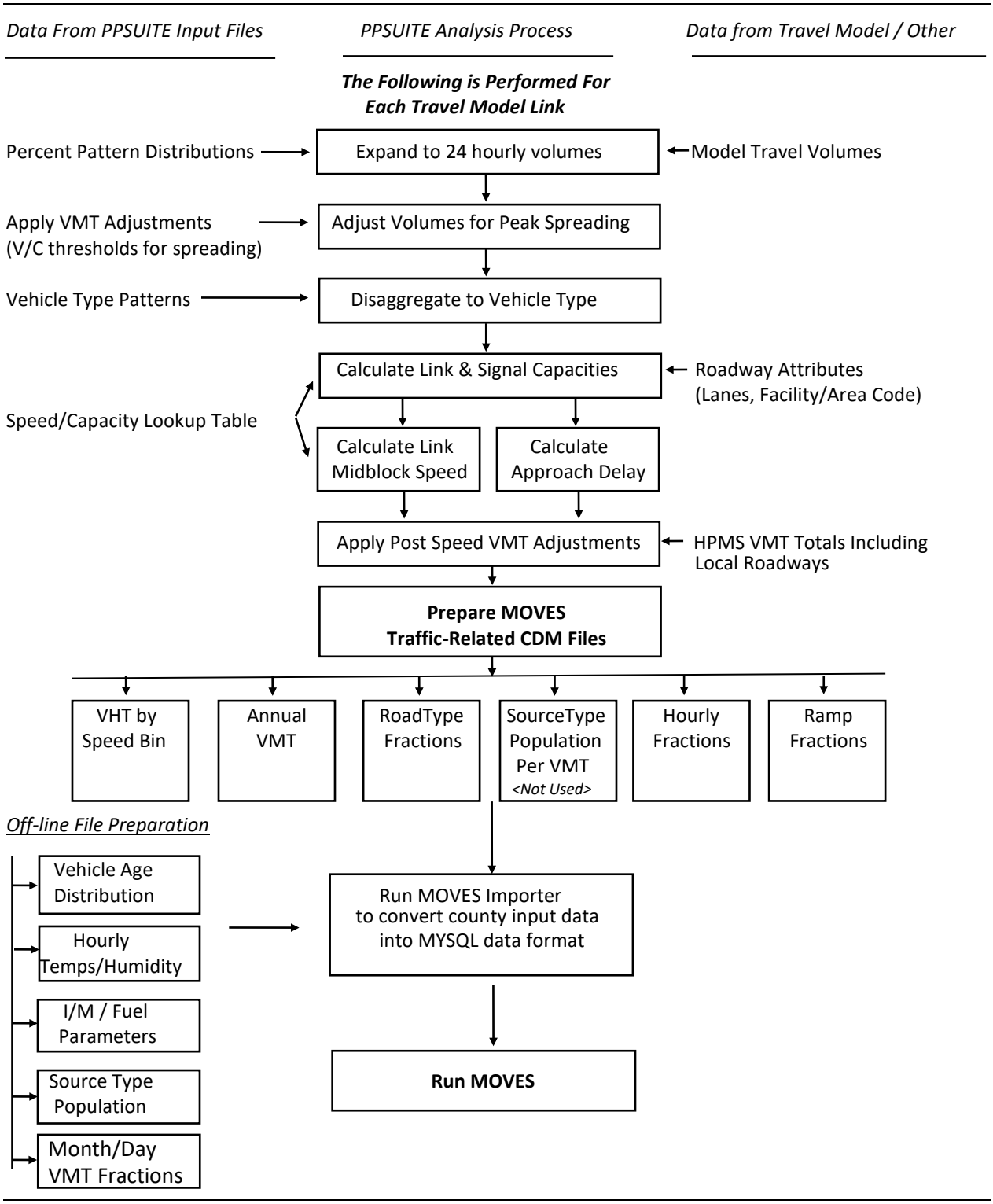
The previous sections have summarized the input data used for computing speeds and emission rates for this conformity analysis. This section explains how PPSUITE and MOVES use that input data to produce emission estimates. **Exhibit 9** provides a more detailed overview of the PPSUITE analysis procedure using the available traffic data information described in the previous section.

VMT Preparation

Producing an emissions inventory with PPSUITE requires a process of disaggregation and aggregation. Data is available and used on a very small scale – individual travel model roadway segments for each of the 24 hours of the day. This data needs to be processed individually to determine the distribution of vehicle hours of travel (VHT) by speed and then aggregated by vehicle class to determine the input VMT to the MOVES emission model. Key steps in the preparation of VMT include:

- *Assemble Travel Model Link VMT* - The RIC regional travel model contains the roadway links, distances and travel volumes needed to estimate VMT. The PPSUITE software processes each link by simply multiplying the assigned travel volume by the distance to obtain VMT.
- *Disaggregate to Hours* - The traffic volumes are distributed to each hour of the day. This allows for more accurate speed calculations (effects of congested hours) and allows PPSUITE to prepare the hourly VMT and speeds for input to MOVES.
- *Peak Spreading* - After dividing the daily volumes to each hour of the day, PPSUITE identifies hours that are unreasonably congested. For those hours, PPSUITE then spreads a portion of the volume to other hours within the same peak period, thereby approximating the "peak spreading" that normally occurs in such over-capacity conditions. This process also helps prevent hours with unreasonably congested speeds that may impact emission calculations.
- *Disaggregation to Vehicle Types* - EPA requires VMT estimates to be prepared by source type, reflecting specific local characteristics. The hourly volumes are disaggregated to the HPMS MOVES vehicle groupings based on WVDOH vehicle classification count data in combination with MOVES defaults as described in the previous section.
- *Apply HPMS VMT Adjustments* - Volumes must also be adjusted to account for differences with the HPMS VMT totals, as described previously. VMT adjustments are provided as input to PPSUITE and are applied to each of the roadway segment volumes. These adjustments were developed from reported HPMS VMT totals for 2017. The VMT adjustments are applied to all analysis year runs. The VMT added or subtracted to the travel model links assume the speeds calculated using the original volumes for each roadway segment for each hour of the day.
- *Apply Seasonal Adjustments* – PPSUITE adjusts the traffic volumes to the appropriate analysis season. These traffic volumes are assembled by PPSUITE and extrapolated over the course of a year to produce the annual VMT file input to MOVES.

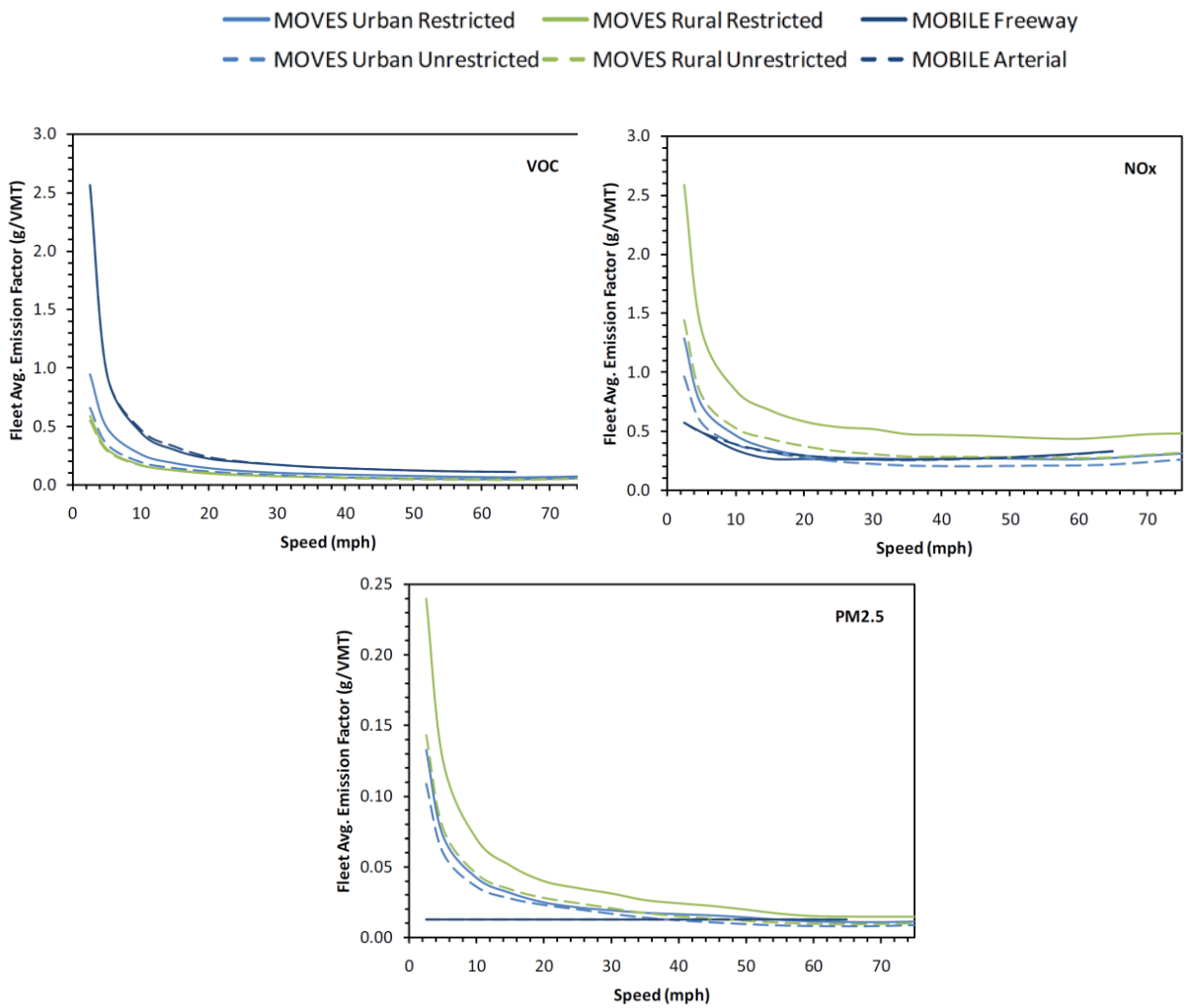
EXHIBIT 9: PPSUITE SPEED/EMISSION ESTIMATION PROCEDURE



Speed Estimation

Emissions for many pollutants (including VOC and NO_X) vary significantly with travel speed. VOC emissions generally decrease as speed increases, while NO_X emissions decrease at low speeds and increases at higher speeds, as illustrated in **Exhibit 10**. Because emissions are so sensitive to speed changes, EPA recommends special attention be given to developing reasonable and consistent speed estimates. EPA also recommends that VMT be disaggregated into subsets that have roughly equal speeds, with separate emission factors for each subset. At a minimum, speeds should be estimated separately by road type.

EXHIBIT 10: EMISSION FACTOR VS. SPEED VARIANCES (VOC, NOX, AND $PM_{2.5}$)



Source: Figure 3 from Implications of the MOVES2010 Model on Mobile Source Emission Estimates, Air & Waste Management Association, July 2010.

The computational framework used for this analysis meets and exceeds the recommendation above relating to speed estimates. Speeds are individually calculated for each roadway segment and hour. Rather than accumulating the roadway segments into a particular road type and calculating an average speed, each individual link hourly speed is represented in the MOVES vehicle hours of travel (VHT) by a speed bin file. This MOVES input file allows the specification of a distribution of hourly speeds. For example, if 5% of a county's arterial VHT operates at 5 mph during the AM peak hour and the remaining 95% operates at 65 mph, this can be represented in the MOVES speed input file. For the roadway vehicle emissions calculations, speed distributions are input to MOVES by road type and source type for each hour of the day.

To calculate speeds, PPSUITE first obtains initial capacities (i.e., how much volume the roadway can serve before heavy congestion) and free-flow speeds (speeds assuming no congestion) from a speed/capacity lookup table. As described previously, this data contains default roadway information indexed by the area and facility type codes. For areas with known characteristics, values can be directly coded to the database and the speed/capacity default values can be overridden. For most areas where known information is unavailable, the speed/capacity lookup tables provide valuable default information regarding speeds, capacities, signal characteristics, and other capacity adjustment information used for calculating congested delays and speeds. The result of this process is an estimated average travel time for each hour of the day for each highway segment. The average travel time multiplied by traffic volume produces vehicle hours of travel (VHT).

Developing the MOVES Traffic Input Files

The PPSUITE software is responsible for producing the following MOVES input files during any analysis run:

- VMT by HPMS vehicle class.
- VHT by speed bin.
- Road type distributions.
- Hourly VMT fractions.
- Ramp fractions.

These files are text formatted files with a *.csv extension. The files are provided as inputs within the MOVES County Data Manager (CDM) and are described below:

- *VMT Input File*: VMT is the primary traffic input affecting emission results. The roadway segment distances and traffic volumes are used to prepare estimates of VMT. PPSUITE performs these calculations and outputs the MOVES annual VMT input file to the County Data Manager (CDM). The annual VMT is computed by multiplying the travel model adjusted VMT by 365 days (366 days in a leap year).
- *VHT by Speed Bin File*: As described in the previous section, the PPSUITE software prepares the MOVES VHT by speed bin file, which summarizes the distribution of speeds across all links into each of the 16

MOVES speed bins for each hour of the day by road type. This robust process is consistent with the methods and recommendations provided in EPA's technical guidance for the MOVES2014a model (http://www.epa.gov/otaq/models/moves/) and ensures that MOVES emission rates are used to the fullest extent.

- *Road Type Distributions*: Within MOVES, typical drive cycles and associated operating conditions vary by roadway type. MOVES defines five different roadway types as follows:

  1 Off-Network.
  2 Rural Restricted Access.
  3 Rural Unrestricted Access.
  4 Urban Restricted Access.
  5 Urban Unrestricted Access.

  For this analysis, the MOVES road type distribution file is automatically generated by PPSUITE using defined equivalencies. The off-network road type includes emissions from vehicle starts, extended idling, and evaporative emissions. Off-network activity in MOVES is primarily determined by the Source Type Population input.

- *Ramp Fractions*: The RIC regional travel model has separate facility classes (urban and rural) for ramps. As a result, PPSUITE assembles ramp VMT for these links and prepares the Ramp Fraction file for input to MOVES.

MOVES Runs

After computing speeds and aggregating VMT and VHT, PPSUITE prepares traffic-related inputs needed to run EPA's MOVES software. Additional required MOVES inputs are prepared externally from the processing software and include temperatures, I/M program parameters, fuel characteristics, vehicle fleet age distributions, and source type population. The MOVES county importer is run in batch mode. This program converts all data files into the MySQL format used by the MOVES model. At that point, a MOVES run specification file (*.mrs) is created which specifies options and key data locations for the run. The MOVES run is then executed in batch mode. A summary of key MOVES run specification settings is shown in **Exhibit 11**. MOVES can be executed using either an inventory or rate-based approach. For this analysis, MOVES is applied using the *inventory-based* approach. Using this approach, actual VMT and population are provided as inputs to the model; MOVES is responsible for producing the total emissions for the region.

EXHIBIT 11: MOVES RUN SPECIFICATION FILE PARAMETER SETTINGS

Parameter	Setting
MOVES Default Database Version	11/17/2017
Scale	COUNTY
Analysis Mode	Inventory
Time Span	**July Weekday Runs:** July month, Weekday, 24 hours
Time Aggregation	Hour
Geographic Selection	54039 – Kanawha County 54079 – Putnam County
Vehicle Selection	All source types Gasoline, Diesel, CNG, E85
Road Type	All road types including off-network
Pollutants and Processes	VOC, NOx
Database selection	Early NLEV database
General Output	Units: Emission = grams Distance = miles Time = hours Energy = Million BTU
Output Emissions	Time = Hour, Emissions by Process ID, Source Type and Road Type

Conformity Analysis

A transportation conformity analysis of the current TIP and LRTP has been completed for the Charleston area. The analyses were performed according to the requirements of the Federal transportation conformity rule at 40 CFR Part 93, Subpart A. The analyses utilized the methodologies, assumptions and data as presented in previous sections. Interagency consultation has been used to determine applicable emission models, analysis years and emission tests.

Emission Tests

A SIP redesignation plan for the *Charleston, WV* nonattainment area (Kanawha and Putnam counties) was approved on August 10, 2006 under the 1997 8-hour ozone NAAQS (reclassifying the area to "Maintenance"). The SIP established 2009 and 2018 motor vehicle emission budgets (MVEBs) for the area. The MVEBs were subsequently revised using EPA's MOVES2010a emission model effective November 14, 2011 (76 FR 56975) and were corrected on July 11, 2018 (83 FR 32062). The ozone transportation conformity analysis has been conducted to evaluate emissions in comparison to the applicable ozone MVEBs as summarized in **Exhibit 12**.

EXHIBIT 12: 1997 8-HOUR OZONE MOTOR VEHICLE EMISSION BUDGETS

County / Pollutant	2009 Budget (tons/day)	2018 Budget (tons/day)
VOC	16.7	13.7
NOx	38.9	17.1

Analysis Years

Section 93.119(g) of the Federal Transportation Conformity Regulations requires that emissions analyses be conducted for specific analysis years as follows:

- The last year of the LRTP's forecast period.
- The attainment year of the standard if within timeframe of TIP and LRTP.
- An intermediate year or years such that if there are two years in which analysis is performed, the two analysis years are no more than ten years apart.

All analysis years were determined through the interagency consultation process. **Exhibit 13** provides the analysis years used for this conformity analysis.

EXHIBIT 13: TRANSPORTATION CONFORMITY ANALYSIS YEARS

Analysis Year	Description
2018	Budget Year
2025	Interim Year
2035	Interim Year
2045	Last Year of LRTP

Regionally Significant Highway Projects

For the purposes of conformity analysis, highway networks are created for each analysis year. For the horizon years, regionally significant projects from the LRTP were coded onto the networks. Detailed assessments were only performed for those new projects which may have a significant effect on emissions in accordance with 40 CFR Parts 51 and 93. Only those projects which would increase capacity or significantly impact vehicular speeds were considered. Projects such as bridge replacements and roadway restoration projects, which constitute the majority of the TIP and LRTP list, have been excluded from consideration since they are considered exempt under 40 CFR 93.126-127. A list of highway projects is shown in **Attachment A**.

Conformity Analysis Results

An emissions analysis has been completed for the 1997 8-hour ozone NAAQS. **Exhibit 14** summarizes the Charleston area ozone emission results for a summer weekday in each analysis year. All years are lower than the applicable conformity budgets established in the regional maintenance plan for the 1997 ozone NAAQS. A summary of MOVES input parameters is provided in **Attachment B**. A detailed emission summary is also provided in **Attachment C**. Example MOVES importer (XML) and run specification (MRS) files are provided in **Attachment D**.

EXHIBIT 14: OZONE EMISSION ANALYSIS RESULTS AND CONFORMITY TEST
(SUMMER WEEKDAY)

Pollutant	*2018 BUDGET (tons/day)*	*2018 (tons/day)*	*2025 (tons/day)*	*2035 (tons/day)*	*2045 (tons/day)*
VOC	***13.7***	*4.10*	*2.71*	*1.55*	*1.41*
NOX	***17.1***	*11.34*	*6.50*	*4.31*	*4.56*
Conformity Result		**Pass**	**Pass**	**Pass**	**Pass**

Conformity Determination

Financial Constraint

The planning regulations, Sections 450.322(b)(11) and 450.324(e), require the transportation plan to be financially constrained while the existing transportation system is being adequately operated and maintained. Only projects for which construction and operating funds are reasonably expected to be available are included. RIC, in conjunction with WVDOH, FHWA and FTA, has developed an estimate of the cost to maintain and operate existing roads, bridges and transit systems in the MPO region and have compared the cost with the estimated revenues and maintenance needs of the new roads over the same period. The TIP and LRTP have been determined to be financially constrained.

Public Participation

The TIP and LRTP have undergone the public participation requirements as well as the comment and response requirements according to the procedures established in compliance with 23 CFR part 450, the region's Public Participation Plan, and the Conformity SIP. The draft document was made available for a public review and comment period.

Conformity Statement

The conformity rule requires that the TIP and LRTP conform to the applicable SIP(s) and be adopted by the MPO/RPO before any federal agency may approve, accept, or fund projects. Conformity is determined by applying criteria outlined in the transportation conformity regulations to the analysis.

The TIP and LRTP for the RIC MPO area is found to conform to the applicable air quality SIP(s) or EPA conformity requirements. This finding of conformity positively reflects on the efforts of the MPO and its partners in meeting the regional air quality goals, while maintaining and building an effective transportation system.

Resources

MOVES model

Modeling Page within EPA's Office of Mobile Sources Website (http://www.epa.gov/omswww/models.htm) contains a downloadable model, MOVES users guide and other information.

Policy Guidance on the Use of MOVES2014 for State Implementation Plan Development, Transportation Conformity, and Other Purposes, US EPA Office of Air and Radiation, EPA-420-B-14-008, July 2014.

MOVES2014 and MOVES2014a Technical Guidance: Using MOVES to Prepare Emission Inventories in State Implementation Plans and Transportation Conformity. US EPA Office of Air and Radiation, and Office of Transportation and Air Quality, EPA-420-B-15-093, November 2015.

MOVES2014a User Guide, US EPA Office of Transportation and Air Quality, EPA-420-B-15-095, November 2015.

Traffic Engineering

Highway Capacity Manual, Transportation Research Board, presents current knowledge and techniques for analyzing the transportation system.

Highway Vehicle Inventory Glossary

AADT: Average Annual Daily Traffic, average of ALL days.

County Data Manager (CDM): User interface developed to simplify importing specific local data for a single county or a user-defined custom domain without requiring direct interaction with the underlying MySQL database.

Emission rate or factor: Expresses the amount of pollution emitted per unit of activity. For highway vehicles, usually in grams of pollutant emitted per mile driven.

FC: Functional code, applied in data management to road segments to identify their type (freeway, local, etc.).

Growth factor: Factor used to convert volumes to future years.

HPMS: Highway Performance Monitoring System

I/M: Vehicle emissions inspection/maintenance programs ensure that vehicle emission controls are in good working order throughout the life of the vehicle. The programs require vehicles to be tested for emissions. Most vehicles that do not pass must be repaired.

MOVES: The latest model EPA has developed to estimate emissions from highway vehicles.

Pattern data: Extrapolations of traffic patterns (such as how traffic volume on road segment types varies by time of day, or what kinds of vehicles tend to use a road segment type) from segments with observed data to similar segments.

PPSUITE: Post-Processor for Air Quality, a set of programs that estimate speeds and processes MOBILE emission rates.

Road Type: Functional code, applied in data management to road segments to identify their type (rural/urban highways, rural/urban arterials, etc.)

Source Type: One of thirteen vehicle types used in MOVES modeling.

VHT: Vehicle hours traveled.

VMT: Vehicle miles traveled. In modeling terms, it is the simulated traffic volumes times link length.

ATTACHMENT A

Project List

County	District	Project	Improvement	Planning Year	Analysis Year	Bond Project
Kanawha	1 (CL-8)	WV 622, I-64 to N of WV 62	Widen existing roadway from 3 to 5-lanes, I-64/Cross Lanes I/C to WV 62, Kanawha County - 0.8 mi	2036-2045	2025	YES
Kanawha	1	Oakwood Road Improvements (US 119 improvements from MacCorkle Ave to Jefferson Rd)	Construct new I/C on US 119 at Lucado Road; construct frontage roads (Add lanes, flyovers, I/C's, frontage roads, etc. along US 119)	Phases: 1-2025 2-2035 3-2045	2025	YES
Putnam	1	US 35 Paving and Interchange	Pave 14 miles of US 35 currently under a Grade and Drain projeict including a new I/C near Buffalo Bridge		2025	YES
Putnam	1 (PC-3)	I-64 Widening	Widen I-64 from US 35 to Nitro including new bridge across Kanawha River	2026-2035	2035	YES
	PC-6A	Teays Valley Rd (CR 33)	Widening	2036-2045	2045	
	KC-8A	Dupont Avenue (US 60)	Widening	2026-2035	2035	YES
	PC-8A	Charleston Road (WV 62)	Widening	2026-2035	2035	
	KC-9	Greenbrier St (WV 114)	Widening	2026-2035	2035	
	KC-U1	Institute Connector	New Location	2026-2035	2035	
	KC-7	Lens Creek Rd (WV 94)	Widening	2026-2035	2035	

ATTACHMENT B

Interagency Consultation / Air Quality Data Checklist Summary

RIC Metro Mobility Plan
Air Quality Conformity Analysis: Interagency Consultation Conference Call
Meeting Minutes
June 19, 2018 10:00 AM

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1. Attending

WVDOH and Michael Baker International (MBI) hosted the Interagency Consultation Group (ICG) conference call / webinar to kick-off the transportation conformity analysis on June 19, 2018 at 10AM. The purpose and goals for the meeting are to:

- Review ICG roles and responsibilities
- Review data collection efforts
- Review and approve latest planning assumptions
- Protocol for identifying Exempt, Non-exempt and Regionally Significant Projects
- Understanding of the conformity process and future review and public comment period requirements
- Discuss future Maintenance Plan Requirements

The participants on the call included:

Participant	Agency	Participant	Agency
Perry Keller	WVDOH	Kara Greathouse	RIC
Chris Kinsey		Randy Durst	WWW
David Fewell	WVDEP	Tracy Brown	
Laura Crowder		Saleem Salameh	KYOVA
Alanna Keller		Terri Sicking	
Chandra Inglis-Smith	FHWA-WV	Dave Moore	ODOT
Laura Toole	FHWA-OH	Mike Maleski	OEPA
Leigh Oesterling		Thomas Witt	KYDOT
Bernadette Dupont	FHWA-KY	Jim Frazier	MBI
Gregory Becoat	EPA Region 3	Dan Szekeres	
Michele DeAngelis	FTA-Region 3	Ying-Tzu Chung	
		Avinash Sinha	

2. Conformity Areas:

Five areas were identified in the FHWA guidance that are subject to transportation conformity for the 1997 Ozone NAAQS. All five areas have approved Maintenance Plans. MBI will perform the conformity analysis for:

- Charleston, WV
- Huntington-Ashland, WV-KY
- Parkersburg-Marietta, WV-OH

ODOT will perform the conformity analysis for:

- Steubenville-Weirton, OH-WV
- Wheeling, WV-OH

3. Conformity Areas and MVEBs

The ICG reviewed the motor vehicle emissions budgets (MVEB) as listed in the table below. For the multi-state areas, it was agreed that MBI will perform the analysis for the Ohio portion of WWW. The approved budget for Washington County, OH was added to the table below. For KYOVA, the Kentucky portion of the conformity analysis will be performed by KYOVA. MBI will assist as needed.

Area	MPO	Counties	Budget Year	VOC (tpd)	NOx (tpd)
Charleston	RIC	Kanawha	2009	16.7	38.9
		Putnam	2018	13.5	17.1
Huntington	KYOVA	Cabell	2009	7.4	14.0
		Wayne	2018	6.6	13.5
Parkersburg	W-W-W	Wood	2009	5.5	7.3
			2018	4.7	7.3
		Washington	2018	1.93	3.25
Weirton	BHJ	Brooke	2009	3.4	4.2
		Hancock	2018	1.9	3.9
Wheeling	Bel-O-Mar	Marshall	2009	10.4	9.1
		Ohio	2018	7.7	3.1

4. Conformity Tools and Models

The ICG reviewed the proposed analysis years required to meet the conformity guidance of the last year of the plan, intermediate years not more than 10 years apart, the attainment year and budget years in the timeframe of the TIP/plan. EPA Region 3 stated that 2018 is a required analysis year for all three MPOs as it is a budget year in the timeframe of the TIP. The following was approved by the ICG:

a. Analysis Years

RIC: 2018, 2025, 2035, 2045
KYOVA/WWW: 2018, 2020, 2030, 2040

b. EPA Emissions Model – MOVES2014a
c. MPO TRANSCAD models and roles
    a. RIC: MPO will provide the modeling setups for MBI to run the model.
    b. KYOVA/WWW: MPO model final assigned networks for each analysis year
    c. MBI's PPSUITE Pre/Post-Processing

5. Project Lists

The project lists include all TIP / Plan and State Road Bond projects that identify exempt and nonexempt projects with draft regionally significant project identified. The MPOs will review the lists and provide any adjustments/comments to WVDOH and MBI. The group discuss that KY and OH projects should be included in the list. Below are the draft regionally significant projects for each MPO.

RIC Projects

County	District	Project	Improvement	Planning Year	Analysis Year	Bond Project
Kanawha	1 (CL-8)	WV 622, I-64 to N of WV 62	Widen existing roadway from 3 to 5-lanes, I-64/Cross Lanes I/C to WV 62, Kanawha County - 0.8 mi	2036-2045	2025	YES
Kanawha	1	Oakwood Road Improvements (US 119 improvements from MacCorkle Ave to Jefferson Rd)	Construct new I/C on US 119 at Lucado Road; construct frontage roads (Add lanes, flyovers, I/C's, frontage roads, etc. along US 119)	Phases: 1-2025 2-2035 3-2045	2025	YES
Putnam	1	US 35 Paving and Interchange	Pave 14 miles of US 35 currently under a Grade and Drain projejct including a new I/C near Buffalo Bridge		2025	YES
Putnam	1 (PC-3)	I-64 Widening	Widen I-64 from US 35 to Nitro including new bridge across Kanawha River	2026-2035	2035	YES
	PC-6A	Teays Valley Rd (CR 33)	Widening	2036-2045	2045	
	KC-8A	Dupont Avenue (US 60)	Widening	2026-2035	2035	YES
	PC-8A	Charleston Road (WV 62)	Widening	2026-2035	2035	
	KC-9	Greenbrier St (WV 114)	Widening	2026-2035	2035	
	KC-U1	Institute Connector	New Location	2026-2035	2035	
	KC-7	Lens Creek Rd (WV 94)	Widening	2026-2035	2035	

6. Latest Planning Assumptions

MBI led the discussions to review each planning assumption for the ICG to approve. The planning assumptions included MOVES inputs, traffic data and identified local data inputs and national defaults. ODOT has protocol for inter-zonal VMT adjustments; MBI will incorporate the protocol when preparing HPMS VMT adjustments for Washington County, OH. The tables below show the latest planning assumptions approved for this conformity analysis.

Latest Planning Assumptions - MOVES

Data Item	Inputs Assumptions		
	Charleston, WV (RIC)	Huntington, WV (KYOVA)	Parkersburg, WV (WWW)
MOVES RunSpec			
MOVES Version	MOVES2014a		
MOVES Default Database	MOVESDB20161117		
Scale/Calulation Type	County Scale Inventory Run		
Analysis Counties	Kanawha (FIPS: 54039), Putnam (FIPS: 54079)	Cabell (FIPS:54011), Wayne (FIPS:54099)	Wood (FIPS:54107)
Analysis Years	2018, 2025, 2035, 2045	2018, 2020, 2030, 2040	2018, 2020, 2030, 2040
Analysis Days/Months	July Weekday		
Pollutants	VOC, NOx		
Stage II Refueling Emissions	Not Included		
Fuel Types	Gasoline, Diesel, CNG, E85		

Latest Planning Assumptions - Traffic

Data Item	Inputs Assumptions		
	Charleston, WV (RIC)	Huntington, WV (KYOVA)	Parkersburg, WV (WWW)
Traffic Data			
Highway Network	2018, 2025, 2035 and 2045 networks and setups to run model, socio-economic inputs/summary data	2018, 2020, 2030 and 2040 assigned networks and socio-economic inputs/summary data	2018, 2020, 2030 and 2040 assigned networks and socio-economic inputs/summary data
County HPMS VMT Adjustments	**Data request:** Latest available HPMS VMT Calculate AADT HPMS adjustments for 2018 (Ensure VMT is consistent with reported HPMS)		
Seasonal Adjustments	**Data request:** Monthly and daily seasonal adjustment factors Use July weekday seasonal factors to convert AADT to average July weekday traffic		
Vehicle Mixes	**Data request:** Truck count/vehicle mix data by functional class, by county MOVES VMT required by 5 HPMS vehicle classes. Use DOT truck count data to split model traffic volumes into auto and trucks, and use MOVES2014a default VMT distributions for the region to divide the two vehicle groups (auto and trucks) into MOVES 13 source types, which are recombined to the 5 HPMS vehicle classes.		

Latest Planning Assumptions – MOVES Inputs

Data Item	Inputs Assumptions		
	Charleston, WV (RIC)	Huntington, WV (KYOVA)	Parkersburg, WV (WWW)
MOVES Inputs			
Annual VMT	Calculated by PPSUITE from model / seasonal factors / vehicle mapping		
Avg. Hourly Speed Distribution	Calculated by PPSUITE (Minimum Speed = 2.5 mph)		
Road Type Distribution	Calculated by PPSUITE; a RoadType field must be added to the travel model network based on FC.		
Ramp Fraction	Calculated by PPSUITE (use ramp classes coded in model network) or use MOVES2014a defaults		
Month VMT Fractions	Factors to convert AADT to an average day in each month (Local data or MOVES default). Calculated based on seasonal adjustment factors.		
Day VMT Fractions	Calculated based on seasonal adjustment factors		
Hour VMT Fractions	Factors to disaggregate daily traffic volumes by hour for different roadway functional classes. Borrow hourly distributions from other region.		
Source Type Population	Data request: socio-economic data. 2016 Inputs provided by WVDEP --> Grow to future years by applying growth factors developed from socio-economic data (same growth factors for all source types)		Data request: socio-economic data. 2016 Inputs provided by WVDEP. Use 2016 data for all analysis years.
Vehicle Age Distribution	Source Types 11, 21, 31, 32 & 54: based on 2016 WV DMV Registration Data for the region; Source Types 41, 42, 43, 51, 52, 53, 61 & 62: use MOVES National Defaults.		
Fuel Parameters (Gasoline/Diesel/CNG/E85)	Use MOVES2014a defaults		
I/M Parameters	No I/M programs		
Temperatures/Humidity	Use MOVES2014a defaults		
Control Programs			
Early NLEV / ~~CALLEV~~	Include EPA provided MOVES override database for early NLEV implementation		
Stage II Refueling Parameters	Not Included		

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7. Data Collection Efforts

The data collection efforts are in process as MBI sent request to the MPOs, WVDOH and WVDEP. The group reviewed the status and pending data needed for the conformity analysis. With the addition of Washington County OH, MBI will send data requests to ODOT and OEPA for a list of data needs. MBI will continue to process the existing data to the formats needed for their PPSUITE process.

Still pending data items include:

- KYOVA will prepare and provide 2018 network files to MBI.
- RIC will provide the TRANSCAD modeling setups for MBI this week.
- WVDOH HPMS data

8. Schedule

MBI will perform and finish technical analysis within 30 days after the completion of data collection efforts, and then prepare documentation within 15 days after finishing technical analysis.

RIC, KYOVA and WWW stated that their public comment period is 15 days and will be responsible for completing the public comment requirements. RIC's next board meeting is September 13, KYOVA's is September 23, and WWW's is September 19.

WVDOH requested that once the public comment and conformity reports are complete to pursue special MPO Board meeting to approve the conformity before the next scheduled meeting to ensure timely delivery to FHWA/EPA.

9. Next Steps

To support future WVDEP Maintenance Plans (SIP) efforts, WWW will need to prepare 2025 network and RIC will need to prepare 2030 network files for MBI. MBI will perform the highway emissions summaries for 2025 and 2030 for WVDEP to use for future MVEB that will be included in the new Maintenance Plans.

MBI will finish modeling setups, conduct conformity analysis, and then distribute draft conformity report for ICG review in early/mid August.

Air Quality Data Checklist Summary

Data Item	Inputs Assumptions
Long Range Plan	2045 Regional Transportation Plan
Transportation Improvement Program	FY 2018-2021 TIP
MOVES RunSpec	
MOVES Version	MOVES2014a
MOVES Default Database	MOVESDB20161117
Scale/Calulation Type	County Scale Inventory Run
Analysis Counties	Kanawha (FIPS: 54039), Putnam (FIPS: 54079)
Analysis Years	2018, 2025, 2035, 2045
Analysis Days/Months	July Weekday
Pollutants	VOC, NOx
Stage II Refueling Emissions	Not Included
Fuel Types	Gasoline, Diesel, CNG, E85
Traffic Data	
Highway Network	Use socio-economic forecast and latest network inputs updated for 2045 LRTP
County HPMS VMT Adjustments	Calculate AADT HPMS adjustments for 2017 (Ensure VMT is consistent with reported HPMS)
Seasonal Adjustments	Use July weekday seasonal factors provided by DOT to convert AADT to average July weekday traffic
Vehicle Mixes	MOVES VMT required by 5 HPMS vehicle classes. Use DOT truck count data to split model traffic volumes into auto and trucks, and use MOVES2014a default VMT distributions for the region to divide the two vehicle groups (auto and trucks) into MOVES 13 source types, which are recombined to the 5 HPMS vehicle classes.
MOVES Inputs	
Annual VMT	Calculated by PPSUITE from model / seasonal factors / vehicle mapping
Avg. Hourly Speed Distribution	Calculated by PPSUITE (Minimum Speed = 2.5 mph)
Road Type Distribution	Calculated by PPSUITE; a RoadType field must be added to the travel model network based on FC.
Ramp Fraction	Calculated by PPSUITE (use ramp classes coded in model network) or use MOVES2014a defaults
Month VMT Fractions	Factors to convert AADT to an average day in each month (Local data or MOVES default). Calculated based on seasonal adjustment factors.
Day VMT Fractions	Calculated based on seasonal adjustment factors
Hour VMT Fractions	Factors to disaggregate daily traffic volumes by hour for different roadway functional classes. Borrow hourly distributions from other region.
Source Type Population	Use 2016 Inputs provided by WVDEP for all analysis year
Vehicle Age Distribution	Source Types 11, 21, 31, 32 & 54: based on 2016 WV DMV Registration Data for the region; Source Types 41, 42, 43, 51, 52, 53, 61 & 62: use MOVES National Defaults.
Fuel Parameters (Gasoline/Diesel/CNG/E85)	Use MOVES2014a defaults
I/M Parameters	No I/M programs
Temperatures/Humidity	Use MOVES2014a defaults
Control Programs	
Early NLEV	Include EPA provided MOVES override database for early NLEV implementation
AVFT	Not included
Stage II Refueling Parameters	Not Included

ATTACHMENT C

Detailed Emission Results

Detailed Emission Results for Daily Ozone Analysis

2018 Daily Ozone by County

County	Summer Daily VMT	Emissoins (Tons/Day)	
		VOC	NOx
Kanawha	6,828,359	3.22	9.00
Putnam	1,825,848	0.88	2.34
Off-Model Project Emission Benefits		0.00	0.00
Region Total	**8,654,207**	**4.09** **3,714**	**11.35** **10,292**

2025 Daily Ozone by County

County	Summer Daily VMT	Emissoins (Tons/Day)	
		VOC	NOx
Kanawha	7,484,591	2.14	5.31
Putnam	2,110,200	0.57	1.19
Off-Model Project Emission Benefits		0.00	0.00
Region Total	**9,594,791**	**2.70** **2,453**	**6.50** **5,895**

2035 Daily Ozone by County

County	Summer Daily VMT	Emissoins (Tons/Day)	
		VOC	NOx
Kanawha	8,331,316	1.25	3.68
Putnam	2,348,371	0.30	0.63
Off-Model Project Emission Benefits		0.00	0.00
Region Total	**10,679,686**	**1.55** **1,402**	**4.31** **3,911**

2045 Daily Ozone by County

County	Summer Daily VMT	Emissoins (Tons/Day)	
		VOC	NOx
Kanawha	9,186,424	1.15	3.94
Putnam	2,588,751	0.26	0.62
Off-Model Project Emission Benefits		0.00	0.00
Region Total	**11,775,175**	**1.41** **1,279**	**4.56** **4,133**

2018 Daily Ozone by Road Type

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day) VOC	NOx
Kanawha	Off-Network	N/A	N/A	2.17	2.39
	Rural Restricted	1,764,438	60.0	0.20	1.76
	Rural UnRestricted	825,171	17.9	0.24	1.51
	Urban Restricted	1,853,368	56.8	0.22	1.92
	Urban UnRestricted	2,385,382	28.4	0.37	1.42
	Subtotal	*6,828,359*		*3.22*	*9.00*
Putnam	Off-Network	N/A	N/A	0.53	0.26
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	558,464	22.9	0.13	0.89
	Urban Restricted	703,846	55.3	0.08	0.58
	Urban UnRestricted	563,539	17.1	0.14	0.62
	Subtotal	*1,825,848*		*0.88*	*2.34*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**8,654,207**		**4.09**	**11.35**
			(Kg/Day)	**3,714**	**10,292**

2025 Daily Ozone by Road Type

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day) VOC	NOx
Kanawha	Off-Network	N/A	N/A	1.56	1.97
	Rural Restricted	2,160,704	59.9	0.12	0.99
	Rural UnRestricted	831,579	17.0	0.12	0.72
	Urban Restricted	1,993,190	56.7	0.12	0.94
	Urban UnRestricted	2,499,118	27.3	0.22	0.69
	Subtotal	*7,484,591*		*2.14*	*5.31*
Putnam	Off-Network	N/A	N/A	0.36	0.14
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	506,783	22.1	0.06	0.37
	Urban Restricted	972,418	55.2	0.06	0.36
	Urban UnRestricted	631,000	16.4	0.09	0.32
	Subtotal	*2,110,200*		*0.57*	*1.19*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**9,594,791**		**2.70**	**6.50**
			(Kg/Day)	**2,453**	**5,895**

2035 Daily Ozone by Road Type

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day) VOC	NOx
Kanawha	Off-Network	N/A	N/A	0.92	1.90
	Rural Restricted	2,666,952	59.8	0.07	0.59
	Rural UnRestricted	877,849	16.2	0.07	0.40
	Urban Restricted	2,144,709	56.5	0.06	0.49
	Urban UnRestricted	2,641,807	26.9	0.12	0.31
	Subtotal	*8,331,316*		*1.25*	*3.68*
Putnam	Off-Network	N/A	N/A	0.18	0.06
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	544,404	22.1	0.03	0.21
	Urban Restricted	1,139,149	55.1	0.03	0.20
	Urban UnRestricted	664,817	15.5	0.05	0.17
	Subtotal	*2,348,371*		*0.30*	*0.63*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**10,679,686**		**1.55**	**4.31**
			(Kg/Day)	**1,402**	**3,911**

2045 Daily Ozone by Road Type

County	Road Type	Summer Daily VMT	Speed (mph)	Emissoins (Tons/Day) VOC	NOx
Kanawha	Off-Network	N/A	N/A	0.83	2.16
	Rural Restricted	3,160,833	59.5	0.08	0.63
	Rural UnRestricted	935,283	15.5	0.07	0.40
	Urban Restricted	2,279,928	56.4	0.06	0.47
	Urban UnRestricted	2,810,381	26.1	0.12	0.28
	Subtotal	*9,186,424*		*1.15*	*3.94*
Putnam	Off-Network	N/A	N/A	0.14	0.04
	Rural Restricted	0	N/A	0.00	0.00
	Rural UnRestricted	583,009	22.0	0.03	0.21
	Urban Restricted	1,298,999	55.0	0.03	0.20
	Urban UnRestricted	706,743	14.5	0.05	0.17
	Subtotal	*2,588,751*		*0.26*	*0.62*
Off-Model Project Emission Benefits				0.00	0.00
Region Total		**11,775,175**		**1.41**	**4.56**
			(Kg/Day)	**1,279**	**4,133**

2018 Daily Ozone by Source Type

County	Source Type	Summer Daily VMT	Emissoins (Tons/Day) VOC	NOx
Kanawha	Motorcycle	38,173	0.10	0.03
	Passenger Car	2,159,027	0.85	0.69
	Passenger Truck	3,368,989	1.47	1.82
	Light Commercial Truck	134,706	0.12	0.15
	Intercity Bus	3,069	0.00	0.03
	Transit Bus	49,588	0.03	0.31
	School Bus	132	0.00	0.00
	Refuse Truck	4,391	0.00	0.02
	Single Unit Short-haul Truck	136,951	0.05	0.26
	Single Unit Long-haul Truck	274,031	0.09	0.55
	Motor Home	7,163	0.01	0.03
	Combination Short-haul Truck	206,131	0.05	0.98
	Combination Long-haul Truck	446,008	0.45	4.14
	Subtotal	*6,828,359*	*3.22*	*9.00*
Putnam	Motorcycle	10,206	0.03	0.01
	Passenger Car	539,904	0.23	0.18
	Passenger Truck	949,192	0.46	0.53
	Light Commercial Truck	24,836	0.02	0.03
	Intercity Bus	893	0.00	0.01
	Transit Bus	13,086	0.01	0.08
	School Bus	148	0.00	0.00
	Refuse Truck	36,976	0.01	0.20
	Single Unit Short-haul Truck	24,168	0.01	0.06
	Single Unit Long-haul Truck	48,000	0.02	0.12
	Motor Home	3,927	0.01	0.02
	Combination Short-haul Truck	64,476	0.02	0.35
	Combination Long-haul Truck	110,038	0.05	0.76
	Subtotal	*1,825,848*	*0.88*	*2.34*
Region Total		**8,654,207 (Kg/Day)**	**4.09 3,714**	**11.35 10,292**

2025 Daily Ozone by Source Type

County	Source Type	Summer Daily VMT	Emissoins (Tons/Day) VOC	NOx
Kanawha	Motorcycle	41,778	0.09	0.03
	Passenger Car	2,362,891	0.60	0.38
	Passenger Truck	3,687,104	0.94	0.91
	Light Commercial Truck	147,426	0.07	0.08
	Intercity Bus	3,565	0.00	0.02
	Transit Bus	54,603	0.01	0.16
	School Bus	143	0.00	0.00
	Refuse Truck	4,603	0.00	0.01
	Single Unit Short-haul Truck	145,805	0.02	0.12
	Single Unit Long-haul Truck	309,308	0.04	0.29
	Motor Home	7,014	0.01	0.02
	Combination Short-haul Truck	261,809	0.03	0.52
	Combination Long-haul Truck	458,541	0.33	2.79
	Subtotal	*7,484,591*	*2.14*	*5.31*
Putnam	Motorcycle	11,910	0.03	0.01
	Passenger Car	630,073	0.17	0.10
	Passenger Truck	1,107,716	0.29	0.27
	Light Commercial Truck	28,984	0.02	0.02
	Intercity Bus	1,093	0.00	0.01
	Transit Bus	14,271	0.00	0.04
	School Bus	159	0.00	0.00
	Refuse Truck	42,010	0.01	0.09
	Single Unit Short-haul Truck	25,262	0.00	0.03
	Single Unit Long-haul Truck	53,193	0.01	0.06
	Motor Home	3,776	0.00	0.01
	Combination Short-haul Truck	80,519	0.01	0.18
	Combination Long-haul Truck	111,234	0.02	0.37
	Subtotal	*2,110,200*	*0.57*	*1.19*
Region Total		**9,594,791 (Kg/Day)**	**2.70 2,453**	**6.50 5,895**

2035 Daily Ozone by Source Type

County	Source Type	Summer Daily VMT	Emissoins (Tons/Day) VOC	NOx
Kanawha	Motorcycle	46,424	0.09	0.03
	Passenger Car	2,625,661	0.33	0.14
	Passenger Truck	4,097,135	0.44	0.31
	Light Commercial Truck	163,821	0.03	0.02
	Intercity Bus	4,384	0.00	0.01
	Transit Bus	60,931	0.00	0.08
	School Bus	154	0.00	0.00
	Refuse Truck	5,234	0.00	0.01
	Single Unit Short-haul Truck	165,082	0.01	0.09
	Single Unit Long-haul Truck	346,127	0.02	0.22
	Motor Home	7,585	0.00	0.01
	Combination Short-haul Truck	294,566	0.01	0.37
	Combination Long-haul Truck	514,214	0.30	2.40
	Subtotal	*8,331,316*	*1.25*	*3.68*
Putnam	Motorcycle	13,273	0.03	0.01
	Passenger Car	702,188	0.09	0.04
	Passenger Truck	1,234,500	0.14	0.09
	Light Commercial Truck	32,302	0.01	0.00
	Intercity Bus	1,307	0.00	0.00
	Transit Bus	15,666	0.00	0.02
	School Bus	169	0.00	0.00
	Refuse Truck	49,968	0.00	0.07
	Single Unit Short-haul Truck	27,059	0.00	0.02
	Single Unit Long-haul Truck	56,314	0.00	0.05
	Motor Home	3,863	0.00	0.00
	Combination Short-haul Truck	89,090	0.01	0.13
	Combination Long-haul Truck	122,670	0.01	0.20
	Subtotal	*2,348,371*	*0.30*	*0.63*
Region Total		**10,679,686 (Kg/Day)**	**1.55 1,402**	**4.31 3,911**

2045 Daily Ozone by Source Type

County	Source Type	Summer Daily VMT	Emissoins (Tons/Day) VOC	NOx
Kanawha	Motorcycle	51,150	0.10	0.04
	Passenger Car	2,892,986	0.27	0.11
	Passenger Truck	4,514,272	0.36	0.21
	Light Commercial Truck	180,500	0.02	0.01
	Intercity Bus	5,354	0.00	0.01
	Transit Bus	66,934	0.00	0.08
	School Bus	168	0.00	0.00
	Refuse Truck	5,804	0.00	0.01
	Single Unit Short-haul Truck	182,966	0.01	0.10
	Single Unit Long-haul Truck	382,849	0.02	0.24
	Motor Home	8,338	0.00	0.00
	Combination Short-haul Truck	322,283	0.02	0.40
	Combination Long-haul Truck	572,820	0.35	2.74
	Subtotal	*9,186,424*	*1.15*	*3.94*
Putnam	Motorcycle	14,651	0.03	0.01
	Passenger Car	775,073	0.08	0.03
	Passenger Truck	1,362,637	0.11	0.06
	Light Commercial Truck	35,654	0.00	0.00
	Intercity Bus	1,419	0.00	0.00
	Transit Bus	17,160	0.00	0.02
	School Bus	183	0.00	0.00
	Refuse Truck	57,646	0.00	0.08
	Single Unit Short-haul Truck	28,751	0.00	0.02
	Single Unit Long-haul Truck	59,715	0.00	0.05
	Motor Home	4,071	0.00	0.00
	Combination Short-haul Truck	96,502	0.01	0.14
	Combination Long-haul Truck	135,289	0.01	0.20
	Subtotal	*2,588,751*	*0.26*	*0.62*
Region Total		**11,775,175 (Kg/Day)**	**1.41 1,279**	**4.56 4,133**

2018 Daily Ozone by Emission Process

County	Emission Process	Emissoins (Tons/Day) VOC	NOx
Kanawha	Running Exhaust	0.80	6.61
	Start Exhaust	1.03	0.93
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.25	0.00
	Evap Fuel Vapor Venting	0.49	0.00
	Evap Fuel Leaks	0.31	0.00
	Crankcase Running Exhaust	0.02	0.00
	Crankcase Start Exhaust	0.01	0.00
	Crankcase Extended Idle Exhaust	0.01	0.00
	Extended Idle Exhaust	0.29	1.43
	Auxiliary Power Exhaust	0.01	0.04
	Subtotal	*3.22*	*9.00*
Putnam	Running Exhaust	0.26	2.08
	Start Exhaust	0.29	0.26
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.07	0.00
	Evap Fuel Vapor Venting	0.15	0.00
	Evap Fuel Leaks	0.09	0.00
	Crankcase Running Exhaust	0.01	0.00
	Crankcase Start Exhaust	0.00	0.00
	Crankcase Extended Idle Exhaust	0.00	0.00
	Extended Idle Exhaust	0.00	0.00
	Auxiliary Power Exhaust	0.00	0.00
	Subtotal	*0.88*	*2.34*
Region Total		**4.09**	**11.35**
	(Kg/Day)	**3,714**	**10,292**

2025 Daily Ozone by Emission Process

County	Emission Process	Emissoins (Tons/Day) VOC	NOx
Kanawha	Running Exhaust	0.38	3.34
	Start Exhaust	0.67	0.50
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.14	0.00
	Evap Fuel Vapor Venting	0.36	0.00
	Evap Fuel Leaks	0.31	0.00
	Crankcase Running Exhaust	0.01	0.00
	Crankcase Start Exhaust	0.01	0.00
	Crankcase Extended Idle Exhaust	0.00	0.00
	Extended Idle Exhaust	0.24	1.41
	Auxiliary Power Exhaust	0.02	0.06
	Subtotal	*2.14*	*5.31*
Putnam	Running Exhaust	0.13	1.05
	Start Exhaust	0.19	0.14
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.04	0.00
	Evap Fuel Vapor Venting	0.11	0.00
	Evap Fuel Leaks	0.10	0.00
	Crankcase Running Exhaust	0.00	0.00
	Crankcase Start Exhaust	0.00	0.00
	Crankcase Extended Idle Exhaust	0.00	0.00
	Extended Idle Exhaust	0.00	0.00
	Auxiliary Power Exhaust	0.00	0.00
	Subtotal	*0.57*	*1.19*
Region Total		**2.70**	**6.50**
	(Kg/Day)	**2,453**	**5,895**

2035 Daily Ozone by Emission Process

County	Emission Process	Emissoins (Tons/Day) VOC	NOx
Kanawha	Running Exhaust	0.16	1.79
	Start Exhaust	0.24	0.20
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.05	0.00
	Evap Fuel Vapor Venting	0.23	0.00
	Evap Fuel Leaks	0.30	0.00
	Crankcase Running Exhaust	0.00	0.00
	Crankcase Start Exhaust	0.00	0.00
	Crankcase Extended Idle Exhaust	0.00	0.00
	Extended Idle Exhaust	0.25	1.60
	Auxiliary Power Exhaust	0.03	0.09
	Subtotal	*1.25*	*3.68*
Putnam	Running Exhaust	0.05	0.57
	Start Exhaust	0.07	0.06
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.01	0.00
	Evap Fuel Vapor Venting	0.07	0.00
	Evap Fuel Leaks	0.10	0.00
	Crankcase Running Exhaust	0.00	0.00
	Crankcase Start Exhaust	0.00	0.00
	Crankcase Extended Idle Exhaust	0.00	0.00
	Extended Idle Exhaust	0.00	0.00
	Auxiliary Power Exhaust	0.00	0.00
	Subtotal	*0.30*	*0.63*
Region Total		**1.55**	**4.31**
	(Kg/Day)	**1,402**	**3,911**

2458 Daily Ozone by Emission Process

County	Emission Process	Emissoins (Tons/Day) VOC	NOx
Kanawha	Running Exhaust	0.15	1.78
	Start Exhaust	0.16	0.15
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.03	0.00
	Evap Fuel Vapor Venting	0.20	0.00
	Evap Fuel Leaks	0.28	0.00
	Crankcase Running Exhaust	0.00	0.00
	Crankcase Start Exhaust	0.00	0.00
	Crankcase Extended Idle Exhaust	0.00	0.00
	Extended Idle Exhaust	0.29	1.90
	Auxiliary Power Exhaust	0.03	0.11
	Subtotal	*1.15*	*3.94*
Putnam	Running Exhaust	0.05	0.58
	Start Exhaust	0.04	0.04
	Brakewear	0.00	0.00
	Tirewear	0.00	0.00
	Evap Permeation	0.01	0.00
	Evap Fuel Vapor Venting	0.06	0.00
	Evap Fuel Leaks	0.09	0.00
	Crankcase Running Exhaust	0.00	0.00
	Crankcase Start Exhaust	0.00	0.00
	Crankcase Extended Idle Exhaust	0.00	0.00
	Extended Idle Exhaust	0.00	0.00
	Auxiliary Power Exhaust	0.00	0.00
	Subtotal	*0.26*	*0.62*
Region Total		**1.41**	**4.56**
	(Kg/Day)	**1,279**	**4,133**

ATTACHMENT D

Sample MOVES
Data Importer (XML) Input File
and
Run Specification (MRS) Input FIle

(Sample For 2018 July Weekday Runs: Kanawha County)

MOVES County Data Manager Importer File – July Weekday Run (MOVESIMPORTER.XML)


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MOVES Run Specification File – July Weekday Run (MOVESRUN.MRS)

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Section 7: RIC Policy Board Adopting Resolution

RESOLUTION OF THE BCKP REGIONAL INTERGOVERNMENTAL COUNCIL POLICY BOARD TO CONCERNING THE FY 2024-2027 TIP AIR QUALITY CONFORMITY DETERMINATION FOR THE CHARLESTON, WV METROPOLITAN PLANNING AREA

Whereas The BCKP Regional Intergovernmental Council (RIC) is the officially designated Metropolitan Planning Organization (MPO) for the Charleston, West Virginia Metropolitan Planning Area comprising Kanawha and Putnam counties in West Virginia;

Whereas The MPO is required to develop a Transportation Improvement Program (TIP) and Metropolitan Transportation Plan (MTP) in accordance with the requirements continued by the Infrastructure Investment and Jobs Act (IIJA);

Whereas The Charleston, West Virginia Metropolitan Planning Area is a Maintenance Area for both Ozone and PM 2.5 pollutants.

Whereas Section 176 C of the Clean Air Act as amended by the Clean Air Act Amendments of 1990, requires that RIC must make a determination that the TIP for the Charleston Metropolitan Planning Area is in conformity with respect to the West Virginia State Implementation Plan for maintenance of the National Ambient Air Quality Standards (NAAQS).

Now, therefore, be it resolved, RIC determines that there is conformity between the adopted FY 2024-2027 TIP and the West Virginia State Implementation Plan for the maintenance of the NAAQS, as described below.

- RIC determines that the TIP as endorsed conforms to the West Virginia State Implementation Plan, by supporting its intentions of maintaining the NAAQS.
- RIC assures that the previously adopted MTP and TIP contain no goals, directives, recommendations, or projects which contradict any requirements or commitments of the West Virginia State Implementation Plan.
- The West Virginia State Implementation Plan currently does not identify any Transportation Control Measures (TCMs) for the Charleston Metropolitan Planning Area. However, as the State Implementation Plan is revised responding to the 1990 Clean Air Act Amendments and identifies TCM's necessary for the Charleston Metropolitan Planning Area, RIC certifies that the TIP shall include these TCM's.
- Based upon the attached support documentation, RIC determines that the adopted TIP meets the current conformity requirements for both ozone and PM 2.5 air pollutants.

So, resolved this 14th day of December 2023.

David Casebolt

David Casebolt, Chairman

BCKP Regional Intergovernmental Council

RESOLUTION OF THE BCKP REGIONAL INTERGOVERNMENTAL COUNCIL POLICY BOARD TO ADOPT THE

FY 2024-2027 TIP

FOR THE CHARLESTON, WV METROPOLITAN PLANNING AREA

Whereas The BCKP Regional Intergovernmental Council (RIC) is the officially designated Metropolitan Planning Organization (MPO) for the Charleston, West Virginia Metropolitan Planning Area comprising Kanawha and Putnam counties in West Virginia;

Whereas The MPO is required to develop a Transportation Improvement Program (TIP) in accordance with the requirements continued by the Infrastructure Investment and Jobs Act (IIJA);

Whereas The Fiscal Year (FY) 2024-2027 TIP is consistent with the 2050 Kanawha-Putnam Metropolitan Transportation plan (MTP);

Whereas The FY 2024-2027 TIP was developed in cooperation with the West Virginia Department of Transportation (WVDOT) and the Kanawha Valley Regional Transportation Authority;

Whereas The proposed TIP meets the conformity requirements of the Clean Air Act;

Whereas The FY 24-27 TIP was developed in accordance with RIC's Public Participation Plan (PPP).

Now, therefore, be it resolved, that the BCKP Regional Intergovernmental Council hereby adopts the FY 2024-2027 TIP.

So, resolved this 14th day of December 2023.

David Casebolt

David Casebolt, Chairman

BCKP Regional Intergovernmental Council