# REGIONAL INTERGOVERNMENTAL COUNCIL METROPOLITAN TRANSPORTATION PLAN



#### Introduction

Transportation is an everyday component of life that has lasting impacts on people everywhere. It represents a critical component of an area's built infrastructure and social environment. The *Regional Intergovernmental Council's Metropolitan Transportation Plan* intends to establish a roadmap for the region that can result in a transportation system that contributes to the overall well-being of the region and its residents while also meeting federal requirements. The Regional Intergovernmental Council—or RIC—is responsible for updating the regional transportation plan every four years. The MTP addresses all modes of transportation including automobiles, bicycles, pedestrians, transit, and trucks.

The *Regional Intergovernmental Council's Metropolitan Transportation Plan (RIC MTP)* is shaped by several elements including federal legislation and the direction of both state and local agencies. Federal transportation legislation, including Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and the subsequent Fixing America's Surface Transportation (FAST) Act, outline funding and procedural requirements for multimodal transportation planning in metropolitan areas and states. They require MPOs and states to develop transportation plans and transportation improvement programs through a performance-driven, outcome-based approach, which is reflected in this MTP.

## Plan Structure

A long-range transportation plan consists of two parts: a description of the vision for the region and a detailed list of projects, policies, and operational strategies to achieve the vision. The *RIC MTP* integrates these two components by discussing the elements dedicated to a variety of modes. The analysis and recommendations for each element has been created to achieve an integrated multimodal transportation system that efficiently moves people and goods throughout the region. The following section below corresponds to and provides a brief description of each chapter.

# Chapter 1: Plan Development

The *RIC MTP* is the result of ongoing collaborations between local, state, and federal representatives in addition to input from a Steering Committee, the public, and targeted stakeholders. The planning process was designed to facilitate an open dialogue about existing and future concerns for transportation access, congestion, connectivity, and safety for all modes of transportation. Chapter 1 details the planning process starting with an introduction to the relationship between the plan and federal regulations. The chapter includes a summary of

public outreach and the previous plans reviewed prior to recommendation development. Chapter 1 concludes with the plans vision and a series of goals and guiding statements.

#### **Guiding Statements**

Establishing guiding statements at the onset of the planning effort provides direction throughout the process. The plan's Steering Committee developed the guiding statements. With the guidance provided through the Fixing America's Surface Transportation (FAST) Act, the guiding statements were refined to reflect the community's vision. The guiding statements serve as a tool for prioritizing recommendations which is crucial, given the limited funding opportunities and magnitude of identified transportation needs.



#### **Culture & Environment**

Preserve and sustain the natural and built environment



# **Economic Vitality**

Promote economic development through targeted transportation investment



## Land Use & Transportation

Improve the integration of land use and transportation



# Mobility & Accessibility

Promote an efficient, interconnected, and accessible transportation network



# Safety & Security

Improve the travel safety and security in the Greater Kanawha Valley



# **System Preservation**

Support and strengthen the current transportation network



## Chapter 2: Regional Profile

The Regional Profile provides an overview of the current characteristics and trends of the Kanawha-Putnam region. The chapter analyzes information on population, housing characteristics, employment, economic development, commuting patterns, and socioeconomic trends as they pertain to transportation planning.

## Chapter 3: Travel Demand Model

The travel demand model (TDM) holds the ability to forecast future traffic conditions based on certain transportation attributes and socioeconomic data. The information outlined in Chapter 3 plays a vital role in the project selection and prioritization process. Similar to prior long-range plans, the RIC MPO utilizes the regional TDM to understand important linkages between transportation, land use, and growth. This chapter describes the key components of the travel demand model and crucial demographic data used to project future highway congestion and travel.

## Chapter 4: Highway

The Highway chapter is the beginning of the modal recommendations outlined in the *RIC MTP*. As the framework for improving the vehicular transportation network throughout the region, the chapter assesses the existing and future transportation conditions and provides a set of recommendations to relieve congestion and enhance safety. The recommendations are then prioritized based on evaluation metrics related to the plan's goals and guiding statements.

## Chapter 5: Bicycle and Pedestrian

Building on the previous planning efforts and current initiatives, the Bicycle and Pedestrian chapter evaluates the recommendations and policies throughout the region. With specific evaluation criteria, bicycle and pedestrian facilities were prioritized to address regional connectivity, access local facilities, connect to low-income communities, prioritize user safety, consider all users, determine the condition of the facility, and incorporate feedback from the RIC Bicycle & Pedestrian Advisory Committee and community input.

## Chapter 6: Transit

Chapter 6 identifies the existing fixed routes provided by the Kanawha Valley Regional Transportation Authority (KVRTA), rail service provided by Amtrak, and air transit provided through Yeager Airport. This chapter summarizes the KVRTA systems analysis and transit asset management process. The project recommendations that provide access to transit are identified in this chapter.

# Chapter 7: Freight

The Freight chapter examines the regional freight network in the context of truck, rail, water, and air freight movement. Chapter 7 also reviews the West Virginia State Freight Plan, highlights anticipated changes, and concludes with a series of recommendations. While most of the discussion focuses on goods movement – trends in recreation, as well as tourism can affect these transportation modes. As with goods movement, tourism trips are impacted by trends originating outside the Kanawha-Putnam region, but affect transportation needs within the region.

## Chapter 8: Safety and Security

Chapter 8 evaluates safety and security by analyzing vehicular, pedestrian, bicyclist, freight and rail transportation statistics and considerations. The analysis includes maps that provide a geographic overview of crashes throughout the region and identify high accident locations. The chapter concludes with recommended safety and security improvements for all modes of transportation.

#### Chapter 9: Financial Element

The Financial Element outlines the region's long-range transportation strategies. The chapter outlines the financially constrained methodology and results in accordance with both state and federal requirements. The intent of a long-range transportation plan is to demonstrate how projects that have been prioritized can realistically be funded by the plan's horizon year of 2050. It is essential to understand the expected levels of future funding, estimated planning-level project costs, and to have consistent assumptions that address all modes of transportation. A financially constrained plan allows the RIC MPO, member jurisdictions, and supporting agencies to focus on near-term opportunities and to identify strategies that support plan implementation.

In addition to roadway projects, revenues have been estimated for bicycle and pedestrian projects. These projects have not been individually financially constrained to allow for flexible and opportunistic implementation. The transit recommendations outline in Chapter 9 are also unique. The costs and revenues are maintained by KVRTA and are not prioritized within the MTP.

The figures and tables on the following pages identify the financially constrained roadway projects for the *RIC MTP*. The projects are moved forward for anticipated funding based on the results of the project prioritization as well as their estimated year of expenditure cost. Anticipated projects to be funded during the MTP are organized into a series of interim years: 2021-2025 (Committed Projects), 2026-2030, 2031-2040, and 2041-2050. The projects that cannot be funded given the project available revenues are part of the unconstrained vision plan. The unconstrained vision projects are also outlined below.

#### Committed Roadway STIP Projects

Financially constrained projects include those projects that already have funding allocated through the 2021-2025 Statewide Transportation Improvement Program (STIP) as well as those projects where the full funding amount is estimated to be available through the 2050 horizon year.

FACILITY	PROJECT DESCRIPTION
Interstate 64 – Nitro to US 35	Upgrade to 6 lanes
WV 622 – Cross Lanes	Widen roadway
US 119 Oakwood Area Improvements	Construct RCUT
RHL Boulevard Connection	Construct new roadway



2025-2030 Financially Constrained Projects

ID	FACILITY	FROM	то	PROJECT DESCRIPTION	ANTICIPATED COSTS
RSA-1	Patrick Street	4th Ave	Patrick Street Plaza	Intersection modifications	\$406,898
SH-1	MacCorkle Ave	Rock Lake Drive	Jefferson Road	Multiple (restripe, signal optimization, sidewalk enhancements, etc.)	\$6,242,273
KC-5	US 119 (Corridor G)	I-64 Connector	Lucado Road (generally)	Widening, Cantley Flyover	\$49,915,000
KC-4	US 119 (Corridor G)	MacCorkle Avenue	Lucado Road	Widening	\$16,581,120
RSA-3	US 60 (Dupont Ave)	Hull Ave	William Street	Intersection improvements	\$709,009
RSA-2	WV 34	I-64	Great Teays Blvd	Roundabout corridor	\$4,926,320

2031-2040 Financially Constrained Projects

ID	FACILITY	FROM	то	PROJECT DESCRIPTION	ANTICIPATED COSTS
PC-U1	Interstate 64	Cow Creek Road	Cabell County Line	Upgrade to 6 lanes	\$163,756,181
PC-3	Interstate 64	Cow Creek Road	WV 34	Upgrade to 6 lanes	\$89,321,553
KC-8D	US 60	Old Town Road	Browns Mountain Road	Widening	\$18,527,159

2041-2050 Financially Constrained Projects

ID	FACILITY	FROM	то	PROJECT DESCRIPTION	ANTICIPATED COSTS
PC-6A	Teays Valley Road (CR 33)	WV 34	Thomas Drive	Widening	\$46,195,692
KC-8A	US 60 (Dupont Ave)	Kellys Creek Road (CR 81)	Chelyan Bridge	Access Management	\$135,316,681
PC-2	WV 817	Winfield Bridge	Planters Road	Widening	\$43,115,980
KC-6	US 119 (Corridor G)	Jefferson Road Interchange	Emerald Road	Widening	\$107,648,651
PC-8A	WV 62	WV 25	Dairy Road	Widening	\$5,459,522
KC-1	3 <sup>rd</sup> Street Underpass	-	-	Widening	\$36,825,588
TV-4	Mt. Vernon Road (CR 34)	WV 34	WV 34 (Teays Valley Road)	Modernization	\$20,298,704
PC-4	Hurricane Improvements	-	-	Access Management	\$4,442,032



**Unconstrained Vision Plan Projects** 

ID	FACILITY	FROM	то	PROJECT DESCRIPTION	ANTICIPATED COSTS
KC-U1	Institute Connector	Institute Interchange	WV 622	New Alignment	\$247,475,641
KC-9	WV 114 (Greenbrier Street)	Airport Road	Rutledge Road (CR 46)	Widening	\$65,191,429
KC-8C	US 60	Sycamore Road	Britt Hollow	Widening	\$78,229,715
KC-U2	Northern Connector	I-64	I-77	New Alignment	\$1,564,548,508
KC-7	WV 94 (Lens Creek Road)	Six Mile Hollow Road	I-64	Widening	\$184,165,786
PC-8B	WV 62	Heizer Creek Road	Poca City Limits (southside)	Widening	\$55,412,714
TV-5	Sleepy Hollow Road	Teays Valley Road	Cow Creek Road	Widening	\$62,457,595

## Chapter 10: Air Quality

Chapter 11 outlines the National Ambient Air Quality Standards (NAAQS) as well as provides the background information of the region's previous nonattainment and maintenance status. The chapter also addresses climate change and resiliency within the context of transportation planning.

## **Appendix**

The *RIC MTP* is supplemented by a series of items within the Appendix including the following sections.

#### Plan Performance

Plan Performance describes the dynamic approach utilizing system-wide information to make strategic investments to achieve the goals outlined for the planning area. To be consistent with federal regulations—MAP-21 and the FAST Act—the RIC MPO has chosen to adopt the statewide performance measures and targets. The document describes these performance measures and evaluation criteria to help guide transportation decision-making while also monitoring the network's performance in years to come.

#### Public Outreach Summary

The public outreach summary contains a compilation of agendas and materials from the MTP outreach efforts.

#### Travel Demand Model Documentation

The documentation on the travel demand model provides a technical review of the assumptions and methodology used in the completion of the travel demand model.

#### Performance Measures

The performance measures outlined in this section adhere to federal requirements for MPOs to establish a performance-based approach to planning and programming.

#### Conclusion

The *RIC MTP* provides the vision for multimodal transportation recommendations that considers the existing and future needs of the region. By working with the public and key stakeholders, the creation of a financially constrained plan helps ensure that projects can reasonably be funded during the lifetime of the MTP. While the region has identified numerous transportation needs, not all of them will be funded given the current revenue projections. As projects are implemented, RIC should work collaboratively with the West Virginia Department of Transportation (WVDOT) and the Federal Highway Administration (FHWA) to determine how to best advance projects.