Executive Summary

KYOVA Interstate Planning Commission

Plan prepared by

BURGESS & NIPLE

Executive Summary

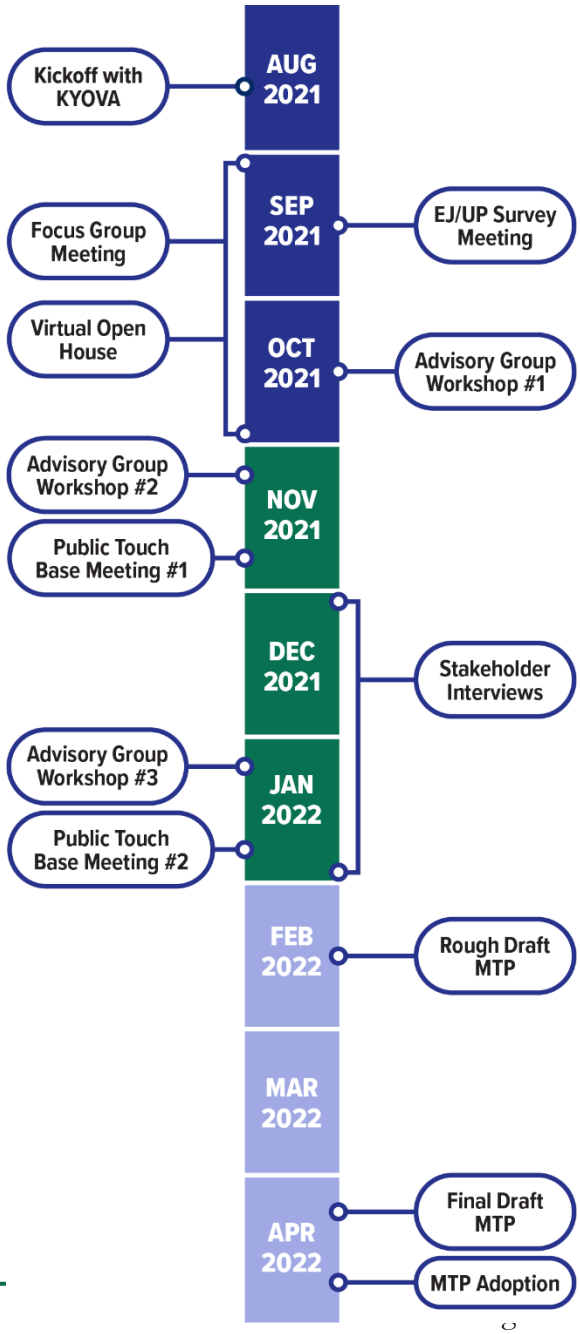
KYOVA Background

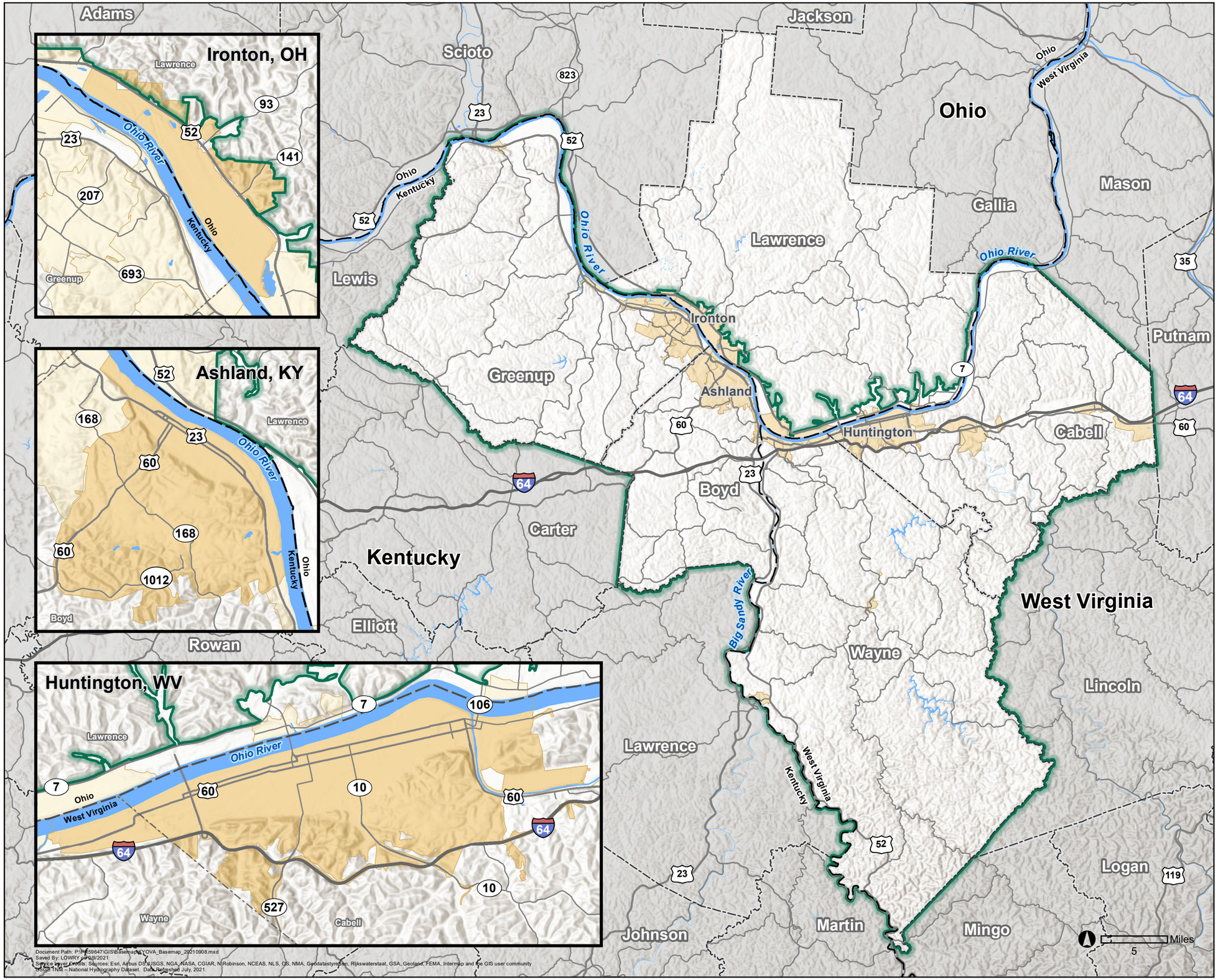
KYOVA Interstate Planning Commission is the Metropolitan Planning Organization (MPO) for the Tri-State area of West Virginia, Kentucky, and Ohio, including West Virginia counties of Cabell and Wayne; Kentucky counties of Boyd and Greenup; and urbanized area of Lawrence County, Ohio (see map on next page). As the MPO, KYOVA serves as a transportation planning agency and forum for regional transportation decisions. Its mission is to plan for an orderly, cost-effective, multi-modal transportation system for all citizens of the service area. KYOVA is responsible for the annual dissemination of millions of dollars in federal transportation funds to conduct transportation-related studies and implement transportation projects. One of the required planning efforts undertakes is the Metropolitan Transportation Plan (MTP), which serves as the long-range transportation plan of the KYOVA region.

MTP Background

The 2050 MTP is the comprehensive transportation plan for the KYOVA region for the next 30 years. It identifies multimodal transportation needs through the year 2050 and makes recommendations for enhanced transportation efficiency and functionality, including construction of new facilities, improved connectivity to other modes and the enhancement of existing facilities. The projects and strategies included in this plan were identified through public and stakeholder input, and an extensive analysis of related plans and public datasets. This plan is designed to be implementable - all projects include cost estimates and are prioritized based on realistic funding projections and timeframes. It should be noted that the MTP is not wholly prescriptive, it is a snapshot of where priorities and funding lay at the moment of the plan's creation with the acknowledgement that they change and shift over time. This plan also includes an extensive "Vision Plan" which are projects that are currently unfunded but were deemed worthy of further consideration should additional funding become available or priorities change.

A comprehensive and engaging nine-month planning process was followed, which included a combination of data collection and technical analysis and numerous conversations with many people who live, work, and play in this community. The following graphic depicts the MTP planning process:





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USGS 1/3 – National Hydrography Dataset. Data Refreshed July, 2021.

KYOVA 2050 Metropolitan Transportation Plan

Exhibit ES-1

Study Area

Legend

KYOVA MPO Boundary

Last Updated: 9/9/2021

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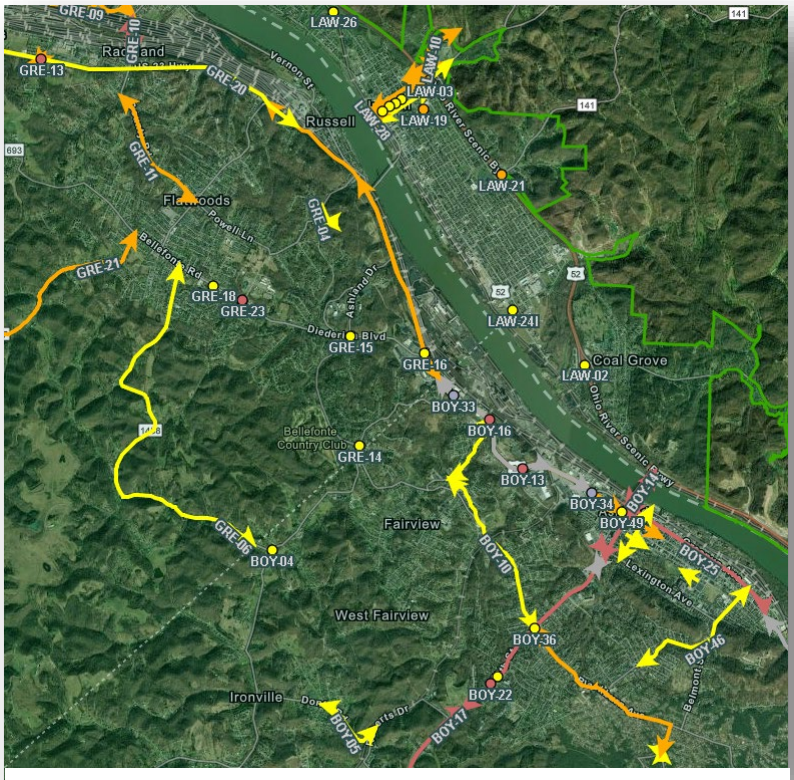
Public/Stakeholder Engagement Process

Residents and stakeholder agencies in the KYOVA region played a central role in the development of this plan. The entirety of the planning process took place during the COVID-19 pandemic, necessitating innovative methods of digital engagement. The public was engaged through surveys, interactive maps, a project website, and targeted engagement with environmental justice and underserved populations via mailing campaigns.



Snapshot of the interactive AGOL map that shows candidate projects for stakeholder review after the third advisory group meeting

Stakeholders were engaged in a variety ways. At the outset of the project an advisory group was formed which included interested community leaders; elected officials; and civil servants from local, regional, state, and federal agencies. The advisory group convened three times over the course of the development of the MTP to provide input, feedback, and guidance. Additionally, three focus group meetings themed around active transportation, diversity equity and inclusion, and economic development and freight were held. The focus groups were comprised of local leaders and stakeholders relevant to the specific focus group topic. Finally, some stakeholders were engaged through direct conversational interviews where they shared insights and context for the MTP, as well as expressed what issues and projects they believed should be prioritized.

What we heard:

- KYOVA needs to plan for the future of transportation systems and have the infrastructure in place to support things like growing electric vehicle ownership, connected and automated vehicles, and ITS
- KYOVA should strengthen the transportation connections between the counties in the planning area as well as the connections with neighboring regions. This applies to all modes, especially as it relates to transit, pedestrian, and bicycle users
- Regional freight and transportation connections need to be maintained and improved to take advantage of KYOVA's unique position in the larger American freight network- this includes attention to, and investment in, ports, highways, pipelines, etc.

Vision, Goals, and Objectives

The KYOVA 2050 MTP is centered around a vision statement, transportation goals and supporting objectives. The vision statement was carried over from the 2040 MTP. The goals and objectives were developed through reviewing the 2040 MTP goals and objectives, incorporating stakeholder and public input, and using Federal and State transportation goals as guidelines to ensure consistency. The table below shows the connection between the goals developed for the 2050 MTP and the guiding principles in the FAST Act.

We envision a growing region serviced by a safe, equitable, and sustainable transportation system that provides real choice among modes of travel. Our transportation system will contribute to an enhanced quality of life by providing attractive connections between destinations for motorists, bicyclists, pedestrians, and transit users without compromising air quality or cultural and environmental resources, and it will support the efficient movement of people and goods at both the local and regional scale.

GOALS

- Preserve, maintain, and enhance the existing transportation system
- Support the economic vitality of the region, especially by enabling global competitiveness, productivity, and efficiency
- Improve the operational efficiency of the transportation network
- Enhance the safety of the transportation system for all users
- Enhance the security of the transportation system for all users
- Protect and enhance the environment and promote energy conservation
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Maintain financial responsibility in the development and preservation of the transportation system

KYOVA 2050 MTP and FAST Act/MAP-21 Planning Factors

FAST Act Planning Factor		2050 MTP Goal/Objective
1	Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.	2, 7
2	Increase the safety of the transportation system for motorized and non-motorized users.	4, 7
3	Increase the security of the transportation system for motorized and non-motorized users.	3, 5, 6
4	Increase the accessibility and mobility of people and freight.	2, 3, 4, 5, 6, 7
5	Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.	1, 2, 3, 6, 7, 8
6	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.	1, 2, 3, 4, 5, 6, 7, 8
7	Promote efficient system management and operation.	1, 2, 3
8	Emphasize the preservation of the existing transportation system.	1, 2, 3, 4, 5, 6, 8

Key Trends and Transportation Influencers

Demographic Trends

The development of the 2050 MTP considered the demographic trends in the KYOVA area to allow for the proper context to prioritize transportation-related investments. In the 2050 MTP, there is a review of race and ethnicity, age and sex, population density; housing characteristics, educational attainment, poverty, vehicle access, workforce, and commuting patterns.

Population

As of the 2019 American Community Survey (ACS), the KYOVA region had a population of 278,063 residents. The population within the KYOVA region is highly concentrated along the Ohio River and I-64, specifically in the urbanized areas of Huntington, Ashland, and Ironton. Population densities decrease moving away from the Ohio River.

20% of the KYOVA population is currently over the age of 65, 20% of the households have no access to a private vehicle, and 20% of the population has incomes below the poverty line- the unique transportation needs of these populations were accounted for in the 2050 MTP.

Technology Trends

Transportation technology is advancing at an every-increasing pace- many stakeholders expressed a desire to prepare to incorporate these emerging technologies into KYOVA's transportation network. Electric vehicles for private use and freight purposes are gaining popularity and many regions like KYOVA are beginning to strategically plan a network of charging stations that includes charging stations on both public and private right-of-ways. In addition to electric vehicles, officials at KYOVA are keeping tabs on the advancements in intelligent transportation systems, connected and automated vehicles, and new modes such as shared micro-mobility in order to make the necessary investments to ensure the transportation network in the KYOVA area remains state-of-the-art.

A group of students using the first and only shared micromobility offering in the region, Marshall University's Rolling Thunder Bike Share Program

Safety and Security

KYOVA places high importance on the issue of roadway safety and security as a transportation network is only useful if people can safely and reliably travel on it. KYOVA routinely evaluates safety and security in all five counties through performance metrics and studies. Results of the safety studies help focus efforts in the region, such as rankings of the most dangerous intersections and roadway segments in each county, crash heat maps, and longitudinal trends of crash causes and types.

Security issues that affect the KYOVA region are emergency response resources and protocols, evacuation route planning and designation, and the condition of all of the 875 bridges in the region listed in the Federal Highway Administration's National Bridge Inventory.

Transportation Systems/Networks

A safe, resilient, and connected transportation network is vitally important to the well-being of the KYOVA region. All modes of travel and types of

infrastructure are considered when creating a comprehensive transportation network.

Roadways/Bridges

WV 52 is one of the region's most important roadways

There are several roadway types in the KYOVA area from interstates like I-64, to regional mobility corridors such as US-52, US-23, WV 152, OH 7, KY 67, WV 10, WV 2, and US-60, to smaller state, county, and local roads. Congestion is minimal in the KYOVA region, with some of the higher congestion areas being on the main regional mobility corridors close to the urbanized portions, especially around Huntington.

The KYOVA area is home to six bridges across the Ohio River for automobile traffic, each with varying levels of pedestrian and bicycle access. The bridges, along with the regional mobility corridors are the key connectors between the different communities in the KYOVA area.

Non-Motorized Transportation

There is very little space on the KYOVA transportation network that is solely dedicated to non-motorized transportation. However, several studies have been completed since the last iteration of the KYOVA MTP that have proposals for non-motorized facilities throughout the region. The largest non-motorized transportation project to see progress in the region in recent years is the Paul Ambrose Trail for Health (PATH), a shared-use path and on-street bike facility network in Huntington, which currently is over 18.6 miles in total, non-continuous length.

Freight

Freight is an essential consideration for KYOVA- the KYOVA area sits at a strategic crossroads in the American freight network and maintains some of the highest levels of in-land port activity in the United States.

Much of the freight infrastructure in the KYOVA region is privately controlled which can make the planning process different than other modes. The primary infrastructure considerations for freight movement planning in the KYOVA area are highways, railroads, maritime ports and passageways, pipelines, and aviation.

Many of the important freight highways are the same that are defined as regional mobility corridors, such as US-52, US-23, WV 152, OH 7, KY 67, WV 10, WV 2, and US-60, as well as I-64.

A cyclist rides along the sidewalk on 3rd Avenue in Huntington

Heavy and bulk raw material freight is usually shipped overland by rail and the KYOVA area is served by Class I railroads such as Norfolk Southern and CSX and uses key rail national corridors to help the KYOVA area remain a nexus of freight activity.

Railroads are an essential component of KYOVA's freight network

The Port of Huntington is comprised of several private intermodal facilities and is located on the Ohio and Big Sandy Rivers- it is the largest inland port in the United States. Most of the freight that moves through the Port of Huntington are heavy bulk commodities and raw materials and is done so via barges.

In addition to trucks, trains, and boats, pipelines are also used to transport bulk natural resources in the KYOVA area, mostly natural gas and petroleum products extracted and refined in the area.

Finally, there are several airports, airparks, and airfields in the region, with the primary airport being the Huntington Tri-State Airport, which is the major passenger airport in the region in addition to being a freight facility.

Transit

The KYOVA area is served by four transit providers- Tri-River Transit and the Tri-State Transit Authority in Cabell and Wayne Counties, the Ashland Bus System in Boyd County, and Lawrence County Transit in Lawrence County. All three transit providers provide both fixed-route and some form of on-demand transit service. There are some connections between each system, however limited operating hours, lack of coordination, and long headways can make relying on these connections difficult. In addition to these traditional transit providers, there are several human-service organizations that provide transit and transportation options for their clientele. Intra-region transit is served via greyhound bus service and Amtrak passenger rail service in Ashland and Huntington.

TTA buses reserved for a special event in on the street in Pullman Square, Huntington

MTP Projects

The KYOVA 2050 MTP projects were identified based on public feedback and stakeholder outreach as well as a review of KYOVA's previous MTP, available congestion and safety data, the West Virginia, Kentucky, and Ohio statewide plans, and other applicable planning efforts. After the initial project identification, projects were evaluated, refined, and prioritized based on their ability to achieve the Plan's goals and make progress toward desired performance outcomes.

The project recommendations are broken out into short (2022 - 2029), medium (2030 - 2039), and long-term (2040 - 2050) implementation phases. It is a federal requirement that an MTP have a fiscally constrained program of transportation improvement projects, which are limited in cost to the forecasted available transportation funding during the plan horizon. Projects that cannot be funded within the 2050 fiscally constrained plan are considered aspirational and are included as part of the Vision Plan for the region. If additional funding becomes available, these projects can be reviewed and considered for incorporation in the future MTP updates or programmed into future TIP updates. **Tables ES-1** through **ES-3** list the fiscally constrained MTP projects by phase and **Table ES-4** lists the Vision Plan projects. A map showing the location of the KYOVA 2050 MTP projects is provided in **Exhibit ES-2.** Anticipated transportation revenues and costs for the KYOVA planning area through 2050 are presented in **Table ES-5**, demonstrating fiscal constraint of the Plan.

Air Quality Conformity

The KYOVA MPO is situated in the Huntington-Ashland airshed for Fine Particulate Matter 2.5, Annual Standard which includes Cabell, Wayne, Putnam, and Mason (partial) counties in West Virginia; Boyd, Greenup, and Lawrence (partial) counties in Kentucky; and Lawrence, Scioto, Adams (partial), and Gallia (partial) counties in Ohio. For 8-hr Ozone, the Huntington-Ashland airshed comprises Cabell and Wayne counties in West Virginia and Boyd County in Kentucky.

The KYOVA 2050 MTP meets all applicable federal (40 CFR Parts 51 and 93), state, and local requirements relating to transportation air quality conformity. The KYOVA 2050 MTP with Air Quality Conformity documentation is being subjected to a 30-day public comment period prior to approval by the KYOVA board.

Table ES – 1 – Phase I Project Recommendations (FY 2022 – 2029)

ID	Description	Project Cost (in 2025$)
West Virginia Phase 1 Projects		
CAB-04	Third and Fifth Avenue Complete Streets	$13,000,000
CAB-05	Downtown Huntington Streetscaping Improvements, Part 1	$12,000,000
CAB-09	Hal Greer Boulevard Complete Street - Third Avenue to Washington Boulevard	$11,000,000
CAB-11	Construct a new interchange at I-64 and Benedict Road (CR 60/21) in Culloden, WV	$37,000,000
CAB-16	Downtown Huntington Streetscaping Improvements, Part 1	$10,700,000
CAB-19	Replace the Fifth Street West Bridge over Fourpole Creek	$1,200,000
CAB-21	PATH Connections - 14th Street West	$110,000
CAB-22	Safety improvements at Adams Avenue and West 19th Street	$190,000
CAB-27	Widen I-64 to a 6-lane divided roadway from Barboursville to the Cabell/Putnam County Line in West Virginia.	$21,000,000
WAY-02	WV 152 and WV 75 intersection safety improvements.	$370,000
WAY-08A	Design, environmental clearance, and right-of-way acquisition for US 52 widening to four lanes from Kermit to Hubbardstown.	$2,000,000
WAY-19	Intersection safety improvements at German Ridge Road and WV 152.	$200,000
Total West Virginia Phase 1 Project Costs Note: CAB-11 is 100% funded with WV General Obligation (GO) Bonds and not reflected in the WV Phase I total for MTP fiscal constraint purposes.		**$71,770,000**
Kentucky Phase 1 Projects		
BOY-01	Eliminate a conflict point on Winchester Avenue (US 23) near Blackburn Avenue and 42nd Street. This project will provide safety and operational improvements.	$2,800,000
BOY-02	Reconstruct KY 716 from MP 0.0 (US 60) to MP .560 (KY 3293) to improve safety and decrease congestion.	$15,000,000
BOY-03	Install a two-way left turn lane (TWTL) on US 60 from just south of Old 13th Street (CS 2232) to Cumberland Avenue to decrease the number/risk of rear-end crashes and backups.	$4,200,000
BOY-04	Reconstruct intersection at KY 5 and KY 1458 to improve safety and mobility and to address geometrics.	$8,500,000
BOY-05	Improve alignment of KY 766 with KY 1134 to improve safety and operations.	$4,900,000
BOY-06	Improve intersection sight distance at KY 168 and South Belmont Street near Ashland to improve safety.	$1,700,000
BOY-07	Improve operational efficiency and system connectivity on KY 3 from PV 1215 to KY 180.	$24,000,000
BOY-08	Improve KY 1945 from KY 773 to KY 854 to address width deficiencies and improve operations.	$40,000,000

ID	Description	Project Cost (in 2025$)
BOY-09	Improve operational efficiency on KY 168 from Hoods Creek Road to US 23.	$7,900,000
BOY-10	Improve operational efficiency on Segment 2 of KY 168 from US 60 (MP 5.8) to Hoods Creek Road (MP 7.4) in Ashland	$580,000
BOY-14	Perform a corridor study and make improvements along US 23 between US 60 in Catlettsburg to KY 207 in Russell.	$5,600,000
BOY-15	Improve Winchester Avenue (US 23 BUS) from 13th Street to 18th Street to provide enhanced pedestrian and bicycle facilities and downtown revitalization.	$4,700,000
BOY-16	Intersection safety improvements at US 23 and KY 168	$106,000
BOY-17	Safety and operational improvements on US 60 from SR 538 to bi-directional split	$9,300,000
BOY-18	Safety improvements on US 60 from the bi-directional split to the county line (1 mile).	$9,900,000
BOY-22	Intersection safety improvements at US 60 and Berry Street	$960,000
BOY-25	Remove raised median sections on Greenup Avenue (US-23) from MP 17.078 to MP 18.640 and add a continuous two way turn lane from 20th Street to 21st Street.	$530,000
BOY-28	Address deficiencies on the I-64 Perry Gentry bridges over the Big Sandy River.	$1,600,000
BOY-33	Intersection safety improvements at KY 5 and US 23	$1,600,000
BOY-34	Realign the US 23/US 23X intersection for better sight distance, shifting Eighth Street/Greenup Avenue as needed.	$8,300,000
BOY-35	Operations improvements on US 60 from Palmer Street to McKinley Street	$2,400,000
BOY-36	Intersection safety improvements at US 60 and KY 168	$5,500,000
BOY-40	Pedestrian safety and mobility improvements at KY 168 and US 23	$150,000
BOY-44	Safety improvements on Central Avenue (CS 2350) from 14th to 17th Street, at 22nd Street, and at 24th Street.	$130,000
BOY-45	Provide bicycle facilities on 15th Street from Lexington Avenue to Riverfront Park.	$43,000
BOY-46	Provide bicycle facilities on 29th Street from Greenup Avenue to Blackburn Avenue.	$43,000
BOY-49	Pedestrian safety improvements at intersection of Winchester Avenue and 12th Street.	$85,000
BOY-50	Dawes Street restoration and rehabilitation from Beech Street to Blackburn Avenue to safely accommodate pedestrian and bicycle traffic for safe routes to school in Ashland, KY.	$280,000
GRE-01	Improve connectivity for truck/freight movement from the Greenup Riverport via KY 3105 to KY 67 (Industrial Parkway).	$2,800,000
GRE-02	Reconstruct KY 1 to improve horizontal and vertical alignment deficiencies and improve clear zones.	$9,000,000
GRE-03	Improve operational efficiency on KY 2541 at the junction with US 23.	$1,600,000
GRE-04	Reconstruct/repairs to KY 750 (Kenwood Drive) from Tower Road toward US 23 for .3 miles.	$2,500,000

ID	Description	Project Cost (in 2025$)
GRE-05	Improve sight distance through curve on KY 7 near Allen Church Road to improve safety.	$2,800,000
GRE-06	Rehabilitate KY 1458 between Boyd/Greenup County line and KY 693 to improve the condition of the roadway.	$22,000,000
GRE-14	Intersection safety and operation improvements at KY 5 and KY 1093.	$24,000
GRE-15	KY 693 at KY 1725 signal improvements.	$110,000
GRE-16	Intersection improvements at KY 693 and US 23.	$47,000
GRE-18	Intersection safety and operation improvements at KY 693 and Espy Lane.	$35,000
GRE-20	US 23 safety improvements from SR 67 to the county line.	$5,300,000
GRE-21	Improve KY 207 from the Industrial Parkway to the KY 693 intersection in Flatwoods.	$2,000,000
GRE-22	Reconstruct KY 2 from MP 13.2 to US 23 (MP 17.2).	$47,000,000
GRE-36	Phase II - Lloyd sidewalk construction of 1,500 linear feet of 4-foot wide sidewalk along Ohio River Road to improve pedestrian mobility and safety.	$200,000
Total Kentucky Phase 1 Project Costs		**$256,223,000**
Ohio Phase 1 Projects		
LAW-01	Purchase right-of-way and construct Phase 2 of the Chesapeake Bypass, including portions with four lanes divided and two of the eventual four lanes, a roundabout, and an interchange at OH 775 between Chesapeake and Proctorville in Lawrence County, OH.	$97,000,000
LAW-02	Construct interchange improvements at US 52 and OH 243 near South Point.	$3,100,000
LAW-07	Construct turn lanes at the US 52 and CR 15 intersection to improve operations and safety.	$110,000
LAW-09	Close Vernon Street to auto traffic and construct improvements to make it a comfortable pedestrian environment between Bobby Bare Boulevard and South Seventh Street, and between South Ninth and South 10th streets.	$130,000
LAW-14	Interim intersection safety, congestion, and economic development improvements at the US 52 intersection with Charley Creek Road (CR 144).	$1,500,000
LAW-15	Interim intersection safety improvements at the US 52 and Sandusky Road (CR 276) intersection.	$710,000
LAW-17	On Park Avenue (OH 93) from Second Street to Coryville Road construct intersection signal and traffic control optimization, safety, complete streets, ADA/sidewalk, and resurfacing improvements.	$1,700,000
LAW-18	Lawrence Union Rome Trails and walkways Phase I.	$1,200,000
LAW-19	Construct a multimodal parking facility and garage adjacent to the Ironton Transit Center in downtown Ironton.	$12,000,000
LAW-26	Replace the Fifth Street bridge (SFN 4460057) within Ironton as part of the municipal bridge program.	$1,800,000
LAW-28	Close Bobby Bare Boulevard to auto traffic and provide pedestrian accommodations and connection to Vernon Street in Ironton.	$280,000
Total Ohio Phase 1 Project Costs		**$118,330,000**

Table ES-2 – Phase 2 Project Recommendations (FY 2030 - 2039)

ID	Description	Project Cost (in 2035$)
West Virginia Phase 2 Projects		
CAB-02	Intersection safety improvements at Eighth Avenue and 31st Street (US 60) in Huntington, WV.	$1,070,000
CAB-03	Eighth Avenue improvements from Hal Greer Boulevard to US 60	$33,000,000
CAB-06	Intersection safety improvements at First Street and Seventh Avenue in Huntington, WV.	$500,000
CAB-07	Intersection safety improvements at First Street and Fifth Avenue in Huntington, WV.	$520,000
CAB-08	Improve First Street from Fourth Avenue to Seventh Avenue in Huntington, WV.	$3,000,000
CAB-10	Hal Greer Boulevard Complete Street - Washington Boulevard to Highlander Way	$3,300,000
CAB-13	Intersection safety improvements at Midland Trail (US 60) and E Pea Ridge Road in Barboursville, WV.	$900,000
CAB-18A	Improve WV 2 from Huntington to the Cabell/Putnam County Line in West Virginia as Phase I of WV 2 Improvements.	$7,500,000
CAB-26A	Intersection safety improvements at Washington Boulevard and US 60 (Midland Trail).	$480,000
CAB-32A	Vehicular and pedestrian safety improvements at the intersection of West 17th Street (US 52) and Washington Avenue (US 60) potentially including signalization and other improvements.	$670,000
CAB-34	Cabell County Signal and Operational Improvements	$5,000,000
CAB-35	Cabell County Safety Improvements	$5,000,000
CAB-36	Cabell County Active Transportation Improvements	$5,000,000
WAY-01	Oak Street (US 60) and 21st Street intersection safety improvements.	$520,000
WAY-03	Eighth Street (CR 11) and Fifth Street Road (WV 152) Connector intersection safety improvements in Lavalette, WV.	$520,000
WAY-04	Spring Valley Drive and Goodwill Road intersection safety improvements.	$550,000
WAY-10	Widen Darling Lane to a four-lane divided roadway from WV 75 to the Tri-State Airport in Wayne County, WV.	$15,000,000
WAY-18	Intersection safety improvements at Fifth Street Road (US 152) and Food Fair Plaza.	$470,000
WAY-20	Harvey Road Connector - Construct a new access road to provide a direct connection between CR 9 and WV 152 beginning on CR 9 approximately 0.2 miles south of Heritage Farm.	$22,000,000
WAY-21	Safety improvements on WV 152 from Bloss Branch Road to Big Creek Road ("All Day Curve").	$280,000
WAY-22	Safety improvements on WV 152 at German Ridge Hill.	$1,120,000
WAY-23	Safety improvements on WV 152 from CR 11 Access to Eighth Street.	$650,000
WAY-24	WV 75 and Spring Valley Drive intersection safety improvements.	$280,000

ID	Description	Project Cost (in 2035$)
WAY-25	Wayne County Active Signal and Operational Improvements	$3,000,000
WAY-26	Wayne County Safety Improvements	$3,000,000
WAY-27	Wayne County Active Transportation Improvements	$3,000,000
Total West Virginia Phase 2 Project Costs		**$116,330,000**
Kentucky Phase 2 Projects		
BOY-11	Improve operational efficiency on KY 168 from KY 1012 to US 60.	$32,000,000
BOY-12	Correct deficiencies on KY 1937 from KY 707 in Lawrence County, KY to KY 3 at Mavity.	$127,000,000
BOY-24	Improve access management on 35th Street (west leg) approach to US 23/US 60 intersection in Catlettsburg.	$680,000
BOY-51	Boyd County Active Transportation Improvements	$5,000,000
BOY-52	Boyd County Safety Improvements	$5,000,000
BOY-53	Boyd County Active Signal and Operational Improvements	$5,000,000
GRE-08	Reconstruct KY 7 from intersection with KY 827 to Rakes Mill Road. Reconstruct KY 7 from Rakes Mill Road to US 23 in South Shore. Reconstruct KY 7 from KY 2 to KY 827.	$250,000,000
GRE-09	Improve Riverside Drive between the cities of Wurtland and Worthington.	$70,000,000
GRE-11	Improve safety and operational efficiency on KY 750 from Pond Run (MP 0.37) to KY 207 (MP 1.595).	$27,000,000
GRE-12	Operational improvements at the intersection of KY 693 and KY 1172.	$1,130,000
GRE-17	Intersection safety and operation improvements at Caroline Road approaching US 23.	$1,570,000
GRE-27	Improve safety on KY 67 from MP 6.2 to MP 9.1.	$5,200,000
GRE-29	Improve last mile roadway connections along US 23 from MP 0.0 to MP 1.7.	$8,700,000
GRE-30	Improve last mile roadway connections along KY 67 from MP 1.1 to MP 1.4.	$1,570,000
GRE-31	Improve last mile roadway connections along KY 67 from MP 0.2 to 0.8.	$3,200,000
GRE-35	Study-Design from Lewis Greenup connector road connecting KY 8 to KY 10 at Scaffold Lick.	$4,200,000
GRE-37	Greenup County Active Transportation Improvements	$5,000,000
GRE-38	Greenup County Safety Improvements	$5,000,000
GRE-39	Greenup County Active Signal and Operational Improvements	$5,000,000
Total Kentucky Phase 2 Project Costs		**$562,250,000**

ID	Description	Project Cost (in 2035$)
Ohio Phase 2 Projects		
LAW-03	Construct interchange improvements at US 52 and Park Avenue (OH 93) in Ironton.	$20,000,000
LAW-04	Construct a new interchange on US 52 in the vicinity of Burlington-Macedonia Road (CR 120), adjacent access enhancements, and remove at-grade access at Wal-Mart Way (CR 410).	$50,000,000
LAW-05	Construct a new interchange on US 52 in the vicinity of Sandusky Road (CR 276) and provide access to adjacent frontage roads and development.	$42,000,000
LAW-06	Construct a new interchange on US 52 near Grandview Avenue.	$25,000,000
LAW-10	Construct a trail connection between Ironton Gateway (South Ninth and Vernon Streets) and proposed Sports and Recreation Complex north of Ironton Hills Shopping Center.	$2,000,000
LAW-12	A new two-lane roadway is proposed between Proctorville and the Gallia County Line in Lawrence County, OH.	$85,000,000
LAW-20	Construct interchange safety and access improvements at the US 52 and CR 1A interchange west of Ironton.	$6,800,000
LAW-21	Construct interchange safety and operational improvements at the US 52 and Campbell Drive (OH 141) intersection and adjacent intersections.	$1,000,000
LAW-22	Improve ramp terminals and intersection capacity and safety where the 12th Street and 13th Street bridges intersect US 52.	$8,300,000
LAW-23	Improve CR 410 from Old US 52 to US 52 in Burlington, OH. The project includes access management and restriping along CR 410.	$5,000,000
LAW-27	Construct intersection safety and operation improvements along OH 775 corridor, including the intersections at OH 7 and State Street (CR 107), OH 7 and OH 775 (south, at bridge terminus), and OH 7 and Irene Road (CR 403).	$4,300,000
LAW-29	On Center Street between Bobby Bare Boulevard and the east end of Center Street, replace existing pavement with brick, remove angled parking and lane markings, reduce speed limits, and install traffic calming, landscaping, and bike parking amongst other improvements.	$830,000
LAW-30	Improve and extend a shared-use path along former railroad right-of-way from the Railroad Street Cycle Track to Ironton Hills Shopping Center.	$1,250,000
LAW-31	Construct sidewalk with ADA compliant curb ramps and bike lanes along Solida Road from Fourth Street East (CR 1) east through the US 52 interchange.	$3,300,000
LAW-33	Lawrence County Active Transportation Improvements	$5,000,000
LAW-34	Lawrence County Safety Improvements	$5,000,000
LAW-35	Lawrence County Active Signal and Operational Improvements	$5,000,000
Total Ohio Phase 2 Project Costs		**$269,780,000**

Table ES-3 – Phase 3 Project Recommendations (FY 2040 - 2050)

ID	Description	Project Cost (in 2045$)
West Virginia Phase 3 Projects		
CAB-01	Streetscaping improvements on Bridge Street from WV 106 to 39th Street and Main Street from Riverside Drive to Water Street in Guyandotte neighborhood of Huntington, WV.	$22,000,000
CAB-12	Widen John Morris Road to a four-lane boulevard in Milton, WV.	$35,000,000
CAB-14	Improve Midland Trail (US 60) from Bonnie Boulevard to Cyrus Creek Road in Barboursville, WV.	$7,600,000
CAB-15	Improve US 60 from Eighth Avenue to Bonnie Boulevard in Huntington, WV.	$5,400,000
CAB-17	Improve Fifth Street (WV 527) from I-64 to Eighth Avenue in Huntington, WV.	$8,600,000
CAB-34	Cabell County Signal and Operational Improvements	$7,000,000
CAB-35	Cabell County Safety Improvements	$7,000,000
CAB-36	Cabell County Active Transportation Improvements	$7,000,000
WAY-14	Realign the access road to the Tri-State Airport in Wayne County, WV and provide a new parking structure.	$59,000,000
WAY-25	Wayne County Active Signal and Operational Improvements	$5,000,000
WAY-26	Wayne County Safety Improvements	$5,000,000
WAY-27	Wayne County Active Transportation Improvements	$5,000,000
Total West Virginia Phase 3 Project Costs		**$173,600,000**
Kentucky Phase 3 Projects		
BOY-13	Study congestion issues and adjust signal timings and/or add turn lanes as needed.	$1,010,000
BOY-19	Safety improvements on I-64 in Boyd County from county line to county line (10.7 miles). The project includes climbing lanes and an additional ramp merge.	$27,000,000
BOY-20	Widen SR 752 (Durbin Road) from US 23 to SR 1937 (Bear Creek Road) and add shoulders.	$25,000,000
BOY-21	Safety and traffic signal optimization improvements at the I-64/US 23 interchange south of Catlettsburg.	$25,000,000
BOY-23	I-64/US 60 (29th Street) interchange improvements.	$25,000,000
BOY-26	Construct a center turn lane, right turn lanes where needed, and replace three functionally obsolete bridges along US 60 between MP 2.0 (Princess Drive) to MP 4.02 at intersection with KY 180 and Cannonsburg Road.	$59,000,000
BOY-29	Improve last mile roadway connections along US 23 (MP 19.5 to MP 20.9).	$11,100,000
BOY-30	Improve last mile roadway connections along US 23 (MP 15.5 to MP 16.9).	$10,800,000
BOY-31	Improve last mile roadway connections along US 23 (MP 9.1 to MP 11.2).	$16,300,000

ID	Description	Project Cost (in 2045$)
BOY-32	Construct safety and access management improvements at the US 60/KY 538 intersection.	$128,000
BOY-37	Safety and access management improvements at the intersection of Lexington Avenue (CS 2492) and 12th and 13th Streets (US 60).	$250,000
BOY-38	Intersection safety improvements at US 60 and Summitt Road.	$104,000
BOY-39	Construct shared-use path (SUP) along US 23/US 60 from Railroad Avenue to Center Street.	$3,700,000
BOY-41	Establish shared-use path connection along US 23 from Seventh Street to the Greenup county line	$5,400,000
BOY-51	Boyd County Active Transportation Improvements	$7,000,000
BOY-52	Boyd County Safety Improvements	$7,000,000
BOY-53	Boyd County Active Signal and Operational Improvements	$7,000,000
GRE-10	Improve KY 244 between the cities of Raceland and Worthington to allow two-way traffic.	$108,000,000
GRE-13	Assess signal warrants and construct right-turn lanes on US-23 for Caroline Drive; if unsignalized, construct acceleration lanes on US-23 for turning busses.	$10,600,000
GRE-19	Replace bridge on CS 1023 (MP 0.121) over Town Branch, 100' south of Jct. KY 2541.	$3,500,000
GRE-23	Improve safety and decrease congestion at the KY 693 (Diederick Boulevard) and KY 1172 (Red Devil Lane) intersection.	$3,900,000
GRE-28	Improve last mile roadway connections along US 23 from MP 23.4 to MP 25.6.	$17,000,000
GRE-37	Greenup County Active Transportation Improvements	$7,000,000
GRE-38	Greenup County Safety Improvements	$7,000,000
GRE-39	Greenup County Active Signal and Operational Improvements	$7,000,000
Total Kentucky Phase 3 Project Costs		**$394,792,000**
Ohio Phase 3 Projects		
LAW-08	Partner with West Virginia DOT to help fund a proposed bridge across the Ohio River at Merritt's Creek and construct an interchange connecting the new bridge to OH 7.	$185,000,000
LAW-32	Construct remaining portion of Chesapeake Bypass in Phases 1C and 2 to provide a four-lane divided facility, with interchanges at all access points between US 52 and the proposed Merritt Creek Ohio River Crossing.	$197,000,000
Total Ohio Phase 3 Project Costs		**$382,000,000**

Table ES-4 – Vision Plan

ID	Description	Project Cost (in 2050$)
West Virginia Vision Plan Projects		
CAB-18B	Widen WV 2 to a 4-lane divided roadway from Huntington to the Cabell/Putnam County Line in West Virginia as Phase II of WV 2 Improvements.	$1,110,000,000
CAB-24	Retrofit 20th Street as a complete, livable street from Third Avenue to 12th Avenue, incorporating green infrastructure, complete streets principles, and placemaking to develop a sense of identity and maximize function of the corridor.	$6,000,000
CAB-25	Improve College Avenue and Martha Road in Barboursville, WV.	$108,000,000
CAB-28	Widen WV 10 a 4-lane divided roadway with wide shoulders from Melissa Road to Salt Rock in Cabell County, WV. Widening this roadway will create a viable alternate route for regional traffic.	$2,100,000,000
CAB-29	Ohio River Bridge Crossing at Merritt's Creek	$240,000,000
CAB-30	Widen WV 152 from Wood Lane south to Skyview Drive to provide a two-way left turn lane (TWLTL) and 4-foot paved shoulders.	$10,200,000
CAB-31	Streetscaping improvements on Buffington Street from the flood wall to CSX rail and Fifth Avenue from WV 106 to Buffington Street in Guyandotte.	$21,000,000
WAY-05	Widen Centerville-Prichard Road and Lynn Creek Road from Prichard to Lavalette in Wayne County, WV.	$750,000,000
WAY-06	Widen Spring Valley Drive to a 3-lane roadway with a two-way left-turn lane from WV 75 to I-64 in Wayne County, WV.	$150,000,000
WAY-07	Construct a new 2-lane roadway with wide shoulders is proposed from Sherwood Drive to I-64 in Wayne County, WV.	$210,000,000
WAY-08B	Widen US 52 to a 4-lane divided highway from Kermit to Hubbardstown, WV. US 52 has been identified as the future alignment for the proposed I-73/I-74 corridor through the KYOVA region. Improving this roadway will serve regional mobility and goods movement needs. This project has been identified as a high-priority project regionally for its potential economic development benefits.	$450,000,000
WAY-11	Widen WV 152 to a 4-lane divided roadway with bike lanes from Lavalette to Huntington in West Virginia.	$240,000,000
WAY-12	Widen WV 152 to a 4-lane divided (where feasible) roadway with wide shoulders from Wayne to Lavalette in Wayne County, WV.	$720,000,000
WAY-13	Widen Walkers Branch Road to a 4-lane divided (where feasible) roadway from Walkers Branch Road Bridge to I-64 in Ceredo, WV.	$660,000,000
WAY-15	New Roadway Location for Beech Fork Lake Lodge Access Road	$6,000,000
WAY-16	New Roadway Location for Beech Fork Connector Road	$18,000,000
WAY-17	Widen Goodwill Road to a 4-lane undivided roadway from Walkers Branch Road to Spring Valley Drive in Wayne County, WV.	$510,000,000
Total West Virginia Vision Plan Project Costs		**$7,309,200,000**
Ohio Vision Plan Project		
LAW-11	Support efforts to construct a trail connection between Ironton and Vesuvius Lake, outside of the KYOVA MPO Boundary.	$3,600,000

KYOVA 2050 Metropolitan Transportation Plan

Exhibit ES-2

KYOVA 2050 MTP Projects

Legend

Projects by Implementation Phase

- Phase I (Short-Term, 2022-2029)
- Phase II (Mid-Term, 2030-2040)
- Phase III (Long-Term, 2041-2050)
- Vision Plan (Not Fiscally Constrained)

Ironton, OH

Ashland, KY

Huntington, WV

Adams
Scioto
Jackson
Ohio
West Virginia
Mason
Gallia
Lawrence
Putnam
Cabell
Lewis
Greenup
Ashland
Ironton
Huntington
Boyd
Carter
Kentucky
Elliott
Rowan
Wayne
Lincoln
Martin
Mingo
Logan
Johnson
Ohio River
Big Sandy River
Kentucky
West Virginia

Miles
5

Last Updated: 2/11/2022

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Table ES-5 – KYOVA 2050 MTP Projected Revenues and Costs by Phase

Phase	Transportation Improvements	Maintenance	Transit Capital	Transit Operations	Total
West Virginia Revenue Forecast					
2022 – 2029	$66,130,502	$314,499,971	$21,266,434	$18,050,669	$419,947,576
2030 – 2040	$132,465,912	$629,974,431	$42,598,763	$36,157,269	$841,196,375
2041 – 2050	$181,542,623	$863,370,882	$58,380,991	$49,553,016	$1,152,847,512
Total	**$380,139,037**	$1,807,845,284	**$122,246,189**	**$103,760,955**	**$2,413,991,463**
West Virginia MTP Costs					
2022 – 2029	$71,770,000*	$314,499,971	$21,266,434	$18,050,669	$425,587,074
2030 – 2040	$116,330,000	$629,974,431	$42,598,763	$36,157,269	$825,060,463
2041 – 2050	$173,600,000	$863,370,882	$58,380,991	$49,553,016	$1,144,904,889
Total	**$361,700,000**	$1,807,845,284	**$122,246,189**	**$103,760,955**	**$2,395,552,426**
Kentucky Revenue Forecast					
2022 – 2029	$283,108,668	$128,779,961	$5,546,964	$8,504,731	$425,940,324
2030 – 2040	$567,094,559	$257,958,952	$11,111,116	$17,035,814	$853,200,441
2041 – 2050	$777,194,923	$353,529,027	$15,227,624	$23,347,338	$1,169,298,912
Total	**$1,627,398,151**	**$740,267,940**	**$31,885,704**	**$48,887,882**	**$2,448,439,677**
Kentucky MTP Costs					
2022 – 2029	$256,223,000	$128,779,961	$5,546,964	$8,504,731	$399,054,656
2030 – 2040	$562,250,000	$257,958,952	$11,111,116	$17,035,814	$848,355,882
2041 – 2050	$394,792,000	$353,529,027	$15,227,624	$23,347,338	$786,895,989
Total	**$1,213,265,000**	**$740,267,940**	**$31,885,704**	**$48,887,882**	**$2,034,306,527**
Ohio Revenue Forecast					
2022 – 2029	$139,429,672	$46,476,557	$6,173,532	$3,556,691	$195,636,452
2030 – 2040	$279,291,372	$93,097,124	$12,366,192	$7,124,403	$391,879,091
2041 – 2050	$382,764,801	$127,588,267	$16,947,688	$9,763,892	$537,064,648
Total	**$801,485,844**	**$267,161,948**	**$35,487,412**	**$20,444,987**	**$1,124,580,191**
Ohio MTP Costs					
2022 – 2029	$118,330,000	$46,476,557	$6,173,532	$3,556,691	$174,536,780
2030 – 2040	$269,780,000	$93,097,124	$12,366,192	$7,124,403	$382,367,719
2041 – 2050	$382,000,000	$127,588,267	$16,947,688	$9,763,892	$536,299,847
Total	**$770,110,000**	**$267,161,948**	**$35,487,412**	**$20,444,987**	**$1,093,204,346**

*Note: The Culloden interchange project (CAB-11) is 100% funded with WV General Obligation (GO) Bonds and not reflected in the WV Phase I total for MTP fiscal constraint purposes.