

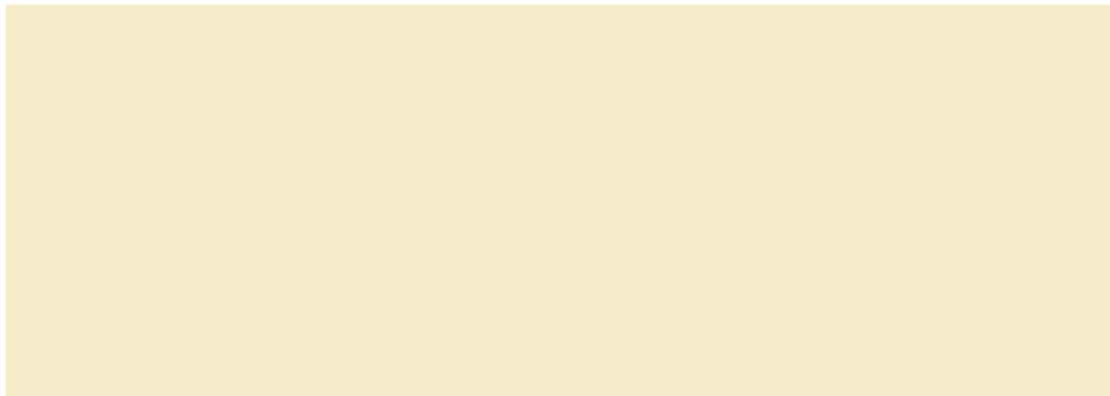


# Kingsport MTPO

## 2040 Long-Range Transportation Plan

### Executive Summary

June 2017



# KINGSPORT, TENNESSEE

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While planning in Kingsport dates back to the early 1900s, regional transportation planning did not emerge until the 1970s. Since that time local, state, and federal agencies have taken a coordinated, cooperative, comprehensive approach to planning and providing transportation solutions within the Kingsport region.

The Kingsport Metropolitan Transportation Planning Organization (MTPO) is the governing entity that is charged with carrying out the transportation planning process for the Kingsport Urbanized Area. The planning area of the Kingsport MTPO consists of the cities of Kingsport, Mount Carmel, and Church Hill, Tennessee; Weber City and Gate City, Virginia; and portions of Hawkins County, Sullivan County, and Washington County Tennessee as well as portions of Scott County, Virginia.

A key planning effort of the MTPO is the development of a Long-Range Transportation Plan (LRTP). The 2040 LRTP is an important document for the region as only projects identified in the Plan are eligible for federal and state transportation funding.

In developing the 2040 LRTP, the Kingsport MTPO developed three goals to guide future transportation decisions in the region.

**LIVABILITY** | **SUSTAINABILITY** | **PROSPERITY**



# GOALS AND OBJECTIVES

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## Goal 1 - Livability

Provide safe, secure, convenient, and active transportation choices to all citizens that strengthen the livability and health of our communities and region.

- Improve safety by reducing transportation-related fatalities and injuries
- Make streets a place for all users - "Complete Streets"
- Promote active transportation by increasing opportunities for short trips through improved accessibility to alternative modes
- Increase transit and other transportation demand management opportunities as a means of providing affordable transportation options
- Strive to balance capacity and mobility needs for all users whereby connections to and across modes and land uses function harmoniously

## Goal 2 - Sustainability

Promote and advance sustainable transportation choices for the greater Kingsport Region that support long-term economic, social, and environmental sustainability within and throughout the region.

- Maintain what we have – take a "state of good repair" approach to our community's transportation assets
- Seek cost-effective management solutions and new technologies as a means of addressing congestion, improving travel time reliability, reducing transportation delay, and improving system operations
- Seek improvement options which minimize adverse impacts of surface transportation to historical, social, cultural, and natural environments, including stormwater impacts
- Promote investment solutions that improve the resiliency of the transportation system and reduce transportation impacts on air-quality

## Goal 3 - Prosperity

Promote transportation policies and investments that advance quality economic development and redevelopment, economic competitiveness, and efficient access to people, places, and goods and services within and throughout the region.

- Strategically target transportation investments to areas supportive and conducive to growth and redevelopment initiatives
- Support transportation investments and policies that work to create jobs, efficiently move freight, promote tourism, and improve access to all modes and destinations while embracing access management and corridor management strategies that preserve the long-term functionality of a roadway's capacity and safety
- Support land use and development patterns that reduce transportation costs and expenditures and improve accessibility for all
- Continue to promote and foster an environment by which citizens, communities, jurisdictions, elected officials, and other stakeholders can collaboratively advance a sustainable multimodal transportation system that provides safe and secure connections throughout a livable and prosperous region



# POPULATION TRENDS

Situated along the borders of northeastern Tennessee and southwestern Virginia in an area commonly referred to as the Tri-Cities region, the Kingsport MTPO planning area is one of three urban areas in the Tri-Cities region.

Since the 1970s, when the Kingsport area was first designated by the federal government as a metropolitan area, the region has experienced steady population growth. The total population of the Kingsport MTPO area in 2015 was approximately 132,000, which represented 37% of the total population of the four counties partially within the MTPO area. By 2040, the Kingsport MTPO area is projected to have approximately 152,000 persons, which is a 15% increase over the 25-year horizon.

	2010	2015	2040	% Change (2010-2015)	Absolute Change (2015-2040)	% Change (2015-2040)
<b>Kingsport MTPO Area</b>	131,042	132,212	152,066	0.89%	19,854	15.0%
Sullivan County, TN	90,993	91,289	98,357	0.33%	7,068	7.7%
Hawkins County, TN	23,248	23,632	30,874	1.65%	7,242	30.6%
Washington County, TN	8,501	8,845	12,582	4.05%	3,737	42.2%
Scott County, VA	8,300	8,446	10,253	1.75%	1,808	21.4%
<b>Total Population (4 Counties)</b>	360,170	366,101	428,515	1.65%	62,414	17.0%
<b>MTPO Percent of 4-County Population</b>	36.4%	36.1%	35.5%	--	--	--



One significant change in the region has been an increase in the percent of persons over the age of 65. In the 1970s, less than 10% of the population was over 65 years of age. Today, nearly 20% of the population is over the age of 65 and that trend is projected to increase to nearly 25% by the year 2040.



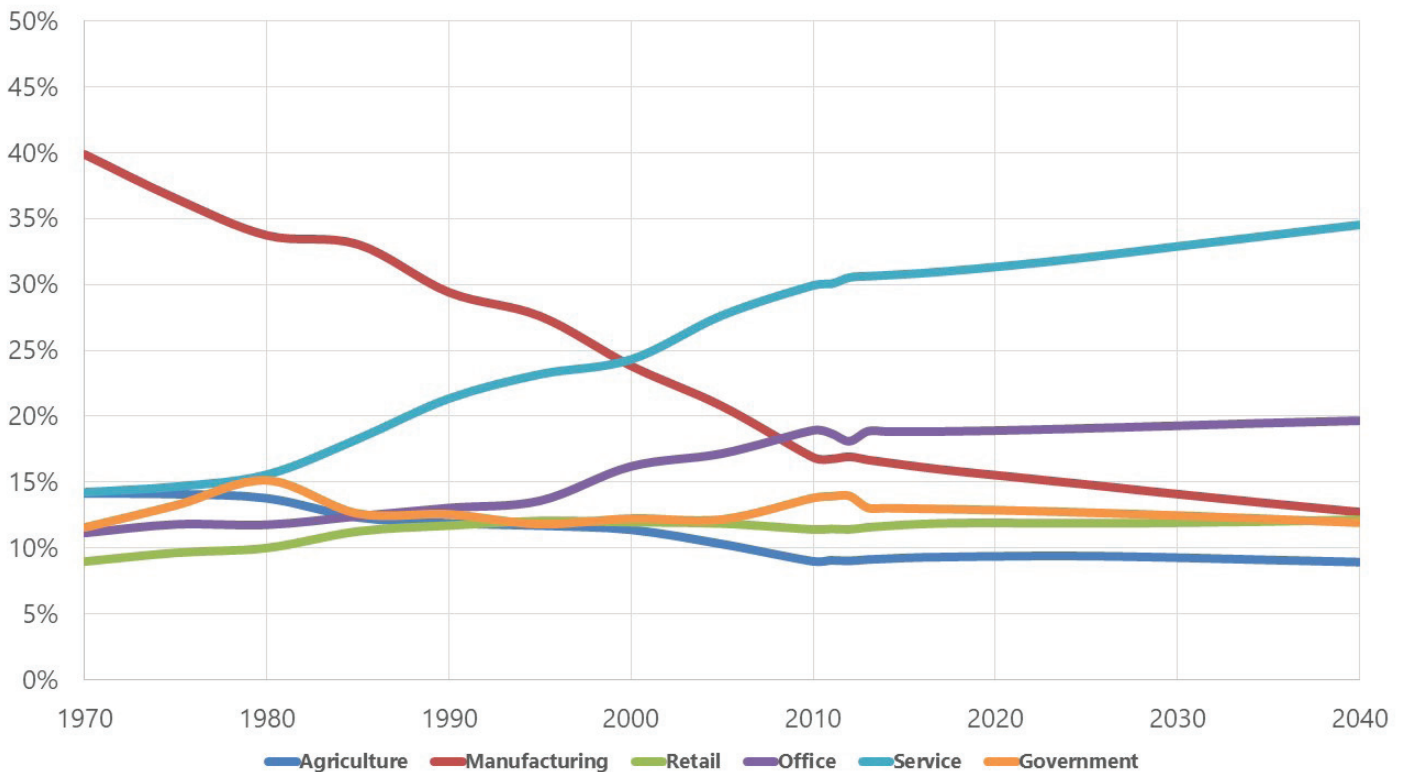
# EMPLOYMENT TRENDS

Employment conditions within the MTPO area, much like in many communities in the southeast, have seen dramatic changes over the last several decades relative to the number of jobs and types of jobs, which make up the local economy.

The region has experienced steady employment growth and has seen a shift in its employment base from heavily manufacturing to one of medical, service, and retail. The figure below illustrates the change in the number of jobs and types of jobs within Sullivan, Hawkins, and Washington County, Tennessee and Scott County, Virginia (which encompasses the Kingsport MTPO area) from 1970 to 2040 for the employment sectors of service, retail, office, manufacturing, government, and agriculture.



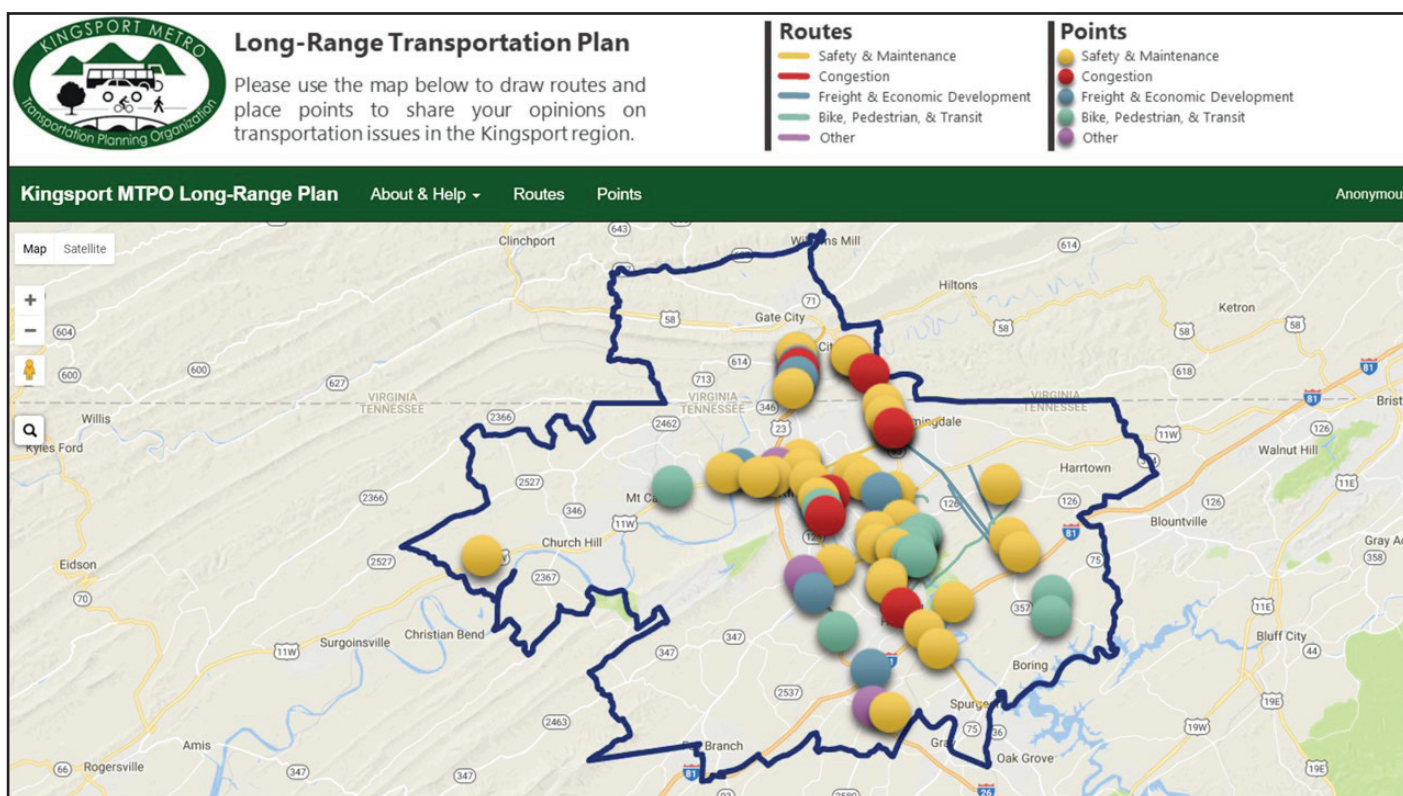
Today, the service, office, and retail employment sectors account for 61% of the jobs within the MTPO area. Over the next 25 years, employment in the Kingsport MTPO area is projected to receive approximately 14,000 new jobs. Of this growth, approximately 84% of it is projected to occur in the service, office, and retail sectors.



# PUBLIC ENGAGEMENT

Public and stakeholder input played a critical role in the development of the 2040 LRTP. The primary means of involvement consisted of public and stakeholder meetings and presentations, the use of an online survey and mapping application, and media outreach.

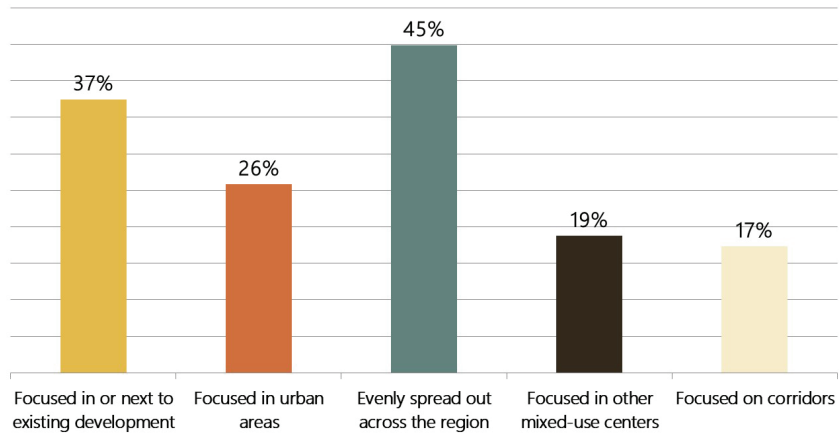
One of the most interactive portions of the public involvement efforts included an online mapping application. This platform allowed residents to share opinions on issues they see every day. In total, 122 location-specific comments were received related to issues of safety and maintenance, congestion, freight and economic development, alternative modes, and others.



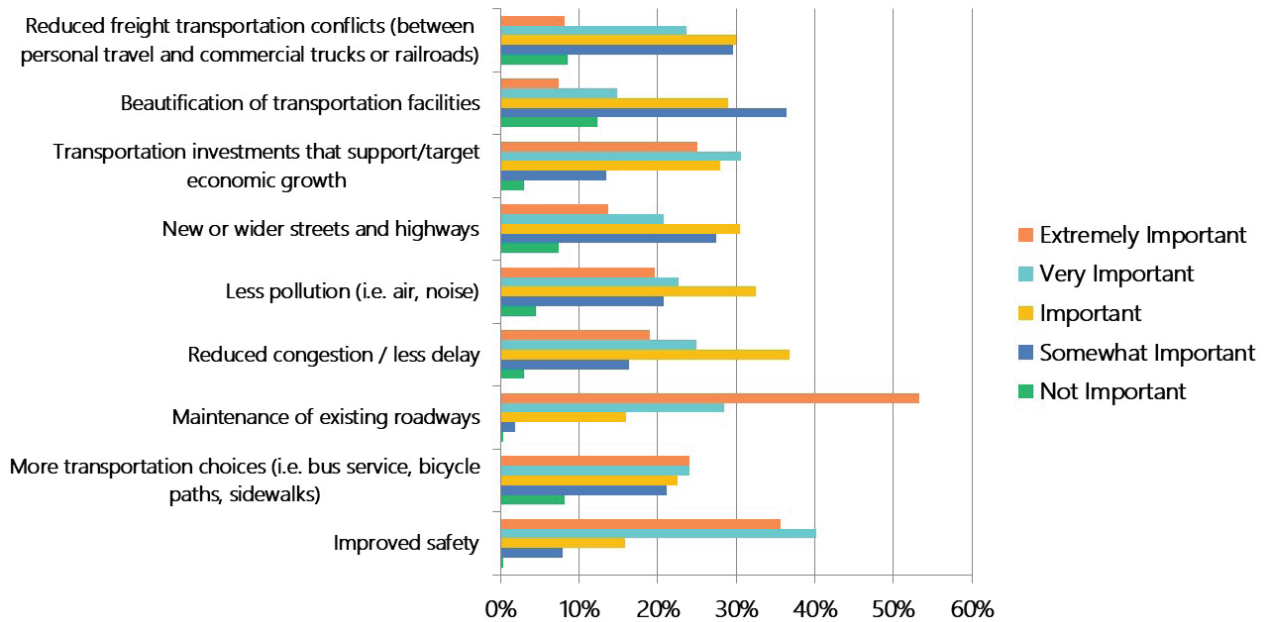
Additionally, a total of 280 individuals participated in the online survey. From the online survey and mapping application, the MTPO was able to gather specific public input that led to the development of the MTPO's LRTP project selection criteria and other plan recommendations.

# SURVEY TAKEAWAYS

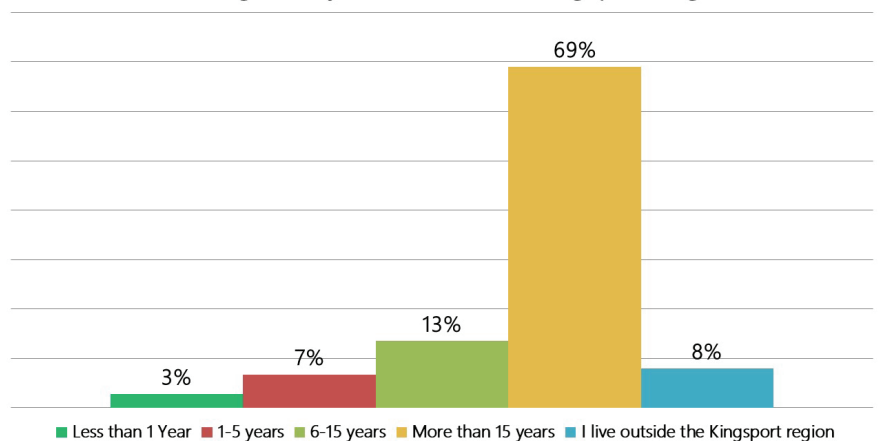
In the future, development in the Kingsport region should be:



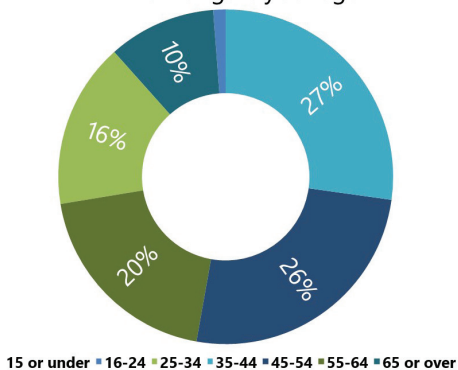
How important are the following priorities for the overall transportation system in the Kingsport region?



How long have you lived in the Kingsport region?



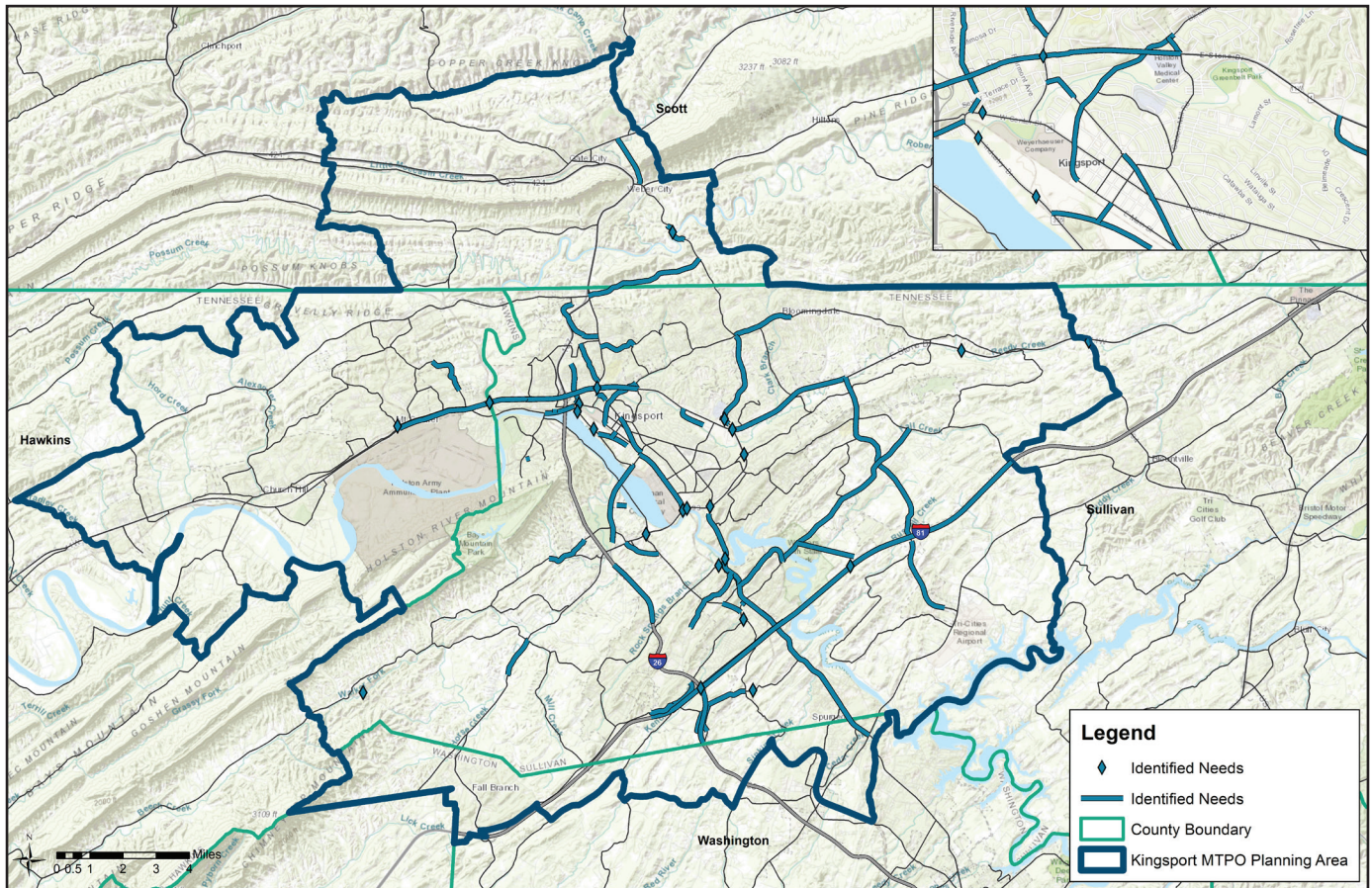
In which range is your age?



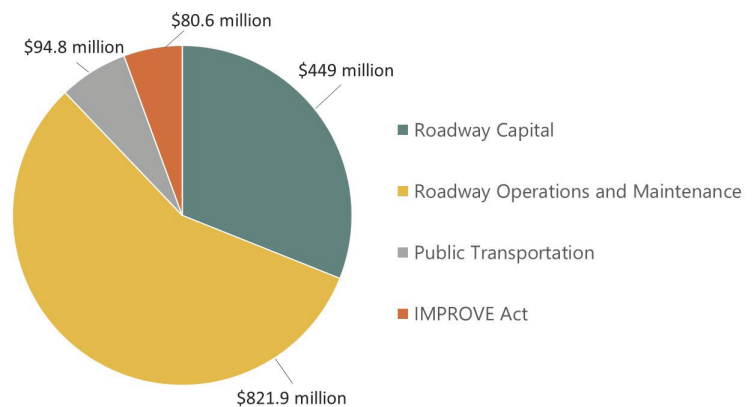


# NEEDS AND REVENUES

Input from the stakeholder and public engagement processes provided insight into the desires of Kingsport area residents. In addition, a technical tool called a travel demand model showed the impact that future population and employment growth will have on the transportation network. Based on information provided by these two sources, transportation system needs were identified as shown in the map below.



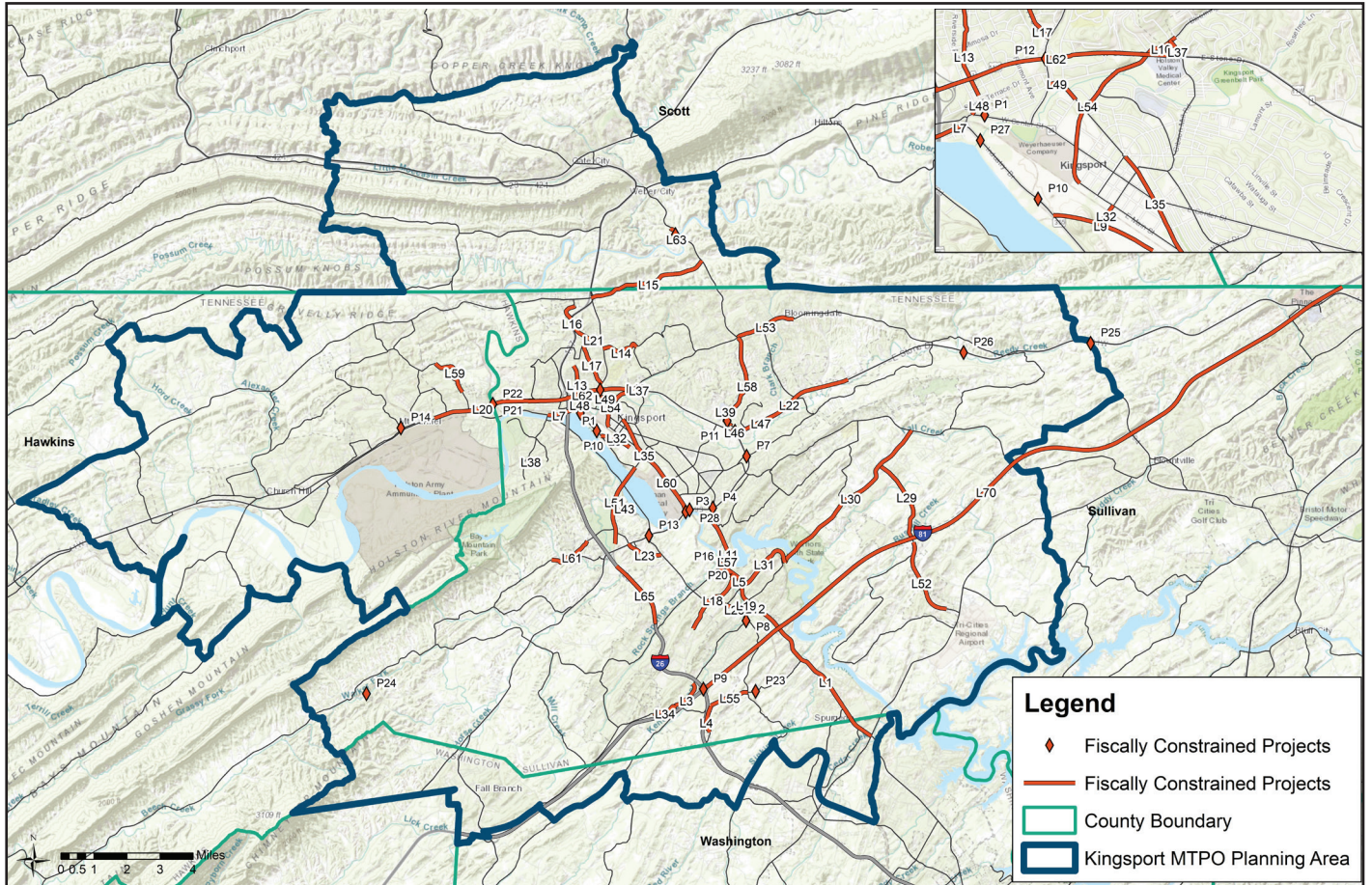
The ability to maintain, improve, and enhance transportation facilities and services in the MTPO area depends on adequate financial resources. Funding for transportation facilities and services comes from a variety of sources – federal, state, local, and private. From these sources, the MTPO can expect to receive nearly \$1.4 billion in revenues over the life of the 2040 LRTP, broken out as shown into roadway capital, operations and maintenance, and public transportation funding. Of note is that the Tennessee IMPROVE Act is expected to bring approximately \$80.6 million in additional funding to the MTPO area for bridge and highway projects.



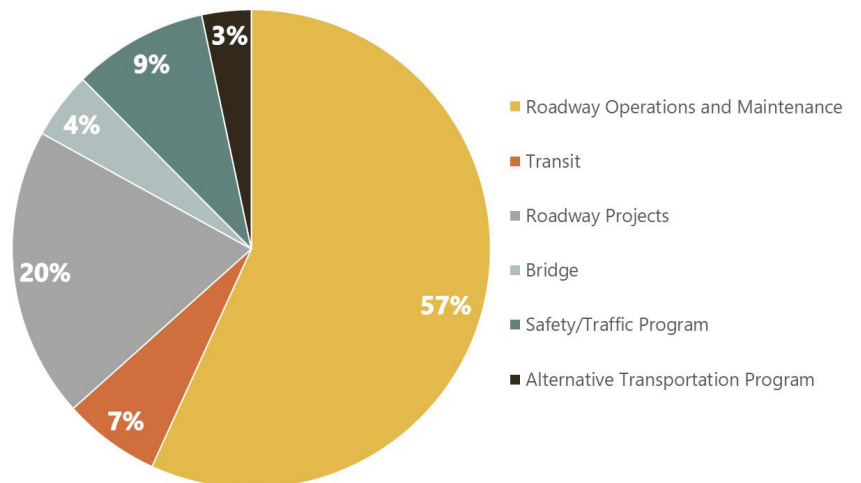


# REVENUE ALLOCATIONS

Within the region, a number of transportation projects are currently under development and/or under construction (see Table 4-2 in the LRTP document for a complete listing). Beyond these project investments, future year projects and programs were identified as being fiscally-constrained based on the scoring and prioritization of projects, available revenues, and public input. This means that funds are reasonably expected to be available for these projects over the 25-year horizon of the LRTP. Project labels in the map below correlate with cost-feasible projects in the 2040 LRTP (see Table 7-4 in the LRTP document for detailed project descriptions).



The figure to the right shows the breakdown of revenue allocations by investment type. As shown, the majority of funding is allocated to the operation and maintenance of existing roadways.



# COST-FEASIBLE PROJECTS

L RTP ID	Route	From	To	Improvement Type	Cost
<b>2025</b>					
L1	Fort Henry Drive	Interstate 81	Airport Road	Roadway Widening	\$44,100,000
L70	Interstate 81	Interstate 26 MM 57	Virginia State Line	ITS and Signal Timing	\$1,780,000
P22	Stone Drive	Bridge over North Fork Holston River		Bridge Replacement/Rehabilitation	\$ 2,947,000
P21	Stone Drive	Bridge over North Fork Holston River		Bridge Replacement/Rehabilitation	\$1,745,000
P27	Industry Drive	Bridge over Reedy Creek		Bridge Replacement/Rehabilitation	\$2,831,000
P23	Fordtown Road	Bridge over CSX Railroad		Bridge Replacement/Rehabilitation	\$1,505,000
P28	John B. Dennis	Bridge over CSX Railroad		Bridge Replacement/Rehabilitation	\$2,081,000
P20	Fort Henry Drive	Wesley Road	Rock Springs Road (NB)	Bridge Replacement/Rehabilitation	\$9,250,000
L57	Fort Henry Drive	Wesley Road	Rock Springs Road (SB)	Bridge Replacement/Rehabilitation	\$12,829,000
P24	Old Blair Gap Road	Bridge over Walker Fort Creek		Bridge Replacement/Rehabilitation	\$496,000
P25	Reedy Creek Lane	Bridge over Reedy Creek		Bridge Replacement/Rehabilitation	\$232,000
P26	Meadow Brooke Lane	Bridge over Reedy Creek		Bridge Replacement/Rehabilitation	\$851,000
L54	Clinchfield Street	Main Street	Stone Drive	ITS and Signal Timing	\$320,000
L62	Stone Drive	Gibson Mill Road	Deneen Lane	ITS and Signal Timing	\$190,000
L22	Stone Drive	John B. Dennis	Cleek Road	Intersection Improvements, ITS and Signal Timing	\$1,080,000
L12	Fort Henry Drive	Moreland Drive/ Hemlock Road	Interstate 81	Intersection Improvements, ITS and Signal Timing	\$1,900,000
L20	Stone Drive West	Kaywood Avenue	Granby Road	Intersection Improvements, ITS and Signal Timing	\$80,000
L53	Bloomingtondale Pike	John B. Dennis	Packinghouse Road	Geometric and Safety Improvements	\$1,270,000
L35	East Sullivan Street	Church Circle	Main Street	Roadway Widening	\$6,330,000
L11	Fort Henry Drive	John B Dennis	Moreland Drive / Hemlock Road	Intersection Improvements, ITS and Signal Timing	\$950,000
L17	Tranbarger Drive	Lynn Garden Drive	Virgil Avenue	Geometric and Safety Improvements	\$920,000
L65	Interstate 26	John B. Dennis	I-26 Exit 6 (SR-347)	Roadway Widening - Truck Climbing Lane	\$2,790,000
L60	Lincoln Street	John B. Dennis	Wilcox Drive	ITS and Signal Timing	\$630,000
L58	John B. Dennis	Stone Drive	Bloomingtondale Pike	Intersection Improvements	\$760,000
L49	West Sullivan Street	Roller Street	Lynn Garden Drive	Roadway Widening	\$3,170,000
L43	Jared Drive	Sluice Bridge	Wilcox Drive	New Roadway	\$2,280,000
L14	Gravelly Road	Lynn Garden Drive	Shipp's Spring Road	Geometric and Safety Improvements	\$840,000
L21	May Avenue	Bell Ridge Drive	Lynn Garden Drive	Geometric and Safety Improvements	\$320,000
L52	Airport Parkway	Interstate 81	Airport Road	Intersection Improvements	\$570,000
L59	Lewis Lane	Rearden Lane	Ripley Street	Geometric and Safety Improvements	\$1,040,000
L19	Lebanon Road	At Fort Henry Road	Colonial Heights Road	Intersection Improvements	\$440,000
L37	Gibson Mill Road	Stone Drive	Bloomingtondale Pike	Roadway Widening	\$2,410,000
P12	Lynn Garden Drive	Stone Drive		Geometric and Safety Improvements	\$530,000
L13	Fairview Avenue	Stone Drive	Virgil Avenue	Geometric and Safety Improvements	\$790,000
L16	Bell Ridge Road / Drive	May Avenue	Harrison Avenue	Geometric and Safety Improvements	\$960,000
L46	Stone Drive	John B. Dennis		Intersection Improvements	\$7,600,000
L61	Reservoir Road	Saratoga Road	Hood Road	Geometric and Safety Improvements	\$990,000

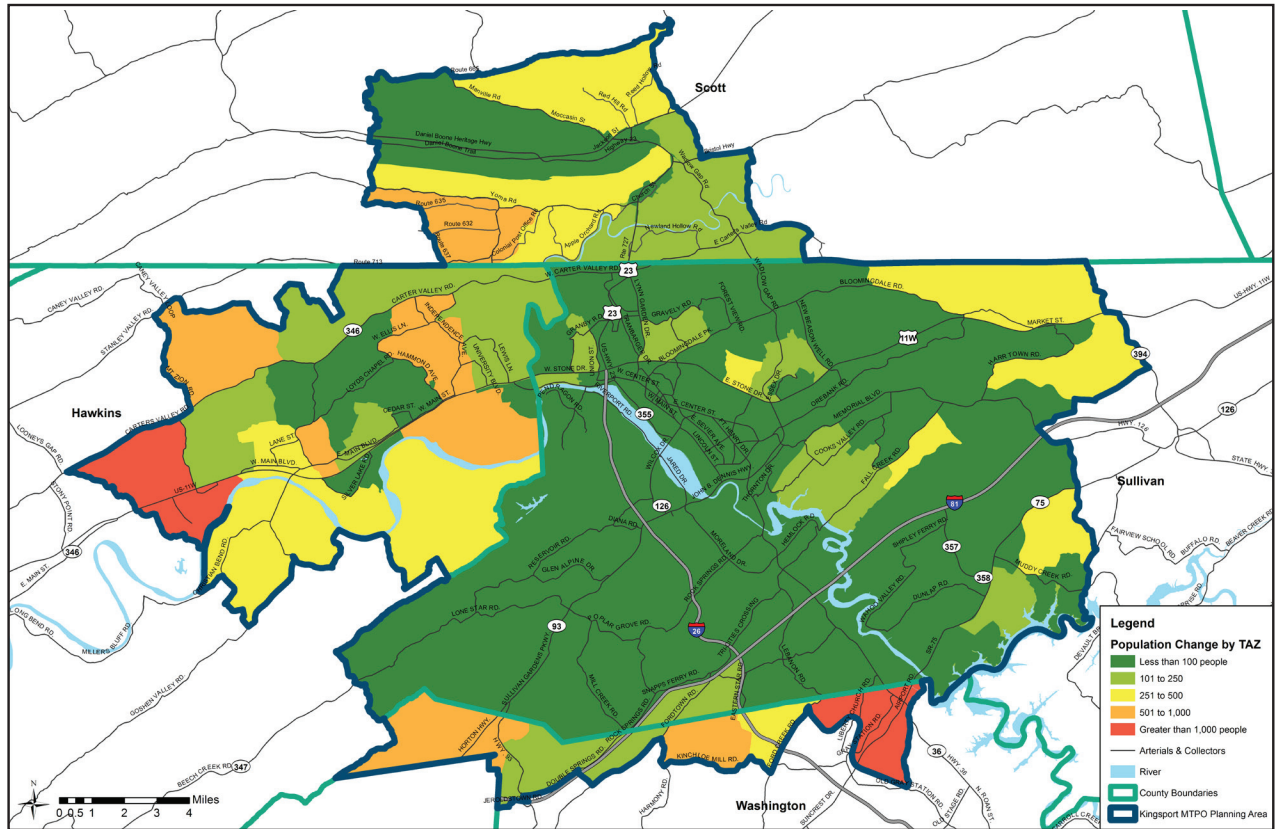


# COST-FEASIBLE PROJECTS

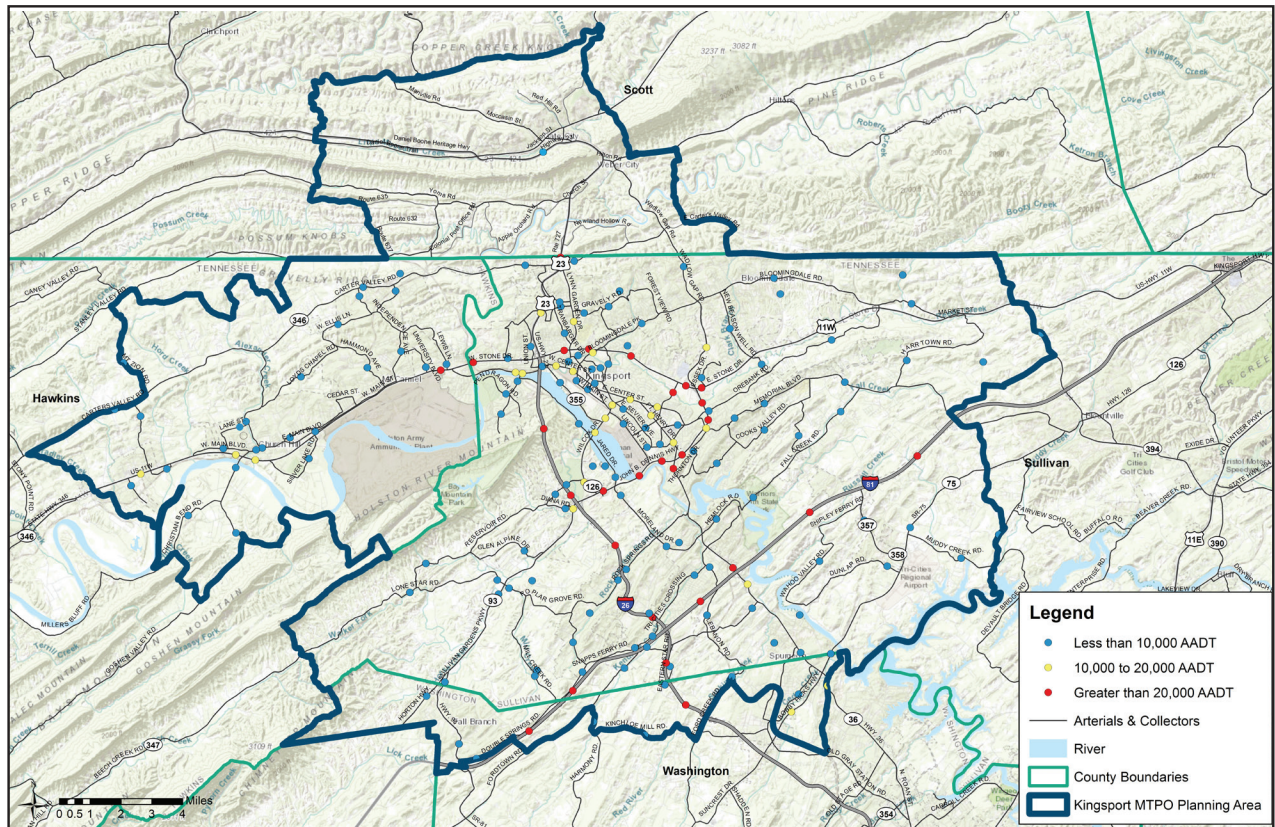
L RTP ID	Route	From	To	Improvement Type	Cost
P3	John B. Dennis	Lincoln Street		Geometric and Safety Improvements	\$270,000
P4	John B. Dennis	Fort Henry Drive		Geometric and Safety Improvements	\$2,530,000
P5	John B. Dennis	Stone Drive		Geometric and Safety Improvements	\$2,530,000
P7	John B. Dennis	Orebank Road		Intersection Improvements; Geometric and Safety Improvements	\$2,150,000
L5	Fort Henry Drive	Holston River Bridge	Hemlock Road	Intersection Improvements	\$4,560,000
P13	John B. Dennis	Moreland Drive		Geometric and Safety Improvements	\$610,000
P11	John B. Dennis			Intersection Improvements	\$1,270,000
L23	Wilcox Drive	John B. Dennis	Moreland Drive	New Roadway	\$20,270,000
L15	Carters Valley Rd East	Lynn Garden Diver	Wadlow Gap Road	Geometric and Safety Improvements	\$2,530,000
L63	Wadlow Gap Road	Near North Fork Holston River		Geometric and Safety Improvements	\$7,600,000
P15	Wadlow Gap Road	North Fork Holston River		Bridge Replacement/Rehabilitation	\$7,090,000
<b>2040</b>					
L47	Stone Drive	John B. Dennis	New Beasonwell Road	Roadway Widening	\$37,930,000
L30	Fall Creek Road	Colonial Heights Road	Memorial Blvd	Geometric and Safety Improvements	\$5,780,000
L51	Wilcox Drive	John B. Dennis	Industry Drive	Intersection Improvements	\$450,000
L31	Hemlock Road	Fort Henry Drive	Fall Creek Road	Geometric and Safety Improvements	\$2,350,000
L10	Bloomingtondale Pike	Stone Drive West	Orbin Drive	Roadway Widening	\$3,250,000
P1	Center Street	Sullivan Street	Fairview Avenue	Intersection Improvements	\$1,810,000
L32	Cherokee Street Viaduct	MLK Extension	Main Street	New Roadway	\$5,780,000
L4	Eastern Star Road	Mitchell Road	Fordtown Road	Roadway Widening	\$4,150,000
L55	Fordtown Road	Eastern Star Road	Lebanon Road	Intersection Improvements	\$6,140,000
L34	Cox Hollow Road	Snapps Ferry	Interstate 81 MM 56	Roadway Widening	\$4,520,000
P10	Industry Drive	At CSX railroad overpass		Roadway Widening; Bridge Replacement	\$7,220,000
P8	Lebanon Road	Kendricks Creek Road	Grove Drive	Intersection Improvements	\$1,440,000
L29	Airport Parkway	Fall Creek Road	Interstate 81	New Roadway	\$14,450,000
L3	Tri-Cities Crossing	Kendricks Creek Road	Fordtown Road	Roadway Widening	\$4,880,000
P14	Hammond Avenue	Near Main Street		Bridge Replacement/Rehabilitation	\$7,220,000
L9	Lincoln Street/MLK Jr Drive Connector	Lincoln Street/MLK Jr Drive	Industry Drive	New Roadway	\$11,920,000
L7	Netherland Inn Road	Center Street	Ridgefields Road	Roadway Widening	\$9,030,000
L48	Stone Drive / Center Street Connector	Stone Drive near Interstate 26 ramp	Center Street	New Roadway	\$5,420,000
L18	Summerville Road	Fort Henry Drive	New Summerville Road	Geometric and Safety Improvements	\$2,170,000
P16	Rock Springs Road	Railroad Tunnel		Bridge Replacement/Rehabilitation	\$3,790,000
P9	Interstate 26	Interstate 81		Intersection Improvements	\$6,320,000
L39	Indian Trail Drive North	Stone Drive	John B. Dennis	Geometric and Safety Improvements; New Roadway	\$2,350,000
L26	Moreland Drive/Lebanon Road Connector	Near Shady Side Drive	Kendricks Creek Road	New Roadway	\$8,670,000
L38	Huntington Hills Connector	Birchwood Road	Burke Road	New Roadway	\$900,000

# ADDITIONAL PLAN INSIGHTS

## POPULATION CHANGE (2015-2040)



## 2015 AVERAGE ANNUAL DAILY TRAFFIC (AADT)





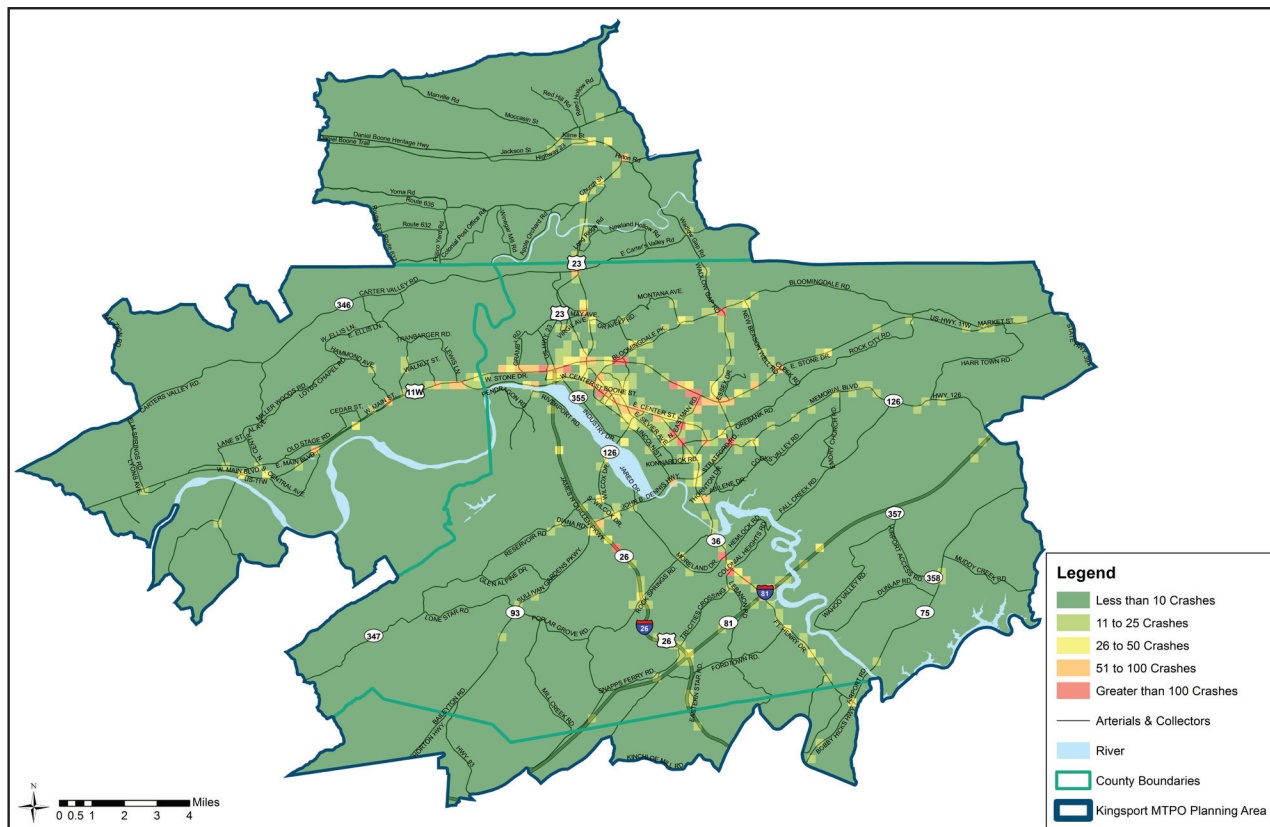
# ADDITIONAL PLAN INSIGHTS

## TENNESSEE AND VIRGINIA STRATEGIC HIGHWAY SAFETY PLANS

Improvement of highway and traffic safety depends on the “4-Es”: engineering, enforcement, emergency services, and education. **Engineering** involves the built roadway and transportation infrastructure and encapsulates design standards; warrants; materials and construction practices; and signage, striping, and signalization policies. **Enforcement** is aimed toward modifying (enforcing) human behavior. Enforcement affects drivers in the following way: a law will be enforced, an offender will be detected, the adjudicatory process will be swift and certain, and punishment will follow conviction. **Emergency services** include the assemblage of ambulance companies, fire rescue services, and third party emergency response units and emergency rooms/trauma centers. Obtaining accurate post-crash diagnosis and high quality post-crash care is a critical factor in transportation safety. Finally, similar to the enforcement programs that modify behavior through enforcement, education programs are intended to modify behavior through knowledge. **Education** encompasses driver licensing programs, driver remediation programs (e.g. traffic school), advanced driving courses, educational campaigns such as “Click It or Ticket” and “Booze it & Lose It,” and school education programs aimed at K-12 and college level students. Combined, the 4-Es capture the range of transportation safety related investments that are needed to improve safety within any jurisdiction.

Federal legislation requires that the MTPO’s L RTP include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the MTPO area that are contained in the State’s Strategic Highway Safety Plan. Since the Kingsport MTPO is a bi-state MPO, the 2040 L RTP incorporates both the Tennessee and Virginia Strategic Highway Safety Plans.

## ANALYSIS OF CRASH DATA





# ADDITIONAL PLAN INSIGHTS

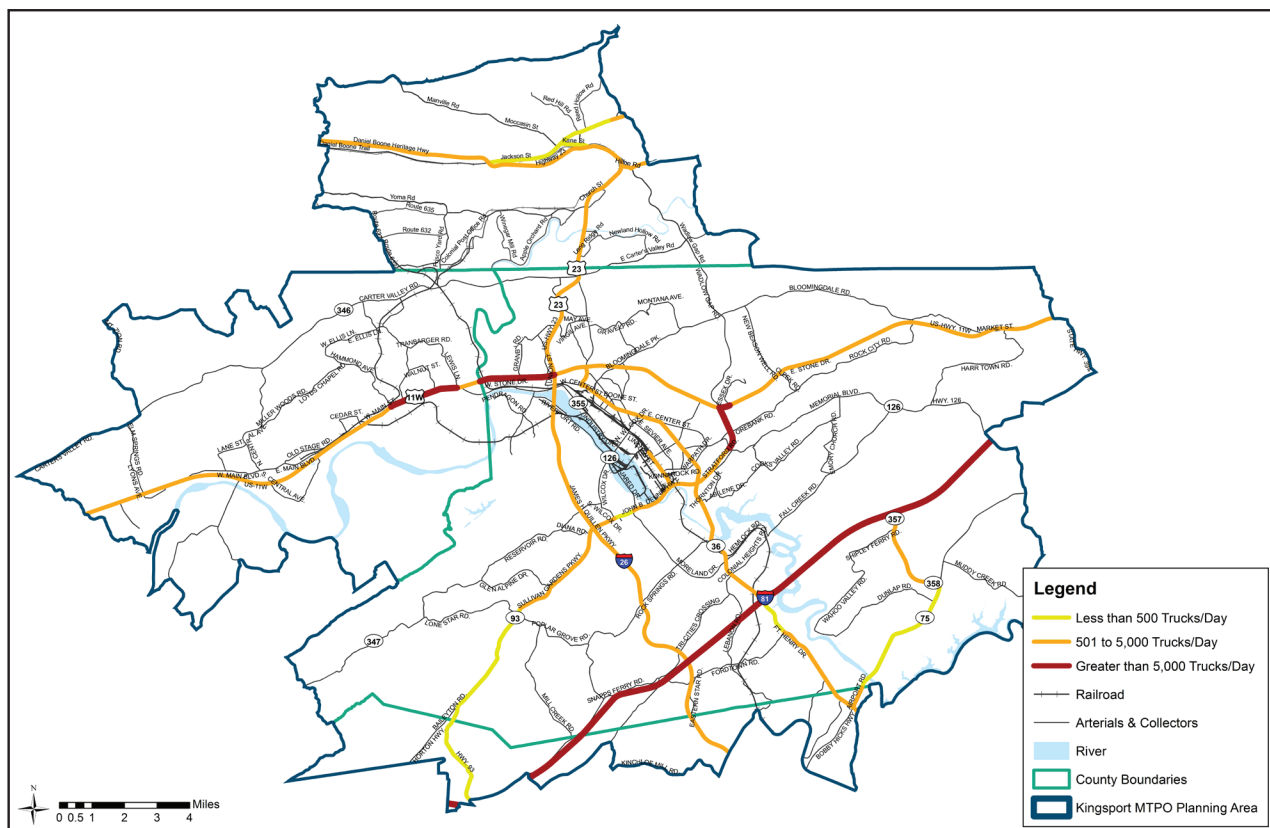
## FREIGHT TRANSPORTATION

The increasing economic competitiveness among regions within the U.S. and the globalization of the economy has further increased the importance of a metropolitan area's freight transportation infrastructure. The changing nature of business practices, with an emphasis on reliable, just-in-time delivery (JIT), places a premium on the efficient operation of the freight transportation system.

An analysis of commodity flows was performed for the region during the development of the 2040 LRTP. In total, nearly 2 million trucks annually are transporting just over 21 million tons of goods in and out of the counties of Sullivan, Washington, and Hawkins, TN and Scott, VA each year. Truck transport represents about 65% of all commodities flowing into and out of the region. Rail transport represents about 35% of all commodities flowing into and out of the region. Drayage transport and air cargo represent less than 1% combined of all commodities flowing into and out of the region.

In addition to looking at commodity flows, daily commercial vehicle truck flows (e.g. semi-trucks) through the MTPO planning were also evaluated as part of the 2040 LRTP. Based on FHWA's Freight Analysis Framework (FAF3) data for the year 2045, the transport of goods to and from the region is projected to increase with the greatest volume of truck traffic occurring along I-26 and I-81 throughout the MTPO planning area and along the major corridors such as SR-36 (Fort Henry Drive/Center Street), US-11/SR-1 (Stone Drive), SR-93 (John B. Dennis Highway/Sullivan Gardens Parkway), and US-23.

## FREIGHT ANALYSIS FRAMEWORK DAILY TRUCK FLOWS (2045)



# ADDITIONAL PLAN INSIGHTS

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## TRANSIT

The need and demand for public transportation services in the MTPO region is clearly demonstrated as seen in the ridership numbers of the KATS, NET Trans, and MEOC Transit. Transit services, both fixed route and demand response within the MTPO area are an integral part of the current transportation system.

In 2011, MEOC Transit, in cooperation with VDOT, and LENOWISCO developed the MEOC Transit Development Plan for the four-county LENOWISCO region. The MEOC Transit Development Plan largely speaks to the service needs outside of the Kingsport MTPO area. However, the plan does identify service needs between the LENOWISCO region and Kingsport. The plan calls for a regional connector service to provide regional connectivity, both within the LENOWISCO region, and to Kingsport and Johnson City.

In 2016, TDOT developed a Coordinated Public Transit-Human Services Transportation Plan (CPHSTP) for the Tri-Cities region which includes the Kingsport MTPO area and encompasses a ten county area including the counties of Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi, and Washington counties in Tennessee and Scott and Washington counties in Virginia.

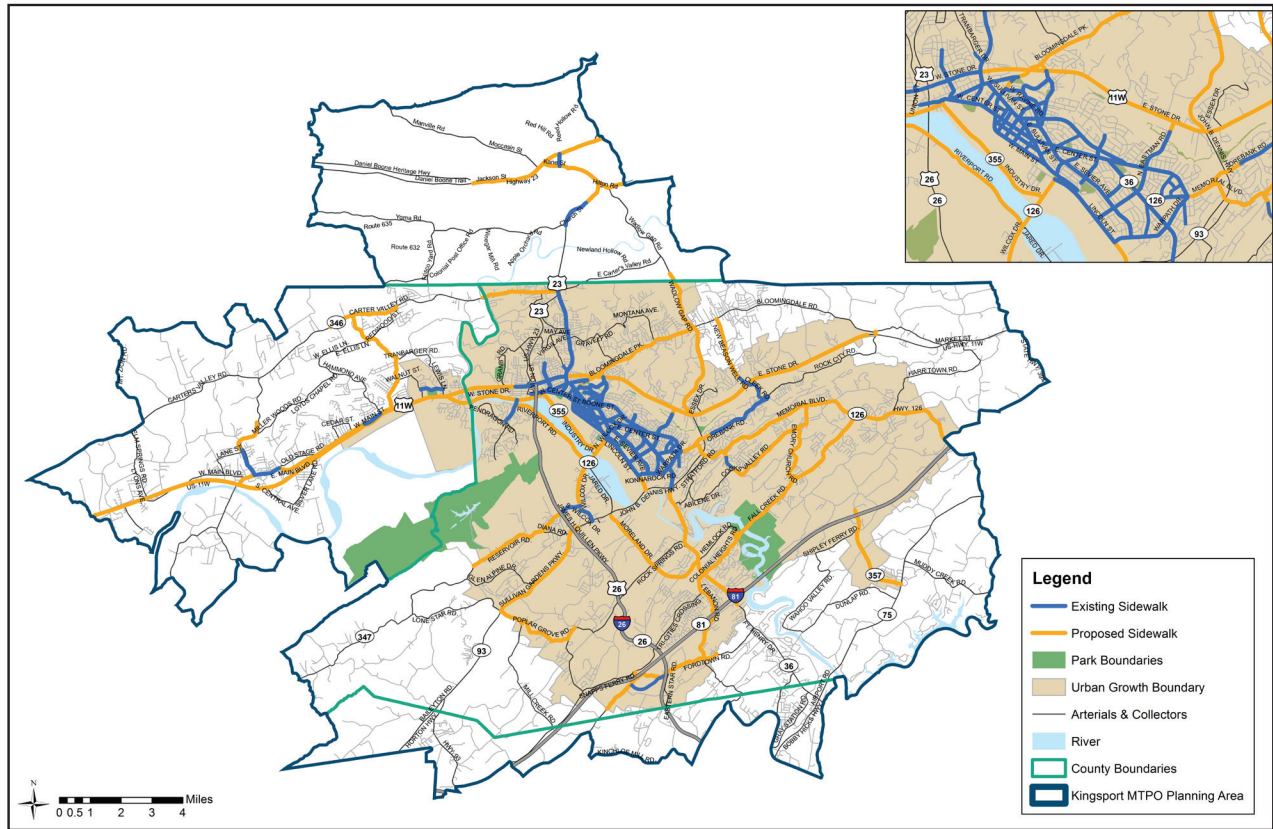
The Tri-Cities region CPHSTP outlines current service providers in the region for both rural and urban areas, identifies service gaps and unmet needs, and suggests short- and long-term strategies to address those needs. Among these needs are lack of available information and marketing for all services, insufficient connectivity or coverage between urbanized areas, urban centers, and rural areas, and the lack of funding to expand and maintain the existing transit services. Short-term strategies include:

- Enhancing planning activities and public education efforts to raise awareness of transit opportunities within the region.
- Exploring the development of a one-stop transportation call center to coordinate services.
- Reviewing service routes and expanding service to key activity centers currently underserved or not served by transit, paratransit, or service agencies.
- Evaluating current accessibility to transit stops and identify ways to improve first-mile and last mile connections.
- Expanding service hours to include weekday early morning and evening service.
- Expanding service hours to include weekend service.
- Identifying funding opportunities for capital improvements or service expansion.
- Identifying funding opportunities to purchase technology systems to improve operations and customer service.

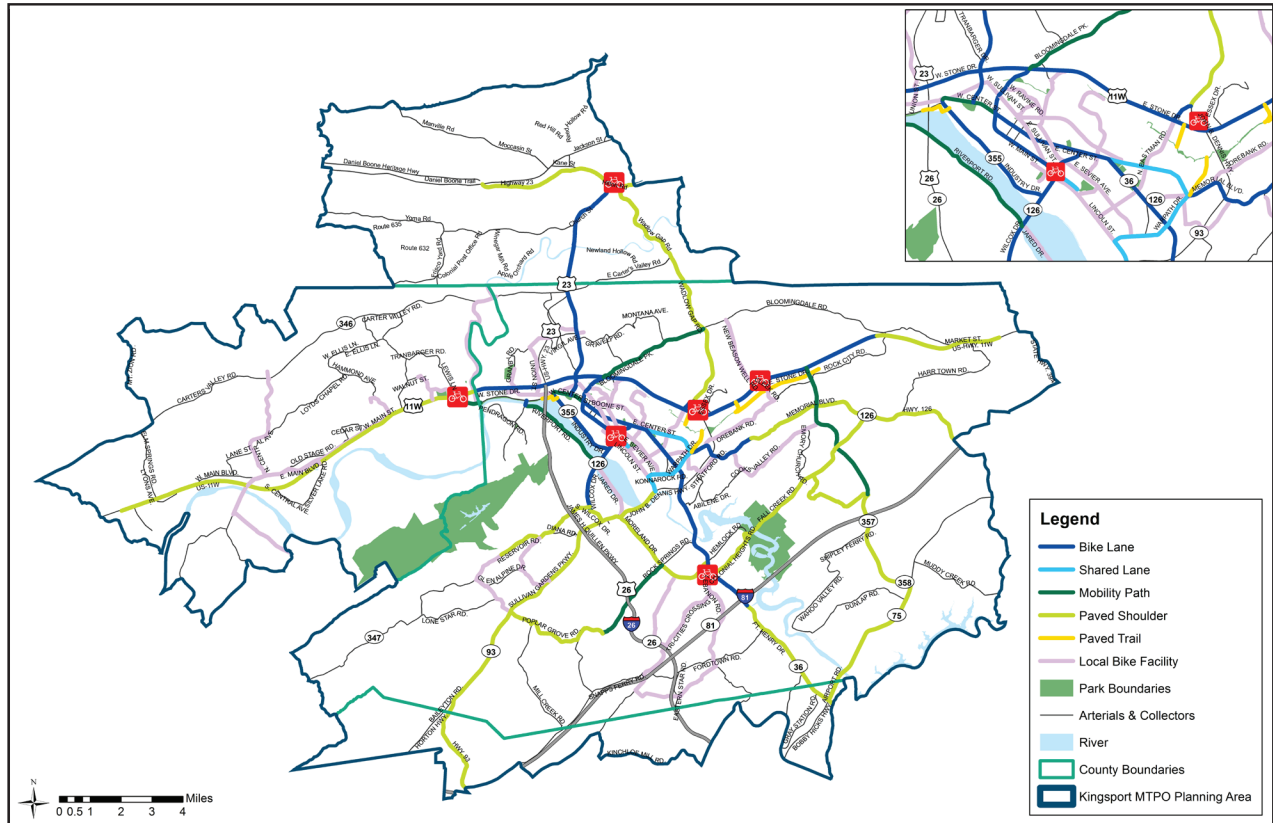


# ADDITIONAL PLAN INSIGHTS

## PROPOSED PEDESTRIAN NETWORK



## PROPOSED BICYCLE NETWORK





# ADDITIONAL PLAN INSIGHTS

## INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

ITS refers to use of technological innovation to manage the existing transportation system more effectively, improve its efficiency, and to make the system more user friendly. A wide variety of ITS technologies are under development or are being used in cities and towns throughout the U.S. and internationally, ranging from motorist message signs to automatic vehicle locator (AVL) systems on transit vehicles.

In order to be eligible for federal transportation funding, regions must show that their ITS projects conform to their Regional ITS Architecture. A Regional ITS Architecture is developed in order to identify the types of ITS services that are planned for implementation in the region. The most recent Kingsport Regional Intelligent Transportation System (KRITS) Architecture was completed in 2017 to organize the implementation of ITS technologies in the Kingsport region. The following table lists the ITS project recommendations from the KRITS Architecture for the Kingsport area.

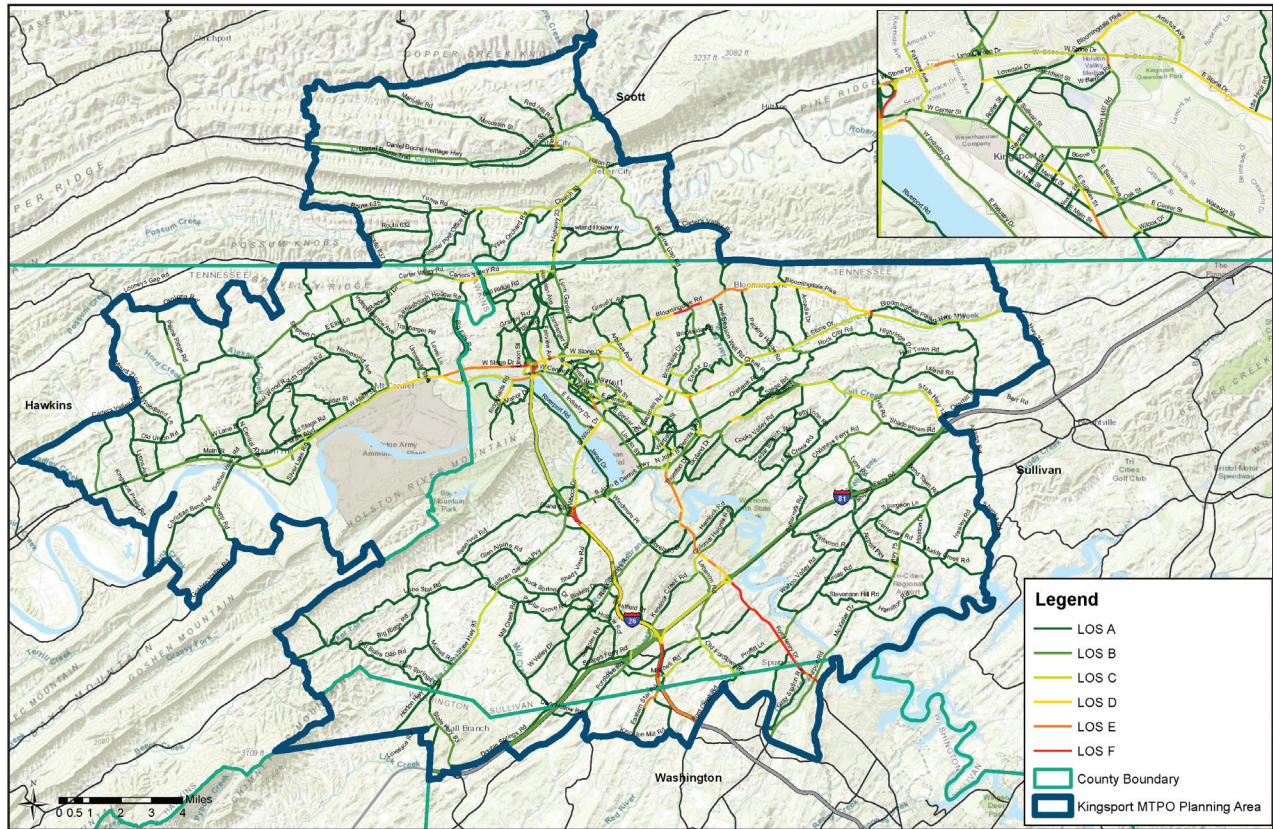
ITS PROJECTS	
TDOT/VDOT Combined Regional Traffic Management Center (TMC)	City of Kingsport Fire and EMS AVL and MDTs
TDOT HELP Vehicle Service Area Expansion	City of Kingsport Emergency Vehicle Signal Preemption
TDOT SmartWay Installation on I-26	City of Kingsport DMS
CCTV Camera Expansion	City of Kingsport Railroad Grade Crossing Improvements
TDOT Active ITS Access for Local Governments	City of Kingsport TOC Coordination with Kingsport 911
TDOT Weather Detection	City of Kingsport Public Works Department Vehicle AVL
TDOT Overheight Detection	City of Kingsport Flood Detection and Warning System
TDOT Variable Speed Limits	Municipal Railroad Grade Crossing Improvements
TDOT and THP Colocation	City of Mt Carmel Speed Monitoring System
TDOT Smart Work Zones	Sullivan Co. 911 Dispatch & EOC CCTV Camera Image Sharing
VDOT DMS on US-23 and SR-224	Kingsport Area Transit Service AVL
VDOT Highway Advisory Radio	Kingsport Area Transit Service Real-time Bus Arrival Information
VDOT CCTV Cameras	Kingsport Area Transit Service Electronic Fare Collection
VDOT Signal Controllers	Kingsport Area Transit Service Automatic Passenger Counters
VDOT Emergency Vehicle Preemption	Kingsport Area Transit Service On-Board Security Monitoring
VDOT Snow Plow Vehicle Location	Kingsport Area Transit Service Security Monitoring
VDOT Drone Network Surveillance	Kingsport Area Transit Service Signal Priority
City of Kingsport TOC Upgrades	MEOC Transit AVL and MDTs
City of Kingsport Signal System Communications	MEOC Transit On-Board Security Monitoring
City of Kingsport Ramp Queue Detection and Signal Preemption	Kingsport MPO Archive Data Warehouse
City of Kingsport Speed Monitoring System	Kingsport Regional Roadway Service Patrol
City of Kingsport CCTV Cameras	School Bus AVL
City of Kingsport TOC Coordination (TDOT Region TMC & VDOT TOC)	



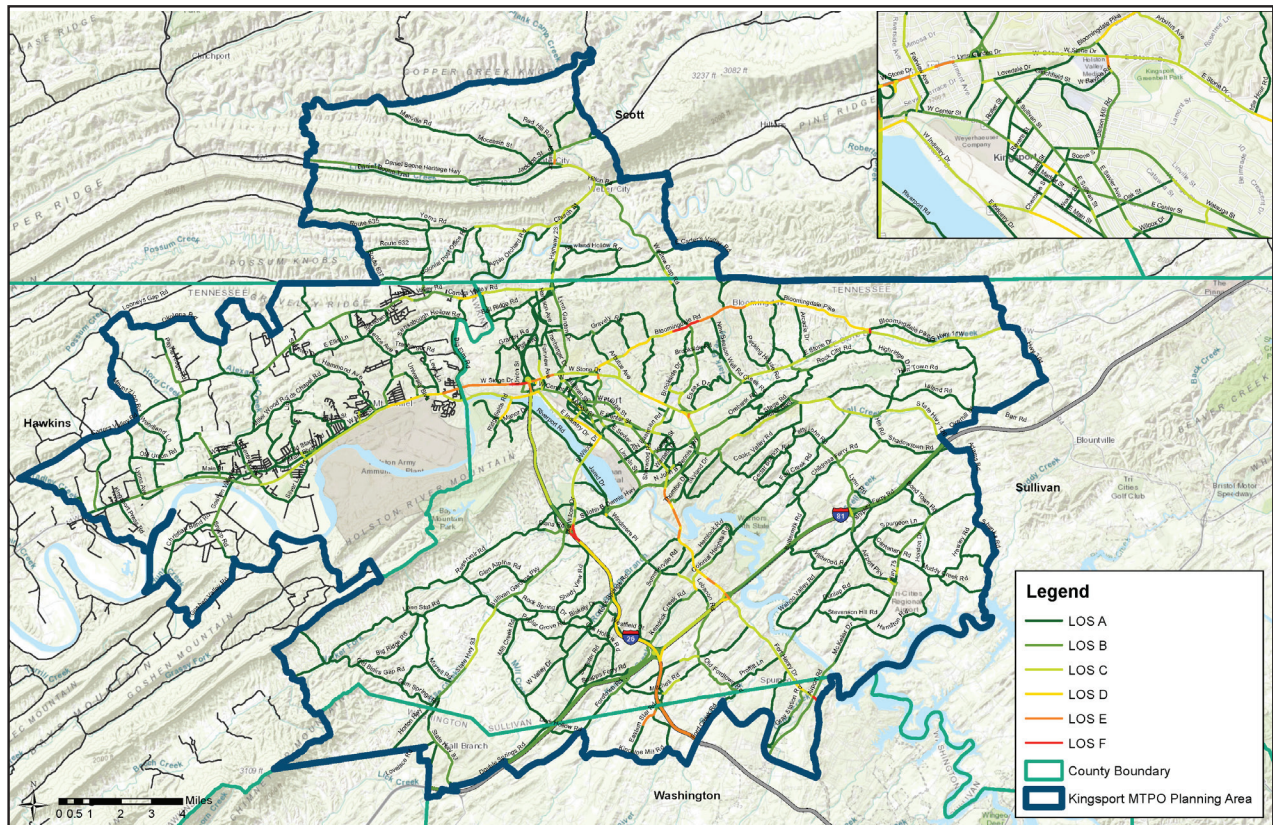


# ADDITIONAL PLAN INSIGHTS

## 2040 LEVEL OF SERVICE - WITHOUT ADDITIONAL ROADWAY IMPROVEMENTS



## 2040 LEVEL OF SERVICE - COST FEASIBLE PLAN





# ADDITIONAL PLAN INSIGHTS

## 2040 STREETS & HIGHWAYS CAPITAL FUNDING

Capital Funding - Tennessee							
Revenue Source	Annual Average*				Revenue Projections		
Tennessee Revenue Sources	Federal Share	Non-Federal Share	Total	Inflation Factor **	2025 Horizon Year	2040 Horizon Year	Total 2015-2040
National Highway Performance Program (NHPP) (80%/20%)	\$ 2,200,000	\$ 550,000	\$ 2,750,000	1.03	\$ 36,278,000	\$ 72,923,000	\$ 109,201,000
Surface Transportation Block Grant Program (S-STBG) Funds State Selected Projects (80%/20%)	\$ 1,300,000	\$ 325,000	\$ 1,625,000	1.03	\$ 21,437,000	\$ 43,091,000	\$ 64,528,000
Safety Funding (90%/10%)	\$ 450,000	\$ 50,000	\$ 500,000	1.03	\$ 6,596,000	\$ 13,259,000	\$ 19,855,000
Bridge Rehabilitation & Replacement (BRR or BR) (80%/20%)	\$ 455,000	\$ 113,750	\$ 568,750	1.03	\$ 7,503,000	\$ 15,082,000	\$ 22,585,000
Surface Transportation Block Grant Program (L-STBG) Funds MPO Selected Projects (80%/20%)	\$ 1,400,000	\$ 350,000	\$ 1,750,000	1.03	\$ 23,086,000	\$ 46,406,000	\$ 69,492,000
Enhancement Funds (EHN, TAP, or RTP) (80%/20%)	\$ 200,000	\$ 50,000	\$ 250,000	1.03	\$ 3,298,000	\$ 6,629,000	\$ 9,927,000
Other Federal-Aid Programs & Discretionary Funds (e.g. APD, ARRA, TIGER, NHFP) (80%/20%)	\$ 320,000	\$ 80,000	\$ 400,000	1.03	\$ 5,277,000	\$ 10,607,000	\$ 15,884,000
State Funds (STA or SP and SPPR) (100% State)		\$ 400,000	\$ 400,000	1.03	\$ 5,277,000	\$ 10,607,000	\$ 15,884,000
City of Kingsport, TN (100% Local)		\$ 1,800,000	\$ 1,800,000	1.03	\$ 23,746,000	\$ 47,732,000	\$ 71,478,000
Sullivan County, TN (100% Local)		\$ 190,000	\$ 190,000	1.03	\$ 2,506,000	\$ 5,038,000	\$ 7,544,000
Town of Mt Carmel TN (100% Local)		\$ 14,000	\$ 14,000	1.03	\$ 185,000	\$ 371,000	\$ 556,000
City of Church Hill, TN (100% Local)		\$ 58,000	\$ 58,000	1.03	\$ 765,000	\$ 1,538,000	\$ 2,303,000
Hawkins County, TN (100% Local)		\$ 65,000	\$ 65,000	1.03	\$ 857,000	\$ 1,724,000	\$ 2,581,000
<b>Sub-Total (TN)</b>	<b>\$ 6,325,000</b>	<b>\$ 4,045,750</b>	<b>\$ 10,370,750</b>		<b>\$ 136,811,000</b>	<b>\$ 275,007,000</b>	<b>\$ 411,818,000</b>

\* Based on a review of historic funding levels to the MTPO region.

\*\* Revenue forecasts assume a 3 percent annual growth rate of funding.

Projections rounded to the nearest thousands

Capital Funding - Virginia							
Revenue Source	Annual Average*				Revenue Projections		
Virginia Revenue Sources	Federal Share	Non-Federal Share	Total	Inflation Factor**	2025 Horizon Year	2040 Horizon Year	Total 2015 - 2040
Interstate, Primary, Secondary, and Statewide Construction***	\$ 1,191,040	\$ 297,760	\$ 1,488,800		\$ 25,690,000	\$ 11,530,000	\$ 37,220,000
Gate City, VA (100% Local)		\$ -	\$ -		\$ -	\$ -	\$ -
Weber City, VA (100% Local)		\$ -	\$ -		\$ -	\$ -	\$ -
<b>Sub-Total (VA)</b>	<b>\$ 1,191,040</b>	<b>\$ 297,760</b>	<b>\$ 1,488,800</b>		<b>\$ 25,690,000</b>	<b>\$ 11,530,000</b>	<b>\$ 37,220,000</b>

\* Annual Average figures are presented for illustrative purposes only. Figures are presented to illustrate a hypothetical annual amount of revenues and share splits to the MTPO area. Actual annual projections are reflected in the Revenue Projections provided to the MTPO by VDOT.

\*\* Revenue forecasts are derived from VDOT's Financial Planning Division, Assumptions - Constrained Long Range Plan documentation (October 2015)

\*\*\* VDOT manages highway revenues through a variety of Construction Programs (Interstate, Primary, Secondary, Statewide, etc.). Through these Programs Virginia revenues (state and federal revenues) are allocated. The following revenues are reflected in these Construction Programs and assumed available to the MTPO area: Bridge Replacement/Rehabilitation (BR/BROS), Interstate Maintenance (IM), National Highway Systems (NHS), National Highway Performance Program (NHPP) Hazard Elimination (HSIP), Surface Transportation Block Grant (STBG), Transportation Alternative Program/Enhancement (TAP/EN), High Priority Projects (HPP), Appalachian Development (APD), Federal Demonstration (DEMO), Safe Routes to School (SRS), High Priority Development (HPD), Intelligent Technology Systems (ITS), Regional STP (RSTP), and Equity Bonus/Minimum Guarantee (EB/MG)

Projections rounded to the nearest thousands

# NEXT STEPS AND CONTACT INFO

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With the inclusion of projects in the fiscally-constrained portion of the LRTP, they can move forward in the project-development process. The next step for a project is to be included for funding in the MTPO's 4-year Transportation Improvement Program (TIP). Once this occurs, the project development process can be carried out including preliminary engineering, environmental analysis, final design, and ultimately construction.

For questions about the MTPO or the LRTP, please contact the MTPO at:

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