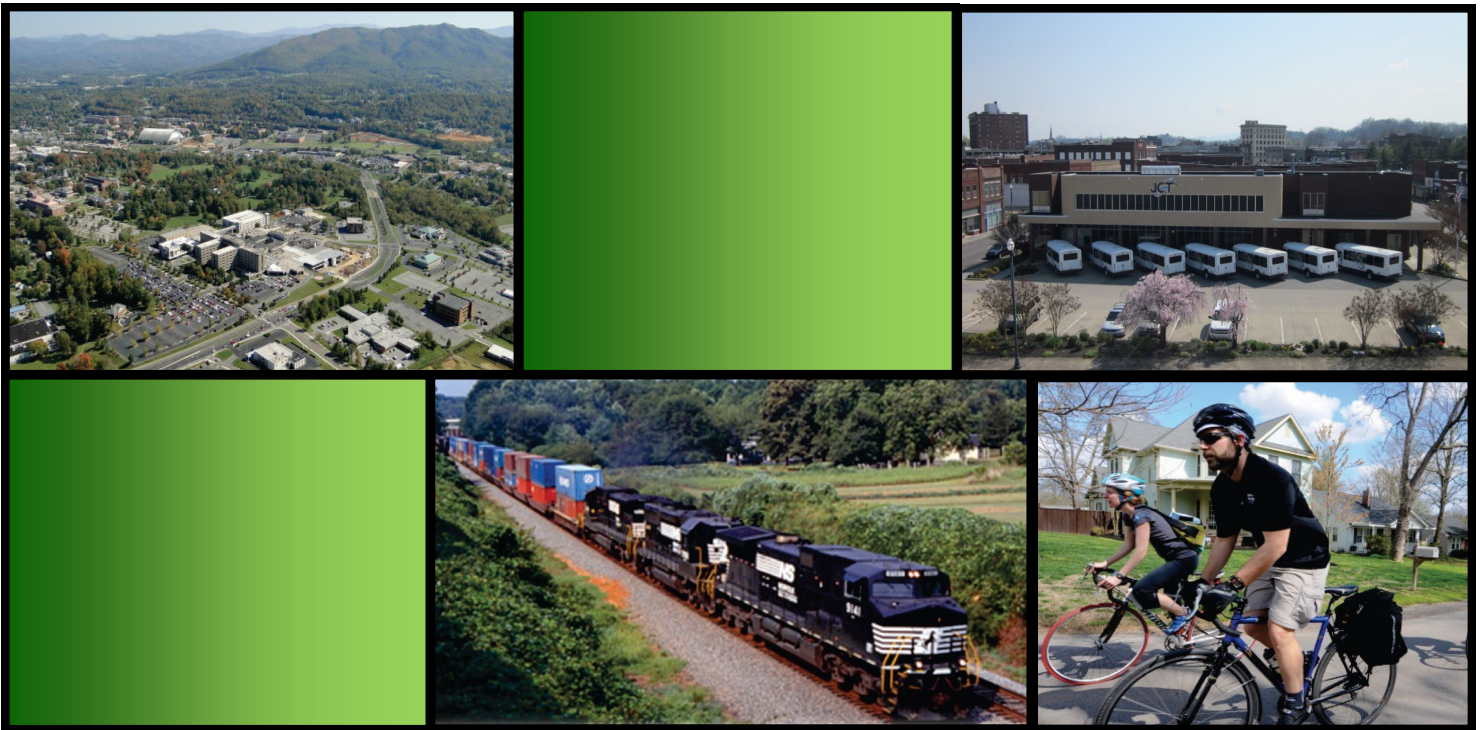


2040 Long Range Transportation Plan Executive Summary

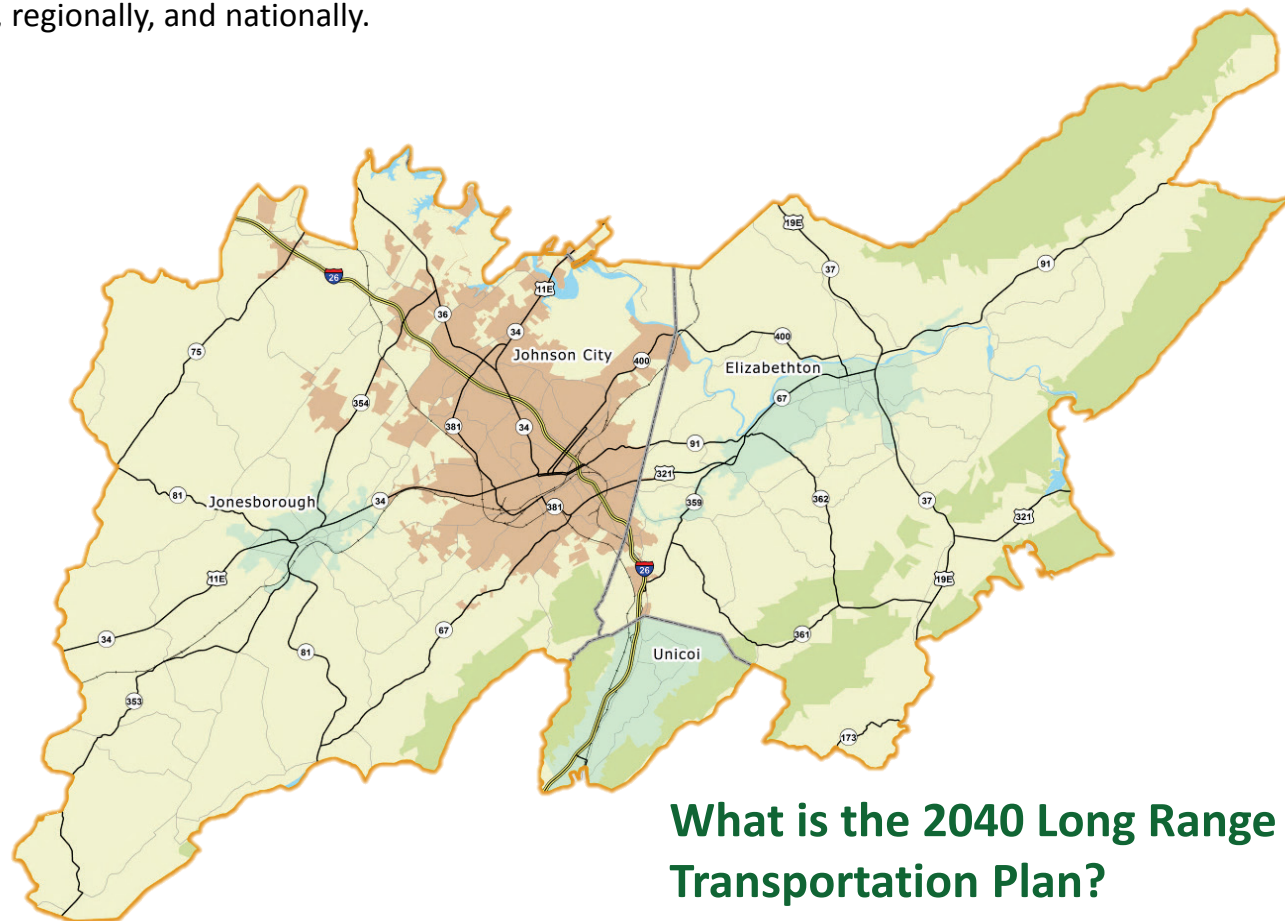


March 2013

The Johnson City Metropolitan Transportation Planning Organization (MTPO)

Introduction

The Johnson City region is situated near the borders of northeastern Tennessee and northwestern North Carolina in an area commonly referred to as the Tri-Cities region. The region's transportation system includes a diverse network of streets and highways, public transportation, walkways and bikeways, airports, and railroads. All of these transportation elements comprise the transportation system within the region and provide for the movement of people and goods which are important locally, regionally, and nationally.



Regional Transportation Planning

While the Johnson City region has a long history of planning dating back to 1927 with the creation of a General Plan for the City of Johnson City by the renowned John Nolen, regional transportation planning did not emerge until the 1980s. Since that time local, state, and federal agencies have taken a coordinated, cooperative, comprehensive approach to planning and providing transportation solutions within the Johnson City region.

What is the 2040 Long Range Transportation Plan?

The Johnson City Metropolitan Transportation Planning Organization (MTPO) is the governing entity that is charged with carrying out the transportation planning process for the Johnson City Urbanized Area. The planning area of the Johnson City MTPO consists of portions of Washington, Carter, and Unicoi counties and the municipalities of Elizabethton, Jonesborough, Johnson City, and Unicoi.

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.

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Federal legislation provides the guiding framework that governs the transportation planning process for all metropolitan planning organizations including the Johnson City MTPO. On July 6, 2012 a new federal transportation bill was signed into law, Moving Ahead for Progress in the 21st Century Act (MAP-21), replacing the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005.

As with SAFETEA-LU, MAP-21 requires that each metropolitan planning organization develop a transportation plan with at least a 20-year horizon of both long-range and short-range strategies/actions. The plan is intended to lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

The 2040 LRTP for the Johnson City MTPO area reflects compliance of the federal requirements of MAP-21 as well as other federal requirements. Throughout the 2040 LRTP, data and analysis are presented illustrating consideration of and compliance with these requirements.

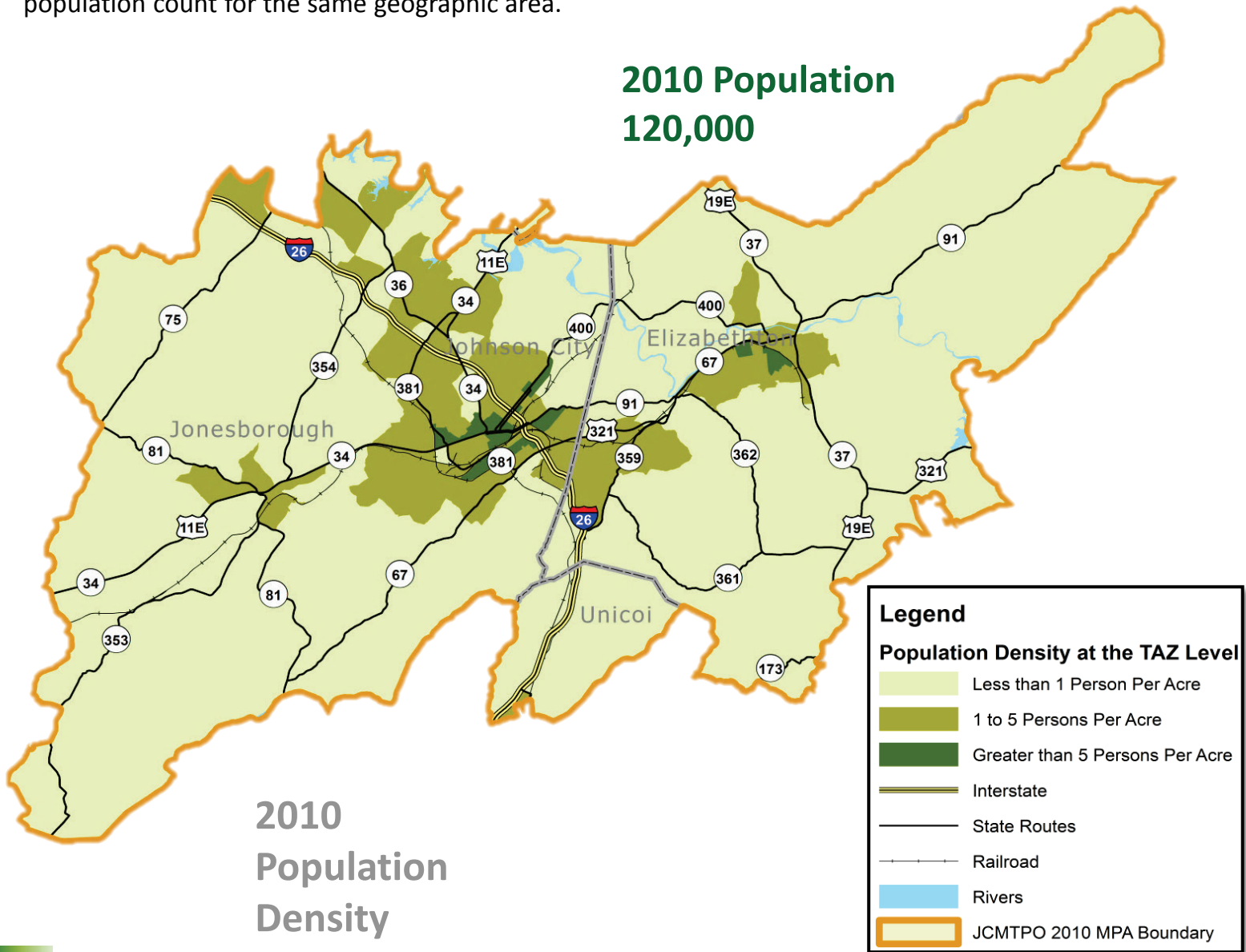


The Johnson City Metropolitan Transportation Planning Organization (MTPO) is the governing entity that is charged with carrying out this process for the Johnson City Urbanized Area. The planning area of the Johnson City MTPO consists of Elizabethton, Jonesborough, Johnson City, a small portion of the Town of Unicoi, and portions of Carter, Unicoi, and Washington Counties.

Regional Trends

Since 1982, when the Johnson City area was first designated by the federal government as a metropolitan area, the region has experienced steady population and employment growth and has seen a shift in its employment base from largely manufacturing to one of service and retail.

The total population of the MTPO area in 2010 was 120,000. By 2040, the MTPO's planning area is projected to have 197,000 persons, which is a 25 percent increase over the 2010 population count for the same geographic area.

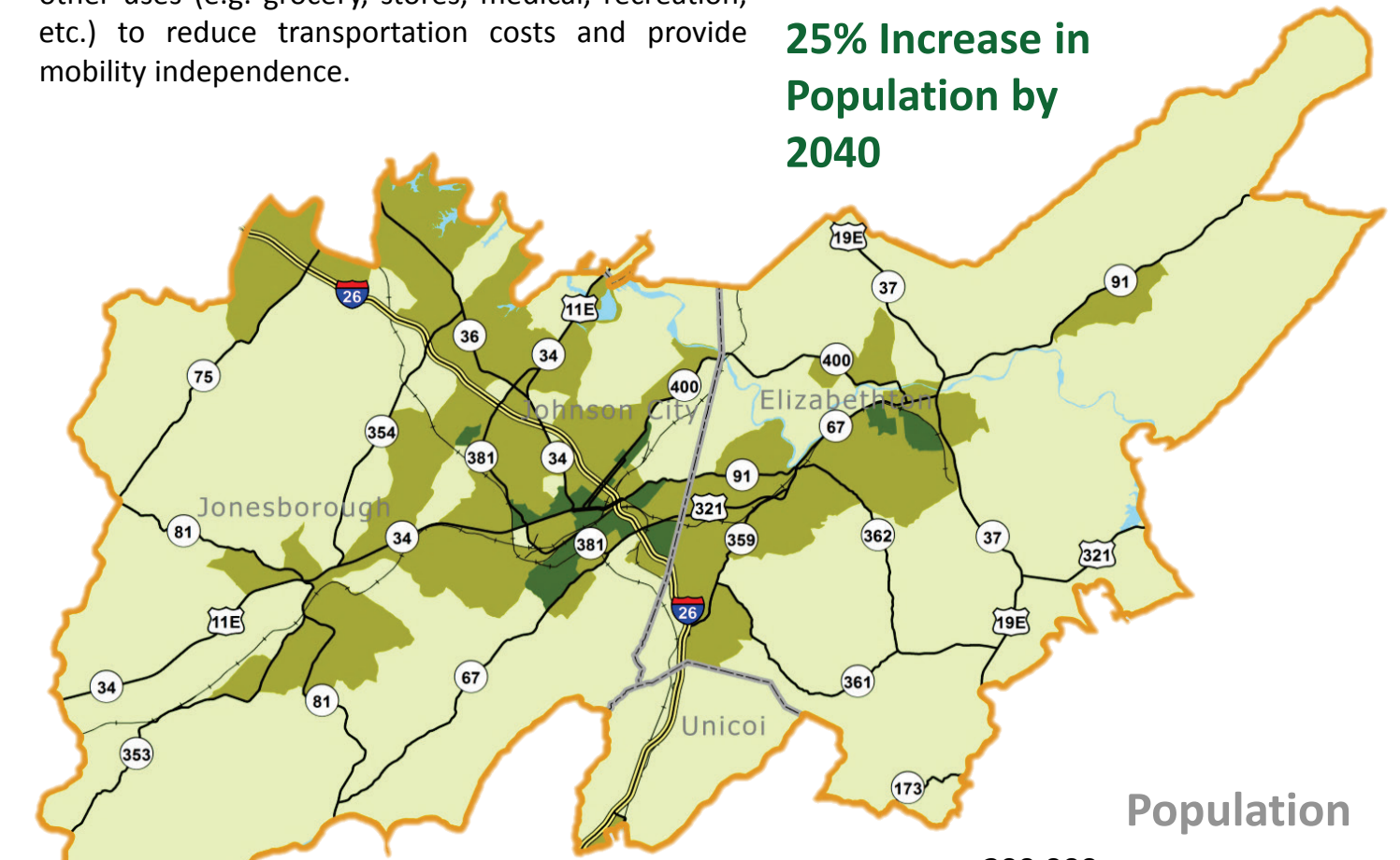


Another change in the region has been an increase in the percent of persons over the age of 65, a trend that is occurring nationally as more Americans are living longer. In the 1970s, less than 10 percent of the population within the MTPO was over 65 years of age. Today, nearly 16 percent of the population is over the age of 65, and that trend is projected to increase to nearly 20 percent by the year 2040.

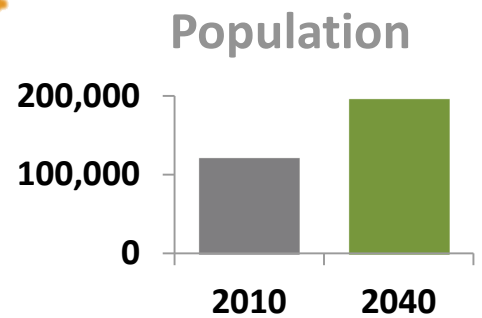
Providing transportation options within the region will require higher levels of investments in transit services, walking, and biking over time in meeting the needs of this growing population group. Equally important will be housing placement in relation to other uses (e.g. grocery, stores, medical, recreation, etc.) to reduce transportation costs and provide mobility independence.



25% Increase in Population by 2040



2040
Population
Density

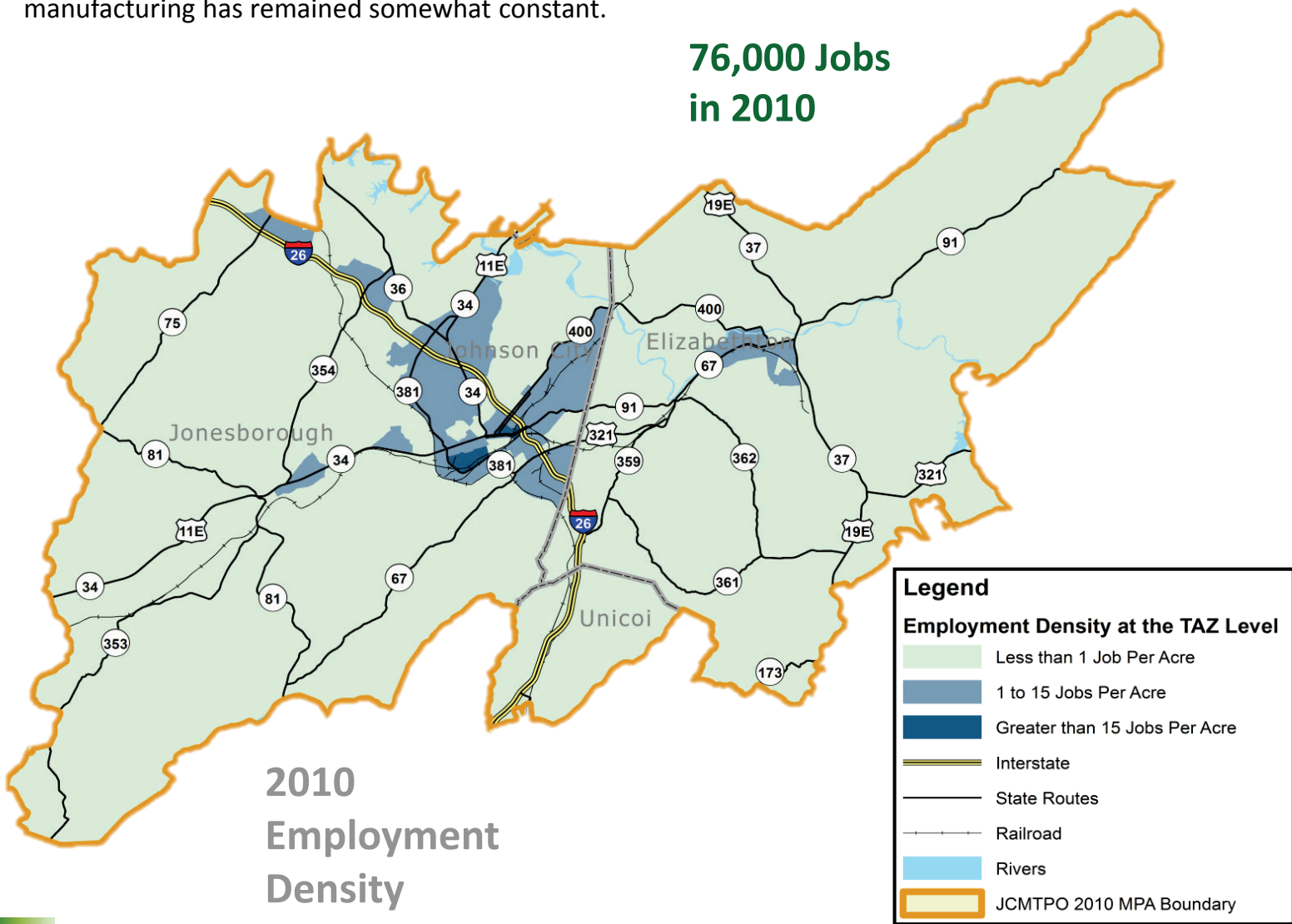


Employment conditions within the MTPO area, much like in many communities in the Southeast, have seen dramatic changes over the last several decades relative to the number of jobs and types of jobs, which make up the local economy.

In the 1970s and 1980s, employment in the region was largely dominated by manufacturing jobs. Since that time, the region, much like the rest of the country, has seen a leveling off of manufacturing employment. Today, service sector employment (which consists of professional, technical, health, education, government, and finance) accounts for 60 percent of the jobs within the MTPO area while manufacturing has remained somewhat constant.



**76,000 Jobs
in 2010**

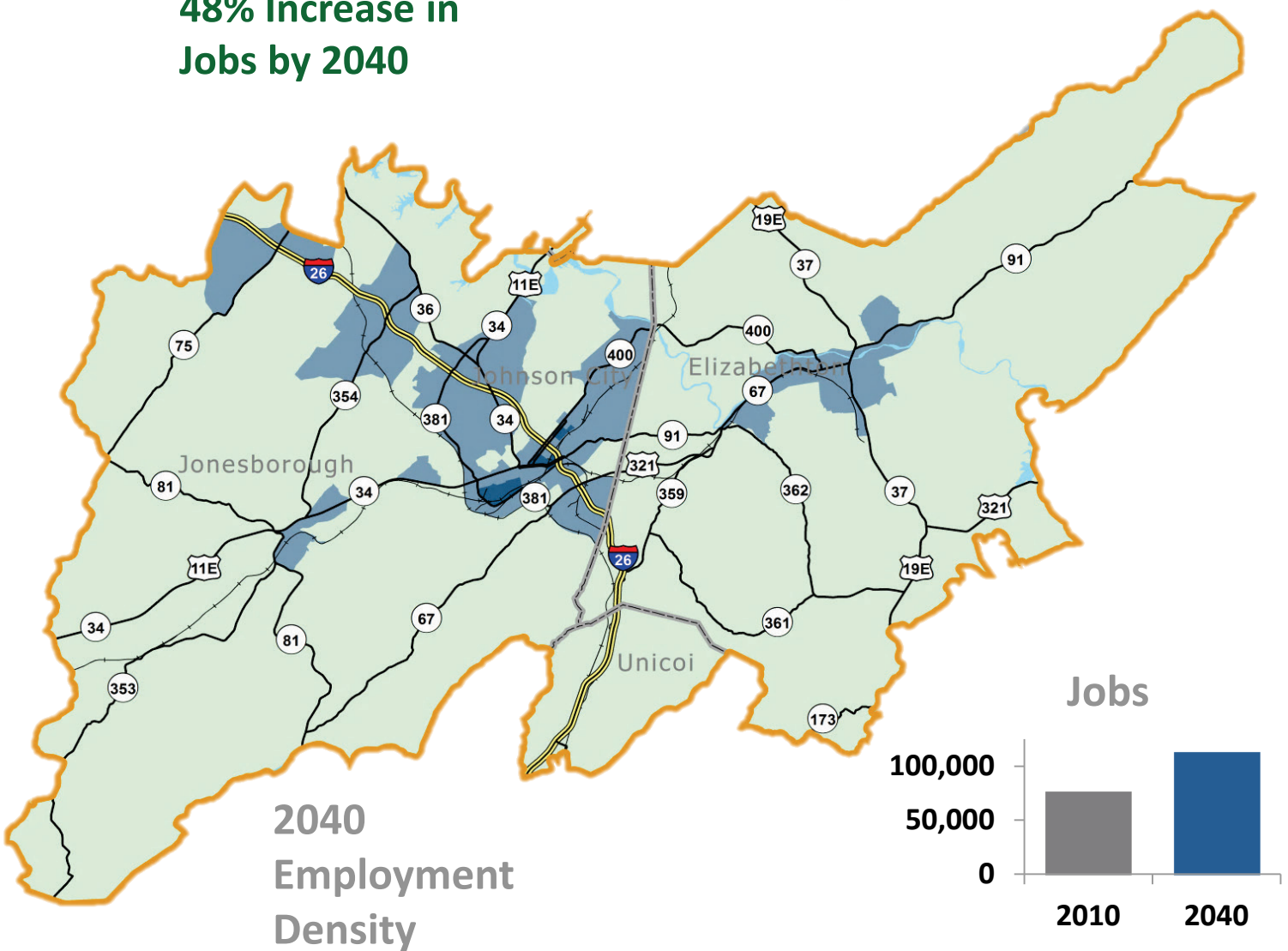


While manufacturing is no longer the leading employment sector in the region, the MTPO area and the region have continued to see positive employment growth in retail and service, specifically medical employment.

By 2040, employment in the region is projected to reach 113,000 (adding 37,000 new jobs to the region).



48% Increase in Jobs by 2040



Public & Stakeholder Participation

Public and stakeholder input are critical components of the MTPO planning process and played a key role in the development of the 2040 LRTP.

The primary means of engagement largely consisted of presentations to civic and community organizations, the use of an online survey, and internet and social media outreach.

Community & Civic Meetings

A number presentations were made throughout the region to various community and civic organizations on the development of the 2040 LRTP. In addition to information being shared on the update of the plan, participants at these meetings were encouraged to share their thoughts and opinions on transportation needs in the region.



Online Public Survey

In developing the 2040 LRTP, an online survey was created in order to afford individuals an additional opportunity to share their thoughts and opinions on transportation needs within the region.

Key Survey Findings

- Nearly 90% of survey respondents feel congestion on roadways in the region has become worse in the last five years
- Increased maintenance of existing facilities and improved roadway safety were listed as top priorities followed by reduced congestion and delay
- Top ranked transportation solutions included:
 - Improved signal timing
 - Improved roadway pavement & bridge conditions
 - Improved roadway safety
 - Improved security at bus stops/on the bus
 - Improved connections to bus stops
 - Increased emphasis on pedestrian and bicycle accommodations



Regional Goals

To guide future transportation investments in the region four guiding goals were established as part of the 2040 LRTP.

- Reduce Traffic Congestion along Major Routes of the MTP0 Area
- Promote Economic Growth and Livability by Enhancing the Transportation System for the MTP0 Area
- Enhance Regional Access to and from the MTP0 Area
- Improve Safety and Security throughout the Transportation System of the MTP0 Area

For each of the goals, a corresponding set of objectives were established to help the region move closer to the intended goal.



In moving the region closer to its intended goals the MTPO will:

- Reduce travel delays between major areas of attractions in the MTPO study area
- Seek cost-effective management solutions and new technologies as a means of addressing congestion, reducing transportation delay, and improving system operations
- Increase transit and other transportation demand management opportunities
- Enhance the flow of raw materials and manufactured products
- Maintain what we have – take a “state of good repair” approach to our community’s transportation assets
- Remove obstacles to economic growth through improved transportation facilities and the integration and connectivity of the transportation system, across and between modes, for people and freight thus allowing for the continued expansion of the business community
- Promote alternative forms of transportation (such as walking, biking, and transit) where possible



- Seek improvement options and strategies which minimize adverse impacts to historical, social, cultural, and natural environments and promote reductions in transportation-related GHG emissions
- Maintain and improve access to regional areas outside of the MTPO study area
- Support transportation investments and policies that work to create jobs and improve access to people, places, and goods while embracing access management and corridor management strategies that preserve the long-term functionality of a roadway’s capacity and safety
- Strategically target transportation investments to areas supportive and conducive to growth and redevelopment initiatives
- Encourage partnerships with other transportation and non-transportation agencies to enhance transportation safety and security
- Reduce secondary traffic accidents
- Establish initiatives (projects and programs) to improve the safety and security of vulnerable roadway users (e.g. pedestrians, cyclists, transit riders, and the young and old)



Funding & Costs

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.

Revenue forecasts were developed for streets and highways and public transit based on historical and existing funding levels and anticipated inflationary factors. Historic funding trends for streets and highways operations and maintenance and capital investments from current funding sources indicate an availability of \$1.1 billion for operating/maintenance funds and \$538 million for capital investments over the planning horizon. Historic funding trends for transit operating assistance and capital investments from all transit related funding sources indicate an availability of \$118 million for operating assistance and \$30 million for capital investments over the planning horizon.

Project improvements were evaluated and fiscal considerations were applied. From this assessment, a Cost Feasible 2040 LRTP was developed. The 2040 LRTP includes 34 specific transportation project improvements and 3 funding programs. In addition to these capital improvements the 2040 LRTP forecasted needed operation and maintenance costs and accounted for necessary funding for continued maintenance of the transportation system including transit operations.

Significant aspects of the 2040 LRTP include funding for:

- 23 Road Projects (\$390 Million)
(Widenings, New Roadways, and Reconstruction Projects)
- 8 Road Safety Projects (\$49 Million)
- 3 Transportation Systems Management (TSM) Projects (\$27 Million)
(Signals, Intersections, Interchanges, & Intelligent Transportation System (ITS) Projects)
- TSM, ITS, Safety & Bridge Program (\$37 Million) for additional operational, safety, and bridge projects
- Transportation Alternatives Program (\$31 Million) for walking & biking projects
- Transit Program (\$30 Million) for transit capital needs



How are projects ultimately funded?

Implementation of project recommendations from the 2040 LRTP occurs through the programming of transportation improvements on an annual and semi-annual basis. For projects within the MTPo area that are federally or state funded, the MTPo, in consultation with the appropriate city, county, and state transportation agency determines which projects are to be advanced from the 2040 LRTP into the MTPo's four-year transportation improvement program (TIP). Funds are allocated to the project once it is included in the TIP, and then the project is undertaken.



Recommended Improvements

The following presents the recommended planned improvements for the Johnson City MTPo area over the next 27 years as part of the 2040 LRTP. Needed transportation improvements were identified based on a review of previous planning efforts, agency involvement, citizen and stakeholder input, and results from the MTPo's regional travel demand model. Each transportation recommendation was evaluated based on the MTPo's established 2040 LRTP project assessment criteria and balanced against the MTPo's projected financial revenue availability.

Projects Underway

- Gap Creek Rd (SR 362) - From SR 67 to SR 361 (Reconstruct to 2/3 lanes)
- I-26 at Exit 13 Bobby Hicks Hwy (SR 75) (Interchange improvements)
- Johnson City ITS Project (Install ITS elements on select State Routes in Johnson City)
- Kingsport Hwy (SR 36) - From Boone Creek Rd (SR 354) to SR 75 (Widen to 5 lanes)
- Mountainview Rd at Browns Mill Rd (Construct roundabout)
- SR 381 at Indian Ridge Rd and Skyline Dr (Intersection & bridge improvements)
- SR 75 - From SR 36 to SR 357 (Widen to 5 lanes)
- I-26 at Exit 17 Boones Creek Rd (SR 354) (Interchange improvements)
- I-26 at Exit 24 University Pkwy (SR 67) (Interchange improvements)



- SR 81 at SR 353 & Depot St (Jonesborough Five Points Intersection) (Construct roundabout)
- SR 91 and SR 67 Signals - Judge Ben Allen Rd at SR 91; SR 67 at Williams Ave in Elizabethton (Intersection improvements)
- Traffic Signal Upgrades in Johnson City (Intersection/Signalization improvements at 10 locations in Johnson City)

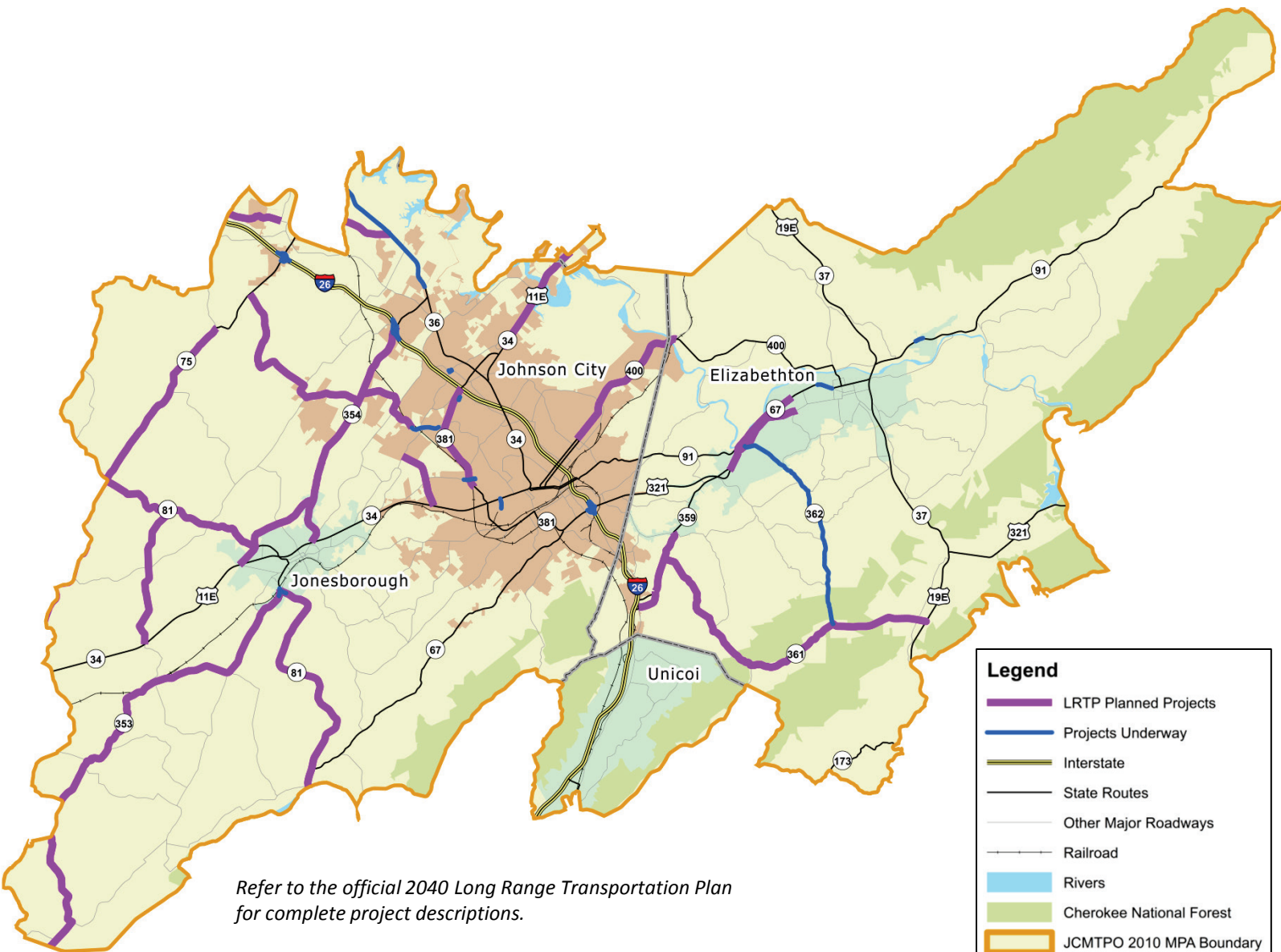
Planned Projects

By 2020

- Greenline Rd at Peoples St and Greenline Rd (Intersection improvements)
- Knob Creek Rd Extension – From West of Mizpah Hills Dr to Marketplace Blvd (Reconstruct to 5 lanes)
- SR 91 Extension (Elizabethton Connector) – From US 19E to US 321 (Reconstruct - add center turn lane along the 4-lane undivided portion of West Elk Ave from Holly Ln to North Roan St. Sidewalk improvements and repaving of SR 91 from West G St to SR 37/US 19E)
- VA Hospital Connector – From West Market St to VA Hospital (Construct new 2 lane road)
- W. G St – From W. Elk Ave (SR 67) to Hudson Dr (Reconstruct to 3 lanes)
- Bob Jobe Rd Extension – From Eastern Star Rd to Ford Creek Rd (Reconstruct 2 lane roadway)
- Bob Jobe Rd Extension – From Ford Creek Rd to Center St (Construct new 2 lane road)
- Highland Church – From SR 75 to Boones Creek Rd (SR 354) (Safety/geometric improvements)

2020-2030

- N. State of Franklin (SR 381) – From I-26 to Knob Creek Rd (Widen to 6 lanes)
- N. State of Franklin (SR 381) – From Knob Creek Rd to Indian Ridge Rd (Widen to 6 lanes)
- Elk Ave (SR 67) – From Milligan Hwy (SR 359) to Hudson Dr (Widen to 6 lanes)
- Knob Creek Rd – From Mizpath Hills Dr to Boones Creek Rd (SR 354) (Widen to 4 lanes)
- Watauga Rd (SR 400) – From Broadway St to E. Fairview Ave (Reconstruct to 3 lanes)
- Watauga Rd (SR 400) – From E. Fairview Ave to Piney Flats Rd (Reconstruct to 3 lanes)
- SR 75 – From Boonesboro Rd to US 11E (Safety/geometric improvements)
- SR 81 – From Jonesborough Parkway to I-81 (Safety/geometric improvements)



2030-2040

- Boones Creek Rd (SR 354) – From I-26 to Highland Church Rd (Widen to 4 lanes)
- Boones Creek Rd (SR 354) – From Highland Church Rd to Jonesborough Parkway (Widen to 4 lanes)
- Boones Creek Rd (SR 354) – From Jonesborough Parkway to US 11E (Widen to 4 lanes)
- Jonesborough Parkway – From Boones Creek Rd (SR 354) to US 11E (Construct new 3 lane road)
- Bristol Hwy (SR 34) – From N. State of Franklin (SR 381) to MTPO Planning Boundary (Widen to 6/7 lanes)
- Roy Martin Rd – From Gray Station Rd to Bobby Hicks Hwy (SR 75) (Reconstruct 2 lane roadway)
- Roy Martin Rd Extension – From Bobby Hicks Hwy (SR 75) to Free Hill Rd (Construct new 2 lane road)
- Free Hill Rd – From Free Hill Rd to Kingsport Hwy (SR 36) (Reconstruct 2 lane roadway)
- Hopper Rd – From W. Market St (US 11E) to Indian Ridge Rd (Reconstruct 2 lane roadway)
- Hopper Rd Extension – From Indian Ridge Rd to Claude Simmons Rd (Construct new 2 lane road)
- Okolona Rd (SR 359) – From I-26 to Existing Okolona Rd (SR 359) (Realign roadway with interchange)
- Leesburg Rd – From US 11E to SR 81 (Safety/geometric improvements)
- SR 353 – From SR 81 to SR 107 (Safety/geometric improvements)
- SR 81 – From SR 353 to I-26 (Safety/geometric improvements)
- SR 361 – From SR 359 to US 19E (Safety/geometric improvements)
- Okolona Rd (SR 359) – From Milligan Hwy (SR 359) to S. Roan St (Safety/geometric improvements)

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