Elizabethton, Tennessee

Transportation Plan

Updated March 5, 2024

Developed by the Elizabethton Planning Department

DRAFT



RESOLUTION SUPPORTING THE ELIZABETHTON, TENNESSEE TRANSPORTATION PLAN

WHEREAS, the Elizabethton Regional Planning Commission seeks to continually develop comprehensive plan elements which serve as guidelines for the maintenance and improvement of community public facilities and infrastructure, and

WHEREAS, the Elizabethton Regional Planning Commission has been given the authority to administer the subdivision regulations within the corporate boundaries of the City of Elizabethton, per Sections 13-4-201 through 203 and Sections 13-4-301 and 302, of the Tennessee Code Annotated (T.C.A.), and

WHEREAS, the citizens of Elizabethton are afforded a continuous process whereby the transportation network within the area is maintained in an efficient and orderly manner while plans for future growth in traffic volumes and land use are considered, and

WHEREAS, the City of Elizabethton seeks to establish a 20-year planning document known as the <u>Elizabethton, Tennessee Transportation Plan</u> whereby proposals for an area street and highway improvements are based on the functional use of those facilities as well as the development and growth of the community.

NOW, THEREFORE BE IT RESOLVED that the Elizabethton Regional Planning Commission does hereby adopt and endorse the contents and proposals of the Elizabethton, <u>Tennessee Transportation Plan</u>.

Secretary,

Date

Elizabethton Regional Planning Commission

Description	Page
Resolution	i
Table of Contents	ii
Introduction	1
Background History	1
Goals and Objectives	2
Regulations and Enforcement	6
Zoning Ordinance	6
Neighborhood Traffic Management Program	8
Subdivision Regulations	9
Street Types and Characteristics	9
Inventory and Analysis	13
Gateways of Elizabethton	14
Elizabethton Highway Entrance Overlay District	14
Potential Roadway Projects	17
Other Transportation Modes in Elizabethton	19
Greenways	19
Sidewalks	20
Bicycle Routes	20
Public Transportation	21
Elizabethton Municipal Airport	23
Level of Service (LOS)	24
Annual Average Daily Traffic (AADT) Counts	26
Crash Analysis	27
Recommendations	29
Summary	30
Appendix A. Street Functional Classification	31

INTRODUCTION

The Elizabethton, Tennessee Transportation Plan is primarily concerned with the City's roadway network that carries virtually all of the local movement of people and goods. The better the transportation system, the better it allows for the convenience, ease, and safety of movement of people, goods and services. This plan emphasizes connectivity and looks out to the year **2040** to guide infrastructure planning and construction.

The first section deals primarily with the major streets and roads within the City of Elizabethton and its Urban Growth Boundary. It identifies each major street within the study area as an Interstate (expressway), Arterial (Urban Principal or Urban Minor), Collector (Urban Major or Urban Minor), or as a Local Road. The functional street classification is based on the Tennessee Department of Transportation (TDOT) Functional Classification Maps <u>Functional Classification</u> <u>Maps (tn.gov)</u>, and information by the Johnson City Metropolitan Transportation Planning Organization (JCMTPO).

BACKGROUND HISTORY

Elizabethton is required by Tennessee state law, T.C.A. Section 13-3-301 through 304, 13-3-401 through 411, to develop a major street plan. Previous transportation plans done within the City of Elizabethton were the 1970 and the 1987 Major Thoroughfare Plans. Both of these documents are very much out of date, thus the rationale to do an update.

The Elizabethton Downtown Mobility Plan (2023) <u>Downtown Elizabethton Mobility Plan</u> <u>FINAL w Appendices and Resolution.pdf.</u>, created by WSP Associates, illustrated various multimodal improvements to the downtown area. This included making East E Street and East Elk Avenue bi-directional roadways instead of being one-way streets. This plan also shows sidewalk improvements, and adding bicycle lanes that would connect the Elizabethton Linear Trail to the Tweetsie Trail. It should be noted that the preparation of this plan has been financed in part by the Tennessee Department of Transportation's (TDOT) Transportation Planning Grant (TPG)

Program, which is made available by State Planning and Research funds through the Federal Highway Administration (FHWA), a division of the U.S. Department of Transportation (USDOT).

Elizabethton is within the JCMTPO urban area. One of the requirements by federal legislation of the MTPO is the development and maintenance of a Metropolitan Transportation Plan (MTP) for its region every five years. The current MTP was adopted on December 13, 2022 by the JCMTPO Executive Board. The Executive Summary of that document can be found here 2050MTPExecSummary_Final.pdf. The next MTP update will be in 2026. It should be noted that Elizabethton is a voting member of the JCMTPO. Whereas the MTP is done on a regional scale,

this document is to provide additional localized information pertaining to the transportation networks.

This <u>Transportation Plan</u> does not negate any zoning ordinances, the 2050 MTP, subdivision regulations, or any city codes of the City of Elizabethton. This plan is to help provide guidance for city officials as to how to improve the transportation network within Elizabethton. This may be accomplished by various improvement type projects.

Some examples of transportation improvement projects, but not limited to, are:

- 1. Street widening for functionally classified streets.
- 2. Sidewalks and Sidewalk ramp improvements to be brought up to the American Disability Act (ADA) requirements.
- 3. Road dieting or complete street development
- 4. Traffic signal timing coordination
- 5. Improved signage
- 6. Crosswalk striping and pedestrian traffic signals ("ped-heads")

The plan may need to be modified as future development occurs within the City in order to maintain an efficient and effective transportation network.

GOALS AND OBJECTIVES

The goals and objectives were developed early in the planning process. They act as guiding principles and reflect community values. The goals and objectives facilitate a proactive approach to address future transportation issues by outlining region's aspirations for the future. A good plan will allow the realization of these goals and objectives – hopefully improving the quality of life and standard of living for all, as well as improving accessibility and mobility for all citizens who use the region's transportation facilities.

Goal #1: Provide for an Efficient Transportation System

- a. Coordinate land use and transportation activities to ensure a compatible relationship.
- b. Preserve and maintain the existing transportation infrastructure.

Goal #2: Improve the Safety of the Transportation System

- a. Identify the most effective strategies for reducing crashes.
- b. Improve the relationship between motorized and non-motorized users by further developing the transportation network for bicycle and pedestrian uses.
- c. Support traffic safety education and traffic enforcement efforts.

Goal #3: Promote Security within the Transportation System

- a. Provide adequate demand response services.
- b. Identify critical facilities within the transportation system.
- c. Promote technologies, such as ITS, proper street lighting, or surveillance initiatives that increase security.

Goal #4: Maintain and Improve the Quality of the Natural Environment

- a. Implement transportation policies and programs that reduce vehicle emissions and the demand for energy.
- b. Increase mass transit ridership.

Goal #5: Improve Mobility of People and Freight

- a. Provide a multimodal transportation system that supports safe, efficient, and convenient travel options for the movement of people and goods.
- b. Reduce congestion and improve access to jobs, markets, and services.

Goal #6: Effectively Manage Financial Resources for the Transportation Network

- a. Consider cost (capital, operating, and maintenance) constraints in selecting the highest priority short and long range improvements and programs.
- b. Use existing transportation facilities and rights-of-way efficiently to provide improved levels of service at minimal capital cost.

Goal #7: Reduce Project Delivery Delays

- a. Utilize existing transportation facilities and rights-of-way effectively to provide improved levels of service at minimal capital cost.
- b. Coordinate land use and transportation activities to ensure a compatible relationship.
- c. Preserve and maintain the existing transportation infrastructure.
- d. Provide a multimodal transportation system that supports safe, efficient and convenient travel options for the movement of people and goods.

Goal #8: Promote Freight Movement and Economic Vitality

- a. Reduce congestion and improve access to jobs, markets and services.
- b. Consider cost (capital, operating, and maintenance) constraints in selecting the highest priority short and long range improvements and programs.

Goal #9: Support Environmental Sustainability

- a. Coordinate land use and transportation activities to ensure a compatible relationship.
- b. Preserve and maintain the existing transportation infrastructure.

c. Utilize existing transportation facilities and rights-of-way effectively to provide improved levels of service at minimal capital cost.

Goal #10: Promote System Reliability

- a. Preserve and maintain the existing transportation infrastructure.
- b. Promote technologies such as ITS, proper street lighting, and surveillance initiatives that increase security.
- c. Utilize existing transportation facilities and rights-of-way effectively to provide improved levels of service at minimal cost.

Goal #11: Reduce Congestion

- a. Reduce congestion and improve access to jobs, markets and services.
- b. Utilize existing transportation facilities and rights-of-way effectively to provide improved levels of service at minimal cost.
- c. Minimize on-street parking on major roadways.

Goal #12: Maintain Infrastructure Conditions

- a. Preserve and maintain the existing transportation infrastructure.
- b. Promote technologies such as ITS, proper street lighting, and surveillance initiatives that increase security.
- c. Consider cost (capital, operating, and maintenance) constraints in selecting the highest priority short and long range improvements and programs.
- d. Improve levels of service at minimal capital cost.

Since Elizabethton is part of the Johnson City MTPO (JCMTPO), below are the regional goals as stated in the JCMTPO 2050 MTP.

1. Improve Safety and Security throughout the MTPO Area Transportation System

- a. Reduce rates of crashes with serious injuries and fatalities.
- b. Reduce secondary traffic crashes.
- c. 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).
- d. Encourage partnerships with other transportation and non-transportation agencies to enhance transportation safety and security.
- e. Increase the transportation system's resilience to climate change and extreme weather.

2. Mitigate Traffic Congestion along Major Routes in the MTPO Area.

- a. Reduce travel delays between major areas of attractions in the MTPO study area.
- b. Seek cost-effective management solutions and new technologies as a means of addressing congestion, reducing transportation delay, improving travel time reliability, and improving system operations.
- c. Increase transit and other transportation demand management strategies.
- d. Enhance the flow of raw materials and manufactured products.

3. Promote Sustainable Economic Growth and Livability by Enhancing the MTPO Area Transportation System

- a. Maintain what we have take a "state of good repair" approach to our community's transportation assets.
- b. Invest in the integration and connectivity of the transportation system, across and between modes, for people and freight, to support sustainable economic development and improve quality of life.
- c. Promote alternative forms of transportation (such as walking, biking, and transit).
- d. Support transportation investments which minimize adverse impacts of surface transportation to historical, social, cultural, and natural environments, including stormwater impacts, and reduce transportation impacts on air-quality.

4. Enhance Regional Access to and from the MTPO Area

- a. Maintain and improve access to regional areas outside of the MTPO study area.
- b. Support transportation investments and policies that work to create jobs and improve access to people, tourism, places, and goods while embracing access management and corridor management strategies that preserve the long-term functionality of a roadway's capacity and safety.
- c. Strategically target transportation investments to areas supportive of and conducive to growth and redevelopment initiatives.

REGULATIONS AND ENFORCEMENT

ZONING ORDINANCE

14-207. Obstruction of vision at street intersections prohibited. In all districts except the B-3 (Central) Business District, no fence, wall, shrubbery, or other obstruction to vision between the

height of three (3) feet above the street grade shall be permitted within twenty (20) feet of the intersection of the right-of-way of streets, or of the intersection of streets and driveways. (1982 Code, § 11-207, as amended by Ord. #35-15, Nov. 1999)

14-208. Off-street automobile parking. Off-street automobile parking space shall be provided on every lot on which any of the following uses are hereinafter established, except in the B-3 (Central) Business District. The number of automobile parking spaces provided shall be at least as great as the ^ Should private off-street parking be desired in the B-3 (Central) Business District, such parking shall be located to the rear of the structure on the lot. (Ord. 50-7) 14-14 numbers specified below for various uses. Each space shall be at least nine (9) feet wide and eighteen (18) feet long and shall have vehicular access to a public street. Turning space shall be provided so that no vehicle will be required to back into the street. (1) Automobile repair garages. One space for each regular employee plus one space for each 250 square feet of floor space used for repair work. (2) Churches. One space for each four (4) seats. (3) Clubs and lodges. One space for each three hundred (300) square feet of floor space over one thousand square feet. (4) Dwellings. One space for each dwelling unit, except designated housing for the elderly, in which case one (1) space for each two (2) units. (5) Funeral parlors. One space for each four (4) seats in chapel. (6) Gasoline service stations and similar establishments. Two (2) spaces for each bay or similar facility plus one space for each employee. (7) Hospitals and nursing homes. One space for each two staff or visiting doctors plus one space for each two employees and one space for each four beds, computed on the largest number of employees on duty at any period of time. (8) Hotel. One space for each four (4) employees plus one space for each two (2) guest rooms. (9) Industry. One space for each three (3) employees computed on the largest number of persons employed at any period during day or night. (10) Motels and tourist courts. One space for each four (4) employees plus one space for each accommodation. (11) Offices: (a) Medical. One space for each three hundred (300) square feet of floor space. (b) Other professional. One space for each four hundred (400) square feet of floor space. (c) General. One space for each four hundred (400) square feet of floor space. (12) Places of public assembly. One space for each four (4) seats in the principal assembly room or area. (13) Recreation and amusement areas without seating capacity. One space for each five (5) customers, computed on maximum service capacity. (14) Restaurants. One space for each four (4) employees, plus one space for each one hundred (100) square feet of floor space devoted to patron use. (15) Retail business and similar uses. One space for each two hundred (200) square feet of gross floor space. (16) Schools. One space for each faculty member, plus one space for each four (4) pupils except in elementary and junior high schools. (17) Mobile home parks. Mobile home parks shall meet the requirements of the Elizabethton Mobile Home Park Ordinance. (18) Wholesale business. One space for each three (3) employees based on maximum seasonal employment. 14-15 If off-street parking space required above cannot reasonably be provided on the same lot on which the principal use is conducted, the board of zoning appeals may permit such space to be provided on other off-street property provided such space lies within four hundred (400) feet of the main entrance to such

principal use. Such vehicle parking space shall be deemed to be required open space associated with the permitted use and shall not thereafter be reduced or encroached upon in any manner. Extension of parking spaces into a residential district. Required parking space may extend up to 120 feet into a residential zoning district, provided that: (a) The parking space adjoins a commercial or industrial district; (b) Has its only exit to or from upon the same street as the property in the commercial or industrial district from which it provides the required parking space; and (c) Is separated from abutting properties in the residential district by a plant or fence buffer strip as determined by the building inspector. (1982 Code, § 11-208) 14-209. Off-street loading and unloading space. On every lot on which a business, trade, or industry use is hereafter established, space with access to a public street or alley shall be provided as indicated below for the loading and unloading of vehicles off the public street or alley: (1) Retail business. One space of at least 12 x 25 feet for each 3,000 square feet of floor area or part thereof. (2) Wholesale and industrial. One space of at least 12 x 50 feet for each 10,000 square feet of floor area or part thereof. (3) Terminals. Sufficient space to accommodate the maximum number of vehicles that will be stored and loading and unloading at the terminal at any one time. (1982 Code, § 11-209

15-601. Generally

Notwithstanding anything else in this code to the contrary, no person shall park or leave a privately owned vehicle parked on any public street or alley, within the central business district, or on any city owned parking lot between the hours of 12:00 A.M. and 5:00 A.M. without a city issued permit which specifies the designated area in which such vehicle shall be parked. No person shall park or leave a vehicle parked on any other public street or alley for more than seventy-two (72) consecutive hours without the prior approval of the chief of police. All vehicles parked in violation of this section shall be regarded as an illegally parked vehicle and shall be subject to towing and impoundment by the Elizabethton Police Department as set forth in § 15704 of this code.

The city manager or the chief of police may designate any street or portion of any street as a "no parking zone" and have appropriate signs erected. No parking shall be permitted in any area which shall restrict the flow of traffic or impede the flow of traffic to the extent that two (2) vehicles cannot pass on the street because of the presence of such parked vehicles. No vehicles shall be parked on the street within fifteen feet (15') of any intersection or within one hundred feet (100') of the crest of a hill, where posted. Unless otherwise posted, parking in residential areas where the streets are twenty-four feet (24'), or less, 15-16 in width shall be limited to the east side of the north-south streets and the south side of east-west streets.

Furthermore, no person shall wash, grease, or work on any vehicle, except to make repairs necessitated by an emergency, while such vehicle is parked on a public street. (2000 Code, § 15601) 15-602.

7

Angle parking. On those streets which have been signed or marked by the city for angle parking, no person shall park or stand a vehicle other than at the angle indicated by such signs or markings. No person shall angle park any vehicle which has a trailer attached thereto or which has a length in excess of twenty-four feet (24'). (2000 Code, § 15-602

NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM

SECTION 15-801. Policies governing the neighborhood traffic management program. 15-802. Process and procedures governing the neighborhood traffic management program. 15-801. Policies governing the neighborhood traffic management program. The following policies shall govern the application of the neighborhood traffic management program within the City of Elizabethton, Tennessee.

(1) This program shall be applied to existing local streets serving predominantly singlefamily residential neighborhoods. Through traffic (defined as traffic having no immediate origin or destination in the neighborhood) should be routed to the maximum extent possible to the major roadways designated on the most recent versions of the major street plan, collector street plan, and area plans prepared by the Elizabethton Planning Commission.

(2) The volume of rerouted traffic acceptable as a result of a traffic management project shall be defined on a project-by-project basis. It is not the intent of this program to simply relocate traffic or traffic concerns to other local residential streets, however it may be desirable to better balance traffic across a network of residential streets.

(3) Emergency vehicle access within and through neighborhoods will be carefully considered in the evaluation of traffic management request and must be preserved in a reasonable manner. Certain traffic management techniques may result in increased emergency response times to certain streets and neighborhoods and these impacts must be carefully considered by the neighborhood in developing a traffic management program.

(4) A variety of traffic calming strategies and techniques shall be employed to achieve the neighborhood traffic management plan objectives. Such traffic calming strategies and techniques shall be planned and designed in conformance with sound engineering and planning practices. All final plans and programs shall be reviewed and approved by the Elizabethton City Council prior to implementation.

(5) Certain procedures must be followed to implement the neighborhood traffic management plan requests in accordance with applicable codes, related policies, and the available funding/resources. At a minimum the procedures shall provide for: (a) Submittal of concerns and project proposals; (b) Evaluation by city staff of conditions and proposals; (c) Citizen participation in and endorsement of plan development and

evaluation; 15-21 (d) Methods of temporarily testing traffic management plans when needed; and, (e) Communication of any test results and specific findings to area residents and affected neighborhoods before installation of temporary or permanent traffic calming devices. (6) The design and installation costs of any neighborhood traffic management program will be the responsibility of the city, with the exception of any needed rightofway and/or easement and any on-going landscaping maintenance requirements which shall both be the responsibility of the neighborhood. A defined neighborhood group or association shall be required to execute an agreement with the City of Elizabethton for the ongoing maintenance and upkeep by that group of any installation of techniques that include landscaping features so long as such landscaping shall exist. Any costs for removal or modification of any neighborhood traffic management program installation shall be the sole responsibility of the neighborhood if it is the result of the neighborhood's request. (2000 Code, § 15-801.

Additional information on the can be found at L:\Cities\Elizabethton\elizabeth.t15.wpd (tennessee.edu)

SUBDIVISION REGULATIONS

ARTICLE III. GENERAL REQUIREMENTS AND MINIMUM STANDARDS OF DESIGN A. Streets

1. Conformity to the Major Thoroughfare Plan The location and width of all streets and roads shall conform to the official Major Thoroughfare Plan.

2. Relation to Adjoining Street Systems The proposed street system extends existing streets or projects. They shall be extended at a width no less than the required minimum width as set forth in this Article or the width of the existing street, whichever is greater.

3. Access Streets to Subdivision Boundaries Sufficient access streets to adjoining properties shall be provided in subdivisions to permit harmonious development of the area.

4. Street Elevation The planning commission shall not approve streets subject to inundation or flooding by water. All streets must be adequately located above the line of flood elevation to prevent isolation of areas by flood. The planning commission may require profiles and elevations of streets in areas subject to flooding.

STREET TYPES AND CHARACTERISTICS

1. <u>Interstates (Expressways)</u> – Major highways designed to carry large volumes of predominately non-local traffic at moderate to high speeds (generally 45 mph or higher). Access is controlled, with a minimal number of grade-level street intersections. **General characteristics** and design standards are:

Average daily traffic (ADT) count of 25,000 Average trip length is 3 miles or more Minimum 120-foot right-of-way Minimum 84-foot roadway width Minimum 10-foot shoulder/ emergency parking lanes Minimum 12-foot lane width Minimum 8-foot median in urban conditions, 30 feet for rural (no turning lane) Median cuts are generally not allowed Minimum of 4 lanes No curbing, no sidewalks Minimum horizontal radius of 1,200 feet Maximum grade of 6%

- 2. <u>Arterial Streets</u> Arterial streets are used primarily for the movement of vehicles, but may provide for vehicular access to adjacent property. When access to adjacent property is permitted, it should be by means of a marginal access type of street to serve several properties rather than permitting each property owner to have his own private driveway access point. Limited access should be encouraged on arterial streets to maintain the function that the street provides the traveling public. The number of household units served by arterial streets is unlimited; however, access onto these streets should be limited. Arterial Streets may be classified as either Principal Arterials or Minor Arterials according to the average daily traffic (ADT) and their function in the overall regional scheme of the transportation plan.
 - <u>a. Principal Arterial Streets</u> Major streets and roads used for traffic of moderate to high speeds (45 mph or higher) and relatively high traffic volumes among major local centers of employment, recreation, shopping, and suburban and rural areas. General characteristics and design standards are:

Average daily traffic (ADT) counts between 17,000 and 25,000 Average trip length is between 1 to 3 miles Minimum 80-150 feet right-of-way width
Minimum 80-foot roadway width with 12-foot turning lane, or 84-foot roadway width with median
Minimum 10-foot shoulder/ emergency parking lanes
Minimum 12-foot lane width
Minimum 8-foot median in urban conditions, 30 feet for rural (no turning lane)
Median cuts are generally not allowed
Minimum of 4 lanes
Curbing, gutter, and sidewalks required
Minimum horizontal radius of 1,200 feet
Maximum grade of 6%
Minimum side street off-set of 300 feet

 <u>b. Minor Arterial Streets</u> – Major streets and roads which are designed to move moderate to high volumes of vehicular traffic through outlying portions of the urban area. Minor arterials serve as by-pass routes connecting principal arterials without passing through the CBD. General characteristics and design standards are:

Average daily traffic (ADT) counts between 8,000 and 17,000 Average trip length is 1 mile Minimum 80-foot right-of-way 56 feet with turning lane Minimum 10-foot shoulder/ emergency parking lanes Minimum 12-foot lane width Minimum 8-foot median in urban conditions, 30 feet for rural (no turning lane) Median cuts are generally not allowed Minimum of 4 lanes, however, 2 and 3 lanes are acceptable when capacity is sufficient Curbing, gutters, and sidewalks required Minimum horizontal radius of 1,000 feet Maximum grade of 6% Minimum side-street offset of 300 feet

3. <u>Collector (or Access) Streets</u> – Intermediate streets which serve the internal traffic movement within a part of the area. Collector streets are broken down by Urban Major Collector and Urban Minor Collector, where the main difference is the traffic volume a certain street handles on a daily basis. They collect traffic from minor and/or local streets and

channel it to arterials. They do continuous for any great length. Access controlled so that minimum of the collector street. Ge

not handle long, through trips, and are not to adjacent property should be planned and disturbance is made to the traffic-moving efficiency **General characteristics** and design standards are:

Average daily traffic (ADT) counts between 3,001 and 8,000 Average trip length is ½ to 1 mile Minimum 60-foot right-of-way Minimum 36-foot roadway width, Minimum 12-foot lane width Minimum of 2 lanes, may have as many as 4 lanes in CBD areas Curbing, gutters, and sidewalks required Minimum horizontal radius of 480 feet Maximum grade of 8% Minimum side-street offset of 200 feet General design speed of 30 mph

4. Local (or Minor) Streets – Streets used by traffic at low speeds and are designed to provide access and service to abutting properties. Most minor streets in residential developments involve parking and/or considerable traffic. They are not intended for use by through traffic. General characteristics and design standards are:

Average daily traffic count between 1 and 3,000 Minimum 50-foot right-of-way Minimum 28-foot roadway width Minimum 12-foot lane width Minimum of 2 lanes Curbing, gutters, and sidewalks required Maximum grade of 10%

5. <u>Marginal Access Streets -</u> Marginal access streets are local or residential streets, which are parallel to and adjacent to arterial streets and expressways. These streets provide access to abutting properties and protection from through traffic. The minimum right of way width is forty (40') feet, while the minimum pavement width is twenty (20') feet. Marginal Access Streets or Frontal Roads where required will be designed on a case by case basis.

The future street system of the area should provide a system based on the functional classification of streets. To obtain this basic system, consideration is given to:

a. Existing land uses and street network

- b. Potential development
- c. Projected growth and future land use development.

The map below illustrates the street functional classification system in Elizabethton and surrounding areas.



INVENTORY AND ANALYSIS

The street system in Elizabethton forms a rectangular grid system in the central core of the city. Further away from the central core of the city, the street system is irregular in shape. The rationale for the irregularity is due to topographic conditions, such as streams, hillsides and ridges, as well as subdivisions that were developed that discouraged through traffic by developing cul-de-sac streets.

"Gateways" of Elizabethton

The major roadways in Elizabethton are U.S. Highway 321, U.S. Highway 19E, State Route 91, and State Route 359 (Milligan Hwy), State Route 362 (Mary Patton Hwy), and State Route 400 (N. Lynn Rd). These roads are the main gateways into the City of Elizabethton.

Elizabethton Highway Entrance Overlay District

The major roadways in Elizabethton are US Hwy 321, US Hwy 19E, SR91, SR359, SR362, and SR400. The City of Elizabethton has also established a Highway Entrance Overlay District. The purpose of this overlay district is to establish higher environmental, aesthetic, and design standards for designated areas of the City of Elizabethton and Carter County, Tennessee, which are visible from specified highways. Because these standards shall apply without regard to the underlying use of the land, they are created in a special overlay district which can be over any zoning district located along a designated highway. (as added by Ord. #44-6, March 2008).

Roadways segments that are included in the Highway Entrance Overlay District are:

- 1. US Hwy 321 from Greenlee Rd to Hudson Dr
- 2. US Hwy 321/ Broad St from N Main St to US Hwy 19E
- 3. US Hwy 19E from Stoney Creek Rd to Riverbottom Rd
- 4. N Lynn Ave/ Old Bristol Hwy from US Hwy 321 to Roe Hodge Rd
- 5. Broad St from US Hwy 19E to SR91/ Stony Creek Rd
- 6. SR91/ Stony Creek Rd from US Hwy 19E to Blue Springs Rd
- 7. S Sycamore St from US Hwy 19E to Hattie Ave
- 8. State Line Rd from Johnson Ave to US Hwy 19E
- 9. SR91/ Elizabethton Hwy from Greenlee Rd to US Hwy 321
- 10. SRE359/ Milligan Hwy from Northeast Dr to US Hwy 321

The section of US Hwy 321 from Hudson Dr to N Main St is not a part of the Highway Entrance Overlay District. The map on the next page shows the Highway Entrance Overlay Zone.



Roadway	Other Name	From	То
US Hwy 19E	US Hwy 321	Broad St	SR67 W in Hampton
	SR67	Broad St	SR67 W in Hampton
Roadway	Other Name	From	То
	University Pkwy/ Hwy 67	Washington County Line	Milligan Hwy
	W Elk Ave	Milligan Hwy	Buck Van Huss Dr
US Hwy 321	W Elk Ave	Buck Van Huss Dr	Elizabethton Hwy
	W Elk Ave	Elizabethton Hwy	Broad St
	Broad St	W / E Elk Ave	US Hwy 19E
	US Hwy 19E	Broad St	SR67 W in Hampton
	SR91	Elizabethton Hwy	US Hwy 19E
Roadway	Other Name	From	То
SR91	Elizabethton Hwy	Washington County line	US Hwy 321
	US Hwy 321	Elizabethton Hwy	US Hwy 19E
Roadway	Other Name	From	То
SR359	Milligan Hwy	Gov Alfred Taylor Rd	US Hwy 321
Roadway	Other Name	From	То
SR362	Mary Patton Hwy	US Hwy 321	Tester Rd
Roadway	Other Name	From	То
SR400	N Lynn Ave	US Hwy 321	Roe Hodge Rd

Below are some roadways that have sections with a different name than the numbered route for that particular roadway.

US Hwy 19E is a 4-lane divided highway that, for the most part, is on the eastern side of Elizabethton. US Hwy 19E connects with US Hwy 11E to the north in Bluff City, and traverses southward to the North Carolina state line. US Hwy 321 and SR91 are two of the main Elizabethton roadways that connects to US Hwy 19E.

US Hwy 321 is a 4-lane divided highway in the western portion, from the Washington County line to approximately the intersection to SR91/ Elizabethton Hwy. From here the roadway is a

5lane (center turn lane) traversing eastward to its intersection with US Hwy 19E. This is the main commercial corridor for the city. Some of the larger traffic volume generators on this route are Super-Walmart, Lowes Home Improvement, and Elizabethton High School.

SR91 can be broken down in 3 different sections. The western section connects Johnson City to US Hwy 321in Elizabethton. Land-use varies from agricultural, residential, and commercial. It is a 2-lane highway. The middle section is part of US Hwy 321, which is a 5-lane roadway through the commercialized part of the city. The final section is the easternmost part of SR91. This is from US Hwy 19E to the Elizabethton's corporation boundary. This part of SR91 connects to an industrial park, as well as the Elizabethton Municipal Airport. It is a 5-lane (center turn lane) roadway.

SR359, also known as Milligan Highway, is a 2-lane roadway that connects Elizabethton to Milligan. Land-use is predominately residential in nature. Milligan University is accessible via this roadway.

SR362, also known as Mary Patton Highway, is a five (5) lane roadway near the intersection with US Hwy 321. Traversing southward, once passed by the Gap Creek Rd intersection, this roadway becomes a two (2) lane road. Agriculture and residential uses occur throughout this area.

SR400, better known as N. Lynn Avenue, is a five (5) lane roadway (with center turn lane) from US Hwy 321 to its intersection with Watauga Rd. Residential, commercial, and industrial uses can be found along this stretch of roadway.

Potential Roadway Projects

There are several proposed roadway projects that could occur in Elizabethton. The rationale for these projects is to:

- 1. Improve travel flow throughout the city.
- 2. To minimize the level of service (LOS) degradation of the major streets
- 3. Improve safety of non-vehicular uses
- 4. Open vacant lands that would be viable for commercial and/or industrial uses

The following five (5) proposed road projects are in the current Johnson City Metropolitan Transportation Planning Organization's (JCMTPO) 2023-2026 Transportation Improvement Program (TIP).

TIP ID 2023-19Historic Cover Bridge Structural Rehabilitation. This is a TennesseeDepartment of Transportation (TDOT) Transportation Alternatives Program (TAP) grant project.The anticipated cost is \$996,780.00, where the federal share for this project is \$797,424.00.

TIP ID 2023-10Linear Path and Tweetsie Trail Connector. This is for a bicycle/pedestrian multiuse path project. The proposed path along Hattie Avenue would connect the

Linear Path at South Riverside Drive to the Tweetsie Trail at Cedar Avenue, approximately 0.23 miles in length. The proposed connector is a ten-foot wide path with a painted centerline that separates the five foot lanes in each direction and a minimum two foot buffer between vehicular traffic. Surface Transportation Block Grant -Local (STBG-L) funds will be used to fund this project. Anticipated cost is #360,000.00, while the federal share is \$288,000.00.

TIP ID 2023-11 Roundabout at Overmountain Drive. The project is for the construction of a roundabout at the intersection of Overmountain Drive and the Walmart Access road. The circular intersection would replace the existing 3-way stop intersection and improve safety by preventing queueing of traffic onto a state route. (Note: This project will need TDOT approval to manage). STBG-L funds will be used. Anticipated cost is \$380,000.00. Only the Preliminary Engineering (PE) NEPA and Design phases are programmed for this project in the years 2025 and 2026.

TIP ID 2023-12 Overmountain Dr Extension. This project is an extension of Overmountain Drive. Starting at the dead end of Overmountain Drive the project would join Overmountain Drive and the hospital access road through the Ballad Health property. (Note: This project will need TDOT approval to manage). Anticipated cost is \$830,000.00. STBG-L funds will be used, and only PE-NEPA is programmed for the year 2026. Design, right-of-way (ROW), and construction phases will come later on.

TIP ID 2023-13 Traffic Management Center. This project includes the installation of a Traffic Management Center (TMC) located in the Elizabethton Engineering Department and installation of CCTV cameras at various intersections along SR-91/67 corridor. A 1/4 mile connection will be needed to extend the existing fiber network to the new TMC. (Note: This project will need TDOT approval to manage). Estimated cost is \$727,000.00. STBG-L funds will be used, and PE-NEPA and Design are programmed in the years 2025 and 2026. ROW and Construction will come in later years.



OTHER TRANSPORTATION MODES IN ELIZABETHTON

Greenways

Elizabethton Linear Trail is approximately six (6) miles long that is located along the western shoreline of the Doe River, running parallel to Riverside Drive and through Edward's Island Park, eventually connecting to Sycamore Shoals State Historic Area. The trail also connects East Side Elementary School and Cat Island Park east of the Doe River. There are picnic tables, bike racks, and benches along this scenic path.

The **Tweetsie Trail** is a non-motorized bicycle/pedestrian greenway that runs parallel to East Doe Avenue in the western portion of the Main Street district. The Tweetsie Trail is a rails-to-

trails project following the former East Tennessee and Western North Carolina Railroad between Johnson City and Elizabethton. The trail is 9.6 miles long and allows for walking, running, and biking. It should be noted that the Tweetsie Trail is owned by the City of Johnson City. For any type of development that may impact the Tweetsie Trail, the developers shall consult with Johnson City and Elizabethton personnel before any work is to be done. Additional information on the Tweetsie Trail can be found at <u>Tweetsie Trail (johnsoncitytn.org)</u>.

The map below shows the Tweetsie Trail, and proposed extension, and the Linear Trail in Elizabethton, Tennessee.



Sidewalks

Sidewalks are throughout City, especially in the downtown area. The City has an ADA Transition Plan, which sidewalks are discussed in that document.

Bicycle Routes

The City of Elizabethton has the Linear Trail and the Tweetsie Trail for Bike riding. Bike riding is allowed on city streets, but not allowed on the sidewalk system.

TDOT has SR400, SR321 and SR91 listed as a Bike Route (see map below). The Blue and Green lines have a higher Level of Service (LOS) while the Yellow, Orange and Red colors have a poor LOS, This Bike route is part of the Chattanooga to Mountain City Bike Route. Additional information can be found at <u>Tennessee Bicycle Routes (tn.gov)</u>.



Public Transportation

Northeast Tennessee Regional Public Transit (NET Trans) offers door-to-door demand response transportation with flexible schedules designed to meet a rider's needs. Anyone can ride! NET Trans is your source for regional public transportation. Service includes door-to-door nonemergency transportation to anyone requesting a ride in our service area. Our fleet is equipped with wheelchair lifts and ramps with industry-leading securement systems.

The service area covers eight (8) upper east Tennessee counties: Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi, and Washington counties (see map on the next page). Trip requests and reservations must be submitted by **12:00pm** the <u>business day</u> prior to service.



Please note that NetTrans accept trip requests Monday-Friday excluding holidays. Closed Saturday, Sundays and Holidays. To schedule a ride, the phone number is 423-461-8233. Additional information can be found at <u>NET Trans</u>.

Elizabethton Municipal Airport

The Elizabethton Municipal Airport is a city-owned public use airport located approximately three (3) miles east of downtown Elizabethton. Some details of this airport are:

- a. Runway is 4,529 feet by 75 feet
- b. Fixed-based operator services: fuel, bulk hangers, T-hangers, maintenance, rental cars, line service, crew cars, and vehicle care and storage
- c. Full time flight training center that teaches private, instrument, and commercial ratings
- d. 29,000 aircraft operations per year.

The address is 415 TN-91, Elizabethton, TN 37643. Phone number 423-543-2801. The airport is open seven (7) days a week. During the summer season (April 1 through October 31) the hours are 7:30 am to 7:30 pm. The services hours during the winter season (November 1 to March 31) are 8 am to 5 pm. The map below is taken from Google Maps, showing the Elizabethton Municipal Airport.



LEVEL OF SERVICE ANALYSIS

Level of Service (LOS) is a term that is used to describe how well traffic operates on a roadway segment or at an intersection. LOS A is the best and LOS F is the worst. LOS D is typically considered to be the minimum acceptable LOS in an urbanized area. The following figure is a graphic depiction of the Level of Service concept.



The picture below is the 2020 LOS for Elizabethton from the Johnson City 2050 MTP document. Most roadways are operating at a level of service of D or better. There is one small section of roadway operating at a LOS E, which is on Mary Patton Dr, from Gap Creek Rd (west side) to Gap Creek Road (east side).



The picture below is the 2050 LOS for Elizabethton from the Johnson City 2050 MTP document. Most roadways are operating at a level of service of D or better. There is one small section of roadway operating at a LOS E, which is on Mary Patton Dr, from Gap Creek Rd (west side) to Gap Creek Road (east side).



Annual Average Daily Traffic (AADT) Counts

The Tennessee Department of Transportation (TDOT) does traffic counts on major roadways throughout the entire state, on a yearly basis. The map shown below illustrates the roadways where traffic counts were taken. US Hwy 321 has the highest AADT counts in the area, with traffic counts over 30,000. US Hwy 19E has traffic counts ranging from 14,000 to over 20,000.



Crash Analysis

The map below illustrates where crashes occur in Elizabethton, from 2021 to 2024. There were over 1,800 crashes during that timespan, averaging approximately 590 crashes per year.





This is a close-up of the map above showing the areas where higher crash rates occurred. Most of the crashes occurred along US Hwy 321 and US Hwy 19E.

There had been 3 fatality accidents within the City of Elizabethton, and another 3 fatality accidents just outside the corporation boundary of Elizabethton. The table below lists where the fatality accidents occurred.

YEAR	Street	Near	Within Flizahathtan 2
			Elizabetition:
2021	19E	SR91 interchange	No
2022	Mary Patton Hwy	Gap Creek Rd (east side) intersection	Yes
2022	US 321/ Broad St	N Roan St intersection	Yes
2023	Grove St	Mid-block accident	Yes
2023	Watauga Rd	Pleasant Beach Rd	No
2023	19E	SR91 interchange	No

RECOMMENDATIONS

Planning staff recommends the following actions to take place:

- 1. To enforce the off-street parking requirements as established in the <u>Zoning</u> <u>Ordinance</u> and <u>Subdivision Regulations</u>.
- 2. To limit the number of driveways and curb-cuts on major roadways within the City of Elizabethton. This can be accomplished by:
 - (a) Requiring a frontage road or marginal access road for new developments that are adjacent to collector and/or arterial classified streets.
 - (b) By promoting and requiring shared driveways on heavily traveled roadways.
 - (c) By promoting and requiring commercial and possibly industrial parking lots to connect adjoining commercial / industrial properties. For example, when a commercial enterprise is in the process of upgrading their parking lot, then at least one drive aisle should be extended to the side, or rear, property line to adjoin property that is zoned commercial or industrial.
- 3. When new developments are being presented for approval, enforce the street dedication as established in the <u>Subdivision Regulations</u>, <u>Zoning Ordinance</u>, and within this report. In cases of redevelopment of property, a variance may be granted by the Planning Commission so that there will not have to be any additional street dedication.
- 4. Promote aesthetics by reducing visual clutter. This can be accomplished by:
 - (a) Not allowing off-premise signs within street right-of-ways.
 - (b) Wayfinding or Information Sign program, which would have directional signs placed along major routes identifying where points of interests are, such as the historical sites, parks, schools, etc., within Elizabethton and Carter County.

- (c) By creating a more strict sign ordinance that would limit the height of the signs, setbacks, and the total sign area.
- 5. Promote pedestrian friendly developments by requiring sidewalks and/or bikeways (to be installed by the developer) within new street right-of-ways (ROWs) and/or extending the City's greenway system.
- 6. Transportation corridor studies should be continued for major streets.
- 7. Continue the Neighborhood Traffic Management Program, as needed.
- 8. Traffic Impact Studies/ Analysis may be required, especially for large-scale developments that will be adjacent to major streets. The rationale for a traffic impact study is to determine the volume increase of traffic, if traffic signals may be needed, if vehicular movement would be free-flowing, or would it create a stop-and-go motion, and how it would affect pedestrian movement in the area.
- 9. Discourage rezoning or development of property to a higher intense land use unless the transportation network is able to handle the projected increase traffic volume and the existing infrastructure is able to meet the demand for any proposed developments.

SUMMARY

The need for a good sound transportation system will allow the City of Elizabethton to grow and flourish. A well maintained transportation system will allow the movement of pedestrians and motorized vehicles to move throughout the City safely, efficiently and effectively. The intent of this Thoroughfare Plan is to provide a set of guidelines and recommendations to accomplish this goal.

Planning is based on proactive instead of reactive measures to solve problems through interaction with surrounding local and regional governments. Knowing generally what will take place in the next ten to twenty years will aid in evaluating any expected problems and determine basically what can be done to prevent them from occurring.

The proposals made for improving the city's urban planning area major thoroughfares focus on appropriate changes, such as widening streets and roads, or possibly new construction. The proposals are based on the desire to keep the street and highway network or "lifeline" in a condition to handle the travel demands of intra and intercity travelers in an efficient environment.



APPENDIX A. STREET FUNCTIONAL CLASSIFICATION

Road Name	From_	To_	Street Functional Classification	AADT (2022)
Alf Taylor Rd	Okolona Rd	Max Jett Rd	Major Collector	1,738
Bemberg Rd	E Elk Av	E G St	Minor Arterial	5,421
Big Springs Rd	Powder Branch Rd	Gap Creek Rd	Major Collector	1,034
Bob Little Rd	Gap Creek Rd	US Hwy 19E	Major Collector	2,164
Broad St	US Hwy 19E	Ontario Dr	Minor Arterial	3,903
Broad St	Ontario Dr	SR91	Minor Arterial	2,944
Broad St	N Roan St	N Sycamore St	Principal Arterial	21,181
Broad St	N Sycamore St	US Hwy 19E	Principal Arterial	22,880
Cedar Av	Trudy St	S Watauga Av	Major Collector	554
Cedar Grove Rd	Milligan Hwy	Washington County Line	Major Collector	457
Charity Hill Rd	Riverview Dr	Siam Rd	Minor Collector	348
Coal Chute Rd	Sims Hill Rd	Gap Creek Rd	Functional Route	500
Coal Chute Rd	Stateline Rd	Sims Hill Rd	Major Collector	965
E E St	E Elk Av	N Sycamore St	Minor Arterial	2,225
E Elk Av	S Sycamore St	US Hwy 19E	Major Collector	4,960
E Elk Av	N Lynn Av	S Sycamore St	Major Collector	4,186
E Elk Av	N Roan St	N Lynn Av	Minor Arterial	5,907
E G St	S Roan St	S Lynn Av	Major Collector	11,410
E Mill St	N Roan St	N Lynn Av	Major Collector	5,761
E Mill St	N Lynn Av	Elm St	Minor Arterial	536
Elm St	E Mill St	Broad St	Minor Arterial	141
Gap Creek Rd	W G St	Mary Patton Hwy	Major Collector	573
Gap Creek Rd	Jim Elliott Rd	Mary Patton Hwy	Functional Route	2,877
Gap Creek Rd	Short Coal Chute Rd	Jim Elliott Rd	Functional Route	1,346
Gap Creek Rd	Mary Patton Hwy	Short Coal Chute Rd	Major Collector	3,098
Happy Valley Rd	SR91 Elizabethton Hwy	Milligan Hwy	Major Collector	951
Hudson Dr	E Elk Av	E G St	Minor Arterial	4,810
Jim Elliott Rd	Gap Creek Rd	Powder Branch Rd	Minor Arterial	644
Johnson Ave	S Sycamore St	Trudy St	Major Collector	554
King Springs Rd	Washington County Line	SR91 Elizabethton Hwy	Major Collector	1,167
Laurels Rd	Okolona Rd	Toll Branch Rd	Major Collector	1,748
Lovers Lane	N Lynn Av	US Hwy 19E	Minor Arterial	3,477
Mary Patton Hwy	Big Springs Rd	Gap Creek Rd	Minor Arterial	5,718
Mary Patton Hwy	W Elk Av	Big Springs Rd	Minor Arterial	4,672
Max Jett Rd	Alf Taylor Rd	Powder Branch Rd	Major Collector	1,045
Mayflower Rd	Blevins Rd	Old Lewis Rd	Minor Arterial	1,423

Road Name	From_	To_	Street Functional Classification	AADT (2022)
Milligan Hwy	Washington County	Old Lowis Pd	Minor Artorial	10 011
Milligan Hwy		Okolona Bd	Minor Arterial	8 /68
Milligan Hwy	Okolopa Pd		Minor Artorial	6,400
Minton Hollow Pd			Major Collector	0,960
			Minor Artorial	2.005
	EF OL			2,220
N Lynn Av	Broad St		Minor Arterial	5,907
N Lynn Av	Race St	SR400 Watauga Rd	Minor Arterial	10,391
N Lynn Av	Race St	Broad St	Minor Arterial	7,981
N Lynn Av	E F St	E Elk Av	Minor Arterial	2,225
N Roan St	EFSt	Broad St	Major Collector	1,401
N Roan St	W Mill St	Broad St	Major Collector	5,761
N Sycamore St	E Elk Av	Broad St	Minor Arterial	2,225
Okolona Rd	S Roan St	Laurels Rd	Major Collector	3,144
Okolona Rd	Laurels Rd	Milligan Hwy	Major Collector	3,195
Old Bristol Hwy	W G Woods Rd	SR400 Watauga Rd	Minor Arterial	3,261
Old Bristol Hwy Gail				
Rd	US Hwy 19F	Sullivan County Line	Minor Collector	590
Old Lewis Rd	Milligan Hwy	Mavflower Rd	Minor Arterial	1.970
Old Lewis Rd	Mayflower Rd	S Roan St	Major Collector	663
Overmountain Dr	Stonewall Jackson Dr	W Elk Av	Minor Arterial	4,810
Parkway Blvd Carter				
Blvd	E G St	Southside Rd	Major Collector	2,865
Piney Flats Rd	SR400 Watauga Rd	Sullivan County Line	Functional Route	1,054
Powder Branch Rd	W Elk Av	Jim Elliott Rd	Functional Route	1,396
Powder Branch Rd	W Elk Av	Jim Elliott Rd	Functional Route	2,348
Powder Branch Rd	lim Elliott Rd	Gan Creek Rd	Functional Route	161
Riverview Dr. Suess Rd	Siam Bd	Hatfield Dr	Major Collector	245
Slynn Av	F F St	F G St	Minor Arterial	5 098
S Boan St	EFSt	E G St	Major Collector	1 401
S Sycamore St	E Elk Av	US Hwy 19E	Minor Arterial	5.091
Siam Rd	US Hwy 19F	Riverview Dr	Major Collector	6,116
Siam Rd	Riverview Dr	Garrison Hollow Bd	Minor Collector	1 552
Siam Rd	Garrison Hollow Bd	Wilbur Dam Rd	Minor Collector	857
Siam Rd	US Hwy 19E	Wilbur Dam Rd	Major Collector	1.707
Siam St	Suess Rd	US Hwy 19E	Major Collector	2,247
Sinking Creek Rd	Smalling Rd	SR91 Elizabethton Hwv	Functional Route	342
Smalling Rd	Sinklng Creek Rd	SR400 Watauga Rd	Functional Route	879

Road Name	From_	To_	Street Functional Classification	AADT (2022)
Sneed Hill Rd	Southside Rd	Bob Little Rd	Functional Route	199
Southside Rd	Sneed Hill Rd	Cedar Av	Major Collector	1,221
Southside Rd	Gap Creek Rd	Parkway Blvd	Major Collector	785
Southside Rd	Parkway Blvd	Sneed Hill Rd	Major Collector	2,865
		Washington County		
SR400 Watauga Rd	Piney Flats Rd	Line	Minor Arterial	6,045
SR400 Watauga Rd	Smalling Rd	Piney Flats Rd	Minor Arterial	3,950
SR400 Watauga Rd	Taylor Av	Smalling Rd	Minor Arterial	4,327
SR400 Watauga Rd	N Lynn Av	Taylor Av	Minor Arterial	6,317
SR91	US Hwy 19E	Broad St	Minor Arterial	14,131
	Broad St Rufus Taylor			
SR91 SR91 Elizabethten	Rd Washington County	Blue Springs Rd	Minor Arterial	11,071
Hwy	l ine	W FIk Av	Minor Arterial	7,230
SR91 Elizabethton	Washington County			.,
Hwy	Line	W Elk Av	Minor Arterial	6,467
SR91 Elizabethton				
Hwy	Dave Buck Rd	W Elk Av	Minor Arterial	6,259
Stateline Rd	Johnson Av	Old Stateline Rd	Major Collector	2,901
Toll Branch Rd	Okolona Rd	Alf Taylor Rd	Functional Route	347
Trudy St	Johnson Av	Cedar Av	Major Collector	554
US Hwy 19E	Mill Pond Rd	US Hwy 321 SR67	Principal Arterial	14,874
US Hwy 19E	Siam Rd	Mill Pond Rd	Principal Arterial	20,136
US Hwy 19E	Broad St	Siam Rd	Principal Arterial	19,845
US Hwy 19E	SR91	Broad St	Principal Arterial	18,683
US Hwy 19E	Minton Hollow Rd	SR91	Principal Arterial	9,299
US Hwy 19E	Old Bristol Hwy	Sullivan County Line	Principal Arterial	9,999
	SR91 Elizabethton	Washington County		
US Hwy 321 W Elk Av	Hwy SD01 Elizabethten	Line	Principal Arterial	24,988
US Hwy 321 W Flk Av	Hwv	Milligan Hwy	Principal Arterial	30,319
US Hwy 321 W Elk Av	Hudson Dr	SB91 Elizabethton Hwy	Principal Arterial	24 859
US Hwy 321 W Elk Av	N Boan St	Bemberg Rd	Principal Arterial	32 608
WGSt	Mary Patton Hwy	Carter Blvd	Major Collector	9 671
WGSt	S Boan St	Carter Blvd	Major Collector	11 <u>/</u> 10
WGSt	W Flk Av	Mary Patton Hwy	Major Collector	11 262
W Mill St		N Roan St	Major Collector	5 502
Watauga Av	FGSt	Cedar Av	Major Collector	1 620