

Bill Albright  
Transportation Planning Manager

Lesley Phillips  
Transportation Planner



Kingsport MTPO  
415 Broad Street  
Kingsport, TN 37660  
[MTPO@KingsportTN.gov](mailto:MTPO@KingsportTN.gov)  
423.224.2677

## MEMORANDUM

To: Kingsport MTPO Executive Board  
CC: Subscribed Interested Parties  
From: Lesley Phillips, Transportation Planner  
Date: January 24, 2022  
Subject: MTPO Executive Board Meeting

---

Please see the attached agenda for the next meeting of the Kingsport MTPO Executive Board, to be held **Thursday, February 3, 2022 at 1:30 PM, in the Kingsport City Hall Board Room (415 Broad Street, Kingsport, Tennessee).**

There are seven action items:

- **Minutes from November 4, 2021 Meeting**
- **Election of Executive Board Vice Chair**
- **Adoption of PM1 Targets – Tennessee and Virginia**
- **Adoption of Transit Safety Targets**
- **2040 Long Range Transportation Plan Amendment**
- **FY 20-23 Transportation Improvement Program Amendment**
- **Adoption of Bicycle and Pedestrian Plan**

In addition to the agenda items listed above, time will be allotted for public comments, project updates, state and federal partner updates, and general information items.

The meeting will be in-person and members of the public are welcome to attend. We also plan to offer live public access to the meeting through a Zoom webinar. Members of the public who are interested in attending remotely should send an email to [MTPO@KingsportTN.gov](mailto:MTPO@KingsportTN.gov) to request the log in information for the meeting. In order to allow time to respond, your request must be received by 12:00 pm on February 2, 2022.

Executive Board members who are unable to attend may designate a proxy in writing to represent you. A sample proxy letter is attached.



# AGENDA

**Kingsport MTPO Executive Board  
February 3, 2022 at 1:30 PM  
Kingsport City Hall – Board Room  
415 Broad Street, Kingsport, TN 37660**

**Call to Order – Paul Montgomery, Chairman**

**1. General Information and Attendance Roll Call**

**Presenter:** Lesley Phillips

**2. Public Comment on Agenda Items**

Those wishing to make a comment pertaining to any of the agenda items may do so at this time with a five-minute time limitation. Comments not pertaining to a specific agenda item will be heard at the end of the meeting.

**3. Approval of Minutes from November 4, 2021 Meeting (Vote Required)**

**Presenter:** Paul Montgomery

**4. Election of Executive Board Vice Chair (Vote Required)**

**Presenter:** Lesley Phillips

**Item Summary:** The Bylaws of the Kingsport MTPO describe how the membership works, including the Executive Board, officers, staff members, sub-committees, etcetera. While the Chair is permanent and does not require an annual or periodic election, the position of Vice-Chair requires annual election. The staff requests that the Executive Board members nominate and elect a Vice-Chair.

**5. PM1 Targets - Tennessee and Virginia (Vote Required)**

**Presenter:** Lesley Phillips

**Item Summary:** As part of the performance based planning and programming requirements of MAP-21, and more recently the FAST Act, MPOs are required to adopt Safety Performance Measures (PM1) annually. In February 2021, the Executive Board voted to adopt TDOT and VDOT's Safety Performance Targets for the five-year reporting

period of 2017-2021. These targets are updated annually and will roll ahead one year to cover the reporting period of 2018-2022. Staff recommends the MTPO continue to support the respective targets for Tennessee and Virginia as outlined in the attached resolution and supporting documentation.

**Recommendation:** Approve the Resolution as presented

## **6. Transit Safety Targets (Vote Required)**

**Presenter:** Lesley Phillips

**Item Summary:** As part of the performance based planning and programming requirements of MAP-21, and more recently the FAST Act, transit agencies that receive FTA Section 5307 Urbanized Area Formula Grant funds are required to develop a Public Transportation Agency Safety Plan (PTASP) and adopt specific transit safety targets. MPOs are also required to adopt transit safety targets. Within the Kingsport MTPO area, there are two transit agencies that receive FTA Section 5307 funds, KATS and NET Trans. Staff recommends the MTPO support the respective transit safety targets of each agency as shown in the attached resolution and supporting documentation.

**Recommendation:** Approve the Resolution as presented.

## **7. 2040 Long Range Transportation Plan Amendment #2 (Vote Required)**

**Presenter:** Lesley Phillips

**Item Summary:** The I-81 Intelligent Transportation Systems (ITS) project needs to be updated in our 2040 Long Range Transportation Plan (LRTP). TDOT has proposed an Amendment to our Transportation Improvement Program (TIP), which greatly increases the total project cost, changes the termini, and increases the project length thus also creating the need for an Amendment to our LRTP. This Amendment also updates the project description and funding source. This is a state IMPROVE Act project.

Amendments to our LRTP require a 30-day public review/comment period prior to adoption. The documentation was posted/distributed on December 29, 2021 with the review/comment period running through January 31, 2022. Public comments can also be made during this meeting. Amendments to the LRTP require Executive Board action.

**Recommendation:** Approve the Resolution as presented.

## **8. FY 20-23 Transportation Improvement Program Amendment #8 (Vote Required)**

**Presenter:** Lesley Phillips

**Item Summary:** TDOT has requested changes to two projects in the FY20-23 TIP. These changes meet the criteria for a TIP Amendment which requires Executive Board action.

I-81 Intelligent Transportation System (ITS) Expansion: Increases CONST to \$8,700,000, increases the total project cost to \$8,900,000, changes the termini, increases the project length, moves PE-D to FY22, updates project description, and updates funding source. This is a state IMPROVE Act project. The project is to be managed and let to contract by TDOT.

SR-93 (From Near Morgan Lane to South of Baileyton Road): Adds \$2,502,000 of ACSTBG funds to CONST in FY22. This increase is based on the latest construction bid. Total project cost is increased to \$8,065,500. This is a state IMPROVE Act project. The project is to be managed and let to contract by TDOT.

**Recommendation:** Approve the Resolution as presented.

## **9. Kingsport MTPO Regional Bicycle and Pedestrian Plan (Vote Required)**

**Presenter:** Bill Albright

**Item Summary:** The consultant presented the Kingsport MTPO Regional Bicycle and Pedestrian Plan at the September 2021 called meeting. Since then, final edits and reviews have taken place. This vote will be to adopt the final plan.

**Recommendation:** Approve the Resolution as presented.

## **10. 2045 Long Range Transportation Plan Update**

**Presenter:** AECOM Representative - Jim Meyer

**Item Summary:** The consultant will give an update on the status of the Long Range Transportation Plan (LRTP).

## **11. Project Pipeline Presentation**

**Presenter:** Chad Tucker, Office of Intermodal Planning and Investment

**Item Summary:** Project Pipeline is a performance-based planning program to identify cost-effective solutions to multimodal transportation needs in Virginia. Through this planning process, projects and solutions may be considered for funding through programs, including SMART SCALE, revenue sharing, interstate funding, and others. Project Pipeline aims to implement a statewide look at needs and formalize the connection with planning, funding, and programming transportation solutions for Virginia.

## **12. Federal & State Partner Updates and Project Updates**

**Presenters:** Federal, State, and Local Representatives

**Item Summary:** Updates will be given by our partners at Federal Highway Administration, Federal Transit Administration, Tennessee, and Virginia. Then, in the interest of time, project updates will only be given if there is a specific request.



### **13. Public Comments**

Members of the public may address the Executive Board with issues related to the region's transportation system. There is a five-minute time limitation per individual and/or topic.

### **14. Meeting Adjournment**

**Please join us after the meeting...**

## **2045 Long Range Transportation Plan Open House**

**Date: February 3, 2022**

**Time: 4 pm to 6 pm, with a short presentation at 5:30 pm (ET)**

**Location: Kingsport City Hall, Room 307**

**If you are unable to attend the Open House in-person but would like to tune in for the short presentation at 5:30 pm (ET), please register at this link...**

**Register in advance for this webinar:**

**[https://us06web.zoom.us/webinar/register/WN\\_WyotruXvRAaoJERxsUqRvw](https://us06web.zoom.us/webinar/register/WN_WyotruXvRAaoJERxsUqRvw)**

**After registering, you will receive a confirmation email containing information about joining the webinar.**

## Sample Proxy Letter

\_\_\_\_\_  
Date

I, \_\_\_\_\_, of \_\_\_\_\_,  
(Print Name) (Agency)

Hereby designate \_\_\_\_\_ to vote as my proxy  
(Name of Proxy)

during the \_\_\_\_\_ meeting of the Kingsport MTPO Executive Board.  
(Meeting Date)

\_\_\_\_\_  
Signature

**KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION  
EXECUTIVE BOARD MEETING  
Meeting Minutes for November 4, 2021 Meeting  
In-Person Meeting with Optional Live Public Access via Zoom Webinar**

**Members Present:**

Jimmy Adkins, Blake Ailor, Troy Ebbert, Chase Milner, Michael Thompson, Ambre Torbett

**Absent:**

Paul Montgomery, Hawkins County/Church Hill/Mount Carmel Representative

**Staff Present:**

Bill Albright, Lesley Phillips, Candace Sherer

**In Person Attendees:**

Brandi Barnette – MEOC  
Randy Busler - TDOT  
Randy Dodson – Mattern & Craig  
Mitchell Elliott – MEOC  
Jason Farmer - TDOT  
Nicky Fleenor – MEOC  
Christopher Goodwin – Sullivan County Highway Department  
Eric Kerney – Sullivan County Highway Department  
Tracy Kissel – NET Trans  
Jon McCurry – NET Trans  
Cory Osborne – VDOT  
Eric Wilson - TDOT  
Will Wright – MEOC

**Online Attendees:**

Michael Dick - TDOT  
David Jones – Tri-City Airport  
Taylor Lee – TDOT  
Jennifer Marshall - TDOT  
Jim Meyer - AECOM  
Sean Santalla – FHWA-TN  
Ronda Sawyer – TDOT  
Angie Stanley – Sullivan County Commission  
+1 phone attendee

**Recorder:** Susan Doran

- I. **Call to Order:** Vice-Chairman Jimmy Adkins called the meeting to order.
- II. **General Information/Attendance Roll Call:**  
The meeting was held in-person with optional live public access available via Zoom Webinar. A video/audio recording of the meeting was published online at <https://www.kingsporttn.gov/city-services/kmtpo/meetings-notice/agenda-minutes/>

Attendance and votes were taken by roll call.

- III. **Public Comment:** Jimmy Adkins invited members of the public to address comments related to agenda items. No comments.
- IV. **Approval of Minutes:** The minutes of the September 2, 2021 meeting were reviewed. No corrections and/or additions were suggested. A motion was made by Chase Milner to approve the minutes and was seconded by Blake Ailor. Passed in a roll call vote: Adkins, Ailor, Ebbert, Milner, Thompson, and Torbett voting “Aye”.
- V. **New Business:**
  - A. Annual List of Priority Projects. Presented by Lesley Phillips and TDOT Representatives. Annually, the Tennessee Department of Transportation (TDOT) requests input on TDOT sponsored transportation projects in the Kingsport MTPO area to be included in TDOT's Three-Year Work Program. These major projects are managed by TDOT and have traditionally been funded with TDOT resources that are available to the state, whether it be federal or state funds. TDOT has provided a list of projects under consideration for the Three-Year Work Program. TDOT also allows us to add projects for consideration. These are state projects, not local projects. Project listing included in agenda packet shows the projects TDOT has asked us to rank and the bottom table shows the projects we have added for consideration. A motion was made by Michael Thompson to approve the resolution and project rankings as presented and was seconded by Ambre Torbett. Passed in a roll call vote: Adkins, Ailor, Ebbert, Milner, Thompson, and Torbett voting “Aye”.
  - B. Annual Federal Funds Obligation Reports – Tennessee and Virginia. Presented by Lesley Phillips. Per 23 CFR 450.334, annually the Kingsport MTPO is required to publish a list of federal funds (FHWA and FTA) that have been obligated on projects within the MTPO area for the previous fiscal year. The list must be made available within 90 days from the end of the program year (September 30). As outlined in the Kingsport MTPO Public Participation Plan, this information is published online and is also available for public review in the Kingsport MTPO office. Questions on individual projects can be answered by TDOT officials or VDOT officials. No Board action is required.
  - C. Long Range Transportation Plan Update. Presented by AECOM Representative Jim Meyer. The consultant gave an update on the status of the Long Range Transportation Plan (LRTP). Updates were provided for the Project Schedule, Public Engagement, Project Identification/Scoring, and Fiscal Constraint Analysis. During the Fiscal Constraint Analysis discussion, it was proposed to use a 3% annual inflation factor for revenues and a 5% annual inflation factor for project costs. Troy Ebbert indicated a resolution and formal vote is not needed, a general consensus from the Executive Board members would suffice. Executive Board members all agreed with using the 3% annual inflation factor for revenue. For project costs, per Blake, VDOT cannot utilize an inflation rate for project costs that has been calculated by another state. Executive Board members all agreed with using the 5% annual inflation factor for project costs for Tennessee projects. For Virginia projects, Blake will follow up with other VDOT staff to be sure the 5% annual inflation factor for project costs can be used. Blake will follow up with Jim after he receives a response. No formal action required.

- D. 2022 Executive Board Meeting Dates. Presented by Lesley Phillips. Discussion of meeting dates for calendar year 2022. Meetings are tentatively scheduled for February 3<sup>rd</sup>, May 12<sup>th</sup>, August 4<sup>th</sup>, and November 3<sup>rd</sup>. Board members did not have any issues with dates scheduled.

**VI. PROJECT UPDATES/STATE AND FEDERAL PARTNER UPDATES**

Staff provided updates on projects as requested. State and Federal updates and information were provided by TDOT, VDOT, and FHWA representatives.

- VII. PUBLIC COMMENTS:** Members of the public were invited to address the Executive Board with issues related to transportation planning issues, activities, and/or projects that pertain to the Kingsport Metropolitan Transportation Planning Organization. No comments.

- VIII. ADJOURNMENT:** There being no other business, a motion was made by Michael Thompson to adjourn the meeting and was seconded by Troy Ebbert. The motion carried unanimously.

## Agenda Item #5 - PM1 Targets - Tennessee and Virginia

### A RESOLUTION BY THE EXECUTIVE BOARD OF THE KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION (MTPO) SUPPORTING THE 2018-2022 SAFETY (PM1) PERFORMANCE MEASURE TARGETS FOR THE STATE OF TENNESSEE AND THE COMMONWEALTH OF VIRGINIA

**WHEREAS**, the Kingsport MTPO is the designated Metropolitan Planning Organization (MPO) for the Kingsport urbanized area in Tennessee and Virginia and is responsible for carrying out a comprehensive, cooperative, and continuing transportation planning process; and

**WHEREAS**, in 2012 Congress passed Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) that mandated the establishment of a performance and outcome based program for transportation decisions that was carried forward in the Fixing America's Surface Transportation (FAST) Act; and

**WHEREAS**, a national goal has been established to achieve a significant reduction in traffic fatalities and serious injuries on all public roads; and

**WHEREAS**, the Safety Performance Management Measures regulations support the Highway Safety Improvement Program (HSIP) and require state DOTs and MPOs to annually set Safety Performance Measure Targets, which apply to all public roads, for five areas including number of fatalities, number of serious injuries, rate of fatalities per 100 million Vehicle Miles Traveled (VMT), rate of serious injuries per 100 million Vehicle Miles Traveled (VMT), and number of non-motorized fatalities and serious injuries; and

**WHEREAS**, MPOs have 180 days following the establishment and reporting of the State targets in the HSIP Annual Report to make a decision regarding whether to support the state's targets or establish their own targets; and

**WHEREAS**, the Tennessee Department of Transportation (TDOT) and the Virginia Department of Transportation (VDOT) formally reported their Safety Performance Measure Targets to the Federal Highway Administration (FHWA) on August 31, 2021 in their respective State HSIP Annual Report; and

**WHEREAS**, the Kingsport MTPO staff recommends supporting the respective Safety Performance Measure Targets for each state as established by TDOT and VDOT.

#### **NOW THEREFORE BE IT RESOLVED BY THE EXECUTIVE BOARD OF THE KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION AS FOLLOWS:**

The Kingsport MTPO hereby supports TDOT's and VDOT's 2018-2022 Targets for all of the required Safety Performance Measures defined above by agreeing to plan and program projects that support each state's established targets as shown in Attachment A (for TN) and the attached letter (for VA).

**RESOLUTION APPROVED:**

Date: \_\_\_\_\_

---

Paul Montgomery, Chairman  
Kingsport MTPO Executive Board

---

Lesley Phillips  
Kingsport MTPO Staff

## **Attachment A**

### **Tennessee Department of Transportation Safety (PM1) Performance Targets**

Safety Performance Measure Targets were based on a 5 year rolling average (2018-2022) and were reported to FHWA by TDOT on August 31, 2021.

<b>Performance Measure</b>	<b>Anticipated Baseline* 2017-2021</b>	<b>Target 2018-2022</b>
Number of Fatalities	1090.8	1201.4
Fatality Rate	1.367	1.476
Number of Serious Injuries	6310.8	5588.6
Serious Injury Rate	7.910	6.869
Number of Non-Motorized Fatalities and Serious Injuries	521.6	534.8

\*The baseline is based on preliminary figures from early 2021. FHWA will determine the final figures in early 2022.



February 4, 2022

Mr. Raymond Khoury, P.E.  
State Traffic Engineer  
Traffic Engineering Division  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, VA 23219

Dear Mr. Khoury:

Kingsport MTPO submits this letter to the Virginia Department of Transportation (VDOT) to fulfill the March 2016 FHWA final rulemaking (23 CFR 490) for National Performance Measures for the Highway Safety Improvement Program (HSIP) target setting requirements. The Safety Performance rulemaking requires MPOs to agree to contribute to meeting the State DOT safety targets or to establish safety targets for each of the five safety measures including number of fatalities, rate of fatalities per 100 million vehicle miles traveled (VMT), number of serious injuries, rate of serious injuries per 100 million VMT, and number of non-motorized fatalities and non-motorized serious injuries.

The selected methodology and selected targets are outlined below acknowledging acceptance to support the VDOT statewide annual goal percent change, to set a numerical target for each performance measure specific to the MPO planning area, or any combination of these two methods for all five safety performance targets.

By establishing MPO safety targets, we agree to plan and program projects to contribute toward reducing fatalities and serious injuries on the transportation system.

### Future 2022 Target Annual Percent Changes

The VDOT statewide annual goal percent changes and the projected change in VMT are provided in the following table based on five-year annual average safety measures. Indicate the MPO's plan to adopt the statewide annual goal percent changes to set safety targets or to establish a different methodology.

Target Description	*Statewide Annual Goal Percent Change	MPO Adoption of Statewide Goal (Yes/No)	If No, Enter MPO Annual Goal Percent Change
Fatalities	+1.37%	Yes	
Serious Injuries	-2.36%	Yes	
Non-Motorized Fatalities and Serious Injuries	-2.37%	Yes	
Vehicle Miles Traveled (VMT)	+6.8%	Yes	

\*A positive value represents an increase and a negative value represents a reduction in five-year averages each year from 2020 to 2022. Year 2020 VMT was 11% lower than 2019 and predicted to recover in 2021 and grow 0.4% in 2022 resulting in 6.8 % per year growth.

### Additional Information on Methodology

Enter data analysis and summary information here if the statewide annual percent changes are not adopted. Other options could include a non-trend line-based analysis; a trend line-based analysis using five-year rolling averages, three-year rolling averages, or annual values; trend line analysis adjusted by presumed factors.

## 2022 Safety Performance Targets

The following five-year average target values were calculated using the MPO annual goal percent changes or other methodology:

Target Description	Target Value
Fatalities	1
Fatality Rate	1.093
Serious Injuries	14
Serious Injury Rate	24.341
Non-Motorized Fatalities and Serious Injuries	0

We acknowledge MPO targets are reported to VDOT and will be made available to FHWA upon request. Our 2022 safety targets are submitted for each performance measure on all public roads within 180 days after the VDOT reported its statewide targets, which falls on **February 27, 2022**.

For questions or comments, please contact me at [LesleyPhillips@KingsportTN.gov](mailto:LesleyPhillips@KingsportTN.gov) or 423-224-2670 .

Respectfully,

Lesley Phillips  
Kingsport MTPO  
Transportation Planner  
415 Broad Street  
Kingsport, TN 37660

**A RESOLUTION BY THE EXECUTIVE BOARD OF THE  
KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION (MTPO)  
SUPPORTING TRANSIT SAFETY TARGETS AS ESTABLISHED BY KATS and NET TRANS**

**WHEREAS**, the Kingsport MTPO is the designated Metropolitan Planning Organization (MPO) for the Kingsport urbanized area in Tennessee and Virginia and is responsible for carrying out a comprehensive, cooperative, and continuing transportation planning process; and

**WHEREAS**, in 2012 Congress passed the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) that mandated the establishment of a performance and outcome based program for transportation decisions that was carried forward in the Fixing America's Surface Transportation (FAST) Act; and

**WHEREAS**, the regulations require transit agencies, states, and MPOs to each set targets; and

**WHEREAS**, the Kingsport Area Transit Service (KATS) and NET Trans (a program of the First Tennessee Human Resource Agency) are designated recipients of Federal Transit Administration (FTA) Urbanized Area Formula Grant Program funds under 49 USC Section 5307 within the Kingsport MTPO planning area; and

**WHEREAS**, KATS and NET Trans have adopted Public Transportation Agency Safety Plans (PTASP) and prepared safety performance targets based on safety performance criteria defined by the National Public Transportation Safety Plan; and

**WHEREAS**, the MTPO understands the requirements to programmatically address these targets within the Long Range Transportation Plan and the Transportation Improvement Program, will report targets as required and share adopted targets with state and federal partners, review any changes to the transit safety performance targets, and consider revisiting the MTPO's targets based on the schedule for preparation of the system performance report that is part of the Long Range Transportation Plan; and

**WHEREAS**, the Kingsport MTPO staff recommends supporting the respective transit safety targets as established by each public transportation provider.

**NOW THEREFORE BE IT RESOLVED BY THE EXECUTIVE BOARD OF THE KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION AS FOLLOWS:**

The Kingsport MTPO hereby supports the respective transit safety targets established by the Kingsport Area Transit Service and NET Trans as shown in the attached tables.

**RESOLUTION APPROVED:**

Date: \_\_\_\_\_

---

Paul Montgomery, Chairman  
Kingsport MTPO Executive Board

---

Lesley Phillips  
Kingsport MTPO Staff

## TRANSIT SAFETY PERFORMANCE TARGETS

### KATS: 2021 & 2022 Transit Safety Targets

#### FIXED ROUTE

2021 Annual Vehicle Revenue Miles (projected): 200,000

2022 Annual Vehicle Revenue Miles (projected): 203,000

	Number of Fatalities	Rate of Fatalities per 100K VRM	Number of Injuries	Rate of Injuries per 100K VRM	Number of Safety Events	Rate of Safety Events per 100K VRM	Total Major Mechanical Failures	System Reliability – Miles between Major Mechanical Failures
2021	0	0	1	.5	1	.5	30	6,666
2022	0	0	1	.5	1	.5	30	6,766

#### DEMAND RESPONSE

2021 Annual Vehicle Revenue Miles (projected): 115,000

2022 Annual Vehicle Revenue Miles (projected): 115,000

	Number of Fatalities	Rate of Fatalities per 100K VRM	Number of Injuries	Rate of Injuries per 100K VRM	Number of Safety Events	Rate of Safety Events per 100K VRM	Total Major Mechanical Failures	System Reliability – Miles between Major Mechanical Failures
2021	0	0	1	1	1	1	5	23,000
2022	0	0	1	1	1	1	3	38,333

### FTHRA/NET Trans: 2021 Transit Safety Targets

FY21 Vehicle Revenue Miles: 2,009,935

FY21 Total Trips: 102,927

Number of Fatalities	Number of Injuries	Number of Safety Events	Total Major Mechanical Failures	System Reliability – Miles between Major Mechanical Failures
0	0	0	19	105,786

**Agenda Item #7 - 2040 Long Range Transportation Plan Amendment #2**

**RESOLUTION BY THE EXECUTIVE BOARD OF THE KINGSPORT METROPOLITAN TRANSPORTATION  
PLANNING ORGANIZATION AMENDING THE 2040 LONG RANGE TRANSPORTATION PLAN  
L RTP Amendment #2**

**WHEREAS**, the Kingsport Metropolitan Transportation Planning Organization (MTPO) is the designated Metropolitan Planning Organization (MPO) for the Kingsport urbanized area in Tennessee and Virginia and is responsible for carrying out a comprehensive, cooperative, and continuous transportation planning process; and

**WHEREAS**, 23 CFR 450.324 of the Code of Federal Regulations requires the development of a Metropolitan Transportation Plan, known herein as the Long Range Transportation Plan (LRTP), every five years; and

**WHEREAS**, the LRTP must comply with requirements of the current Federal Transportation Legislation; and

**WHEREAS**, said requirements mandate the need to maintain consistency for project scope and description between the long-term LRTP and the short-term Transportation Improvement Program (TIP); and

**WHEREAS**, the Executive Board of the Kingsport MTPO wishes to amend the 2040 LRTP by updating the I-81 Intelligent Transportation System Expansion Project by updating the termini, project length, cost, and funding source as identified and detailed in the attached LRTP pages for Amendment #2; and

**WHEREAS**, the proposed amendments are financially feasible based on future revenue forecasts, resulting in a fiscally constrained LRTP; and

**WHEREAS**, the Kingsport MTPO has followed procedures for amending the 2040 LRTP outlined in the Public Participation Plan including the requirement for a 30-day public review and comment period (December 30, 2021 through January 31, 2022) and public comments were also sought during the Executive Board meeting on February 3, 2022.

**NOW THEREFORE BE IT RESOLVED BY THE EXECUTIVE BOARD OF THE KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION AS FOLLOWS:**

The proposed amendment to the 2040 Long Range Transportation Plan, which shall be known as LRTP Amendment #2, is hereby approved as presented.

**RESOLUTION APPROVED:**

Date: \_\_\_\_\_

---

Paul Montgomery, Chairman  
Kingsport MTPO Executive Board

---

Lesley Phillips  
Kingsport MTPO Staff

Bill Albright  
Transportation Planning Manager

Lesley Phillips  
Transportation Planner



Kingsport MTPO  
415 Broad Street  
Kingsport, TN 37660  
[MTPO@KingsportTN.gov](mailto:MTPO@KingsportTN.gov)  
423-224-2670

## MEMORANDUM

To: Kingsport MTPO Executive Board  
All Interested Parties

From: Lesley Phillips, Transportation Planner

Date: December 29, 2021

Subject: Long Range Transportation Plan Amendment #2 – Public Review Period

---

The Kingsport MTPO has a proposed amendment to our 2040 Long Range Transportation Plan (LRTP). Attached you will find documentation for the following changes:

### **Project: I-81 ITS Expansion**

LRTP Page #: 7-4

#### Changes:

- Update termini
- Update length
- Update description
- Update YOE Cost
- Update funding source

#### Reason for Changes:

This is a state IMPROVE Act project. TDOT has proposed an Amendment to our Transportation Improvement Program (TIP) which increases the total project cost, changes the termini, and increases the project length thus also creating the need for a LRTP Amendment. The project description and funding source have also been updated.

As required by our Public Participation Plan, LRTP Amendment #2 is available for public review for at least 30 days (December 30, 2021 through January 31, 2022) prior to Executive Board action. Comments may be sent to [MTPO@KingsportTN.gov](mailto:MTPO@KingsportTN.gov) by 5:00 pm (Eastern Time) on January 31, 2022. Comments can also be made at the MTPO Executive Board meeting on February 3, 2022 at 1:30 pm.

Thank you!

**Table 7-4  
Planned Project Improvements (Cost Feasible) - Tennessee**

ID	Horizon Year	Route	From Road	To Road	Description	Length (miles)	YOE Cost	Funding
L1	-	Fort Henry Drive (SR-36)	Interstate 81	Airport Road (SR-75)	Widen existing 2 lane road to 5 lanes with sidewalks on both sides	3.5	\$88,600,000	IMPROVE
L70	-	Interstate 81	Interstate 26 Interchange (Exit 57)	Virginia State Line	ITS expansion	18.8	\$1,780,000	IMPROVE
P22	-	Stone Drive (US-11)	Bridge over North Fork Holston River		Bridge replacement/rehabilitation	0.1	\$ 2,947,000	IMPROVE
P21	-	Stone Drive (US-11)	Bridge over North Fork Holston River		Bridge replacement/rehabilitation	0.1	\$1,745,000	IMPROVE
P27	-	Industry Drive	Bridge over Reedy Creek		Bridge replacement/rehabilitation	0.1	\$2,831,000	IMPROVE
P23	-	Fordtown Road	Bridge over CSX Railroad		Bridge replacement/rehabilitation	0.1	\$1,505,000	IMPROVE
P28	-	John B. Dennis (SR-93)	Bridge over CSX Railroad		Bridge replacement/rehabilitation	0.1	\$2,081,000	IMPROVE
P20	-	Fort Henry Drive (SR-36)	Wesley Road	Rock Springs Road	Replace northbound bridge over the South Fork Holston River for safety	0.1	\$9,250,000	IMPROVE
L57	-	Fort Henry Drive (SR-36)	Wesley Road	Rock Springs Road	Replace southbound bridge over the South Fork Holston River for safety	0.2	\$12,829,000	IMPROVE
P24	-	Old Blair Gap Road	Bridge over Walker Fort Creek		Bridge replacement/rehabilitation	0.1	\$496,000	IMPROVE
P25	-	Reedy Creek Lane	Bridge over Reedy Creek		Bridge replacement/rehabilitation	0.1	\$232,000	IMPROVE
P26	-	Meadow Brooke Lane	Bridge over Reedy Creek		Bridge replacement/rehabilitation	0.1	\$851,000	IMPROVE
L54	2025	Clinchfield Street	Main Street	Stone Drive (US-11)	Coordinate signal system to improve traffic flow	1.2	\$320,000	L-STBG
L62	2025	Stone Drive (US-11)	Gibson Mill Road	Deneen Lane	Coordinate signal system	2.8	\$190,000	NHPP
L22	2025	Stone Drive (US-11)	John B. Dennis (SR-93)	Cleek Road	Improve intersections and coordinate signal timings	3.1	\$1,080,000	NHPP
L12	2025	Fort Henry Drive (SR-36)	Moreland Drive/ Hemlock Road	Interstate 81 (I-81)	Improve intersections, coordinate signal timings, and evaluate driveway cuts	1.4	\$1,900,000	NHPP
L20	2025	Stone Drive West (US-11)	Kaywood Avenue	Granby Road	Install signal system with advanced warning signals to improve safety at intersections	2.5	\$80,000	NHPP
L53	2025	Bloomingtondale Pike	John B. Dennis (SR-93)	Packinghouse Road	Improve shoulders and geometry with spot safety improvements	1.5	\$1,270,000	Local
L35	2025	East Sullivan Street	Church Circle	Main Street	Widen to 2/3 lanes with multimodal and aesthetic improvements	1.0	\$6,330,000	Local
L11	2025	Fort Henry Drive (SR-36)	John B Dennis (SR-93)	Moreland Drive / Hemlock Road	Improve intersections and coordinate signal timings; install median where non-existent	2.0	\$950,000	NHPP
L17	2025	Tranbarger Drive	Lynn Garden Drive (SR-36)	Virgil Avenue	Improve shoulders and geometry with spot safety improvements with additional safety improvements	1.0	\$920,000	Local
L65	2025	Interstate 26	John B. Dennis (SR-93)	I-26 Exit 6 (SR-347 Rock Springs Road)	Add eastbound truck climbing lane	1.9	\$2,790,000	NHFP
L60	2025	Lincoln Street	John B. Dennis (SR-93)	Wilcox Drive (SR-126)	Coordinate signal system	1.7	\$630,000	NHPP
L58	2025	John B. Dennis (SR-93)	Stone Drive (US-11)	Bloomingtondale Pike	Implement access management	2.4	\$760,000	NHPP



Table 7-4  
Planned Project Improvements (Cost Feasible) - Tennessee

ID	Horizon Year	Route	From Road	To Road	Description	Length (miles)	YOE Cost	Funding
L1	-	Fort Henry Drive (SR-36)	Interstate 81	Airport Road (SR-75)	Widen existing 2 lane road to 5 lanes with sidewalks on both sides	3.5	\$88,600,000	IMPROVE
L70	-	Interstate 81	Near Interstate 26 Interchange (Exit 57)	Near I-381 in Virginia	Intelligent Transportation System expansion (IA)	23.3	\$8,900,000	NHPP
P22	-	Stone Drive (US-11)	Bridge over North Fork Holston River		Bridge replacement/rehabilitation	0.1	\$ 2,947,000	IMPROVE
P21	-	Stone Drive (US-11)	Bridge over North Fork Holston River		Bridge replacement/rehabilitation	0.1	\$1,745,000	IMPROVE
P27	-	Industry Drive	Bridge over Reedy Creek		Bridge replacement/rehabilitation	0.1	\$2,831,000	IMPROVE
P23	-	Fordtown Road	Bridge over CSX Railroad		Bridge replacement/rehabilitation	0.1	\$1,505,000	IMPROVE
P28	-	John B. Dennis (SR-93)	Bridge over CSX Railroad		Bridge replacement/rehabilitation	0.1	\$2,081,000	IMPROVE
P20	-	Fort Henry Drive (SR-36)	Wesley Road	Rock Springs Road	Replace northbound bridge over the South Fork Holston River for safety	0.1	\$9,250,000	IMPROVE
L57	-	Fort Henry Drive (SR-36)	Wesley Road	Rock Springs Road	Replace southbound bridge over the South Fork Holston River for safety	0.2	\$12,829,000	IMPROVE
P24	-	Old Blair Gap Road	Bridge over Walker Fort Creek		Bridge replacement/rehabilitation	0.1	\$496,000	IMPROVE
P25	-	Reedy Creek Lane	Bridge over Reedy Creek		Bridge replacement/rehabilitation	0.1	\$232,000	IMPROVE
P26	-	Meadow Brooke Lane	Bridge over Reedy Creek		Bridge replacement/rehabilitation	0.1	\$851,000	IMPROVE
L54	2025	Clinchfield Street	Main Street	Stone Drive (US-11)	Coordinate signal system to improve traffic flow	1.2	\$320,000	L-STBG
L62	2025	Stone Drive (US-11)	Gibson Mill Road	Deneen Lane	Coordinate signal system	2.8	\$190,000	NHPP
L22	2025	Stone Drive (US-11)	John B. Dennis (SR-93)	Cleek Road	Improve intersections and coordinate signal timings	3.1	\$1,080,000	NHPP
L12	2025	Fort Henry Drive (SR-36)	Moreland Drive/ Hemlock Road	Interstate 81 (I-81)	Improve intersections, coordinate signal timings, and evaluate driveway cuts	1.4	\$1,900,000	NHPP
L20	2025	Stone Drive West (US-11)	Kaywood Avenue	Granby Road	Install signal system with advanced warning signals to improve safety at intersections	2.5	\$80,000	NHPP
L53	2025	Bloomingtondale Pike	John B. Dennis (SR-93)	Packinghouse Road	Improve shoulders and geometry with spot safety improvements	1.5	\$1,270,000	Local
L35	2025	East Sullivan Street	Church Circle	Main Street	Widen to 2/3 lanes with multimodal and aesthetic improvements	1.0	\$6,330,000	Local
L11	2025	Fort Henry Drive (SR-36)	John B Dennis (SR-93)	Moreland Drive / Hemlock Road	Improve intersections and coordinate signal timings; install median where non-existent	2.0	\$950,000	NHPP
L17	2025	Tranbarger Drive	Lynn Garden Drive (SR-36)	Virgil Avenue	Improve shoulders and geometry with spot safety improvements with additional safety improvements	1.0	\$920,000	Local
L65	2025	Interstate 26	John B. Dennis (SR-93)	I-26 Exit 6 (SR-347 Rock Springs Road)	Add eastbound truck climbing lane	1.9	\$2,790,000	NHFP
L60	2025	Lincoln Street	John B. Dennis (SR-93)	Wilcox Drive (SR-126)	Coordinate signal system	1.7	\$630,000	NHPP
L58	2025	John B. Dennis (SR-93)	Stone Drive (US-11)	Bloomingtondale Pike	Implement access management	2.4	\$760,000	NHPP

Table 6-10  
Streets & Highways  
Capital Revenues and Expenditures - Tennessee

2025		Budgeted				Remainder
Funding Programs	Revenue	Project Specific	Bridge Program	Safety/Traffic Program	Bike/Ped Program	
National Highway Performance Program (NHPP)	\$31,120,000	\$27,680,000		\$3,440,000		\$0
Surface Transportation Block Grant Program (S-STBG) State	\$2,169,000	\$530,000		\$1,093,000	\$546,000	\$0
NHPP Grouping, STBG Grouping, Safety Grouping, ITS/Traffic Operations/Safety	\$5,158,000			\$31,022,000		\$0
	\$19,268,000					
	\$6,596,000					
Bridge Rehabilitation & Replacement (BRR or BR)	\$7,503,000		\$7,503,000			\$0
Surface Transportation Block Grant Program (L-STBG) Local	\$23,086,000	\$21,870,000			\$1,216,000	\$0
Enhancement Funds (EHN, TAP, or RTP)	\$3,298,000				\$3,298,000	\$0
Other Federal-Aid Programs & Discretionary Funds	\$5,277,000	\$2,790,000			\$2,487,000	\$0
Local (All allocations in Sullivan County/Kingsport)	\$28,059,000	\$19,170,000			\$8,889,000	\$0
STA	\$5,277,000			\$5,277,000		\$0
IMPROVE Act	\$125,147,000	\$125,147,000				\$0
Totals	\$261,958,000	\$197,187,000	\$7,503,000	\$40,832,000	\$16,436,000	\$0

2040		Budgeted				Remainder
Funding Programs	Revenue	Project Specific	Bridge Program	Safety/Traffic Program	Bike/Ped Program	
National Highway Performance Program (NHPP)	\$62,555,000	\$62,490,000		\$65,000		\$0
Surface Transportation Block Grant Program (S-STBG) State	\$4,361,000	\$2,260,000		\$2,101,000		\$0
NHPP Grouping, STBG Grouping, Safety Grouping, ITS/Traffic Operations/Safety	\$10,368,000			\$62,357,000		\$0
	\$38,730,000					
	\$13,259,000					
Bridge Rehabilitation & Replacement (BRR or BR)	\$15,082,000		\$15,082,000			\$0
Surface Transportation Block Grant Program (L-STBG) Local	\$46,406,000	\$44,070,000		\$500,000	\$1,836,000	\$0
Enhancement Funds (EHN, TAP, or RTP)	\$6,629,000				\$6,629,000	\$0
Other Federal-Aid Programs & Discretionary Funds	\$10,607,000	\$5,780,000		\$827,000	\$4,000,000	\$0
Local (All allocations in Sullivan County/Kingsport)	\$56,403,000	\$36,120,000		\$4,958,500	\$15,324,500	\$0
STA	\$10,607,000			\$10,607,000		\$0
						\$0
Totals	\$275,007,000	\$150,720,000	\$15,082,000	\$81,415,500	\$27,789,500	\$0

2025 TN Capital Expenditures	
LRTP Roadway Projects	\$72,040,000
IMPROVE Roadway Projects	\$88,600,000
LRTP Bridge Program	\$7,503,000
IMPROVE Bridge Projects	\$34,767,000
LRTP Safety/Traffic Program	\$40,832,000
IMPROVE ITS	\$1,780,000
LRTP Bike/Ped Program	\$16,436,000
Total	\$261,958,000

2025 - Investments	
Roadway Improvements	61%
Bridge Improvements	16%
Safety/Traffic Operations	16%
Bike/Ped Improvements	7%
Total	100%

2040 TN Capital Expenditures	
LRTP Roadway Projects	\$150,720,000
LRTP Bridge Program	\$15,082,000
LRTP Safety/Traffic Program	\$81,415,500
LRTP Bike/Ped Program	\$27,789,500
Total	\$275,007,000

2040 - Investments	
Roadway Improvements	55%
Bridge Improvements	5%
Safety/Traffic Operations	30%
Bike/Ped Improvements	10%
Total	100%

	2025	2040	Total
TN - Capital Revenues	\$136,811,000	\$275,007,000	\$411,818,000
IMPROVE Act	\$125,147,000		\$125,147,000
Total Capital Revenues	\$261,958,000	\$275,007,000	\$536,965,000

2025 & 2040 TN Capital Expenditures	
LRTP Roadway Projects	\$222,760,000
IMPROVE Roadway Projects	\$88,600,000
LRTP Bridge Program	\$22,585,000
IMPROVE Bridge Projects	\$34,767,000
LRTP Safety/Traffic Program	\$122,247,500
IMPROVE ITS	\$1,780,000
LRTP Bike/Ped Program	\$44,225,500
Total	\$536,965,000

2025 & 2040 - Investments	
Roadway Improvements	58%
Bridge Improvements	11%
Safety/Traffic Operations	23%
Bike/Ped Improvements	8%
Total	100%

Table 6-10  
Streets & Highways  
Capital Revenues and Expenditures - Tennessee

2025		Budgeted				Remainder
Funding Programs	Revenue	Project Specific	Bridge Program	Safety/Traffic Program	Bike/Ped Program	
National Highway Performance Program (NHPP)	\$31,120,000	\$27,680,000		\$3,440,000		\$0
Surface Transportation Block Grant Program (S-STBG) State	\$2,169,000	\$530,000		\$1,093,000	\$546,000	\$0
NHPP Grouping, STBG Grouping, Safety Grouping, ITS/Traffic Operations/Safety	\$5,158,000			\$31,022,000		\$0
	\$19,268,000					
	\$6,596,000					
Bridge Rehabilitation & Replacement (BRR or BR)	\$7,503,000		\$7,503,000			\$0
Surface Transportation Block Grant Program (L-STBG) Local	\$23,086,000	\$21,870,000			\$1,216,000	\$0
Enhancement Funds (EHN, TAP, or RTP)	\$3,298,000				\$3,298,000	\$0
Other Federal-Aid Programs & Discretionary Funds	\$5,277,000	\$2,790,000			\$2,487,000	\$0
Local (All allocations in Sullivan County/Kingsport)	\$28,059,000	\$19,170,000			\$8,889,000	\$0
STA	\$5,277,000			\$5,277,000		\$0
IMPROVE Act	\$123,367,000	\$123,367,000				\$0
IMPROVE Act/NHPP	\$8,900,000	\$8,900,000				
Totals	\$269,078,000	\$204,307,000	\$7,503,000	\$40,832,000	\$16,436,000	\$0

2040		Budgeted				Remainder
Funding Programs	Revenue	Project Specific	Bridge Program	Safety/Traffic Program	Bike/Ped Program	
National Highway Performance Program (NHPP)	\$62,555,000	\$62,490,000		\$65,000		\$0
Surface Transportation Block Grant Program (S-STBG) State	\$4,361,000	\$2,260,000		\$2,101,000		\$0
NHPP Grouping, STBG Grouping, Safety Grouping, ITS/Traffic Operations/Safety	\$10,368,000			\$62,357,000		\$0
	\$38,730,000					
	\$13,259,000					
Bridge Rehabilitation & Replacement (BRR or BR)	\$15,082,000		\$15,082,000			\$0
Surface Transportation Block Grant Program (L-STBG) Local	\$46,406,000	\$44,070,000		\$500,000	\$1,836,000	\$0
Enhancement Funds (EHN, TAP, or RTP)	\$6,629,000				\$6,629,000	\$0
Other Federal-Aid Programs & Discretionary Funds	\$10,607,000	\$5,780,000		\$827,000	\$4,000,000	\$0
Local (All allocations in Sullivan County/Kingsport)	\$56,403,000	\$36,120,000		\$4,958,500	\$15,324,500	\$0
STA	\$10,607,000			\$10,607,000		\$0
						\$0
						\$0
Totals	\$275,007,000	\$150,720,000	\$15,082,000	\$81,415,500	\$27,789,500	\$0

2025 TN Capital Expenditures	
LRTP Roadway Projects	\$72,040,000
IMPROVE Roadway Projects	\$88,600,000
LRTP Bridge Program	\$7,503,000
IMPROVE Bridge Projects	\$34,767,000
LRTP Safety/Traffic Program	\$40,832,000
IMPROVE ITS	\$8,900,000
LRTP Bike/Ped Program	\$16,436,000
Total	\$269,078,000

2025 - Investments	
Roadway Improvements	60%
Bridge Improvements	16%
Safety/Traffic Operations	18%
Bike/Ped Improvements	6%
Total	100%

	2025	2040	Total
TN - Capital Revenues	\$136,811,000	\$275,007,000	\$411,818,000
IMPROVE Act	\$132,267,000		\$132,267,000
Total Capital Revenues	\$269,078,000	\$275,007,000	\$544,085,000

2040 TN Capital Expenditures	
LRTP Roadway Projects	\$150,720,000
LRTP Bridge Program	\$15,082,000
LRTP Safety/Traffic Program	\$81,415,500
LRTP Bike/Ped Program	\$27,789,500
Total	\$275,007,000

2040 - Investments	
Roadway Improvements	55%
Bridge Improvements	5%
Safety/Traffic Operations	30%
Bike/Ped Improvements	10%
Total	100%

2025 & 2040 TN Capital Expenditures	
LRTP Roadway Projects	\$222,760,000
IMPROVE Roadway Projects	\$88,600,000
LRTP Bridge Program	\$22,585,000
IMPROVE Bridge Projects	\$34,767,000
LRTP Safety/Traffic Program	\$122,247,500
IMPROVE ITS	\$8,900,000
LRTP Bike/Ped Program	\$44,225,500
Total	\$544,085,000

2025 & 2040 - Investments	
Roadway Improvements	57%
Bridge Improvements	11%
Safety/Traffic Operations	24%
Bike/Ped Improvements	8%
Total	100%

**RESOLUTION BY THE EXECUTIVE BOARD  
OF THE KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION  
AMENDING THE KINGSPORT AREA FY 2020-2023 TRANSPORTATION IMPROVEMENT PROGRAM**

**TIP AMENDMENT #8**

**WHEREAS**, the Kingsport Metropolitan Transportation Planning Organization (MTPO) is the designated Metropolitan Planning Organization (MPO) for the Kingsport urbanized area in Tennessee and Virginia and is responsible for carrying out a comprehensive, cooperative, and continuing transportation planning process; and

**WHEREAS**, the Kingsport MTPO is responsible for programming funds for transportation projects in the Transportation Improvement Program (TIP); and

**WHEREAS**, the Kingsport Area FY 2020-2023 TIP is a document that continually evolves and needs amended; and

**WHEREAS**, the Memorandum of Agreement between the Tennessee Department of Transportation and the Kingsport MTPO outlines the requirements to amend the TIP; and

**WHEREAS**, the Executive Board of the Kingsport MTPO wishes to amend the FY 2020-2023 TIP by making the following changes as detailed in the attached TIP pages for Amendment #8:

- I-81 ITS Expansion (TN-2019-009) – Update termini, length, description, and total project cost. Move PE-D to FY22, increase CONST to \$8,700,000;
- SR-93 (TN-2011-010b) – Add \$2,502,000 ACSTBG funds to CONST in FY22 and increase total project cost; and

**WHEREAS**, TIP amendments comply with the requirements of the Kingsport MTPO's Public Participation Plan; and

**WHEREAS**, the Kingsport MTPO staff used criteria from Federal Metropolitan Transportation Planning regulations found in 23 CFR 450.316 and 450.326 to ensure compliance, and

**WHEREAS**, in accordance with requirements of the U.S. Department of Transportation, amendments to the Transportation Improvement Program are to receive final approval from the Executive Board of the local Metropolitan Transportation Planning Organization.

**NOW THEREFORE BE IT RESOLVED BY THE EXECUTIVE BOARD OF THE KINGSPORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION AS FOLLOWS:**

The proposed amendment to the Tennessee portion of the Kingsport Metropolitan Transportation Planning Organization FY 2020-2023 Transportation Improvement Program, which shall be known as TIP Amendment #8, is hereby approved as presented.

**RESOLUTION APPROVED:**

Date: \_\_\_\_\_

---

Paul Montgomery, Chairman  
Kingsport MTPO Executive Board

---

Lesley Phillips  
Kingsport MTPO Staff

## METROPOLITAN TRANSPORTATION PLANNING PROCESS CERTIFICATION

In accordance with 23 CFR 450.336, the Kingsport Metropolitan Transportation Planning Organization and the Tennessee Department of Transportation hereby certify that the metropolitan transportation planning process is addressing major issues facing the Kingsport, TN-VA urbanized area, and is being carried out in accordance with the following requirements:

- I. 23 U.S.C. 134 and 135, 49 U.S.C. 5303 and 5304 (Highways and Transit).
- II. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000 d-1) and 49 CFR part 21.
- III. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity.
- IV. Section 1101 (b) of the FAST-Act (Pub. L 114-357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT-funded projects.
- V. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts.
- VI. Provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq) and 49 CFR parts 27, 37, and 38.
- VII. In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended, 42 U.S.C. 7504, 7506 (c) and (d), and 40 CFR part 93.
- VIII. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance.
- IX. Section 324 of Title 23 U.S.C. regarding the prohibition of discrimination based on gender.
- X. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

---

Paul Montgomery, Chairman  
Kingsport MTPO Executive Board

---

Date

---

Lesley Phillips  
Kingsport MTPO Staff

---

Date



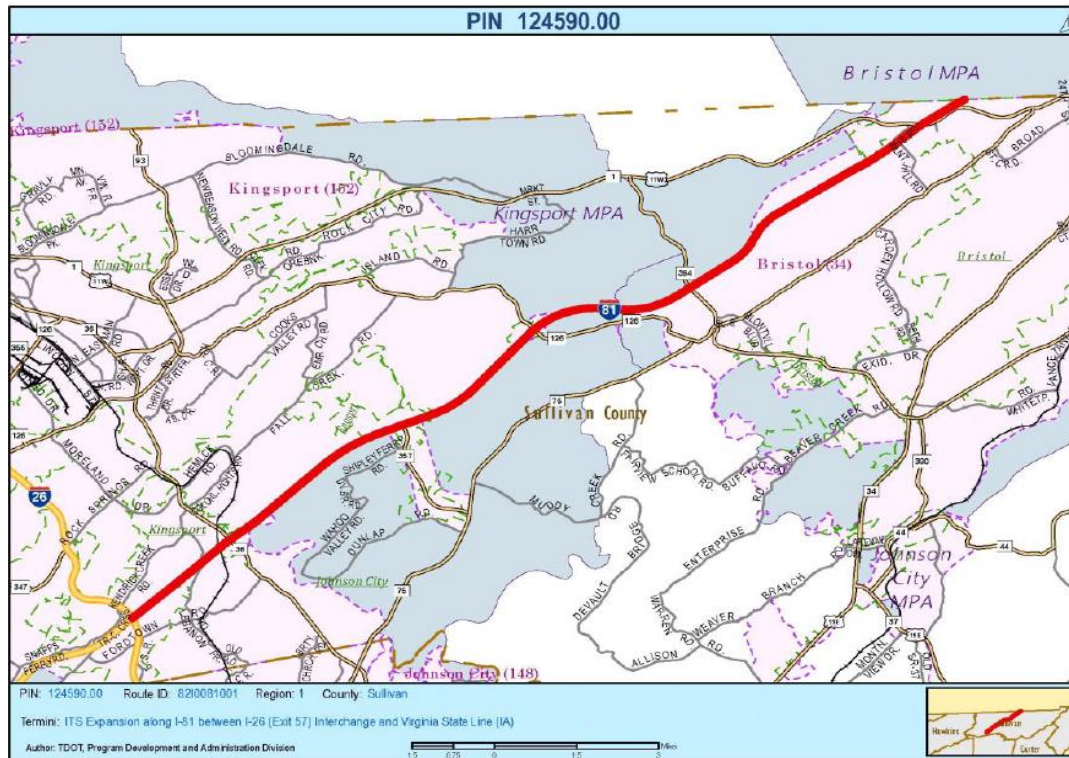
OLD PAGE

TIP #	TN-2019-009	TDOT PIN / VA UPC	124590.00	Priority		Lead Agency	TDOT
STIP #	2082000						
County	Sullivan	Length	18.8 miles	L RTP#	Page # 7-4	Conformity Status	NA
Route/Project Name	I-81 - ITS Expansion					Total Project Cost	\$2,200,000
Termini or Intersection	I-26 (Exit 57) Interchange and Virginia State Line						
Project Description	Includes the deployment of CCTV cameras at critical interchanges. Includes installation of communications infrastructure and at least 2 CCTV cameras at each interchange.						

Fiscal Year	Phase	Funding Type	Total Funds	Fed Funds	State Funds	Local Funds
FY20	PE-N	NHPP	\$140,000	\$126,000	\$14,000	\$0
FY20	PE-D	NHPP	\$60,000	\$54,000	\$6,000	\$0
FY23	CONST	NHPP	\$2,000,000	\$1,800,000	\$200,000	\$0

Remarks	Amendment #	Admin Modification #
TDOT Modification #160 - Move CONST phase from FY22 to FY23		7





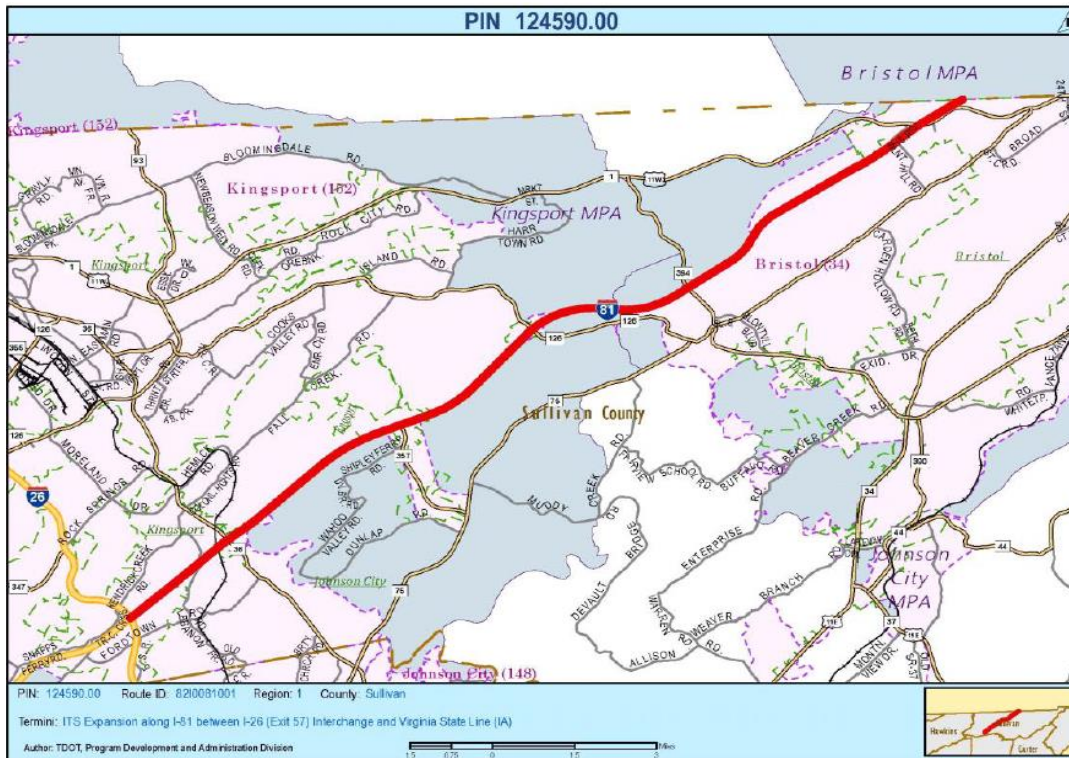


AMENDED PAGE

TIP #	TN-2019-009	TDOT PIN / VA UPC	124590.00	Priority		Lead Agency	TDOT
STIP #	2082000						
County	Sullivan	Length	23.3 miles	L RTP#	Page # 7-4	Conformity Status	NA
Route/Project Name	I-81 - ITS Expansion					Total Project Cost	\$8,900,000
Termini or Intersection	Near I-26 (Exit 57) Interchange to Near I-381 in Virginia (IA)						
Project Description	Intelligent Transportation System Expansion						

Fiscal Year	Phase	Funding Type	Total Funds	Fed Funds	State Funds	Local Funds
FY20	PE-N	NHPP	\$140,000	\$126,000	\$14,000	\$0
FY22	PE-D	NHPP	\$60,000	\$54,000	\$6,000	\$0
FY23	CONST	NHPP	\$8,700,000	\$7,830,000	\$870,000	\$0

Remarks	Amendment #	8	Admin Modification #	
TDOT Amendment #114 - Move PE-D to FY22, increase CONST to \$8,700,000, update project description, termini, length, and total project cost				





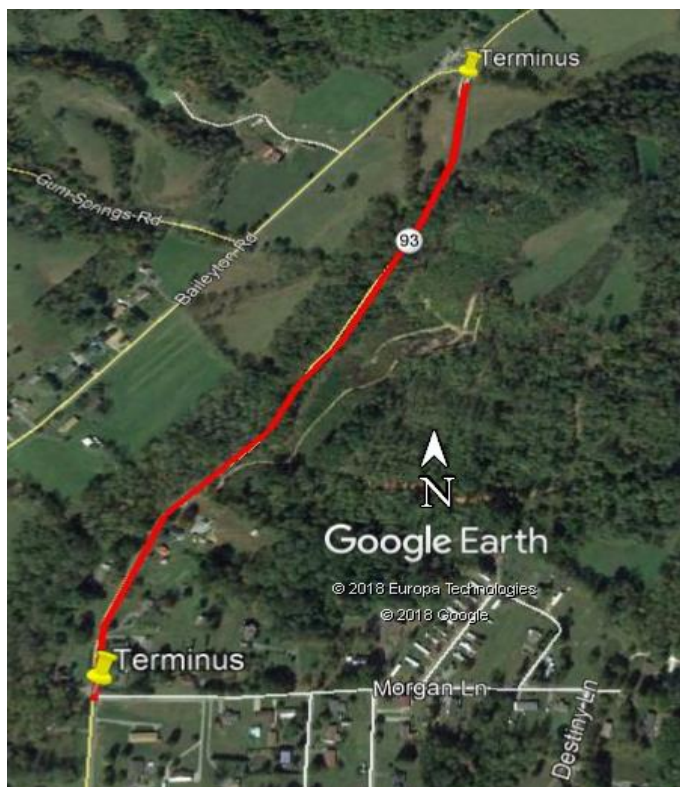


OLD PAGE

TIP #	TN-2011-010b	TDOT PIN / VA UPC	112834.02	Priority		Lead Agency	TDOT
STIP #	2090135						
County	Washington, Sullivan	Length	0.54 mile	LRTP#	Page #4-5	Conformity Status	NA
Route/Project Name	SR-93					Total Project Cost	\$5,563,500
Termini or Intersection	(Sullivan Gardens Parkway) from Near Morgan Lane in Washington County to South of Baileyton Road in Sullivan County (TPR Option 5, Spot Improvement) (IA)						
Project Description	Miscellaneous Safety Improvements - proposed realignment of SR-93 to improve sight distance, provide two 12-foot lanes and 6-foot shoulders.						

Fiscal Year	Phase	Funding Type	Total Funds	Fed Funds	State Funds	Local Funds
FY22	CONST	ACSTBG	\$4,300,000	\$0	\$4,300,000	\$0

Remarks	Amendment #	Admin Modification #
TDOT Modification #442 - Change STBG funds to ACSTBG funds		15



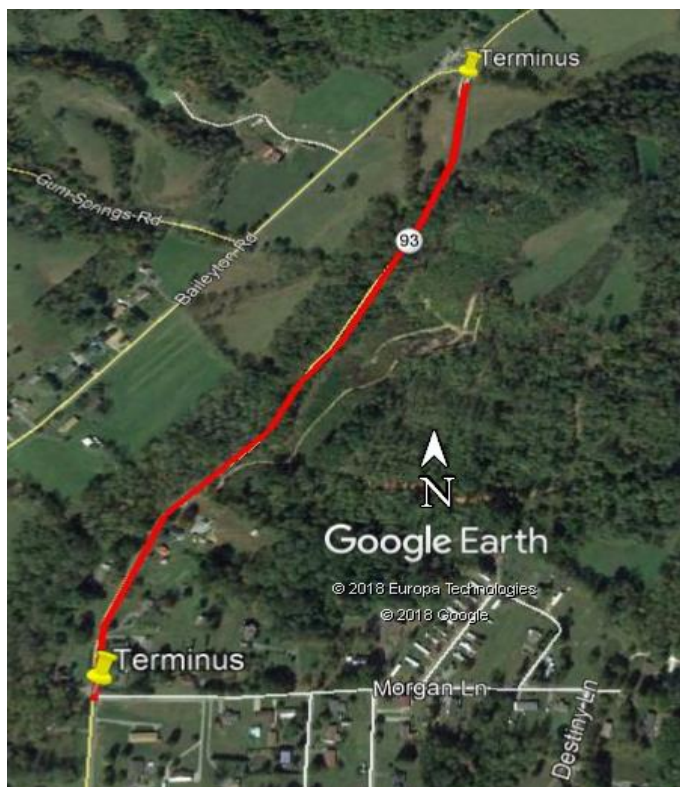


AMENDED PAGE

TIP #	TN-2011-010b	TDOT PIN / VA UPC	112834.02	Priority		Lead Agency	TDOT
STIP #	2090135						
County	Washington, Sullivan	Length	0.54 mile	LRTP#	Page #4-5	Conformity Status	NA
Route/Project Name	SR-93					Total Project Cost	\$8,065,500
Termini or Intersection	(Sullivan Gardens Parkway) from Near Morgan Lane in Washington County to South of Baileyton Road in Sullivan County (TPR Option 5, Spot Improvement) (IA)						
Project Description	Miscellaneous Safety Improvements - proposed realignment of SR-93 to improve sight distance, provide two 12-foot lanes and 6-foot shoulders.						

Fiscal Year	Phase	Funding Type	Total Funds	Fed Funds	State Funds	Local Funds
FY22	CONST	ACSTBG	\$6,802,000	\$0	\$6,802,000	\$0

Remarks	Amendment #	8	Admin Modification #	
TDOT Amendment #118 - Add \$2,502,000 ACSTBG funds to CONST in FY22				



Beg. Balance STBG (local): \$8,830,089  
**Kingsport MTPO FY 2020 - 2023 TIP Highway Funding Summary**

**Tennessee Highway Totals for FY20**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
HSIP	\$400,000	\$360,000	\$40,000	\$0	\$0	\$400,000	\$0
HSIP-R	\$425	\$383	\$43	\$0	\$0	\$425	\$0
NHPP	\$445,000	\$376,000	\$69,000	\$0	\$0	\$445,000	\$0
R-STBG (State)	\$131,500	\$105,200	\$26,300	\$0	\$0	\$131,500	\$0
STBG (State)	\$12,150,000	\$9,720,000	\$2,430,000	\$0	\$0	\$12,150,000	\$0
STBG (Local)*	\$3,329,000	\$2,680,200	\$80,000	\$568,800	\$6,149,889	\$1,553,905	\$7,703,794
O & M (Local)	\$17,560,000	\$0	\$0	\$17,560,000	\$0	\$17,560,000	\$0
<b>Totals:</b>	<b>\$34,015,925</b>	<b>\$13,241,783</b>	<b>\$2,645,343</b>	<b>\$18,128,800</b>	<b>\$0</b>	<b>\$32,240,830</b>	<b>\$7,703,794</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

**Tennessee Highway Totals for FY21**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
HSIP	\$78,125	\$70,313	\$7,813	\$0	\$0	\$78,125	\$0
HSIP-R	\$350	\$315	\$35	\$0	\$0	\$350	\$0
NHPP	\$8,000,000	\$6,400,000	\$1,600,000	\$0	\$0	\$8,000,000	\$0
STBG (State)	\$2,475,000	\$1,980,000	\$495,000	\$0	\$0	\$2,475,000	\$0
STBG (Local)*	\$1,150,000	\$280,000	\$0	\$870,000	\$7,423,794	\$1,543,424	\$8,967,218
O & M (Local)	\$17,735,600	\$0	\$0	\$17,735,600	\$0	\$17,735,600	\$0
<b>Totals:</b>	<b>\$29,439,075</b>	<b>\$8,730,628</b>	<b>\$2,102,848</b>	<b>\$18,605,600</b>	<b>\$7,423,794</b>	<b>\$29,832,499</b>	<b>\$8,967,218</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

**Tennessee Highway Totals for FY22**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
ACSTBG	\$4,300,000	\$0	\$4,300,000	\$0	\$0	\$4,300,000	\$0
HSIP	\$46,875	\$42,188	\$4,688	\$0	\$0	\$46,875	\$0
HSIP-R	\$150	\$135	\$15	\$0	\$0	\$150	\$0
NHPP	\$5,000,000	\$4,000,000	\$1,000,000	\$0	\$0	\$5,000,000	\$0
STBG (State)	\$2,000,000	\$1,600,000	\$400,000	\$0	\$0	\$2,000,000	\$0
STBG (Local)*	\$10,723,388	\$8,578,710	\$0	\$2,144,678	\$388,508	\$1,553,905	\$1,942,413
CRRSAA-HIP	\$611,612	\$611,612	\$0	\$0	\$0	\$611,612	\$0
O & M (Local)	\$17,912,956	\$0	\$0	\$17,912,956	\$0	\$17,912,956	\$0
<b>Totals:</b>	<b>\$40,594,981</b>	<b>\$14,832,645</b>	<b>\$5,704,703</b>	<b>\$20,057,634</b>	<b>\$388,508</b>	<b>\$31,425,498</b>	<b>\$1,942,413</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

**Tennessee Highway Totals for FY23**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
HSIP	\$31,250	\$28,125	\$3,125	\$0	\$0	\$31,250	\$0
HSIP-R	\$75	\$68	\$8	\$0	\$0	\$75	\$0
NHPP	\$2,105,000	\$1,884,000	\$221,000	\$0	\$0	\$2,105,000	\$0
STBG (State)	\$37,500	\$30,000	\$7,500	\$0	\$0	\$37,500	\$0
STBG (Local)*	\$2,500,000	\$2,000,000	\$0	\$500,000	-\$57,587	\$1,553,905	\$1,496,318
O & M (Local)	\$18,092,085	\$0	\$0	\$18,092,085	\$0	\$18,092,085	\$0
LOCAL	\$3,000,000	\$0	\$0	\$3,000,000	\$0	\$3,000,000	\$0
<b>Totals:</b>	<b>\$22,765,910</b>	<b>\$3,942,193</b>	<b>\$231,633</b>	<b>\$18,592,085</b>	<b>-\$57,587</b>	<b>\$24,819,815</b>	<b>\$1,496,318</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

\*\* surplus or deficit represents the MTPO's objective to maintain fiscal constraint for projects and funding designated within the Kingsport MTPO area

Beg. Balance STBG (local): \$8,830,089

**Kingsport MTPO FY 2020 - 2023 TIP Highway Funding Summary**

**Tennessee Highway Totals for FY20**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
HSIP	\$400,000	\$360,000	\$40,000	\$0	\$0	\$400,000	\$0
HSIP-R	\$425	\$383	\$43	\$0	\$0	\$425	\$0
NHPP	\$385,000	\$322,000	\$63,000	\$0	\$0	\$385,000	\$0
R-STBG (State)	\$131,500	\$105,200	\$26,300	\$0	\$0	\$131,500	\$0
STBG (State)	\$12,150,000	\$9,720,000	\$2,430,000	\$0	\$0	\$12,150,000	\$0
STBG (Local)*	\$3,329,000	\$2,680,200	\$80,000	\$568,800	\$6,149,889	\$1,553,905	\$7,703,794
O & M (Local)	\$17,560,000	\$0	\$0	\$17,560,000	\$0	\$17,560,000	\$0
<b>Totals:</b>	<b>\$33,955,925</b>	<b>\$13,187,783</b>	<b>\$2,639,343</b>	<b>\$18,128,800</b>	<b>\$0</b>	<b>\$32,180,830</b>	<b>\$7,703,794</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

**Tennessee Highway Totals for FY21**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
HSIP	\$78,125	\$70,313	\$7,813	\$0	\$0	\$78,125	\$0
HSIP-R	\$350	\$315	\$35	\$0	\$0	\$350	\$0
NHPP	\$8,000,000	\$6,400,000	\$1,600,000	\$0	\$0	\$8,000,000	\$0
STBG (State)	\$2,475,000	\$1,980,000	\$495,000	\$0	\$0	\$2,475,000	\$0
STBG (Local)*	\$1,150,000	\$280,000	\$0	\$870,000	\$7,423,794	\$1,543,424	\$8,967,218
O & M (Local)	\$17,735,600	\$0	\$0	\$17,735,600	\$0	\$17,735,600	\$0
<b>Totals:</b>	<b>\$29,439,075</b>	<b>\$8,730,628</b>	<b>\$2,102,848</b>	<b>\$18,605,600</b>	<b>\$7,423,794</b>	<b>\$29,832,499</b>	<b>\$8,967,218</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

**Tennessee Highway Totals for FY22**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
ACSTBG	\$6,802,000	\$0	\$6,802,000	\$0	\$0	\$6,802,000	\$0
HSIP	\$46,875	\$42,188	\$4,688	\$0	\$0	\$46,875	\$0
HSIP-R	\$150	\$135	\$15	\$0	\$0	\$150	\$0
NHPP	\$5,060,000	\$4,054,000	\$1,006,000	\$0	\$0	\$5,060,000	\$0
STBG (State)	\$2,000,000	\$1,600,000	\$400,000	\$0	\$0	\$2,000,000	\$0
STBG (Local)*	\$10,723,388	\$8,578,710	\$0	\$2,144,678	\$388,508	\$1,553,905	\$1,942,413
CRRSAA-HIP	\$611,612	\$611,612	\$0	\$0	\$0	\$611,612	\$0
O & M (Local)	\$17,912,956	\$0	\$0	\$17,912,956	\$0	\$17,912,956	\$0
<b>Totals:</b>	<b>\$43,156,981</b>	<b>\$14,886,645</b>	<b>\$8,212,703</b>	<b>\$20,057,634</b>	<b>\$388,508</b>	<b>\$33,987,498</b>	<b>\$1,942,413</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

**Tennessee Highway Totals for FY23**

Funding Source	Total Programmed Funds	Programmed Federal Funds	Programmed State Funds	Programmed Local Funds	Surplus / Deficit **	Anticipated Revenue	Available Unprogrammed Balance
HSIP	\$31,250	\$28,125	\$3,125	\$0	\$0	\$31,250	\$0
HSIP-R	\$75	\$68	\$8	\$0	\$0	\$75	\$0
NHPP	\$8,805,000	\$7,914,000	\$891,000	\$0	\$0	\$8,805,000	\$0
STBG (State)	\$37,500	\$30,000	\$7,500	\$0	\$0	\$37,500	\$0
STBG (Local)*	\$2,500,000	\$2,000,000	\$0	\$500,000	-\$57,587	\$1,553,905	\$1,496,318
O & M (Local)	\$18,092,085	\$0	\$0	\$18,092,085	\$0	\$18,092,085	\$0
LOCAL	\$3,000,000	\$0	\$0	\$3,000,000	\$0	\$3,000,000	\$0
<b>Totals:</b>	<b>\$29,465,910</b>	<b>\$9,972,193</b>	<b>\$901,633</b>	<b>\$18,592,085</b>	<b>-\$57,587</b>	<b>\$31,519,815</b>	<b>\$1,496,318</b>

\*The State Funds column for this line item refers to projects that may include the State's participation requiring the use of STBG funds

\*\* surplus or deficit represents the MTPO's objective to maintain fiscal constraint for projects and funding designated within the Kingsport MTPO area

**Agenda Item #9 - Kingsport MTPO Regional Bicycle and Pedestrian Plan**

**RESOLUTION BY THE EXECUTIVE BOARD  
OF THE KINGSFORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION (MTPO)  
TO APPROVE AND ADOPT THE KINGSFORT MTPO REGIONAL BICYCLE AND PEDESTRIAN PLAN**

**WHEREAS**, the Kingsport Metropolitan Transportation Planning Organization (MTPO) is the designated Metropolitan Planning Organization (MPO) for the Kingsport urbanized area in Tennessee and Virginia and is responsible for carrying out a comprehensive, cooperative, and continuing transportation planning process; and

**WHEREAS**, various state, local, and regional agencies involved with transportation planning for the Kingsport MTPO Planning area have cooperatively developed the *Kingsport MTPO Regional Bicycle and Pedestrian Plan* in order to provide documentation on multimodal travel options for citizens and travelers within the planning area in a safe and effective manner; and

**WHEREAS**, the *Kingsport MTPO Regional Bicycle and Pedestrian Plan* was developed to support and promote federal, state, and local initiatives pertaining to bicycle and pedestrian facilities and also to supplement the multimodal element included in the Kingsport MTPO Long Range Transportation Plan, and identified in 23 CFR Part 450; and

**WHEREAS**, the MTPO has involved the public and interested stakeholders in an open and transparent process in accordance with the MTPO's adopted Public Participation Plan and according to federal and state regulations pertaining to face to face and virtual meetings, and has incorporated public initiated suggestions into the plan; and

**WHEREAS**, the plan includes project descriptions by cross-section type, safety features, connectivity with communities, demographic equity, and economic development.

**NOW THEREFORE BE IT RESOLVED BY THE EXECUTIVE BOARD OF THE KINGSFORT METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION AS FOLLOWS:**

The Executive Board of the Kingsport MTPO does hereby approve and adopt the *Kingsport MTPO Regional Bicycle and Pedestrian Plan* in order to ensure the continued livability, sustainability, and prosperity of the region by serving as the basis for future multimodal transportation planning and programming decisions, specifically bicycle and pedestrian facilities and programs.

**RESOLUTION APPROVED:**

Date: \_\_\_\_\_

\_\_\_\_\_  
Paul Montgomery, Chairman  
Kingsport MTPO Executive Board

\_\_\_\_\_  
William Albright  
Kingsport MTPO Staff

**The final Kingsport MTPO Regional Bicycle and Pedestrian Plan document is attached beginning at page 32.**

## **PROJECT UPDATES**

### **KINGSPORT/SULLIVAN COUNTY**

- Greenbelt – West End
- Brickyard Bicycle & Pedestrian Bridge
- Main Street Rebuild
- Island Road Rebuild
- Resurfacing Grouping – Kingsport
- Fort Robinson Bridge over Dry Creek
- SR-126 (Memorial Boulevard) – Phase I
- SR-126 (Memorial Boulevard) – Phase II
- SR-36 (Fort Henry Drive) – SR-75 to I-81
- SR-347 (Rock Springs Road)
- SR-93 Improvements
  - .01 Washington County section
  - .02 Washington/Sullivan County section
  - .03 Sullivan County section
- I-81 ITS Expansion

### **RECENTLY COMPLETED**

- Stone Drive Sidewalk
- US-23 Access Management and Park & Ride Lot (Gate City)
- Memorial Blvd/Fort Henry Dr Intersection

### **HAWKINS COUNTY**

- Independence Avenue
- Hammond Avenue

### **VIRGINIA**

- US-23/58 and Hilton Road Intersection

---

### **PLANS and STUDIES**

- Long Range Transportation Plan
- Kingsport Regional Bicycle and Pedestrian Plan
- Urban Transportation Planning Grant/East Center Street Corridor Study
- FHWA/Local Road Safety Plan
- US-23 – Virginia (Project Pipeline)



Kingsport Metropolitan Transportation Planning Organization (MTPO)

---

# Regional Bicycle and Pedestrian Plan

January 2022





Prepared By

---



GreshamSmith.com  
615.770.8100

222 Second Avenue South  
Suite 1400  
Nashville, TN 37201

©2022 Gresham Smith



## Regional Bicycle and Pedestrian Plan

# Contents

### **Section 1.0**

Overview..... 2

### **Section 2.0**

Bicycle and Pedestrian Network Plans ..... 18

### **Section 3.0**

Bicycle and Pedestrian Policies and Programs ..... 46

### **Section 4.0**

Implementation and Funding Strategies ..... 54

### **Section 5.0**

Summary ..... 60

### **Appendices**

Appendix A. Public Engagement Summary ..... II

Appendix B. Project Concept

Construction Cost Estimates ..... XIV

Appendix C. Model Complete Streets Ordinance..... XXVI

Appendix D. Ranked Project Lists..... XXXI

## Figures

Figure 1.1 Regional Bicycle and Pedestrian Plan Study Area .....	3
Figure 1.2 Existing Bicycle and Pedestrian Demand .....	9
Figure 1.3 Projected Bicycle and Pedestrian Demand .....	10
Figure 1.4 Demand Increase – Existing to Projected .....	11
Figure 1.5 Bicycle Level of Traffic Stress (LTS) .....	13
Figure 1.6 Pedestrian Level of Traffic Stress (LTS) .....	15
Figure 2.1 Recommended Bikeway Network (without Greenbelt Expansion) .....	21
Figure 2.2 Recommended Bikeway Network (with Greenbelt Expansion) .....	22
Figure 2.3 Recommended Bikeway Network: Detail of Urban Core .....	23
Figure 2.4 Pedestrian Network Recommendations .....	28
Figure 2.5a West Jackson Street from Solon Street to Fir Street / Water Street .....	35
Figure 2.5b East Jackson Street from Jones Street to Solon Street .....	36
Figure 2.6 West Stone Drive (US-11W) / Netherland Inn Road from Independence Avenue to Big Elm Road .....	37
Figure 2.7 North John B Dennis Highway from Bloomingdale Road to Pavilion Drive .....	38
Figure 2.8 Fort Henry Drive (SR-36) from Colonial Heights Road to Wilmont Drive .....	39
Figure 2.9 Warm Springs Road / Apple Orchard Road from Yuma Road to Carters Valley Road .....	40
Figure 2.10 Watauga Street from Broad Street to East Center Street .....	41
Figure 2.11 East Stone Drive (US-11W) from Beechnut Drive to Kingsport Pavilion Access Road .....	42
Figure 2.12 Horse Creek Greenway .....	43
Figure 4.1 Project Prioritization and Development Process .....	56

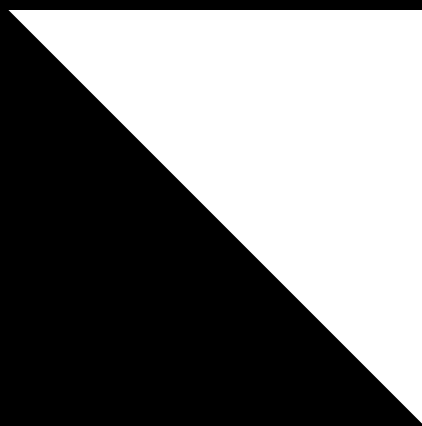
## Tables

Table 2.1 Recommended Bicycle Improvements . . . . .	24
Table 2.2 Pedestrian Network Recommendations – Project List . . . . .	29
Table 3.1 Best Practices – Land Development Policies and Regulations . . . . .	48
Table 3.2 Priority Short-Term Non-Infrastructure Programs . . . . .	49



# Overview

Section 1.0



# Overview

The Kingsport Metropolitan Transportation Planning Organization (MTPO) was established in 1977, pursuant to federal requirements, to provide a continuing, cooperative, and comprehensive approach to transportation planning for the Kingsport urbanized area – which today, based on the 2010 US Census, includes the city of Kingsport, town of Mount Carmel, and City of Church Hill, Tennessee; Weber City and Town of Gate City, Virginia; and portions of Hawkins County, Sullivan County, and Washington County, Tennessee, as well as portions of Scott County, Virginia (see Figure 1.1).

Like many communities in Tennessee, Virginia, and around the country, the Kingsport urbanized area has seen a renewed interest in walking and bicycling. As demographic trends point to additional growth in metropolitan regions, more and more people are increasingly interested in walking and bicycling for a wide range of trip purposes – from going to work and shopping, to tourism and general recreation.

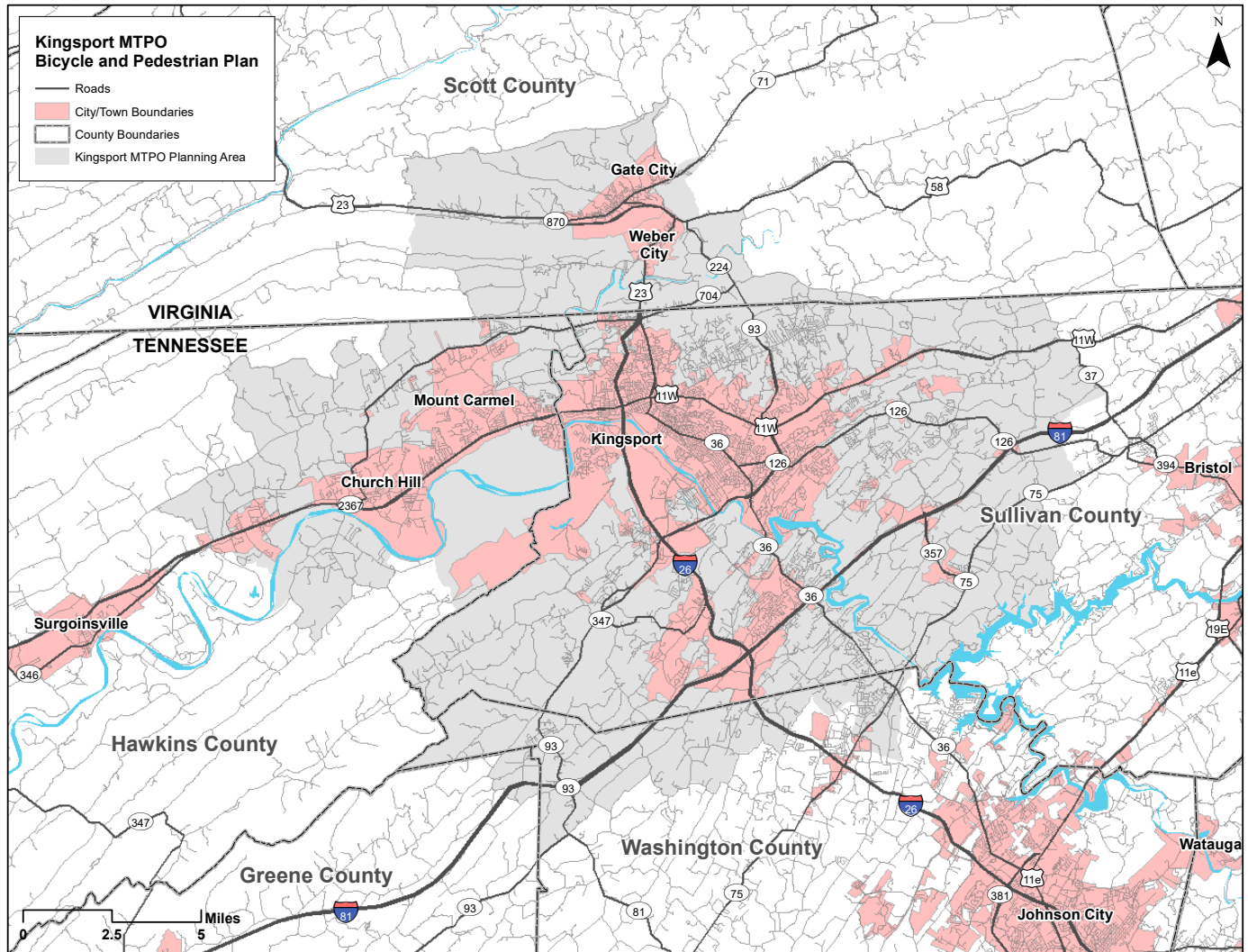
In 2012, the Kingsport MTPO developed a comprehensive regional bicycle and pedestrian plan to provide safe and convenient walking and bicycling opportunities. This plan represents an update that builds upon, rather than replaces, the 2012 plan.

There are several reasons why the MTPO decided to update the bicycle and pedestrian plan, including:

- Progress has been made since the adoption of the 2012 plan – recommended projects have been constructed and policies have been implemented;
- The Kingsport urbanized area remains a generally unsafe place to walk or bike for many residents and improvements can continue to be made to make the region a safer place to walk or bike;
- Many low-income and vulnerable populations that rely on walking, bicycling, or transit do not have safe, convenient access to these forms of transportation; and
- Other local agencies, in particular the City of Kingsport Parks and Recreation Department, have planned key extensions to existing local facilities, most notably the Kingsport Greenbelt.

*This plan represents an update that builds upon, rather than replaces, the 2012 plan.*

The purpose of the Kingsport MTPO Regional Bicycle and Pedestrian Plan is to update the 2012 plan and guide the development of bicycle and pedestrian improvements over the next 20 years throughout the region. At the heart of the plan are the recommended bicycle and pedestrian networks that propose improvements in all the cities and counties within the MTPO's planning area. Additionally, the plan includes a set of policy and program strategies that, taken together, provide important tools for implementing the plan at both the regional and local levels.

**Figure 1.1** Regional Bicycle and Pedestrian Plan Study Area**This update includes the following key elements:**

- Statement of vision, goals, and objectives for walking and biking in the Kingsport urbanized area;
- Assessment of existing walking and biking deficiencies and future needs based on estimated demand and level of traffic stress (LTS);
- Recommended bicycle and pedestrian networks;
- Recommended non-infrastructure programs and policies; and
- Implementation and funding strategies.

The Regional Bicycle and Pedestrian Plan provides a roadmap for meeting the growing demand for walking and biking and, in the process, will improve safety, enhance mobility, increase connectivity, and promote a higher quality of life throughout upper East Tennessee and southwest Virginia.



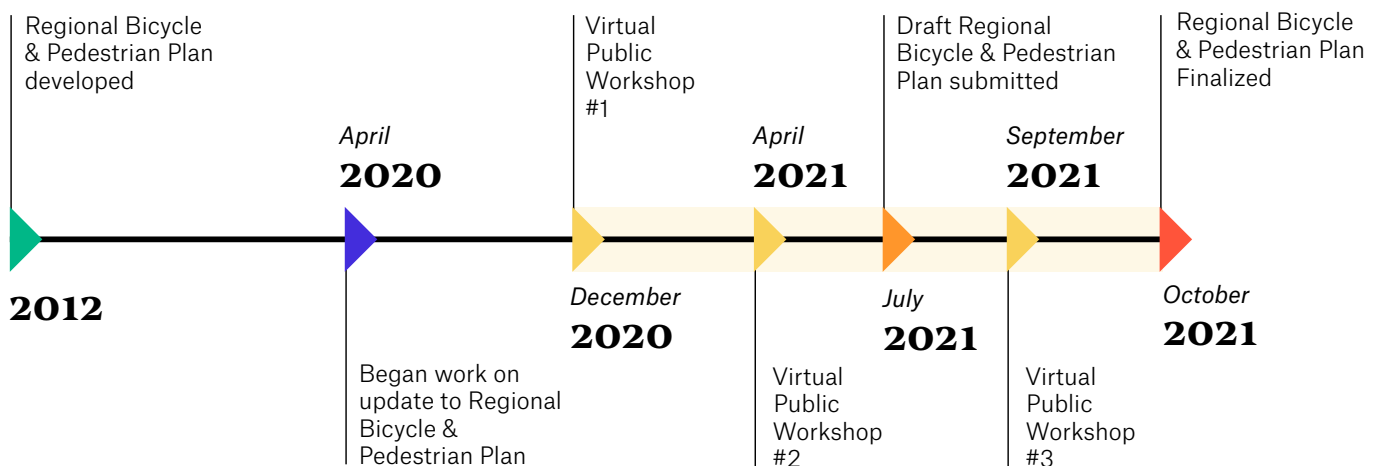
# Public and Stakeholder Involvement

Three virtual public workshops, as well as an online interactive map and online survey, formed the backbone of the public engagement process which augmented a project advisory committee (PAC) comprised of key public- and private-sector stakeholders from throughout the region. Three rounds of public workshops that coincided with key project milestones were held virtually due to the COVID-19 pandemic. The workshops were supported by an online interactive map, online survey, and project Facebook page.

Participants of the first workshop, held in December 2020, provided valuable comments on a variety of issues. Overall, participants indicated a strong preference for dedicated and separated facilities, such as sidewalks with buffers, bicycle lanes, and shared-use paths. Workshop participants were also asked about the goals and objectives of the plan, which are discussed in the next section.

A second virtual workshop was held in April 2021. Participants were presented with the draft regional bicycle and pedestrian recommendations and provided with an opportunity to comment on the draft networks.

A third virtual workshop (Final Presentation) was held in September 2021 concurrently with a special MTPO meeting. The purpose of the final meeting was to summarize input received from previous workshops; provide an overview of the draft facility, policy, and program recommendations; and serve as a opportunity for any final public or stakeholder input.



**The overall key findings from the public engagement process are summarized below.**

- Respondents were clear on their preference for using the existing roadway network to provide active transportation connections to key origins and destinations, favoring a Complete Streets approach, when appropriate. Some respondents commented on the challenges of incorporating bikeway facilities onto roadways that currently lack them, underscoring the need for state-of-the-practice facilities that can effectively accommodate both automobiles and active transportation users.
- To this end, users expressed a preference for active transportation facilities that have separation from traffic and better user amenities, such as trees and lighting along the street. Parallel facilities, well-separated from automobile traffic, can balance the different and often competing needs of motorists and active transportation users.
- The presence of safe, accessible facilities that provide connections to desired destinations were the most often-identified key factor in people's transportation choice decisions.

- Respondents indicated that key connections to existing facilities or facilities that fill gaps in the existing network should be considered a priority.

Survey responses and feedback from workshops were a primary influence for the redesign of streetscapes within the MTPO region. Each design focuses on the overall key findings from the public engagement process while maintaining the identity and culture of each area. These designs utilize items such as bike lanes, bike boulevards, the addition of sidewalks, and a greenway to enhance the usability of the existing conditions. The conceptual plans are designed to provide versatility and allow for their implementation into many different locations throughout the city. Through these designs the MTPO can move further towards obtaining the four goals set out by citizens, which are livability, sustainability, prosperity, and connectivity.

A summary of public engagement conducted for the plan is included in Appendix A.

# Vision, Goals, and Objectives

Based on stakeholder and public input, the vision, goals, and objectives remained largely the same as the 2012 plan, with the addition of a goal and associated objectives explicitly addressing regional connectivity.

## Vision Statement

The purpose of the Kingsport MTPo Regional Bicycle and Pedestrian Plan is to establish a comprehensive bikeway and pedestrian network, suitable for users of all ages and abilities, which enables regional jurisdictions to plan and implement facilities that expand multimodal connectivity, improve safety, enhance mobility, and promote a higher quality of life throughout upper east Tennessee and southwest Virginia.



# Goals and Objectives

## Livability

Provide safe, secure, convenient, and active transportation choices to all citizens which strengthens the livability and health of the region

- Improve safety by reducing transportation-related fatalities and injuries
- Make streets a place for all users - "Complete Streets"
- Increase opportunities for short trips to be made by non-motorized modes to promote active transportation
- Increase transit and other transportation demand management opportunities

## 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 improvement options which minimize adverse impacts to historical, social, cultural, and natural environments
- Promote investment solutions that reduce carbon and other harmful emissions from transportation

## Prosperity

Promote transportation policies and investments that advance quality economic development and redevelopment, economic competitiveness, and increased 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 opportunities
- Support land use and development patterns that reduce transportation costs and expenditures for all users
- 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

## Connectivity

Establish a regional bicycle and pedestrian network that connects people of all ages and abilities to places they want to go

- Ensure that all facilities are suitable for users of all ages and abilities, consistent with national best practices in facility planning and design
- Include links to key origins and destinations, including homes, schools, major employment centers, and parks and recreational facilities, as well as areas with high development or redevelopment potential
- Promote connectivity within and among jurisdictions
- Coordinate components of the network with parks and recreation plans, and other relevant land use and development plans



# Existing Plans and Studies

In addition to the 2012 bicycle and pedestrian plan, two other local planning documents provide a basis for the current plan update. The Kingsport MTPo Long Range Transportation Plan (2017) retains the bicycle and pedestrian recommendations from the 2012 plan, emphasizing the following key components of bicycle and pedestrian connectivity in the Kingsport region:

- Major on-street bikeway facilities should connect to regional destinations and be eligible for inclusion in future roadway improvement plans;
- Stakeholders have stressed the importance of off-street facilities and the Greenbelt in particular. To increase the impact of the Greenbelt as a transportation facility, new facilities are needed to connect the Greenbelt to planned regional on-street facilities;
- Sidewalk recommendations within city limits and urban growth boundaries are generally higher priority for the MTPo; and
- The Kingsport MTPo should continue to champion policies and programs that promote bicycling and walking, education for bicyclists, pedestrians, and motorists, and ideas that promote a more institutionalized process for implementing facilities for non-motorized travel.

The MTPo's Long Range Transportation Plan is undergoing a scheduled update at the time of this plan publication.

The City of Kingsport Parks and Recreation Department updated its Parks & Recreation Master Plan in 2021. Included in the plan recommendations was a significant expansion of the Kingsport Greenbelt. As stated in plan development documents:

*There are numerous opportunities for new Greenbelt connections to existing parks & recreation amenities, downtown businesses, and natural assets of Kingsport. The South Fork of the Holston River bolsters a unique experience within Kingsport and offers the opportunity for a Greenbelt loop by traversing along the waterway while offering beautiful views.*

The final recommendations from the Parks & Recreation Master Plan are incorporated into this plan's recommendations. These are further discussed in the next section.



# Existing and Projected Bicycle and Pedestrian Demand

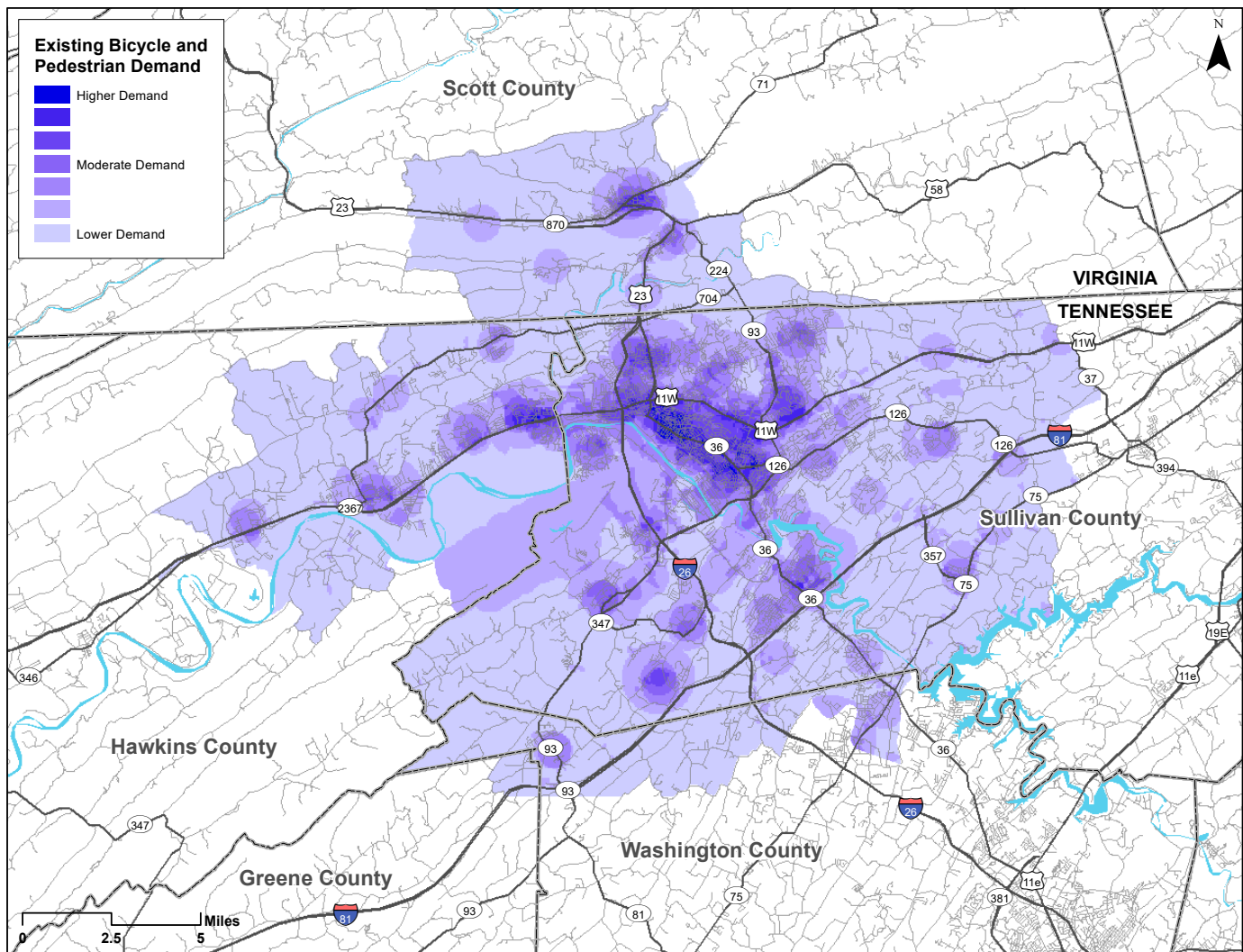
Existing and projected bicycle and pedestrian demand were modeled for the Kingsport MTPO planning area. The goal of the demand analysis is to estimate where people would likely want to walk or bike, regardless of the presence, condition, or comfort of facilities.

Two demand analyses were prepared. The first, depicting existing demand, is based on data that reflects current conditions. The second, depicting projected demand, is a modified version of the first, with variables depicting

growth in population and employment, and likely changes in future land use. Both analyses incorporate the following variables;

- Population density (based on base year Traffic Analysis Zone [TAZ] estimates for existing demand and future year estimates for projected demand);
- Employment density (based on base year TAZ estimates for existing demand and future year estimates for projected demand);

**Figure 1.2** Existing Bicycle and Pedestrian Demand



- Proximity to commercial areas (based on existing land use, where available, for existing demand and commercial zoning for future demand);
- Proximity to schools and colleges;
- Proximity to parks;
- Proximity to transit stops; and
- Key origin zones as identified by MTPo staff.

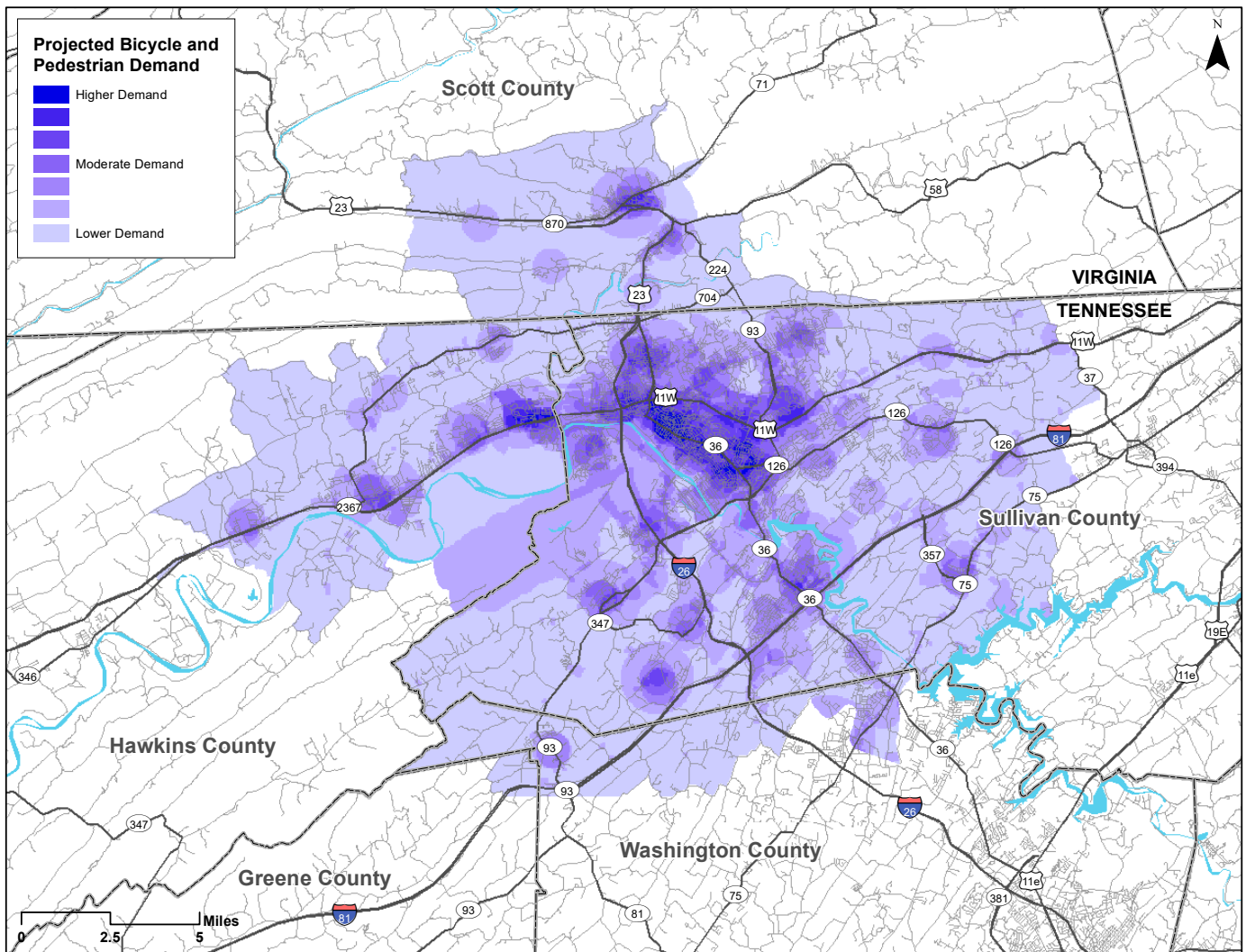
Figure 1.2 and Figure 1.3 show the existing and projected demand, respectively.

Existing demand is highest, not surprisingly, in and around the downtown Kingsport area. Other areas

showing relatively high existing demand include along Lynn Garden Drive in the vicinity of John F. Kennedy Elementary School, the Allandale area just east of Mt. Carmel, the Colonial Heights community, and downtown Gate City. Consistent linear demand is present along US-11W north of downtown Kingsport and Center Street and Eastman Road near downtown Kingsport, which suggests these corridors will likely be good candidates for on-street or parallel facilities.

Furthermore, while the aforementioned locations represent the highest areas of demand, smaller, less intense demand zones are located throughout the region, reinforcing the plan's commitment to regional

**Figure 1.3** Projected Bicycle and Pedestrian Demand





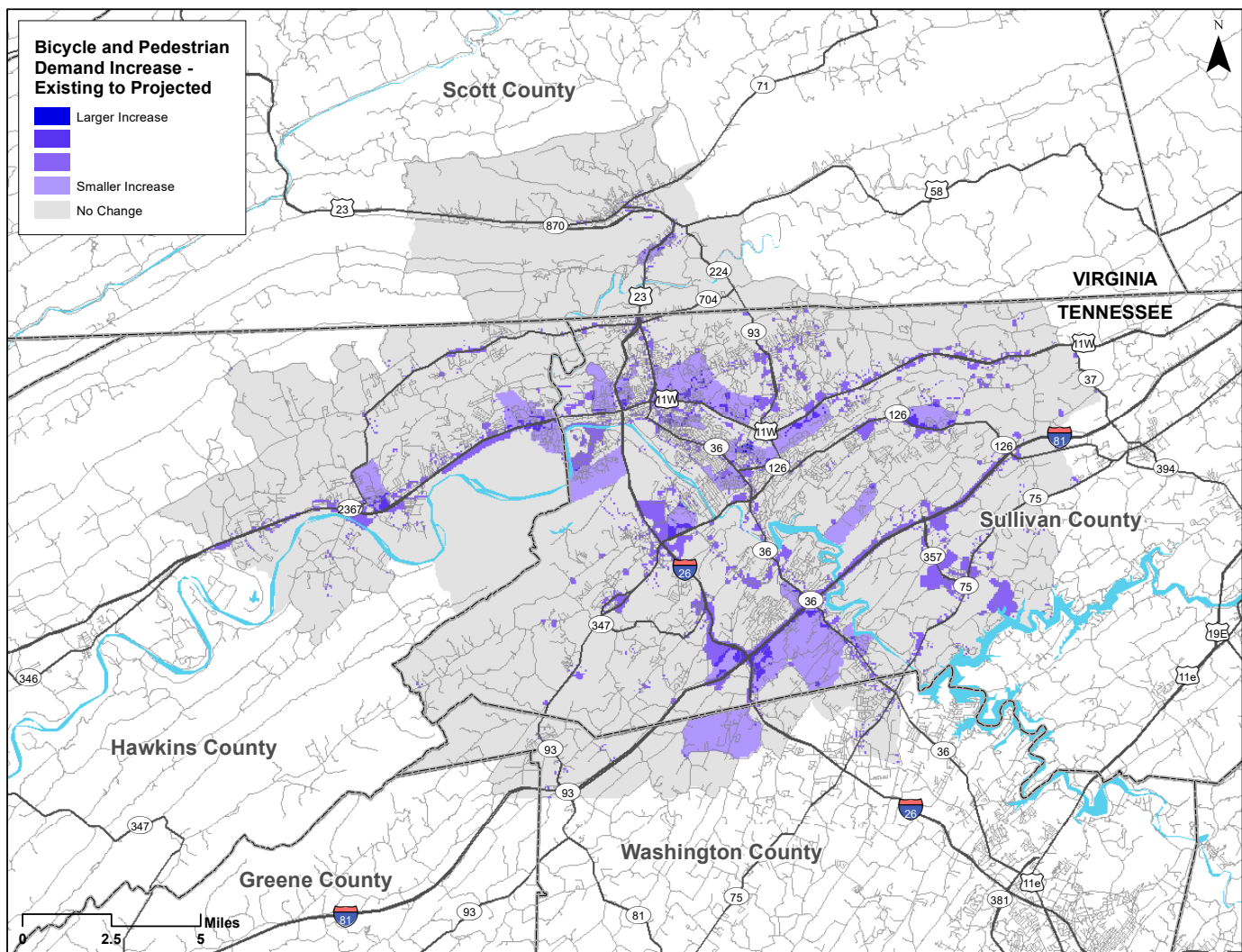
connectivity and underscoring the need for improved regional connections. This observation is especially acute when considering the projected demand results.

As shown in Figure 1.4, the projected bicycle and pedestrian demand results do not fundamentally alter the demand pattern in the region; they reinforce it. Zones that were identified as having high existing demand present even more intense projected demand, likely due to projected increases in population and employment in these zones. In addition to this intensification, a number of new or emerging zones of higher demand may be expected in the coming years, including:

- Church Hill;
- Weber City;
- Meadowview;
- Sullivan Gardens; and
- Fall Branch

Developed areas with existing densities of population, employment, and destinations represent the primary nodes in a regional multimodal network, particularly given the relatively high return on investment on facilities in these areas and the number of potential users. However, the demand analyses emphasize the need for safe, comfortable, and accessible regional connections as well. These findings will inform the development of the draft regional network in later phases of the planning process.

**Figure 1.4** Demand Increase – Existing to Projected





# Level of Traffic Stress

Measuring the Level of Traffic Stress (LTS) is an effective tool for describing the perceived safety of walking and bicycling in a community or region. Unlike conventional level of service (LOS) analyses, LTS rates streets relative to general user groups.

**For bicycling, the user groups associated with LTS are:**

- **Level of Traffic Stress 1** – The level most users can tolerate including children and older adults; strong separation from all traffic except for low-speed, low-volume traffic;
- **Level of Traffic Stress 2** – The level tolerated by most adults; may require engaging with multiple vehicles at once, but only on lower-volume, lower-speed facilities;
- **Level of Traffic Stress 3** – The level tolerated by more confident adults, but those who still prefer dedicated space; involves interaction with moderate speed or multilane traffic or close proximity to higher speed traffic; and
- **Level of Traffic Stress 4** – The level tolerated by the most experienced adults; involves mixing with moderate speed traffic or riding in close proximity to high speed traffic.

Consistent with the data that was available, LTS was calculated primarily on functionally-classified roads using data obtained from the Tennessee and Virginia Departments of Transportation. As a result, local roads are generally omitted from the analysis. That said, the primary goal of the LTS analysis, at this stage, is to evaluate the relative safety and comfort for users walking and bicycling throughout the region; examining major transportation corridors provides a useful proxy at the regional level. In fact, many local streets, particularly those serving residential developments, are already used for walking and bicycling by people of all ages and abilities at relatively high levels of comfort, regardless of the presence of adequate facilities.

From a safety perspective, LTS 1 and LTS 2 are the desired levels of traffic stress for bicycle and pedestrian networks that appeal to people of different ages and abilities. Figure 1.5 and Figure 1.6 illustrate existing bicycle and pedestrian LTS, respectively, as well as bicycle and pedestrian crashes between 2014 and 2019, in the Kingsport MTPO planning area.

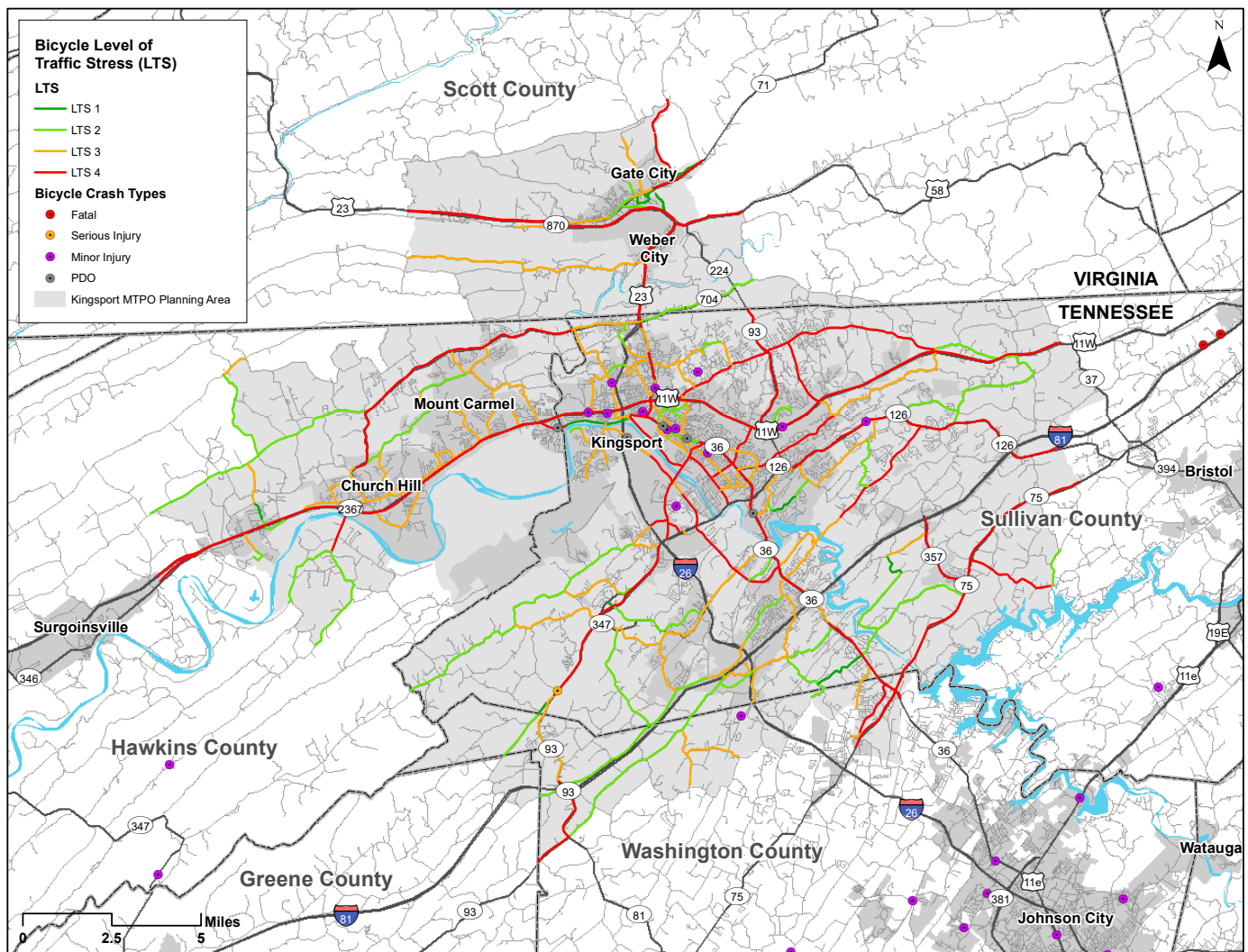
For bicyclists, existing LTS throughout the region indicates a number of roadways and corridors that are generally comfortable for adults and more experienced riders, whether by way of roadway characteristics or the presence of existing facilities, such as bike lanes. Some corridors, such as US-11W, are currently signed as bike routes. As bicycle planning practice has evolved over the last decade, it has become generally recognized that signed bike routes, implemented without any significant changes in the built infrastructure, do little to increase perceived safety among users, are routinely not recognized by motorists, and generally only serve the most experienced and “fearless” users.

Alternatively, the LTS of Netherland Inn Road shows the benefit of parallel shared-use facilities, in this case the Greenbelt, which can accommodate users of all ages and abilities and provide a high level of comfort even along busier high-speed roadways. Examining the relationship between bicycle LTS and likely demand will inform the selection of various facility types during the development of recommendations.

Examining bicycle crashes in relation to LTS shows no significant patterns over the last five years, though

most of the crashes occurred on or along roadways with LTS 3 or 4. Most of the 19 crashes, approximately 74%, occurred within the Kingsport city limits, with the majority occurring at intersections in and around the downtown district. No obvious aggravating factors, such as poor lighting or visibility, are noted in the crash data. Evaluation of conditions at these intersections, particularly in relation to recommended bikeway facilities, may be warranted as the planning process continues.

**Figure 1.5** Bicycle LTS



Pedestrian LTS is almost entirely influenced by the presence or absence of facilities, in this case sidewalks and shared-use paths. A score of LTS 1 indicates a roadway segment, generally with a posted speed under 45 mph, with a quality sidewalk facility, suitable for all able-bodied users. Scores of LTS 2 and 3 indicate roadway segments with sidewalks that are substandard, posted speeds in excess of 45 mph, and/or three or more travel lanes. A score of LTS 4 indicates a roadway segment lacking a pedestrian facility.

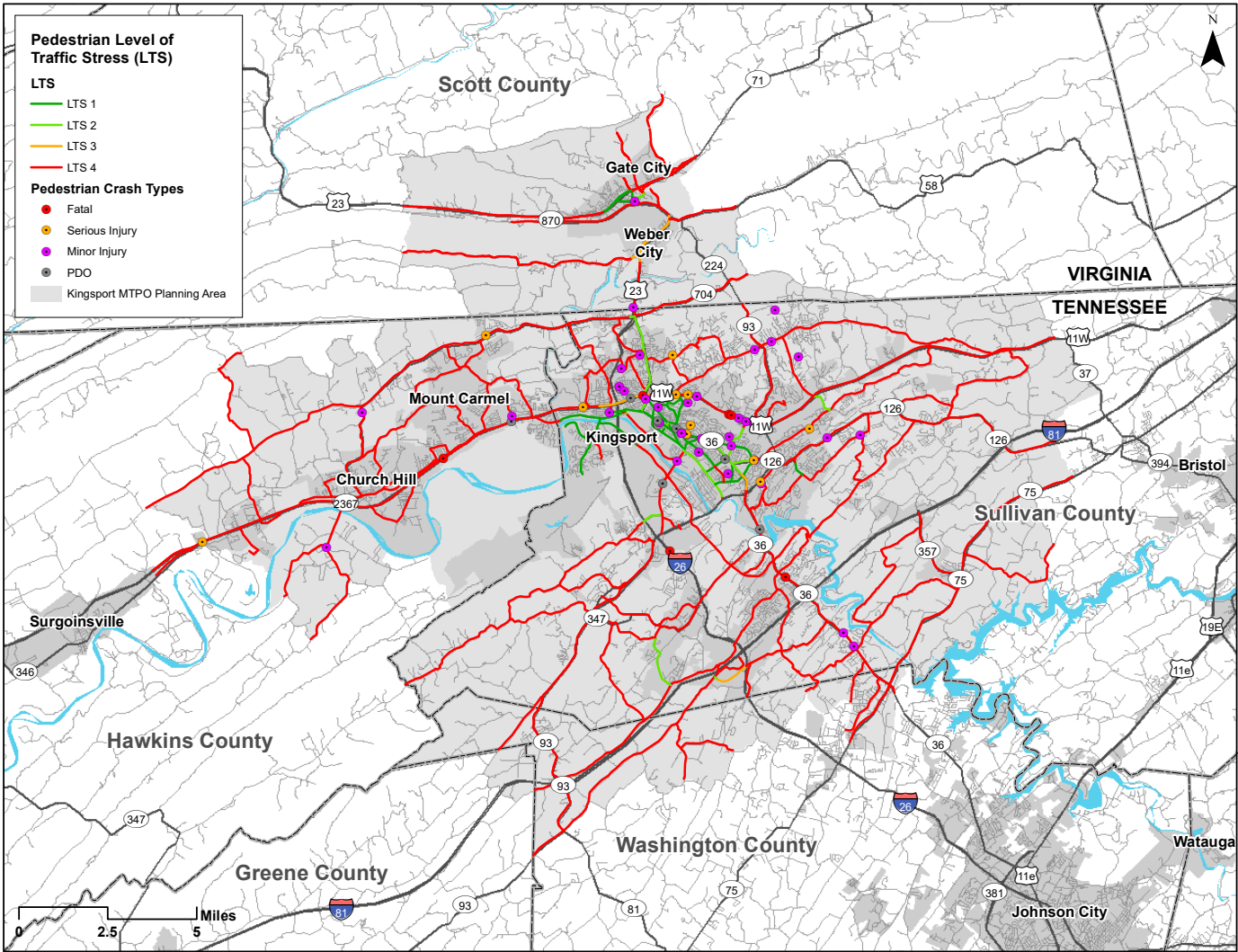
The most obvious finding is that pedestrian LTS in and around the downtown district of Kingsport indicates an acceptable level of pedestrian user comfort, due to the legacy sidewalk system in that district of the region. The same can be said of the downtown area of Gate City. However, linkages within and among other key activity nodes are noticeably lacking. While a region-wide sidewalk network may not be a practical goal, ensuring that (1) high demand origin areas are well-served by facilities, and; (2) linkages among these areas are strengthened, where possible, will be guiding principles of the facility recommendations process.

Pedestrian crashes from 2014 to 2019 follow a similar pattern as bicycle crashes; approximately 78% of the 68 crashes occurred within the City of Kingsport, with most of these clustered in and around the downtown area. Outside of the downtown Kingsport area, nearly all crashes occurred along roadways rated LTS 4.

Notably, eleven pedestrian crashes occurred along US-11W between Walnut Avenue and John B. Dennis Highway, with roughly an equal number occurring at intersections and along the roadway. Concerning aspects of crashes along this segment include that all but two occurred after dark, most resulted in injuries, and three resulted in a fatality.

At the time of plan development, construction is completed on sidewalk improvements along US-11W from Clinchfield Street to west of Pinebrook Drive and construction will begin along SR-36 in Colonial Heights. The new facilities, which include crossing improvements, are expected to improve safety conditions along the roadway. However, close monitoring of safety conditions is recommended going forward.

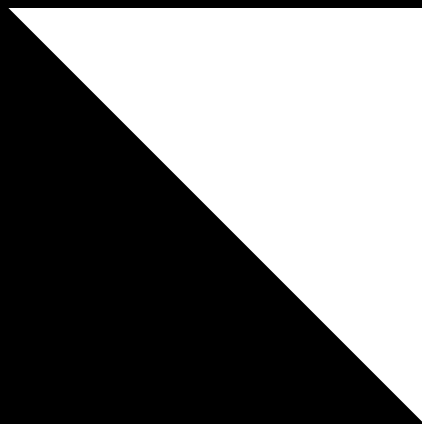
Figure 1.6 Pedestrian LTS





# Bicycle and Pedestrian Network Plans

Section 2.0



# Bicycle and Pedestrian Network Plans

Over the past 20 years, bicycle and pedestrian planning has shifted from focusing almost exclusively on the most experienced users using arterials and collector streets to the daily needs of people of all ages and abilities. Successful bicycle and pedestrian networks now include combinations of state highways, county roads, local streets, and trails, as well as different facility types – including sidewalks, paved shoulders, bike boulevards, bike lanes, and shared-use paths and sidepaths. The new strategies and tools offer every community the ability to plan, design, and build great bicycle and pedestrian systems.

The Kingsport MTPO Bicycle and Pedestrian Plan is primarily focused on regional mobility and connectivity along major arterials and collectors. However, recommendations are included that promote a regional network suitable for all users. That said, realizing a truly safe, accessible, comfortable, and effective network will require coordination and cooperation with all constituent jurisdictions within the Kingsport urbanized area. Therefore the recommendations presented here should be considered a strong foundation for an even larger regional network that includes more locally-focused facilities in the cities, towns, and counties within the Kingsport region.

*The recommendations presented here should be considered a strong foundation for an even larger regional network*





# Bicycle Recommendations

Building on the 2012 bicycle and pedestrian plan, public input, and technical analysis, the recommended bicycle network combines three principal strategies:

- Carrying forward all of the recommendations from the 2012 plan and Parks & Recreation Master Plan;
- Updating the recommendations to reflect national best practices and facility type preferences provided by the public; and
- Expanding the recommended bikeway network to emphasize regional connectivity.

Figure 2.1 presents the recommended bikeway network without the Parks & Recreation Master Plan Greenbelt expansion projects. Figure 2.2 includes these additional recommendations. It should be noted that several of the recommendations are located in areas with planned roadway improvements projects (which will likely include an active transportation component) or roadways that are currently or will soon be under special study. As such, the specific facility type recommendations are generally subject to change, pending a more detailed planning or engineering study.

Figure 2.3 provides a more detailed look at the combined bikeway network in and around downtown Kingsport.

For planning purposes, certain facility types, such as bike lanes, are presented as a single class of facility, even though variations such as buffered or separated bike lanes could be deployed during project implementation.

Table 2.1 lists the recommended improvements, which do not include the Parks & Recreation Master Plan Greenbelt expansion projects.

## Recommended bikeways by facility type and total estimated construction costs

<i>Paved Shoulders</i>	109 miles at a total estimated construction cost of \$11,297,658
<i>Shared Lanes / Bike Boulevards</i>	15 miles at a total estimated construction cost of \$2,491,673
<i>Bike Lanes</i>	18 miles at a total estimated construction cost of \$3,435,932
<i>Shared-Use Paths / Sidepaths</i>	31 miles at a total estimated construction cost of \$25,072,041



# Types of Bikeways

A general description of the proposed bikeways.



## Paved Shoulders

Paved shoulders are typical of highways and roads in rural areas, and provide important safety benefits to minimize run-off-the-road crashes, especially on higher speed (greater than 40 mph) roads. While paved shoulders are not dedicated bikeways, for bicyclists, paved shoulders provide important operating space. Adequate width (4' minimum) and bike friendly rumble strips are important design considerations.



## Shared Lanes / Bike Boulevards

Shared lanes and bike boulevards are lower volume, lower speed local streets that offer a safe and comfortable option for bicycling compared to major streets. Traditional shared lane treatments such as shared lane pavement markings (sharrows), or bike boulevard treatments such as signage and mini-traffic circles, represent relatively low cost improvements that reinforce local streets as safe and comfortable places to bicycle and discourage motor vehicle through traffic in neighborhoods.



## Bike Lanes

Bike lanes provide dedicated operating space for bicyclists, and with paved shoulders, have traditionally served as the foundation for bike networks for more experienced bicyclists. While bike lanes remain a good option for urban streets with moderate traffic volumes and speeds, creating more lateral distance between bicyclists and motor vehicles either with buffers or physically separated facilities is important for people of all ages and abilities.



## Shared-Use Paths / Sidepaths

Unlike the various bike lane types, shared-use paths and sidepaths are designed for use by both pedestrians and bicyclists. Sidepaths are located within the street or road right-of-way, while shared-use paths are located within an independent right-of-way. Shared-use paths / sidepaths have become increasingly popular with the growing demand for walking and bicycling, and can provide important connections for longer distance trips.

Figure 2.1 Recommend. Bikeway Network (without Greenbelt Expansion)

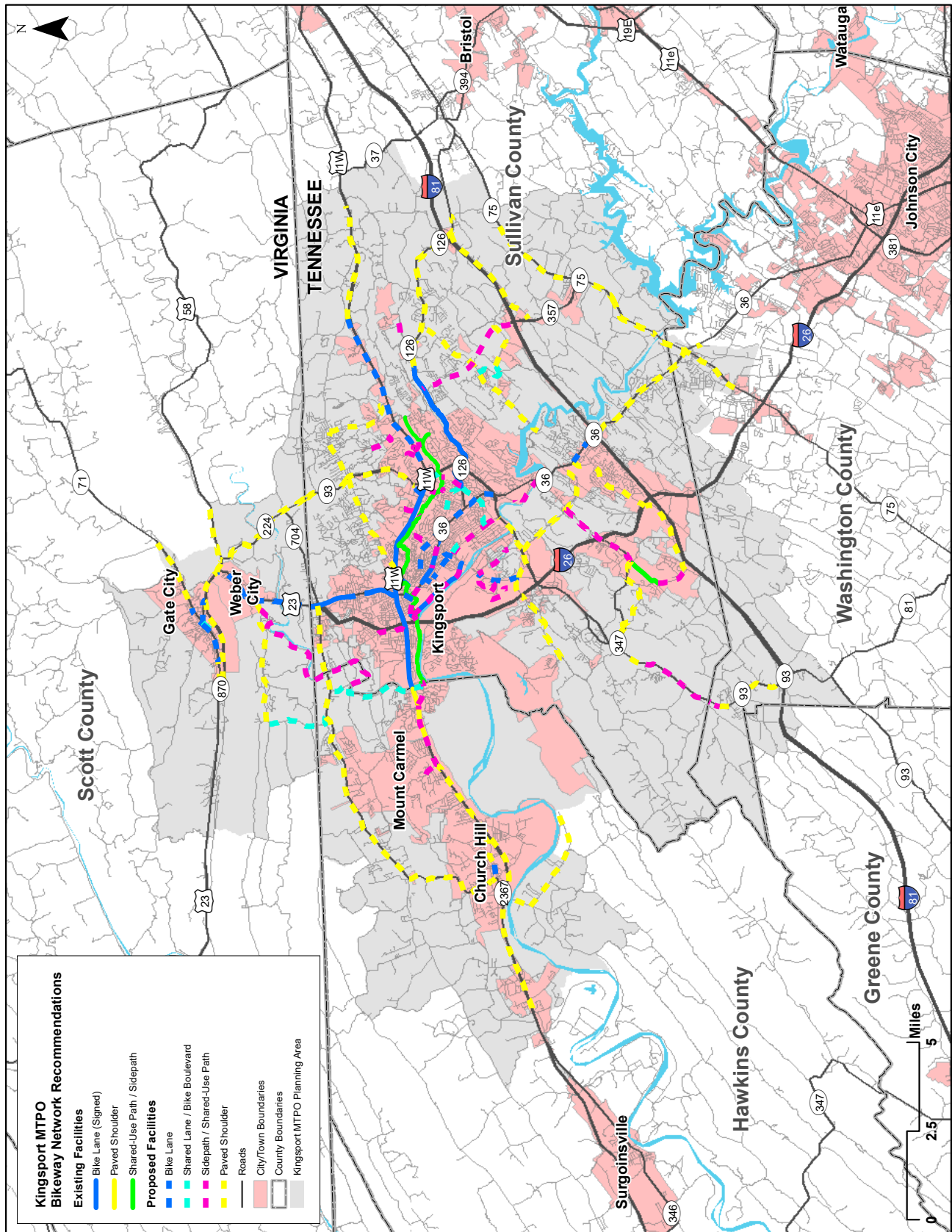




Figure 2.2 Recommend. Bikeway Network (with Greenbelt Expansion)

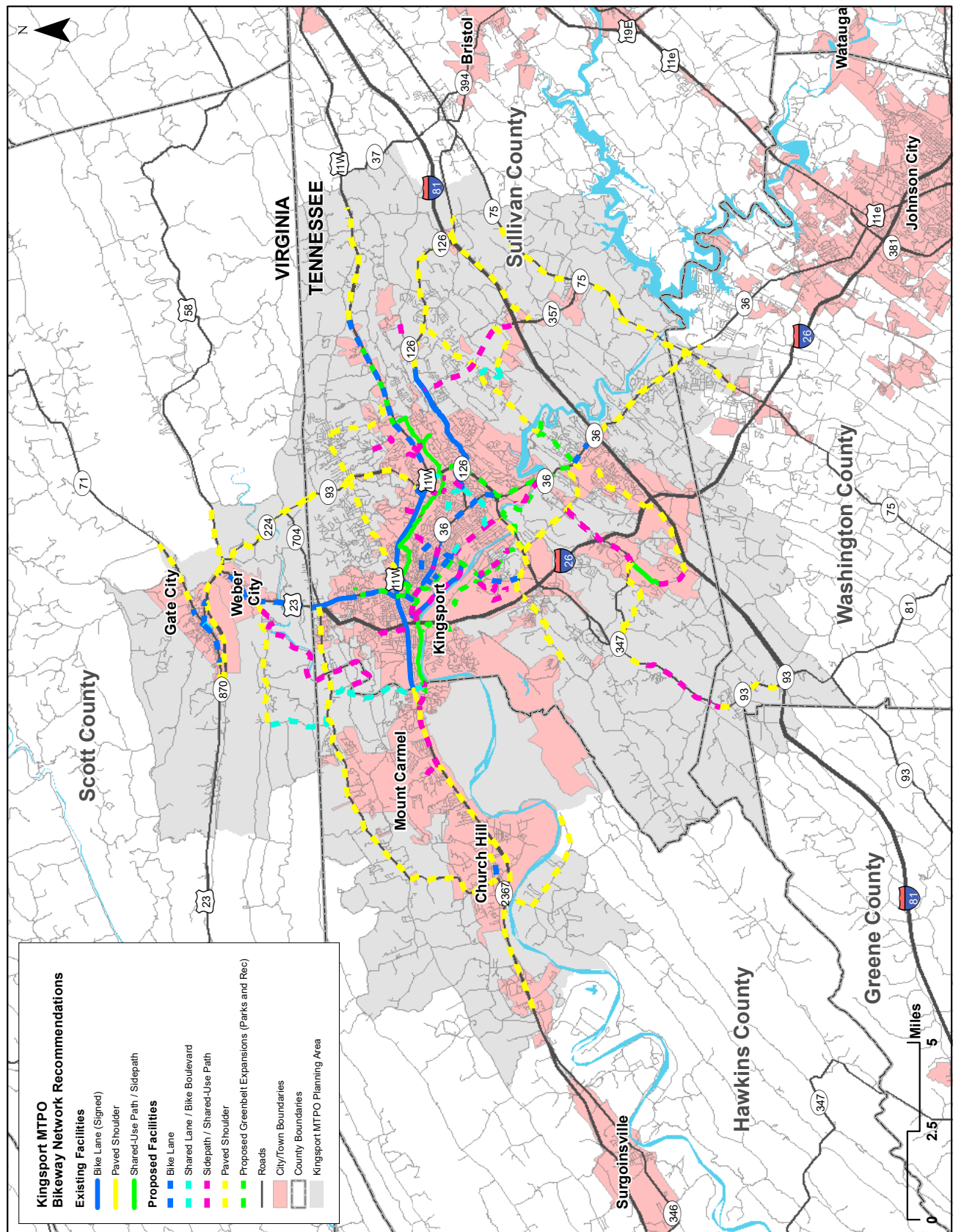
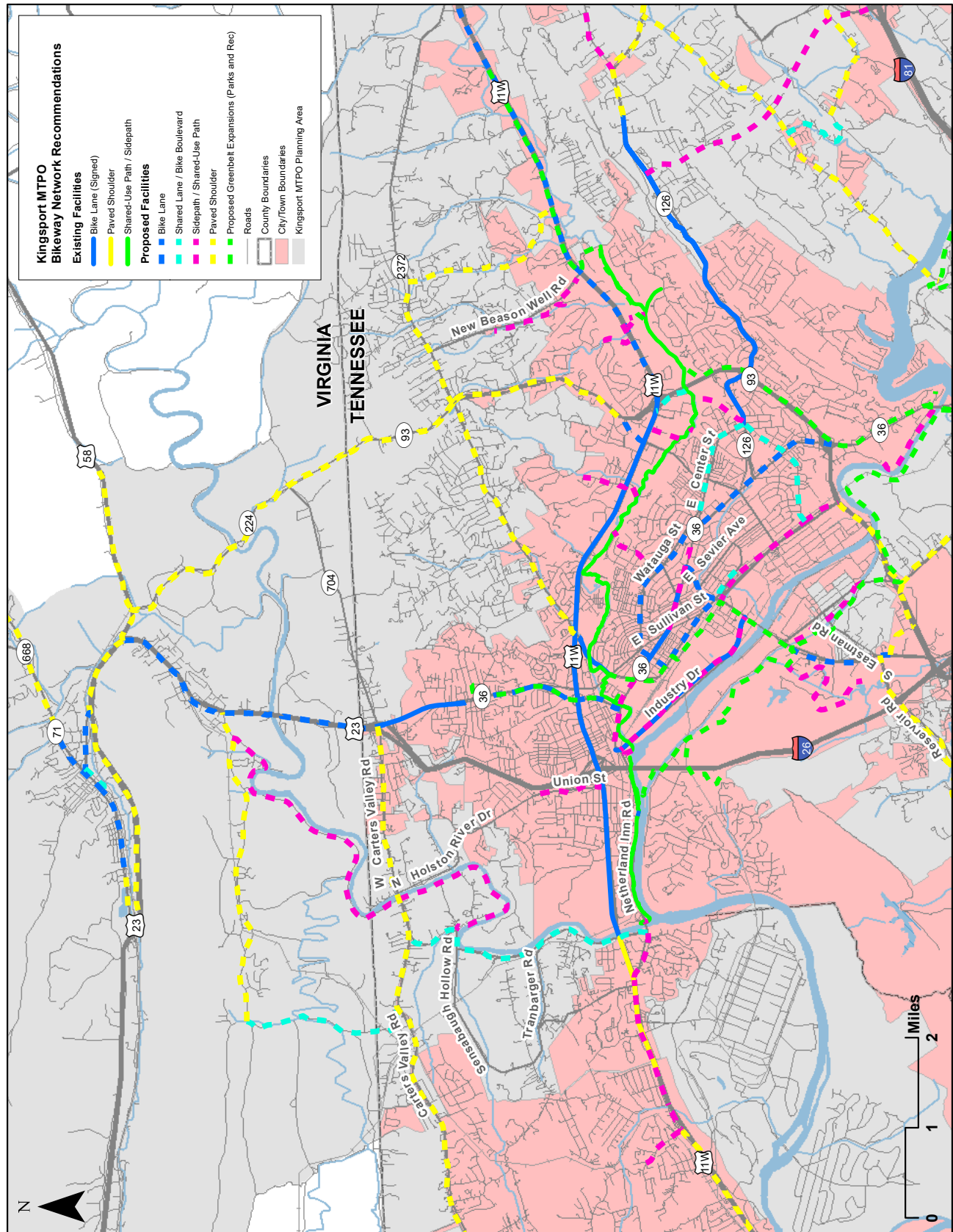


Figure 2.3 Recommended Bikeway Network (with Greenbelt Expansion at a finer scale)



**Table 2.1 Recommended Bicycle Improvements**

Recommended improvements, which do not include the Parks & Recreation Master Plan Greenbelt expansion projects.

<div> <div>Facility Type Definition</div> <div> <div>B/SL - Bike/Shared Lane</div> <div>B/PS - Bike/Paved Shoulder</div> </div> <div> <div>B/SUP - Bike/Shared Use Path</div> <div>B/BL - Bike/Bike Lane</div> </div> </div>							
Road	From	To	County	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Construction Cost
SR 75	Henry Ln	Kingsport Hwy	Sullivan	3,506	B/PS	\$20	\$70,127
SR 75	Stevenson Hill Rd	Robinwood Rd	Sullivan	7,913	B/PS	\$20	\$158,265
Apple Orchard Rd	Yuma Rd	Carters Valley Rd	Scott, Hawkins	18,867	B/SL	\$30	\$565,995
Barton St	Keller St	South Fork Holston River	Sullivan	525	B/SUP	\$150	\$78,727
Big Elm Rd	Carters Valley Rd	Netherland Inn Rd	Hawkins	16,522	B/SL	\$30	\$571,317
Bike Lane	N John B Dennis Hwy	E Stone Dr	Sullivan	1,792	B/BL	\$30	\$53,754
Bloomingdale Rd	Packing House Rd	Wadlow Gap Hwy	Sullivan	7,688	B/PS	\$20	\$153,761
Bloomingdale Rd / Bloomingdale Pk	Wadlow Gap Hwy	US 11 W	Sullivan	15,622	B/PS	\$20	\$312,442
Bobby Hicks Hwy	Kingsport Hwy	Spratlin Park Dr	Washington	10,492	B/PS	\$20	\$74,847
Bristol Hwy / Wadlow Gap Hwy	US-23	Whitt Dr	Scott	10,696	B/PS	\$20	\$213,914
Broad St	E Sullivan St	W Main St	Sullivan	1,808	B/BL	\$30	\$54,254
Buttermilk Rd	Old Mill Rd	Shipley Ferry Rd	Sullivan	9,567	B/PS	\$20	\$191,339
Carters Valley Rd	North Fork Holston River	Lynn Garden Dr	Sullivan	10,167	B/PS	\$20	\$317,544
Carters Valley Rd	Independence Ave	North Fork Holston River	Hawkins	19,044	B/PS	\$20	\$17,565
Carters Valley Rd	N Central Ave	Independence Ave	Hawkins	15,877	B/PS	\$20	\$64,216
Clicktown Rd	Big Elm Rd	Carters Valley Rd	Scott, Hawkins	11,484	B/SUP	\$150	\$1,722,525
E Center St	Fort Henry Dr	Memorial Blvd	Sullivan	7,230	B/SL	\$30	\$216,893
E Center St	E Sullivan St	Fort Henry Dr	Sullivan	6,151	B/SUP	\$150	\$922,650
E Jackson St / Nickelsville Hwy	Jones St	Rifle Dr	Scott	11,054	B/PS	\$20	\$87,146
E Main St	Cherokee St	N Wilcox Dr	Sullivan	4,174	B/BL	\$30	\$125,226
E Sullivan St / E Sullivan Ct	N Wilcox Dr	Lamont St	Sullivan	2,098	B/SL	\$30	\$62,949
Fall Creek Rd	Rose Trace Ct	Hemlock Rd	Sullivan	17,855	B/PS	\$20	\$357,100
Fort Henry Dr	Wilmont Dr	SR 75	Sullivan / Washington	37,000	B/PS	\$20	\$740,000
Fort Henry Dr	E Center St	N John B Dennis Hwy	Sullivan	9,945	B/BL	\$30	\$298,339
Fort Henry Dr	Colonial Heights Rd	Wilmont Dr	Sullivan	2,699	B/BL	\$30	\$80,970
Frisco Yard Rd	Yuma Rd	Carters Valley Rd	Scott/Hawkins	10,508	B/SL	\$30	\$315,252
Goshen Valley Rd / Gray Brothers Store Rd	Main Blvd	River Rd	Hawkins	5,714	B/PS	\$20	\$114,281
Hammond Ave	Rose Ln	US-11W	Hawkins	2,898	B/SUP	\$150	\$434,700
Horse Creek Greenway	Riverport Rd	Meadowview Pkwy	Sullivan	9,955	B/SUP	\$150	\$1,493,271
Industry Dr	Netherland Inn Rd	S Wilcox Dr	Sullivan	10,949	B/SUP	\$150	\$1,642,395
Island Rd	Memorial Blvd	Golf Ridge Dr	Sullivan	5,440	B/SUP	\$150	\$816,047
Kane St	E Jackson St	US 23 N	Scott	3,672	B/BL	\$30	\$145,830
Keller St	Dead End	Barton St	Sullivan	578	B/SUP	\$150	\$86,746

Road	From	To	County	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Construction Cost
Kendrick Creek Rd	Lebanon Rd	Tri Cities Xing	Sullivan	11,060	B/PS	\$20	\$246,472
Konnarock Rd / Warpath Dr	Lincoln St	Memorial Blvd	Sullivan	7,370	B/SL	\$30	\$221,099
Lamasa Dr	E Stone Dr	Dead End	Sullivan	2,303	B/SL	\$30	\$69,085
Lebanon Rd	Fort Henry Dr	Kendrick Creek Rd	Sullivan	2769.18	B/PS	\$20	\$221,208
Lincoln St	S Wilcox Dr	Konnarock Rd	Sullivan	6,842	B/SUP	\$150	\$1,026,327
Lincoln St	Konnarock Rd	N John B Dennis Hwy	Sullivan	2,272	B/SUP	\$150	\$340,791
Lynn Garden Dr	Melvin St	Clarke Ave	Sullivan	3,869	B/BL	\$30	\$116,081
Lynn Garden Dr	US 11 W	W Center St	Sullivan	3,426	B/BL	\$30	\$102,792
Main Blvd	US 11 W	Highland Ave	Hawkins	6,322	B/PS	\$20	\$54,187
Main Blvd	Highland Ave	Old Mill Race Rd	Hawkins	2,709	B/BL	\$30	\$495,651
Main Blvd	Old Mill Race Rd	Gray Brothers Store Rd	Hawkins	868.437	B/PS	\$20	\$203,332
Meadowview Pkwy	I-26	Wilcox Dr	Sullivan	2,961	B/PS	\$20	\$59,213
Meadowview Pkwy	Saratoga Rd	I-26	Sullivan	1,128	B/PS	\$20	\$22,567
Memorial Blvd	Fisher Dr	Adams Chapel Rd	Sullivan	26,197	B/PS	\$20	\$523,936
Mill Creek Rd	Twin Hills Dr	Sullivan Garden Pkwy	Sullivan	3,626	B/PS	\$20	\$72,521
Moreland Dr	S John B Dennis Hwy	Fort Henry Dr	Sullivan	16,701	B/PS	\$20	\$334,028
N Central Ave	Grandview St	Main Blvd	Hawkins	878	B/PS	\$20	\$86,083
N Central Ave	Lane St	Grandview St	Hawkins	3,211	B/PS	\$20	\$152,689
N Central Ave	Miller Wood Rd	Lane St	Hawkins	4,304	B/PS	\$20	\$209,832
N Central Ave	Carters Valley Rd	Miller Wood Rd	Hawkins	7,634	B/PS	\$20	\$367,832
N John B Dennis Hwy	Bloomington Rd	Hospital Entrance	Sullivan	11,238	B/PS	\$20	\$224,756
N Wilcox Dr	E Center St	Martin Luther King Jr Dr	Sullivan	3,128	B/BL	\$30	\$93,846
Netherland Inn Rd	US 11 W	Riverwoods Pl	Hawkins	3,696	B/SUP	\$150	\$554,400
Old Mill Rd	Fall Creek Rd	Childress Ferry Rd	Sullivan	4,276	B/SL	\$30	\$128,288
Packing House Rd	Bloomington Rd	US 11 W	Sullivan	10,926	B/PS	\$20	\$218,524
Shared-Use Path	N John B Dennis Hwy	Memorial Blvd	Sullivan	3,350	B/SUP	\$150	\$502,484
Shared-Use Path	E Stone Dr	Ryder Dr	Sullivan	1,819	B/SUP	\$150	\$272,876
Shared-Use Path	US 11 W	Browder Rd	Sullivan	20,996	B/SUP	\$150	\$3,149,400
Shared-Use Path	Suffolk St	Reedy Creek	Sullivan	4,050	B/SUP	\$150	\$101,375
Shared-Use Path	Cliffside Rd	Fort Henry Dr	Sullivan	5,514	B/SUP	\$150	\$985,941
Shared-Use Path	Reedy Creek	Houston Ave	Sullivan	676	B/SUP	\$150	\$640,347
Shared-Use Path	Lowrance Pl	E Stone Dr	Sullivan	6,573	B/SUP	\$150	\$573,576
Shared-Use Path	Aldi Access Drive	Kingsport Greenbelt	Sullivan	969	B/SUP	\$150	\$145,339
Pinebrook Dr	Bermuda Dr	Reedy Creek	Sullivan	3,824	B/SUP	\$150	\$1,705,044
Poplar Grove Rd	Blakley Dr	Mill Creek Rd	Sullivan	9,656	B/PS	\$20	\$193,118
Reservoir Rd	Bays Mountain Park Rd	Saratoga Rd	Sullivan	10,616	B/PS	\$20	\$212,318
Ridgefields Rd	Netherland Inn Rd	Riveredge Dr	Sullivan	661	B/BL	\$30	\$19,839
River Rd	Dead End	Goshen Valley Rd	Hawkins	16,245	B/PS	\$20	\$324,900
Rock Springs Dr	Rock Springs Rd	Blakley Dr	Sullivan	2,793	B/PS	\$20	\$55,866
Rock Springs Rd	Moreland Dr	Cox Hollow Rd	Sullivan	12,728	B/SUP	\$150	\$1,909,155
Rock Springs Rd	W Valley Dr	Snapps Ferry Rd	Sullivan	4,811	B/SUP	\$150	\$721,718
S John B Dennis Hwy	S Wilcox Dr	Lincoln St	Sullivan	9,023	B/PS	\$20	\$180,459
S Wilcox Dr	Wilcox Dr	S John B Dennis Hwy	Sullivan	2,328	B/PS	\$20	\$46,557
Shadowntown Rd	Shipley Ferry Rd	Highway 126	Sullivan	1,697	B/PS	\$20	\$33,943
Shipley Ferry Rd	Airport Pkwy	Shadowntown Rd	Sullivan	15,986	B/PS	\$20	\$319,712



Road	From	To	County	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Construction Cost
Shipley Ferry Rd	Buttermilk Rd	Airport Pkwy	Sullivan	9,610	B/PS	\$20	\$192,196
Springfield Ave	Reedy Creek	Linville St	Sullivan	3,223	B/SUP	\$150	\$483,473
SR 75	Robinwood Rd	Henry Ln	Sullivan	2,118	B/PS	\$20	\$42,367
SR 75	Airport Pkwy	Stevenson Hill Rd	Sullivan	6,823	B/PS	\$20	\$136,455
SR 75	Adams Chapel Rd	Airport Pkwy	Sullivan	18,392	B/PS	\$20	\$221,070
Sullivan Garden Pkwy	S Wilcox Dr	Lone Star Rd	Sullivan	24,588	B/PS	\$20	\$491,762
Sullivan Garden Pkwy	Lone Star Rd	Derby Dr	Sullivan	5,376	B/PS	\$20	\$107,523
Sullivan Garden Pkwy	Derby Dr	Murrel Rd	Sullivan	6,764	B/SUP	\$150	\$1,014,560
Sullivan Garden Pkwy	Murrel Rd	Morgan Lane	Sullivan, Washington	6,303	B/SUP	\$150	\$945,524
Sullivan Garden Pkwy	Morgan Lane	I-81	Sullivan	12,707	B/PS	\$20	\$254,140
Tri Cities Xing / Snapps Ferry Rd	Kendrick Creek Rd	Rock Springs Rd	Sullivan	12,324	B/PS	\$20	\$126,432
Union St	Danbury St	W Stone Dr	Sullivan	4,269	B/SUP	\$150	\$483,473
US 11 W	Fudges Chapel Rd	Garland Ave	Hawkins	24,769	B/PS	\$20	\$495,382
US 11 W	N John B Dennis Hwy	Ollis Bowers Hill Rd	Sullivan	26,865	B/BL	\$30	\$805,935
US 11 W	Ollis Bowers Hill Rd	Hilltop Rd	Sullivan	17,360	B/PS	\$20	\$347,202
US 23	W Jackson St	Wadlow Gap Hwy	Scott	18,763	B/PS	\$20	\$375,258
US 23	Wadlow Gap Hwy	US 23	Scott, Sullivan	17,320	B/BL	\$30	\$519,606
US-11W	Garland Ave	Independence Ave	Hawkins	1,682	B/SUP	\$150	\$252,300
W Center St	Fort Robinson Dr	Clinchfield St	Sullivan	4,403	B/SUP	\$150	\$660,488
W Jackson St	Daniel Boone Heritage Hwy	Sue St	Scott	3,742	B/PS	\$20	\$73,437
W Jackson St	Sue St	Kane St	Scott	4,861	B/BL	\$30	\$121,506
W Stone Dr / Netherland Inn Rd	Independence Ave	Big Elm Rd	Hawkins	11,367	B/SUP	\$150	\$1,705,044
Wadlow Gap Hwy	Bristol Hwy	State Line	Scott	17,225	B/PS	\$20	\$344,504
Wadlow Gap Hwy	State Line	Bloomington Rd	Sullivan	7,485	B/PS	\$20	\$149,707
Watauga St	Broad St	E Center St	Sullivan	9,573	B/SL	\$30	\$287,187
Water St	W Jackson St	Kane St	Scott	1,787	B/SL	\$30	\$53,608
Wilcox Dr	Riverport Rd	S Wilcox Dr	Sullivan	6,463	B/BL	\$30	\$193,894
Yuma Rd	Frisco Yard Rd	US 23	Scott	19,018	B/PS	\$20	\$380,366
TOTAL				885,576			\$42,064,283

# Pedestrian Recommendations

The Kingsport region has expanded its sidewalk network in recent years and currently has several projects under development that will add to the existing regional network. Current projects of note with new sidewalks include:

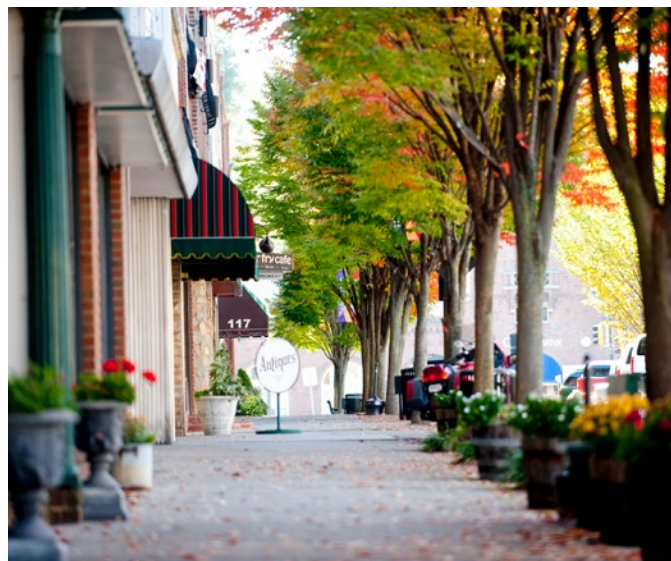
- West Stone Drive / US-11W;
- Memorial Boulevard / SR-126; and
- Fort Henry Drive / SR-36.

Similar to the bikeway recommendations, the recommended pedestrian network (Figure 2.4) carries forward many of the proposed sidewalks from the 2012 plan. (Committed projects or those under construction are displayed separately..

## Key features of the recommended pedestrian network include:

- A primary pedestrian network focused on state and federal aid roads, functionally classified as arterials and major collectors, located within existing municipal boundaries or growth areas;
- A secondary pedestrian network consisting of primarily local streets within existing municipal boundaries that provide enhanced connectivity to key origin and destination zones; and
- A nine-mile unpaved trail along Reedy Creek within the MTPO planning area with potential connection to the Bristol urbanized area.

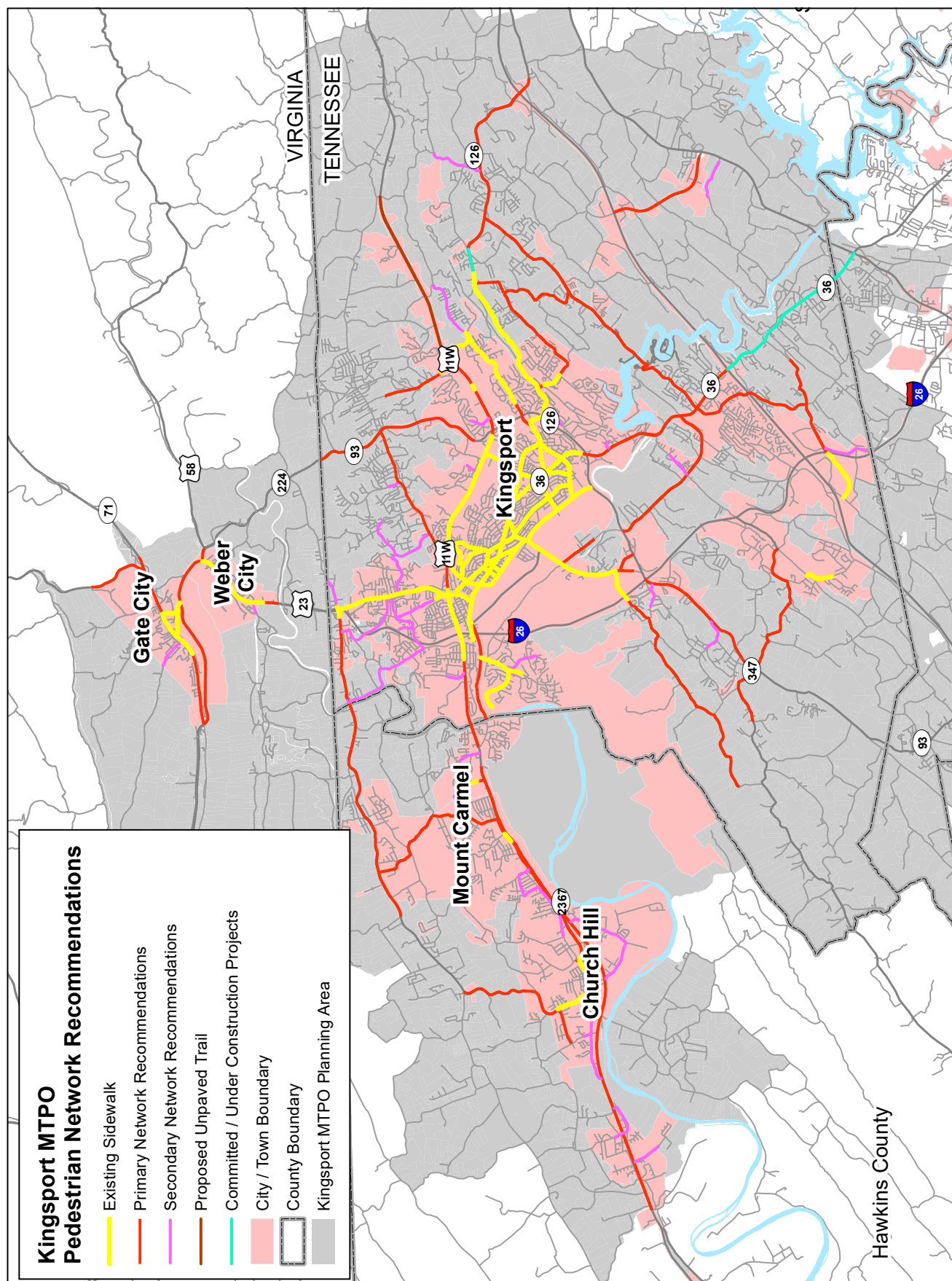
Table 2.2 lists the sidewalk recommendations – a total of approximately 124 miles with an estimated construction cost of \$327,711,635. All project recommendations, and associated cost estimates, assume sidewalk construction on both sides of the road or street. In some cases, sidewalks on a single side of the street may be appropriate, such as within low-traffic environments or concurrently with a shared-use path.



While individual intersection safety improvements were not considered in this regional-level plan, it is recommended that individual project implementation include intersection safety treatments, where appropriate. These could include, but are not necessarily limited to:

- High visibility crosswalks on all intersection legs;
- Advanced stop lines;
- Pedestrian signal countdown heads;
- Leading pedestrian intervals on traffic signals;
- Curb extensions and / or reduced curb radii;
- Pedestrian refuge islands; and
- Improved nighttime lighting.

Figure 2.4 Pedestrian Network Recommendations



**Table 2.2** *Pedestrian Network Recommendations*

Road	From	To	County	Network	Linear Feet	Estimated Construction Cost
Airport Pkwy	Harry Steadman Dr	SR-75	Sullivan	Primary	2,676	\$1,338,000
Reservoir Rd	Willowbrook Trce	New Moore Rd	Sullivan	Primary	3,178	\$1,588,885
Sullivan Gardens Pkwy	Rock Springs Dr	Lone Star Rd	Sullivan	Primary	3,594	\$1,797,000
Memorial Blvd	Fall Creek Rd	Montezuma Rd	Sullivan	Primary	1,974	\$987,000
W Carters Valley Rd	McConnell Rd	Moccasin St	Sullivan	Primary	1,083	\$541,500
Poplar Grove Rd	Twin Hills Dr	Bell Hollow Rd	Sullivan	Primary	4,282	\$2,141,000
Independence Ave	Redwood St	Tranbarger Rd	Hawkins	Primary	4,283	\$2,141,500
Independence Ave	Tranbarger Rd	Walnut St	Hawkins	Primary	3,163	\$1,581,500
US 11 W	Goshen Valley Rd	Garland Ave	Hawkins	Primary	6,564	\$3,282,000
US 11 W	Afg Rd	Tipton Ave	Hawkins	Primary	6,880	\$3,440,000
US 11 W	Tipton Ave	New Canton Rd	Hawkins	Primary	4,657	\$2,328,500
US 11 W	New Canton Rd	Goshen Valley Rd	Hawkins	Primary	10,307	\$5,153,500
N Central Ave	Miller Wood Rd	Lane St	Hawkins	Primary	3,980	\$1,990,000
Grey Brothers Store Rd	W Main Blvd	US 11 W	Hawkins	Primary	1,153	\$576,500
W Main Blvd	Grey Brothers Store Rd	S Central Ave	Hawkins	Primary	1,640	\$820,000
N Central Ave	Carters Valley Rd	Miller Wood Rd	Hawkins	Primary	8,351	\$4,175,500
US 11 W	Independence Ave	Venture Park	Hawkins	Primary	5,901	\$2,950,500
W Main St	Silver Lake Rd	Englewood Ave	Hawkins	Primary	10,677	\$5,338,500
US 11 W	Silver Lake Rd	Independence Ave	Hawkins	Primary	13,402	\$6,701,000
US 11 W	Garland Ave	Silver Lake Rd	Hawkins	Primary	4,434	\$2,217,000
Old Stage Rd	Deerfield Cir	E Main Blvd	Hawkins	Primary	400	\$200,000
W Main St	Hammond Ave	Independence Ave	Hawkins	Primary	1,751	\$875,500
Reservoir Rd	Hood Rd	Willowbrook Trce	Sullivan	Primary	3,397	\$1,698,500
Mill Creek Rd	Sullivan Gardens Pkwy	Twin Hills Dr	Sullivan	Primary	3,527	\$1,763,500
Twin Hills Dr	Mill Creek Rd	Poplar Grove Rd	Sullivan	Primary	734	\$367,000
Poplar Grove Rd	Bell Hollow Rd	Rock Spring Valley Rd	Sullivan	Primary	2,855	\$1,427,500
Poplar Grove Rd	Rock Springs Valley Rd	Rock Springs Dr	Sullivan	Primary	1,916	\$958,000
Rock Springs Dr	Poplar Grove Rd	Cox Hollow Rd	Sullivan	Primary	2,795	\$1,397,500
Netherland Inn Rd	County Line	Netherland Ter	Sullivan	Primary	4,158	\$2,079,000
Netherland Inn Rd	Netherland Ter	W Center St	Sullivan	Primary	6,389	\$3,194,500
US 11 W	County Line	Deneen Ln	Sullivan	Primary	4,608	\$2,304,000
US 11 W	Deneen Ln	Afton St	Sullivan	Primary	2,427	\$1,213,500
US 11 W	Netherland Inn Rd	County Line	Hawkins	Primary	2,491	\$1,245,500
Fort Henry Dr	Wesley Rd	Fort Henry Dr	Sullivan	Primary	1,648	\$412,000
W Carters Valley Rd	Moccasin St	Harrison Ave	Sullivan	Primary	2,886	\$1,443,000
W Carters Valley Rd	Harrison Ave	Tenneva St	Sullivan	Primary	1,617	\$808,500
Fort Henry Dr	SR-93 Interchange	Thornton Dr	Sullivan	Primary	3,282	\$1,641,000
Fort Henry Dr	Thornton Dr	Ft Patrick Dam Maintenance Rd	Sullivan	Primary	4,109	\$2,054,500
Fort Henry Dr	Hemlock Rd	I-81	Sullivan	Primary	7,314	\$3,657,000
Carters Valley Rd	Way Cross Rd	Riverchase Dr	Hawkins	Primary	3,185	\$1,592,500
Carters Valley Rd	Riverchase Dr	N Holston River Dr	Hawkins	Primary	4,069	\$2,034,500
Carters Valley Rd	N Holston River Dr	McConnell Rd	Sullivan	Primary	3,447	\$1,723,500
Carters Valley Rd	McCracken Ln	Kinthead St	Hawkins	Primary	3,152	\$1,576,000
Carters Valley Rd	Independence Ave	McCracken Ln	Hawkins	Primary	4,986	\$2,493,000
Carters Valley Rd	Mt pleasant Rd	Independence Ave	Hawkins	Primary	5,346	\$2,673,000



Road	From	To	County	Network	Linear Feet	Estimated Construction Cost
Independence Ave	Carters Valley Rd	Redwood St	Hawkins	Primary	5,088	\$2,544,000
Independence Ave	Walnut St	Meadow Springs Ln	Hawkins	Primary	2,253	\$1,126,500
Independence Ave	Meadow Springs Ln	US 11 W	Hawkins	Primary	2,209	\$1,104,500
Fall Creek Rd	Bridwell Heights Rd	Pettyjohn Rd	Sullivan	Primary	3,141	\$1,570,500
Fall Creek Rd	Memorial Blvd	Bridwell Heights Rd	Sullivan	Primary	2,884	\$1,442,000
Fall Creek Rd	Pettyjohn Rd	Steep Hill Rd	Sullivan	Primary	3,006	\$1,503,000
Fall Creek Rd	Steep Hill Rd	Emory Church Rd	Sullivan	Primary	3,318	\$1,659,000
Fall Creek Rd	Emory Church Rd	Warrior Falls Dr	Sullivan	Primary	3,583	\$1,791,500
Fall Creek Rd	Warrior Falls Dr	Park Ridge Ct	Sullivan	Primary	2,557	\$1,278,500
Fall Creek Rd	Park Ridge Ct	Hemlock Rd	Sullivan	Primary	5,493	\$2,746,500
Hemlock Rd	Colonial Heights Rd	Fall Creek Rd	Sullivan	Primary	624	\$312,000
Colonial Heights Rd	Hemlock Rd	Warrior Dr	Sullivan	Primary	3,758	\$1,879,000
Colonial Heights Rd	Warrior Dr	Fort Henry Dr	Sullivan	Primary	4,129	\$2,064,500
Lebanon Rd	Grove Dr	Chesterfield Dr	Sullivan	Primary	3,549	\$1,774,500
Lebanon Rd	Chesterfield Dr	Sandridge Dr	Sullivan	Primary	5,735	\$2,867,500
Lebanon Rd	Sandridge Dr	Fordtown Rd	Sullivan	Primary	1,316	\$658,000
Hwy 126	Gravel Top Rd	I-81	Sullivan	Primary	4,445	\$2,222,500
Hwy 126	I-81	Gunnings Ave	Sullivan	Primary	2,003	\$1,001,500
Hwy 126	Cochise Trl	Gravel Top Rd	Sullivan	Primary	4,481	\$2,240,500
Hwy 126	Montezuma Rd	Cochise Trl	Sullivan	Primary	5,182	\$2,591,000
Hwy 126	Island Rd	Fall Creek Rd	Sullivan	Primary	3,856	\$1,928,000
Hwy 126	Fisher Dr	Island Rd	Sullivan	Primary	2,673	\$1,336,500
New Beason Well Rd	Tate Dr	Sussex Dr	Sullivan	Primary	6,611	\$3,305,500
US 11 W	Arcadia Dr	Crown Cir	Sullivan	Primary	3,567	\$1,783,500
US 11 W	Crown Cir	Ollis Bowers Hill Rd	Sullivan	Primary	5,889	\$2,944,500
Moreland Dr	Pond Springs Rd	Rock Springs Rd	Sullivan	Primary	5,014	\$2,507,000
Moreland Dr	John B Dennis Hwy	Pong Springs Rd	Sullivan	Primary	4,254	\$2,127,000
Moreland Dr	Rock Springs Rd	Fort Henry Dr	Sullivan	Primary	7,790	\$3,895,000
Fordtown Rd	Breckenridge Trce	Lebanon Rd	Sullivan	Primary	2,665	\$1,332,500
Fordtown Rd	Lebanon Rd	Deck St	Sullivan	Primary	1,995	\$997,500
Fordtown Rd	Deck St	Fondulac Dr	Sullivan	Primary	3,531	\$1,765,500
Fordtown Rd	Kendrick Creek Rd	Breckenridge Trce	Sullivan	Primary	3,444	\$1,722,000
Fort Henry Dr	Ft Patrick Dam Maintenance Rd	VFW Rd	Sullivan	Primary	2,722	\$1,361,000
Fort Henry Dr	VFW Rd	Moreland Dr	Sullivan	Primary	1,983	\$991,500
Sullivan Gardens Pkwy	Belsay Dr	I-26	Sullivan	Primary	4,497	\$2,248,500
Sullivan Gardens Pkwy	Rock Springs Dr	Belsay Dr	Sullivan	Primary	8,315	\$4,157,500
S Wilcox Dr	Wilcox Dr	John B Dennis Hwy	Sullivan	Primary	2,329	\$1,164,500
Wilcox Dr	Meadowview Pwky	John B Dennis Hwy	Sullivan	Primary	2,016	\$1,008,000
Reservoir Rd	Bays Mountain Park Rd	Glen Alpine Rd	Sullivan	Primary	5,109	\$2,554,500
Reservoir Rd	Hood Rd	Bays Mountain Park Rd	Sullivan	Primary	4,794	\$2,397,000
Reservoir Rd	Glen Alpine Rd	Lone Star Rd	Sullivan	Primary	8,777	\$4,388,500
US 11 W	Donelson Dr	Clinchfield St	Sullivan	Primary	3,209	\$1,604,500
Cooks Valley Rd	Emory Church Rd	Palomino Dr	Sullivan	Primary	5,718	\$2,859,000
Cooks Valley Rd	Palomino Dr	Harbor Springs Rd	Sullivan	Primary	4,444	\$2,222,000
Cooks Valley Rd	Harbor Springs Rd	Harbor Chapel Rd	Sullivan	Primary	1,731	\$865,500
Cooks Valley Rd	Memorial Blvd	Emory Church Rd	Sullivan	Primary	3,902	\$1,951,000
Orebank Rd	Steeplechase Dr	Memorial Blvd	Sullivan	Primary	3,321	\$1,660,500

Road	From	To	County	Network	Linear Feet	Estimated Construction Cost
Emory Church Rd	Cooks Valley Rd	Pettyjohn Rd	Sullivan	Primary	1,681	\$840,500
Emory Church Rd	Pettyjohn Rd	Cedar Branch Rd	Sullivan	Primary	2,664	\$1,332,000
Emory Church Rd	Cedar Branch Rd	Lake Park Dr	Sullivan	Primary	2,016	\$1,008,000
Emory Church Rd	Lake Park Dr	Fall Creek Rd	Sullivan	Primary	2,703	\$1,351,500
Harbor Chapel Rd	Memorial Blvd	Skyland Dr	Sullivan	Primary	1,045	\$522,500
Memorial Blvd	Harbor Chapel Rd	Harbor Chapel Rd	Sullivan	Primary	106	\$53,000
N John B Dennis Hwy	State Line	Bloomington Rd	Sullivan	Primary	7,421	\$3,710,500
N John B Dennis Hwy	Bloomington Rd	Pavilion Dr	Sullivan	Primary	11,239	\$5,619,500
Airport Pkwy	I-81	Shipley Ferry Rd	Sullivan	Primary	2,319	\$1,159,500
Airport Pkwy	Shipley Ferry Rd	Centenary Rd	Sullivan	Primary	2,798	\$1,399,000
Airport Pkwy	Centenary Rd	Harry Steadman Dr	Sullivan	Primary	4,641	\$2,320,500
US 23 N	W Jackson St	Kane St	Scott	Primary	13,825	\$6,912,500
US 23 N	Kane St	Wadlow Gap Hwy	Scott	Primary	5,706	\$2,853,000
W Jackson St	US 23 N	Park St	Scott	Primary	5,689	\$2,844,500
W Jackson St	Park St	Cypress St	Scott	Primary	1,930	\$965,000
Wadlow Gap Hwy	US 23 S	Bristol Hwy	Scott	Primary	1,410	\$705,000
Veterans Memorial Hwy	Golf Course Rd	Jackson St	Scott	Primary	6,469	\$3,234,500
Jackson St	Red Hill Rd	Old Nickelsville Rd	Scott	Primary	3,473	\$1,736,500
Jackson St	Old Nickelsville Rd	Shotgun Dr	Scott	Primary	3,286	\$1,643,000
Lone Star Rd	Potato Hill Rd	Sullivan Gardens Pwky	Sullivan	Primary	2,960	\$1,480,000
Lone Star Rd	Stardust Rd	Potato Hill Rd	Sullivan	Primary	3,969	\$1,984,500
E Main Blvd	Old Stage Rd	Silver Lake Rd	Hawkins	Primary	3,931	\$1,965,500
US 23 N	Spring St	River Rd	Scott	Primary	1,628	\$814,000
Eastern Star Rd	Mitchell Rd	I-26 On-Ramp	Sullivan	Secondary	1,284	\$642,000
Virgil Ave	Wampler St	Lynn Garden Dr	Sullivan	Secondary	4,254	\$2,127,000
May Ave	High Point Ave	Lynn Garden Dr	Sullivan	Secondary	171	\$85,500
Bell Ridge Dr	Bell Ridge Rd	High Point Ave	Sullivan	Secondary	4,339	\$2,169,500
Silver Lake Rd	Linville St	Riverview Dr	Hawkins	Secondary	2,724	\$1,362,000
S Central Ave	US 11 W	Hamilton St	Hawkins	Secondary	1,954	\$977,000
Clouds Ford Rd	Granby Rd	Virgil Ave	Sullivan	Secondary	1,542	\$771,000
Granby Rd	Hall St	US 11 W	Sullivan	Secondary	2,259	\$1,129,500
Kingsport Press Rd	US 11 W	Business Rd	Hawkins	Secondary	3,227	\$1,613,500
Elm Springs Rd	Rogan St	Holliston Mills Rd	Hawkins	Secondary	1,552	\$776,000
W Main Blvd	US 11 W	W Main Blvd	Hawkins	Secondary	1,927	\$963,500
W Main Blvd	Old Union Rd	Grey Brothers Store Rd	Hawkins	Secondary	2,989	\$1,494,500
Old Union Rd	Akard St	W Main Blvd	Hawkins	Secondary	910	\$455,000
W Main Blvd	W Main Blvd	Chickasaw Cir	Hawkins	Secondary	2,135	\$1,067,500
Walnut St	Independence Ave	Residential House	Hawkins	Secondary	424	\$212,000
Montgomery Ave	Cedar St	Beech St	Hawkins	Secondary	1,891	\$945,500
Cedar St	Montgomery Ave	Dover Ave	Hawkins	Secondary	2,305	\$1,152,500
Old Stage Rd	Carolyn Ave	Montgomery Ave	Hawkins	Secondary	2,826	\$1,413,000
Silver Lake Rd	US 11 W	Ordnance Dr	Hawkins	Secondary	744	\$372,000
Old Stage Rd	Lloyds Chapel Rd	Silver Lake Rd	Hawkins	Secondary	903	\$451,500
Old Stage Rd	Silver Lake Rd	Carolyn Ave	Hawkins	Secondary	2,444	\$1,222,000
Dover Ave	Cedar St	W Main St	Hawkins	Secondary	1,316	\$658,000
Walnut St	Residential House	University Blvd	Hawkins	Secondary	1,522	\$761,000
Sullivan Gardens Dr	Glen Alpine Rd	Sullivan Gardens Pwky	Sullivan	Secondary	2,398	\$1,199,000

Road	From	To	County	Network	Linear Feet	Estimated Construction Cost
Glen Alpine Rd	Princeton Rd	Sullivan Gardens Dr	Sullivan	Secondary	1,491	\$745,500
Fleetwood Dr	Manor Dr	Woodgreen Ln	Sullivan	Secondary	2,539	\$1,269,500
Lewis Ln	Bellingham Dr	C.E. Brooks Jr Way	Hawkins	Secondary	986	\$493,000
University Blvd	Walnut St	Wellington Blvd	Hawkins	Secondary	1,264	\$632,000
University Blvd	Bellingham Dr	US 11 W	Hawkins	Secondary	1,402	\$701,000
Lewis Ln	Ferndale Ln	Bellingham Dr	Hawkins	Secondary	1,438	\$719,000
Ridgefields Rd	Pendragon Rd	Lynwood Rd	Sullivan	Secondary	764	\$382,000
Dunlap Rd	Red Barn	Hwy 75	Sullivan	Secondary	4,328	\$2,164,000
New Moore Rd	Princeton Rd	Sullivan Gardens Pwky	Sullivan	Secondary	763	\$381,500
Eastern Star Rd	Fordtown Rd	Mitchell Rd	Sullivan	Secondary	3,653	\$1,826,500
Tranbarger Dr	Virgil Ave	Colfax Ave	Sullivan	Secondary	4,482	\$2,241,000
Gibson Mill Rd	Bloomingtondale Rd	US 11 W	Sullivan	Secondary	727	\$363,500
Thornton Dr	Red Bud Dr	Atoka Cir	Sullivan	Secondary	1,111	\$555,500
Beechnut Dr	Essex Dr	US 11 W	Sullivan	Secondary	1,061	\$530,500
Essex Dr	North of Sheffield St	Beechnut Dr	Sullivan	Secondary	1,423	\$711,500
Orebank Rd	Lamberth St	Hooven St	Sullivan	Secondary	2,181	\$1,090,500
Gravely Rd	Independence Dr	Forest View Dr	Sullivan	Secondary	1,176	\$588,000
E Carters Valley Rd	Parker Hill Dr	Carters Valley Gdns	Sullivan	Secondary	2,158	\$1,079,000
Forest View Rd	Myron St	Bloomingtondale Rd	Sullivan	Secondary	1,291	\$645,500
Silver Lake Rd	Riverview Dr	S Central Ave	Hawkins	Secondary	1,275	\$637,500
Harr Town Rd	Highridge Dr	Hwy 126	Sullivan	Secondary	5,786	\$2,893,000
S Central Ave	Hamilton St	Silver Lake Rd	Hawkins	Secondary	2,707	\$1,353,500
Silver Lake Rd	Ordnance Dr	Linville St	Hawkins	Secondary	2,060	\$1,030,000
Bell Ridge Rd	Harrison Ave	Bell Ridge Dr	Sullivan	Secondary	1,203	\$601,500
Harrison Ave	W Carters Valley Rd	Bell Ridge Rd	Sullivan	Secondary	940	\$470,000
N Holston River Dr	W Carters Valley Rd	Brentwood Dr	Sullivan	Secondary	1,409	\$704,500
E Carters Valley Rd	Carters Valley Gdns	State Line	Sullivan	Secondary	818	\$409,000
Gravely Rd	Kincaid St	Independence Dr	Sullivan	Secondary	1,829	\$914,500
Rock Springs Rd	Running Deer Trl	Moreland Dr	Sullivan	Secondary	2,840	\$1,420,000
Orebank Rd	Hooven St	Rock City Rd	Sullivan	Secondary	4,580	\$2,290,000
Shipp Springs Rd	Leeland Dr	Bloomingtondale Pike	Sullivan	Secondary	3,098	\$1,549,000
Princeton Rd	New Moore Rd	Diana Rd	Sullivan	Secondary	888	\$444,000
Diana Rd	Diana Ave	Princeton Rd	Sullivan	Secondary	1,349	\$674,500
University Blvd	Wellington Blvd	Bellingham Dr	Hawkins	Primary	1,224	\$612,000
W Main Blvd	Chickasaw Cir	Old Union Rd	Hawkins	Secondary	1,145	\$572,500
Lane St	Old Union Rd	N Central Ave	Hawkins	Primary	2,885	\$1,442,500
Fairview Ave	Granby Rd	Virgil Ave	Sullivan	Secondary	1,517	\$758,500
Virgil Ave	Fairview Ave	Wampler St	Sullivan	Secondary	2,537	\$1,268,500
Stratford Rd	Memorial Blvd	Alderwood Dr	Sullivan	Secondary	2,373	\$1,186,500
Gravely Rd	Lynn Garden Dr	Ridgecrest Ave	Sullivan	Secondary	2,689	\$1,344,500
Gravely Rd	Ridgecrest Ave	Ridgecrest Ave	Sullivan	Secondary	1,769	\$884,500
Gravely Rd	Ridgecrest Ave	Kincaid St	Sullivan	Secondary	1,838	\$919,000
Manville Rd	Burnt Cabin Branch Dr	W Jackson St	Scott	Secondary	3,504	\$1,752,000
Yuma Rd	Warm Springs Rd	US 23	Scott	Secondary	1,343	\$335,750
Fleetwood Dr	Chippendale Rd	Manor Dr	Sullivan	Secondary	1,034	\$517,000
Bowater Dr	Whitley Dr	US 11 W	Sullivan	Secondary	1,475	\$737,500
Shipp Springs Rd	Gravely Rd	Leeland Dr	Sullivan	Secondary	1,720	\$860,000



Road	From	To	County	Network	Linear Feet	Estimated Construction Cost
N Holston River Dr	Brentwood Dr	Granby Rd	Sullivan	Secondary	8628	\$4,314,000
Virgil Ave	Union St	Fairview Ave	Sullivan	Secondary	2,640	\$1,320,000
Jared Dr	Wilcox Dr	Young Rd	Sullivan	Primary	4,424	\$2,212,000
US-11W	American Way	New Beason Wells Rd	Sullivan	Primary	2,032	\$1,016,000
Lebanon Rd	Fort Henry Dr	Grove Dr	Sullivan	Primary	2,823	\$1,411,500
Holliston Mills Rd	Elm Springs Rd	US 11 W	Hawkins	Secondary	3,352	\$1,478,500
Carters Valley Rd	Kinhead St	Way Cross Rd	Hawkins	Primary	4,157	\$2,078,500
US 11 W	New Beason Well Rd	Arcadia Dr	Sullivan	Primary	13,110	\$6,555,000
Reedy Creek Trail	Cleek Rd	MTPO Planning Area Boundary	Sullivan	Unpaved Trail	48,594	\$1,214,850
Bloomingdale Rd / Bloomingdale Pke	Wadlow Gap Hwy	Larry Neil Way	Sullivan	Primary	14,585	\$7,292,500
<b>TOTAL*</b>						<b>\$328,444,985</b>

\*Total network length does not include Reedy Creek Trail

# Project Concept Renderings

Consistent with the Regional Bicycle and Pedestrian Plan's focus on project implementation, eight high-impact, high-priority projects were chosen for detailed concept renderings to better illustrate what project implementation would look like in practice. In addition to the impact potential of the projects, the renderings also highlight the various facility types included in the plan, emphasizing the flexibility of implementation going forward. Supporting the renderings for each project are detailed, engineering-level construction cost estimates (see Appendix B).

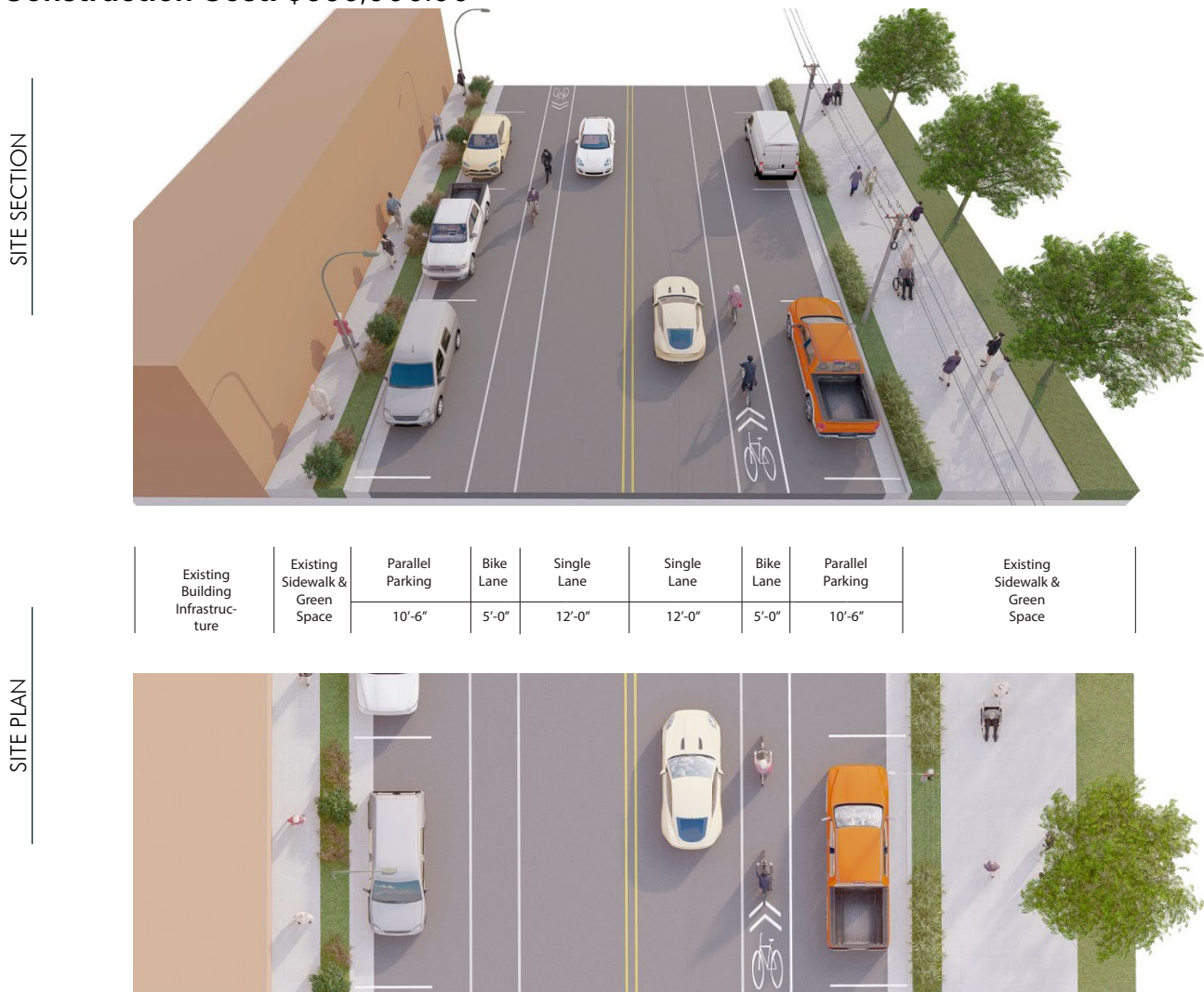
Note: The costs listed on the renderings are for construction and do not include Preliminary Engineering or Right-of-Way. The estimates are in today's dollars and do not include inflation.

The concept renderings (Figures 2.5 through 2.12) include:

- West and East Jackson Street (two renderings) – Bike Lanes;
- West Stone Drive (US-11W) / Netherland Inn Road – Shared-Use Path;
- North John B. Dennis Highway – Bike Lanes and Sidewalks or Shared-Use Path;
- Fort Henry Drive (SR-36) – Bike Lane and Sidewalks;
- Warm Springs Road / Apple Orchard Road – Shared Lane and Shared-Use Path;
- Watauga Street – Bike Boulevard;
- East Stone Drive (US-11W) – Sidewalks; and
- Horse Creek Greenway – Shared-Use Path.

**Figure 2.5a** West Jackson Street from Solon Street to Fir Street / Water Street

**Construction Cost:** \$660,000.00



**OPPORTUNITIES:**

- Provide parallel on-street parking facility on Water Street
- Draw visitors to local businesses

**CONSTRAINTS:**

- Potential conflict with street parking locations and proposed bike lane



Existing Sidewalk



Existing Angled Parking

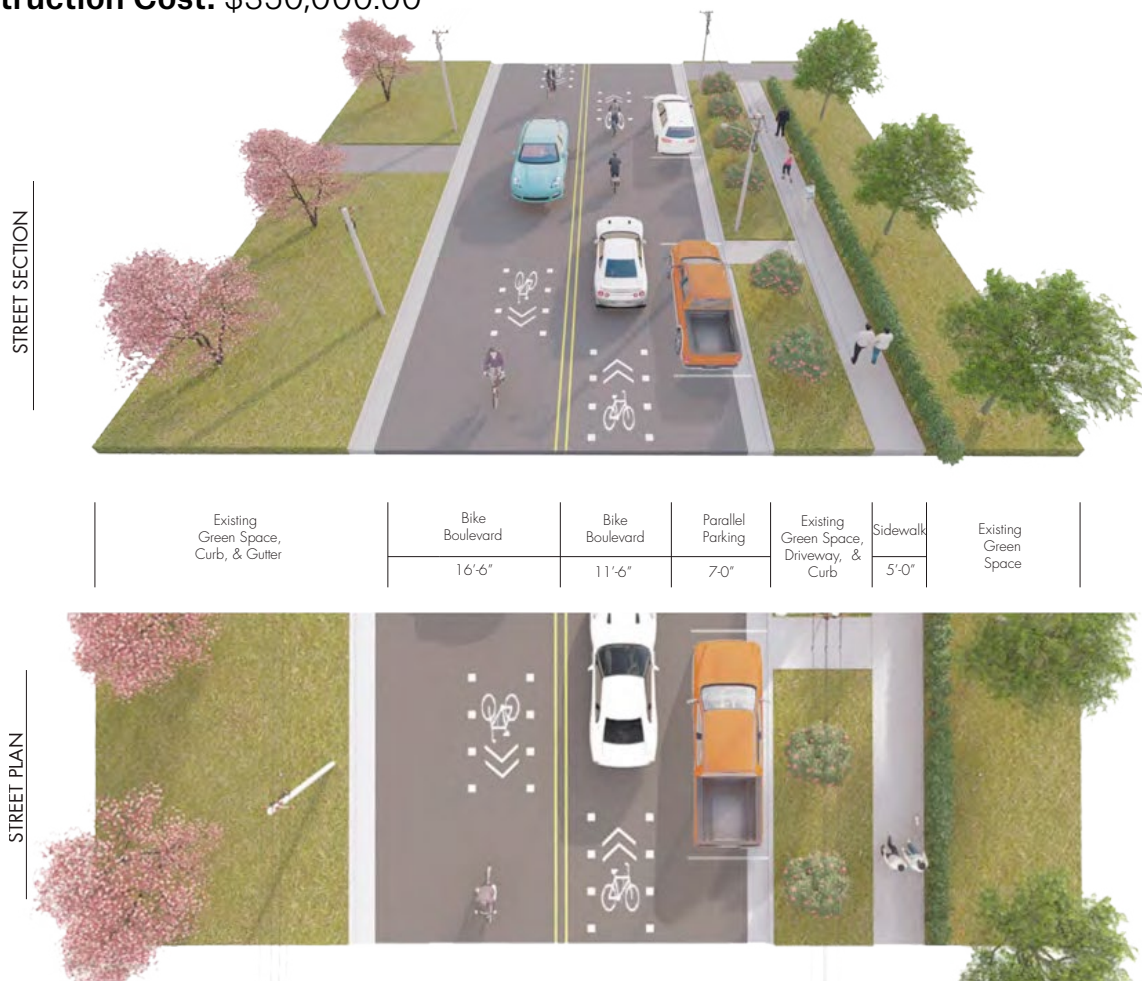
Solon St. to Fir St./Water St.

Length: 0.46 mile

The implementation of a bike lane along West Jackson Street from Solon St. to Fir St./Water St. would allow for an alternative means of transportation and engagement. To allow for the proposed bike lane to achieve the necessary width, it is proposed that parallel parking could be provided along Water Street.

Figure 2.5b East Jackson Street from Jones Street to Solon Street

Construction Cost: \$350,000.00



**OPPORTUNITIES:**

- Connectivity to the downtown area
- Current road width provides adequate space for a bike boulevard
- Allows for pathway to be utilized for primarily pedestrian use

**CONSTRAINTS:**

- Adequate signage and pavement markings must be provided to ensure safe vehicular and cyclist use



Existing Sidewalk



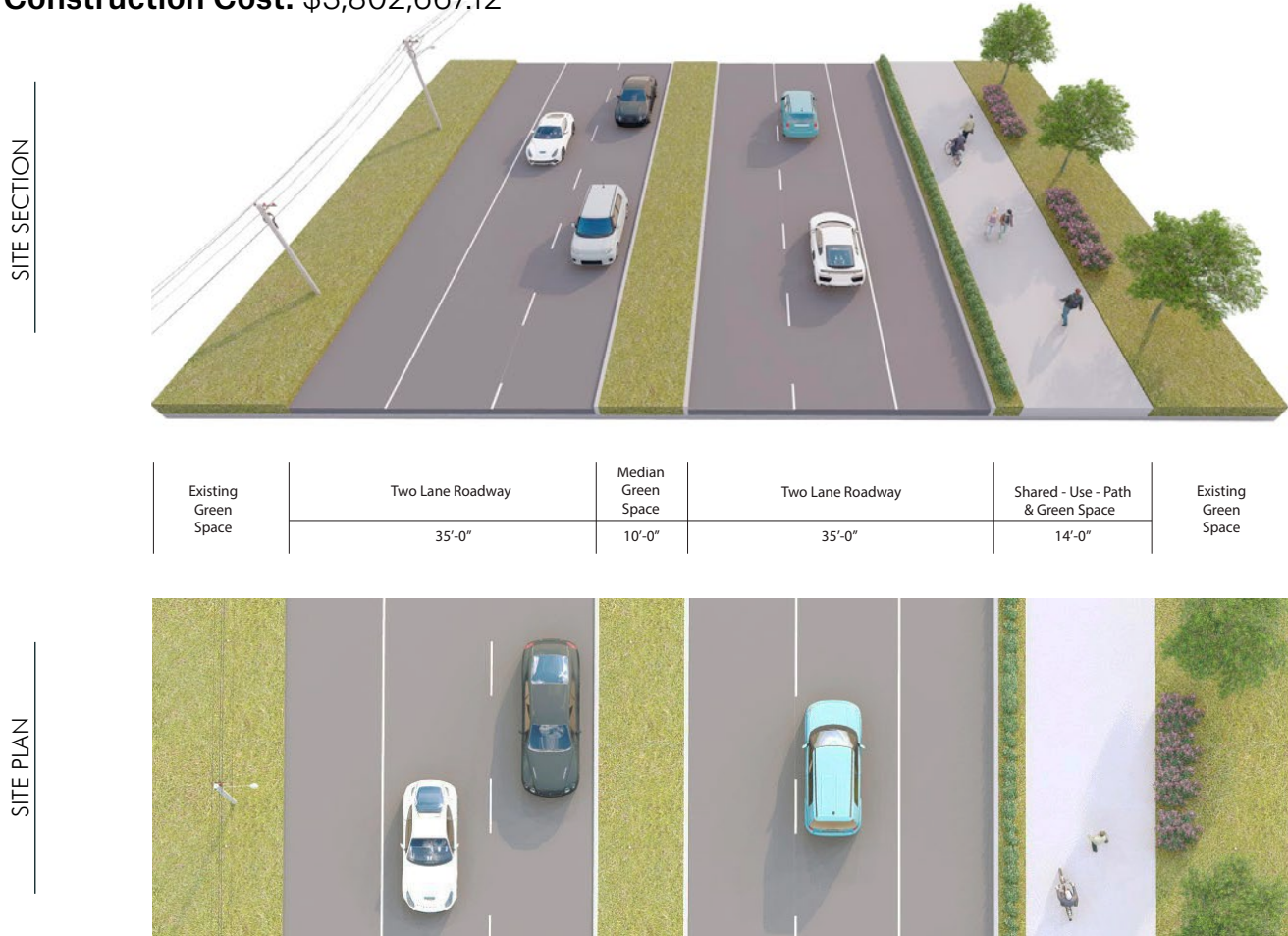
Existing Parallel Parking

Jones St. to Solon St.

Length: 0.37 mile

The implementation of a bike boulevard along East Jackson Street from Jones St. to Solon St. would allow for an alternative means of transportation that would increase mobility of residents and visitors resulting in a connectivity to the downtown area. To ensure driver and cyclist safety, additional parking is available on Water Street.

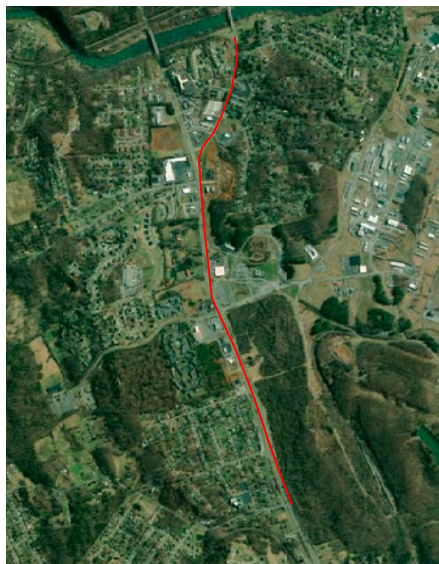


**Figure 2.6** West Stone Drive (US-11W) / Netherland Inn Road from Independence Avenue to Big Elm Road**Construction Cost:** \$3,802,667.12**OPPORTUNITIES:**

- Increase access to local vendors for residents and visitors
- Future potential extensions
- Correct network gap between Mt. Carmel and Kingsport Greenbelt

**CONSTRAINTS:**

- Minimal existing tree canopy
- Slope varies for edge of road conditions
- Requires safe bike and pedestrian crossing(s)



Existing Roadway



Existing Infrastructure

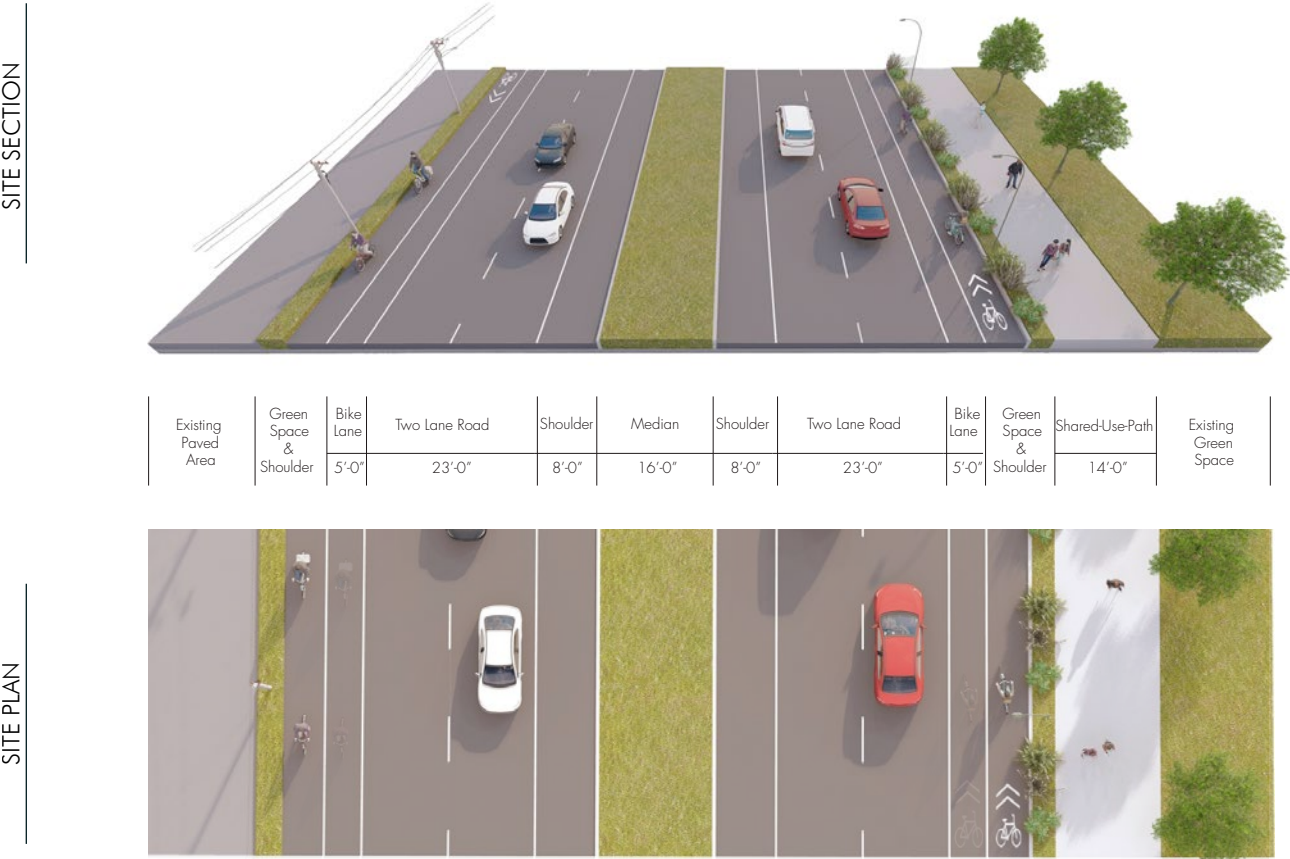
Independence Ave. to Big Elm Rd.

Length: 2.0 mile

The addition of a shared-use path would allow for connectivity with the North Fork Holston River. The shared-use path would allow pedestrians and bikers to travel alongside a highly traveled road safely while offering opportunities to visit local businesses. The inclusion of the greenway extension along W. Stone Drive/US-11W could add momentum and value to the MTPO's pursuit of the Netherland Inn connection.

Figure 2.7 North John B. Dennis Highway from Bloomingdale Road to Pavilion Drive

Construction Cost: \$3,531,061.12



OPPORTUNITIES:

- Existing roadway provides space for addition of bike lane
- Minimal grading required
- Increase walkability for local residents

CONSTRAINTS:

- Some locations provide steep slope areas, which will require grading
- Some houses along this road do not have driveways; they only have on-street parking
- A considerable amount of right of way and relocations could be required



Existing Roadway



Existing Edge of Road

Bloomingdale Rd. to Pavilion Dr.

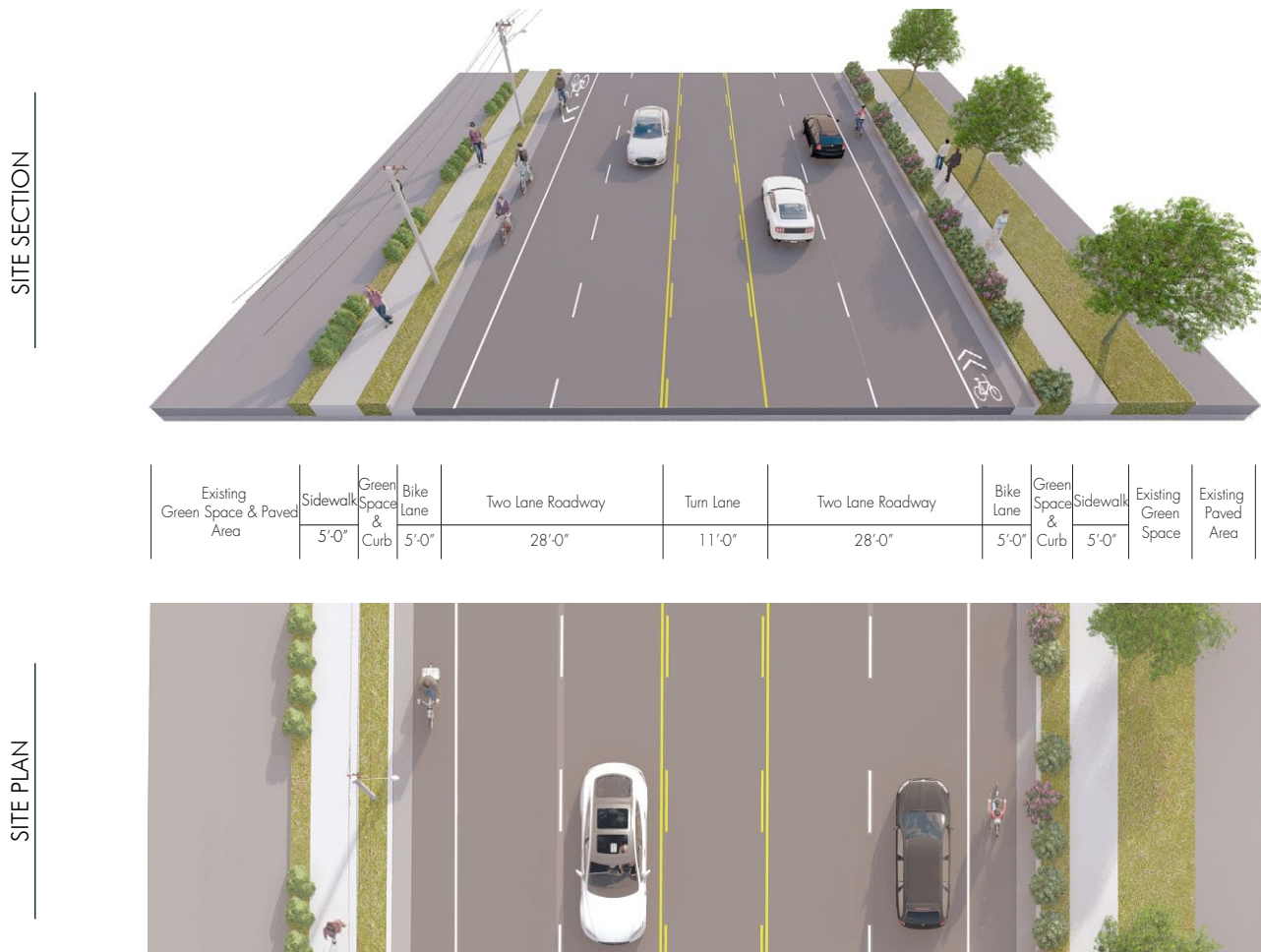
Length: 2.0 miles

The addition of a shared-use path would allow users to travel alongside a highly trafficked road safely while offering opportunities to visit local businesses. The presence of apartments, subdivisions, and a future middle school along this shared-use path indicate the large number of potential users that could utilize this pathway addition



**Figure 2.8** Fort Henry Drive (SR-36) from Colonial Heights Road to Wilmont Drive

**Construction Cost:** \$1,001,690.75



**OPPORTUNITIES:**

- Increase access to local vendors for residents and visitors
- Potential grant funding
- Multidimensional programming

**CONSTRAINTS:**

- Minimal existing tree canopy
- Slope varies for edge of road conditions
- Highly trafficked location



Existing 5 Lane Roadway



Existing Traffic Lights

Colonial Heights Rd. to Wilmont Dr.

Length: 0.5 mile

With potential grant funding, this installation of a bike lane and sidewalks would allow users to travel along side a highly trafficked road safely while offering opportunities to visit local businesses. Surrounding subdivisions indicate potential high levels of usage by local pedestrians and bicyclists.

Figure 2.9 Warm Springs Road / Apple Orchard Road from Yuma Road to Carters Valley Road

Construction Cost: \$10,700,000.00

SITE SECTION



North Fork River	Existing Green Space	Shared - Use - Path	Green Space	Single Lane	Single Lane	Existing Green Space
	VARIES	14'-0"	5' MIN	11'-0"	11'-0"	

SITE PLAN



**OPPORTUNITIES:**

- Access to North Fork Holston River; Possum Creek & North Fork Holston River confluence
- Views of the river and agricultural fields
- Ample space in flood plain for shared-use-path

**CONSTRAINTS:**

- Private property - a considerable amount of right of way and relocations could be required
- Expand width of road to accommodate bike lanes
- Right of way may dictate design
- Right of way would be required for trailhead parking



North Fork Holston River



Existing Roadway Condition

Yuma Rd. to Carters Valley Rd.

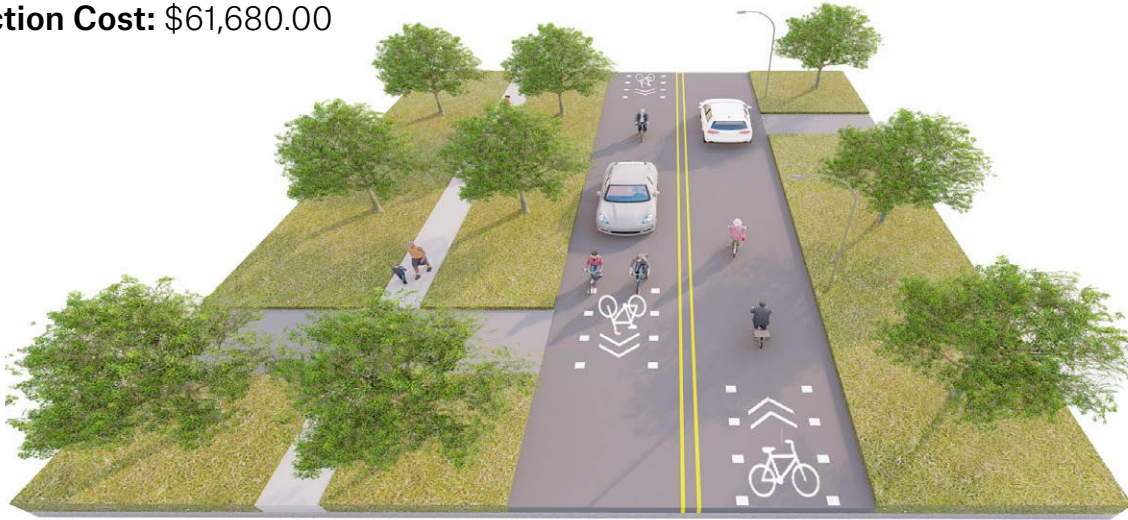
Length: 3.6 miles

The addition of a shared lane (not shown in rendering) and shared-use path in this location offers the user beautiful views and the ability to interact with the North Fork Holston River. The shared-use path crosses the Tennessee and Virginia border and could become a potential recreational connection to Weber City.



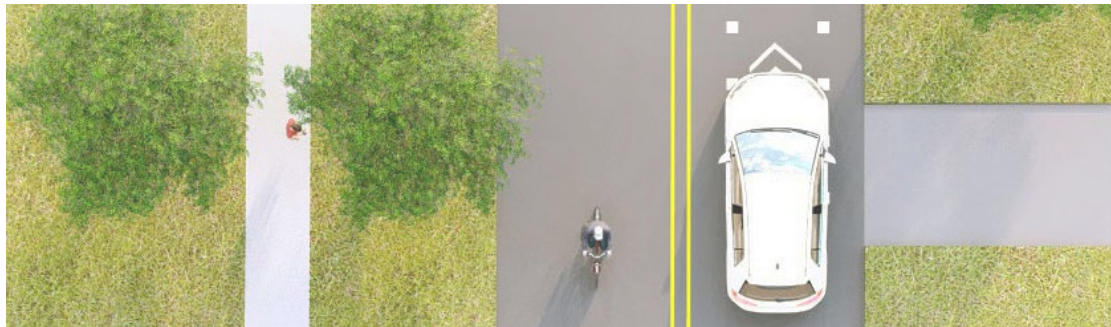
**Figure 2.10** Watauga Street from Broad Street to East Center Street**Construction Cost:** \$61,680.00

SITE SECTION



Existing Green Space & Driveways	Existing Sidewalk	Existing Green Space	Bike Boulevard	Bike Boulevard	Existing Green Space
	5'0"	VARIES	11'3"	11'3"	VARIES

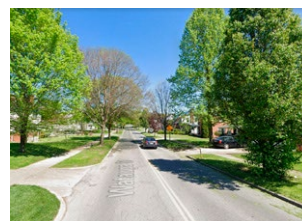
SITE PLAN

**OPPORTUNITIES:**

- Encourage use of existing pedestrian infrastructure
- Existing pathways in good condition
- Safe alternative means of transportation

**CONSTRAINTS:**

- Roundabouts
- Property Lines
- Ensure consistent flow of pedestrian circulation



Existing Sidewalks



Existing Pedestrian Infrastructure

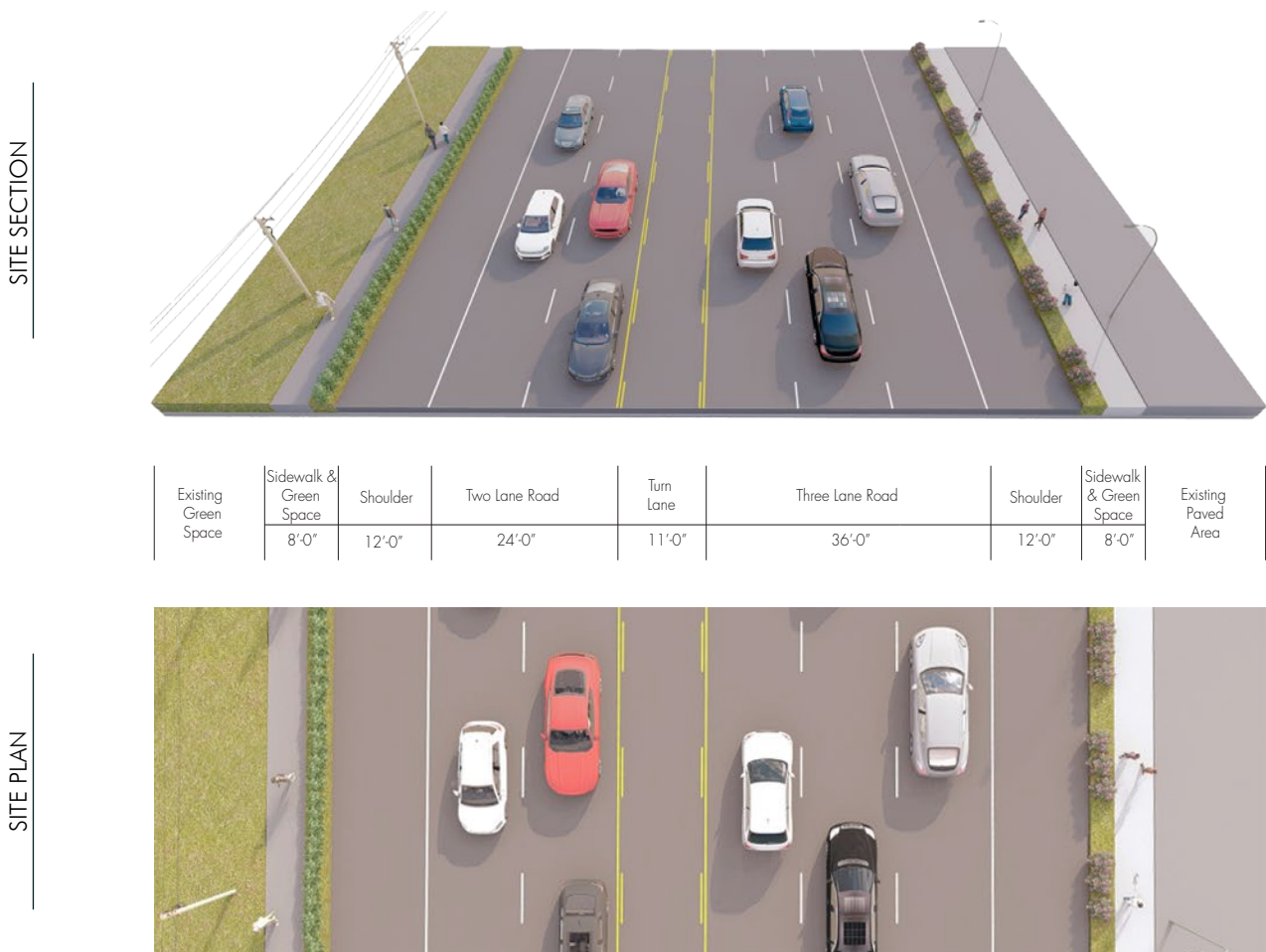
Broad St. to E. Center St.

Length: 1.8 mile

With existing infrastructure this addition of a bike boulevard would require minimal effort and would utilize the existing sidewalk. Located on site. Located within a neighborhood, this facility would allow for users to easily travel without impacting the experience of the pedestrian or vehicular user. In addition, this project has been identified as a key neighborhood connection in Central Kingsport.

Figure 2.11 East Stone Drive (US-11W) from Beechnut Drive to Kingsport Pavilion Access Road

Construction Cost: \$2,078,985.07



**OPPORTUNITIES:**

- Alternative means of transportation
- Access to sidewalks that provide opportunities for physical activity & environmental interaction

**CONSTRAINTS:**

- High traffic capacity
- Culvert on northwest side of road prior to Kingsport Pavilion Shopping Center
- Southeastern portion requires grading & clearing



Existing Sidewalk



Existing Parallel Parking

Beechnut Dr. to Kingsport Pavilion Access Rd. Length: 0.7 mile:

The addition of sidewalks to this location would provide an ability for users to utilize alternative means of transportation and allowing for greater connectivity.



**Figure 2.12 Horse Creek Greenway**

**Construction Cost: \$2,695,887.32**

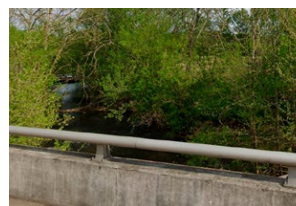


**OPPORTUNITIES:**

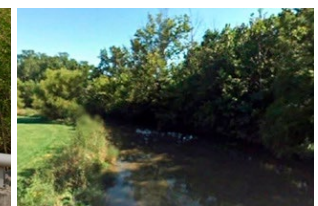
- Access to Horse Creek
- Create safe alternative route
- Increase opportunities for physical activity
- Potential to become a destination and amenity

**CONSTRAINTS:**

- Clearing & regular maintenance
- Maintain a healthy riparian zone
- Litter receptacle installation



Existing Creek Condition



Existing Creek Condition

Riverport Rd. to Meadowview Pkwy.

Length: 2.35 miles

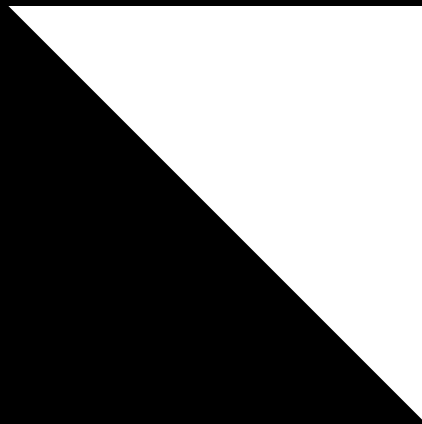
*The creation of a greenway system would provide a beautiful location for users to visit and form a relationship with an existing interesting feature. Through this process and installation, this shared-use path could become an additional amenity and destination for the city of Kingsport and a strategic connection between the downtown and the convention center.*





# Bicycle and Pedestrian Policies and Programs

Section 3.0



# Bicycle and Pedestrian Policies and Programs

Consistent with the MTPO's primary responsibility for transportation planning and programming, the Regional Bicycle and Pedestrian Plan includes a suite of bicycle and pedestrian project recommendations that will be considered for implementation going forward, largely as funding becomes available. However, there are also actions local jurisdictions within the MTPO's planning area can pursue to better promote bicycle and pedestrian mobility within their respective communities.

*There are also actions local jurisdictions within the MTPO's planning area can pursue to better promote bicycle and pedestrian mobility within their respective communities.*



# Land Development Policies and Regulations

Local jurisdictions can use policy and regulatory tools to improve walking and bicycling in their communities – notably, zoning ordinances, subdivision regulations, and Complete Streets policies. It should be noted that the MTPO does not have direct authority or influence over policy and regulatory decisions at the local level. These decisions are made solely at the discretion of the elected representatives of each community. That said, local jurisdictions can work in partnership with the MTPO to better cultivate a culture of walking and bicycling across the region.

Complete Streets policies are an increasingly effective strategy to ensure that the needs of pedestrians and bicyclists are incorporated into all transportation planning, design, operation and maintenance decisions. The goal of a Complete Streets policy is to provide a transportation system that meets the needs of all users, regardless of age, ability, income, ethnicity, or mode of transportation. Appendix C includes a Complete Streets policy template that can be tailored to each jurisdiction.

While the effectiveness of Complete Streets policies varies across the country – more than 1,600 Complete Street policies have been adopted nationwide, the most successful policies emphasize:

- Applying the Complete Streets policy in all phases of transportation project development, including planning, programming, design, construction, operations and maintenance;
- Updating all department, agency and commission policies and standards for consistency with the Complete Streets policy; and
- Measuring outcomes, including design (e.g., %age of planned sidewalks constructed) and administrative (e.g., the number of exceptions granted) performance measures.

One of the most effective implementation strategies for each jurisdiction is to establish land development regulations and street design standards that promote Complete Streets and walkable and bikeable development. Table 3.1 lists best practices in land development policies and regulations that promote places for walking and biking.

**Table 3.1** *Best Practices – Land Development Policies and Regulations*

Best Practices	What is it?	Where is it typically applied?	How is it typically applied?
Access management standards	Requires minimum access spacing, connectivity, and cross-access to preserve operations and safety for all transportation modes.	Designated areas and streets	Zoning ordinance
Bicycle parking ordinance	Requires the provision of bicycle parking based on land use and location.	Designated areas and streets	Zoning ordinance
Development incentives	Provides developers with additional development rights in exchange for public benefits, such as plazas, parks, trails, and other pedestrian-oriented amenities.	Downtown, mixed-use districts, and neighborhood centers	Zoning ordinance
Form-based code	Regulates the built environment based primarily on building form rather than building use to achieve a pedestrian-oriented development pattern.	Downtown, mixed-use districts, and neighborhood centers	Zoning ordinance
Mixed-use zoning	Allows for the vertical and horizontal combination of commercial, residential, and civic uses in a given area, supporting walkable live-work-play districts.	Downtown, mixed-use districts, and neighborhood centers	Zoning ordinance
Sidewalk ordinance	Requires sidewalks in new development, redevelopment, and expansion based on land use and location.	Designated areas and streets	Zoning ordinance
Tree ordinance	Protects trees in public right-of-way and on private property and requires trees in new construction based on land use and location.	Designated areas and streets	Zoning ordinance
Greenway easement	Requires an easement for greenways identified in local and regional plans.	Communitywide	Subdivision regulations
Walkable subdivisions	Supports more walkable communities through improved connectivity, defined centers, increased housing choices, and well-designed public streets.	Communitywide	Subdivision regulations
Complete Streets ordinance or policy	Requires or encourages a safe, comfortable, integrated transportation network for all users, regardless of age, ability, income, ethnicity, or mode of transportation.	Communitywide	Land use and transportation plans, policies, and standards
Traffic calming policy and program	Aims to reduce negative impacts of motor vehicle use, alter driver behavior, and improve conditions for pedestrians and bicyclists.	Designated areas and streets	Agency program

# Non-Infrastructure Program Recommendations

While the focus of a bicycle and pedestrian plan tends to concentrate on capital improvements, national best practices in bicycle and pedestrian planning and design underscore the importance of taking a comprehensive approach and highlighting what the League of American Bicyclists calls the five “Es:”

- Education;
- Encouragement;
- Equity;
- Evaluation and planning; and
- Engineering.

The non-infrastructure programs described in this section complement the plan’s engineering improvements – i.e. bike lanes, shared-use paths, and sidewalks – and give Kingsport-area residents and visitors the tools they need to safely and confidently walk and bike. A particular emphasis of the non-infrastructure

recommendations is providing more information and opportunities to traditionally-underrepresented communities in active transportation and recreation programs, such as non-white and non-English speaking residents and visitors.

Implementation of the non-infrastructure programs relies heavily on partnerships – within the public and private sectors, and local and regional agencies, businesses, community organizations, and other civic groups will play a vital role in their success. These programs, like the land development policies and regulations, will likely be implemented at the local level with the MTPO playing a critical role in coordinating partnerships and funding. Table 3.2 describes non-infrastructure programs that can be implemented in the short-term, along with potential partners and funding sources.

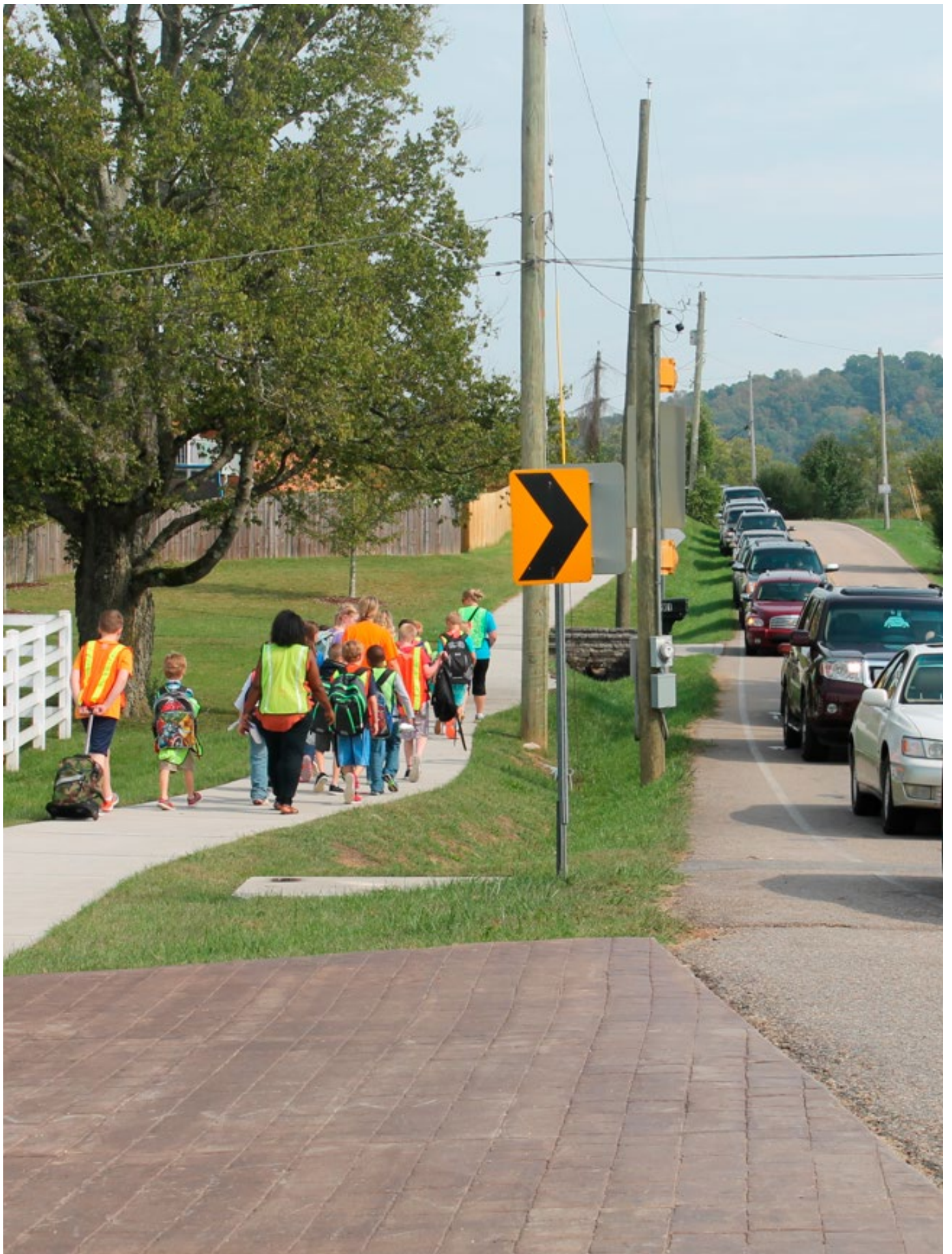
**Table 3.2** *Priority Short-Term Non-Infrastructure Programs*

Program		Responsible Party/Partners	Funding Source(s)
Education	Bike rodeos and classes for children	Cities; Counties; Law Enforcement Agencies; Bicycle Clubs; School Districts; Community Organizations	Grants; Local Parks & Recreation Budgets
	Pop-up demonstrations ("tactical urbanism") to test out potential infrastructure projects and generate community interest	Cities; Counties; Community Organizations	Cities; Counties; MTPO
	Bicycle/pedestrian safety awareness campaign for motorists	Cities; Counties; Law Enforcement Agencies; MTPO	Grants
Encouragement	Free bicycle and bicycle helmet program for low-income residents	Cities; Counties; Law Enforcement Agencies; School Districts; Community Organizations	Cities; Counties; Grants
	Pedestrian and bicycle maps and website	Cities; Counties; MTPO; Community Organizations	Cities; Counties; MTPO
	Open street events	Cities; Counties; Community Organizations	Cities; Counties; Sponsorships
Evaluation & Planning	Annual pedestrian and bicycle counts at key locations	Cities; Counties; MTPO; Community Organizations; TDOT; VDOT	Counties; MTPO; TDOT; VDOT

Since many non-infrastructure programs typically depend on in-kind staff and resources, the key to building awareness, education, and participation is offering a regular schedule of events that engage both participants and volunteers. In addition to the short-term priorities, other potential non-infrastructure programs that can help improve walking and biking in the Kingsport region include the following.

Education	<ul style="list-style-type: none"><li>• Partner with local community organizations to host all-ages “how-to-ride” classes (e.g. Boys &amp; Girls Club of Greater Kingsport)</li><li>• Provide information and educational materials in Spanish, in addition to English</li><li>• Offer Safe Routes to Schools programming, including National Walk to School Day</li></ul>
Encouragement	<ul style="list-style-type: none"><li>• Host launch parties for new walking and biking facilities</li><li>• Celebrate National Bike Month in May and “Walktober” events in the fall</li><li>• Promote access to nature/ recreation opportunities (e.g. 5k runs, bicycle rental or bike share in/near parks for recreational use)</li><li>• Start local chapters of organizations that promote walking and biking issues (e.g. Bike Walk Tennessee)</li></ul>
Evaluation & Planning	<ul style="list-style-type: none"><li>• Conduct roadway audits with volunteers</li></ul>

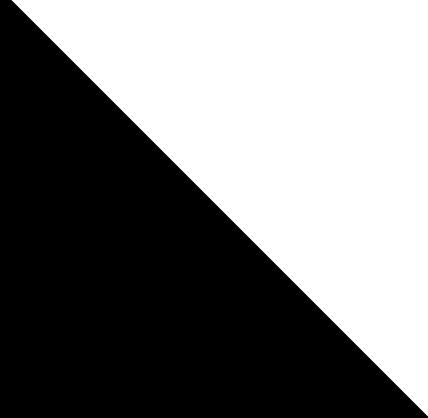






# Implementation and Funding Strategies

Section 4.0



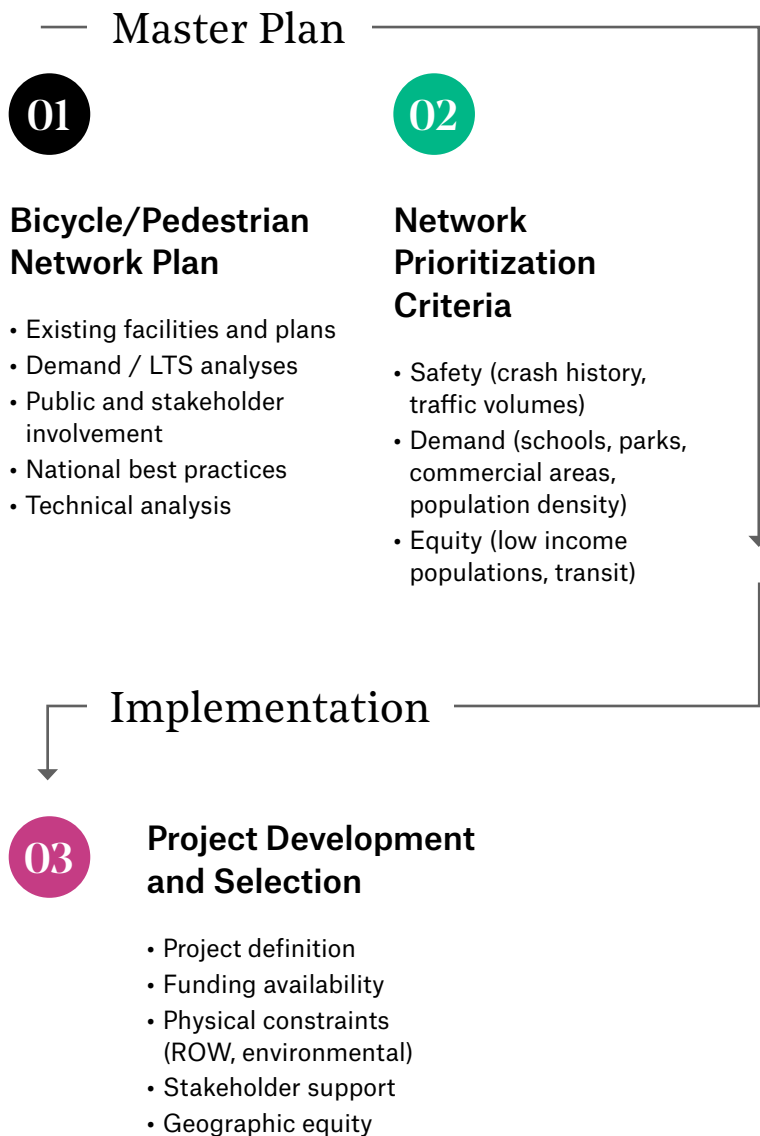
# Implementation and Funding Strategies

The Regional Bicycle and Pedestrian Plan provides the overall framework for improving the multimodal transportation system in the Kingsport urbanized area going forward. While the lists of improvements in Section 2.0 identify recommendations by street or road, they do not necessarily represent specific projects, though the segmentation of the sidewalk, bikeways, and shared-use paths was conducted with an emphasis on project-scale recommendations. The project development process begins with project definition – typically describing the project’s purpose and need, its logical termini, and feasibility.

As part of the planning process, however, criteria were developed to help prioritize streets and roads in the network plans. Figure 4.1 depicts the relationship among the network plans, prioritization criteria, and project development. The full listings of projects ranked by the composite prioritization criteria are included in Appendix D.

Of course, project development ultimately depends on funding availability. While walking and bicycling facilities are typically included as part of larger public infrastructure and private development projects, increasingly, communities are undertaking targeted bicycle and pedestrian improvements to retrofit commercial districts and neighborhoods for economic and community development purposes.

*The project development process begins with project definition - typically describing the project’s purpose and need, its logical termini, and feasibility.*

**Figure 4.1** Project Prioritization and Development Process

Funding for bicycle and pedestrian projects typically fall into two categories:

## Multimodal Improvement Projects

The most cost-effective way to implement the recommendations in the plan is to coordinate walking and bicycling improvements with either local or state road projects during the project planning and programming processes. Opportunities for coordinating projects include:

- New roadway construction;
- Corridor resurfacing;
- Corridor reconstruction;
- Intersection and safety improvements;
- Drainage improvements; and
- Utility projects.

## State / Federal Transportation Grant Programs

There are also several grant opportunities at the state and federal levels aimed at bicycle and pedestrian improvements. Table 4.1 summarizes several programs, including eligible activities.



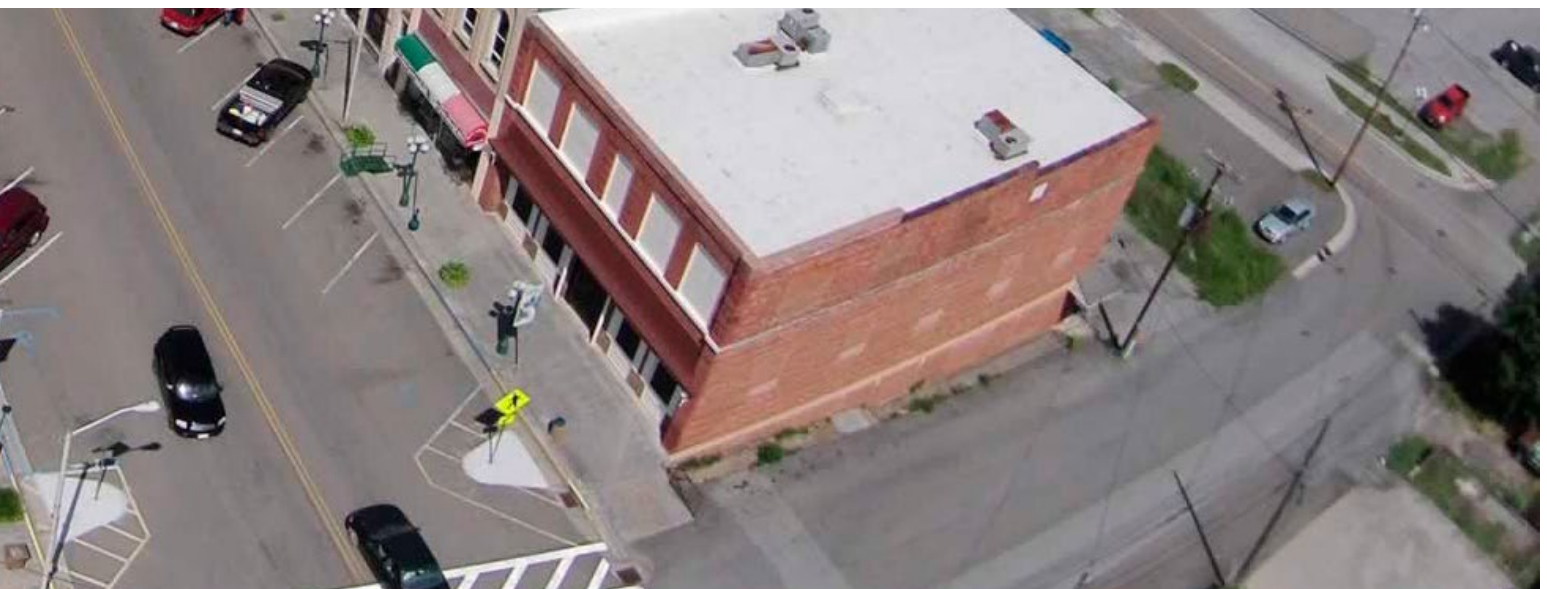
**Table 4.1** State and Federal Grant Programs

Program Name / Administering Agency	Examples of Eligible Activities	Funding	How to Apply
Transportation Alternatives Program / Tennessee Department of Transportation	On- and off-road pedestrian and bicycle facilities, and safe routes to schools projects	80% federal with a 20% non-federal construction share. Nonfederal share must be provided as a hard cash match, and all preliminary engineering (PE), design and right-of-way expenditures are solely the responsibility of the local governmental agency.	Application cycle is open from July to October each year. Application materials can be accessed on the TDOT website <a href="http://tn.gov/tdot/program-development-and-administration-home/local-programs/tap">tn.gov/tdot/program-development-and-administration-home/local-programs/tap</a>
Multimodal Access Grant / Tennessee Department of Transportation	Pedestrian crossing improvements, sidewalks, paved shoulders, bicycle lanes, ADA, multi-use paths, and pedestrian lighting.  <i>Applies to projects along state routes only.</i>	95% state with a 5% local match. Total project costs must not exceed \$1 million.	Application materials can be accessed on the TDOT website <a href="http://tn.gov/tdot/multimodal-transportation-resources/multimodal-access-grant">tn.gov/tdot/multimodal-transportation-resources/multimodal-access-grant</a>
Spot Safety Improvements Program / Tennessee Department of Transportation	Signalization, school flashing signals, and flashing beacons on state routes or at intersections with state routes only.	Depending on the type of work, 80% to 100% federal with corresponding local match.	Application materials can be accessed on the TDOT website <a href="http://tdot.tn.gov/PublicDocuments/LocalPrograms/FundingGuidance/SpotSafetyGuidelines.pdf">tdot.tn.gov/PublicDocuments/LocalPrograms/FundingGuidance/SpotSafetyGuidelines.pdf</a>
Recreational Trails Program / Tennessee Department of Environment & Conservation	Land acquisition for trails, trail maintenance, trail construction, trail rehabilitation and trail head support facilities.	80% federal with a 20% nonfederal match. Maximum award is \$1,000,000.	Application materials can be accessed on the TDEC website <a href="http://tn.gov/content/tn/environment/program-areas/res-recreation-educational-services/res-recreation-educational-services-grants0">tn.gov/content/tn/environment/program-areas/res-recreation-educational-services/res-recreation-educational-services-grants0</a>
Local Parks and Recreation Fund (LPRF) / Tennessee Department of Environment & Conservation	Development and/or renovation of public park and recreation facilities, and/or purchase of land for parks, natural areas, greenways and the purchase of land for recreational facilities.	50% federal with 50% nonfederal match. Maximum award is \$1,000,000.	Application materials can be accessed on the TDEC website <a href="http://tn.gov/content/tn/environment/program-areas/res-recreation-educational-services/res-recreation-educational-services-grants0">tn.gov/content/tn/environment/program-areas/res-recreation-educational-services/res-recreation-educational-services-grants0</a>





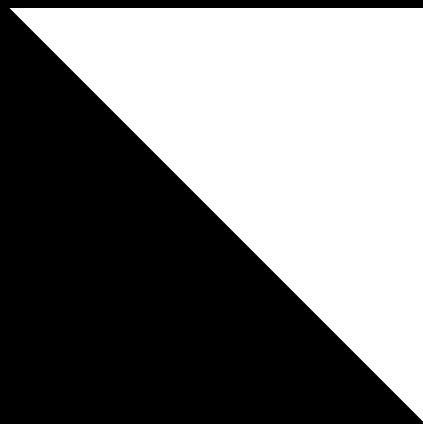
Program Name / Administering Agency	Examples of Eligible Activities	Funding	How to Apply
Access to Health through Healthy Built Environments / Tennessee Department of Health	Greenways, trailhead signs, sidewalks, bikeways, crosswalks, and pedestrian/ bicycle traffic signs/signals.	100% state with a maximum award of \$85,000, including a maximum of \$80,000 for design/construction. All applications must include an evaluation framework.	Application announcement is in the fall of each year. Application materials can be accessed on the TDH website <a href="https://tn.gov/health/health-program-areas/office-of-primary-prevention/redirect-opp/built-environment-and-health/built-environment-grants">tn.gov/health/health-program-areas/office-of-primary-prevention/redirect-opp/built-environment-and-health/built-environment-grants</a>
Project Diabetes / Tennessee Department of Health	Greenways connecting schools and neighborhoods and park walking trails.	There are two levels of Project Diabetes funding. Category A grants are funded for up to 3 years for a maximum amount of \$150,000 per year. Category B grants are funded for up to 2 years for a maximum amount of \$15,000 per year.	Current funding cycle is for 2019 - 2022. Additional information can be accessed on the TDH website <a href="https://tn.gov/health/health-program-areas/mch-diabetes/project-diabetes">tn.gov/health/health-program-areas/mch-diabetes/project-diabetes</a>
Multimodal Planning Grant Program / Virginia Office of Intermodal Planning and Investment	Implementable plans that advance context sensitive solutions; bicycle, pedestrian, and transit alternatives		Application materials can be accessed on the following website: <a href="https://oipi.virginia.gov/planning-assistance/grants/default.asp">oipi.virginia.gov/planning-assistance/grants/default.asp</a>
Growth and Accessibility Planning Technical (GAP) Assistance Program / Virginia Office of Intermodal Planning and Investment	Conduct multimodal planning within existing or planned Urban Development Areas, Growth Areas, outside Urbanized Areas	Maximum technical assistance amount equates to \$125,000 depending on the project category. No local match required.	Application materials can be accessed on the following website: <a href="http://oipi.virginia.gov/planning-assistance/grants/default.asp">http://oipi.virginia.gov/planning-assistance/grants/default.asp</a>





# Summary

Section 5.0



# Summary

Although implementation can be challenging, the Kingsport MTPo Regional Bicycle and Pedestrian Plan represents a critical step in achieving the region's vision for walking and bicycling – and making the case for funding. There are, of course, multiple transportation needs and demands for resources in every community. Because bicycle and pedestrian improvements fundamentally tie communities together – neighborhoods, commercial districts, schools, parks, and other civic spaces – they offer a unique opportunity to achieve many community goals and objectives simultaneously, and in the process, deliver a great return on investment. With the regional bicycle and pedestrian plan, the Kingsport region is poised to realize the benefits of great places to walk and bike.











# Appendices



# Appendix A

## Public Engagement Summary



### Kingsport Metropolitan Transportation Planning Organization Regional Bicycle and Pedestrian Plan Public Engagement Summary

#### **Public Workshop #1**

The Kingsport Metropolitan Transportation Planning Organization (MTPO), for its Regional Bicycle and Pedestrian Plan, hosted a virtual workshop to gather feedback on the plan goals and objectives and input on potential locations for new or improved active transportation facilities. The workshop consisted of both synchronous and asynchronous components. A live, virtual workshop was held on December 8, 2020, on the Microsoft Teams platform. The workshop consisted of a live presentation and discussion where attendees were encouraged to ask questions. Information about the asynchronous components was provided as well. The asynchronous components included a recorded version of the workshop presentation, an online survey, and an online interactive map.

The virtual workshop materials were available on the MTPO's website through January 8, 2021. During this time, additional public outreach was conducted through traditional media outlets, such as WJHL, and on social media by way of Facebook.

#### **Online Survey**

An online survey was hosted on the SurveyMonkey platform ([link](#)). The survey asked respondents to rank the draft project goals and objectives, as well as provide more open-ended input regarding their experiences walking and biking in the region. The responses to each of the questions presented are summarized below.

#### *Livability (Questions 1 through 4)*

Questions 1 through 4 focused on objectives associated with the Livability project goal. The responses are shown below.

Objective	Responses				
	Extremely Helpful	Very Helpful	Somewhat Helpful	Slightly Helpful	Not at All Helpful
Improve safety by reducing transportation-related fatalities and injuries	18	9	5	2	2
Make streets a place for all users, including vehicles, bicyclists, and pedestrians - "Complete Streets"	22	8	2	3	1
Increase opportunities for short trips to be made by non-motorized modes to promote active transportation	19	10	3	0	4
Increase transit and other transportation demand management opportunities	9	9	11	5	2



### *Sustainability (Questions 5 through 7)*

Questions 5 through 7 focused on objectives associated with the Sustainability project goal. The responses are shown below.

Objective	Responses				
	Extremely Helpful	Very Helpful	Somewhat Helpful	Slightly Helpful	Not at All Helpful
Maintain what we have - take a "state of good repair" approach to our community's transportation assets	13	8	6	0	4
Seek improvement options which minimize adverse impacts to historical, social, cultural, and natural environments	11	13	6	1	1
Promote investment solutions that reduce carbon and other harmful emissions from transportation	10	11	6	3	2

### *Prosperity (Questions 8 through 10)*

Questions 8 through 10 focused on objectives associated with the Prosperity project goal. The responses are shown below.

Objective	Responses				
	Extremely Helpful	Very Helpful	Somewhat Helpful	Slightly Helpful	Not at All Helpful
Strategically target transportation investments to areas supportive of and conducive to growth and redevelopment opportunities	10	10	9	1	1
Support land use and development patterns that reduce transportation costs and expenditures for all users	16	7	5	3	0
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	17	6	5	4	0



### Connectivity (Questions 11 through 14)

Questions 11 through 14 focused on objectives associated with the Connectivity project goal. The responses are shown below.

Objective	Responses				
	Extremely Helpful	Very Helpful	Somewhat Helpful	Slightly Helpful	Not at All Helpful
Ensure that all facilities are suitable for users of all ages and abilities, consistent with national best practices in facility planning and design	17	9	4	2	0
Include links to key origins and destinations, including homes, schools, major employment centers, and parks and recreational facilities, as well as areas with high development or redevelopment potential	19	9	3	1	0
Promote connectivity within and among jurisdictions	10	11	8	2	1
Coordinate components of the network with parks and recreation plans, and other relevant land use and development plans	19	7	5	1	0

### Visual Preference Survey (Questions 15 through 17)

Respondents were then presented with a visual preference survey to better understand the specific types of facilities they would most prefer in the plan. Facility types were presented for pedestrian, bikeway, and trail facilities. Respondents were directed to choose as many or as few as they liked. The responses are summarized below.

Category	Facility Type	Responses
Sidewalks	Sidewalks	23
	Crosswalks	17
	Crossing Islands	14
	Street Trees & Lighting	24
Bikeways	Bike Lane	5
	Bike Boulevard	10
	Buffered Bike Lane	12
	Separated Bike Lane	30
Trails	Sidepaths	22
	Greenways	24
	Trailheads	18
	Parks & Plazas	19





### *Key Factors in Transportation Choice (Question 18)*

Respondents were presented with an open-ended question prompt: What key factors determine whether you will drive, walk, or bike to places in the Kingsport region? Responses are summarized below and, where appropriate, lightly edited for clarity.

- Traffic, Parking & Weather. STOP trading auto lanes for bike lanes... it has killed Downtown.
- Availability [of facilities]
- Safety and accessibility
- I always bike whenever possible, but if the Greenbelt or sidewalks don't offer me an outlet to where I'm headed, then it becomes difficult. Easy access to more public places is important! Like Walmart. Walmart needs some biking paths to it and bike racks outside! If I could bike everywhere, all the time, I absolutely would. But access is limited to a lot of places.
- If there is adequate room for me to do so while not having to worry about a car swerving and hitting me.
- If the path can safely take me to the places I need to go: stores, doctors' offices, restaurants, etc.
- Whether it is easily accessible, visible, well-lit at night, and a feeling of safety. Also, I like walking or biking in an area where I can stop, eat and shop such as in the Downtown area where there are the most businesses clustered together.
- How much time I have in between appointments.
- Can we get there on our bicycles without being on a major street? Is there a bike lane?
- Access to my neighborhood. Currently need a sidewalk along New Beason Well to Sussex to connect to other sidewalks and greenways.
- The key factor is safety from automobile traffic. I would bike to most places in the city if I felt safe doing so. Physical improvement of bicycle lanes would help, [along with] with educating the public about the benefits of cycling. Also motorists need to be much more aware and respectful of cyclists and pedestrians. Encouraging more exercise has the potential to positively impact the rates of obesity and its associated health care costs!
- Need to take bike lanes off Center Street. Very dangerous and backs up traffic during busiest time of day. Really interferes with the flow of traffic.
- Distance, weather and availability of bike lanes or sidewalks.
- If I can get there safely with my kids.
- Safe access and proximity are major factors for my family. For example, we live in Rotherwood Estates and will frequently ride our bikes into downtown to shop/eat. The only reason we are able to do that is because we have convenient and safe access to Downtown via the Greenbelt. Even though there are bike lanes in areas outside of Downtown, my family would NEVER try to walk/bike along these other areas for fear of being struck by a car. If there were more sidewalks or there was more of a buffer between the road and the bike lanes we might be willing to do that. But for now, we only feel comfortable biking to/from areas that are Greenbelt accessible.
- Connections, time available and ease of access.
- Distance, safety, lighting, policing, cameras, and signage. "Kingsport Can Do this with Unity working Together!" ~ Johnnie Mae Swagerty
- Safety, connections to major destinations and neighborhoods.



- I live on a hill in a neighborhood with no sidewalks, so I always drive.
- Availability of non-motorized routes. Recreation choice.
- Safe zone to ride the bike, outdoor beauty, and connections so you can easily ride from your house.
- I would love to ride my bike more and don't feel as comfortable with paths that share the road. Would love separate bike lanes for sure and more walking paths are also a plus!
- Safety such as bike lanes/paths, distance.
- Bikes are hazardous on our streets. I believe in having opportunities for biking, but they have taken away some of the turn lanes to ensure this, which I believe has made our streets a little more UNSAFE.
- Distance
- Distance between home, work and other businesses
- Distance, purpose (grocery shopping is not really an option for walking or biking because I typically have a large order), safety (prefer separation from vehicles when walking or biking), weather.

#### *Additional Comments (Question 19)*

Respondents were presented with a final opportunity to offer any additional comments about the plan. Responses are summarized below and, where appropriate, lightly edited for clarity.

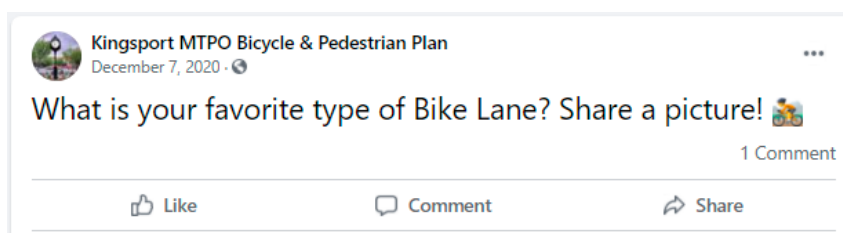
- Please make biking a sustainable way of transportation in Kingsport! I do my part to try and cut down on my carbon footprint, and it's difficult when I don't have easy biking access to many areas.
- Thank you for making biking safer!
- This is much needed for our City to continue to prosper and grow and offer quality of life for Kingsport's current citizens as well as those who are visiting and contemplating whether to move to Kingsport!
- I would love to see more multi-use greenways such as the Kingsport Greenbelt. Extending and enhancing the Greenbelt is a high priority for us.
- More rails to trails programs would be great too! I'd like to see city connections via such a trail system for long bike rides!
- I think it's awesome that Kingsport is looking to improve the livability of the City.

#### **Facebook Comments**

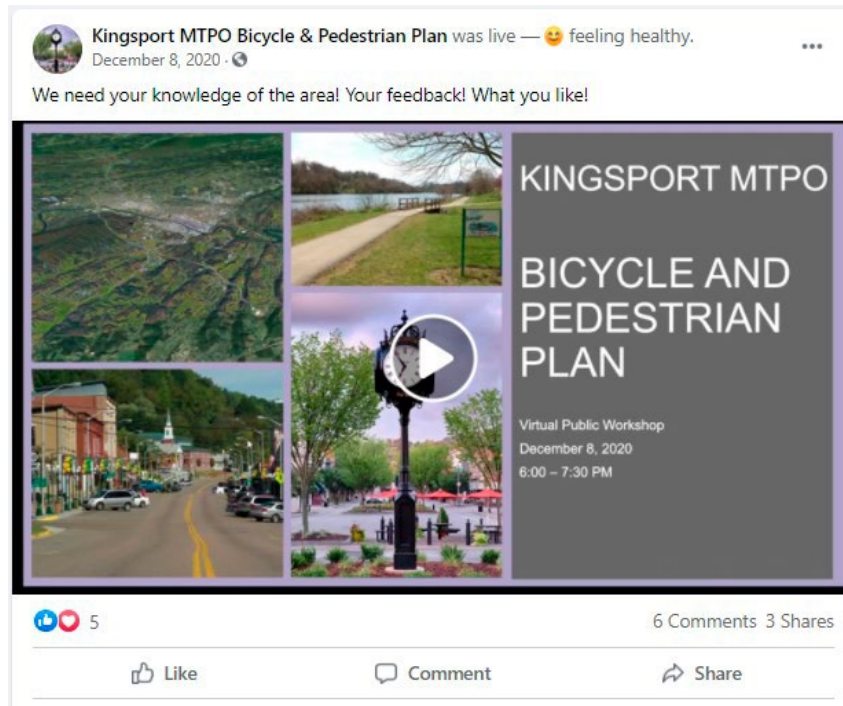
A Facebook page was created specifically for outreach related to the plan ([link](#)). As part of the outreach strategy, regular posts are provided to stimulate discussion or link to a topical article related to active transportation. Posts that generated comments are provided below, in chronological order from oldest to newest, as well as the comment(s) provided in response. Internal comments from team members are not included. (Please note that the names of the authors of comments are omitted here, though may be accessed by viewing the publicly-available Facebook site.)



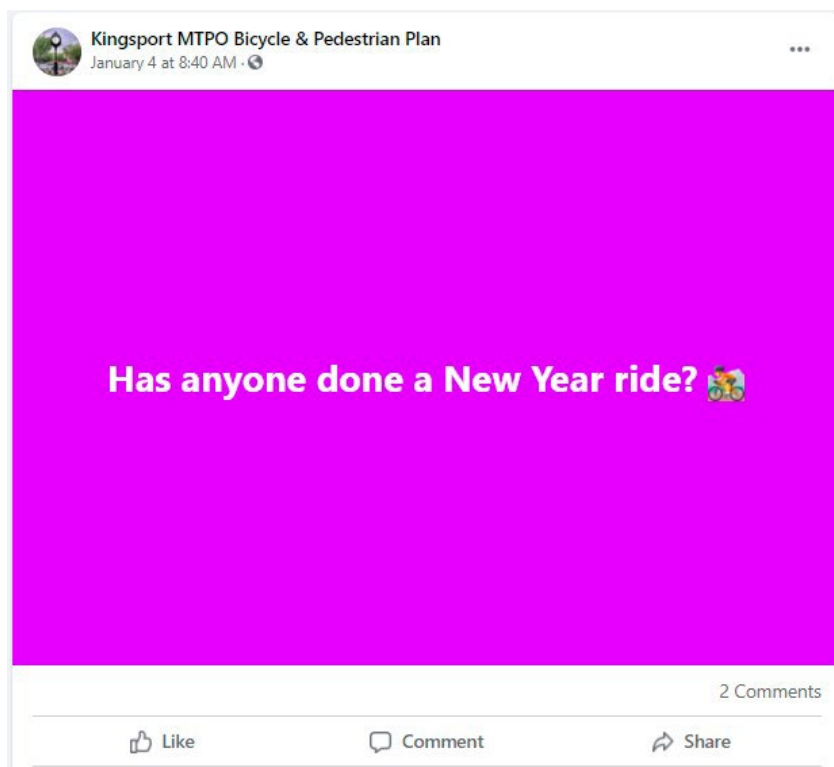
- Any route that follows a natural creek or riverbed and utilizes any existing bridge crossing, whether active bridge or inactive. Those bridges can be focal points to shoot for in strolls and biking.



- I travel extensively...In all my travels I admire Milwaukee, Denver, and DC. DC near the national mall has some neat bike paths in the center of the street, buffered to prevent car, with their own street markings and lights. NYC is an example of horrible bike lanes, constantly fighting parked cars, pedestrians, trash bags, taxi, impatient drivers, police cruisers. Bike lanes need the bollard separation for safety and sanity.



- Desperately need a bike path or sidewalks connecting 11W at Netherland Inn road down to the big elm parking area. Of all the thousands of miles I've biked in Kingsport that tiny section has caused me more close encounters than I care to talk about. 11W already has a bike lane, and connecting the 2 safely opens the door to bike travel into town from Church Hill, Mt Carmel, etc.
- Sidewalks are needed on the north side of Stone Dr. from Fairmont to Bloomingdale. Also, from Stone Dr. to Lynn Garden Dr. to keep pedestrians off the ramps! Very dangerous, especially coming from Lynn Garden to Stone Dr. around sunset!
- Healthy Kingsport will help spread the word.



- My children have been riding all over the valley.
- Nope, but my son and I got in a nice walk [this] evening!

### Online Interactive Map

An online interactive map was provided on the Wikimapping platform ([link](#)). Respondents were presented with a map of the Kingsport MTPO planning area and its existing bicycle and pedestrian facilities. Respondents were provided with tools to digitize preferred locations for sidewalks, bikeways, trail facilities, and crossing improvements. Tools were also included to identify key or preferred destinations and to provide a general comment. The input received is shown in Figure 1 and summarized below.

The majority of the facility recommendations were new sidewalk facilities. Generally speaking, the impetus for the recommendations focused largely on establishing connections to or among existing facilities and/or major destinations. Examples included connections to existing greenway or trail facilities, and practical, usually short, connections to everyday destinations such as grocery stores.

Proposed bikeway facilities included new connections in the downtown Kingsport area, along Riverport Road and Industry Drive to better connect the Eastman Chemical campus to the Greenbelt.

Trail facility recommendations included connections to the existing Greenbelt facility at several locations. A second series of recommendations emphasized the need for a greenway/trail facility along Rock Springs Branch, creating a new connection to Warriors Path State Park.





Point features included a few recommendations for new or improved crossings, access points to existing facilities, and comments regarding existing facilities that were omitted from the map.

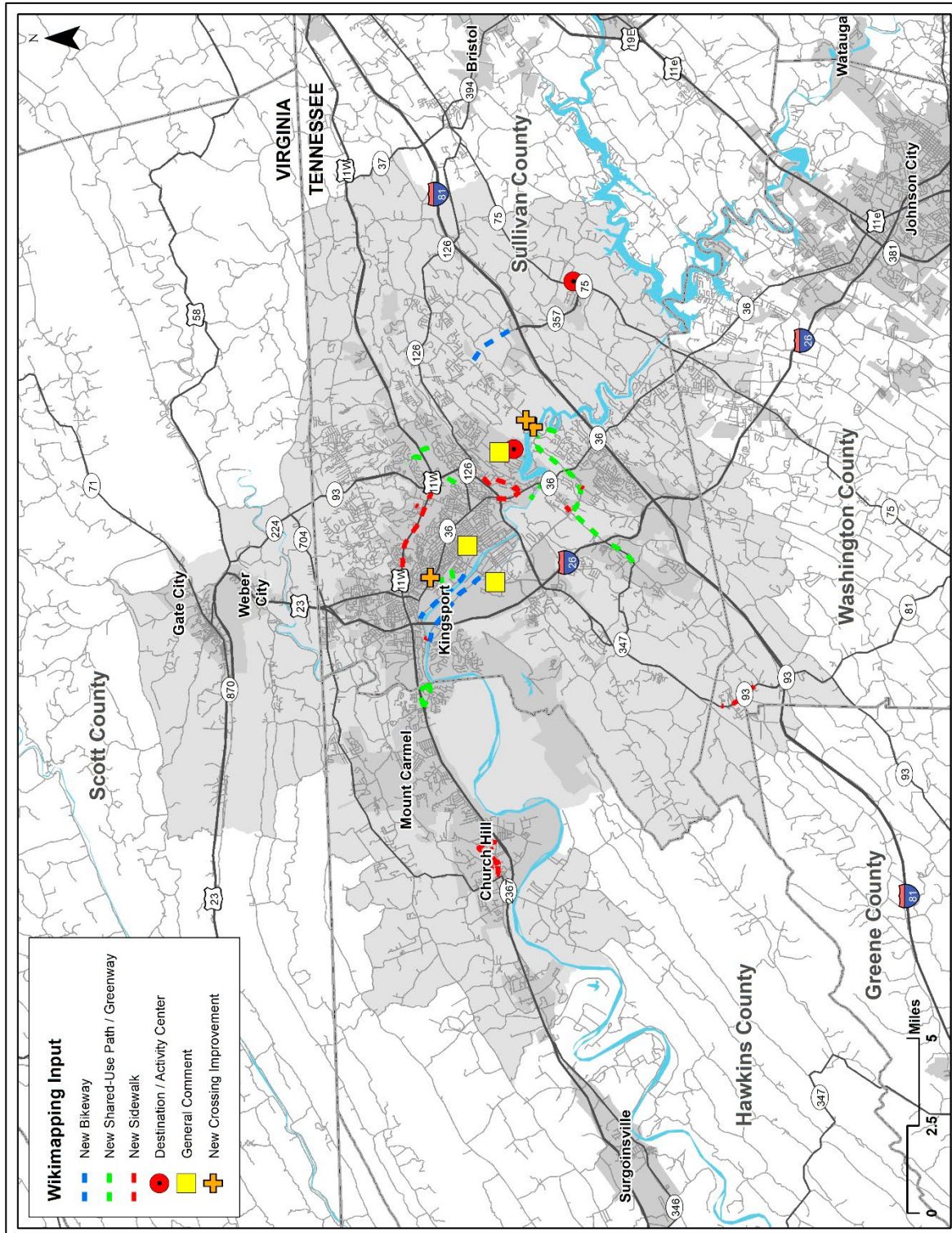
### **Key Findings**

Taken together, the input received in the first round of public engagement provides actionable guidance for the development of the bicycle and pedestrian network recommendations. The overall key findings of the first round of engagement are summarized below.

- Respondents were clear on their preference for using the existing roadway network to provide active transportation connections to key origins and destinations, favoring a Complete Streets approach, when appropriate. Some respondents commented on the challenges of incorporating bikeway facilities onto roadways that currently lack them, underscoring the need for state-of-the-practice facilities that can effectively accommodate both automobiles and active transportation users.
- To this end, users expressed a preference for active transportation facilities that have separation from traffic and better user amenities, such as street trees and lighting. Parallel facilities, well-separated from automobile traffic, can balance the different and often competing needs of motorists and active transportation users.
- The presence of safe, accessible facilities that provide connections to desired destinations were the most often-identified key factor in people's transportation choice decisions.
- Respondents indicated that key connections to existing facilities or facilities that fill gaps in the existing network should be considered a priority.



Figure 1 – Wikimapping Input Summary – First Round





### **Public Workshop #2**

The Kingsport Metropolitan Transportation Planning Organization (MTPO), for its Regional Bicycle and Pedestrian Plan, hosted a virtual workshop to gather feedback on the draft bikeway and pedestrian network recommendations. The workshop consisted of both synchronous and asynchronous components. A live, virtual workshop was held on April 8, 2021, on the Microsoft Teams platform. The workshop consisted of a live presentation and discussion where attendees were encouraged to ask questions. Information about the asynchronous components was provided as well. The asynchronous components included a recording of the synchronous workshop, maps depicting the draft network recommendations, and an online interactive map.

The virtual workshop materials were available on the MTPO's website through April 30, 2021. During this time, additional public outreach was conducted by way of Facebook.

### **Online Interactive Map**

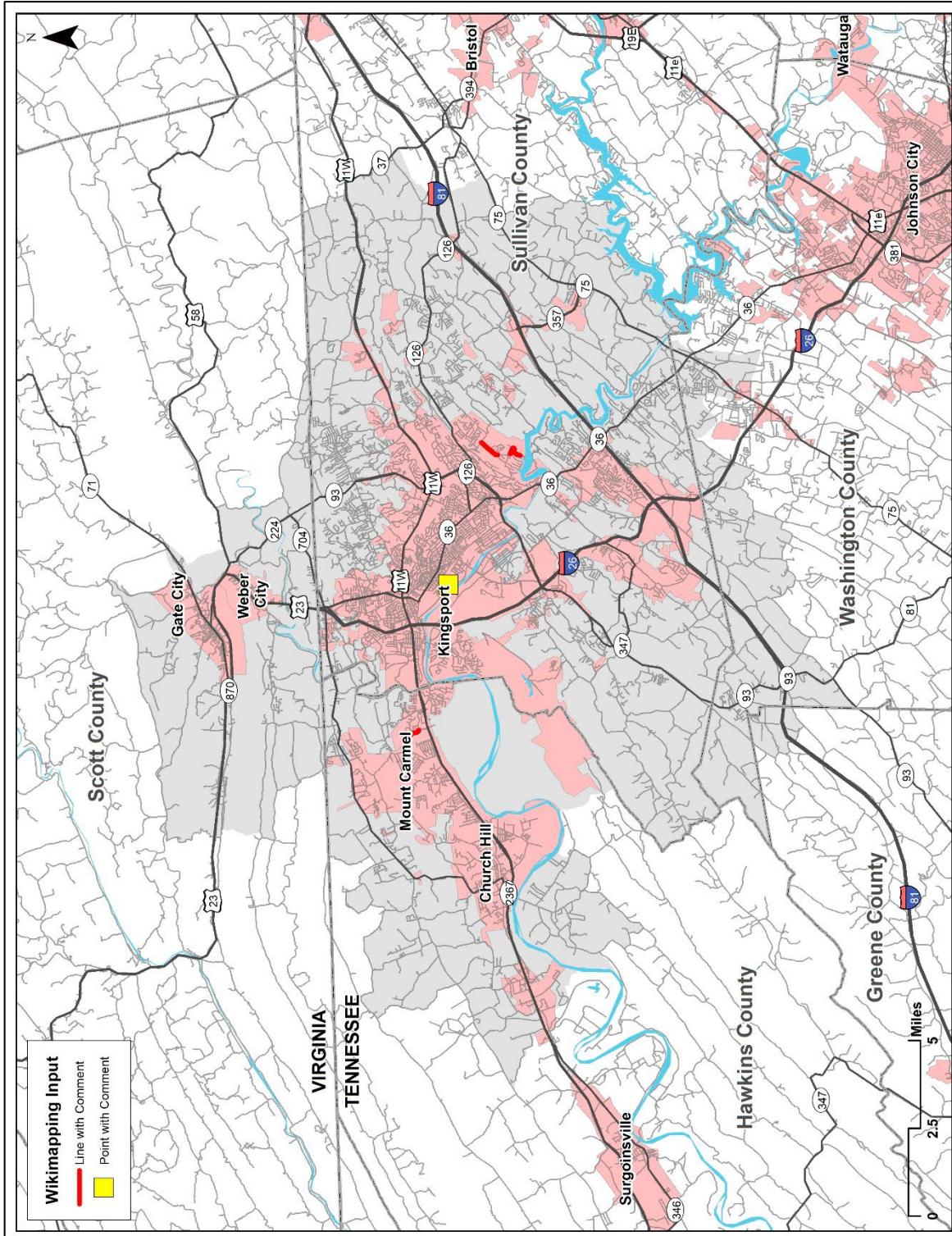
An online interactive map was provided on the Wikimapping platform ([link](#)). Respondents were presented with a map of the Kingsport MTPO planning area and the draft network recommendations. Respondents were presented with tools to digitize either a line or point to accompany a comment. The input received is shown in Figure 2 and summarized below.

- Please connect existing multi-use path on Harbor Chapel to sidewalk at Autumn Woods subdivision. There are many pedestrians already using the roadway on Cooks Valley Rd., and with the blind hill at 1390 Cooks Valley Rd.
- Please connect existing sidewalks between Autumn Wood Subdivision and Anchor Point subdivision, which also allows for safe walking access to the boat ramp area.
- Sidewalk needed [along University Boulevard]. I see people walking from apartments to ETSU often. Even an asphalt path would be great.
- Cement Hill Mountain Biking Park. Need something like Tannery Knobs or Urban Wilderness in Knoxville. [This is more of a Parks and Recreation issue] but still important.





Figure 2 – Wikimapping Input Summary – Second Round



# Appendix B

## Project Concept Construction Cost Estimates

*Note: The cost estimates are for construction only and do not include Preliminary Engineering or Right-of-Way. The estimates are in today's dollars and do not include inflation.*



### West Jackson Street from Solon Street to Fir Street / Water Street

FOR USE IN PRE-SCOPING AND SCOPING CONSTRUCTION ESTIMATES				
(This is not intended to be a detailed pay item breakdown. It is intended to be tool that assists users in preparing early estimates prior to having developed plans. TRNSPRT should be utilized by the PFI stage.)				
ITEM	Unit	Quantity	Unit Price	Amount
MOBILIZATION	LS	1	\$41,864	\$41,864
CONSTRUCTION SURVEYING	LS	1	\$8,000	\$8,000
GRADING ITEMS				
CLEARING AND GRUBBING	ACRE	0	\$20,000	\$0
REGULAR EXCAVATION	CY	0	\$17	\$0
BORROW EXCAVATION	CY	0	\$15	\$0
UNSUITABLE MAT'L. (paid as Regular Excav.)	CY	0	\$17	\$0
BACKFILL STONE (NO. 1) FOR UNSUITABLE MATL. AREAS	TONS	0	\$20	\$0
DRY RIPRAP	TONS	0	\$40	\$0
<b>Sub-Total</b>				<b>\$0</b>
<b>Grading Items Contingency</b>		-		<b>\$0</b>
DRAINAGE ITEMS				
CONCRETE BOX CULVERT	LF	0	\$2,500	\$0
PIPES UNDER 36"	LF	0	\$125	\$0
PIPES OVER 36"	LF	0	\$250	\$0
END WALLS FOR PIPES OVER 36"	EA	0	\$300	\$0
DROP INLETS	EA	0	\$1,000	\$0
CURB AND GUTTER	LF	0	\$35	\$0
<b>Sub-Total</b>				<b>\$0</b>
<b>Drainage Items Contingency</b>		-		<b>\$0</b>
PAVEMENT ITEMS				
SURFACE COURSE	TONS	1634	\$150	\$245,025
INTERMEDIATE COURSE	TONS	0	\$100	\$0
BASE COURSE	TONS	0	\$90	\$0
SUBBASE COURSE	TONS	0	\$20	\$0
No.1 STONE	TONS	0	\$25	\$0
DEMOLITON OF PAVEMENT	SY	0	\$10	\$0
PLANNING 0"- 2" FOR OVERLAY SECTION	SY	14850	\$10	\$148,500
<b>Sub-Total</b>				<b>\$393,525</b>
<b>Pavement Items Contingency</b>		-		<b>\$19,676</b>
INCIDENTAL ITEMS				
RETAINING WALLS (CONC.)	CY	0	\$400	\$0
RURAL PRIVATE ENTRANCE	EA	0	\$2,000	\$0
URBAN PRIVATE ENTRANCE	EA	0	\$5,000	\$0
COMMERCIAL ENTRANCE	EA	0	\$10,000	\$0
<b>Sub-Total</b>				<b>\$0</b>
<b>Incidental Items Contingency</b>		-		<b>\$0</b>
PROTECTIVE ITEMS				
MAINTENANCE OF TRAFFIC (LUMP SUM)	LS	1	\$50,000	\$50,000
FIELD OFFICE	MO	0	\$2,000	\$0
SIDEWALK	SY	0	\$90	\$0
<b>Sub-Total</b>				<b>\$50,000</b>
<b>Protective Items Contingency</b>		-		<b>\$2,500</b>





EROSION CONTROL				
STORM WATER MANAGEMENT FACILITY	EA	-	-	\$0
SEEDING	LB	0	\$15	\$0
TEMP. SILT FENCE	LF	0	\$4	\$0
CHECK DAMS TY. I OR II	EA	0	\$500	\$0
Sub-Total				\$0
E&S Control Items Contingency		-		\$0
UTILITIES				
BELOW GROUND UTILITIES (LUMP SUM \$\$\$\$)	LF	0	\$75	\$0
Sub-Total				\$0
Right of Way Contingency (XX%)		-		\$0
TRAFFIC AND SAFETY				
PERMANENT SIGNAL (LUMP SUM)	EA	0	\$300,000	\$0
PAVEMENT MARKINGS (IF APPLICABLE)	LF	0	\$1	\$0
GUARDRAIL	LF	0	\$25	\$0
GUARDRAIL END TREATMENT	EA	0	\$2,500	\$0
GR-FOA'S IF BRIDGE IS ON PROJECT	EA	0	\$2,000	\$0
Sub-Total				\$0
Traffic Items Contingency		-		\$0
BRIDGE				
NS BRIDGE	SF	0	\$400	\$0
DEMOLITION OF EXISTING BRIDGE	LS	0	\$18	\$0
Sub-Total				\$0
Bridge Items Contingency		-		\$0
STREAM/WETLAND MITIGATION THAT IS INCLUDED IN CONSTRUCTION				
Stream Mitigation	LF	0	\$700	\$0
Wetland Mitigation	Acre	0	\$75,000	\$0
MISCELLANEOUS ITEMS SUMMARY FROM ALIGNMENT SUMMARY TABS				
*Individual Misc. Items, Units, Quantity, and Unit Price must be input in "Alignment Summary Tabs"				
Alignment 1	LS		\$0	\$48,000
Alignment 2	LS		\$0	\$0
Alignment 3	LS		\$0	\$0
Alignment 4	LS		\$0	\$0
Alignment 5	LS		\$0	\$0
Alignment 6	LS		\$0	\$0
			\$0	\$0
			\$0	\$0
			\$0	\$0
			\$0	\$0
Contingency Total				\$22,176
Mobilization				\$41,864
Construction Survey				\$8,000
Sub-Total				\$491,525
Total				\$563,566
CEI & CONTINGENCY				
CEI OF AT LEAST 12% AS A LUMP SUM ITEM	LS	1	12.00%	\$67,628
PROJECT CONTINGENCY	Tier I		5%	\$24,576
GRAND TOTAL				\$660,000

# East Jackson Street from Jones Street to Solon Street



## FOR USE IN PRE-SCOPING AND SCOPING CONSTRUCTION ESTIMATES

(This is not intended to be a detailed pay item breakdown. It is intended to be tool that assists users in preparing early estimates prior to having developed plans. TRNSPRT should be utilized by the PFI stage.)

ITEM	Unit	Quantity	Unit Price	Amount
MOBILIZATION	LS	1	\$24,662	\$24,662
CONSTRUCTION SURVEYING	LS	1	\$4,000	\$4,000
<b>GRADING ITEMS</b>				
CLEARING AND GRUBBING	ACRE	0	\$20,000	\$0
REGULAR EXCAVATION	CY	0	\$17	\$0
BORROW EXCAVATION	CY	0	\$15	\$0
UNSUITABLE MAT'L. (paid as Regular Excav.)	CY	0	\$17	\$0
BACKFILL STONE (NO. 1) FOR UNSUITABLE MATL. AREAS	TONS	0	\$20	\$0
DRY RIPRAP	TONS	0	\$40	\$0
<b>Sub-Total</b>				<b>\$0</b>
<b>Grading Items Contingency</b>		-		<b>\$0</b>
<b>DRAINAGE ITEMS</b>				
CONCRETE BOX CULVERT	LF	0	\$2,500	\$0
PIPES UNDER 36"	LF	0	\$125	\$0
PIPES OVER 36"	LF	0	\$250	\$0
END WALLS FOR PIPES OVER 36"	EA	0	\$300	\$0
DROP INLETS	EA	0	\$1,000	\$0
CURB AND GUTTER	LF	0	\$35	\$0
<b>Sub-Total</b>				<b>\$0</b>
<b>Drainage Items Contingency</b>		-		<b>\$0</b>
<b>PAVEMENT ITEMS</b>				
SURFACE COURSE	TONS	788	\$150	\$118,217
INTERMEDIATE COURSE	TONS	0	\$100	\$0
BASE COURSE	TONS	0	\$90	\$0
SUBBASE COURSE	TONS	0	\$20	\$0
No.1 STONE	TONS	0	\$25	\$0
DEMOLITON OF PAVEMENT	SY	0	\$10	\$0
PLANNING 0"- 2" FOR OVERLAY SECTION	SY	7165	\$10	\$71,647
<b>Sub-Total</b>				<b>\$189,864</b>
<b>Pavement Items Contingency</b>		-		<b>\$9,493</b>
<b>INCIDENTAL ITEMS</b>				
RETAINING WALLS (CONC.)	CY	0	\$400	\$0
RURAL PRIVATE ENTRANCE	EA	0	\$2,000	\$0
URBAN PRIVATE ENTRANCE	EA	0	\$5,000	\$0
COMMERCIAL ENTRANCE	EA	0	\$10,000	\$0
<b>Sub-Total</b>				<b>\$0</b>
<b>Incidental Items Contingency</b>		-		<b>\$0</b>
<b>PROTECTIVE ITEMS</b>				
MAINTENANCE OF TRAFFIC (LUMP SUM)	LS	1	\$50,000	\$50,000
FIELD OFFICE	MO	0	\$2,000	\$0
SIDEWALK	SY	0	\$90	\$0
<b>Sub-Total</b>				<b>\$50,000</b>
<b>Protective Items Contingency</b>		-		<b>\$2,500</b>



EROSION CONTROL				
STORM WATER MANAGEMENT FACILITY	EA	-	-	\$0
SEEDING	LB	0	\$15	\$0
TEMP. SILT FENCE	LF	0	\$4	\$0
CHECK DAMS TY. I OR II	EA	0	\$500	\$0
Sub-Total				\$0
E&S Control Items Contingency		-		\$0
UTILITIES				
BELOW GROUND UTILITIES (LUMP SUM \$\$\$\$)	LF	0	\$75	\$0
Sub-Total				\$0
Right of Way Contingency (XX%)		-		\$0
TRAFFIC AND SAFETY				
PERMANENT SIGNAL (LUMP SUM)	EA	0	\$300,000	\$0
PAVEMENT MARKINGS (IF APPLICABLE)	LF	0	\$1	\$0
GUARDRAIL	LF	0	\$25	\$0
GUARDRAIL END TREATMENT	EA	0	\$2,500	\$0
GR-FOA'S IF BRIDGE IS ON PROJECT	EA	0	\$2,000	\$0
Sub-Total				\$0
Traffic Items Contingency		-		\$0
BRIDGE				
NS BRIDGE	SF	0	\$400	\$0
DEMOLITION OF EXISTING BRIDGE	LS	0	\$18	\$0
Sub-Total				\$0
Bridge Items Contingency		-		\$0
STREAM/WETLAND MITIGATION THAT IS INCLUDED IN CONSTRUCTION				
Stream Mitigation	LF	0	\$700	\$0
Wetland Mitigation	Acre	0	\$75,000	\$0
MISCELLANEOUS ITEMS SUMMARY FROM ALIGNMENT SUMMARY TABS				
*Individual Misc. Items, Units, Quantity, and Unit Price must be input in "Alignment Summary Tabs"				
Alignment 1	LS		\$0	\$22,300
Alignment 2	LS		\$0	\$0
Alignment 3	LS		\$0	\$0
Alignment 4	LS		\$0	\$0
Alignment 5	LS		\$0	\$0
Alignment 6	LS		\$0	\$0
			\$0	\$0
			\$0	\$0
			\$0	\$0
			\$0	\$0
Contingency Total				\$11,993
Mobilization				\$24,662
Construction Survey				\$4,000
Sub-Total				\$262,164
Total				\$302,819
CEI & CONTINGENCY				
CEI OF AT LEAST 12% AS A LUMP SUM ITEM	LS	1	12.00%	\$36,338
PROJECT CONTINGENCY	Tier I		5%	\$13,108
GRAND TOTAL				\$350,000

# West Stone Drive (US-11W) / Netherland Inn Road from Independence Avenue to Big Elm Road



## Stage III – Construction (Add and remove lines as needed)

All projects must be competitively bid and awarded to the lowest responsive bidder

TDOT LINE ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL	80% FED. FUNDS	20% LOCAL MATCH
<b>Site Preparation &amp; Demolition:</b>							
201-07.02	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1	\$ 80,000.00	\$ 80,000.00	\$ 64,000.00	\$ 16,000.00
<b>Construction Items:</b>							
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	10000	\$ 12.00	\$ 120,000.00	\$ 96,000.00	\$ 24,000.00
203-06	WATER	MG	1	\$ 81.77	\$ 81.77	\$ 65.42	\$ 16.35
209-01.10	EROSION AND SILTATION CONTROL	LS	1	\$ 60,000.00	\$ 60,000.00	\$ 48,000.00	\$ 12,000.00
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	6120	\$ 30.00	\$ 183,600.00	\$ 146,880.00	\$ 36,720.00
307-01.08	ASPHALT CONC MX(PG64-22)(BPM-B-HM)GR C-M2	TON	2800	\$ 90.81	\$ 254,268.00	\$ 203,414.40	\$ 50,853.60
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	7.1	\$ 1,350.00	\$ 9,585.00	\$ 7,668.00	\$ 1,917.00
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	2833	\$ 94.68	\$ 268,228.44	\$ 214,582.75	\$ 53,645.69
602-03.03	PEDESTRIAN BRIDGE	LS	0	\$ 327,750.00	\$ -	\$ -	\$ -
604-08.10	RETAINING WALL	SF	6000	\$ 100.00	\$ 600,000.00	\$ 480,000.00	\$ 120,000.00
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	4000	\$ 100.00	\$ 400,000.00	\$ 320,000.00	\$ 80,000.00
611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	20	\$ 3,000.00	\$ 60,000.00	\$ 48,000.00	\$ 12,000.00
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	50	\$ 4,500.00	\$ 225,000.00	\$ 180,000.00	\$ 45,000.00
630-01.16	6" CONCRETE BOLLARD/GUARD POST	EACH	20	\$ 500.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
701-02.03	CONCRETE CURB RAMP	S.F.	2000	\$ 10.00	\$ 20,000.00	\$ 16,000.00	\$ 4,000.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	758.3136	\$ 375.00	\$ 284,367.60	\$ 227,494.08	\$ 56,873.52
713-16.20	SIGNS	EACH	20	\$ 250.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	LF	600	\$ 25.00	\$ 15,000.00	\$ 12,000.00	\$ 3,000.00
730-00.00	SIGNALS	EACH	2	\$ 15,000.00	\$ 30,000.00	\$ 24,000.00	\$ 6,000.00
<b>**Landscaping:</b>							
803-01	SODDING (NEW SOD)	SY	4694	\$ 4.27	\$ 20,043.38	\$ 16,034.70	\$ 4,008.68
<b>Pedestrian Amenities:</b>							
721-01.01	BENCH	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
721-01.02	TRASH RECEPTACLE	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
<b>SUBTOTAL of Itemized Quantities above</b>					\$ 2,645,174.19	\$ 2,116,139.35	\$ 529,034.84
<b>Mobilization and Engineering Services:</b>							
	Contractor Mobilization	LS	1	\$ 132,258.71	\$ 132,258.71	\$ 105,806.97	\$ 26,451.74
	Traffic Control	LS	1	\$ 105,806.97	\$ 105,806.97	\$ 84,645.57	\$ 21,161.39
	Flexible Drums (Channelizing)	EA	75	\$ 25.00	\$ 1,875.00	\$ 1,500.00	\$ 375.00
	Signs (Construction)	S.F.	200	\$ 25.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
	CNST. Stakes, Lines and Grades	LS	1	\$ 100,000.00	\$ 100,000.00	\$ 80,000.00	\$ 20,000.00
	TDOT Materials & Test	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
	Construction Contingency	10%	of construction	\$ 264,517.42	\$ 264,517.42	\$ 211,613.94	\$ 52,903.48
	TDOT Engineering Services	\$1,000 for every 30 days of construction		\$ 9,000.00	\$ 9,000.00	\$ 7,200.00	\$ 1,800.00
	Construction Engineering Inspection (CEI)	20%	of construction	\$ 529,034.84	\$ 529,034.84	\$ 423,227.87	\$ 105,806.97
<b>TOTAL of reimbursable construction expenses</b>					\$ 3,802,667.12	\$ 3,042,133.70	\$ 760,533.42

\* Relocating or undergrounding utilities is limited to 33% of eligible reimbursable costs in accordance with T.C.A. § 13-20-303 and 23 CFR 635.107

\*\*Landscaping activities must be a direct component of an eligible on-road or off-road trail facility for pedestrians, bicyclists and other non-motorized forms of transportation only, and is limited to 25% of eligible and reimbursable construction costs.

# North John B. Dennis Highway from Bloomingdale Road to Pavilion Drive



## Stage III – Construction (Add and remove lines as needed)

All projects must be competitively bid and awarded to the lowest responsive bidder

TDOT LINE ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL	80% FED. FUNDS	20% LOCAL MATCH
<b>Site Preparation &amp; Demolition:</b>							
201-07.02	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1	\$ 80,000.00	\$ 80,000.00	\$ 64,000.00	\$ 16,000.00
<b>Construction Items:</b>							
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	10000	\$ 12.00	\$ 120,000.00	\$ 96,000.00	\$ 24,000.00
203-06	WATER	MG	1	\$ 81.77	\$ 81.77	\$ 65.42	\$ 16.35
209-01.10	EROSION AND SILTATION CONTROL	LS	1	\$ 60,000.00	\$ 60,000.00	\$ 48,000.00	\$ 12,000.00
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	6120	\$ 30.00	\$ 183,600.00	\$ 146,880.00	\$ 36,720.00
307-01.08	ASPHALT CONC MX(PG64-22)(BPM-B-HM)GR C-M2	TON	2800	\$ 90.81	\$ 254,268.00	\$ 203,414.40	\$ 50,853.60
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	7.1	\$ 1,350.00	\$ 9,585.00	\$ 7,668.00	\$ 1,917.00
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	2833	\$ 94.68	\$ 268,228.44	\$ 214,582.75	\$ 53,645.69
602-03.03	PEDESTRIAN BRIDGE	LS	0	\$ 327,750.00	\$ -	\$ -	\$ -
604-08.10	RETAINING WALL	SF	3900	\$ 100.00	\$ 390,000.00	\$ 312,000.00	\$ 78,000.00
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	4000	\$ 100.00	\$ 400,000.00	\$ 320,000.00	\$ 80,000.00
611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	20	\$ 3,000.00	\$ 60,000.00	\$ 48,000.00	\$ 12,000.00
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	50	\$ 4,500.00	\$ 225,000.00	\$ 180,000.00	\$ 45,000.00
630-01.16	6" CONCRETE BOLLARD/GUARD POST	EACH	20	\$ 500.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
701-02.03	CONCRETE CURB RAMP	S.F.	2000	\$ 10.00	\$ 20,000.00	\$ 16,000.00	\$ 4,000.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	758.3136	\$ 375.00	\$ 284,367.60	\$ 227,494.08	\$ 56,873.52
713-16.20	SIGNS	EACH	20	\$ 250.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	LF	300	\$ 25.00	\$ 7,500.00	\$ 6,000.00	\$ 1,500.00
716-04.13	PLASTIC PAVEMENT MARKING (BIKELANE SYMBOL)	EACH	20	\$ 150.00	\$ 3,000.00	\$ 2,400.00	\$ 600.00
716-12.06	THERMO (40 MIL 4IN)	L.M	4	\$ 1,025.00	\$ 4,100.00	\$ 3,280.00	\$ 820.00
730-00.00	SIGNALS	EACH	3	\$ 15,000.00	\$ 45,000.00	\$ 36,000.00	\$ 9,000.00
<b>**Landscaping:</b>							
803-01	SODDING (NEW SOD)	SY	4694	\$ 4.27	\$ 20,043.38	\$ 16,034.70	\$ 4,008.68
<b>Pedestrian Amenities:</b>							
721-01.01	BENCH	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
721-01.02	TRASH RECEPTACLE	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
<b>SUBTOTAL of Itemized Quantities above</b>					\$ 2,449,774.19	\$ 1,959,819.35	\$ 489,954.84
<b>Mobilization and Engineering Services:</b>							
	Contractor Mobilization	LS	1	\$ 122,488.71	\$ 122,488.71	\$ 97,990.97	\$ 24,497.74
	Traffic Control	LS	1	\$ 97,990.97	\$ 97,990.97	\$ 78,392.77	\$ 19,598.19
	Flexible Drums (Channelizing)	EA	75	\$ 25.00	\$ 1,875.00	\$ 1,500.00	\$ 375.00
	Signs (Construction)	S.F.	200	\$ 25.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
	CNST. Stakes, Lines and Grades	LS	1	\$ 100,000.00	\$ 100,000.00	\$ 80,000.00	\$ 20,000.00
	TDOT Materials & Test	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
	Construction Contingency	10%	of construction	\$ 244,977.42	\$ 244,977.42	\$ 195,981.94	\$ 48,995.48
	TDOT Engineering Services	\$1,000 for every 30 days of construction		\$ 9,000.00	\$ 9,000.00	\$ 7,200.00	\$ 1,800.00
	Construction Engineering Inspection (CEI)	20%	of construction	\$ 489,954.84	\$ 489,954.84	\$ 391,963.87	\$ 97,990.97
<b>TOTAL of reimbursable construction expenses</b>					\$ 3,531,061.12	\$ 2,824,848.90	\$ 706,212.22

\* Relocating or undergrounding utilities is limited to 33% of eligible reimbursable costs in accordance with T.C.A. § 13-20-303 and 23 CFR 635.107

\*\*Landscaping activities must be a direct component of an eligible on-road or off-road trail facility for pedestrians, bicyclists and other non-motorized forms of transportation only, and is limited to 25% of eligible and reimbursable construction costs.



## Fort Henry Drive (SR-36) from Colonial Heights Road to Wilmont Drive



### Stage III – Construction (Add and remove lines as needed)

All projects must be competitively bid and awarded to the lowest responsive bidder

TDOT LINE ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL	80% FED. FUNDS	20% LOCAL MATCH
<b>Site Preparation &amp; Demolition:</b>							
201-07.02	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1	\$ 40,000.00	\$ 40,000.00	\$ 32,000.00	\$ 8,000.00
<b>Construction Items:</b>							
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	2000	\$ 12.00	\$ 24,000.00	\$ 19,200.00	\$ 4,800.00
203-06	WATER	MG	1	\$ 81.77	\$ 81.77	\$ 65.42	\$ 16.35
209-01.10	EROSION AND SILTATION CONTROL	LS	1	\$ 40,000.00	\$ 40,000.00	\$ 32,000.00	\$ 8,000.00
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	750	\$ 30.00	\$ 22,500.00	\$ 18,000.00	\$ 4,500.00
307-01.08	ASPHALT CONC MX(PG64-22)(BPM-B-HM)GR C-M2	TON	0	\$ 90.81	\$ -	\$ -	\$ -
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	0	\$ 1,350.00	\$ -	\$ -	\$ -
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	0	\$ 94.68	\$ -	\$ -	\$ -
602-03.03	PEDESTRIAN BRIDGE	LS	0	\$ 327,750.00	\$ -	\$ -	\$ -
604-08.10	RETAINING WALL	SF	0	\$ 100.00	\$ -	\$ -	\$ -
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	200	\$ 100.00	\$ 20,000.00	\$ 16,000.00	\$ 4,000.00
611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	2	\$ 3,000.00	\$ 6,000.00	\$ 4,800.00	\$ 1,200.00
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	3	\$ 4,500.00	\$ 13,500.00	\$ 10,800.00	\$ 2,700.00
630-01.16	6" CONCRETE BOLLARD/GUARD POST	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
701-01.01	CONCRETE SIDEWALK (4")	S.F.	27200	\$ 8.00	\$ 217,600.00	\$ 174,080.00	\$ 43,520.00
701-02	CONCRETE DRIVERWAY	S.F.	11520	\$ 15.00	\$ 172,800.00	\$ 138,240.00	\$ 34,560.00
701-02.03	CONCRETE CURB RAMP	S.F.	2500	\$ 10.00	\$ 25,000.00	\$ 20,000.00	\$ 5,000.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	66.7833	\$ 375.00	\$ 25,043.74	\$ 20,034.99	\$ 5,008.75
713-16.20	SIGNS	EACH	20	\$ 250.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	LF	600	\$ 25.00	\$ 15,000.00	\$ 12,000.00	\$ 3,000.00
716-04.13	PLASTIC PAVEMENT MARKING (BIKELANE SYMBOL)	EACH	10	\$ 150.00	\$ 1,500.00	\$ 1,200.00	\$ 300.00
716-12.06	THERMO (40 MIL 4IN)	L.M	0	\$ 1,025.00	\$ -	\$ -	\$ -
<b>**Landscaping:</b>							
803-01	SODDING (NEW SOD)	SY	4694	\$ 4.27	\$ 20,043.38	\$ 16,034.70	\$ 4,008.68
<b>Pedestrian Amenities:</b>							
721-01.01	BENCH	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
721-01.02	TRASH RECEPTACLE	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
<b>SUBTOTAL of Itemized Quantities above</b>					\$ 648,068.89	\$ 518,455.11	\$ 129,613.78
<b>Mobilization and Engineering Services:</b>							
	Contractor Mobilization	LS	1	\$ 32,403.44	\$ 32,403.44	\$ 25,922.76	\$ 6,480.69
	Traffic Control	LS	1	\$ 25,922.76	\$ 25,922.76	\$ 20,738.20	\$ 5,184.55
	Flexible Drums (Channelizing)	EA	75	\$ 25.00	\$ 1,875.00	\$ 1,500.00	\$ 375.00
	Signs (Construction)	S.F.	200	\$ 25.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
	CNST. Stakes, Lines and Grades	LS	1	\$ 75,000.00	\$ 75,000.00	\$ 60,000.00	\$ 15,000.00
	TDOT Materials & Test	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
	Construction Contingency	10%	of construction	\$ 64,806.89	\$ 64,806.89	\$ 51,845.51	\$ 12,961.38
	TDOT Engineering Services	\$1,000 for every 30 days of construction		\$ 9,000.00	\$ 9,000.00	\$ 7,200.00	\$ 1,800.00
	Construction Engineering Inspection (CEI)	20%	of construction	\$ 129,613.78	\$ 129,613.78	\$ 103,691.02	\$ 25,922.76
<b>TOTAL of reimbursable construction expenses</b>					\$ 1,001,690.75	\$ 801,352.60	\$ 200,338.15

\* Relocating or undergrounding utilities is limited to 33% of eligible reimbursable costs in accordance with T.C.A. § 13-20-303 and 23 CFR 635.107

\*\*Landscaping activities must be a direct component of an eligible on-road or off-road trail facility for pedestrians, bicyclists and other non-motorized forms of transportation only, and is limited to 25% of eligible and reimbursable construction costs.

## Warm Springs Road / Apple Orchard Road from Yuma Road to Carters Valley Road

**FOR USE IN PRE-SCOPING AND SCOPING CONSTRUCTION ESTIMATES**

(This is not intended to be a detailed pay item breakdown. It is intended to be tool that assists users in preparing early estimates prior to having developed plans. TRNSPRT should be utilized by the PFI stage.)

ITEM	Unit	Quantity	Unit Price	Amount
MOBILIZATION	LS	1	\$426,962	\$426,962
CONSTRUCTION SURVEYING	LS	1	\$120,000	\$120,000
<b>GRADING ITEMS</b>				
CLEARING AND GRUBBING	ACRE	7	\$20,000	\$133,609
REGULAR EXCAVATION	CY	7500	\$17	\$127,500
BORROW EXCAVATION	CY	0	\$15	\$0
UNSUITABLE MAT'L. (paid as Regular Excav.)	CY	5185	\$17	\$88,148
BACKFILL STONE (NO. 1) FOR UNSUITABLE MATL. AREAS	TONS	10500	\$20	\$210,000
DRY RIPRAP	TONS	0	\$40	\$0
<b>Sub-Total</b>				<b>\$559,257</b>
<b>Grading Items Contingency</b>		-		<b>\$111,851</b>
<b>DRAINAGE ITEMS</b>				
CONCRETE BOX CULVERT	LF	200	\$2,500	\$500,000
PIPES UNDER 36"	LF	1000	\$125	\$125,000
PIPES OVER 36"	LF	200	\$250	\$50,000
END WALLS FOR PIPES OVER 36"	EA	6	\$300	\$1,800
DROP INLETS	EA	2	\$1,000	\$2,000
CURB AND GUTTER	LF	0	\$35	\$0
<b>Sub-Total</b>				<b>\$678,800</b>
<b>Drainage Items Contingency</b>		-		<b>\$33,940</b>
<b>PAVEMENT ITEMS</b>				
SURFACE COURSE	TONS	2438	\$150	\$365,750
INTERMEDIATE COURSE	TONS	5098	\$135	\$688,275
BASE COURSE	TONS	0	\$90	\$0
SUBBASE COURSE	TONS	10574	\$25	\$264,338
No.1 STONE	TONS	0	\$25	\$0
DEMOLITON OF PAVEMENT	SY	0	\$10	\$0
PLANNING 0"- 2" FOR OVERLAY SECTION	SY	0	\$2	\$0
<b>Sub-Total</b>				<b>\$1,318,363</b>
<b>Pavement Items Contingency</b>		-		<b>\$131,836</b>
<b>INCIDENTAL ITEMS</b>				
RETAINING WALLS (CONC.)	CY	8710	\$400	\$3,483,822
RURAL PRIVATE ENTRANCE	EA	0	\$2,000	\$0
URBAN PRIVATE ENTRANCE	EA	0	\$5,000	\$0
COMMERCIAL ENTRANCE	EA	0	\$10,000	\$0
<b>Sub-Total</b>				<b>\$3,483,822</b>
<b>Incidental Items Contingency</b>		-		<b>\$174,191</b>
<b>PROTECTIVE ITEMS</b>				
MAINTENANCE OF TRAFFIC (LUMP SUM)	LS	1	\$150,000	\$150,000
FIELD OFFICE	MO	0	\$2,000	\$0
SIDEWALK	SY	0	\$90	\$0
<b>Sub-Total</b>				<b>\$150,000</b>
<b>Protective Items Contingency</b>		-		<b>\$7,500</b>



EROSION CONTROL				
STORM WATER MANAGEMENT FACILITY	EA	-	-	\$250,000
SEEDING	LB	3800	\$20	\$76,000
TEMP. SILT FENCE	LF	38000	\$4	\$152,000
CHECK DAMS TY. I OR II	EA	380	\$500	\$190,000
Sub-Total				\$668,000
E&S Control Items Contingency		-		\$133,600
UTILITIES				
BELOW GROUND UTILITIES (LUMP SUM \$\$\$)	LF	0	\$75	\$0
Sub-Total				\$0
Right of Way Contingency (XX%)		-		\$0
TRAFFIC AND SAFETY				
PERMANENT SIGNAL (LUMP SUM)	EA	0	\$300,000	\$0
PAVEMENT MARKINGS (IF APPLICABLE)	LF	76000	\$1	\$76,000
GUARDRAIL	LF	0	\$25	\$0
GUARDRAIL END TREATMENT	EA	0	\$2,500	\$0
GR-FOA'S IF BRIDGE IS ON PROJECT	EA	4	\$2,000	\$8,000
Sub-Total				\$84,000
Traffic Items Contingency		-		\$4,200
BRIDGE				
NS BRIDGE	SF	1260	\$400	\$504,000
DEMOLITION OF EXISTING BRIDGE	LS	0	\$18	\$0
Sub-Total				\$504,000
Bridge Items Contingency		-		\$25,200
STREAM/WETLAND MITIGATION THAT IS INCLUDED IN CONSTRUCTION				
Stream Mitigation	LF	700	\$700	\$490,000
Wetland Mitigation	Acre	0	\$75,000	\$0
MISCELLANEOUS ITEMS SUMMARY FROM ALIGNMENT SUMMARY TABS				
*Individual Misc. Items, Units, Quantity, and Unit Price must be input in "Alignment Summary Tabs"				
Alignment 1	LS		\$0	\$3,000
Alignment 2	LS		\$0	\$0
Alignment 3	LS		\$0	\$0
Alignment 4	LS		\$0	\$0
Alignment 5	LS		\$0	\$0
Alignment 6	LS		\$0	\$0
			\$0	\$0
			\$0	\$0
			\$0	\$0
			\$0	\$0
Contingency Total				\$622,319
Mobilization				\$426,962
Construction Survey				\$120,000
Sub-Total				\$7,939,242
Total				\$9,108,523
CEI & CONTINGENCY				
CEI OF AT LEAST 12% AS A LUMP SUM ITEM	LS	1	12.00%	\$1,093,023
PROJECT CONTINGENCY	Tier II		10%	\$793,924
GRAND TOTAL				\$10,700,000

## Watauga Street from Broad Street to East Center Street

### Stage III – Construction (Add and remove lines as needed)

All projects must be competitively bid and awarded to the lowest responsive bidder

TDOT LINE ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL	80% FED. FUNDS	20% LOCAL MATCH
Site Preparation & Demolition:							
201-07.02	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
202-01.xx	REMOVAL OF PIPE	LF	0	\$ 35.00	\$ -	\$ -	\$ -
202-01.50	REMOVAL OF STRUCTURES (END WALL)	EACH	0	\$ 1,000.00	\$ -	\$ -	\$ -
202-03	REMOVAL OF RIGID PAVEMENT	SY	0	\$ 12.45	\$ -	\$ -	\$ -
202-03.01	REMOVAL OF ASPHALT PAVEMENT	SY	0	\$ 11.00	\$ -	\$ -	\$ -
Construction Items:							
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	0	\$ 20.00	\$ -	\$ -	\$ -
203-06	WATER	MG	0	\$ 81.77	\$ -	\$ -	\$ -
209-01.10	EROSION AND SILTATION CONTROL	LS	0	\$ 48,000.00	\$ -	\$ -	\$ -
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	0	\$ 30.00	\$ -	\$ -	\$ -
307-02.07	ASPHALT CONCRETE MIX, GRADING B-M	TON	0	\$ 190.00	\$ -	\$ -	\$ -
411.01.10	ACS MIX (PG64-22) GRADING D RDWY	TON	0	\$ 160.00	\$ -	\$ -	\$ -
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	0	\$ 7.00	\$ -	\$ -	\$ -
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	0	\$ 1,350.00	\$ -	\$ -	\$ -
602-03.03	PEDESTRIAN BRIDGE	LS	0	\$ 612,000.00	\$ -	\$ -	\$ -
630-01.16	6" CONCRETE BOLLARD/GUARD POST	EACH	0	\$ 1,000.00	\$ -	\$ -	\$ -
701-01.01	CONCRETE SIDEWALK (4")	S.F.	0	\$ 5.00	\$ -	\$ -	\$ -
701-02.03	CONCRETE CURB RAMP	S.F.	0	\$ 10.00	\$ -	\$ -	\$ -
716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	LF	60	\$ 25.00	\$ 1,500.00	\$ 1,200.00	\$ 300.00
716-04.13	PLASTIC PAVEMENT MARKING (BIKELANE SYMBOL & ARROW)	EACH	40	\$ 200.00	\$ 8,000.00	\$ 6,400.00	\$ 1,600.00
713-16.20	SIGNS	EACH	40	\$ 250.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
**Landscaping:							
803-01	SODDING (NEW SOD)	SY	0	\$ 4.27	\$ -	\$ -	\$ -
Pedestrian Amenities:							
714-08.09	DECORATIVE LIGHT STANDARD	EACH	0	\$ 3,700.00	\$ -	\$ -	\$ -
721-01.01	BENCH	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
721-01.02	TRASH RECEPTACLE	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
SUBTOTAL of Itemized Quantities above					\$ 24,500.00	\$ 19,600.00	\$ 4,900.00
Mobilization and Engineering Services:							
Contractor Mobilization		LS	1	\$ 1,225.00	\$ 1,225.00	\$ 980.00	\$ 245.00
Traffic Control		LS	1	\$ 980.00	\$ 980.00	\$ 784.00	\$ 196.00
Flexible Drums (Channelizing)		EA	25	\$ 25.00	\$ 625.00	\$ 500.00	\$ 125.00
Signs (Construction)		S.F.	120	\$ 25.00	\$ 3,000.00	\$ 2,400.00	\$ 600.00
CNST. Stakes, Lines and Grades		LS	1	\$ 5,000.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
TDOT Materials & Test		LS	1	\$ 10,000.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
Construction Contingency		10%	of construction	\$ 2,450.00	\$ 2,450.00	\$ 1,960.00	\$ 490.00
TDOT Engineering Services		\$1,000 for every 30 days of construction		\$ 9,000.00	\$ 9,000.00	\$ 7,200.00	\$ 1,800.00
Construction Engineering Inspection (CEI)		20%	of construction	\$ 4,900.00	\$ 4,900.00	\$ 3,920.00	\$ 980.00
TOTAL of reimbursable construction expenses					\$ 61,680.00	\$ 49,344.00	\$ 12,336.00

\* Relocating or undergrounding utilities is limited to 33% of eligible reimbursable costs in accordance with T.C.A. § 13-20-303 and 23 CFR 635.107

\*\*Landscaping activities must be a direct component of an eligible on-road or off-road trail facility for pedestrians, bicyclists and other non-motorized forms of transportation only, and is limited to 25% of eligible and reimbursable construction costs.

# East Stone Drive (US-11W) from Beechnut Drive to Kingsport Pavilion Access Road



## Stage III – Construction (Add and remove lines as needed)

All projects must be competitively bid and awarded to the lowest responsive bidder

TDOT LINE ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL	80% FED. FUNDS	20% LOCAL MATCH
<b>Site Preparation &amp; Demolition:</b>							
201-07.02	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1	\$ 50,000.00	\$ 50,000.00	\$ 40,000.00	\$ 10,000.00
<b>Construction Items:</b>							
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	2500	\$ 12.00	\$ 30,000.00	\$ 24,000.00	\$ 6,000.00
203-06	WATER	MG	1	\$ 81.77	\$ 81.77	\$ 65.42	\$ 16.35
209-01.10	EROSION AND SILTATION CONTROL	LS	1	\$ 55,000.00	\$ 55,000.00	\$ 44,000.00	\$ 11,000.00
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1170	\$ 30.00	\$ 35,100.00	\$ 28,080.00	\$ 7,020.00
307-01.08	ASPHALT CONC MX(PG64-22)(BPMB-HM)GR C-M2	TON	0	\$ 90.81	\$ -	\$ -	\$ -
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	0	\$ 1,350.00	\$ -	\$ -	\$ -
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	0	\$ 94.68	\$ -	\$ -	\$ -
602-03.03	PEDESTRIAN BRIDGE (and Box Culvert)	LS	2	\$ 100,000.00	\$ 200,000.00	\$ 160,000.00	\$ 40,000.00
604-08.10	RETAINING WALL	SF	0	\$ 100.00	\$ -	\$ -	\$ -
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	2000	\$ 100.00	\$ 200,000.00	\$ 160,000.00	\$ 40,000.00
611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	5	\$ 3,000.00	\$ 15,000.00	\$ 12,000.00	\$ 3,000.00
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	27	\$ 4,500.00	\$ 121,500.00	\$ 97,200.00	\$ 24,300.00
630-01.16	6" CONCRETE BOLLARD/GUARD POST	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
701-01.01	CONCRETE SIDEWALK (4")	S.F.	42240	\$ 8.00	\$ 337,920.00	\$ 270,336.00	\$ 67,584.00
701-02	CONCRETE DRIVERWAY	S.F.	7920	\$ 15.00	\$ 118,800.00	\$ 95,040.00	\$ 23,760.00
701-02.03	CONCRETE CURB RAMP	S.F.	1800	\$ 10.00	\$ 18,000.00	\$ 14,400.00	\$ 3,600.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	379.1568	\$ 375.00	\$ 142,183.80	\$ 113,747.04	\$ 28,436.76
713-16.20	SIGNS	EACH	8	\$ 250.00	\$ 2,000.00	\$ 1,600.00	\$ 400.00
716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	LF	1200	\$ 25.00	\$ 30,000.00	\$ 24,000.00	\$ 6,000.00
716-04.13	PLASTIC PAVEMENT MARKING (BIKELANE SYMBOL)	EACH	0	\$ 150.00	\$ -	\$ -	\$ -
716-12.06	THERMO (40 MIL 4IN)	L.M	0	\$ 1,025.00	\$ -	\$ -	\$ -
730-00.00	SIGNALS	EACH	2	\$ 30,000.00	\$ 60,000.00	\$ 48,000.00	\$ 12,000.00
<b>**Landscaping:</b>							
803-01	SODDING (NEW SOD)	SY	1760	\$ 4.27	\$ 7,515.20	\$ 6,012.16	\$ 1,503.04
<b>Pedestrian Amenities:</b>							
721-01.01	BENCH	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
721-01.02	TRASH RECEPTACLE	EACH	0	\$ 500.00	\$ -	\$ -	\$ -
<b>SUBTOTAL of Itemized Quantities above</b>					\$ 1,423,100.77	\$ 1,138,480.62	\$ 284,620.15
<b>Mobilization and Engineering Services:</b>							
	Contractor Mobilization	LS	1	\$ 71,155.04	\$ 71,155.04	\$ 56,924.03	\$ 14,231.01
	Traffic Control	LS	1	\$ 56,924.03	\$ 56,924.03	\$ 45,539.22	\$ 11,384.81
	Flexible Drums (Channelizing)	EA	75	\$ 25.00	\$ 1,875.00	\$ 1,500.00	\$ 375.00
	Signs (Construction)	S.F.	200	\$ 25.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
	CNST. Stakes, Lines and Grades	LS	1	\$ 75,000.00	\$ 75,000.00	\$ 60,000.00	\$ 15,000.00
	TDOT Materials & Test	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
	Construction Contingency	10%	of construction	\$ 142,310.08	\$ 142,310.08	\$ 113,848.06	\$ 28,462.02
	TDOT Engineering Services	\$1,000 for every 30 days of construction		\$ 9,000.00	\$ 9,000.00	\$ 7,200.00	\$ 1,800.00
	Construction Engineering Inspection (CEI)	20%	of construction	\$ 284,620.15	\$ 284,620.15	\$ 227,696.12	\$ 56,924.03
<b>TOTAL of reimbursable construction expenses</b>					\$ 2,078,985.07	\$ 1,663,188.06	\$ 415,797.01

\* Relocating or undergrounding utilities is limited to 33% of eligible reimbursable costs in accordance with T.C.A. § 13-20-303 and 23 CFR 635.107

\*\*Landscaping activities must be a direct component of an eligible on-road or off-road trail facility for pedestrians, bicyclists and other non-motorized forms of transportation only, and is limited to 25% of eligible and reimbursable construction costs.



## Horse Creek Greenway



### Stage III – Construction

(Add and remove lines as needed)

All projects must be competitively bid and awarded to the lowest responsive bidder

TDOT LINE ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL	80% FED. FUNDS	20% LOCAL MATCH
<b>Site Preparation &amp; Demolition:</b>							
201-07.02	REMOVAL AND DISPOSAL OF BRUSH & TREES	LS	1	\$ 100,000.00	\$ 100,000.00	\$ 80,000.00	\$ 20,000.00
<b>Construction Items:</b>							
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CY	4595.555556	\$ 15.00	\$ 68,933.33	\$ 55,146.67	\$ 13,786.67
203-06	WATER	MG	2	\$ 81.77	\$ 163.54	\$ 130.83	\$ 32.71
209-01.10	EROSION AND SILTATION CONTROL	LS	1	\$ 75,000.00	\$ 75,000.00	\$ 60,000.00	\$ 15,000.00
209-03.42	STREAM MITIGATION - LIVE BRUSH LAYERING	LF	1000	\$ 170.00	\$ 170,000.00	\$ 136,000.00	\$ 34,000.00
209-03.68	STREAM MITIGATION - BOULDER TOE	LF	1000	\$ 250.00	\$ 250,000.00	\$ 200,000.00	\$ 50,000.00
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	5150	\$ 30.00	\$ 154,500.00	\$ 123,600.00	\$ 30,900.00
307-01.08	ASPHALT CONC MX(PG64-22)(BPMB-HM)GR C-M2	TON	2340	\$ 90.81	\$ 212,495.40	\$ 169,996.32	\$ 42,499.08
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	6	\$ 1,350.00	\$ 8,100.00	\$ 6,480.00	\$ 1,620.00
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	2380	\$ 94.68	\$ 225,338.40	\$ 180,270.72	\$ 45,067.68
602-03.03	PEDESTRIAN BRIDGE (and Box Culverts)	LS	2	\$ 100,000.00	\$ 200,000.00	\$ 160,000.00	\$ 40,000.00
604-08.10	RETAINING WALL	SF	1800	\$ 100.00	\$ 180,000.00	\$ 144,000.00	\$ 36,000.00
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	800	\$ 100.00	\$ 80,000.00	\$ 64,000.00	\$ 16,000.00
611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	16	\$ 3,000.00	\$ 48,000.00	\$ 38,400.00	\$ 9,600.00
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	2	\$ 4,500.00	\$ 9,000.00	\$ 7,200.00	\$ 1,800.00
630-01.16	6" CONCRETE BOLLARD/GUARD POST	EACH	14	\$ 500.00	\$ 7,000.00	\$ 5,600.00	\$ 1,400.00
701-02	CONCRETE DRIVERWAY	S.F.	1440	\$ 15.00	\$ 21,600.00	\$ 17,280.00	\$ 4,320.00
701-02.03	CONCRETE CURB RAMP	S.F.	400	\$ 10.00	\$ 4,000.00	\$ 3,200.00	\$ 800.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.		\$ 375.00	\$ -	\$ -	\$ -
713-16.20	SIGNS	EACH	10	\$ 250.00	\$ 2,500.00	\$ 2,000.00	\$ 500.00
716-02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	LF	150	\$ 25.00	\$ 3,750.00	\$ 3,000.00	\$ 750.00
730-00.00	SIGNALS	EACH	0	\$ 15,000.00	\$ -	\$ -	\$ -
<b>**Landscaping:</b>							
803-01	SODDING (NEW SOD)	SY	5515	\$ 4.27	\$ 23,549.05	\$ 18,839.24	\$ 4,709.81
<b>Pedestrian Amenities:</b>							
721-01.01	BENCH	EACH	5	\$ 500.00	\$ 2,500.00	\$ 2,000.00	\$ 500.00
721-01.02	TRASH RECEPTACLE	EACH	5	\$ 500.00	\$ 2,500.00	\$ 2,000.00	\$ 500.00
<b>SUBTOTAL of Itemized Quantities above</b>					\$ 1,848,929.72	\$ 1,479,143.78	\$ 369,785.94
<b>Mobilization and Engineering Services:</b>							
	Contractor Mobilization	LS	1	\$ 92,446.49	\$ 92,446.49	\$ 73,957.19	\$ 18,489.30
	Traffic Control	LS	1	\$ 73,957.19	\$ 73,957.19	\$ 59,165.75	\$ 14,791.44
	Flexible Drums (Channelizing)	EA	75	\$ 25.00	\$ 1,875.00	\$ 1,500.00	\$ 375.00
	Signs (Construction)	S.F.	200	\$ 25.00	\$ 5,000.00	\$ 4,000.00	\$ 1,000.00
	CNST. Stakes, Lines and Grades	LS	1	\$ 100,000.00	\$ 100,000.00	\$ 80,000.00	\$ 20,000.00
	TDOT Materials & Test	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 8,000.00	\$ 2,000.00
	Construction Contingency	10%	of construction	\$ 184,892.97	\$ 184,892.97	\$ 147,914.38	\$ 36,978.59
	TDOT Engineering Services	\$1,000 for every 30 days of construction		\$ 9,000.00	\$ 9,000.00	\$ 7,200.00	\$ 1,800.00
	Construction Engineering Inspection (CEI)	20%	of construction	\$ 369,785.94	\$ 369,785.94	\$ 295,828.76	\$ 73,957.19
<b>TOTAL of reimbursable construction expenses</b>					\$ 2,695,887.32	\$ 2,156,709.85	\$ 539,177.46

\* Relocating or undergrounding utilities is limited to 33% of eligible reimbursable costs in accordance with T.C.A. § 13-20-303 and 23 CFR 635.107

\*\*Landscaping activities must be a direct component of an eligible on-road or off-road trail facility for pedestrians, bicyclists and other non-motorized forms of transportation only, and is limited to 25% of eligible and reimbursable construction costs.

# Appendix C

## Model Complete Streets Ordinance

### **ORDINANCE NUMBER \_\_\_\_\_ AN ORDINANCE TO ADOPT A “COMPLETE STREETS” POLICY IN [JURISDICTION]**

WHEREAS, increasing walking and bicycling offers the potential for greater accessibility and mobility, improved health, a more livable community, and a more efficient use of road space and resources; and

WHEREAS, the Complete Streets guiding principle is to design, operate and maintain streets to promote safe and convenient access and travel for all users, including residents who do not or cannot drive, such access to include sidewalks, bicycle lanes, shared-use paths and vehicle lanes; and

WHEREAS, other jurisdictions and agencies nationwide have adopted Complete Streets legislation including the U.S. Department of Transportation and communities in [TENNESSEE / VIRGINIA]; and

WHEREAS, [JURISDICTION] will implement a Complete Streets policy by designing, operating and maintaining the transportation network to improve travel conditions for people walking, bicycling, using transit, and driving in a manner consistent with, and supportive of, the surrounding community; and

WHEREAS, [JURISDICTION] recognizes the number of cost-effective improvements to existing roads that can increase access and safety, including crosswalks, bicycle lanes, signage, bulb-outs, on-street parking, street trees and changing the signalization of traffic lights; and

WHEREAS, [JURISDICTION] will implement policies and procedures with the construction or reconstruction of transportation facilities to support the creation of Complete Streets including capital improvements and re-channelization projects, recognizing that all streets are different and in each case user needs must be balanced;

BE IT ORDAINED BY THE MAYOR AND [LEGISLATIVE BODY] OF [JURISDICTION], AS FOLLOWS:

Section 1. [JURISDICTION] will plan for, design and construct all new transportation improvement projects to provide appropriate accommodation for people of all abilities who walk, bicycle, use transit and/or drive, while promoting safe operation for all users, as provided for below.

#### Section 2. Definitions

The following words and phrases, whenever used in this ordinance, shall have the meanings defined in this section unless the context clearly requires otherwise:

1) “Bicycle Way or Bikeway” means any course or way intended specifically for the preferential use of bicyclists. Examples include bicycle lanes and shared-use paths.

2) “Complete Streets Infrastructure” means design features that contribute to a safe, convenient, or comfortable travel experience for users, including but not limited to features such as: sidewalks; shared-use paths; bicycle lanes; automobile lanes; paved shoulders; accessible curb ramps; bulb-outs; crosswalks; refuge islands; pedestrian and traffic signals; and public transportation stops and facilities.

- 3) “Pedestrian Way or Walkway” means any course or way intended specifically for the preferential use of pedestrians. Examples include sidewalks and shared-use paths.
- 4) “Shared-Use Path” means a multi-use pathway for all non-motorized users including pedestrians and bicyclists.
- 5) “Street” means any right of way, public or private, including arterials, collectors, local roads, and roadways by any other designation, as well as bridges, tunnels and any other portions of the transportation network.
- 6) “Transportation Improvement Project” means the construction, reconstruction, retrofit, or alteration of any street, and includes the planning, design, approval, and implementation processes, except that “Transportation Improvement Project” does not include routine maintenance such as cleaning, sweeping, mowing, spot repair or pavement resurfacing.
- 7) “Users” mean individuals that use streets, including people walking, bicycling, using transit, and/or driving, and people of all ages and abilities, including children, teenagers, families, older adults and individuals with disabilities.

### Section 3. Requirements

[JURISDICTION] will implement the Complete Streets principles as follows:

- 1) Every transportation improvement project shall incorporate Complete Streets infrastructure including both bicycle and pedestrian ways sufficient to enable reasonably safe travel along and across the right-of-way for each category of users; unless one or more of these conditions exists and is documented:
  - a) People walking or bicycling are prohibited by law from using the roadway. In this instance, a greater effort may be necessary to accommodate people walking or bicycling elsewhere within the right-of-way or within the same transportation corridor.
  - b) The cost of establishing bikeways or walkways would be excessively disproportionate to the total cost of the transportation project. “Excessively disproportionate” is defined as exceeding twenty percent of the total cost.
  - c) Severe existing topographic, natural resource or right-of-way constraints exist that preclude construction of bicycle or pedestrian ways without incurring excessive costs.
  - d) Bicycle ways will not be required on local streets where the speed limit is 25 mph or less.
  - f) Pedestrian ways will not be required along local streets with fewer than three (3) dwelling units per acre or along rural roadways outside of urbanized areas, unless the respective roadway has been identified for pedestrian ways in the Sidewalk and Pedestrian Study or another adopted plan.
  - g) [LEGISLATIVE BODY] issues a documented exception concluding that application of Complete Streets principles to a location is inappropriate because it would be contrary to public benefit and safety.
- 2) Pedestrian improvements and shared-use facilities that have been identified as priorities in the Sidewalk and Pedestrian Study and any previous and subsequent planning documents shall be given particular consideration for implementation.
- 3) Bicycle ways shall be designed and constructed according to accepted design guidance, such as that included in the National Association of City Transportation Officials’ *Urban Bikeway Design Guide*, the Federal Highway Administration’s *Small Town and Rural Multimodal Networks* guide, the American Association of State Highway and Transportation Officials’ *Guide for the Development of Bicycle Facilities*, and the design guidelines included in the adopted Sidewalk and Pedestrian Study.

2) Sidewalks, shared-use paths, street crossings (including over and under passes), pedestrian signals, signs, street furniture, transit stops and other facilities, shall be designed, constructed, operated and maintained so that all pedestrians, including people with disabilities, can travel safely and independently.

3) As feasible, the [CITY / TOWN / COUNTY] shall incorporate Complete Streets infrastructure into existing streets to improve the safety and convenience of users, and construct and enhance the transportation network for each category of users.

4) If the safety and convenience of users can be improved within the scope of pavement resurfacing, restriping or signalization operations on streets, such projects shall implement Complete Streets infrastructure where feasible.

5) The appropriate [CITY / TOWN / COUNTY] departments shall review and develop proposed revisions to all appropriate zoning and subdivision codes, procedures, regulations, guidelines and design standards to integrate, accommodate and balance the needs of all users in all transportation improvement projects.

#### Section 4. Statutory Construction and Severability

1) This Ordinance shall be construed so as not to conflict with applicable federal or state laws, rules or regulations. Nothing in this Ordinance authorizes any [CITY / TOWN / COUNTY] agency to impose any duties or obligations in conflict with limitations on municipal authority established by federal or state law at the time such agency action is taken.

2) In the event that a court or agency of competent jurisdiction holds that a federal or state law, rule, or regulation invalidates any clause, sentence, paragraph, or section of this Ordinance or the application thereof to any person or circumstances, it is the intent of the Ordinance that the court or agency sever such clause, sentence, paragraph, or section so that the remainder of this Ordinance remains in effect.

3) In undertaking the enforcement of this Ordinance, [JURISDICTION] is assuming only an undertaking to promote the general welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation through which it might incur liability in monetary damages to any person who claims that a breach proximately caused injury.

Section 5. That this Ordinance take effect and be in force thirty (30) days from and after passage as provided by law.

The foregoing Ordinance having been reduced to writing, the same was introduced by Council person \_\_\_\_\_, seconded by Council person \_\_\_\_\_, and was adopted by the following vote to-wit:

YEAS:

NAYS:

The President thereby declared the motion carried and the foregoing Ordinance adopted and approved, this the XX<sup>th</sup> day of MONTH, A.D., 20XX.

ATTEST:

---

CLERK OF COUNCIL

ADOPTED:

---

PRESIDENT

The above foregoing Ordinance having been submitted to and approved by the Mayor, this the XX<sup>th</sup> day of MONTH, A.D., 20XX.

ATTEST:

---

[CITY / TOWN / COUNTY] CLERK

APPROVED:

---

[BOARD PRESIDENT/MAYOR]





# Appendix D

## Prioritized Bikeway Facilities

Road	From	To	County	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Construction Cost	Safety		Demand					Equity		Safety		Demand					Equity		Ranking
								ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	
								ADT Weight	Crash Weight	Schools Weight	Parks Weight	Pop Density Weight	Commercial /Retail Weight	O/D Weight	Low-Income Weight	Transit Weight	ADT Norm. Weighted Criterion	Crash Norm. Weighted Criterion	Schools Norm. Weighted Criterion	Parks Norm. Weighted Criterion	Pop Density Norm. Weighted Criterion	Commercial /Retail Norm. Weighted Criterion	O/D Norm. Weighted Criterion	Low-Income Norm. Weighted Criterion	Transit Norm. Weighted Criterion	
E Center St	Fort Henry Dr	Memorial Blvd	Sullivan	7,230	B/SL	\$30	\$216,893	3	3	3	3	3	2	2	3	3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	9.0000
Fort Henry Dr	E Center St	N John B Dennis Hwy	Sullivan	9,945	B/BL	\$30	\$298,339	3	3	3	3	3	2	2	2	3	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	8.6667
E Center St	E Sullivan St	Fort Henry Dr	Sullivan	6,151	B/SUP	\$150	\$922,650	3	3	3	3	2	2	2	3	3	1.0000	1.0000	1.0000	1.0000	0.6667	1.0000	1.0000	1.0000	1.0000	8.6667
Lynn Garden Dr	Melvin St	Clarke Ave	Sullivan	3,869	B/BL	\$30	\$116,081	3	2	3	3	2	2	2	3	3	1.0000	0.6667	1.0000	1.0000	0.6667	1.0000	1.0000	1.0000	1.0000	8.3333
W Center St	Fort Robinson Dr	Clinchfield St	Sullivan	4,403	B/SUP	\$150	\$660,488	3	2	3	3	3	2	2	3	1	1.0000	0.6667	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3333	8.0000
Bloomingtondale Rd / Bloomingtondale Pke	Wadlow Gap Hwy	US 11 W	Sullivan	15,622	B/PS	\$20	\$312,442	2	3	3	2	2	2	2	3	2	0.6667	1.0000	1.0000	0.6667	0.6667	1.0000	1.0000	1.0000	0.6667	7.6667
W Stone Dr / Netherland Inn Rd	Independence Ave	Big Elm Rd	Hawkins	11,367	B/SUP	\$150	\$1,705,044	3	1	2	3	1	2	2	3	3	1.0000	0.3333	0.6667	1.0000	0.3333	1.0000	1.0000	1.0000	1.0000	7.3333
Watauga St	Broad St	E Center St	Sullivan	9,573	B/SL	\$30	\$287,187	0	1	3	3	3	2	2	3	3	0.0000	0.3333	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	7.3333
Lynn Garden Dr	US 11 W	W Center St	Sullivan	3,426	B/BL	\$30	\$102,792	2	3	3	3	2	2	0	3	3	0.6667	1.0000	1.0000	1.0000	0.6667	1.0000	0.0000	1.0000	1.0000	7.3333
E Main St	Cherokee St	N Wilcox Dr	Sullivan	4,174	B/BL	\$30	\$125,226	1	1	2	3	3	2	2	3	3	0.3333	0.3333	0.6667	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	7.3333
S Wilcox Dr	Wilcox Dr	S John B Dennis Hwy	Sullivan	24,588	B/PS	\$20	\$491,762	3	3	3	3	1	2	2	3	0	1.0000	1.0000	1.0000	1.0000	0.3333	1.0000	1.0000	1.0000	0.0000	7.3333
US 11 W	N John B Dennis Hwy	Ollis Bowers Hill Rd	Sullivan	26,865	B/BL	\$30	\$805,935	3	2	1	3	1	2	2	1	3	1.0000	0.6667	0.3333	1.0000	0.3333	1.0000	1.0000	0.3333	1.0000	6.6667
N Wilcox Dr	E Center St	Martin Luther King Jr Dr	Sullivan	3,128	B/BL	\$30	\$93,846	2	1	3	3	3	2	0	3	2	0.6667	0.3333	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	0.6667	6.6667
Konnarock Rd / Warpath Dr	Lincoln St	Memorial Blvd	Sullivan	7,370	B/SL	\$30	\$221,099	1	2	2	1	2	2	2	3	3	0.3333	0.6667	0.6667	0.3333	0.6667	1.0000	1.0000	1.0000	1.0000	6.6667
Industry Dr	Netherland Inn Rd	S Wilcox Dr	Sullivan	10,949	B/SUP	\$150	\$1,642,395	2	1	2	3	2	2	2	3	0	0.6667	0.3333	0.6667	1.0000	0.6667	1.0000	1.0000	1.0000	0.0000	6.3333
Broad St	E Sullivan St	W Main St	Sullivan	1,808	B/BL	\$30	\$54,254	1	0	3	3	0	2	2	3	3	0.3333	0.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	6.3333
N John B Dennis Hwy	Bloomingtondale Rd	Hospital Entrance	Sullivan	11,238	B/PS	\$20	\$224,756	3	1	3	1	1	2	2	3	1	1.0000	0.3333	1.0000	0.3333	0.3333	1.0000	1.0000	1.0000	0.3333	6.3333
Springfield Ave	Reedy Creek	Linville St	Sullivan	3,223	B/SUP	\$150	\$483,473	0	0	3	3	3	2	2	3	1	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.3333	6.3333
Lincoln St	S Wilcox Dr	Konnarock Rd	Sullivan	6,842	B/SUP	\$150	\$1,026,327	2	0	2	3	0	2	2	3	2	0.6667	0.0000	0.6667	1.0000	0.0000	1.0000	1.0000	1.0000	0.6667	6.0000
Rock Springs Rd	Moreland Dr	Cox Hollow Rd	Sullivan	12,728	B/SUP	\$150	\$1,909,155	2	1	2	3	1	2	2	3	0	0.6667	0.3333	0.6667	1.0000	0.3333	1.0000	1.0000	1.0000	0.0000	6.0000
Union St	Danbury St	W Stone Dr	Sullivan	4,269	B/SUP	\$150	\$483,473	1	1	1	2	1	2	2	3	3	0.3333	0.3333	0.3333	0.6667	0.3333	1.0000	1.0000	1.0000	1.0000	6.0000
Pinebrook Dr	Bermuda Dr	Reedy Creek	Sullivan	3,824	B/SUP	\$150	\$1,705,044	0	1	1	3	1	2	2	3	3	0.0000	0.3333	0.3333	1.0000	0.3333	1.0000	1.0000	1.0000	1.0000	6.0000
Fort Henry Dr	Wilmont Dr	SR 75	Sullivan/Washington	37,000	B/PS	\$20	\$740,000	3	3	1	1	1	2	2	2	0	1.0000	1.0000	0.3333	0.3333	0.3333	1.0000	1.0000	0.6667	0.0000	5.6667
Shared-Use Path	N John B Dennis Hwy	Memorial Blvd	Sullivan	3,350	B/SUP	\$150	\$502,484	0	0	2	3	1	2	2	3	2	0.0000	0.0000	0.6667	1.0000	0.3333	1.0000	1.0000	1.0000	0.6667	5.6667
Big Elm Rd	Carters Valley Rd	Netherland Inn Rd	Hawkins	16,522	B/SL	\$30	\$571,317	0	1	1	3	1	2	2	3	2	0.0000	0.3333	0.3333	1.0000	0.3333	1.0000	1.0000	1.0000	0.6667	5.6667
Meadowview Pkwy	I-26	Wilcox Dr	Sullivan	2,961	B/PS	\$20	\$59,213	2	0	0	3	0	2	2	3	3	0.6667	0.0000	0.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	5.6667
Fort Henry Dr	Colonial Heights Rd	Wilmont Dr	Sullivan	2,699	B/BL	\$30	\$80,970	3	3	2	1	2	2	0	2	1	1.0000	1.0000	0.6667	0.3333	0.6667	1.0000	0.0000	0.6667	0.3333	5.6667
US 11 W	Fudges Chapel Rd	Garland Ave	Hawkins	24,769	B/PS	\$20	\$495,382	3	0	3	0	1	2	2	3	0	1.0000	0.0000	1.0000	0.0000	0.3333	1.0000	1.0000	1.0000	0.0000	5.3333
Moreland Dr	S John B Dennis Hwy	Fort Henry Dr	Sullivan	16,701	B/PS	\$20	\$334,028	2	1	3	1	1	2	0	3	2	0.6667	0.3333	1.0000	0.3333	0.3333	1.0000	0.0000	1.0000	0.6667	5.3333
Bloomingtondale Rd	Packing House Rd	Wadlow Gap Hwy	Sullivan	7,688	B/PS	\$20	\$153,761	1	2	3	0	1	2	2	3	0	0.3333	0.6667	1.0000	0.0000	0.3333	1.0000	1.0000	1.0000	0.0000	5.3333
E Sullivan St / E Sullivan Ct	N Wilcox Dr	Lamont St	Sullivan	2,098	B/SL	\$30	\$62,949	0	1	2	2	3	2	0	2	3	0.0000	0.3333	0.6667	0.6667	1.0000	1.0000	0.0000	0.6667	1.0000	5.3333
US-11W	Garland Ave	Independence Ave	Hawkins	1,682	B/SUP	\$150	\$252,300	3	1	3	0	1	2	2	2	0	1.0000	0.3333	1.0000							

Prioritized Bikeway Facilities (cont.)

Road	From	To	County	Linear Feet	Facility Type	Unit Cost (per linear foot)	Estimated Construction Cost	Safety		Demand					Equity		Safety		Demand					Equity		Ranking
								ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	
								ADT Weight	Crash Weight	Schools Weight	Parks Weight	Pop Density Weight	Commercial /Retail Weight	O/D Weight	Low-Income Weight	Transit Weight	ADT Norm. Weighted Criterion	Crash Norm. Weighted Criterion	Schools Norm. Weighted Criterion	Parks Norm. Weighted Criterion	Pop Density Norm. Weighted Criterion	Commercial /Retail Norm. Weighted Criterion	O/D Norm. Weighted Criterion	Low-Income Norm. Weighted Criterion	Transit Norm. Weighted Criterion	
								1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Barton St	Keller St	South Fork Holston River	Sullivan	525	B/SUP	\$150	\$78,727	0	0	1	3	2	0	2	2	0	0.0000	0.0000	0.3333	1.0000	0.6667	0.0000	1.0000	0.6667	0.0000	3.6667
Rock Springs Dr	Rock Springs Rd	Blakley Dr	Sullivan	2,793	B/PS	\$20	\$55,866	2	0	0	3	1	0	2	2	0	0.6667	0.0000	0.0000	1.0000	0.3333	0.0000	1.0000	0.6667	0.0000	3.6667
Main Blvd	Highland Ave	Old Mill Race Rd	Hawkins	2,709	B/BL	\$30	\$495,651	1	0	3	0	1	2	2	0	0	0.3333	0.0000	1.0000	0.0000	0.3333	1.0000	1.0000	0.0000	0.0000	3.6667
N Central Ave	Grandview St	Main Blvd	Hawkins	878	B/PS	\$20	\$86,083	1	0	3	0	1	2	2	0	0	0.3333	0.0000	1.0000	0.0000	0.3333	1.0000	1.0000	0.0000	0.0000	3.6667
N Central Ave	Lane St	Grandview St	Hawkins	3,211	B/PS	\$20	\$152,689	1	0	3	0	1	2	2	0	0	0.3333	0.0000	1.0000	0.0000	0.3333	1.0000	1.0000	0.0000	0.0000	3.6667
Fall Creek Rd	Rose Trace Ct	Hemlock Rd	Sullivan	17,855	B/PS	\$20	\$357,100	1	1	0	3	1	0	2	1	0	0.3333	0.3333	0.0000	1.0000	0.3333	0.0000	1.0000	0.3333	0.0000	3.3333
Lebanon Rd	Fort Henry Dr	Kendrick Creek Rd	Sullivan	2769.18	B/PS	\$20	\$221,208	1	0	3	1	1	2	0	1	0	0.3333	0.0000	1.0000	0.3333	0.3333	1.0000	0.0000	0.3333	0.0000	3.3333
Kendrick Creek Rd	Lebanon Rd	Tri Cities Xing	Sullivan	11,060	B/PS	\$20	\$246,472	1	0	3	0	2	0	2	1	0	0.3333	0.0000	1.0000	0.0000	0.6667	0.0000	1.0000	0.3333	0.0000	3.3333
Shared-Use Path	Reedy Creek	Houston Ave	Sullivan	676	B/SUP	\$150	\$640,347	0	0	2	3	1	0	0	3	1	0.0000	0.0000	0.6667	1.0000	0.3333	0.0000	0.0000	1.0000	0.3333	3.3333
S John B Dennis Hwy	S Wilcox Dr	Lincoln St	Sullivan	9,023	B/PS	\$20	\$180,459	0	0	1	1	0	2	0	3	2	0.0000	0.0000	0.3333	0.3333	0.0000	1.0000	0.0000	1.0000	0.6667	3.3333
Sullivan Garden Pkwy	Morgan Lane	I-81	Sullivan	12,707	B/PS	\$20	\$254,140	1	0	3	0	0	2	2	0	0	0.3333	0.0000	1.0000	0.0000	0.0000	1.0000	1.0000	0.0000	0.0000	3.3333
Main Blvd	Old Mill Race Rd	Gray Brothers Store Rd	Hawkins	868.437	B/PS	\$20	\$203,332	1	0	2	0	1	2	2	0	0	0.3333	0.0000	0.6667	0.0000	0.3333	1.0000	1.0000	0.0000	0.0000	3.3333
Carters Valley Rd	North Fork Holston River	Lynn Garden Dr	Sullivan	10,167	B/PS	\$20	\$317,544	2	1	1	0	1	2	0	2	0	0.6667	0.3333	0.3333	0.0000	0.3333	1.0000	0.0000	0.6667	0.0000	3.3333
N Central Ave	Carters Valley Rd	Miller Wood Rd	Hawkins	7,634	B/PS	\$20	\$367,832	1	0	3	0	0	2	0	3	0	0.3333	0.0000	1.0000	0.0000	0.0000	1.0000	0.0000	1.0000	0.0000	3.3333
Shared-Use Path	Cliffside Rd	Fort Henry Dr	Sullivan	5,514	B/SUP	\$150	\$985,941	0	0	0	3	0	2	0	2	2	0.0000	0.0000	0.0000	1.0000	0.0000	1.0000	0.0000	0.6667	0.6667	3.3333
Shared-Use Path	Aldi Access Drive	Kingsport Greenbelt	Sullivan	969	B/SUP	\$150	\$145,339	0	0	1	3	0	2	0	1	2	0.0000	0.0000	0.3333	1.0000	0.0000	1.0000	0.0000	0.3333	0.6667	3.3333
Horse Creek Greenway	Riverport Rd	Meadowview Pkwy	Sullivan	9,955	B/SUP	\$150	\$1,493,271	0	0	0	2	0	2	0	3	2	0.0000	0.0000	0.0000	0.6667	0.0000	1.0000	0.0000	1.0000	0.6667	3.3333
Ridgefields Rd	Netherland Inn Rd	Riveredge Dr	Sullivan	661	B/BL	\$30	\$19,839	2	0	0	3	1	0	0	3	0	0.6667	0.0000	0.0000	1.0000	0.3333	0.0000	0.0000	1.0000	0.0000	3.0000
N Central Ave	Miller Wood Rd	Lane St	Hawkins	4,304	B/PS	\$20	\$209,832	1	0	1	0	1	2	0	3	0	0.3333	0.0000	0.3333	0.0000	0.3333	1.0000	0.0000	1.0000	0.0000	3.0000
Goshen Valley Rd / Gray Brothers Store Rd	Main Blvd	River Rd	Hawkins	5,714	B/PS	\$20	\$114,281	1	0	2	0	1	2	0	2	0	0.3333	0.0000	0.6667	0.0000	0.3333	1.0000	0.0000	0.6667	0.0000	3.0000
Bristol Hwy / Wadlow Gap Hwy	US-23	Whitt Dr	Scott	10,696	B/PS	\$20	\$213,914	0	0	1	0	0	2	2	2	0	0.0000	0.0000	0.3333	0.0000	0.0000	1.0000	1.0000	0.6667	0.0000	3.0000
Yuma Rd	Frisco Yard Rd	US 23	Scott	19,018	B/PS	\$20	\$380,366	0	0	3	0	1	2	0	1	0	0.0000	0.0000	1.0000	0.0000	0.3333	1.0000	0.0000	0.3333	0.0000	2.6667
Buttermilk Rd	Old Mill Rd	Shipley Ferry Rd	Sullivan	9,567	B/PS	\$20	\$191,339	0	0	0	1	0	2	2	1	0	0.0000	0.0000	0.0000	0.3333	0.0000	1.0000	1.0000	0.3333	0.0000	2.6667
Mill Creek Rd	Twin Hills Dr	Sullivan Garden Pkwy	Sullivan	3,626	B/PS	\$20	\$72,521	1	0	1	0	1	2	0	2	0	0.3333	0.0000	0.3333	0.0000	0.3333	1.0000	0.0000	0.6667	0.0000	2.6667
Shared-Use Path	Lowrance Pl	E Stone Dr	Sullivan	6,573	B/SUP	\$150	\$573,576	1	1	1	1	1	0	0	3	0	0.3333	0.3333	0.3333	0.3333	0.3333	0.0000	0.0000	1.0000	0.0000	2.6667
Shadowtown Rd	Shipley Ferry Rd	Memorial Blvd	Sullivan	1,697	B/PS	\$20	\$33,943	0	0	3	0	0	2	0	1	0	0.0000	0.0000	1.0000	0.0000	0.0000	1.0000	0.0000	0.3333	0.0000	2.3333
Shipley Ferry Rd	Airport Pkwy	Shadowtown Rd	Sullivan	15,986	B/PS	\$20	\$319,712	0	0	3	0	0	2	0	1	0	0.0000	0.0000	1.0000	0.0000	0.0000	1.0000	0.0000	0.3333	0.0000	2.3333
SR 75	Robinwood Rd	Henry Ln	Sullivan	2,118	B/PS	\$20	\$42,367	3	0	0	0	0	2	0	1	0	1.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.3333	0.0000	2.3333
Tri Cities Xing / Snapps Ferry Rd	Kendrick Creek Rd	Rock Springs Rd	Sullivan	12,324	B/PS	\$20	\$126,432	1	0	1	1	0	0	2	1	0	0.3333	0.0000	0.3333	0.3333	0.0000	0.0000	1.0000	0.3333	0.0000	2.3333
Sullivan Garden Pkwy	Derby Dr	Murrel Rd	Sullivan	6,764	B/SUP	\$150	\$1,014,560	2	0	0	0	0	2	0	2	0	0.6667	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.6667	0.0000	2.3333
Sullivan Garden Pkwy	S Wilcox Dr	Lone Star Rd	Sullivan	24,588	B/PS	\$20	\$491,762	0	0	1	3	0	2	0	0	0	0.0000	0.0000	0.3333	1.0000	0.0000	1.0000	0.0000	0.0000	0.0000	2.3333
River Rd	Dead End	Goshen Valley Rd	Hawkins	16,245	B/PS	\$20	\$324,900	0	0	0	1	0	2	0	2	0	0.0000	0.0000	0.0000	0.3333	0.0000	1.0000	0.0000	0.6667	0.0000	2.0000
Wadlow Gap Hwy	Bristol Hwy	State Line	Scott	17,225	B/PS	\$20	\$344,504	0	0	1	0	0	0	2	2	0	0.0000	0.0000	0.3333	0.0000	0.0000	0.0000	1.0000	0.6667	0.0000	2.0000
Poplar Grove Rd	Blakley Dr	Mill Creek Rd	Sullivan	9,656	B/PS	\$20	\$193,118	1	1	1	1	0	0	0	2	0	0.3333	0.3333	0.3333	0.3333	0.0000	0.0000	0.0000	0.6667	0.0000	2.0000
W Jackson St	Daniel Boone Heritage Hwy	Sue St	Scott	3,742	B/PS	\$20	\$73,437	0	0	0	0	1	2	0	2	0	0.0000	0.0000	0.0000	0.0000	0.3333	1.0000	0.0000	0.6667	0.0000	2.0000
Old Mill Rd	Fall Creek Rd	Childress Ferry Rd	Sullivan	4,276	B/SL	\$30	\$128,288	0	1	0	0	1	0	2	1	0	0.0000	0.3333	0.0000	0.0000	0.3333	0.0000	1.0000	0.3333		

Prioritized Sidewalk Facilities

Road	From	To	County	Network	Linear Feet	Estimated Construction Cost	Safety		Demand					Equity		Safety		Demand					Equity		Ranking
							ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	
							ADT Weight	Crash Weight	Schools Weight	Parks Weight	Pop Density Weight	Commercial /Retail Weight	O/D Weight	Low-Income Weight	Transit Weight	ADT Norm. Weighted Criterion	Crash Norm. Weighted Criterion	Schools Norm. Weighted Criterion	Parks Norm. Weighted Criterion	Pop Density Norm. Weighted Criterion	/Retail Norm. Weighted Criterion	O/D Norm. Weighted Criterion	Low-Income Norm. Weighted Criterion	Transit Norm. Weighted Criterion	
							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Virgil Ave	Wampler St	Lynn Garden Dr	Sullivan	Secondary	4,254	\$2,127,000	1	3	3	3	2	2	2	3	3	0.3333	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.7500	8.0833
US 11 W	Independence Ave	Venture Park	Hawkins	Primary	5,901	\$2,950,500	3	1	2	3	1	2	2	3	3	1.0000	0.3333	0.6667	1.0000	0.5000	1.0000	1.0000	1.0000	0.7500	7.2500
US 11 W	Donelson Dr	Clinchfield St	Sullivan	Primary	3,209	\$1,604,500	3	2	3	3	1	2	0	3	3	1.0000	0.6667	1.0000	1.0000	0.5000	1.0000	0.0000	1.0000	0.7500	6.9167
US-11W	American Way	New Beason Wells Rd	Sullivan	Primary	2,032	\$1,016,000	3	3	1	3	1	2	0	3	4	1.0000	1.0000	0.3333	1.0000	0.5000	1.0000	0.0000	1.0000	1.0000	6.8333
Virgil Ave	Fairview Ave	Wampler St	Sullivan	Secondary	2,537	\$1,268,500	1	2	2	1	2	2	2	3	3	0.3333	0.6667	0.6667	0.3333	1.0000	1.0000	1.0000	1.0000	0.7500	6.7500
Tranbarger Dr	Virgil Ave	Colfax Ave	Sullivan	Secondary	4,482	\$2,241,000	1	3	2	1	1	2	2	3	3	0.3333	1.0000	0.6667	0.3333	0.5000	1.0000	1.0000	1.0000	0.7500	6.5833
Sullivan Gardens Pkwy	Rock Springs Dr	Belsay Dr	Sullivan	Primary	8,315	\$4,157,500	3	0	3	3	1	2	2	3	0	1.0000	0.0000	1.0000	1.0000	0.5000	1.0000	1.0000	1.0000	0.0000	6.5000
Lewis Ln	Bellingham Dr	C.E. Brooks Jr Way	Hawkins	Secondary	986	\$493,000	1	0	2	3	1	2	2	3	3	0.3333	0.0000	0.6667	1.0000	0.5000	1.0000	1.0000	1.0000	0.7500	6.2500
Netherland Inn Rd	Netherland Ter	W Center St	Sullivan	Primary	6,389	\$3,194,500	3	0	1	3	2	2	2	2	1	1.0000	0.0000	0.3333	1.0000	1.0000	1.0000	0.6667	0.2500	6.2500	
US 11 W	Deneen Ln	Afton St	Sullivan	Primary	2,427	\$1,213,500	3	2	1	3	1	2	2	0	3	1.0000	0.6667	0.3333	1.0000	0.5000	1.0000	1.0000	0.0000	0.7500	6.2500
US 11 W	Netherland Inn Rd	County Line	Hawkins	Primary	2,491	\$1,245,500	3	0	1	2	1	2	2	3	3	1.0000	0.0000	0.3333	0.6667	0.5000	1.0000	1.0000	1.0000	0.7500	6.2500
US 23 N	W Jackson St	Kane St	Scott	Primary	13,825	\$6,912,500	3	0	3	3	1	2	2	2	0	1.0000	0.0000	1.0000	1.0000	0.5000	1.0000	1.0000	0.6667	0.0000	6.1667
Fairview Ave	Granby Rd	Virgil Ave	Sullivan	Secondary	1,517	\$758,500	1	1	1	1	2	2	2	3	3	0.3333	0.3333	0.3333	0.3333	1.0000	1.0000	1.0000	1.0000	0.7500	6.0833
Fort Henry Dr	SR-93 Interchange	Thornton Dr	Sullivan	Primary	3,282	\$1,641,000	3	1	1	3	2	2	0	2	3	1.0000	0.3333	0.3333	1.0000	1.0000	1.0000	0.0000	0.6667	0.7500	6.0833
University Blvd	Bellingham Dr	US 11 W	Hawkins	Primary	1,402	\$701,000	1	1	3	3	1	2	0	3	3	0.3333	0.3333	1.0000	1.0000	0.5000	1.0000	0.0000	1.0000	0.7500	5.9167
US 11 W	Silver Lake Rd	Independence Ave	Hawkins	Primary	13,402	\$6,701,000	3	1	3	1	1	2	2	2	0	1.0000	0.3333	1.0000	0.3333	0.5000	1.0000	1.0000	0.6667	0.0000	5.8333
US 23 N	Kane St	Wadlow Gap Hwy	Scott	Primary	5,706	\$2,853,000	3	0	3	2	1	2	2	2	0	1.0000	0.0000	1.0000	0.6667	0.5000	1.0000	1.0000	0.6667	0.0000	5.8333
Fort Henry Dr	Hemlock Rd	I-81	Sullivan	Primary	7,314	\$3,657,000	3	3	2	1	2	2	0	1	1	1.0000	1.0000	0.6667	0.3333	1.0000	1.0000	0.0000	0.3333	0.2500	5.5833
Bloomingtondale Rd / Bloomingdale Pke	Wadlow Gap Hwy	Larry Neil Way	Sullivan	Primary	14,585	\$7,292,500	0	0	3	3	2	2	2	0	3	0.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.7500	5.7500
New Beason Well Rd	Tate Dr	Sussex Dr	Sullivan	Primary	6,611	\$3,305,500	1	2	2	1	1	2	2	3	0	0.3333	0.6667	0.6667	0.3333	0.5000	1.0000	1.0000	1.0000	0.0000	5.5000
US 11 W	County Line	Deneen Ln	Sullivan	Primary	4,608	\$2,304,000	3	3	0	3	0	2	2	0	2	1.0000	1.0000	0.0000	1.0000	0.0000	1.0000	1.0000	0.0000	0.5000	5.5000
Sullivan Gardens Pkwy	Rock Springs Dr	Lone Star Rd	Sullivan	Primary	3,594	\$1,797,000	3	1	3	1	1	2	2	1	0	1.0000	0.3333	1.0000	0.3333	0.5000	1.0000	1.0000	0.3333	0.0000	5.5000
Lewis Ln	Ferndale Ln	Bellingham Dr	Hawkins	Secondary	1,438	\$719,000	0	0	2	3	1	2	2	2	2	0.0000	0.0000	0.6667	1.0000	0.5000	1.0000	1.0000	0.6667	0.5000	5.3334
Sullivan Gardens Pkwy	Belsay Dr	I-26	Sullivan	Primary	4,497	\$2,248,500	3	2	0	2	0	2	2	3	0	1.0000	0.6667	0.0000	0.6667	0.0000	1.0000	1.0000	1.0000	0.0000	5.3333
Fort Henry Dr	Thornton Dr	Ft Patrick Dam Maintenance Rd	Sullivan	Primary	4,109	\$2,054,500	3	1	0	3	1	2	0	2	3	1.0000	0.3333	0.0000	1.0000	0.5000	1.0000	0.0000	0.6667	0.7500	5.2500
Jackson St	Red Hill Rd	Old Nickelsville Rd	Scott	Primary	3,473	\$1,736,500	2	0	2	3	1	2	2	1	0	0.6667	0.0000	0.6667	1.0000	0.5000	1.0000	1.0000	0.3333	0.0000	5.1667
University Blvd	Wellington Blvd	Bellingham Dr	Hawkins	Primary	1,224	\$612,000	1	0	3	3	1	2	0	3	1	0.3333	0.0000	1.0000	1.0000	0.5000	1.0000	0.0000	1.0000	0.2500	5.0833
Gravelly Rd	Lynn Garden Dr	Ridgecrest Ave	Sullivan	Secondary	2,689	\$1,344,500	1	1	3	3	1	2	0	1	2	0.3333	0.3333	1.0000	1.0000	0.5000	1.0000	0.0000	0.3333	0.5000	5.0000
Fort Henry Dr	Ft Patrick Dam Maintenance Rd	VFW Rd	Sullivan	Primary	2,722	\$1,361,000	3	0	0	2	1	2	0	3	3	1.0000	0.0000	0.0000	0.6667	0.5000	1.0000	0.0000	1.0000	0.7500	4.9167
Independence Ave	Meadow Springs Ln	US 11 W	Hawkins	Primary	2,209	\$1,104,500	1	0	2	1	1	2	2	3	0	0.3333	0.0000	0.6667	0.3333	0.5000	1.0000	1.0000	1.0000	0.0000	4.8333
Reservoir Rd	Willowbrook Trce	New Moore Rd	Sullivan	Primary	3,178	\$1,588,885	1	0	0	3	1	2	2	3	0	0.3333	0.0000	0.0000	1.0000	0.5000	1.0000	1.0000	1.0000	0.0000	4.8333
Virgil Ave	Union St	Fairview Ave	Sullivan	Secondary	2,640	\$1,320,000	0	1	1	1	2	2	0	3	3	0.0000	0.3333	0.3333	0.3333	1.0000	1.0000	0.0000	1.0000	0.7500	4.7500
US 11 W	Afg Rd	Tipton Ave	Hawkins	Primary	6,880	\$3,440,																			

Prioritized Sidewalk Facilities (cont.)

Road	From	To	County	Network	Linear Feet	Estimated Construction Cost	Safety		Demand					Equity		Safety		Demand					Equity		Ranking
							ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	
							ADT Weight	Crash Weight	Schools Weight	Parks Weight	Pop Density Weight	Commercial /Retail Weight	O/D Weight	Low-Income Weight	Transit Weight	ADT Norm. Weighted Criterion	Crash Norm. Weighted Criterion	Schools Norm. Weighted Criterion	Parks Norm. Weighted Criterion	Pop Density Norm. Weighted Criterion	/Retail Norm. Weighted Criterion	O/D Norm. Weighted Criterion	Low-Income Norm. Weighted Criterion	Transit Norm. Weighted Criterion	
Kingsport Press Rd	US 11 W	Business Rd	Hawkins	Secondary	3,227	\$1,613,500	1	0	3	0	0	2	2	2	0	0.3333	0.0000	1.0000	0.0000	0.0000	1.0000	1.0000	0.6667	0.0000	4.0000
Wadlow Gap Hwy	US 23 S	Bristol Hwy	Scott	Primary	1,410	\$705,000	3	0	1	0	0	2	2	2	0	1.0000	0.0000	0.3333	0.0000	0.0000	1.0000	1.0000	0.6667	0.0000	4.0000
Fort Henry Dr	Wesley Rd	Fort Henry Dr	Sullivan	Primary	1,648	\$412,000	3	0	0	2	1	0	0	3	3	1.0000	0.0000	0.0000	0.6667	0.5000	0.0000	0.0000	1.0000	0.7500	3.9167
Thornton Dr	Red Bud Dr	Atoka Cir	Sullivan	Secondary	1,111	\$555,500	0	0	0	3	1	2	0	2	3	0.0000	0.0000	0.0000	1.0000	0.5000	1.0000	0.0000	0.6667	0.7500	3.9167
Lebanon Rd	Fort Henry Dr	Grove Dr	Sullivan	Primary	2,823	\$1,411,500	1	1	3	1	1	2	0	1	0	0.3333	0.3333	1.0000	0.3333	0.5000	1.0000	0.0000	0.3333	0.0000	3.8333
Glen Alpine Rd	Princeton Rd	Sullivan Gardens Dr	Sullivan	Secondary	1,491	\$745,500	0	0	2	2	1	2	0	3	0	0.0000	0.0000	0.6667	0.6667	0.5000	1.0000	0.0000	1.0000	0.0000	3.8333
Gravelly Rd	Ridgecrest Ave	Kincaid St	Sullivan	Secondary	1,838	\$919,000	1	1	3	2	1	0	0	3	0	0.3333	0.3333	1.0000	0.6667	0.5000	0.0000	0.0000	1.0000	0.0000	3.8333
Manville Rd	Burnt Cabin Branch Dr	W Jackson St	Scott	Secondary	3,504	\$1,752,000	1	0	2	2	1	2	0	2	0	0.3333	0.0000	0.6667	0.6667	0.5000	1.0000	0.0000	0.6667	0.0000	3.8333
Rock Springs Dr	Poplar Grove Rd	Cox Hollow Rd	Sullivan	Primary	2,795	\$1,397,500	2	0	0	3	1	0	2	2	0	0.6667	0.0000	0.0000	1.0000	0.5000	0.0000	1.0000	0.6667	0.0000	3.8333
US 11 W	Garland Ave	Silver Lake Rd	Hawkins	Primary	4,434	\$2,217,000	3	0	2	0	1	2	0	2	0	1.0000	0.0000	0.6667	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	3.8333
US 11 W	New Canton Rd	Goshen Valley Rd	Hawkins	Primary	10,307	\$5,153,500	3	0	1	0	1	2	0	3	0	1.0000	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	1.0000	0.0000	3.8333
W Main Blvd	Grey Brothers Store Rd	S Central Ave	Hawkins	Primary	1,640	\$820,000	1	0	3	0	1	2	2	0	0	0.3333	0.0000	1.0000	0.0000	0.5000	1.0000	1.0000	0.0000	0.0000	3.8333
Walnut St	Independence Ave	Residential House	Hawkins	Secondary	424	\$212,000	1	0	2	1	1	2	0	3	0	0.3333	0.0000	0.6667	0.3333	0.5000	1.0000	0.0000	1.0000	0.0000	3.8333
Wilcox Dr	Meadowview Pwky	John B Dennis Hwy	Sullivan	Primary	2,016	\$1,008,000	3	0	0	1	0	2	0	3	2	1.0000	0.0000	0.0000	0.3333	0.0000	1.0000	0.0000	1.0000	0.5000	3.8333
Netherland Inn Rd	County Line	Neterland Ter	Sullivan	Primary	4,158	\$2,079,000	3	0	0	3	1	2	0	0	1	1.0000	0.0000	0.0000	1.0000	0.5000	1.0000	0.0000	0.0000	0.2500	3.7500
S Wilcox Dr	Wilcox Dr	John B Dennis Hwy	Sullivan	Primary	2,329	\$1,164,500	2	0	0	1	0	2	0	3	3	0.6667	0.0000	0.0000	0.3333	0.0000	1.0000	0.0000	1.0000	0.7500	3.7500
Airport Pkwy	Harry Steadman Dr	SR-75	Sullivan	Primary	2,676	\$1,338,000	2	0	2	0	0	2	2	1	0	0.6667	0.0000	0.6667	0.0000	0.0000	1.0000	1.0000	0.3333	0.0000	3.6667
Moreland Dr	Rock Springs Rd	Fort Henry Dr	Sullivan	Primary	7,790	\$3,895,000	2	1	1	0	1	2	0	1	2	0.6667	0.3333	0.3333	0.0000	0.5000	1.0000	0.0000	0.3333	0.5000	3.6667
New Moore Rd	Princeton Rd	Sullivan Gardens Pwky	Sullivan	Secondary	763	\$381,500	1	0	0	1	0	2	2	3	0	0.3333	0.0000	0.0000	0.3333	0.0000	1.0000	1.0000	1.0000	0.0000	3.6667
Carters Valley Rd	Independence Ave	McCracken Ln	Hawkins	Primary	4,986	\$2,493,000	1	1	0	0	1	2	2	1	0	0.3333	0.3333	0.0000	0.0000	0.5000	1.0000	1.0000	0.3333	0.0000	3.5000
Fort Henry Dr	VFW Rd	Moreland Dr	Sullivan	Primary	1,983	\$991,500	3	1	1	1	0	2	0	0	2	1.0000	0.3333	0.3333	0.3333	0.0000	1.0000	0.0000	0.0000	0.5000	3.5000
Independence Ave	Tranbarger Rd	Walnut St	Hawkins	Primary	3,163	\$1,581,500	1	0	1	1	1	2	0	3	0	0.3333	0.0000	0.3333	0.3333	0.5000	1.0000	0.0000	1.0000	0.0000	3.5000
US 11 W	Goshen Valley Rd	Garland Ave	Hawkins	Primary	6,564	\$3,282,000	3	0	2	0	1	2	0	1	0	1.0000	0.0000	0.6667	0.0000	0.5000	1.0000	0.0000	0.3333	0.0000	3.5000
US 11 W	New Beason Well Rd	Arcadia Dr	Sullivan	Primary	13,110	\$6,555,000	3	1	0	1	1	2	0	1	0	1.0000	0.3333	0.0000	0.3333	0.5000	1.0000	0.0000	0.3333	0.0000	3.5000
E Main Blvd	Old Stage Rd	Silver Lake Rd	Hawkins	Primary	3,931	\$1,965,500	1	0	3	0	1	2	0	2	0	0.3333	0.0000	1.0000	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	3.5000
Forest View Rd	Myron St	Bloomingdale Rd	Sullivan	Secondary	1,291	\$645,500	1	0	3	0	1	2	0	2	0	0.3333	0.0000	1.0000	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	3.5000
W Carters Valley Rd	Harrison Ave	Tenneva St	Sullivan	Primary	1,617	\$808,500	2	1	1	0	1	2	0	2	0	0.6667	0.3333	0.3333	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	3.5000
Essex Dr	North of Sheffield St	Beechnut Dr	Sullivan	Secondary	1,423	\$711,500	1	0	1	2	1	0	2	1	1	0.3333	0.0000	0.3333	0.6667	0.5000	0.0000	1.0000	0.3333	0.2500	3.4167
Airport Pkwy	Centenary Rd	Harry Steadman Dr	Sullivan	Primary	4,641	\$2,320,500	2	0	1	0	0	2	2	1	0	0.6667	0.0000	0.3333	0.0000	0.0000	1.0000	1.0000	0.3333	0.0000	3.3333
US 11 W	Crown Cir	Ollis Bowers Hill Rd	Sullivan	Primary	5,889	\$2,944,500	3	0	0	0	0	2	2	1	0	1.0000	0.0000	0.0000	0.0000	0.0000	1.0000	1.0000	0.3333	0.0000	3.3333
Elm Springs Rd	Rogan St	Holliston Mills Rd	Hawkins	Secondary	1,552	\$776,000	0	0	2	0	0	2	2	2	0	0.0000	0.0000	0.6667	0.0000	0.0000	1.0000	1.0000	0.6667	0.0000	3.3333
Harbor Chapel Rd	Memorial Blvd	Skyland Dr	Sullivan	Primary	1,045	\$522,500	1	0	0	1	2	2	0	2	0	0.3333	0.0000	0.0000	0.3333	1.0000	1.0000	0.0000	0.6667	0.0000	3.3333
Lane St	Old Union Rd	N Central Ave	Hawkins	Primary	2,885	\$1,442,500	0	0	1	0	2	2	0	3	0	0.0000	0.0000	0.3333	0.0000	1.0000	1.0000	0.0000	1.0000	0.0000	3.3333
Moreland Dr	John B Dennis Hwy	Pong Springs Rd	Sullivan	Primary	4,254	\$2,127,000	2	0	1	1	0	2	0												



Prioritized Sidewalk Facilities (cont.)

Road	From	To	County	Network	Linear Feet	Estimated Construction Cost	Safety		Demand					Equity		Safety		Demand					Equity		Ranking
							ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	
							ADT Weight	Crash Weight	Schools Weight	Parks Weight	Pop Density Weight	Commercial /Retail Weight	O/D Weight	Low-Income Weight	Transit Weight	ADT Norm. Weighted Criterion	Crash Norm. Weighted Criterion	Schools Norm. Weighted Criterion	Parks Norm. Weighted Criterion	Pop Density Norm. Weighted Criterion	/Retail Norm. Weighted Criterion	O/D Norm. Weighted Criterion	Low-Income Norm. Weighted Criterion	Transit Norm. Weighted Criterion	
Old Stage Rd	Deerfield Cir	E Main Blvd	Hawkins	Primary	400	\$200,000	1	0	1	0	1	0	2	2	0	0.3333	0.0000	0.3333	0.0000	0.5000	0.0000	1.0000	0.6667	0.0000	2.8333
Old Stage Rd	Silver Lake Rd	Carolyn Ave	Hawkins	Secondary	2,444	\$1,222,000	1	0	1	0	1	2	0	2	0	0.3333	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	2.8333
W Main Blvd	W Main Blvd	Chickasaw Cir	Hawkins	Secondary	2,135	\$1,067,500	1	0	0	0	1	2	0	3	0	0.3333	0.0000	0.0000	0.0000	0.5000	1.0000	0.0000	1.0000	0.0000	2.8333
Eastern Star Rd	Fordtown Rd	Mitchell Rd	Sullivan	Secondary	3,653	\$1,826,500	1	0	1	0	2	2	0	0	0	0.3333	0.0000	0.3333	0.0000	1.0000	1.0000	0.0000	0.0000	0.0000	2.6667
Fall Creek Rd	Steep Hill Rd	Emory Church Rd	Sullivan	Primary	3,318	\$1,659,000	1	1	0	0	1	0	2	1	0	0.3333	0.3333	0.0000	0.0000	0.5000	0.0000	1.0000	0.3333	0.0000	2.5000
Grey Brothers Store Rd	W Main Blvd	US 11 W	Hawkins	Primary	1,153	\$576,500	1	0	2	0	1	2	0	0	0	0.3333	0.0000	0.6667	0.0000	0.5000	1.0000	0.0000	0.0000	0.0000	2.5000
Harr Town Rd	Highridge Dr	Memorial Blvd	Sullivan	Secondary	5,786	\$2,893,000	0	0	1	0	1	2	0	2	0	0.0000	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	2.5000
Independence Ave	Walnut St	Meadow Springs Ln	Hawkins	Primary	2,253	\$1,126,500	1	0	1	1	1	0	0	3	0	0.3333	0.0000	0.3333	0.3333	0.5000	0.0000	0.0000	1.0000	0.0000	2.5000
Lone Star Rd	Potato Hill Rd	Sullivan Gardens Pwky	Sullivan	Primary	2,960	\$1,480,000	1	0	1	0	1	0	2	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	0.0000	1.0000	0.3333	0.0000	2.5000
Montgomery Ave	Cedar St	Beech St	Hawkins	Secondary	1,891	\$945,500	1	0	0	0	1	2	0	2	0	0.3333	0.0000	0.0000	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	2.5000
N Holston River Dr	Brentwood Dr	Granby Rd	Sullivan	Secondary	8,628	\$4,314,000	1	0	1	1	1	0	0	3	0	0.3333	0.0000	0.3333	0.3333	0.5000	0.0000	0.0000	1.0000	0.0000	2.5000
Old Stage Rd	Carolyn Ave	Montgomery Ave	Hawkins	Secondary	2,826	\$1,413,000	1	0	0	0	1	2	0	2	0	0.3333	0.0000	0.0000	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	2.5000
S Central Ave	Hamilton St	Silver Lake Rd	Hawkins	Secondary	2,707	\$1,353,500	1	0	1	0	1	2	0	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	0.3333	0.0000	2.5000
S Central Ave	US 11 W	Hamilton St	Hawkins	Secondary	1,954	\$977,000	1	0	1	0	1	2	0	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	0.3333	0.0000	2.5000
Silver Lake Rd	Linville St	Riverview Dr	Hawkins	Secondary	2,724	\$1,362,000	1	0	1	0	1	2	0	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	0.3333	0.0000	2.5000
Silver Lake Rd	Ordnance Dr	Linville St	Hawkins	Secondary	2,060	\$1,030,000	1	0	1	0	1	2	0	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	0.3333	0.0000	2.5000
Silver Lake Rd	US 11 W	Ordnance Dr	Hawkins	Secondary	744	\$372,000	1	0	1	0	1	2	0	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	1.0000	0.0000	0.3333	0.0000	2.5000
W Jackson St	US 23 N	Park St	Scott	Primary	5,689	\$2,844,500	1	0	0	0	1	2	0	2	0	0.3333	0.0000	0.0000	0.0000	0.5000	1.0000	0.0000	0.6667	0.0000	2.5000
W Main Blvd	Old Union Rd	Grey Brothers Store Rd	Hawkins	Secondary	2,989	\$1,494,500	1	0	2	0	1	2	0	0	0	0.3333	0.0000	0.6667	0.0000	0.5000	1.0000	0.0000	0.0000	0.0000	2.5000
N John B Dennis Hwy	Bloomingsdale Rd	Pavilion Dr	Sullivan	Primary	11,239	\$5,619,500	0	0	3	0	1	2	0	0	0	0.0000	0.0000	1.0000	0.0000	0.5000	1.0000	0.0000	0.0000	0.0000	2.5000
Airport Pkwy	I-81	Shipley Ferry Rd	Sullivan	Primary	2,319	\$1,159,500	2	1	0	0	0	2	0	1	0	0.6667	0.3333	0.0000	0.0000	0.0000	1.0000	0.0000	0.3333	0.0000	2.3333
Airport Pkwy	Shipley Ferry Rd	Centenary Rd	Sullivan	Primary	2,798	\$1,399,000	2	0	1	0	0	2	0	1	0	0.6667	0.0000	0.3333	0.0000	0.0000	1.0000	0.0000	0.3333	0.0000	2.3333
US 11 W	Arcadia Dr	Crown Cir	Sullivan	Primary	3,567	\$1,783,500	3	0	0	0	0	2	0	1	0	1.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.3333	0.0000	2.3333
Fordtown Rd	Breckenridge Trce	Lebanon Rd	Sullivan	Primary	2,665	\$1,332,500	1	0	3	0	0	2	0	0	0	0.3333	0.0000	1.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	2.3333
Fordtown Rd	Kendrick Creek Rd	Breckenridge Trce	Sullivan	Primary	3,444	\$1,722,000	1	0	3	0	0	2	0	0	0	0.3333	0.0000	1.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	2.3333
Lebanon Rd	Grove Dr	Chesterfield Dr	Sullivan	Primary	3,549	\$1,774,500	1	0	3	0	2	0	0	0	0	0.3333	0.0000	1.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	2.3333
Mill Creek Rd	Sullivan Gardens Pkwy	Twin Hills Dr	Sullivan	Primary	3,527	\$1,763,500	1	0	1	0	0	2	0	2	0	0.3333	0.0000	0.3333	0.0000	0.0000	1.0000	0.0000	0.6667	0.0000	2.3333
Reservoir Rd	Bays Mountain Park Rd	Glen Alpine Rd	Sullivan	Primary	5,109	\$2,554,500	0	0	1	3	0	0	0	3	0	0.0000	0.0000	0.3333	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	2.3333
Reservoir Rd	Hood Rd	Bays Mountain Park Rd	Sullivan	Primary	4,794	\$2,397,000	0	0	1	3	0	0	0	3	0	0.0000	0.0000	0.3333	1.0000	0.0000	0.0000	0.0000	1.0000	0.0000	2.3333
Reservoir Rd	Hood Rd	Willowbrook Trce	Sullivan	Primary	3,397	\$1,698,500	0	0	0	1	0	0	2	3	0	0.0000	0.0000	0.0000	0.3333	0.0000	0.0000	1.0000	1.0000	0.0000	2.3333
Colonial Heights Rd	Hemlock Rd	Warrior Dr	Sullivan	Primary	3,758	\$1,879,000	1	0	0	1	1	0	2	0	0	0.3333	0.0000	0.0000	0.3333	0.5000	0.0000	1.0000	0.0000	0.0000	2.1667
Cooks Valley Rd	Emory Church Rd	Palomino Dr	Sullivan	Primary	5,718	\$2,859,000	1	1	0	0	1	2	0	0	0	0.3333	0.3333	0.0000	0.0000	0.5000	1.0000	0.0000	0.0000	0.0000	2.1667
Emory Church Rd	Lake Park Dr	Fall Creek Rd	Sullivan	Primary	2,703	\$1,351,500	0	1	0	0	1	0	2	1	0	0.0000	0.3333	0.0000	0.0000	0.5000	0.0000	1.0000	0.3333	0.0000	2.1667
Independence Ave	Carters Valley Rd	Redwood St	Hawkins	Primary	5,088	\$2,544,000	1	0	0	0	1	2	0	1	0	0.3333									

Prioritized Sidewalk Facilities (cont.)

Road	From	To	County	Network	Linear Feet	Estimated Construction Cost	Safety		Demand					Equity		Safety		Demand					Equity		Ranking
							ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	ADT	Crash	Schools	Parks	Pop Density	Commercial /Retail	O/D	Low-Income	Transit	
							ADT Weight	Crash Weight	Schools Weight	Parks Weight	Pop Density Weight	Commercial /Retail Weight	O/D Weight	Low-Income Weight	Transit Weight	ADT Norm. Weighted Criterion	Crash Norm. Weighted Criterion	Schools Norm. Weighted Criterion	Parks Norm. Weighted Criterion	Pop Density Norm. Weighted Criterion	/Retail Norm. Weighted Criterion	O/D Norm. Weighted Criterion	Low-Income Norm. Weighted Criterion	Transit Norm. Weighted Criterion	
							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00										
Lone Star Rd	Stardust Rd	Potato Hill Rd	Sullivan	Primary	3,969	\$1,984,500	1	0	1	0	1	0	0	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	1.5000
Yuma Rd	Warm Springs Rd	US 23	Scott	Secondary	1,343	\$335,750	1	0	1	0	1	0	0	1	0	0.3333	0.0000	0.3333	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	1.5000
Eastern Star Rd	Mitchell Rd	I-26 On-Ramp	Sullivan	Secondary	1,284	\$642,000	1	0	0	0	0	2	0	0	0	0.3333	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	1.3333
Fall Creek Rd	Park Ridge Ct	Hemlock Rd	Sullivan	Primary	5,493	\$2,746,500	1	0	0	3	0	0	0	0	0	0.3333	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.3333
Fordtown Rd	Deck St	Fondulac Dr	Sullivan	Primary	3,531	\$1,765,500	1	0	1	0	0	0	0	2	0	0.3333	0.0000	0.3333	0.0000	0.0000	0.0000	0.0000	0.0000	0.6667	1.3333
Jackson St	Old Nickelsville Rd	Shotgun Dr	Scott	Primary	3,286	\$1,643,000	1	0	1	1	0	0	0	1	0	0.3333	0.0000	0.3333	0.3333	0.0000	0.0000	0.0000	0.3333	0.0000	1.3333
Poplar Grove Rd	Twin Hills Dr	Bell Hollow Rd	Sullivan	Primary	4,282	\$2,141,000	1	0	1	0	0	0	0	2	0	0.3333	0.0000	0.3333	0.0000	0.0000	0.0000	0.0000	0.6667	0.0000	1.3333
Twin Hills Dr	Mill Creek Rd	Poplar Grove Rd	Sullivan	Primary	734	\$367,000	1	0	1	0	0	0	0	2	0	0.3333	0.0000	0.3333	0.0000	0.0000	0.0000	0.0000	0.6667	0.0000	1.3333
W Main Blvd	US 11 W	W Main Blvd	Hawkins	Secondary	1,927	\$963,500	1	0	0	0	0	0	0	3	0	0.3333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	1.3333
Carters Valley Rd	Mt pleasant Rd	Independence Ave	Hawkins	Primary	5,346	\$2,673,000	1	0	0	0	1	0	0	1	0	0.3333	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	1.1667
E Carters Valley Rd	Carters Valley Gdns	State Line	Sullivan	Secondary	818	\$409,000	1	0	0	0	1	0	0	1	0	0.3333	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	1.1667
Fall Creek Rd	Pettyjohn Rd	Steep Hill Rd	Sullivan	Primary	3,006	\$1,503,000	1	0	0	0	1	0	0	1	0	0.3333	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	1.1667
Hemlock Rd	Colonial Heights Rd	Fall Creek Rd	Sullivan	Primary	624	\$312,000	1	0	0	1	1	0	0	0	0	0.3333	0.0000	0.0000	0.3333	0.5000	0.0000	0.0000	0.0000	0.0000	1.1667
Independence Ave	Redwood St	Tranbarger Rd	Hawkins	Primary	4,283	\$2,141,500	1	0	0	0	1	0	0	1	0	0.3333	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	1.1667
Lebanon Rd	Sandridge Dr	Fordtown Rd	Sullivan	Primary	1,316	\$658,000	1	0	2	0	0	0	0	0	0	0.3333	0.0000	0.6667	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
Veterans Memorial Hwy	Golf Course Rd	Jackson St	Scott	Primary	6,469	\$3,234,500	1	0	1	0	0	0	0	1	0	0.3333	0.0000	0.3333	0.0000	0.0000	0.0000	0.0000	0.3333	0.0000	1.0000
Cooks Valley Rd	Harbor Springs Rd	Harbor Chapel Rd	Sullivan	Primary	1,731	\$865,500	1	0	0	0	1	0	0	0	0	0.3333	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.0000	0.0000	0.8333
Cooks Valley Rd	Memorial Blvd	Emory Church Rd	Sullivan	Primary	3,902	\$1,951,000	1	0	0	0	1	0	0	0	0	0.3333	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.0000	0.0000	0.8333
Emory Church Rd	Cedar Branch Rd	Lake Park Dr	Sullivan	Primary	2,016	\$1,008,000	0	0	0	0	1	0	0	1	0	0.0000	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	0.8333
Emory Church Rd	Pettyjohn Rd	Cedar Branch Rd	Sullivan	Primary	2,664	\$1,332,000	0	0	0	0	1	0	0	1	0	0.0000	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.3333	0.0000	0.8333
Fall Creek Rd	Warrior Falls Dr	Park Ridge Ct	Sullivan	Primary	2,557	\$1,278,500	1	0	0	1	0	0	0	0	0	0.3333	0.0000	0.0000	0.3333	0.0000	0.0000	0.0000	0.0000	0.0000	0.6667
Reservoir Rd	Glen Alpine Rd	Lone Star Rd	Sullivan	Primary	8,777	\$4,388,500	0	0	0	1	0	0	0	1	0	0.0000	0.0000	0.0000	0.3333	0.0000	0.0000	0.0000	0.3333	0.0000	0.6667
Emory Church Rd	Cooks Valley Rd	Pettyjohn Rd	Sullivan	Primary	1,681	\$840,500	0	0	0	0	1	0	0	0	0	0.0000	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.0000	0.0000	0.5000
May Ave	High Point Ave	Lynn Garden Dr	Sullivan	Secondary	171	\$85,500	0	0	0	0	0	0	0	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



