

**LANSING MOVES**

**2021**  
**Pedestrian and Bicycle Plan**  
*Town of Lansing, NC*

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Integrated Mobility Division  
N.C. DEPARTMENT OF TRANSPORTATION



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July 13, 2021



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# ACKNOWLEDGMENTS

Some Lansing residents are deeply rooted in the Town and Ashe County while others are relatively newcomers. What they all share is a passion to improve the Town while honoring its legacy. A plan such as this is only as strong as the voices it represents, and this Plan represents the voices that make Lansing the special place it is. We sincerely appreciate all of those who were a part of the development of this Pedestrian and Bicycle Plan and who reflected their passion and care for the community in these pages.

## The Residents and Visitors of Lansing

### Lansing Board of Aldermen

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Jim Blevins

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Anita Greenwood

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Larry Blevins, *Town of Lansing*

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Doug Goss, *Virginia Creeper Trail Volunteer*

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# TABLE OF CONTENTS

- INTRODUCTION** ..... 10
  - Project Background ..... 10
  - Purpose & Goals ..... 11
  - Why Lansing Moves is Important ..... 12
  
- COMMUNITY ANALYSIS** ..... 16
  - History ..... 16
  - Demographics ..... 17
  - Physical Characteristics & Transportation Network ..... 18
  - Overview: People Walking & Biking ..... 21
  - Opportunities & Challenges ..... 25
  - Local, Regional and State Plans ..... 26
  - Community Engagement ..... 28
  
- PEDESTRIAN & BICYCLE NETWORK PLAN** ..... 32
  - How We Got Here ..... 32
  - Main Corridors and Focus Area ..... 34
  - Regional Connections ..... 35
  - Project Ranking ..... 36
  - Facility Types ..... 37
  - Final Priority Projects ..... 38
  - PROJECT GOAL MATRIX ..... 74
  - Secondary Projects ..... 75
  
- IMPLEMENTATION PLAN** ..... 78
  - Lifecycle of a Multimodal Project ..... 78
  - The Action Plan ..... 79
  - Potential Funding Sources ..... 82
  
- CLOSING** ..... 86
  
- APPENDIX** ..... See Separate Document

# INDEX OF FIGURES, IMAGES, MAPS & TABLES

## FIGURES

Figure 1. The Many Benefits of Bicycling and Walking Infrastructure to Our Selves and Communities.....	12
Figure 2. Demographic Snapshot of Lansing Compared to Ashe County as a Whole.....	17
Figure 3. Heat Map from Strava Indicating Relative Walking/Running/Hiking Use in the Lansing Area.....	24
Figure 4. Heat Map from Strava Indicating Relative Biking Use in the Lansing Area.....	24
Figure 5. Opportunities and Constraints for Bicycle and Pedestrian Network Expansion.....	25
Figure 6. Plans Reviewed.....	26
Figure 7. Sequence of Meetings.....	29
Figure 8. This describes the key steps in developing pedestrian and bicycle projects alongside community engagement tasks. ....	33
Figure 9. The Vision and Priorities for Pedestrian and Bicycle Connectivity in Lansing.....	34
Figure 10. Lansing Sits at the Heart of Long-Term Trail Ideas in this Region.....	35
Figure 11. Graphic Illustrating the Typical “Lifecycle” of a Multimodal Project; Lansing Moves is in the Guiding Plan Phase.....	78

## IMAGES

Image 1. Train Depot in Lansing, NC; Date Unknown.....	16
Image 2. A Train Headed Towards West Jefferson from Lansing; Date Unknown.....	16
Image 3. & 4. People Walking & Biking the Lansing Creeper Trail.....	21
Image 5. Residents and Visitors Gathering for the April 2021 Public Meeting.....	28
Image 6. Community Members Learning About Project Details.....	28
Image 7. January 2021 Site Visit in the Creeper Trail Park.....	28
Image 8. Historic Lansing School and Future Home of the Lost Province Center for Cultural Arts.....	32
Image 9. Lansing Creeper Trail Southern Section.....	32
Image 10. NC-194 Traveling South of Downtown Towards the Town Limits.....	75
Image 11. Ashe County Middle School.....	75
Image 12. Lansing from Above.....	87

## MAPS

Map 1. Lansing is in the Western North Carolina County of Ashe, Proximate to the Tennessee and Virginia Borders.....	19
Map 2. Lansing Key Destinations are Largely Located along NC-194.....	20
Map 3. Lansing Existing Sidewalk Network.....	22
Map 4. Lansing Existing Greenway Network.....	23
Map 5. Lansing Pedestrian and Bicycle Priority Project Network.....	39

## TABLES

Table 1. Primary Facility Types for Lansing.....	37
Table 2. Action Plan.....	79

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# INTRODUCTION

# INTRODUCTION

## PROJECT BACKGROUND

The residents and leadership of Lansing know they live in a special community. Rather than keep it for themselves, they have been working tirelessly – with a small budget and dedicated volunteers – to improve the Town and make it a desirable place to live and visit. One aspect on which they have placed a strong emphasis is access to outdoor recreation and cultural sites. The Town has successfully expanded and improved the Lansing Creeper Trail Park, they are revitalizing the Lost Province Center for the Cultural Arts (LPCCA) and are now shifting their focus to Lansing’s pedestrian and bicycle network to enhance quality of life, tourism and economic development.

To give the Town the blueprint to achieve its goals, in 2019 they applied to the North Carolina Department of Transportation (NCDOT) Integrated Mobility Division for a Bicycle and Pedestrian Planning Grant - Project Acceleration Planning Grant. In 2020, they were awarded funds to develop such an Accelerated Plan. The purpose of this Plan is to provide a framework for the Town, County, High Country Regional Planning Organization (RPO), residents, NCDOT, developers and other partners to create the vision of a multimodal network and supporting policies to see that through.



### WHAT IS A PROJECT ACCELERATION PLAN?

These plans are envisioned as a focused document concentrating on the identification of priority projects that are implementable for smaller communities with more limited resources.



## PURPOSE & GOALS

The following represents the project purpose and goals as developed with the Project Steering Committee.

### **Connect Lansing**

Identify the projects to connect key locations for people walking and biking.

### **Identify the Network**

Determine priority projects, costs, and funding opportunities.

### **Build a Pedestrian & Bicycle Friendly Lansing**

Identify programs, policies and funding strategies to promote walking and biking.

1

#### **GOAL 1**

**Providing connectivity  
on foot and bike**

2

#### **GOAL 2**

**Ensuring economic  
resiliency**

3

#### **GOAL 3**

**Enabling residents and  
visitors to park once and  
walk/bike**

4

#### **GOAL 4**

**Creating a sense of place  
that tells Lansing's story**

## WHY LANSING MOVES IS IMPORTANT

Building walk and bike friendly communities has certainly become more commonplace in the US over the last decade, and for good reason. The return on investment from multimodal programs and infrastructure is significant; walking and biking is great for communities large and small, urban and rural, and everything in between. These benefits are not just at the community level but also for the individual quality of life.

In 2018, NC State University's Institute of Transportation Research and Education (ITRE) released findings from a study evaluating the economic impacts of four shared use paths in the state; the study found that: **every \$1.00 of trail construction supports \$1.72 annually from local business revenue, sales tax revenue and benefits related to health and transportation.**

In a town like Lansing, where the destinations are close by and there are existing sidewalks and greenways, these benefits are especially meaningful, and the impacts of future expansion will be significant. Figure 1 from the Carolina Thread Trail describes the health, economic, environmental and community benefits of walking and biking infrastructure. Appendix C describes the benefits of walking and biking in more detail.

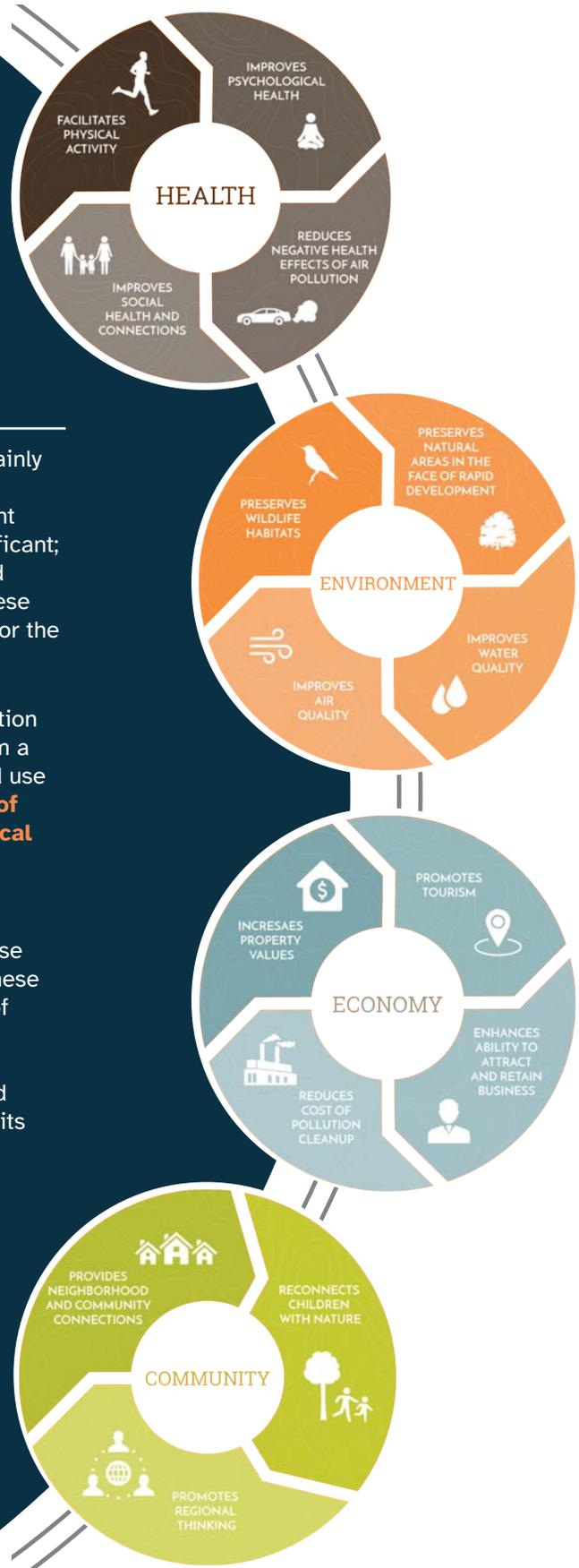


Figure 1. The Many Benefits of Bicycling and Walking Infrastructure to Our Selves and Communities (Source: Carolina Thread Trail)

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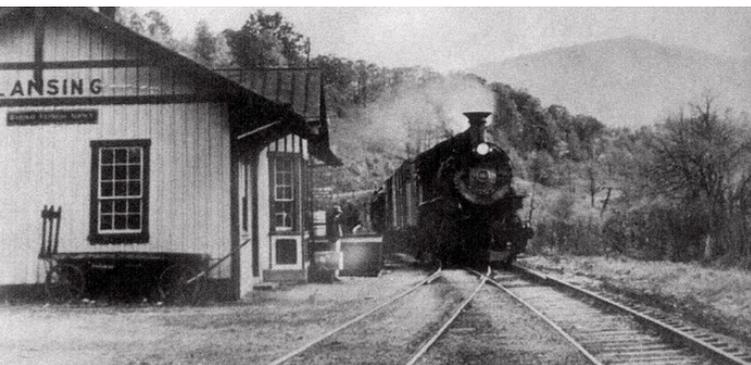
# 2



## COMMUNITY ANALYSIS

# COMMUNITY ANALYSIS

Image 1. Train Depot in Lansing, NC; Date Unknown  
(Source: Lansing Town Clerk)



## HISTORY

Long before Lansing became a community, the land in Ashe County belonged to the Cherokee, Shawnee and Creek Indians who hunted, fished and farmed the land.<sup>i</sup> By the 1800s, Lansing began to form as a small agrarian trading post. The original Lansing school was built in 1889 and served dual purposes as a school and church.

Like many communities, Lansing's identity came to form with the construction of the railroad; in this case, from 1914 - 1916 when the Virginia Carolina Railroad was built. With the railroad, exports of iron ore and timber spurred the economy in Ashe County. Lansing turned into a bustling community and eventually incorporated in 1928. The importance of the Virginia Carolina Railroad to Ashe County and Lansing's community cannot be understated; it shaped the culture and community of Lansing in lasting ways. However, in the same way that the railroad helped put Lansing on the map, when it discontinued all service in 1977, several local stores in Town closed and the Lansing community and economy was impacted.<sup>ii</sup>

Image 2. A Train Headed Towards West Jefferson from Lansing; Date Unknown  
(Source: Lansing Town Clerk)

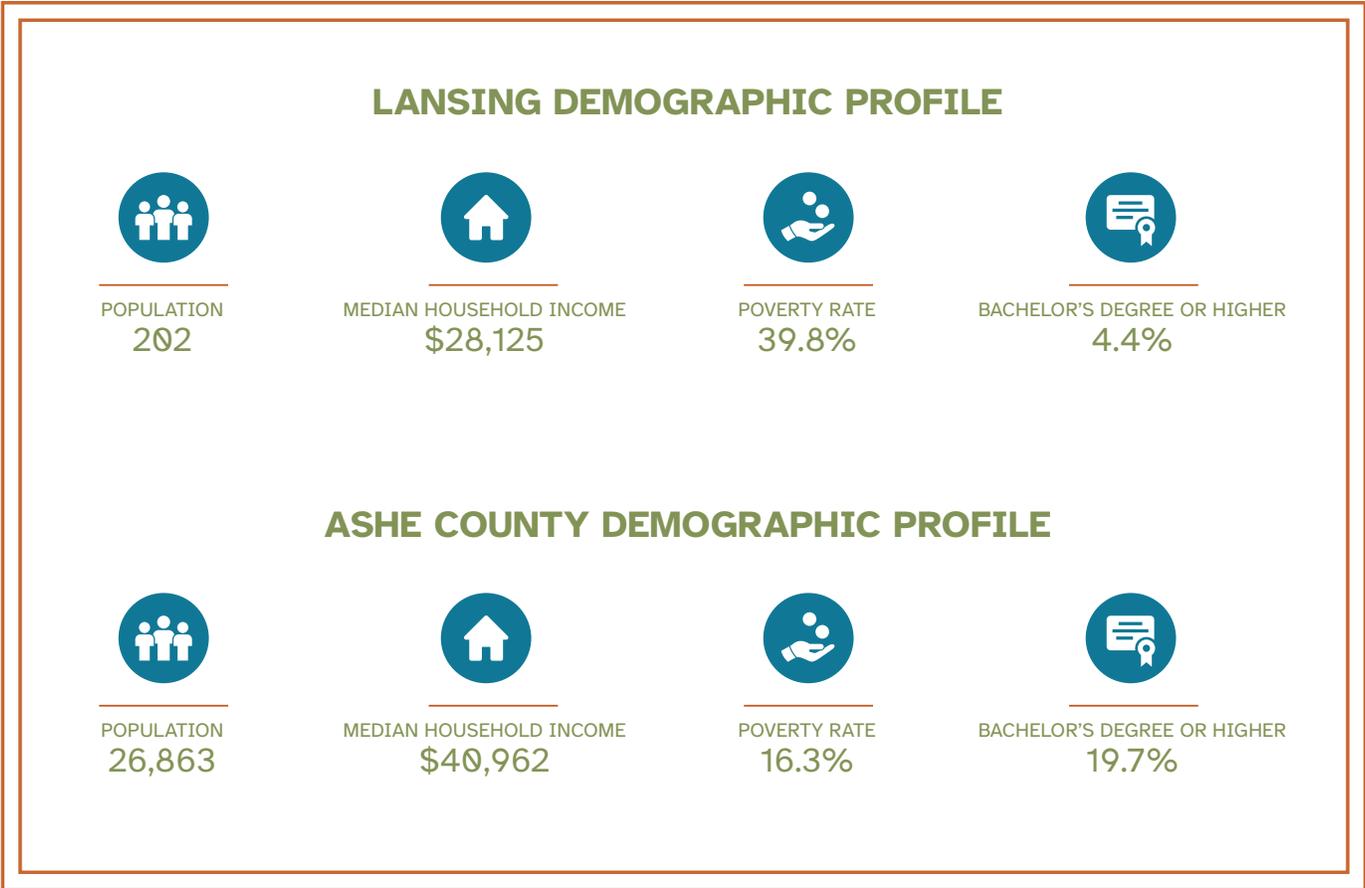


Figure 2. Demographic Snapshot of Lansing Compared to Ashe County as a Whole (Source: US Census\*)

\*Census Data for Lansing Has a Higher Margin of Error Due to the Town's Small Population

## DEMOGRAPHICS

Figure 2 provides a demographic snapshot of Lansing, compared to surrounding Ashe County, from the US Census' 2019 American Community Survey (ACS) 5-Year Estimates.

According to the 2019 ACS, 36.5 was the median age in Lansing, 99.5% of individuals reported their race as white alone, and nearly 26% of the population reported having a disability. Surrounding Ashe County has a median age of 48.3 years, is 95.4% white race and 15.8% of people report a disability. It should be noted that the ACS data for Lansing has a higher margin of error given the small population of the Town.

## PHYSICAL CHARACTERISTICS & TRANSPORTATION NETWORK

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Lansing is in Ashe County, which shares a northern border with Virginia and a western border with Tennessee. Map 1 indicates the location of Lansing relative to the region.

Lansing occupies about 218 acres and is characterized by rolling hills, the Big Horse Creek and Old Field Creek. Big Horse Creek is a part of the Mountain Heritage Trout Waters Program and is one of the few bodies of water in the program that is easily accessible. There are several key destinations in the Town, mostly located along NC-194 which bisects the Town. Map 2 describes these destinations.

The NCDOT state-maintained roads in Lansing include the following:

- o NC Highway 194 (NC-194)
- o South Big Horse Creek Road (SR-1353)
- o Teaberry Road (SR-1347)
- o Patton Road (SR-1380)
- o Piney Creek Road (SR-1517)

The remaining streets in the Town, which largely follow a naming convention as the first letter of the alphabet beginning with A and ending with J, are owned and maintained by the Town. In 2019, the recorded Average Annual Daily Traffic (AADT) at NC-194 and E Street was 5,100 vehicles per day (VPD); at NC-194 and F Street it was recorded at 3,100 VPD. The AADT of South Big Horse Creek Road in 2016 was 1,200 VPD. There is one stop-controlled intersection in Town at the intersection of South Big Horse Creek Road and NC-194. There are no traffic signals in Lansing.

The Virginia Carolina Railroad, now abandoned, has left a lasting impact on recreational opportunities in the region. In Virginia, this alignment is now the well-known Virginia Creeper Trail, and in Lansing it is the Creeper Trail. This former railroad continues to inspire and influence planning in the region. A vision by many in Western North Carolina is to connect North Carolina to the Virginia Creeper Trail.

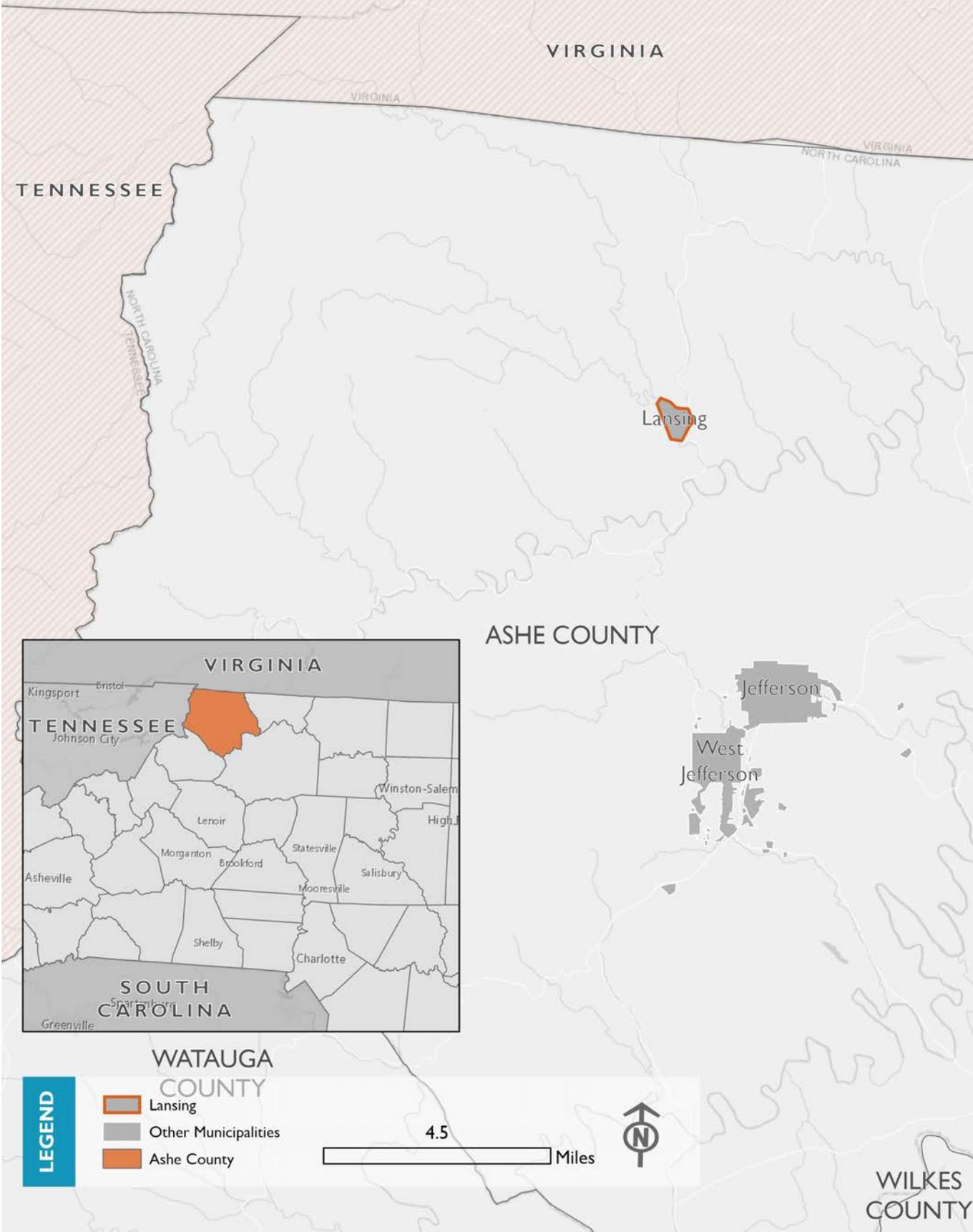


FOREVER, COMMUNITY, FAMILY, FRIEND.

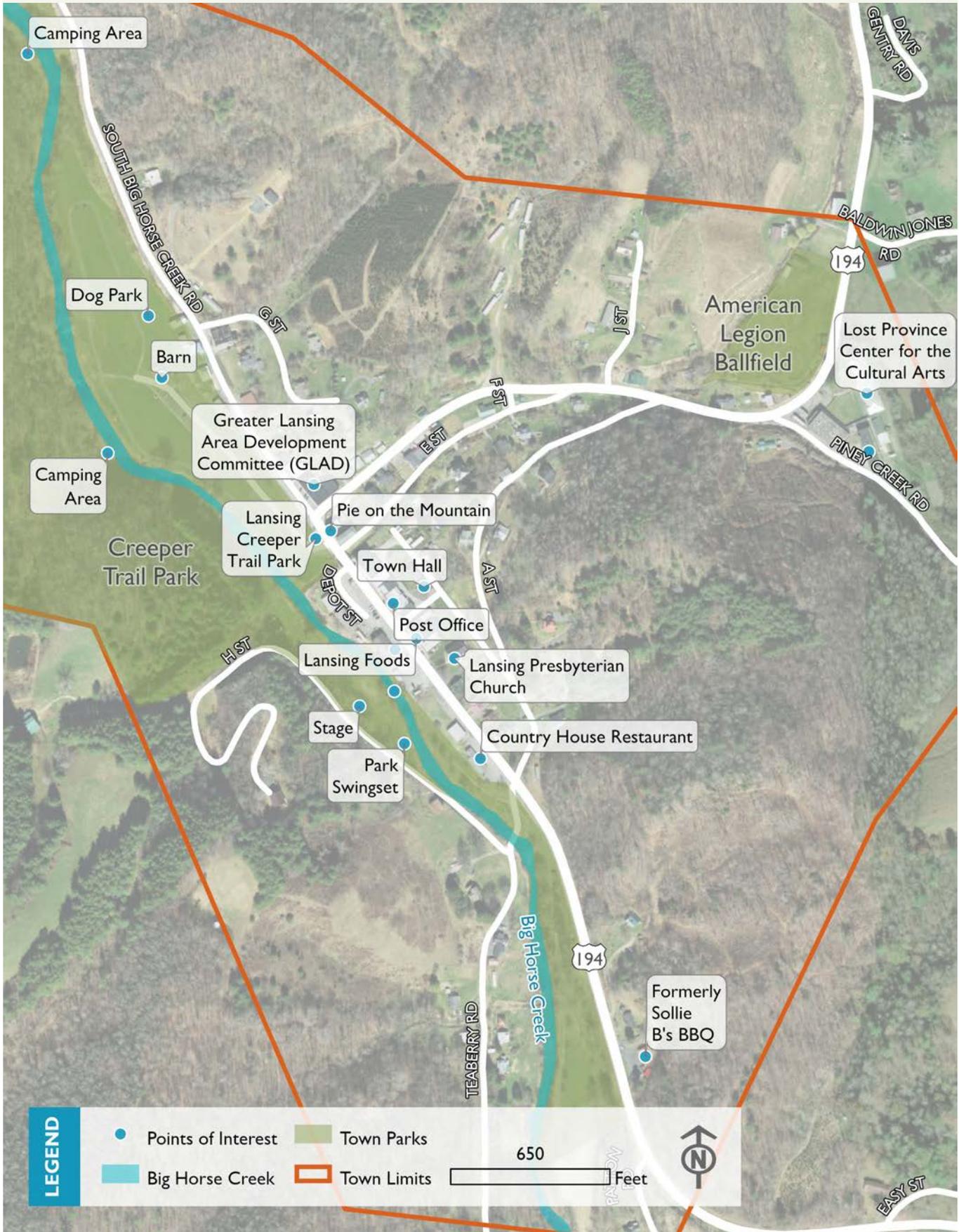
**Situated as the last town in northwest North Carolina, Lansing is a gateway to nearby attractions in 3 states. As an aged piece of American heritage, at one point all but forgotten, Lansing is coming alive again featuring recreation, business opportunities & great place to call home with the motto: "Forever, community, family, friend."**

*-Lansing Economic Development Strategic Plan*

**Map 1. Lansing is in the Western North Carolina County of Ashe, Proximate to the Tennessee and Virginia Borders**



**Map 2. Lansing Key Destinations are Largely Located along NC-194**





**Image 3. & 4.** People Walking & Biking the Lansing Creeper Trail

## OVERVIEW: PEOPLE WALKING & BIKING

For its small size, Lansing has an impressive network of existing sidewalks and greenways. The existing sidewalks, 0.13 miles in total, are along the building frontages of NC-194 and South Big Horse Creek Road. The Town has one sidewalk project in the planning stages, which will follow the front and side of the abandoned gas station at the all-way stop. NCDOT has replaced the bridge over Old Field Creek which will provide two 6-foot sidewalks on both sides of the bridge. See Map 3 for more detail.

Map 4 illustrates the existing trails in Lansing which include a 1-mile paved loop (the Creeper Trail) that follows the east side of Big Horse Creek. The trail is in two sections that are informally linked through the Depot Street parking lot. The Lansing Creeper Trail follows the alignment of the former Virginia Carolina Railroad. The Creeper Trail has become an important way for Lansing to not only acknowledge the railroad's legacy but also embrace the community's connection to the land and recreation, in addition to being a tourism draw.

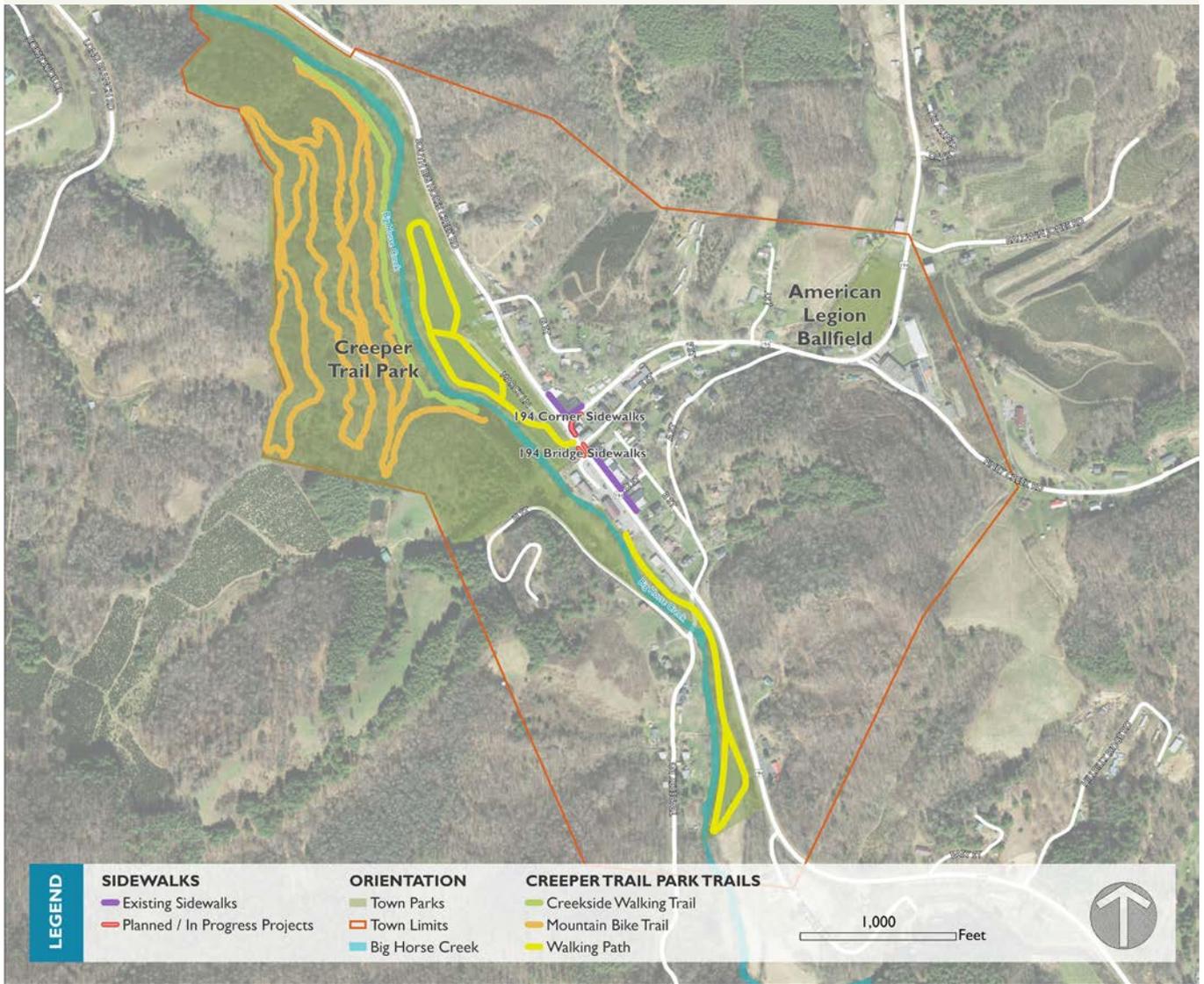
There is a 0.44-mile Creekside trail that is natural surface on the west side of Big Horse Creek; also on the west side of Big Horse Creek is natural surface trail for mountain biking and hiking (2.5-miles in length).

Data from NCDOT between 2007-2019 reveal that there have been no reported crashes involving people walking or biking in Lansing. This should not suggest that there is no traffic safety issues to address in Lansing. Rather, the lack of crashes is likely linked more to the low population and relatively low exposure rate for people walking and biking. Exposure rate is a commonly used metric to measure safety, and it evaluates crashes by the percentage of people that walk or bicycle.<sup>iii</sup> In the following section, this Plan explores issues of perceived safety in Lansing.

**Map 3. Lansing Existing Sidewalk Network**



**Map 4. Lansing Existing Greenway Network**



The Town does not have any current data on bicycling and walking rates. To offer an approximation of the trips taken on foot, the online fitness website and app, Strava<sup>iv</sup>, can provide a broad overview of the networks on which people walk, hike and bike. Strava has developed “heat maps” showing aggregated public activities taken by its users over the last two years. In this case, people who travel by foot or bike will use the app or website to record their trip or exercise information. Strava’s activity is derived from users who publicly share their routes. Some users may opt out of updating their journeys, and areas with very little activity may not show up on the heat map. It is important to note that these trips are typically taken for recreation purposes and not transportation. Communities that have actual count data for bicycling and walking can develop factors, or ways to reference the Strava data to actual counts, which enable them to use the Strava heat maps to indicate broader walking and biking rates. In the absence of this data, Lansing can use the Strava heat map as a relative approximation of walking and biking recreational use.

Figure 3. Heat Map from Strava Indicating Relative Walking/Running/Hiking Use in the Lansing Area

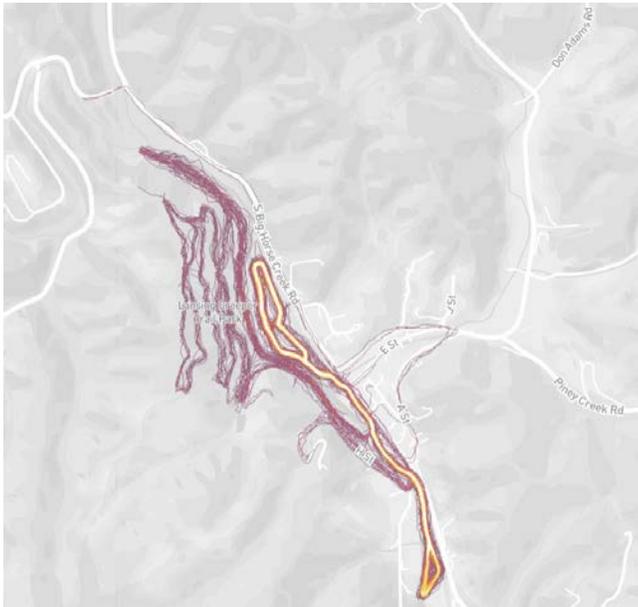


Figure 4. Heat Map from Strava Indicating Relative Biking Use in the Lansing Area



Figures 3 - 4 show Strava Maps of streets and trails in Lansing. The thicker the line, the heavier the use with the heaviest routes shown in a bright orange/yellow. A few notable features of these maps include:

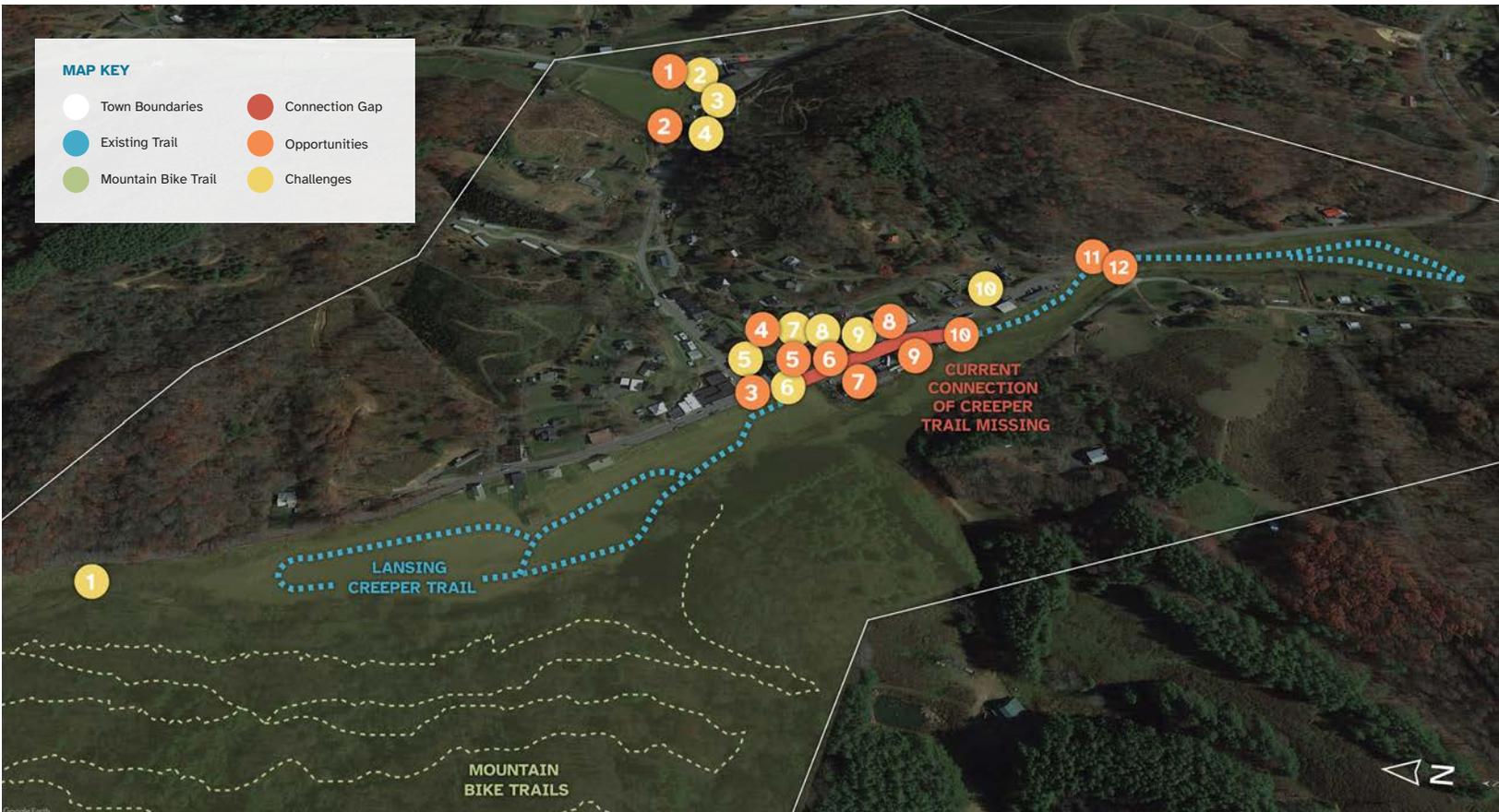
- People biking seem to travel on-road more than using the Town’s greenways and trails.
- The bicycling rates seem to indicate that people biking use the parking at the Lansing Creeper Park and then travel north along South Big Horse Creek Road or NC-194.
- The mountain bike trails indicate relatively lower use when compared to other recreational bicycling activity.
- People walking strongly prefer using the town’s paved greenway/trail system and are not deterred by the missing segment of trail in Town.
- Some people walking use the mountain bike trails.

# OPPORTUNITIES & CHALLENGES

Members of the community shared their thoughts on current walking and biking routes in Lansing, walking and biking routes they would like to use, and barriers

to walking and biking. Some sentiments are captured in Figure 5, and additional feedback was captured though the January 2021 field visit..

Figure 5. Opportunities and Constraints for Bicycle and Pedestrian Network Expansion



## OPPORTUNITIES

1. At-grade crossing possibility at LPCCA
2. Sewer easement may offer greenway alignment
3. Traffic circle at all-way stop to address intersection operations, visibility, and traffic calming needs
4. Utilize old foot bridges over Old Field Creek as other creek crossing connections
5. NC-194 bridge replacement over Old Field Creek
6. Reconfiguration of angled parking to parallel to expand sidewalk
7. Depot Street runs through parking lot in downtown; may offer connectivity
8. Crossings of NC-194 can be enhanced
9. Big Horse Creek stream stabilization efforts underway
10. Connections to Big Horse Creek; making bridge accessible
11. Connect the Lansing Creeper Trail down to West Jefferson and then to the Virginia Creeper Trail in Damascus; other regional trail connections
12. Teaberry Road bridge replacement

## CHALLENGES

1. No creek crossing at northern end of park
2. Tunnel connecting LPCCA to ballfield is not ADA-accessible
3. Intersection of NC-194 and Piney Creek Road challenging
4. Terrain and grade can be a constraint to sidewalk and greenway connections
5. Sight lines/visibility at the all-way stop limited
6. Sight lines/visibility at E Street intersection limited
7. Hazard flood area in downtown
8. Parking is a premium in town
9. Angled parking on NC-194 protrudes into sidewalk and some large vehicles overhang into travel lane
10. Homes close to the road on NC-194; may preclude sidewalk expansion in some areas

# LOCAL, REGIONAL AND STATE PLANS

In Appendix D, the full review of relevant local, regional and state plans is provided. The plans that have been reviewed can be found in Figure 6.

Recurring themes and recommendations throughout these documents indicate the strong support of

walking and biking infrastructure in Lansing, including: an updated plan (from which Lansing Moves was born); construction of new facilities; funding solutions; coordination with NCDOT; consideration of traffic calming and other measures.

Figure 6. Plans Reviewed





# COMMUNITY ENGAGEMENT

*An Integral Component of the Lansing Moves Plan*

**6**  
Six Meetings with the Steering Committee

**1**  
One Walking Field Visit Meeting

**1**  
One Meeting with NCDOT

**1**  
One Public Meeting



GET OUT.  
Stay Out  
NEW RIVER  
FLOW N

## COMMUNITY ENGAGEMENT

This section describes the public engagement process and highlights key findings. Complete notes and other details from community engagement activities are captured in Appendix A.

Community engagement was an integral component of the Lansing Moves plan development. Preferences, recommendations, and specific project ideas were incorporated into the planning process; residents, community members, visitors and local interest groups provided their input. A Steering Committee guided the plan and project development, and a list of Committee members is provided in the Acknowledgments section of this document.

Due to the COVID-19 Pandemic, all the Committee meetings were hosted in a virtual format. The field visit and public meeting were hosted in person with appropriate COVID-19 precautions in place.

Figure 7 describes the sequence of the meetings.



Image 5. Residents and Visitors Gathering for the April 2021 Public Meeting.

Image 6. Community Members Learning About Project Details.

Image 7. January 2021 Site Visit in the Creeper Trail Park.

Figure 7. Sequence of Meetings



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## PEDESTRIAN & BICYCLE NETWORK PLAN

# PEDESTRIAN & BICYCLE NETWORK PLAN

## HOW WE GOT HERE

As reviewed, Lansing Moves was heavily guided by a Steering Committee, whose input provided the local knowledge and insight of the Town's vision, plan goals, and project needs. Figure 8 describes the project tasks that culminated in the Lansing Moves Network Plan alongside the community engagement touch points to arrive at that outcome. The process to arrive at the pedestrian and bicycle network plan was iterative, involving multiple touch points with the Committee, NCDOT stakeholders and the public.

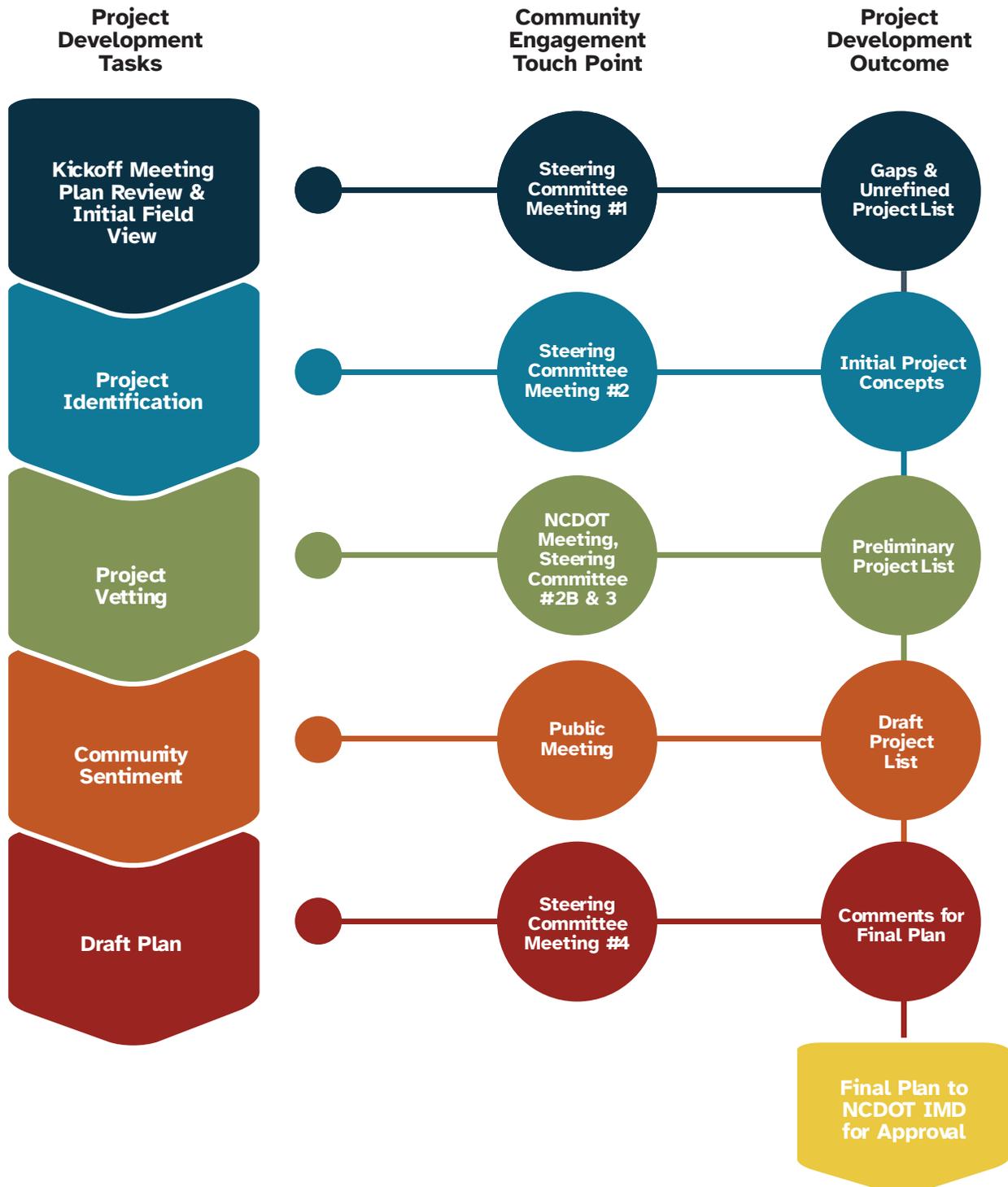


Image 8. Historic Lansing School and Future Home of the Lost Province Center for Cultural Arts

Image 9. Lansing Creeper Trail Southern Section

Figure 8. This describes the key steps in developing pedestrian and bicycle projects alongside community engagement tasks.

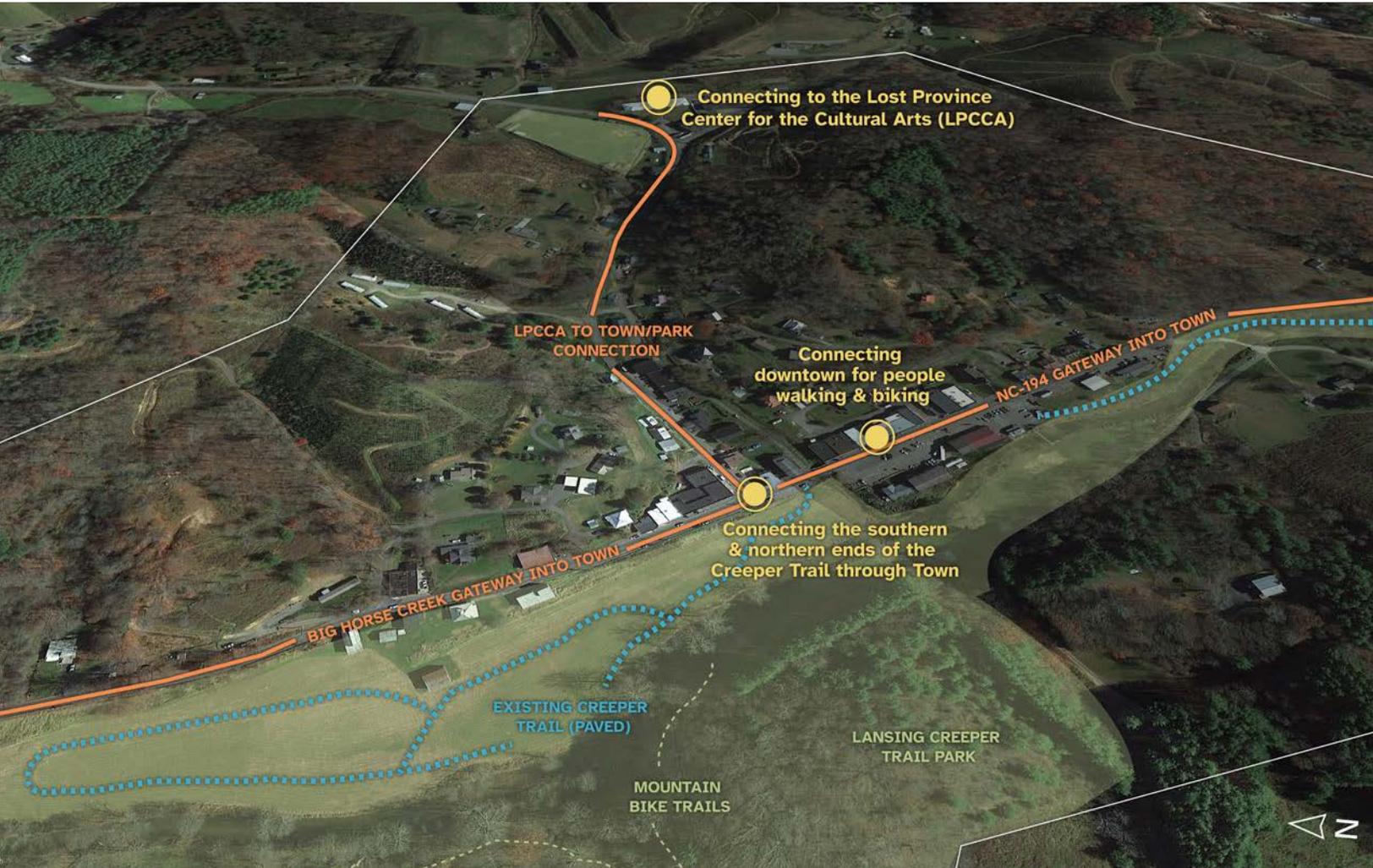
## Lansing Moves Network Plan Development



# MAIN CORRIDORS AND FOCUS AREA

The focus of the pedestrian and bicycle network plan is to enhance pedestrian connections in downtown, to connect the LPCCA with downtown Lansing and to improve connectivity of the Creeper Trail. These ideas are illustrated in Figure 9. It is from this vision that the projects took form.

Figure 9. The Vision and Priorities for Pedestrian and Bicycle Connectivity in Lansing



### MAP KEY

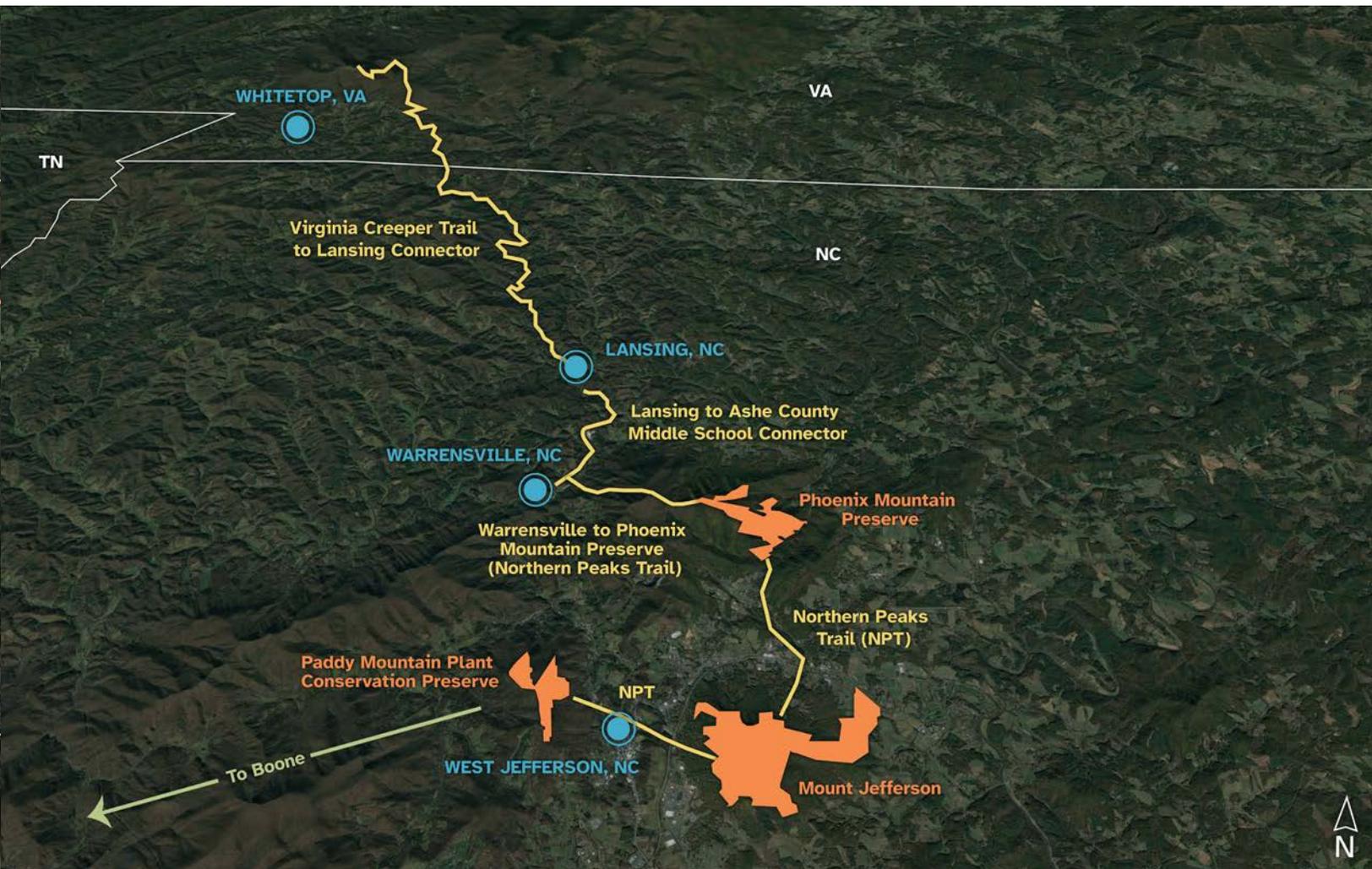
- Town Boundaries
- Major Corridors
- Existing Trail
- Priority Points
- Trail Park

## REGIONAL CONNECTIONS

Lansing is at the heart of future trail connections in the region, which is illustrated in Figure 10. This vision influenced project recommendations and should be considered as this plan is implemented in the years to come. To the north of Lansing, in Virginia, is the Virginia Creeper Trail running from Whitetop Mountain to Abingdon. To the south is a vision to connect to

Warrensville and Ashe County Middle School and longer-term plans to tie this area into the Northern Peaks Trail (Boone to West Jefferson). Connecting Lansing to these surrounding assets could provide a regional connection that will be of great interest to the community at large.

Figure 10. Lansing Sits at the Heart of Long-Term Trail Ideas in this Region



### MAP KEY

- State Boundaries
- Towns
- Boone Connection
- Mountains
- Trails

## PROJECT RANKING

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Although all projects identified in this plan are important to the Town, the Town does not have the resources to complete the entire vision immediately. It is important to prioritize the projects so that the Town can focus their limited resources on key projects that will enable them to achieve the goals and vision set out in the beginning of the Plan. As such, a prioritization methodology was developed based on project goals and the NCDOT Strategic Prioritization methodology used for bicycle and pedestrian projects. This methodology is described in the graphic on this page; the maximum score possible for a project is 10 points and each factor provides the total possible points allocated to each. Detailed rankings are provided in Appendix E.

### PROJECT RANKING CRITERIA



#### Vehicle Exposure (+4 Points) (Speed, Length, Traffic Volume)

*This factor evaluates the need for a project based on safety and vehicle exposure, which considers the length/time people walking or riding bicycles are exposed to vehicles and adjacent traffic speeds and volumes.*



#### Connectivity (+4 Points)

*This factor evaluates whether the project is a key connection or only serves a few homes or businesses.*



#### Feasibility Score (-2 Points)

*This score subtracts one point each if right-of-way, traffic challenges, or environmental/permitting challenges are anticipated.*



#### Quality Factor (-1 Point)

*This factor subtracts one point for projects that have more than one proposed alignment, for the project that is less separated from traffic.*



#### Public Sentiment (+2 Points)

*This score is both rankings from the Steering Committee and the Public Meeting.*

# FACILITY TYPES

There are four primary types of pedestrian and bicycle network connections that are identified in this Plan: paved shoulder/bike lane, sidewalk, multi-use sidepath and greenway. These are described in Table 1. The final and secondary projects, as described in the following sections, relate back to these primary facility types.

Table 1. Primary Facility Types for Lansing

PAVED SHOULDER/BIKE LANE		
<p>Land Use Varies   Bike Lane 5'   Travel Lane 11' - 13' Lanes (Width Varies)   Travel Lane 11' - 13' Lanes (Width Varies)   Bike Lane 5'   Land Use Varies</p>		<p>Paved, designated space on the edge of the roadway that is striped with a white edge of lane line.</p>
SIDEWALK		
<p>Sidewalk 5'   Curb &amp; Gutter 24"   Parallel Parking 8'   Travel Lane 9' - 11' Lanes (Width Varies)   Travel Lane 9' - 11' Lanes (Width Varies)   Soft Shoulder 2'   Land Use Varies</p>		<p>A designated space along the side of a road for use by people walking. Traditional sidewalk design includes a 5-foot concrete sidewalk pedestrian path. Where possible, separated from traffic with a 3-5-foot minimum buffer strip between the sidewalk and nearest travel lane.</p>
MULTI-USE SIDEPATH		
<p>Multiuse Side Path 10'   Buffer 7-8'   Curb &amp; Gutter 2'   Travel Lane 9' - 11' Lanes (Width Varies)   Travel Lane 9' - 11' Lanes (Width Varies)   Soft Shoulder 2'   Land Use Varies</p>		<p>A two-way shared use path (minimum 10 feet wide with a 3-5-foot buffer strip between the path and nearest travel lane) located immediately adjacent and parallel to a roadway.</p>
GREENWAY		
<p>Land Use Varies   Multiuse Side Path 10' - 12'   Land Use Varies</p>		<p>A designated pedestrian and bicycle facility that is away from a roadway corridor and often follows features such as rivers, old railroad lines.</p>



# FINAL PRIORITY PROJECTS

The results of the project rankings are shown in the following list of 18 projects. These projects are listed by order of prioritization, so the higher the number, the higher the priority.

- 1 / E Street - One Way EB Shared
- 2 / Lansing Creeper Trail Park to Depot Street Alignment B (Off Road Greenway)
- 3 / LPCCA to E Street Alignment A (On Road)
- 4 / All Way Stop to E Street Connection (Via Corner Parcel)
- 5 / Paved Creeper Trail Extension to All Way Stop
- 6 / Depot Street Greenway (Alignment A)
- 7 / NC-194 East Side Sidewalk and Parking Modifications
- 8 / Long-Term Fire Department Connection Off Road Greenway Alignment A
- 9 / LPCCA to E Street Alignment B (Off Road)
- 10 / Lansing Creeper Trail Park to Depot Street Alignment A (Multi-Use Sidepath)
- 11 / Depot Street Multi-Use Sidepath (Alignment B)
- 12 / NC-194 West Side Sidewalk to Teaberry Road
- 13 / Fire Department Connection Along NC-194 (Preferred) Alignment B
- 14 / Creeper Trail Extension and Bridge
- 15 / Creeper Trail North Bridge to East Side Campground
- 16 / Neighborhood Greenway Connector
- 17 / NC-194 to E Street Sidewalk Connectors
- 18 / Upgrade Existing Bridge (Near Fire Department) for ADA Access

These projects were cross-checked with the NCDOT 2021-2025 Highway Maintenance Improvement Program (HMIP). The HMIP indicates NCDOT’s plan for maintenance to roadways, including preservation, resurfacing/repaving and rehabilitation. Coordination with the HMIP offers opportunities for cost-savings and construction coordination to reduce construction impacts to the community. None of the priority projects are planned to be resurfaced in the 2021-2025 timeframe.

The first three projects – E Street One Way EB Shared, Lansing Creeper Trail Park to Depot Street Alignment B (Off Road Greenway), and LPCCA to E Street

Alignment A (On Road) – are considered Lansing Moves Catalyst Projects. The projects are foundational to the Lansing walking and biking network. They will help establish a spine to the network and connect major destinations. As funding opportunities present themselves, these projects should be prioritized.

The following map (Map 5) and cutsheets describe these projects in further detail. The cutsheets provide a summary of planning level cost estimates for each project included in the cutsheets. It should be noted that the projects require additional engineering to verify costs and feasibility for retaining walls, grading and utility relocation.

**Map 5. Lansing Pedestrian and Bicycle Priority Project Network**



# 1A

## LPCCA TO E STREET ALIGNMENT A (ON ROAD)



### PROJECT DESCRIPTION

- 10 Foot Multiuse Sidepath on South Side
- Curb and Gutter with 5 Foot Minimum Buffer

### PLANNING LEVEL COST ESTIMATE

**\$885,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*

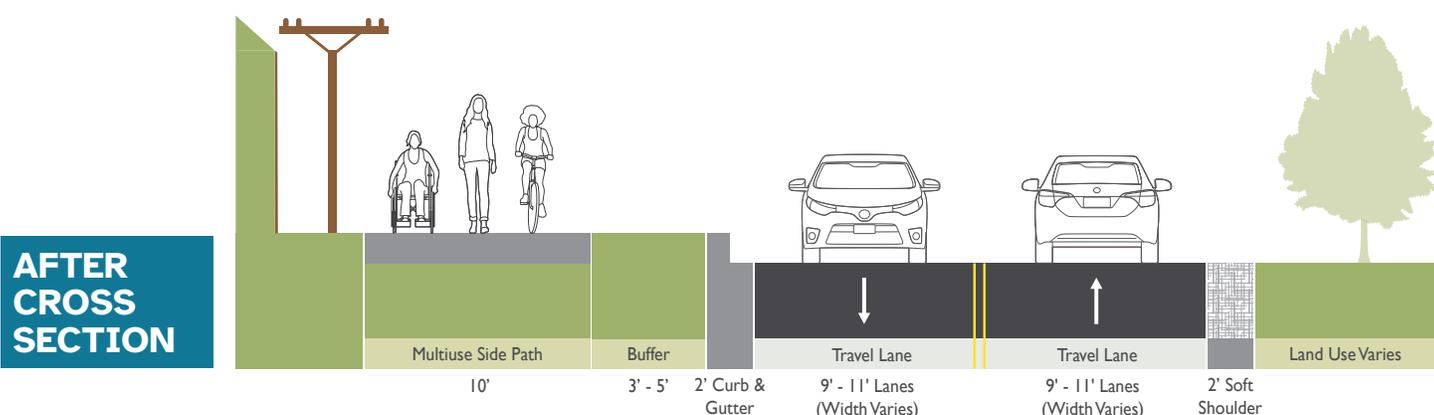
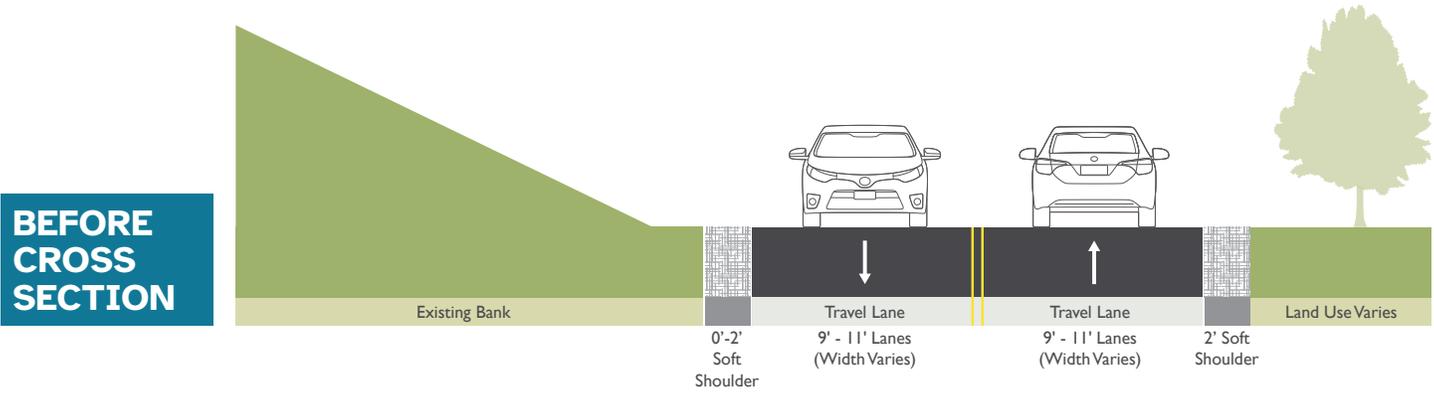
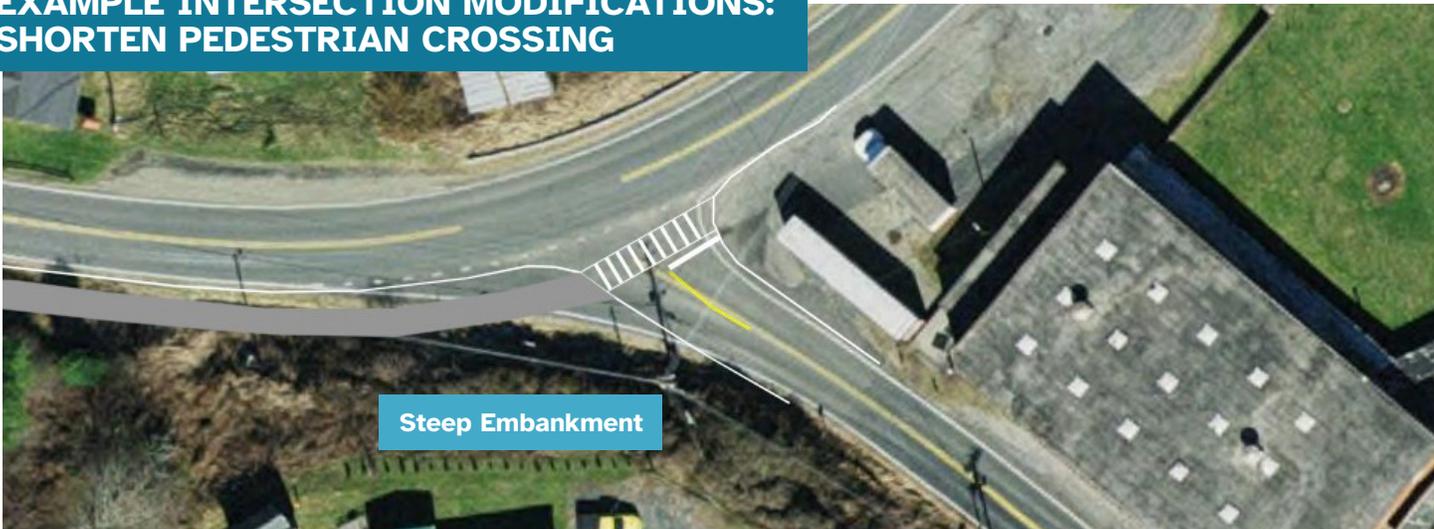


- Sidewalk short-term option
- Retaining wall and/or regrading along NC 194
- Modifications required for stream crossing



CONNECTIONS		KEY ELEMENTS	
<ul style="list-style-type: none"> <li>East Side of Lansing (LPCCA and Molly Chomper) to E Street and Town Center</li> </ul>		<p><i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i></p> <ul style="list-style-type: none"> <li>A. Modify Turning Radius to Shorten Pedestrian Crossing and Slow Vehicles (See Image Below)</li> <li>B. Steep Grades Require Retaining Walls (reference photo, significant barrier)</li> <li>C. Utility Relocations Required (reference photo, significant barrier)</li> <li>D. Modify NC 194 Stream Crossing over Old Field Branch</li> <li>E. Retaining Wall and/or Guide Rail Needed</li> </ul>	
CROSSINGS			
<ul style="list-style-type: none"> <li>Piney Creek Road - Stop Controlled Crossing</li> </ul>			

## EXAMPLE INTERSECTION MODIFICATIONS: SHORTEN PEDESTRIAN CROSSING



# 1B

## LPCCA TO E STREET ALIGNMENT B (OFF ROAD)



### PROJECT DESCRIPTION

- 10 Foot Greenway on Ballfield Site and Sewer Easement

### PLANNING LEVEL COST ESTIMATE

**\$606,500**

**\$741,500** (with Gateway Treatment Road Widening)

Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool

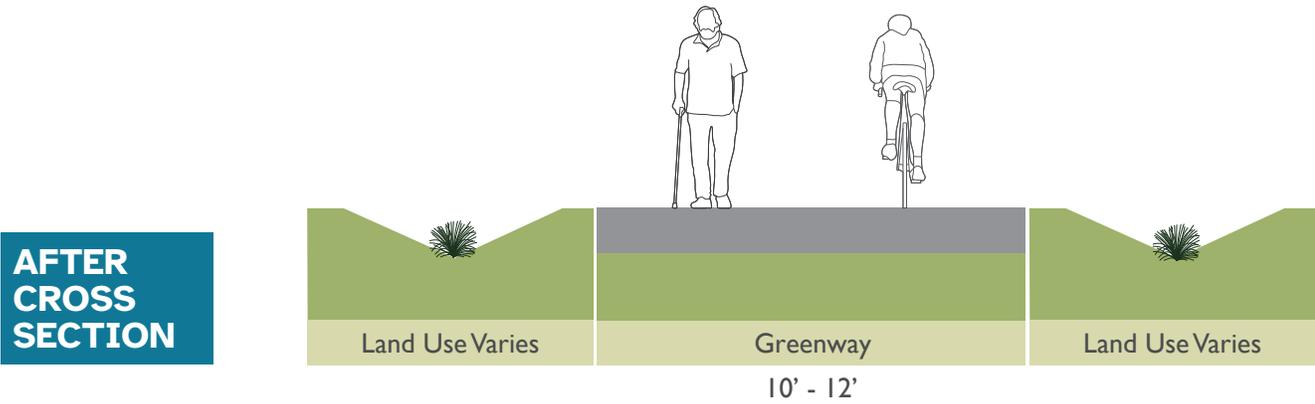


CONNECTIONS		KEY ELEMENTS	
		*SEE LOCATION ON MAP BY CORRESPONDING LETTERS	
<ul style="list-style-type: none"> <li>East Side of Lansing (LPCCA and Molly Chomper) to E Street and Town Center</li> </ul>		<ul style="list-style-type: none"> <li>A. Gateway Opportunity: Entering Lansing from East on NC 194 (Widen Road for Pedestrian Refuge Island - See Image) (Included in Separate Cost Estimate)</li> <li>B. Modifications Required to Ball Field</li> <li>C. Avoid Old School Sewage Treatment (Location Approximate)</li> <li>D. Small Bridge or Culvert</li> <li>E. Modifications to Private Property</li> <li>F. Modify NC 194 Stream Crossing over Old Field Branch</li> <li>G. Option: Opportunity for Future Greenway Loop on Ball Field Site (Not Included in Cost)</li> <li>H. Retaining Wall and/or Guide Rail Needed</li> </ul>	
CROSSINGS			
<ul style="list-style-type: none"> <li>NC 194 at LPCCA</li> <li>NC 194 at A Street (On Sewer Easement Alignment)</li> </ul>			

### EXAMPLE GATEWAY TREATMENT (OPTION - ADDITIONAL COST)



Photo courtesy of the City of Bellevue, WA



# 2

## NEIGHBORHOOD GREENWAY CONNECTOR



### PROJECT DESCRIPTION

- Convert Closed Road to Greenway Connector to A Street

### PLANNING LEVEL COST ESTIMATE

**\$90,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



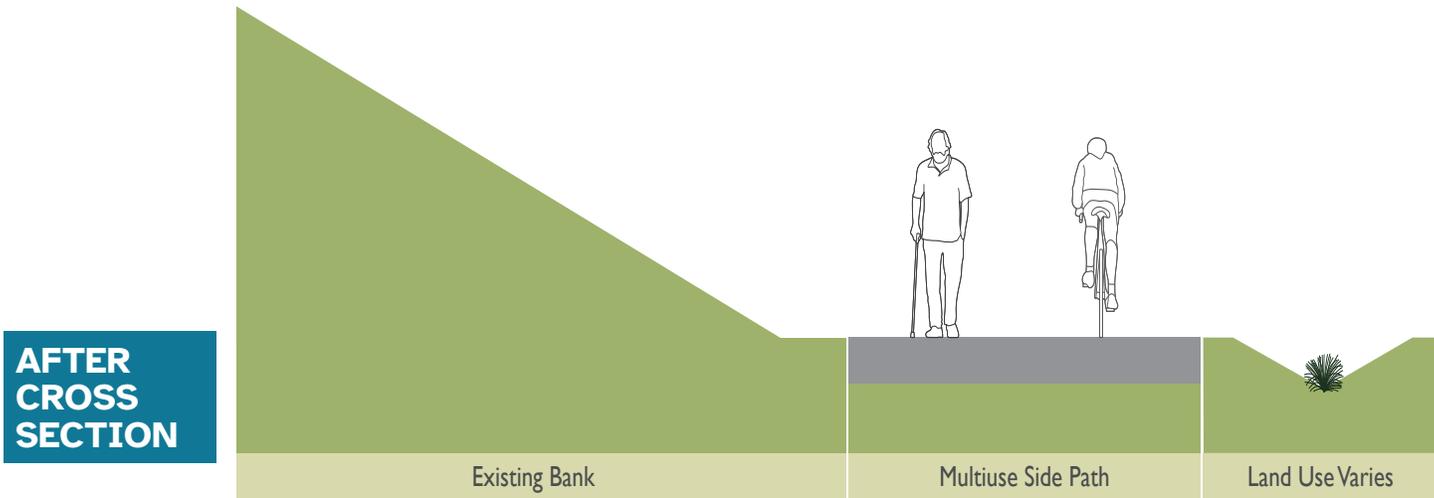
Photo courtesy of National Association of City Transportation Officials (NACTO)

- A Street (Beyond Closure to Teaberry Road) Shared Street Sign Examples



CONNECTIONS	KEY ELEMENTS
<ul style="list-style-type: none"> <li>East Side of Lansing (NC 194) to A Street and B Street</li> </ul>	<p><i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i></p> <p>A. Close Road with Bollards and Sign for Greenway Connection to A Street</p>
OTHER NOTES	<p><b>NOTES FOR A STREET CONNECTION TO TEABERRY ROAD</b></p> <ul style="list-style-type: none"> <li>A Street is Low Volume &amp; Low Speed Connection to NC194 and B Street</li> <li>Option: Sign A Street as a Shared Street</li> </ul>

## CONVERT CLOSED ROAD TO A TRAIL



**AFTER  
CROSS  
SECTION**

Existing Bank

Multiuse Side Path

Land Use Varies

10' - 12'

# 3A

## E STREET – ONE WAY EB SHARED STREET



### PROJECT DESCRIPTION

- 14 – 17 Foot Wide Shared Street
- Convert E Street to One-Way Eastbound Traffic
- Shared Street Signing and Treatments (see Appendix E for Living Street Examples)
- Requires Widening
- Decorative Pavement Options 1 and 2: Entire Width or Limited to 6 Foot Shared Pedestrian and Westbound Bicycles Sidepath

### PLANNING LEVEL COST ESTIMATE

Includes Widening to 14 Feet

**Option 1: \$655,000**

*(paved with 6' width stamped asphalt)*

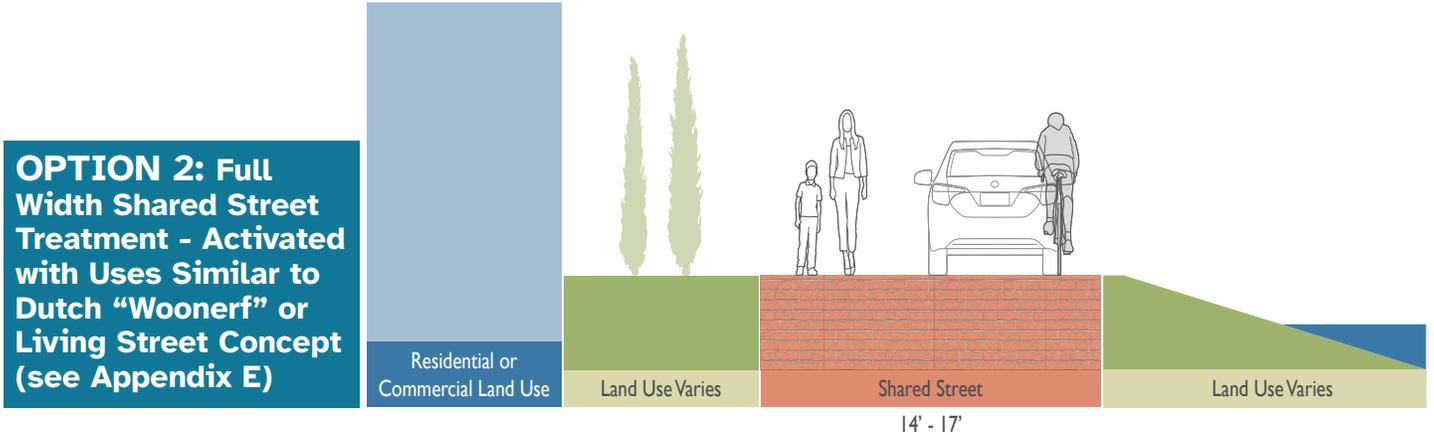
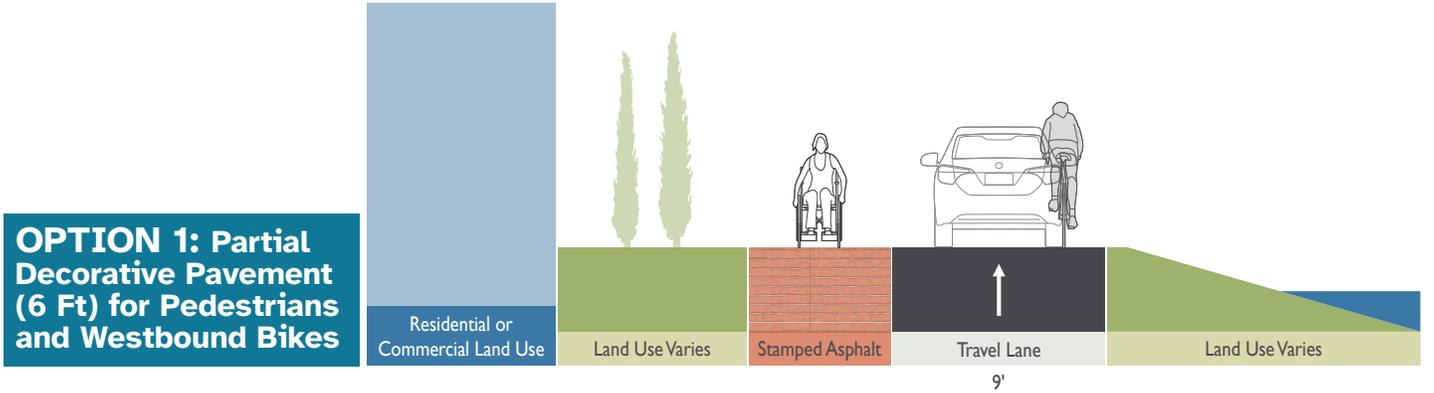
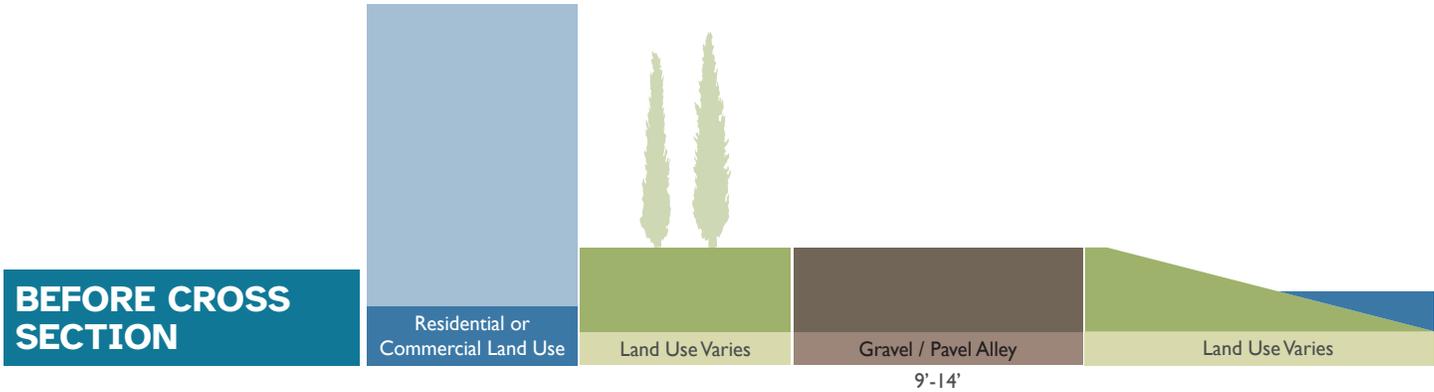
**Option 2: \$920,000**

*(paved full width stamped asphalt)*

Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool. Natural surface options will result in lower cost with maintenance tradeoffs.

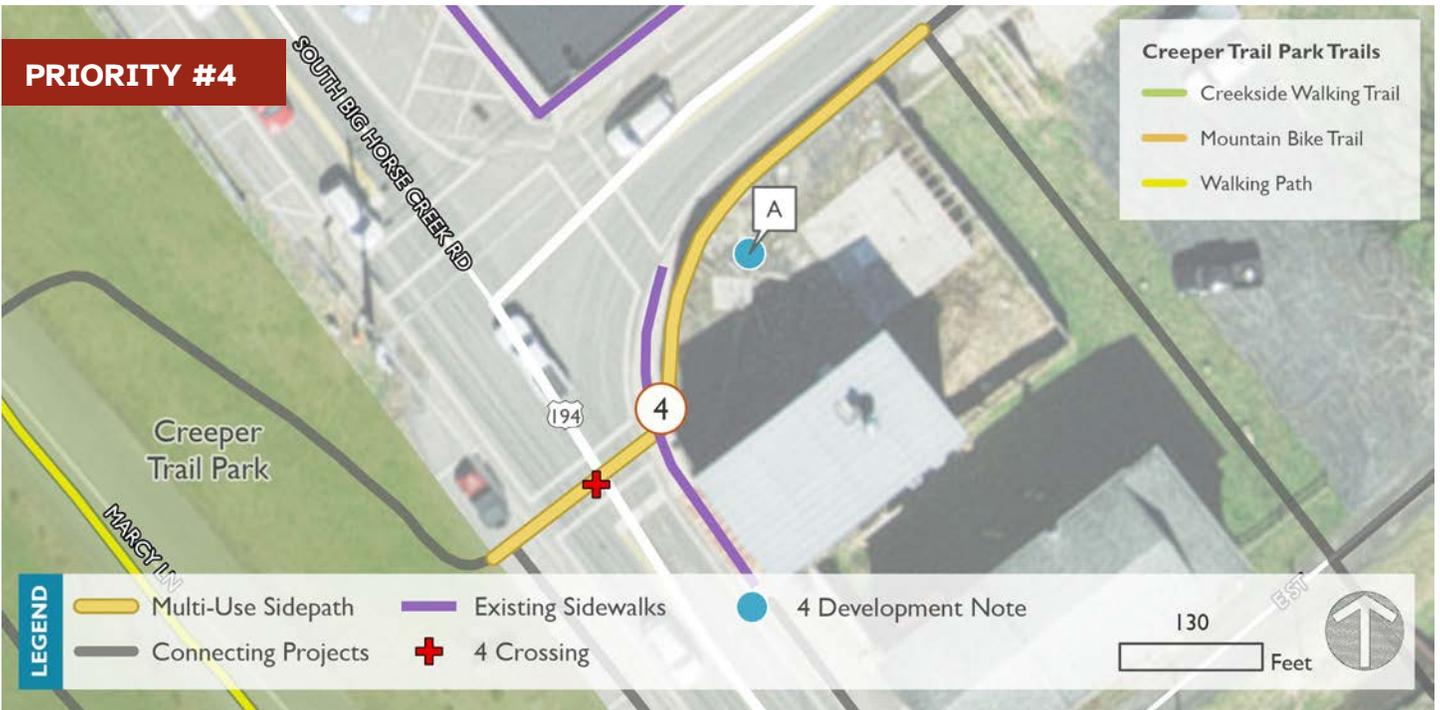


CONNECTIONS	KEY ELEMENTS
OTHER NOTES	*SEE LOCATION ON MAP BY CORRESPONDING LETTERS
<ul style="list-style-type: none"> <li>East Side of Lansing (LPCCA and Molly Chomper) to Park and Town Center</li> </ul>	<ul style="list-style-type: none"> <li><b>A.</b> Northern Terminus: Reconfigure Private Residence Parking Area and Intersection of E Street at NC194 to Provide Trail Access to Connect to Project 1</li> <li><b>B.</b> Option: Close E Street North of F Street (Traffic Redirected to F Street)*</li> <li><b>C.</b> Southern Terminus: Connection to NC194 Through Town of Lansing Parking Lot (Connection to Project 4)</li> <li><b>D.</b> Elevation Change Requires ADA Ramp</li> <li><b>E.</b> Coordination Needed With Planned Deck Elevation and Possible Trail Access</li> <li><b>F.</b> Option for Pedestrian Bridge Spur to B Street (Not Included in Cost Estimate)</li> </ul> <p>*May result in Powell Bill funding adjustment</p>
<ul style="list-style-type: none"> <li>Surface treatment can vary based on funding; however, surface should meet ADA cross slope and surface requirements for pedestrian access route</li> <li>Wayfinding signs are recommended for all modes</li> <li>Coordinate E Street to NC194 ADA ramp with future plans for outdoor dining space south of Pie on the Mountain (Option for rear entrance from trail)</li> <li>Option to upgrade town parking lot with placemaking elements</li> </ul>	



# 4

## ALL WAY STOP TO E STREET CONNECTION (VIA CORNER PARCEL)



### PROJECT DESCRIPTION

- 10 Foot Multi-Use Side Path with 5 Foot Buffer
- Upgrade Crossing at All Way Stop

### PLANNING LEVEL COST ESTIMATE

**\$125,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*

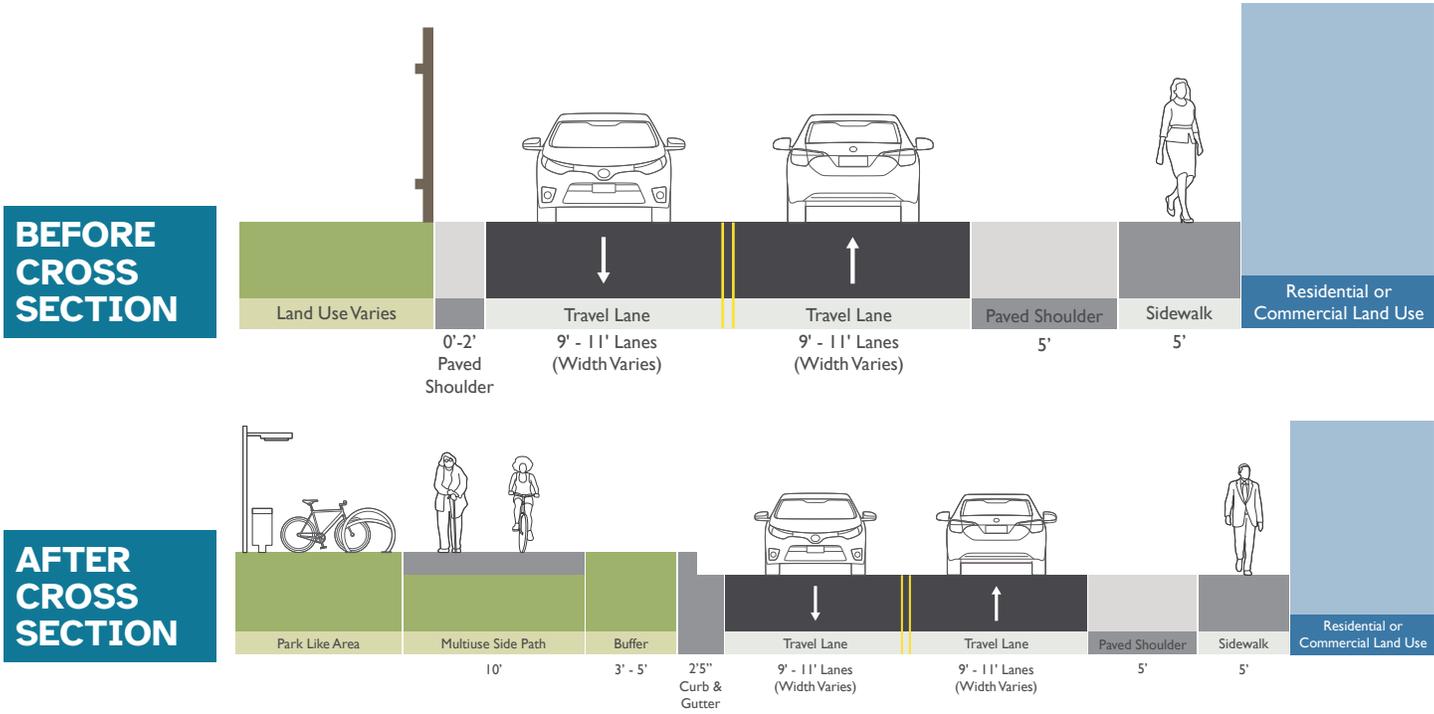


- Crossing Upgrade At All Way Stop (To Project 5)



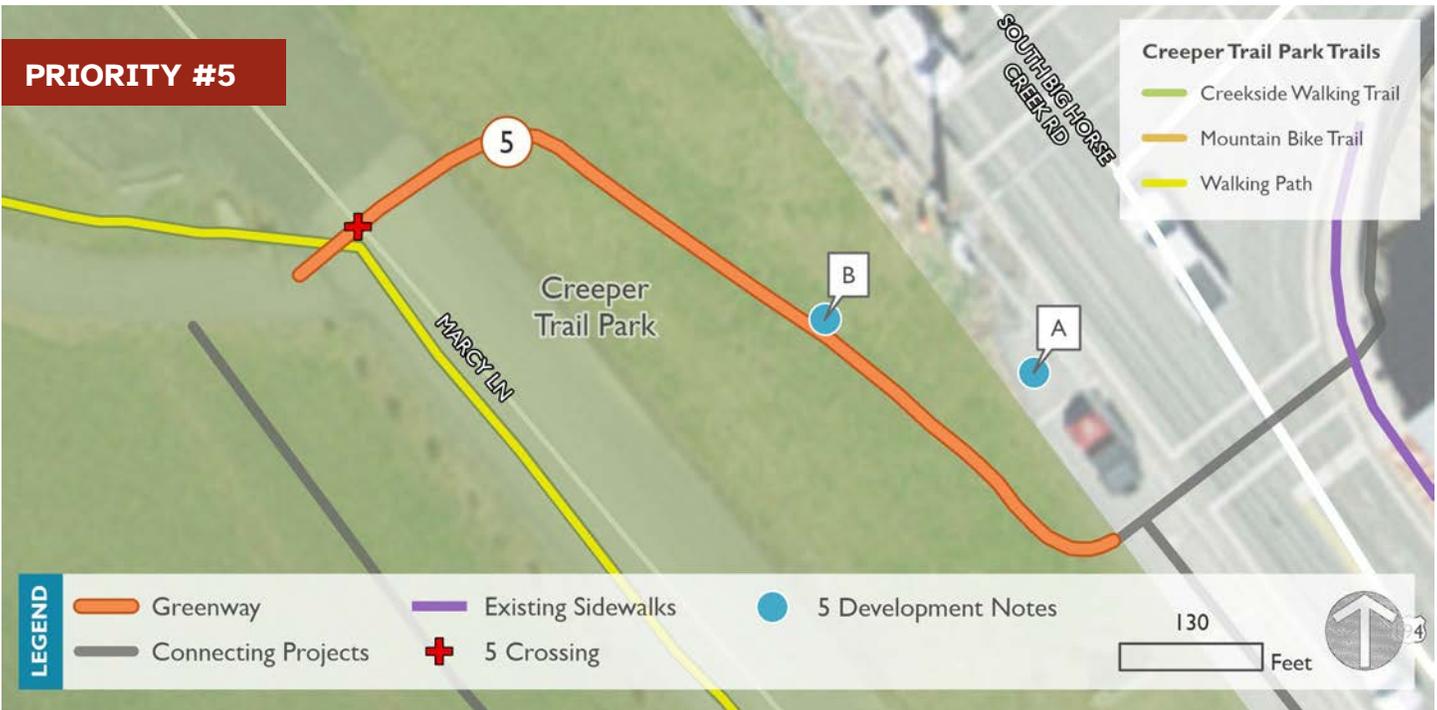
CONNECTIONS	KEY ELEMENTS <i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i>
<ul style="list-style-type: none"> <li>o E Street and Parking Lot to Lansing Creeper Trail Park</li> </ul>	<ul style="list-style-type: none"> <li>A. Preferred Option Includes Aligning Trail Off Road and Through Corner the Corner Site. This Would be Incorporated With Landscaping and a Pocket Park Design as a Placemaking Effort.</li> </ul>
CROSSINGS	OTHER NOTES
<ul style="list-style-type: none"> <li>o All Way Stop Crossing (Southern Leg of NC 194 at S. Big Horse Creek Road)</li> </ul>	<ul style="list-style-type: none"> <li>o Wayfinding Signs are Recommended for All Modes</li> <li>o The Ultimate Facility Design will Need to Consider the Heavy Seasonal Truck Volume at this Intersection so as to Buffer Pedestrians from the Traffic</li> </ul>

## EXAMPLE POCKET PARK WITH TRAIL (FOR VACANT CORNER LOT)



# 5

## PAVED CREEPER TRAIL EXTENSION TO ALL WAY STOP



### PROJECT DESCRIPTION

- 10 Foot Greenway on Park Property
- Option for Park Gateway Elements to Welcome Visitors (Benches, Art Work, Landscaping, etc.)

### PLANNING LEVEL COST ESTIMATE

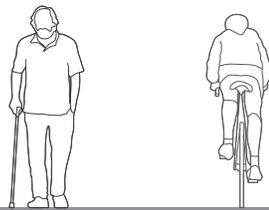
**\$110,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



CONNECTIONS	CROSSINGS	KEY ELEMENTS <i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i>
<ul style="list-style-type: none"> <li>○ Town Center and E Street to Lansing Creeper Trail Park</li> </ul>	<ul style="list-style-type: none"> <li>○ Trail Crossing of Driveway within Lansing Creeper Trail Park</li> </ul>	<ul style="list-style-type: none"> <li>A. Modify Parallel Parking on NC 194 (Provide Clear Line of Sight for Pedestrians)</li> <li>B. Steep Grades Entering Park Require Grading (5% ADA Grade Requirements)</li> </ul>

**POTENTIAL PATH ALIGNMENT**



**AFTER CROSS SECTION**



# 6A

## LANSING CREEPER TRAIL PARK TO DEPOT STREET ALIGNMENT A (MULTI-USE SIDEPATH)



### PROJECT DESCRIPTION

- 10 Foot Multiuse Sidepath Along NC 194 to New NC 194 Bridge Sidewalk
- Curb and Gutter with 5 Foot Buffer

### PLANNING LEVEL COST ESTIMATE

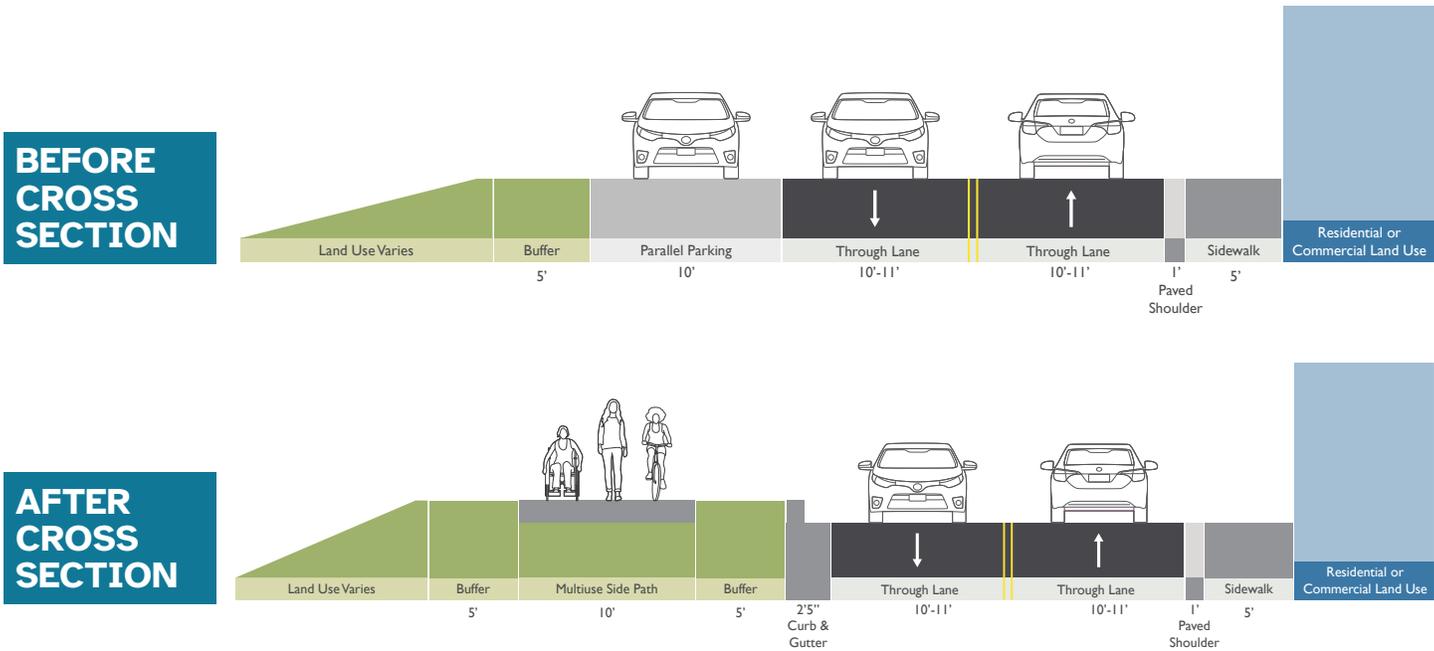
**\$105,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



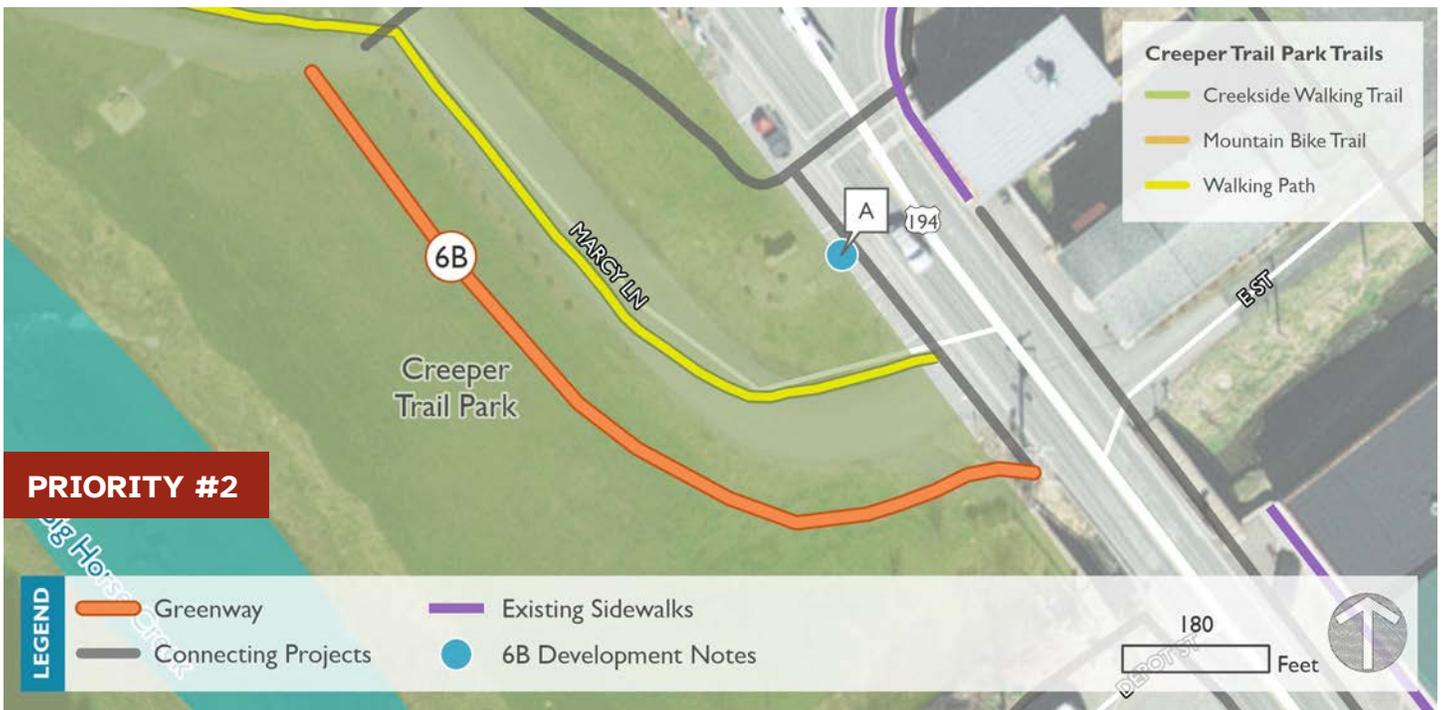
CONNECTIONS	CROSSINGS	KEY ELEMENTS
<ul style="list-style-type: none"> <li>Lansing Creeper Trail Park to Depot Street</li> </ul>	<ul style="list-style-type: none"> <li>Trail Crossing of Lansing Creeper Trail Park Driveway</li> </ul>	<p><i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i></p> <p><b>A.</b> Modify Parallel Parking on NC 194 to Provide Clear Line of Sight for Pedestrians and Exiting Park Traffic</p> <p>Option: Replace Parking with Multi-Use Sidepath</p>

**PROJECT 4, 5 AND 6A MEET ALL WAY STOP**



# 6B

## LANSING CREEPER TRAIL PARK TO DEPOT STREET ALIGNMENT B (OFF ROAD GREENWAY)



**PRIORITY #2**

### PROJECT DESCRIPTION

- 10 Foot Greenway on Park Property to New NC 194 Bridge Sidewalk

### PLANNING LEVEL COST ESTIMATE

**\$175,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



**CONNECTIONS**

**KEY ELEMENTS**

*\*SEE LOCATION ON MAP BY CORRESPONDING LETTERS*

- o Lansing Creeper Trail Park to Depot Street

- A. Modify Parallel Parking on NC 194 to Provide Clear Line of Sight for Pedestrians and Exiting Park Traffic

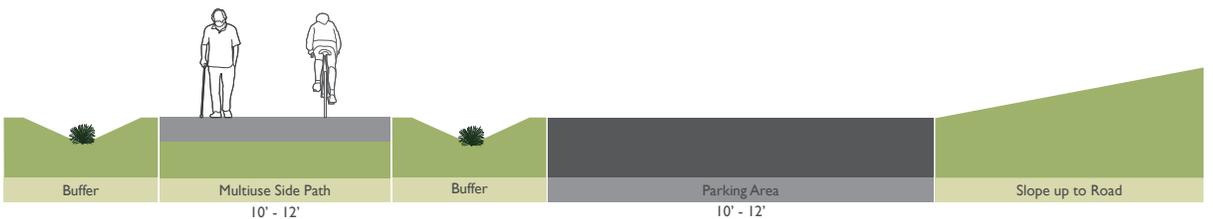
**ALIGNMENT VIEW FROM PARK (LOOKING TOWARDS EXIT)**



**BEFORE CROSS SECTION**



**AFTER CROSS SECTION**



# 7A

## DEPOT STREET GREENWAY (ALIGNMENT A)



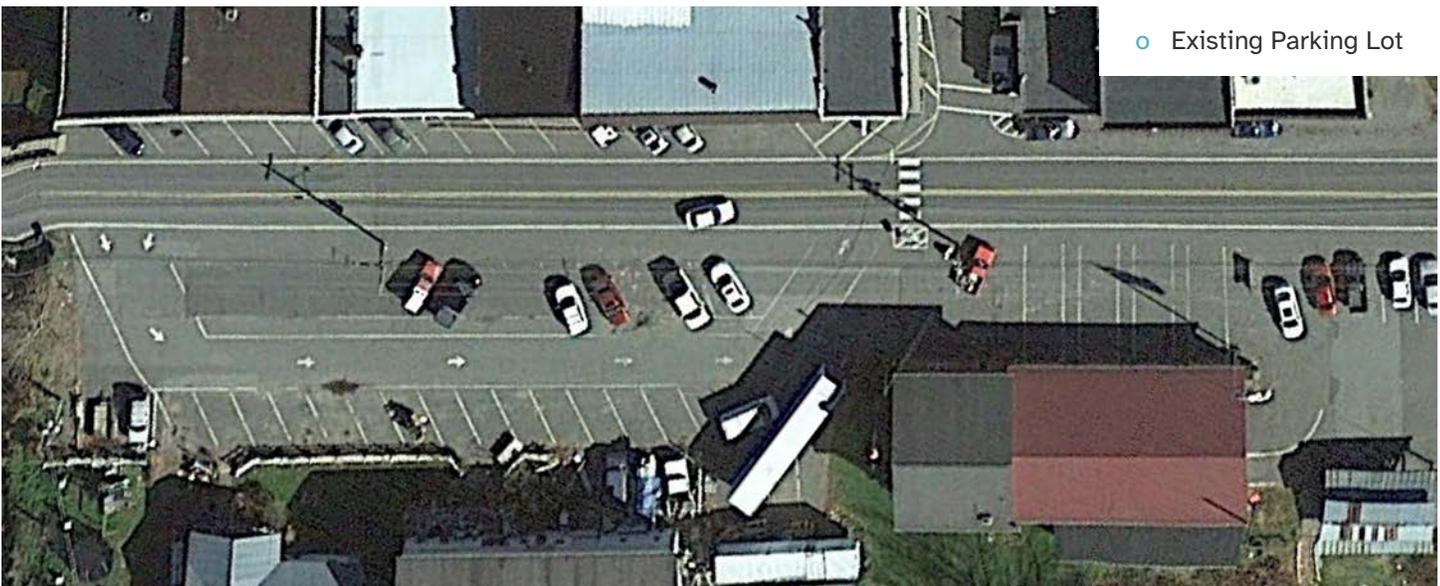
### PROJECT DESCRIPTION

- 10 Foot Greenway Along Western Edge of Parking Lot
- Buffer from Parking Area

### PLANNING LEVEL COST ESTIMATE

**\$220,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



**CONNECTIONS**

**KEY ELEMENTS**

*\*SEE LOCATION ON MAP BY CORRESPONDING LETTERS*

- o Lansing Creeper Trail Park to Fire Department

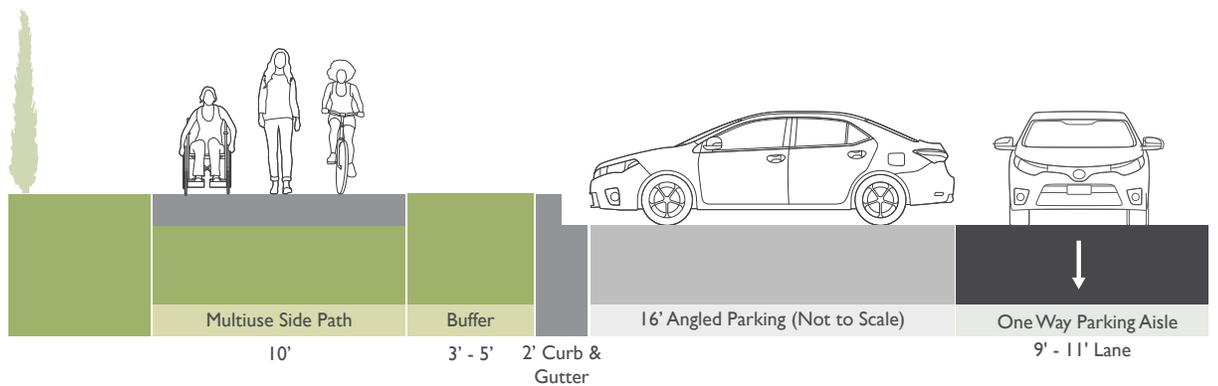
- A. Reconfigure Parking Lot for One Way Traffic Flow with Angled Parking
- B. Maintain Private Parking Spaces

**AFTER IMAGE**



*Graphic shows both Projects 7 and 8 together!*

**AFTER CROSS SECTION**



# 7B

## DEPOT STREET MULTI-USE SIDEPATH (ALIGNMENT B)



### PROJECT DESCRIPTION

- 10 Foot Multiuse Sidepath Along Western Side of NC 194
- Curb and Gutter with 5 Foot Buffer

### PLANNING LEVEL COST ESTIMATE

**\$200,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



CONNECTIONS	CROSSINGS	KEY ELEMENTS
<ul style="list-style-type: none"> <li>Lansing Creeper Trail Park to Fire Department</li> </ul>	<ul style="list-style-type: none"> <li>Depot Street (Parking Lot Driveways)</li> </ul>	<p><i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i></p> <ul style="list-style-type: none"> <li>A. Reconfigure Parking Lot for One Way Traffic Flow with Angled Parking</li> <li>B. Maintain Private Parking Spaces</li> </ul>

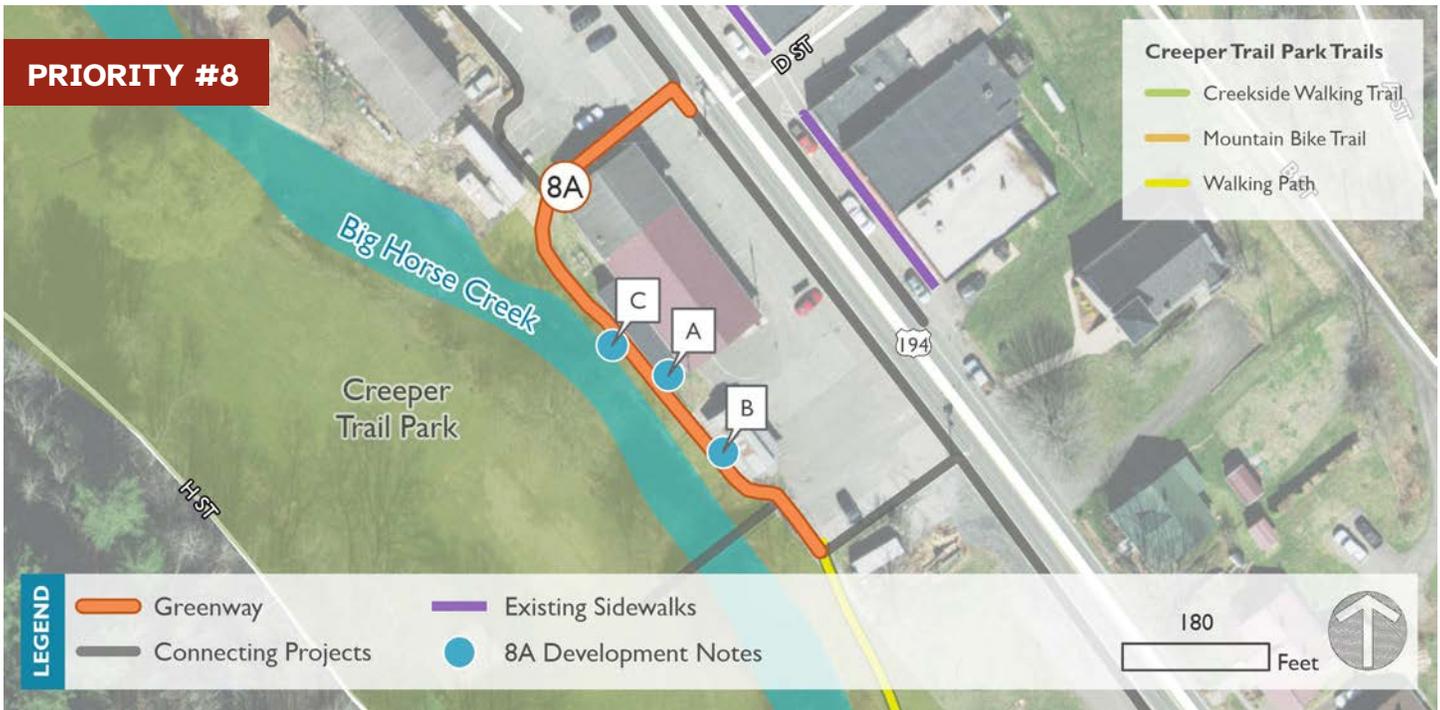
**AFTER IMAGE**



# 8A

## FIRE DEPARTMENT CONNECTION (LONG-TERM) OFF ROAD GREENWAY ALIGNMENT A

PRIORITY #8



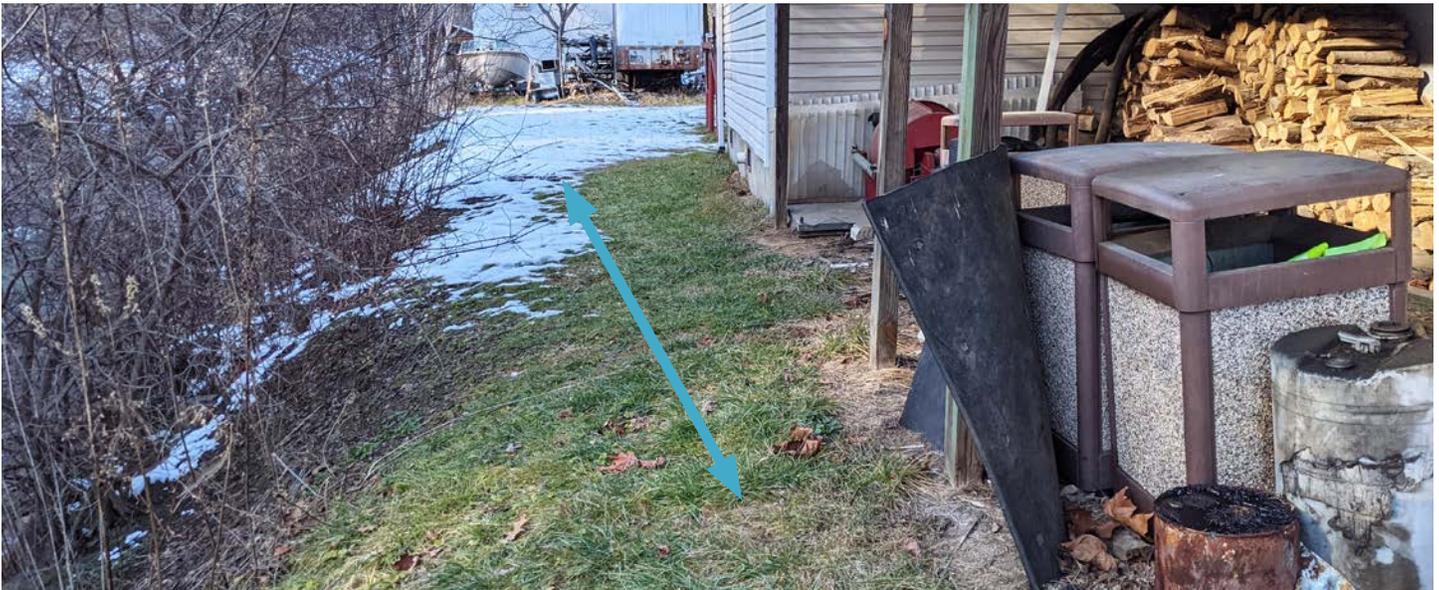
### PROJECT DESCRIPTION

- 10 Foot Greenway Behind Fire Department
- This option is not preferred at this time due to obstacles in the Fire Department property layout.** The project may become more feasible in the future.

### PLANNING LEVEL COST ESTIMATE

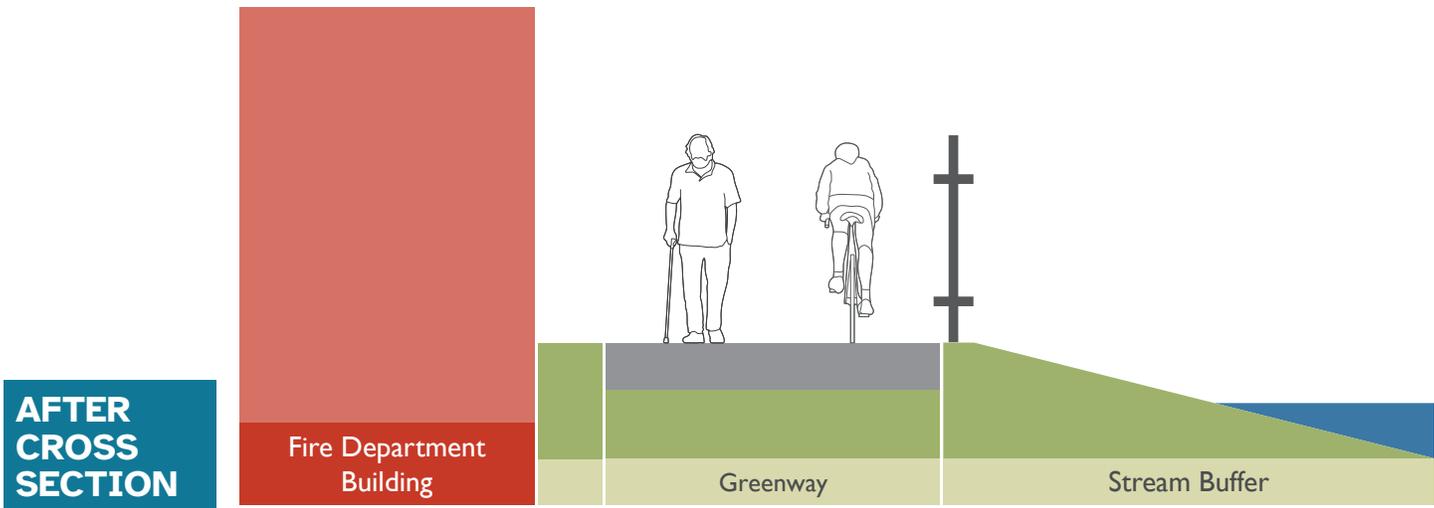
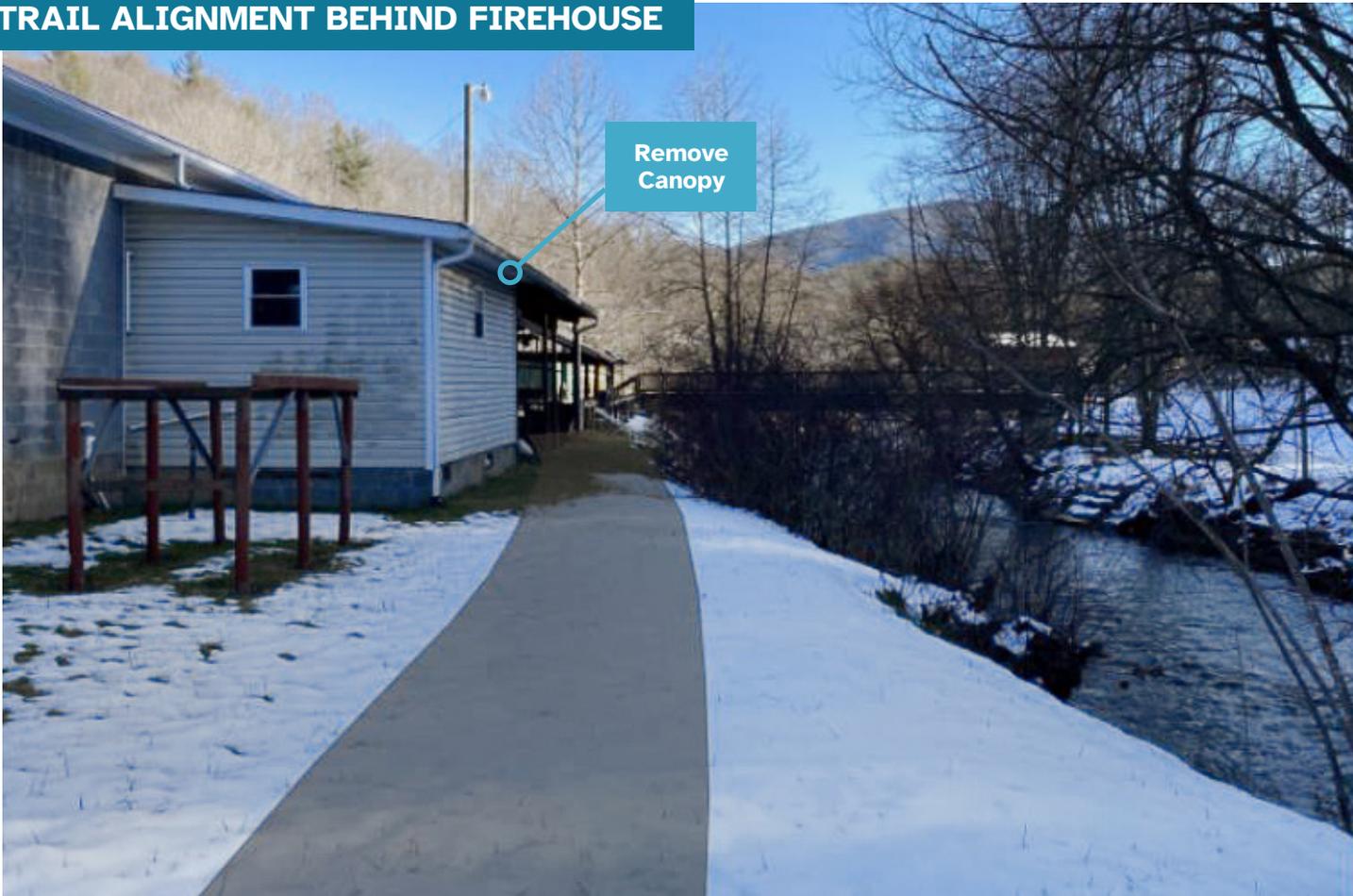
**\$247,500**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



CONNECTIONS	KEY ELEMENTS <i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i>
<ul style="list-style-type: none"> <li>o Depot Street to Lansing Creeper Trail (South)</li> </ul>	<ul style="list-style-type: none"> <li>A. Covered Storage Area Modification Required</li> <li>B. Integrate Trail with Fire Department BBQ Pit</li> <li>C. Coordinate with Stream Restoration Project</li> </ul>

## TRAIL ALIGNMENT BEHIND FIREHOUSE



**AFTER  
CROSS  
SECTION**

8' - 10'

# 8B

## FIRE DEPARTMENT CONNECTION ALONG NC-194 (PREFERRED) ALIGNMENT B



### PROJECT DESCRIPTION

- 10 Foot Multi-Use Sidepath Along Western Side of NC 194
- Flush Treatment Along Wide Fire Department Driveway

### PLANNING LEVEL COST ESTIMATE

**\$250,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*

### SHORT TERM - TEMPORARY OPTION: SHARED USE\* WITH PARKING LOT AISLES



\* Trail users use this alignment under existing conditions. Signing and Pavement markings are recommended to reduce vehicle and trail user conflicts

CONNECTIONS	CROSSINGS	KEY ELEMENTS <i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i>
<ul style="list-style-type: none"> <li>○ Depot Street to Lansing Creeper Trail (South)</li> </ul>	<ul style="list-style-type: none"> <li>○ Fire Department Driveway Crossings</li> </ul>	<ul style="list-style-type: none"> <li>A. Wide Driveway Required for Fire Department</li> <li>B. Delineate Parking Aisles and Driveways for Trail User Safety</li> </ul>

**ALIGNMENT B AT FIRE STATION DRIVEWAY**



# 9

## NC-194 WEST SIDE SIDEWALK TO TEABERRY ROAD



**PRIORITY #12**

### PROJECT DESCRIPTION

- 5 Foot Sidewalk
- Curb and Gutter Where Possible

### PLANNING LEVEL COST ESTIMATE

**\$160,000**  
*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*

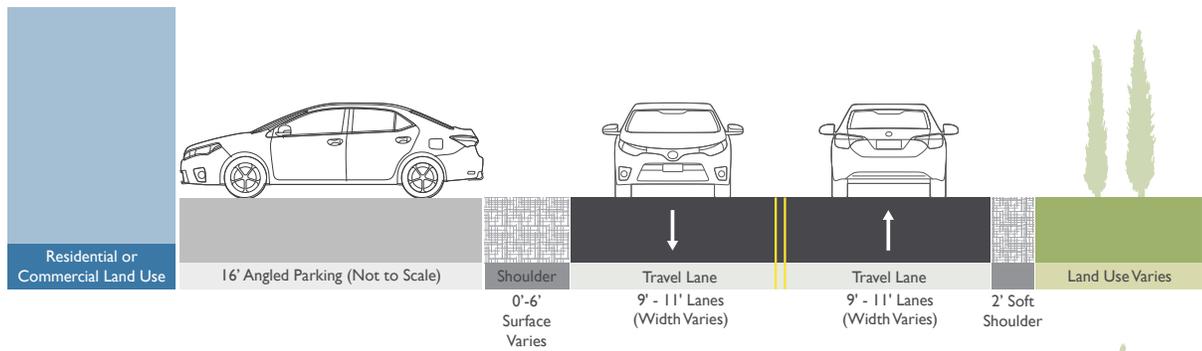


CONNECTIONS	CROSSINGS	KEY ELEMENTS <i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i>
<ul style="list-style-type: none"> <li>Fire Department to Teaberry Road and A Street</li> </ul>	<ul style="list-style-type: none"> <li>NC 194 Crossing from A Street to Teaberry Road</li> </ul>	<ul style="list-style-type: none"> <li>A. Accommodate Utility Poles in Buffer Where Possible</li> <li>B. Backing Vehicle Conflicts, Consider Sidewalk at Building Front (Front of Parking)</li> </ul>

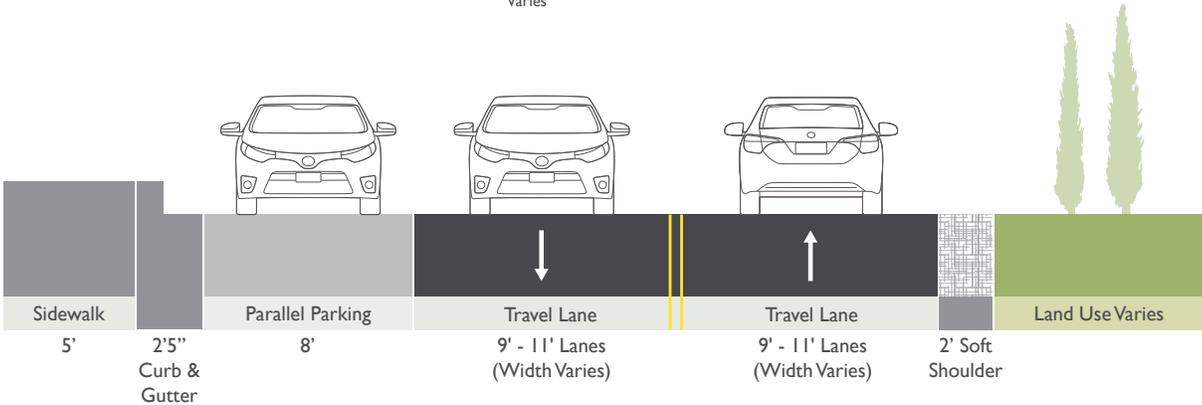
## SIDEWALK EXAMPLE



### BEFORE CROSS SECTION

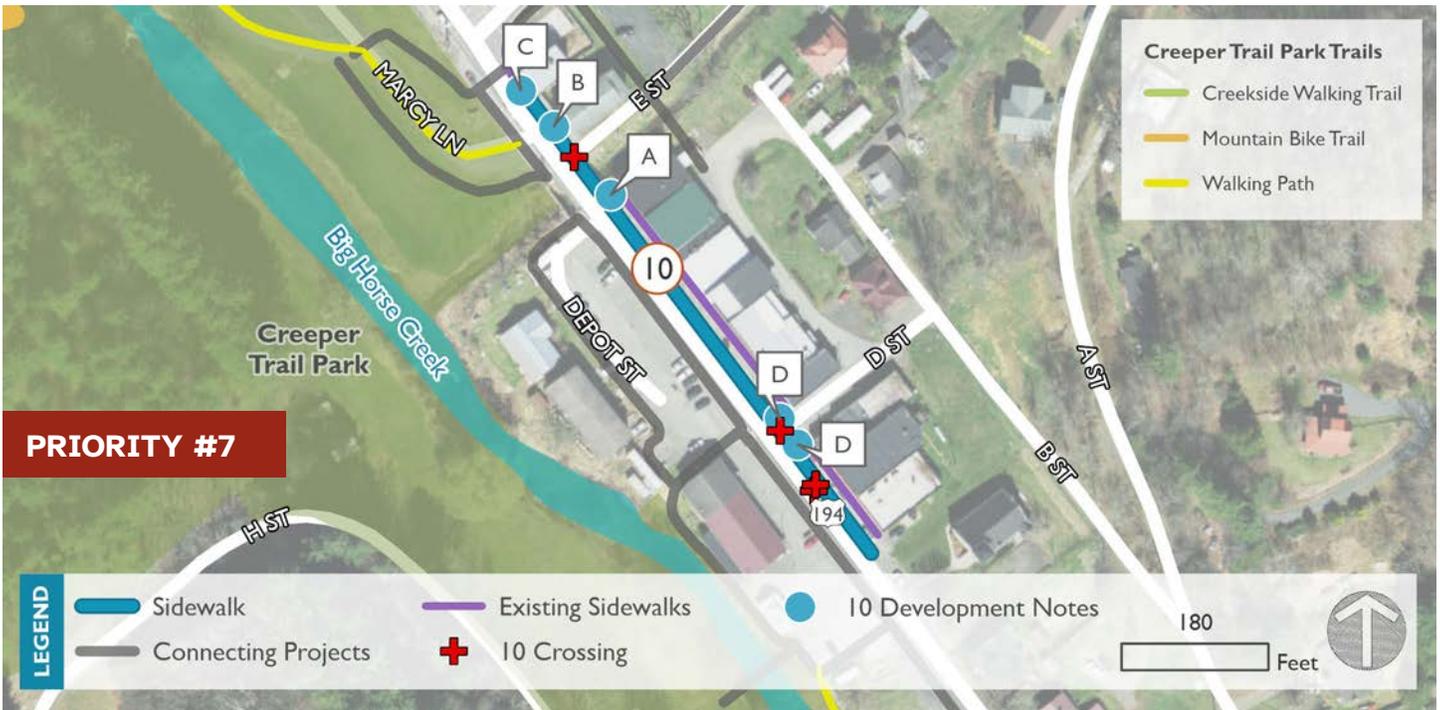


### AFTER CROSS SECTION



# 10

## NC-194 EAST SIDE SIDEWALK AND PARKING MODIFICATIONS



**PRIORITY #7**

### PROJECT DESCRIPTION

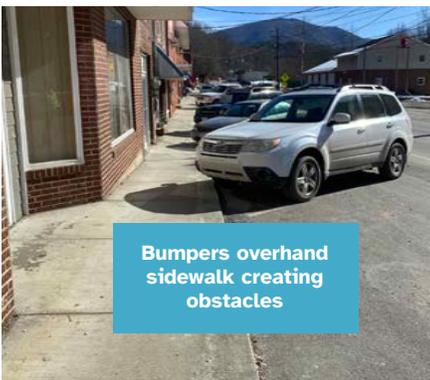
- Widen Sidewalk between 5 Feet to 10.5 Feet (Width Varies) and Convert Parking to Parallel Parking from Old Field Branch to Church
- Landscaping Bump Outs at Pedestrian Crossings
- 5 Foot Sidewalk from E Street to All Way Stop (NC 194 and S. Big Horse Creek Road)

\* Currently there are a max of 28 angled parking spaces. With parallel parking, up to 17 spaces will be available, for a net loss of 9 parking spaces. Option to add parking behind the building may be investigated.

### PLANNING LEVEL COST ESTIMATE

**\$160,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*

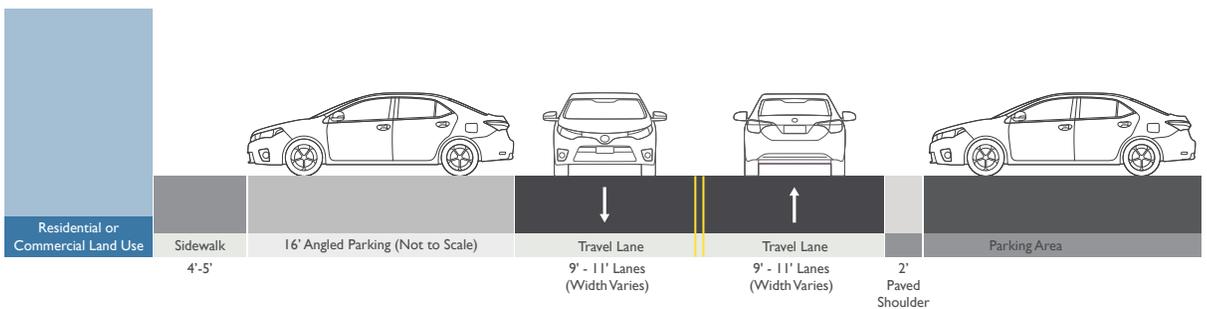


CONNECTIONS		KEY ELEMENTS	
<ul style="list-style-type: none"> <li>Commercial Center of Town to Parking and Trails</li> </ul>		<p><i>*SEE LOCATION ON MAP BY CORRESPONDING LETTERS</i></p> <ul style="list-style-type: none"> <li>A. Current Angled Parking Configuration Creates Vehicle Overhang onto Sidewalk and into NC 194</li> <li>B. Sidewalk Connection and Parking Restriction Above E Street</li> <li>C. Connect to All Way Stop Via Existing Sidewalk at Pie on the Mountain</li> <li>D. Example Landscape Bump Out Locations</li> </ul>	
CROSSINGS		OTHER NOTES	
<ul style="list-style-type: none"> <li>E Street Entrance</li> <li>D Street</li> </ul>		<ul style="list-style-type: none"> <li>Consideration may be giving to removing all on street parking in order to widen sidewalks further and provide additional landscaping.</li> </ul>	

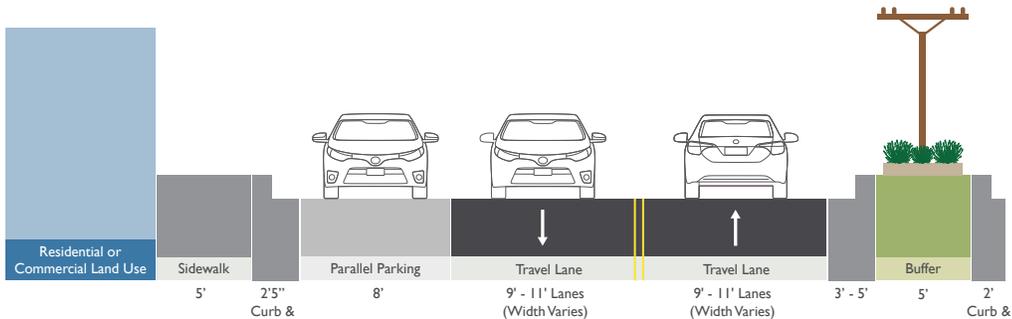
## BEFORE & AFTER IMAGES



### BEFORE CROSS SECTION



### AFTER CROSS SECTION



# 11

## NC-194 TO E STREET SIDEWALK CONNECTORS



### PROJECT DESCRIPTION

- Fill Sidewalk Gaps with 5' Sidewalk along NC 194 from S. Big Horse Creek Road to F Street
- Curb and Gutter

### PLANNING LEVEL COST ESTIMATE

**\$165,000**

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*



**CONNECTIONS**

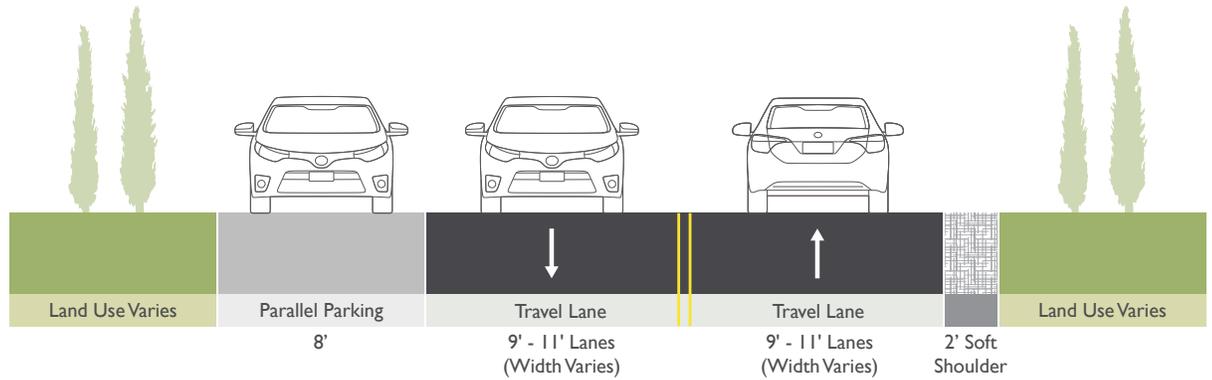
**KEY ELEMENTS**

*\*SEE LOCATION ON MAP BY CORRESPONDING LETTERS*

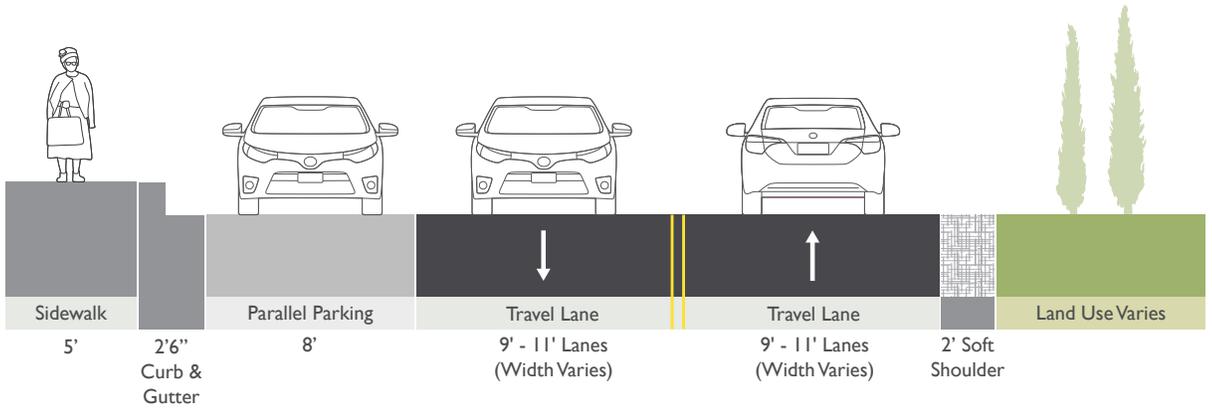
- E Street to Buildings Fronting NC 194

- A. Infeasible Sidewalk Section
- B. Low Priority Sidewalk Gap
- C. Connection to E Street on F Street

**BEFORE CROSS SECTION**



**AFTER CROSS SECTION**



# 12

## UPGRADE EXISTING BRIDGE (NEAR FIRE DEPARTMENT) FOR ADA ACCESS



### PROJECT DESCRIPTION

- Fill Sidewalk Gaps with 5' Sidewalk along NC 194 from S. Big Horse Creek Road to F Street
- Upgrade Existing Bridge (Near Fire Department) for ADA Access

### PLANNING LEVEL COST ESTIMATE

**\$60,000** (existing bridge upgraded with ADA accessible ramps)

**\$400,000** (new construction)

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*

## CONNECTIONS

- Connect Town and Lansing Creeper Trail to Future Accessible Park

### EXISTING BRIDGE



### BRIDGE EXAMPLE



# 13 14

## CREEPER TRAIL EXTENSION AND BRIDGE CREEPER TRAIL NORTH BRIDGE TO EAST SIDE CAMPGROUND



### PROJECT DESCRIPTION

#### PROJECT 13

- Paved 10' Greenway Extension to Old Rail Bed
- Accessible Trail Bridge (Possible Suspension Bridge Concept)

#### PROJECT 14

- Accessible Trail Bridge to Planned Campground
- At present, there is no way to cross the creek at the northern end, which is planned to become integral to the Park

### PLANNING LEVEL COST ESTIMATE

Project 13: \$665,000

Project 14: \$545,000

*Includes Design, Right-of-Way, Utilities and Construction Per Assumptions from the NCDOT Bicycle and Pedestrian Cost Estimating Tool*

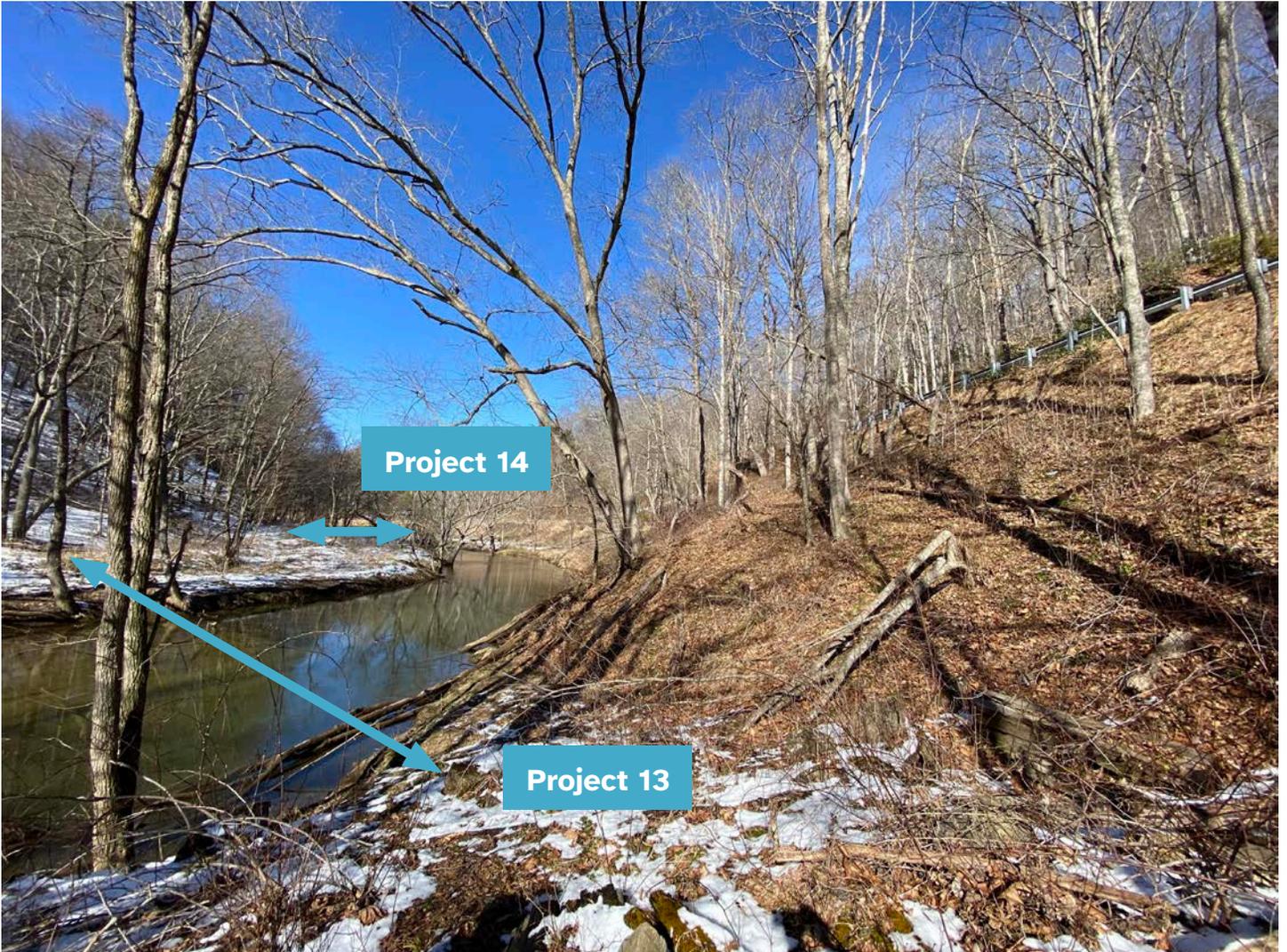
## CONNECTIONS

### PROJECT 13

- Lansing Creeper Trail, Parking and Bathrooms to Campgrounds and Trail System

### PROJECT 14

- Big Horse Creek East Side Campground Connection to Lansing Creeper Trail, Parking and Bathrooms and Trail System





# PROJECT GOAL MATRIX

The Town of Lansing identified four guiding project goals (see page 11). The matrix below details the goals that each project meets.

**GOAL 1:**  
Providing connectivity on foot and bike.

**GOAL 2:**  
Ensuring economic resiliency.

**GOAL 3:**  
Enabling residents and visitors to park once and walk/bike.

**GOAL 4:**  
Creating a sense of place that tells Lansing's story.

PROJECT	GOAL 1	GOAL 2	GOAL 3	GOAL 4
1 / E Street – One Way EB Shared	○	○	○	○
2 / Lansing Creeper Trail Park to Depot St Alignment B (Off Road Greenway)	○	○	○	○
3 / LPCCA to E Street Alignment A (On Road)	○	○	○	○
4 / All Way Stop to E Street Connection (Via Corner Parcel)	○	○	○	○
5 / Paved Creeper Trail Extension to All Way Stop	○	○	○	○
6 / Depot Street Greenway (Alignment A)	○	○	○	○
7 / NC-194 East Side Sidewalk and Parking Modifications	○	○	○	○
8 / Long-Term Fire Department Connection Off Road Greenway Alignment A	○	○	○	○
9 / LPCCA to E Street Alignment B (Off Road)	○	○	○	○
10 / Lansing Creeper Trail Park to Depot Street Alignment A (Multi-Use Sidepath)	○	○	○	○
11 / Depot Street Multi-Use Sidepath (Alignment B)	○	○	○	○
12 / NC-194 West Side Sidewalk to Teaberry Road	○	○	○	○
13 / Fire Department Connection Along NC-194 (Preferred) Alignment B	○	○	○	○
14 / Creeper Trail Extension and Bridge	○	○	○	○
15 / Creeper Trail North Bridge to East Side Campground	○	○	○	○
16 / Neighborhood Greenway Connector	○	○	○	○
17 / NC-194 to E Street Sidewalk Connectors	○	○	○	○
18 / Upgrade Existing Bridge for ADA Access	○	○	○	○



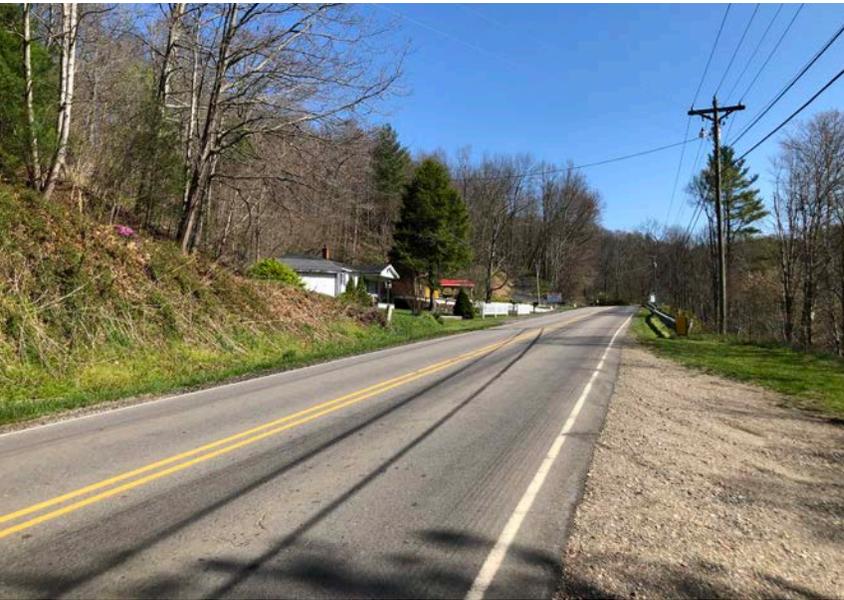


Image 10. NC-194 Traveling South of Downtown Towards the Town Limits.



Image 11. Ashe County Middle School

## SECONDARY PROJECTS

Three “secondary” projects were identified during the Lansing Moves network development. These were indicated to be longer-term projects and thus were not ranked, nor the concepts further developed, as were the priority group of projects. These projects are the following:

### Teaberry Road to Town Limits Shoulder

A recommendation of paved shoulders from Teaberry Road to just north of the Town Limits, where the commercial building (formerly Sollie B’s BBQ) is located. According to NCDOT 2019 data, this segment of road carries 5,100 vehicles per day (VPD) and has a posted speed limit of 35 miles per hour. The desired facility width of paved shoulders is 8’, per the FHWA Bikeway Selection Guide<sup>v</sup>. If this is not feasible due to constructability constraints, a narrower shoulder may be considered; NCDOT guidance recommends a 5’ shoulder.

### South Big Horse Creek Road to G Street Shoulder

A recommendation of paved shoulders from the all-way stop to G Street along South Big Horse Creek. In

addition to providing pedestrian access, this route is used by people on bikes (according to community member feedback and Strava data insights). This road carries 1,200 VPD and has a posted speed limit of 25 miles per hour; according to the Bikeway Selection Guide, a 5’ shoulder is recommended. The only road in Lansing that is on the NCDOT 2021-2025 HMIP is South Big Horse Creek, which is anticipated for resurfacing in 2024. This may be a coordination opportunity with NCDOT to ensure that a pedestrian or bicycle facility is advanced.

### Regional Greenway Connection to Middle School

This greenway connection would extend beyond the Town limits to connect Lansing to the Ashe County Middle School, just a few miles south of Town. A detailed alignment was not investigated as a part of this study. Figure 10 describes the concept for this connection.

As development, NCDOT projects, or other coordination opportunities arise, these projects should be considered to provide a roadmap for further conversations.

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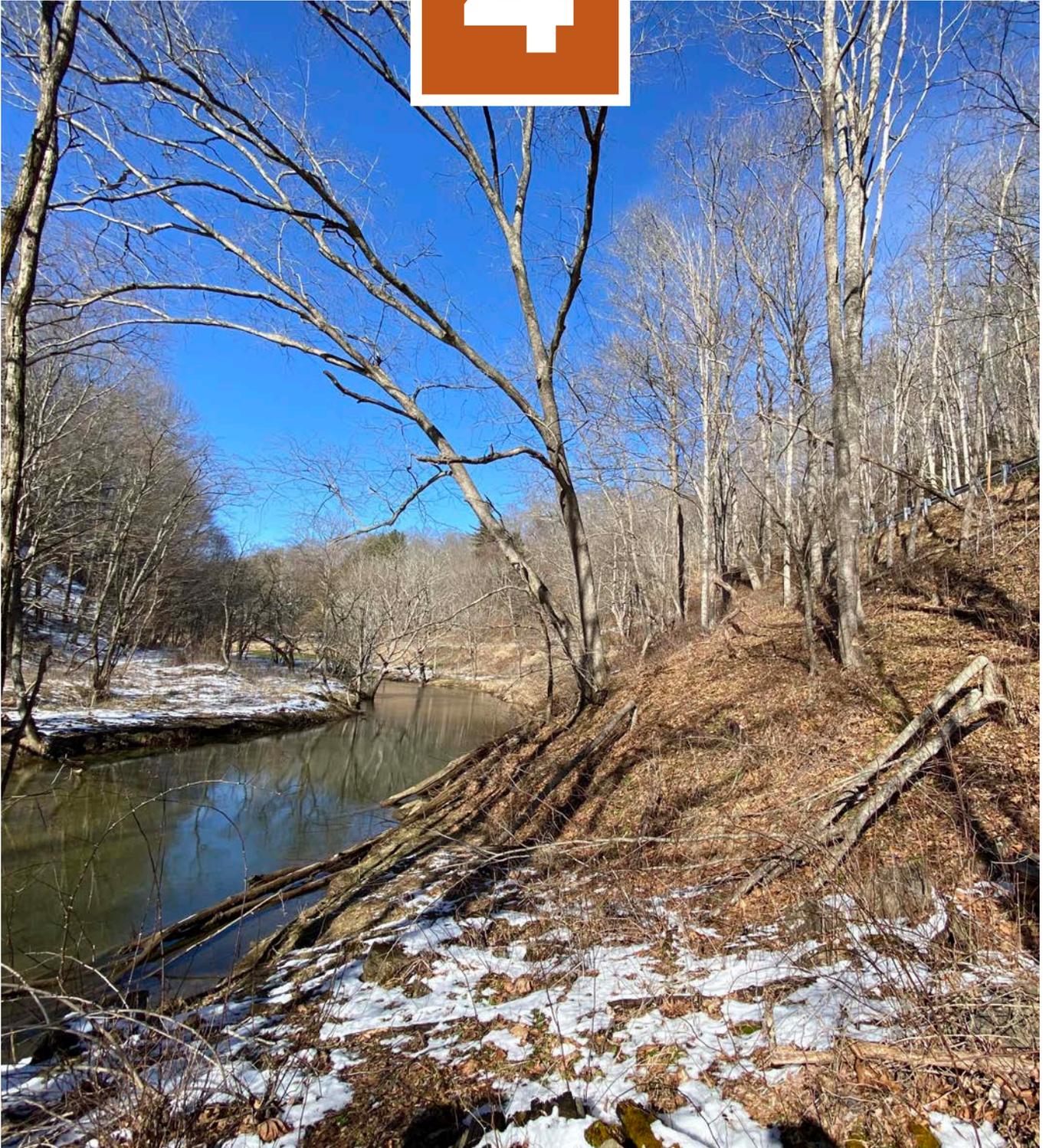
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# 4



## IMPLEMENTATION PLAN

## IMPLEMENTATION PLAN

### LIFECYCLE OF A MULTIMODAL PROJECT

The project recommendations in this Plan are a starting point for the Town to develop a network for people walking and biking. Many of the project recommendations appear as lines on a map, and these are intended to be a high-level concept for the Town to develop further as the projects advance into

the next stages of a typical project lifecycle. These lines are not intended to represent the final alignment for construction; they are simply a place for the Town to work with partners in project development and pedestrian/bicycle network expansion. This Plan provides the 15–20-year vision for the Town to improve walking and biking for its residents and visitors.

### LIFE CYCLE OF A TRANSPORTATION PROJECT

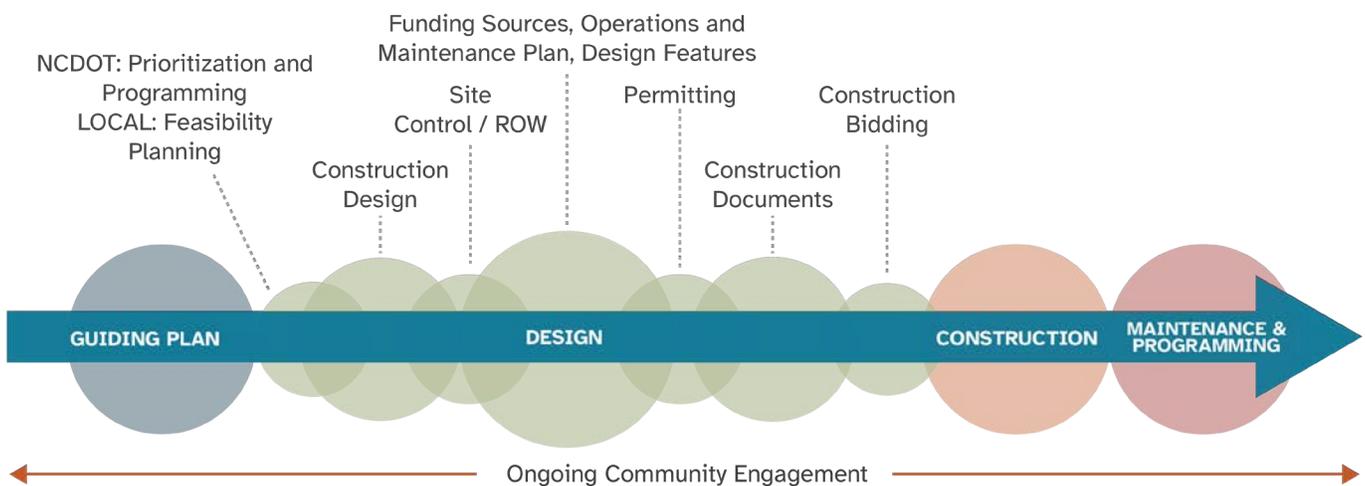


Figure 11. Graphic Illustrating the Typical “Lifecycle” of a Multimodal Project; Lansing Moves is in the Guiding Plan Phase

Figure 11 describes the typical lifecycle of a multimodal project. The Lansing Moves Plan represents the ‘Guiding Plan’ phase of this process; from there, a project identified in this Plan will move into the many stages of design, then construction, and then maintenance and programming. It is important to acknowledge this process as it helps set the stage for project success. The time it takes to implement a project can depend on how uncomplicated or complex the project may be, who “manages” the project (e.g., local jurisdiction or NCDOT), the type of funding involved, how much land is needed, and the scale (size) of the project. An example of an uncomplicated project is a new crosswalk. An example of a complex project is a greenway that requires the purchase of private property and crosses streams and busy roadways.

The following Action Plan offers a rough estimate of the timeframe in which projects should be completed; however, it should be noted that this depends on resources and budget. Project timeframes are variable based on funding, resources and other unforeseen project elements.

## THE ACTION PLAN

The Action Plan describes the administrative, infrastructure, policy, and program steps needed to see this Plan move forward. It should be noted that evolving project partner and funding opportunities may shift priorities and action items.

Table 2. Action Plan

TASK #	DESCRIPTION	LEAD	PARTNER	TIME FRAME	HOW WILL SUCCESS BE MEASURED
<b>ADMINISTRATIVE ACTION ITEMS</b>					
1	Adopt Lansing Moves as the Town’s Pedestrian and Bicycle Plan. This allows the Plan to become the official multimodal planning document for the Town and shows intention to support implementation over time. The Plan should be shared with county, regional and state partners for inclusion in the comprehensive plan, County Transportation Plan (CTP) and other planning documents.	Board of Aldermen	Steering Committee, County, NCDOT, RPO	2021	Adopted Plan
2	Formalize the Lansing Moves Steering Committee as a planning advisory role on pedestrian and bicycle project implementation.	Board of Aldermen, Steering Committee		2021	Committee Charter or Meeting Agendas/Minutes
3	Ensure that recommendations from Lansing Moves are incorporated into regional plans, such as the CTP and the County Comprehensive Plans.	County Staff, NCDOT, RPO	Steering Committee	2023	Amendments to Plan documents
4	Send interested volunteers to NCDOT Complete Streets Trainings and other multimodal design opportunities as they are offered.	Steering Committee		2023	Attendance at training events
5	Update Lansing Moves in 5 years. If any projects or programs have been completed, a new set of priorities should be proposed.	Steering Committee, Town Staff	Board of Aldermen	2026	Initiated planning process

TASK #	DESCRIPTION	LEAD	PARTNER	TIME FRAME	HOW WILL SUCCESS BE MEASURED
6	Work with High County COG or others to determine need for Capital Improvement Plan (CIP) and begin implementing a CIP if the need exists. Capital funding may be needed as a match for certain projects.	Town Staff, Board of Aldermen		2023	CIP Evaluation
7	Actively participate in regional trail planning efforts to ensure a regional trail network and connectivity	Town Staff, RPO, Steering Committee		Ongoing	Attendance at coordination meetings
<b>INFRASTRUCTURE ACTION ITEMS</b>					
8	Begin setting the groundwork for Catalyst Projects: E Street One Way EB Shared, Lansing Creeper Trail Park to Depot Street Alignment B (Off Road Greenway), and LPCCA to E Street Alignment A (On Road). Develop feasibility study for the three projects.	Steering Committee	Board of Aldermen	2026	Feasibility study for three Catalyst Projects
9	As the saying goes - <i>what gets counted counts</i> . Collect counts of people walking and biking the Creeper Trail. Use volunteers or partner with the County/RPO/NCDOT to obtain loaner equipment. Hint: this will be helpful to grant applications.	Steering Committee, County Staff, RPO		2026	Data from 2 count periods/year (April and September)
10	Work with NCDOT Division 11 to review their 5-year resurfacing program to identify possible opportunities on the horizon for pedestrian project implementation (HMIP). Begin talking with NCDOT immediately about the Big Horse Creek repaving project.	Steering Committee, NCDOT, RPO		2021	Annual coordination meeting agenda and minutes
11	Low-hanging fruit project: advance the project to upgrade the existing bridge for ADA access. Steering Committee members have been pursuing this project for grant funding.	Steering Committee, Town Staff	Board of Aldermen	2023	One project advanced
12	Design a pedestrian- and bicycle-scale wayfinding system to indicate destinations, distance and direction. Given Lansing's small size, the system would be achievable and could include mile-marker indicators on the Trail.	Town Staff, Steering Committee, GLAD	Board of Aldermen	2026	Draft wayfinding system
13	Implement bike parking racks or other bicycle amenities (e.g., fix-it stations) in downtown or at LPCCA as it is developed.	Steering Committee, Town Staff	Board of Aldermen	2024	Bike amenities installed
14	Explore options and grant funding to improve Creeper Trail Park Mountain Bike Trails. Secure grant funding to hire a professional trail building company to enhance trail and add features.	Steering Committee, GLAD	Board of Aldermen	2022	Improved Mountain Bike Trails

TASK #	DESCRIPTION	LEAD	PARTNER	TIME FRAME	HOW WILL SUCCESS BE MEASURED
15	Send volunteers to Trail Building School available through Rockingham Community College in Wentworth, NC or McDowell Technical Community College in Marion, NC.	Steering Committee		2025	Attendance at Trail Building School
16	Invite member of the Northwest NC Mountain Biking Association for a field visit/ brainstorming session.	Steering Committee		2023	Field Visit with Mountain Bike Representative
<b>POLICY &amp; PROGRAM ACTION ITEMS</b>					
17	Follow guidance outlined in the Town Land Use Plan related to updating ordinances to support bicycling and walking.	Board of Aldermen	Steering Committee	2026	Ordinance updates as needed
18	Create a façade improvement incentive grant program for businesses; use this program to build support for larger downtown streetscape improvements such as power line relocation and streetscaping. Invite staff from the NC Main Street Center to speak to the Town about options such as these.	Board of Aldermen, GLAD	Town Staff	2025	Lansing Façade Improvement Program
19	Work with Ashe County and the Ashe County Chamber of Commerce to determine if there are ways to partner on funding opportunities for community projects, tourism development, or standalone bicycle/pedestrian infrastructure.	Board of Aldermen	Steering Committee	2023	Coordination with the County and Chamber
20	As walking and biking activities grow in the Town, consider ways to celebrate walking and biking such as free, temporary bike parking at Town events; bicycle rodeos for kids; or free loaner bikes for short trips in town.	Steering Committee		2026	New events in the community

## POTENTIAL FUNDING SOURCES

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To advance Lansing's priority projects, there are several eligible funding sources that the Town may consider. The North Carolina Main Street and Rural Planning Center's Potential Funding Sources and Resources for Downtown and Rural Economic Development document is a great resource for Lansing. This contains dozens of resources and is found in Appendix B.

Given the small size and population of Lansing, and its position within the RPO, the Town will need to think beyond traditional sources of funding for bicycle and pedestrian projects. In addition to the resources in Appendix B, the following are a few other considerations. Each funding source has unique eligibility and funding amounts. The funding programs may also change, so the information provided is accurate at the time of publication of this Plan.

## FUNDING PROGRAMS

### Capital Improvement Plan (CIP)

A CIP may be needed to reserve funds for and apply for various funding sources and help guide the Town in transportation and other infrastructure improvements (water/sewer). As described in the Action Plan, the first step is determining the need and then developing a plan.

### Business Improvement Districts

The North Carolina code authorizes local governments to define special areas to assess property tax on properties located within the district, which in turn funds projects and services in said district. These special taxing districts, often known as Business Improvement Districts (BIDs) fund various services and functions including downtown revitalization projects. Such projects may encompass the following: maintenance of streets, sidewalks, and other public facilities; downtown marketing and events; and construction of capital improvements. Such a funding source is a long-range consideration for Lansing as the downtown is still being developed.

### NCDOT Bicycle Helmet Initiative

Once Lansing grows its culture for biking and walking, it may want to host a community event. Since 2007, the NCDOT Bicycle Helmet Initiative has helped equipped thousands of children with a helmet – a simple and essential means of reducing injuries and fatalities. To promote helmet usage and support local bicycle activities, the selection process encourages applicants to partner with community groups to extend bicycle safety awareness outreach. More information can be found [here](#).

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**CLOSING**

## CLOSING

The people of Lansing are hardworking and determined; they are eager to have help and gracious when resources come their way. When they set out to improve the Town, they do so with grit and gratitude. They embody the Town's motto - *Forever, community, family, friend.*

In developing this Plan, the people of Lansing set out to identify sidewalk and greenway connections for their residents and visitors, to ensure economic resiliency and to tell Lansing's story. This Plan identifies key connections to enhance downtown and nearby destinations, and it offers policy, program and funding ideas to realize this vision.

To see these projects through, Lansing will need to get creative with funding and partnership opportunities. Lansing will not compete well for the standalone NCDOT source of pedestrian/bicycle project funding (Strategic Transportation Investments) and will want to explore developing funding streams within the Town (like a reserve fund for capital improvements) or partnering with other agencies like the County or Chamber of Commerce.

To improve the downtown, Lansing will be successful by focusing first on smaller wins to generate support for the bigger projects. For instance, developing a façade improvement program will allow the Town to gain the momentum for larger projects like relocating power lines.

As the Town sets its sight on the recommendations in this Plan, they should pause and celebrate the tremendous amount of volunteer efforts that have brought them to the present day. Acknowledging this progress and dedication, Lansing will be successful in their endeavors. People will seek out its small-town charm and plentiful opportunities to connect with nature, live, dine and gather as a community.



**FOREVER, COMMUNITY, FAMILY, FRIEND.**



Image 12. Lansing from Above (Source: <https://vimeo.com/221426851>)

## Endnotes

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i History. Ashe County. (n.d.). <https://www.ashecountygov.com/ashe-county/history>.

ii History of Lansing. Town of Lansing. (2020, June 22). <https://www.lansingnc.us/history>.

iii Road Traffic Fatalities Exposure Rate. U.S. Department of Transportation. (2015, August 24). <https://www.transportation.gov/mission/health/road-traffic-fatalities-exposure-rate>.

iv Strava. (2021). Strava Global Heatmap. Retrieved from <https://www.strava.com/heatmap>

v Schultheiss, Bill; Goodman, Dan; Blackburn, Lauren; Wood, Adam; Reed, Dan; Elbech, Mary (2019). Bikeway Selection Guide. Federal Highway Administration.

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