

TRAIL MASTER PLAN UPDATE

CHEROKEE COUNTY CTP

DECEMBER 2022

Cherokee



MOVES

Cherokee County
2022 Comprehensive Transportation Plan

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1. INTRODUCTION

As part of the CTP process, the project team produced a Trails Master Plan for Cherokee County. The Trails Master Plan effort contains more detailed information specifically related to the state and future of multi-use paths and trails in Cherokee County and its municipalities. The document provides an existing conditions analysis, needs assessment and updated project prioritization for the trail system in Cherokee County and is intended to stand alone from the CTP.

The first step was conducting an inventory of existing and planned bicycle and pedestrian infrastructure and policies in Cherokee County. This includes elements like sidewalks, walking/hiking trails, multi-use paths, and bike lanes. The full existing conditions analysis for Cherokee County Trails can be found in Existing Conditions Report.

The existing conditions review showed a connected network of trails that could serve a transportation function in the County is currently lacking outside of Woodstock. The active transportation network is less connected in-between the downtown areas. Additionally, some frequently visited locations such as community parks, outdoor recreation opportunities, and schools are under-served by existing bicycle and pedestrian facilities. The southern portion of the County is generally better served with multi-use trail facilities than the northern portion of the County.

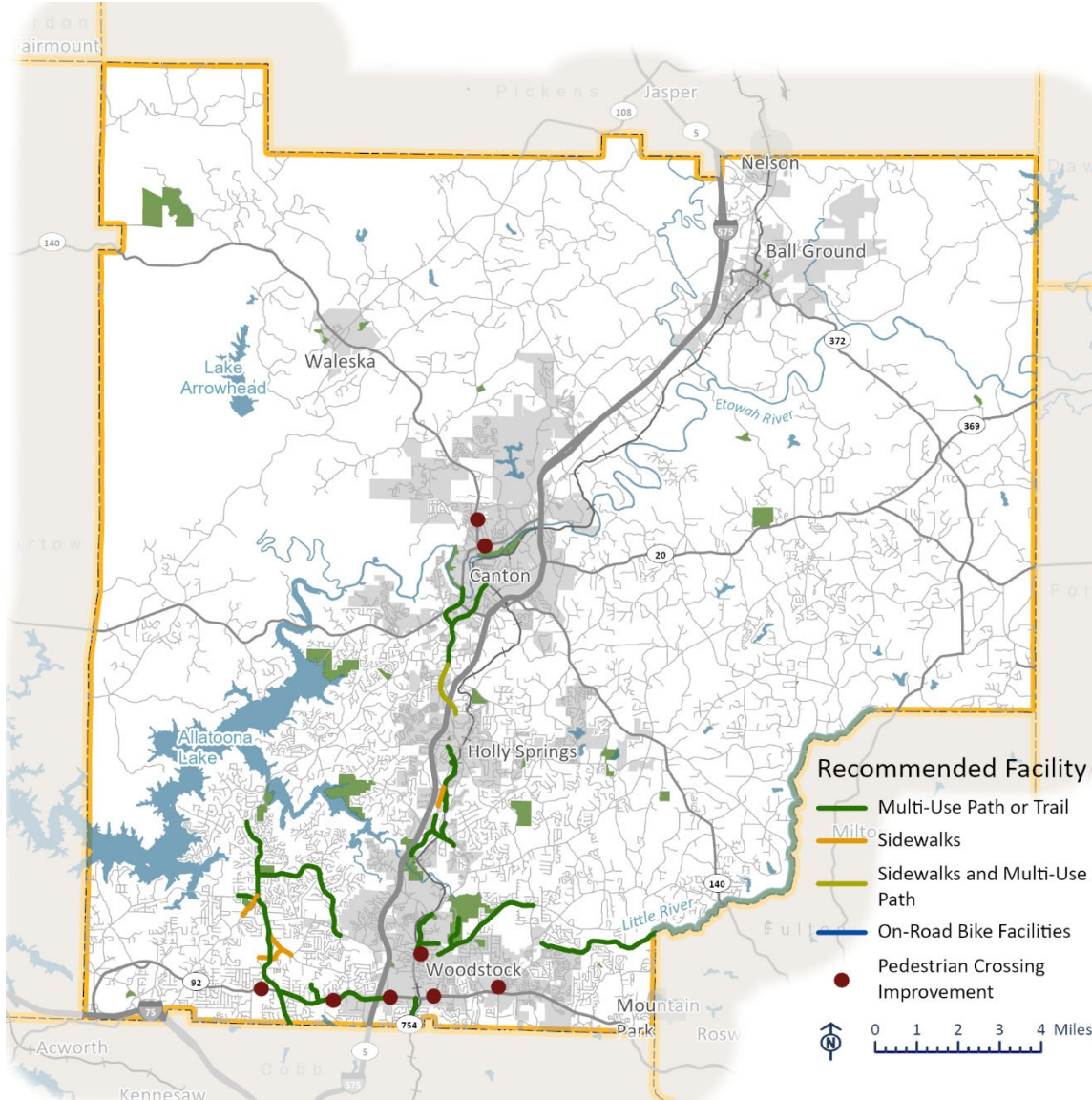
Following the existing conditions analysis, a needs assessment was conducted. The bicycle and pedestrian needs assessment involved a multifaceted analysis approach. The project team built off the review of previous bicycle, pedestrian, trail, and small area planning studies by documenting which facilities have been built. Parks, along with community destinations, were identified as part of a multi-phase bicycle and pedestrian needs selection analysis that looked at proposed facilities proximity to key destinations and land uses. The facilities were then cataloged based on their type. Initial findings were then presented to stakeholders for feedback to help identify additional recreation trails that are priority projects. The priority projects were then scored based on the plan's vision, goals, and objectives. Finally, the balance of previously recommended projects was carried forward as aspirational projects. For additional detailed descriptions and analysis of the bicycle and pedestrian needs analysis process, please refer to the Trails Master Plan Appendix.

Finally, the trails master plan projects were prioritized. The prioritization process uses a four metric scoring rubric with a four-tier scoring system. Using the universe of projects identified in the existing conditions and needs assessment portion of the plan, projects are analyzed and scored in GIS. Projects are prioritized using a weighted scoring system based on four key factors. The criteria used are: connections to key activity centers and destinations, connections to bicycle and pedestrian facilities, bicycle and pedestrian safety, and improving access to transit vulnerable communities. Projects are then ranked based on their composite score where the top 30 projects are considered for prioritized implementation.



The final list of project recommendations consists of 29 linear bicycle and pedestrian facilities and seven pedestrian crossing improvements, which can be seen below in Figure 1. A detailed list of projects can be found at the end of this document.

Figure 1 Final Recommended Trail Projects in Cherokee County



As part of the CTP process, the project team produced a Trails Master Plan for Cherokee County. This Trails Master Plan effort contains more detailed information specifically related to the state and future of multi-use paths and trails in Cherokee County and its municipalities. The following sections of this document provide an existing conditions analysis, needs assessment and updated project prioritization for the trail system in Cherokee County and is intended to stand alone from the CTP.



2. EXISTING CONDITIONS OVERVIEW

This section summarizes the inventory of existing and planned bicycle and pedestrian infrastructure and policies in Cherokee County. This includes elements like sidewalks, walking/hiking trails, multi-use paths, and bike lanes. The full existing conditions analysis for Cherokee County Trails can be found in Existing Conditions Report.

In order to better understand the current state of bicycle and pedestrian facilities and what improvements have been planned/implemented in Cherokee County, the project team reviewed bicycle, pedestrian, trail and small area planning studies for the County and its municipalities. Planned multi-use paths and trails from the previous CTP update (2016) were also reviewed and compared with existing conditions.

When reviewing existing bicycle and pedestrian facilities, multi-use path and trail facilities were grouped with on-road bicycle facilities. Multi-use facilities are currently more prevalent in Cherokee County than on-road bicycle facilities. Sidewalks were reviewed separately under pedestrian infrastructure section.

Planned on-road bicycle improvements and multi-use trail improvements were grouped together for the purposes of reviewing planned infrastructure. Planned sidewalk improvements were reviewed separately.

The following transportation, bicycle, pedestrian, and greenway plans and LCI studies were reviewed for on-road bicycle, pedestrian, and multi-use trail facilities recommendations:

- Cherokee Comprehensive Transportation Plan 2016
- Woodstock Greenprints Parks and Trails Master Plan
- Woodstock Town Center LCI Plan (2013 Update)
- Woodstock LCI Highway 92 Extension (2015)
- Bells Ferry LCI Plan (2006)
- 2015 Canton Forward
- Holly Springs Downtown LCI Plan (2013)
- Southwest Cherokee Parks and Trails Plan (2021)
- To help complete the inventory of existing bicycle and pedestrian facilities in Cherokee County, additional files and maps were reviewed to support documentation:
 - Atlanta Regional Commission Existing Bikeway Inventory (ESRI ArcGIS file)
 - Reinhardt University Hiking and Mountain Biking Trails (2018 pdf map)



EXISTING CONDITIONS KEY FINDINGS

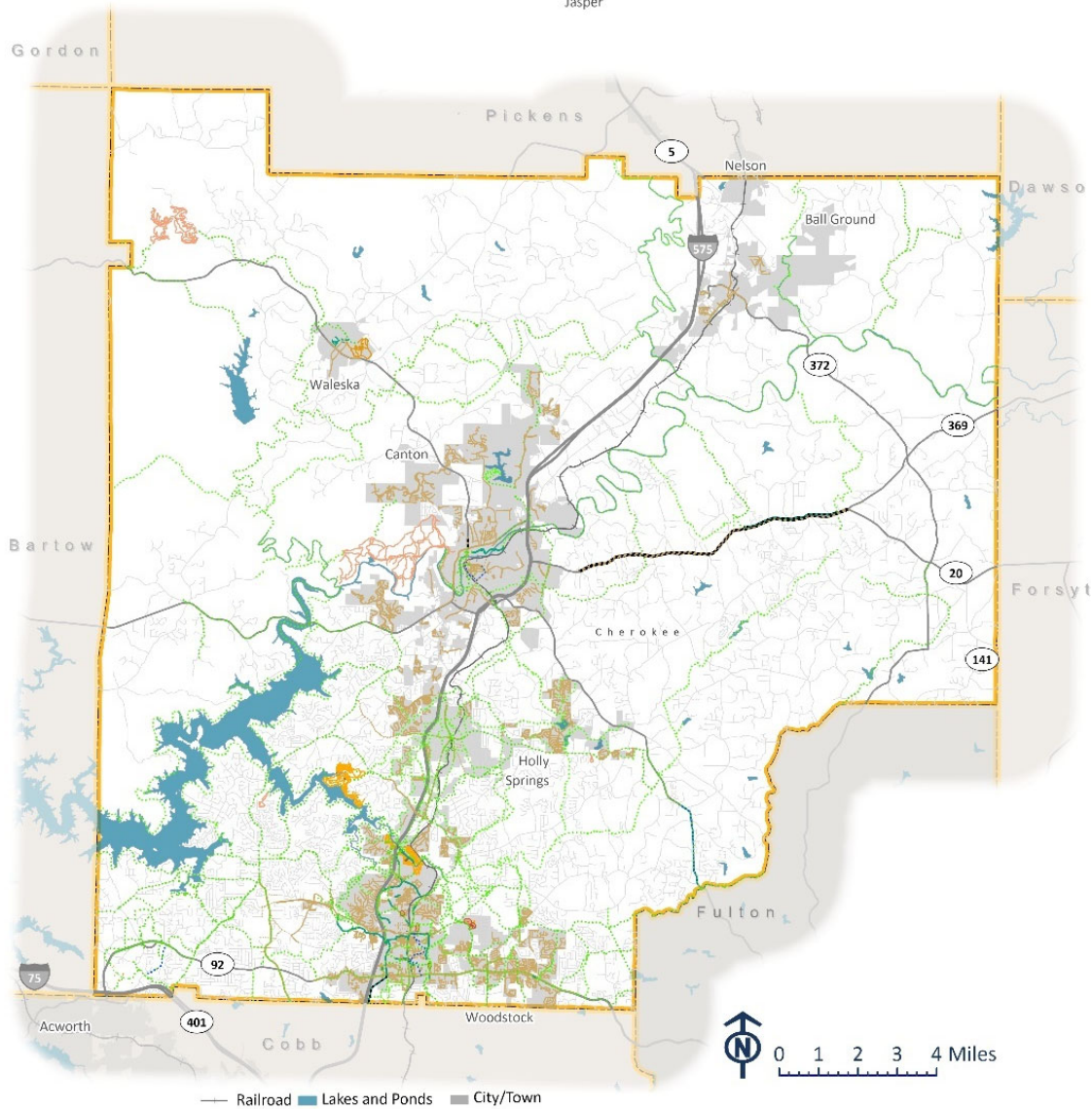
Cherokee County has previously completed a number of bicycle, pedestrian and trail studies and LCI studies with emphasis on improving bicycle and pedestrian infrastructure. The 2016 CTP Update also included recommendations for a network of multi-use trails across the County.

Based on a review of existing conditions, (see Figure 2 below), the downtown areas tend to have a good sidewalk network with a significant network of trails already present in Woodstock. Some of the residential subdivisions include a sidewalk network. Several mountain bicycling trail and hiking trail nodes provide great access to recreational opportunities.

A connected network of trails that could serve a transportation function in the County is currently lacking outside of Woodstock. The active transportation network is less connected in-between the downtown areas. Additionally, some frequently visited locations such as community parks, outdoor recreation opportunities, and schools are under-served by existing bicycle and pedestrian facilities. The southern portion of the County is generally better served with multi-use trail facilities than the northern portion of the County.



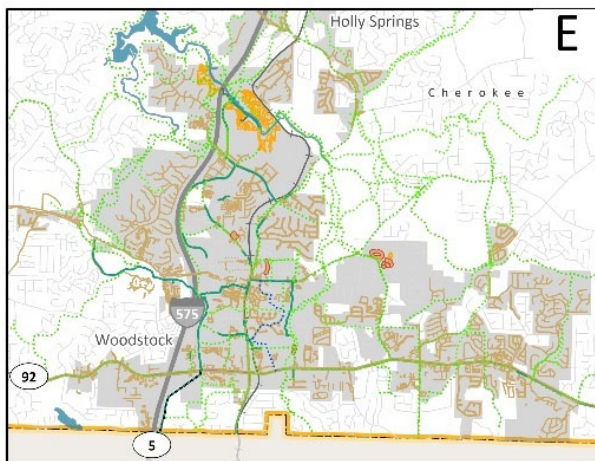
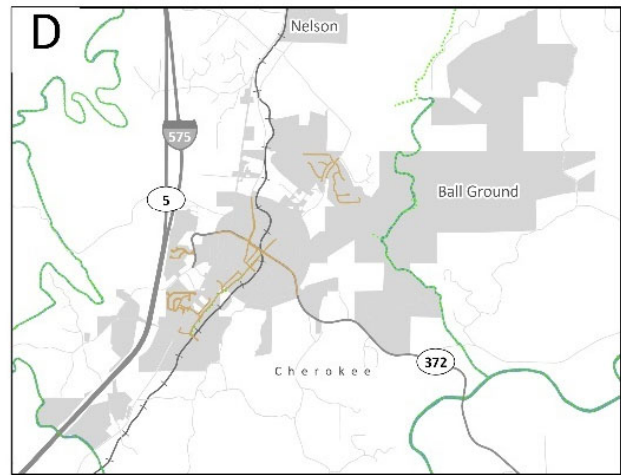
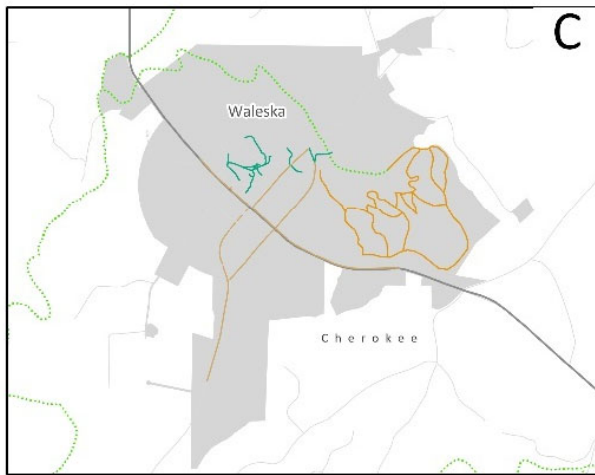
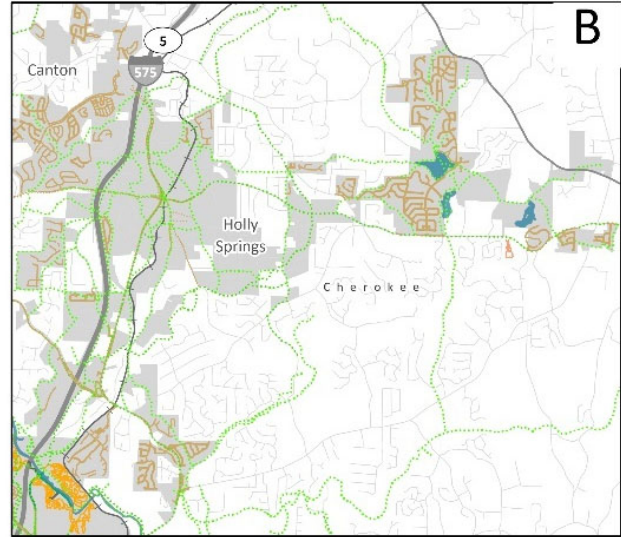
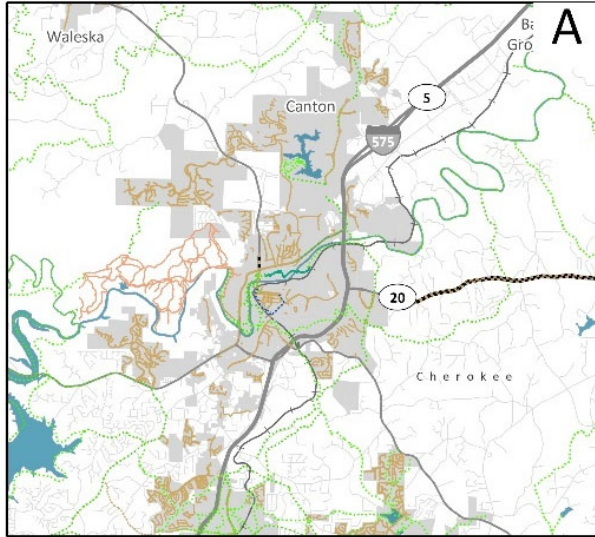
Figure 2: Existing and Planned Bicycle, Pedestrian, and Multi-Use Trail Facilities



- Existing MUP or Trail
- Planned MUP or Trail
- Multi-use trail - RTP Projects
- Bridge
- Emergency Access
- Bike Lane
- Planned On-Road Bike Connector
- Existing Sidewalk
- Planned Sidewalk
- Sidewalks as part of RTP roadway projects
- Mountain Biking Trail
- Planned Mountain Biking Trail
- Unpaved Trail



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- A - City of Canton
- B - City of Holly Springs
- C - City of Waleska
- D - City of Ball Ground
- E - City of Woodstock

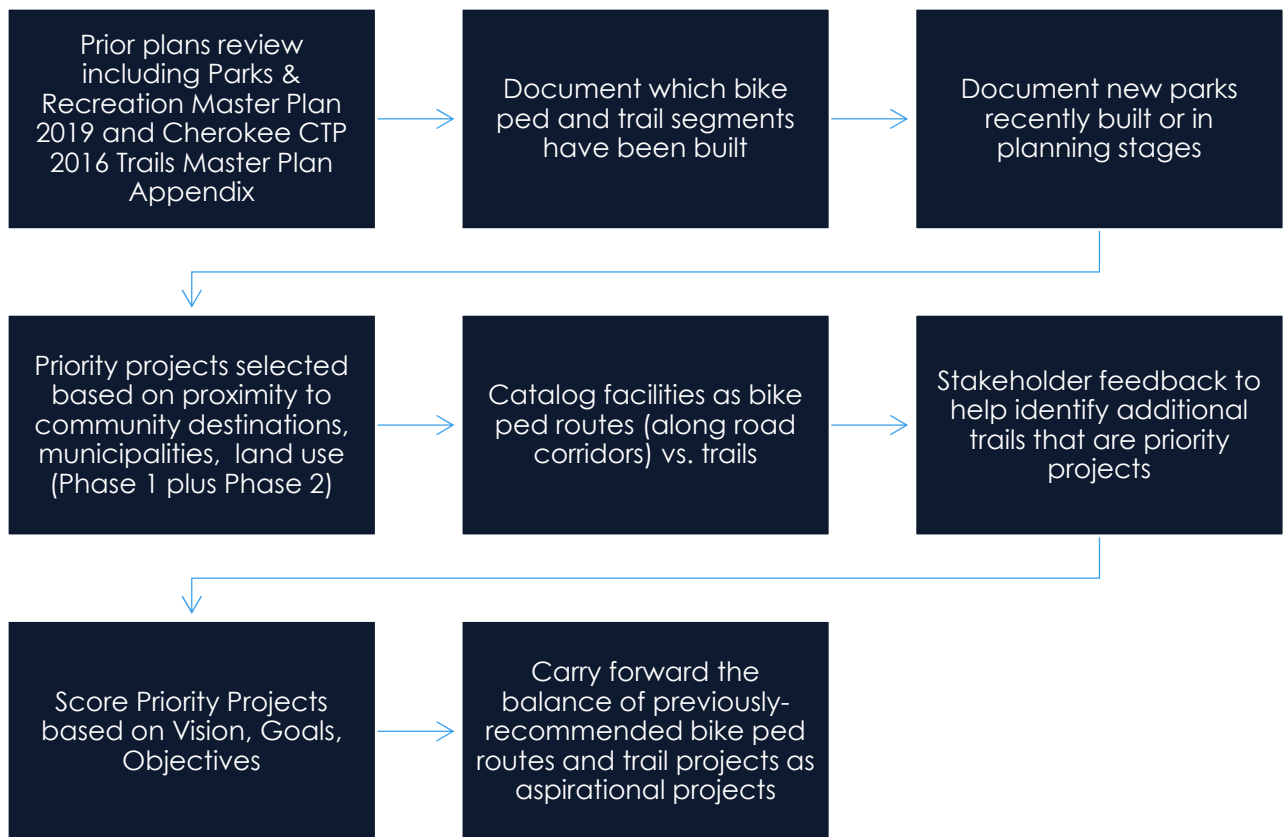


3. NEEDS ASSESSMENT

OVERVIEW

The bicycle and pedestrian needs assessment involved a multifaceted analysis approach. As shown in Figure 3 below, the project team first reviewed previous bicycle, pedestrian, trail, and small area planning studies and documented which facilities have been built. Parks, along with community destinations, were identified as part of a multi-phase bicycle and pedestrian needs selection analysis that looked at proposed facilities proximity to key destinations and land uses. The facilities were then cataloged based on their type. Initial findings were then presented to stakeholders for feedback to help identify additional recreation trails that are priority projects. The priority projects were then scored based on the plan's vision, goals, and objectives. Finally, the balance of previously recommended projects was carried forward as aspirational projects. For additional detailed descriptions and analysis of the bicycle and pedestrian needs analysis process, please refer to the Trails Master Plan Appendix.

Figure 3 Flow Chart of the Bicycle and Pedestrian Needs Assessment Approach



PREVIOUS PLANNING STUDIES REVIEW

The project team reviewed bicycle, pedestrian, trail and small area planning studies for the County and its municipalities to be able to identify bicycle and pedestrian improvements priority needs. Plan review included the following studies:

- Cherokee Comprehensive Transportation Plan 2016 including Trails Master Plan Appendix
- Woodstock Greenprints Parks and Trails Master Plan
- Woodstock Town Center LCI Plan (2013 Update)
- Woodstock LCI Highway 92 Extension (2015)
- Bells Ferry LCI Plan (2006)
- 2015 Canton Forward (LCI Plan)
- Holly Springs Downtown LCI Plan (2013)
- Southwest Cherokee Parks and Trails Plan (2021)

Bicycle, pedestrian, and trail facilities identified in the prior plan review were added into the GIS. Facilities were then compared against the existing facilities database to identify which segments have already been built. Due to the high number of potential improvements identified in previously completed planning studies, the project team focused on narrowing down the list to arrive at a more manageable selection of priority bicycle and pedestrian improvement needs.



NEEDS ASSESSMENT PROCESS

A multi-step process was utilized to select for priority bicycle and pedestrian needs based on previously completed plans, with an addition of a few key links and pedestrian crossing improvements. The selection process included the following steps:

- Phase 1:
 - A. Screening Prior Plan Recommendations for Municipal Limits, Parks and Schools
 - B. Adding Recommendations for Key Missing Links between City Centers and Major Activity Centers
- Phase 2: Screening Recommendations Based on Land Use Types
- Identifying Candidates for Pedestrian Crossing Improvements

PHASE 1 A: SCREENING PRIOR PLAN RECOMMENDATIONS FOR MUNICIPAL LIMITS, PARKS, AND SCHOOLS

During the first step of prioritizing bicycle and pedestrian facilities needs, the project team utilized a screening approach based on proximity to existing city centers, parks and schools. A quarter-mile buffer was drawn around cities, parks, and schools. Transit stops were found to be located primarily inside Canton city limits and those were included as part of municipal buffer. Bicycle, pedestrian, and multi-use path improvements identified in prior plans that overlapped with the quarter-mile buffer were selected for consideration. Some duplicate projects were removed (for example, different alignments of the same planned trail based on two different plans).

PHASE 1 B: ADDING RECOMMENDATIONS FOR KEY MISSING LINKS BETWEEN CITY CENTERS AND MAJOR ACTIVITY CENTERS

After the initial screening of recommendations from prior plans, several key additional links were identified that connect between municipalities and key activity centers:

- SR 92 from Woodstock west to Bells Ferry Road (convert sidewalk to sidepath on one side)
- Etowah River trail from Canton up to Ball Ground near Highway 372
- Waleska Road (SR 140) through Canton: sidewalks from Riverstone Parkway up to the edge of municipal limits
- SR 140 beyond Canton out to Waleska: bikeable shoulder
- Reinhardt College Parkway from Riverstone Parkway to SR 140 in Canton: sidepath on one side and sidewalk on the other side
- Reservoir Drive in Canton from Reinhardt College Parkway to 1 Mission Point: multi-use path to connect to Hickory Log Creek Reservoir trail, Teasley Middle School
- Marietta Highway from I-575 interchange north of Woodstock to Bells Ferry Road in south Canton: sidewalk on one side, sidepath other side



- Marietta Highway from Bells Ferry Rd to Riverside Drive in South Canton: provide sidewalk on second side, close sidewalk gaps where sidewalks are existing
- Marietta Road from Marietta Highway at Bells Ferry Road in South Canton to Dr John Pettit Street in Canton: close sidewalk gaps, widen sidewalk on one side to a sidepath
- Univeter Road Sidepath from Marietta Highway (Cherokee Co) to Pinecrest Road in South Canton: recommended for sidepath; this corridor has a transit stop, Kenney Askew Park, Cherokee County Child and Family Services along this stretch
- Canton Highway from I-575 interchange in Canton to GA 5 BS (Howell Bridge Road) in Ball Ground: sidepath one side
- Howell Bridge Road from Canton Highway in Ball Ground to Sharp Mountain Creek: sidepath (trail along Sharp Mountain Creek)
- Gilmer Ferry Road/Ball Ground Road from Valley Street in Ball Ground to Etowah River: sidepath (to connect to Etowah River Trail)
- Canton Highway from Howell Bridge Rd to AW Roberts Drive/ Gilmer Ferry Road: sidewalk one side/sidepath other side (in Ball Ground)
- Canton Highway from AW Roberts Drive/Gilmer Ferry Road in Ball Ground to Nelson Park: sidepath one side



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The table below illustrates the resulting recommended bicycle and pedestrian facilities after Phase 1 A and 1 B of bicycle and pedestrian needs selection was complete. Several of the longest trail stretches identified in the needs assessment process in this phase included Lake Allatoona trail sections and Etowah River Trail sections.

Table 1 Bicycle, Pedestrian and Multi-Use Trail Needs Identified withing 1/4 Mile of Key Destinations and along Corridors Linking Municipalities

Project Type	Number of Individual Projects	Total Length in Miles
Sidewalk	132	44.90
Multi-Use Path or Trail	633	354.55
Sidepath	16	20.66
On-Road Bike Facilities	12	7.22
Bikeable Shoulder	4	5.88

PHASE 2: SCREENING RECOMMENDATIONS BASED ON LAND USE TYPES

Considering the number and total length of bicycle and pedestrian needs identified as a result of the initial selection, the project team added a further screening step. Bicycle and pedestrian facilities recommendations were further analyzed for overlap with specific land use types and overlay districts which are expected to generate a higher number of bicycle and pedestrian trips, including the following:

- Overlay Districts (Mixed Use Overlay, Highway 92 Overlay, Bells Ferry Overlay)
- Zoning types such as office/institutional, commercial, civil, neighborhood commercial, mixed-use commercial and Central Business District

The resulting more limited bicycle and pedestrian needs assessment list excluded Etowah River Trail sections between Canton and Ball Ground while keeping portions of Lake Allatoona Trail. Some recommendations were added back in in Canton due to overlap with commercial areas. A total of 286 projects with a combined length of approximately 195 miles were selected.

IDENTIFYING CANDIDATES FOR PEDESTRIAN CROSSING IMPROVEMENTS

In addition to linear project recommendations, the project team looked at potential pedestrian crossing improvements. The following pedestrian crossing improvements have been identified based on a review of prior plans and pedestrian crash data.

Note: LPIs refer to leading pedestrian intervals, where the 'Walk' signal turns several



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seconds prior to the concurrent green phase, allowing pedestrians to enter the intersection before vehicles.

- SR 92 at Robin Road (near Kroger): evaluate for LPIs on the signal phases and additional lighting and other enhancements; existing signalized pedestrian crossing present, multiple pedestrian crashes in the vicinity including a fatality 1/25/2020
- SR 92 at Sharon Way in Woodstock: evaluate for LPIs, additional lighting and visibility enhancements; existing signalized pedestrian crossing; multiple pedestrian crashes including a fatality
- Arnold Mill Rd at Hubbard Rd in Woodstock: evaluate for LPIs, additional lighting and visibility enhancements; existing signalized pedestrian crossing, one pedestrian fatality
- Woodstock: Highway 92 Trail Crossing for Noonday Creek Trail (underpass)-Highway 92 LCI Study recommendation
- Woodstock: Highway 92 Trail Crossing for Rubes Creek Trail-Evaluate for a mid-block crossing with a Pedestrian Hybrid Beacon or other enhancements; Highway 92 LCI Study recommendation
- Woodstock: Trickum Road south of Gunnin Road, evaluate for midblock crossing with a Pedestrian Hybrid Beacon or other enhancements, one pedestrian fatality (5/2/2018)
- Canton: Riverstone Parkway approximately 600 feet east of Waleska Road and west of Hospital Drive- evaluate for a potential midblock crossing with a Pedestrian Hybrid Beacon or other visibility enhancements; one pedestrian fatality 11/20/2019; bus stops and a variety of commercial destinations present
- Canton: Waleska Road at Old Donaldson Road- evaluate for realignment, roundabout or pedestrian crossing improvements; confusing geometry and bus stop at this intersection, pedestrian crash resulting in severe injury in 8/9/2019

While some starting ideas for potential treatments are included, those locations would require follow-up analysis to identify appropriate treatments and countermeasures. Several iterations of bicycle and pedestrian project selection took place based on proximity to land uses and key activity centers likely to generate higher numbers of bicycle and pedestrian trips. In addition, several bicycle and pedestrian links between municipalities and activity centers not identified in prior planning studies were added for consideration. Additional pedestrian crossing needs were identified, based in prior planning studies and pedestrian crashes. Table 2 below summarizes priority bicycle and pedestrian needs by project type.



Table 2 Priority Bicycle and Pedestrian Improvement Needs

Project Type	Number of Individual Projects	Total Length in Miles
Sidewalks	46	29.02
Multi-Use Path or Trail	234	159.05
On-Road Bike Facilities including Bikeable Shoulder	7	7.75
Pedestrian Crossing Improvements	8	N/A
Total	292	194.88

CATALOG FACILITIES AS BICYCLE/PEDESTRIAN ROUTES OR TRAILS

The project team then took the list of assessed projects and cataloged them as either a bicycle/pedestrian route or a trail. Bicycle/pedestrian routes are defined as facilities that follow a roadway corridor, such as sidewalks, multi-use paths following a roadway, or on-road bicycle facilities. Trails were defined as any bicycle or pedestrian facility that functions as part of a green space away from the roadway right-of-way or follows an environmental feature, such as a river, or utility easement, such as a sewer corridor. A visual reference guide for these facilities is provided as an appendix to this document.

STAKEHOLDER FEEDBACK: ADDITIONAL PRIORITY PROJECTS

In addition to the objective analysis discussed above, the project team also utilized stakeholder feedback to identify priority projects for the County. The stakeholder group identified the need to prioritize key north-south and east-west corridors throughout the county. The following projects were identified as priority projects from stakeholders:

- Kellogg Creek Road Corridor
- Bells Ferry Road Corridor
- SR 20 – from Canton east to Forsyth County
- Little River Corridor to Forsyth County
- Mill Creek Line from Hickory Flat to SR 20



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- SR 108 between Suttalee and Waleska – bikeable shoulder
- Holly Street from Holly Springs Parkway to city limit – upgrade to sidewalks and bike lanes

SCORE PRIORITY PROJECTS

The identified priority projects were then scored based on metrics that align with the study's vision, goals, and objectives. The scoring process will rank the projects that most align with the vision, goals, and objects as well as additional factors such as cost and difficulty. Priority projects with higher scores are more likely to be funded and constructed than lower scoring priority projects. The purpose of scoring projects is to provide an objective analysis of how resources should be spent to bring projects to fruition.

NON-PRIORITY PROJECTS

Projects that were identified from previous plans that were not identified as priority through the needs assessment process discussed above will be carried forward as aspirational projects. For additional details on priority and non-priority projects, please refer to the Trails Master Plan Appendix.

4. PROJECT PRIORITIZATION & SCORING PROCESS

The trails master plan project prioritization process uses a four metric scoring rubric with a four-tier scoring system. Using the universe of projects identified in the existing conditions and needs assessment portion of the plan, projects are analyzed and scored in GIS. Projects are then ranked based on their composite score where the top 30 projects are considered for prioritized implementation.

PERFORMANCE MEASURES/SCORING PROCESS

Projects are prioritized using a weighted scoring system based on four key factors. The criteria used are: connections to key activity centers and destinations, connections to bicycle and pedestrian facilities, bicycle and pedestrian safety, and improving access to transit vulnerable communities (Table 3). Projects are assigned one of four tiered scores based on each criteria: 20 points, 10 points, 5 points, and 0 points. Points are added from each criteria to a final score out of 80.

Key activity centers and destinations are defined as senior centers, public libraries, hospitals, courts, city halls, colleges and universities, schools, churches, parks, large commercial nodes, and downtown cores. If any of the defined activity centers and destinations are within 500 feet of a proposed project, they were counted as a connection, otherwise they are not.

Scoring for connections to bicycle and pedestrian facilities is based on the number and status of connections. The highest scoring projects in this category will connect to multiple existing and/or planned bicycle or pedestrian facilities. This is followed by



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connections to an existing bicycle or pedestrian facility (10 points) and proposed facility (5 points).

Safety is examined using two factors: history of bicycle and pedestrian crashes and roadway crash rate in relation to the statewide crash rate. The highest scoring safety projects have a history of four or more bicycle and pedestrian crashes along the roadway or adjacent roadway facility or if the roadway has a crash rate 50% above the statewide average. Middle-tier scoring projects (10 points) have a history of 1-3 bicycle or pedestrian crashes or if the roadway has a crash rate 20-50% above the statewide average. Projects are given 5 points if they do not have a history of bicycle or pedestrian crashes, but the roadway's crash rate is above the state's average.

Transit vulnerable communities are defined based on four groupings of individuals: seniors (aged 65+), individuals with a disability, low-income households, and households without a vehicle. The analysis is conducted at the census tract level. Points are awarded if a project if it is entirely within, partially within, intersects, or is on the boundary of the highest concentration of transit vulnerable community tract.

Table 3 Trails Master Plan Project Prioritization Scoring Rubric

Metric	Point Value
Connections to Key Activity Centers and Destinations*	
11 or more	20
6 – 10	10
1 – 5	5
Connections to Bicycle and Pedestrian Facilities	
Connects to multiple existing and/or planned bicycle or pedestrian facilities	20
Connects to an existing bicycle or pedestrian facility	10
Connects to a planned bicycle or pedestrian facility	5
Bicycle and Pedestrian Safety	
4+ bike/ped crashes or roadway 50%+ above statewide crash rate average	20
1 – 3 bike/ped crashes or roadway 20 – 50% above statewide crash rate average	10
No bike/ped crashes or roadway 0 – 20% above statewide crash rate average	5
Improve Access to Transit Vulnerable Communities**	
Connects to Census Tract with more than 11 Transit Vulnerable Persons per Acre	20
Connects to Census Tract with more than 7.5 Transit Vulnerable Persons per Acre	10
Connects to Census Tract with more than 4 Transit Vulnerable Persons per Acre	5



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*Activity Centers are defined as senior centers, public libraries, hospitals, courts, city halls, colleges/universities, schools, churches, parks, large commercial nodes, and downtown cores. Activity Centers within 500ft of projects are included in the scoring methodology
**Transit vulnerable persons include the following: Seniors (Aged 65+), Individuals with a disability, Low-income households, and Households without a vehicle

PRIORITIZATION PROCESS

Projects are analyzed in GIS based on the universe of projects and each respective scoring criterion. Basic selection inquiries are utilized in the scoring and prioritization process. This method is used for the improve access to transit and vulnerable communities criterion based on highest density of transit vulnerable communities a project will serve and for the connection to bicycle and pedestrian facilities. A 500-foot buffer is utilized around all proposed projects for the connections to activity centers and key destinations score followed by a selection inquiry that generates the number of destinations within that project buffer. Lastly, the safety criterion utilized a 50-foot buffer to identify pedestrian and bicycle crashes in addition to a selection based on the roadway crash rate in comparison to the statewide average.

Each project was then assigned a score based on the four criteria in the rubric. A composite score was then generated by summing each criterion. Proposed projects were then compared to each other based on the composite score out of total 80 points. The top scoring projects were then selected as the prioritized project list.



FINAL RECOMMENDATIONS

The final bicycle and pedestrian recommendations include a set of project recommendations with specific implementation bounds and cost estimates as well as a set of policy recommendations which are my programmatic and systemwide in nature. Together these recommendations make up the priority efforts that Cherokee County and its jurisdictions should focus on implementing.

FINAL PROJECT RECOMMENDATIONS

The following bicycle and pedestrian projects are recommended for prioritization based on the scoring schema described in the previous section.

Table 4 Prioritized List of Bicycle and Pedestrian Projects

Prioritized List of Bicycle and Pedestrian Projects								
Project ID	Project Name	Extent From	Extent To	Jurisdiction	Project Type	Project Description	Length (Mi)	Cost Estimate
BikePed-182	Rubes Creek Trail-J.J. Biello Park Connector	Arnold Mill Rd	Riverside Athletic Complex J.J Biello Park	Woodstock	Multi-Use Path or Trail	Add multi-use path along Rubes Creek. Extend from Arnold Mill Rd to J.J. Biello Park-Riverside Athletic Complex (Woodstock)	0.84	\$630,000
BikePed-244	Main St Connector (South Woodstock - North Cobb) Multi-Use Path	SR 92	South of Cherrywood Dr	Woodstock	Multi-Use Path or Trail	Add multi-use path along Canton Hwy from Highway 92 to South of Cherrywood Dr (Woodstock)	0.75	\$560,000
BikePed-252	Main Street Multi-Use Path (Woodstock)	Ridgewalk Pkwy	E Main St	Woodstock	Multi-Use Path or Trail	Multi use path along Main Street from Ridgewalk Pkwy to E Main St (Woodstock)	0.91	\$690,000



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BikePed-287	Holly Springs Pkwy Multi-Use Path	Fox Creek Dr	Toonigh Creek	Holly Springs	Multi-Use Path or Trail	Add multi use path along Holly Springs Pkwy from Fox Creek Dr to Toonigh Creek	0.41	\$750,000
BikePed-327	Bells Ferry North Trail	Kellogg Creek Road	Victoria Road	Cherokee Co	Multi-Use Path or Trail	Add multi-use path along Bells Ferry Rd from Kellogg Creek Rd to Victoria Rd	2.00	\$1,500,000
BikePed-463	Kellogg Creek - Red Top Mountain Connector Multi-Use Path	Bells Ferry Rd	Heritage Pl	Cherokee Co	Multi-Use Path or Trail	Kellogg Creek - Red Top Mountain Connector sidepath from Bells Ferry Rd to Heritage Pl	0.51	\$380,000
BikePed-489	Palm St Multi-Use Path (Holly Springs)	Holly Springs Pkwy	Palm Lake Dr	Holly Springs	Multi-Use Path or Trail	Add multi-use path along Palm St from Holly Springs Pkwy to Palm Lake Dr (Holly Springs)	0.41	\$310,000
BikePed-505	Holly Springs Pkwy /Railroad/Sewer Easement Multi-use Path (Holly Springs)	Holly St	Toonigh Creek	Holly Springs	Multi-Use Path or Trail	Add trail along Holly Springs Pkwy/Railroad/Sewer Easement Corridor from Holy St to Toonigh Creek (Holly Springs)	1.42	\$1,280,000
BikePed-551	Towne Lake Extension Trail (Woodstock)	Towne Lake Hls E	Towne Lake Hills Dr S	Woodstock	Multi-Use Path or Trail	Add multi-use path along Parkside Ln extend from Towne Lake Hls E to Towne Lake Hills Dr S (Woodstock)	0.79	\$2,550,000
BikePed-592	Highway 92 Sidepath	Lovejoy Ln	I-575	Woodstock	Multi-use Path or Trail	Multi-use path along SR 92 from Lovejoy Ln to I-575	0.95	\$710,000
BikePed-609	Arnold Mill Rd Sidepath	Trickum Rd	Neese Rd	Woodstock	Multi-use Path or Trail	Add multi-use path along Arnold Mill Rd extend from Trickum Rd to Neese Rd (Woodstock)	1.95	\$1,460,000



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BikePed-613	Dobbs Rd Multi-Use Path	Main St	Proposed trail along Dobbs Rd	Woodstock	Multi-use Path or Trail	Add multi-use path along Dobbs Rd from Main St to proposed trail along Dobbs Rd (Woodstock)	0.48	\$360,000
BikePed-614	Main St Sidepath from Recreation Center to Belleview Dr (Woodstock)	Recreation Center	Belleview Dr	Woodstock	Multi-use Path or Trail	Multi-use path along Main St from Recreation Center to Belleview Dr (Woodstock)	0.31	\$230,000
BikePed-633	Posey Branch Trail	Highway 92	368 ft south of Posey Branch	Cherokee Co	Multi-use Path or Trail	Posey Branch Trail from SR 92 to 368 ft south of Posey Branch	0.50	\$380,000
BikePed-650	Victory Dr On-Road Bike Facilities	David Lee St	Bells Ferry Rd	Cherokee Co	On-Road Bike Facilities	Bike facility along Victory Dr from David Lee St to Bells Ferry Rd	0.61	\$1,080,000
BikePed-688	Holly Springs Pkwy Sidewalk	Rabbit Hill Rd	Ronnell Rd	Holly Springs	Sidewalks	Add multi-use path along Holly Springs Pkwy from Rabbit Hill Rd to Ronnell Rd	0.47	\$350,000
BikePed-745	Bascomb Carmel Rd Sidewalks	Old Bascomb Rd	Putnam Ford Rd	Cherokee Co	Sidewalks	Sidewalks along Bascomb Rd from old Bascomb rd to Putnam Ford Rd	0.28	\$570,000
BikePed-746	Old Bascomb Rd Sidewalk	Bascomb Carmel Rd	Old Bascomb Ct	Cherokee Co	Sidewalks	Add sidewalk along old Bascomb Rd from Bascomb Carmel Rd to Old Bascomb Ct	0.28	\$210,000
BikePed-749	Buice Lake Pkwy Sidewalks	Old Bascomb Rd	western terminus of Buice Lake Pkwy	Cherokee Co	Sidewalks	Add sidewalks along Buice Lake Pkwy from Old Bascomb Rd to western terminus of Buice Lake Pkwy; to include ped crossings of Bells Ferry Rd	0.25	\$290,000
BikePed-761	Holly Springs - Trails	Holly Springs pkwy	Proposed trail	Holly Springs	Multi-Use Path or Trail	Add multi-use path from Holly Springs Pkwy to proposed trail	0.11	\$90,000



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BikePed-764	SR 92 Sidepath	Industrial Drive	Bells Ferry Road	Woodstock	Sidepath	SR 92 sidepath from Industrial Dr (Woodstock) west to Bells Ferry Road	1.01	\$760,000
BikePed-774	Marietta Hwy Sidepath and Sidewalks, Univeter Road to GA 205 (Bells Ferry Rd) (Canton)	Univeter Rd	GA 205 (Bells Ferry Rd)	Canton	Sidewalks and sidepath	Marietta Hwy sidewalk on one side, sidepath other side from Univeter Rd to GA 205 (Bells Ferry Rd)	1.01	\$760,000
BikePed-776	Marietta Hwy Multi-Use Path	Boling Park	Bells Ferry Rd	Canton	Multi-Use Path or Trail	Add multi-use path along Marietta Hwy from Boling Park to Bells Ferry Rd (Canton)	1.09	\$820,000
BikePed-778	Marietta Rd Sidepath	Bells Ferry Rd	Dr John Pettit St	Canton	Sidepath	Implement sidepath along Marietta Rd from Bells Ferry Rd to Dr John Pettit St (Canton)	1.44	\$1,080,000
BikePed-794	Marietta Hwy Sidepath and Sidewalks, Hembredge Dr to Univeter Rd (across I-575 Interchange, Canton)	Hembredge Dr east of I-575 Interchange	Univeter Rd	Canton	Sidepath	Marietta Hwy sidewalk on one side, sidepath other side from Hembredge Dr east of I-575 interchange to Univeter Rd	0.93	\$980,000
BikePed-800	Arnold Mill Rd Multi-Use Path	Neese Rd	Fire Station 14	Cherokee Co	Multi-Use Path or Trail	Add multi-use path along Arnold Mill Rd from Neese Rd to Fire Station 14	0.83	\$620,000
BikePed-801	Highway 92 Multi-Use Path	Lovejoy Ln	Proposed trail	Woodstock	Multi-Use Path or Trail	Add multi use path along SR 92 from Lovejoy Ln to proposed trail along Highway 92	0.87	\$650,000
BikePed-811	Victory Dr Sidewalks	David Lee St	Bells Ferry Rd	Cherokee Co	Multi-Use Path or Trail	Multi-use path along Victory Dr extend from	0.62	\$460,000



TRAILS MASTER PLAN UPDATE

	David Lee St to Bells Ferry Rd							
BikePed-847	Little River Multi-Use Trail	Woodstock Little River Park	Fulton County - Roswell/Milton	Woodstock	Multi-Use Path or Trail	Multi-use trail from Woodstock Little River Park along the Little River, connecting to facilities at the Fulton County line with Roswell and/or Milton	3.10	\$2,330,000
BikePed-848	Olde Rope Mill Park Trail Connector	Olde Rope Mill Park	Sixes Rd & Holly Springs Pkwy	Cherokee Co	Multi-Use Path or Trail	Multi-use trail, extending the Noonday Creek Trail from Woodstock Olde Rope Mill Park through the Sixes & I-575 SE Quadrant (N Rope Mill) to Sixes Road and Holly Springs Parkway	1.00	\$750,000
BikePed-846 (CTP-1)	Bells Ferry LCI Trail	Cobb County Line	Kellogg Creek Rd	Cherokee Co	Multi-Use Path or Trail	Add multi-use path along Bells Ferry Rd from Cobb County Line to Kellogg Creek Road	3.30	\$2,480,000



TRAILS MASTER PLAN UPDATE

The following projects are the prioritized list of pedestrian crossings for Cherokee County:

Table 5 Pedestrian Crossing Project Table

Project ID	Crossing	Jurisdiction	Potential Improvement
BikePed-900	SR 92 at Robin Road (near Kroger)	Cherokee County	Evaluate for LPIs and additional lighting and other enhancements; existing signalized pedestrian crossing present, multiple pedestrian crashes in the vicinity including a fatality (1/25/2020)
BikePed-902	SR 92 at Sharon Way	Woodstock	Evaluate for LPIs, additional lighting and visibility enhancements; existing signalized pedestrian crossing, multiple pedestrian crashes including a fatality
BikePed-901	Arnold Mill Rd. at Hubbard Rd.	Woodstock	Evaluate for LPIs, additional lighting and visibility enhancements; existing signalized pedestrian crossing, one pedestrian fatality
BikePed-909	Highway 92 Trail Crossing for Noonday Creek Trail (underpass)	Woodstock	Highway 92 LCI Study Recommendation
BikePed-903	Highway 92 Trail Crossing for Rubes Creek Trail	Woodstock	Evaluate for a mid-block crossing with a Pedestrian Hybrid Beacon or other enhancements; Highway 92 LCI Study recommendation
BikePed-906	Trickum Road South of Gunnin Road	Woodstock	Evaluate for a potential midblock crossing with a Pedestrian Hybrid

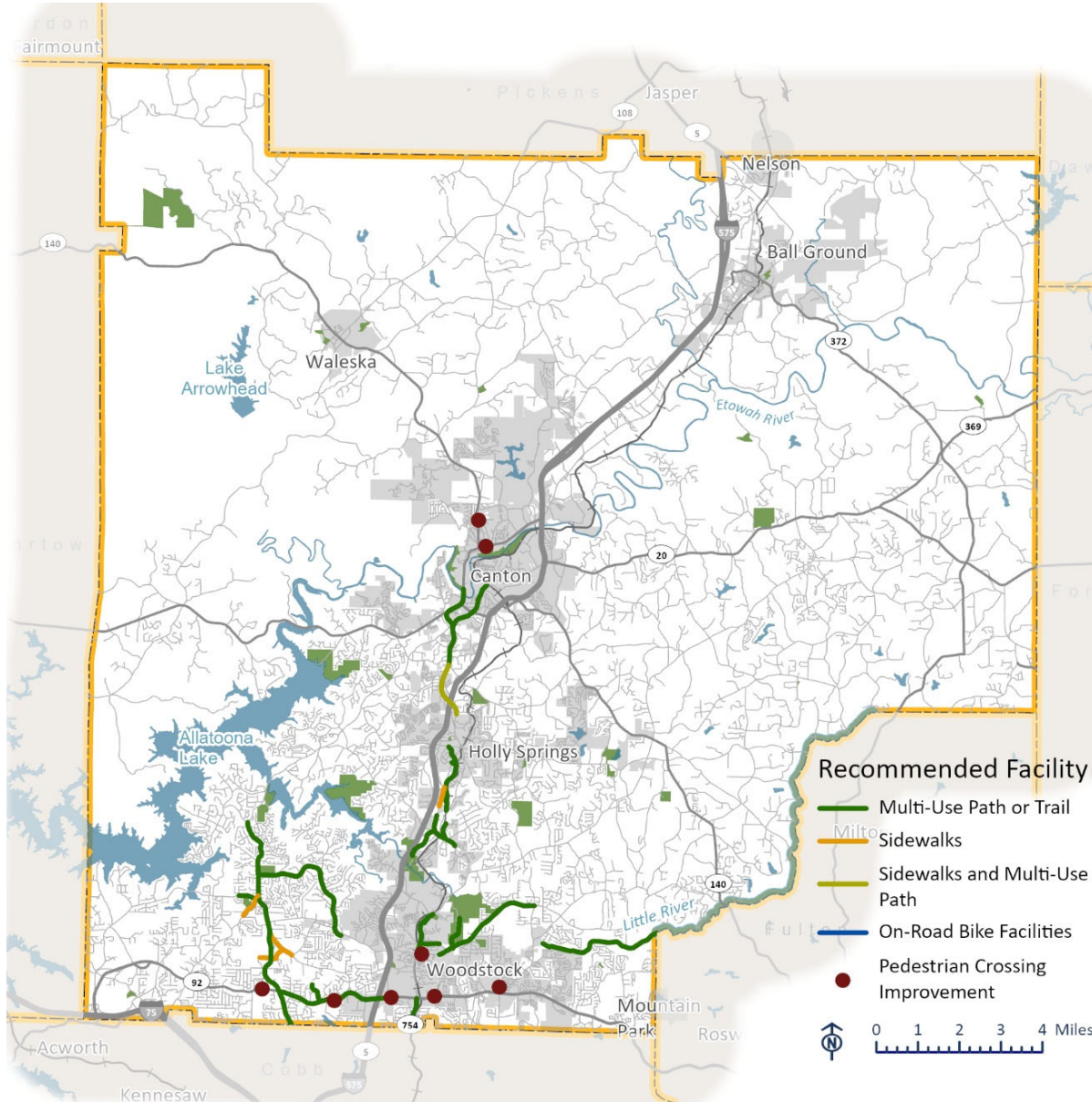


TRAILS MASTER PLAN UPDATE

			Beacon or other visibility enhancements
BikePed-907	Riverstone Parkway approximately 600 feet east of Waleska Road and west of Hospital Drive	Canton	Evaluate for a potential midblock crossing with a Pedestrian Hybrid Beacon or other visibility enhancements
BikePed-908	Waleska Road at Old Donaldson Road	Canton	Evaluate for realignment, roundabout, or pedestrian crossing improvements; confusing geometry and bus stop at this intersection; pedestrian crash resulting in severe injury (8/9/2019)



Figure 4: Map of Prioritized Bicycle and Pedestrian Recommendations



The majority of projects are within the southern portion of Cherokee County in Woodstock, Holly Springs, and Canton (Figure 4). This is to be expected as most prioritized projects lie within higher concentrations of transportation-disadvantaged communities and provide connections to a variety of destinations and existing bicycle and pedestrian facilities.



ADDITIONAL POLICY & SYSTEMWIDE RECOMMENDATIONS

While the recommended projects listed above are good for long-term implementation and completion of a cohesive bicycle and pedestrian network, there are other countywide and area-specific policies and programs that could be beneficial to the overall active transportation network in Cherokee County. Some active transportation policies and programs to consider across the County are detailed below.

CONSIDER IMPLEMENTING VISUAL REFERENCE GUIDE FOR BICYCLE AND PEDESTRIAN FACILITY CONSTRUCTION

There are many existing bicycle and pedestrian facility planning efforts across jurisdictions in Cherokee County. The visual reference guide, found in the appendix to this report, was created to consolidate the design and planning of bicycle and pedestrian facilities in the county. The guide provides consistent design references and naming conventions to support cohesive planning across the entire county. Jurisdictions should consider implementing the information in the visual reference guide to promote consistency in active transportation planning throughout the county.

ENCOURAGEMENT PROGRAMS

The County can use encouragement programs to strengthen the walking and bicycling culture within the community. Local businesses, jurisdictions, and County departments can all play a role in encouraging pedestrian and bicycling activity through a variety of opportunities and incentives.

WAYFINDING SIGNS

As the pedestrian and bicycle system develops, and especially as sidewalks are installed and neighborhoods are connected, wayfinding will help contribute to the overall pedestrian and bicyclist environment. Items such as mile markers, consistent themes and logos, and regular wayfinding kiosks will become important elements to encourage walking and biking. The County can use services such as Walk [Your City] (<https://walkyourcity.org>) to purchase inexpensive, weather resistant signs to educate residents about the distance and direction between destinations.

AWARENESS DAYS AND EVENTS

The County can devote specific days of the year to raise awareness related to pedestrian promotion and encourage socializing. Current events include Events can be held in parks, schools, city and County facilities, or similar venues.

The County can use national events to increase use of pedestrian and bicycling facilities, create new versions specific to local events, and add pedestrian and bicyclist topics to existing city events. Examples of national events include National Walk to Work Day (April), Earth Day (April 22), National Trails Day (First Saturday in June), PARK(ing) Day (September), National Open Streets Day (September), and National Walk to School Day (October).



EVALUATION PROGRAMS

The County can use evaluation efforts to understand how well the strategies in the plan are working over time. Evaluation activities include setting goals, collecting baseline data (where possible), setting timetables, and collecting follow up data for all projects. Not all evaluation activities are data-driven; qualitative feedback and partnerships can assist with achieving the goal of evaluating program/strategy effectiveness and identifying improvements.

CONDUCT ROAD SAFETY AUDITS

County and local staff and representatives can conduct Road Safety Audits on priority corridors to identify more specific engineering-related improvements. This is a formal and detailed process that involves a multidisciplinary team to identify roadway elements that present the most safety concerns and formulate solutions to eliminate or mitigate the safety issues. The County may request support from its local jurisdictions, GDOT, and even request technical assistance from the Federal Highway Administration (alternatively, the County can consider hiring an outside consultant to organize and conduct RSAs).

COMMUNITY SURVEYS

The County can use surveys and other similar feedback mechanisms as tools to gauge county-wide acceptance and understanding of new projects; needs and interests for other future projects; and other community concerns that may be addressed through Encouragement and Education programming. The County should work with stakeholder groups who reach broad audiences to help disseminate survey tools and collect feedback.

FACILITY INSPECTION AND MAINTENANCE

A key piece of evaluation is measuring and identifying maintenance needs, particularly after implementation. Public Works maintenance and facility staff should conduct routine maintenance checks of installed pedestrian and bicycle projects to identify general wear and tear and immediate fixes—such as potholes and broken asphalt—that may impede use. The County should establish a plan and timeline for addressing such issues. This encouragement initiative relies upon crowd-sourcing to report maintenance needs

FACILITY RECORDS MAINTENANCE

The County and local jurisdictions should work collaboratively to establish a county-wide bicycle and pedestrian GIS database of existing and planned facilities. Facilities should be regularly updated as planned projects are implemented and as other bicycle and pedestrian needs arise. The GIS database could be tied into the facility inspection and maintenance procedure to have an up-to-date assessment of bicycle and pedestrian facilities.



Appendix




Visual Reference Guide



Cherokee 2022 Comprehensive Transportation Plan

Bicycle and Pedestrian Facility Types




Visual Reference Guide

Facility Name	Facility Sub-Type	Example Image	Characteristics
Bike Ped Routes (Following a Roadway Corridor)	Sidewalk		<p>A sidewalk is a separated space adjacent to the vehicle travel lane and within the public right-of-way that is dedicated to pedestrian travel; generally, not intended for electric scooter use or adult bicyclist use. The sidewalk should meet design minimums (typically at least 5' wide for sidewalks) and be fully accessible to pedestrians with mobility limitations.</p>
	Sidepath		<p>A sidepath is a specific type of multi-use trail facility, paved, and designated for use by pedestrians and bicyclists that is physically separated from the road but follows a roadway corridor. Typically more than 8' in width.</p>
	Bicycle Lane		<p>A paved and striped/painted segment of roadway that is visually separated from the vehicle travel lane by paint or pavement markings, typically 4'-6' in width, and adjacent to vehicular travel lanes; not intended for pedestrian use.</p>

Cherokee 2022 Comprehensive Transportation Plan

Bicycle and Pedestrian Facility Types




Visual Reference Guide

Facility Name	Facility Sub-Type	Example Image	Characteristics
Bike Ped Routes (Following a Roadway Corridor)- Continued	Separated Bicycle Lane		<p>A separated bicycle lane, also known as a cycle track (raised, and/or vertically-delineated) can provide for one-way or two-way bicycle travel while providing additional separation from vehicular travel lanes. One-way separated bicycle lanes are typically at least 5' wide with vertical separation and a 2-3' buffer. Two-way separated bicycle lanes are at least 8' wide with vertical separation and a 2-3' buffer.</p>
	Share the Road Signs and Sharrows	 <p><i>Bicycles May Use Full Lane Sign and Sharrow Pavement Markings Image Courtesy of the City of Winston-Salem</i></p>	<p>Share the Road signage and sharrows are a form of accommodating bicycle travel without dedicating a separate space within a paved roadway. "Share the Road" signs are used as a reminder to motorists that bicyclists may use the regular travel lanes. "Sharrow" pavement markings (also known as Shared Lane Markings or SLM) may be used in combination or separately from "Share the Road" yellow sign or "Bicycles May Use Full Lane" sign to help bicyclists position themselves in roadway more safely, i.e. next to parked cars.</p>
	Bikeable Shoulder	 <p><i>Bikeable Shoulder Image Courtesy of Clay Dolan, www.escarpmentmagazine.ca</i></p>	<p>Similar to bike lanes, a bikeable shoulder, or paved shoulder that is at least 4' wide, can accommodate bicycle travel through on-road facilities delineated by a painted stripe in low-volume or rural road contexts to provide safety by reducing passing conflicts between bicyclists and drivers. Bikeable shoulders are sometimes implemented in combination with bike route signage.</p>

Cherokee 2022 Comprehensive Transportation Plan

Bicycle and Pedestrian Facility Types




Visual Reference Guide

Facility Name	Facility Sub-Type	Example Image	Characteristics
	Bike Boulevard	 <p style="text-align: center;"><i>Brevard Bike Boulevard Image Courtesy of Transylvania Times News</i></p>	<p>Bicycle boulevards are typically low-volume, low speed streets with added signage, intersection design, and traffic calming features to make them more comfortable for bicyclists and to discourage through motorist traffic.</p>
Paved Trail (Shared Use Path, Multi-Use Path, or Greenway) Following a Natural Corridor)	Paved Trail		<p>A facility for multi-modal use, typically located within its own right-of-way. Paved trails are typically more than 8' in width. Paved trails often follow a creek or another green space corridor and can act as a linear park if additional amenities are provided (benches, water fountains recreational equipment). Motorized vehicles (i.e. golf carts) are not allowed on paved trails in Cherokee County unless specified as allowed by local rules and signage.</p>
Unpaved Trail (Recreational Trail)	Mountain Biking Trail	 <p style="text-align: center;"><i>Cuyuna Lakes Mountain Biking Trail Image Courtesy of Jodzee www.singletracks.com</i></p>	<p>Mountain biking trails are unpaved trails designated for recreational biking purposes. A mountain biking trail may include elements of unpaved track, gravel road sections, uneven terrain and some obstructions. Mountain biking trails may be designed for a variety of skill and fitness levels and have age restriction for safety. For more remote and long-distance trails, bicyclists may share the trail with ATV users or equestrians.</p>

Cherokee 2022 Comprehensive Transportation Plan

Bicycle and Pedestrian Facility Types




Visual Reference Guide

Facility Name	Facility Sub-Type	Example Image	Characteristics
Unpaved Trail (Recreational Trail)- Continued	Unpaved Trail (Walking Path)		<p>An unpaved trail is a path that is not paved and may include a combination of treatment materials such as mulch and gravel. Unpaved trails are generally used for recreational purposes such as hiking and walking. Some unpaved trails are limited to walkers/hikers and some are open to bicyclists and equestrian users.</p>
	Equestrian Trail	 <p style="text-align: center;"><i>Image Courtesy of Friends of Garland Mountain Facebook Page</i></p>	<p>Equestrian or horseback riding trails are unpaved surface trails that offer various levels of challenges depending on the terrain. In some cases equestrian trails are signed to mix with bicycle and hiking trail users. Wider facilities and clear signage regarding the rules of the trail are preferred where different types of users might be mixing with equestrian users. Cyclists are expected to yield to horses in mixed situations. Equestrian Trails typically require additional consideration for parking and access to accommodate vehicles pulling a horse trailer.</p>
	Marked Crosswalks		<p>A marked crosswalk includes pavement markings that indicate optimal or preferred locations for pedestrians to cross and help designate right-of-way for motorists to yield to pedestrians. Various crosswalk marking patterns are utilized including transverse lines, ladder, and continental markings.</p>

Cherokee 2022 Comprehensive Transportation Plan

Bicycle and Pedestrian Facility Types




Visual Reference Guide

Facility Name	Facility Sub-Type	Example Image	Characteristics
Pedestrian Crossing	Trail Crossing		<p>A Trail Crossing is a crosswalk location designed to accommodate both bicyclists and pedestrians where a paved trail crosses a road. Warning and regulatory signs, traffic signals, and pavement markings can help delineate which corridor has the right-of-way and guide trail users to cross safely. Wider curb cuts and high visibility crosswalk markings are typical features. Additional features could include a Rapid Rectangular Flashing Beacon, a Pedestrian Hybrid Beacon, improved overhead lighting, a median refuge island, and other elements to support safety.</p>
	Crosswalk with a Rectangular Rapid Flashing Beacon (RRFB)		<p>An RRFB is a high-frequency blinking pedestrian warning beacon that is used in combination with a high visibility pedestrian crosswalk, especially at midblock locations, to improve crosswalk safety and driver yielding behavior. The flashing pattern can be set up to be activated via a pushbutton or via automated pedestrian detection (video or infrared).</p>
	Crosswalk with a Pedestrian Hybrid Beacon (PHB)		<p>A PHB is a beacon that is used to warn and control traffic at unsignalized marked crosswalks. Key design components of PHBs include: overhead beacons with circular yellow signal indication centered below two horizontally aligned circular red signals facing both directions on the major street; overhead signs labeled "Crosswalk Stop on Red" to indicate that the location is associated with a pedestrian crosswalk; a marked crosswalk; countdown pedestrian signal heads; and pedestrian push buttons.</p>

Cherokee 2022 Comprehensive Transportation Plan

Bicycle and Pedestrian Facility Types

Visual Reference Guide

Facility Name	Facility Sub-Type	Example Image	Characteristics
Pedestrian Crossing - Continued	Signalized Pedestrian Crosswalk		<p>A signalized pedestrian crosswalk may utilize a variety of traffic signals including traffic signals with standard pedestrian signal heads and traffic signals with pedestrian countdown signals. Signalized crosswalks may also include pedestrian pushbuttons which are electronic buttons used by pedestrians to change the traffic signal timing.</p>
Pedestrian Crossing Elements	Curb Ramp	 <p style="text-align: center;"><i>Image Courtesy of NCDOT</i></p>	<p>To meet ADA requirements, both ends of a crosswalk should have curb cuts with a gently sloping ramp where the crosswalk meets the adjoining sidewalk. This ramp should be covered by a textured warning surface, typically truncated domes, to alert visually impaired pedestrians that they are entering the roadway.</p>
	Pedestrian Refuge Island		<p>Pedestrian refuge islands are typically placed in the center of the street at intersections or midblock crossings that are intended to help protect crossing pedestrians from motor vehicles. Pedestrian refuge islands allow pedestrians to cross one direction of traffic at a time by stopping in the median refuge to wait for an adequate crossing gap.</p> <p>MUTCD Reference: MUTCD Section 4B.04</p>