



TOWN OF ASHLAND CITY

Budget Meeting

November 19, 2019 6:00 PM

Agenda

Chairman: Mayor Steve Allen

Committee Members: Tim Adkins, Daniel Anderson, Alwilda Binkley, Lisa Walker, Roger Jackson, Chris Kerrigan

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF MINUTES

- [1.](#) Budget Meeting Minutes 8-20-19

OLD BUSINESS:

- [2.](#) Resolution: Adopt Community Mobility Plan
- [3.](#) Resolution: Updating Personnel Manual

NEW BUSINESS:

- [4.](#) Amusement Attractions Contract for Summerfest
- [5.](#) Bicentennial Trail Extension Engineering Agreements
- [6.](#) ServLine Insurance Policy
7. December Budget Meeting
8. Christmas Parade

OTHER.

ADJOURNMENT

Those with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting, should contact the ADA Coordinator at 615-792-6455, M-F 8:00 AM – 4:00 PM. The town will make reasonable accommodations for those persons.



TOWN OF ASHLAND CITY BUDGET MEETING MINUTES

August 20, 2019

6:00 PM at Ashland City Municipal Building
101 Court Street, Ashland City, Tennessee

CALL TO ORDER at 6:01 PM by Mayor Steve Allen.

ROLL CALL

Present: Mayor Steve Allen, Vice Mayor Daniel Anderson, Councilman Tim Adkins, Councilwoman Alwilda Binkley, Councilwoman Lisa Walker, and Councilman Chris Kerrigan
Absent: Councilman Roger Jackson

CONSIDERATION OF AGENDA

A motion made by Councilwoman Walker, seconded by Vice Mayor Anderson to approve the August 20, 2019 agenda. Motion passed unanimously by voice vote.

CONSIDERATION OF MINUTES

A motion made by Councilman Adkins, seconded by Vice Mayor Anderson to approve the July 16, 2019 minutes as typed. Motion passed unanimously by voice vote.

OLD BUSINESS

None.

NEW BUSINESS

A. CITY HALL/FIRE HALL CONSTRUCTION BUDGET. Ms. Kellie Reed presented Mr. Rick Delany to the council for discussion of payment options, current rates and current market for the construction of the new City Hall and Fire Department. Ms. Reed stated we needed to start this discussion because the City has closed on the new property location and needs to commit to a budget for the projects. Ms. Reed presented the council with the Calculation Form for Certified Tax Rate on the overhead. She explained our asset value on our tangible property and the expected collection for City taxes to be around \$804,912.60 for this year to cover expenses. She stated in the past there has never been a debt in the general fund and if we start issuing debt we will need to know ahead of time that we may need to raise taxes in the budget to cover our payment for said debt. Mr. Delany with Raymond James provided the Council with a public finance packet for financial planning. Mr. Delany stated rural development was discussed as a source. He explained the current rural development rate is 3.5% and that rate is expected to drop as a result in the trend of the marketplace to as low as 3.25% or lower for 40 years financing. It was discussed in a previous meeting that the construction of the fire department may be in this financing as well. After much discussion regarding provided paperwork it was determined that interest rates are at a 50-year low with now being the best time to borrow money. Mayor Allen invited Mr. Josh Wright to speak. Mr. Wright stated the reason he wanted to meet with Council is because the architectural process works better when there is a budget put in place. He advised he needs to know if the direction Council is wanting to go is with the original floor plan provided for City Hall and Fire Station. He stated if there is anything that needs or wants to be cut from the floor plans, now would be a good time to discuss. Mr. Wright advised he has an upcoming meeting with Chief Chuck Walker and Deputy Chief Derek Noe to discuss the fire station design. He met with Mayor Allen and Ms. Reed a week ago to discuss cost saving strategies. Ms. Reed provided an overhead view of the current floor plan for City Hall without some of the

previously approved changed. He stated he has started working on those changes but did not bring them with him tonight. Mayor Allen said the purchase of the property closed on Friday August 19th. Ms. Walker asked if the cost to tear down the current buildings on the property has been factored in. Chief Walker stated he has talked with Mr. Clint Biggers and they feel the City has the equipment needed to do the work but would need to pay for dumpsters to remove of the material. He projects the cost to be around \$2,000.00, not including labor. After much discussion of the possible floor plans the best estimate they could give for everything including construction, infrastructure and furnishing the building nationwide would cost around \$350 per square foot. Chief Walker feels confident it can be built for this rate or cheaper. Ms. Reed stated last week a meeting took place with USDA for funding options for possible grant money. She stated the City Hall floor plan on the overhead was for 15,000 square feet and is projected to be the around the same for the fire hall. She stated the projected amount for both projects, including building and site works, to be 7 million dollars. Chief Walker stated he thinks the City will get better prices if each trade is bid out. Vice Mayor Anderson stated it would be more helpful to everyone if a drawing was presented before it is approved. Mr. Wright stated he can do this. Vice Mayor Anderson stated he thinks there will not be a budget number available tonight. After much more discussion on floor plans and having the option to expand in the future, it was determined the Council was ok with the proposed square footage and a form was given to Council explaining the process once everything is approved and Mr. Wright will have something to show Council by next meeting. It was also determined that at next month's meeting Council would vote on surplus of any material on the Main Street property.

OTHER

- A. Mr. Chris Kerrigan stated it was brought to his attention the Cheatham County Exchange ran an article about upcoming events the City is hosting and one of them mentioned The Braxton Lee Under the Trees Dinner and asked if the City is involved in hosting this. Ms. Walker and Ms. Alwilda Binkley responded with no's. Mr. Kerrigan questioned why it was mentioned in an Events Committee meeting. Ms. Walker stated it was not discussed in the Events Committee meeting but was discussed at a media day and since The Braxton Lee is part of the history of Ashland City they have decided to host their event on September 14, 2019 as part of the history of the City. After much discussion Mr. Kerrigan stated there is no clarification when you look at the article and it appears the City is promoting it all together. Mayor Allen asked if it was the way the article was ran. Mayor Allen invited Ms. Candice Beasley to the floor to speak. Ms. Beasley stated the proceeds to her Farm to Table Dinner is 70% to Wheels on Meals and 30% to a fund to start a community center which is desperately needed. She said she has applied for a 501C3 to start a fund. Ms. Beasley openly voiced her opinions and concerns with the lack of support she is receiving for her upcoming event in October. After much discussion from Ms. Beasley she walked away from the podium leaving the meeting.

ADJOURNMENT

A motion made by Councilwoman Binkley, seconded by Councilman Kerrigan to adjourn. Motion passed unanimously by voice vote. Meeting adjourned at 7:01 p.m.

Mayor Steve Allen

RESOLUTION 2019-

**A RESOLUTION OF THE TOWN OF ASHLAND CITY, TENNESSEE TO
ADOPT THE COMMUNITY MOBILITY PLAN**

WHEREAS, the Town was awarded TDOT’s Long Range Planning Division Complete Streets Plan Grant in 2018; and

WHEREAS, the Town selected engineering firm Kimley Horn to study the existing traffic and mobility conditions; and,

WHEREAS, Kimley Horn further developed a plan for connectivity of the town’s parks, streets, sidewalks, and overall mobility; and,

WHEREAS, Kimley Horn has developed and provided the Town with the attached Community Mobility Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE TOWN OF ASHLAND CITY, TENNESSEE the Town of Ashland City hereby adopts the attached Community Mobility Plan.

We, the undersigned City Council members, meeting in Regular Session on this 12th day of November, 2019 move the adoption of the above Resolution.

Councilmember _____ moved to adopt the Resolution.

Councilmember _____ seconded the motion.

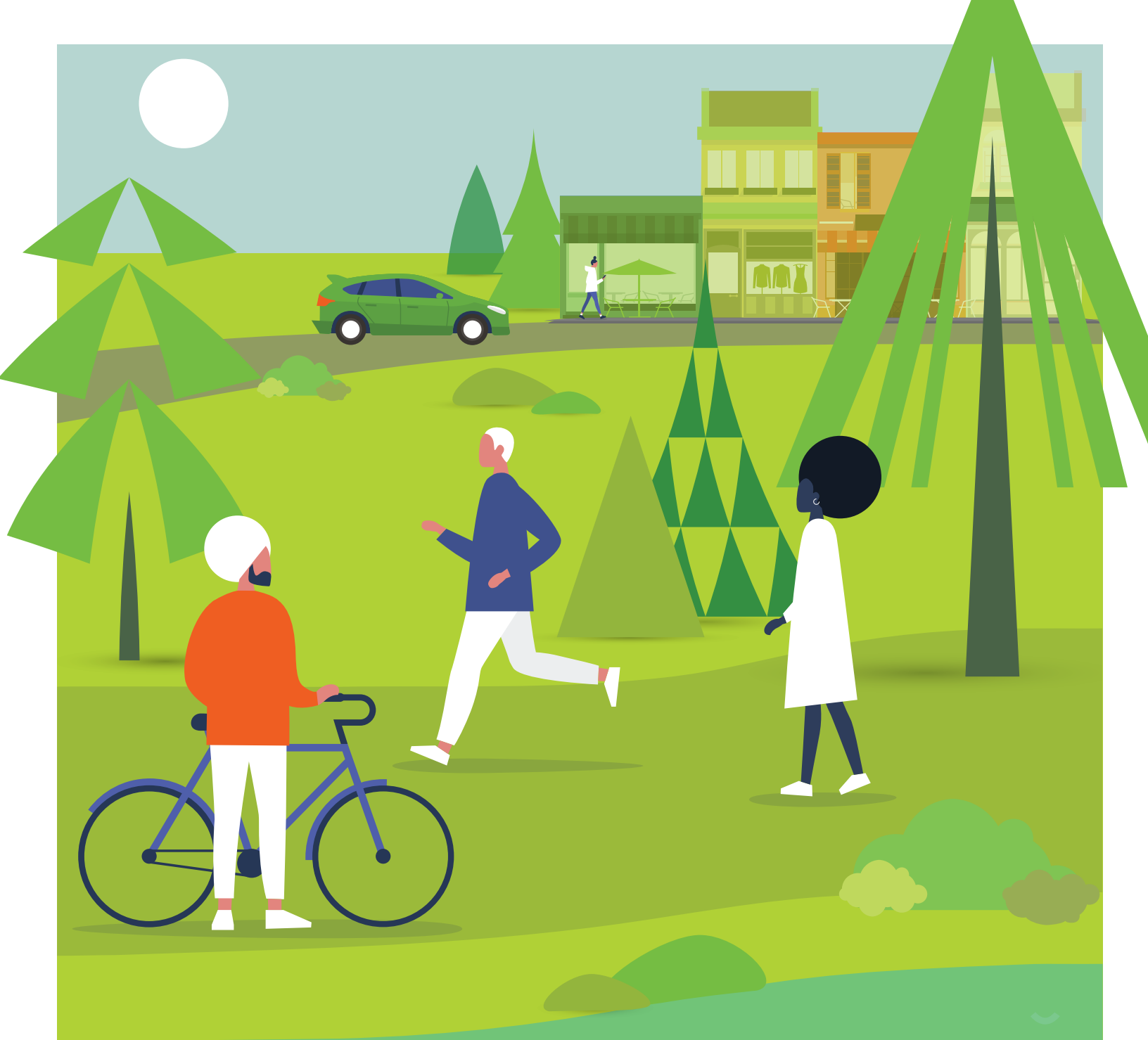
Voting in Favor _____

Voting Against _____

Attest:

Steve Allen, Mayor

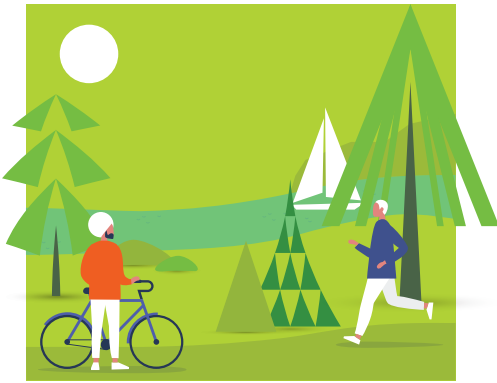
City Recorder Kellie Reed, CMC, CMFO



FINAL DRAFT • November 2019

ASHLAND CITY

Community Mobility Plan



ASHLAND CITY

Community Mobility Plan

ACKNOWLEDGMENTS

This planning effort would not be possible without the hard work and dedication of Ashland City and the Tennessee Department of Transportation staff. Thank you.

The Town of Ashland City

Steve Allen, Mayor
 Clint Biggers, Public Works Director
 Scott Sampson, Parks and Recreation Director
 Chuck Walker, Building and Codes
 Brian Stinson, Public Works

Tennessee Department of Transportation

Jonathan Russell, Transportation Planning Supervisor, Region 3
 Ian Preston, Community Transportation Planner, Region 3
 Melanie Murphy, Senior Community Transportation Planner, Region 3

Rural Planning Organization

Karyssa Helton, Mid-Cumberland Human Resource Agency

Planning Team

Terrance Hill, PE, Kimley-Horn
 Nate Sweitzer, PLA, Kimley-Horn
 Nicole McVey, Kimley-Horn
 Catherine Hackett, Kimley-Horn

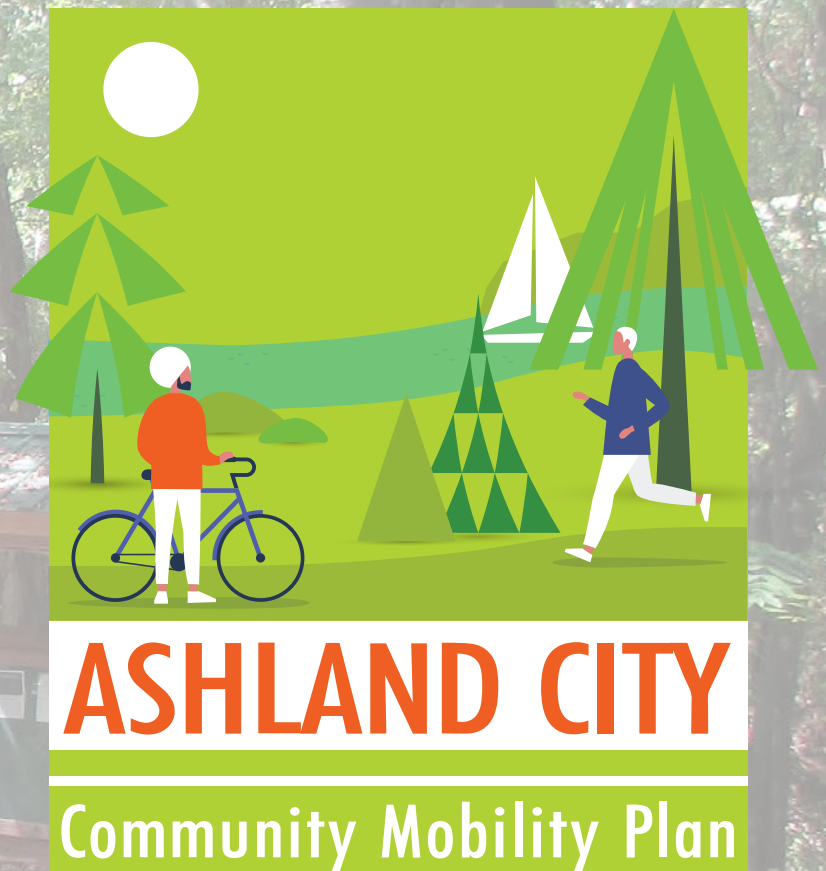
Prepared by Kimley-Horn
 214 Oceanside Drive, Nashville, TN 37204
 615-564-2701 | www.kimley-horn.com

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INTRODUCTION ①



ASHLAND CITY

Community Mobility Plan

BACKGROUND

Tucked between the Cumberland River and rolling hills of Middle Tennessee, the Town of Ashland City is located approximately 17 miles northwest of Downtown Nashville. The town was incorporated in 1859, a few years after the creation of Cheatham County. Serving as the county seat since its incorporation, the town prides itself on its sense of community and small-town feel. One of the many amenities that the Town offers are the many parks located within the town limits. These parks do not only serve the residents of Ashland City, but also attract individuals from surrounding areas. With the town positioned for rapid growth in the future given its close proximity to Nashville, residents and town officials would like to ensure that the town take the next steps necessary in creating a plan for the future in terms of being walkable, bikeable, encouraging economic growth, and promoting beautification.

Community Transportation Planning Grant

The preparation of this plan has been financed in part by the Tennessee Department of Transportation's (TDOT) Community Transportation Planning Grant, which is made available by State Planning and Research funds through the Federal Highway Administration (FHWA), a division of the U.S. Department of Transportation (USDOT). The contents of this report do not necessarily reflect the official views or policies of the USDOT, FHWA, and/or TDOT. It is the policy under Title VI of the Civil Rights Act of 1964 that TDOT prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance.

In 2018, the town applied to develop a community mobility plan through the CTPG program, which is administered by the Long Range Planning Division of TDOT, to identify deficiencies and opportunities in the current transportation network and recommend improvements that could be implemented in the future. A mobility plan focuses on all modes of transportation including motor vehicles, rail, freight, bicycles, pedestrians and public transportation; however, the Town wanted to emphasize bicycle and pedestrian improvements. This plan focuses on improving or constructing sidewalks, bike lanes, and shared-use paths (greenways) to connect residences to parks, businesses, schools, and other attractions along with operational improvements that will allow traffic to flow more smoothly and improve safety. These improvements are in line with the CTPG program goals which include the following:

- Assist rural municipalities with planning efforts that define transportation cohesiveness between multimodal transportation systems and local land use objectives that achieve the statewide transportation goals.
- Aid in rural municipalities with the creation of planning documents that support improvements in traffic flow, safety, and overall efficiency of the transportation system.
- Provide rural city governments with planning resources to achieve community visions as related to transportation and land use needs that promote future economic growth.



PROJECT PROCESS

The process to develop a Community Mobility Plan follows certain guidelines in order to realize a successful final comprehensive plan. Without all the proper steps in place, progress and future facility development would be difficult and possibly disjointed. The proper process for the successful development and construction of recommended facilities through the CTPG are as follows:

Step 1: Project Development

Leadership Commitment: Community leaders must demonstrate a clear commitment to support the project.

- Ashland City’s mayor, police, and various other town departments have been involved in the creation of this mobility plan from it’s inception, and all agree they want smart, sustainable growth that supports all modes of transportation.

Visioning & Consensus: Establishing a shared vision and consensus allows the community to set project goals and objectives. Understanding needs and developing support from the community is vital to start the planning, design, and implementation process.

- **An important component to this project is the involvement of the community. Their input was key in determining needs and prioritization.**

Planning & Design: Communities should leverage local resources and knowledge to assist in guiding project activities to best meet the needs of their community. Tailoring best practices to meet local conditions and desires will assist in developing an implementable, successful planning study.

- **Once needs have been identified, the appropriate solution for each location was evaluated. Projects were prioritized based on need, connectivity, and complexity.**

PROJECT DEVELOPMENT

STEPS:

1. **Leadership Commitment**
2. **Visioning & Consensus**
3. **Planning and Design**

Step 2: Project Implementation

Funding for Implementation: Communities should seek diverse funding sources to implement their project plans such as partnering with private industry as well as seeking funding from other state and federal sources.

TDOT offers the following competitive programs to assist with implementation:

Federal-Aid

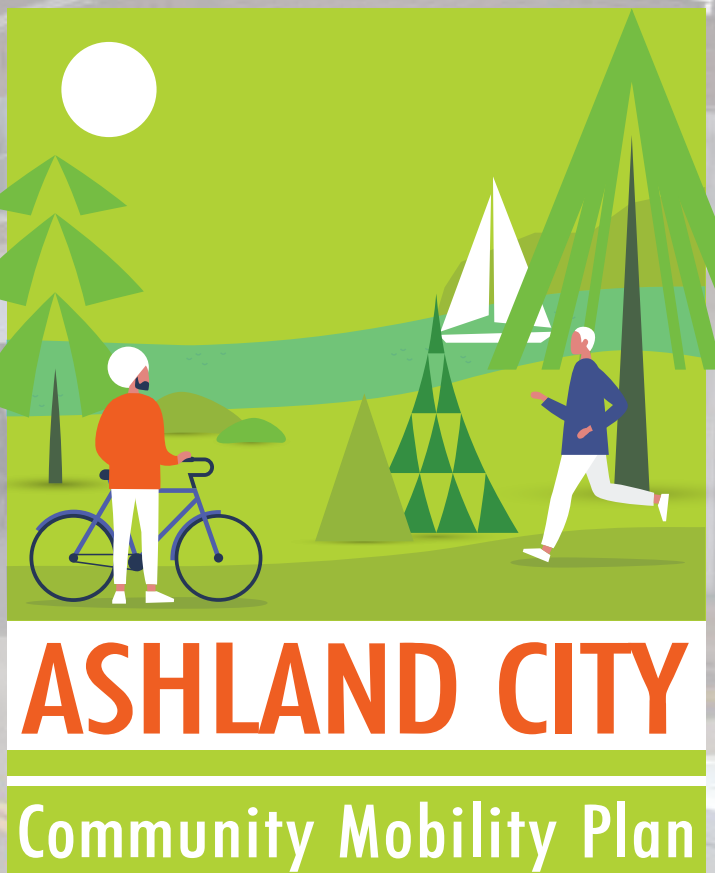
- **Multimodal Access Grant (MMAG):** Provides funding to support the transportation needs of transit users, pedestrians and bicyclists through infrastructure projects that address existing gaps along state routes
- **Surface Transportation Block Grant (STBG):** Targets improvements and new infrastructure to sidewalks, shared-use paths, safe routes to school, complete streets, and bridge enhancements
- **Transportation Alternatives Program (TAP):** Functions as the main funding source for general pedestrian and bicycling infrastructure projects

(See Funding Alternatives on page 38 for additional municipal grant opportunities)

Source: Community Transportation Planning Grant Fact Sheet; Planning Division. 2019



EXISTING CONDITIONS ②



AREA OF STUDY

The study area mostly lies within the downtown limits of Ashland City and consists of the following primary corridors: SR 12 (Main Street) from SR 455 (Tennessee Waltz Parkway) to SR 455 (McQuarry Street), SR 455 (Tennessee Waltz Parkway / McQuarry Street) from SR 12 (N. Main Street) to SR 12 (South Main Street), and SR 49 (Cumberland Street / Frey Street) from SR 455 (Tennessee Waltz Parkway) to Oak Street. The limits encompass approximately one square mile. Locations adjacent to these corridors were also included. Those locations include Ashland City Elementary, Riverbluff Park, and J.W. Johns Jr. Park. Additionally, a connection to the Cumberland River Bicentennial Trail was also examined as it is a popular destination for bicyclists located less than a mile north of downtown Ashland City.



1 City Park



2 Main Street



3 Cumberland River
Bicentennial Trail












4 Riverbluff Park

Area of Study



Legend

-  School
-  Bicentennial Greenway Trail
-  Existing Sidewalk
-  Poole Walking Track
-  Existing Street
-  Railroad
-  Water
-  Park
-  City Boundary

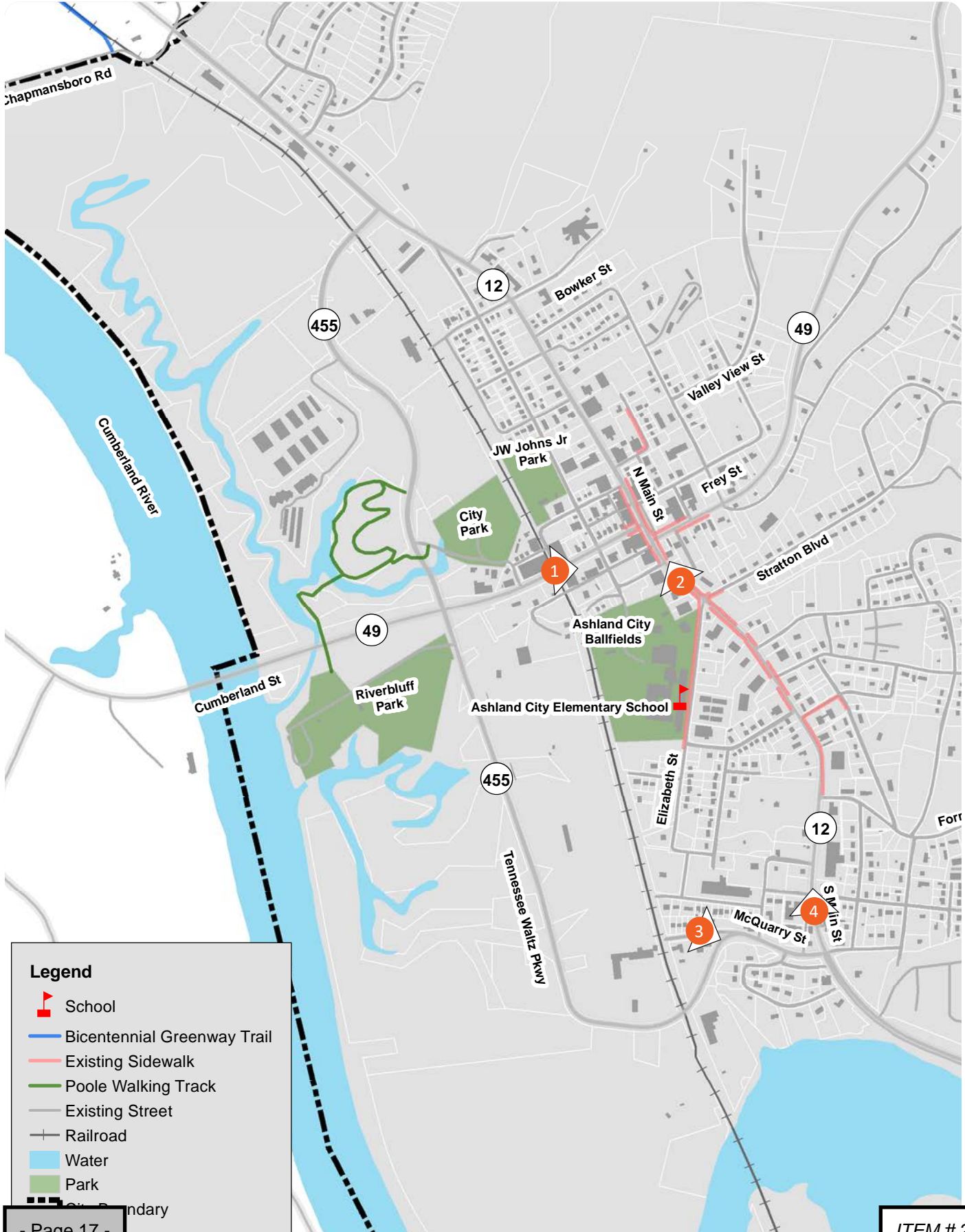
EXISTING CONDITIONS

There are a number of opportunities for improvements including the need for sidewalks on many streets, improving sidewalks that are not ADA compliant, traffic calming measures, traffic flow improvements, and safety improvements. The following photos outline some deficiencies that should be corrected once funding is available.










1. Access Management: Cumberland Street has a number of locations in which there is open frontage and no defined parking or driveways. (See #1 below)
2. Route Discontinuity: Drivers that want to continue on SR 49 must briefly turn onto SR 12 in the middle of downtown. The offset signalized intersection at SR 12 creates traffic congestion.
3. Pedestrian Infrastructure: There are a number of locations in which sidewalks should be constructed to provide an alternative from walking in the street or shoulder.
4. ADA Compliance: It is important to make sure curb ramps and sidewalk cross slopes meet the requirements outlines in TDOT's standard drawings. (See #2 below)
5. Sight Distance: Obstacles such as vegetation, roadway geometry, signs and buildings inhibit the ability of drivers to see oncoming cars at certain intersections. The curve and tree growth at SR 12 and McQuarry Street limit the sight distance of the westbound approach of McQuarry Street. (See #3 below)
6. Geometric Configuration: The intersection of SR 12, Harris Street, and Elm Street is a five-legged intersection in which Harris Street intersects at a skewed angle. (See #4 below)
7. Bicycle Connectivity: Paved shoulders along SR 12 and SR 455 would allow for the striping and signing of bicycle lanes.



Existing Conditions



Legend

-  School
-  Bicentennial Greenway Trail
-  Existing Sidewalk
-  Poole Walking Track
-  Existing Street
-  Railroad
-  Water
-  Park
-  City Boundary

TRIP GENERATORS

Within the study area, there are a number of attractors that draw residents, visitors, and employees to the Town of Ashland City. Continued growth within the downtown core and surrounding areas of Ashland City will contribute to the need to make infrastructure improvements for all modes of transportation. The following is a list of key trip generators within the study area:



Ashland City Elementary and Baseball Fields – Ashland City Elementary houses pre-school through fourth grade with a student population of nearly 550. Directly adjacent to the school is a park that has baseball fields for recreational leagues, a football field, picnic areas, and two playgrounds.



Riverbluff Park – This park's amenities include playgrounds, picnic tables, a boat ramp and dock, soccer fields, and an observation deck



The Braxton/Harpeth Shoals Marina – A residential community of twin high-rise buildings that include condominiums along with access to the Cumberland River through private docks.



J.W. Johns Jr. Park – Located adjacent to City Park, this park includes a playground, basketball courts, batting cages, and baseball fields.



Ashland City Medical Center – The Town's and County's primary hospital provides emergency and non-emergency services to the surrounding areas.



Cheatham County Courthouse – On the National Register of Historic Places, the courthouse contains the county courts, the sheriff's office, and the county mayor's office.



A.O. Smith Corporation – Manufacturing water heaters, A.O. Smith is the Town's largest employer and generates a number of heavy truck trips.



City Park – Located adjacent to J.W. Johns Jr. Park, this park includes a walking trail that crosses SR 455 via a tunnel, tennis courts and restrooms. A connection from this park to Riverbluff Park has also been constructed under the SR 49 bridge over the Cumberland River.



Dillion Transportation – A trucking company that transports goods and services across the country.

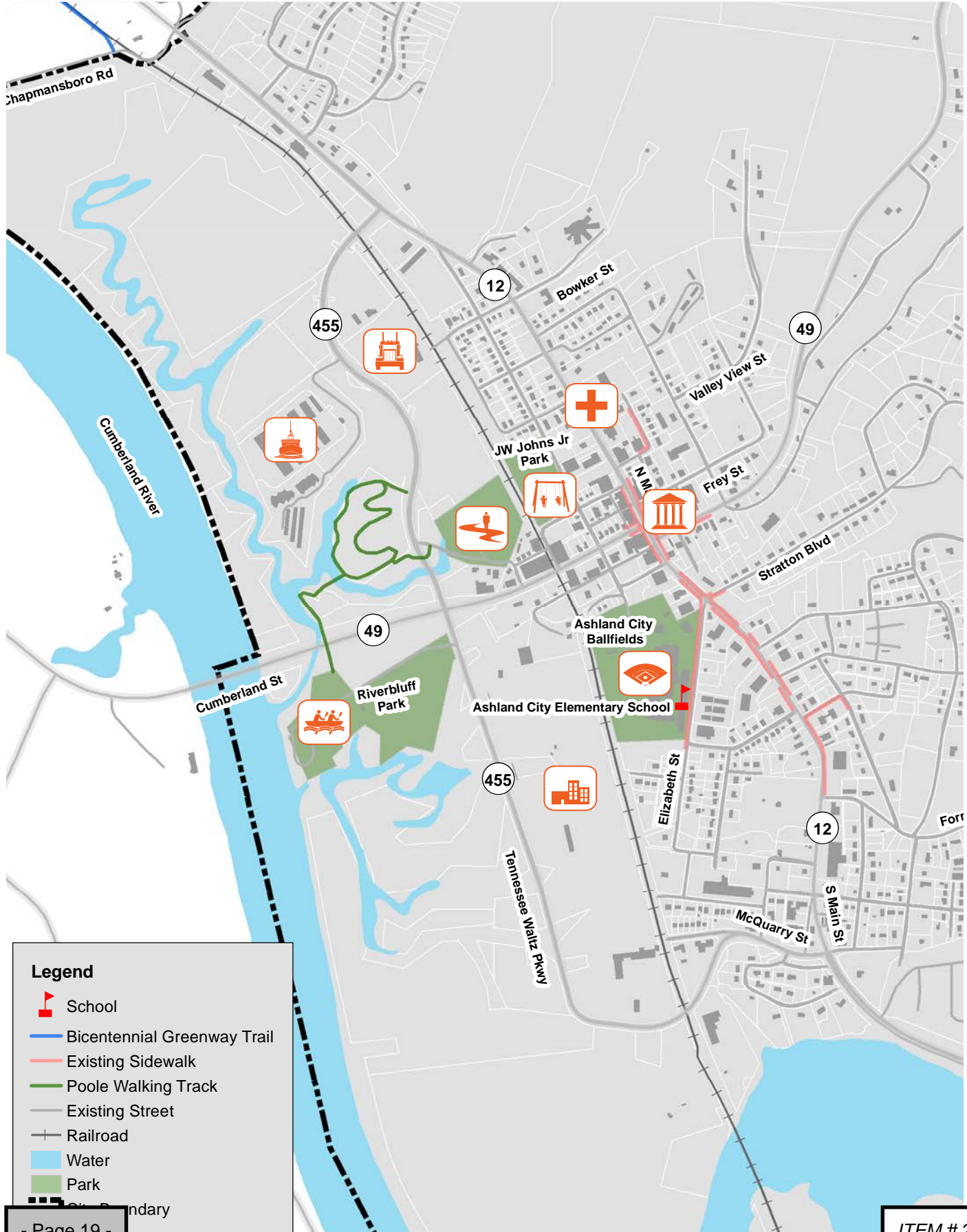
Additional Generators

Just outside of the project area, there are several attractors that draw individuals to the study area or cause individuals to pass through the study area to reach their destination. Those trip generators include a Walmart on SR 12 nearly two miles south of downtown, the Cheatham County Public Library located approximately one mile northeast of downtown along SR 49, the Cumberland River Bicentennial Trail (a popular trail just north of town which includes four miles that are paved and over two miles of gravel trail), The Cheatham County Fairgrounds just southeast of downtown, and the Riverview Restaurant and Marina just across the Cumberland River west of downtown. Additionally, several new developments are planned just south of downtown including a 280-unit apartment complex, a hotel, and expansion of a boat manufacturing facility and a concrete plant.










Future Growth

It is envisioned by Town leaders that Ashland City's growth could be shaped and molded from other forms of transportation. The Town has the potential to flourish via passenger water transport along the Cumberland River. Tourists from Nashville could take a boat ride to the Town to shop, dine, or recreation, and residents could theoretically travel to Nashville for work or play. Another form of transportation that would benefit the Town of Ashland City is the Nashville to Clarksville Commuter Rail (also known as the Northwest Corridor) along the Nashville & Western rail corridor. A feasibility study was completed in 2008 that examined the viability of connecting Clarksville to Nashville utilizing one of three existing rail lines. Not much progress has been made on the implementation of the Northwest Corridor; however, if the route through Ashland City is chosen, the Cumberland River Bicentennial Trail would be affected as it was constructed along this rail line. To promote growth, the Town also passed a Downtown Overlay District in February 2017 to allow denser development that promotes growth with the establishment of mixed-use buildings. This proactive step coupled with the unique possibilities of the transportation options afford the Town many opportunities to thrive as it grows.

Trip Generators



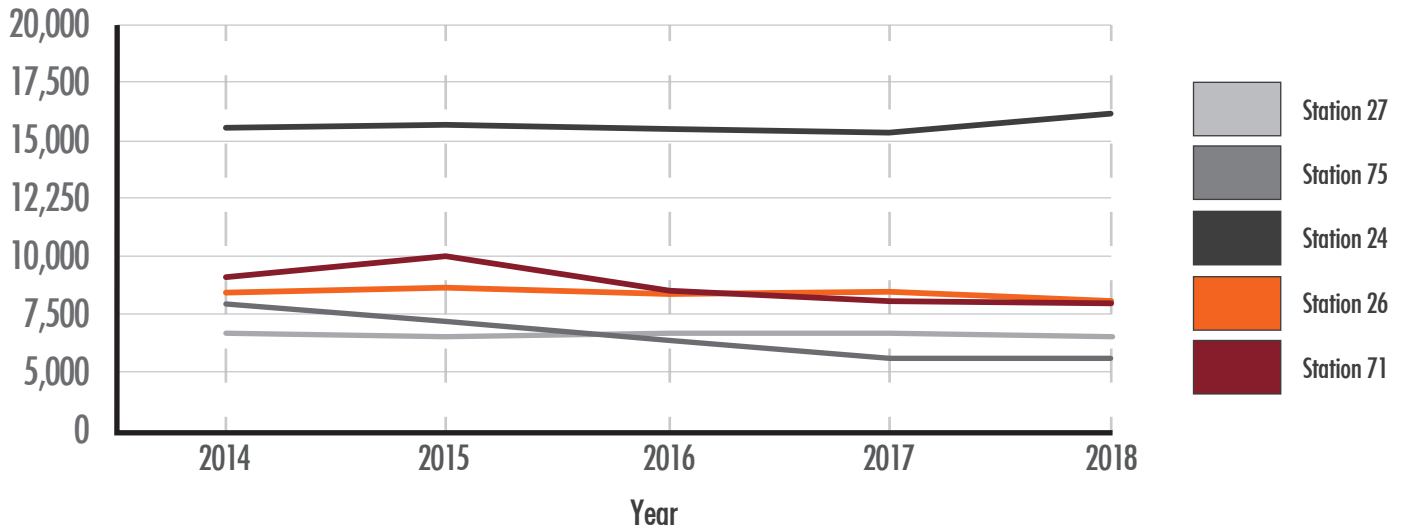
Legend

-  School
-  Bicentennial Greenway Trail
-  Existing Sidewalk
-  Poole Walking Track
-  Existing Street
-  Railroad
-  Water
-  Park
-  City Boundary

TRAFFIC ANALYSIS

Ashland City has experienced economic and residential growth in recent years, and the overall traffic counts along the major corridors over the last ten years support that trend. The graph below depicts the trends at the TDOT count stations. The ten-year growth rate of traffic is 0.7 percent, and the three-year growth rate is three percent.

Average Daily Traffic



A signal warrant analysis was conducted at the intersection of SR 12 and SR 455 (McQuarry Street). The analysis of the study intersection was performed using the methodology provided in Chapter 4C of the Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition published by the Federal Highway Administration (FHWA). The MUTCD provides the following standard, among others, regarding justification for traffic control signals:

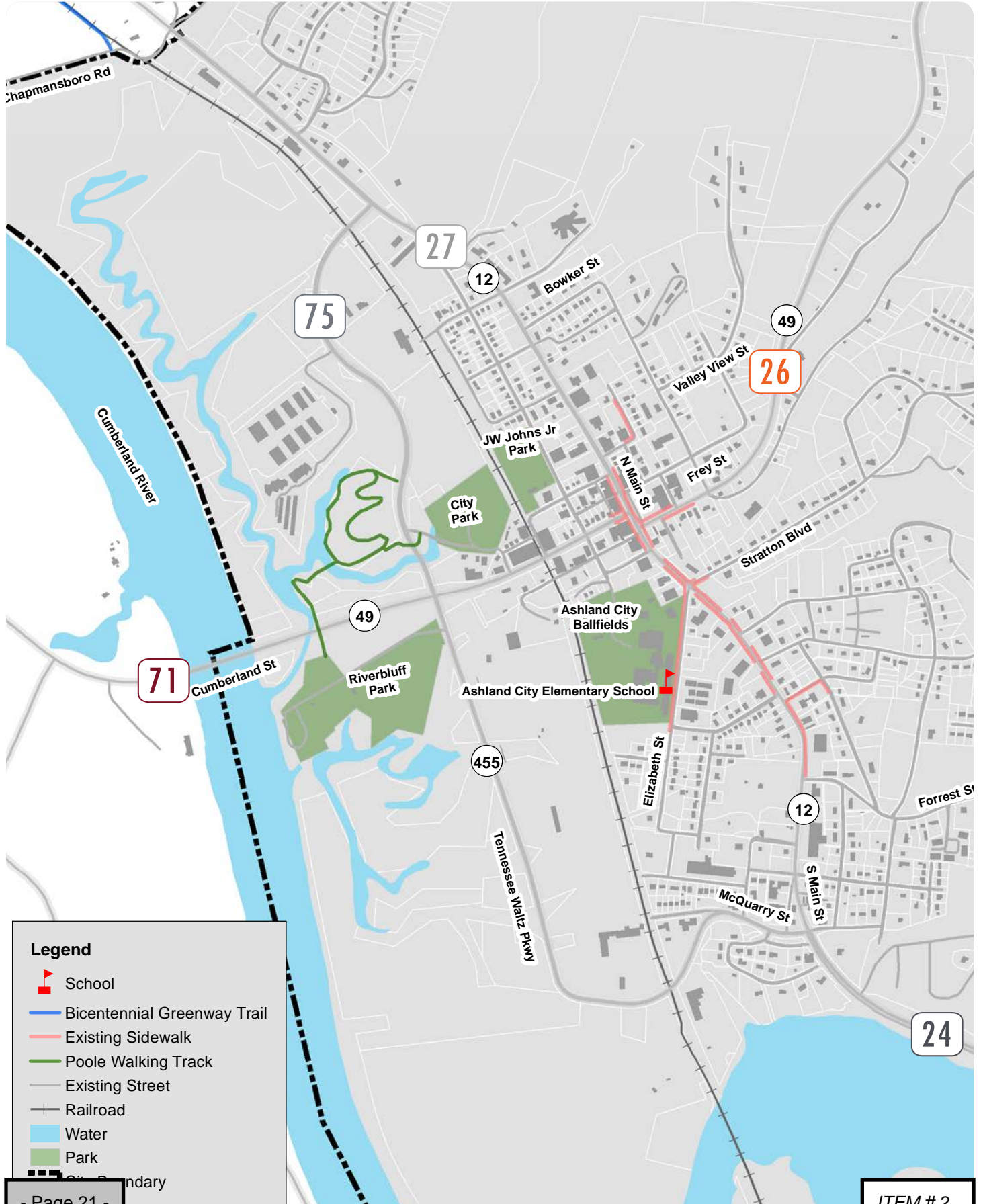
- “The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.”
(Source: MUTCD 2009, Section 4C.01, Paragraph 03)

There are eight total signal warrants within the MUTCD. The following three were analyzed to determine if a traffic signal was warranted at the above-referenced intersection:










- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour

Although the intersection did not meet signal warrants at the time of the study, the installation of a signal should still be considered due to poor sight distance issues on the McQuarry Street approach as well as proposed increase in truck traffic along SR 455 from A.O. Smith.

Trip Analysis



Legend

-  School
-  Bicentennial Greenway Trail
-  Existing Sidewalk
-  Poole Walking Track
-  Existing Street
-  Railroad
-  Water
-  Park
-  City Boundary

TRAFFIC ANALYSIS SR49 AT SR12

The intersection of SR 12 and SR 49 in the heart of Ashland City has caused traffic issues for quite some time. Congestion and crashes have occurred at this intersection due to its geometric configuration as an offset intersection. Drivers that would like to continue straight on SR 49 from either the westbound or eastbound direction must make a right turn onto SR 12 for approximately 125 feet and then turn left onto SR 49. This can create confusion for drivers and contributes to traffic delays as each signalized approach of SR 49 at SR 12 must be served independently instead of concurrently. The Town approached TDOT in an effort to align SR 49 in the center of town. The proposed realignment would allow SR 49 (Cumberland Street) on the west side of SR 12 to be directly across from the existing location of SR 49 (Frey Street), which would have involved removing some of the oldest buildings within downtown Ashland City. To avoid this, an alternate alignment for SR 49 was recommended. This alternative realigns SR 49 beginning approximately at the intersection with SR 455 and curves southeastward eventually following the existing alignment of Chestnut Street to SR 12. The new SR 49 would then continue northeastward past SR 12 (south of its current alignment) and eventually rejoin its existing alignment just east of Oak Street. This option would reduce the number of impacts on existing structures compared to the other alternative. A conceptual drawing of the proposed change is on the following page.

Analysis was conducted using Synchro 9, a traffic microsimulation software, to model existing conditions and future conditions. Control delay and level of service were obtained for the following ten (10) conditions:

- AM & PM Existing
- 2025 AM & PM No-Build
- 2025 AM & PM Build
- 2045 AM & PM No-Build
- 2045 AM & PM Build

Control Delay:

- “Control delay – the delay brought about by the presence of a traffic control device – is the principal service measure in the HCM for evaluating LOS at signalized and unsignalized intersections. Control delay includes delay associated with vehicles slowing in advance of an intersection, the time spent stopped on an intersection approach, the time spent as vehicles move up in the queue, and the time needed for vehicles to accelerate to their desired speed” (Source: Highway Capacity Manual 2010, Chapter 4).

LOS:

- “LOS is a quantitative stratification of a performance measure or measures that represent quality of service. The measures used to determine LOS for transportation system elements are called service measures. The HCM defines six levels of service, ranging from A to F, for each service measure, or for the output from a mathematical model based on multiple performance measures. LOS A represents the best operating conditions from the traveler’s perspective and LOS F the worst. For cost, environmental impact, and other reasons, roadways are not typically designed to provide LOS A conditions during peak periods, but rather some lower LOS that reflects a balance between the individual travelers’ desires and society’s desires and financial resources. Nevertheless, during low-volume periods of the day, a system element may operate at LOS A” (Source: Highway Capacity Manual 2010, Chapter 5).

LEVEL OF SERVICE CRITERIA

The LOS criteria for signalized intersections are summarized in the table below.

Signalized Intersection Level of Service		
LOS	Control Delay (Seconds/Vehicle)	Comments
A	≤10	Volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	>10-20	Volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
C	>20-35	Progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	>35-55	Volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	>55-80	Volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	>80	Volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual 2010, Chapter 18



Intersection of South Main Street & Chestnut Street

LEVEL OF SERVICE RESULTS

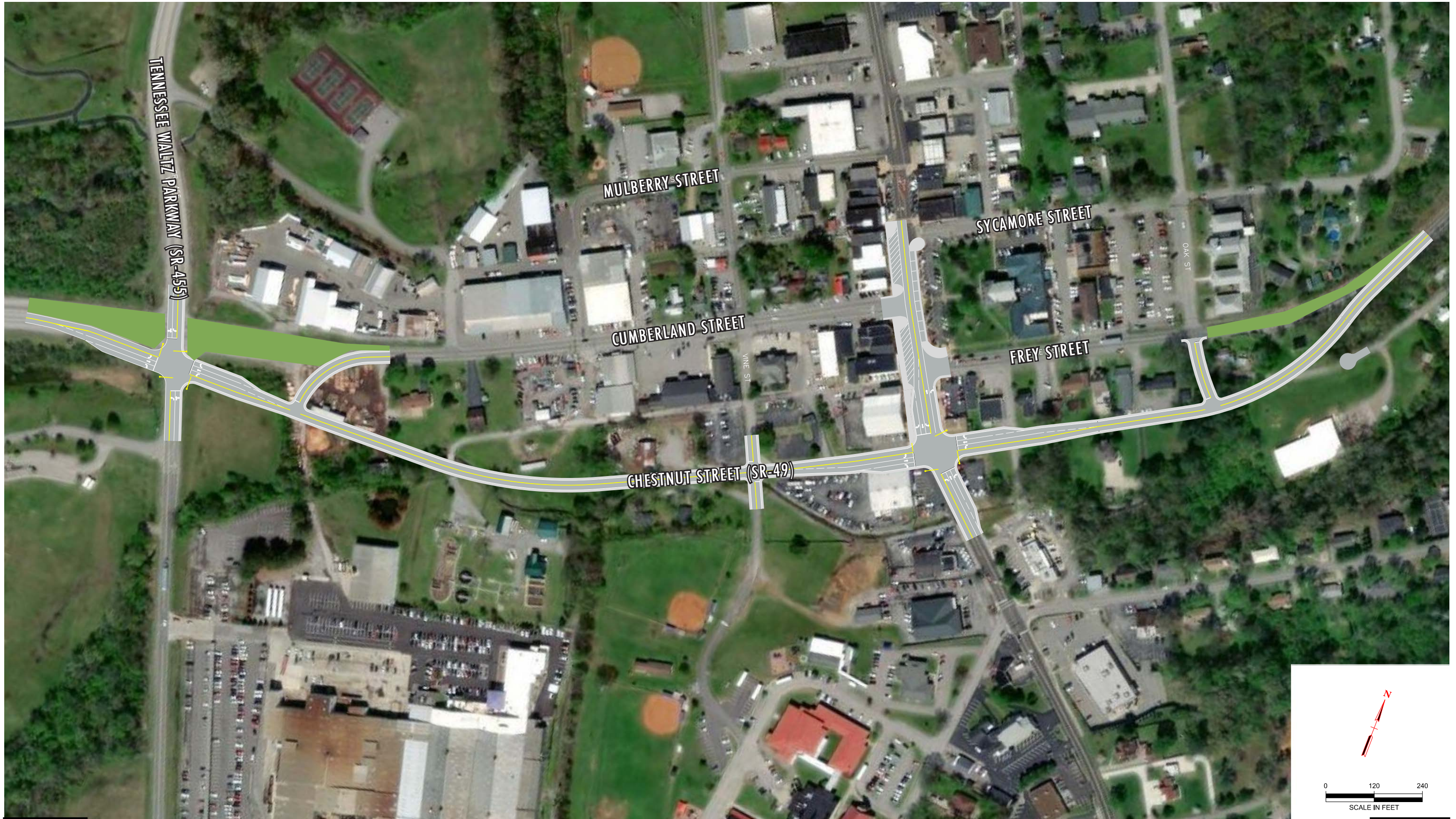
Signalized Intersection LOS:

- Control delay alone is used to characterize LOS for the entire intersection or an approach.
- Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group.
- Delay quantifies the increase in travel time due to traffic signal control. It is also a surrogate measure of driver discomfort and fuel consumption.

The Existing and No-Build alternatives include the roadway conditions as they are today with no geometric improvements being made to the existing intersection. The Build alternative includes the realigned SR 49; intersecting with SR 12 approximately 220' south of the existing intersection. The traffic was increased at a rate of two percent per year to obtain the 2025 and 2045 volumes. Below are the results of the traffic analysis in terms of LOS and the corresponding delay in parentheses for all scenarios:

Intersection Capacity Analysis Results - AM Peak Hour						
Intersection	Approach	Existing 2019 Conditions	No-Build 2025 Conditions	Build 2025 Conditions	No-Build 2045 Conditions	Build 2045 Conditions
S Main Street at Cumberland Street	Eastbound:	C (24.5)	C (24.7)	-	C (24.4)	-
	Southbound:	C (28.8)	C (32.2)	-	F (118.1)	-
	Overall:	B (18.6)	C (20.4)	-	E (58.9)	-
S Main Street at Frey Street (SR49)	Westbound:	C (31.9)	D (41.4)	-	F (147.8)	-
	Northbound:	B (16.6)	B (17.6)	-	C (20.4)	-
	Overall:	B (16.2)	C (20.4)	-	E (59.8)	-
S Main Street at Proposed (SR49)	Eastbound:	-	-	C (32.5)	-	C (34.3)
	Westbound:	-	-	C (26.9)	-	D (42.9)
	Northbound:	-	-	A (9.1)	-	B (13.0)
	Southbound:	-	-	B (17.8)	-	C (25.8)
	Overall:	-	-	C (20.7)	-	C (29.8)
Intersection Capacity Analysis Results - PM Peak Hour						
Intersection	Approach	Existing 2019 Conditions	No-Build 2025 Conditions	Build 2025 Conditions	No-Build 2045 Conditions	Build 2045 Conditions
S Main Street at Cumberland Street	Eastbound:	C (24.6)	C (24.8)	-	C (25.2)	-
	Southbound:	C (20.6)	C (23.5)	-	D (37.7)	-
	Overall:	B (10.9)	B (12.5)	-	B (17.0)	-
S Main Street at Frey Street	Westbound	C (24.3)	C (25.6)	-	C (32.0)	-
	Northbound	B (17.0)	C (20.6)	-	C (38.6)	-
	Overall	B (14.4)	B (17.0)	-	C 29.2)	-
S Main Street at Downtown Connector	Eastbound:	-	-	C (34.6)	-	C (34.0)
	Westbound:	-	-	C (28.0)	-	C (31.6)
	Northbound:	-	-	B 12.9)	-	B (19.6)
	Southbound:	-	-	B (11.4)	-	B (18.3)
	Overall:	-	-	B (18.7)	-	C (23.8)

The analyses show that the LOS for the 2045 AM No Build conditions is an E or F for the southbound and westbound approaches as well as the overall intersections; however, for the 2045 AM Build condition, all approaches and the overall intersection LOS perform at a D or better. For the PM peak period, the 2045 No Build and Build conditions all operate at a LOS D or better. Additional analysis may need to be completed to determine the full impact of a realigned SR 49.



CRASH ANALYSIS

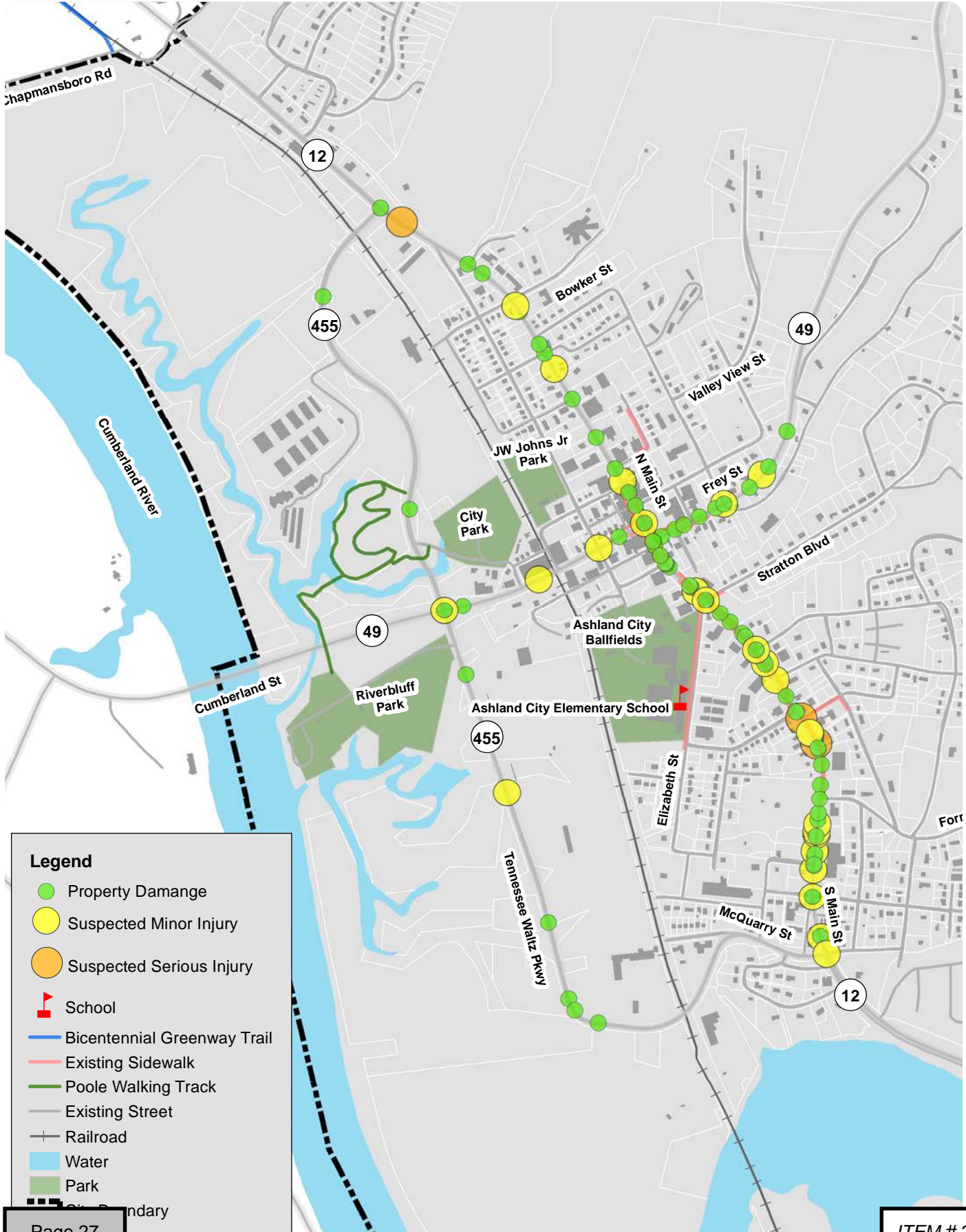
Study Area Crash Statistics		
Condition	1/1/2016 - 12/31/2018	
	Number of Crashes	Percentage of Total
Lighting Conditions		
Daylight	109	73%
Dark - Not Lighted	5	3%
Dark - Lighted	25	17%
Dusk/Dawn	7	5%
Not Indicated	3	2%
Crash Severity		
Property Damage	117	79%
Suspected Minor Injury	29	19%
Suspected Serious Injury	3	2%
Fatality	0	0%
Manner of Collision		
Rear-End	56	38%
Lane Departure	30	20%
Angle	29	19%
Sideswipe	15	10%
Head-On	3	2%
Overturn	0	0%
Animal	5	3%
Other/Unknown	11	7%
Weather Conditions		
Clear	99	66%
Rain	16	11%
Snow	2	1%
Sleet/Hail	2	1%
Cloudy	25	17%
Foggy	2	1%
Not Indicated	3	2%

Historical crash data for the study area was obtained from TDOT's Enhanced Tennessee Roadway Information Management System (E-TRIMS) for the most recent three years (January 1, 2016 to December 31, 2018). There were a total of 149 crashes along the three primary corridors in the Town of Ashland City; SR 49 (Cumberland Street and Frey Street), SR 12 (Main Street), and SR 455 (Tennessee Waltz Parkway). More than three-quarters (115) of the total number of crashes occurred along SR 12. Of those 115 crashes on SR 12, 91 were property damage only crashes. Along the three corridors, there were three suspected serious injury crashes; all of which were also on SR 12.

All the reported crashes were plotted on the map to the right. The table on this page provides a summary of crash types and condition associated with those crashes. The majority were rear-end crashes and property damage only. Although the crashes are scattered along all three major corridors, there are four segments in which clusters of crashes are evident. The cluster sections along SR 12 include Harris Street to Forrest Street, near Helen Street, and Turner Street to Boyd Street. These segments have clusters of property damage, suspected minor injury, and suspected serious injury crashes. Additionally, there is a cluster near the intersection of SR 12 and SR 49 (Frey Street). After reviewing the crash reports, it seems as though some safety measures can be implemented to help reduce crashes at these locations. Most of the reports involve crashes in which a vehicle was rear ended while stopped or slowing to make a turn into a driveway or side street in addition to vehicles exiting side streets or driveways and colliding with vehicles on the main roadway. Below are a few relatively low-cost safety measures that can be installed to help reduce the number of crashes.

- Access management techniques such as driveway closures or the installation of curbs should be implemented to reduce the open road frontage and number of driveways along SR 12 between Harris Street and Forrest Street, along Frey Street west of Oak Street, along SR 12 between Mulberry and Jefferson Street, and SR 49 (Cumberland Street) between Park Street and SR 12.
- Install retro-reflective material on objects within the clear zone of the roadway including on utility poles, lamp posts, and mailboxes.
- Install side road warning signs on the main roadway to warn drivers that vehicles may be entering the roadway or slowing to turn onto the side road.
- Delineate culverts along SR 49, SR 12, and SR 49 with object marker signs.
- Ensure faded roadway striping is refreshed including centerline, edge lines and stop bars.
- Replace existing regulatory and warning signs that are faded and lost their retro-reflectivity.

Crash Analysis

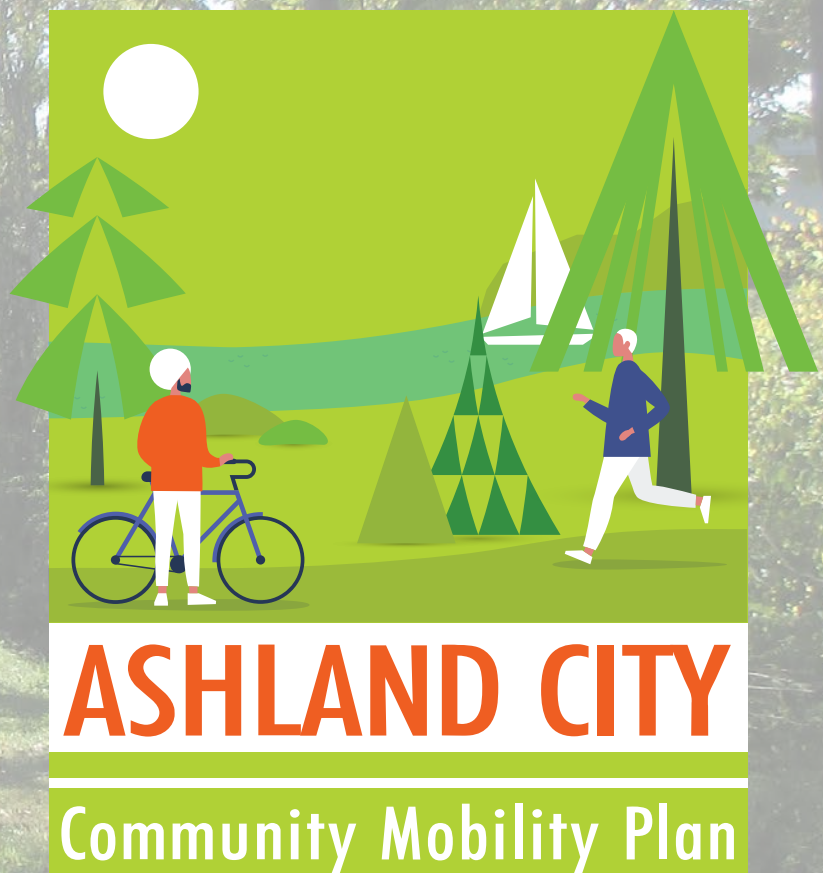


Legend

- Property Damage
- Suspected Minor Injury
- Suspected Serious Injury
- ▲ School
- Bicentennial Greenway Trail
- Existing Sidewalk
- Poole Walking Track
- Existing Street
- + Railroad
- Water
- Park
- City Boundary



RECOMMENDATIONS ③



COMMUNITY OUTREACH

Community involvement and input is crucial to the success of any planning process. It guides the project team in understanding the desires of city officials and citizens. It allows citizens to have a voice in shaping the future of the community, giving the project team the ability to discover concerns that may not be readily apparent from field visits, crash reports, or traffic analysis. The outreach event broadened the project team's understanding of Ashland City and the surrounding area as well as the project limits. These findings led to the identification of the route recommendations identified later on in this chapter.

Project Kickoff & Steering Committee Meeting

To help establish the goals, objectives, and the overall direction of the Ashland City Community Mobility Plan, the project team met with Town staff and TDOT. This meeting helped establish the project time frame, determine what information was crucial to gather from the community, and what contextual information regarding the existing bicycle, pedestrian and roadway network was important to gather and analyze. After the meeting, the design team conducted a field visit with the Town and TDOT staff to review vehicular, pedestrian and bicycle conflicts, infrastructure conditions, and safety issues. This helped the design team begin the analysis process and preliminary route recommendations that ultimately were shown in the community meeting.

Community Meeting

The community meeting, held at the Ashland City municipal building, focused on gathering information from Ashland City residents based on existing conditions and proposed improvements. The project team showcased potential bicycle, pedestrian, and roadway improvements and asked for resident input on preferred design scenarios and priorities. A series of exercises were conducted with meeting attendees to help the design team better understand needs of residents and additional safety issues around schools, parks, and other routes around the Town.



Exercise #1 - What Makes a Great Place?

Featuring three boards of streetscape images collected from across the country, the "What Makes a Place Great?" exercise provided a setting where participants could place stickers on images that they felt were great places to visit, experience, live, work, and play. Without having to provide a written verbal explanation, they were able to respond to the visual cues and aesthetics in the photographs. The images below represent the four most popular choices during the exercise.

Based on the photos that were chosen, it is clear that Ashland City residents are passionate about implementing a variety of transportation options, reliable pedestrian networks, and a sense of place in the downtown core.



COMMUNITY OUTREACH

Exercise #2 - Priority Pyramid

This exercise allowed participants to prioritize a list of planning themes as shown on the following page. Each participant received a board displaying a pyramid and eight cards representing a destination within the Ashland City community. They were challenged to place the themed cards on the pyramid based on the destination's importance to them, the top being the most important. The project team collected the pyramids and placed them in view of participants for discussion.

Transportation Destination Priorities

downtown



#1
PRIORITY

Employment



parks & open space



#2
PRIORITY

neighborhood



exercise



Schools



#3
PRIORITY

Results

Pedestrian Priorities

Enabling residents to provide their feedback during the public meeting was essential to understanding their needs and desires in relation to important connections in the City. Through the priority pyramid exercise, the design team discovered the high importance of transportation connectivity to downtown, places of employment, and parks and open space. This feedback helped the design team recommend necessary and appropriate transportation connections throughout the Town of Ashland City. Additionally, sidewalk was requested to be proposed on Stratton Boulevard.



EXERCISE

One of the biggest benefits of providing alternative modes of transportation, such as walking and bicycling, is creating a healthy environment for residents and visitors.



PARKS AND OPEN SPACE

Throughout Ashland City, parks and open space provide places of recreation and solitude. Special attention was made to parks and open space connectivity based on the strong priority comments from residents.



PLACES OF WORSHIP

There are several places of worship within the Community Mobility Plan area of study. In addition, it was noted during the public meeting that these connections are important and should be included.



EDUCATION

Providing safe and reliable connectivity to and from schools for children is vital to creating a strong pedestrian and bicycle network. These projects are typically of highest priority for cities, and Ashland City is no exception. Both City staff and Ashland City residents expressed the importance for these connections.



RETAIL

Retail opportunities are present within the study area that are close in proximity to residential neighborhoods. Providing access to and from these places of business are important to allow residents a safe, alternative mode of transportation to coffee shops, grocers, restaurants, and more.



DOWNTOWN

Ashland City's downtown district is continuing to change and grow, making it important for multimodal connections to be created to and from it's shops, restaurants, and public spaces.



NEIGHBORHOOD

There are several neighborhoods within the area of study. Connecting these residences, especially school children to schools, parks, businesses and public spaces should be considered and implemented.



EMPLOYMENT

Considering bicycle and pedestrian connections to places of employment is sometimes overlooked, but a large number of people utilize non-motorized transportation to get to and from work.

CASE STUDIES

As the design team conducted site visits and analyzed the pedestrian connectivity needs and desires of the Ashland City community, the team also looked at similar studies, helping them to visualize the purpose and intent of the Ashland City Community Mobility Plan.

Waynesboro Corridor Study - 2016

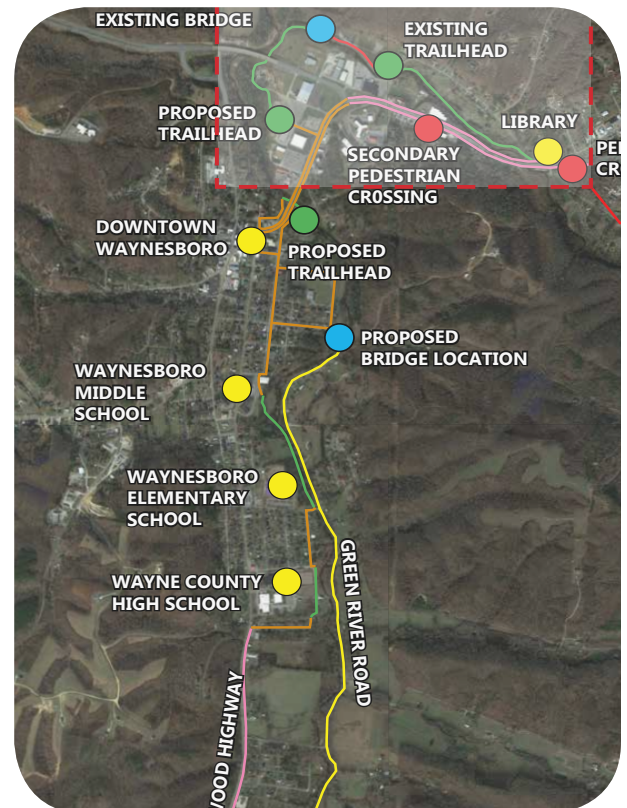
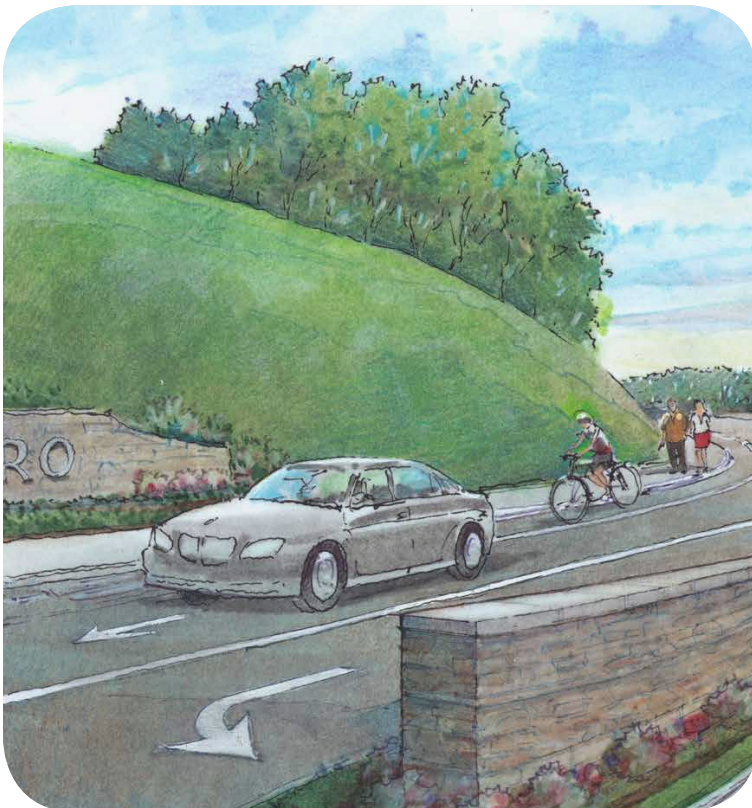
A corridor study was completed in 2016 for the City of Waynesboro that focused on improving pedestrian and vehicular conditions along Dexter L. Woods Memorial Boulevard, while also looking at citywide bicycle and pedestrian networks, trailhead opportunities, and neighborhood sidewalk concepts.

The Waynesboro community has seen little development and growth over recent years. Due to this trend, as well as health concerns of the community, it was Waynesboro's desire to establish a vision to aid the promotion of economic development, safety and health throughout the Waynesboro community. Wayne County ranks below the U.S. average and Tennessee average in several key health categories, including adult smoking, adult obesity and physical inactivity.

This was a cause for concern among residents and public officials within the City of Waynesboro. The recommended implementation strategies, when constructed, will provide pedestrian safety, promote economic vitality, and increase the health of individuals throughout the community.

Recommended Improvements:

- Implement new greenway connections to downtown Waynesboro, City Park, local schools and the community Sportsplex
- Improve sidewalk network from Dexter L. Woods Memorial Boulevard to downtown Waynesboro
- Introduce bike lanes and implement a "road diet" on Dexter L. Woods Memorial Boulevard
- Provide pedestrian "safe zone crossings" along Dexter L. Woods Memorial Boulevard while improving inner neighborhoods sidewalk systems to link important destinations

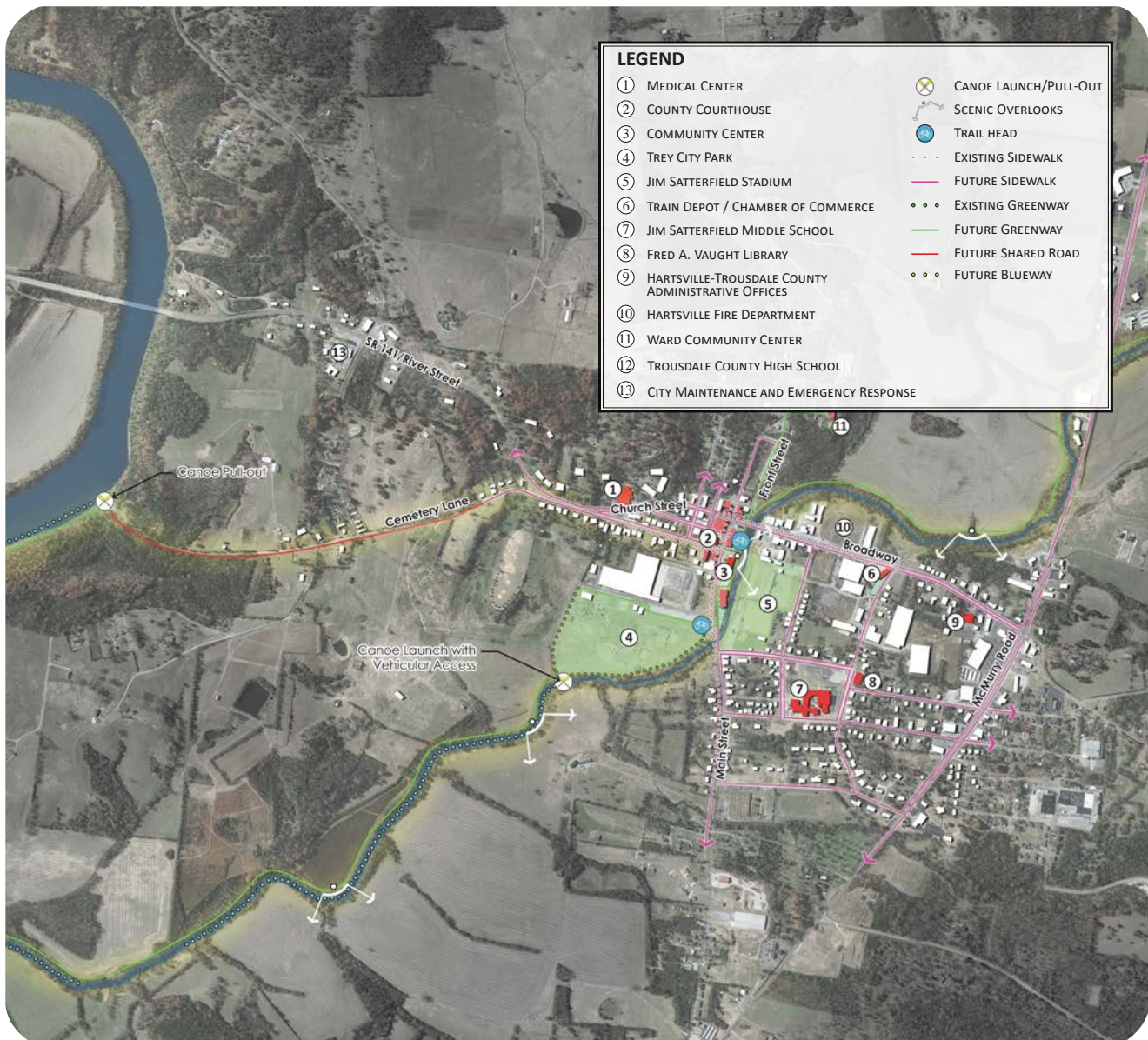


Hartsville Connectivity Plan - 2017

A connectivity plan analyzes a community's alternative modes of transportation and generates a plan that works to link and connect the network with the inclusion of new trails and routes. Connectivity plans are often used to inspire the use of multi-modal transportation options for work and recreation, while leading the community to take an active approach to health and fitness.

The connectivity plan for Hartsville, as shown on the following page, depicts the network of existing sidewalks and greenways paired with future connections to blueways, new sidewalks, greenway trails, and shared streets. The plan strives to build a network of connectivity around Downtown Hartsville, connecting the community's resources together and allowing them to be more accessible to its residents. In addition to downtown circulation, the plan also connects downtown to the Cumberland River through a series of greenways and blueways running with Little Goose Creek. The greenway trail would also provide many opportunities for scenic overlooks along the trail.

Resource: Hartsville Connectivity Plan; Kimley-Horn. 2017



PROPOSED IMPROVEMENTS

Upgrading Facilities

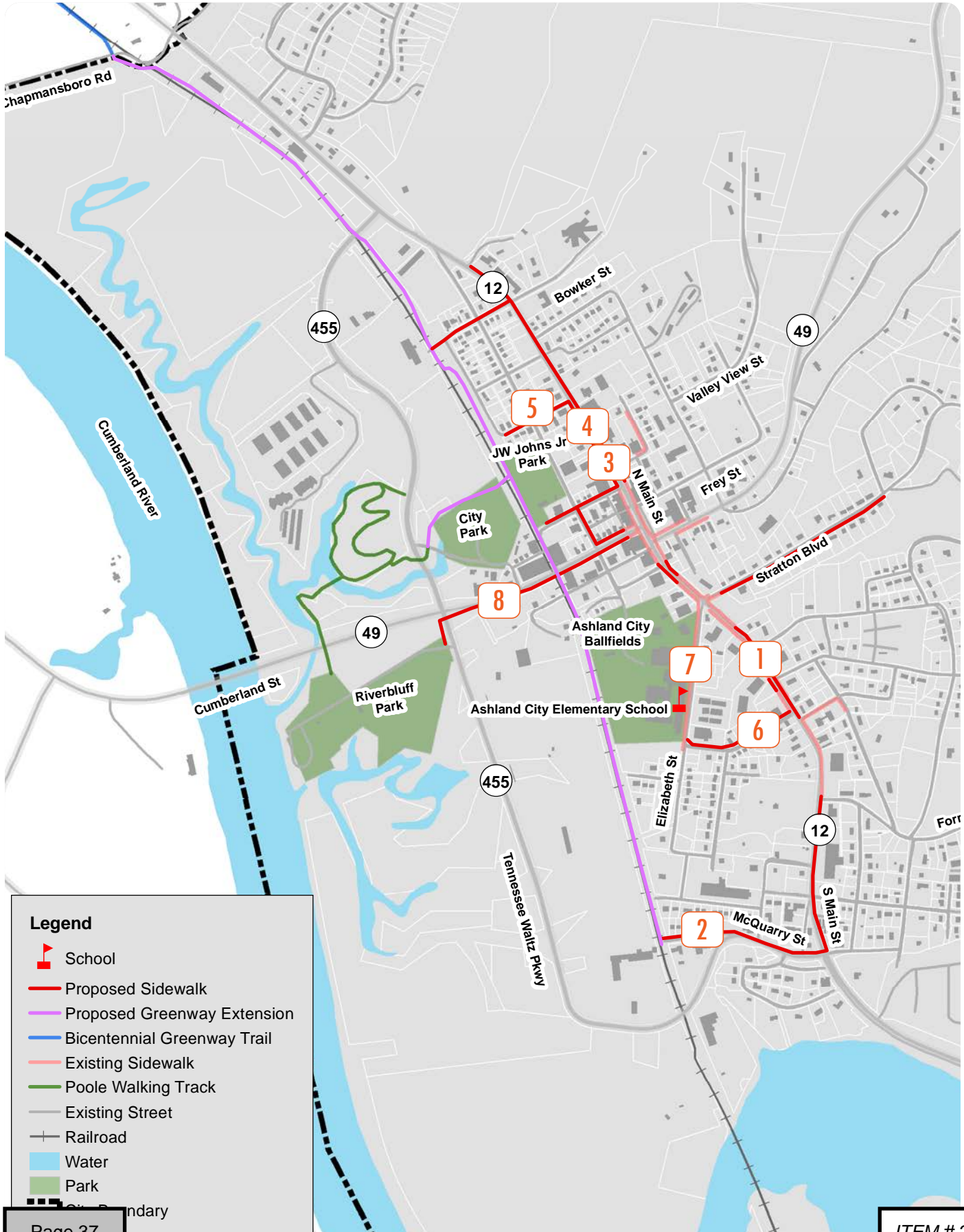
Providing safe and accessible bicycle and pedestrian facilities for residents and visitors is vital to the livability of any community. Those individuals that rely on facilities that follow the American Disabilities Act (ADA) must be taken into consideration when planning city-wide bicycle and pedestrian connections. There is a demand for ADA facilities in Ashland City that must be addressed in order to give everyone an equal opportunity to safely access public buildings and areas throughout Ashland City. In addition to the following proposed bicycle and pedestrian facilities, the City must review all existing sidewalks and shared-use paths to ensure they comply with ADA. Doing so will heighten the overall accessibility and enjoyment of public spaces that Ashland City has to offer.

The following is a list of projects that was developed to address safety concerns, traffic congestion, connectivity, and alternative modes of transportation. These recommended improvements are a result of the traffic and safety analysis, field observations of existing infrastructure, Town staff and public input, and future needs as the Town continues to grow. The proposed projects are divided into short-term and long-term implementation. Short-term are projects that can be completed within a three to five-year timeframe depending on the availability of funding, time to design, constructability, and phasing. Long-term are projects that would generally take longer to design and construct due to right-of-way issues or funding. These long-term projects would likely take at least five years to complete.

Pedestrian Facilities - Short-Term

1. South Main Street (SR 12) Sidewalks Phase I – From just south of Forrest Street to Chestnut Street, this project will construct new sidewalk and reconstruct existing sidewalk along the northbound shoulder of SR 12. This will provide a connection from downtown to the shopping center located just north of Elm Street.
2. South Main Street (SR 12) Sidewalks Phase II – New sidewalk along the northbound shoulder of SR 12 from McQuarry Street to connect with Phase I just south of Forrest Street. Additionally, with the proposed signal at McQuarry Street, this project will install a crosswalk across SR 12 and sidewalk along McQuarry Street to where McQuarry ends at the abandoned railroad. This will connect to a proposed future extension of the Cumberland River Bicentennial Trail. *(See image next page)*
3. North Main Street (SR 12) Sidewalks Phase I – New sidewalk along the northbound shoulder of SR 12 from Mulberry Street to north of Pemberton Drive.
4. North Main Street (SR 12) Sidewalks Phase II – New Sidewalk along the southbound shoulder of SR 12 from Mulberry Street to Pemberton Drive with a crosswalk across SR 12 at Pemberton Drive, Jefferson Street, and Mulberry Street.
5. Main Street Connectors – New Sidewalk along Pemberton Drive, Jefferson Street and Mulberry Streets to connect North Main Street to Riverbluff Park with pedestrian signals installed at the intersection of SR 455 and SR 49 (Cumberland Street).
6. Low Street Connector – New sidewalks along the westbound shoulder of Low Street to connect SR 12 with Elizabeth Street. This project would also include an updated crosswalk at the intersection of Low Street and SR 12.
7. Elizabeth Street Sidewalk Reconstruction – Replace the existing sidewalk along the southbound shoulder of Elizabeth Street from Main Street to Low Street.
8. Cumberland Street Sidewalk – New Sidewalk along SR 49 (Cumberland Street) from SR 12 to Tennessee Waltz Parkway.

Pedestrian Facilities



Legend

-  School
-  Proposed Sidewalk
-  Proposed Greenway Extension
-  Bicentennial Greenway Trail
-  Existing Sidewalk
-  Poole Walking Track
-  Existing Street
-  Railroad
-  Water
-  Park
-  City Boundary

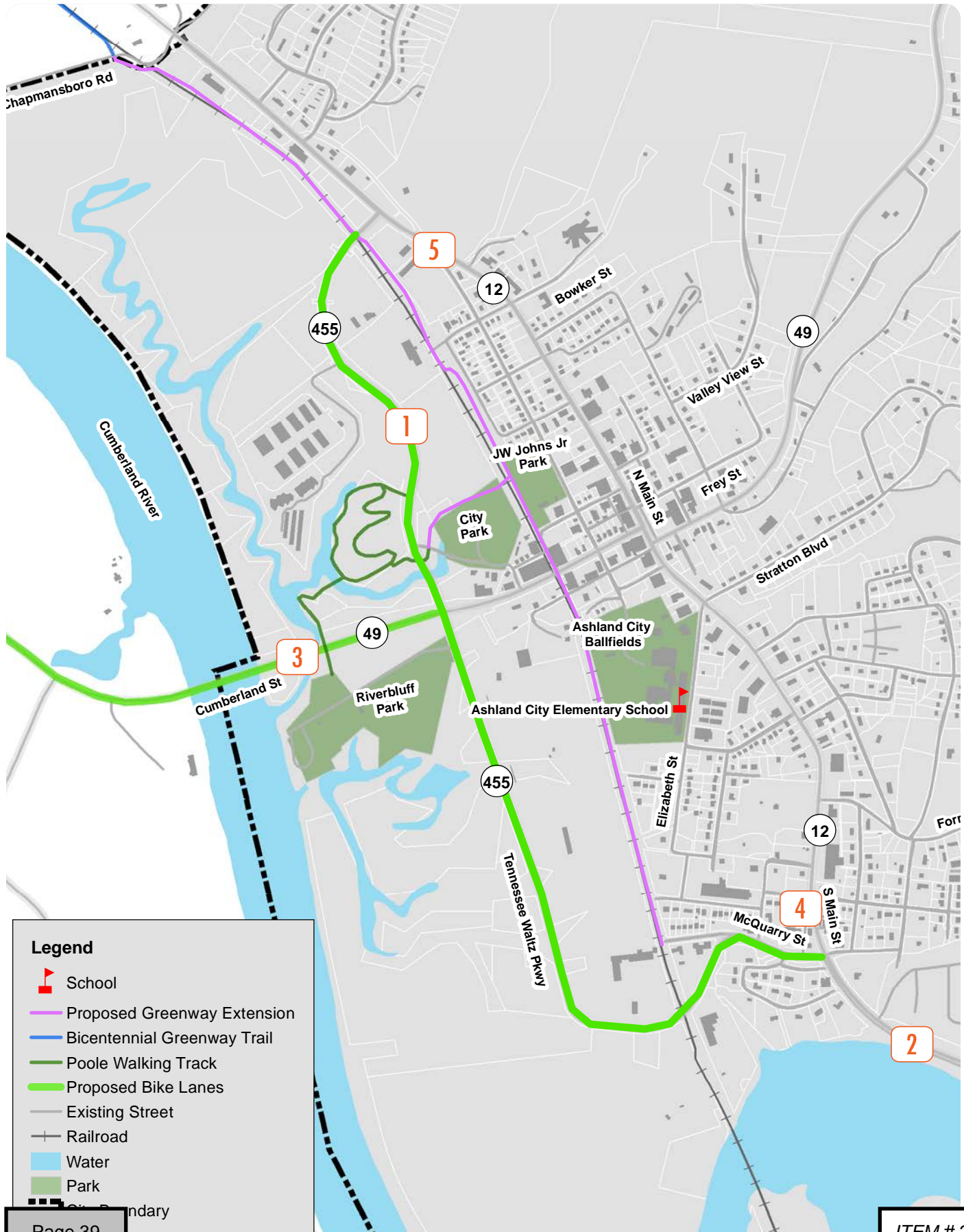
PROPOSED IMPROVEMENTS

Bicycle Facilities & Roadway Improvements - Short-Term

1. SR 455 Bike Lanes – Sign and stripe bike lanes along the northern portion of SR 455 from SR 49 (Cumberland Street) to SR 12.
2. SR 12 Bike Lanes – Sign and stripe bike lanes along the existing paved shoulders of SR 12 from the Davidson County line to just south of McQuarry Street.
3. SR 49 Bike Lanes – Sign and stripe bike lanes along the existing paved shoulders of SR 49 from SR 455 to just west of SR 249 (River Road).
4. Harris Street One-Way Conversion – Convert Harris Street to one-way southbound to eliminate conflict points at the intersection of SR 12, Elm Street, and Harris Street.
5. Vine Street Realignment – Convert the intersection of SR 12 and Vine Street from a skewed angle to 90 degrees to allow for better sight distance for drivers on Vine Street.



Bicycle & Roadway



PROPOSED IMPROVEMENTS

Long-Term Bicycle Facilities & Roadway Improvements

1. Bicentennial Trail Extension – Extend the Bicentennial trail from its current terminus near Chapmansboro Road along the abandoned railroad corridor to McQuarry Street south of downtown Ashland City. *(See image below)*
2. SR 49 Realignment – Realign SR 49 just south of the current alignment through downtown Ashland City from approximately SR 455 to approximately Oak Street. This improvement will remove the offset intersection that exists between SR 12 and SR 49.
3. SR 455 Paved Shoulders – Add eight- to ten-foot paved shoulders along SR 455 south of SR 49 to SR 12 to match the cross section of the northern section. This will allow the inclusion of bike lanes along this section.
4. SR 455/McQuarry Street Realignment – Lengthen the horizontal radius of the curve along McQuarry Street and SR 455 near Adkisson Street to improve sight distance and reduce the sharpness of the existing curve. Realign the intersection of the existing skewed intersection at McQuarry Street to 90-degrees.



Long-Term Projects



PROPOSED IMPROVEMENTS

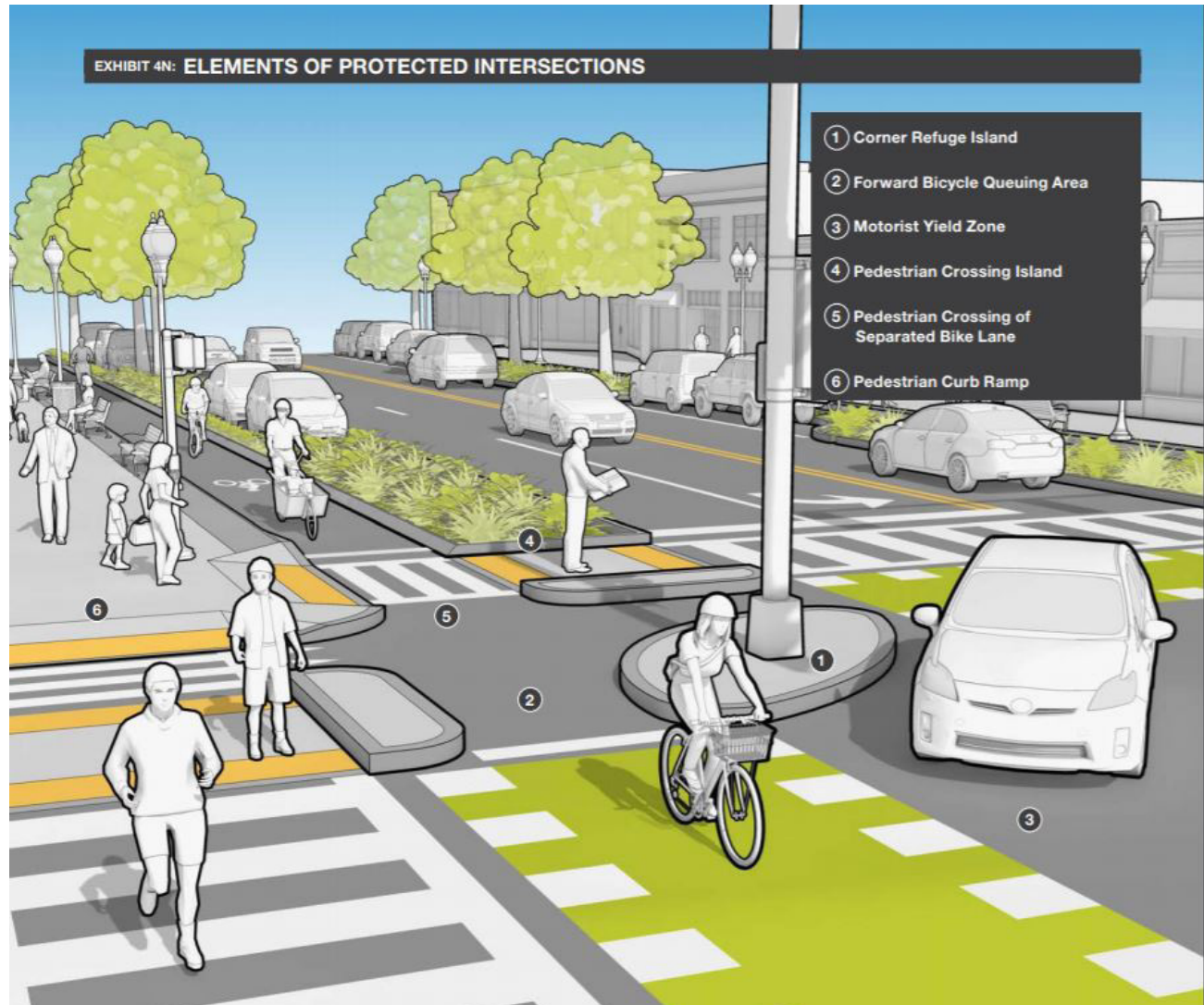
Citywide Connectivity

Joining all of the proposed improvement maps and analyzing them together provides a look at the holistic network of connections throughout the City. It is important the City understands that in order for the network to operate most efficiently, both facility types must be built. The implementation plan, as shown on page 50, helps put these projects on a timeline to make it easy to see what steps need to take place.

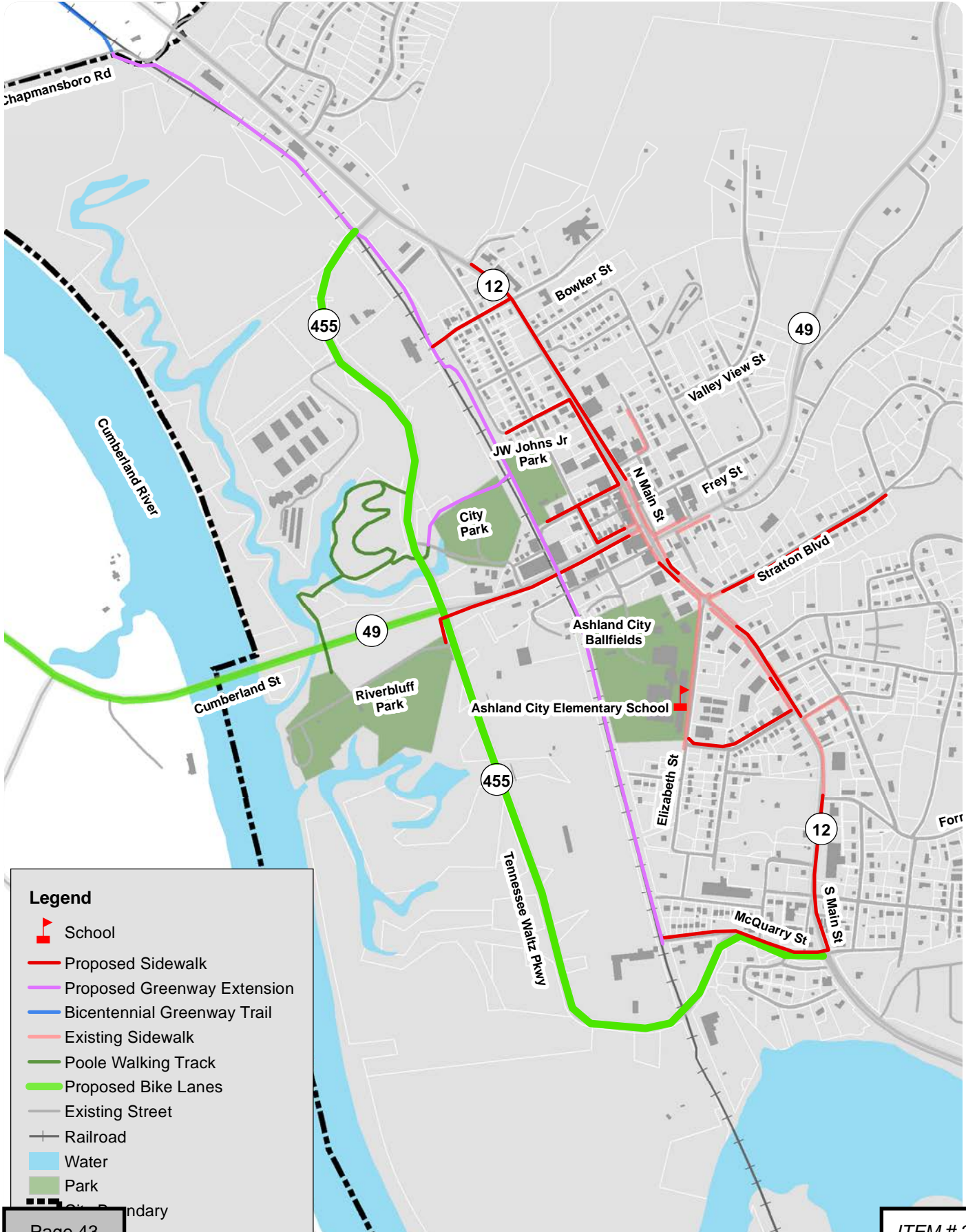
Integrating Facilities

Ensuring the integration of facility types throughout the City is vital to providing a reliable and safe transportation network. In addition to making important connections to get users from point A to point B, the use of protected intersections should be considered when planning for future facilities to create safe interchanges between vehicular, bicycle, and pedestrian travel. The image below shows the typical elements of a protected intersection, which help provide safer movements for all modes of transportation. Protected intersections increase visibility and promote predictability of movement for each user group.

Source: MassDOT Separated Bike Lane Planning and Design Guidelines, 2015



All Facilities

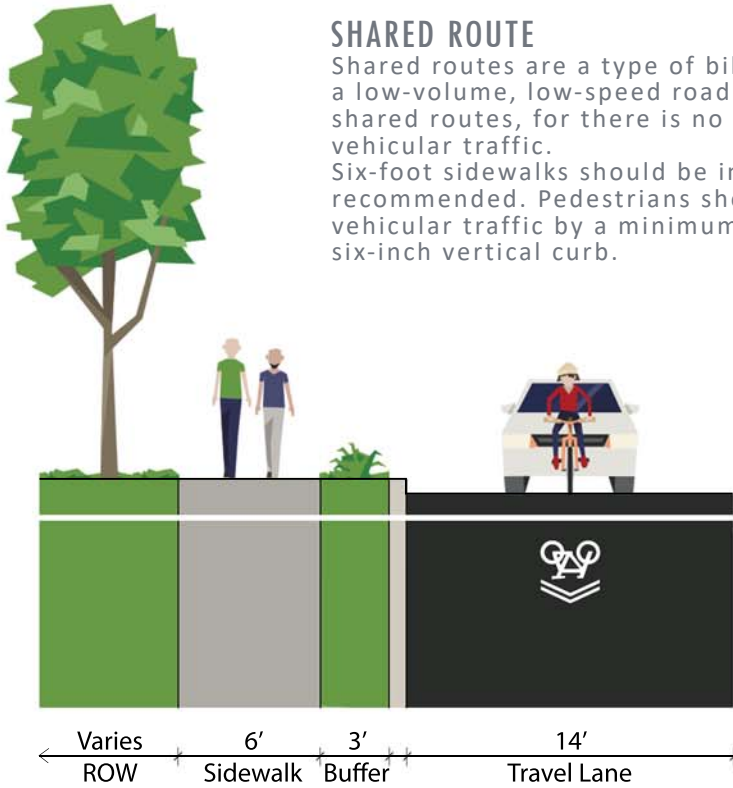


Legend

-  School
-  Proposed Sidewalk
-  Proposed Greenway Extension
-  Bicentennial Greenway Trail
-  Existing Sidewalk
-  Poole Walking Track
-  Proposed Bike Lanes
-  Existing Street
-  Railroad
-  Water
-  Park
-  City Boundary

FACILITY TYPES

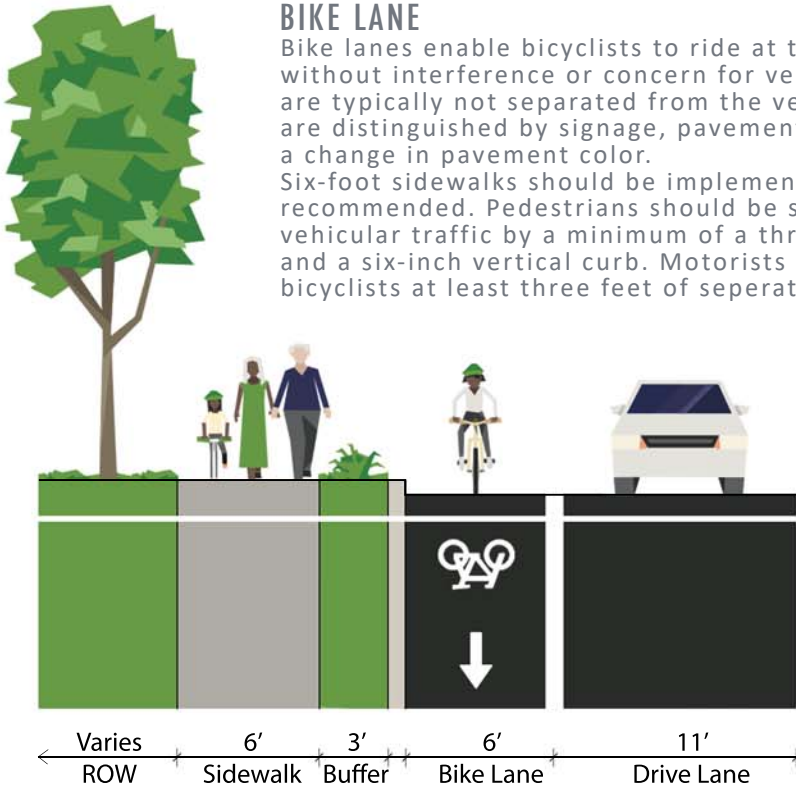
When planning the implementation of public bike facilities, there are important elements to consider to ensure they are designed for all ages and abilities. Vehicular speeds and volumes, operational uses, and sensitivity to vehicular-pedestrian conflict areas are vital to the safety and overall functionality of the bikeway network. The following cross sections are considered best practices for walkways and bikeways. These sections are the minimum that should be attained in order for Ashland City to become a more walkable and bikeable community.



BIKE LANE

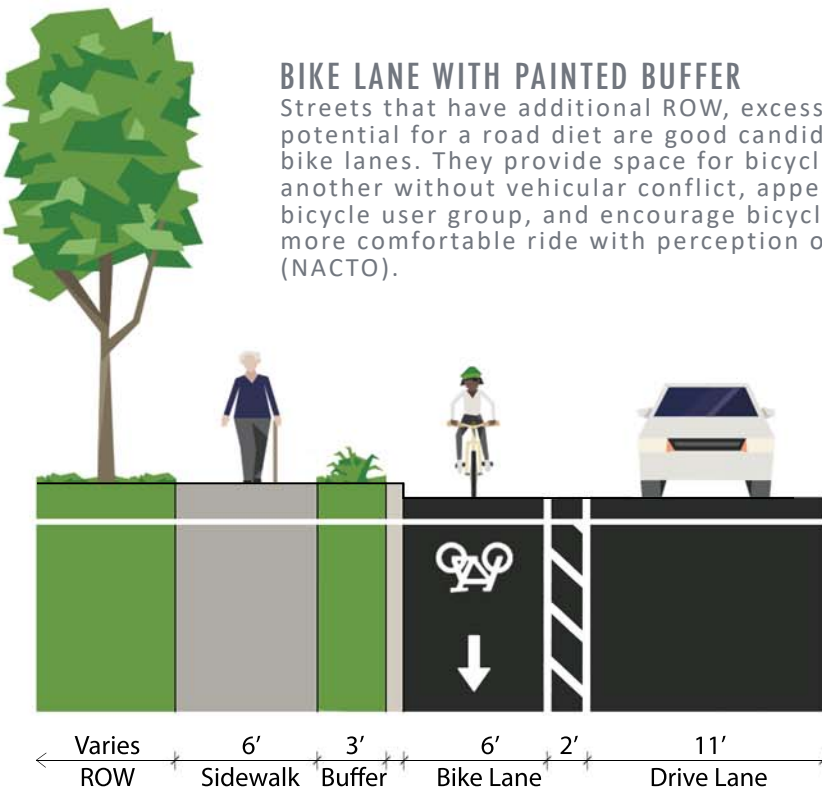
Bike lanes enable bicyclists to ride at their preferred speed without interference or concern for vehicular traffic. Bike lanes are typically not separated from the vehicular travel lane, and are distinguished by signage, pavement markings, and sometimes a change in pavement color.

Six-foot sidewalks should be implemented where bike lanes are recommended. Pedestrians should be separated from bicycle and vehicular traffic by a minimum of a three-foot landscaped buffer and a six-inch vertical curb. Motorists are required to provide bicyclists at least three feet of separation when passing.

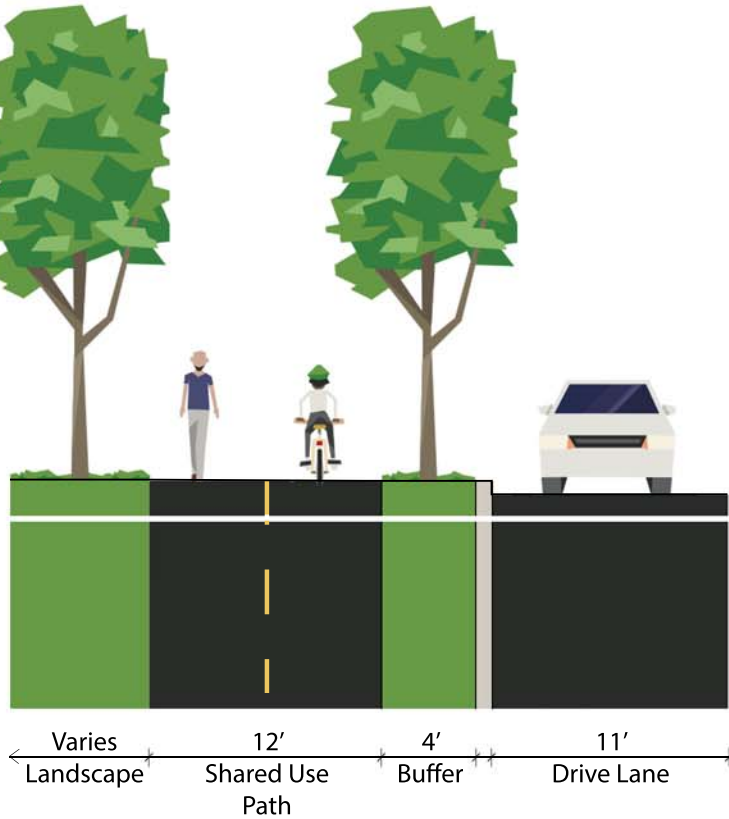


BIKE LANE WITH PAINTED BUFFER

Streets that have additional ROW, excess parking, or potential for a road diet are good candidates for buffered bike lanes. They provide space for bicyclists to pass one another without vehicular conflict, appeal to a wider bicycle user group, and encourage bicycling by providing a more comfortable ride with perception of increased safety (NACTO).

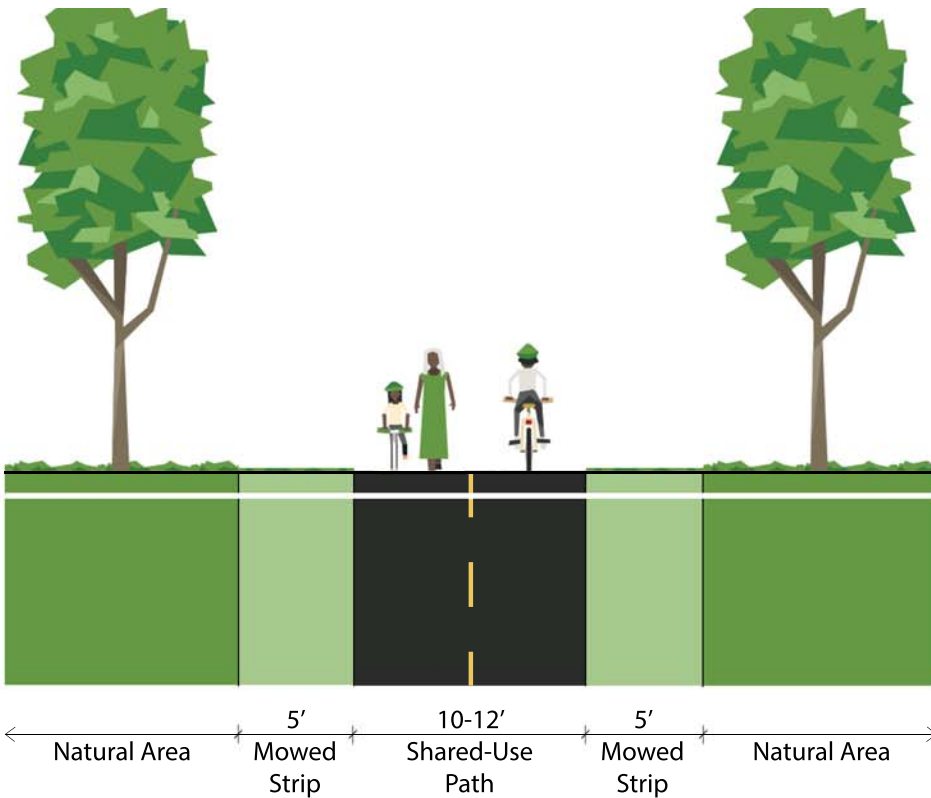


FACILITY TYPES



SHARED-USE PATH TWO-WAY

Shared-use paths are often used in rural and suburban areas adjacent to existing streets. These facilities provide a physical separation between the vehicular travel lanes with the use of landscape buffer and a vertical curb. Shared-use paths are best suited where there is little conflict with driveways, utility poles, and steep areas. These types of pathways are typically pleasing to the eye and provide a safe and comfortable ride for users.

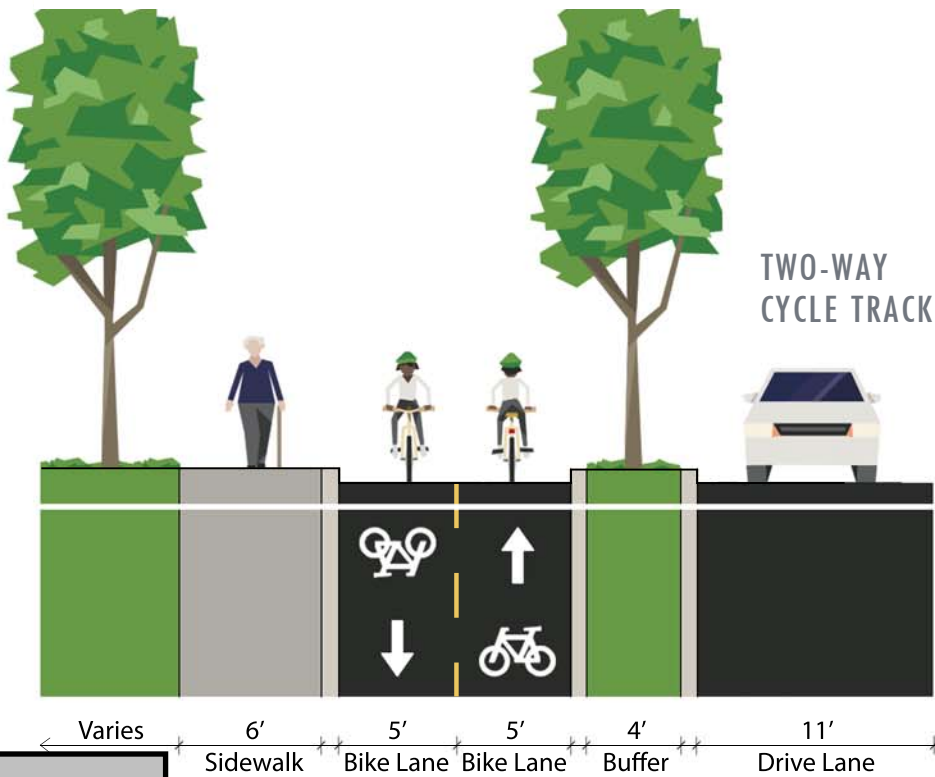
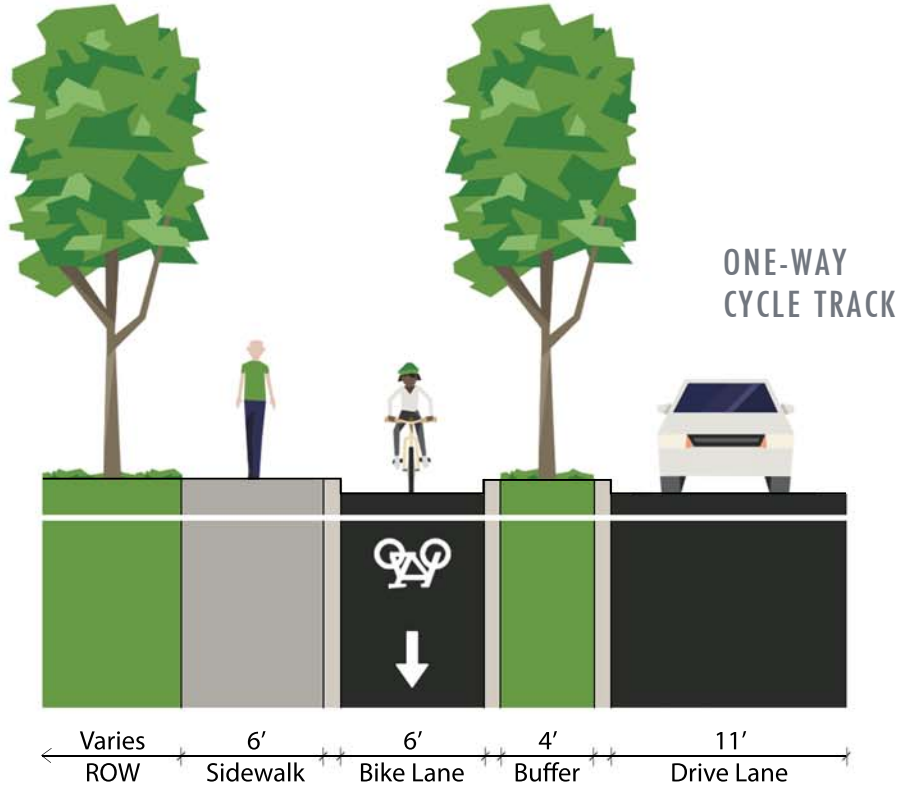


PAVED SURFACE GREENWAY

Greenways may be the most important means of alternative transportation for all ages and abilities. Greenways are typically away from vehicular travel ways, traveling through open public space such as parks, natural areas, and abandoned railroad corridors. They appeal to families and casual bicyclists since there are usually very few interactions or conflicts with vehicles. Greenways are an excellent choice for areas of a city where the streets have little additional right-of-way or physical constraints for roadway facilities. A minimum of ten feet in width is recommended to allow users to pass one another comfortably. The five-foot mowed strip along each side minimizes maintenance and provides a clear and safe greenway.

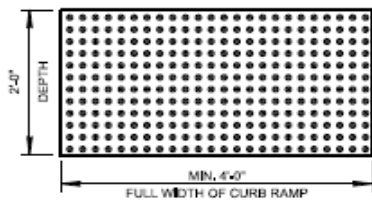
CYCLE TRACKS

Separated bike lanes are bikeways that physically protect bicyclists from the vehicular travel lanes using a landscape buffer and vertical curb. It combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane (NACTO). Separated bike lanes can be one-way or two-way and have many benefits. They dedicate and protect space for bicyclists in order to improve perceived comfort and safety, generally provide overall low-implementation costs by making use of existing pavement and drainage, and are more attractive for bicyclists of all levels and ages.

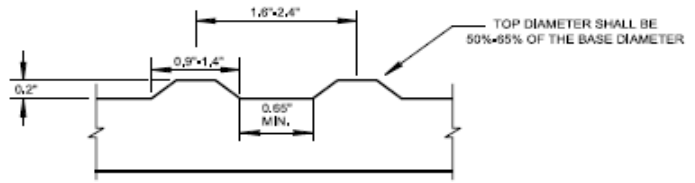


DESIGN STANDARDS

Ashland City has developed an American with Disabilities (ADA) transition plan that evaluates all the sidewalks and curb ramps within the entire city to determine if they need to be improved to meet ADA standards. While the transition plan focuses on the entire city, this Community Mobility Plan focuses on improvements within the project limits that make important connections to trip generators and attractors. Below are examples of elements of pedestrian improvements that should be considered when planning, designing, and constructing roadway and sidewalk projects. Images are from TDOT standard drawings, the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Planning, Design and Operation of Pedestrian Facilities, The Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), and the U.S. Access Board's Public Right of Way Accessibility Guidelines (PROWAG).

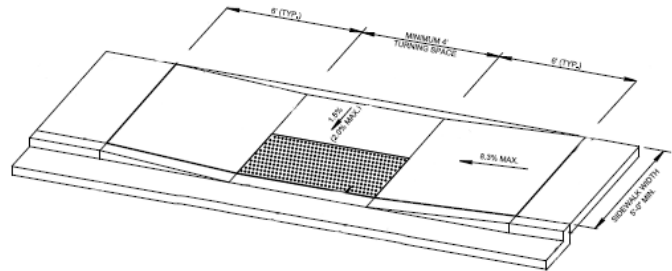
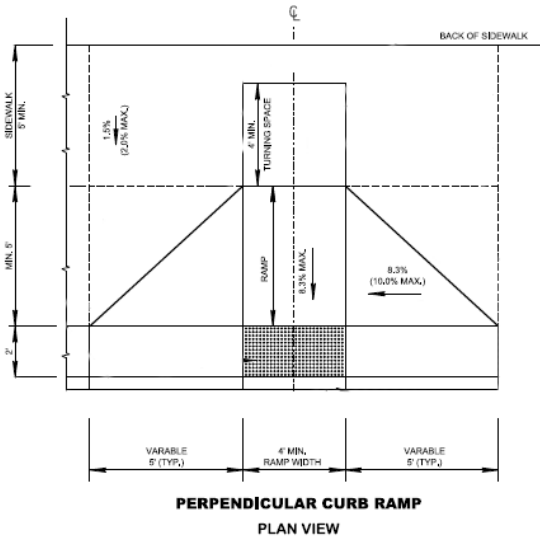


DETECTABLE WARNING SURFACE DETAIL



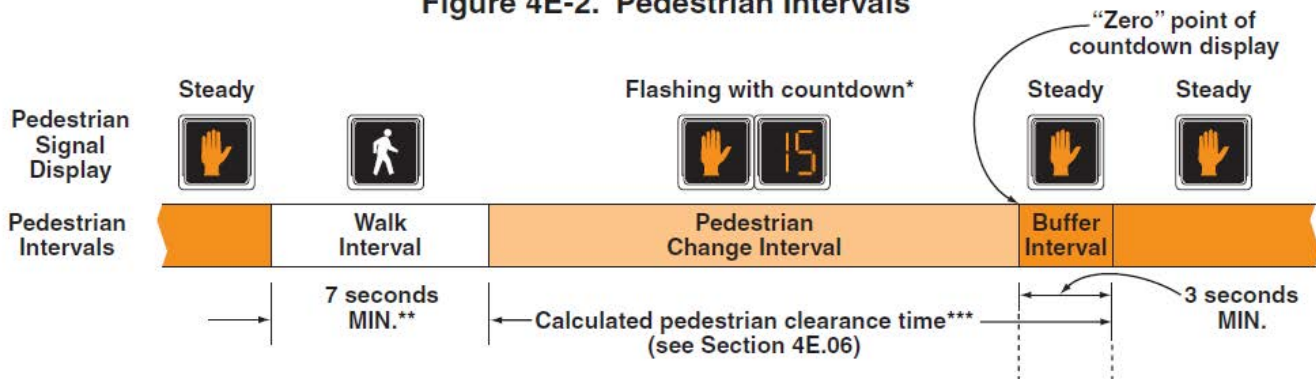
DETECTABLE WARNING SURFACE ELEVATION VIEW (TYP.)

Detectable warning surfaces are used to warn pedestrians with low or no vision that they are entering the street, railroad crossing, or transit stop/platform. The color of the surface must contrast visually with the adjacent ramp, gutter, sidewalk, or street.

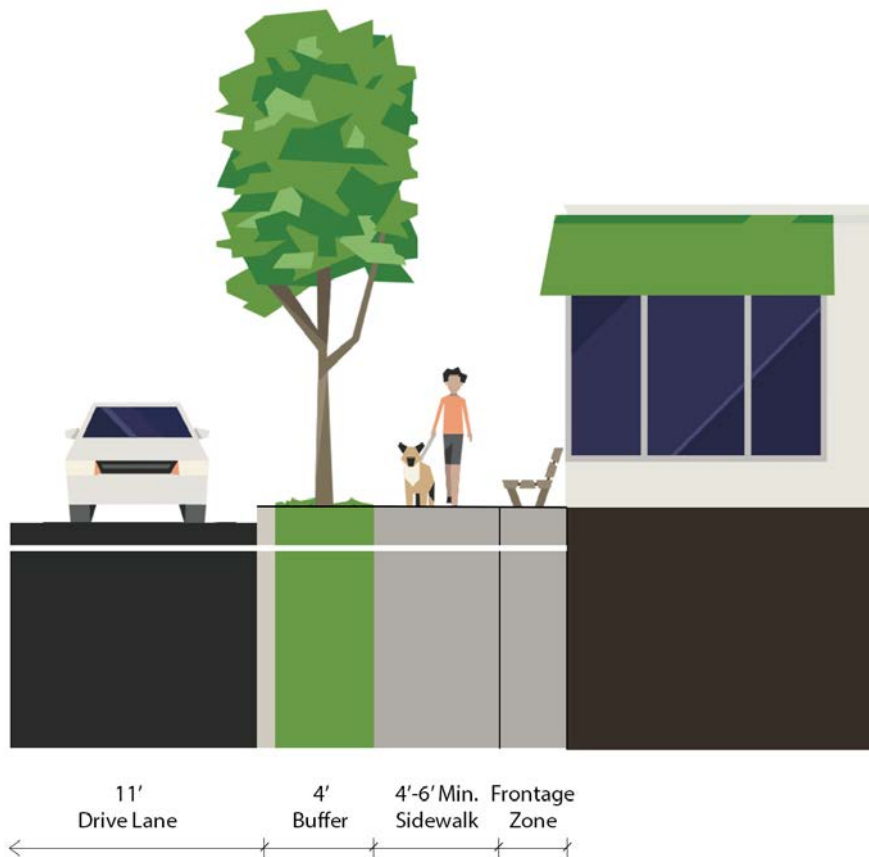


Depending on the geometry of the intersection, there are several types of curb ramps that can be used to allow pedestrians to cross a street. Perpendicular ramps work best when there is a grass strip between the sidewalk and the back of curb, and parallel ramps are best for sidewalk adjacent to the back of curb.

Figure 4E-2. Pedestrian Intervals



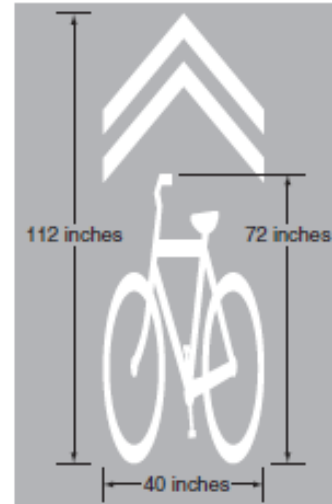
If pedestrian signals are installed at an intersection, they should include a countdown display to warn pedestrians how much time they have left to cross.



The pedestrian access route (sidewalk) should be at least four feet in width (preferably five to six feet) and kept clear of obstructions such as doors, table/benches, signs, and vegetation. The pedestrian access route is typically accompanied by a frontage zone adjacent to the building face, providing room for benches, cafe tables, lighting, and signage.

DESIGN STANDARDS

Although some of the proposed bicycle recommendations may require the alteration or reconstruction of existing roadways, there are low-cost measures that can be implemented to improve the roadway environment for cyclists. The MUTCD provides a number of signs and pavement markings to alert drivers of the possibility of cyclists within or adjacent to the roadway. Those improvements include striping bike lanes on existing shoulders of at least four feet in width, installation of signs and pavement markings to inform drivers that they must allow space for cyclists within the travel way, and directional signs for cyclists along designated bike routes.



Traffic Calming Measures

There are techniques that can be implemented to help calm traffic in key locations within the Town. The examples below are some of the most effective ways of reducing vehicle speed, automobile collisions and improve aesthetics.



Neighborhood Traffic Circle

Advantages:

- Effective in reducing vehicle speed
- Can reduce severity of motor vehicle collisions
- Opportunity for landscape and improved aesthetics

Disadvantages:

- Difficult for left-turning emergency vehicles
- Possible need for right-of-way, depending on size of raised island
- Increased cost for maintenance of landscaping



Chicane

Advantages:

- The change in vehicle movement slows traffic
- Well designed chicanes have a positive aesthetic value
- Opportunity for landscape and improved aesthetics

Disadvantages:

- Possibility of vehicles mounting the landscaping areas
- May interrupt driveway access to adjacent properties
- Increased cost for maintenance of landscaping



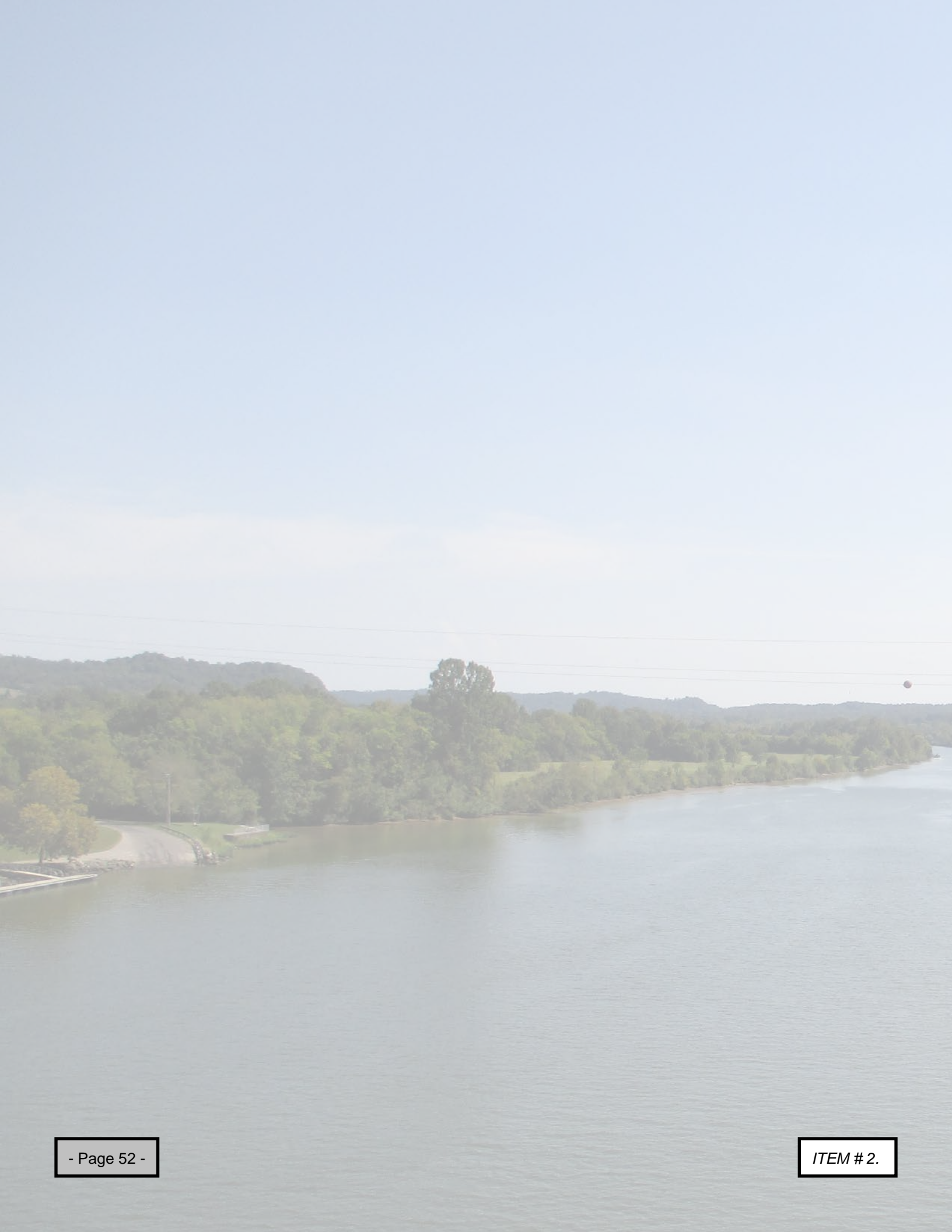
Speed Table

Advantages:

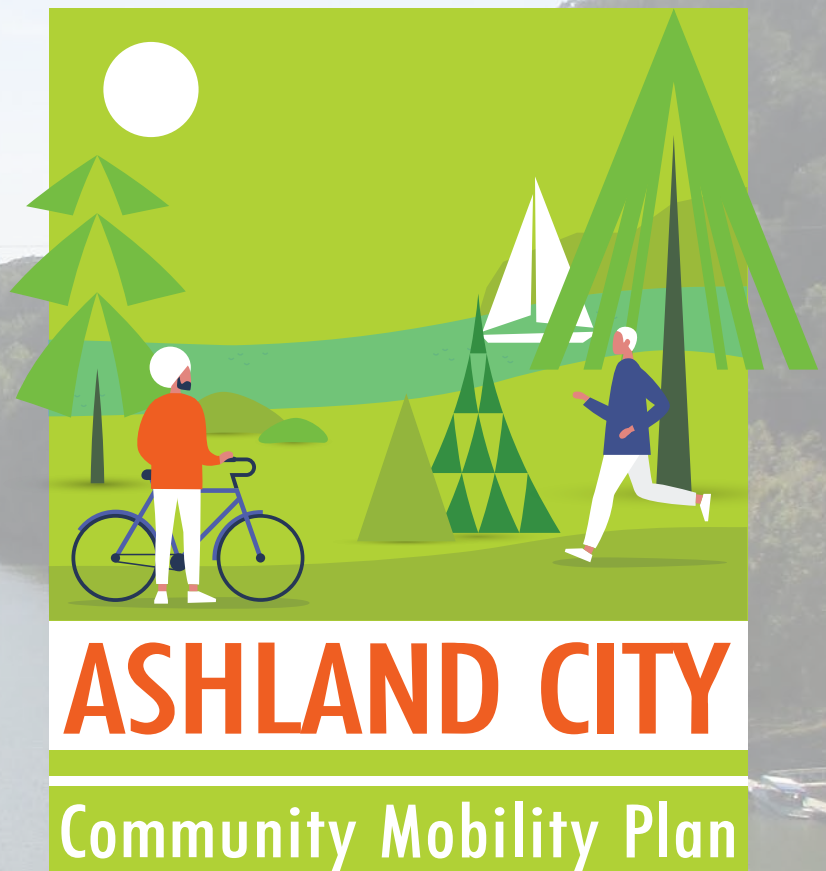
- Quicker response time for emergency vehicles than speed humps
- Effective in reducing vehicle speed
- Addition of brick or textured materials can improve aesthetics

Disadvantages:

- More expensive than speed humps
- Increases noise and air pollution in neighborhood
- May be damaged by snow plows



CONCLUSIONS ④



IMPLEMENTATION

Community Partnership

The projects outlined in the route recommendation section of this report are considered the most important projects for Ashland City. The following project list narrows the list of recommended projects and presents them in order of implementation based on input from Ashland City staff and the public meeting as well as field observations, engineering judgment, and cost analysis. Information such as estimated costs and timeframe are provided for these priority projects to assist the City in planning and budgeting. The timeframe for implementation includes short-term (zero to three years), mid-term (three to ten years), and long-term (more than ten years). While the Ashland City Bicycle and Pedestrian Master Plan represents the contribution of the City staff and local community, successfully implementing the recommended projects will require cooperation among government entities, stakeholders, private developers, and people that live, work and visit the Town.



- P1. South Main Street (SR 12) Sidewalks Phase I**
Project Limits: Just south of Forrest Street to Chestnut Street
Project Cost: \$1M



- P2. North Main Street (SR 12) Sidewalks Phase I**
Project Limits: SR 12 from McQuarry Street to just south of Forrest Street
Project Cost: \$1.1M



- P3. South Main Street (SR 12) Sidewalks Phase II**
Project Limits: SR 12 from just south of Forrest Street to McQuarry and along McQuarry toward the proposed Cumberland River Bicentennial Trail Extension
Project Cost: \$1.5M



- P4. North Main Street (SR 12) Sidewalks Phase II**
Project Limits: SR 12 from Mulberry Street to Pemberton Drive
Project Cost: \$1.2M



- P5. Cumberland Street Sidewalk**
Project Limits: SR 49 (Cumberland Street) from SR 12 to Tennessee Waltz Parkway
Project Cost: \$1.5M



- B1. SR 49 Bike Lanes**
Project Limits: SR 49 from SR 455 to just west of SR 249 (River Road)
Project Cost: Included in the next TDOT repaving project



- B2. SR 455 Bike Lanes**
Project Limits: SR 455 from SR 49 (Cumberland Street) to SR 12
Project Cost: Included in the next TDOT repaving project

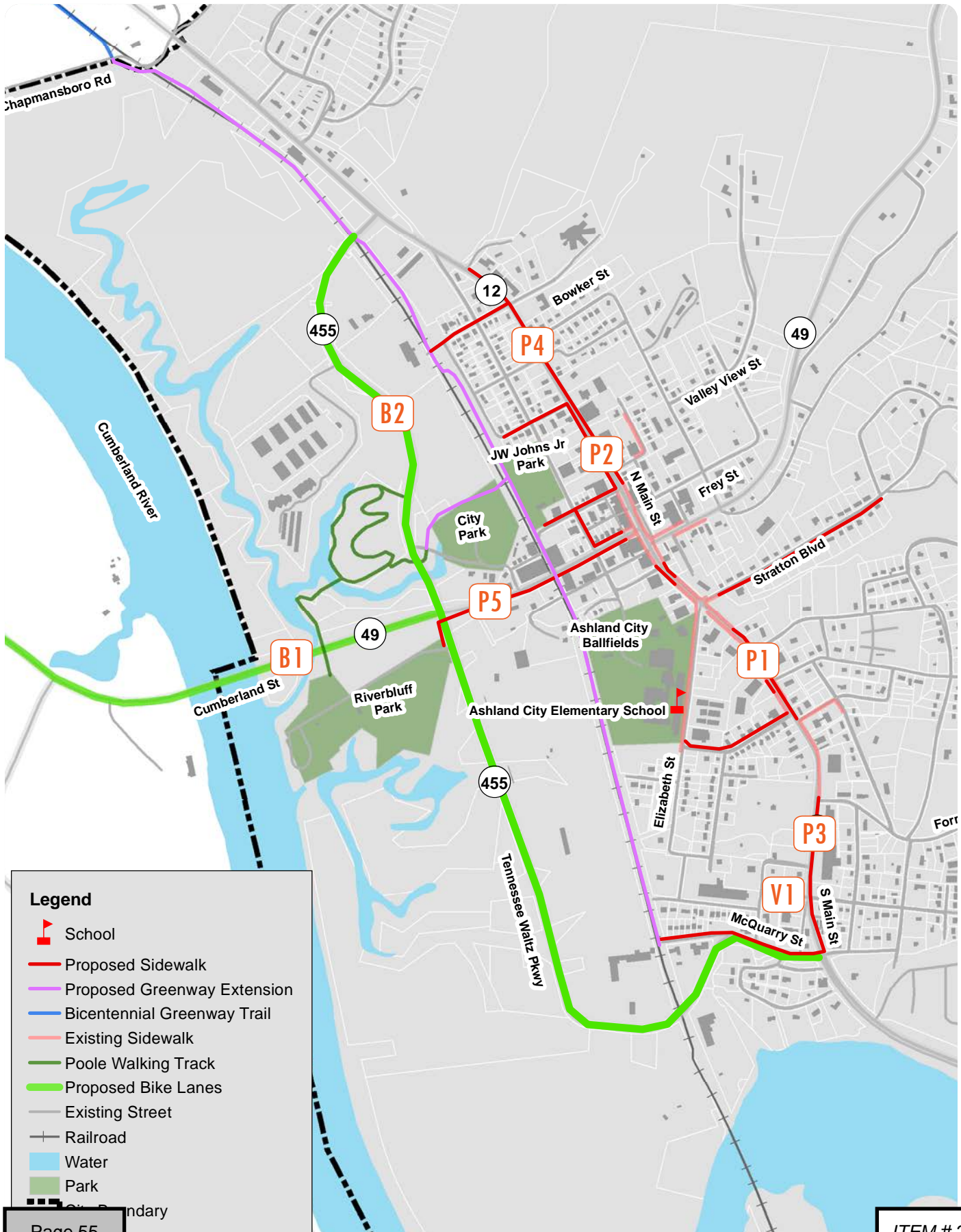


- V1. Harris Street Realignment**
Project Limits: Intersection of SR 12 and Harris Street and Elm Street
Project Cost: \$15K



Riverbluff Park

Priority Projects



Legend

-  School
-  Proposed Sidewalk
-  Proposed Greenway Extension
-  Bicentennial Greenway Trail
-  Existing Sidewalk
-  Poole Walking Track
-  Proposed Bike Lanes
-  Existing Street
-  Railroad
-  Water
-  Park
-  City Boundary

FUNDING OPPORTUNITIES

Funding Mechanisms

The recommendations from the Ashland City Bicycle and Pedestrian Master Plan will not be implemented through a single source, but a combination of multiple sources, including all or some of the following. The appropriate funding sources will depend on the project type and location.

- Public/Private Investment and Partnerships
- Ashland City Capitol Improvement Projects
- Grant Opportunities
- Imposing an Additional Tax

Public/Private Investment and Partnerships

Public/private partnership is a popular source for funding of parks, trails, and other recreational facilities. These partnerships can result in significant positive outcomes by bringing revenue, labor, and other resources for projects. Some typical examples of funding partnerships include park or amenity sponsorship, trail segment adoption, and organization-driven fundraisers. While these partnerships sometimes result in the investment in the parks and recreation system, they can also include shared-use or greenway facilities.

Ashland City Capitol Improvement Projects

Ashland City should continue planning at least five years out for future infrastructure enhancement projects that help with the safety and efficiency of bicycle and pedestrian transportation.

Grant Opportunities

In addition to self and private funding or partnership agreements, Ashland City can pursue a variety of local, state and federal grant options that best fit their needs based on project and location. Current grant options are highlighted on the following page, and the City should take advantage of these opportunities to help build better bicycle and pedestrian facilities.

Imposing Additional Taxes or Fees

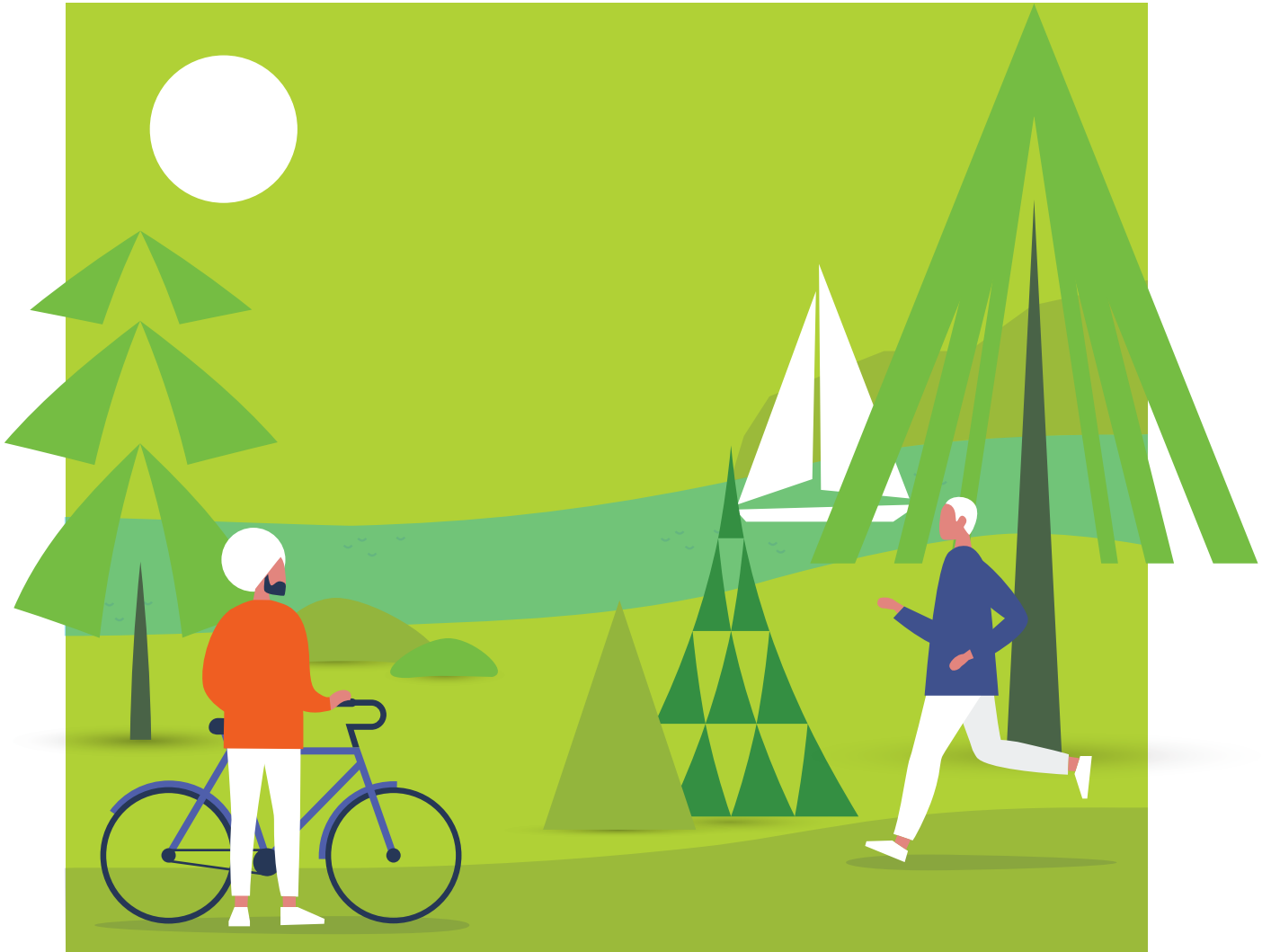
Another way the City could be increasing funds to help build bicycle and pedestrian infrastructure is imposing additional taxes and fees. These could include park or facility fees, utility-type fees, solid waste fees, and food and beverage tax. Adding new or increasing fees can help improve Ashland City's operational cost-recovery. Operational cost recovery is calculated by dividing total non-tax revenue by total operational expense. The operational cost recovery is a critical performance indicator that measures how well each department's revenue generation covers the total cost of operations. Increasing the City's cost recovery ultimately means more money the City can put back into its infrastructure, potentially improving bicycle and pedestrian infrastructure.



Ashland City Municipal Building

GRANT OPPORTUNITIES

<p>Multimodal Access Grant</p>	<ul style="list-style-type: none"> ▪ Pedestrian Crossings ▪ Sidewalks ▪ Bike Lanes ▪ ADA Improvements ▪ Pedestrian Lighting ▪ Bus Shelters ▪ Separated Bicycle Facilities ▪ Park and Ride Facilities ▪ Traffic Calming Measures ▪ Utility Relocation
<p>Surface Transportation Block (STBG)</p>	<ul style="list-style-type: none"> ▪ Sidewalks ▪ Shared-Use Paths ▪ Safe Routes to School ▪ Complete Streets ▪ Bridge Enhancements ▪ Tunnel Enhancements
<p>Transportation Alternatives Program (TAP)</p>	<ul style="list-style-type: none"> ▪ Pedestrian Facilities ▪ Shared-Use Paths ▪ Bike Lanes ▪ Safe Routes for Non-Drivers ▪ Safe Routes to School ▪ Historic Preservation ▪ Sidewalks ▪ Signage ▪ Crosswalks
<p>Recreational Trails Program (RTP)</p>	<ul style="list-style-type: none"> ▪ Hard/Natural Surface Trail ▪ Shared-Use Paths ▪ Land Acquisition ▪ Maintenance ▪ Trailheads
<p>Bridge Replacement and Rehabilitation Program (BRR)</p>	<ul style="list-style-type: none"> ▪ Every two years, the Tennessee Department of Transportation inspects all bridges in the State using National Bridge Inspection Standards. Bridges with a rating of 15 tons or less are prioritized from worst to best and then added to either the rehabilitation list or the replacement list.
<p>High Priority Project (HPP)</p>	<ul style="list-style-type: none"> ▪ This program provides designated funding to the state (HPP) and Local Agencies (HPP-L) for specific projects identified by Congress.
<p>Highway Safety Improvement Program (HSIP)</p>	<ul style="list-style-type: none"> ▪ Signage Improvements ▪ Roadway Re-striping ▪ Intersection Enhancements
<p>Local Parks and Recreation Fund (LPRF)</p>	<ul style="list-style-type: none"> ▪ Land Acquisition ▪ Indoor/Outdoor Recreational Facilities ▪ Trail Development



ASHLAND CITY

Community Mobility Plan

Proposed Changes to the Personnel Manual

Page 18

BREAKS

~~An employee who works a full workday shall have a 60 minute meal break. Your supervisor will choose the proper time and place for breaks.~~

~~All employees who work eight hour shifts on the evening or night shift can include a thirty minute meal break and two (2) fifteen (15) minute breaks in their work shifts.~~

Employees working at least an eight (8) hour shift shall have sixty (60) minutes of employer paid break time. Employees can choose to take a thirty (30) minute meal break and two (2) fifteen (15) minute breaks or one (1) sixty (60) minute meal break. Employees working at least a four (4) hour shift shall have a fifteen (15) minute employer paid break.

Page 19

NEPOTISM

No member of an employee's immediate family, which is defined as **spouse, mother/father, son/daughter, siblings, grandparents, step-mother/father, son/daughter in-law, mother/father in-law, step grandmother/grandfather, or non-immediate family, which is defined as 1st and 2nd cousins, grandmother/grandfather in-law, aunt/uncle, niece/nephew** ~~spouse, mother or stepmother, father or stepfather, children, sister, brother, grandparents, grandchildren, current mother in law and father in law, son in law, daughter in law, current brother or sister in law, step grandparents, step grandchildren, aunt, uncle, niece/nephew, 1st cousin~~ will be hired as an employee under the same line of supervision.

No immediate family member (as defined above) of a municipal official, **as defined as elected officials or department heads**, will be hired as an employee by the Town of Ashland City.

Page 21-23

SICK LEAVE

Each regular full-time employee and regular part-time (~~pro-rated~~) will accrue sick leave bi-weekly beginning on the first day after 30 days of employment and continuing until their termination. An employee shall not accumulate sick time if the employee does not work 30 consecutive **regularly scheduled work business** days. Sick leave benefits will commence on the first day of such absence and shall continue for as long as sick leave credit remains.

Generally, employees become eligible to use sick leave in the situations outlined below.

1. Employees are incapacitated by sickness or a non-job-related injury.
2. Employees are seeking medical, dental, optical, or other professional diagnosis or treatment.
3. Necessary care and attendance of a member of the employee's immediate family, **as defined in the nepotism section of this employee manual**, if approved by the Mayor, ~~or~~ department head, **and/or immediate supervisor** so authorized to approve such leave. ~~Immediate family members include spouse, children, parents, in-laws, and siblings, including legal foster children and parents.~~
4. Employees may jeopardize the health of others because they have been exposed to a contagious disease. This must be certified by a qualified doctor's certificate.

Employees shall notify their immediate supervisor at the earliest possible time prior to the start of their shift but no later than two (2) hours after the beginning of their regular work day of their absence due to illness. Every effort shall be made to notify the supervisor at the earliest possible time.

To prevent abuse of sick leave privilege, ~~the Mayor and department heads~~ employees are required to ~~satisfy themselves that the employee is genuinely ill before paying sick leave. Any absence may require a doctor's certificate, and~~ obtain and turn in a doctor's note to their immediate supervisor, department head, or mayor for any absence in excess of three (3) workdays. ~~may also require a doctor's certificate to return to work (if, in the opinion of the immediate supervisor, such action is deemed appropriate).~~

Leave deducted from an employee's sick leave accumulation shall be for a regular workday and shall not include holidays and scheduled days off. Employees claiming sick leave while on annual leave must support their claim by a doctor's statement. When an employee is on "leave without pay" for fifteen (15) days during any calendar month, no sick leave accumulates. An employee shall not accumulate sick time if the employee does not work 30 consecutive regularly scheduled work business days.

After employees have exhausted their accrued sick leave, "leave without pay" may be granted at the discretion of the Mayor. Also, employees may be placed on special "leave without pay", or they may be terminated if unable to perform their job or another job with or without a reasonable accommodation. Should employees later be able to return to work, upon presentation of certification by a doctor, they shall be given preference for employment in a position for which they are qualified, with a recommendation by the department head and the approval of the Mayor.

Sick leave does not accrue while on short term or long term disability.

Employees may not borrow against future sick leave or transfer earned sick leave to another employee. The only allowable transfer would be for the approval of sick bank hours.

Page 30

BEREAVEMENT LEAVE

Regular Full-time and regular part-time employees shall be allowed three (3) days, twenty-four (24) hours pay for full-time and twelve (12) hours for part time employees, leave with pay for the death of an-immediate family member as defined in the nepotism section of this personnel manual. ~~employee's spouse, parents, in laws, children or siblings.~~ One (1) day, eight (8) hours pay for full-time and four (4) hours pay for part-time employees, of leave with pay will be allowed for the death of non-immediate family members as defined in the nepotism section of this personnel manual. ~~other members of the employee's immediate family, as defined under Nepotism herein.~~ An extra day may be allowed when out of state travel is required, as approved by the employee's immediate supervisor. Any employee who wishes to take time off for death of family or friends not defined within the nepotism section will be allowed to take any accumulated paid time off, as defined as compensatory time, vacation time,

or sick leave, for a period not to exceed two (2) days. In the event the employee does not have enough paid time off employees may seek approval from the mayor for temporary “leave without pay.”

RIDES AND
CONCESSIONS

AMUSEMENT ATTRACTIONS

13007 WHITNELL WAY
RIVERVIEW, FL 33579

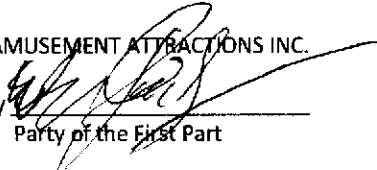
William Purdy, Agreement

612-801-2712

Memorandum of Agreement

- 1 This contract made and entered into this, the 7th day of November A.D., 2019 by and between Amusement Attractions, Party of the first part and Ashland City Summerfest of the Town of Ashland City State of Tennessee party of the second part.
- 2 Witness:- That for and in consideration of the sum of one dollar in hand paid to each to the other, the receipt of which in herein acknowledged, and other good valuable considerations hereinafter set forth, both parties aforesaid bind themselves as follows:- TO-WIT:
- 3 That party of the first part agrees to present their entire company, consisting of high-class pay shows, riding devices, music, concessions, etc., to the town of Ashland City State of TN for a period of 5 days and nights, commencing June 2nd, 2020 to June 6th, 2020 both dates inclusive. The party of the first part is also to furnish all tickets.
- 4 The party of the second part agrees to furnish all licenses and permits that may be required by law and also a suitable location of grounds known as Soccer Field at River Bluff Park and located at Ashland City, TN and free gate admission tickets for all actual attaches of the party of the first part, if exhibiting where gate admission is charged.
- 5 That all shows, riding devices, concessions and minor privileges shall be under management and control of the first part.
- 6 That: Party of the first part shall have the exclusive on all rides and games, unless other-wise stated herein, during the life of this contract.
 - a. *That Amusement Attractions to pay 20% of ticket box revenue and will provide accounting record of said fees to the records office.
 - b. Parks and Recreation will provide restroom facilities , trash dumpster, and water connection
 - c. Amusement Attractions will provide insurance certificate to the town of Ashland City, TN P.O. Box 36 Ashland City, TN 37015. (Insurance coverage will be a minimum of \$1,000,000.)
 - d. Amusement Attractions will provide 15-21 rides and 15-21 concessions
 - e. In the event of any lawsuits due to injury of a third party due to liability of the party of the first part, the party of the first part shall identify and hold party of the 2nd part harmless including reimbursement of attorney fees.
 - f. Amusement Attractions will provide 150 wristbands to the Town of Ashland City for use by employees at no cost.
- 7 That it is mutually agreed by both parties hereto that there is no other contract or promise, either written verbal existing between them, and that this contract is subject to the approval of the above named shows, either by wire or letter.
- 8 In case of sickness or death or the performer, then party of the first part shall have a reasonable length of time to replace such performer. In case of railroad accident or delay, strikes, fire, flood, cyclone, or the party of the epidemic or any unforeseen occurrence over which the party of the first can not control, then they are not to be held for damages by party of the second part.
- 9 This contract entered into and signed in duplicate in the town of Ashland City State of Tennessee, this the 7th day of November A.D., 2019 by the duly authorized representatives of the parties here to.

AMUSEMENT ATTRACTIONS INC.

By 
Party of the First Part

Organization

By _____
Party of the Second Part

By _____
Title _____

November 11, 2019
CSR Proposal No. 2019-69

Mr. Scott Sampson
Director of Parks & Recreation Department
233 Tennessee Waltz Parkway
Ashland City, Tennessee 37015

RE: PROPOSAL OF PROFESSIONAL SERVICES FOR A NEW ASPHALT TRAIL CONNECTION IN ASHLAND CITY, TENNESSEE (CHEATHAM COUNTY)

Mr. Sampson,

We appreciate the opportunity to assist with design services for your new trail connection facilities. We understand that your department desires a new trail connection and related site amenities to be constructed by the TN Army National Guard on the existing railroad property in Ashland City. Based on our recent site visit and discussion we understand the basic features that are currently under consideration. The site development will include a preliminary design phase coordinated with the Town's Parks Department and eventually finalize your desired features with all staff input necessary to refine those needs. The basic project description is as follows:

- 2,100 feet +/- of new asphalt trail connection from TN Waltz Pkwy to the rail bridge at Chapmansboro Road
- 10 standard parking spaces and trailhead access at the TN Waltz beginning
- Minimum required grading/drainage/stormwater design
- Ancillary features as defined by continued Town staff coordination (lighting, etc.)

Based upon the above information we submit this proposal for professional services. Please accept this Letter Agreement as our proposal for these engineering and related services.

Phase I - Data Collection & Preliminary: During this phase, CSR Engineering will collect data relevant to the project including additional detailed topographical survey, available railroad property, review local code requirements for the site, and hold meetings with department staff to further understand the project intent. Using this acquired information, CSR Engineering will prepare a set of preliminary plans for the site. The 50% plans will be utilized for review, comment, and confirmation of any budgetary considerations.

Phase II - Site Plans: From the approved preliminary plans, CSR Engineering will proceed to final plans for the site. The plans will also be in accordance with local requirements including:

- Site Layout
- Grading & Drainage
- Erosion Prevention and Sediment Control Measures (EPSC)
 - Precludes SWPPP submittal to TDEC for NPDES permit (size limited disturbance)

- Permanent Stormwater Infrastructure
- Pavement
- On-Site Utilities (if required)
- Landscape Plan (as desired)
- Lighting (as desired)
- Site Details

Phase III – Construction: We assume that this phase is provided by the City’s staff or state partner. No costs are provided for this phase of development.

Construction: There is significant variability among clients as to the preferred level of service during construction. Upon agreement of the Town, services can be reduced or omitted if so desired by the County. CSR Engineering services during construction typically include:

- Project Management
- Compaction Testing
- Shop Drawing Review
- Foundation Inspections
- Construction Observation
- Special Inspections
- Concrete Testing
- Asphalt Testing
- SWPPP Compliance / EPSC Inspections
- Building/Site As-Builts

Services provided will be limited to the specific scope of work defined above. In order to keep costs reasonable, some service items have been excluded or limited in this proposal. If the excluded services are needed, they will be added with the mutual agreement of both parties. Specific exclusions include:

- Plat surveys (lot combination)
- Off-site utilities
- Off-site traffic studies or modifications (TDOT)
- Environmental studies or remediation
- Permit Fees
- Sprinkler (by others)
- Property Acquisition
- Construction services

The fee for these services will be a lump sum of \$14,800.00 broken down as follows:

I - Data Collection & Preliminary	\$ Included
II - Site Plans	\$ Included
III - Construction (as needed)	\$ TBD Hourly

CSR's engineering services will be subject to the Terms and Conditions attached as Exhibit "A". We will bill by percentage complete of each phase at intervals determined by progression of CSR efforts. The fee quoted includes compensation for basic services, digital check prints for your review and half-sized hard copies to the stakeholders. Full-sized prints will be supplied as requested and billed at the direct cost for printing with no markup. We will begin work immediately upon tasking approval and will work on a reasonable schedule to submit documents promptly.

Again, we appreciate the opportunity to develop this proposal and look forward to completion of a successful project.

Sincerely,

A handwritten signature in blue ink, appearing to read "J L Reynolds", with a horizontal line extending to the right.

Jason L. Reynolds, PE
Project Manager

EXHIBIT "A"
CSR ENGINEERING, INC.
GENERAL TERMS AND CONDITIONS

1. Relationship between Engineer and Client.

Engineer shall serve as Client's professional engineering consultant in those phases of the Project to which this Agreement applies. The relationship is that of a buyer and seller of professional services and it is understood that the parties have not entered into any joint venture or partnership with the other. The Engineer shall not be considered to be the agent of the Client.

- 2. Responsibility of the Engineer.** Engineer will **strive** to perform services under this Agreement in a manner consistent with that standard of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representation, express or implied, and no warranty or guarantee is included or intended in this Agreement or in any report, opinion, document, or otherwise.

Notwithstanding anything to the contrary which may be contained in this Agreement or any other material incorporated herein by reference, or in any agreement between the Client and any other party concerning the Project, the Engineer shall not have control of and shall not be responsible for the means, methods, techniques, sequences or procedures of construction; or the safety, safety precautions or programs of the Client, the construction contractor, other contractors or subcontractors performing any of the work or providing any of the services on the Project. Nor shall the Engineer be responsible for the acts or omissions of the Client, or for the failure of the Client, any contractor or subcontractor, or any other engineer, architect or consultant not under contract to the Engineer to carry out their respective responsibilities in accordance with the Project documents, this Agreement or any other agreement concerning the Project.

Engineer shall determine the amounts owing to the construction contractor and recommend in writing payments to the contractor in such amounts. By recommending any payment, the Engineer will not thereby be deemed to have represented that exhaustive, continuous or detailed reviews or examinations have been made to check the quality or quantity of the contractor's work.

- 3. Responsibility of the Client.** Client shall provide all criteria and full information as to his

requirements for the Project, including budgetary limitations. Client shall arrange for Engineer to enter upon public and private property and obtain all necessary approvals and permits required from all governmental authorities having jurisdiction over the Project.

Client shall give prompt written notice to the Engineer whenever Client observes or otherwise becomes aware of any development that affects the scope or timing of Engineer's services, or any defect or nonconformance in the work of any construction contractor.

Client shall examine all documents presented by Engineer, obtain advice of an attorney or other consultant as Client deems appropriate for such examinations and provide decisions pertaining thereto within a reasonable time so as not to delay the services of the Engineer.

- 4. Designation of Authorized Representatives.** Each party shall designate one or more persons to act with authority in its behalf with respect to appropriate aspects of the Project. The persons designated shall review and respond promptly to all communications received from the party.

- 5. Ownership of Documents.** Drawings, specifications, reports and any other documents prepared by Engineer in connection with any or all of the services furnished hereunder shall be the property of Engineer. Engineer shall have the right to retain copies of all documents and drawings for its files.

- 6. Reuse of Documents.** All documents, including drawings and specifications furnished by Engineer pursuant to this Agreement, are intended for use on the Project only. Client agrees they should not be used by Client or others on extensions of the Project or on any other project. Any reuse, without written verification or adaptation by Engineer, shall be at Client's sole risk, and Client shall indemnify and hold harmless Engineer from all claims, damages, losses and expenses, including attorney's fees arising out of or resulting therefrom.

- 7. Opinions of Cost.** Since the Engineer has no control over the cost of labor, materials, equipment or services furnished by the contractor, or over the contractor's methods of determining prices, or over

competitive bidding or market conditions, the Engineer cannot and does not guarantee that proposals, bids or actual construction costs will not vary from his opinions or estimates of construction costs.

8. **Changes.** Client reserves the right by written change order or amendment to make changes in requirements, amount of work, or engineering time schedule adjustments; and Engineer and Client shall negotiate appropriate adjustments in fee and/or schedule acceptable to both parties to accommodate any changes.
9. **Delays.** If the Engineer's services are delayed by the Client, or for other reasons beyond the Engineer's control, for more than one year, the fee provided for in this Agreement shall be adjusted equitably.
10. **Subcontracts.** Engineer may subcontract portions of the services, but each subcontractor must be approved by Client in writing.
11. **Suspension of Services.** Client may, at any time, by written order to Engineer, require Engineer to stop all, or any part, of the services required by this Agreement. Upon receipt of such an order, Engineer shall immediately comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the services covered by the order. Client, however, shall pay all costs associated with suspension including all costs necessary to maintain continuity and the staff required to resume the services upon expiration of the suspension of work order. Engineer will not be obligated to provide the same personnel employed prior to suspension when the services are resumed in the event the period of any suspension exceeds 30 days. Client will reimburse Engineer for the costs of such suspension and remobilization.
12. **Termination.** This Agreement may be terminated by either party upon 30 days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. This Agreement may be terminated by Client, under the same terms, whenever Client shall determine that termination is in its best interests. Cost of termination, including salaries, overhead and fee, incurred by Engineer either before or after the termination date shall be reimbursed by Client.
13. **Notices.** Any notice or designation required to be given by either party hereto shall be in writing and,

unless receipt of such notice is expressly required by the terms hereof, it shall be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed and addressed to the party to whom such notice is directed at such party's place of business or such other address as either party shall hereinafter furnish to the other party by written notice as herein provided.

14. **Indemnification.** Engineer shall indemnify and hold harmless Client from Client's loss or expense, including reasonable attorney's fees for claims for personal injury (including death) or property damage to the extent caused by the sole negligent act, error or omission of Engineer.

Client shall indemnify and hold harmless Engineer from Engineer's loss or expense, including reasonable attorney's fees, for claims for personal injuries (including death) or property damage to the extent caused by the sole negligent act, error or omission of Client.

In the event of joint or concurrent negligence of Engineer and Client, each shall bear that portion of the loss or expense that its share of the joint or concurrent negligence bears to the total negligence (including that of third parties) which caused the personal injury or property damage.

Client shall not be liable to the Engineer, and the Engineer shall not be liable to the Client, for any special, incidental or consequential damages, including, but not limited to, loss of use and loss of profit, incurred by either party due to the fault of the other, regardless of the nature of this fault, or whether it was committed by the Client or the Engineer or their employees, agents or subcontractors, by reason of services rendered under this Agreement.

15. **Legal Proceedings.** In the event Engineer's employees are at any time required by Client to provide testimony, answer interrogatories or otherwise provide information ("testimony") in preparation for or at a trial, hearing, proceeding on inquiry ("proceeding") arising out of the services that are the subject of this Agreement, where Engineer is not a party to such proceeding, Client will compensate Engineer for its services and reimburse Engineer for all related direct costs incurred in connection with providing such testimony. This provision shall be of no effect if the parties have agreed in a separate agreement or an amendment to this Agreement to terms which specifically supersede this provision, nor shall this provision apply in the event Client engages

Engineer to provide expert testimony or litigation support, which services shall be the subject of a separate agreement or an amendment to this Agreement.

16. **Successors and Assigns.** The terms of this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided however, that neither party shall assign this Agreement in whole or in part without the prior written approval of the other.

17. **Insurance.** Within the context of prudent business practices, Engineer shall endeavor to maintain workmen's compensation and unemployment compensation of a form and in an amount as required by state law; comprehensive general liability with limits of at least \$500,000/\$1,000,000; automotive liability with limits of at least \$500,000/\$500,000; and professional liability insurance with an annual limit of at least \$500,000. Client recognizes that insurance market is erratic and Engineer cannot guarantee to maintain the coverage identified above.

18. **Information Provided by the Client.** The Engineer shall indicate to the Client the information needed for rendering of services hereunder. The Client may elect to provide this information (including services by others) to the Engineer. In this case, the Client recognizes that the Engineer cannot assure the sufficiency of such information. Accordingly, the Engineer shall not be liable for any claims for injury or loss arising from errors, omissions or inaccuracies in documents or other information provided by the Client. In addition, the Client agrees to compensate the Engineer for any time spent or expenses incurred in defending such claim or in making revisions to his work as a direct or indirect result of information provided by the Client which is insufficient.

19. **Subsurface Conditions and Utilities.** Client recognizes that a comprehensive sampling and testing program implemented by trained and experienced personnel of Engineer or Engineer's sub-consultants with appropriate equipment may fail to detect certain hidden conditions. Client also recognizes that actual environmental, geological and geotechnical conditions that Engineer properly inferred to exist between sampling points may differ significantly from those that actually exist.

Engineer will locate utilities which will affect the project from information provided by the Client and utility companies and from Engineer's surveys. In that these utility locations are based, at least in

part, on information from others, Engineer cannot and does not warrant their completeness and accuracy.

20. **Hazardous Materials.** When hazardous materials are known, assumed or suspected to exist at a project site, Engineer is required to take appropriate precautions to protect the health and safety of his personnel, to comply with the applicable laws and regulations and to follow procedures deemed prudent to minimize physical risks to employees and the public. Client hereby warrants that, if he knows or has any reason to assume or suspect that hazardous materials may exist at the project site, he will inform Engineer in writing prior to initiation of services under this Agreement.

Hazardous materials may exist at a site where there is no reason to believe they could or should be present. Client agrees that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. Engineer agrees to notify Client as soon as practically possible should unanticipated hazardous materials or suspected hazardous materials be encountered. Client waives any claim against Engineer and agrees to indemnify, defend and hold Engineer harmless from any claim or liability for injury or loss arising from Engineer's encountering unanticipated hazardous materials or suspected hazardous materials. Client also agrees to compensate Engineer for any time spent and expenses incurred by Engineer in defense of any such claim.

21. **Risk Allocation.** The Client recognizes that Engineer's fee includes an allowance for funding a variety of risks which affect the Engineer by virtue of his agreeing to perform services on the Client's behalf. One of these risks stems from the Engineer's potential for human error. In order for the Client to obtain the benefits of a fee which includes a lesser allowance for risk funding, the Client agrees to limit the Engineer's liability to the Client and all construction contractors arising from the Engineer's professional acts, errors or omissions, such that the total aggregate liability of the Engineer to all those named shall not exceed \$50,000 or the Engineer's total fee for the services rendered on this project, whichever is greater.

22. **Anticipated Change Orders.** Client recognizes and expects that a certain amount of imprecision and incompleteness is to be expected in construction contract documents; that contractors are expected to furnish and perform work, materials

and equipment that may reasonably be inferred from the contract documents or from the prevailing custom or trade usage as being required to produce the intended result whether or not specifically called for; and that a certain amount of change orders are to be expected. As long as Engineer provides services in a manner consistent with that standard of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions, client agrees not to make any claim against Engineer for cost of these change orders unless these costs become a significant part of the construction contract amount. In no case will Client make claim against Engineer for costs incurred if the change order work is a necessary part of the Project for which Client would have incurred cost if work had been included originally in the contract documents unless Client can demonstrate that such costs were higher through issuance of the change order than they would have been if originally included in the contract documents in which case any claim of Client against Engineer will be limited to the cost increase and not the entire cost of the change order.

23. **Payment.** Engineer shall submit monthly statements to Client. Payment in full shall be due upon receipt of the invoice. If payments are delinquent after 30 days from invoice date, the Client agrees to pay interest on the unpaid balance at the rate of one percent per month. Payment for Engineer's services is not contingent on any factor except Engineer's ability to provide services in a manner consistent with that standard of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. If Engineer brings any action at law or in equity to enforce or interpret the terms of this Agreement, or if Engineer must either prosecute or defend any action related to the subject matter of the Agreement, and prevails in such action, then Engineer shall be entitled to reasonable attorney's fees, expenses and costs, including expert witness fees, if applicable.
24. **Force Majeure.** Neither Client nor Engineer shall be liable for any fault or delay caused by any contingency beyond their control, including, but not limited to, acts of God, wars, strikes, walkouts, fires, natural calamities, or demands or requirements of governmental agencies.
25. **Compliance with Laws.** To the extent they apply to its employees or its services, the Engineer shall comply with all applicable United States, state, territorial and commonwealth laws, including ordinances of any political subdivisions or agencies of the United States, any state, territory or commonwealth thereof.

26. **Separate Provisions.** If any provisions of this Agreement are held to be invalid or unenforceable, the remaining provisions shall be valid and binding.
27. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the principal place of business of the Engineer.
28. **Amendment.** This Agreement shall not be subject to amendment unless another instrument is executed by duly authorized representatives of each of the parties.
29. **Entire Understanding of Agreement.** This Agreement represents and incorporates the entire understanding of the parties hereto, and each party acknowledges that there are no warranties, representations, covenants or understandings of any kind, matter or description whatsoever, made by either party to the other except as expressly set forth herein. Client and Engineer hereby agree that any purchase orders, invoices, confirmations, acknowledgments or other similar documents executed or delivered with respect to the subject matter hereof that conflict with the terms of this Agreement shall be null, void and without effect to the extent they conflict with the terms of this Agreement.

November 5, 2019

Mr. Scott Sampson
Parks Director
Town of Ashland City
101 Court Street, PO Box 36
Ashland City, TN 37015

Dear Mr. Sampson:

Subject: Proposal for Professional Consulting Services
Cumberland River Bicentennial Trail
Trail Extension Phase 1
CEC Project 195-821

1.0 **INTRODUCTION**

Civil & Environmental Consultants, Inc. (CEC) is pleased to provide The Town of Ashland City (Town) with this proposal for survey and design of a proposed trail extension. The proposed extension of the trail would stretch from Tennessee Waltz Parkway to a point just south of Marks Creek. Preparation of this proposal was based on the following:

- Your request for proposal via email and phone conversation with Peter Chimera of CEC, on October 25, 2019.
- CEC's site visit on October 30, 2019.
- CEC's knowledge of the area.

CEC appreciates your consideration of our firm for this project. CEC is recognized as a leading consulting engineering firm that takes an innovative approach to projects.

The following information provides background information, scope of services, costs, schedule, additional services, and closing remarks.

2.0 **BACKGROUND INFORMATION**

As part of the Town of Ashland City's desire to connect the Bicentennial Trail to River Bluff Park, and areas further south, the Town contacted the Tennessee Army National Guard's 194th Engineer

Brigade for assistance. This unit commonly assists local governments with construction projects as a form of training. In October 2019, the Town received confirmation that the 194th Engineer Brigade would construct a section of the trail free of charge as long as the Town provided design documents and all required materials. CEC has been asked to prepare design documents for the section of the trail from Tennessee Waltz Parkway north to Marks Creek.

Additionally, the following assumptions are made with respect to this proposal:

- Stormwater Quality and Quantity requirements will not apply to the project.
- All application and review fees will be paid by the town.

3.0 SCOPE OF SERVICES

The following information provides our scope of services for this project:

3.1 Task 0001 – Survey

- CEC's will conduct a field-run topographic survey for the area shown on the attached Figure 1.
 - Survey information will be collected on the existing railroad centerline and extend approximately 25 feet on each side.
- Within the survey limits, CEC will provide the following:
 - Locate visible and/or marked utilities, adjacent roadway, and existing site improvements.
 - Utilities will be shown according to surface observations combined with plans and markings provided by calling the TN811. It is CEC's experience TN811 may not respond to a request for markings unless excavation activities are involved. TN811 does not mark utility lines or services on private property. The surveyor makes no guarantee that the utilities located comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the utilities located are in the exact location indicated. For utility lines or service locations on private property, CEC can retain the services of a private underground utility location service for an additional fee upon request.
 - Invert elevations, pipe size and pipe material of the storm and sanitary sewer structures will be obtained if visible.
 - Contours will be generated at one-foot intervals.
- CEC will locate existing property and right-of-way (ROW) monumentation along with field evidence of occupation for the first 200 feet of the new trail area from Tennessee Waltz Parkway. CEC will establish the approximate railroad ROW and property sidelines for said length from deed calculations in combination with field evidence located. CEC

assumes there will be sufficient monumentation and evidence found during the performance of the field portion of the survey to adequately define the ROW and sidelines. Property owner information will be provided based on current tax records. A General Property Survey, as defined by the Standards of Practice for Land Surveyors in TN, is not included as part of this proposal.

- CEC will utilize survey field technicians equipped with GPS, Robotics, and Conventional Total Station surveying instruments. The survey will be referenced to the Tennessee State Plane Coordinate System (NAD83) and the North American Vertical Datum of 1988 (NAVD88, Geoid 12B) in U.S. Feet. CEC will process the survey and provide a CAD (*.dwg) 2018 format deliverable to the CEC design team for their use with design.

3.2 Task 0002 – Design Documents

- CEC’s design will include the following:
 - Approximately 2,200 feet of trail starting at Tennessee Waltz Parkway and ending approximately 10 feet before the existing railroad bridge over Mark’s Creek.
 - A parking lot with approximately ten parking spaces including one accessible space.
- CEC will create design documents containing of the following:
 - Proposed layout
 - Proposed trail alignment and profile
 - Proposed grading and stormwater controls
 - Proposed trail cross sections
 - Erosion and sediment control plans
 - Paving, stormwater, and erosion and sediment control details
- CEC will submit a Notice of Intent to TDEC for coverage under the Tennessee Construction General Permit.
- CEC will apply for a grading permit with the Town of Ashland City, and respond to one round of technical comments. Additional responses will need to be addressed for an additional fee.
- CEC will submit plans to the railroad owner. It is assumed that the railroad owner will not have comments. If the owner has comments, CEC response to these comments can be included for an additional fee.
- CEC will submit driveway plans to TDOT.
- CEC will assist the Town in filling out a Special Waste Application for the disposal of railroad ties.

4.0 COSTS

The costs for providing professional services, as described above, are summarized below. These costs are based the scope of services outlined above. The scope of services and costs may require adjustment as the project progresses. If the scope of services changes, CEC will issue a change order for the Town’s approval, and will not perform work outside of this scope of services until the change order is approved by the Town.

Task 0001	Survey	\$ 9,500
Task 0002	Civil Engineering	\$ 20,000
Total Cost		\$ 29,500

Invoicing of professional services will be on a lump sum basis.

Our Schedule of Terms and Conditions, which apply to the proposed work, is attached. Any changes to our Terms and Conditions must be agreed to in writing by both parties prior to your authorization to proceed. Your oral or written authorization to proceed will form a binding contract and indicates your acceptance of our Terms and Conditions.

5.0 SCHEDULE

CEC is available to begin work on this project upon a notice to proceed. CEC will work to meet deadlines and/or scheduling requirements as they are defined. Once the CEC receives approval from the Town, this scope is estimated to take 60 days.

6.0 ADDITIONAL SERVICES

The proposed scope of services and estimated costs presented do not include the following services, which the Town may require as the project progresses. At your request, we can provide separate proposals, which include these or other additional services as their scope is defined.

Landscape Plan: CEC can provide a landscape plan for the project under a separate change order as needed for this service.

Construction Staking: CEC can provide construction staking for the project under a separate change order as needed for this service.

7.0 CLOSING

CEC appreciates this opportunity to present this proposal to the Town of Ashland City. We are available to meet with you to discuss the scope of services, estimated costs, or schedule. We can modify the proposed scope of services, if necessary, to accommodate specific constraints that may exist for this project.

CEC looks forward to working with you toward the successful completion of the project. Please do not hesitate to contact us at 615-333-7797 should you have any questions or if this proposal does not match your intentions.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.



Peter Chimera, E.I.
Assistant Project Manager



Bert Morton, P.E.
Senior Project Manager

Accepted: _____
Name and Title

Date

Enclosures: Figure 1
CEC Terms & Conditions

Survey Limits



**SCHEDULE OF TERMS AND CONDITIONS
GEOTECHNICAL, CIVIL ENGINEERING AND SURVEYING SERVICES**

1.0 PROPOSAL ACCEPTANCE

The following terms and conditions ("TERMS") shall apply to and are an integral part of the attached proposal between Civil & Environmental Consultants, Inc. ("CEC") and the CLIENT named in the attached proposal ("CLIENT"). CLIENT's acceptance of the proposal includes acceptance of the TERMS and any terms and conditions proposed by the CLIENT will be deemed to materially alter the TERMS and are hereby objected to and rejected by CEC. Acceptance of this proposal, including acceptance of the TERMS, shall occur upon the notification of CEC by CLIENT, in writing or orally, to commence performance in accordance with the proposal and the TERMS.

CEC shall perform its services consistent with the professional skill and care ordinarily provided by professionals, such as CEC, practicing in the same or similar locality under the same or similar circumstances. There are no warranties provided whether express or implied.

2.0 SUBSURFACE CONDITIONS

The CLIENT recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data, interpretation, and recommendations by CEC will be based solely on information available to CEC. CEC is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.

3.0 SUBCONTRACTED SERVICES

CEC will select reputable subcontractors for test borings and/or other explorations or services based on oral or written competitive prices. The contractor's invoices shall be billed in accordance with our proposal. Nothing in this paragraph shall require that services or equipment be obtained through competitive bidding or be available from more than one source.

4.0 SITE ACCESS AND SITE CONDITIONS

CLIENT will grant or obtain free access to the site for all equipment and personnel for CEC to perform the work set forth in this AGREEMENT. The CLIENT will notify any and all possessors of the project site that CLIENT has granted CEC free access to the site. CEC will take reasonable precautions to limit damage to the site, but it is understood by CLIENT that, in the normal course of work, some damage may occur and the correction of such damage is not part of this AGREEMENT unless so specified in the PROPOSAL.

CLIENT shall provide CEC with all information in CLIENT's possession concerning the Project Site or information which would materially affect performance of the work. CLIENT shall cooperate fully with CEC and shall timely provide CEC with all decisions, choices, criteria, or other determination necessary to the prosecution of the work. CLIENT shall designate a Project Manager who shall act on CLIENT's behalf.

The CLIENT is responsible for the accuracy of locations for all subterranean structures and utilities. CEC will take reasonable precautions to avoid known subterranean structures, and the CLIENT waives any claim against CEC, and agrees to defend, indemnify, and hold CEC harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, CLIENT agrees to compensate CEC for any time spent or expenses incurred by CEC in defense of any such claim with compensation to be based upon CEC's prevailing fee schedule and expense reimbursement policy.

5.0 SAMPLE DISPOSAL

CEC will dispose of all remaining soil and rock samples 60 days after submission of report covering those samples. Further storage or transfer of samples can be made at CLIENT's expense upon CLIENT's prior written request.

6.0 CONSTRUCTION OBSERVATION

If CEC is retained by the CLIENT to provide a site representative for the purpose of observing specific portions of the construction work as set forth in the PROPOSAL then this section applies.

For the specified assignment, CEC will report observations and professional opinions to the CLIENT. No action of CEC or CEC's site representative can be construed as altering any AGREEMENT between the CLIENT and others. CEC will report any observed work to the CLIENT which, in CEC's professional opinion, does not conform with plans and specifications. CEC has no right to reject or stop work of any agent of the CLIENT. Such rights are reserved solely for the CLIENT. Furthermore, CEC's presence on the site does not in any way guarantee the completion or quality of the performance of the work of any party retained by the CLIENT to provide construction related services.

CEC will not be responsible for and will not have control or charge of specific means, methods, techniques, sequences or procedures of construction selected by any agent or AGREEMENT of the CLIENT, or safety precautions and programs incident thereto.

CEC disclaims any and all responsibility and liability for damages that result from implementation of CEC's plans, specifications, or recommendations when CEC is not retained to observe such implementation.

7.0 BILLING AND PAYMENTS

7.1 General: Invoicing for labor will be performed in accordance with the provisions outlined in the proposal to which these Terms and Conditions are a part. Invoices shall generally be submitted every four weeks for services performed during the previous four weeks. Payment shall be due within 30 days of invoice date. Payment shall be made as follows:

1. Lockbox (regular mail):
Civil & Environmental Consultants, Inc.
P.O. Box 644246
Pittsburgh, PA 15264-4246

2. Electronic Payments:
Bank Wire Information:
Bank: PNC Bank
Pittsburgh, PA 15222

Account Name: Civil & Environmental Consultants, Inc.
333 Baldwin Road
Pittsburgh, PA 15205

PNC Bank Routing #043000096 Bank telephone Number: 412-762-1836

Civil & Environmental Consultants, Inc. – Account #2272405

If CLIENT objects to all or any portion of any invoice, CLIENT will so notify CEC in writing within fourteen (14) calendar days of the invoice, identify the cause of disagreement, and pay within thirty (30) days that portion of the invoice, if any, not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, the balance as stated on the invoice will be paid.

Invoices are delinquent if payment has not been received within thirty (30) days from date of invoice. CLIENT will pay an additional charge of 1-1/2 (1.5) percent per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent amount, excepting any portion of the invoiced amount in dispute and resolved in favor of CLIENT. Payment thereafter will first be applied to accrued interest and then to the principal unpaid amount. All time spent and expenses incurred (including any attorney's fees) in connection with collection of any delinquent amount will be paid by the CLIENT to CEC per CEC's current fee schedules. In the event CLIENT fails to pay CEC within thirty (30) days after invoices are rendered, CLIENT agrees that CEC will have the right to suspend this AGREEMENT, without incurring liability to CLIENT, after giving seven (7) days written notice to CLIENT.

- 7.2 Litigation Services: If litigation services are not part of the proposal to which these Terms and Conditions are attached and are requested by CLIENT, the scope and invoicing terms for the requested litigation services will be identified in a separate proposal. The labor rate paid for senior CEC personnel (project manager, senior project manager, principal, or officer) for direct litigation support services shall generally be invoiced at a minimum rate of 1.5 times typical CEC rates, as specified in a separate proposal for those services.

8.0 REIMBURSABLE EXPENSES

The following items of direct non-salary expenses shall be billed according to the terms of our proposal.

- 8.1 Transportation and living expenses incurred for assignments outside the area.
8.2 Automobile expenses for personal or company vehicles at the allowable IRS mileage rate, plus parking and toll charges. For company vehicles, a minimum of \$85/day will be charged for use, unless the daily mileage charge for the vehicle in question exceeds \$85/day, in which case the actual daily mileage charge applies. Rental vehicles will be charged at cost.
8.3 Long distance telephone calls, telegrams, and cables.
8.4 Field survey equipment usage at \$10.00/hr.
8.5 Computer usage and word processing at \$5.00/hr. and CADD at \$15.00/hr connect time.

- 8.6 Shipping charges for soil and rock samples, field equipment, etc.
- 8.7 Project photographs and reproduction of drawings and reports.
- 8.8 Test borings, laboratory services, and other subcontracted services.
- 8.9 Other items directly identifiable to the project.

Our proposal does not include gross receipts taxes, business or occupation taxes or assessments that the municipality where the project is located may assess upon CEC or its subcontractors. If such taxes are or become a liability of CEC, the CLIENT agrees to reimburse CEC at cost. This tax cost reimbursement will not be subject to mark-up.

9.0 TERMINATION

This AGREEMENT may be terminated by either party seven (7) days after written notice in the event of any breach of any provision of this AGREEMENT or in the event of substantial failure of performance by the other party, or if the CLIENT suspends the work for more than three (3) months. In the event of termination, CEC will be paid for services performed prior to the date of termination plus reasonable termination expenses, including the cost of completing analyses, records and report necessary to document job status at the time of termination.

10.0 SAFETY

When CEC provides construction observation or management services on the job site during project construction, it is understood that, in accordance with generally accepted practices, the contractor shall be solely and completely responsible for working conditions on the job site, including safety of all persons and property during the performance of the work and compliance with OSHA regulations, and that these requirements will apply continuously and not be limited to normal working hours. Any observations of the contractor's performance conducted by our personnel will not include review of the adequacy of the contractor's safety measures in, on or near the construction site.

11.0 INSURANCE

CEC will maintain Workmen's Compensation Insurance as required by state law and General Liability Insurance for bodily injury and property damage with an aggregate limit of \$1,000,000 per occurrence. CEC will furnish certificates of such insurance upon request. In the event the CLIENT desires additional coverage of this type CEC will, upon the CLIENT's written request, obtain additional insurance (if possible) at the CLIENT's expense. Our liability to the CLIENT for bodily injury or property damage arising out of work performed for the CLIENT for which legal liability may be found to rest upon us, other than for professional errors or omissions, shall be limited to our General Liability Insurance coverage.

12.0 ALLOCATION OF RISK

- 12.1 Limitation of Remedies: Subject to all otherwise applicable statutes of limitations and repose, CLIENT agrees to limit CEC's liability to CLIENT, and to any other person or entity, for any claim arising from, or alleged to arise from any acts, errors or omissions in the performance of services under this AGREEMENT whether such claim sounds in negligence, breach of contract, strict liability, or other legal theory, except for willful misconduct or gross negligence and including any legal fees or costs awarded under this AGREEMENT, to an aggregate limit of the amount of fees paid to CEC under this AGREEMENT, or \$50,000, whichever is greater.

If CLIENT prefers not to limit our professional liability to this sum, we shall waive this limitation upon CLIENT's written request, provided that CLIENT agrees to pay for this waiver at a negotiated fee. CLIENT's request for this option must be made at the time CLIENT accepts our proposal. In the event CLIENT makes a claim against us for any act arising out of the performance of our professional services, and fails to prove such claim, then CLIENT agrees to pay all legal and other costs incurred by us in defense of such claim.

- 12.2 Waiver of Consequential Damages: CEC and CLIENT agree to waive any claim against each other for consequential damages.
- 12.3 Indemnification: CEC shall indemnify and hold harmless CLIENT from and against any and all claims, damages, or liability arising from the negligent performance of services under this AGREEMENT by CEC, including injuries to employees of CEC.
- 12.4 Continuing Agreement: The obligations of this section shall survive notwithstanding termination of this AGREEMENT. In the event that CLIENT requests that CEC provide additional services, CLIENT's obligations under this section shall apply to such additional services as if such additional services had to be performed as part of this AGREEMENT.

13.0 DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS

CLIENT warrants that a reasonable effort to inform CEC of known or suspected Biological Pollutants or Hazardous Materials on or near the project site has been made by the CLIENT. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the by-product of any such biological organisms. The term Hazardous Materials shall mean any toxic substances, chemicals, pollutants, or other materials, in whatever form or state, including but not limited to smoke, vapors, soot, fumes, acids, alkalis, minerals, toxic chemicals, liquids, gases or any other material, irritant, contaminant or pollutant, that is known or suspected to adversely affect the health and safety of humans or of animal or plant organisms, or which are known or suspected to impair the environment in any way whatsoever and shall include, but not be limited to, those substances defined, designated, or listed in Section 404 of the Solid Waste Disposal Act (42 USC Subsection 6903); Section 9601(14) of the Comprehensive Environmental Response, Compensation and Liability Act (42 USC Subsection 9601(14)); as listed or designated under Sections 1317 and 1321(b)(2)(a) of the Title 33 (33 USC Subsections 1317 and 1321(b)(2)(a)) or as defined, designated, or listed under any other federal, state, or local law, regulation or ordinance concerning hazardous wastes, toxic substances, or pollution.

Hazardous Materials may exist at a site where there is no reason to believe they could or should be present. CEC and CLIENT agree that the discovery of unanticipated Hazardous Materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. CEC and CLIENT also agree that the discovery of unanticipated Hazardous Materials may make it necessary for CEC to take immediate measures to protect health and safety. CLIENT agrees to compensate CEC for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous waste.

CEC agrees to notify CLIENT when unanticipated Hazardous Materials or suspected Hazardous Materials are encountered. CLIENT agrees to make any disclosures required by law to the appropriate governing agencies. CLIENT also agrees to hold CEC harmless for any and all consequences of disclosures made by CEC which are required by governing law. In the event the project site is not owned by CLIENT, CLIENT recognizes that it is the CLIENT's responsibility to inform the property owner of the discovery of unanticipated Hazardous Materials or suspected Hazardous Materials.

Notwithstanding any other provision of the AGREEMENT, CLIENT waives any claim against CEC, and to the maximum extent permitted by law, agrees to defend, indemnify, and save CEC harmless from any claim, liability, and/or defense costs for injury or loss arising from CEC's discovery of unanticipated Biological Pollutants, Hazardous Materials or suspected Hazardous Materials including any costs associated with possible reduction of the property's value. CLIENT will be responsible for ultimate disposal of any samples secured by CEC which are found to be contaminated.

14.0 CHANGES

- 14.1 Unforeseen Site Conditions: CLIENT reserves the right to make reasonable changes in the work to be performed after acceptance of this AGREEMENT. CLIENT understands that unforeseen site conditions may require changes in the Scope of Work to be performed.
- 14.2 Unauthorized Changes: If changes are made in CEC work products by CLIENT or persons other than CEC, and these changes affect our work, any and all liability against CEC arising out of such changes is waived and you assume full responsibility for such changes unless you have given us prior notice and have received from us written consent for such changes.
- 14.3 CLIENT Requested Changes: Upon receipt of a change requested by CLIENT, CEC will obtain price quotations from the contractors and shall provide CLIENT with a quotation of the cost of having the change performed, and any increase in contract time caused by the change. CLIENT shall authorize the requested change by amending the contract price and contract time.

15.0 MEDIATION AND ARBITRATION

- 15.1 Scope of Clause: Any claim arising out of or related to this AGREEMENT, except claims which are specifically excluded from mediation and arbitration as set forth in the "Exclusions" paragraph of this section of the AGREEMENT, shall be subject to mediation as a condition precedent to arbitration or the institution of legal or equitable proceedings by either party. With the exception of the claims set forth in the "Exclusions" paragraph of this section of the AGREEMENT, the mediation and arbitration provisions of this section shall apply to any and all disputes between CLIENT and CEC which arise from or which are in any way related to this AGREEMENT, including, but not limited to, the interpretation of this AGREEMENT, the enforcement of its terms, and any acts, errors, or omissions of CEC in the performance of this AGREEMENT.
- 15.2 Notice of Dispute: Within forty-five (45) days of the occurrence of any incident, action, or failure to act upon which a claim for relief is based, the party seeking relief shall serve the other party with a written notice specifying the nature of the relief sought, the amount of relief sought, a description of the reason relief should be granted, and a citation of the appropriate portions of this AGREEMENT that authorize the relief requested. The Notice of Dispute requirement under this paragraph does not pertain to the claims excluded from mediation and arbitration as described in the "Exclusions" paragraph of this section of the AGREEMENT.

15.3 Meet and Confer: Within ten (10) days of receipt of the Notice of Dispute, the parties shall meet and confer in a good faith attempt to resolve the dispute. Participants in the meet and confer must have the authority to enter into a resolution on behalf of each party. Attorneys representing the parties may not be present at this meeting. The Meet and Confer requirement under this paragraph does not pertain to the claims excluded from mediation and arbitration as described in the "Exclusions" paragraph of this section of the AGREEMENT.

If, as a result of the parties having met and conferred, an agreement is reached resolving the dispute, the parties shall immediately execute an addendum to this AGREEMENT setting forth the terms of their agreement.

15.4 Facilitated Mediation: If no agreement is reached, or if the agreement does not resolve all of the issues encompassed by the Notice of Dispute, the parties shall resolve their claims by mediation which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect. Request for mediation shall be filed in writing with the other party to this AGREEMENT and the American Arbitration Association. The Request for Mediation may be made concurrently with the filing of a demand for arbitration but, in such event, mediation shall proceed in advance of arbitration or legal or equitable proceedings, which shall be stayed pending mediation for a period of sixty (60) days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

15.5 Fees and Location: The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in Pittsburgh, Pennsylvania, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

15.6 Arbitration: Prior to arbitration, the parties shall endeavor to resolve disputes by mediation in accordance with the paragraphs set forth above. Claims not resolved by mediation shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. Demand for arbitration shall be filed in writing with the other party to this AGREEMENT and with the American Arbitration Association.

15.7 Demand for Arbitration: A demand for arbitration shall be made within a reasonable time after the claim has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such claim would be barred by the applicable statute of limitations.

15.8 Limitation on Consolidation or Joinder: Except by written consent of the person or entity sought to be joined, no arbitration arising out of or relating to this AGREEMENT shall include, by consolidation or joinder or in any other manner, any person or entity not a party to this AGREEMENT under which such arbitration arises, unless it is shown at the time the demand for arbitration is filed that (1) such person or entity is substantially involved in a common question of fact or law, (2) the presence of such person or entity is required if complete relief is to be accorded in the arbitration, and (3) the interest or responsibility of such person or entity in the matter is not insubstantial. This agreement to arbitrate and any other written agreement to arbitrate with an additional person or persons referred to herein shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

- 15.9 Claims and Timely Assertion of Claims: The party filing a notice of demand for arbitration must assert in the demand all claims then known to that party on which arbitration is permitted to be demanded.
- 15.10 Judgment on Final Award: The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.
- 15.11 Non-Admissibility and Confidentiality: The Meet and Confer and the Facilitated Mediation are conducted under the provision that evidence may not be introduced at any later proceeding of any communication, statement, document provided, expert opinion, expert report, or offer to compromise unless such was made, provided, or disposed outside of, and not in connection with, the Meet and Confer or Facilitated Mediation. Under no circumstances may the mediator, or any documents created or maintained by the mediation, be subpoenaed, nor shall the mediator testify in any subsequent proceedings.

All communications, statements, documents provided, expert opinions, expert reports, or offers to compromise are confidential and may not be disclosed without the written consent of the party making the statement or offering the information.

- 15.12 Cross-Claims: If a party contends that all or part of a claim described in the Notice of Dispute is offset by a cross-claim, or if a party contends that it has a claim which arises out of the same factors upon which the Notice of Claim is based, the party must, within seven days after receipt of the Notice of Claim, provide a written Notice of Cross-claim setting forth the same information as required in a Notice of Claim. The cross-claim shall be resolved in the Meet and Confer or the Facilitated Mediation in the same manner as the claim described in the Notice of Dispute.

Any agreement reached in the Meet and Confer or the Facilitated Mediation shall bar the later assertion in any action, arbitration, or other proceeding of any cross-claim which was required to be asserted by this section unless the parties' written resolution agreement explicitly reserves such cross-claim.

- 15.13 Exclusions: The mediation and arbitration provisions of this section **do not apply** to claims which arise out of or relate to disputes between CEC and CLIENT concerning amounts owed CEC for performance of services and/or disputes between CEC and CLIENT concerning the payment of CEC's invoices as provided in the "Billing and Payments" section of this AGREEMENT. Rather, CEC and CLIENT agree that any court of record of Allegheny County, Pennsylvania, shall have jurisdiction and venue over any claims excluded from mediation and arbitration as provided herein.

16.0 GOVERNING LAW AND SURVIVAL

The law of the State of Pennsylvania will govern the validity of these TERMS, their interpretation and performance.

If any of the provisions contained in this AGREEMENT are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Limitations of liability and indemnities will survive termination of this AGREEMENT for any cause.

17.0 DESIGN/BUILD SERVICES

If Client requests CEC-led design-build services, those design-build services will be performed in accordance with separate terms and conditions that specifically address design-build services.

18.0 BIOLOGICAL POLLUTANTS

CEC's scope of services does not include the investigation or detection of the presence of any Biological Pollutants in or around any structure. CLIENT agrees that CEC will have no liability for any claim regarding bodily injury or property damage alleged to arise from or be caused by the presence of or exposure to any Biological Pollutants, in or around any structure. In addition, CLIENT will defend, indemnify, and hold harmless Consultant from any third party claim for damages alleged to arise from or be caused by the presence of or exposure to any Biological Pollutants in or around any structure, except for damages arising from or caused by CEC's sole negligence.

19.0 CONSENT TO ASSIGN

CLIENT and CEC, respectively, each binds itself and its successors and assigns to the other and its successors and assigns with respect to all covenants of these TERMS. Neither CLIENT nor CEC shall assign, sublet or transfer any rights under or interest in these TERMS without the prior written consent of the other party, including, but not limited to (a) any interest in the proceeds of these TERMS, or any proceeds of claims arising from or under these TERMS; (b) any claims, causes of action or rights against the other party arising from or under these TERMS; (c) the control of claims or causes of action against the other party arising from or under these TERMS; and (d) any proceeds from claims or causes of action as security, collateral, or the source of payment for any notes or liabilities to any third party. This section shall not, however, apply to any subrogation rights (if any) of any insurer of either party. This section shall survive the completion or termination of these TERMS for any reason and shall remain enforceable between parties.

20.0 FILE RETENTION

After this project is concluded, our file on the project will be closed. All documents and information within the project file will be retained by CEC, and may be sent offsite for storage. Unless you make other arrangements with us, CEC reserves the right to destroy all file information seven (7) years after the project is closed.

END OF TERMS AND CONDITIONS

Here are a few of your Utility friends and neighbors in Tennessee that implemented the TAUD ServLine Program

Utility Name	Approximate Total	
	Residential Water Customers	Residential Sewer Customers
Hixson Utility District (TN)	24,500	
West Wilson UD	19,369	
LaFollette Utility	9,665	3,259
Shady Grove UD	8,600	
North West Utility District	6,759	
Ocoee Utility District	6,501	
Poplar Grove Utility District	6,200	
Watts Bar UD	5,600	
S Cumberland	4,500	
Cumberland UD	4,300	
Gibson County Water	3,672	
O'Connor	3,200	
Lutrell, Blaine, Corryton Utility District	3,101	
Second South Cheatham	2,875	
Dandridge	2,793	1,200
DeWhite	2,700	
Cookeville Boat Dock	2,558	
Jackson County Utility District	2,368	
West Cumberland	1,866	
Bon De Croft	1,290	
River Road Utility District	1,083	
Sneedville UD	700	
City of Rutledge	679	280
25 Utility District	620	



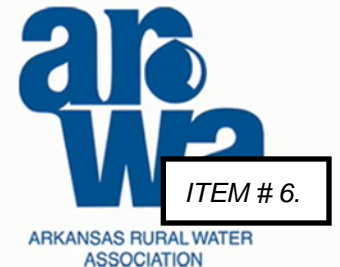
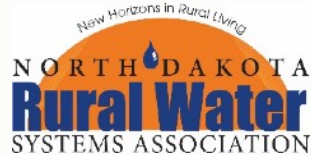
- RECAPTURE LOST REVENUE
- ELIMINATE A CONSUMER FINANCIAL BURDEN
- REDUCE UTILITY WORKLOAD



LEAK ADJUSTMENT AND SERVICE LINE PROGRAM

An Affinity Program of the

SERVLINE IS IN MORE THAN 30 STATES NATIONWIDE



EPA STUDY

- EPA study found that residential lost water = 1.3 trillion gallons of water / yr. on average
- EPA is encouraging utilities to implement water loss control programs
- 880,000 miles of aging pipes have been in service for decades
- 237,600 breaks / year (avg)
- EPA is now urging utilities to make line repairs a priority

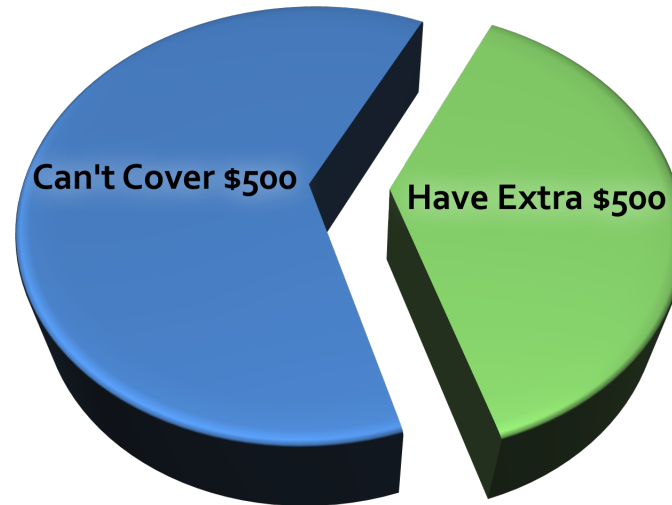


Customers Awareness of Water line coverage?

Who's Responsibility?



Americans Unable to Cover an Unexpected Expense of \$500 ¹

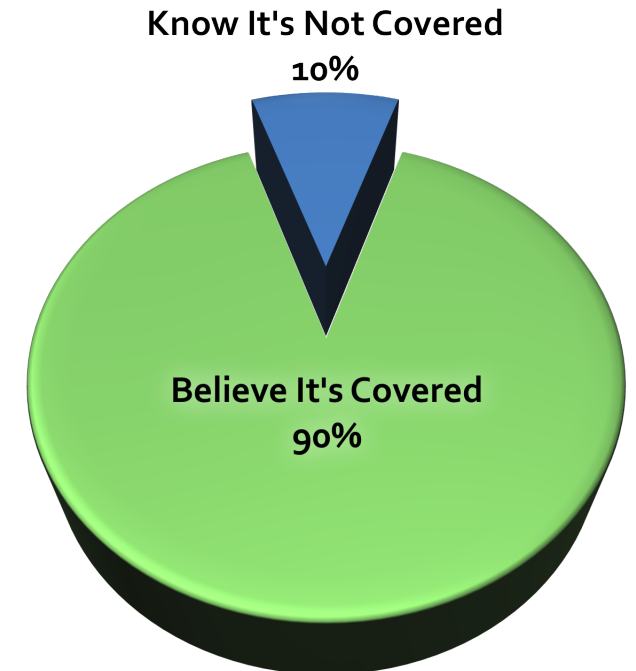


¹ 2015 CNBC Article referencing Bankrate Study



Customers believe Home Owners Insurance Covers Water Lines

Who's Responsibility?



QUESTIONS FOR UTILITIES

Lets Identify the Problem:

- ✓ Are customers aware of their responsibilities when a leak occurs ?
- ✓ What are the utilities responsibilities for these leaks // line repairs ?
- ✓ Do leaks take valuable time away from main utility functions ?
- ✓ Do "in house" leak adjustments increase risk for the utilities ?
- ✓ Regardless of responsibility – who does the customer blame ?
- ✓ Why do utilities help customers with big leak bills? is it appreciated ?

Is there a better way to still help customers ?

CUSTOMER WATER LEAKS PAINFUL FOR THE CUSTOMER & UTILITY

- Unexpected High cost to customers
- Inconvenience of lost water and what it takes to get it repaired
- Customer must find \$\$\$ to pay for repairs
- Time involvement for staff and often board members
- Many involved, and stressful phone calls per leak

End result - unhappy customer & frustrated staff

ACTUAL FINANCIAL IMPACT ON UTILITIES

WHO REALLY PAYS?

Real Utilities Examples

4,500 residential customers

4,300 residential customers

8,600 residential customers

10,000 residential customers

29,500 residential customers

Financial Impact

\$30,780

\$68,332

\$54,468

\$107,560

\$313,252

WHAT IS SERVLIN

ServLine - full service specialty insurance program insured by an “A” rated insurance

- We only work directly with your utility.
- The best program providing your customer and option and solution for this financial burden of unexpected often high water bills due to leaks
- We are unique and offered through the NRWA & your state assoiation
- This is not a warranty program, and here is why!
- Tried and true and used throughout the country, Ask any one of our utilities!
- Provides the customer complete freedom to decide to participate.

MORE THAN INSURANCE

LET'S SIMPLIFY YOUR OFFICE!

- Administration
- Answers customer questions
- Coordinates / updates customer data

Customer Service

- Educates customer of their responsibility
- Program materials
- Web site information

Education

- We assist with claims process
- We follow up to insure satisfaction

Action

- Handles leak adjustment requests
- Line repair claims
- Coordinates / updates customer data

Claims

HOW DOES LEAK ADJUSTMENT PROTECTION WORK



1 Leak Adjustment Protection

2 Water Line Protection

3 Sewer Line Protection



LEAK ADJUSTMENT PROTECTION

- ✓ Utility Chooses its cost protection limit: \$500, \$1,000, or \$2,500
- ✓ Cost is usually \$1-\$2 per customer per month
- ✓ Customer now has the option not to participate (*i.e. decline participation*)
- ✓ No deductible to the customer or utility
- ✓ Follows & enhances your Utility's leak adjustment guidelines:
number of and qualifications for leak adjustments (customized)
- ✓ No cost to your utility

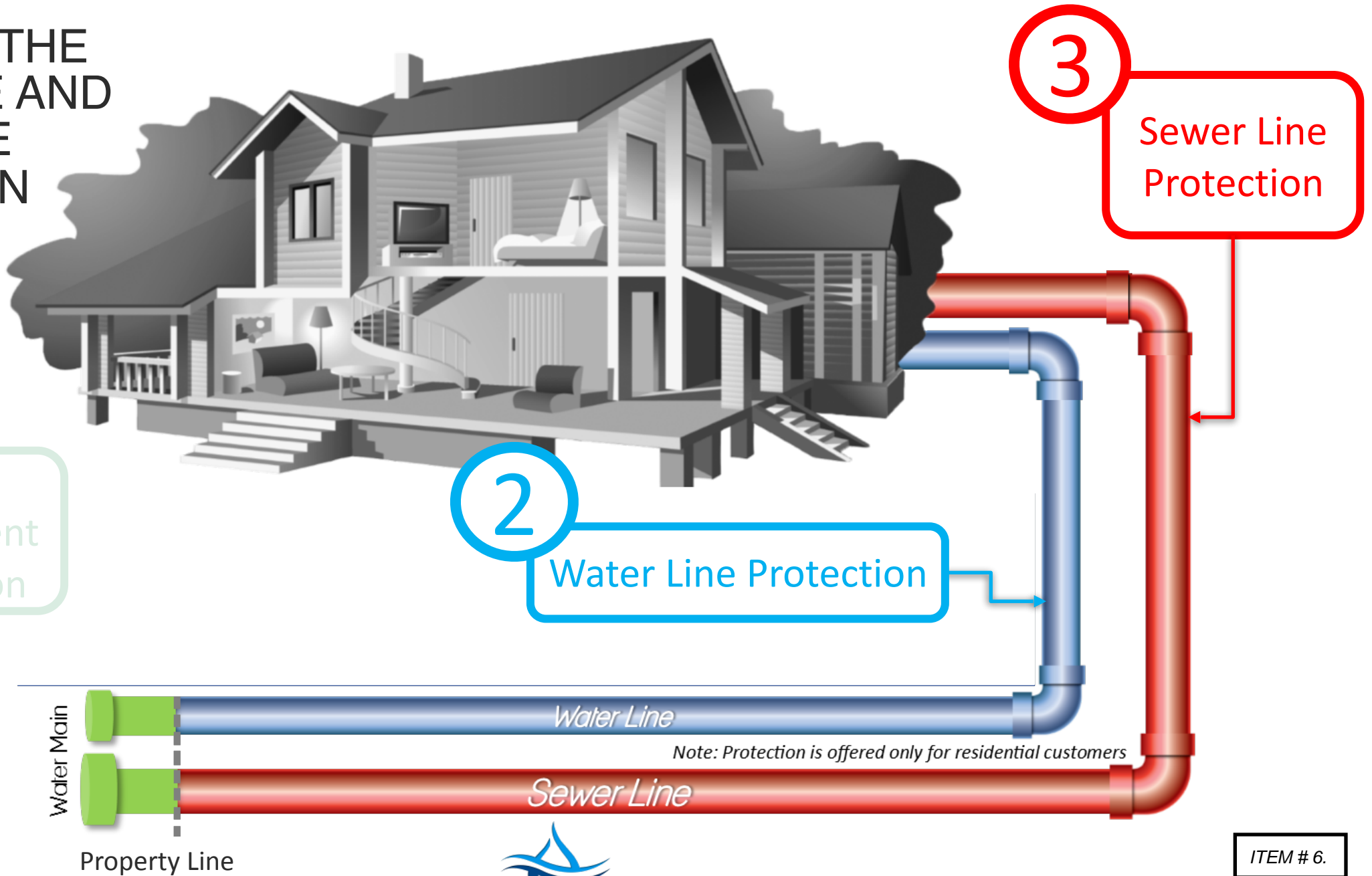
RESULTS USING SERVLINE

- ✓ Customer only pays \$1-2 per month
- ✓ 98% of customers participate – National average
- ✓ Utility recaptures lost revenue lost revenue & bad debt
- ✓ Reduces utility workload from customer water leaks
- ✓ Improves customers financial condition
- ✓ Huge improvement in customer relations

THE CUSTOMER

- ✓ Customer is in complete control of deciding to participate in Servline... or not, and whether they want to add additional line coverage.
- ✓ At Launch The Customer has adequate time for the decision and can change their mind at any time.
- ✓ Offering the customer the option for water loss protection is the real decision for the utility. ***Does your customer have that option now?***

HOW DOES THE WATER LINE AND SEWER LINE PROTECTION WORK



WATER LINE & SEWER LINE PROTECTION

It's New protection for customers (Result = positive customer relations)

- ✓ It's The CUSTOMERS CHOICE > Water & sewer line protection require sign up
- ✓ Water Line Protection Cost: \$3.50 -> \$5.50
- ✓ Sewer Line Protection Cost: \$5.00 -> \$7.00
- ✓ No cost to Utility
- ✓ No deductible
- ✓ When a claim is made customer pays nothing to repair or replace service lines
- ✓ Protection up to \$10,000 for water line and an additional \$10,000 for sewer line
- ✓ No limit to number of repairs in a year
- ✓ Comprehensive unmatched coverage

SERVICE LINE COVERAGE COMPARISON

Coverage Issue	AWR Warranty	Service Line Warranty	ServLine Program
Exterior single lateral water service line	Yes	Yes	Yes
Exterior line break due to Normal Wear & Tear	Yes	Yes	Yes
Repair and Replacement Limits Up to \$10,000	Available	No	Yes
Payment of Increased Water Bill up to selected limit	No	No	Yes
Coverage if late on Water Bill	No	No	Yes
Line Breaks after calling Dig Safe 811 with ticket and lines marked	No	No	Yes
Defective or recalled materials	No	Unknown	Yes
Restoring sidewalks, driveways or paved surfaces up to \$500	No	No	Yes
Strictly regulated and protected as an Insurance Policy by State Department of Insurance	No	No	Yes
Lines connecting to main water line (sprinklers / irrigation systems)	No	No	No
Water meter, water meter pit, and/or water vault, pumps, valves, or backflow meters	No	No	No
Earthquake, Flood, Sinkhole, War, Civil Authority, Dishonest/Illegal Acts, Pollutants backing up into residence	No	No	No

IS INSURANCE THE BEST OPTION?

- Insurance regulation = the best protection for your utility
- Highly customizable coverage and pricing (*unlike warranties*)
- Utility has greater control over their policy & ServLine will only work through your utility
- Cost Protection for water loss/leaks can only be covered by insurance
- This is the broadest coverage of water / sewer line repair & replacement available.

What's Next?

WHAT ARE THE FIRST STEPS

- **First decide** – does the utility want to allow their customers the option to protect themselves from high water bills due to leaks for a small monthly fee?
- **Upon Approval** of the Servline Program our team will work with your office and begin to launch the program.
- **Your Implementation** of Servline does not commit any customer to any part of the program, and allows them the freedom to enter or exit the program at their discretion as often as they choose.
- **Finally** your customer can decide to add line protection now, later, or never. An option previously unavailable to them!

LEAK VOLATILITY AND THE FINANCIAL RISK

Actual Utility Leak Adjustment Data with 5600 connections

2011			2012			2013		
Range	Incidents	Adjustments	Range	Incidents	Adjustments	Range	Incidents	Adjustments
\$0 - \$500	158	\$ 28,301.80	\$0 - \$500	116	\$ 20,698.12	\$0 - \$500	133	\$ 26,383.42
\$500 - \$1,000	28	\$ 20,037.78	\$500 - \$1,000	22	\$ 16,864.50	\$500 - \$1,000	16	\$ 10,914.97
\$1,000 - \$2,500	6	\$ 9,187.62	\$1,000 - \$2,500	7	\$ 11,468.17	\$1,000 - \$2,500	10	\$ 14,663.63
Over \$2,500	3	\$ 11,620.22	Over \$2,500	3	\$ 9,316.45	Over \$2,500	2	\$ 6,406.60
Totals	195	\$ 69,147.42	Totals	148	\$ 58,347.23	Totals	161	\$ 58,368.62

2014			2015 thru June		Annualized		
Range	Incidents	Adjustments	Range	Incidents	Adjustments	Incidents	Adjustments
\$0 - \$500	192	\$ 36,464.94	\$0 - \$500	68	\$ 13,448.12	136	\$ 26,896.23
\$500 - \$1,000	42	\$ 28,655.37	\$500 - \$1,000	8	\$ 5,620.00	16	\$ 11,240.00
\$1,000 - \$2,500	23	\$ 34,625.22	\$1,000 - \$2,500	12	\$ 16,979.57	24	\$ 33,959.13
Over \$2,500	4	\$ 16,258.88	Over \$2,500	3	\$ 10,513.68	6	\$ 21,027.37
Totals	261	\$ 116,004.40	Totals	91	\$ 46,561.37	182	\$ 93,122.73