



ADAMS COUNTY, OH ACTIVE TRANSPORTATION PLAN

September 2023

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INTRODUCTION





INTRODUCTION

WHAT IS ACTIVE TRANSPORTATION AND WHY IS IT IMPORTANT?

“Active Transportation” means people-powered transportation. It includes all the ways that people engage in physical activity while getting around. It includes walking, cycling, and rolling such as using wheelchairs, mobility devices, scooters, strollers, skateboards, and rollerblades. It can even include riding a horse or traveling via buggy, which are important in Adams County due to its large Amish population.

Active Transportation represents fundamental transportation modes for many Ohioans to access transit, work, school, retail stores or any number of destinations in urban, suburban, and rural settings. Active transportation can provide many community benefits beyond personal mobility, such as improved public health, economic development, greater quality of life, and enhanced environmental quality.

Active transportation is vital for many, especially people that cannot drive, including children, older adults, people with disabilities, people that do not have a valid driver’s license, and people that choose not to drive for a variety of reasons, including reduced transportation costs, environmental benefits, and physical health. Active transportation facilities are often used as recreational routes as well. Introducing people to walking, bicycling, and rolling through recreation can lead to more people using active transportation.

Active transportation planning involves community engagement specific to the needs of people who walk and bicycle and outlines the vision, goals, and strategies needed to support safe, convenient, and accessible active transportation options. It is important and beneficial to meet the needs of people walking and biking by planning for and directing investments in infrastructure and programs that support active transportation options.

Benefits of Active Transportation

Physical Health

Increased opportunity for recreation and destination-oriented trips using active modes of travel are key to increasing daily physical activity and reducing the risk for developing preventable, chronic diseases.

Mental Health

Physical activity reduces depression, can improve the quality of sleep, and has been shown to improve cognitive function for older adults. Active transportation can also improve social conditions in communities, which contributes to positive mental well-being among residents.

Economic Development

There is broad consensus across the country, and in Ohio, that investing in active transportation produces a positive return on investment for host communities. This is especially true when it comes to trails, which serve as major regional attractions for recreational riders.

Quality of Life

Comfortable and accessible options for bicycling and walking provide a host of quality of life benefits. They increase the number of travel options for everyone and can lead to greater independence for older residents, young people, and others who cannot or choose not to drive. Providing a high-quality active transportation network is especially important for the mobility of community members who do not have full access to a vehicle.

Environmental Quality

Shifting to bicycling and walking trips, and concentrating development in dense walkable and bikeable communities can reduce transportation-based emissions and sprawling land use that impacts the natural environment.²

1. U.S. Department of Health and Human Services. 2008 PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS. Washington, DC: U.S. Dept of Health and Human Services; 2008. <http://health.gov/paguidelines/pdf/paguide.pdf>

2. Federal Highway Administration, National Bicycling and Walking Study, "Case Study No. 15 The Environmental Benefits Of Bicycling And Walking," 1993 http://safety.fhwa.dot.gov/ped_bike/docs/case15.pdf

ACTIVE TRANSPORTATION PLAN (ATP) DEVELOPMENT PROCESS

The ATP was created under the leadership of a Core Team and Steering Committee. These groups ensured the plan represents the diverse voices of the community and variety of interests of all Adams County. Figure 1 identifies key milestones during the plan development. The process started by setting a vision and goals for active transportation using input from the Core Team, Steering Committee, and the public. Using the vision and goals as a framework and considering various data from the existing conditions assessment, the project team developed a draft long-term active transportation network, non-infrastructure recommendations (such as policies and programs), and an initial list of priority projects. The public weighed in on these items and all were refined before being finalized by the Core Team and Steering Committee. Next, the project team completed the implementation component to identify how the recommendations should be funded and maintained.

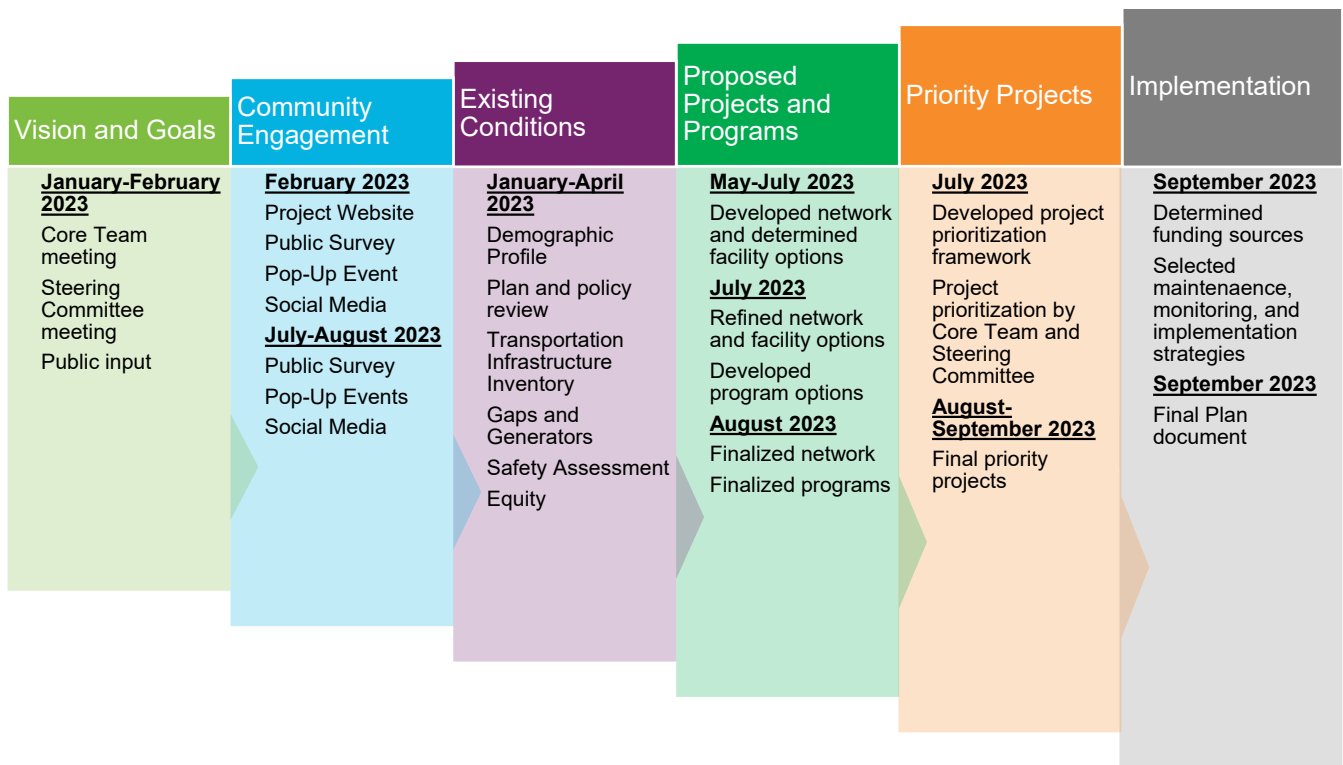


Figure 1. Plan Development Timeline

VISION AND GOALS





VISION AND GOALS

VISION STATEMENT

Adams County Active Transportation - Creating Choice and Opportunity

In Adams County, active transportation is about creating **choice** and **opportunity**. Through investments in active transportation, we can choose how we travel, choose how we recreate, choose how we impact our environment, choose how we impact our health, choose how much we pay to travel, retain and attract residents, attract visitors, support economic development and businesses, and allow people of all ages and ability to safely travel.

GOALS

This plan establishes eight goals (Figure 2) that Adams County strives to achieve in support of the vision for active transportation.



ACCESS

Expand the active transportation network to provide convenient access to important destinations throughout Adams County.



SAFETY

Make it safer and more comfortable to use active transportation.



ACCESSIBILITY

Increase the accessibility of our active transportation network for people of all ages and abilities.



ECONOMIC DEVELOPMENT

Expand the active transportation network to support economic development and job growth.



TOURISM

Expand the active transportation network to support existing tourism and foster growth in tourism.



STEWARDSHIP

Enhance access to nature and natural areas.



PUBLIC HEALTH

Increase opportunities for regular physical activity to improve health outcomes.



ENCOURAGEMENT

Promote active transportation and its benefits.

Figure 2: Plan Goals

COMMUNITY ENGAGEMENT





COMMUNITY ENGAGEMENT

Community engagement was an essential tool in the plan development process. Involving the public builds trust in the plan, improves the overall quality of the findings, and ensures recommendations reflect community desires and priorities. There were two rounds of community engagement, each strategically scheduled to present ideas and gather input that directly fed into plan recommendations (Figure 3). The Core Team used several strategies to collect public input including Steering Committee meetings, stakeholder meetings, a project website, online and hardcopy surveys, online and hardcopy mapping exercises, promotional items, and pop-up events. Pop-up events have a broader reach than conventional public meetings. By leveraging existing events, popular destinations, and existing services the project team reached a wider cross-section of Adams County community members, especially those who might not be able to participate in online or traditional forms of engagement.

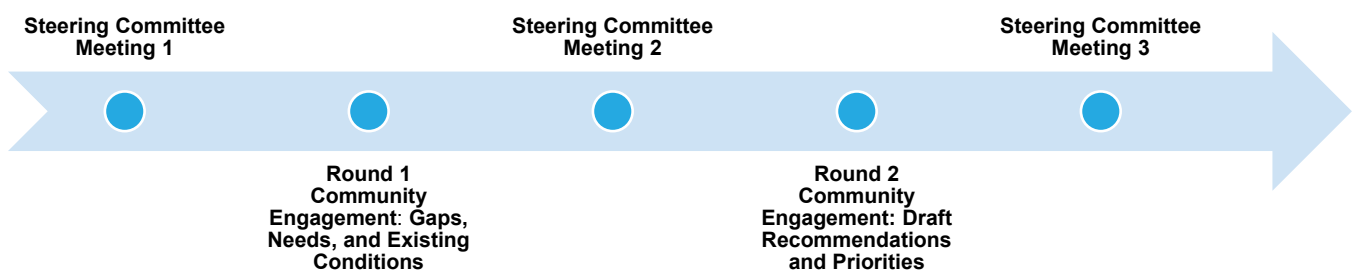


Figure 3: Community Engagement Process

STEERING COMMITTEE MEETINGS

The Steering Committee helped guide the development of the Adams County ATP. Community leaders and decision makers comprised the Steering Committee including the County Engineer, County Economic Development Director, health and tourism staff, community volunteers, Mobility Manager, parks officials, Village and Township officials, School District staff, public transportation providers, Regional Transportation Planning Organization staff and others (Steering Committee members are listed under Acknowledgments at the beginning of this document). The Steering Committee met three times during plan development.

- » **Meeting One (February 22)** kicked off the planning process with the public including a mapping exercise to identify opportunities and challenges. Steering Committee members were shown a map of the villages in Adams County and a countywide map. Individuals had the opportunity to place dots where there were existing and desired active transportation routes, destinations, safety concerns, and challenging intersections.
- » **Meeting Two (July 12)** gave the Steering Committee an opportunity to review the proposed long-term active transportation network and give input on priority projects.
- » **Meeting Three (August 25)** gave the Steering Committee an opportunity to finalize recommendations for the long-term active transportation network, priority project locations and facility types, and non-infrastructure policies and programs.

ROUND 1 COMMUNITY ENGAGEMENT

The first round of public engagement was carried out in March 2023, early in the planning process, and focused on asking community members to share their opinions regarding the state of walking, biking, and active transportation in the county. People had the option to fill out an Active Transportation Survey on their current transportation habits and to add comments to a map identifying active transportation destinations and barriers.

POP-UP EVENT

The project team held a pop-up event at the annual countywide Venture Hawks Basketball game (Figure 4). There were between 600-700 people at the event, and the team engaged with at least 100 people. The project team also spoke one-on-one with leaders such as school principals, multiple law enforcement officials, and EMTs. EMTs shared their firsthand accounts about witnessing or responding to crashes. Community members filled out 13 surveys at the event and added over 50 comments to the map.



Figure 4: Community members discuss destinations and barriers at the Venture Hawks Basketball game pop-up engagement event

ONLINE AND PRINT ENGAGEMENT

Printed versions of the Active Transportation Survey were available at the Adams County library branches, on FRS transportation buses (distributed to meals-on-wheels recipients), the Amish community, and Senior Citizen Council clients. This direct distribution proved highly effective and resulted in the completion of 72 surveys.

A project website was developed to inform the community of the planning process. It also included the online versions of the Active Transportation Survey and mapping exercise. The website, in-person events, and online survey were promoted to community members through social media posts and direct communications through the School District and other Steering Committee members, via bit.ly/AdamsATP. 71 people responded to the survey online and over 100 map comments were provided.



Adams County creates an Active Transportation Plan

Achieving a healthy and sustainable way to travel

March 2, 2023



Charles Countryman, Debbie Ryan, and Leann Puckett work on the Active Transportation Plan map. (Photos by Sherry Larson)

Figure 5: News article about the Plan

Do you want to make it safer to walk and bike in Adams County?

Tell us your ideas for how to make it better.

Comment online:
<https://bit.ly/adamsatp>

OR in person:

- Any Adams County Public Library branch
- Venture Hawks Basketball Game (West Union High School, March 19, 2 PM)

Scan Here

Figure 6: Facebook post advertising the public engagement opportunities for Round 1

SURVEY

The Active Transportation Survey allowed community members who were not able to attend in-person events to provide input. The survey opened on March 1 and closed March 24. The survey received 156 responses from community members across Adams County. Results of the survey are summarized below.

Within the last year, did you ever use any of the following ways of getting around Adams County? (select all that apply)

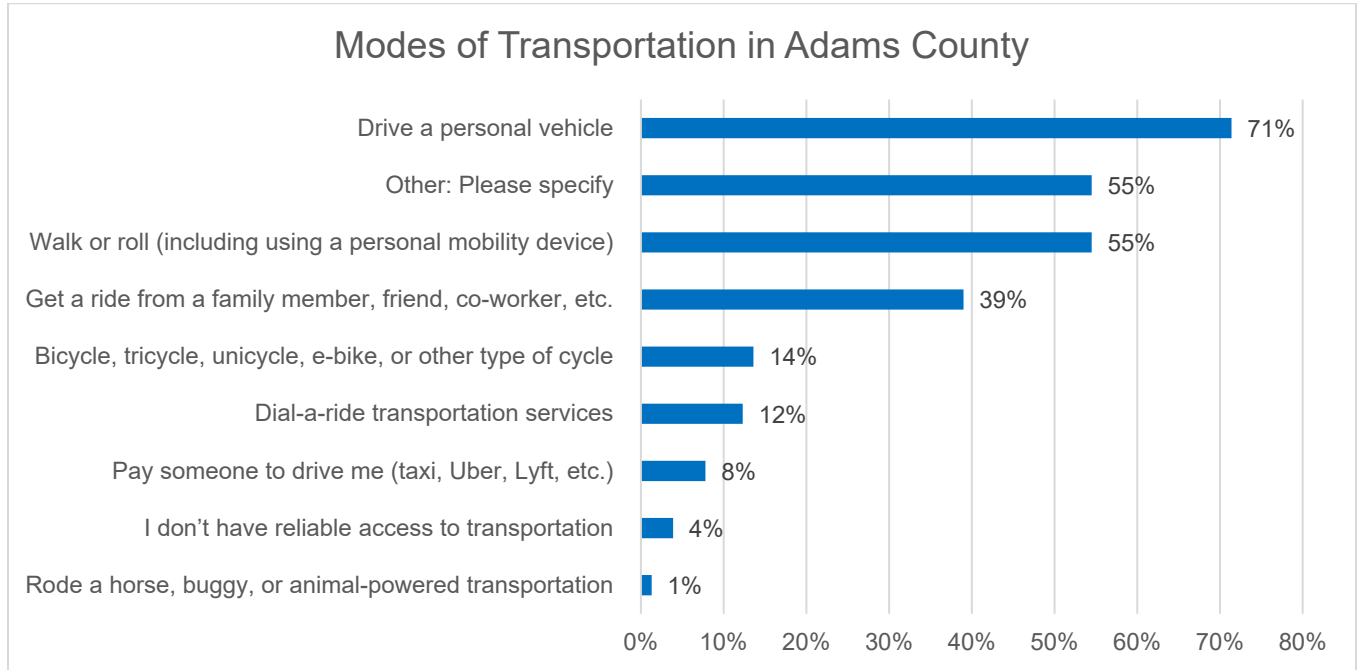


Figure 7: Bar graph of the modes of transportation used in Adams County

What are your reasons for using active transportation? (select all that apply)

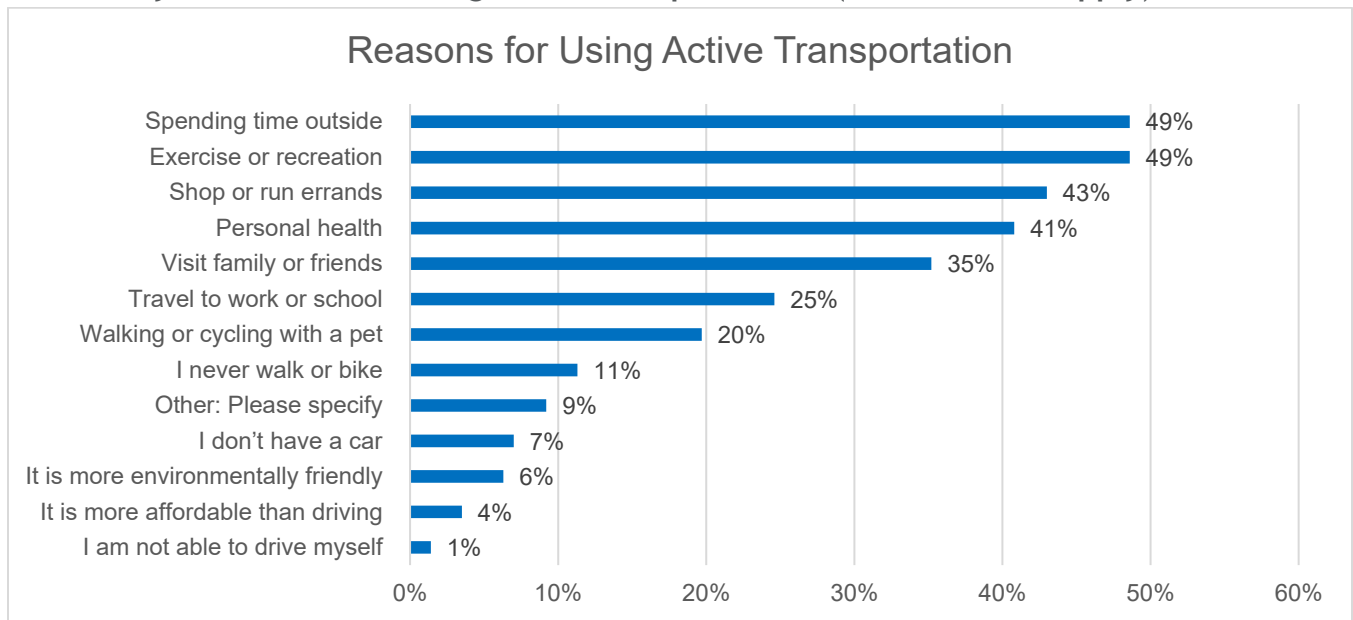


Figure 8: Bar graph of reasons for using active transportation in Adams County

What would encourage you or your family to use active transportation?

Respondents had the option to choose from 21 factors that would encourage them and their family to use active transportation. The top five factors were:

- 57% of respondents chose “more sidewalks, trails, or bike lanes in the community”.
- 46% chose “better maintenance of sidewalks, trails, and streets”.
- 39% chose “having places to go that were closer to my home”.
- 36% chose “better lighting of sidewalks, trails, and streets”.
- 35% chose “wider shoulders along roadways”.

Is there anything else you would like for us to know about active transportation in Adams County?

Many respondents shared personal anecdotes, ideas on how active transportation could be improved, and locations where active transportation is critically needed. Some common themes found amongst the responses include:

- Need for more sidewalks, trails, and bicycle paths:
- Public transportation options and access to transportation:
- Improved safety (speeding, roadway safety, etc.):
- Funding to build projects:

Demographics

Several questions asked respondents about their sociodemographic information, such as their age, how many automobiles they have in their household, where in Adams County they live, age, gender, race, and if they have a disability. This portion of the survey was optional and helps to understand how representative the survey was of the community as a whole and the specific populations of interest.

Here are the key demographics of the respondents:

- » 70% were female.
- » 47% were over the age of 65.
- » 96% were White/Caucasian.
- » 42% of respondents identified as a person with a disability or a chronic condition that limits their mobility.
- » Most of the respondents resided in West Union (37%) or Peebles (18%).

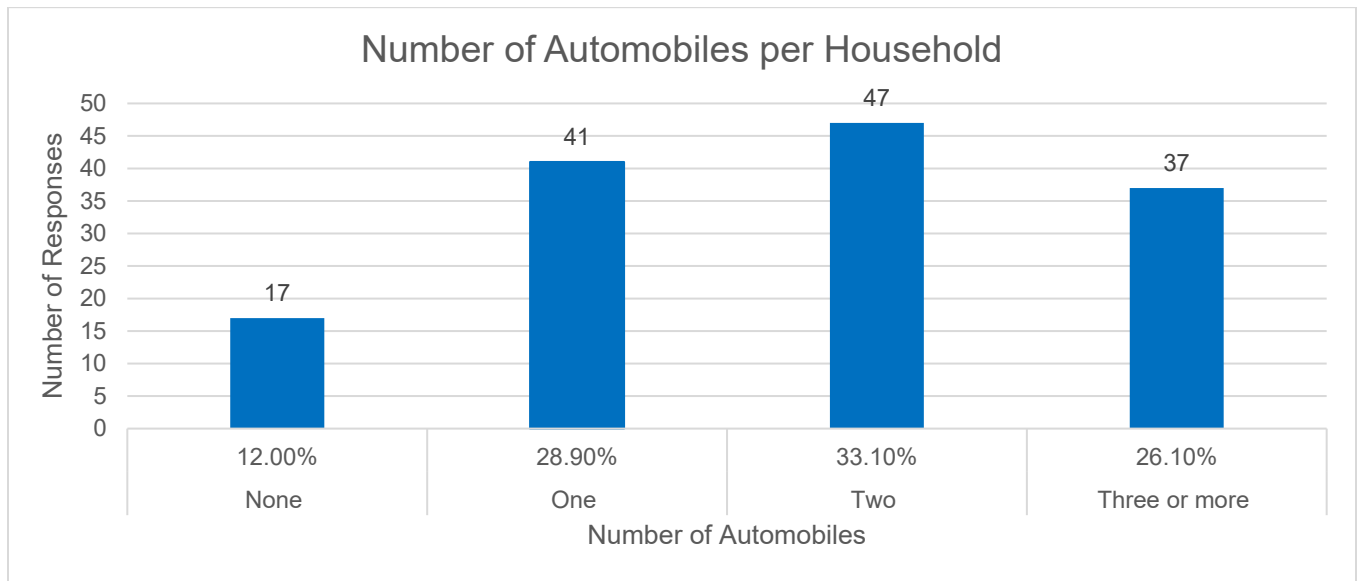


Figure 9: Bar graph of number of automobiles per household

MAPPING EXERCISE

Steering Committee members as well as the public had the opportunity to participate in a mapping exercise at in-person meetings and events, via the online mapping tool, and on the hardcopy surveys. The mapping exercise asked about several items related to current active transportation travel and desired changes for the future.

- » What destinations do you walk, bike, or roll to?
- » What destinations would you like to walk, bike, or roll to in the future?
- » Along which routes or streets do you currently walk, bike, or roll?
- » Along which routes or streets would you like to walk, bike, or roll?
- » What are the barriers to walking, biking, or rolling in Adams County?
- » What intersections are challenging to cross or make you feel unsafe or uncomfortable?
- » What locations do you have safety concerns?
- » Where are active transportation facilities needed?

The Core Team assessed the results from the online and physical version of the maps and were able to determine challenging and unsafe locations as well as destinations and routes for active transportation in the villages and countywide; these are detailed in the Existing Conditions chapter.



Figure 10: Destinations and barriers identified during public engagement

Round 1 Engagement Highlights

- 156 Survey Responses and 188 Map Comments received
- People are concerned about the safety of people using active transportation, especially children and the Amish community
- People would primarily use active transportation to exercise or for recreation
- People would like to see more sidewalks, trails, and bike paths in Adams County
- People would like to see active transportation facilities like sidewalks along State Route 41
- People believe that addressing safety concerns, such as speeding, pedestrian and bike safety on roadways should be a main priority to address in the plan

ROUND 2 COMMUNITY ENGAGEMENT

For the second round of engagement, conducted in July and August 2023, the project team presented a draft long-term active transportation network and a top ten list of priority project locations. Community members were asked to provide feedback on the long-term network to make sure it represents their ideas and will achieve desired safety and connectivity. They could indicate which of the priority projects they thought were most important, and if they had other ideas for priorities or routes.

POP-UP EVENTS

The team held two pop-up events, one at the Adams County Fair on July 14 and one at the Back-to-School Health Fair on August 12 (Figure 11). The project team engaged with over 200 people total at these two events and over 30 specific comments were provided about the long-term network and priorities. Many of those that engaged with the project team also participated in the dot exercise, resulting in 284 “votes” on priority projects (Figure 12).



Figure 11: Community members discuss priority project locations at pop-up engagement events at the Adams County Fair and Back-to-School Health Fair

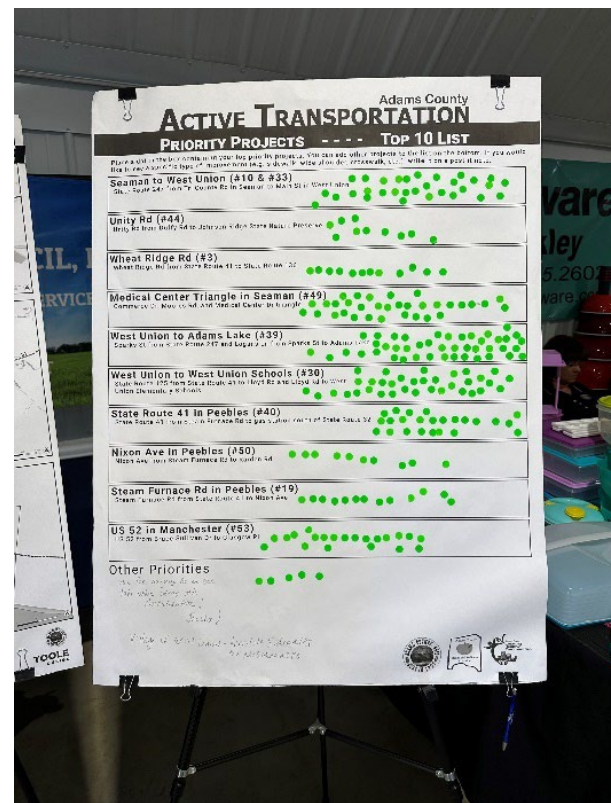
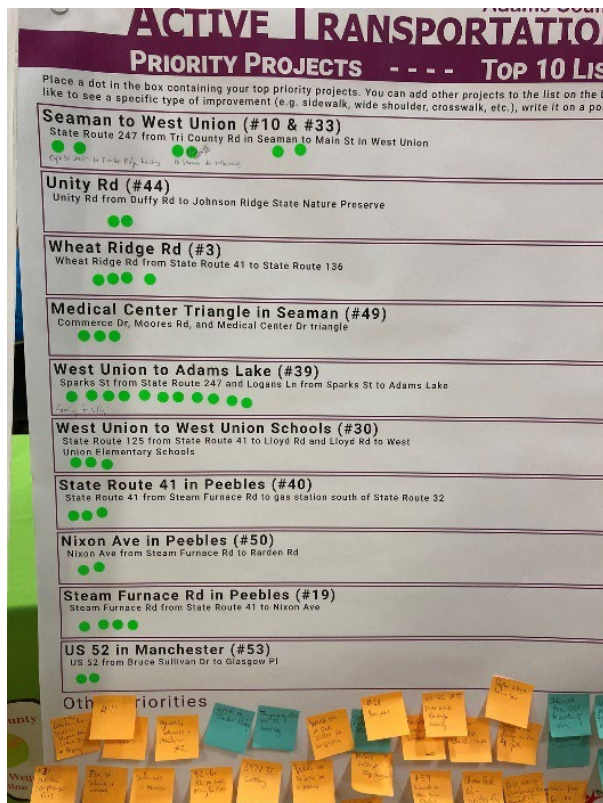


Figure 12: Boards from the pop-up events show votes (dots) for individual priority project locations

ONLINE AND PRINT ENGAGEMENT

The project website was updated, and a new online survey was published for public feedback. This new survey was promoted via social media and email list serves. Printed versions of the new survey were also distributed to senior citizens through the Adams County Senior Citizens Council. 31 people completed the online survey, and 30 people completed a paper survey.

DIRECT ENGAGEMENT

The project team also coordinated direct outreach with the Amish community including reaching out to the Amish Bishops, Oliver Township Trustees, and the owner of the Stutzman bicycle shop. Below is a summary of the input received:

- » Oliver Township is the beating heart of tourism in Adams County. As tourism grows, Amish travel routes should be prioritized to enhance the safety of Amish community members and families that travel these routes including Wheat Ridge Rd, Unity Rd, Graces Run Rd, Duffy Rd, Tater Ridge Rd, State Route 247, and State Route 137.
- » The priority location for immediate improvements is on Wheat Ridge Rd between Poole Rd and Shelton Rd. The volume of motor vehicle traffic creates hazardous conditions for people riding bicycles and buggies. The preference is to have wider shoulders or pull-offs, at least when approaching certain hills.
- » Individuals that provided input like the idea of installing slow moving vehicle detection and warning signs.
- » Improvements on State Route 247, Unity Rd, and others in the area are needed, but less of a priority than Wheat Ridge Rd.
- » Amish community members often travel before the sun rises, so visibility is a primary concern.
- » Motor vehicle drivers often do not provide sufficient space when passing people riding bicycles.
- » The Amish community would like to be engaged during the design process.

What are your priorities for walking and biking in Adams County?

Comment on our draft Active Transportation Plan

Comment online:
<https://tinyurl.com/5yrj3f8z>

Scan Here

OR in person:

- July 14 - Adams County Fair, Adams County Senior Citizens Council Booth, 11-3pm
- August 12 - Back to School Health Fair, Adams County Christian School

Adams County Health and Wellness Center logo, Adams County logo, and Adams County Community Development logo are also present.

Figure 13: Facebook post advertising the public engagement opportunities for Round 1

PRIORITIZATION FEEDBACK

The feedback from the Steering Committee and the public on the top ten list of priority project locations showed very strong support for West Union to Adams Lake as well as others shown below.

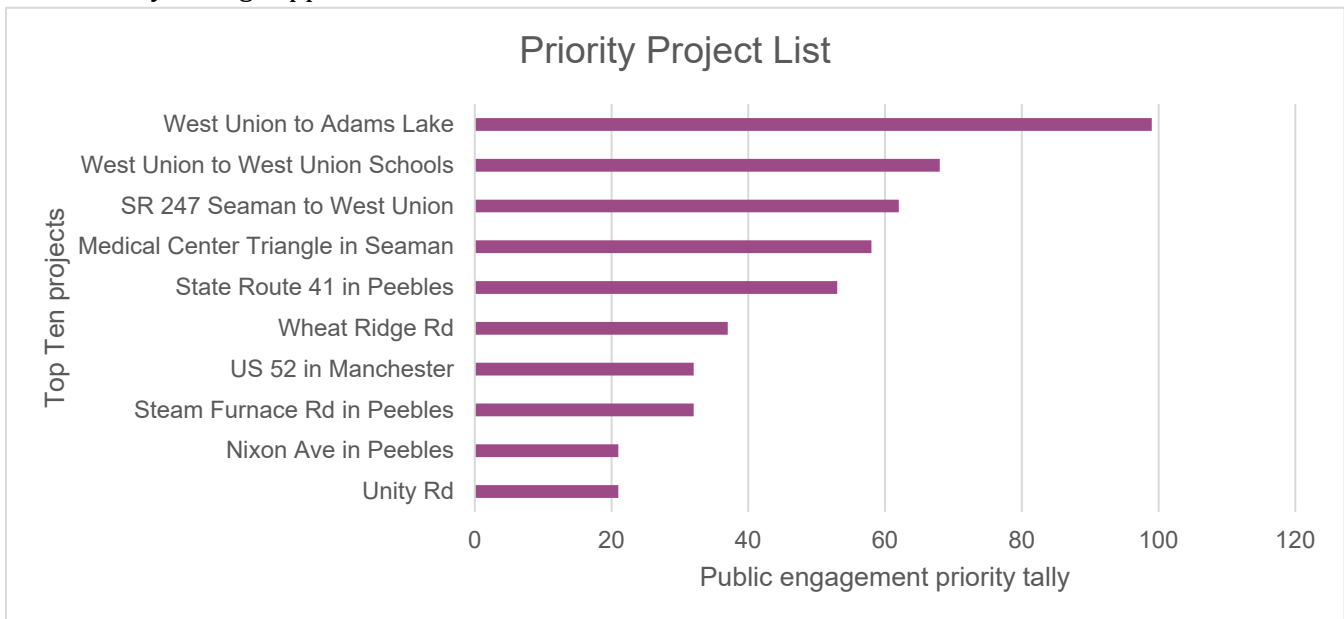


Figure 14: Bar graph showing votes for priority projects

Other projects mentioned by several people that were considered for addition to the priority list are:

- Manchester – rear connection to schools via Cemetery/Linda Vista
- East Adams County – Lynx Drive
- Winchester to Seaman via Tri County Rd
- Cherry Fork and Graces Run (perhaps extend to Winchester)
- US 52 River Trail
- Peebles – US 41 crossing at Dairy Bar

Several additional projects were also identified to add to the plan during this phase of engagement including:

- Peebles – Church St from Main St to Library (local route)
- West Union – 41 & 125 intersection near UDF (crossing improvement)
- Winchester – 136 & Tri-County Rd (crossing improvement)
- Adams Lake circular trail (local route)

Round 2 Engagement Highlights

- Around 250 individuals engaged
 - 2 pop-events engaging around 200 people
 - 61 online and paper surveys
- 483 individual votes indicating support for priority projects
- The Amish community sees Wheat Ridge Rd as the priority location for improvements

EXISTING CONDITIONS





EXISTING CONDITIONS

This chapter examines several elements of Adams County that impact active transportation. It presents a demographic profile of Adams County, and a plan and policy review summarizing existing active transportation and related efforts to date, framing the current planning process as a logical next step in Adams County's active transportation evolution. It summarizes the existing transportation system and includes outputs from analyses that examine the active transportation system from various perspectives.

DEMOGRAPHIC PROFILE

Adams County is a rural county in southern Ohio that is home to over 27,000 people according to the 2020 US Census. Most of Adams County's communities are small and rural. Throughout the county, there are several villages including: Manchester, Peebles, Seaman, West Union (county seat), and Winchester. The county also features many small townships such as Bratton, Brush Creek, Franklin, Green, Jefferson, Liberty, and many others.

There is a large Amish population in the West Union area, approximately 495 people. According to ODOT's Statewide Amish Travel Study (2020), the West Union Amish community allows cycling and many children bike to school, and horse-drawn buggies are also used.¹

As of July 2021, there were over 12,000 housing units in the county. The average value of a housing unit is \$118,300 while the average rent is \$593. The median household income is \$44,467, which is lower than the state's average (\$58,116) and the United States' average (\$64,994). Just over 19 percent of the county's

¹ Ohio Department of Transportation, Amish Travel Study, 2020. <https://www.transportation.ohio.gov/programs/statewide-planning-research/statewide-transportation-planning/amish-travel-study>

population lives in poverty. Additionally, 13 percent of households do not own a computer and 23 percent do not have access to broadband internet.²

The top employment sectors in the county are Health Care and Social Assistance, Retail Trade, and Manufacturing.³ In the northern portion of the county, GE Aerospace operates its largest jet engine testing facility and Heidelberg Materials operates a significant limestone mining facility. Other major or significant employers include the county’s school districts, county government, local nursing homes, Adams County Regional Medical Center, and Walmart. Agriculture is also an important part of the County economy.⁴

Adams County has nearly 7,000 school-aged children who attend one of the nine public schools in the county’s two school districts. Colleges in adjacent counties include Maysville Community & Technical College, Southern State Community College, and Shawnee State University. Of Adams County residents over the age of 25, 53 percent have a high school graduate degree, 24 percent have associate’s degree or some college, and 13 percent have a bachelor’s degree or higher.⁵ Figure 15 through Figure 18 display basic demographic data for the county including race, age, car ownership, and commute mode share. The majority of county households (98 percent) have access to at least one car, and 82 percent of community members drove alone to work, followed by just under 10 percent carpooling and over four percent working from home.

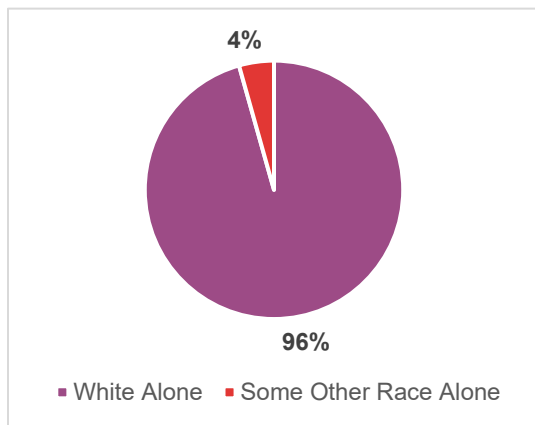


Figure 15. Adams County Race

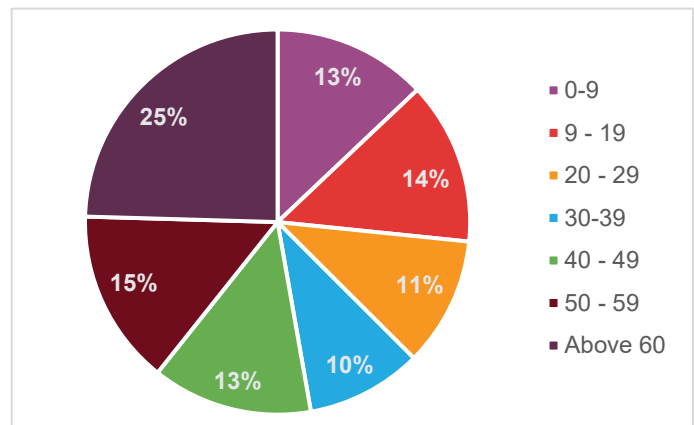


Figure 16. Adams County Age

² [Census Reporter. Adams County](#)

³ Longitudinal Employer-Household Dynamics, via US Census On the Map, 2019. <https://onthemap.ces.census.gov/>

⁴ Adams County, Ohio, "About", 2022. <https://www.adamscountyoh.gov/about/>

⁵ [Census Reporter. Adams County](#)

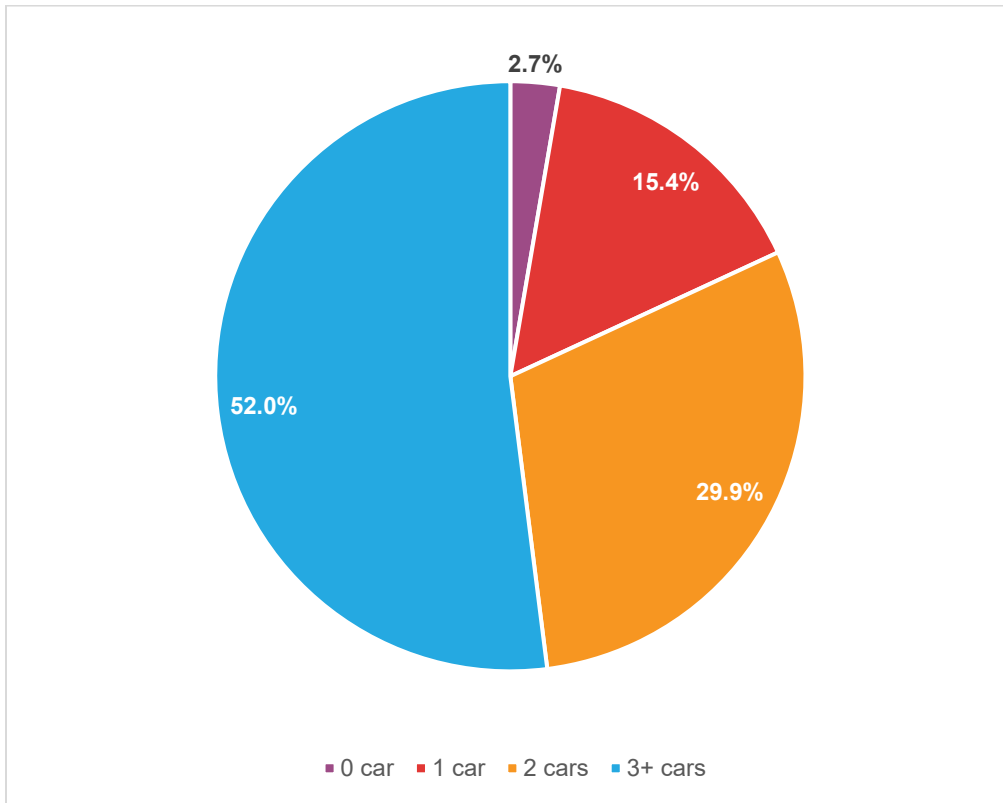


Figure 17. Adams County Car Ownership by Household

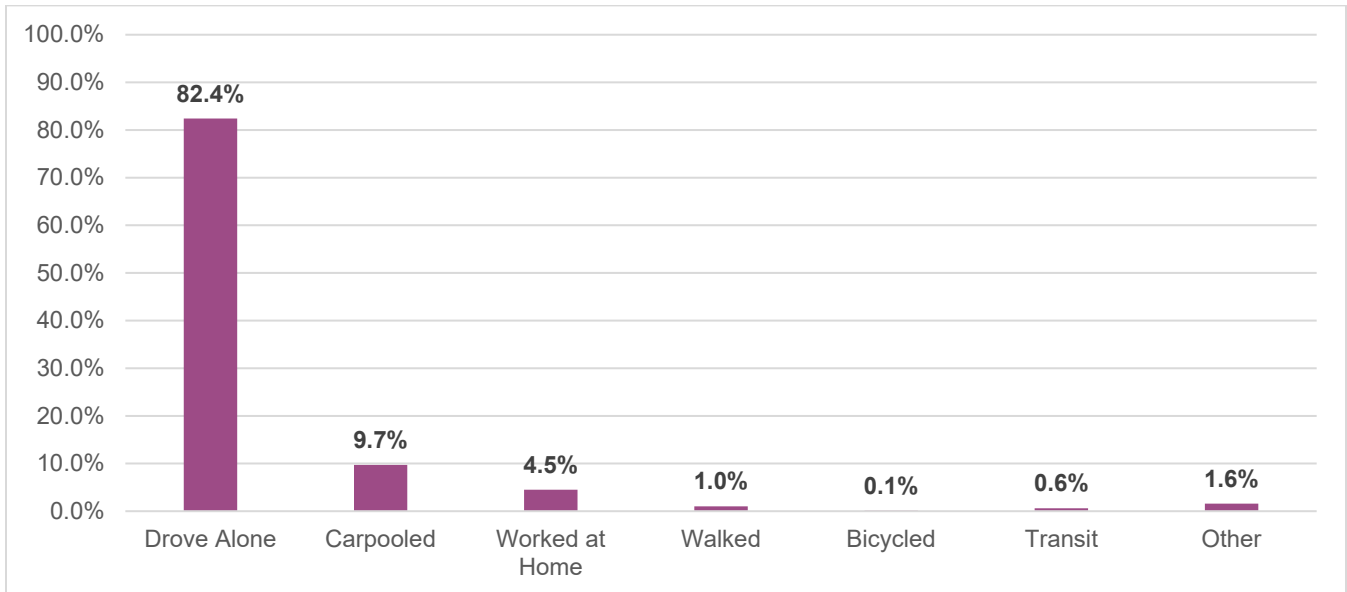


Figure 18. Adams County Commute Mode Share

EXISTING PLANS, POLICIES, AND SUPPORTIVE PROGRAMS

The Adams County Active Transportation Plan builds on prior plans and initiatives developed by entities within Adams County. Table 1 summarizes key takeaways from these plans/policies related to active transportation. Table 2 identifies programs that are supportive of active transportation.

Table 1. Existing Plans and Policies

Plan/Policy	Lead Agency	Year Completed	Key takeaways (what proposed projects/policies will impact the active transportation plan?)
<i>Village of Seaman North Adams Elementary and High School - School Travel Plan</i>	Adams County/Ohio Valley Schools & Ohio DOT	2009	“Pathways to Education” is the name of the school travel plan. The vision is to create student lifestyle changes and create different modes of egress and regress to the new North Adams Elementary School that is both safe and health active for students. The plan includes strategies to improve safety including installing bike racks, school zone safety upgrades, crosswalks, walkways, education, training, walking programs, enforcement / supervision, and monitoring / evaluation.
<i>Inspire to Improve: Village of Manchester and Manchester Local School District - School Travel Plan</i>	Village of Manchester and Manchester Local School District	2009	“Inspire to Improve” is the name of the school travel plan. The vision is to create a healthy community by inspiring students and community members to improve their health by walking and bicycling. Safety improvements identified in the plan include installing bike racks and sidewalks, developing bicycle training, and implementing walk to school day events.
<i>Trails to Success: Village of Peebles Elementary & High School - School Travel Plan</i>	Adams County/Ohio Valley School District and Village of Peebles, Ohio	2009	The goal of this plan is to evaluate current student lifestyles and create a plan that will substantially change their lifestyles through various program activities. The plan will create, through various means of transportation, different modes of travel to the new Peebles Elementary School that are both safe and health active for students. Recommendations developed through the planning effort include installing asphalt and concrete paths, school zone safety upgrades, and an on-line evaluation survey.

Plan/Policy	Lead Agency	Year Completed	Key takeaways (what proposed projects/policies will impact the active transportation plan?)
<i>Adams County Economic Development/ Tourism Plan</i>	Adams County, Ohio Valley Regional Development Commission	2015	In regard to transportation goals, expanding bike travel was seen as a major priority. The plan proposed the development of the Norfolk Southern Railroad line into a rail to trail pathway connecting Winchester, Seaman, and Peebles. In this way, with more tourism, the villages can become stronger “Trail Towns” providing needed amenities to trail users, visitors, tourists and local residents. To revitalize the downtowns of the villages, the plan calls for the utilization of the Trail Town Redevelopment Strategies and the Main Street approach developed by the National Trust for Historic Preservation.
<i>Coordinated Public Transit-Human Services Transportation Plan</i>	Adams Brown Counties Economic Opportunities, Inc.	2021	This plan fulfills the requirements of the Federal Transit Administration (FTA) under the Fixing America’s Surface Transportation (FAST) Act. The plan is intended to identify all community resources and identify and prioritize community transportation needs. Goals identified in the plan include: <ul style="list-style-type: none"> • Purchase and replace equipment. • Utilize technology to improve service. • Seek more funding opportunities. • Hire a mobility manager. • Expand public outreach and education. • Conduct a feasibility study for expanding services.
<i>Impediments to Fair Housing Choice</i>	Adams County Economic & Community Development Office	2019	According to the study, the median home value of owner-occupied units rose by \$25,500 between 2000 and 2010, a 72.5% increase. In 2010, 98.6% of homes in Adams County had a value of less than \$100,000 in contrast to 98.1% in 2000. Median rent rose by only \$150, a 71.7% increase from 2000 to 2010. From 2000 to 2010, median household income rose by \$1,600 or 27 % while median home values rose by 72.5 % and median gross rent values rose by 71.7 %. Adams County representatives report an increase in the number of their families who are being forced to move in with relatives because they cannot afford the cost of rent or housing options are not available to them. The plan recommends encouraging lending institutions to offer educational services to clients to assist them in completing lending applications, understanding credit and homebuyer education.

<i>Plan/Policy</i>	<i>Lead Agency</i>	<i>Year Completed</i>	<i>Key takeaways (what proposed projects/policies will impact the active transportation plan?)</i>
<i>Adams County Land Use Plan</i>	Adams County	2011	<p>The transportation vision of this plan is to “Have an efficient, integrated, safe transportation system providing support for a vibrant economy while maintaining the rural flavor of our communities.”.</p> <p>This vision is to be realized through the following transportation goals:</p> <ul style="list-style-type: none"> • Support improvements to state highways, county roads and bridges, and township roads. • Support development and implementation of roadway construction standards which are practical and reasonable for both county entities and developers. • Support airport improvement projects. • Support continuation of rail service to county and explore additional uses. • Explore development of river commerce. • Explore development of bus service. • Explore development of pedestrian and bicycle paths.
<i>HUD-RED Study</i>	Ohio Valley Regional Development Commission	2009	A study of the fire protection services for Adams County identified all housing units and determined if they were in protected and unprotected areas for fire protection. This study has direct implications for the future development of the county as growth in unprotected areas mean higher insurance costs for homeowners and slower response times for fire protection services.
<u><i>Comprehensive Transportation Plan</i></u>	Ohio Valley Regional Development Commission	2021	<p>The eight goals of the OVRDC’s Long Range Transportation Plan emphasizes key factors to build a robust transportation system: Safety, Economic Vitality, Preservation, Efficiency & Reliability, Connectivity, Accessibility & Mobility, Security, and Environmental Stewardship. The plan recommendations include things such as:</p> <ul style="list-style-type: none"> • Improve access management policies. • Support both recreational bike trail and proposed bike routes facilities expansion in the OVRDC region. • Expand sidewalk network in the largest population centers to cover current gaps. • Evaluate high speed/high crash locations for safety improvements.
<u><i>Ohio’s Wilderness Tourism Strategy</i></u>	Ohio Valley Regional Development Commission	2022	<p>As an organizational concept, “wilderness” echoes the values of many local organizations in promoting area tourism, effectively captures visitor interest in the region, while highlighting connections between the various types of local attractions. The Ohio’s Wilderness Tourism Strategy has three elements: destination development, marketing, and organization. Initiatives proposed under these three initiatives related to active transportation include:</p> <ul style="list-style-type: none"> • Invest in trail development: The area’s forests are known as a backpacking destination, as well as for hiking trails. • Develop new bicycle path segments: take a lead in coordinating a regional off-road bicycle path plan that includes existing routes and recommending new routes and connections to cross the region.

<i>Plan/Policy</i>	<i>Lead Agency</i>	<i>Year Completed</i>	<i>Key takeaways (what proposed projects/policies will impact the active transportation plan?)</i>
<u>Walk.Bike.Ohio</u>	Ohio DOT	2020	<p>WBO is a beneficial resource as it provides a vast amount of information for municipalities who are attempting to expand or improve their active transportation inventory and network. WBO provides an overview for why active transportation is beneficial, strategic goal areas for the state of Ohio, and a plan framework for areas that are producing active transportation plans. Their analysis states that the role of the local government is:</p> <ul style="list-style-type: none"> • Developing an ATP and supporting policies, • Leveraging funding, • Overseeing construction and development, • Encouraging events and education around active transportation, • Maintaining and overseeing operations, and • Evaluating active transportation systems through performance measurements.
<u>Ohio Trails Plan</u>	Ohio Department of Natural Resources	2019	<p>The plan identifies large areas of the state lacking significant mileage of multi-use trails. In southwest Ohio, there are large expanses of counties, including Adams County, without a multi-use trail network. Development of multi-use trail and active transportation plans can help connect counties that lack trail systems with people, places and opportunities.</p>
<u>ODOT Amish Travel Study</u>	Ohio DOT	2020	<p>This study serves as an update to the Amish Buggy Safety on Ohio's State Roadway System Analysis and Action Plan, 2000. This Plan identifies state routes Amish and Non-Motorized users (i.e. bike and pedestrian) frequent and formulate recommendations to improve safety and maintenance of pavement along those roadways. North Adams County is highlighted as a probable expansion area for the existing Amish community.</p> <p>State Route 137 (from State Route 136 to State Route 247) was identified as the most frequently used route for bicyclists and pedestrians. Many Amish school children use this route to travel to/from school.</p> <p>Prioritization criteria was used to rank recommendations from low to high priority. High priority countermeasures include: Widen shoulders to 4', fill sidewalk gaps, and create buggy lanes by increasing shoulder widths to 8' on high traffic routes.</p>

Table 2. Existing Supportive Programs

Program Name	Program lead (organization)	Target Audience	Key Takeaways (how does this program support active transportation?)
Ohio River Way Program	Ohio River Way Organization	Recreational	<ul style="list-style-type: none"> • The VISION of the Ohio River Way is to welcome all people to safely enjoy land and water trails connecting the natural riches and vibrant communities of the Ohio River. • The Ohio River flows along the south border of Adams County, ensuring active transportation access to the riverfront is a key element of active transportation recreation. • The "Digital Guide to the Ohio River" is designed to help boaters, paddlers, anglers, cyclists and motorists safely explore the Ohio and its historic river communities. • At times, cyclists can travel between the two-lane roads on the south and north sides of the Ohio River using a number of bridges and ferries. • Typically, there are more amenities for cyclists on the north side of the river. • There is often reasonable space for cyclists to share the road with drivers along the side of roadways. At times there are wide berms.
Adams County Creating Healthy Communities	Adams County Health Department	County residents in areas with high incidence of chronic disease	<p>The Ohio Department of Health's Creating Healthy Communities (CHC) funds 22 local health departments throughout Ohio to implement policy, systems and environmental changes that increase access to healthy foods and opportunities for active living.</p> <p>Vision: Vibrant Ohio communities where everyone has access to healthy food and opportunities for active living</p> <p>Mission: Activating community-led solutions to create sustainable change in policies, places, and population health</p> <p>The Adams County Health & Wellness Coalition has been active in Adams County since 2010, leading the CHC work plan in a variety of programs and initiatives for active living, including a bicycle safety class, development of a Storybook Trail, development of walking paths, Safe Routes to School infrastructure projects, free helmet distribution, development of bike park and skate park, bicycle parking and fix-it stations, fitness trails and bicycle giveaways at local elementary schools to promote youth physical activity.</p>

ANALYSES

After mapping the existing transportation system, the project team reviewed available data to better understand the connectivity of the network, safety, demand, and needs. The following section provides a summary of each existing conditions analysis.

SUMMARY OF FACILITY INVENTORY

Development and Land Use Patterns

Adams County is a largely rural county with a low density of development and population. Population and jobs are most concentrated in the five villages. The county features large areas of undeveloped land and open space, as well as regionally and environmentally important attractions such as Serpent Mound, The Edge of Appalachia Preserve, Adams Lake State Park, Robert H. Whipple State Nature Preserve, Brush Creek Forest, Davis Memorial State Nature Preserve, Tranquility Wildlife Area, and portions of Shawnee State Forest/Wilderness Area. Nature trails are common in these areas. The Ohio River borders the southern edge of the county and offers recreational as well as economic opportunities.

Active Transportation Infrastructure

Adams County currently has very little dedicated infrastructure for active transportation (see Figure 20). The county's villages have some limited and disconnected sidewalks, mostly within business districts. There are no on-road bicycle facilities nor any long-distance trails. Seven pedestrian projects have been funded through the Ohio Department of Transportation (ODOT) funding sources in recent years; these have included Safe Routes to School sidewalk and traffic control projects that were completed in Peebles and Manchester. A Transportation Alternatives-funded project in West Union will provide an 8-foot wide shared-use path along the south side of State Route 41 through the business district southwest of the village center; the first phase of the project is completed from West Walnut Street to CIC Boulevard, with the second phase to continue the path to McHenry Drive to be completed in 2024.

Ohio is establishing a network of [State and US bicycle routes](#) intended to provide bicyclists with safe and convenient connections through and to population centers and destinations in Ohio. The system will serve as a strong backbone that local and regional bike networks can build on and connect to across the state. These routes are generally oriented towards long-distance cyclists. Currently there is one proposed route, State Bike Route 10, that travels east to west through Adams County along State Route 125 through West Union. This route does not currently have any dedicated bicycle infrastructure or signage and is considered to present a medium to high level of stress to bicyclists. In Brown County, the route connects to US Bicycle Routes 21 and 25; to the east it connects to Shawnee State Forest and the city of Portsmouth.

The Buckeye Trail is a 1,444-mile-long route that completely circles the state. In Adams County, the Buckeye Trail runs along Straight Creek Preserve, Serpent Mound, and Shawnee State Forest. Manchester

and Peebles are connectors and West Union is just a little over two miles from the trail.⁶ Unpaved hiking and bridle trails are present in many of the parks and nature preserves around the county.

The 2015 Adams County Tourism Plan proposed the development of a 23.7-mile trail along the Norfolk Southern rail line between Winchester, Seaman and Peebles. It also proposed bicycle facilities or routes along State Route 136 (Winchester to Manchester), State Route 136 / State Route 41 (Manchester to West Union), State Route 41/ State Route 73 (West Union to Peebles and Serpent Mound), and State Route 247/ State Route 52 (West Union to the Ohio River)⁷. As of the start of this plan, no progress had yet been made on these proposals.

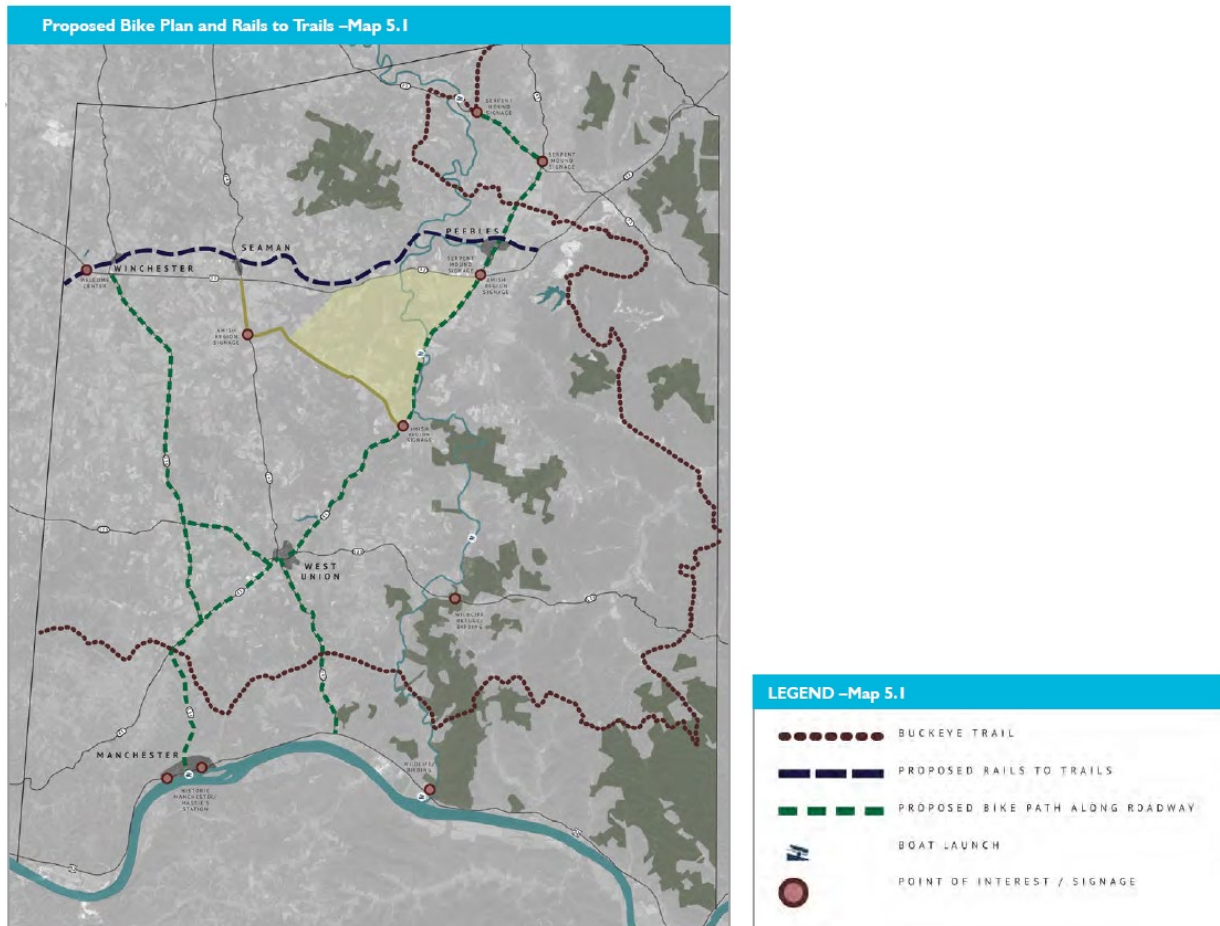


Figure 19. Adams County Tourism Plan – Proposed Bike Plan and Rails to Trails

⁶ Directly from tourism plan. Other resources: <https://www.nature.org/en-us/get-involved/how-to-help/places-we-protect/?s=Ohio&fa=open-to-the-public,limited-access,closed-to-the-public>; https://www.nature.org/content/dam/tnc/nature/en/documents/ADAMS_HIKE_FINAL.pdf, <https://arcofappalachia.org/preserves/>

⁷ From 2015 tourism plan

Public Transit Services

There are four primary public transportation providers within Adams County: Adams County Senior Citizen's Council, Adams County FRS Transportation, Adams Brown Counties Economic Opportunities, Inc. (aka ABCAP), and Venture Productions, Inc. Job and Family Services contract with Adams County Senior Citizens, FRS, and ABCAP for their transportation needs.

These providers serve seniors 60+ for medical appointments, Medicaid recipients for medical appointments, persons with physical and mental disabilities, persons getting WIC and Medicaid predeterminations, and job and education program participants. Transportation is offered within the county and to out-of-county destinations around Ohio and Kentucky for medical needs.⁸ One long-distance Greyhound bus is available, connecting to Athens and Cincinnati with stops in Peebles and Seaman.

In 2022, FRS conducted a six-month pilot to provide deviated fixed route bus service in West Union, serving thirteen stops with hourly service, such as groceries, hospital, library, senior and low-income housing, Job and Family Services, courthouse, and homeless shelter. During the trial, the service provided over 1,300 pick-ups; however, demand was not sufficient to continue the program past the pilot period.

Adams and Brown Counties have a shared Mobility Manager whose goal is to remove transportation barriers and increase mobility for residents. Their role includes developing a Local Coordinated Plan for the county, connecting community members with, and informing them of, their transportation options, advocating for mobility options, and coordinating with partners to improve services in the area.

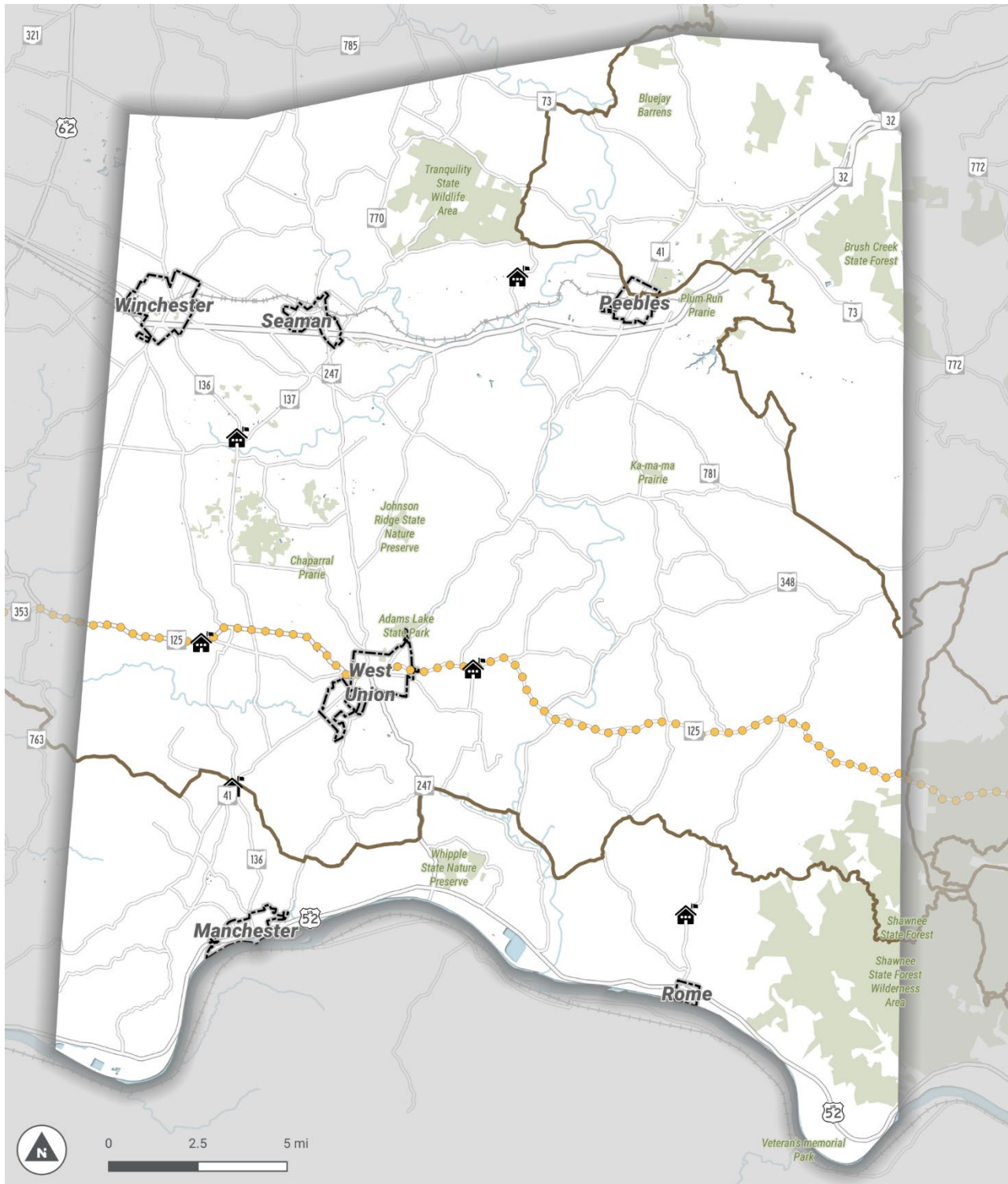
Roadway Network

The major roadways in the county are US 52 along the Ohio River (designated as the Ohio River Scenic Byway), and State Routes 32 (James A. Rhodes Appalachian Highway), 41, and 73. All villages are located on state routes, which are maintained by ODOT outside of village limits and by the villages themselves, if incorporated, inside the village limits. The County Engineer is responsible for 375 miles of county roads outside of villages. Townships and villages own and maintain roadways in their jurisdictions.

There is one active rail line, operated by Norfolk and Southern Corporation, that runs from east to west through Winchester, Seaman, and Peebles. There is a small offshoot of the rail line east of Peebles that is classified as abandoned.

The county's terrain features rolling Appalachian foothills where topography can be a barrier for people biking and can constrain space for adding sidewalks, bikeways, and other active transportation facilities along roads. The design of state routes, oriented towards higher volumes of high-speed travel, can be at conflict with the needs of the villages and communities they pass through, where they serve as the main street but often do not offer safe and comfortable conditions for walking, biking, and crossing.

⁸ Direct from coordinated plan



Adams County, Ohio - Active Transportation Plan

Existing Conditions

- State Bike Route 10
- Buckeye Trail



School

Basemap

- ▭ County Boundary
- ▭ Park
- ▭ Village Boundary
- ▭ Waterbody
- +—+—+ Railroad



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Figure 20. Adams County Base Map

NETWORK CONNECTIVITY

Completeness of active transportation system

Active transportation facilities that connect people to jobs, schools, parks, and other destinations form a complete network. Filling in missing connections expands access and mobility for people walking and bicycling and providing multiple route options accommodates people of all ages and abilities. Evaluating network connectivity provides an understanding of where gaps in the network exist and whether low comfort or high comfort walking and bicycling facilities exist.

Gaps and Generators Mapping

Stakeholders were asked to identify routes/destinations and challenges/barriers for walking and biking throughout Adams County during the first Steering Committee Meeting on February 22, 2023. A gap analysis looks at missing connections in the active transportation network. This is done by identifying routes commonly used by people using active transportation or destinations they access. It also looks at challenging locations and barriers to active transportation use such as safety concerns. In addition to Steering Committee input, a public survey and in-person engagement event at the Venture Hawks Basketball Game at West Union High School on March 19, 2023 asked members of the public to identify specific locations for current and future destinations, safety concerns, and challenging intersections. General key takeaways from commenters included:

Countywide:

- | | |
|--|-----------------------|
| » Routes/Destinations | » Challenges/Barriers |
| ▪ Connections between all villages in Adams County | ▪ State Route 41 |
| ▪ Connections to state parks and recreational destinations | ▪ State Route 125 |
| ▪ Ohio River | ▪ Route 247 |
| ▪ Wheat Ridge Rd | ▪ Wheat Ridge Rd |
| ▪ Chaparral Prairie | ▪ Unity Road |
| ▪ State Route 41 | |
| ▪ Lloyd Road | |

Manchester:

- | | |
|------------------------|-----------------------|
| » Routes/Destinations | » Challenges/Barriers |
| ▪ Cemetery St | ▪ None listed |
| ▪ W Front St | |
| ▪ W 3 rd St | |

Peebles:

- » Routes/Destinations
 - Better sidewalks on State Route 41
 - Better crosswalks on State Route 41
 - Connection to McDonalds along State Route 41
 - Peebles High School
 - Stores along Main Street
 - S Nixon Ave
 - Hackleshin Rd
 - Steam Furnace Rd

- » Challenges/Barriers
 - Main St
 - Nixon Ave
 - Hackleshin Rd
 - Steam Furnace Rd

Seaman:

- » Routes/Destinations
 - Connections along Moores Rd to Adams County Regional Medical Center and along Medical Center Dr and Commerce Dr.
 - Adams County Medical Center
 - North Adams High School
 - North Adams Elementary School
 - Stores along Main Street

- » Challenges/Barriers
 - Moores Rd
 - State Route 32

West Union:

- » Routes/Destinations
 - Better sidewalks on State Route 41
 - State Route 41 from West Union to Adams Lake State Park
 - State Route 125 from West Union to West Union High School
 - Walmart
 - Save A Lot
 - E Main St
 - E Mulberry St

- » Challenges/Barriers
 - N West St
 - N Cross St

Winchester:

- » Routes/Destinations
 - Memorial Park
 - South St
 - Tri-County Rd

- » Challenges/Barriers
 - Main St

Evaluating crash trends and patterns

Evaluating crash trends and patterns identifies where crashes are currently occurring and provides a better understanding of what factors may be contributing to crashes. Understanding these crashes can lead to projects that have the greatest likelihood of improving safety for pedestrians and bicyclists. These analyses are especially important because Ohio is not trending in the right direction for bicyclist and pedestrian safety.

SAFETY

Crash Analysis

From 2012 through 2022, there were a total of 23 fatal or injury crashes involving people using non-motorized modes of travel in Adams County⁹. Table 3 shows the number of injury and fatal crashes by mode of travel, which are illustrated in Figure 21 and Figure 22.

Table 3. Fatal and Injury Crashes

Mode of Travel	Fatality	Injury
Pedestrian	3	7
Bicyclist	0	7
Animal with Rider or Animal Drawn Vehicle	3	3

Due to the low number of non-motorized crashes in Adams County, statewide data was reviewed to understand the characteristics associated with the locations where non-motorized crashes are occurring. The reports referenced below use the term “FSI crashes,” which refers to fatal and serious injury crashes.

Pedestrian

The Walk.Bike.Ohio Pedestrian Safety analysis report¹⁰ shows that there are far more non-intersection pedestrian FSI crashes in rural areas than intersection crashes. The highest number of rural non-intersection FSI pedestrian crashes occurred on collectors with less than four travel lanes and a posted speed limit of 40 mph or higher. The highest number of rural intersection FSI pedestrian crashes occurred where there were pavement marking control with roadways that have less than four travel lanes and a posted speed limit of 40 mph or higher.

Bicyclist

The Walk.Bike.Ohio Bicycle Safety analysis report¹¹ shows that there are far more non-intersection bicyclist FSI crashes in rural areas than intersection crashes. The highest number of rural non-intersection FSI bicyclist crashes occurred on collectors with fewer than four travel lanes and posted speeds of 40 mph

⁹ Ohio Department of Transportation (ODOT) Transportation Information Mapping System (TIMS) GIS Crash Analysis Tool (GCAT)

¹⁰ Ohio Department of Transportation. Walk.Bike.Ohio Pedestrian Safety. 2020.

¹¹ Ohio Department of Transportation. Walk.Bike.Ohio Bicycle Safety. 2020.

or higher. The highest number of rural intersection FSI bicyclist crashes occurred at intersections with stop signs with roadways that have less than four travel lanes and posted speeds of 40 mph or higher.

Amish Community

The Statewide Amish Travel Study¹² identifies buggy, bicycle, and pedestrian crash data within known Amish travel areas. The most common type of crash involving a buggy occurs while passing (sideswipe). Just under half of bicycle and pedestrian crashes in the Amish Statewide Travel Study occurred at night. According to public survey input for the Statewide Amish Travel Survey, aggressive motor vehicle driving was the most frequent safety concern in the West Union Area Amish community. Local Amish community members also expressed concern with the increased number of tourists in the area, with many not aware the Amish live in Adams County and do not expect to encounter a slow-moving vehicle on state routes in the area. State Route 247 between West Union and State Route 32 was identified as the route with the highest safety concern in the area and State Route 247 was the most difficult to cross due to high truck and traffic volumes.

Posted Speed Limit

Roadways and areas with higher posted speed limits (55mph) include major roadways, such as US Highway 52 and State Routes 32, 41, and 247. Posted speed limits are illustrated in Figure 23 and Figure 24.

Traffic Volume

High volumes of motor vehicle traffic, which are depicted via the dark red line on the map in Figure 25 and Figure 26, occur on the major highways such as State Routes 32, 41, and 125 primarily around the villages. For many of the local roadways, traffic volumes were not available.

¹² Statewide Amish Travel Study. Ohio Department of Transportation. March 2020.

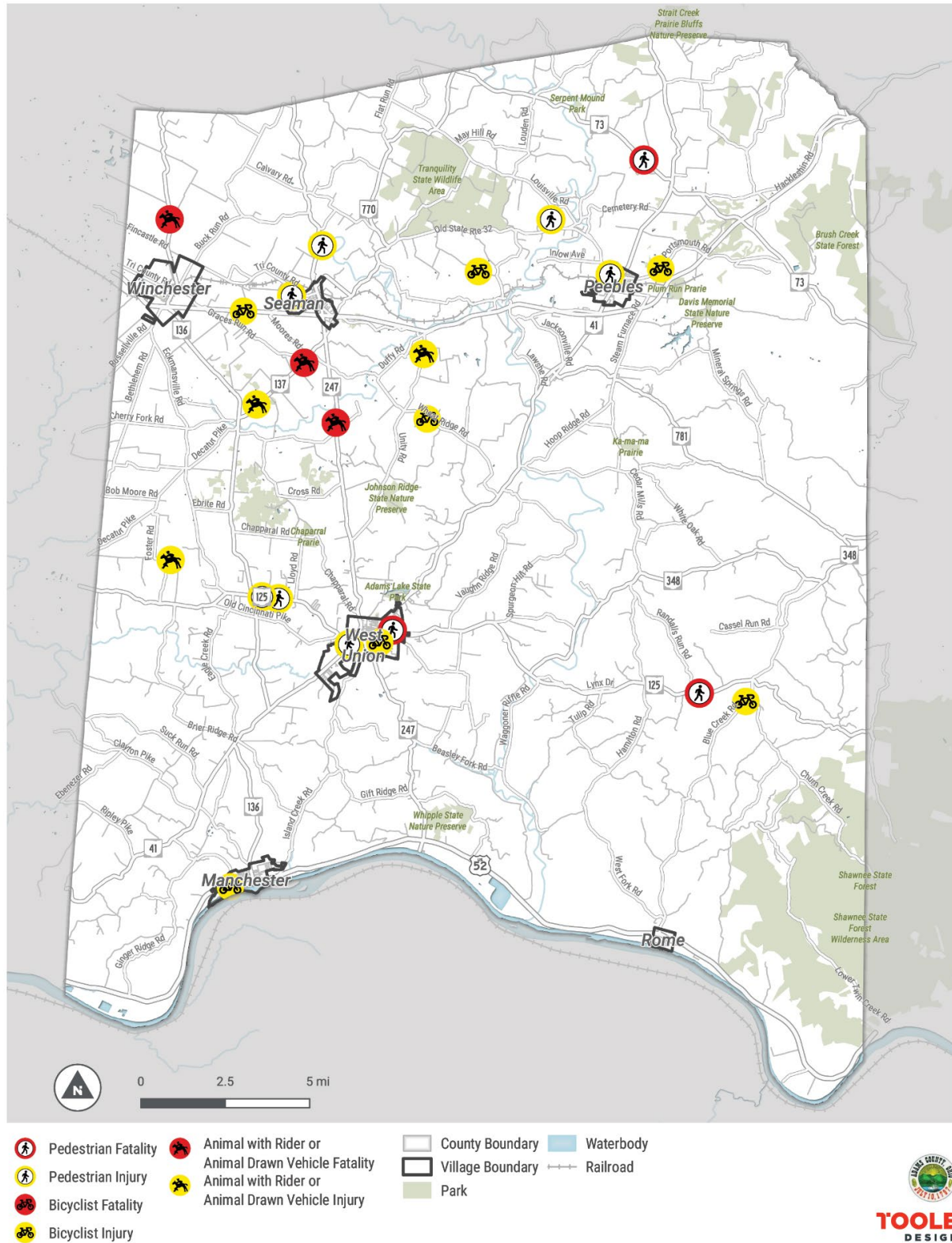


Figure 21: Adams County Non-Motorized Injury and Fatal Crashes

Non-Motorized Injury and Fatal Crashes

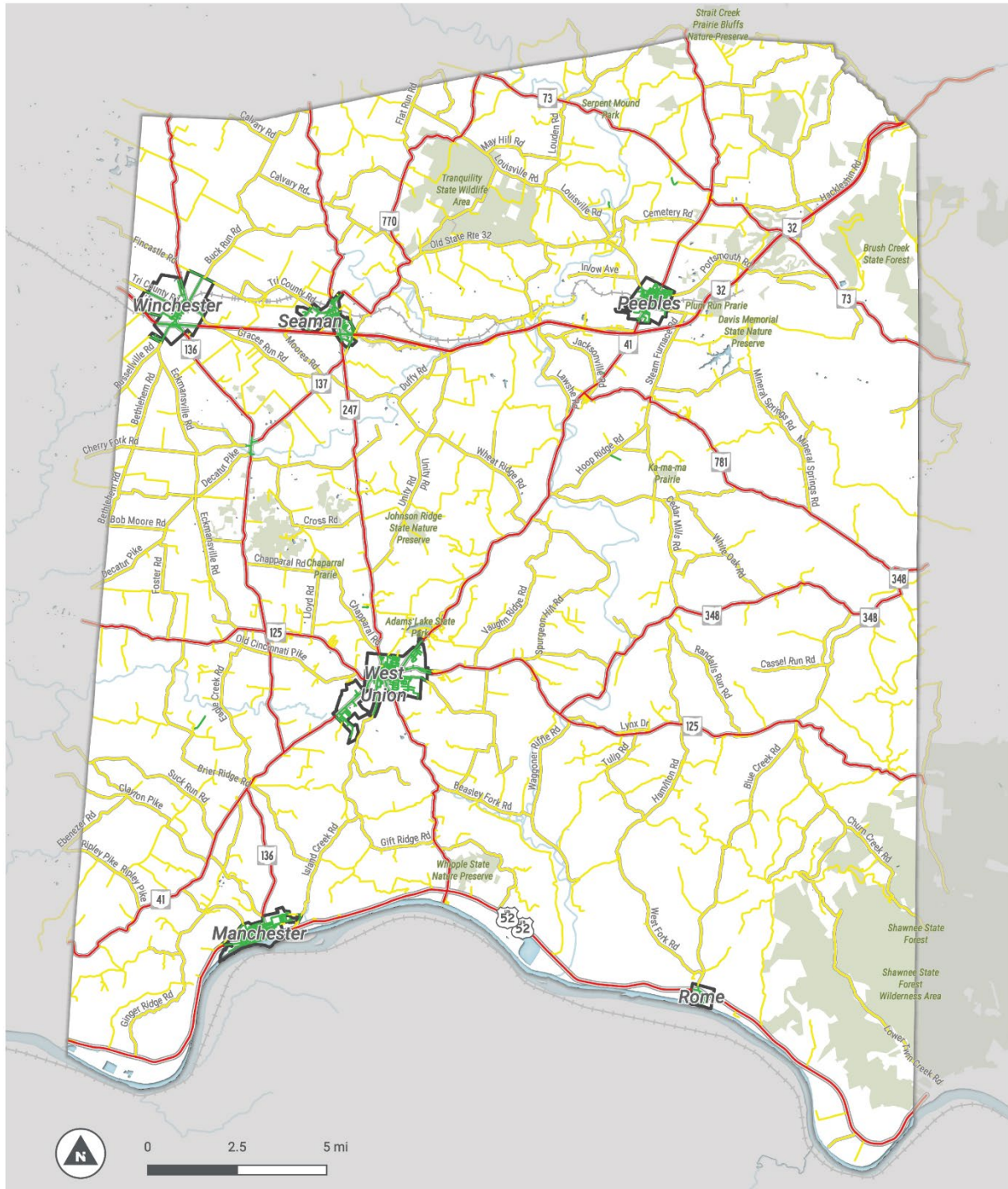
Adams County, Ohio - Active Transportation Plan



- | | | | | | | | |
|--|---------------------|--|--|--|------------------|--|-----------|
| | Pedestrian Fatality | | Animal with Rider or Animal Drawn Vehicle Fatality | | County Boundary | | Waterbody |
| | Pedestrian Injury | | Animal with Rider or Animal Drawn Vehicle Injury | | Village Boundary | | Railroad |
| | Bicyclist Fatality | | | | Park | | |
| | Bicyclist Injury | | | | | | |



Figure 22: Adams County Non-Motorized Injury and Fatal Crashes - Insets



Posted Speed Limit

- 25 mph
- 45 mph
- 55 mph

 County Boundary	 Waterbody
 Village Boundary	 Railroad
 Park	



Figure 23: Adams County Posted Speed Limit

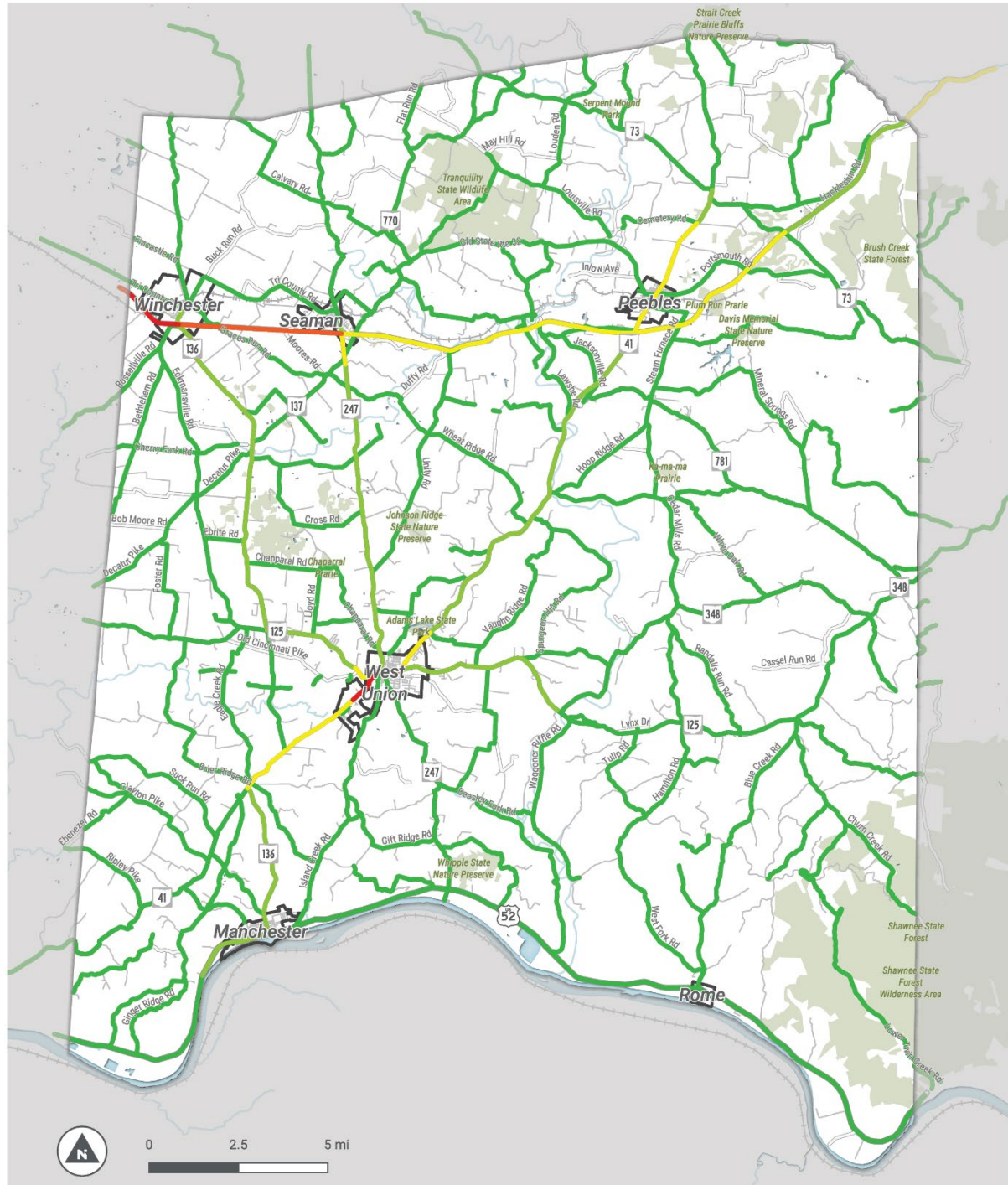
Posted Speed Limit

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Figure 24: Adams County Posted Speed Limit - Insets



- Less than 2,500
 — 7,501 - 10,000
 County Boundary
 Waterbody
- 2,501 - 5,000
 — Greater than 10,000
 Village Boundary
 Railroad
- 5,001 - 7,500
 Park

AADT is not available for roads symbolized in grey.



Figure 25: Adams County Traffic Volume

Average Annual Daily Traffic (AADT)

Adams County, Ohio - Active Transportation Plan



- Less than 2,500
 — 7,501 - 10,000
 County Boundary
 — Waterbody
- 2,501 - 5,000
 — Greater than 10,000
 Village Boundary
 -+ -+ Railroad
- 5,001 - 7,500
 Park

AADT is not available for roads symbolized in grey.



Figure 26: Adams County Traffic Volume - Insets

NEEDS AND DEMAND EQUITY ANALYSIS

Incorporating Equity in Active Transportation Planning

Active transportation options contribute to a more equitable transportation system by reducing barriers for people who do not use a motor vehicle. Many people do not drive because of ability, income, age, or a combination of these factors. The cost of owning and maintaining a vehicle can be a major burden, especially on low-income families. People without a vehicle need to access employment, school, grocery shopping, and a variety of other activities to fully participate in society. Transit, walking, and bicycling play a vital role in the overall transportation system by offering increased mobility, independence, and access to opportunity for people without vehicles.

National statistics point towards the need for equity in active transportation planning and design. Across the country and in Ohio, a disproportionate share of walking and bicycling fatalities occur among communities of color, older adults, and low-income populations.¹ Connected and accessible active transportation infrastructure for these groups results in better access to daily physical activity and improved quality of life.

1. Ohio Department of Transportation. (2020), Walk.Bike.Ohio Safety Analysis Reports. <https://www.transportation.ohio.gov/wps/portal/gov/odot/programs/walkbikeohio/existing-future-conditions-analysis/safety-analysis-reports>

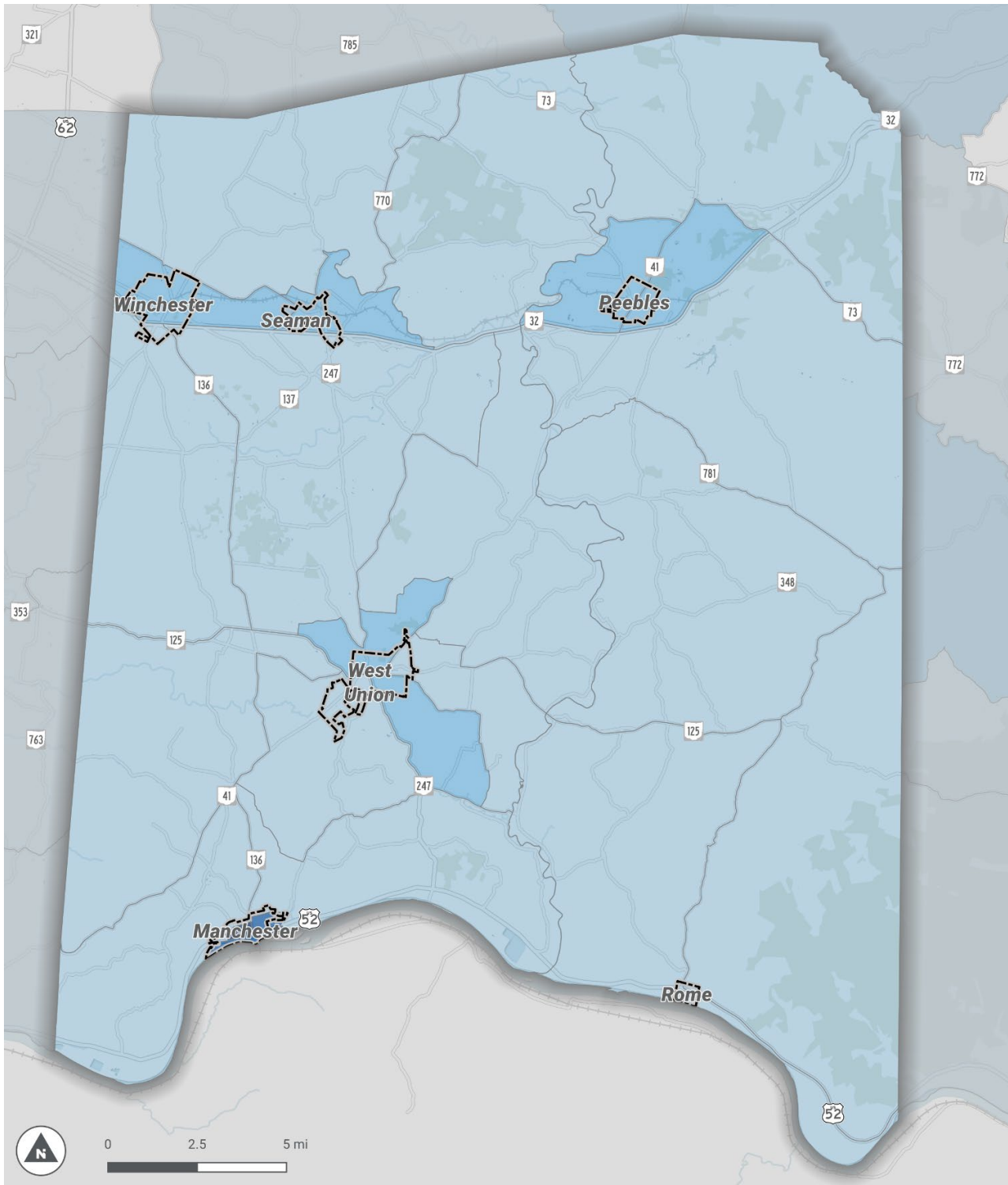
As part of its statewide bicycle and pedestrian plan, Walk.Bike.Ohio, the Ohio Department of Transportation (ODOT) performed an Active Transportation need and demand analysis for the entire state. It created composite scores for every census tract in the state, with scores assigned based on the presence of demographic and land use factors. These studies can help identify areas where active transportation infrastructure and programming may be needed and can help a community prioritize where to focus its efforts first.

[ODOT's Demand Analysis](#) identifies areas where residents are likely to rely more heavily on active transportation options for getting around. Demand indicators include employment density, population density, walk/bike commute mode share, park density, presence of college/universities, retail employment density, and number of people 200% below poverty line. Figure 27 identifies block groups in Adams County that are likely to have a higher demand for walking and cycling opportunities, indicated by darker areas on the map. The Village of Manchester was found to have relatively "high" demand, while areas around the Villages of West Union, Winchester, Seaman and Peebles were found to have "moderate" demand. The remaining areas of the county had low demand indicators.

[ODOT's Need Analysis](#) identifies where active transportation is needed based on concentrations of vulnerable populations. Higher scores correspond to a higher presence of underserved groups and indicate a greater need to increase equitable outcomes. A total of seven need indicators were included: minority groups, youth, older adults, poverty, no high school diploma, limited English proficiency, and no access to a

motor vehicle. Figure 28 identifies block groups in Adams County where areas of higher need were found, indicated by darker shading on the map. Much of the county has indicators of higher need. “Very high need” was found in the center of the county northeast of West Union. “High need” areas include areas around the Villages of Winchester, Seaman, Peebles, and West Union; the Village of Manchester and its surroundings to the northeast; and the center-east portion of the county. The remainder of the county has moderate to low demand indicators.





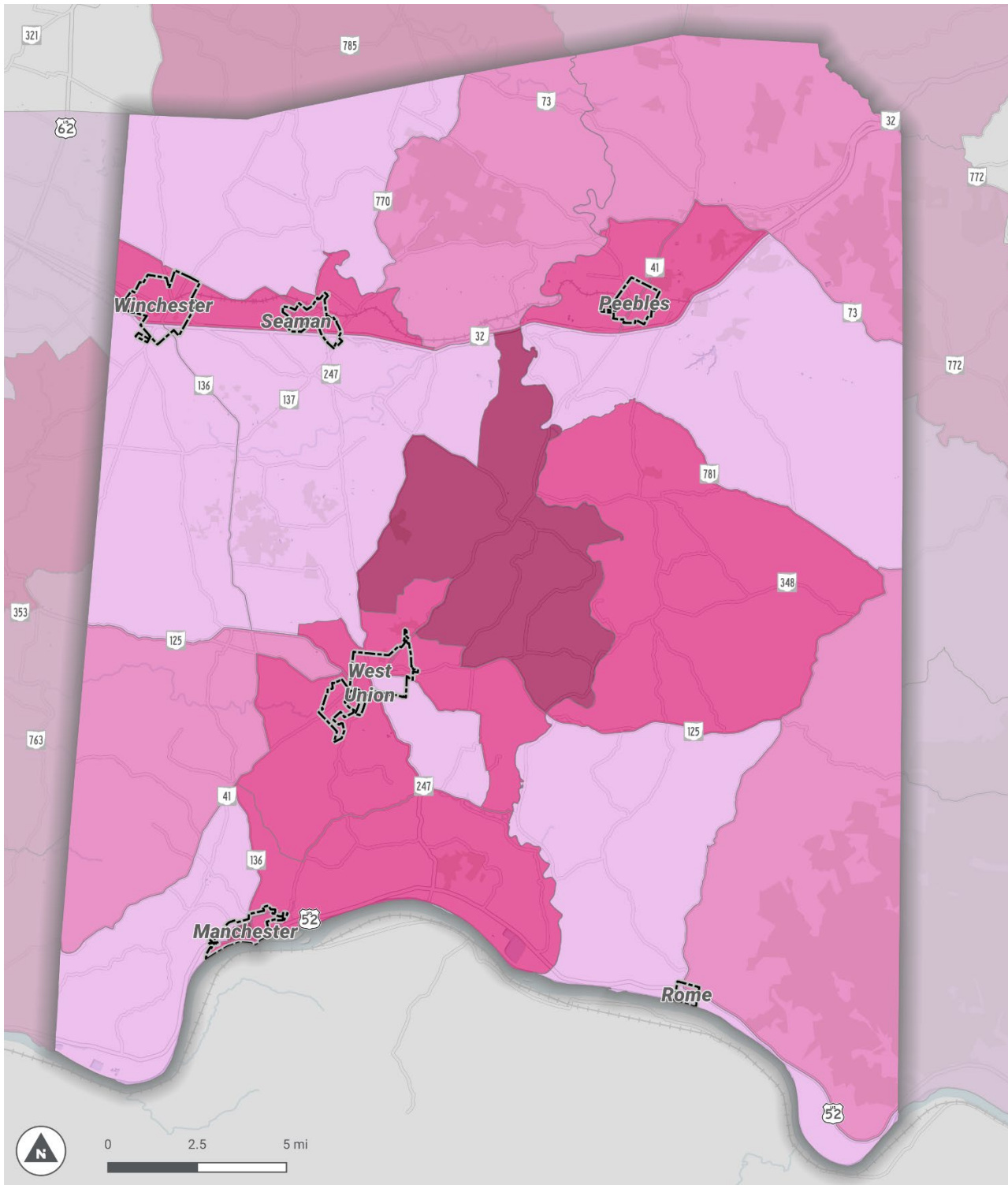
Adams County, Ohio - Active Transportation Plan

Active Transportation Demand		Basemap		
 1 - Low	 3 - High	 County Boundary	 Park	 Railroad
 2 - Moderate	 4 - Very High	 Village Boundary	 Waterbody	



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Figure 27: Adams County Active Transportation Demand



Adams County, Ohio - Active Transportation Plan

Active Transportation Need		Basemap					
	1 - Low		County Boundary		Park		Railroad
	2 - Moderate		Village Boundary		Waterbody		
	3 - High						
	4 - Very High						



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Figure 28: Adams County Active Transportation Need

CONCLUSION

The existing conditions analyses highlight challenges and opportunities in Adams County that will lead to the development of the active transportation network recommendations.

The population and jobs in Adams County are generally concentrated in five villages, with low density rural areas between them. There are many regionally and environmentally important attractions around Adams County including the Ohio River along the southern border.

Adams County has very little dedicated infrastructure for active transportation. The terrain can often constrain space for adding active transportation facilities along roadways. There is a proposed State and US bicycle route, State Bike Route 10, that traverses east/west through Adams County along State Route 125 through West Union. The Buckeye Trail also crosses east/west through southern Adams County and north/south in the northeastern portion.

Several routes, destinations, challenges, and barriers were identified by stakeholders and the public. These offer a starting point for the development of a network of active transportation routes. In general, the focus was providing safe connections for children and the Amish community.

Crash data show 23 fatal and injury crashes involving non-motorized travel modes between 2012 and 2022. Although this is a relatively small number, safety is a major concern for Adams County and the Amish community in Adams County. While there are no concentrations of non-motorized crashes, improvements at individual crash locations as well as those with similar characteristics to known safety risks should be considered to improve safety.

Several areas around the county have “very high” and “high” active transportation needs and demands including the area northeast of West Union including the Amish community and the villages of Manchester, West Union, Peebles, Seaman, and Winchester and the immediate surrounding areas. Active transportation investments in these areas can help Adams County provide more opportunities for all.

LONG-TERM NETWORK AND PRIORITY PROJECTS





LONG-TERM NETWORK AND PRIORITY PROJECTS

This plan recommends a connected network of active transportation routes that will support and promote walking, biking, and other forms of active transportation. This long-term network highlights routes that should include active transportation infrastructure such as sidewalks, shoulders, crosswalks, and other infrastructure investments.

This chapter documents the process of developing a long-term network, selecting priority projects, and determining the appropriate facility type options for each route based upon the active transportation modes and types of users.

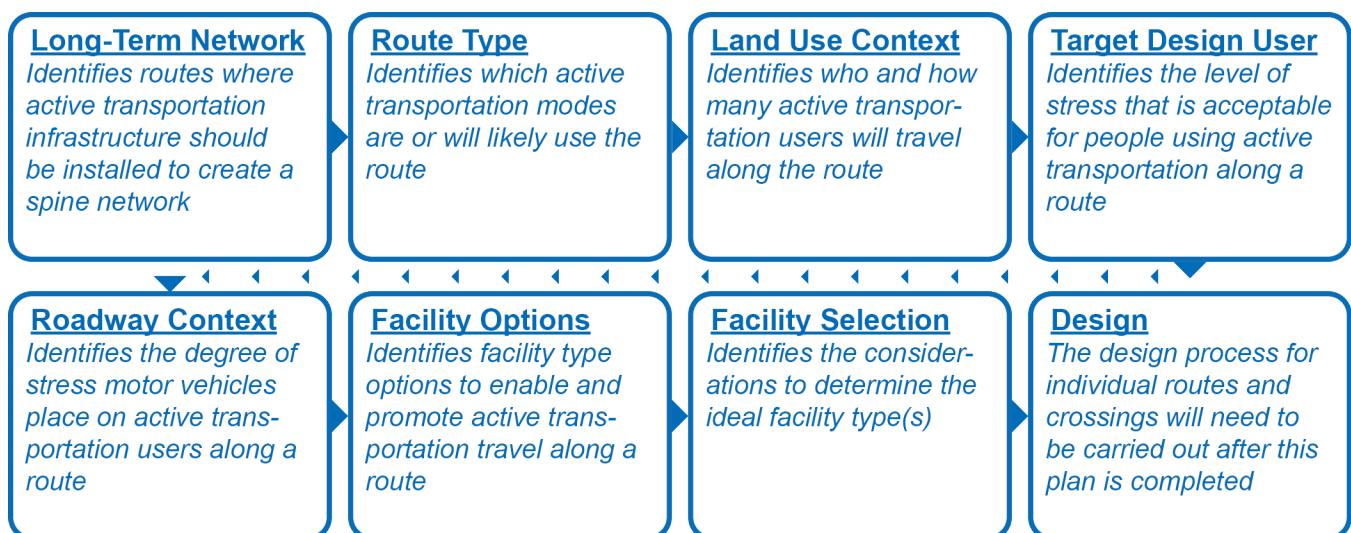


Figure 29: Project Development Process

LONG-TERM NETWORK

The long-term active transportation network (Figure 30 through Figure 35) is an interwoven system of routes and crossings that are envisioned to be the backbone for providing safe and comfortable active transportation travel. Infrastructure planning and projects along these routes should prioritize safety, comfort, and connectivity for active transportation users. The network focuses on four main elements, while also meeting the goals of the plan:

- » Connecting people to primary destinations such as schools, libraries, parks, shopping, and jobs.
- » Connecting the villages within Adams County.
- » Enhancing safe connections for the Amish community, who rely on active transportation.
- » Providing opportunities for recreation and healthy activity.

Some of the long-term network routes will require major physical improvements, others may be minor, and some routes may not need any improvements at this time. There is additional guidance in this section to help determine what, if any, improvements should be made on each route.

The initial draft network was developed by the project team after reviewing data such as crash history, traffic speeds and volumes, and active transportation need and demand. However, the primary considerations were input from the public and Steering Committee during Round 1 of Community Engagement, which identified active transportation destinations, routes, barriers, and challenges. The draft network was refined by the Core Team and Steering Committee then presented to the public during Round 2 of Community Engagement. Public feedback was then used to finalize the network.

PRIORITY PROJECTS

Ten projects were selected as priority projects from the long-term active transportation network. The Core Team brainstormed the first list of priority projects based upon data in the existing conditions and input from the public and Steering Committee during Round 1 of community engagement. The Core Team then refined the list, combining some projects and ultimately recommending a list of ten priority projects to present to the Steering Committee. The Steering Committee discussed the draft priority projects, identified some additional priorities, and participated in an exercise to identify their top three priority projects. This final list of the top ten priority projects was then taken to the public during Round 2 of engagement via public survey and in-person events. Public feedback was considered by the Core Team, which decided to add a few projects to the list and combine a few more priority project locations into larger projects before recommending the final top ten priority projects list to the Steering Committee. The final list was recommended for approval by the Steering Committee.

The top ten priority projects are illustrated on Figure 30 through Figure 35. The four short-term priority projects are identified in Table 4 and the six medium-term priority projects are identified in Table 5. Adams County should proactively seek funding for these projects. Adams County and partners will need to seek outside funding from state and federal sources to supplement local funds. Potential funding options for constructing improvements are identified in the Implementation Chapter. Greater detail is provided at the end of this chapter on the short-term priority projects. Detailed information for the opinion of probable costs for all ten of the priority projects are provided in Appendix A.

Table 4: Short-Term Priority Projects (0-3 years)

ID	Location	Description	Opinion of Probable Cost	Potential Funding Sources
B	Amish Routes	Unity Rd from Duffy Rd to Johnson Ridge State Nature Preserve; Wheat Ridge Rd from State Route 41 to Graces Run Rd; Graces Run Rd from Wheat Ridge Rd to SR 137 (including crossing of SR 247); SR 137 from to Graces Run Rd to SR 136 (Cherry Fork). These routes are (and/or anticipated to be) used by buggies and bicyclists due to being Amish community travel routes. Recommended improvements include installing Share the Road signage at every public roadway intersection on these routes, install 20 slow-moving vehicle detection systems, and constructing shoulder widening areas (8' wide and 50' long) for slow-moving vehicles to pull out of the travel lane in strategic locations along the corridors.	\$1,240,235	Transportation Alternatives, Community Development Block Grant
C	Medical Center Triangle in Seaman	Commerce Dr, Moores Rd, and Medical Center Dr triangle. These routes are (and/or anticipated to be) used by pedestrians (including runners) and bicyclists of all ages and abilities including children and older adults due to their proximity to North Adams schools and the medical and nursing facilities. Recommended improvements include installing 5' sidewalk along all three routes, a crossing of Moores Rd with Rectangular Rapid Flash Beacon and pavement markings, and a 5' sidewalk extension to the existing sidewalk around the baseball field at the school.	\$1,155,490	Transportation Alternatives, Community Development Block Grant
D	West Union to Adams Lake	Sparks St from SR 247 to Logans Ln and Logans Ln from Sparks St to Adams Lake State Park trail. This route is (and/or anticipated to be) used by pedestrians and bicyclists of all ages and all abilities, especially young children and families. Recommended improvements include installing 5' wide sidewalk along the north side of Sparks St from SR 247 to Logans Ln and along the east side of Logans Ln from Sparks St to Fair Park Ave, widening the asphalt shoulder by 6' from Fair Park Ave to 150' south of the Adams Lake Bridge including pavement markings and flexible posts delineating the wide shoulder, and installing a 10' wide shared use path from Logans Ln to the existing trail on the south side of Adams Lake State Park.	\$1,468,630	Transportation Alternatives, Clean Ohio Trails, Clean Ohio Green Space, Appalachian Community Grant
G	SR 41 in Peebles	SR 41 from Steam Furnace Rd to McDonalds including crossings at Ruth St and Peebles Indian Driver/Shaker Run Rd. This route is (and/or anticipated to be) used by pedestrians and bicyclists of all ages and abilities including children due to its proximity to Peebles High School. Recommended improvements include installing 6' wide sidewalk along the west side of SR 41 from McDonald's to Peebles Indian Drive with a 5'-10' wide grass buffer from the street (or wood post fence in constrained locations), widen the existing 4' sidewalk to a 6' wide sidewalk on the west side of State Route 41 from Peebles Indian Drive to Steam Furnace Rd with a grass buffer of varying width, and enhancing two crossings of SR 41 at Ruth St and at Shaker Run Rd by installing rectangular rapid flashing beacons and crosswalk pavement markings.	\$1,893,010	Highway Safety Improvement Program, Transportation Alternatives, Community Development Block Grant

Table 5: Medium-Term Priority Projects (4-10 years)

ID	Location	Description	Opinion of Probable Cost
A	Seaman to West Union	SR 247 from Tri County Rd in Seaman to Main St in West Union. This route is (and/or anticipated to be) used by buggies and bicyclists due to being an Amish community travel route. This route carries fast-moving motor vehicles and large/oversize loads, so it is desired to have room for buggies and bicyclists to pull off the road and allow passing. Recommended improvements include constructing widen shoulder areas (8' wide and 350' long) for slow-moving vehicles to pull out of the travel lane in strategic locations along the corridor, widening all other shoulder areas along the corridor to 4' width, installing 20 slow-moving vehicle detection systems, and installing 5' wide sidewalk from McDonald's to Dollar General including signal modifications at SR 32 to accommodate crosswalks.	\$4,806,740
E	West Union to West Union Schools	SR 125 from SR 41 to Lloyd Rd; Lloyd Rd to West Union Elementary Schools. This route is (and/or anticipated to be) used by pedestrians and bicyclists of all ages and abilities including children due to its connection to the West Union schools. Specific recommended improvements are not provided due to previous investigations that identified severe limitations to shoulder widening or developing an off-street path due to terrain. The likely cost of improvements will limit project development due to needed retaining wall. Alternative routes were considered but deemed undesirable. However, this is a priority for the County, as indicated by public feedback.	Reliable opinion of probable cost could not be developed due to unavailable topographic data.
F	SR 41 in West Union	SR 41 crossings at CIC Blvd and Walmart, with connections to Walmart and Medical Center. This route is (and/or anticipated to be) used by pedestrians and bicyclists of all ages and abilities including older adults due to the proximity to the medical center. Recommended improvements include enhancing the crossing at Walmart Dr (rectangular rapid flashing beacon, crosswalk pavement markings, reduced curb radii, truck aprons, and curb ramps), installing 5' wide sidewalk along Walmart Dr to connect to McDonald's and Walmart, enhancing the crossing at CIC Blvd (pedestrian signals, reduced curb radii, and truck aprons), and installing 5' wide sidewalk along CIC Blvd to connect to West Union Family Health Center.	\$714,790
H	Nixon Ave and Steam Furnace Rd in Peebles	Nixon Ave from Steam Furnace Rd to Rarden Rd; Steam Furnace Rd from SR 41 to Nixon Ave. This route is (and/or anticipated to be) used by pedestrians and bicyclists of all ages and abilities including children walking and cycling from the neighborhoods to SR 41 and the Peebles schools. Recommended improvements include installing 5' wide sidewalk along the north side of Steam Furnace Rd from SR 41 to Nixon Ave, installing 5' wide sidewalk along Nixon Ave from Steam Furnace Rd to Rarden Rd, and enhancing the crossing of SR 41 at Steam Furnace Rd by installing a rectangular rapid flashing beacon, crosswalk pavement markings, and modifying the curb radius to shorten crossing distance.	\$3,049,350
I	Linda Vista Dr school access in Manchester	Rear entrance to Manchester school via Cemetery St, Valley Vista Rd, and Linda Vista Dr. This route is (and/or anticipated to be) used by pedestrians and bicyclists of all ages and abilities including children walking and bicycling from residences, including the higher density apartments, to Manchester schools. Recommended improvements include installing 5' wide sidewalk along the north side of Cemetery Ave from Foothill Apartments to Valley Vista Dr, installing 5' wide sidewalk along the east side of Valley Vista Dr from Cemetery Ave to Linda Vista Dr, and installing 5' wide sidewalk along the north side of Linda Vista Dr from Valley Vista Dr to east end of the road including a connection to the school parking lot.	\$922,905

ID	Location	Description	Opinion of Probable Cost
J	US 52 River Trail	Cross-county river trail along US 52. This route is (and/or anticipated to be) used by bicyclists and pedestrians of all ages and abilities within the Village of Manchester. In the rural sections, this route is (and/or anticipated to be) used by primarily experienced bicyclists. Recommended improvements include widening the asphalt shoulder to 8' wide along US 52 throughout Adams County except between Fair Ave and Island Creek Rd in Manchester, install 8' wide shared use path along Fair Ave, Front St, and Jack Roush Way to avoid impacts to downtown businesses, reconstruct existing narrow sidewalk to 8' wide shared use path along the south side of US 52 from Jack Roush Way to Island Creek Rd, and reconstruct and extend 5' wide sidewalk along the south side of US 52 from Fair Ave to Jack Roush Way.	\$19,384,710

Implementation Flexibility

Projects can be implemented in phases to fit available funding or other limitations. Adams County should also consider projects that make progress towards safely and conveniently supporting active transportation goals and projects contained in this plan. Demonstration projects, temporary projects, or similar type of active transportation improvements can often be done quickly and with less capital investment.

The remaining routes on the long-term network are important to active transportation users, but have not been identified as high priority and can be viewed as more opportunistic. As transportation or development projects occur, Adams County and partner jurisdictions should implement active transportation facilities that are appropriate to safely and effectively accommodate existing and future active transportation users. As an example, imagine a roadway that is identified on the long-term network is being reconstructed. The improvements should include facilities that prioritize active transportation users along the route as well as crossing the route.

Active transportation facilities should not be limited to those routes identified on the long-term network. Active transportation facilities should be considered on all roadways, especially on routes likely to be used by people walking, using mobility devices, on bicycles, on buggies, and other forms of active transportation. Some places to consider adding active transportation facilities include routes that are likely to have active transportation users, such as within villages, routes around schools, connections to parks and other destinations, and various other locations. Villages can benefit from a connected network of sidewalks, street crossings, and other active transportation infrastructure to facilitate safe and efficient walking, biking, and other forms of active transportation.

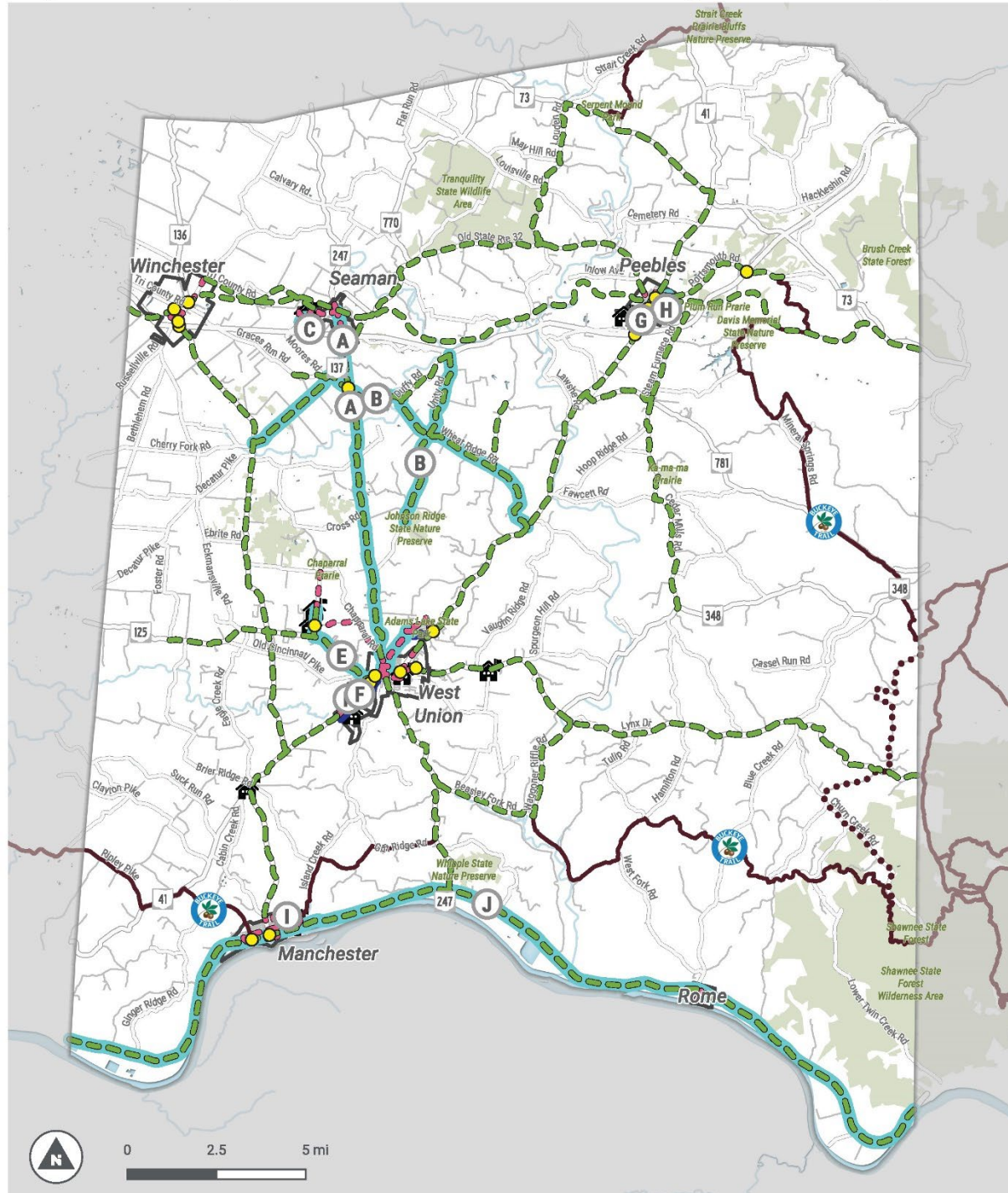
ROUTE TYPES

The long-term network identifies active transportation routes, but to understand what improvements should be made along these routes (if any are needed), we first need to know which modes of travel we should be prioritizing along these routes. This is done by identifying “Route Type.” The long-term network is comprised of two types of routes, regional routes and local routes. The route type designation helps communicate the **primary active transportation mode(s)** for each route.

Regional routes are longer-distance connections between the villages and other important county destinations. The active transportation modes to be considered along regional routes are buggies and bicycles. Walking should be considered, but distances between destinations along the regional routes may limit walking along the routes. However, there may be a need to provide pedestrian accommodations on segments of the longer route where pedestrians currently travel or will likely travel in the future. These routes are likely to be used as recreational routes as well.

Local routes are short-distance connections, generally within villages, where people would like to safely travel to local destinations like schools, parks, jobs, and restaurants. The active transportation modes to be considered along local routes are walking (including people using mobility devices) and bicycles.

The network also identifies **crossings**, which are places where crossing the street is difficult or dangerous. Crossing improvements should enhance the safety and comfort of each mode of active transportation that are or will be using the crossing. Crossings help ensure continuity of the routes by facilitating safe crossings of barriers to active transportation travel.



- | | | | |
|---|--------------------|--------------------|--------------|
| Proposed Active Transportation Network | — Buckeye Trail | ▭ Village Boundary | —+— Railroad |
| ● Crossing Enhancement | — Regional Route | ▭ Park | 🏠 School |
| - - - Local Route | — Priority Project | ▭ County Boundary | 🌊 Waterbody |



Figure 30: Long-Term Active Transportation Network and Priority Projects



Figure 31: Long-Term Active Transportation Network and Priority Projects – Manchester

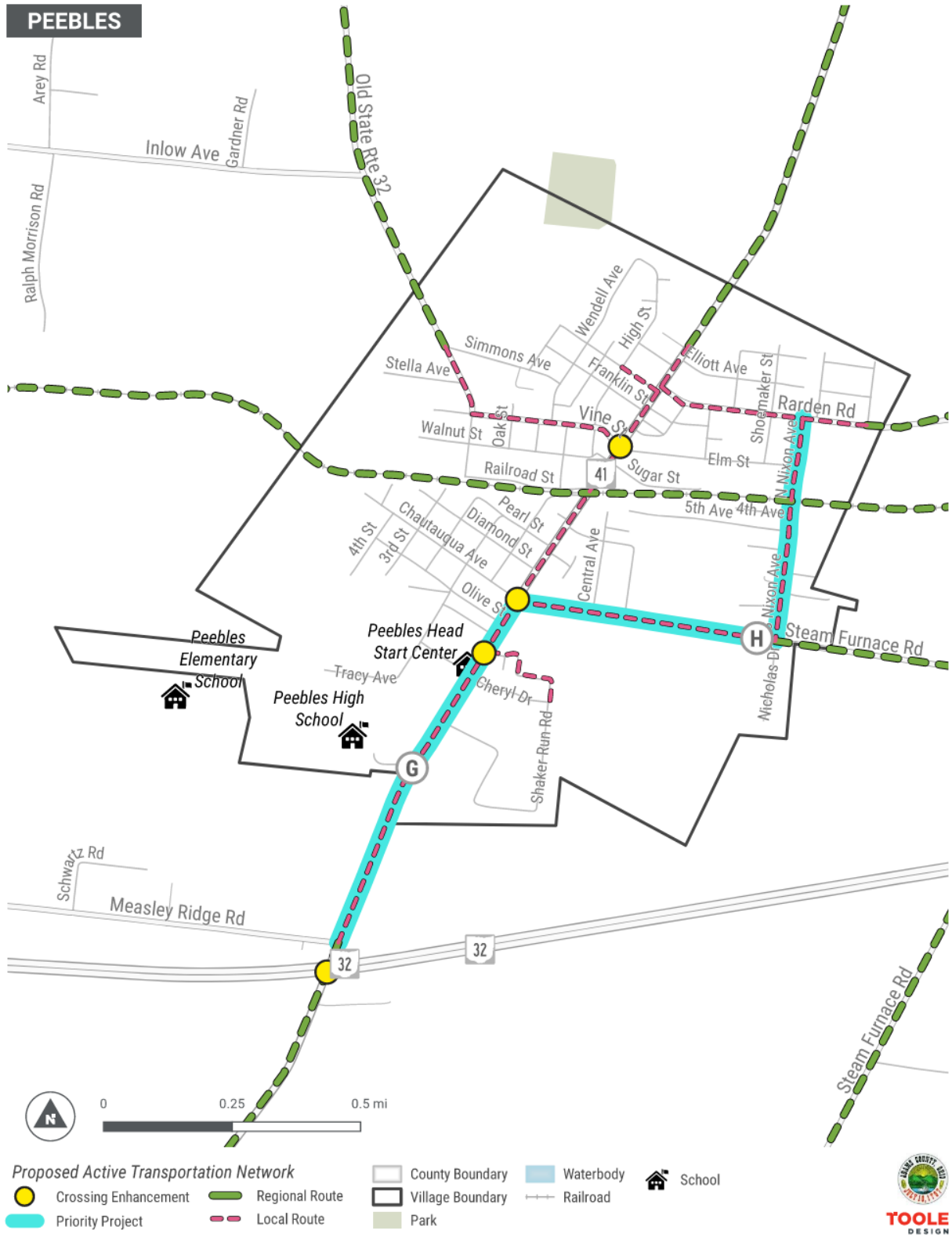


Figure 32: Long-Term Active Transportation Network and Priority Projects - Peebles

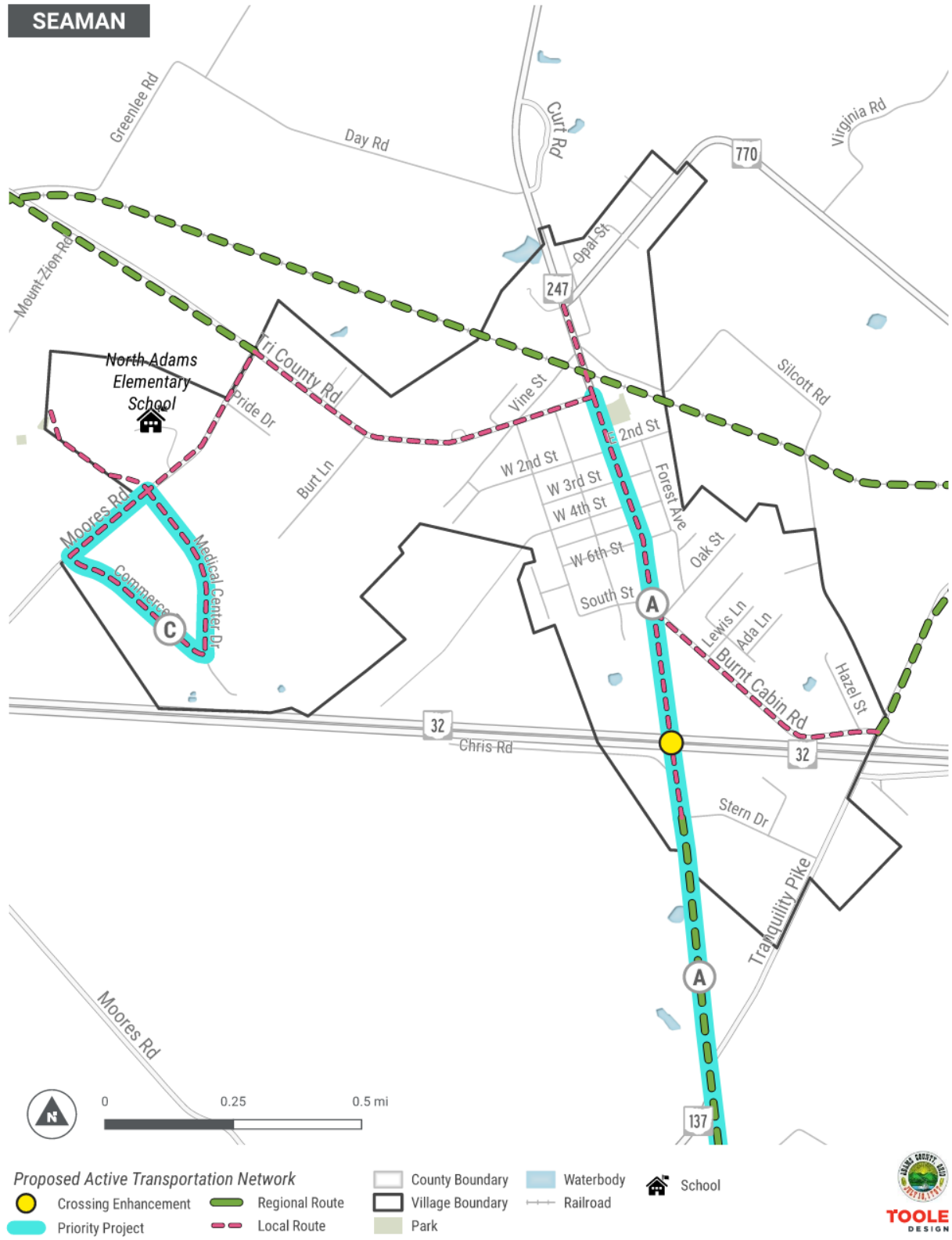


Figure 33: Long-Term Active Transportation Network and Priority Projects – Seaman

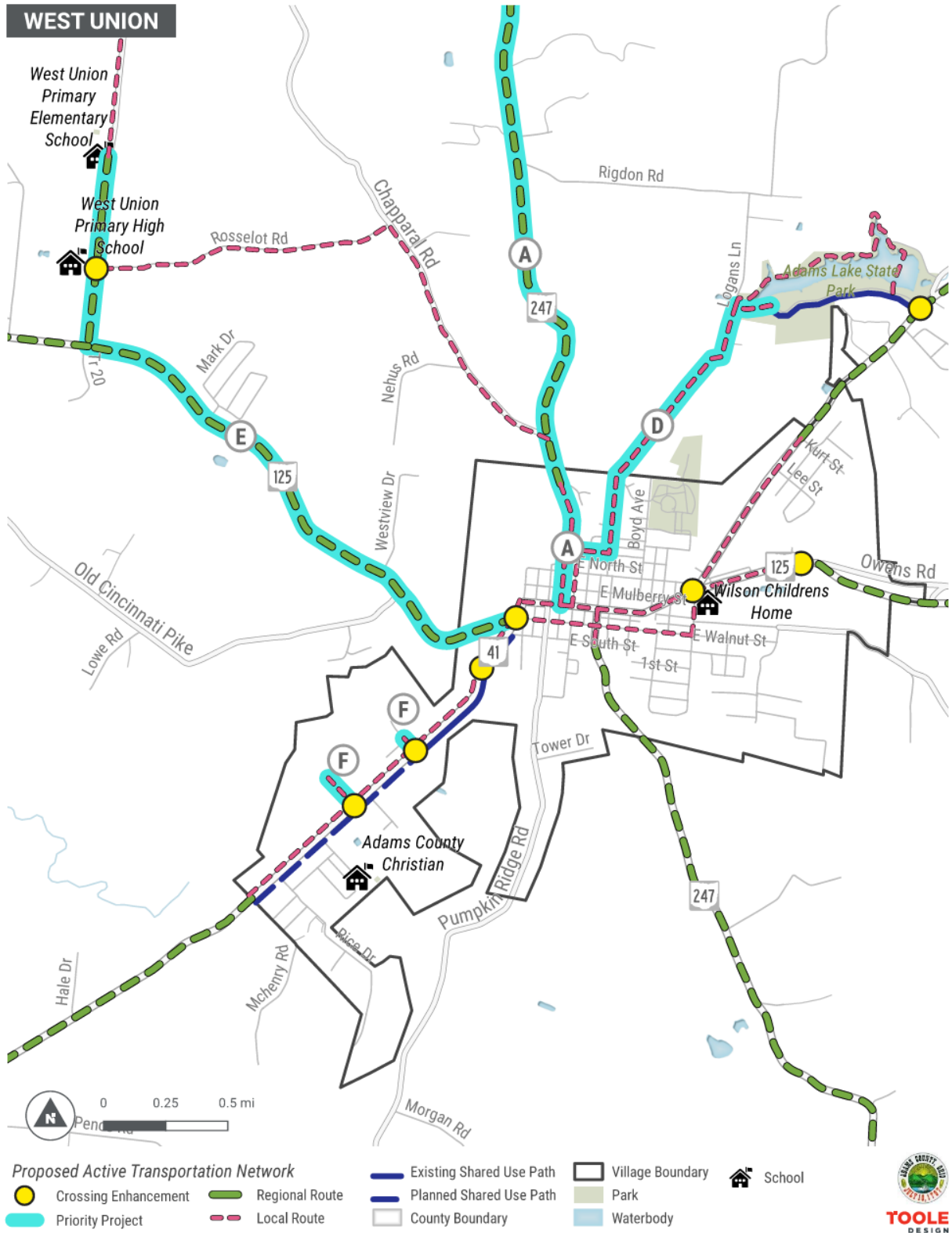


Figure 34: Long-Term Active Transportation Network and Priority Projects - West Union

WINCHESTER



Figure 35: Long-Term Active Transportation Network and Priority Projects - Winchester



LAND USE CONTEXT

Land use context refers to the setting of the route within the larger context of the community including land uses directly adjacent to the route as well as uses further away. Land use context can influence **who** is using active transportation along the route. Routes providing direct access to a school, library, or a community park will likely have more children walking and biking along the route. Routes that connect housing to schools will likely have more children traveling along the route. Who is (or will be) using active transportation along the route will influence the type of active transportation facility that should be provided.

Land use context can also influence **how many** people are or will be using active transportation along the route. Routes in areas with high concentrations of people and destinations often have greater numbers of people using active transportation. Routes in downtown or that connect to larger housing developments, schools, and major destinations will likely have more active transportation users. Routes with a large number of businesses fronting the street will likely have more active transportation users as well. How many people are (or will be) using active transportation along the route will influence the design of the active transportation facility, particularly the width of the active transportation facility.

TARGET DESIGN USER

People using active transportation have varying degrees of experience and confidence, which influence their tolerance to stress. Stress is often caused by adjacent traffic speeds and volumes. Reducing stress increases user comfort. Establishing a target design user for a route establishes the level of comfort for which a route should be designed. Very experienced, confident, and abled individuals may feel comfortable walking, bicycling, or riding a buggy in a shared space with motor vehicles. However, this will not feel comfortable for people of all ages and all abilities. Less experienced and more vulnerable people using active transportation will not feel safe or comfortable sharing the space with motor vehicles. People with disabilities, children, older adults, and various other people will require more separation and protection from motor vehicles in order to feel comfortable. Safe and comfortable active transportation routes are essential to meet basic transportation needs of people that rely on active transportation.

The target design user will need to be determined for each individual route on the long-term network. It is desirable to design certain routes for all ages and all abilities such as those in neighborhoods, near schools and parks, and around elderly housing and care facilities. For other routes, it may not be desirable to develop the route for people of all ages and all abilities. This may be due to the lack of inexperienced or vulnerable people using (or likely to use) active transportation along a specific route, the cost for developing active transportation facilities that provide a greater degree of separation and/or protection, or other constraints. However, the default should be that all active transportation routes are designed for people of all ages and all abilities.

ROADWAY CONTEXT

The conditions of the roadway influence the type of active transportation facility needed to accommodate the target design user. Primary factors to consider are traffic speed, traffic volumes, presence of large

vehicles. In general, as traffic speeds, traffic volumes, and the number of large vehicles increase, more separation and protection from motor vehicle traffic is needed for active transportation users. Roadway context is a primary consideration to select the appropriate active transportation facility and during the design process.

FACILITY OPTIONS AND SELECTION

There are likely several facility types that could be installed along a route or at a crossing. Below we identify some facility type options for each active transportation mode and how facilities should be selected. The [Ohio Department of Transportation Multimodal Design Guide](#) is a great reference for selecting and designing active transportation facilities. [Section 2.5](#) of the Guide gives information about when to provide pedestrian and bicycle facilities, and what type of facility (or facilities) to provide.

PEDESTRIAN FACILITY SELECTION

Pedestrian infrastructure is primarily provided in the form of sidewalks and shared use paths. It is preferable to have a sidewalk or shared use path along both sides of the street. The presence of sidewalks along a roadway corresponds to a 65 to 89 percent reduction in walking along road pedestrian crashes.¹³ Pedestrians are also among the most vulnerable road users and 72 percent of pedestrian fatalities occur at non-intersection locations.¹⁴ In certain instances, pedestrian facilities can be on-street in the form of shared streets or wide shoulders. For further guidance on pedestrian design, refer to [ODOT's Multimodal Design Guide, Chapter 4 -Pedestrian Facilities and Chapter 5 – Shared Use Paths](#)

A variety of solutions can be employed to make intersections and mid-block crossings safer and more convenient for people walking. These treatments range from painted facilities, such as high-visibility crosswalks, to signs, lights, and signals. Painted crosswalks delineate the safest pathway for pedestrians, and rectangular rapid flashing beacons (RRFBs) enhance user safety and convenience at crossing points when full signalization is not warranted. For further guidance on pedestrian and crossing design, refer to [ODOT's Multimodal Design Guide \(MDG\) Chapter 4 -Pedestrian Facilities, MDG Chapter 8 – Signals, Beacons, and Signs, and FHWA's Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.](#)



Figure 37: Sidewalk



Figure 36: Rectangular Rapid Flash Beacon

¹³ FHWA (2017). Desktop Reference for Crash Reduction Factors, FHWA-SA-08-011, Table 11. Referenced in <https://safety.fhwa.dot.gov/provencountermeasures/walkways/>

¹⁴ FHWA (2018). Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, Page 1.

https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf

HORSE AND BUGGY FACILITY SELECTION

Horse and buggy infrastructure and safety countermeasures are primarily provided in the form of signage, detection and warnings, pull-offs, and wide shoulders. The [Ohio Department of Transportation Statewide Amish Travel Study](#) identifies typical safety countermeasures that could be implemented to improve roadway safety. The countermeasures identified below are those identified by the Core Team and Steering Committee as the preferred options for routes carrying Amish travelers.

Signage

Signs alert road users of a situation that may not be apparently obvious. The W11-14 sign should be used on roadways carrying Amish buggies and be primarily located where Amish buggies enter traffic, where vehicle drivers' sight distance is restricted, and intermittently on roadways where buggies are present.

Cost estimate: \$2,000 / section



W11-14
Sec. 2C.49

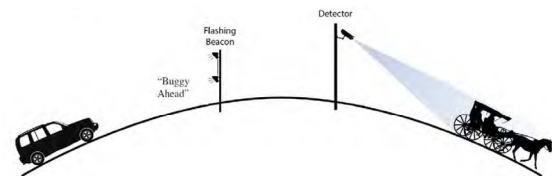


W16-1P
Sec. 2C.60

Detection & Warnings

An enhanced warning sign that is active when conflicts exist that detects buggies and warns motorists of their presence. The actuated warning system allows motorists to slow down proactively for a downstream slow-moving vehicle.

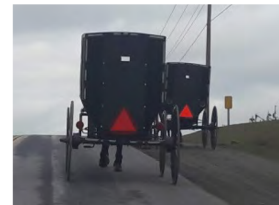
Cost estimate: \$20,000 / sign location



Pull-Offs

A pull-off, also called a hill climbing and downhill lane, is a narrow lane meant for buggies to use and allow motor vehicles to continue in the travel lane. These must be long enough to account for Amish buggies that gain momentum on the downhill side and need to merge back into the travel lane safely.

Cost estimate: \$250,000 / 1,000 feet



Wide Shoulder

Paved or treated shoulders of eight feet can function as a buggy lane, separating slow moving vehicles from high speed motor vehicles. Shoulders for walking should be at least four feet wide. Shoulders for buggies should be at least eight feet wide.

Cost estimate: \$750,000 / mile to \$2,000,000 / mile



Source and Image Credit: 2020 ODOT Amish Travel Study

Figure 38: Amish Buggy Countermeasure Options

BICYCLE FACILITY SELECTION

Bicycle infrastructure is primarily provided in the form of shared roadways, shoulder bikeways, and shared use paths. Dedicated bicycle infrastructure and routes will help riders of varying abilities access their daily destinations such as schools, grocery stores, parks, and work. There are several important factors to consider during bicycle facility selection, such as land use context, target design users, and roadway context. Bicycle facility selection guidance is provided in the [ODOT Multimodal Design Guide – Section 2.5.2.1](#). Additional bicycle facility design guidance is provided in the ODOT Multimodal Design Guide:

- » [Chapter 5 – Shared Use Paths](#)
- » [Chapter 6 – On-Road Bicycle Facilities](#)
- » [Chapter 7 – Motor Vehicle Facilities Supporting Multimodal Accommodation](#)
- » [Chapter 9 – Multimodal Accommodations at Interchanges & Alternative Intersections](#)

PRIORITY PROJECT CUTSHEETS

Detailed project descriptions and justification for the four short-term priority projects are included in this section. Detailed information for the opinion of probable costs for all ten of the priority projects are provided in Appendix A.



Figure 39: Shared Roadway



Figure 40: Shoulder Bikeway



Figure 41: Shared Use Path

AMISH ROUTES (B)

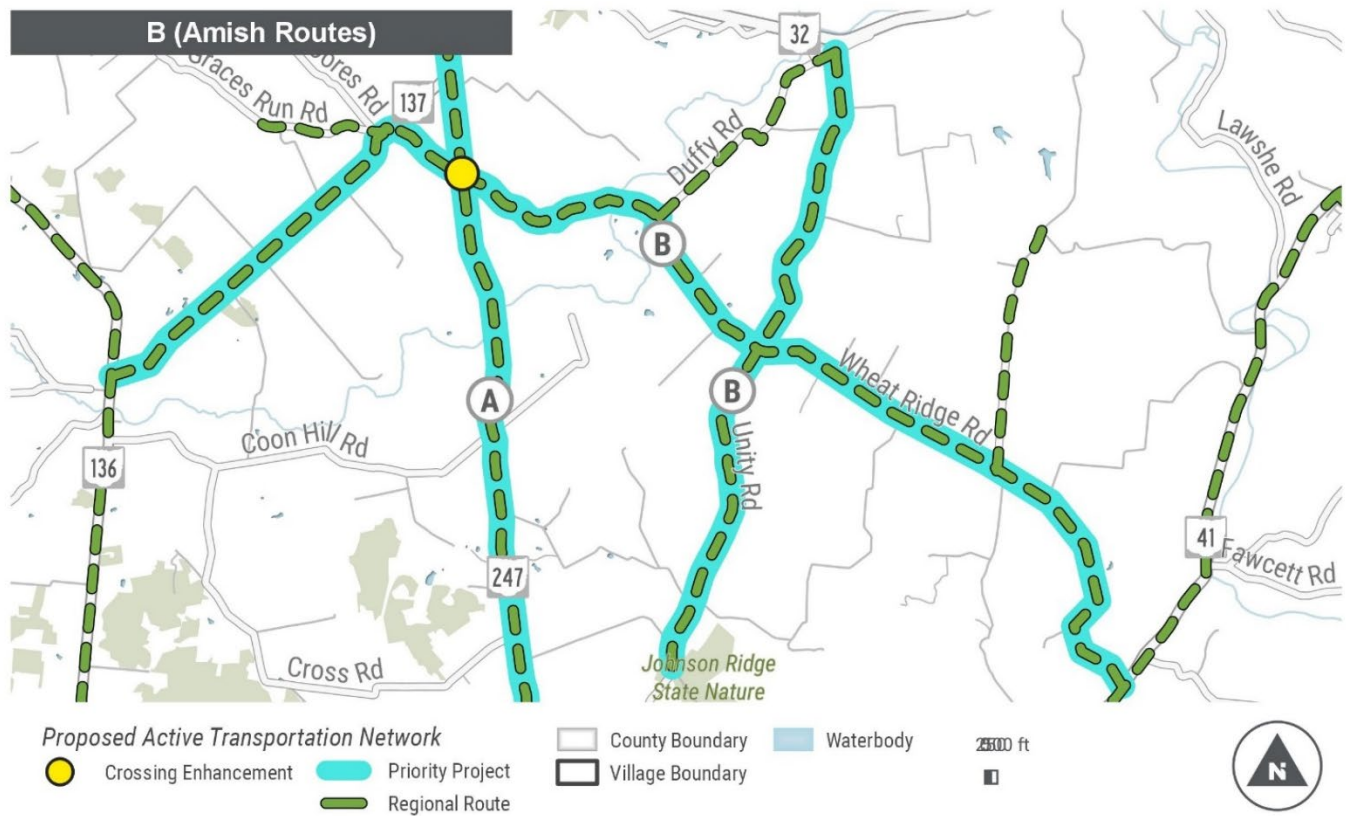


Figure 42: Amish Routes (B)

The Amish Routes projects includes active transportation enhancements on Wheat Ridge Rd from State Route 41 to Graces Run Rd; Graces Run Rd from Wheat Ridge Rd to State Route 137 including crossing of State Route 247; Unity Rd from Duffy Rd to Johnson Ridge State Nature Preserve; and State Route 137 from Graces Run Rd to State Route 136.

These routes are primary Amish buggy, bicycle, and walking routes in the heart of the Amish community connecting residences, jobs, commerce, schools, and social destinations. The presence of local and visitor motor vehicle traffic creates hazards to the slower moving buggies, bicyclists, and pedestrians.

The recommended improvements include 1) installing Share the Road signage after every public roadway intersection and in each direction, 2) installing slow-moving vehicle detection systems in strategic locations throughout the corridors, and 3) constructing shoulder widening areas (8' wide and 50' long) for slow-moving vehicles to pull out of the travel lane in strategic locations along the corridors.

The opinion of probable cost for these improvements is \$1,240,235. Detailed cost information is provided in Appendix A. The Amish community highlighted the importance of starting improvements on Wheat Ridge Rd. The detailed cost information breaks the project into two phases; 1) Wheat Ridge Rd and Graces Run Rd from State Route 41 to State Route 137 and 2) Unity Rd and State Route 137.

MEDICAL CENTER TRIANGLE IN SEAMAN (C)

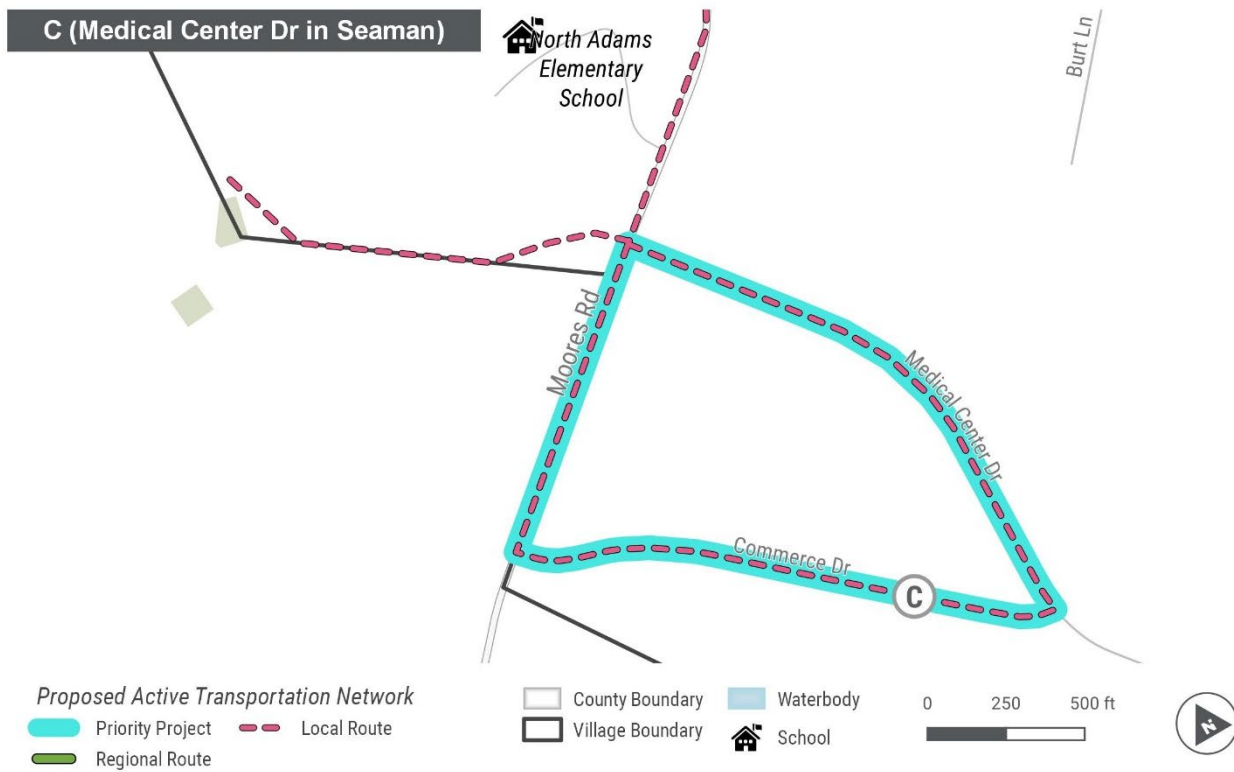


Figure 43: Medical Center Triangle in Seaman (C)

The Medical Center Triangle in Seaman project includes active transportation enhancements on Moores Rd, Medical Center Dr, and Commerce Dr.

The North Adams Elementary and High School complex and the North Adams Public Library are just north of the project. A recent project constructed sidewalk along Moores Rd from the north to the school complex. The Adams County Medical Center, a skilled nursing facility, and a dialysis clinic are located on the south end of the triangle. The route is (and/or is anticipated) to be used by pedestrians and bicyclists of all ages and abilities including children, older adults, and medical facility patients, visitors, and workers. School children often run along this route for training and practice.

The recommended improvements include 1) installing 5' wide sidewalk along the north side of Medical Center Dr, 2) installing 5' wide sidewalk along the south side of Commerce Dr, 3) installing 5' wide sidewalk along the east side of Moores Rd, 4) enhancing the crossing of Moores Rd at Medical Center Dr by salvaging and reinstalling the existing rectangular rapid flashing beacon and utilizing the existing crosswalk pavement markings, and 5) installing 5' wide sidewalk from the new crossing at Moores Rd and Medical Center Dr to the sidewalk around the baseball field.

The opinion of probable cost for these improvements is \$1,012,490. Detailed cost information is provided in Appendix A.

WEST UNION TO ADAMS LAKE (D)

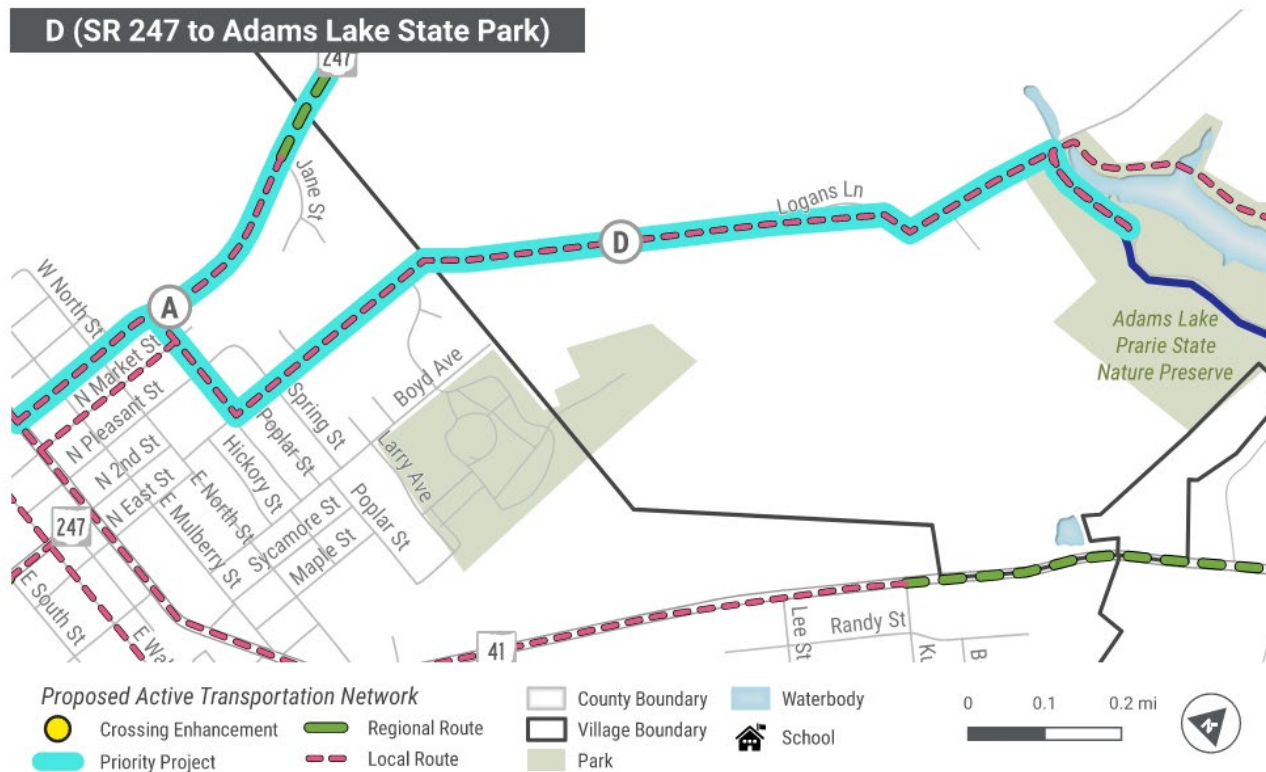


Figure 44: West Union to Adams Lake (D)

The West Union to Adams Lake project includes active transportation enhancements on Sparks St and Logans Ln to Adams Lake State Park.

Adams Lake State Park and the existing trail at the park draws people walking and bicycling from West Union. There are also discussions about creating a loop around the entire lake, enhancing recreational opportunities in close proximity to West Union. The route is (and/or is anticipated) to be used by pedestrians and bicyclists of all ages and abilities including children and families.

The recommended improvements include 1) installing 5' wide sidewalk along the north side of Sparks St from State Route 247 to Logans Ln, 2) installing 5' wide sidewalk along the east side of Logans Ln from Sparks St to Fair Park Ave, 3) widening the asphalt shoulder by 6' from Fair Park Ave to 150' south of the Adams Lake Bridge including pavement markings and flexible posts delineating the wide shoulder, and 4) installing a 10' wide shared use path from Logans Ln to the existing trail on the south side of Adams Lake State Park.

The opinion of probable cost for these improvements is \$1,468,630. Detailed cost information is provided in Appendix A.

STATE ROUTE 41 IN PEEBLES (G)

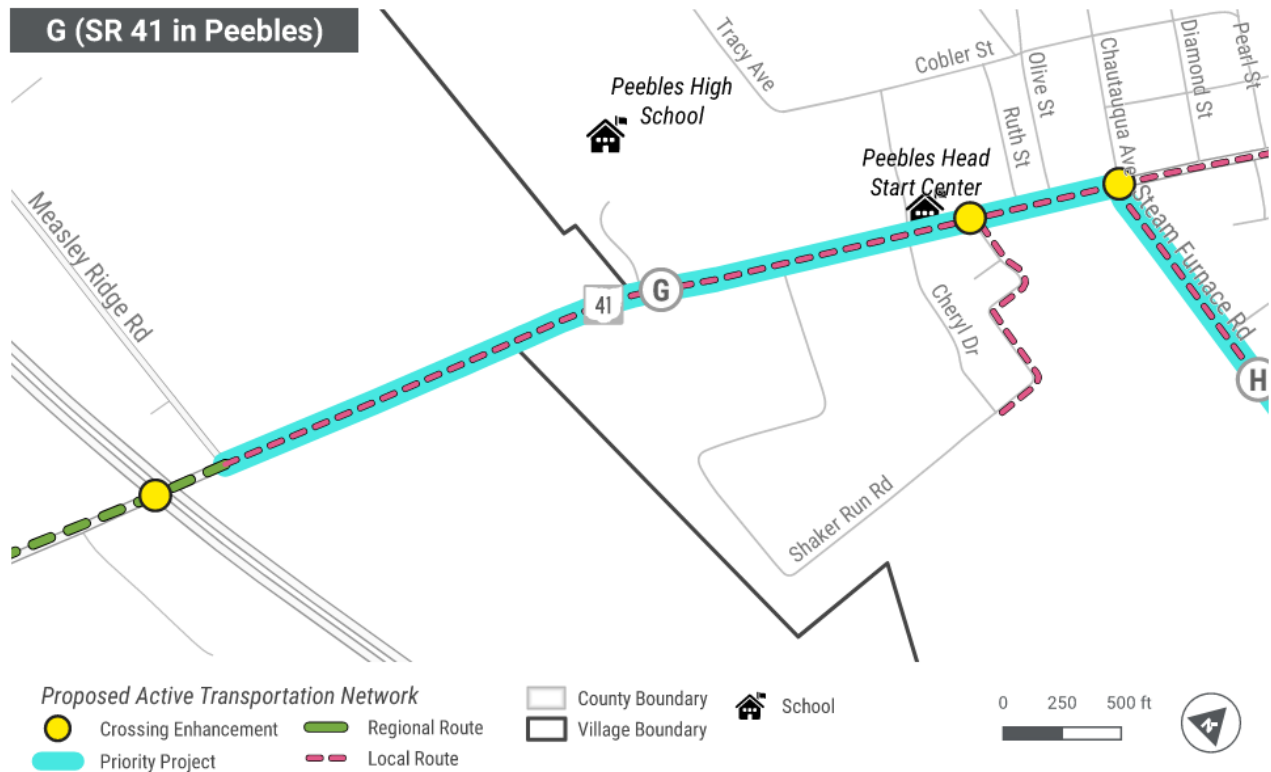


Figure 45: State Route 41 in Peebles (G)

The State Route 41 in Peebles project includes active transportation enhancements on State Route 41 from Steam Furnace Rd to the McDonald's at Measley Ridge Rd.

Peebles High School and Peebles Head Start Center are located along this village main street along with other destinations including McDonalds, Save A Lot, Family Dollar, Dollar General, dentist office, dairy bar, convenience store, and various other destinations. The route is (and/or is anticipated) to be used by pedestrians and bicyclists of all ages and abilities, especially school children.

The recommended improvements include 1) installing 6' sidewalk along the west side of State Route 41 from McDonald's to Peebles Indian Drive with a 5'-10' wide grass buffer between the walkway and the street (or wood post fence in constrained locations), 2) widen the existing 4' sidewalk to a 6' sidewalk on the west side of State Route 41 from Peebles Indian Drive to Steam Furnace Rd with a grass buffer of varying width, and 3) enhancing two crossings of State Route 41 at Ruth St and at Shaker Run Rd by installing rectangular rapid flashing beacons and crosswalk pavement markings.

The opinion of probable cost for these improvements is \$1,893,010. Detailed cost information is provided in Appendix A.

PROGRAMS AND POLICIES





PROGRAMS AND POLICIES

Establishing safe and convenient active transportation infrastructure is critical to improving walking and bicycling conditions. But without programs and policies in place to support active transportation, infrastructure projects can only go so far. A variety of non-infrastructure tools can increase pedestrians' and bicyclists' safety by establishing a culture of walking and biking and creating a friendly regulatory and political environment for active transportation.

Programs and policies can typically be implemented relatively quickly and inexpensively. Programs can be easily scaled to a wide audience, such as elementary school students, transit riders, or business owners or they can target specific groups for programming, like speeding motorists in school zones. Individual programs can increase walking and bicycling in specific circumstances and locations but should be coordinated with policy development to ensure lasting change. See Table 6 for a list of proposed programs and policies. These proposed programs and policies aim to accomplish the following goals:

- » **Foster culture change:** shift community members mindset so that walking and bicycling is normal and expected.
- » **Maintain momentum:** help maintain momentum and excitement around active transportation while infrastructure projects are in development.
- » **Build support:** encourage new people to try active transportation and help community partners recognize the value of increased active transportation options.
- » **Support efficient operations and maintenance:** help institutionalize best practices in active transportation operations and maintenance.

The timeframes outlined in Table 6 are defined as follows:

- » **Immediate:** Within the first year after plan adoption
- » **Short-term:** 0 to 3 years after plan adoption
- » **Long-term:** 4 to 10 years after plan adoption

The status of programs and policies should be assessed and updated each time the overall plan is updated. Status is defined as:

- » **New:** A program or policy that is proposed in this Plan.
- » **Ongoing:** An existing program or policy that will be continued.
- » **On hold:** A program or policy that has been stalled or deferred.
- » **Completed:** When regularly updating the plan, update the program or policy status to complete when applicable to help track progress.

Table 6. Program and Policy Recommendations

<i>Goal</i>	<i>Program/ Policy</i>	<i>Responsible Party(ies)</i>	<i>Timeframe</i>	<i>Status</i>
<i>Accessibility</i>	<p>Public Transportation System Continue to explore ways to offer on-demand and fixed route transportation options more widely and reliably throughout the County and to key destinations.</p>	FRS Transportation, Adams Brown Community Action Partnership (ABCAP), Adams- Brown Mobility Management, Ohio Valley Regional Development Commission (OVRDC)	Long-Term	Ongoing
	<p>Sidewalk Repair and Maintenance Increase resources to support low-income property owners in repairing sidewalks. Individual homeowners are responsible for the repair and maintenance of sidewalks in front of their property, but not all property owners have resources to do so. This results in a patchwork and inconsistent walking network. Villages and/or the County could identify priority sidewalks or routes to invest in repairing sidewalks, and offer opportunities for property owners to apply for assistance. Jurisdictions could also identify priority sidewalks, trails, and bike routes to be included within their overall street maintenance program.</p>	Adams County Creating Healthy Communities, Adams County Senior Citizens Council, Inc., Villages, Adams County Economic & Community Development	Long-Term	New
<i>Access</i>	<p>Bike Library Establish a Bike Library program. Many people lack access to bikes. Work with libraries, bike shops, hospitals, and/or charities to provide free or affordable bicycles, e-bikes, cargo bikes, and/or trikes or other adaptive devices. Explore developing a bike library where bikes can be checked out, or a bike and gear giveaway program for low-income community members, to foster a culture of safe riding practices.</p>	Adams County Creating Healthy Communities, ABCAP, Adams- Brown Mobility Management, Adams County Senior Citizens Council, Inc.	Short- Term	New
	<p>Complete Streets Policies Adopt local and County-wide Complete Streets policies. A Complete Streets policy commits a jurisdiction to planning and designing roadways to be safe and comfortable for all users, not just motor vehicles. This context-sensitive</p>	ABCAP, Adams- Brown Mobility Management, Villages, County, OVRDC, Adams	Long-Term	New

Goal	Program/ Policy	Responsible Party(ies)	Timeframe	Status
	approach to planning and design can help create livable communities and ensure a consistent roadway design approach for people walking and bicycling throughout the city. The County and the individual Villages in the county should consider adopting polices to guide their transportation funding decisions.	County Economic & Community Development		
	Demonstration Project Familiarize residents with bicycle or pedestrian infrastructure through a demonstration project. This will provide greater understanding of how the public will react to changes and interactions. Additionally, demonstration projects can allow the public to give feedback and provide support if they are in favor of the project.	Adams County Creating Healthy Communities, Adams County Senior Citizens Council, Inc., Adams County Engineer, Adams County Economic & Community Development	Short-Term	New
<i>Encouragement</i>	Complete Streets/Active Transportation Committee Formalize a diverse committee made of residents and partner organizations to regularly meet and advise the County on Complete Streets and Active Transportation and oversee implementation of the Active Transportation Plan. Work to secure diverse representation on the Steering Committee to match county demographics.	FRS, ABCAP, Adams-Brown Mobility Management, Adams County Senior Citizens Council, Inc., Adams County Engineer	Immediate	Ongoing
	Bicycle, Pedestrian and Buggy Counts Conduct bicycle, pedestrian, and buggy counts on a regular basis to track ridership, usage of facilities, and help tell the story about how many people are walking and bicycling in the County. This data can also be useful for future grant applications. Best practices recommend installing the permanent counter in a visible, high-use location, such as along a trail or on a bicycle facility.	OVRDC, Adams County Engineer	Immediate	New
	Plan Adoption and Updates Adopt the Active Transportation Plan by County Commission resolution. Revise and update the Active Transportation Plan on a regular basis (every ~5 years). To ensure that the plan remains relevant to the community and eligible for funding, it is crucial to update the Plan and incorporate any new, revised, or completed projects and reflect any changes to the community.	Adams County Creating Healthy Communities, FRS Transportation, ABCAP, Adams-Brown Mobility Management, Adams County Senior Citizens Council, Inc. , Adams County Economic & Community Development	Immediate	Ongoing
	Positive Information Campaign A positive campaign can share information about walking and biking benefits while using positive imagery that	Adams County Creating Healthy Communities,	Short-Term	New

Goal	Program/ Policy	Responsible Party(ies)	Timeframe	Status
	normalizes all types of people participating in walking and biking a regular activity.	ABCAP, Adams-Brown Mobility Management, Adams County Senior Citizens Council, Inc., Adams County Travel & Visitors Bureau		
<i>Economic Development</i>	Pursue Grant Funding Actively pursue federal, state, and regional grants and funding. This may include applying for grants through the state and federal programs identified in the "Implementation" section of this plan. Coordinate funding for pedestrian and bicycle facilities across departments and jurisdictions as appropriate.	Adams County Creating Healthy Communities, ABCAP, Adams-Brown Mobility Management, Adams County Engineer, OVRDC, Villages, Adams County Economic & Community Development	Immediate	Ongoing
<i>Public Health</i>	Active Living Community Events Host events such as community hikes, bicycle rides, "Walk with a Doc", 5ks, etc. to promote being active and healthy. Some events could be oriented towards specific groups, such as older adults.	Adams County Creating Healthy Communities, ABCAP, Adams-Brown Mobility Management, Adams County Senior Citizens Council, Inc., Adams County Travel & Visitors Bureau	Short-Term	Ongoing
<i>Tourism</i>	Trail Towns Work with regional partners to promote villages along the Ohio River as "Trail Towns", oriented towards tourism along the river and proposed US 52 trail (or other future trails). Trail town strategies include wayfinding, promotion, tourism services, development of tourism-oriented businesses, and a culture of hospitality and stewardship.	Adams County Senior Citizens Council, Inc., Adams County Travel & Visitors Bureau, Adams County Economic & Community Development	Long-Term	New
<i>Safety</i>	Crosswalk Policy and Design Guidance Create a crosswalk policy and design guidance. A crosswalk policy will create a consistent approach to evaluating and installing various roadway crossing treatments. The policy will identify factors for consideration and prioritization process. The guidance will establish primary crossing types and preferred designs and treatments. The policy can refer to state and federal guidance from ODOT and FHWA .	Adams County Creating Healthy Communities, Adams County Engineer, Villages	Long-Term	New

Goal	Program/ Policy	Responsible Party(ies)	Timeframe	Status
	<p>Driver and bicyclist education Increase opportunities for driver and bicyclist education across the County, emphasizing the rights of bicyclists and pedestrians as well as safe practices. Teaching people of all ages about their transportation options and the benefits of walking and bicycling makes them more aware of their transportation habits. Education also encourages safe behaviors as a driver, bicyclist, and/or pedestrian. Group bicycle rides, classes, workplace trainings, and online resources are all opportunities to educate Adams County residents. In particular, culturally sensitive classes should be offered to the Amish community; one class was previously provided in 2019.</p>	Adams County Creating Healthy Communities, ABCAP, Adams-Brown Mobility Management	Immediate	Ongoing
	<p>Free Helmet & Safety Program Provide free helmets to school children through the American Association of Pediatrics' "Put a Lid On It" program. The program could also expand to provide educational materials, bicycle lights, locks, etc.</p>	Adams County Creating Healthy Communities, ABCAP, Adams-Brown Mobility Management	Immediate	Ongoing



IMPLEMENTATION





IMPLEMENTATION

ROLES AND RESPONSIBILITIES

Collaboration is the first step towards successful implementation of the Adams County ATP. Stakeholders involved in the planning process will be collectively responsible for the design, funding, construction, maintenance, monitoring, and/or evaluation of the network. See Table 7 for a list of responsibilities.

Table 7. Implementation Responsibilities

Agency	Responsibility	Description
Adams County Creating Healthy Communities	County-wide public health promotion	<ul style="list-style-type: none"> • Lead/support active transportation education and encouragement programs • Support funding applications • Monitoring and Evaluation
Adams County Health and Wellness Coalition	County-wide public health promotion	<ul style="list-style-type: none"> • Lead/support active transportation education and encouragement programs
Adams Brown County Community Action Partnership	Transportation support for County residents	<ul style="list-style-type: none"> • Lead/support active transportation education and encouragement programs • Apply for funding or support funding applications
Adams-Brown Mobility Management	Transportation support for County residents	<ul style="list-style-type: none"> • Lead/support active transportation education programs and other supportive programs
Adams County Engineer	County-owned roadways, policies, and budgeting	<ul style="list-style-type: none"> • Design, construction, maintenance, and evaluation of bicycling and walking facilities • Apply for funding • Support local jurisdictions with roadway projects • Monitoring and Evaluation
Adams County Economic & Community Development	Support for economic development and community enhancements	<ul style="list-style-type: none"> • Provide funding support for active transportation projects • Lead/support grant administration for active transportation projects and programs

Agency	Responsibility	Description
Adams County Senior Citizens Council, Inc.	Support for Senior Citizens	<ul style="list-style-type: none"> • Lead/support active transportation education and encouragement programs
Adams County Travel & Visitors Bureau	County-wide tourism promotion	<ul style="list-style-type: none"> • Lead/support active transportation education and encouragement programs • Apply for funding or support funding applications
Adams County Commissioners	County-wide policies and budgeting	<ul style="list-style-type: none"> • Plan adoption • Apply for funding
Villages and Townships	Village or township-owned roadways, policies, and budgeting	<ul style="list-style-type: none"> • Design, construction, maintenance, and evaluation of bicycling and walking facilities • Apply for funding
Ohio Valley Regional Development Commission	Regional transportation planning	<ul style="list-style-type: none"> • Funding and planning support • Monitoring and Evaluation
Adams County School District	School travel coordination, programming, and facilities maintenance	<ul style="list-style-type: none"> • Lead/support active transportation education and encouragement programs
Ohio Department of Natural Resources	Operation of State Park property	<ul style="list-style-type: none"> • Design, construction, maintenance, and evaluation of bicycling and walking facilities on state properties
Ohio Department of Transportation	County-wide transportation funding, operation, and regulation	<ul style="list-style-type: none"> • Funding and planning support • Design, construction, maintenance, and evaluation of bicycling and walking facilities on state-owned facilities
FRS Transportation	County-wide public transportation	<ul style="list-style-type: none"> • Lead/support active transportation education and encouragement programs • Provision of public transportation

FUNDING STRATEGIES

Active transportation projects comprise a fraction of overall transportation network construction and maintenance. While pedestrian and bicycle infrastructure generally does not serve as many users as highways, bridges, and other critical infrastructure, it can have a substantial positive effect on local economies. Additionally, providing opportunities for active living promotes public health and may reduce the burden on tax-payer funded healthcare systems over time. In this light, active transportation infrastructure is a critical component of a complete transportation network and results in a positive return on investment for communities that fund such projects.

State and federal funding sources can be used to supplement local funding sources to build out the active transportation network and fund related programming efforts. Table 8 lists the primary funding sources for active transportation projects in Ohio; click on the name of each funding source to access web pages with further information. As part of the statewide Walk.Bike.Ohio Plan, ODOT published a [Funding Overview Report](#) that provides more details on types of funding available, schedules, and eligibility requirements. For information on funding for public transit, visit the [ODOT Office of Transit's website](#).

Table 8. Primary Active Transportation Funds in Ohio

Funding Source	Distributed by	Eligible Project Examples	Eligible Project Sponsor
<u>Transportation Alternatives</u>	Metropolitan Planning Organization (if applicable), or Ohio Department of Transportation (ODOT) if not	Bicycle & pedestrian facilities Safe routes for non-drivers Conversion & use of abandoned railroad facilities Overlooks & viewing areas	Local governments
<u>Safe Routes to School</u>	ODOT	Infrastructure Non-Infrastructure School Travel Plan assistance	Local governments (infrastructure) Local governments, school or health district, or non-profit (non-infrastructure)
<u>Highway Safety Improvement Program</u>	ODOT (Coordinate with local ODOT District to submit a safety study)	Signalization Turn lanes Pavement markings Traffic signals Pedestrian signals/crosswalks Bike lanes Road diets	Local governments
<u>Recreational Trails Program</u>	Ohio Department of Natural Resources (ODNR)	New recreational trail construction Trail maintenance/restoration Trailside and trailhead facilities Purchase/lease of construction & maintenance equipment Acquisition of easements Educational programs	Local governments State and federal agencies Park districts Conservancy districts Soil and water conservation districts Non-profits
<u>Clean Ohio Trail Fund</u>	ODNR	New trail construction Land acquisition for a trail Trail planning/engineering and design (must include construction)	Local governments Park districts Conservancy districts Soil and water conservation districts Non-profits
<u>Clean Ohio Green Space Conservation Program</u>	Ohio Public Works Commission (OPWC)	Open space acquisition including easements Bike racks Kiosks/Signs Hiking/Biking trails Pedestrian bridges Boardwalks	Local governments Park districts Conservancy districts Soil and water conservation districts Non-profits

MAINTENANCE STRATEGIES

The long-term performance of bicycle and pedestrian networks depends on both the construction of new facilities and an investment in continued maintenance. Maintaining bicycle and pedestrian facilities is critical to ensuring those facilities are accessible, safe, and functional.

FREQUENCY

The first step to approaching maintenance is to understand how often maintenance should be performed. Many activities, such as signage updates or replacements, are performed as needed, while other tasks such as snow removal are seasonal (see Table 9). Creating a winter maintenance approach is important to encourage year-round travel by walking and biking. One key component of this approach should be identifying priority routes for snow removal. More information on winter maintenance such as types of

equipment needed for different facility types and how to consider snow removal in the design of facilities can be found in [Toole Design's Winter Maintenance Resource Guide](#).

Table 9: Maintenance Activity Frequency

<i>Frequency</i>	<i>Facility Type</i>	<i>Maintenance Activity</i>
<i>As Needed</i>	Shared Use Paths	Tree/brush clearing and mowing
		Replace/repair trail support amenities (parking lots, benches, restrooms, etc.)
		Map/signage updates
		Trash removal/litter clean-up
		Repair flood damage: silt clean-up, culvert clean-out, etc.
	Patching/minor regrading	
<i>As Needed</i>	Shared Use Paths/ Separated Bike Lanes / Paved Shoulders/ Bike lanes	Sweeping
	Bicycle Boulevards	Sign replacement
	Sidewalks	Concrete panel replacement
<i>Seasonal</i>	All	Snow and Ice control
	Shared Use Paths	Planting/pruning/beautification
		Culvert/drainage cleaning and repair
<i>Seasonal</i>		Installation/removal of seasonal signage
	Shared Use Paths/ Sidewalks	Evaluate support services to determine need for repair/replacement
		Perform walk audits to assess ADA compliance of facilities
<i>Yearly</i>	Separated Bike Lanes / Paved Shoulders/ Bike lanes	Surface evaluation to determine need for patching/regarding/re-stripping of bicycle facilities
	Shared Use Paths	Repaint or repair trash receptacles, benches, signs, and other trail amenities, if necessary
<i>5-year</i>		
	<i>10-year</i>	Shared Use Paths
<i>20-year</i>	Shared Use Paths/ Sidewalks	Assess and replace/reconstruct shared use paths/ sidewalks

PLAN FOR MAINTENANCE

Creating a strong maintenance program begins in the design phase. The agency that will eventually own the completed project should collaborate with partners to determine the infrastructure placement, final design, and life cycle maintenance cost. Maintenance staff should help identify typical maintenance issues, such as areas with poor drainage or frequent public complaints. They may have suggestions for design elements that can mitigate these issues or facilitate maintenance activities and can provide estimates for ongoing maintenance costs for existing and proposed facilities.

COORDINATION & RESPONSIBILITY BETWEEN AGENCIES

Many jurisdictions struggle with confusion around which entity – city, village, township, county, or state – is responsible for the maintenance of trails and other active transportation facilities. Frequently there is no documentation showing who is responsible for maintenance of existing facilities, which can prolong unsafe conditions for trail users. Coordination between the government agencies is key for effective maintenance programs. Intergovernmental agreements (IGAs) are used to codify the roles and responsibilities of each agency regarding ongoing maintenance. For example, a local government may agree to conduct plowing, mowing, and other maintenance activities on trails in its jurisdiction that were built by another agency. Clarifying who is responsible for maintenance costs and operations ensures that maintenance problems are resolved in a timely manner.

MAINTENANCE ACTIVITIES

Different facility types require different types of strategies to be maintained. Table 10 breaks down maintenance activities and strategies for each by facility type.

Table 10: Maintenance Strategy Recommendations

<i>Facility Type</i>	<i>Maintenance Activity</i>	<i>Strategy</i>
<i>Shared Use Paths/ Separated Bike Lanes</i>	Pavement Preservation	Develop and implement a comprehensive pavement management system for the shared use path network.
	Snow and Ice Control	Design shared-use paths to accommodate existing maintenance vehicles.
	Drainage Cleaning/Repairs	Clear debris from all drainage devices to keep drainage features functioning as intended and minimize trail erosion and environmental damage.
		Check and repair any damage to trails due to drainage issues.
	Sweeping	Implement a routine sweeping schedule to clear shared-use paths of debris.
		Provide trail etiquette guidance and trash receptacles to reduce the need for sweeping.
	Vegetation Management	Implement a routine vegetation management schedule to ensure user safety.
		Trim or remove diseased and hazardous trees along trails. Preserve and protect vegetation that is colorful and varied, screens adjacent land uses, provides wildlife habitats, and contains prairie, wetland and woodland remnants.
	ADA Requirements	Conduct walk and bike audits to assess accessibility of new, proposed, and existing shared-use paths.
		Ensure that ADA compliance is incorporated into the design process for new facilities.
<i>Paved Shoulders/ Bike Lanes</i>	Pavement Markings	Explore approaches to routinely inspect pavement markings for bicycle infrastructure and replace as needed.
		Consider preformed thermoplastic or polymer tape on priority bikeways (identified in this Plan) adjacent to high-volume motor vehicle routes (preformed thermoplastic or polymer tape are more durable than paint and requires less maintenance).
	Snow and Ice Control	Clear all signed or marked shoulder bicycle facilities after snowfall on all state-owned facilities that do not have a maintenance agreement with a local governmental unit in place.

<i>Facility Type</i>	<i>Maintenance Activity</i>	<i>Strategy</i>
	Sweeping	Implement a routine sweeping schedule to clear high-volume routes of debris.
<i>Bicycle Boulevards</i>	Sign Replacement	Repair or replace damaged or missing signs as soon as possible.
<i>Sidewalks</i>	Pavement Preservation and Repair	Conduct routine inspections of high-volume sidewalks and apply temporary measures to maintain functionality (patching, grinding, mudjacking).
		Consider using public agency staff or hiring contractors for sidewalk repairs, rather than placing responsibility on property owner (property owner can still be financially responsible).
	Snow and Ice Control	Educate the public about sidewalk snow clearance.
		Require sidewalk snow clearance to a width of five feet on all sidewalks.
		Establish required timeframes for snow removal.
	Implement snow and ice clearing assistance programs for select populations.	

ON-GOING MONITORING AND EVALUATION

Measuring the performance of active transportation networks is essential to ongoing success. Bicycle and pedestrian counts, crash records, and other data contribute to a business case for continued improvement of and investment in multimodal infrastructure. As recommendations are implemented, Adams County must be able to measure whether these investments are paying active transportation dividends (i.e. more people walking and bicycling). An affirmative answer reinforces this Plan’s legitimacy and provides evidence that future investments will also yield positive results. The performance measures in Table 11 will chart progress towards making walking and bicycling safe, connected, and comfortable. Adams County should establish baseline targets and revisit these metrics as new plans and priorities occur. Data on these measures should be documented and published for public review annually. A robust performance measures program includes establishing baseline measurements, performance targets, data collection frequency, and data collection and analysis responsibility.

Table 11: Performance Measures

<i>Category</i>	<i>Goal</i>	<i>Measure</i>	<i>Timeline (how often is data collected/ updated)</i>	<i>Responsibility (who will collect the data)</i>
<i>Infrastructure</i>	Increase miles of pedestrian and biking network (sidewalks, signed bike routes, or shared use path/trail) built annually.	# of miles added to the walking and biking network each year	Annually	County Engineer, The Nature Conservancy, ODNR, Villages, Townships, Adams County Travel & Visitors Bureau
	Increase # of supportive infrastructure projects (i.e. bike parking, bikeshare, etc.).	# and locations of new supportive infrastructure added each year	Annually	Adams County Creating Healthy Communities, ACHWC, ACHWC partners
<i>Education and Encouragement</i>	Increase # of people reached through education programming (e.g., free helmet program).	# of people reached through educational programming each year	Annually	Adams County Creating Healthy Communities, ACHWC, Adams-Brown Mobility Management
	Increase # of people documented using active transportation.	# of people walking or biking in key locations during annual counts	Annually	Adams County Creating Healthy Communities, ACHWC
<i>Policy Changes</i>	Increase # of policies that support the development of active transportation infrastructure.	# of policies adopted	Annually	County Commissioners, Township Trustees, Village Councils, Adams County Engineer
<i>Funding</i>	Increase amount of outside funding obtained for active transportation projects.	\$ awarded through funding applications	Annually	Adams County Economic & Community Development, Adams County Creating Healthy Communities, ACHWC, Villages, Townships, Adams County Engineer, Adams County Travel & Visitors Bureau

APPENDIX A: OPINIONS OF PROBABLE COST



APPENDIX A: OPINIONS OF PROBABLE COST





ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	1	\$ 5,000.00
203E10000	EXCAVATION	CY	\$ 25.00	6520	\$ 163,000.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	27360	\$ 109,440.00
254E01000	PAVEMENT PLANING, ASPHALT CONCRETE (2")	SY	\$ 2.00	35200	\$ 70,400.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
304E20000	AGGREGATE BASE	CY	\$ 50.00	6080	\$ 304,000.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 240.00	3040	\$ 729,600.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
608E10000	4" CONCRETE WALK	SF	\$ 14.00	4250	\$ 59,500.00
608E15000	8" CONCRETE WALK	SF	\$ 28.00	300	\$ 8,400.00
608E52000	CURB RAMP	SF	\$ 26.00	550	\$ 14,300.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	110	\$ 6,600.00
N/A	PEDESTRIAN CROSSING - SIGNAL HEADS AND PUSH BUTTONS	EA	\$ 20,000.00	8	\$ 160,000.00
N/A	TRAFFIC CABINET MODIFICATIONS	EA	\$ 7,500.00	1	\$ 7,500.00
N/A	SLOW MOVING VEHICLE DETECTION SYSTEM	EA	\$ 20,000.00	20	\$ 400,000.00
ITEMIZED SUBTOTAL					\$ 2,037,740.00
LUMP SUM ITEMS	Description	% OF ITEMIZED SUB TOTAL			
	MOBILIZATION AND DEMOBILIZATION	5.00%		\$ 102,000.00	
	DRAINAGE EROSION AND SEDIMENT CONTROL	5.00%		\$ 102,000.00	
	LANDSCAPING	5.00%		\$ 102,000.00	
	UTILITY ADJUSTMENT	5.00%		\$ 102,000.00	
	SIGNING AND PAVEMENT MARKINGS	5.00%		\$ 102,000.00	
	MAINTAINANCE OF TRAFFIC	5.00%		\$ 102,000.00	
SUBTOTAL WITH LUMP SUM ITEMS					\$ 2,649,740.00
CONTINGENCY					
			CONTINGENCY	30.00%	\$ 795,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 3,444,740.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
			DETAILED DESIGN	15.00%	\$ 517,000.00
			CONSTRUCTION ADMINISTRATION	12.00%	\$ 414,000.00
			INFLATION (Assumes Construction in 2028)	12.50%	\$ 431,000.00
TOTAL PROJECT COST					\$ 4,806,740.00

Brief Project Description:

- Construct shoulder widening area for pull-offs (350' length X 8' wide, 1 per mile per direction) - exact locations to be chosen to minimize impacts to drainage, other roadway features, etc.
- Widen all other shoulder areas along corridor to consistent 4' width
- Install slow-moving vehicle detection systems (1 per mile per direction)
- Construct 5' wide sidewalk from McDonalds to Dollar General, including signal modifications at SR 32/SR 247 intersection to accommodate crosswalks

Cost Opinion Disclaimer and Exclusions:

This opinion of probable cost was developed by identifying pay items and establishing quantities based on the concept descriptions of the project. Additional pay items have been assigned approximate prices based on a percentage of the anticipated construction cost. Concept cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2023 dollars and were assigned based on historical cost data. This cost estimate is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the estimate as compared to actual bids or cost to the Client.

Specifically, because of the scope of the defined project, uncertain construction timeline, uncertain funding sources, and lack of topographic and boundary survey information, the following costs are expressly not included in this cost estimate:

- Easement and right-of-way acquisition
- Permitting
- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs (except as noted in pay items above).

Additional investigation and design tasks will be required to ascertain whether the above items will be needed for the eventual implemented project.



ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	1	\$ 5,000.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	725	\$ 2,900.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
301E56000	ASPHALT CONCRETE BASE, PG64-22, (449)	CY	\$ 363.00	25	\$ 9,075.00
304E20000	AGGREGATE BASE	CY	\$ 50.00	160	\$ 8,000.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	80	\$ 19,600.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
N/A	SLOW MOVING VEHICLE DETECTION SYSTEM	EA	\$ 20,000.00	10	\$ 200,000.00
ITEMIZED SUBTOTAL					\$ 244,575.00
LUMP SUM ITEMS	Description	% OF ITEMIZED SUB TOTAL			
	MOBILIZATION AND DEMOBILIZATION	5.00%			\$ 13,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL	5.00%			\$ 13,000.00
	LANDSCAPING	5.00%			\$ 13,000.00
	UTILITY ADJUSTMENT	5.00%			\$ 13,000.00
	SIGNING AND PAVEMENT MARKINGS	10.00%			\$ 25,000.00
	MAINTAINANCE OF TRAFFIC	5.00%			\$ 13,000.00
SUBTOTAL WITH LUMP SUM ITEMS					\$ 334,575.00
CONTINGENCY					
CONTINGENCY			30.00%		\$ 101,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 435,575.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
	DETAILED DESIGN		20.00%		\$ 88,000.00
	CONSTRUCTION ADMINISTRATION		15.00%		\$ 66,000.00
	INFLATION (Assumes Construction in 2026)		7.50%		\$ 33,000.00
TOTAL PROJECT COST					\$ 622,575.00
Brief Project Description:					

- Construct shoulder widening area for pull-offs (50' length X 8' wide, 1 per mile per direction) - exact locations to be chosen to minimize impacts to drainage, other roadway features, etc.
- Install slow-moving vehicle detection systems (strategic placement throughout corridor)
- Install Share the Road signage after every public roadway intersection, each direction

Cost Opinion Disclaimer and Exclusions:

This opinion of probable cost was developed by identifying pay items and establishing quantities based on the concept descriptions of the project. Additional pay items have been assigned approximate prices based on a percentage of the anticipated construction cost. Concept cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2023 dollars and were assigned based on historical cost data. This cost estimate is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the estimate as compared to actual bids or cost to the Client.

Specifically, because of the scope of the defined project, uncertain construction timeline, uncertain funding sources, and lack of topographic and boundary survey information, the following costs are expressly not included in this cost estimate:

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- Permitting
- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs (except as noted in pay items above).

Additional investigation and design tasks will be required to ascertain whether the above items will be needed for the eventual implemented project.

ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	1	\$ 5,000.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	700	\$ 2,800.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
301E56000	ASPHALT CONCRETE BASE, PG64-22, (449)	CY	\$ 363.00	20	\$ 7,260.00
304E20000	AGGREGATE BASE	CY	\$ 50.00	160	\$ 8,000.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	80	\$ 19,600.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
N/A	SLOW MOVING VEHICLE DETECTION SYSTEM	EA	\$ 20,000.00	10	\$ 200,000.00
ITEMIZED SUBTOTAL					\$ 242,660.00
LUMP SUM ITEMS	Description	% OF ITEMIZED SUB TOTAL			
	MOBILIZATION AND DEMOBILIZATION	5.00%			\$ 13,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL	5.00%			\$ 13,000.00
	LANDSCAPING	5.00%			\$ 13,000.00
	UTILITY ADJUSTMENT	5.00%			\$ 13,000.00
	SIGNING AND PAVEMENT MARKINGS	10.00%			\$ 25,000.00
	MAINTAINANCE OF TRAFFIC	5.00%			\$ 13,000.00
SUBTOTAL WITH LUMP SUM ITEMS					\$ 332,660.00
CONTINGENCY					
CONTINGENCY			30.00%		\$ 100,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 432,660.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
DETAILED DESIGN			20.00%		\$ 87,000.00
CONSTRUCTION ADMINISTRATION			15.00%		\$ 65,000.00
INFLATION (Assumes Construction in 2026)			7.50%		\$ 33,000.00
TOTAL PROJECT COST					\$ 617,660.00
Brief Project Description:					

- Construct shoulder widening area for pull-offs (50' length X 8' wide, 1 per mile per direction) - exact locations to be chosen to minimize impacts to drainage, other roadway features, etc.
- Install slow-moving vehicle detection systems (strategic placement throughout corridor)
- Install Share the Road signage after every public roadway intersection, each direction

Cost Opinion Disclaimer and Exclusions:

This opinion of probable cost was developed by identifying pay items and establishing quantities based on the concept descriptions of the project. Additional pay items have been assigned approximate prices based on a percentage of the anticipated construction cost. Concept cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2023 dollars and were assigned based on historical cost data. This cost estimate is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the estimate as compared to actual bids or cost to the Client.

Specifically, because of the scope of the defined project, uncertain construction timeline, uncertain funding sources, and lack of topographic and boundary survey information, the following costs are expressly not included in this cost estimate:

- Easement and right-of-way acquisition
- Permitting
- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs (except as noted in pay items above).

Additional investigation and design tasks will be required to ascertain whether the above items will be needed for the eventual implemented project.

ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	1	\$ 5,000.00
202E23000	PAVEMENT REMOVED	SY	\$ 10.00	25	\$ 250.00
203E10000	EXCAVATION	CY	\$ 25.00	255	\$ 6,375.00
203E40000	BORROW	CY	\$ 25.00	255	\$ 6,375.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	2550	\$ 10,200.00
252E01500	FULL DEPTH PAVEMENT SAWING	FT	\$ 10.00	60	\$ 600.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
301E56000	ASPHALT CONCRETE BASE, PG64-22, (449)	CY	\$ 363.00	60	\$ 21,780.00
304E20000	AGGREGATE BASE	CY	\$ 50.00	5	\$ 250.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	10	\$ 2,450.00
441E10200	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	CY	\$ 178.00	5	\$ 890.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
608E10000	4" CONCRETE WALK	SF	\$ 14.00	23500	\$ 329,000.00
608E52000	CURB RAMP	SF	\$ 26.00	120	\$ 3,120.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	40	\$ 2,400.00
611E23600	60" CONDUIT, TYPE A	FT	\$ 380.00	85	\$ 32,300.00
601E10970	RIPRAP, TYPE A	SY	\$ 100.00	5	\$ 500.00
620E00500	DELINEATOR, POST GROUND MOUNTED	EA	\$ 77.00	0	\$ -
	RAPID RECTANGULAR FLASHING BEACON (SALVAGE AND REINSTALL EXISTING)	EA	\$ 2,500.00	2	\$ 5,000.00
ITEMIZED SUBTOTAL					\$ 426,490.00
LUMP SUM ITEMS	Description			% OF ITEMIZED SUB TOTAL	
	MOBILIZATION AND DEMOBILIZATION			5.00%	\$ 22,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL			5.00%	\$ 22,000.00
	LANDSCAPING			5.00%	\$ 22,000.00
	UTILITY ADJUSTMENT			2.00%	\$ 9,000.00
	SIGNING AND PAVEMENT MARKINGS			5.00%	\$ 22,000.00
	MAINTAINANCE OF TRAFFIC			5.00%	\$ 22,000.00
LUMP SUM SUBTOTAL					\$ 545,490.00
CONTINGENCY					
			CONTINGENCY	30.00%	\$ 164,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 709,490.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
			DETAILED DESIGN	20.00%	\$ 142,000.00
			CONSTRUCTION ADMINISTRATION	15.00%	\$ 107,000.00
			INFLATION (Assumes Construction in 2026)	7.50%	\$ 54,000.00
TOTAL PROJECT COST					\$ 1,012,490.00

Brief Project Description:

- Construct 5' wide sidewalk along south side of Commerce Drive and north side of Medical Center Drive
- Construct 5' wide sidewalk along east side of Moores Road between Medical Center Drive and Commerce Drive.
- Construct crossing at Moores Road/Medical Center Drive intersection using existing RRFB (salvage and reinstall) and pavement markings, and construct 5' wide sidewalk extension to sidewalk around the baseball field.
- Assumes that large drainage pipe crossing Medical Center Drive will need to be replaced (cost included in estimate).

Cost Opinion Disclaimer and Exclusions:

This opinion of probable cost was developed by identifying pay items and establishing quantities based on the concept descriptions of the project. Additional pay items have been assigned approximate prices based on a percentage of the anticipated construction cost. Concept cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2023 dollars and were assigned based on historical cost data. This cost estimate is provided for the Client's information, and is based on the design professional's recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the estimate as compared to actual bids or cost to the Client.

Specifically, because of the scope of the defined project, uncertain construction timeline, uncertain funding sources, and lack of topographic and boundary survey information, the following costs are expressly not included in this cost estimate:

- Easement and right-of-way acquisition
- Permitting
- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs.

Additional investigation and design tasks will be required to ascertain whether the above items will be needed for the eventual implemented project.



EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	2	\$ 10,000.00
202E23000	PAVEMENT REMOVED	SY	\$ 10.00	205	\$ 2,050.00
203E10000	EXCAVATION	CY	\$ 25.00	115	\$ 2,875.00
203E40000	BORROW	CY	\$ 25.00	2205	\$ 55,125.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	1850	\$ 7,400.00
252E01500	FULL DEPTH PAVEMENT SAWING	FT	\$ 10.00	1830	\$ 18,300.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
304E20000	AGGREGATE BASE	CY	\$ 50.00	210	\$ 10,500.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	50	\$ 12,250.00
441E10200	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	CY	\$ 178.00	80	\$ 14,240.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
608E10000	4" CONCRETE WALK	SF	\$ 14.00	12060	\$ 168,840.00
608E52000	CURB RAMP	SF	\$ 26.00	330	\$ 8,580.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	110	\$ 6,600.00
609E12000	COMBINATION CURB AND GUTTER, TYPE 2	FT	\$ 47.00	1250	\$ 58,750.00
611E04400	12" CONDUIT, TYPE B	FT	\$ 100.00	1275	\$ 127,500.00
611E10200	24" CONDUIT, TYPE A	FT	\$ 200.00	160	\$ 32,000.00
611E98150	CATCH BASIN, NO. 3	EA	\$ 5,000.00	4	\$ 20,000.00
601E10970	RIPRAP, TYPE A	SY	\$ 100.00	10	\$ 1,000.00
620E00500	DELINEATOR, POST GROUND MOUNTED	EA	\$ 77.00	60	\$ 4,620.00
ITEMIZED SUBTOTAL					\$ 560,630.00
LUMP SUM ITEMS	Description	% OF ITEMIZED SUB TOTAL			
	MOBILIZATION AND DEMOBILIZATION	5.00%			\$ 29,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL	5.00%			\$ 29,000.00
	LANDSCAPING/TURF ESTABLISHMENT	5.00%			\$ 29,000.00
	UTILITY ADJUSTMENT	10.00%			\$ 57,000.00
	MAINTAINANCE OF TRAFFIC	5.00%			\$ 29,000.00
	SIGNING/PAVEMENT MARKINGS	5.00%			\$ 29,000.00
	STRUCTURE	5.00%			\$ 29,000.00
LUMP SUM SUBTOTAL					\$ 791,630.00
CONTINGENCY					
CONTINGENCY			30.00%		\$ 238,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 1,029,630.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
DETAILED DESIGN			20.00%		\$ 206,000.00
CONSTRUCTION ADMINISTRATION			15.00%		\$ 155,000.00
INFLATION (Assumes Construction in 2026)			7.50%		\$ 78,000.00
TOTAL PROJECT COST					\$ 1,468,630.00

Brief Project Description:

- Construct 5' wide concrete sidewalk with curb and gutter along north side of Sparks Street from SR 247 to Logans Lane, including any needed drainage system modifications.
- Construct 5' concrete sidewalk with curb and gutter along east side of Logans Lane from Sparks Street to Fair Park Avenue.
- Widen asphalt shoulder by 6' from Fair Park Avenue to 150' south of Adams Lake bridge, including modification of ditches due to widening. Delineation via pavement markings and periodic installation of flexible post delineators.
- Construct 10' wide shared use path from Logans Lane to Park Road 1 cul-de-sac using a to-be-determined off-street alignment.

Cost Opinion Disclaimer and Exclusions:

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- Easement and right-of-way acquisition
- Permitting
- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs.

Additional investigation and design tasks will be required to ascertain whether the above items will be needed for the eventual implemented project.



ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
202E23000	PAVEMENT REMOVED	SY	\$ 10.00	70	\$ 700.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	80	\$ 320.00
252E01500	FULL DEPTH PAVEMENT SAWING	FT	\$ 10.00	400	\$ 4,000.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
304E20000	AGGREGATE BASE	CY	\$ 50.00	10	\$ 500.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	30	\$ 7,350.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
608E10000	4" CONCRETE WALK	SF	\$ 14.00	2200	\$ 30,800.00
608E15000	8" CONCRETE WALK	SF	\$ 28.00	1990	\$ 55,720.00
608E52000	CURB RAMP	SF	\$ 26.00	350	\$ 9,100.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	50	\$ 3,000.00
609E12000	COMBINATION CURB AND GUTTER, TYPE 2	FT	\$ 47.00	400	\$ 18,800.00
N/A	RAPID RECTANGULAR FLASHING BEACON	EA	\$ 25,000.00	2	\$ 50,000.00
N/A	TRAFFIC SIGNAL MODIFICATIONS	EA	\$ 75,000.00	1	\$ 75,000.00
N/A	TRAFFIC CABINET MODIFICATIONS	EA	\$ 7,500.00	1	\$ 7,500.00
ITEMIZED SUBTOTAL					\$ 262,790.00
LUMP SUM ITEMS	Description			% OF ITEMIZED SUB TOTAL	
	MOBILIZATION AND DEMOBILIZATION			5.00%	\$ 14,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL			5.00%	\$ 14,000.00
	LANDSCAPING			5.00%	\$ 14,000.00
	UTILITY ADJUSTMENT			10.00%	\$ 27,000.00
	MAINTAINANCE OF TRAFFIC			5.00%	\$ 14,000.00
	STRUCTURE			5.00%	\$ 14,000.00
LUMP SUM SUBTOTAL					\$ 359,790.00
CONTINGENCY					
			CONTINGENCY	30.00%	\$ 108,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 467,790.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
			DETAILED DESIGN	20.00%	\$ 94,000.00
			CONSTRUCTION ADMINISTRATION	15.00%	\$ 71,000.00
			INFLATION (Assumes Construction in 2030)	17.50%	\$ 82,000.00
TOTAL PROJECT COST					\$ 714,790.00

Brief Project Description:

- Construct crossing improvements at SR 41/Walmart driveway (RRFB, pavement markings, reduced curb radii, truck apron installation, and curb ramps).
- Construct crossing improvements at SR 41/CIC Blvd (pedestrian signals, reducing curb radii, installing truck aprons)
- Construct new 5' wide sidewalk to connect to West Union Family Health Center.
- Construct new 5' wide sidewalk from SR 41 to Walmart adjacent to McDonalds (need easement, on private property)

Cost Opinion Disclaimer and Exclusions:

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- Easement and right-of-way acquisition
- Permitting
- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs (except as noted in pay items above).

Additional investigation and design tasks will be required to ascertain whether the above items will be needed for the eventual implemented project.



ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	1	\$ 5,000.00
202E23000	PAVEMENT REMOVED	SY	\$ 10.00	110	\$ 1,100.00
202E30000	WALK REMOVED	SF	\$ 10.00	8480	\$ 84,800.00
203E10000	EXCAVATION	CY	\$ 25.00	130	\$ 3,250.00
203E40000	BORROW	CY	\$ 25.00	130	\$ 3,250.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	2660	\$ 10,640.00
252E01500	FULL DEPTH PAVEMENT SAWING	FT	\$ 10.00	950	\$ 9,500.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	10	\$ 2,450.00
441E10200	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	CY	\$ 178.00	15	\$ 2,670.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
608E10000	4" CONCRETE WALK	SF	\$ 14.00	23940	\$ 335,160.00
608E52000	CURB RAMP	SF	\$ 26.00	290	\$ 7,540.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	100	\$ 6,000.00
609E12000	COMBINATION CURB AND GUTTER, TYPE 2	FT	\$ 47.00	950	\$ 44,650.00
611E04400	12" CONDUIT, TYPE B	FT	\$ 100.00	950	\$ 95,000.00
611E98150	CATCH BASIN, NO. 3	EA	\$ 5,000.00	3	\$ 15,000.00
	RAPID RECTANGULAR FLASHING BEACON	EA	\$ 25,000.00	4	\$ 100,000.00
ITEMIZED SUBTOTAL					\$ 726,010.00
LUMP SUM ITEMS	Description			% OF ITEMIZED SUB TOTAL	
	MOBILIZATION AND DEMOBILIZATION			5.00%	\$ 37,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL			5.00%	\$ 37,000.00
	LANDSCAPING			5.00%	\$ 37,000.00
	UTILITY ADJUSTMENT			10.00%	\$ 73,000.00
	SIGNING/PAVEMENT MARKINGS			10.00%	\$ 73,000.00
	MAINTAINANCE OF TRAFFIC			5.00%	\$ 37,000.00
LUMP SUM SUBTOTAL					\$ 1,020,010.00
CONTINGENCY					
			CONTINGENCY	30.00%	\$ 307,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 1,327,010.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
			DETAILED DESIGN	20.00%	\$ 266,000.00
			CONSTRUCTION ADMINISTRATION	15.00%	\$ 200,000.00
			INFLATION (Assumes Construction in 2026)	7.50%	\$ 100,000.00
TOTAL PROJECT COST					\$ 1,893,010.00

Brief Project Description:

- Construct 6' wide sidewalk on west side of SR 41 from McDonalds to Peebles Indian Drive, with 5-10' wide grass buffer and wood post fence in constrained locations.
- Widen existing 4' wide sidewalk to 6' wide sidewalk from Peebles Indian Drive to Steam Furnace Road with varying width grass buffer.
- Spot areas of curb & gutter, catch basins, and storm sewer where needed to accompany widening.
- Construct RRFBs with concrete curb ramps and marked crossings at 2 locations (Ruth Street and Shaker Run Road).

Cost Opinion Disclaimer and Exclusions:

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- Permitting
- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs.

Additional investigation and design tasks will be required to ascertain whether the above items will be needed for the eventual implemented project.



ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	1	\$ 5,000.00
202E23000	PAVEMENT REMOVED	SY	\$ 10.00	805	\$ 8,050.00
202E30000	WALK REMOVED	SF	\$ 10.00	9220	\$ 92,200.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	3310	\$ 13,240.00
252E01500	FULL DEPTH PAVEMENT SAWING	FT	\$ 10.00	2410	\$ 24,100.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	90	\$ 22,050.00
STRUCTURES (500)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
509E25000	UNCOATED STEEL REINFORCEMENT	LB	\$ 3.00	0	\$ -
511E47010	CLASS QC1 CONCRETE, CULVERT	CY	\$ 533.00	0	\$ -
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
608E10000	4" CONCRETE WALK	SF	\$ 14.00	29790	\$ 417,060.00
608E15000	8" CONCRETE WALK	SF	\$ 28.00	2400	\$ 67,200.00
608E52000	CURB RAMP	SF	\$ 26.00	480	\$ 12,480.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	120	\$ 7,200.00
609E12000	COMBINATION CURB AND GUTTER, TYPE 2	FT	\$ 47.00	2410	\$ 113,270.00
611E04400	12" CONDUIT, TYPE B	FT	\$ 100.00	2355	\$ 235,500.00
611E98150	CATCH BASIN, NO. 3	EA	\$ 5,000.00	6	\$ 30,000.00
N/A	RAPID RECTANGULAR FLASHING BEACON	EA	\$ 25,000.00	2	\$ 50,000.00
ITEMIZED SUBTOTAL					\$ 1,097,350.00
LUMP SUM ITEMS	Description	% OF ITEMIZED SUB TOTAL		Qty	COST (\$)
	MOBILIZATION AND DEMOBILIZATION	5.00%			\$ 55,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL	5.00%			\$ 55,000.00
	LANDSCAPING	5.00%			\$ 55,000.00
	UTILITY ADJUSTMENT	10.00%			\$ 110,000.00
	SIGNING AND PAVEMENT MARKINGS	5.00%			\$ 55,000.00
	MAINTAINANCE OF TRAFFIC	5.00%			\$ 55,000.00
	STRUCTURE ADJUSTMENT	5.00%			\$ 55,000.00
LUMP SUM SUBTOTAL					\$ 1,537,350.00
CONTINGENCY					
CONTINGENCY			30.00%		\$ 462,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 1,999,350.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
DETAILED DESIGN			20.00%		\$ 400,000.00
CONSTRUCTION ADMINISTRATION			15.00%		\$ 300,000.00
INFLATION (Assumes Construction in 2030)			17.50%		\$ 350,000.00
TOTAL PROJECT COST					\$ 3,049,350.00

Brief Project Description:

- Construct 5' wide sidewalk along north side of Steam Furnace Road from SR 41 to Nixon Avenue
- Construct 5' wide sidewalk along west side of Nixon Avenue from Steam Furnace Road to Rarden Road
- Construct crossing at SR 41 and Steam Furnace Road with RRFB, pavement markings, and modification of curb radius to shorten crossing.

Cost Opinion Disclaimer and Exclusions:

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- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
- Installation of new traffic signals or other traffic control devices beyond standard signs.

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ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
201E11000	CLEARING AND GRUBBING	LS	\$ 5,000.00	1	\$ 5,000.00
202E23000	PAVEMENT REMOVED	SY	\$ 10.00	140	\$ 1,400.00
202E30000	WALK REMOVED	SF	\$ 10.00	1900	\$ 19,000.00
204E10000	SUBGRADE COMPACTION	SY	\$ 4.00	705	\$ 2,820.00
252E01500	FULL DEPTH PAVEMENT SAWING	FT	\$ 10.00	61	\$ 610.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
301E56000	ASPHALT CONCRETE BASE, PG64-22, (449)	CY	\$ 363.00	75	\$ 27,225.00
304E20000	AGGREGATE BASE	CY	\$ 50.00	95	\$ 4,750.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 245.00	20	\$ 4,900.00
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
608E10000	4" CONCRETE WALK	SF	\$ 14.00	12500	\$ 175,000.00
608E15000	8" CONCRETE WALK	SF	\$ 28.00	1800	\$ 50,400.00
608E52000	CURB RAMP	SF	\$ 26.00	400	\$ 10,400.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	160	\$ 9,600.00
609E12000	COMBINATION CURB AND GUTTER, TYPE 2	FT	\$ 47.00	400	\$ 18,800.00
ITEMIZED SUBTOTAL					\$ 329,905.00
LUMP SUM ITEMS	Description			% OF ITEMIZED SUB TOTAL	
	MOBILIZATION AND DEMOBILIZATION			5.00%	\$ 17,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL			5.00%	\$ 17,000.00
	LANDSCAPING			5.00%	\$ 17,000.00
	UTILITY ADJUSTMENT			10.00%	\$ 33,000.00
	SIGNING AND PAVEMENT MARKINGS			5.00%	\$ 17,000.00
	MAINTAINANCE OF TRAFFIC			5.00%	\$ 17,000.00
	STRUCTURE ADJUSTMENT			5.00%	\$ 17,000.00
LUMP SUM SUBTOTAL					\$ 464,905.00
CONTINGENCY					
CONTINGENCY			30.00%		\$ 140,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 604,905.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
			DETAILED DESIGN	20.00%	\$ 121,000.00
			CONSTRUCTION ADMINISTRATION	15.00%	\$ 91,000.00
			INFLATION (Assumes Construction in 2030)	17.50%	\$ 106,000.00
TOTAL PROJECT COST					\$ 922,905.00
Brief Project Description:					

- Construct 5' wide sidewalk along north side of Cemetery Avenue from apartments east of Valley Vista Drive to Valley Vista Drive
- Construct 5' wide sidewalk along east side of Valley Vista Drive from Cemetery Avenue to Linda Vista Drive
- Construct 5' sidewalk along north side of Linda Vista Drive from Valley Vista Drive to east end plus connection between end of Linda Vista Drive to school parking lot.

Cost Opinion Disclaimer and Exclusions:

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- Escalation/inflation beyond the noted year
- Cost for ongoing maintenance
- Cost for adjustments to existing structures (such as bridges, retaining walls, buildings, foundations, etc.)
- Cost for new structures (such as bridges, retaining walls, etc.)
- Upsizing of existing drainage facilities if needed to handle increased impervious surface
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ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
EARTHWORK (200-250)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
202E23000	PAVEMENT REMOVED	SY	\$ 10.00	1050	\$ 10,500.00
202E30000	WALK REMOVED	SF	\$ 10.00	16000	\$ 160,000.00
203E10000	EXCAVATION	CY	\$ 25.00	18170	\$ 454,250.00
204E10000	SUBGRADE COMPACTION	SY	\$ 3.00	268270	\$ 804,810.00
254E01000	PAVEMENT PLANING, ASPHALT CONCRETE (2" DEPTH)	SY	\$ 2.00	260800	\$ 521,600.00
PAVEMENT (300-400)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
301E56000	ASPHALT CONCRETE BASE, PG64-22, (449)	CY	\$ 363.00	0	\$ -
304E20000	AGGREGATE BASE	CY	\$ 45.00	18170	\$ 817,650.00
441E10000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22	CY	\$ 225.00	15350	\$ 3,453,750.00
441E10200	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446)	CY	\$ 178.00	2750	\$ 489,500.00
STRUCTURES (500)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
509E25000	UNCOATED STEEL REINFORCEMENT	LB	\$ 3.00	0	\$ -
511E47010	CLASS QC1 CONCRETE, CULVERT	CY	\$ 533.00	0	\$ -
INCIDENTALS (600)					
ODOT Item No.	Description	Unit	Unit Price (\$)	Qty	COST (\$)
606E13000	GUARDRAIL, TYPE 5	FT	\$ 23.00	1000	\$ 23,000.00
606E17900	GUARDRAIL POST	EA	\$ 75.00	200	\$ 15,000.00
608E10000	4" CONCRETE WALK	SF	\$ 14.00	18300	\$ 256,200.00
608E15000	8" CONCRETE WALK	SF	\$ 28.00	4200	\$ 117,600.00
608E52000	CURB RAMP	SF	\$ 26.00	8100	\$ 210,600.00
608E53020	DETECTABLE WARNING	SF	\$ 60.00	1620	\$ 97,200.00
609E12000	COMBINATION CURB AND GUTTER, TYPE 2	FT	\$ 47.00	3150	\$ 148,050.00
ITEMIZED SUBTOTAL					\$ 7,579,710.00
LUMP SUM ITEMS	Description	% OF ITEMIZED SUB TOTAL			
	MOBILIZATION AND DEMOBILIZATION	5.00%			\$ 379,000.00
	DRAINAGE EROSION AND SEDIMENT CONTROL	5.00%			\$ 379,000.00
	LANDSCAPING	5.00%			\$ 379,000.00
	UTILITY ADJUSTMENT	10.00%			\$ 758,000.00
	SIGNING AND PAVEMENT MARKINGS	5.00%			\$ 379,000.00
	MAINTAINANCE OF TRAFFIC	5.00%			\$ 379,000.00
	STRUCTURE ADJUSTMENTS	5.00%			\$ 379,000.00
LUMP SUM SUBTOTAL					\$ 10,611,710.00
CONTINGENCY					
CONTINGENCY			30.00%		\$ 3,184,000.00
TOTAL COST OF CONSTRUCTION (WITHOUT CONSTRUCTION ADMIN)					\$ 13,795,710.00
PRELIMINARY DESIGN, CONSTRUCTION ADMINISTRATION, AND INFLATION					
DETAILED DESIGN			13.00%		\$ 1,794,000.00
CONSTRUCTION ADMINISTRATION			10.00%		\$ 1,380,000.00
INFLATION (Assumes Construction in 2030)			17.50%		\$ 2,415,000.00
TOTAL PROJECT COST					\$ 19,384,710.00

Brief Project Description:

- Widen asphalt shoulder to 8' wide (both sides of roadway) along US 52 throughout entire county, except between Fair Avenue and Island Creek Road in Manchester.
- Construct 8' wide shared use path along Fair Avenue, Front Street, and Jack Roush Way to avoid impacts to the downtown business district.
- Reconstruct existing sidewalk to 8' wide shared use path along south side of US 52 from Jack Roush Way to Island Creek Road.
- Reconstruct/extend 5' wide concrete sidewalk along south side of US 52 from Fair Avenue to Jack Roush Way.
- Avoid impacts to existing bridge structures, retaining walls, guardrails, and other structural features along the project corridor (cost estimate does not assume widening or replacement of structures).

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