

DEFIANCE COUNTY, OHIO

ACTIVE TRANSPORTATION PLAN



Connected, Safe, Accessible, Healthy, Promoted

EXECUTIVE SUMMARY

Maumee Valley Planning Organization
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INTRODUCTION

After recognizing the desire for greater connectivity of non-motorized transportation in Defiance County, a committee was formed to investigate the needs and potential solutions. The planning committee was established with representatives located throughout Defiance County including the City, Villages, and County entities, schools, social service agencies, the health department, and Defiance College.

Plan Development

The plan was developed by the Maumee Valley Planning Organization for the purpose of outlining the vision, goals, and strategies needed to support increased modes of active transportation in Defiance County. The plan includes a needs assessment, Safe Routes to School Travel Plan for the City of Defiance, recommendations, action plan, and project list.

What is Active Transportation?

Active transportation is defined by the Ohio Department of Transportation (ODOT) as “human-powered transportation that engages people in healthy, physical activity while they travel from place to place.”

The most common examples of active transportation include walking, bicycling, horseback riding, and skateboarding. Active transportation promotes healthy people, a healthy environment, a healthy economy, and mobility for all.

Benefits of Active Transportation

The Ohio Department of Transportation (ODOT) presented the following benefits of incorporating active modes of travel into a community’s transportation system:

- Greater economic prosperity
- Better transportation choices
- Improved access to local businesses and services
- Healthier communities
- Cleaner air and water
- Improved social equity

Source: ODOT Active Transportation Guide (Oct. 2014)

Plan Components

The following items are included in the Defiance County Active Transportation Plan, which has a horizon year of 2030. The plan will be reviewed annually and fully updated every five years.

- Vision, Goals, and Objectives
- Public Involvement
- Existing Conditions
- Needs Assessment
- City of Defiance Safe Routes to School
- Focus Areas
- Project List
- Action Plan

Plan Adoption

After a 30-day public comment period, the plan was formally adopted by the Defiance County Commissioners on January 13, 2020 via resolution.

VISION AND GOALS

Vision

Defiance County envisions a connected, safe, and efficient non-motorized transportation system for essential travel, health, recreation, and tourism.

Goals & Objectives

Five goals were developed with corresponding objectives and strategies in order to reach the County's vision. The goals include the overarching themes of Connectivity, Safety, Accessibility, Health, and Promotion.



1. Connectivity: Increase connections between places for non-motorized means of travel

Objective 1.a. Develop a comprehensive non-motorized transportation system that provides County-wide connectivity.

Objective 1.b. Increase connections and fill gaps between existing parks and amenities in the City and Villages.



2. Safety: Improve the safety and efficiency of the transportation system for non-motorized users

Objective 2.a. Reduce distracted driving, walking, and bicycling.

Objective 2.b. Reduce the number and severity of crashes involving bicyclists and pedestrians.

Objective 2.c. Create and maintain safe routes for students traveling to and from school.



3. Accessibility: Enhance mobility for all users

Objective 3.a. Improve and expand infrastructure for pedestrians, bicyclists, and people with disabilities.

Objective 3.b. Enhance opportunities for active water transportation on the local rivers.

Objective 3.c. Adopt policies, standards, or regulations promoting Complete Streets principles.



4. Health: Support healthy lifestyles for all residents

Objective 4.a. Promote healthier communities by encouraging and improving access to Active Transportation facilities.

Objective 4.b. Increase walking and biking for short trips.

Objective 4.c. Support policies to ensure walking and bicycling are viable and desirable components of the transportation network.



5. Promotion: Enhance and market existing parks, trails, and amenities

Objective 5.a. Establish a marketing strategy to promote existing parks, trails, and amenities.

Objective 5.b. Develop a regular maintenance schedule to ensure existing sidewalks and bicycle facilities are well maintained.

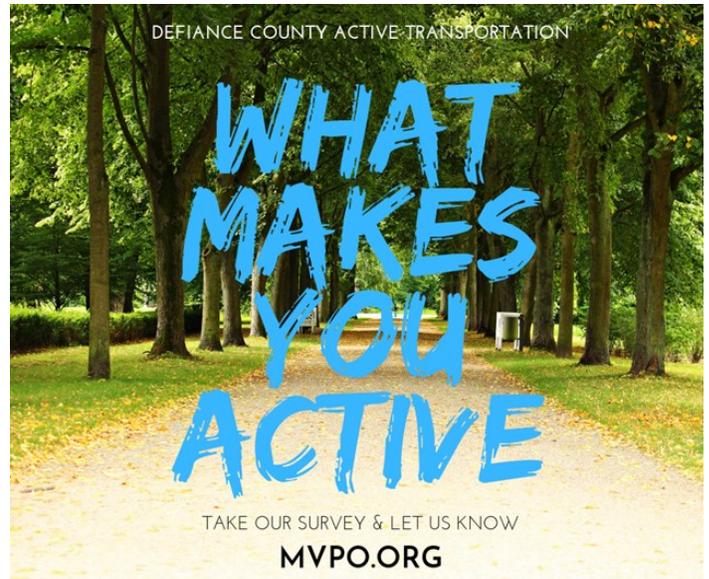
Objective 5.c. Increase the number of pedestrian and bicycle support facilities, such as bike racks, repair stations, and wayfinding signs.

PUBLIC INVOLVEMENT

The public was engaged in a variety of ways during the development of the Active Transportation Plan. A public survey was released from June to July 2019 to gather input from residents. After the survey results were analyzed, two public meetings were held in the City of Defiance and the Village of Hicksville.

Public Survey

The survey consisted of 16 questions related to demographics, current travel behaviors, and existing and future conditions. 502 individuals responded to the survey across Defiance County, with most respondents from the City of Defiance. The survey was advertised on the Maumee Valley Planning Organization’s website, the City of Defiance’s website, social media, email, flyers, word-of-mouth, and through press releases in the local newspapers, the Crescent News and the Hicksville Tribune.



Survey Results Overview

Several questions gauged public perception on safety when riding bicycles, walking, or participating in other forms of active transportation. 36% of respondents said they did not feel safe/comfortable walking or bicycling in their respective communities. The most common reasons for not feeling safe walking or bicycling were dangerous or heavy traffic, followed by lack of connections (i.e. sidewalk ends), and poor sidewalk conditions.

Respondents primarily wanted to see more nature/natural trails (77.6%) and paved trails (71.6%) in Defiance County.

Existing Parks & Trails

The survey also included questions pertaining to the current use of parks throughout the County. Many individuals were already using the parks and trails in the County, with only 17% reporting that they never use the existing parks and trails.

Water Transportation

Survey participants were asked if they used non-motorized transportation options on the three local rivers. Many respondents used kayaks for water transportation on these rivers, with the greatest usage on the Auglaize River (18.3%), followed by the Maumee River (16.6%) and the Tiffin River (13.0%). Canoes were the second choice for many individuals, with the Maumee River leading with 11.0% of the total responses, followed by the Auglaize River (10.3%) and the Tiffin River (6.7%).



Ideal, Future Transportation System

Respondents were asked to identify three words they would use to describe their ideal, future transportation system in the County. The top three words selected were safe (160), accessible (115), and convenient (53).

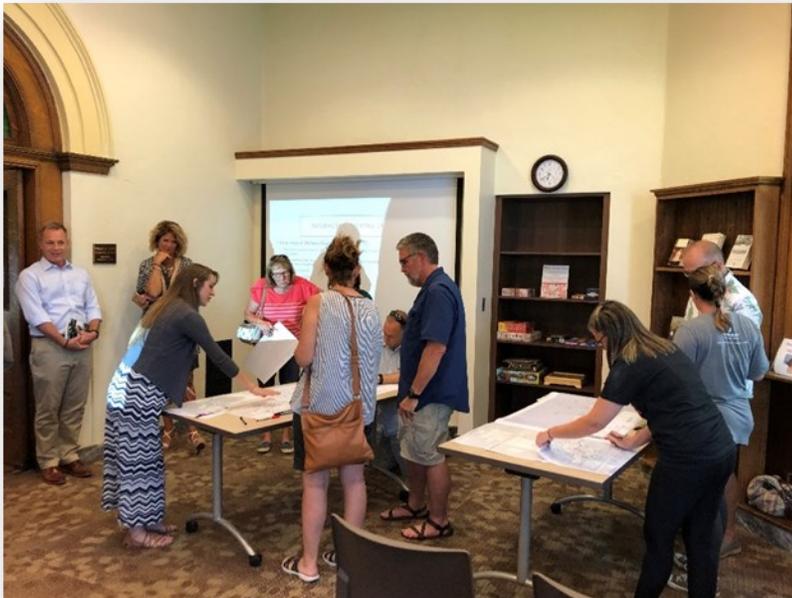
Public Meetings

After the public survey was analyzed, two public meetings were held at the public libraries in Hicksville and Defiance to gain further input from residents through an interactive mapping exercise.

After a brief presentation by Maumee Valley Planning Organization on the survey results and the plan development, participants were asked to draw on maps where they wanted to see sidewalks, bike lanes, trails, and connections in Defiance County and throughout the municipalities. Public comments were also collected during the meetings, with input on where to place bicycle and pedestrian infrastructure and where to make improvements.



Hicksville Public Meeting on July 30, 2019



Defiance Public Meeting on August 1, 2019

“Look at existing trails we have and explore more ways to connect them all.”

“There is a need for better access to the rivers for kayaks and canoes.”

Comments from the City of Defiance public meeting

EXISTING CONDITIONS

Existing conditions data related to active transportation in Defiance County were gathered in order to understand what the County has and where gaps may exist.

Demographic information, relevant plans and policies, crash statistics, and information about existing trails, parks, sidewalks and other assets were also collected. Demographic data were analyzed from the U.S. Census Bureau’s American Community Survey (ACS) five-year estimates (2017).

Demographics

Demographic data for Defiance County is summarized below (*US Census Bureau ACS 2017*):

- Total population: 38,311
- Median household income: \$55,295
- Individuals with a disability: 4,839 (12.7%)
- Individuals walking and biking to work: 2.6%

Crash Statistics

There were 39 crashes involving a pedestrian, cyclist, or other non-motorist from 2014-2018 in Defiance County (ODOT Transportation Information Mapping System, 2019). The City of Defiance had the greatest number of non-motorist crashes, accounting for 25 out of the total 39 crashes, or 64% of the total crashes in the County. The Village of Hicksville experienced 7 out of the total 39 crashes, or 18% during the five-year period. The remaining 7 crashes occurred outside of municipal boundaries in several different townships.

Existing Assets & Historic Places

Parks are located throughout the entire County, with the majority in the City of Defiance. The County also boasts a State Park (Independence Dam) and a portion of the Buckeye Trail/North Country National Scenic Trail. In addition to parks and trails, there are many sites and corridors with historic designation in Defiance

Relevant County and regional plans were also reviewed as part of the existing conditions section.

County. Popular historic sites include Fort Defiance Park, the Defiance Public Library, the East Side Fire Station, and the Riverside Chapel in the City of Defiance. St. Paul’s Episcopal Church is the only historic structure in the Village of Hicksville.

Physical & Mental Health

Health benefits of active transportation extend to mental health as well as physical health. Physical activity can reduce the risks of mental illness.

According to the Defiance County Health Assessment (2018), 72% of Defiance County adults were overweight (32%) or obese (40%). Reasons for not exercising included time constraints (45%) but also included reasons such as poorly maintained or no sidewalks (6%) and no walking, biking, trails or parks (4%).

Out of the 39 crashes involving non-motorized transportation users from 2014 to 2018, 20 crashes involved pedestrians and 19 crashes involved bicyclists. Most crashes resulted in some level of injury (90%), followed by property damage only (7.5%) and one fatal crash (2.5%).

NEEDS ASSESSMENT

Gaps and barriers in the active transportation network were determined through fieldwork, public feedback, committee input, and infrastructure mapping. The main gaps and barriers to creating a comprehensive non-motorized transportation network include funding, natural and infrastructure barriers, weather & climate, and public awareness. Gaps and barriers are discussed in further detail below.

Funding: It will take multiple funding sources as well as time to implement a County-wide and regionally connected active transportation system. In order to overcome this barrier, Defiance County can prioritize projects while also identifying potential funding sources. Phasing projects into multiple parts may also be a solution to this issue.

Natural Barriers: Defiance County is unique as it has two major rivers flowing through it – the Maumee River and the Auglaize River, as well as the smaller Tiffin River. These rivers are assets to the County but can complicate planning efforts. There are a limited number of bridges across the rivers and even fewer with pedestrian and bicycle infrastructure. Incorporating pedestrian and bicyclist infrastructure when bridges are being rebuilt or maintained can help in addressing this barrier.

Infrastructure Barriers: As Defiance County is primarily rural, one of the largest barriers is creating connections between places. Many of the roads that connect municipalities and other Counties are on State and U.S. Routes. The high speeds and narrow shoulders on many of these roads make it unsafe for active transportation users. Creating paths adjacent to these roadways, connecting via less-travelled County roads, widening shoulders, and installing bike lanes are a few ways to combat the infrastructure barriers in the County.

Weather & Climate: During the winter months from December to March, it is difficult for active transportation users to navigate the roadways. Infrastructure typically deteriorates further during this time due to roadway salt, snow plows, and cold temperatures. Unfortunately, the winter months cannot be changed, but encouraging short-distance travel between nearby places during these months may be a possible solution for active transportation users.

Public Awareness: There are many facets of public awareness that are important to consider for active transportation. Members of the public may be unaware of the existing assets in the County, the benefits of active transportation, and the current policies in place for walking and biking. Creating and implementing educational and encouragement campaigns around active transportation can help to inform the public and increase safe travel behaviors for motorists, pedestrians, bicyclists, and other users.

Addressing Barriers

Safety is a large part of public awareness. Through planning for Safe Routes to School, many parents answered that they would not allow their children to walk or bike to school due to the amount and speed of traffic, unsafe crossings, lack of sidewalks and pathways, and perceived crime and violence. As such, the first focus area is a Safe Routes to School Travel Plan for the City of Defiance. Following the School Travel Plan are infrastructure focus areas that can be used to implement projects to fill gaps and overcome barriers.

SAFE ROUTES TO SCHOOL

A Safe Routes to School Travel Plan (STP) outlines a community's intentions for enabling students in grades K-8 to engage in safe, active transportation (i.e. walking or bicycling) as they travel to and from school. The Ohio Safe Routes to School (SRTS) program requires applicants to have an approved STP or Active Transportation Plan (ATP) that addresses walking and biking to school when applying for SRTS funds. Safe Routes to School information was gathered for four schools in the City of Defiance, including Defiance Elementary and Middle Schools, Holy Cross Catholic School, and St. John Lutheran School.

Key Issues

Key issues impacting student ability to safely walk and bike to school were compiled from student travel tallies, parent surveys, walk audits, and feedback from the Safe Routes to School Team. The key issues are:

- Motorists speeding in school zones and within school campus
- Lack of encouragement from schools to support walking and biking
- Faded crosswalks at all school locations
- Lack of ADA compliant pedestrian infrastructure on South Clinton Street
- Lack of safe pedestrian and bicyclist infrastructure on South Jefferson Avenue
- Lack of pedestrian infrastructure on Karnes Avenue and Cleveland Avenue
- Lack of connections between residential neighborhoods and schools

Proposed Countermeasures

Non-Infrastructure

- Enforcement of school zone speeds with assistance from the City of Defiance Police Department
- Education of pedestrian, bicyclists, and motorists as a partnership with the Defiance County Health Department
- Encouragement through the City of Defiance's Heart Healthy Communities initiative

Infrastructure

- Repaint crosswalks in school zones to be more visible
- Addition of a crosswalk at Karnes & Cleveland Avenue near the Defiance Middle School
- Rectangular Rapid Flashing Beacon at the intersection of Jefferson Avenue and Rosewood Avenue
- Sidewalks on South Clinton Street and Ayersville Avenue
- Infill sidewalk on Karnes Avenue, Cleveland Avenue, and Jefferson Avenue

Defiance SRTS Vision

The Defiance SRTS Team and Active Transportation Committee envision a safe, connected, and accessible non-motorized transportation network that will support kids walking and biking to school. The Team and Committee plan to:

- Increase the number of students walking and biking to school through infrastructure improvements and educational campaigns;
- Support school policies and activities that encourage students to walk and bike to school;
- Enhance enforcement efforts to reduce motorist speeds and ensure safety of student travel;
- Create a more walkable and bikeable community within the City of Defiance;
- Ensure the progress by evaluating the program annually.



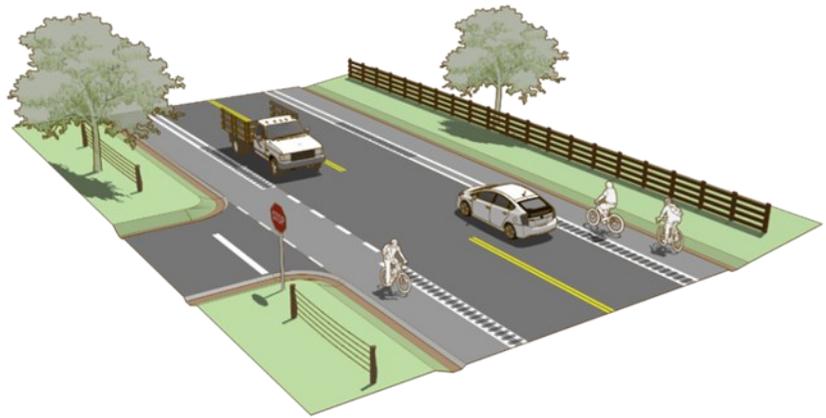
FOCUS AREAS

The following Facility Types provide a brief overview of standard bicycle and pedestrian facilities that exist. The following types refer to facility definitions in AASHTO’s Guide for the Development of Bicycle Facilities (*Fourth Edition*) as well as the Federal Highway Administration (FHWA) Small Town and Rural Multimodal Networks guide. These different facility types can be utilized when updating and implementing active transportation infrastructure.

Visually Separated

Visually separated facilities are found on roads with low to moderate volumes of traffic at moderate speeds. These facilities typically use buffer striping and markings to increase the distance between motorized and non-motorized users. No physical barrier exists with these facilities. Examples include:

- Bike lane
- Paved shoulder



Example: Bike lane

Mixed Traffic

Mixed traffic facilities are best suited for roads with low traffic volumes and low speeds. These facilities are shared among motorists, bicyclists, and sometimes pedestrians. Some examples are:

- Shared lanes
- Sharrows

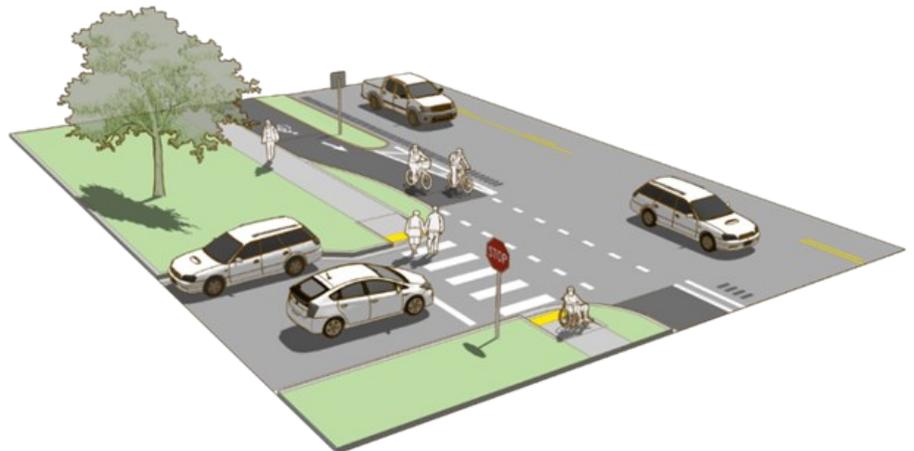


Example: Shared lane

Physically Separated

Physically separated facilities create actual barriers from the roadway network. Facility types include:

- Separated bike lane
- Sidewalk
- Sidepath
- Raised crosswalk
- High-visibility crosswalk



Example: Separated bike lane and sidewalk

PROJECTS

Projects were solicited from all of the entity organizations in the County, including all the Townships, Villages, and the City of Defiance. Project forms were sent via email and mail in August 2019, with a due date of September 30, 2019. Projects were also solicited from the County Engineer and the Defiance County Economic Development office. It was imperative that projects be solicited and included in this plan as their completion will help the County achieve its goals for active transportation. 26 total projects were submitted, which consisted of 18 projects and 1 safety study within the City of Defiance, 1 project in the Village of Hicksville, 2 projects in the County, and 4 regional projects spanning multiple counties.

Funding Sources

Funding programs to implement active transportation projects are summarized below:

Program	Description	Funding Amounts
Ohio Department of Transportation (ODOT)		
Transportation Alternatives Program (TAP)	Multi-use paths that connect destinations	No set max.; 20% local match plus engineering
Safety Program	Bike/ped facilities in high crash areas; safety education	0-10% local match plus engineering
Safe Routes to School	Funds for grades K-8 to encourage kids to walk and bike to school	100% funded; \$400,000 infrastructure projects; \$20,000 for non-infrastructure projects
Ohio Department of Natural Resources (ODNR)		
Clean Ohio Trails	Land acquisition, trail development, trailside & trailhead facilities, design & engineering, trail safety education	Max. award is \$500,000; 25% local match (can use as local match for ODOT funding)
NatureWorks	Recreation and park projects, acquisition, development and rehabilitation	County allocation up to \$150,000; 25% local match
Recreational Trails Fund	Trail linkages, maintenance of existing trails, restoration of trail areas, improved access, acquisition	Max. award is \$150,000; 20% local match
Other Grant Opportunities		
Community Development Block Grant (CDBG)	Public facilities, remove barriers for accessibility	Approx. \$150,000 for a minimum of 4 projects
SRTS National Partnership Safe Routes to Parks	Planning, education, signage, maintenance, street design, right-of-way acquisition	\$12,500; Match not required
People for Bikes	Bicycling, active transportation, community development	\$10,000; at least 50% match

The full project list can be found in the Defiance County Active Transportation Plan.

ACTION PLAN

The Action Plan outlines how Defiance County will successfully implement the Active Transportation Plan and reach their vision of having a connected, safe, and efficient non-motorized transportation system for essential travel, health, recreation, and tourism. Strategies for each goal are summarized below:

Strategies

1. **Connectivity: Increase connections between places for non-motorized means of travel**

- Conduct corridor planning and public input to determine the best routes for connecting places in the County.
- Create a bicycle level of traffic stress (LTS) network to determine the best routes for bicycle improvements.
- Develop and implement a Safe Routes to Parks plan.

2. **Safety: Improve the safety and efficiency of the transportation system for non-motorized users**

- Develop and implement educational campaigns to teach road users about how to be safe on roads, sidewalks, and in crosswalks.
- Partner with the Defiance County Health Department to increase education of motorized and non-motorized users.
- Emphasize law enforcement that impacts active transportation user safety and behavior change in motorists.
- Promote safe roadway crossing through infrastructure improvements like crosswalks and pedestrian refuge islands.
- Apply for Safe Routes to School infrastructure funding to improve the built environment to make it easier and safer to participate in active transportation.
- Apply for Safe Routes to School non-infrastructure funding to support and expand encouragement, education, and enforcement efforts.

3. **Accessibility: Enhance mobility for all users**

- Incorporate ADA compliant paths and signals for all infrastructure improvements.
- Market the existing water trail facilities.
- Work towards projects that establish canoe and kayak launches.
- Incorporate educational materials on active water transportation during the annual City of Defiance Riverfest.
- Tailor a complete streets policy for the County and local communities and encourage adoption through working with stakeholders and the public.

4. **Health: Support healthy lifestyles for all residents**

- Partner with the Defiance County Health Department to promote the health benefits of active transportation.
- Complete a data/mapping analysis of local parks to identify barriers to park access.
- Conduct walk and accessibility audits with community partners to address safety, access, and any barriers to active transportation facilities.
- Increase the availability of information on walking and bicycling options in the City and Villages.
- Promote Complete Streets policies through partnerships and projects.

5. Promotion: Enhance and market existing parks, trails, and amenities

- Create a media campaign on active transportation and identify partners to distribute the campaign message.
- Coordinate with the City and Villages to track the maintenance schedule and apply for funds if needed.
- Access funding sources for implementing support facilities at existing parks and trailheads.
- Work with the City and Downtown Visitors Bureau to determine appropriate locations for wayfinding signs for parks, trails, and amenities.
- Encourage bicycle parking at workplaces, parks, and desired destinations.

Performance Measures

Performance measures will be utilized to determine the progress being made toward each goal outlined in the plan. Performance measures will be assessed annually to measure progress of the plan implementation. Some of the performance measures to be tracked include:

- Miles of bicycle facilities, sidewalk, and multi-use paths added
- Percent of roadway miles with complete sidewalks on both sides
- Percent of signalized intersections that have complete pedestrian and bicycle facilities
- Portion of space dedicated to pedestrians through sidewalk additions, roadway widening, or park expansion
- Level of traffic stress (LTS) metric for bicyclists
- Number of pedestrian and bicyclist fatalities and serious injuries
- Number of students walking and biking to school
- Percent of total street crossings and sidewalk miles that meet accessibility standards
- Percent of transportation-disadvantaged population within a ¼ mile network distance to sidewalk, trail, or bike facility
- Number of Complete Streets policies adopted
- Number of active water transportation facilities added
- Average minutes of physical activity per day attributable to active transportation
- Percent of population within a ¼ mile network distance to sidewalk, trail, or bike facility
- Number of support facilities added for active transportation
- Miles of maintained sidewalks, trails, and bike lanes
- Increase in downtown business sales

Performance Measures

According to the **Federal Highway Administration (FHWA)**, performance measures are indicators of how well something is performing and can be used in several ways.

These measures are most often utilized in objective-driven planning in order to help an organization track progress towards achieving established goals and objectives.

The entire Defiance County Active Transportation Plan can be accessed online at www.mvpo.org/planning.