## **4. TRANSPORTATION**

Transportation is a vital element in creating and maintaining a successful city. Transportation systems connect people, products, and places, and is one of the most fundamental aspects of city planning. An efficient system of transportation provides access to destinations efficiently and with minimal impacts on others. The ideal transportation system will present a variety of transportation options, allowing for convenient access for vehicular traffic and the opportunity for walking and biking.

Both motorized and non-motorized transportation are presented in this chapter as well as the City's gateway structure.

#### CHAPTER SUMMARY

4.1

## existing conditions

- Wooster has convenient access to surrounding communities and major thoroughfares within the State.
- Significant industrial and commercial growth has occurred within close proximity to the freeways and rail lines within Wooster.
- The City does not currently have a wellconnected and complete non-motorized transportation network.
- Destinations that serve as centers of commerce, business, and entertainment are not adequately connected by a non-motorized transportation network.
- Multiple entry points into the City provide opportunities for enhanced gateway entrances to define the image and brand of Wooster.

# 4.2

## public input

- There is a general desire to alleviate automobile traffic concerns Downtown.
- Citizens want to improve connections between various points throughout the City.
- Citizens support convenient and efficient free parking throughout the City.
- Bike trails that provide connections throughout the City and connect to regional systems are supported by Wooster residents.
- Residents support an assortment of public transportation options to serve a variety of age groups.

# 4.3

## current trends

- Complete streets are designed to accommodate all users, including multiple modes of transportation, ages, and abilities.
- Roundabouts are an alternative type of roadway intersection that can decrease traffic congestion and increase safety.
- Recent transportation planning concepts, including complete streets, have introduced room for cyclists roadway design, including sharrows and dedicated bike lanes.
- The State of Ohio has been one of the leading states in developing regional non-motorized transportation recreation connections.

# **4.4** plan principle + objectives

#### GROW SMART

A prosperous and well-balanced community that ensures the small town character, green areas, and downtown atmosphere is preserved and enhanced, while carefully planning for the growth and development of existing and emerging economic centers and neighborhoods.

#### **Objective TR.1**

Make Wooster a more connected and walkable city.

#### **Objective TR.2**

Facilitate the flow of traffic and parking in and around the City.

#### **Objective TR.3**

Promote alternative modes of transportation.

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# existing conditions

#### Overview

Like many cities within Ohio, Wooster's transportation network has developed outward from the historic downtown center. Because land use and transportation are intrinsically linked, the introduction of the automobile has allowed development to occur further from the city center. Since the end of World War II, improvements to the transportation system have focused on increasing the efficiency and speed of automobile transportation to serve the growing areas of the City.

Although the automobile is currently the primary means of transporting people and goods within and outside of the City, alternate modes of transportation must be considered as crucial pieces to a complete transportation system. Improving pedestrian and bicycle access is an important step in reducing the burden on the automobile network while providing a cost efficient and enjoyable transporation option.

#### Motorized Transportation

As the primary means of transportation for a majority of Wooster's citizens, the automobile provides quick access through a fairly well-connected road network to local and regional destinations.

#### Wooster has convenient access to surrounding communities and major thoroughfares within the State.

Located south of Downtown, U.S. Route 30 connects Wooster to Massillon, Canton, and I-77 to the east, and Mansfield and I-71 to the west. In addition, numerous state routes connect the City to the agricultural areas and smaller cities throught the County. Dix Expressway (SR-83 / SR-3) provides freeway access to the industrial and residential areas to the north and east, connecting to U.S. 30 east of downtown. Although no freeways are located within the western side of the City, a series of arterial and collector streets give residents some opportunity for freeway access.

Significant industrial and commercial growth has occurred within close proximity to the freeways and rail lines within Wooster.

Transportation is critical and convenient access to freeways and rail lines, combined with lower land prices, has helped to establish the industrial and commercial areas located adjacent to both US-30 and



Figure 4.1 Transportation, the City of Wooster, 2013

Source: Gateway Planning and Design Standards, 2013

the Dix Expressway (SR-83 / SR-3). Warehousing, manufacturing, and research and development form the industrial base of the City, with industries taking advantage of the excellent access provided by the freeways and rail lines. A network of limited-access arterial and collector roads connect these areas to freeways and other areas within Wooster.

#### Non-Motorized Transportation

The City does not currently have a wellconnected and complete non-motorized transportation network.

Non-motorized transportation falls into two basic categories, pedestrian and cyclist. These modes serve the dual purpose of recreation and transportation while promoting the physical activity of residents. Safety and connectivity are two critical factors in creating a successful system, both of which must be addressed for the system to effectively serve residents.

While most primary roadways within the City provide sidwalks, some of the smaller local streets within postwar residential areas do not, creating a disconnect. Sidewalk condition is a concern in some of the older areas of the City, where the original sandstone or concrete walkway has deteriorated to the point where it is no longer fully accessible to pedestrians. The City has made efforts throughout the years to upgrade sidewalks and curb ramps to ADA accessible curb ramps, but many existing streets and neighborhoods have yet to be updated.

Cycling infrastructure can come in several different forms, from sharrows and dedicated bike lanes to multiuse paths. While cyclists have the option to ride along roads, the absence of bicycle markings (sharrows or dedicated lanes) is a safety concern that could possibly deter cyclists.

Multi-use paths that are devoted to serving cyclists and pedestrians alike can aleviate some of the current safety and connectivity concerns in Wooster, as conflict with cars is minimal and street crossings are typically well defined. Some effort has been made within Wayne County to transform vacant rail lines into cycling trails, but such trails do not currently connect to Wooster.



Image 4.2: Dedicated bike lane example



Image 4.3: Dedicated bike lane example



Destinations that serve as centers of commerce, business, and entertainment are not adequately connected by a nonmotorized transportation network.

Destinations within the City that would benefit from non-motorized transportation options have been identified. These are areas that could have parking issues at peak times (fairgrounds), large amounts of non-drivers (colleges, recreational areas), or areas that require frequent visits from residents (commercial, medical areas).

Figure 4.1 shows the locations of several primary destinations within Wooster:

- 1. Downtown Wooster
- 2. Ohio Agricultural Research and Development Center (OARDC)
- 3. College of Wooster
- 4. Wayne County Fairgrounds
- 5. Wooster Community Hospital
- 6. Soccer Complex and Gault Recreation Center
- 7. Burbank Road Commercial Area

#### Gateways

Multiple entry points into the City provide opportunities for enhanced gateway entrances to define the image and brand of Wooster.

Gateways are entrances into the community that are frequently passed by visitors and residents, and provide the opportunity to showcase the brand and image of Wooster. Enhancing and branding these areas will clearly frame the entry into the City and help reinforce its identity.

Six primary gateways have been identified on Figure 4.1, and are primarily located at highway and freeway exits. Efforts have been made in recent years by the City to identify and improve gateway conditions in Wooster. In 2013 the City and GGJ, Inc. developed a Gateway Planning & Design Standards document that illustrates the gateway opportunities and enhancements at the Madison Avenue and State Route-30 exit that include both signage and landscape treatments (See Figures 4.2 - 4.4).

*Figure 4.2: Concept sketches from 2013 Gateway Planning & Design Standards* 



Figure 4.3: Concept sketches from 2013 Gateway Planning & Design Standards



Figure 4.4: Concept sketches from 2013 Gateway Planning & Design Standards



# 4.2

## public input

#### Motorized Transportation

## *There is a general desire to alleviate automobile traffic concerns Downtown.*

The most common concern mentioned throughout online discussion and meetings were semi-truck traffic Downtown and multiple roadway and intersection locations.

Responses to the survey showed a 2.75 rating (1 highest, 5 lowest) of the traffic in the City. There was a large difference between those polled between 18-24 years of age and other age groups, as the younger group rated the traffic much worse. Ward 3 also had a slightly worse rating of traffic than the other wards.

## *Citizens want to improve connections between various points throughout the City.*

Ensuring appropriate vehicular routes between destinations was stated multiple times throughout the public process. Some of the respondents wanted road extensions to help alleviate traffic and increase travel time.

## *Citizens support convenient and efficient free parking throughout the City.*

Citizens agree on the overall success of parking in Downtown, especially free parking. Suggestions with the current network that were mentioned include:

- Building a parking garage
- Improving parking in commercial areas
- Eliminating the parking time limit
- Adding parking spaces

#### Non-Motorized Transportation

Bike trails that provide connections throughout the City and connect to regional systems are supported by Wooster residents.

Input from residents showed an interest in connecting Downtown to residential areas and the OARDC with either bike lanes or trails. These comments also discussed the possibility of connecting to the Ohio to Erie Trail or to one of the surrounding rails-to-trails networks. Residents stated that they wanted bicycle safety to improve with these upgrades.

For future development, citizens strive for a bicycleoriented community by implementing bike lanes, bike paths, and sharrows linking the City together, as well as state-wide bike routes. In addition, there is interest for a bike-share system within Wooster.

Residents of Wooster generally agree that more walking paths should be implemented within the City to connect Downtown with residential areas.

Residents support an assortment of public transportation options to serve a variety of age groups.

Citizens have differing ideas regarding public transportation within Wooster. Some feel that the bus system should be enhanced, which may include incorporating city service buses and promoting bus system use with branding and communication tactics.

Other residents feel that the bus system should be a low priority and that the City should instead focus on offering a variety of mass transportation options such as taxi services, van circulators, car-pooling, and trains. *Figure 4.5: How would you rate Wooster's traffic?* (1 highest, 5 lowest)





*Figure 4.6 How important is it to you that the community be connected by sidewalks, bike paths, and recreational trails?* 



Ward Breakdown



# 4.3

## current trends

#### Motorized Transportation

*Complete streets are designed to accommodate all users, including multiple modes of transportation, ages, and abilities.* 

Transportation planning with a complete streets policy uses the entire right of way to increase functionality, convenience, and safety for users while maintaining traffic capacity and flow.

Complete streets can include, but are not limited to, the following elements:

- Bike lanes/sharrows
- Wide sidewalks
- Bus lanes
- Street trees
- ADA curb ramps
- Median islands
- Roundabouts

The focus of complete strees does not stop at providing alternate forms of transportation, but also places importance on the creation and enhancement of the public realm. The placement of street trees and parallel parking spaces can help protect pedestrians from automobile traffic, while traffic calming devices help to lessen the speed and intensity of traffic and noise. Ensuring the safety and comfort of cyclists and pedestrians will help increase pedestrian activity at the street and allow the street to function as a segment of the public realm.

Image 4.4: Example of a complete street



#### *Roundabouts are an alternative type of* roadway intersection that can decrease traffic congestion and increase safety.

Roundabouts are an increasingly common type of roadway intersection that have numerous benefits over a traditional four-way intersection. A traditional four-way intersection contains up to 32 potential points of conflict for vehicles, and an additional 24 points of conflict for vehicles / pedestrians. In comparison, a roundabout reduces the amount of conflict points to eight, for both automobiles and pedestrians (See Figure 4.7).

Studies by the Federal Highway Administration and Insurance Institute for Highway Safety have shown a reduction in traffic delays anywhere from 20 - 89%, and a reduction in vehicle collisions of up to 37%. Because speeds within a roundabout are lower, fatal collisions can see a reduction of up to 90%.

In addition to the safety and capacity improvements, roundabouts are also cheaper to maintain in comparison to an electronically signaled intersection. Replacement and repair costs for electronic signalization average from \$5,000-\$10,000 yearly. Maintenance for a roundabout will match that of a roadway, with a useful life of up to 25 years.

#### Figure 4.7: Roundabouts vs. Traditional Intersections

#### Intersection



32 Vehicle conflicts 24 Pedestrian conflicts 8 Pedestrian conflicts

#### Roundabout



8 Vehicle conflicts

#### Non-Motorized Transportation

*Recent transportation planning concepts,* including complete streets, have introduced room for cyclists roadway design, including sharrows and dedicated bike lanes.

Sharrows are markings painted on the road indicating cyclists are included in the traffic pattern, giving cities a cost effective solution to accomodate cyclists since the bikes are merged with traffic. While cheaper and easier to implement, sharrows offer little protection for cyclists against faster moving vehicles.

Dedicated bike lanes can be placed alongside traffic with painted lines distinguishing the lane. Bright painted lanes are effective at delineating bike lanes from vehicular traffic. In addition, the placement of physical buffers that protect cyclists from traffic can include the parallel automobile parking between traffic and the bike lane, as well as concrete or knock-down bollards. Physical buffers gives cyclists a better sense of safety, encouraging more bike lane use and better safety overall.

The State of Ohio has been one of the leading states in developing regional non-motorized transportation recreation connections.

Multi-use trails provide the opportunity for recreational activity, while giving residents and visitors a unique way to experience nature. The development of multi-use trails can utilize land that is not easily developable, such as land within a flood plain. These trails often serve the dual use of a mode of transportation, as well as passive parkland.

The Ohio to Erie Trail is one of the longest dedicated multi-use trails in the country, which when completed, will be a 325 mile long route that extends from the Ohio River in Cincinnati to Lake Erie in Cleveland. Four large metropolitan areas will be connected through this trail, Cincinnati, Dayton, Columbus, and Cleveland.

While most of this trail is complete or under construction, there are still large sections that must go on-road to connect. South of Wooster is one of the largest sections of the trail that has not been completed. To the south, the trail ends at Fredericksburg and continues to the north at Dalton.

# 4.4 plangingiple bigectives

A safe, efficient, and balanced transportation network that includes a variety of mobility choices, connects land uses, enhances the environment, and improves the quality of life for those who live and work in the community.

## **RESPONSIBLE PARTIES** WOOSTER LEADERSHIP PLANNING AND ZONING **CITY ENGINEER** FNG PARKS AND RECREATION POLICE DEPARTMENT ) P FIRE DEPARTMENT CODE ENFORCEMENT CE WAYNE COUNTY MAIN STREET WOOSTER CHAMBER OF COMMERCE THE COLLEGE OF WOOSTER OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER WOOSTER COMMUNITY HOSPITAL PRIVATE LAND OWNERS TIMEFRAME

Short Term	1-3 years
Medium Term	3-6 years
Long Term	6-10 years
Ongiong	Action to be continuously addressed

#### Objective TR.1 Make Wooster a better connected and walkable city.

Action TR.1.1

*Revise City Code to allow for and encourage a walkable mix of uses and amenities throughout Wooster.* 

Incorporating the right mix of land uses, along with good site design, will help to promote walkability within Wooster. In addition, the incorporation of pedestrian amenities such as sidewalks, benches, street trees, seat walls, waste receptacles, restrooms, and bike racks should be mandatory for new development.



Revise City Code and standards to require new development to build/incorporate multi-use paths on primary and secondary roadways.

All new development should be required to dedicate space for alternative modes of transportation. This space will lessen the space needed for automobiles on the roadway, minimizing the impact on existing roadways.

#### Action TR.1.3

Support the development of complete street practices as new roadway infrastructure is planned and built.

The City should ensure that pedestrian, bicycle, transit, and vehicular travel needs are given equal consideration, along with providing accessbility for all of Wooster's residents. Streets in Wooster should be designed to accommodate all modes of transportation, motorized and non-motorized, in a manner accessible to all portions of the population.

#### Action TR.1.4

Continue to repair and expand the existing sidewalk network.

Conduct regular inspections of public walks and paths to ensure they meet accessibility standards. Advertise on the City website and on pedestrian and bike facility maps how users can report maintenance problems or other concerns to the City.



Time Frame: Short Term/Ongoing



Time Frame: Short - Mid Term







#### Time Frame: Ongoing

#### Action TR.1.5

Connect Downtown, the OARDC, the College of Wooster, and the Wayne County Fairgrounds with multi-use trails and bicycle lanes.

Construct a multi-use trail that connects the OARDC across the highway to a trail that runs along Little Apple Creek. Utilize on-street bike lanes to connect the Wayne County Fairgrounds, Downtown, and the College of Wooster to the Little Apple Creek Trail.

Explore options to build off-street multi-use paths in combination with on-street bike lanes that connect Downtown, the OARDC, the College of Wooster, and the Wayne County Fairgrounds.

#### Action TR.1.6

*Continue to participate in ODOT's Safe Routes to School program.* 

Wooster should continue to work with the School District to improve the walking and biking environment for students.

#### Action TR.1.7

*Implement the recommendations of the Transportation Implementation Project included in the City's Capital Improvement Plan.* 

Table 4.1 and Figure 4.9 indicate the planned motorized road and intersection improvements as outlined within the 10-year TIP.

## Objective TR.2 Facilitate the flow of traffic and parking in and around the City.

**Action TR.2.1** *Explore opportunities to route truck traffic away from Downtown.* 

In order to reinforce the pedestrian friendliness of Downtown, options should be explored to better manage truck routes. Truck traffic should be rerouted in a manner that supports the industrial community while promoting a clean and safe Downtown.



*Time Frame: Short - Mid - Long Term /Ongoing* 



Time Frame: Mid Term



Time Frame: Long Term/Ongoing



*Time Frame: Short Term* 

#### **Action TR.2.2** Continue to consider the implementation of roundabouts instead of traffic lights as part of future intersection improvements.

In the interest of reducing traffic congestion, maintenance costs, and safety issues, future intersection improvements should study the possibility of using roundabouts at select intersections. These considerations should also be part of any traffic study required for new developments.

#### Action TR.2.3

*Improve awareness and access to public parking through a comprehensive wayfinding strategy.* 

The City should complete a wayfinding study that investigates parking and mobility options. Within Downtown, this study should review wayfinding signage and public parking visibility. This study should provide recommendations to improve access and awareness of public parking options.

#### Action TR.2.4

*Traffic light timing and intersections with "No turn on red" restrictions should be evaluated.* 

All traffic lights that prohibit turning on red lights should be examined to the necessity of that restriction. Lifting some of those restrictions can increase functionality and decrease congestion in the transportation network.



#### Time Frame: Short Term/Ongoing



*Time Frame: Short Term* 



Time Frame: Ongoing

#### Objective TR.3 Promote alternative modes of transportation.

#### Action TR.3.1

Continue to plan local bikeway and trail connections that complement and tie into regional and statewide systems (e.g. the Ohio Trails and Greenways Plan, Ohio to Erie Trail).

The Ohio to Erie Trail is planned to pass just a few miles southeast of Wooster and the City should look for ways to connect into the statewide system. By adding a trail head in Wooster to the Ohio to Erie Trail, the City can attract additional visitors and promote cycling within the community.

#### Action TR.3.2

Create standards to promote bike facilities (e.g. racks or shelters) for all new commercial and public developments.

City Code revisions should be made that encourage new development to provide bike facilities in order to promote cycling as a viable transportation option. These standards will help encourage a bicycle-friendly and healthy community. Facilities should be aesthetically pleasing and attractive to pedestrians, while enhancing the image of the City as whole.

#### Action TR.3.3

Develop a comprehensive bikeway network in Wooster that connects places of commerce, entertainment, neighborhoods, and institutions. Sharrows can be used as a short term strategy to identify the network for routes where funding is not available to create bike lanes or multi-use trails.

Figure 4.8 shows the recommended on-street bike lanes and multi-use trails for the City. Policy should be created to plan for creating dedicated bike lanes and multi-use trails in these locations in the future. In the meantime, the City should fund the implementation of sharrows along these roads and educate citizens on the rules of sharrows. This education should be for motorists as well as cyclists in order to ensure safety for all parties involved.



#### Time Frame: Short Term/Ongoing



#### Time Frame: Mid Term



Time Frame: Mid Term



Figure 4.8 Proposed Non-Motorized Transportation

	Туре	Location	Timeline
1	Road Improvement (Phase I completed, Phase II in progress)	Akron Road; Portage Road to Milltown Road	In Progress
2	Road Improvement (In progress)	Friendsville Road; Milltown Road to Riffel Road	In Progress
3	Intersection Improvement	Beall Avenue and Winter Street	In Progress
4	Road Improvement	Akron Road; Highland Park Road to Gateway Drive	In Progress
5	Intersection Improvement	Madison Avenue and Timken Road	2015
6	Intersection Improvement- Roundabout	Burbank Road and Smithville Western Road	2015
7	Intersection Improvement- Signal Replacement	Beall Avenue and Cleveland Road	2016
8	Intersection Improvements- Crosswalk and Signal Replacement	SR 302 and SR 83	2017
9	Road Improvement	Burbank Road; Highland Road to Oldman Road	2017
10	Intersection Improvement- Roundabout	Oak Hill Road and Oldman Road	2018
11	Road Improvement	West Highland Avenue; Christmas Run Boulevard west to corporate limits	2019
12	Road Improvement- Widening	West Highland Avenue; Christmas Run Boulevard to Oak Hill Road	2019
13	Road Improvement- Widening	Cleveland Road; Milltown Road to Smithville Western Road	2020
14	Road Improvements	Portage Road; Akron Road to Geyers Chapel Road	2020
15	Intersection Improvements	Highland Avenue and Oak Hill Road	2021
16	Extension	Riffel Road; Friendsville Road to Cleveland Road	2021
17	Road Improvement- Widening	Palmer Street; East Bowman Street to East Wayne Ave	2021
18	Road Improvement- Widening (Future)	Melrose Drive; Milltown Road to Smithville Western Road	2022
19	Intersection Improvements	Melrose Drive and Smithville Western Road	2022
20	Road Improvement- Widening (Future)	Cleveland Road; SR 83 to Smithville Western Road	Unknown
21	Road Improvement- Widening (Future)	Burbank Road: Riffel Road to Smithville Western Road	Unknown
22	Road Improvement- Curb and Gutter Improvements (Future)	University Street; Gasche Street to Palmer Street	Unknown
23	Road Improvement- Curb and Gutter Improvements (Future)	Oak Hill Road; Oldman Road to Milltown Road	Unknown
24	Road Improvement (Future)	Silver Road; Mechanicsburg Road to Venture Boulevard	Unknown
25	Intersection Improvement- Roundabout	Melrose Drive and East Milltown Road	Unknown
26	Extension	Milltown Road: Melrose Drive to Geyers Chapel Road	Unknown
27	Extension	Progress Drive: Enterprise Drive to Geyers Chapel Road	Unknown

#### TABLE 4.1 PLANNED MOTORIZED TRANSPORTATION PROJECTS, 2014



Figure 4.9 Planned Motorized Transportation Projects, the City of Wooster, 2014