

SECTION 6.2

BICYCLE AND PEDESTRIAN



W A M P O

Wichita Area Metropolitan Planning Organization



Overview

Biking and walking are viable forms of transportation as well as recreation. They are low-impact ways to travel that can reduce air pollution and help alleviate traffic congestion. A well designed bicycle and pedestrian system can provide many levels of accessibility and mobility. Cyclists and pedestrians include individuals with limited options for travel, such as those that do not or cannot drive. They also include people that choose to walk or bike.

A well connected and safe bicycle and pedestrian system can improve the livability of an area. It increases transportation choices for citizens and encourages **active lifestyles**.

The WAMPO Regional Pathway System Plan (RPSP) identifies existing and planned pathways, as well as different ways the region could achieve a stronger, more connected system. The MTP 2035 builds upon the RPSP by including goals, objectives, and strategies for more connected and usable bicycle and pedestrian facilities.

This section of the MTP 2035 provides an overview of existing bicycle and pedestrian facilities in the region, existing plans (e.g., RPSP), highlights the trends and needs of the region, and provides recommendations to improve **walkability** and **bikeability**.

Background

Past federal legislation has increased the priority for bicycle and pedestrian infrastructure. If new legislation reflects recent United States Department of Transportation (USDOT) policies, bicycle and pedestrian options may continue to be an important part of the transportation system.

Involvement and interest in bicycle and pedestrian options is not only at a national level, it is regional and local as well. WAMPO region residents participated in public outreach efforts on bicycle and pedestrian issues. These efforts included public meetings, surveys, and stakeholder meetings, as well as conversations at the MTP Project Advisory Committee meetings. Public input provided an

What is an active lifestyle?

A way of life that integrates physical activity into daily routines including walking and biking.



Pedestrians

What is walkability and bikeability?

A unique measure of how friendly an area is for walking or biking. Factors include:

- Number, width, and condition of sidewalks and pathways.
 - A system that connects to destinations.
 - Availability of curb cuts for wheelchair access.
 - Presence of buffers between sidewalks and roads.
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understanding of the needs, concerns, and opportunities for bicycling and walking in the region.



Destination Travel

The region has made progress on accommodating bicycles and pedestrians. Stakeholders indicated that the region has been more opportunistic or reactive, rather than proactive. In other words, bicycle and pedestrian improvements are made when new opportunities arise, such as unanticipated funding. According to some stakeholders, the region lacks a planned commitment towards improving the system. However, stakeholders were optimistic that local officials are beginning to see the benefits of bicycle and pedestrian opportunities.

While the opportunities for bicycling and walking are increasing in the region, the reasons to bike or walk stay the same. The reasons for bicycling and walking fall into two distinct types of travel; destination and recreation.

Destination

Walking or biking to get from one place to another is destination travel. Many people choose to walk or bike to get from one place to another, but not everyone has that choice. Children, persons with disabilities, and many elderly are not able to drive. Some people simply cannot afford an automobile. For individuals that are unable to drive or do not have access to a vehicle; bicycling and walking may be the only way to get around.

Recreation

Walking and biking for recreation is more common in the region than biking or walking to get around. According to a WAMPO survey, people more frequently walk or bike for recreation, as shown in **Exhibit 6.2.1** and **Exhibit 6.2.2**.



Recreation

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Exhibit 6.2.1: Bicycling Trip Frequency

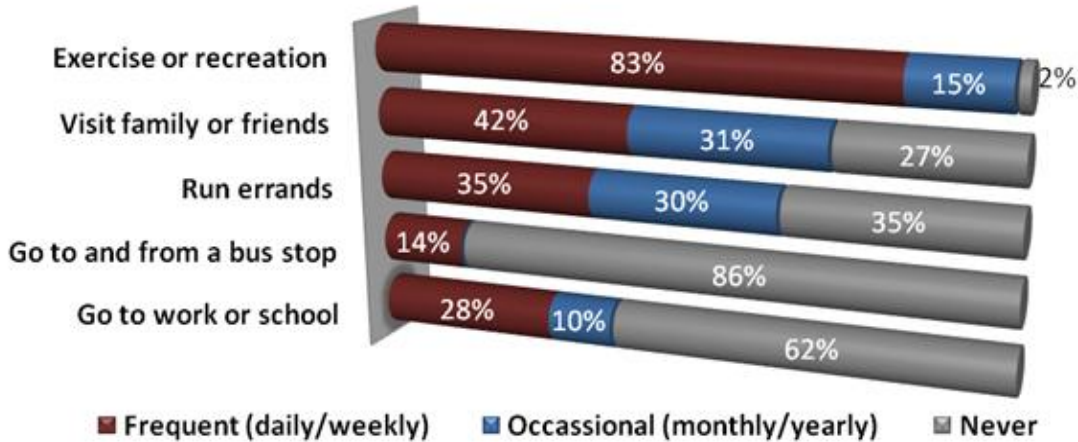
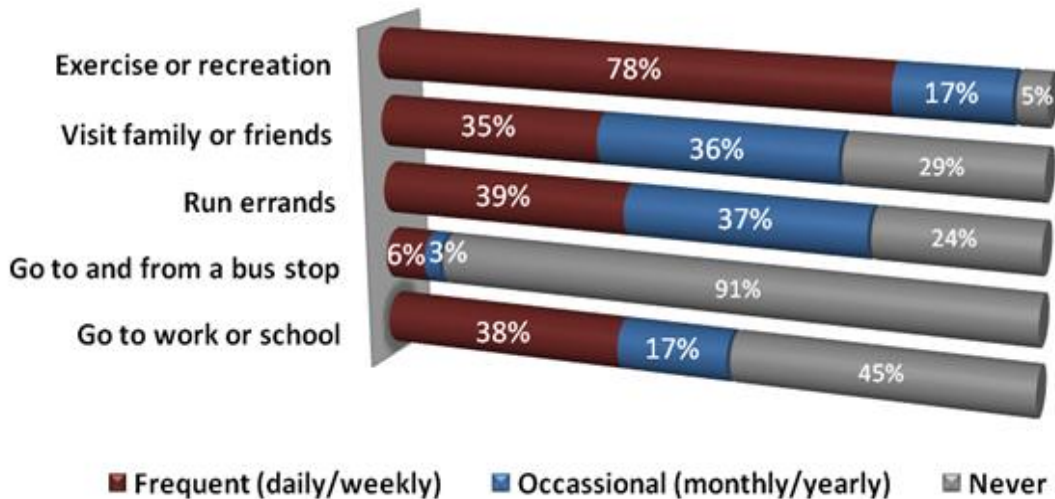


Exhibit 6.2.2: Walking Trip Frequency



Existing Facilities

Whether it is for destination or recreation purposes, there are four types of facilities to accommodate biking and walking: sidewalks, multiuse paths, park trails, and roads. The following outlines the types of facilities available for biking and walking.



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Sidewalk

What are multiuse paths?

An off road, typically hard surfaced, route that can be used by bicyclists, pedestrians, and other non-motorized forms of transportation.



Greenway

A multiuse path that is located in protected open-space areas, typically following a natural or manmade linear feature such as a river or a road.



Sidewalks

A common type of bicycle and pedestrian facility in the area is the sidewalk. Sidewalks provide a separate, relatively safe route on which to walk or bike. They are typically located along one or both sides of roadways.

The Safe Routes to School (SRTS) program has encouraged greater interest in developing sidewalks to connect neighborhoods and schools. Even with this increased interest, it is up to each community to decide the priority of building sidewalks.

Multiuse Paths

Multiuse paths provide a completely separate right-of-way designated for use by bicycles, pedestrians, and other non-motorized modes. These paths differ from sidewalks because they are wider and better accommodate bicyclists. Multiuse paths minimize conflict points with motorists.

There are approximately 107 miles of multiuse paths in the region. Existing multiuse paths, such as the Arkansas River, Sedgwick County Zoo Park, and Derby paths are each more than 10 miles long and provide recreation and transportation connections.

Recently completed paths include the Historic Midtown bike path/**greenway** and the I-135/Gypsum Creek connection in the City of Wichita. The Historic Midtown bike path connects the downtown bikeway from Central to Broadway south of 15th Street N. The I-135/Gypsum Creek bike path connects I-135 to Oliver Street along Gypsum Creek. Several other cities like Andover, Haysville, Maize, and Mulvane also have a number of bicycle paths.

Rails-to-trails is another type of multiuse path. These are abandoned rail lines that are converted for pathway use. A regional example is the Prairie Sunset Trail, which connects Goddard to Garden Plain.

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Park Trails

Trail is a general term describing any route, which is intended for use by bicyclists, hikers, joggers, horses, or casual walkers. Several of the parks in the region provide multiuse trails, such as the Sedgwick County Park. The park trail system not only connects to other major trails, but links to other parks and sports facilities. While these trails provide some connections to destinations, they are primarily used for recreational purposes. However, they can work within the regional pathway network to provide connections.

Roads

Roads provide a hard surface on which to bike or walk. Often, due to the lack of sidewalks or paths, pedestrians are forced to walk on the road. This may not be the ideal location for pedestrians.

Bicycles are considered vehicles and have the right to ride on roads other than interstates and freeways/expressways. Bicyclists that travel on roads are required to follow the same rules as motorists. Experienced bicyclists often feel comfortable on roadways without specific bicycle facilities if automobile volumes and travel speeds are relatively low. Less experienced riders may not feel safe on roads, especially those with more cars that travel at higher speeds. Marked bicycle facilities (e.g., bike lanes) or adjacent bicycle paths are desirable for riders of all levels.

On-Street Bicycle Lanes

On-street bicycle lanes provide a right-of-way on the road that is designated for bicyclists by signs or permanent markings. There are several short segments of on-street bike lanes in the region. These include a section in the City of Maize, one that connects the Sedgwick County Park system to the Arkansas River system, and one in the City of Wichita on Mount Vernon between Broadway and the Arkansas River.

Existing Pathway Maps

The [RPSP](#) provides baseline information on existing trails and pathways in the region. From the [RPSP](#), the following maps were developed to show the current network of

What are Rails-to-Trails?

Conversion of a railway easement into a multiuse path.



On-Street Bicycle Lane



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Arterial with Sidewalk

bicycle paths, trails, and sidewalks. These maps include projects with designated funding from the 2010 Transportation Improvement Program (TIP), which are assumed to be completed in the near future. **Exhibit 6.2.3** shows an enlarged portion of the downtown Wichita area and **Exhibit 6.2.4** shows the entire region. Not all sidewalks are shown on the maps, as there are subdivisions with internal sidewalks and pathways. The larger regional map shows the sidewalk network on arterial streets.

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WAMPO
Adopted date:
July 13, 2010

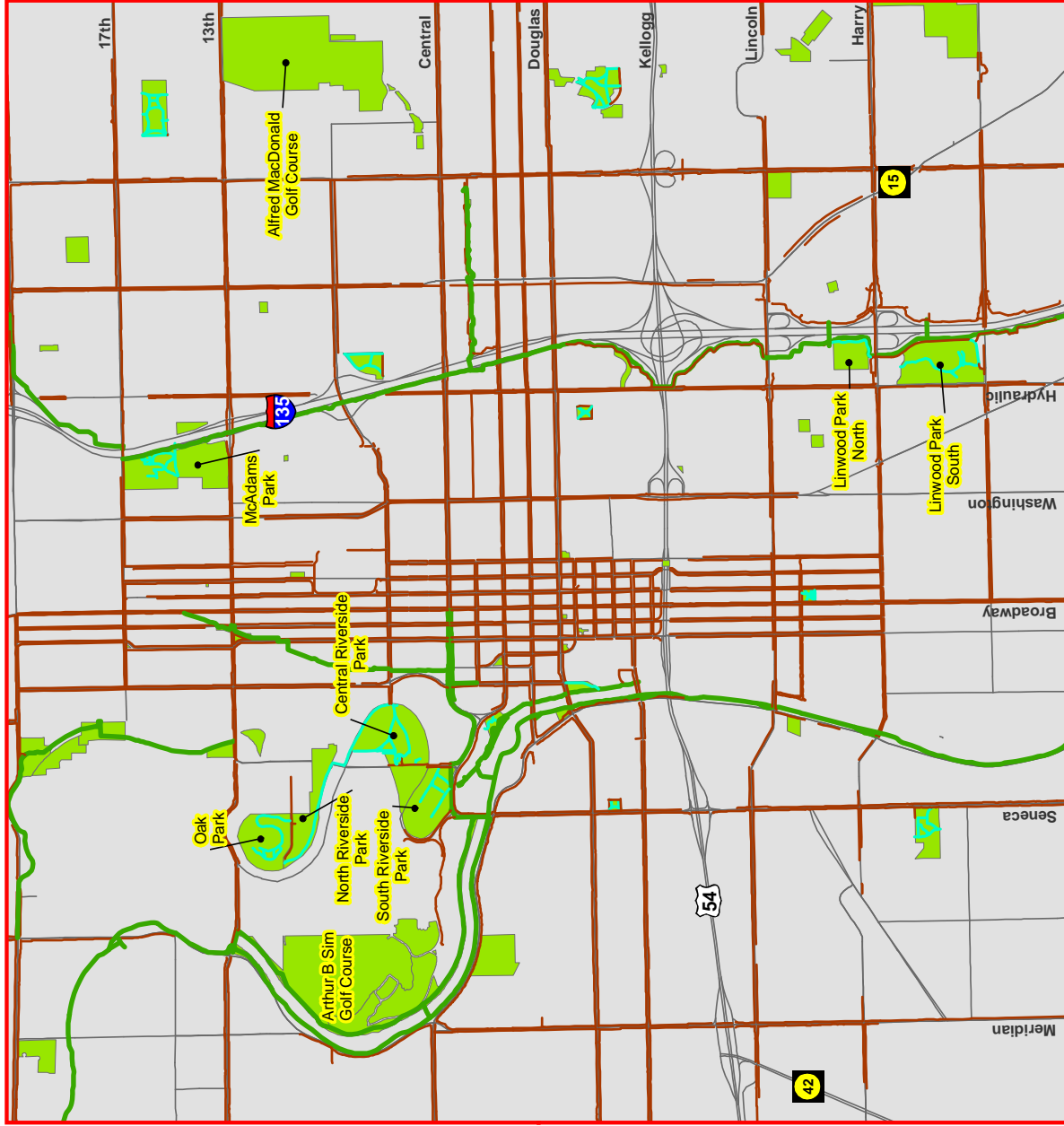
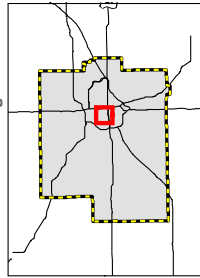


Exhibit 6.2.3 Downtown Wichita Bicycle and Pedestrian Network

WAMPO Region



Legend

Existing Bicycle & Pedestrian Facilities

- Multituse Paths
- Park Trail
- Sidewalk
- Park
- Major Roads

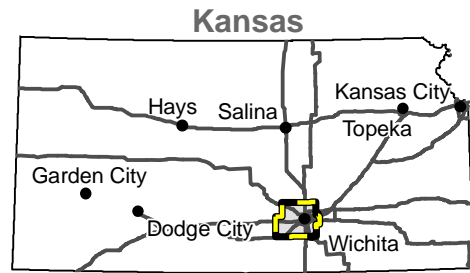
Not all sidewalks are shown.
Neighborhood sidewalks are not included.



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Exhibit 6.2.4
Bicycle and Pedestrian Network

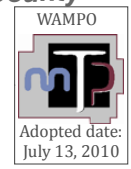
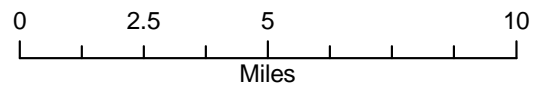
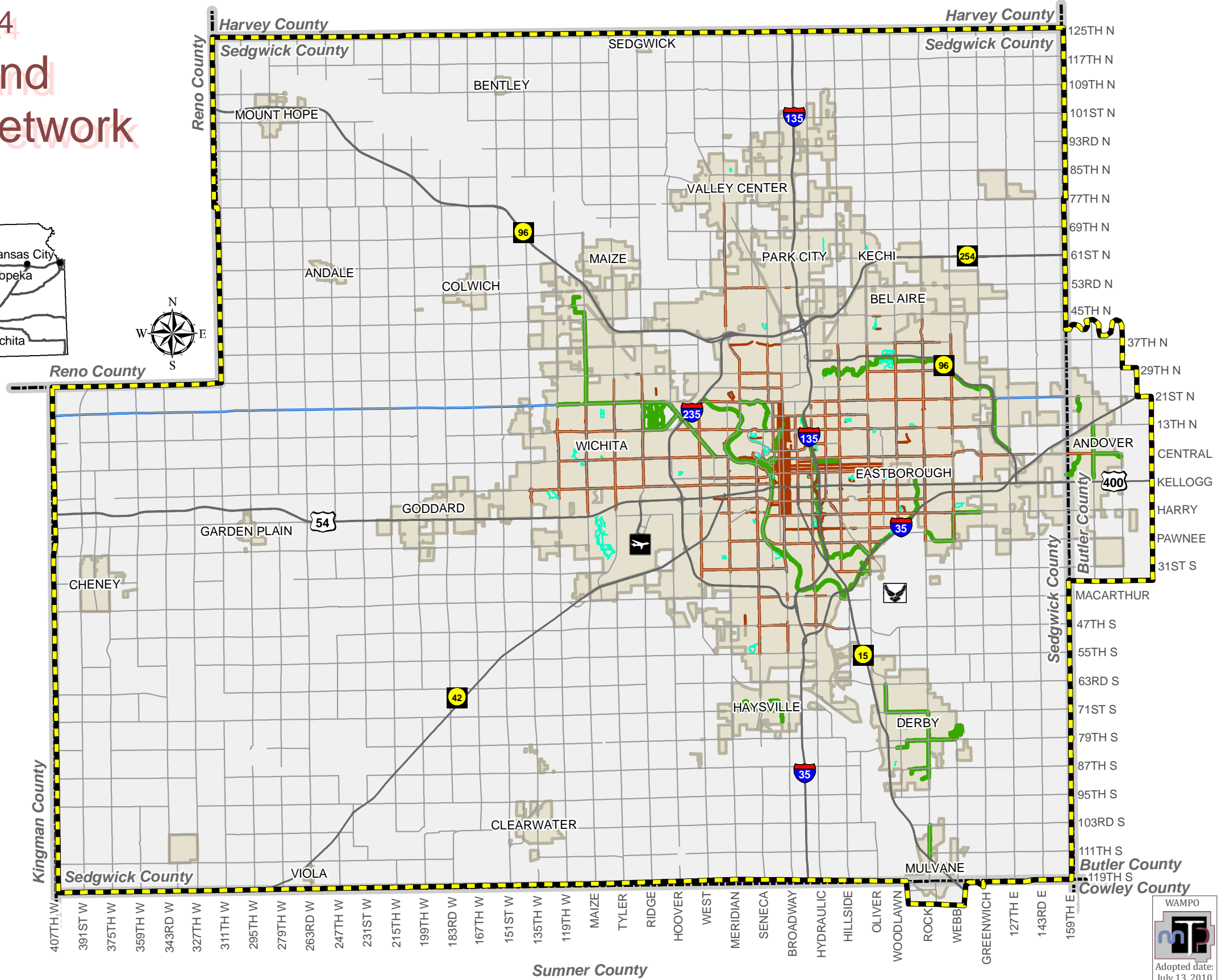


Legend

Existing Bicycle & Pedestrian Facilities

- Multiuse Path
- Park Trail
- Sidewalk
- Paved Shoulders

- WAMPO Boundary
- County Boundaries
- Major Roads

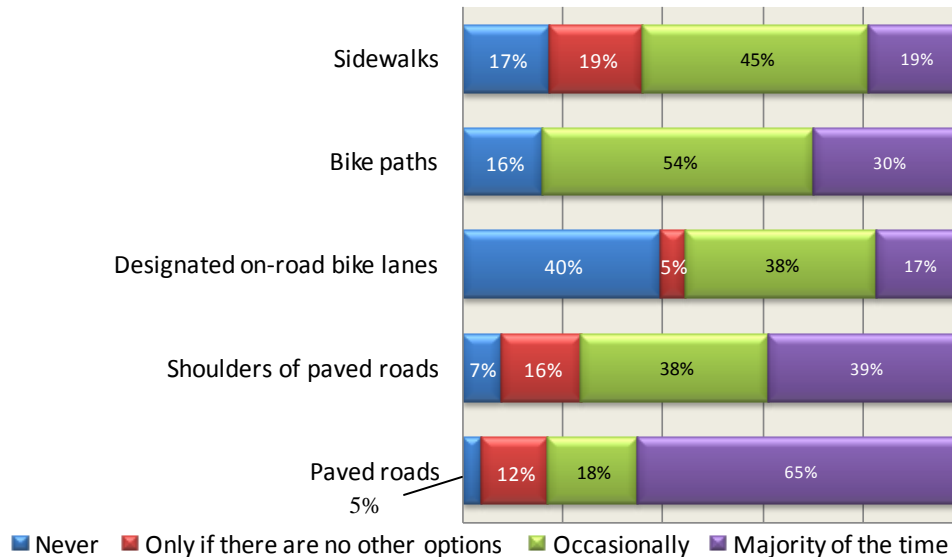




Types of Facilities Used by Bicyclists

According to the MTP 2035 bicycle survey, bicyclists in the region primarily travel on paved roads or the shoulders of roads (**Exhibit 6.2.5**). The choice of what surface bicyclists ride on is often determined by what is available.

Exhibit 6.2.5: Types of Surfaces and Frequency of Use by Bicyclists



Planned Bicycle and Pedestrian Facilities

Several projects were submitted for inclusion in the MTP 2035 that include accommodations for bicycles and pedestrians. Some projects are multiuse pathways, while others are road or bridge projects with bicycle and pedestrian facilities. The MTP 2035 **Eligible for Funding List** includes some of the priority missing links identified in the RPSP. The project list in **Appendix 4: Project List** includes more specific information on these projects, including a map of their locations.

What is the Eligible for Funding List?

The list of projects included in the MTP 2035 that are qualified to receive federal transportation funds over the next 25 years. The list was developed using the project selection process (**Appendix 3: Project Selection Process**).



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Existing Plans

There are a few existing plans for the region that emphasize bicycle and pedestrian facilities.

WAMPO Regional Pathway System Plan

The 2007 RPSP was completed through a cooperative effort with representatives from the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the Kansas Department of Transportation (KDOT), Wichita Transit, local jurisdictions, and pathway users.

The RPSP establishes a backbone system to connect existing and future bicycle and pedestrian facilities. It identifies a comprehensive system of primary corridors the region should strive to complete in order to provide a network of non-motorized opportunities. The RPSP further identifies priority connections for the short to medium term. This plan is available on the WAMPO website.

Parks, Recreation, and Open Space Plan

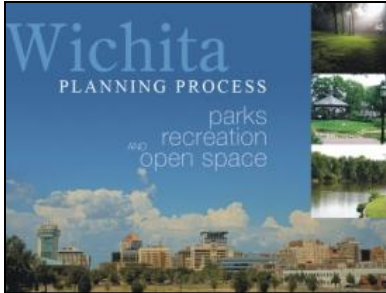
In 2008, the City of Wichita Parks and Recreation Department completed an update of the 1996 Parks and Pathways Plan. The new document, the Parks, Recreation, and Open Space (PROS) Plan, is a strategic master plan for parks, recreation, and open spaces. The PROS Plan recognizes the role of Wichita's park and recreation system in building community, preserving natural areas, and enhancing quality of life and the local economy. This plan recognizes the importance of bicycle and pedestrian facilities and promotes additional facilities. This plan is available on the City of Wichita's website.

WAMPO Safe Routes to School Plan

The Safe Routes to School (SRTS) Program was established as part of SAFETEA-LU and provides funding for state departments of transportation to create SRTS programs. SRTS funds can be used for projects or activities that make walking and bicycling to school safe, enjoyable, and routine; ultimately improving the livability of the community. Projects include infrastructure improvements as well as educational programs.



Bike Rack at Wichita Transit Center



PROS Plan



School Zone and Pedestrian Crossing Signs

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WAMPO was awarded funding in 2006 to complete a regional SRTS plan in conjunction with *Safe Kids Wichita Area Coalition*. The regional SRTS Plan includes recommendations on regional strategies to improve the safety of children in the vicinity of schools. This plan is available on the WAMPO website.

Complete Streets

Bicyclists, walkers, drivers, bus riders, and all other users should be able to get around safely and conveniently. Complete streets policies aim to reconfigure some local roadways to better accommodate many transportation system users.

Recently, the United States Department of Transportation (USDOT) created a policy statement on bicycle and pedestrian accommodation. The main focus, which is consistent with the complete streets idea, is to provide safe and convenient bicycle and pedestrian facilities within transportation projects.

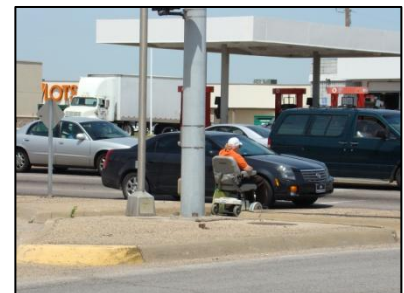
The concept of complete streets moves beyond building roads specifically for cars. The concept is based on designing the transportation network to improve safety and access for all users. Several states, regions, and localities have created complete streets policies. While there are not any existing complete streets policies in the region, one of the strategies identified in the MTP 2035 is to develop and implement a complete streets policy. This will move the region in the direction of increasing multimodal options and access and improving accessibility and connectivity throughout the region.



Complete Street

Regional Trends and Needs

How many people in the WAMPO region actually ride bikes or walk on a regular basis? This question is difficult to answer. However, data from the 2000 Census that shows the percentage of people who bike or walk to work helps provide some answers.



Pedestrian in Wheelchair Crossing the Street

The means of transportation to work for all workers aged 16 and older in the region is in **Chapter 5: Land Use and**



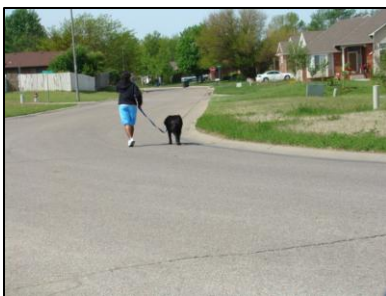
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Top 3 Reasons Why People Do Not Bike.

1. Lack of bike lanes and/or paths.
 2. Automobile traffic (speed and number of cars).
 3. Lack of bicycle parking/storage.
-

Top 5 Reasons Why People Do Not Walk.

1. Weather.
 2. Lack of sidewalks.
 3. Not enough time.
 4. Destinations are too far.
 5. Driving is more convenient.
-



Pedestrians Walking in the Street

Transportation Connection. The 2000 Census data for the WAMPO region shows that only 0.2% of workers bike to work, while 1.4% walk to work. The national average shows 0.4% bike to work and 2.9% of workers walk to work. In both cases the region is 50% lower than the national average.

Responses to the MTP 2035 surveys highlight two main reasons why people do not walk or bike more; connectivity and safety.

Connectivity

Connectivity refers to how well different areas of the region are linked. According to stakeholder input, and public meeting comments, there is a desire and need to improve bicycle and pedestrian connectivity within and between communities.

From the survey, the top reason given why people do not bike is the lack of bike lanes or paths. A top reason why people do not walk is the lack of sidewalks. There is an interest in sidewalk development but this is the choice of each community.

Compounding the lack of connectivity, there are physical barriers as well. Rivers, freeways, and railroads are some of those barriers. There are many bridges over rivers, freeways, and railroads that include bicycle and pedestrian facilities. However, many bridges do not accommodate bicycle and pedestrians. Providing accessible crossings over physical barriers is an issue.

Another missing component in the bicycle and pedestrian system are the connections to transit stops. People walking or biking to transit stops do not always have sufficient facilities on which to travel. This issue was identified in the MTP 2035 surveys and vocalized at public meetings. The importance of bike racks on buses and at destination points was also expressed.

All of these connectivity issues lead to a bicycle and pedestrian system that may be difficult to use. There are many bicycle and pedestrian facilities in the region, however, they do not all connect to each other. Providing those connections, or missing links, would improve the

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opportunity for biking and walking to be a viable transportation option. Other ways to improve connectivity are included in the recommendations at the end of this section.

Safety

While providing connectivity should be a major focus of improving bicycle and pedestrian facilities, safety should be just as important.

The MTP 2035 survey shows that regional residents perceive safety for bicyclists and pedestrians as relatively low. The survey results show 70% of bicyclists and 40% of pedestrians feel somewhat safe or not safe at all. Statistics on bicycle and pedestrian crashes, which are provided later in this section, support these concerns. Other safety issues identified by the stakeholders are listed below.

Pedestrian Bridges and Crossings

Safety concerns for children walking or biking to school include the lack of sidewalks and safe crossings. In some areas, the only options for walking to school are in the road or a ditch. In other locations, school kids are faced with the obstacle of crossing a highway to get to school. The safety of Goddard school children who cross US-54/400 (Kellogg) to get to school was one example identified. A pedestrian bridge would be one way to mitigate safety concerns near the Goddard school and others like it.

Accommodation for the Disabled

People who use wheelchairs often share the roads with motorists due to the lack of sidewalks or the poor condition of the existing sidewalks. Many intersections and **curb cuts** do not meet the needs of those who use wheelchairs.

Maintenance

Stakeholders perceive that maintenance of existing paths is limited. Pavement conditions, broken lights, and lack of winter maintenance are some of the associated safety issues cited by stakeholders.



Pedestrians in Street

What are Curb Cuts?

Typically a curb cut is a ramp that allows an easier movement from the sidewalk to the road. Curb cuts are required by the Americans with Disabilities Act.



Pathway Maintenance



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Crash Statistics

Did you Know?

2 out of every 9 fatal pedestrian or bicycle crashes in the State of Kansas occurred in the WAMPO region.



Pedestrian Crossing

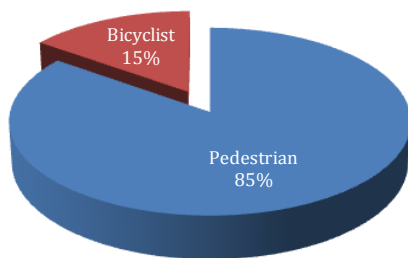
Understanding what the safety issues are and where they are located is an important step towards improving the walkability and bikeability of the region. A complete analysis of bicycle and pedestrian crash statistics can be found in the [WAMPO Safety Plan](#). This section highlights some key bicycle and pedestrian safety statistics.

The WAMPO region had a disproportionate share of total bicycle and pedestrian crashes that occurred in the State of Kansas between 2004 and 2008. Out of all the bicycle and pedestrian crashes that occurred in Kansas, 25% were in the WAMPO region. The region makes up about 15% of the total Kansas population.

Bicycle and pedestrian crashes result in higher injury and fatality rates than motor vehicle only crashes. Bicycle and pedestrian crashes account for 2% of the total crashes (including motor vehicle) that occurred in the region. However, bicycle and pedestrian crashes represent 6% of the injuries and 13% of the fatalities that are caused by crashes in the region.

Between 2004 and 2008, there were many more pedestrian fatalities than bicycle fatalities. As shown in **Exhibit 6.2.6**, of the 27 (100%) total bicycle and pedestrian fatalities in the region, four were bicyclist fatalities (15%) and 23 were pedestrian fatalities (85%).

Exhibit 6.2.6: Share of Fatalities 2004-2008 in WAMPO Region



Where Do Bicycle and Pedestrian Crashes Happen?

Primary crash sites are conflict points, which are locations where roads, driveways, sidewalks, and bike lanes cross each other. As the number of conflict points increase, the likelihood of a crash increases. There can be many conflict points at intersections, parking lots, and driveways. Almost half of the bicycle and pedestrian crashes that happened in the region occurred at an intersection or were intersection related.

Information about the location of bicycle and pedestrian crashes can help identify specific regional bicycle and pedestrian safety issues. Once the issues are identified, action steps can be taken to mitigate the problems. These action steps can include construction or reconstruction, but can also be as simple as providing education to bicyclists,

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pedestrians, and drivers. More information about the location of bicycle and pedestrian crashes is available in the [WAMPO Safety Plan](#), which is available on the WAMPO website..

What Are Some Causes of Bicycle and Pedestrian Crashes?

Bicycle or pedestrian crashes are caused by either the bicyclist, the driver, the pedestrian, the environment (weather), or the road (condition or design). The top three contributing circumstances were all caused by the driver, bicyclist, or pedestrian. More specific information, including the top 10 factors that contributed to bicycle or pedestrian crashes and their causes can be found in the [WAMPO Safety Plan](#).

Recommendations

Several goals, objectives, and strategies of the MTP 2035 show a commitment to improve the opportunities for walking and biking. The bicycle and pedestrian projects listed in **Appendix 4** can improve the connectivity and safety of the bicycle and pedestrian system. However, projects are only part of the picture to achieve a walkable and bikeable region.

Many successful bicycle and pedestrian programs follow a **5-E approach**. Based on input received from the public consultation process, together with other regional trends and identified needs, the following recommendations adhere to the 5-E approach.

Education and Enforcement

- **Safety programs.** Identify funding for local jurisdictions to implement bicycle and pedestrian safety and educational programs, such as promoting the use of bicycle helmets.
- **Education programs.** Promote share the road campaigns to educate motorists and bicyclists on the rules of road.
- **Safe Routes to School.** Promote Safe Routes to School programs and walk or bike to school events.

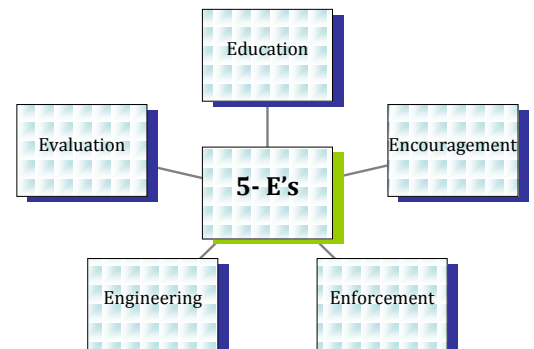
Top 3 Contributing Circumstances in Bicycle and Pedestrian Crashes

1. Improper parking.
 2. Failure to yield right-of-way.
 3. Inattention.
-

5-E Approach

1. Education (for everyone involved).
 2. Encouragement (to increase levels of use).
 3. Enforcement (to protect the rights of all).
 4. Engineering (to provide needed improvements).
 5. Evaluation (to assess levels of success).
-

5-E Approach





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- **Safety enforcement.** Encourage local jurisdictions to provide training for law enforcement officers on the laws pertaining to bicyclists and pedestrians.

Encouragement

- **Local coordination.** Appoint a bicycle liaison officer.
- **Promote national events.** Encourage local jurisdictions, businesses, and other organizations to support and promote events that encourage bicycling and walking (e.g., National Bike to Work Week).
- **Regional map.** Develop a map of designated bicycle and pedestrian facilities in the WAMPO region and distribute this map through local stores, Convention and Visitors Bureau, Chamber of Commerce, etc.

What is a road diet?

A road diet reduces the number and/or width of lanes in a road in order to provide right-of-way for bicycles and/or pedestrians.



Bike Route Sign

Engineering

- **Regional corridor missing links.** Place priority on construction of missing links that have been identified.
- **Bicycling network.** Provide a safe and convenient network for destination orientated trips. Suggestions include; providing on-street bicycle accommodations such as bike lanes, **road diets**, paved shoulders, shared roadways, and bicycle route signage.
- **Bicycle amenities.** Provide bicycle racks or lockers near schools, workplaces, transit stops, and other destination centers. Encourage employers to provide secure bicycle parking and shower facilities.
- **Signage.** Improve pedestrian and bicycle signage.
- **Connectivity.** Provide connectivity between communities through off-street multiuse paths and trails. Focus improvements on completing east-west and north-south connections throughout the region.
- **Pedestrian bridges/crossings.** Provide pedestrian bridges or signaled midblock crossings to schools at locations where crossing a busy road poses a safety hazard. Provide safe pedestrian crossings at intersections for school children, pedestrians, and bicyclists.
- **Accommodation for the disabled.** Prioritize construction of new sidewalks or reconstruction of existing sidewalks in areas where disabled citizens are likely to need access.

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- **Transit connection.** Develop links between bicycle and pedestrian facilities and transit. Encourage the use of bike racks on buses and ensure ADA ramps are near designated bus stops.
- **Access during construction.** Develop plans to maintain bicycle and pedestrian access during construction.
- **Maintenance.** Ensure existing bicycle and pedestrian facilities are well maintained by filling pot holes and keeping pavement in good condition. Maintain good lighting to provide a more secure environment for bicyclists and pedestrians.
- **Be proactive.** Take a proactive not reactive approach to improving the bicycling and walking environment.

Evaluation

- **Update plans.** Periodically review and assess the data and recommendations contained in the MTP 2035 and other regional plans.

These recommendations are all geared at improving the walkability and bikeability throughout the region. WAMPO cannot implement these recommendations on its own. Cities, counties, and other interested organizations in the region need to participate in the implementation process. Improving livability and the sustainability of the region's transportation system will require commitment and collaboration.



Maintenance on Sidewalk



Bike Path