Safe Routes to School Plan

City of Glenwood City and the School District of Glenwood City

SAFE ROUTES to School
NATIONAL PARTNERSHIP
Glenwood City

May 2013

Welcome to
Glenwood City, Wisconsin
"Home of the Fifty-Seven Hills"

Home of the Hilltoppers

GLENWOOD CITY POLICE
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Bicycle, Pedestrian and Safe Routes to School Plan 2013-2018

City of Glenwood City and School District of Glenwood City

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Purpose

The purpose of the Glenwood City Bicycle, Pedestrian, and Safe Routes to School Plan is to provide a long range planning document that inventories the City's bicycle/pedestrian infrastructure, identifies needs new infrastructure and safety improvements, and identifies ways to encourage residents of all ages to walk and bike to school, work, or other destinations within the community.

The Plan will help current and future City officials and residents to make consistent decisions related to pedestrian and bicycle infrastructure improvements as the City and surrounding area grows.

The Plan is a fluid document that should be reviewed yearly and revised when needed.

Overall Goals

The overall goals of the City of Glenwood City Bicycle, Pedestrian, and Safe Routes to School Plan are the following:

1. Continue the City's commitment to making sidewalk and multi-use trail improvements when economically feasible.
2. Maintain good communication with residents, the Glenwood City Police Department, Glenwood City government officials and staff and the School District of Glenwood City to identify areas where there are safety issues and needs for improvements.
3. Create a connected network of safe sidewalks and multi-use trails that residents of all ages can enjoy.
4. Increase encouragement and education while explaining the benefits of walking and biking.

Bicycle, Pedestrian and Safe Routes to School Committee

The Glenwood City Bicycle, Pedestrian, and Safe Routes to School Plan was created by a committee with representatives from the City of Glenwood City, School District of Glenwood City, Glenwood City Police Department, and interested residents.

The committee collected the information contained in this document with a goal to address safety concerns and pedestrian and bicycle infrastructure gaps within the City and to provide a long range plan to address them with the desired outcome of getting more school age children to walk or bike to school and more adults to walk or bike to work.

Committee Members

John Larson, Glenwood City Mayor
Tim Emholtz, School District of Glenwood City Administrator
Doug Doornink, Glenwood City Public Works Director
John Darwin, Glenwood City Police Chief
Shari Rosenow, City Clerk

Past Pedestrian and Bicycle Infrastructure Planning Efforts

The City of Glenwood City has been doing sidewalk and multi-use trail planning since 2004 when it began working on its first comprehensive plan. The City recommended and mapped future sidewalks and multi-use trails to connect the Central Business District, parks, and Elementary School, Middle School, and High School as well as new residential developments. This document represents a continuation of these past planning efforts.

Benefits to Area Residents

Sidewalk and multi-use trail planning will provide several benefits to Glenwood City and Village of Downing residents. The benefits can be economic, social, safety, and health related.

Economic

- Sidewalks and multi-use trails are becoming quality of life issues for many people and can attract residents to the area. New residents will increase the City's tax base and school population.
- Biking and walking can lead to reduced traffic, parking needs, and energy consumption.
- Biking and walking reduces health care costs by encouraging exercise.

Social

- Walking helps students and adults decompress after a long day.
- Walking creates community interaction and connectedness.
- The elderly are more likely to walk to nearby services and socialize within their community and offers them more independence.
- Walking and biking helps give younger people a feeling of responsibility and independence.

Safety

- Pedestrians do not have to share the same infrastructure as motorized traffic.
- Appropriate signage and markings make motorists aware of possible pedestrian or bicyclist traffic.
- Education makes residents conscious of pedestrian and bicyclist issues.

Health

- Biking and walking are easy ways to get short sessions of exercise.
- Active children tend to remain active.
- Biking and walking helps fight obesity.
- Biking and walking brings people to the outdoors, providing fresh air and natural beauty.

Existing Sidewalks and Multi-Use Trail Conditions

Map 1 shows the existing sidewalks and multi-use trails within the City of Glenwood City. The City has approximately 4.1 miles of sidewalks that mainly serve the Central Business District and neighboring residential areas. This area is the oldest part of the City and has the highest building density. Newer subdivisions or residential properties on the north and south side of the City do not have any sidewalks

In general, most sidewalks in the City are in good condition. Typically, sidewalks are repaired or replaced, if needed, in conjunction with street and utility projects.

There are about three miles of multi-use trails serving Glenwood City. The trail along the south side S.T.H. 170 connects sidewalks on the eastern edge of the developed portion of the City to the Elementary, Middle and High Schools. There is a graveled multi-use trail that is an abandoned railroad bed that connects Glenwood City to the Village of Downing. Although not a multi-use trail, there is also a mowed area north of S.T.H. 170 that connects the eastern edge of the developed portion of the City to the Ball Field Park. This is a worn path used by residents. The path ends at a residential cul-de-sac which, then, leads to the schools.

The multi-use trails are either gravel, grass, or asphalt. When economically feasible, the grass and gravel multi-use trails should be improved with an asphalt surface.

Evaluation of Existing Pedestrian and Bicycle Infrastructure

The Safe Routes to School Committee members were asked to identify areas within the City where pedestrian and bicycle infrastructure improvements are needed. The most common responses were:

1. Sidewalks in the Glenview Heights Subdivision that connect to S.T.H. 170. This is a popular corridor for students walking to and from school. In this area, students have to cross S.T.H. 170. Peak traffic times on S.T.H. 170 correspond with when students are arriving and leaving school. This makes crossing the highway dangerous.

Existing Sidewalks and Multi-Use Trails

City of Glenwood

Existing Sidewalks
Existing Multi-Use Trails

City Park

Downtown

Hinman Park

Ball Fields

Asphalt

School District of Glenwood City

Gravel Multi-Use Trail to Downing

N

0 400' 800'

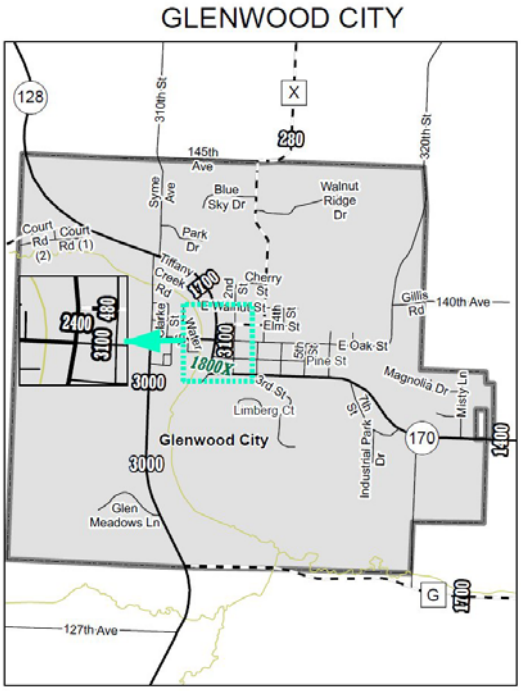
2. Pave the existing gravel trail from Glenwood City to the Village of Downing. This provides the safest route for residents living in Downing to walk or bike to the Glenwood City. In addition, a trail is recommended that connects this area to the Glenwood Schools.
3. Crosswalk improvements on S.T.H. 170 at the schools north entrance.
4. General maintenance and replacement of the existing sidewalks.
5. Evaluate new development for the inclusion of sidewalks and trails.

Average Annual Daily Traffic

The Wisconsin Department of Transportation maintains Average Annual Daily Traffic counts for communities in Wisconsin. The traffic counts for Glenwood City were last updated in 2009. Figure 1 shows that there are approximately 1,400 vehicle traveling on S.T.H. 170 near the Elementary, Middle, and High Schools. The highest traffic counts are in the Central Business District with 3,100 vehicles a day on Oak Street and 2,400 vehicles a day on S.T.H. 128.

Observations by the Glenwood City Police Department have included excessive speeds by drivers entering and exiting the City near the Elementary, Middle, and High Schools. Drivers entering the east end of the City along S.T.H. 170 do not slow to the designated speed limit, and drivers along 320the Street/North Boundary Road have not maintained the designated speed limit when entering and exiting the City.

Figure 1: Annual Average Daily Traffic



City Of Glenwood City Historical and Projected Population

It is important to evaluate the projected growth of the City to anticipate the need for bicycle and pedestrian infrastructure and to ensure that it is included as development occurs. The City of Glenwood City has seen a steady increase in population since 1970 growing by 51.1% or almost 13% every ten years.

The 2010 U.S. Census shows that residents between the ages of under five years to 19 years make up 28.6% of Glenwood City's population. The number of residents in these age groups is growing indicating a growing student population in the future.

Table 1: Historic Population

Municipality	1970	1980	1990	2000	2010
City of Glenwood City	822	950	1,026	1,183	1,242
St. Croix County	34,354	43,262	50,251	63,155	84,345

Source: West Central Wisconsin Regional Planning Commission and the 2010 U.S. Census

The Wisconsin Department of Administration Demographic Services Center released a report on projected State, County, and Municipal populations and household populations in 2008. The projections indicate that the City of Glenwood City and St. Croix County will continue to grow in the foreseeable future *(see Table 2)*. The growth in population should result in an increase in school enrollment.

Table 2: Population Projections

Municipality	2010	2015	2020	2025	2025
City of Glenwood City	1,242	1,405	1,506	1,597	1,672
St. Croix County	80,779	87,967	95,202	100,806	137,360

Source: U.S. Census, Wisconsin Department of Administration

School Enrollment

Table 3 shows recent school enrollment in the School District of Glenwood City. School enrollment has mirrored the growth of the communities within the School District. The 2010 U.S. Census Bureau showing the age of the population indicates that the number of school aged residents will continue to grow resulting in growing enrollment.

Table 3: School District of Glenwood City Enrollment Data

Grade	EC/4K	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
2012-2013 Enrollment	51	49	57	47	48	56	52	49	55	62	46	47	49	53	721
2013-2014 Enrollment	51	52	58	54	59	49	53	60	51	55	56	63	47	40	748

Source: School District of Glenwood City

School District Wellness and Physical Fitness Policies

The School District of Glenwood City recognizes that proper nutrition and physical activity are related to students' physical well-being, growth, development and readiness to learn. A healthy school environment gives students consistent, reliable health information and ample opportunity to use it.

The School District of Glenwood City supports and promotes a healthy school nutrition environment that includes the following:

- Quality school meals with an emphasis on nutritional foods
- School meals, breakfast and lunch, will follow at least the minimal U.S. Government's Nutrition Standards
- Ala carte items that do not meet the District nutrition standards may be acceptable through moderation (example: limit amount sold to a student)
- Other healthy food choices that meet the nutrition guidelines established by the District
- Pleasant eating experience
- Nutrition education
- Marketing health and nutrition within the community

In addition, the School District of Glenwood City is committed to providing opportunities for physical activity.

The District's nutrition/wellness committee monitors the implementation of the District's wellness policies, evaluates the progress of related goals, serves as a resource to the staff, plans special events and incentives, and recommends policy revisions as necessary.

The School District of Glenwood City strongly encourages the sale or distribution of nutrient dense foods for all school functions and activities. Nutrient dense foods are those foods that provide students with calories rich in the nutrient content needed to be healthy. The School District has adopted Nutrition Standards for foods sold outside of a reimbursable school meal, such as student vending machines, cafeteria ala carte, fundraisers, school stores, school parties and snacks during the school day.

The School District does not allow the vending of candy. Beverages such as non-diet beverages, sports drinks, and fruit-based drinks that contain less than 100% fruit juice are banned.

Any food items, sold individually, that contain more than 7 grams of fat per serving and food items, sold individually, that list sugar as its first ingredient (that contain more than 30/35 grams of carbohydrates) are also banned.

Also, the Elementary School participates in the Wisconsin Department of Public Instruction's Movin' and Munchin' Program. In this program, schools take an innovative approach to the problem of poor nutritional choices and lack of physical activity among school children. The program encourages schools to develop creative strategies to promote healthy eating and increased physical activity among students and their families. Individuals earn "Movin' and Munchin' Miles" for various physical activities and wise nutrition choices.

School Bicycle Facilities Assessment

A lack of bicycle facilities, such as bicycle racks, can influence a person's decision to ride his or her bike to school. Students may worry that their bicycle will be stolen if there is not a safe

place to lock it. The Glenwood Elementary, Middle, and High Schools share the same bicycle racks. Currently, there are five (5) bicycle racks that hold 20 bicycles each.

Student Transportation Services

The School District of Glenwood City provides bus transportation for all students residing within the School District's boundaries. This was approved by the State of Wisconsin because of the schools being located on S.T.H. 170, which is considered a "hazardous situation".

Sidewalk and Multi-Use Trail Design Standards

The location and design of sidewalks, multi-use trails, or bike lanes is important to ensure the improvements are safe and user friendly.

Crosswalks should be provided at each intersection. Curb ramps and detectable warning fields shall be provided at all street crossings. Crosswalks should not be provided mid-block except in rare circumstances. If such a situation is unavoidable, appropriate signage shall be provided to adequately warn drivers of the crosswalk.

Sidewalks are typically placed on the same side as existing sidewalks in the area. Other considerations such as driveway density, tree removals, cross-walk visibility, bus stop safety, and resident concerns should be taken into account when choosing which side to install sidewalk.

Multi-use trails (biking, walking, rollerblading, etc…) will primarily be constructed in developing portions of the City and into adjacent rural areas. Multi-use trails should be constructed in conjunction with new subdivisions and/or improvements or as part of area and regional trail plans.

Multi-use trail alignment should follow the existing topography to the maximum extent practical. Horizontal curves, vertical curves and slopes should be evaluated for excessive speed and/or visibility.

Bike lanes typically are located on rural area roads as they enter a community. Bike lanes shall be marked on pavement and with signage. The width of the paved shoulder bicyclists will be riding on shall be a minimum of four feet wide.

The Wisconsin Bicycle Facility Design Handbook and AASHTO Guide for the Development of Bicycle Facilities both provide an excellent guide for detailed bicycle facility planning. The Association of Pedestrian and Bicycle Professionals publishes the Bicycle Parking Guidelines for parking facilities.

Table 4 provides generals design standards for sidewalks, bike lanes, and trails. It should be used as a starting point to plan and do initial cost estimates. Each proposed project in the City should be evaluated on individual and already established standards.

Table 4: General Design Standards

Infrastructure	Material	Minimum Width	Depth	Base
Sidewalk	Concrete	5', 6' (against curb)	4" typical	6" granular
Sidewalk (Driveway)	Concrete	-	6" typical	8" crushed aggregate
Bike Lane-Paved Shoulder	Asphalt	4'-6'	Match Street	Match Street
Multi-Use Trail	Asphalt, Crushed Limestone	10' (with 2' shoulders)	2" typical, 3" if service trail	8" crushed aggregate

Currently, the Glenwood City Council may require the construction of new sidewalks or the replacement of sidewalks within the City. The minimum required width of a sidewalk is five feet.

Proposed Sidewalk and Multi-Use Trail Considerations

The Proposed Sidewalks and Multi-Use Trails map shows existing and proposed sidewalks along with multi-use trails planned in the City of Glenwood City *(see Map 2).* The proposed improvements would add approximately 1.2 miles of sidewalks and almost 1.3 miles of multi-use trails to the City's pedestrian and bicycle infrastructure. The committee took the following factors into account as they determined where future sidewalk and multi-use trail improvements are needed.

- Providing safe passage to generators of traffic including parks, schools, and the Central Business District.
- Locate sidewalks along roads with heavy traffic such as arterials and collectors.
- Build sidewalks that provide connectivity to other sidewalks.
- Establish trails that link the schools, parks and conservancy areas.

Future Sidewalk and Multi-Use Trail Improvements

The Proposed Sidewalks and Multi-Use Trails map identifies proposed improvements and prioritizes them by category *(see Map 2).* The categories along with a brief explanation are listed below:

Short Term (1 to 5 years): Areas where there are high safety concerns for students because they provide access to the Elementary, Middle, and High Schools. The City would like to see these projects completed as soon as possible.

Medium Term (6 to 10 years): Areas that address safety and connectivity issues but are not immediately needed. These may also include the upgrading of existing infrastructure.

Long Term (11 to 20 years): Part of the long range plans for a connected pedestrian and bicycle inspired transportation system. These may be addressed during reconstruction projects or new development.

The improvements listed below are followed by an explanation of each and correspond with Map 2.

Short Term:

1. Add a crosswalk on S.T.H. 170 that connects the school buildings with the Glenview Subdivision. Improvements would include block pavement markings, rapid flashing beacon assemblies, and driver feedback signs.
2. Construct sidewalk along Misty Lane and Magnolia Drive in the Glenview Subdivision and connect to the School District of Glenwood City Schools. This is a main walking corridor for students who then have to cross S.T.H. 170 to reach school property.
3. Develop the worn path that begins on the east side of the City's residential area and extends to the cul-de-sac at the end of Magnolia Drive. The multi-use trail could be extended south to the west driveway at the schools if the sidewalk was not constructed along Misty Lane and Magnolia Drive but an easement would have to be obtained. Replace a small wooden bridge with an upgraded structure. The path would be replaced with a 10' wide asphalt multi-use trail.
4. Improve crosswalk safety and visibility at S.T.H. 170 and 7th Street. Improvements would include block pavement markings, rapid flashing beacon assemblies, and driver feedback signs.

Medium Term:

1. Construct a 10' wide asphalt multi-use trail along 320th Street/North Boundary Road from the gravel multi-use trail to the schools.

Long Term:

1. Reconstruct the gravel multi-use trail that connects the City and the Village of Downing with a 10' wide asphalt surface and gravel shoulders.
2. Construct multi-use trails connecting the rural subdivisions in the City to existing trails.
3. Construct sidewalks to residential areas during reconstruction projects or new development.

Proposed Sidewalks and Multi-Use Trails

City of Glenwood

Existing Sidewalks
Proposed Sidewalks
Existing Multi-Use Trails
Proposed Multi-UseTrails
Proposed Crosswalk Improvements
ST Short Term Improvements (1-5 yrs.)
MT Medium Term Improvements (6-10 yrs.)
LT Long Term Improvements (11-20 yrs.)

LT
Proposed Sidewalks
City Park
Downtown
Hinman Park
ST
ST
ST
Proposed Sidewalks
Proposed Multi-Use Trail
LT
Ball Fields
Asphalt
LT
Proposed Multi-Use Trail
ST
ST
School District of Glenwood City
LT
Proposed Multi-Use Trail
MT
Proposed Multi-Use Trail
LT
Proposed Multi-Use Trail
Replace Gravel with Asphalt Surface to Downing
LT
LT
N
0 400’ 800’

Traffic Calming Techniques

Traffic calming techniques are designed to reduce the negative effects between motor vehicles and pedestrians/bicyclists. One or several of these techniques can be incorporated into new or reconstruction infrastructure projects to increase the safety of bicyclists and pedestrians and reduce the speed of traffic.

Curb Extensions: Also known as bulb-outs or bump-outs, curb extensions extend the sidewalk or curb line out into the parking lane. This reduces the effective street width. Curb extensions significantly improve pedestrian crossings by reducing the pedestrian crossing distance, visually and physically narrowing the roadway, improving the ability of pedestrians and motorists to see each other, and reducing the time that pedestrians are in the street and reducing the speed of oncoming vehicles.

Crossing Islands: Also known as center islands, refuge islands, or pedestrian islands. These are raised islands placed in the center of the street at intersections to help protect crossing pedestrians from motor vehicles. Center crossing islands allow pedestrians to deal with only one direction of traffic at a time, and they enable them to stop partway across the street and wait for an adequate gap in traffic before crossing the second half of the street.

Mini-Circles: These are raised circular islands constructed in the center of residential street intersections (generally not intended for use where one or both streets are arterial streets). They reduce vehicle speeds by forcing motorists to maneuver around them. Mini-circles have been found to reduce motor vehicle crashes by an average of 90 percent in some cities.

Speed Humps/Speed Tables/Raised Pedestrian Crossings: Speed humps are paved and usually 3 to 4 inches high at their center and extend the full width of the street with height tapering near the drain gutter to allow unimpeded bicycle travel. They are designed to reduce vehicle speed. Speed tables are flat-topped speed humps. Raised pedestrian crossings are similar to speed tables but are used for the entire intersection and enhance the pedestrian environment.

Gateways: A gateway is a physical or geometric landmark that indicates a change in environment from a higher speed arterial or collector road to a lower speed residential or commercial district. They often place a higher emphasis on aesthetics and are frequently used to identify neighborhood and commercial areas within a larger urban setting.

Landscaping: The careful use of landscaping along a street can provide separation between motorists and pedestrians, reduce the visual width of the roadway (which can help to reduce vehicle speeds), and provide a more pleasant street environment for all. This can include a variety of trees, bushes, and/or flowerpots, which can be planted in the buffer area between the sidewalk or walkway and the street.

Bike Lanes: Bike lanes are portions of roadway that have been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes make bicyclist more visible to motorists.

Pavement Markings and Signage

Education: Instructions given to the residents on safe on-street vehicle travel. Education can be in the form of newspaper article, radio or television reports, or posters. Instruction makes motorists more aware of bicyclist and pedestrian safety.

Police Enforcement: Enforcing speed and traffic laws sends a message to motorists to be aware of their driving habits and traffic signage.

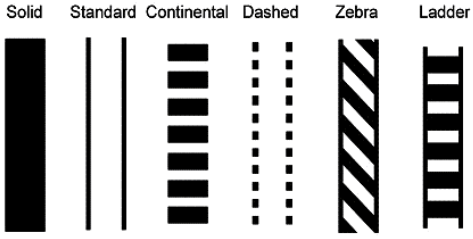
There are several methods to make crosswalks and school zones safer for pedestrians and bicyclist. These methods should be used to improve visibility and slow motorized traffic.

School Zone Signs: School zone signs help create awareness that children are in the area. Today, the traditional yellow sign is available in brighter colors and flashing lights to improve their visibility.

Driver Feedback Signs: Driver feedback signs increase compliance to posted speed limits. These signs also log speed data that can be used by local law enforcement. The signs can be programmed to display changeable messages.

Pedestrian Crossing Delineators or Traffic Cones: Delineators or the less expensive cones are used in crosswalks or street center lines to warn vehicle operators that pedestrians are in the area. These signs are moveable.

Crosswalk Markings: Crosswalk markings provide visible direction for pedestrians and bicyclist to cross streets. Reflective materials can be used to increase the visibility. There are several different markings that can be used. The continental pattern is preferred.



Overhead Lights: Overhead lights can be used in busier intersections where pedestrian crossing delineators or cones are not allowed. They are programmable to flash at determined times.

Crossing Guards: Crossing guards direct pedestrians and guide traffic in school zones. They can wear reflective vests and use signs to make themselves visible. Crossing guards can also be used to monitor driving habits of residents.

Ongoing Recommendations

The recommendations in this section will provide options for the City of Glenwood City to establish short and long term goals. The goals are what the City hopes to accomplish within a timeframe to make the Bicycle, Pedestrian and Safe Routes to School Plan a success.

The recommendations will address the 5 E's (Engineering, Encouragement, Education, Enforcement, and Evaluation) and identify actions under each category the City will consider.

Engineering

- Replace sidewalks in poor condition and construct new sidewalks in vital areas identified in this plan
- Maintain the City's 5 Year Capital Improvements Plan which includes sidewalks and multi-use trails
- Plan sidewalk improvements with road reconstruction projects
- Identify dangerous crosswalks and recommend marking, signage, or traffic calming improvements
- Submit new subdivision plats to Transportation Department to identify bus stops and recommend sidewalks and/or concrete pads for waiting areas if needed
- Increased bicycle racks at schools and other locations in the City (Library, Parks) where needed
- Implement traffic calming techniques in street reconstruction projects and new subdivision development where needed
- Identify and mark specific "safe routes" through the City for students to use

Encouragement

- Place the Bicycle, Pedestrian and Safe Routes to School Plan on the City's website.

- Designate a walk or bike to work month or walk to school with your child day
- Provide rewards for walking or biking to school or work that are age appropriate
- Create competitions between businesses and classes

Education

- Have school speakers talk about walking and bicycling safety that are age appropriate
- Have students track the distances they walk or bike and research the benefits
- Walking and bicycling audits by students and adults
- Implement lessons during Summer Recreation Programs

Enforcement

- Speed trailers or driver feedback signs
- Increase police patrols near schools during morning and afternoon hours
- Increase fines in school zones
- Neighborhood Watch programs

Evaluation

- Yearly review to evaluate the successes and challenges of implementing the Plan and revise goals as needed
- Compare results of walking and bicycling audits over several years
- Measure participation and volunteers
- Post-project survey
- Walking and bicycling attitudes survey
- Monitor participation in walk or bike to school days

Funding Opportunities

There are a number of grant opportunities that can be used to fund road, sidewalk, trail, signage, and marking improvements. Each grant addresses different needs and requires varying financial commitments from the City.

Transportation Alternatives Program (WDOT)

- Safe Routes to School (SRTS)
- Transportation Enhancements (TE)
- Bicycle and Pedestrian Facilities Program (BPFP)
- Maximum grant of 80% with minimum 20% community match
- Applications taken in every four years
- Minimum infrastructure project costs of $300,000

Stewardship/Federal Recreational Trails Program (WDNR)

- May 1 deadline for most grants

- 50% DNR; 50% local match
- Funds for land acquisition, trails, picnic areas, etc.

Community Development Block Grant Program (WDOA)

- Grant funds for constructing streets and sidewalks
- Pre-application is required
- Community survey may be required
- Low-to-moderate income requirements
- Competitive grant
- Tied to economic development

Impact Fees

- New development pays their fair share of new capital improvements
- Fees can be used for sidewalk or trail development

Special Assessments

- Project costs for sidewalk improvements are assessed back to the property owners

Plan Updates

The Glenwood City Bicycle, Pedestrian, and Safe Routes to School Plan should be reviewed yearly and updated as necessary. The priorities listed in the *Future Sidewalk and Multi-Use Trail Improvements* should be evaluated when the City revised its Capital Improvements Plan to consider the economic feasibility of implementing the recommendations.