

7. Proposed Policies & Programs

These policies and programs provide the institutional support for the non-motorized system. They provide the necessary support systems for the proposed physical system. They also provide a framework within which new issues related to non-motorized transportation may be addressed.

Topics:

- 7.1 – Compete Streets Policy
- 7.2 – ADA Compliance Issues
- 7.3 – Safe Routes to School
- 7.4 – Bike Parking
- 7.5 – Maintenance of Non-motorized Facilities
- 7.6 – Sidewalk/Roadside Pathway Completion

Prioritization Process for Policy Recommendations:

The method of prioritization for the following policy recommendations was made by identifying the relative importance of that policy and the ease with which it could be implemented within a given time frame. Some policy items could readily be achievable within a year. Others, due to the process required to put together the necessary items needed to fully implement the policy, may take three to five years. These policies are flexible enough that they can be rearranged as priorities and available resources change.

Roles and Responsibilities in Implementing Policy Recommendations:

The policy recommendations have not been assigned to particular departments or staff positions in the community. One of the first tasks in implementing these recommendations would be assigning each policy recommendation to a responsible party.

7.1 Complete Streets Policy

Complete Streets Background

States, regions, counties and cities around the country have used various complete street policies to unambiguously endorse and define their support for non-motorized transportation. Complete streets are planned, designed, operated and maintained such that all users may safely, comfortably and conveniently move along and across streets throughout a community. The complete streets concept recognizes that streets serve multiple purposes and that a community's roadways must be designed such that they balance the needs of all of the transportation users. Complete streets are key to creating healthy, active communities and establishing safe routes to school. There has been a concerted move towards complete streets in the United States since the 1990's.

Recently, the US Department of Transportation issued a Policy Statement on Complete Streets. It indicated that it is the DOT's policy to incorporate safe and convenient walking and bicycling facilities into transportation projects. It also noted that it is every transportation agency's responsibility to improve conditions and opportunities for walking and bicycling and integrate improvements for such into the transportation system. It also encourages transportation agencies to go beyond the minimum standards. Part of the DOT recommended actions include:

- Providing accommodations on new, rehabilitated and limited-access bridges
- Collecting data, setting targets and tracking progress
- Maintaining sidewalks and pathways the same way roads are maintained
- Improving facilities as part of maintenance projects

In short, the policy states that walking and bicycling should be considered equals with other transportation modes.

In the fall of 2010, The State of Michigan adopted Complete Streets legislation. The complete streets legislation was in the form of two bills. The first bill revised Act 51, addressing transportation issues. The second bill revised Act 33 that addresses planning issues.

Act 51 Revision Highlights:

- Requires interjurisdictional consultation on non-motorized projects and 5-year plans
- Use of established best practices
- Directs MDOT to draft and adopt a complete streets policy as well as develop model policies for local agencies
- Directs MDOT to advise local agencies on non-motorized issues
- Enables interjurisdictional agreements for maintenance

Act 33 Revision Highlights:

- Expands the definition of “streets” to include all legal users
- Expands elements that may be included in a master plan to include all forms of transportation
- Specifies that transportation improvements be appropriate to their context
- Specifies cooperation with road agencies.

Numerous local communities have already adopted complete streets resolutions or ordinances.

National Complete Streets Coalition Model

Since the FHWA model was developed, The National Complete Streets Coalition has taken the idea further and identified ten elements of a comprehensive Complete Streets policy:

1. A vision for how and why the community wants to complete its streets. Specifies that all users including pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.
2. Specifies that ‘all users’ includes pedestrians, bicyclists and transit passengers of all ages and abilities; as well as trucks, buses and automobiles.
3. Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
4. Is adoptable by all agencies to cover all roads.
5. Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
6. Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
7. Directs the use of the latest and best design standards while recognizing the need for flexibility in balancing user needs.
8. Directs that complete streets solutions will complement the context of the community.
9. Establishes performance standards with measurable outcomes.
10. Includes specific next steps for implementation of the policy.

The adoption of this plan addresses many of the elements.

Policy Recommendations for Complete Streets:

Within One Year:

- Adopt a Complete Streets Resolution that includes language about developing a complete streets policy.
- Adopt the Non-motorized Transportation Plan
- Draft a Complete Streets Policy that address the ten key elements as defined by the National Complete Streets Coalition and that clearly defines the responsible authorities
- Adopt a Complete Streets Policy
- Develop 5-year non-motorized improvement plan (based on the Non-Motorized Master Plan)
- Meet with MDOT and Isabella County Road Commission to review 5-year plan as it relates to facilities under their jurisdiction

Within Three Years:

- Implement recommended operations procedures
- Establish performance measures
- Begin data collection
- Build a reference library of current best practices
- Establish professional staff training program
- Identify local municipality standard plans and details that need to be revised
- Begin revising standard plans and details

Within Five Years:

- Complete update of standard plans and details
- Evaluate progress

7.2 ADA and Transition Plan

Title II of the Americans with Disabilities Act of 1990 (ADA) requires local governments to make their activities, programs and services accessible to persons with disabilities. In the area of non-motorized transportation, public entities with 50 or more employees are required to use accessible design standards for newly constructed and reconstructed sidewalks and shared use paths to the maximum extent feasible and make altered facilities through the City as part of a transition plan.

Four recent publications address accessibility of non-motorized facilities. They are:

1. *Designing Sidewalks and Trails for Access Part 2 – Best Practices Design Guide* (FHWA, Publication # FHWA-EP-01-027)
2. *Building a True Community – Final Report of the Public Rights-of-Way Access Advisory Committee*, November, 2005 (Public Rights-of-Way Access Advisory Committee)
3. *Draft Guidelines for Accessible Rights-of-Way*, November 23, 2005 (FHWA, Pub. # FHWA-SA-03-019, based in part on the preceding publication)
4. *Accessible Public Rights-of-Way, Planning and Designing for Alternations*, July 2007 (Public Rights-of-Way Access Advisory Committee)

Together these documents define current best practices for accommodating pedestrians with disabilities for sidewalks and shared-use paths, intersections, crosswalks, and signalization. Until public rights-of-way standards are adopted by the Department of Justice and the U.S. Department of Transportation, the DOT has identified the 2005 draft PROWAG as the current best practice in accessible pedestrian design.

Transition Plan

Title II requires that public entities with 50 or more employees create and regularly update an ADA Transition Plan and make this plan available to the public. The transition plan should at a minimum identify physical barriers and provide a detailed outline to remove those barriers. An ADA coordinator must be designated to coordinate compliance efforts. The following outlines the key elements of a transition plan.

Identification of Physical Barriers

The identification of physical barriers may take place on a number of levels:

- **Complaint-Based** – At the most basic level, there should be a process in place for citizens to register a complaint and for that complaint to receive appropriate evaluation and action.
- **Inventory Based** – More commonly, existing facilities receive a base line documentation that may be accomplished with simple tools such as a smart level, digital camera and a standard recording form. For example, the inventory of sidewalk curb ramps would identify issues such as the presence of a ramp, ramp slope and cross slope and the presence, type and condition of a detectable warning strip. The goal of this inventory is to identify the geographic location, type and severity of barriers. Often this survey would be done using a Global Positioning System and the data stored in a Geographic Information System. This inventory would be completed over time with the most heavily traveled areas completed first and then covering other, less traveled areas in a systematic approach.
- **Survey Based** – In a few cases where there is a high degree of controversy regarding a specific area or facility type, trained surveyors will take detailed field measurements and elevations of the facilities and translate them into survey drawings. This is by far the most expensive identification

approach but may be appropriate if construction to remedy the solution is considered likely to occur in the near future.

Outline of Methods to Remove Barriers

A systematic approach for removing barriers should be established.

- **New and Altered Facilities Policy** – There should be in place a policy for how accessibility is achieved for new construction and alterations. This should include addressing how areas adjacent to new construction or alternation projects may be incorporated into a project. For example, when a new construction or alternation project is undertaken, the inventory of physical barriers for the immediate surrounding areas should be consulted to see if limited targeted improvements in adjacent areas would make a much larger area accessible. If so, those changes should be incorporated into the project.
- **Prioritization of Routes** – As it will be many years before new construction and alterations will provide accessible routes along all public right-of-ways, a process should be established to identify which routes should be upgraded independent of new or altered facilities. This would be based on the inventory of the physical barriers, citizen complaints and relative demand. This way, key routes such as those in the downtown, near schools and public buildings may be targeted improvements independently of new construction or alternation projects.

Schedule for Implementation

After the routes are prioritized, general costs of removing the barriers should be determined. Then using those costs, the removal of barriers should be integrated into the city's capital improvement plan.

Policy Recommendations for ADA Compliance:

Even if a community is not required to do an ADA transition plan it is still recommended that it be done as a best practice to prevent any incidents. See the Appendix for more details on ADA and Transition Plans.

Within One Year:

- Establish an interim transition complaint based transition plan.
- Designate an ADA coordinator.

Within Three Years:

- Have an inventory based transition plan in place.
- Integrate the transition plan into the capital improvement plan.

Within Five Years:

- Complete the inventory of physical barriers.
- Have made substantial progress in removing barriers in the most highly traveled corridors.

7.3 Safe Routes to Schools

The challenges to getting more children to walk and or bike to school are significant. Approximately half of all children in the United States are driven to school in a private vehicle and only 13% walk or bike to school.¹ The number of children walking or biking to school has dropped 37% in 20 years.² This drop in the number of children walking and bicycling to school can be attributed to many factors that have changed over the past 20 years:

- Increase in availability of before and after-school programs.
- Increase in the number of schools of choice, private schools and charter schools.
- Increase in the number of grade-based elementary schools.
- Increase in the number of children bused to school who live within walking distance due to real or perceived safety concerns.
- Fewer children living in each home.

These factors have combined to simultaneously reduce the total number of children who attend their neighborhood school, reduce the number of kids who walk and spread out the times children arrive at and depart from school. The result is a loss of the critical mass of children walking to school and the perceived safety in numbers.

These factors are combined with the fact that there is also an increase in the number of two-wage earner families where both wage-earners are leaving for work in the morning. This makes dropping a child off at school on the way to work the easy and seemingly logical choice. We have now entered a period in time where choosing to have a child walk to school is considered a political statement or some act tantamount to child neglect rather than the default choice.

While the challenges to getting more children to walk and bicycle to school are significant, the consequences of doing nothing are even more challenging. The Center for Disease Control states that 13% of children in the United States are overweight, and the number of overweight teens has tripled since 1980. Many children in the United States do not get the hour of daily physical activity recommended by the Surgeon General. Decreased participation in physical activities, and fewer students walking or riding their bikes to school may be contributing to the rise in childhood obesity.

For many children who live very far away from school, walking or biking is not a feasible option. However, the CDC estimates that only 31% of the children living a mile away or less walk or bike to school. Often times, schools and their surrounding areas lack safe road crossings, preventing children from having safe access to school on foot. Parents and caregivers cite perceived traffic danger as the second most common barrier to children walking and biking to school, preventing as many as 20 million children from walking or biking to school nationwide.³ The amount of people driving their children to school in private automobiles not only represents a missed opportunity for physical activity, but also increases traffic congestion and puts a huge strain on existing road systems during peak travel times. In one city examined, 20-25% of morning traffic consisted of students being driven to school and 50% percent of children hit near schools were hit by parents of other students.⁴

¹ Center for Disease Control. *MMWR Weekly*. August 16, 2002. 51(32);701-704

² Michigan Governor's Council on Physical Fitness, Health and Sports.

³ Center for Disease Control. *MMWR Weekly*. August 16, 2002. 51(32);701-704

⁴ Center for Disease Control, 1995.

In an effort to reverse these alarming trends, the CDC announced a national health objective to increase the proportion of walking and biking trips to school for children living a mile or less from 31% to 50% by the year 2010. Communities, school groups, and local officials all over the country are responding to this challenge by mobilizing children to walk to school, addressing traffic safety concerns, mapping safe routes to school, and by measuring and taking account of their neighborhoods' walkability.

Michigan's Safe Routes to School (SR2S)

Michigan has a model Safe Routes to School program that is managed by the Michigan Department of Transportation (MDOT) in partnership with the Michigan Fitness Foundation which provides training, administrative and technical support. The center for Michigan SR2S program's website www.saferoutesmichigan.org has extensive information on how a school may start a SR2S program.

The website describes the six step SR2S planning process:

1. Register a school on the website.
2. Designate a SR2S coordinator.
3. Establish a SR2S team comprised of school officials, students and their parents and local officials.
4. Survey the students and parents to understand the issues.
5. Perform a safety assessment of the physical environment.
6. Develop an action plan.

Beyond describing the planning process Michigan's SR2S program offers technical assistance and support to schools. These include:

- A SR2S Handbook with a wealth of information including templates and forms useful in implementing a program.
- Providing training programs.
- Walk to School Day kits.
- Newsletters.
- Direct technical assistance.

The Community's Role in SR2S Programs

The community a key partner in any Safe Routes to School Program. SR2S school teams typically include a local law enforcement official or officer and a representative from the local road authority. These officials provide the technical expertise to help the team implement some of the programs and physical improvements.

A typical SR2S program addresses issues such as the education of parents and students as well as improvements to the physical conditions on the school grounds. But much of the SR2S physical improvements take place on facilities outside of the school's jurisdiction and must be undertaken in partnership. Likewise the city's non-motorized network identifies key routes that transverse school grounds. Thus, both entities must work together in order to meet their shared goals.

Community policies should include a system of accountability for responding to and remedying safety concerns along children's routes to school. The community should work with the surrounding School

Districts to evaluate how best to spend transportation dollars, looking at busing, facility improvements, and the addition of adult supervisors for children walking to school.

Ensuring safety in the school zone must be a combined effort of traffic engineers, local officials, law enforcement, school officials, parents and children. In addition to promotional and educational programs, a variety of roadway improvements can be used to increase safety in school zones and for children on their routes to school. Some important safety design guidelines for school zones include¹:

- Reduced speed zones.
- Marked crosswalks.
- Signalized crossings at intersections with pedestrian activation.
- Pedestrian crossing islands and bulb outs where needed.
- Special crosswalk striping, painted according to state standards, and “School Crossing” signage where appropriate.

Police enforcement of yielding and speeding in school zones, and the utilization of adult crossing guards at difficult intersections can also increase safety in the school zone.

Individual school policies as well as district wide policies should be evaluated to make sure that they promote bicycling and walking.

The National Highway Traffic Safety Administration has provided some resources that may be useful in teaching children pedestrian safety and cycling skills. Please visit their website at, <http://www.nhtsa.gov/ChildPedestrianSafetyCurriculum> for more information.

In conclusion, increasing the number of children who are able to safely walk and bike to school is part of a national goal that will address childhood obesity, enhance neighborhood walkability, and help alleviate traffic congestion problems.

Key Programs to Continue for School Transportation

The Greater Mt. Pleasant Area has some good existing policies and programs that support the non-motorized system. The following policies and programs should be reinforced and continued.

- Fancher Elementary participates in the Safe Routes to School Program.
- The local government should continue to enforcement speeding in school zones and yielding to pedestrians in the crosswalks within school safety zone.
- The local government should continue to encourage that within school safety zones, all safety design guidelines are in place and current with national safety guidelines.

¹ San Diego’s Regional Planning Agency. Model Guidelines for the San Diego Region. April 2002. p. 105.

Policy Recommendations for School Transportation

The local government and the Surrounding School Districts should jointly explore the following options.

Within One Year:

- The local government and the School Districts should develop maintenance standards as well as fix defects and gaps in public sidewalk system adjoining school sites.
- Encourage the School District to consider the safest routes to school for children when adjusting school boundaries.
- The local government and the School District should develop a cost-share policy for the construction and maintenance on pathways that are part of the City's Non-motorized System and traverse school property.
- The local government and School District should develop a strategic implementation plan for pathways and trails that are part of the City's Non-motorized System that traverse school property.

Within Three Years:

- The local government and School District should continue to enhance a system of accountability for responding to and correcting safety concerns along routes to school and other problems identified through these programs.
- The local government should continue to promote and initiate with the school system and parents Walk-to-School Day events, "walking school bus" programs, "Safe Routes to School" programs, and walkability audits in conjunction with the state-wide program.
- School Districts should perform formal evaluations of how pedestrians and bicyclists are accommodated to all school grounds and prepare action plans to address deficiencies.
- School Districts should encourage walking and bicycling to school as a part of the physical education and well being of the students.
- School Districts should try to eliminate the need for all "Safety Busing" by remedying the hazards that currently warrant the safety busing.

Within Five Years:

- School Districts should evaluate all individual school and district wide policies regarding bicycling to school and amend policies that discourage bicycling.
- Encourage residential infill projects within walking distance of schools.

7.4 Bike Parking

The lack of a secure parking space discourages many people from using their bikes for basic transportation. When sufficient bike parking is not provided, theft becomes a concern and it leads to bikes being locked up to sign post, benches and other street furniture. When bicycles are parked in these spaces, they often disrupt pedestrian flow because the bikes impede the walkway. Bicycles also get impounded by local enforcement when parked in these areas causing an even greater deterrent to bicycle use. Bicycle parking needs to be visible, accessible, plentiful and convenient. If any of these criteria are not met, there is a good chance cyclist will not use the facilities and will park their bike wherever they feel it will be safest.

Definition of a Bicycle Parking Space- A bicycle parking space is an area two feet by six feet or the area occupied by a bicycle when using a bicycle parking device as designed.

Short-Term Bicycle Parking - Short-term bicycle parking is defined as a rack to which the frame and at least one wheel can be secured with a user-provided U-lock or padlock and cable. This type of parking is appropriate for short term parking at locations such as shopping areas, libraries, restaurants and other places where typical parking duration is less than two hours.

Long-Term Bicycle Parking- A long-term bicycle parking space is defined as protecting the entire bicycle and its components from inclement weather and theft or vandalism. It is to be located where it will serve the needs of cyclist who need to leave their bicycles unattended for extended periods of time, such as employees, tenants or residents.

Uncovered Bicycle Racks

Uncovered Bicycle Racks are the primary bike parking approach for areas where people are expected to park their bikes for only a few hours.

Design-Generally, bicycle racks of the inverted “U” design are considered the best models. Alternative designs may be considered for special situations, although they should function similar to the inverted “U” design, providing at least two contact points for a bicycle and be a shape and size that would permit locking of a bicycle through the frame and one wheel with a standard U-Lock or cable.



Location- Bicycle racks should be located on every city block where there is retail within a commercial district. The hoops should be placed on a hard surface with ample lighting and high visibility (e.g. in front of a store window) to discourage theft and vandalism. Racks should be placed to avoid conflicts with pedestrians, usually installed near the curb and away from building entrances and crosswalks. When racks are installed in public spaces there needs to be at least 5 feet of clear sidewalk space in order to allow for pedestrian flow.

Covered Bicycle Parking

Covered Bike Parking is desirable for both long-term and short-term bicycle storage. Basic bicycle racks should be placed under an overhang whenever possible, and specific covered bicycle parking should be created when needed. Covered Bicycle Parking should be available in areas where bikes are kept for an extended period of time, such as apartment buildings or at large commercial centers where employees and customers will utilize the covered spaces.

Design- The covering for bicycle parking will vary depending on the location. In addition to a roof, complete or partial side enclosures should be provided to minimize exposure to windblown rain and snow. The design of the racks is the same as for the basic uncovered bicycle hoops. When creating covered parking, there is also the opportunity to incorporate a green roof or solar panels into the rooftop to add to the functionality of the structure.



Location- Covered Bike Parking should be incorporated whenever there is opportunity to do so. Long-term covered bike parking should be located within 400 feet of the building it is intended to serve. Centralized locations further than 400 feet are also acceptable.

Enclosed and Secured Bicycle Parking

Enclosed and Secured Bicycle Parking is best for areas where bikes are kept for extended periods of time, such as apartment buildings and near places of employment. These types of facilities are usually placed within existing parking structures and come with extra bicycle parking amenities.

Design- Enclosed and Secured Bicycle Parking generally consists of an enclosed room or fenced off-area where access is controlled through a doorway. The configuration of the bike racks will vary based on the space, but in general they are designed to maximize the number of bicycles that may be fit in the space. Double tier bike racks and hanging bike racks are used to provide the majority of the bike storage. A few standard inverted “U” hoops should be provided and reserved for atypical bicycle designs that may not be accommodated by the other racks.

When bike racks are located within a parking decks there should be a safe means of egress to the parking area. If bicycles must access the space via a gate controlled access point, care should be taken to minimize conflicts with the gate arm. The gate arm should be shortened to allow a 4’ wide pathway for bicycles. The end of the gate arm should be rounded and covered with foam. The pathway for bicycles should be clearly marked on the pavement. This pathway should be 3’ wide and be located at least one foot from the end of the gate. Users of enclosed secured bike parking that is accessed via gate control should be provided instruction on how to safely navigate around the gate.

Access Control- Is by identification badge reader and for a specific location only.

Location- Generally within parking decks, but individual facilities may be established.

Amenities- Will vary by site. Ideally these include compressed air, lockers, a bench and a vending machine that dispenses basic bicycle supplies such as tubes and repair kits.

User Costs- Generally \$60 to \$80 per year rental plus \$20 account set-up fee.

Enclosed and Secured Bicycle Parking works best at areas with high concentrations of people, such as at Hospitals or Regional Shopping Centers where the facilities are targeted toward employees.

Bike Station

Bike Stations are premium secured bike parking and maintenance facilities intended for transit stations located in high density areas. They are intended primarily to serve transit riders who will disembark and then retrieve their bike and continue onto their final destination. They will also serve as a centralized bike parking solution for bicyclists who are not using the transit station but whose final destination is near the bike station. The bike station has an attendant that assist with the bicycle storage and the day-to-day operations of the facility.

Amount of Parking- Based on the expected number of transit users and a survey of potential users.

Design- The bike parking and maintenance areas are restricted to bike station employees only.

Access Control- The bike station is generally attended for extended hours.

Location- Generally within parking decks

Amenities- Compressed air, lockers, benches, changing room, showers and bicycle repair shop. The changing room and showers may be omitted if most of the users are expected to arrive via transit.

User Costs- Generally \$60 to \$80 per year rental plus \$20 account set-up fee or an hourly charge for parking. Repair cost at market rate.

At this point the Mt. Pleasant area probably does not have the density to support a full blown Bike Station but some scaled back version may be appropriate on campus.

Bike Lockers

Bike Lockers are individual premium bike parking solution intended for remote and lower density areas where enclosed and secured bike parking is not available or feasible. Given the cost, appearance and space requirements of bike lockers they are only appropriate for limited locations.

Design- There is substantial variability in the designs of the bike lockers. Typically, individual bike lockers have an interior diagonal divider and doors on either end such that they may accommodate two bicycles. Bike Lockers may be arranged in row, in a circular pattern and stacked.

Access Control- Typically via a key.

User Costs- Generally around \$60 per year rental plus a \$20 key deposit.



On-Street Bicycle Parking

On-Street Bicycle Parking consists of movable bike racks that take the place of on-street motor vehicle parking. These racks are temporary and can be experimented with and moved as needed. They can also be used on a seasonal basis and can be removed during the winter.

Design- On-Street Bicycle Parking Racks are the size of a standard vehicle parking space and hold about 12 bicycles. These Racks are bolted into the pavement and can be removed when needed.

Location- These racks should be placed in active areas where it is difficult to accommodate sidewalk bicycle parking due to the competing demand for café tables and pedestrian walking space within the sidewalk area. Urban public spaces where there is on-street parking, such as Main Street would be a good location to test these facilities once non-motorized facilities are provided to this area.

Bike Racks on Buses

Used individually, bicycling and transit provide low-cost mobility and place fewer demands on local roads and highways to carry every day trips. Studies show that people are most likely to use public transit when it's within a quarter mile walking distance or when it's within a three mile bike ride. By combining bikes and transit it makes it easier for bicyclists to take their vehicles along on public transit, opening up a 12 times larger drawing zone for riders. Also, many bicyclists are constrained by bridges, tunnels, freeways and other barriers that prevent them from using their bicycle. Adding bike racks to buses provides an alternative option to overcome geographical barriers, thus creating more opportunities for commuters to choose to use their bicycle over automobile.



Current Programs

The City of Mt. Pleasant, as part of their Capital Improvement Plan, is going to implement bike shelters in the downtown area over the next few years. The attempt will be made to place bike shelters in and around parking lots over time as they are repaved in the next 10 to 15 years. There are plans to begin an installation of a prototype bike shelter in 2012.



Photo: City of Mt. Pleasant Capital Improvement Plan

Bicycle Parking Requirements

Currently the communities' do not have bicycle parking requirements in their ordinances. The code should be revised and updated as necessary to address the following issues:

- Require a minimum of 4 bicycle parking spaces at each commercial development or multi-family dwelling.
- For each multi-family dwelling require half of the bicycle parking spaces to be covered if the site is required to have 16 or more spaces based on the existing code description.
- Incentives should be provided to commercial and multi-family dwellings for providing covered and secured bicycle parking (e.g. reduction of vehicular parking and/or density bonus could be offered).
- Incentives should be provided to commercial and multi-family dwellings for providing covered bicycle parking over uncovered bicycle parking when not required to by code (e.g. reduction of vehicular parking and/or density bonus could be offered).
- Explore the idea of required bicycle parking facilities being credited toward provision of motor vehicle parking. Each ten required bicycle parking spaces, or fraction thereof, may be substituted for one code required motor vehicle parking space.
- Provide or reference graphical design guidelines with information on the specifics of bicycle rack design and placement. The Association of Pedestrian and Bicycle Professionals recently published the 2nd Edition of Bicycle Parking Guidelines; these serve as a good model or may be referenced. The report may be found at http://www.apbp.org/resource/resmgr/publications/bicycle_parking_guidelines.pdf
- Require hoops on every block with retail in a downtown/commercial zone.

Policy Recommendations for Bicycle Parking:

Within One Year:

- Update the local government code to include bicycle parking requirements and design standards.
- Encourage Isabella County Transportation Commission to implement bike racks on bus racks on at least one of the bus routes

Within Three Years:

- Implement the bicycle parking requirements and design standards.
- If the bike racks on buses is successful after the first year add bike racks to the entire fleet.

7.5 Maintenance of Non-motorized Facilities

The success of the City's non-motorized transportation system ultimately depends on thorough and timely maintenance of all its facilities. Typical problems that can occur on pedestrian and bike facilities include cracked pavement, standing water, obstructions in the clear zone such as sidewalk furniture, overgrown trees and shrubs, construction equipment and signs, and road debris. Without proper maintenance and removal of these problems, people are not encouraged or able to use non-motorized modes of transportation.

General Maintenance of Sidewalks

Regular and consistent maintenance of sidewalks, particularly along arterials and collectors, is important for non-motorized modes of travel. Conditions such as cracks, heaving from tree roots, icy surfaces and surface spalling create trip hazards for pedestrians. Inadequate maintenance of sidewalks is not only dangerous, but can complicate any travel by pedestrians who are elderly or have mobility impairments.

It is recommended that the communities update their ordinances to require property owners to maintain the sidewalk adjacent to their property. It is recommended that the city develop a citywide inspection program to identify and cite hazardous sidewalks. The program should evaluate different areas of the city each year and property owners should be notified if their sidewalk is not in compliance with city regulations. If a property owner does not make the required repairs, the community should make the repairs and assess the property for cost. This may be integrated into a comprehensive citywide asset management system that also addresses ADA issues.

For asphalt shared use paths, an asset management system should be created to track condition and repairs. The surface should be inspected every other year to make sure the surface is appropriate for all users and to determine what repairs and preventative maintenance operations should be scheduled.

In addition to the sidewalk and path surface evaluation programs, a systematic tree and brush trimming program for sidewalks along major streets and shared use paths should be undertaken.

Overhanging vegetation can greatly reduce the usable width of a walkway, cause injury to users and obstruct views. There should be a 2 foot clear zone on each side of the walkway and a vertical clearance of 8 feet above the walkway. Routine trimming should be done at least twice a year to keep the sidewalk clear of vegetation.



Snow Removal

People who rely on non-motorized transportation as a means of travel are often at the mercy of the weather, especially in the winter. The current practices of snow removal on sidewalks, curb cuts and crossing islands make large portions of the City impassable to many mobility impaired pedestrians or those pushing strollers or grocery carts.

Many northern cities around the globe maintain excellent facilities for non-motorized travel in the winter. For example, Boulder, Colorado and Madison, Wisconsin, cities that both have comparable amounts of annual snow to the Mt. Pleasant area , (Boulder-60", Madison-42", Mt. Pleasant-36") have bicycle mode-

shares higher than the Mt. Pleasant area. Both Minneapolis and Madison have higher bicycle commuting rates than San Diego¹.

Just as it is important for roads to be cleared for automobile, it is important for sidewalks to be cleared for pedestrians. If the sidewalks are not cleared, many times pedestrians will use the cleared roadway, presenting a dangerous situation for both cars and pedestrians. Areas of special concern are curb ramps at intersections and pedestrian crossing islands. Crossing islands are not the responsibility of an adjacent property owner, so they require clearing by City staff. Additional attention may be needed to identify “orphan” areas, such as over freeways or along other public rights-of-way to ensure that these areas are cleared by the appropriate agency. Shared-use Trails should also be included in snow removal because they provide a non-motorized route of travel.

Crosswalks

While motorists can tolerate bumpy roads, uneven pavement surfaces at intersection crosswalks can be hazardous for pedestrians. The City should develop criteria to identify those pedestrian crossings that are in need of resurfacing. In addition to a smooth pavement surface, crosswalks need markings that provide good contrast for motorists and a non-slip surface for pedestrians.

Bicycle Lanes

Motor vehicles tend to sweep debris into bicycle lanes filling them with debris quicker than the motor vehicle lanes. If debris is left in place it becomes a hazard for cyclists and some cyclists will no longer ride in the bicycle lanes. To avoid this problem, bicycle lanes should receive more frequent sweeping. This has the added benefit of reducing the amount of sediment washed into the storm sewer system and some communities have increased the frequency of street cleaning solely for that purpose.



Maintaining visibility and reflectivity of bicycle lane pavement markings and symbols are important to nighttime cycling safety, especially when raining or snowing. The City should repaint its pavement markings on all roadways, including bike lanes and crosswalks on a yearly basis. This type of maintenance is important to retain high contrast and visibility. The City should avoid multiple layers of thermoplastic because it results in rough surfaces for bikers. Materials used for bicycle markings should be non-slip.

When snow is removed, it is critical that the entire bicycle lane be cleared since many cyclists use their bicycle year round. Any loss of bicycle lane width means cyclists are more likely to use the motor vehicle lanes.

The City should also undertake a public awareness campaign on the value of keeping bicycle lanes and curbs in general free of debris to promote bicycle safety and water quality. It is recommended that the City evaluate if more frequent street sweeping is necessary to keep the bicycle lanes and curb areas cleared.

¹ Federal Highway Administration. Publication FHWA-PD-041. Case Study No.1:Reasons Why Bicycling and Walking Are Not Being Used More Extensively as Travel Modes.

Signalized Intersections

Bicyclists and Pedestrians in many cases, cross the road in very different fashions. Bicyclists in the roadway most likely will treat the intersection the same as a vehicle, merging across lanes and making a left turn from the center turn lane. Their restrictions to crossing the road are primarily based on their comfort level of riding with traffic and the volumes, speed and gaps that exist. Since many bicycles function similar to vehicles at intersections it is important that signals are able to detect bicycles even when no motor vehicles are present. The City should develop a system to identify and replace the signals that do not identify bicycles at an intersection.

Problem Identification and Prioritization

Encouraging the community to identify non-motorized facility problems and maintenance issues can save City staff both time and resources. Public participation also allows citizens to feel that the City is responding to their needs and concerns. The City of Portland, Oregon uses a phone hotline, web pages and postcard/comment cards to aid citizens in reporting maintenance issues. Problems may include malfunctioning pedestrian signals, gaps in the sidewalk system, maintenance of crosswalk or bicycle lane markings, or debris in bicycle lanes. In addition to providing comment cards at locations such as bicycle stores and public buildings, the City should set up web-based forms that allow tracking of service requests and direct the request to the appropriate person.

One area that demands particular attention is pedestrian-activated crosswalk signals that are not functioning properly. By the time pedestrians have completed their trip, they may not remember or do not know how to report the problem. Posting a phone number on the post, along with the fixture number, could allow those with cell phones to call in a report.

Key Programs to Continue for Maintenance of Non-motorized Facilities

The Greater Mt. Pleasant Area has many good existing policies and programs that support the non-motorized system. The following policies and programs should be reinforced and continued.

- The City of Mt. Pleasant has a sidewalk snow removal policy in place. Property Owners are responsible for the snow removal of at least 48" width on their property within 18 hours after the end of each accumulation of snow, sleet or freezing rain. This policy should be enforced and continued.
- The City of Mt. Pleasant has an ordinance to give written notice to the owner or occupant of the premises when a sidewalk needs repair or when the sidewalk is unsafe for use or required to be constructed for the public safety. This policy should be enforced and continued.

Policy Recommendations on Maintenance of Non-motorized Facilities

Within One Year:

- The local government should develop a multi-year maintenance schedule as part of the annual striping program for updating signs and refreshing pavement markings on Trails and Bike Routes to maintain high contrast and visibility and help bicyclist and pedestrians navigate.
- The local government should develop a community inspection program to identify and cite hazardous sidewalks.
- The local government should develop a comprehensive community asset management for entire system that addresses regular inspections, preventative maintenance and ADA issues.
- Establish a dedicated website form for non-motorized service requests.
- Develop an educational campaign encouraging property owners to clear curb ramps and bus stops when shoveling their sidewalks.
- Establish a policy for maintenance and snow removal of crossing islands.
- The local government should continue to refresh pavement marking on all roadways, including bike lanes and crosswalks, yearly to maintain high contrast and visibility.
- The local government should enforce a street sweeping policy to keep the bike lanes clear of debris
- Establish a policy to integrate all of the non-motorized facilities that are part of the Network Plan into the current snow removal program.

Within Three Years:

- The local governments should determine if additional means are necessary to develop a program that provides maintenance contact information, such as stickers or signs to be placed on pedestrian signals.
- The local government should assess the effectiveness of the efforts of the code compliance staff to enforce the existing snow removal ordinance on privately owned hard surfaced sidewalks and pathways, specifically on local roads and private drives. If necessary, the City should develop a program to assure snow removal from privately owned sidewalks and pathways along Arterials and Collectors.
- The local government should designate or hire additional staff and assign responsibility for clearing and maintaining crossing islands, shared-use trails and off-road pathways of snow and ice.
- The local government should develop a program that monitors the condition of sidewalks along Arterials and Collectors on a yearly basis.

Within Five Years:

- Establish a maintenance hot-line and website for non-motorized issues (this may be integrated with other maintenance hot-lines) and place a sticker with this hotline number and website address at locations around town including at all pedestrian activated signals.

7.6 Sidewalk/Roadside Pathway Completion

Sidewalks are the unsung heroes of a non-motorized system. They are usually the first facilities to be constructed and provide a backbone to a complete non-motorized network. Sidewalks are one of the key components to a walkable community and policies and programs need to be established to support the installation of these facilities.

In general, sidewalks should be installed by developers when constructing new buildings or homes and by the local city, county or state agency during a roadway improvement project. Every city and municipality handles sidewalk installation differently, but the important thing is to have policies in place that require the installation of sidewalks in both existing and newly developed areas.

Sidewalks/Roadside Pathways along Arterial and Collector Roads

There are usually many destinations along arterial and collector roads so it is important to have a complete sidewalk and/or pathway on both sides of the street.

The Greater Mt. Pleasant Area has a fairly complete system in the neighborhoods, however the areas of new develop have little to no pedestrian connections. A sidewalk should be built on at least one side of the road in these areas to help link people to existing non-motorized system.

Sidewalks in Residential Neighborhoods

Local sidewalks are critical to the walkability of a neighborhood. In many communities, local sidewalks are where a majority of daily recreation takes place. Daily activities such as jogging, dog walking, and socializing occur along local neighborhood streets so it is important to provide a safe alternative to the roadway where these activities can take place.

There are some neighborhoods in the Greater Mt. Pleasant Area that have an incomplete sidewalk system along the local roadways. Many times the existing policies for sidewalk construction only apply to new construction, not to existing subdivisions where there are many gaps or no sidewalks at all within the entire development. Also, in some of the newly constructed subdivisions, sidewalk construction is not always required until the house is completed. As a result of the current economic downturn, many of the new subdivisions are only partly built out, creating many gaps in the sidewalk system where houses have not been built yet.

The local government policies should be revised for a possible updated to include the following:

In New Construction of Subdivisions, given the development may take up to 10 years to complete, sidewalks must be complete at the time the road is being built.

In Existing Subdivisions where there are sidewalk gaps, or no sidewalks are present, establish a process for completing the sidewalk system. It is suggested that if 2/3 of the occupied households vote to complete the sidewalk system that is being constructed with cost assessed to the landowners who segments are incomplete. If it is for a sidewalk along a local neighborhood road the vote should be among property owners just on that road. If it is for a sidewalk along a neighborhood collector road then the vote should be among the property owner in the neighborhood.

Key Programs to Continue for Sidewalk/Roadside Pathway Completion

The Greater Mt. Pleasant Area has many good existing policies and programs that support the non-motorized system. The following policies and programs should be reinforced and continued.

- There is a Sidewalk and Pathways Committee that is part of a regional effort that is prioritizing non-motorized routes for development. The committee includes representatives from Union Township, Central Michigan University, the City of Mt. Pleasant, four townships to the north of Union Township and the Bay Region office of the Michigan Department of Transportation.
- Union Township adopted a sidewalk and pathway ordinance which requires all new development and redevelopment requiring site plan approval and substantial remodeling to include a sidewalk plan.

Policy Recommendations on Sidewalk/Roadside Pathway Completion**Within One Year:**

- Establish a committee to update the local government code based on the recommendations within this report.

Within Three Years:

- Establish the process for neighborhoods to complete their sidewalk system.

Within Five Years:

- Track the progress of sidewalks constructed.