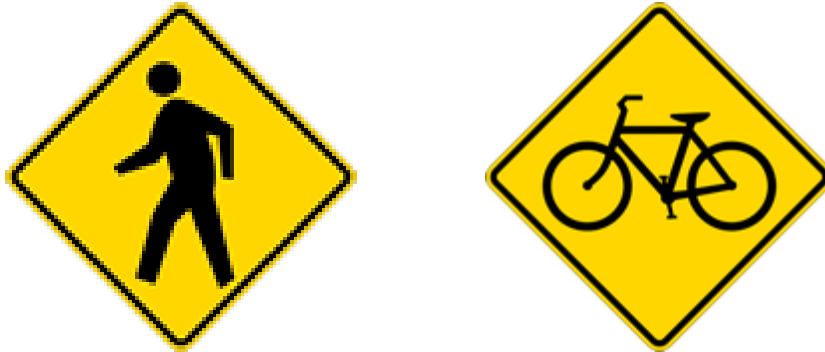


MIDLAND, MICHIGAN  
NON-MOTORIZED TRANSPORTATION IMPROVEMENT PLAN



Version: 2013 update v3.1

PREPARED BY THE MIDLAND NON-MOTORIZED TRANSPORTATION COMMITTEE

**Change History:**

**7/27/2009:** adopted by the City Council

**Draft 2013 Update:**

**6/5/2012:** v2.1 reviewed and updated with City Engineering (B.McManus)

**6/11/2013:** v3 reviewed and approved by NMT Committee (incl. City Planning and Engineering)

**7/17/2013:** V3.1 incorporates feedback from Open Houses

**8/27/2013:** V3.1 recommended for approval by City Planning Commission

**9/9/2013:** V3.1 adopted by City Council

## **City of Midland Non-Motorized Transportation Committee (NMTC)**

The City of Midland Non-Motorized Transportation Committee (NMTC) is pleased to present the 2013 update to Midland's Non-Motorized Transportation Plan. Comments and questions can be forwarded to Brad Kaye, Director of Planning & Community Development, at (989) 837-3379 or *bkaye@midland-mi.org*. The NMTC developed this plan based on the original 2009 NMT Plan and experience gained from the implementation of that plan. This updated plan covers the next 5 years starting in late 2014.

Improvements are specifically described in the body of the plan and supported by maps depicting the proposed bicycle and pedestrian improvements. These maps are available from the City of Midland Planning Department.

At the time of this submission the formal members of the NMTC are:

Doug Greminger (Dow Chemical)(Evaluation)

Jim Hemeyer (Dow Chemical)(Enforcement)

Mary Laforet (SR2S)

Kerry Irons (Adventure Cycling)(co-chair)(Education)

David Waite (Friends of the Pere Marquette Rail Trail) (co-chair)(Engineering)

Encouragement leader position is open.

Supported by:

Brad Kaye (City of Midland Planning Department)

Brian McManus (City Engineering)

Ken Andrews (mi-Vibe)

Wendell Dilling (TCC)

Jim Schmitt (Ray's Bike Shop)

## Executive Summary

The Midland Non-Motorized Transportation Committee (NMTC) was formed by the City Planning Department on July 17, 2008 as recommended by the 2007 City of Midland Master Plan which outlined the need for a comprehensive multi-year non-motorized transportation plan. The first NMT Plan was approved in 2009 and improvement implemented from 2010 to 2013. In 2010 the City adopted a Complete Streets resolution that ensures all future street projects consider the needs of all users. In 2012 the City of Midland was recognized by the League of American Bicyclists as a “Bronze level” Bicycle Friendly Community. The NMTC was then re-charted in 2012 for a further 3 years and has now developed the next version of the Plan.

Creating a safe and welcoming alternative to our current automobile-centric transportation system can have profound and positive effects on the quality of life of Midland’s children and citizens and encourage more visitors to the city as shown by the success of the Pere Marquette Rail Trail. The Midland community can realize significant health, environmental, social and economic benefits by becoming more pedestrian and bicycle active to fulfill both recreational and transportation needs with subsequent reduced road congestion and reliance on automotive transportation. To enable this change a more pedestrian and bicycle friendly infrastructure is required.

The vision of the NMTC is that within a 10 year time horizon, most elementary and middle school children will walk or bike to school and that its’ citizens will increasingly walk or bike to and from their recreational and transportation destinations in the city. The NMTC has identified 5 areas of focus necessary to achieve the vision:

- Education & Encouragement: Develop and implement programs that educate and encourage children and citizens of the benefits of non-motorized transport, to develop the skills required, and to take advantage of the NMT infrastructure.
- Engineering: Implement projects that transform the current infrastructure to a more pedestrian and bicycle friendly infrastructure.
- Enforcement: Work with city police such that laws and programs are in place to ensure motorists and cyclists are held accountable.
- Evaluation: Maintain a consistent program to measure the success, challenges and future needs of NMT efforts.

The following is a summarized list of the physical improvements the committee considers crucial to the continuing success of NMT in Midland. Final prioritization by the City & the NMT Committee should be based upon annual evaluation of city construction project priorities, pedestrian and cyclist safety statistics, public input and funding availability. For more details see Appendix A and B.

	2014	2015	2016	2016 +
<b>Multi-Use Paths</b>				Midland to Auburn (part of the GLBRT trail)
<b>Bike Lanes</b>	Wackerly: Swede to Siebert, Sturgeon to Dublin Dublin: Wackerly to Rail Trail	Ashman: Swede to Rockwell St.Andrews: Plymouth Park to Helen	Selected 36ft wide streets	Selected 36ft wide streets
<b>Designated Bicycle Routes</b>			Selected streets	Selected streets
<b>Sidewalks &amp; Signaled cross-walks</b>	Various locations as identified	Various locations	Various locations	Various

The preliminary 5 year estimated costs for the proposed infrastructure is summarized as follows:

Multi-Use Paths: \$1,500,000 Great Lakes Bay Region Trail project (funded by MDOT and matching grants from GLBRT and other foundations)

Bike Lanes: \$90,000

Designated Bicycle Routes: \$30,000

Sidewalks & Signaled cross walks: \$10,000/year

**TABLE OF CONTENTS**

**INTRODUCTION..... 1**

    SCOPE..... 1

    MOTIVATION FOR A NMT FRIENDLY COMMUNITY ..... 1

    VISION OF A BALANCED MOTORIZED AND NON-MOTORIZED SOCIETY ..... 2

**CITY OF MIDLAND NMT INFRASTRUCTURE ..... 3**

    DEFINITIONS OF THE MAIN NMT INFRASTRUCTURE TYPES: ..... 3

    CURRENT NMT INFRASTRUCTURE ..... 3

**PROCESS USED TO DEVELOP THE NMT PLAN..... 3**

**NON-MOTORIZED TRANSPORTATION DESTINATIONS..... 4**

    GENERAL TRANSPORTATION DESTINATIONS..... 4

    RECREATIONAL DESTINATION LIST ..... 5

**PLAN RECOMMENDATIONS..... 6**

    EDUCATION AND PROMOTION ..... 6

    EVALUATION..... 6

    INFRASTRUCTURE DEVELOPMENT ..... 7

    FUNDING FOR INFRASTRUCTURE ..... 11

    GOVERNANCE..... 11

**SAFE ROUTES TO SCHOOL (SR2S)..... 11**

# Introduction

## Scope

When developing this updated non-motorized transportation (NMT) plan, the committee considered the current NMT capabilities, use of these capabilities through bicycle and pedestrian counts and identified gaps in these capabilities necessary to support various, and wide ranging, modes of transportation needs. These modes include, but are not limited to: pedestrians, bicyclists, skaters, and personal mobility devices for the handicapped (wheelchairs, non-motorized or electric powered and electric scooters). What was not considered as NMT transportation would include any internal combustion powered vehicle (motor vehicles, motorcycles, snow machines, golf carts, etc.), or large electric powered vehicles (golf carts, etc.).

## Motivation for a NMT Friendly Community

An effective NMT program can have many positive impacts on a community: improved health for adults and children, reduced environmental impact, reduced traffic congestion, increased recreation opportunities, enhanced tourism, and a generally improved community climate. There are many elements to such a program, often described as "the 5 'E's": engineering, education, encouragement, evaluation, and enforcement.

Cities with extensive NMT usage are often among those rated "most livable" in various national surveys and studies. Communities with a strong NMT program experience an improved business climate, improved citizen health and quality of life, and higher housing values in general, and specific areas of high NMT activity have shown the greatest improvements. By continuing to enhance Midland's NMT infrastructure and citizen participation, there is an opportunity for the city to take further "steps up" in livability.

In the City of Midland, there is an extensive sidewalk system with very few gaps that inhibit walking and the use of personal mobility devices for recreation and transportation. Midland's existing and planned multi-use pathways offer, and will continue to offer, excellent facilities for in-line skaters, walkers, cyclists, and the handicapped. As a result of the first NMT Plan a network of Bicycle Routes have been implemented on quieter streets and bike lanes on cross city grid streets. Additionally bike racks are now installed at 95% of identified key destinations.

The original plan included a peripheral Multi-Use Path that is infeasible in the foreseeable future so further bike lanes are included in this plan to provide similar NMT capability. This plan also supports the Great Lakes Bay Regional Trail initiative which will be developing a multi-use trail from Midland to Bay

City. Additionally, with the formation of the Midland Area Transportation Study (MATS) Municipal Planning Organization (MPO) this plan will likely become part of a MATS NMT plan in 2014 onwards.

Annually the NMT Engineering sub-committee meets with City Engineering to review the coming year's street construction project plans in the context of the Complete Streets policy and establishes where street construction projects should incorporate NMT requirements.

This plan includes a map of existing and proposed bicycle facilities, the rationale for each proposed facility, a proposed implementation timetable, and the estimated cost the various plan components (along with potential funding sources for each). Also included are various "5 E" proposed actions that the NMT Committee determined were appropriate to support a community-wide NMT program.

### Vision of a Balanced Motorized and Non-Motorized Society

The purpose of this plan is not to remove the use of motor vehicles in the City of Midland, but to make non-motorized transportation options more desirable, safe and convenient. However a significant shift to NMT options can reduce traffic congestion through reduced dependency on automobiles. NMT is not viewed as a silver bullet to solve all transportation problems facing the City of Midland, either currently or in the future, but it can be part of the solution for the challenges facing the City today and tomorrow.

With the wildly successful Pere Marquette Rail Trail, Midland is already a hub and center of activity for those who wish to use this recreation gem. With the development of the Tri-City Connectors Project, expanding the Rail Trail with additional trails extending from Midland to Bay City and Saginaw, it is envisioned that Midland will increase its role as a recreation destination for mid-Michigan, offering recreational bicyclists, walkers and hikers a variety of restaurant, entertainment (Great Lake Loons, activities at the Tridge), and shopping opportunities to complement their recreational activities on the Rail Trail. As a result of this trail system Midland is located on the USBR 20 (United States Bicycle Route).

It is further envisioned that the City of Midland's NMT infrastructure encourages and leads to significantly more children safely walking or biking to school and their extracurricular activities, e.g., soccer, baseball, tennis, etc. Additionally, safer routes for bicyclists to use to commute to and from their homes to work are designed to encourage people to use NMT to reduce congestion on the City's roads, reduce the use of fossil fuels (especially when gas prices are high), and improve their health and quality of life. With good NMT infrastructure in place and, more importantly, an environment which encourages NMT, it is envisioned that the citizens of Midland will also use NMT for recreation, social interaction and general transportation.

# City of Midland NMT Infrastructure

## Definitions of the main NMT Infrastructure Types:

Throughout this plan, a variety of infrastructure types for NMT will be discussed. These include:

- i. **Walkways:** A route (minimum of 4 feet wide) separated from other roads by a barrier or space to accommodate pedestrians, skaters and handicapped transportation. Such pathways can also be used by other NMT users, e.g., bicycles if an alternative bicycle route is not available.
- ii. **Multi-Use Pathways:** A multi-use path is a paved route (typically 12 feet wide) separated from other roads by a barrier or open space that is designed to accommodate a mix of non-motorized users, e.g., walkers, runners, strollers, wheel chair users, roller skaters and bicyclists.
- iii. **Bike Lane:** A bike lane is a portion of a paved road (minimum 5 feet wide) that is designated by striping, signing and pavement marking for the preferential use of bicyclists.
- iv. **Shared Lanes:** A shared lane is a travel lane shared by bicyclists and motorists and designated with appropriate signs and road markings and/or route signs.
- v. **Designated Bicycle Route:** A designated bicycle route is a travel lane shared by bicyclists and motorists and designated with appropriate signs and road markings and/or route signs. These signs and markings are different from the Shared Lane signs and markings.

## Current NMT Infrastructure

The current NMT infrastructure comprises:

1. The Pere Marquette Rail Trail (Multi-use path, Tridge to Clare)
2. The Chippewa Trail (Multi-Use path, Tridge to Chippewa Nature Center)
3. The Southern section of the Loop Trail (Multi-Use path, Tridge to Patrick/Illinois Drive)
4. Cinema Drive Spur (Multi-Use path, Soccer Fields to Midland Mall)
5. Bicycle Routes (see map)
6. Shared Lanes on Ashman & Rodd (see map)
7. Bike lanes on Swede, Sugnet, Eastlawn (see map)
8. Extensive sidewalks with only minor gaps

## **Process Used to Develop the NMT Plan**

1. May 2013: "Design" sub-committee work sessions and recycle with NMT Committee.
2. June 2013: NMT Committee approval of draft. Review with City Engineering (cost estimating).
3. June/July 2013: Open House (public comment and input).
4. August 2013: final approval by NMT Committee.
5. September 2013: Planning Commission review and approval
6. October 2013: City Council review and approval. Submit 2014 budget request.



## Non-Motorized Transportation Destinations

As a part of understanding the transportation needs of the City of Midland, the NMTC compiled a list of common destinations within the city. These destinations were first grouped according to the type of activity that occurred at the destination – either recreation or general activities (work, school, shopping, etc.). The destinations were further broken down by their level of use, based on the estimated number of visits per year. Although actual data were not collected for these sites, reasonable estimates were used based on existing data or through common assumptions.

### General Transportation Destinations

Transportation use is defined when the end activity is work, school, shopping, running errands, etc...

Note: Usage Ratings are approximate

#### General/Commercial

- High use (100,000 or more visits/year)
  - Mall
  - N. Saginaw/Eastman Rd plaza area
  - Circle Area including Eastlawn, South Saginaw
  - Hospital
  - Dow Chemical Michigan Division
  - Dow Chemical Headquarters
  - Dow Corning Midland Plant
  - Dow Corning Headquarters (note: outside City Limits)
  - Downtown Area including Quebecor World Inc
- Medium use (50,000 visits/year)
  - Northwood University
  - Larkin Lab area
  - Eagle Ridge area
  - James Savage Rd area
- Low use (20, 000 or less visits/year)
  - Senior Center (Dublin, Saginaw)
  - Consumers Power (Washington St)
  - Midland Cogeneration Venture
  - Delta College (Wheeler/Washington)

#### Midland Public Schools

- High use (100,000 or more visits/year)
  - High Schools
    - Dow High
    - Midland High
- Medium use (50,000 visits/year)
  - Middle Schools
    - Jefferson

- North East
- Central
- Low use (20, 000 or less visits/year)
  - Elementary Schools
    - Adams
    - Carpenter
    - Chestnut Hill
    - Eastlawn
    - Plymouth
    - Siebert
    - Sugnet
    - Woodcrest

### Recreational Destination List

- High use (100,000 or more visits/year)
  - Pere Marquette Rail Trail
  - Midland County Fairgrounds
  - Soccer Complex
  - Community Center/Central Park
  - Dow Gardens/Center for the Arts/Library
  - Dow Diamond Baseball park
  - Midland High Stadium (including tracks)
  - Tridge Area
  - Plymouth Park
- Medium use (50,000 visits/year)
  - Civic Arena (Bay City Road)
  - Chippewa Nature Center
  - Chippewa Trail
  - Baseball Diamonds including Disc Golf (Whitman Drive)
  - Emerson Park
  - Dow High Stadium including tracks
- Low use (20, 000 or less visits/year)
  - McKay Press (W. Wackerly, Saginaw Rd)
  - Little League Baseball Diamonds (Sturgeon Rd)
  - City Forest
  - Barstow Woods
  - Tennis Center including Fitness Centers on Wackerly
  - Stratford Woods including BMX park
  - Blake Park
  - Optimists Park/Baseball Diamonds (Bay City Rd, Waldo)
  - Currie Golf
  - Herbert H. Doan History Museum area
  - “Large” Churches (throughout the city)

## **Plan Recommendations**

To continue to make the City of Midland friendlier for non-motorized transportation, the NMTC developed the following list of actions that should be undertaken.

### Education and Encouragement

The activities in Education and Encouragement are designed to inform the community of NMT options, either existing or as they become available, within the City. Additionally, one of the aims is to encourage the use of these options and to further promote Midland as an NMT – friendly city.

- NMT public awareness/education program on “bicycle friendly community” utilizing MCTV, social media, and web based solutions
- Bike safety education at Elementary Schools
- Promote/establish “Bike to ....” (MCC, Tennis, Work, School, etc) events
- Implement Safe Routes To School (SR2S) projects (see separate section)

### Evaluation

Through bi-annual counts of bike and walkers at designated locations and at planned events we have data to track the use of these capabilities, overall we see usage trending upwards over the past 5 years. Additionally, we monitor accident statistics to identify trouble spots – Midland’s NMT safety performance continues to be very good and on par with state-wide performance.

- Continue bike/walk counts
- Continue monitoring safety performance

## Engineering (Infrastructure Development)

To continue to develop Midland as a NMT – friendly City, further improvements to the NMT infrastructure are recommended. Those recommendations are summarized below; detailed actions and cost estimates are listed in Table 1. Additionally, Appendix A is a map that outlines the location of the various existing and proposed NMT paths, routes, and lanes. The proposed routes were identified based on their proximity to major destinations (e.g., all of Midland Public Schools buildings are on or very near an NMT route).

- Support the Great Lakes Bay Regional trail project to install a Midland to Bay City MUP with the emphasis on the Midland to Auburn section.
- Install bike lanes on Wackerly: Swede to Siebert, Dublin to Sturgeon and Dublin to connect the bike network and the Pere Marquette to the north side of the City.
- Install bike lanes on Ashman from Swede to Rockwell and St. Andrews along its full length once a traffic signal is installed at St. Andrews and Saginaw Rd.
- Install Bike Lanes or Designated Bike Routes on 36 ft. wide streets (Complete Streets).
  - Evaluate Fog Lines (\$2500/mile) as an option to bike lanes and bike routes
  - Consider alternatives for Jefferson and Eastman as additional North/South routes
  - Ellsworth 'streetscape' redesign: consider bike lanes and sidewalks
- Install crossing sensors that recognize bicycles at Eastman Road bike route/lane crossings
- Identify pedestrian crosswalks that need improvement (safety):
  - Eastman Avenue north of US10 and the Mall, Joe Mann Blvd, Saginaw, etc
- Fill in sidewalk "gaps" around the city
  - Dublin (Saginaw to Countryside)
  - Northwood Drive (Saginaw to Rail Trail)
- Assess Saginaw Rd. bike access to Dow Chemical and Dow Corning Manufacturing Divisions
- Improve NMT capabilities on South Saginaw (Saginaw development initiative)
- Re-evaluate Ashman/Rodd SLM design
- Rail Trail hub facility at Tridge/downtown park (Downtown development initiative)
  - Bike racks and secure weather protected short term storage
  - Improved bathroom/locker/shower facilities
- Changes to the Dial-a-Ride system
  - Re-evaluate the need for bike racks on the buses

**Table 1: Midland NMT Route Projects Proposed and Existing**

**Definitions:**

- Trail: dedicated multi-use separated path facility with two-way traffic for bicycles, pedestrians, in-line skaters. Marked and possibly signaled street crossings.
- Bike Lane: on-street pavement striping with bike lane sign & markings, proper intersection treatments
- Shared Lane: on-street pavement “shared lane markings” (Sharrows) and signs
- Designated Bicycle Route: low traffic streets marked where route turns with signs and pavement markings

**Cost Estimates:**

Costs were estimated based on the unit rates provided by the City of Midland Engineering Department.

- Multi-Use Pathways: \$290,000/mile of 10ft paved path.
- Bike Lane: \$4,000/mile to incorporate bike lanes on an existing 36ft wide pavement (includes paint striping and sign on both sides of the pavement)
- Shared Lane: \$1,000/mile (includes signs and pavement markings)
- Designated Bicycle Route: \$1,000/mile (includes signs and pavement markings)
- Walkways: \$100,000/linear mile for 5ft wide concrete sidewalk

<b>Routes Proposed (estimated cost)</b>	<b>Destinations served</b>	<b>Route rationale</b>	<b>Comment</b>
Midland to Auburn Multi-Use pathway \$1.5M	Auburn	Multi-use ‘rail to trails’ pathway built alongside the existing active rail line. Part of the GLBR Trail system.	
East Wackerly bike lane \$6K	MCTC, East Wackerly businesses, soccer fields, Mall area	Connects Swede bike lane to Jefferson overpass (Midland Mall and soccer complex) and then Siebert bike route	Siebert will no longer be a “dead end” at Wackerly
West Wackerly and Dublin bike lane \$8K	Connect the Rail Trail to the West side of town. Connects the new housing developments on Dublin to the bike network.	Provides significant added NMT connectivity for the NW quadrant of city. Access to Rail Trail, Dublin Senior Center, churches, private schools, and to the bike route network.	Perrine and Sturgeon no longer “dead end” at Wackerly
St. Andrews (Plymouth Park to Helen) bike lane \$12K	MCFTA, Library, Dow Country Club, Plymouth Park, Plymouth Elementary, Northeast Middle School, Circle Area Businesses	Fills a gap in east-west connections north of Ashman and south of Sugnet. Provides access to Circle Area Businesses. Low traffic wide street.	Plymouth Park to Helen. Will be implemented after traffic light installed on

			Saginaw
Ashman (Swede to Rockwell) bike lane \$7K	Stratford Woods, baseball diamonds, Recycle Center, Dow facility	Connects east side housing developments, work locations, and Stratford woods. Puts all of US Bicycle Route 20 on NMT facilities	
Complete Streets treatment of various 36 ft. streets \$60K	Various	Brings these streets up to Complete Streets design: Waldo, Patrick, Wheeler, Sturgeon, Haley, Ashman, St.Andrews, Sturgeon Creek Pkwy	Bike lane or Designated Bike Route treatment
<b>Existing Routes (actual cost)</b>			
South side Loop Multi-Use Trail	Tridge area, downtown businesses, Dow Diamond baseball stadium, Dow, Dow Credit Union, Washington and South Saginaw Rd. business areas, Dow Center, Eagle Ridge, James Savage Rd. businesses, Civic Arena, Waldo Rd. connector to Saginaw Trail, Dow Corning plant via Saginaw Rd. or Waldo/Salzburg, E. Patrick connector to Bay City Trail, Dow Corning HQ via E. Patrick to Flajole or Carter Road.	Recreational and utility separated trail for walkers, in-line skaters, families, cyclists. Completes loop around the south side of the city using Rail Trail. Connects to Bayliss designated bike route and Swede Rd. bike lane. Will provide connection to GLBRT to Bay City.	
Swede Ave. bike Lane \$11K	Plymouth Park, Dow Center, Midland High School, Midland Stadium, Blessed Sacrament, Holy Family Episcopal, Christian Celebration Center	Commuter route connecting south side of loop trail with north side of loop trail. Major commuter route for east side. Bike lane communicates "share the Rd." to motorists.	
Eastlawn bike lane/shared lane \$10K (completion spring 2013)	Dow Center, Midland High School, Eastlawn school, Midland Stadium, South Saginaw Rd. businesses, Community Center	Bike lane/shared lane to deal with traffic levels on Eastlawn. Connects east side route, Concord / Dartmouth / Bayliss route, and Haley / Nelson / Grove downtown route. Part of Adventure Cycling Lake Erie Connector route and US Bicycle Route 20.	
Sugnet Rd. bike lane/shared lane \$20K (completion spring 2013)	Sugnet school, Plymouth school, Northeast Middle School, First Baptist, LDS Church, Holy Scripture Lutheran, Trinity Lutheran, Hospital, Northwood University	Major east-west connector. Bike lane communicates "share the Rd." to motorists. Crosses Washington, Jefferson, Saginaw Rd. & Eastman with traffic lights.	
Ashman / Rodd shared lanes \$20K	Tridge area, downtown business district, Community Center, City and County offices, County Court House, Central Middle School, St. Brigid, Memorial	Shared lane on Ashman from Nelson St. to downtown and on Rodd from downtown to Nelson St. Connects Nelson /Helen / St. Andrews designated bike route with	

	Presbyterian, First United Methodist, St. John Lutheran.	downtown.	
Orchard Rd. bike route \$2K	Hospital, Rail Trail, Emerson Park, Currie Golf	West side connection to Sugnet and west side route.	
East side (north to south) designated bike route \$4.8K	Chestnut Hill school, United Church of Christ, Ashman School	North/south commuter route between Swede and Waldo.	
North side (east to west) designated bike route \$3.6K	Jefferson Middle School, Adams School, Siebert School, Community Church of the Nazarene, Chapel Lane Presbyterian, Christian Celebration Center	Low traffic connector crossing Jefferson & Eastman w/traffic lights. Connects all north/south routes & bike lanes.	
Central (North to South) designated bike route Concord / Dartmouth / Bayliss designated bike route \$3.6K	Adams School, Delta College, Washington Woods, Midland Stadium, South Saginaw Rd. businesses, post office, Dow, Dow Chemical Credit Union, Good Shepherd Evangelical Lutheran	North/south commuter route between Washington & Jefferson. Connects all east/west routes, bike lanes, and south side loop trail.	
Siebert / Russell / Castle Dr. designated bike route \$1.6K	Wackerly businesses, Siebert School, Jefferson Middle School	North/south commuter route between Jefferson and Eastman. Makes use of short sidewalk segment connecting Crescent & Wheeler.	
West side (north to south) designated bike route \$2.8K	Hospital, west Saginaw Rd. businesses, fairgrounds, Woodcrest school, Open Door Baptist	Connects northwest quadrant via low traffic streets to Sugnet bike lane. West side commuter route feeding Dow and downtown via Orchard and Rail Trail.	
Helen / St. Andrews designated bike route \$1.2K	MCFTA, Library, Dow Gardens, Emerson Park, Rail Trail	Connector for downtown loop and extension from Eastlawn Bike Lane (via Nelson)	
Haley / Nelson / Grove downtown designated bike route \$6.0K	Tridge area, downtown business district, Community Center, City and County offices, County Court House, Central Middle School, Carpenter School, baseball stadium, St. Brigid, Memorial Presbyterian, First United Methodist.	Loop connecting Eastlawn bike lane, Helen/St. Andrews designated bike route, Tridge area and Rail trail Source / destination for Ashman / Rodd shared lanes. Part of Adventure Cycling Lake Erie Connector route and US Bicycle Route 20.	
Main St. / Perrine Rd. designated bike route \$2.8K	Northwood University, hospital, Dow High School, Cook School, Holy Scripture Lutheran.	Connecting Rail Trail and north side loop.	

## Funding for Infrastructure

In addition to City of Midland General Funds, it is anticipated that other sources of funding for the proposed NMT infrastructure improvements can be found. These may include:

- Walkways & Signaled cross walk improvements: funding could be adequately covered by the City's MAP 21 portion of annual road maintenance budget.
- Bike Lanes: a blend of local MAP 21 monies and foundation grants.
- Designated Bike Routes: local MAP 21 monies

## Governance

It is a goal of the NMTC to see these recommendations implemented. To that end, the following actions are suggested to ensure that NMT becomes an integral part of the City and its future planning and growth.

- Re - certification as "Bike Friendly Community" through League of American Bicyclists
- Annual "Complete Streets" review
- Emphasis on enforcement (police department) of bike laws and traffic behavior related to bicycles.

## **Safe Routes To School (SR2S)**

There is a national and state level program called Safe Routes to School (SR2S). This program is run by the Michigan Fitness Foundation (MFF) (<http://www.saferoutesmichigan.org> [www.saferoutesinfo.org](http://www.saferoutesinfo.org)) to promote physical activity in children by walking/biking to and from school.

We initially made presentations to Midland Public School administration and although they were supportive of the intent of SR2S they could not support a school administration driven program. Consequently we made presentations to all the PTOs and subsequently have achieved some small successes working with School Administration, PTO members and individual schools, for example walking buses, Bike Safety classes. We do see some increase in biking (bikes at rack counts) and walking to School.

We plan to continue to work with these contacts and find new contacts to leverage our know how to reach parents and their children to get more of them walking and biking to school.