

Table 2.1: Catalogue of Designated Streets (continued)

<i>Road Name</i>	<i>Segment Start</i>	<i>Segment End</i>	<i>Segment Communities</i>	<i>Federal Aid Eligibility</i>
Hollywood Rd	Niles Rd	Marquette Woods Rd	Royalton Twp, Lincoln Twp	Yes
Holden Rd	Lemon Creek Rd	Shawnee Rd	Lake Twp	No
Jakway Ave	Lu Al Dr	Colfax Ave	St. Joseph Twp	No
John Beers Rd	Red Arrow Hwy	M-139	Lincoln Twp, Royalton Twp, Stevensville	Yes
Klock Rd	Jean Klock Park	N Shore Dr	Benton Harbor	Yes
Lake St	West end	Gast Rd	Bridgman	Partial
Lakeshore Dr	State St	Maiden Ln	Shoreham, St. Joseph	Yes
Langley St	Broad St	Napier Ave	St. Joseph	Yes
Lemon Creek Rd	Red Arrow Hwy	Holden Rd	Lake Twp	Yes
Lincoln Ave	Niles Rd	Linco Rd	Lincoln Twp, St. Joseph Twp	Yes
Lu Al Dr	Jakway Ave	Riverbend Dr	St. Joseph Twp	No
M-139	Fair Ave/MLK Dr junction	South I-94 Entrance Ramps	Benton Twp	Yes
M-63	Hagar Twp / Benton Twp border	Benton Twp / Benton Harbor border (north of Klock Rd)	Benton Harbor, Benton Twp	Yes
	Miners Rd	Linco Rd	Royalton Twp	Yes
Maiden Ln	Lakeshore Dr	Cleveland Ave	Lincoln Twp, St. Joseph Twp	Yes
	Washington Ave	Niles Rd	Lincoln Twp, Royalton Twp, St. Joseph Twp	Yes
Main St (St Joe)	Blossomland Bridge	S State St	St. Joseph	Yes
Mall Dr	Plaza Dr	Pipestone Rd	Benton Twp	Yes
Marquette Woods Rd	Notre Dame Ave	Ridge Rd	Lincoln Twp	No
	St Joseph Ave	Bacon School Rd	Lincoln Twp, Royalton Twp	No
May St	Miami Rd	Colfax Ave	Benton Harbor, St. Joseph Twp	No
Meadowbrook Rd	Pipestone Rd	Benton Twp / Bain-bridge Twp border	Benton Twp	Yes
Miami Rd	May St	Napier Ave	St. Joseph Twp	No
Miners Rd	Niles Rd	Brown School Rd	Royalton Twp	No
Martin Luther King Dr	Territorial Ave	M-139/Fair Ave junction	Benton Twp	Yes
N Shore Dr	Higman Park Dr	Water St	Benton Harbor, Benton Twp	Yes
Naomi Rd	River Rd	Hillandale Rd	Sodus Twp	Yes
Napier Ave	Niles Ave	Benton Center Rd	Benton Twp, St. Joseph Twp	Yes

Table 2.1: Catalogue of Prioritized Streets (continued)

<i>Road Name</i>	<i>Segment Start</i>	<i>Segment End</i>	<i>Segment Communities</i>	<i>Federal Aid Eligibility</i>
Nelson Rd	Cleveland Ave	Washington Ave	St. Joseph Twp	No
Niles Ave	Main St	Washington Ave	St. Joseph	Yes
Niles Rd	Washington Ave	Miners Rd	Royalton Twp, St. Joseph Twp	Yes
Notre Dame Ave	Marquette Woods Rd	Grand Mere Rd	Lincoln Twp, Stevensville	No
Palladium Dr	West end	Hollywood Rd	St. Joseph Twp	Yes
Paw Paw Ave	Hagar Twp / Benton Twp border	Territorial Ave	Benton Harbor, Benton Twp	Yes
Pipestone Rd	M-139	River Rd	Benton Twp, Sodus Twp	Yes
Pipestone St	Main St	M-139	Benton Harbor, Benton Twp	Yes
Red Arrow Hwy	Maiden Lane	Browntown Rd	Bridgman, Lake Twp, Lincoln Twp, Stevensville	Yes
	Euclid Ave	Benton Twp / Hagar Twp border	Benton Twp	Yes
Ridge Rd	Glenlord Rd	Marquette Woods Rd	Lincoln Twp	No
River Rd	Pipestone Rd	Tabor Rd	Sodus Twp	Yes
Riverside Dr	Main St	Empire Ave	Benton Harbor	Yes
Rocky Weed Rd	Cleveland Ave	Lincoln Ave	Lincoln Twp	Yes
Roosevelt Rd	Marquette Woods Rd	John Beers Rd	Lincoln Twp	No
Shawnee Rd	Gast Rd	Holden Rd	Lake Twp	Yes
Snow Rd	Browntown Rd	Holden Rd	Lake Twp	Yes
St Joseph Ave	Red Arrow Hwy	Southern Stevensville / Lincoln Twp border	Lincoln Twp, Stevensville	Yes
State St	Lakeshore Dr	Hilltop Rd	St. Joseph	Yes
Stevensville-Baroda Rd	Southern Stevensville / Lincoln Twp	Linco Rd	Lincoln Twp	Yes
Territorial Ave	Paw Paw Ave	Euclid Ave	Benton Harbor, Benton Twp	Yes
	Benton Center Rd	Benton Twp / Bainbridge Twp border	Benton Twp	Yes
Thornton Dr	Grand Mere Rd	Willow Rd	Lincoln Twp	No
Union Ave	Cross St	Nickerson Rd	Benton Harbor, Benton Twp	Yes
Vineland Rd	Washington Ave	Lincoln Ave	St. Joseph Twp	No
Washington Ave	Niles Ave	Linco Rd	Lincoln Twp, St. Joseph Twp	Yes
Water St	Main St	5th St	Benton Harbor	Yes
Woodward Ave	Empire Ave	May St	St. Joseph Twp	No

Section 3: Local Conditions

In addressing the needs of a transportation system, it is important to have clear understanding of the local conditions that bear on its performance. This section describes these local conditions, including the experiences and perceptions of local non-motorized users, the observed conditions and safety performance of area roadways, and the presence of different population groups that have particular walking and biking needs.

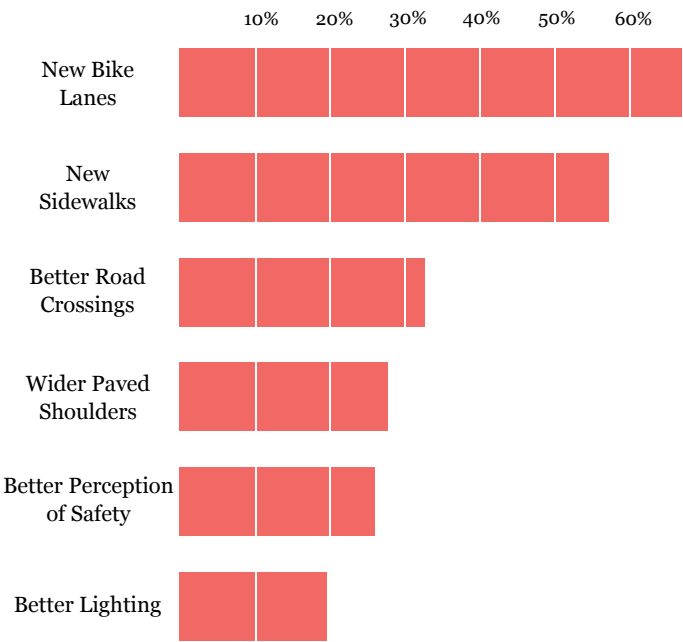
Section 3.1: Public Input

Public input plays an important role in determining the transportation needs of area residents. Staff of the Southwest Michigan Planning Commission (SWMPC) used several methods to gather such input on the TwinCATS walking and biking environment. A series of four public input meetings were held in May 2011 in Lincoln Township and the cities of Benton Harbor, St. Joseph, and Bridgman in which residents were given an opportunity to tell staff about their own walking and biking habits and the ways in which they felt their walking and biking experiences could be improved. Additionally, a written walking and biking survey was also administered at the meetings, as well as being posted to the SWMPC website.

In all, 73 respondents finished the written survey. The questions they responded to fit into three general categories: questions about their personal characteristics (age, gender, home city/town, and disability status), questions about their travel habits (type, distance, and frequency of walking and biking trips), and perception of non-motorized conditions (specific problem areas and potential changes that would make them walk or bike more).

In answering questions about what facility improvements would encourage them to walk and bike more frequently, survey respondents chose from a among a number of options. The results, displayed in Figure 3.1, show that a majority of people reported

Figure 3.1: Percentage of Survey Respondents Who Said the Following Improvements Would Encourage Them to Walk or Bike More



that their walking and biking would increase from new bike lanes (67.2%) and new sidewalks (57.4%). Among the listed design improvements, relatively large minorities of respondents also listed better road crossings, wider shoulders, a better perception of safety, and better lighting as potentially helpful.

In addition to specifying the sorts of design fixes they would find most useful, survey respondents also listed the specific locations, both streets and intersections, in which they would like to see improvements. A total of seven roads received more than ten mentions:

- Red Arrow Highway
- Hilltop Road
- Cleveland Avenue
- Niles Avenue
- Glenlord Avenue
- Washington Avenue
- Marquette Woods Road

Section 3.1: Public Input (continued)

Specific intersections that received repeated mention include the intersection of Red Arrow Hwy. and Marquette Woods Rd. and the adjacent I-94 junction, the intersections of Hilltop Rd. with Cleveland Ave. and Niles Rd., and the intersection of Hollywood Rd. and Glenlord Rd.

While the above information is valuable in identifying particular segments of the area transportation system that could benefit from better walking and biking facilities, it's important to keep in mind the limitations of the survey device used. Namely survey respondents tended to be clustered in a few portions of the TwinCATS region (a slight majority of respondents claimed residence in either the city of St. Joseph or Lincoln Township) and were largely recreational bicyclists and pedestrians (recreation was by far the most common purpose reported for walking and biking trips, and respondents reported their most typical trip distances to be between 1 and 3 miles for walking and over 3 miles for biking). Thus, while the results gained are important, they should not be thought of as completely representative of all area residents who walk and bike.

Section 3.2: Local Design Obstacles

The public input described in the preceding section, combined with the observations of local transportation officials and SWMPC staff, gives a number of insights into the performance of non-motorized transportation facilities throughout the TwinCATS area. This section seeks to flesh out a number of these insights, looking at particular ways in which the area transportation network presents obstacles to effect transportation via walking and biking.

The obstacles discussed in this section are broken into seven different types:

1. The absence of sidewalks
2. The presence of sidewalks in poor condition
3. The absence of marked bike paths
4. Unpaved or poorly maintained shoulders
5. Difficult road crossings
6. Barriers to bus access

For each of these obstacles, an example from the TwinCATS area is examined. The examination covers the ways in which the obstacle and others like it can be identified, why such obstacles are problematic, and ways in which they have been successfully addressed. These discussions of particular problems aren't meant to single out any particular neighborhood or community within TwinCATS. Rather, they're meant to show the concrete existence of barriers to successful transportation that occur within a wide range of communities, and to demonstrate the benefits that the TwinCATS area could reap by addressing them.

Obstacle #1: Absence of Sidewalks

Area Example:

Napier Avenue, from the St. Joseph River in St. Joseph Township east to Pipestone Rd. in Benton Township

Evidence of Need:

- Identification in public surveys
- The presence of “goat paths,” where grass has been worn down by frequent walking
- Frequent observations of people walking or riding a wheelchair on the side of the road or in the roadway itself
- Presence of many pedestrian origins and destinations along roadway; for Napier Ave., these origins and destinations include
 - A large apartment complex and many single family houses
 - A middle school
 - Several grocery stores and markets
 - Several medical offices and other service centers
 - A number of churches
 - A several bus stops near the corner of Napier Ave. and M-139

Potential Design Fixes:

Adding a sidewalk is the primary fix. Care should be taken, however, to make the sidewalk as accommodating as possible to the range of potential pedestrian users. Specifically, to the extent possible, the sidewalk should be sufficiently wide, set back from the roadway, well lit, free from obstacles, and possess curb cuts where necessary and a smooth, flat grad. For reference to more detailed design guidance, see Section 3 of this document.

Other Area Examples:

M-139 (including Fair and MLK), Fairplain Dr., Mall Dr. and Pipestone Rd. in Benton Township; Red Arrow Hwy, north of intersection with Marquette Woods Rd. in Lincoln Township; Hilltop Rd. in St. Joseph and St. Joseph Township



Pedestrian using “goat path” on south side of Napier Ave., between Colfax Ave. and Broadway Ave.



Goat path along north (right) side of Napier Ave., between Ogden Ave. and Union Ave. (photo from Bing Maps)