



City of Kenosha Bicycle and Pedestrian Facilities Plan

Prepared by the Department of City Development
in cooperation with representatives of Kenosha's Bicycling Community

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Acknowledgments

Planning Team

Jayne Herring
Jack Hirt
Jim Jake
Doug Lee
Stan Rosenstiel
Ralph Ruffolo
Don Urquhart
Chris Weber

City Development Staff

Ray Forgianni, Director and City Planner
Jeff Labahn, Assistant City Planner
Rich Schroeder, Development Coordinator
Mike Maki, AICP, Planner
Brian Reining, AICP, Planner
Brian Wilke, Planner
Michael Callovi, Engineering Technician

Special Thanks for Assistance Provided by:



Madison Office:
608/251-4456
608/251-4594 (fax)

Milwaukee Office:
414/271-9685
414/ 271-7293 (fax)

info@bfw.org
www.bfw.org

City of Kenosha Bicycle and Pedestrian Facilities Plan

Purpose

The City of Kenosha Bicycle and Pedestrian Facilities Plan is a blueprint for improving the pedestrian and bicycle routes in the city of Kenosha for the purpose of improving safety; meeting increased needs of bicyclists and pedestrians, particularly in the wake of new development; improving clarity and sense of route marking; and understanding of the laws, rights and responsibilities of bicyclists, pedestrians and motorists.

Increased bicycle use can help relieve current and future motor traffic congestion, as well as improve Kenosha's air quality by promoting bicycling and walking as safe and viable forms of transportation.

Importance of pedestrian and bicycling paths and routes to Kenosha

This plan supports improved pedestrian and bicycling paths and routes to provide a safe and convenient alternative to vehicular commuting and enhance the enjoyment of the community by residents and visitors alike.

The Kenosha plan seeks to support the 1990 U.S. Department of Transportation's policy to "increase use of bicycling and encourage planners and engineers to accommodate bicycle and pedestrian needs in designing transportation facilities for urban and suburban areas." A National Bicycling and Walking Study was funded by the DOT in 1991 with the goals to: 1) double the trips made by bicycling, and 2) reduce the number of bicyclists and pedestrians killed or injured.

As a result of the study, a host of design and sign guides, manuals, and training materials have been developed to assist communities such as Kenosha on how to become a more bicycle- and pedestrian-friendly city.

If even a fraction of the trips to school, video store, friend's home or even work were taken by bicycle or walking, both the bicyclist and the community would reap benefits:

- Reduce pollution
- Improve fitness and health
- Spend less on motor fuel
- Give persons unable to afford the expense of a vehicle and children too young to drive a viable, safe commuting option

It is important to have safe routes that actually go somewhere—that link residents with shopping, services and schools. According to the National Highway Traffic Safety Administration, up to 20% of morning rush hour traffic is parents driving their children to school, and Kenosha Unified School District alone has nearly 22,000 students. An increase in using bicycles to get to school would have a major impact on traffic and transportation costs. Nationally, school bus transportation costs have risen dramatically—and the most recent figures were compiled prior to the drastic increase in fuel prices. In 1999-2000, \$13 billion was spent on busing—an average cost of \$521 per student.

Childhood obesity, another national issue facing school-age youth, is also addressed through increased regular activity such as riding a bike or walking to school. In the November, 2003 issue of Bicycling magazine, it was reported that the average

teenager is 13% less physically active today than in 1980¹ . Approximately nine million kids are considered overweight making them more susceptible to diabetes, heart disease and asthma. A study published in the Journal of the American Medical Association in 2003 found the quality of life of obese children comparable to that of young cancer patients on chemotherapy.

Both residents and visitors have an existing interest in bicycling and walking as evidenced by the current level of investment. Kenosha boasts the oldest continually operating Velodrome in the country. Kenosha has also become a favored stop along the SuperWeek bike race circuit. The day-long races attract professional competitors as well as amateur masters competitors from all over the country. Many in the national bicycle racing community consider Kenosha and bicycling as synonymous.

Kenosha has and is developing a fine set of trails for residents and tourists with the primary purpose of enjoyment and exercise. The Pike Trail, beginning at Carthage College and traveling south through Eichelman Park, is safe, offers beautiful views and showcases the new HarborPark development. Likewise the Kenosha County Bicycle Trail - north to Racine and south to Illinois - encourages recreational bicycling, walking and running.

A common approach to community and economic development is to build onto your strengths as a first-line strategy for effective growth. It is obvious that building onto and connecting among our existing paths makes great sense in continuing to attract the national bicycle community as well as giving visitors to the community safe, attractive venues to enjoy active sports and recreation.

Increased Safety

For the community to maximize its existing tourism investment and enjoy the benefits of increased pedestrian and bicycle commuting outlined above, residents must be assured of safe passage. The Kenosha Bicycle and Pedestrian Facilities Plan is designed to identify and promote the safest on-street routes that residents can use to get to schools, retail, and services. Wherever possible, we recommend striping of bicycle lanes, construction of trails or lanes as part of road improvement plans, signing of routes to alert vehicles of bicycle traffic, increased lighting where necessary and a community education program that promotes and educates drivers as well as bicyclists and pedestrians how to safely navigate existing and new bicycle routes.

¹ Lisa Sutherland, University of North Carolina at Chapel Hill



Figure 1. Bicycle rodeos help teach safe bicycling skills, and are a community outreach tool for police departments.

The safety statistics are alarming. Nearly 7,000 pedestrians and bicyclists die on the nation’s roads each year.² A study conducted as part of a Wisconsin Department of Transportation bicycle plan to assist communities’ efforts indicated that many parents will not allow their children ride a bike to school because they do not believe it is safe. In Kenosha, for instance, six schools have no safe walking or biking alternative—Mahone, Indian Trail, Pleasant Prairie, Prairie Lane, Somers, and LakeView Academy.

Plan Scope

This plan lays out a blueprint for improving both bicycle and pedestrian commuting routes and recreational paths. *Recreational Routes* are both on- and off-street and are intended to connect points of interest while providing a more scenic ride. *Commuter Routes* are all on-street and are intended to provide the most direct means from Point A to Point B.

The plan takes a prioritized approach to improving bike routes. Particular actions are suggested for consideration as stand-alone recommendations with funding coming from the appropriate city department budget. Other projects are recommended for completion in conjunction with any street improvement projects which may take place along the plan’s selected routes; and other actions may require seeking grant or other outside funding.

Process

Over the course of nearly a year, the City Development Department captured the current state of bike and pedestrian routes; identified gaps in route availability, safety, and signage; and developed an initial route plan. City Development then pulled together a task force of local bicycling and walking enthusiasts to serve on the Bicycle & Pedestrian Facilities Planning Team. The Team met during the winter of 2005 to review and refine the initial route plan and formulate the other components of the plan.

² www.americabikes.org

The Bicycle and Pedestrian Facilities Plan

Data Collection and Performance Measurement:

To realize the potential of the route and trail system, it is important to perform periodic checks on whether or not it is a functioning transportation alternative. To that end, the goals of establishing the routes and trails should be firmly and clearly stated along with the ways to determine which goals have been fulfilled and which ones require additional action.

The goals and performance measures of the Bicycle and Pedestrian Facilities Plan for the City of Kenosha are:

- 1) To create a bikeway network that is functional and convenient for every resident of Kenosha.
 - a) The bicycle and pedestrian routes laid out in this plan should, within two years of adoption, be analyzed using a geographic information system (GIS) to ensure that all existing and future residential areas of the City are fully serviced, with the goal being to have a striped lane, bike route or multi-use path located within one-half mile of every resident
 - b) All future development plans should be reviewed to ensure that bicycle and pedestrian needs are properly and adequately addressed. All applicable ordinances should be reviewed to ensure that when projects are reviewed, bicycle and pedestrian issues are required to be addressed and are specifically assigned.
- 2) To ensure that the bicycle and pedestrian system provides a proper level of service to cyclists and pedestrians. (See Appendix A)
 - a) The bicycle and pedestrian routes proposed and described in this plan should, within two years of adoption, be analyzed using the analysis algorithm established by the League of Illinois Bicyclists to ensure that each identified route provides a minimum Bicycle Level of Service of “C” or, in the case of off-street trails, have a score of less than or equal to “8”.
 - b) All future development plans which will (re)construct a roadway identified as being part of the route and trail system should be reviewed to ensure that the finished (re)constructed roadway has a minimum Bicycle Level of Service grade equal to or better than the original roadway. All applicable ordinances should be reviewed to ensure that project reviews are required and are specifically assigned.
- 3) To increase the number of children riding a bicycle and/or walking to and from school.
 - a) Surveys should be conducted among school children to determine a baseline and then conducted on a recurring basis to ensure that the bicycle and pedestrian network is functioning as a transportation alternative among school children. The target increase should be no less than 20 percent within five years, or at an amount that brings the total number of students who walk and/or ride a bicycle to 70 percent of the total student body.

- b) The City of Kenosha should work cooperatively with the Kenosha Unified School District No. 1 to assist in establishing a Safe Routes to School (SR2S) program. The City and school district could partner in establishing this program in the same way that they cooperated in providing the Drug Abuse Resistance Education program. Funding can be obtained from a Federal Highway Administration SR2S grant as well as through savings achieved through reduced transportation costs. (See Appendix B)
- 4) To increase the number of bicycling and walking trips used to perform errands or to travel to and from work.
- a) Survey data can be obtained through the Southeast Wisconsin Regional Planning Commission's bi-annual household surveys and/or through the US Census data, with the goal of increasing said trips by an amount equal to 5 percent per year or until the total number of said trips is equal to 40 percent. (A Federal Highway Administration survey reported that 40 percent of respondents indicated that they would ride a bicycle or walk on these trips if facilities were made available.)
 - b) The City of Kenosha should encourage bicycle and pedestrian travel by implementing and following this plan, as well as participating in encouragement campaigns such as Bike to Work Week and Walk to School Day, implementing or assisting with a Yellow Bike Program, or holding a bicycle safety festival.
- 5) To reduce the number of accidents involving pedestrians and bicyclists.
- a) Statistics can be obtained from the state and the City reporting the number of accidents involving bicyclists and pedestrians. The goal of this plan is to decrease the total number of pedestrian/bicyclist accidents in Kenosha at a rate which is 5 percent greater than the statewide change.
 - b) Locations of recurring accidents can be identified using accident data tracked by the Kenosha Police Department and Emergency Medical Services. These "hot spots" can then be reviewed to determine the best method for reducing the number of accidents there.
- 6) Make bicycle commuting for employment and errands more practical by ensuring that there are adequate facilities for parking and securing bicycles at commercial and employment centers.
- a) A study should be performed within one year to determine appropriate types of facilities and preferred locations, with the goal of increasing the total number of bicycle parking spaces by 25-50 per year until there are an additional 250 bicycle parking spaces in the City.
 - b) The current Code of General Ordinances and Zoning Ordinance should be reviewed to ensure that adequate provisions are made for the requirement of bicycle parking in all commercial and industrial (re)development projects. All applicable ordinances should be reviewed to ensure that project reviews are required and are specifically assigned.

- 7) Increase intermodal facilities and connectivity
 - a) The City of Kenosha should finish installing bicycle racks on its buses and streetcars. Additionally, major bus transfer points should contain maps of bicycle and bus routes to inform the public of the locations and connection points between these three modes of transportation.
 - b) The City should begin a program to track the usage of the bicycle racks on the buses with the goal being to increase the ridership of bicyclists by a rate which is 5 percent greater than the increase in transit use overall.
- 8) Provide additional traffic law enforcement for bicycle routes
 - a) The City should provide training in state programs for bicycle and pedestrian law enforcement. Strategic enforcement should be pursued, including using the City's bicycle patrol, on the highest profile bicycle routes. The goal is to increase motorists' awareness of and compliance with yielding the right-of-way to pedestrians and bicyclists and to reduce the total accident rate 5 percent greater than the change reported statewide.

Bike and Pedestrian Routes

Bicycle and Pedestrian Facilities refers to any improvements which are designed to accommodate, or increase use by, pedestrians and bicyclists. These can range from the installation of signs in an area, to separate elaborate trails and paths designed for exclusive use by non-motorized traffic.

For the purposes of this plan the term facilities will be used to generically refer to any of these improvements, but specific recommendations will be used as to the type of facility for each described improvement.

Existing Routes

The current trail system consists of 6.5 miles of on-street routes and 6 miles of off-street trail within the City. The on-street routes consist of a 2.7 mile segment with a striped “bicycle only” lane and 3.8 miles of on-street routes without designated lanes. The off-street trails are asphalt-paved and, for the most part, 10 feet wide. The proposed bicycle route and trail system will add approximately 47 miles of on-street routes and 14 miles of off-street trails.

The proposed route and trail system was created with the goal of connecting the City’s major commercial, recreational and educational institutions. This Plan uses the most direct roadways that will safely accommodate bicyclist traffic without disrupting existing vehicular traffic patterns. The route and trail system design team recognizes that, while bicycle and pedestrian transportation should be made available to every commuter, an increase in bicycle and pedestrian traffic on the City’s major arterial roadways could lead to increased risk of accident or injury. This plan seeks to minimize that risk through design recommendations and public education.

The proposed route and trail system consists of two classes of routes: recreational and commuter. Recreational routes are intended to connect points of interest while providing a more scenic ride. Commuter routes are intended to provide the most direct means from Point A to Point B.

To aid in navigation of the route and trail system, the entire system should be color-coded. For the purposes of this narrative, the entire network will be described by these routes.

Blue Route

This is the longest proposed bicycle route in the City. It forms an almost continuous loop, traveling closest to the periphery of the City in many places. Blue Route begins on 20th Avenue slightly north of 13th Place. It travels on 20th Avenue until reaching Poerio Park. This section connects the off-street trail in Poerio Park to the Kenosha County Bicycle Trail. Due to the short length of this segment – just over 500 feet – and the low traffic volume on 20th Avenue, the only improvement this segment will require is signage. However, because the Kenosha County Bicycle Trail and Poerio Park are on opposite sides of 20th Avenue, Bicycle Crossing signs should also be added to alert motorists, as well as painted crosswalks to direct bicycle traffic.

Blue Route continues through Poerio Park and adjacent to Bose School. This section is 10 foot wide paved asphalt, and was completed in early summer 2005. The only recommendation for this section is to add color-coded signage to aid in navigation. (Figure 2.)



Figure 2. The proposed signage includes the standard green Bike Route sign, with an additional sign to mark changes in direction and indicate the color of the route. The Pike symbol is used to indicate that a rider is on the Pike Bike Trail of the City of Kenosha.

Blue Route returns to an on-street route as it turns east on 15th Street, then south on 15th Avenue to Birch Road (Figure 3). These streets are 56 feet wide from curb to curb. This will allow for a vehicular traffic lane, bike lane buffer zone, bicycle lane and parking lane in each direction on both streets (Figure 4). This segment of Blue Route should be identified as a priority for implementation because it will connect two off-street segments and will provide a highly visible section of bicycle route to introduce motorists to the concept of segregated lanes. Since traffic volumes on this section of the Blue Route are relatively low, segregated lanes will not negatively impact vehicular traffic. Signage along this section should include arrows to indicate where the route changes direction and color-coding.

At Birch Road, the Blue Route moves to an off-street segment. This segment is 10 feet wide and paved asphalt. The only improvements to this section should be color-coded signs to aid in navigation.

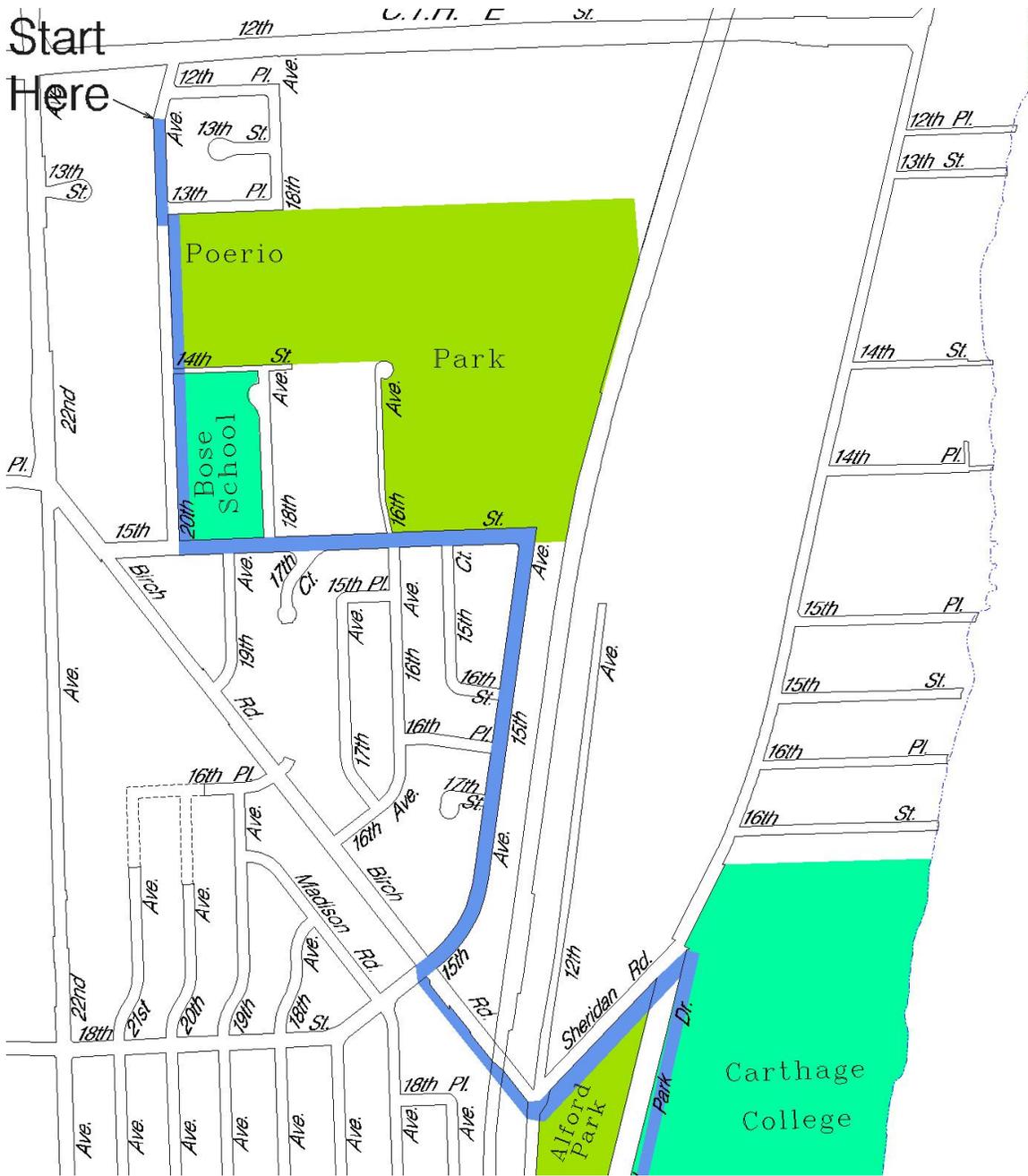


Figure 3. Blue Route connects the Kenosha County Bicycle Trail to the Pike Bike Trail lakefront segment through Poerio and Alford Parks.

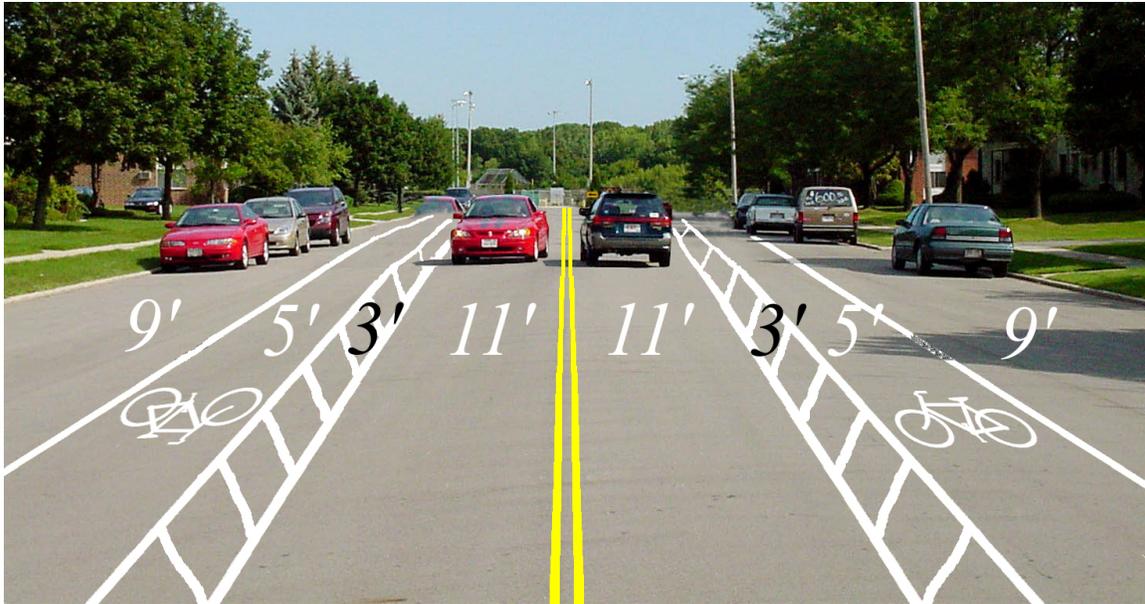


Figure 4. Wide roadways with on-street parking and low-to-moderate traffic volumes may receive both segregated and buffer lanes.

Once across Sheridan Road, Blue Route will travel through Alford Park and across Alford Park Drive to Carthage College. Alford Park Drive is currently being reconstructed and this crossing point will be at a signalized intersection. This segment of Blue Route will be paved asphalt 10 feet wide. This section is currently in the engineering/construction phase and should only require the addition of color-coded route markers.

Blue Route travels through and along Carthage College, through Alford, Pennoyer, Kennedy and Simmons Island Parks. Most of these existing off-street trails are paved asphalt 10 feet wide. The addition of color-coded route markers should be sufficient for this section of route.

The connection between Simmons Island Park and Navy Memorial Park traverses the 50th Street bridge over Kenosha Harbor, but there is no clear connection point to return to the HarborWalk portion of the lakeshore trail. A well-marked and well-defined connection is a priority recommendation of this plan.

Upon returning to the HarborWalk section of Blue Route, the existing trail forks into a bicycle path and a separate pedestrian path. These paths wind along Kenosha Harbor, past Southport Marina and through Eichelman and Wolfenbuttel Parks. HarborPark offers views of Lake Michigan and the Sears Tower, on a clear day. There is also a European-style market every Saturday from May through October. HarborPark is home to the Kenosha Public Museum, as well as a proposed Civil War museum. Cyclists and pedestrians are only a short detour from downtown Kenosha at this point. There are also public restrooms in HarborPark. This segment of Blue Route is asphalt paved and 10 feet wide. The addition of color-coded route markers should be sufficient for this section of Blue Route.

Upon departing Wolfenbuttel Park, Blue Route returns to an on-street route and travels south along 3rd Avenue to 69th Street, east on 69th Street to 2nd Avenue, south on 2nd Avenue to 71st Street, east to 1st Avenue and south to Southport Park. Because it is preferred to install pavement markings on the greatest possible number of on-street recreational routes, the 3rd Avenue segment of should receive shared-use lane markings (Figure 5). These differ from

segregated lanes in that while the Bicycle Route symbols are still painted on the roadway, they are placed without striping an additional lane. While not recommended for this section of Blue Trail, certain situations require that signs be posted instructing motorists in a shared-use lane to yield the right-of-way to bicyclists.



Figure 5. Shared-use lane markings can designate a bicycle route without a segregated bicycle lane. The pavement markings are placed to leave adequate space for vehicular traffic, parked cars and bicyclists.

Blue Trail continues on the existing off-street trail through Southport Park. This section is paved asphalt and 10 feet wide. It will require only the addition of color-coded signage.

After exiting Southport Park Blue Route travels west on 78th Street, to 7th Avenue. As was discussed with 3rd Avenue, this segment should receive shared-use lane markings. The pavement markings are especially important on this segment because once the Blue Route intersects 7th Avenue, there will be a continuation of Blue Route for recreation and the addition of Orange Route (which will be discussed later) for commuting.

Blue Route will continue south along 7th Avenue to 82nd Street. The current configuration of the roadway does not provide for sufficient width to add any lane markings without becoming disruptive to vehicular traffic. However, 7th Avenue is currently a well-known and designated bicycle route, and the addition of color-coded signage should be sufficient for this relatively short segment.

South of 82nd Street, 7th Avenue falls under the jurisdiction of the Village of Pleasant Prairie. This segment currently has a single designated bicycle lane, which requires one-half of the bicycle traffic to ride incorrectly (facing traffic). The major obstacle to correcting this, by adding a second bicycle lane, is that the roadway is relatively new. Any reconstruction to such a new roadway is fiscally imprudent unless the issue of safety far surpasses the cost of reconstructing the roadway. Therefore, the preferred way to correct this situation in the meantime is to repaint the entire roadway, thereby narrowing the driving lanes. This may cause vehicular traffic to slow down to the point that it becomes impractical for vehicular traffic to use this road. As an alternative, an off-street trail could be installed through the environmental areas along the east side of 7th Avenue. The decisions on how and when to address this segment of

Blue Route will ultimately rest with the Village Board, but the City should provide whatever assistance it is able.

Seventh Avenue makes a gentle curve and then becomes 91st Street where it once again enters the City of Kenosha. The portion of 91st Street that lies east of Sheridan Road should be reconstructed to include dedicated bicycle lanes in the shoulders since this roadway is a continuation of 7th Avenue. Once the route crosses Sheridan Road, shared-use pavement markings should be installed to provide a visual and physical continuation of Blue Route. Color-coded signage should also be installed to indicate changes in direction.

At 17th Avenue Blue Route turns north to 89th Street, then proceeds west to 22nd Avenue. This section should also receive shared-use lane markings and color-coded route signs.

West of 22nd Avenue, there is an existing 10 foot wide paved asphalt off-street trail that travels through Anderson Park (Figure 7). Where this trail intersects the roadway, Bike Crossing signs should be installed to alert motorists of bicycle traffic entering the roadway (Figure 6) as well as painted crosswalks. Color-coded route signs should also be installed. The rest area at 30th Avenue should receive a map of the bicycle routes to aid cyclists in navigation.



Figure 6. Bike X-ing signs alert motorists to bicycle traffic entering and exiting the roadway. They should be placed at points where bicyclists are required to cross traffic lanes that have no other signage, or where higher traffic volumes warrant additional safeguards for bicyclists.

At 30th Avenue Blue Route returns to an on-street route and continues to 43rd Avenue. This is also the point where Blue Route intersects the Kenosha County Bicycle Trail on the south side of Kenosha. This segment should receive shared-use lane markings and color-coded route markings.

Blue Route turns north on 43rd Avenue and continues to 80th Street. Once again, this route crosses the municipal boundary into Pleasant Prairie, just north of Schulte Park. At this point the right-of-way is dedicated, but unconstructed. This provides a unique opportunity for the City and Village to cooperate in establishing a connection between the currently constructed portions of 43rd Avenue. At 85th Street, 43rd Avenue is offset with the northern segment being further west than the southern segment. This presents a situation where Bike Crossings signs should be installed. Even though bicyclists are required to wait for traffic to clear before attempting to cross 85th Street, it is in the interest of safety to alert motorists to their presence. Forty-third Avenue is not of sufficient width to install any pavement markings, but should receive color-coded signage.

Continuing past 43rd Avenue, Blue Route turns east on 80th Street and then turns north on Pershing Boulevard. The 80th Street segment should receive segregated lanes. The preferred alternative is to install both a segregated bicycle lane with a buffer lane. This will serve the dual purpose of providing the on-street bicycle lane and acting as a traffic calming measure for Gilbert M. Lance Middle School. If this is impractical, a segregated lane without a buffer lane may be acceptable.

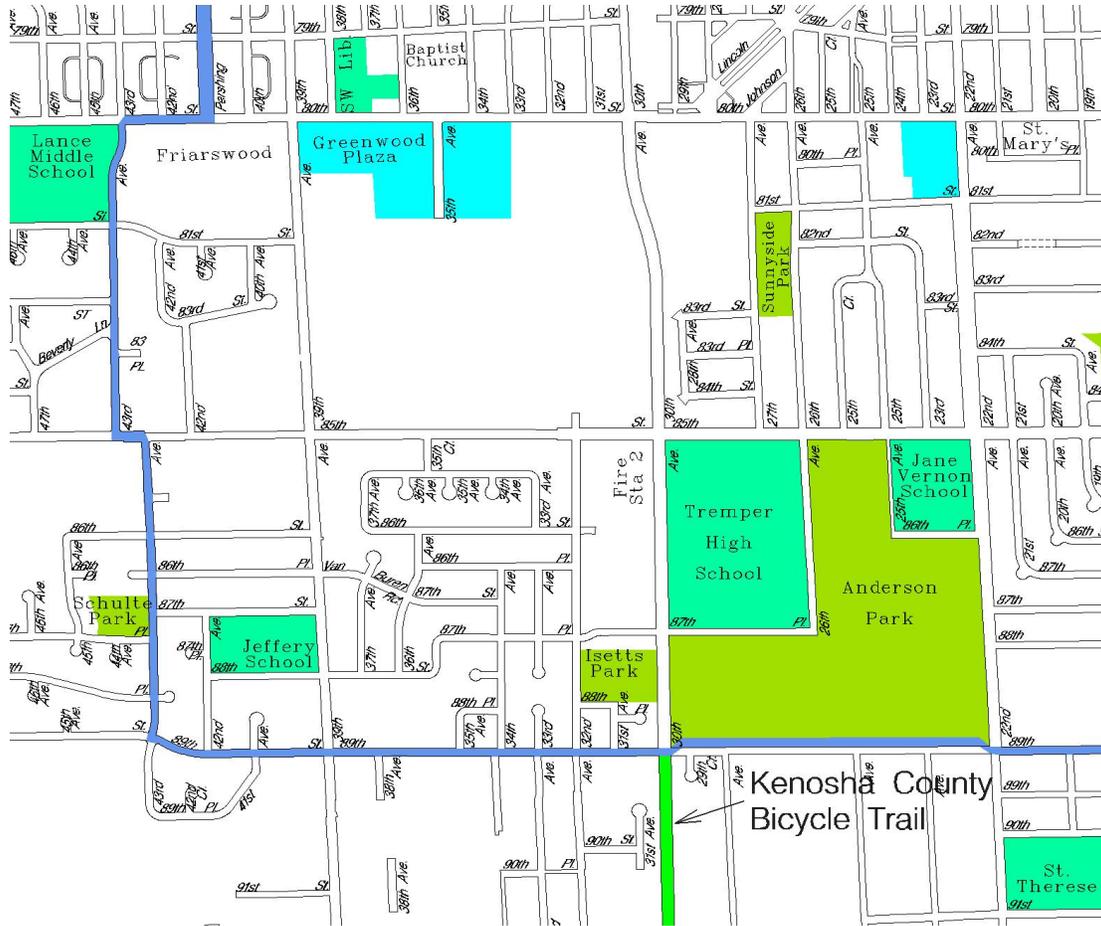


Figure 7. Blue Route will connect schools, parks and commercial areas as it wraps its way around the City.

Pershing Boulevard should receive segregated lanes with buffer lanes when practical. Between 41st Avenue and 75th Street (State Trunk Highway 50) the right-hand lanes should be designated as shared-use lanes and appropriate signs should be installed (Figure 8). The southbound lanes of Pershing Boulevard should also receive appropriate signage and lane markings to alert motorists and bicyclists to the direction of the bicycle route and the proper lane to ride in.



Figure 8. In high traffic areas, shared-use lanes should be accompanied with signage to instruct motorists to yield to bicyclists.

At 67th Street, Blue Route turns west and proceeds to the WE Energies right-of-way which runs parallel to 56th Avenue (Figure 9). Sixty-seventh Street should receive shared-use lane markings and color-coded signage.

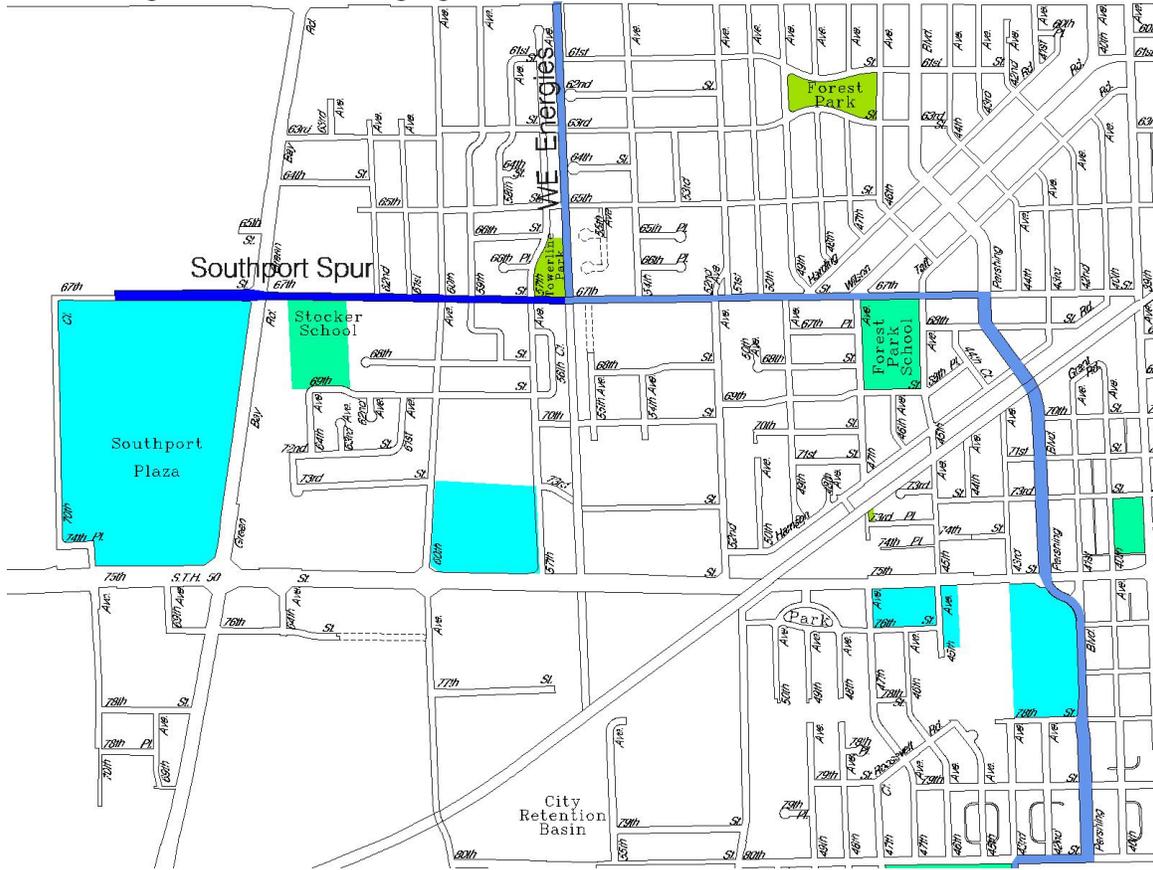


Figure 9. Blue Route follows Pershing Boulevard to 67th Street, then becomes off-street at Towerline Park.

At the WE Energies right-of-way, Blue Route continues north along the right-of-way, but also adds a spur which follows 67th Street to Southport Plaza. The Southport Plaza Spur should receive shared-use lane markings and green “Bike Route” signs, but should not be color-coded. It should receive text-based signage indicating that it is the Southport Plaza Spur (Figure 10).



Figure 10. Portions of the bicycle route system are intended to serve a single destination. These spurs should receive text-based signage to indicate their destinations, rather than the color-coding of the rest of the routes.

The WE Energies segment of Blue Route should be paved asphalt and 10 feet wide. This off-street segment should receive signage both along its length for bicyclists and at intersections to alert motorists of crossing bicycle traffic. Lighting should be considered for this portion of the route to encourage a feeling of safety and security among its users. Where this portion of Blue Route crosses major arterial roadways, bridges and/or tunnels should be considered if and when

any of these arterial roadways are reconstructed. Until such time as separate crossings can be constructed at major arterial roadways, Bike X-ing signs with flashing amber lights should be installed to alert motorists to crossing traffic and painted crosswalks should be installed.

At 35th Street Blue Route returns to an on-street route (Figure 11). It follows 35th Street to 55th Avenue, then on to 34th Street and then to 50th Avenue. At approximately 30th Street, Blue Route moves to an off-street trail through the City's park land in the Walnut Grove Subdivision. The on-street portions of this section are neighborhood-level streets and therefore will require only color-coded signage. At the point where the on- and off-street trails meet, a Bike X-ing sign should also be installed to alert motorists to crossing bicycle traffic and painted crosswalks should also be installed. The off-street portion of Blue Route should be asphalt paved and 10 feet wide.

Blue Route exits the park at the intersection of 47th Avenue and 27th Street. Although 27th Street is currently unconstructed in this area, Blue Route will follow 27th Street once it is constructed. This plan recommends that when development plans are submitted for this section of the Blue Route, they are reviewed for bicycle compatibility.

Until such time as all of these streets are constructed, there are two possibilities for maintaining continuity of Blue Route: re-routing bicycle and pedestrian traffic to existing streets, or constructing temporary off-street trails for use in the interim (Figure 12). In the case of 27th Street, Blue Route can be re-routed to 24th Street by way of 50th and 48th Avenues. In the case of 50th Avenue, between 29th Place and 31st Street, there are no existing roadways to alternate with, therefore a temporary off-street trail is the preferred solution.

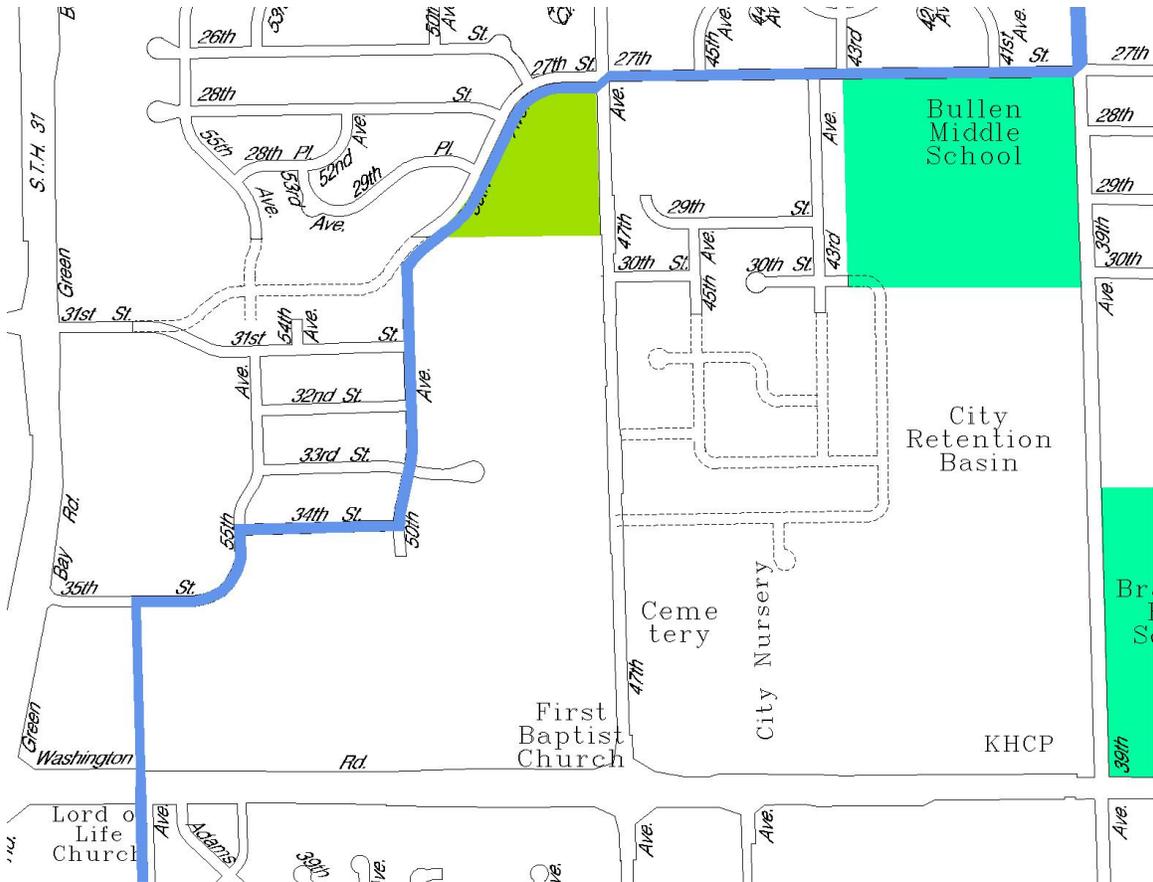


Figure 11. Blue Route is one connection between residential neighborhoods and the schools they serve.

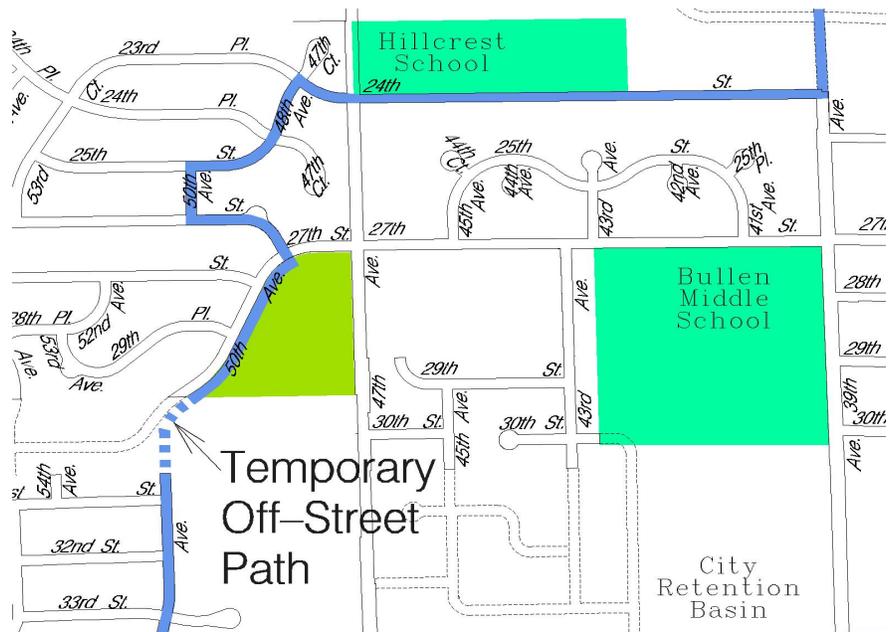
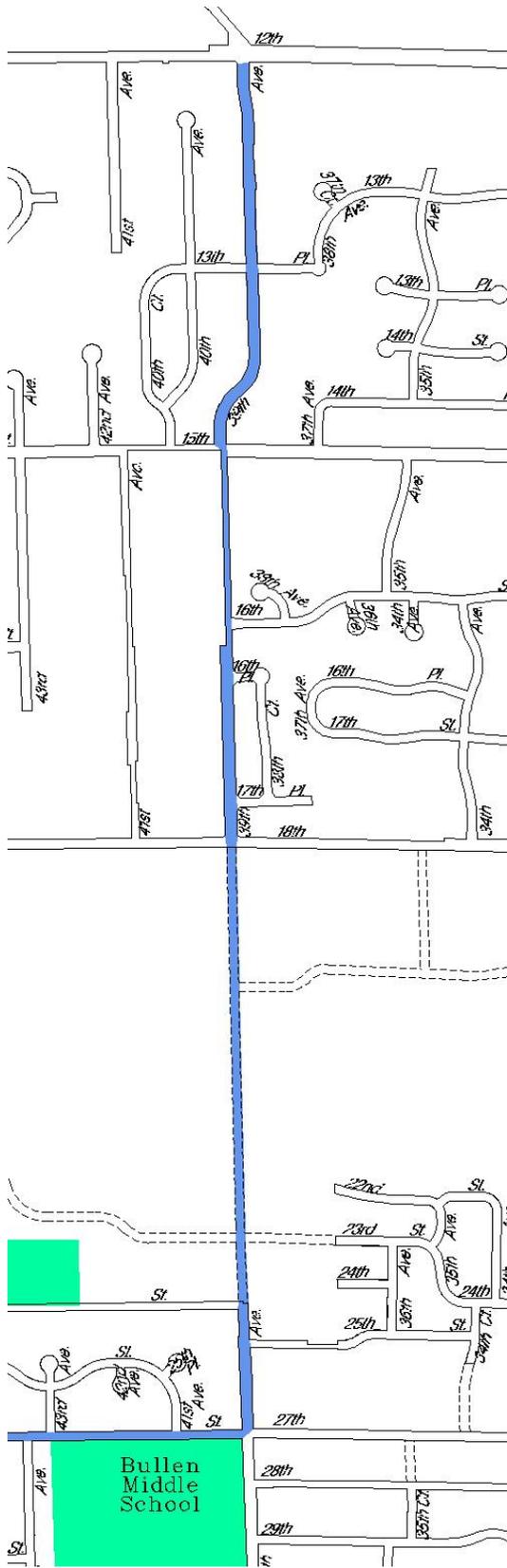


Figure 12. Alternate routes will be required in areas where streets are currently unconstructed.



At 39th Avenue Blue Route turns north (Figure 13). Currently, 39th Avenue is unconstructed between 18th and 24th Streets. This provides the opportunity to design bicycle facilities into the roadway, rather than trying to accommodate them later. While 39th Avenue restricts parking south of this point, 39th Avenue north of 18th Street does not restrict on-street parking. Therefore, the unconstructed section will likely have on-street parking available. The recommendation of this plan is to match the width of the existing roadway and install segregated lanes with buffer lanes. Since the area surrounding the unconstructed segment is expected to develop residentially, this will act as a traffic calming measure. The segment of 39th Avenue between 18th and 12th Streets should also receive segregated and buffer lanes. In the event that this proves impractical, segregated lanes without buffer lanes may be acceptable.

The Blue Route ends at 12th Street, or County Trunk Highway “E”, directly across from the University of Wisconsin – Parkside. There is currently a proposal for a Kenosha County bicycle trail to travel along CTH E, and this would serve as a companion to the Blue Route, and would link the ends into a continuous loop.

Figure 13. Blue Route provides connections to points outside of the City such as Petrifying Springs Park and UW-Parkside.

Orange Route

Orange Route is a companion to Blue Route in that they are often a single route traveling in tandem. However, Orange Route contains several segments that are intended primarily for commuting purposes. Because Orange Route does form a continuous loop, the description will begin with an arbitrary starting point, Anderson Park.

At the intersection of 30th Avenue and 89th Street, Orange Route intersects the Kenosha County Bicycle Trail (Figure 14). Working in a clockwise direction, Orange Route travels west on 89th Street to 43rd Avenue, north on 43rd Avenue to 80th Street, east on 80th Street to Pershing Boulevard and north on Pershing Boulevard to 67th Street. This is one of the segments that runs in tandem with Blue Route and has been previously described with recommendations for improvement.



Figure 14. Some routes run in tandem with others to take advantage of the best possible routes, rather than routes for routes' sake.

Orange Route continues north along Pershing Boulevard as a recreational route. This segment should receive segregated and buffer lanes where practical, as well as color coded signage.

At 45th Street, Orange Route follows the roadway east to 39th Avenue (Figure 15). This segment should receive segregated lanes and color-coded signs.

At 39th Avenue, Orange Route turns north and continues to 27th Street. This segment currently contains two lanes of traffic in each direction without on-street parking. The recommendation for this section is to narrow the traffic lanes and add segregated bicycle lanes. If this proves impractical, designating the right-hand lanes as shared-use with appropriate yield signs may be acceptable (Figure 8). Due to the configuration of this section of roadway and the availability of adjoining bicycle routes, this segment of 39th Avenue is considered to be a commuter route.

Orange Route moves east on 27th Street to 17th Avenue. The portion of 27th Street between 39th and 30th Avenues is currently located in the Town of Somers and has a rural profile. This means that there are no curbs or gutters, but there are ditches. This section also has no shoulder. At the present time, signage is the only practical improvement for this segment of 27th Street; however, when the roadway is upgraded to an urban profile, bicycle traffic should be given a priority in the redesign.

Between 30th and 17th Avenues, 27th Street is not of sufficient width to install any pavement markings without disrupting vehicular traffic flows. Therefore, signage is the practical improvement for this portion as well. Despite the moderate traffic volumes and lack of major facilities, 27th Street is the preferred east-west connection because it is uninterrupted and has signalized intersections at all major arterial roadways. Twenty-seventh Street is also primarily for commuter cyclists.



Figure 15. Orange Route is primarily for commuter traffic on 39th Avenue and 27th Street.

At 17th Avenue Orange Route turns north toward 25th Street, then east to 14th Avenue, then north to 24th Street and east to Sheridan Road. This section of Orange Route is on neighborhood-level streets and will therefore require only signage, but enough signage to ensure riders are able to navigate each twist and turn through the neighborhood. When the redevelopment plans for the former MacWhyte Wire Rope Company are prepared, it may be

possible to reroute this section and this possibility should be investigated as part of the redevelopment plan.

Orange Route then turns south and follows Sheridan Road to 7th Avenue (Figure 16). While Sheridan Road is also primarily a commuter route, it is recommended that segregated lanes be installed along with color-coded signs.

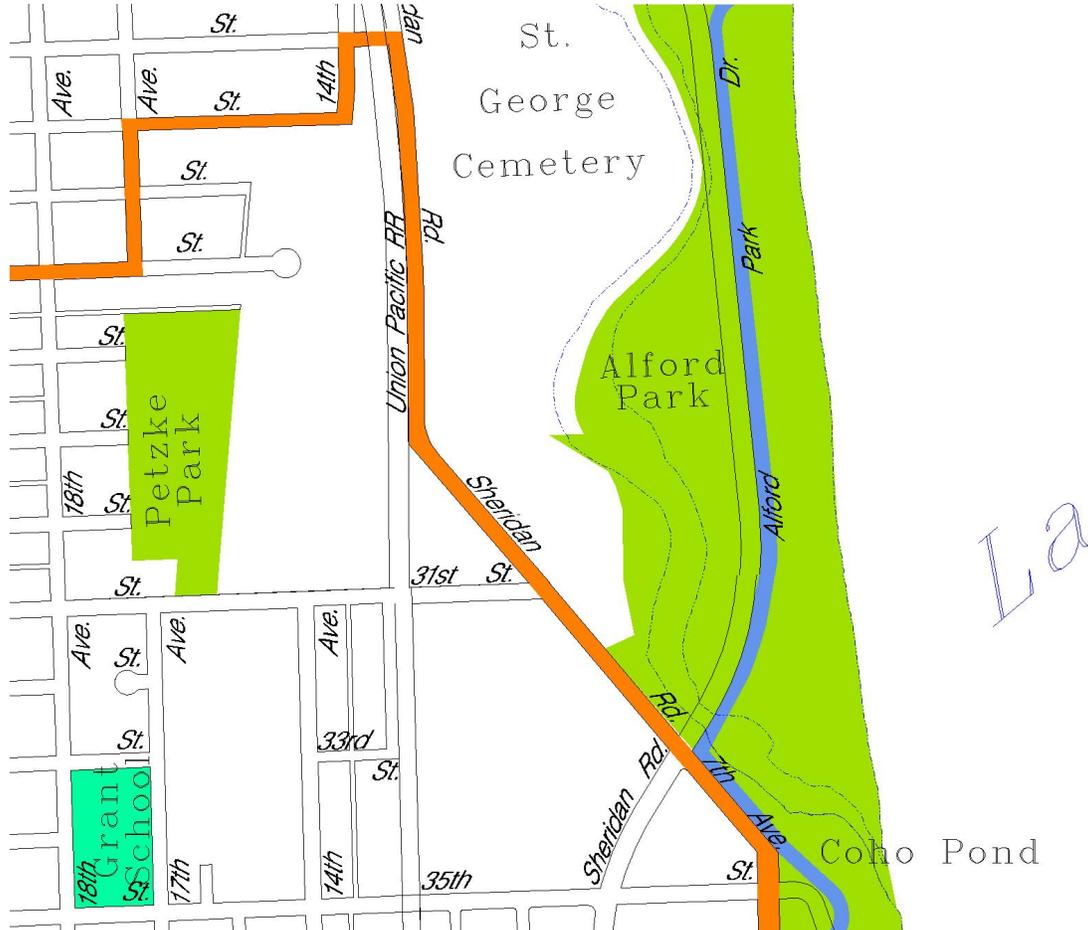


Figure 16. Orange Route meanders around the former MacWhyte Wire Rope Company and then turns south on Sheridan Road.

On 7th Avenue, Orange Route continues south into the Central Business District. Between Sheridan Road and 38th Street, the existing roadway has two traffic lanes in each direction with no on-street parking. From 38th Street to 50th Street in Harborside, there are two traffic lanes in each direction along with on-street parking. To avoid any conflicts between these segments, it is recommended that this entire portion of 7th Avenue receive shared-use lane markings and appropriate yield signage, along with color-coded route markings. This segment of 7th Avenue is intended primarily for commuter bicyclists.

Upon entering the Central Business District, Orange Route moves to 6th Avenue and continues south to Library Park (Figure 17). This part of downtown Kenosha was streetscaped recently and received such pedestrian elements as bump outs, benches and resurfaced sidewalks. Due to the traffic calming of these efforts, the 6th Avenue segment of Orange Route should be adequate for bicycle traffic with only the addition of color-coded signage.

At Library Park there is a divergence of Orange Route due to the one-way streets surrounding it. Southbound bicycle traffic will have to turn west on 59th Place, south on 8th Avenue and east on 61st Street to return to 7th Avenue. Northbound bicycle traffic can simply remain on 7th Avenue to 59th Place where Orange Route angles to 6th Avenue to downtown.

South of Library Park Orange Route continues on 7th Avenue to 75th Street. This segment is intended primarily for commuter cyclists, and due to the current configuration of the roadway, it will not accommodate any improvements other than color-coded signage.

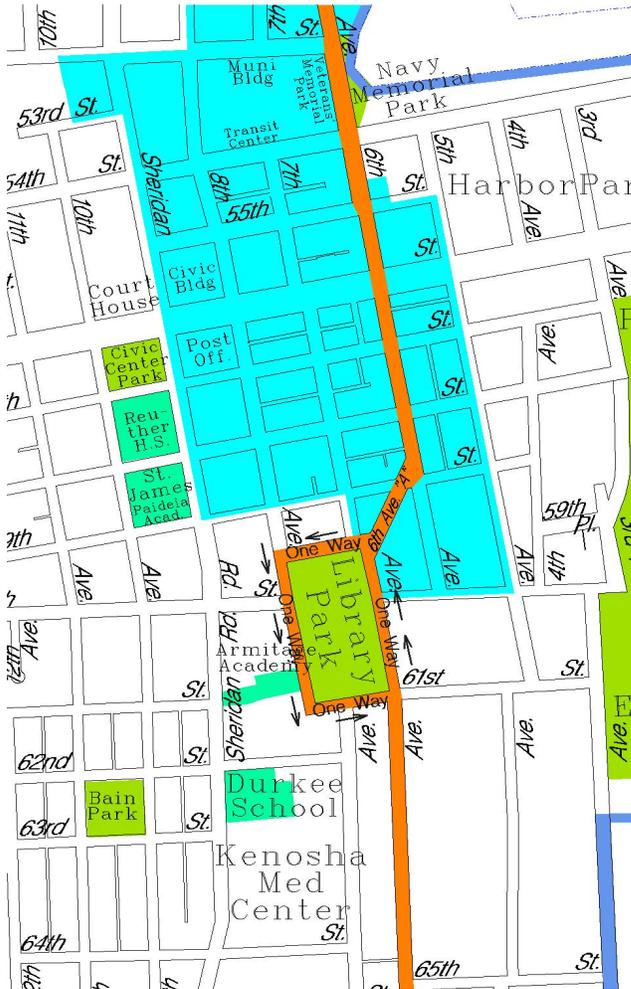


Figure 17. Orange Route travels through the heart of downtown Kenosha.

At 75th Street, Orange Route turns west toward 11th Avenue. At 11th Avenue, Orange Route turns north along the railroad tracks and continues to Sheridan Road. Once across Sheridan Road Orange Route proceeds west along 73rd Street to 18th Avenue. Orange Route turns south at 18th Avenue and proceeds south to 78th Street, turns east on 78th Street to 17th Avenue, and then south on 17th Avenue to 89th Street. These roadways are neighborhood-level streets and will require only the addition of color-coded signage.

A spur of Orange Route travels east on 78th Street to provide access to Simmons Athletic Field. This spur should receive text-based signage.

At 89th Street, Orange Route rejoins Blue Route and continues to 30th Avenue. Improvements to this segment of Orange Route have been previously discussed.

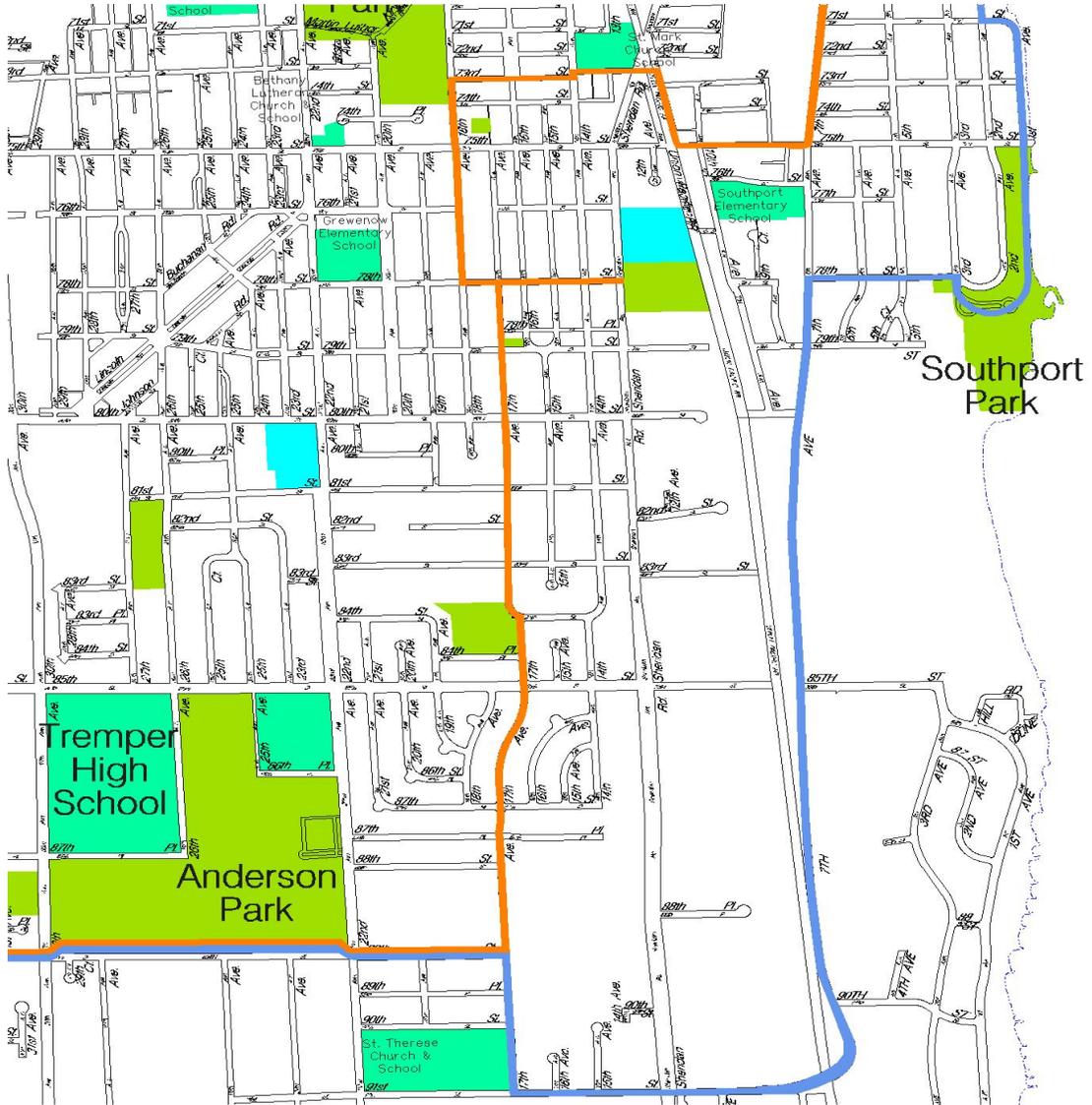


Figure 18. Orange Route provides commuter and recreational opportunities for cyclists

Green Route

Green Route will provide a connection between the north and south segments of the Kenosha County Bicycle Trail on the former North Shore Electric Railroad right-of-way. This route has recreational and commuter elements, and is partially constructed. It is a strong recommendation of this plan that the City work closely with Kenosha County regarding elements of color-coding and installing maps of the entire route and trail system. It is also a recommendation of this plan that the City and County should investigate the possibility of jointly upgrading the existing surface to asphalt paving.

Beginning at 12th Street, the existing Kenosha County Bicycle trail follows the former North Shore Electric Railroad right-of-way traveling southerly to 35th Street. The existing trail is crushed limestone and is 10 feet wide. At 12th Street color-coding of this route should begin. There should also be a map of the City placed near 12th Street to indicate the variety of routes and trails through the City of Kenosha. This would encourage recreational riders to explore the City at large, in addition to riding the existing trail.

At 35th Street the City is preparing to extend Green Route along the rail corridor to 50th Street. This new segment of Green Route will be paved asphalt 10 feet wide with construction slated for 2006. The only additions to this segment of Green Route should be the addition of color-coded route markers to aid in navigation.

West of the existing Kenosha County Bicycle Trail, 35th Street is a spur for access to Gateway Technical College. Much like the Southport Plaza Spur, this segment should receive text-based signage and shared-use lane markings.

Green Route changes to an on-street route at 50th Street, and is intended to primarily serve commuter cyclists (Figure 19). Green Route travels east on 50th Street to 23rd Avenue, then turns south to 63rd Street. While this section of Green Route does not cross major arterial roadways at signalized intersections, traffic signals are located one block away, at 22nd Avenue, and should provide sufficient traffic control to allow for the safe passage of cyclists. Bike X-ing signs and painted crosswalks should be installed at 52nd and 60th Streets. Flashing amber lights are recommended to alert motorists on 52nd Street of crossing bicycle and pedestrian traffic. These neighborhood-level streets will not accommodate any improvements other than signage.

At 63rd Street Green Route turns west and proceeds to 26th Avenue. South of Uptown shopping district, 26th Avenue is of sufficient width and is configured to accommodate shared-use pavement markings. These should be installed as far south as 85th Street (Figure 20). Color-coded signage should also be installed to aid in navigation. South of 85th Street Green Route continues on 26th Avenue to 87th Place where it changes to an off-street trail. This off-street segment of Green Route is currently paved asphalt and is 10 feet wide. It travels parallel to 87th Place, then turns south along 30th Avenue to 89th Street where it joins Blue and Orange Routes and the Kenosha County Bicycle Trail.



Figure 19. Green Route serves commuters for work and school.

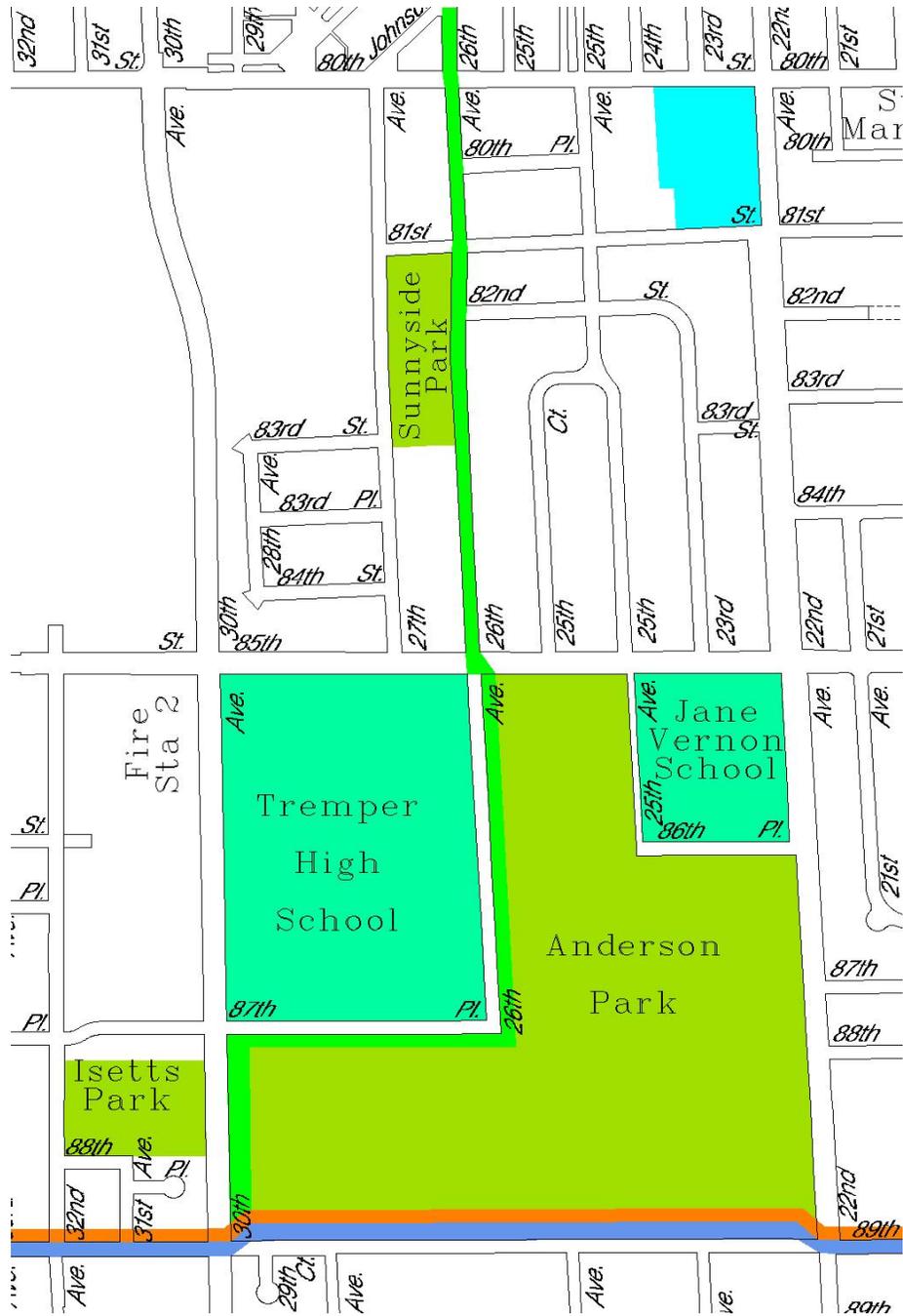


Figure 20. Green Route provides access to schools and parks on Kenosha's south side.

Red Route

The primary east-west route will be Red Route. It is proposed to connect downtown Kenosha to the westernmost limits of the City. Beginning downtown and traveling west, Red Route starts on 56th Street at 6th Avenue. Through downtown and west to 13th Avenue, 56th Street is a divided street with a large grass median. The wide roadway surfaces are sufficient to accommodate motorists and bicyclists without installing segregated lanes. There is sufficient traffic calming in the downtown area to provide a safe environment for bicyclists.

West of the Union-Pacific Rail Road right-of-way, the boulevard disappears and the roadway narrows considerably. The configuration of the roadway prohibits any improvements but signage; however, one-half of the roadway has had decorative lighting installed. This has improved the feelings of safety and security among residents and travelers in this area. It is recommended that the other one-half of the roadway also receive lighting improvements and that the entire section between 13th and 23rd Avenues receive color-coded signage.

At 23rd Avenue Red Route turns south toward 60th Street. This section of Red Route is also on neighborhood level streets and can accommodate only signage.

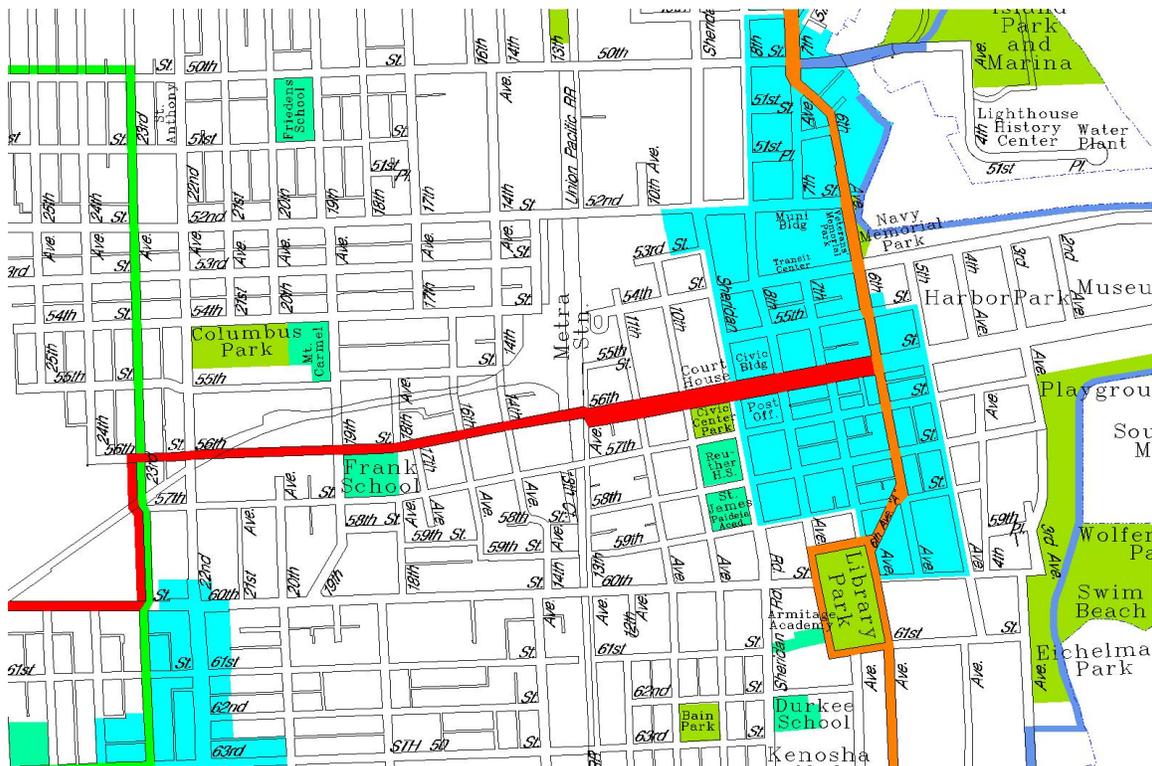


Figure 21. Red Route is the primary east-west access route to downtown Kenosha. It connects Orange and Green Routes while providing access to schools, commercial centers and employment.

At 60th Street Red Route turns west and continues to Green Bay Road. This section of Red Route should receive shared use pavement markings in the right hand lanes and appropriate yield signs should be installed. At 23rd Avenue Bike X-ing signs should also be installed to alert motorists to bicycle traffic.

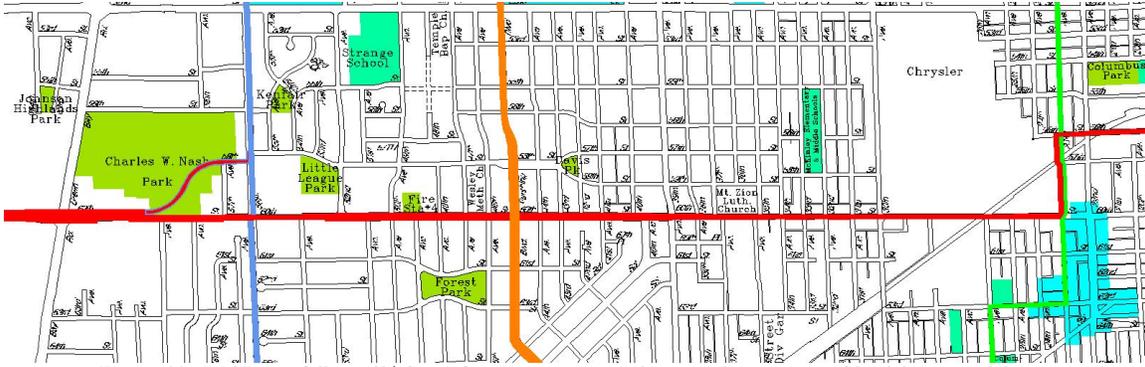


Figure 22. Red Route follows 60th Street for commuter access between the western residential areas and downtown.

The intersection of STH 31 and 60th should be improved to include crosswalks and pedestrian signals, and to ensure that the lights are properly timed to allow adequate crossing intervals.

West of Green Bay Road there are two recommendations for Red Route. The first is to install an off-street trail on the north side of 60th Street that is to be 10 feet wide and asphalt paved. This will provide a recreational opportunity for western Kenosha residents as well as a pedestrian and bicycle connection to Indian Trail Academy and Mahone Middle School. The second recommendation for improvements is to install on-street lanes for commuter cyclists. The installation of both on- and off-street facilities along this portion of 60th Street can be likened to the Interstate Highway system where there is the main roadway, but there are also frontage roads. Cyclists who are traveling the entire length of 60th Street with full confidence in their abilities and equipment will likely choose to travel using the on-street lanes, while those who hold reservations about traveling in such close proximity to motor vehicles can choose to use the off-street trails. Since this portion of Red Route will carry most bicycle traffic from the western edge of the City, as well as County residents, to the interior of the City, multiple modes should be considered imperative to the success of the route and trail system as a viable transportation alternative. On-street bicycle lanes should be included when 60th Street is reconstructed.

At Interstate Highway 94, 60th Street has controlled intersections at both frontage roads and passes under the Interstate. There are no on- or off-ramps connecting Interstate Highway 94 and 60th Street. Upon crossing Interstate Highway 94 the on-street lanes should be continued to 156th Avenue - County Trunk Highway MB - and installed as part of any improvement to 60th Street. Off-street trails will not be installed west of I-94.

Yellow Route

Yellow Route is intended primarily for bicycle commuters and follows 50th Street from 7th Avenue to 56th Avenue where it joins Blue Route (Figure 23). The major recommendation for this route is to install color-coded signage. While 50th Street is not currently continuous, the City's *Wilson Neighborhood Plan* does recommend connecting the two segments of 50th Street, and when they are connected, bicycle accommodations should be made a priority. Until a permanent roadway is constructed, a temporary off-street trail should be installed to accommodate bicycle and pedestrian traffic.

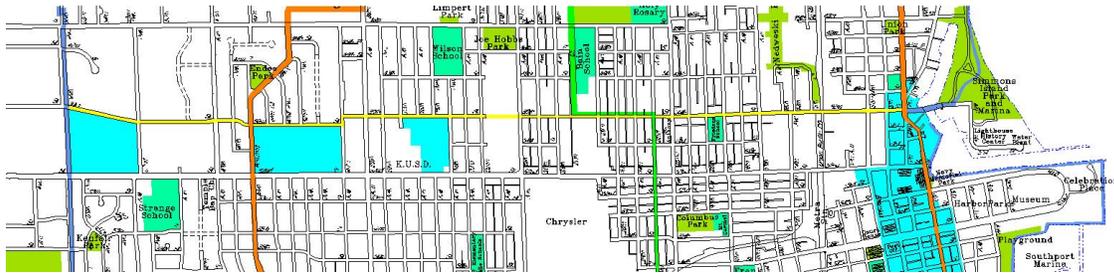


Figure 23. Yellow Route provides connections to Blue, Orange and Green Routes, as well as parks, schools, and commercial and employment centers.

Purple Route

Purple Route begins on 65th Street at 3rd Avenue, and proceeds west to Sheridan Road (Figure 24). This segment is made up of neighborhood-level streets and the only improvements that are recommended are color-coded signs to indicate the direction of Purple Route.

West of Sheridan Road, Purple Route continues along 65th Street to 18th Avenue. The current configuration of 65th Street does not allow for the addition of any improvements other than color-coded signage.

At 18th Avenue, Purple Route turns south and continues to Martin Luther King Jr. Drive. While this segment has low traffic volumes, the recommendation is to install shared-use lane markings to provide traffic calming for Lincoln Middle School, as well as color-coded route marking signs.

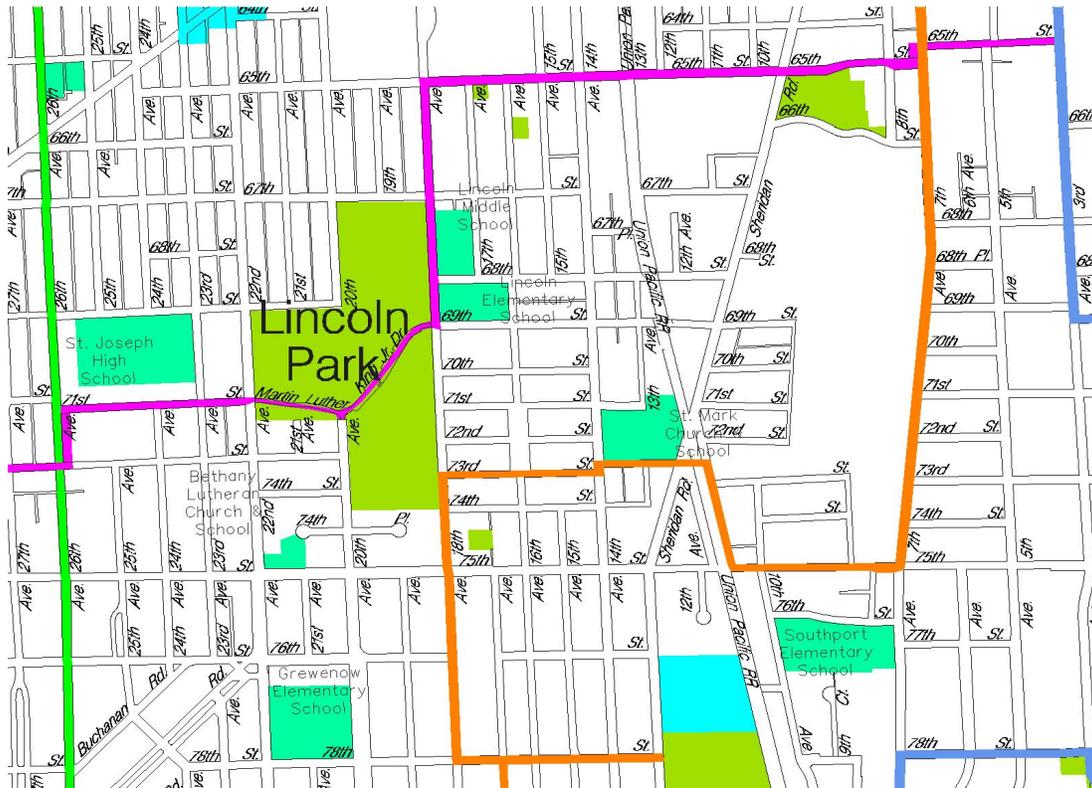


Figure 24. Purple Route provides connections to Blue, Orange and Green Routes, as well as parks and schools.

Martin Luther King Jr. Drive curves into 71st Street at 22nd Avenue. Purple Route follows 71st Street to 26th Avenue and then turns south to 73rd Street, and proceeds west on 73rd Street to 34th Avenue (Figure 25). At 34th Avenue, Purple Route turns south and proceeds to 79th Street, where it turns west and continues to Pershing Boulevard. Since these are all neighborhood-level streets, they will require only the addition of color-coded route marking signs.

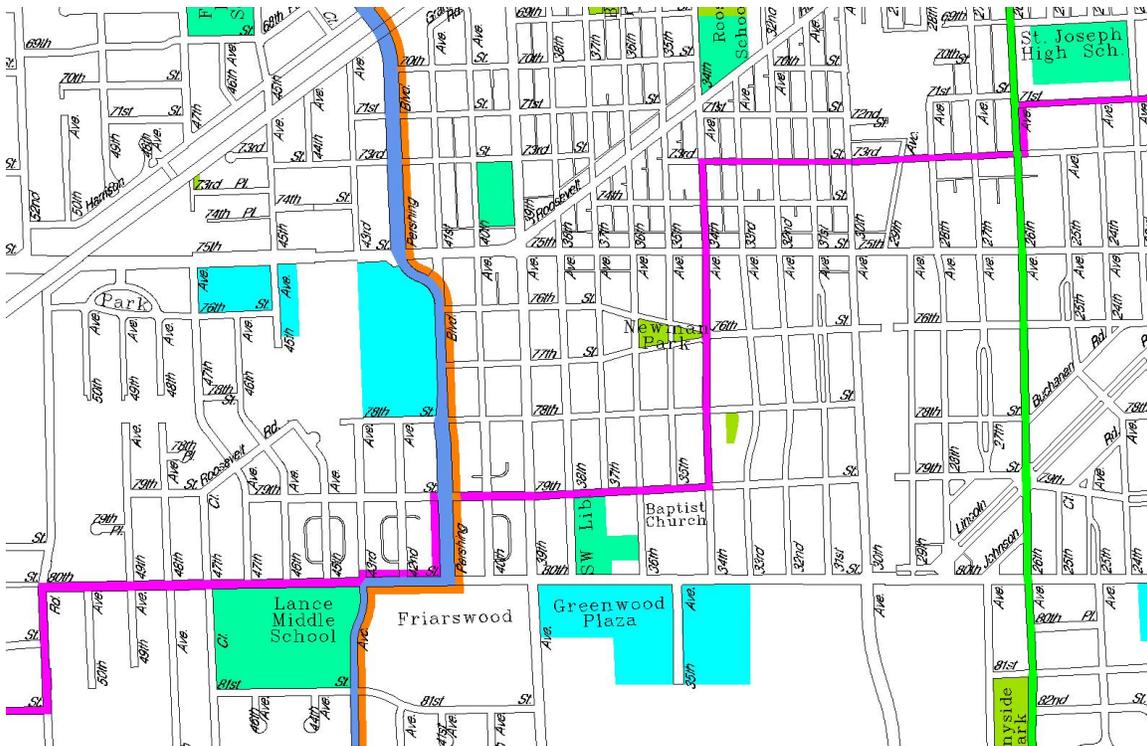


Figure 25. Purple Route travels both east-west and north-south, connecting various routes and destinations.

At Pershing Boulevard, Purple Route turns south, continues toward 80th Street and turns west. From 79th Street to 43rd Avenue, Purple Route is the same as Blue and Orange Routes, and the recommendations for this segment have been previously made. Purple Route continues west on 80th Street to Cooper Road. From 43rd Avenue to 50th Avenue the recommendation is to continue the segregated and buffer lanes already proposed from 43rd Avenue to Pershing Boulevard. The segregated lanes will act as traffic calming for Lance Middle School.

At 50th Avenue Purple Route passes into the Village of Pleasant Prairie. Purple Route is proposed to follow 80th Street to Cooper Road, turn south on Cooper Road to 82nd Street, then turn west on 82nd Street to 67th Avenue (Figure 26). While the recommendation is for Cooper Road to receive segregated lanes when it is reconstructed, this is outside of the City’s jurisdiction and is therefore only advisory.

On 82nd Street Purple Route returns to the City at 60th Avenue. However, all of 82nd Street is a neighborhood-level street and therefore will only require color-coded signage.

The terminus of 82nd Street is very close to Old Green Bay Road, and Park Vista West subdivision does have an outlot that will provide a potential connection to Old Green Bay Road. The recommendation is to install an off-street trail through this outlot. Because there are so few other street connections to 82nd Street, west of 60th Avenue, it would be prudent to design this off-street segment in such a way as to accommodate emergency vehicles as an additional access point to the neighborhood. The terminus of 82nd Street is also the end of Purple Route.

Brown Route

Brown Route differs from the others in that it is proposed to travel through natural environmental areas, and act as a self-guided nature path designed to primarily serve pedestrians. Brown Route starts at State Trunk Highway 50 east of 118th Avenue (Figure 27). It meanders north along Kilbourn Road Creek, crosses 60th, 52nd and 38th Streets and ends at Burlington Road. The recommendation for this route is to install a 10' asphalt trail; however, due to environmental regulations pervious natural materials such as crushed limestone or wood chips would be an acceptable alternative. It is also recommended to consider installing placards along the trail to identify and describe various elements and features of Kilbourn Road Creek. There will be an additional access spur through City park land in Horizons at WhiteCaps subdivision.

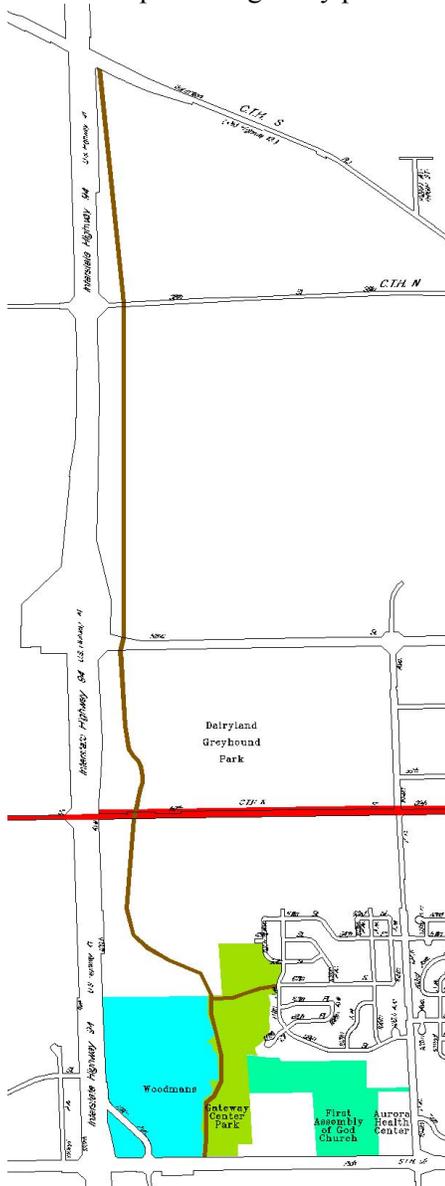


Figure 27. Brown Route serves as a nature trail first and a bicycle route second.

Pink Route

The final route is Pink Route and it serves as the primary bicycle circulation route for development west of Interstate Highway 94. It is proposed to follow the “ring road” that will travel through the lands covered by the City’s *Bristol Neighborhood Plan*. Most of the streets that will make up this “ring road” have yet to be dedicated, therefore all plans in the City Growth Area should be reviewed to ensure that bicycle and pedestrian access are properly addressed.

Three connector legs are part of Pink Route: two provide connections to Red Route on 60th Street, while the third provides access to the Town of Bristol via 144th Avenue.

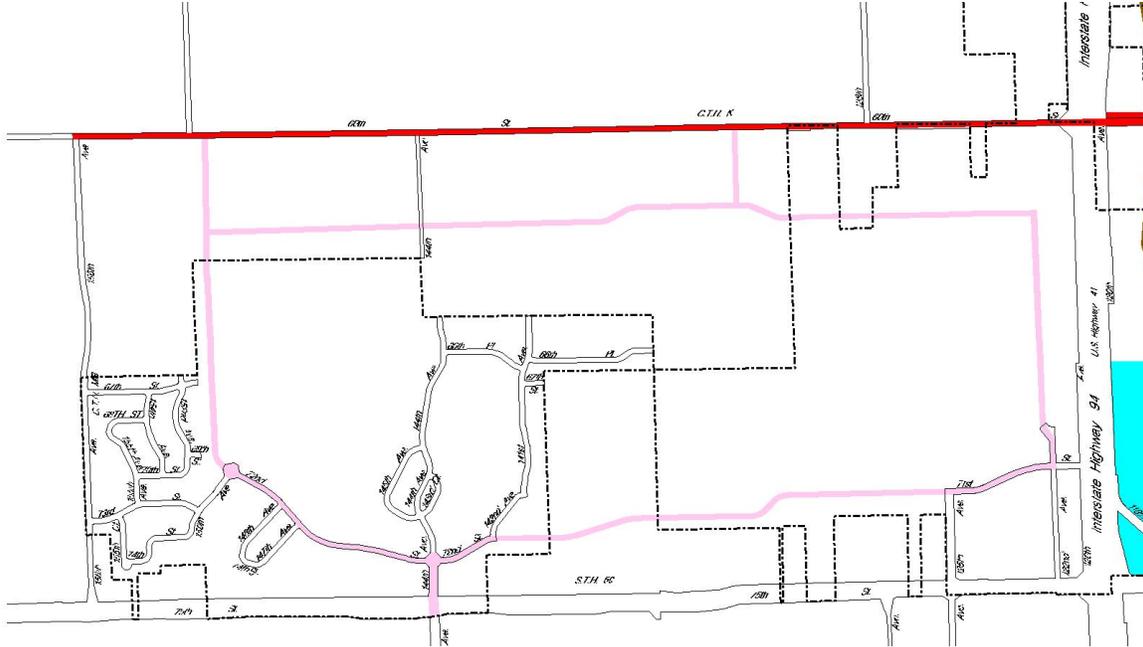


Figure 28. Pink Route will provide the primary bicycle circulation in the City Growth Area.

Connector Routes

The seven primary routes do not provide complete interconnectivity within the City, and therefore there are several routes that exist to provide a more complete and well-connected route network throughout the City. The following connector routes are generally short-distance and primarily commuter-oriented in nature.

Blue-Orange Route

There are a number of Blue-Orange Connector Routes in the overall network. The first is on Sheridan Road between Birch Road and 24th Street. Portions of this segment are in the Town of Somers and once again provide an opportunity for intergovernmental cooperation. The current roadway configuration will only support the addition of color-coded signs, but any reconstruction of Sheridan Road in this area should make the addition of segregated lanes a priority. Where there is sufficient roadway width, segregated lanes should be installed.

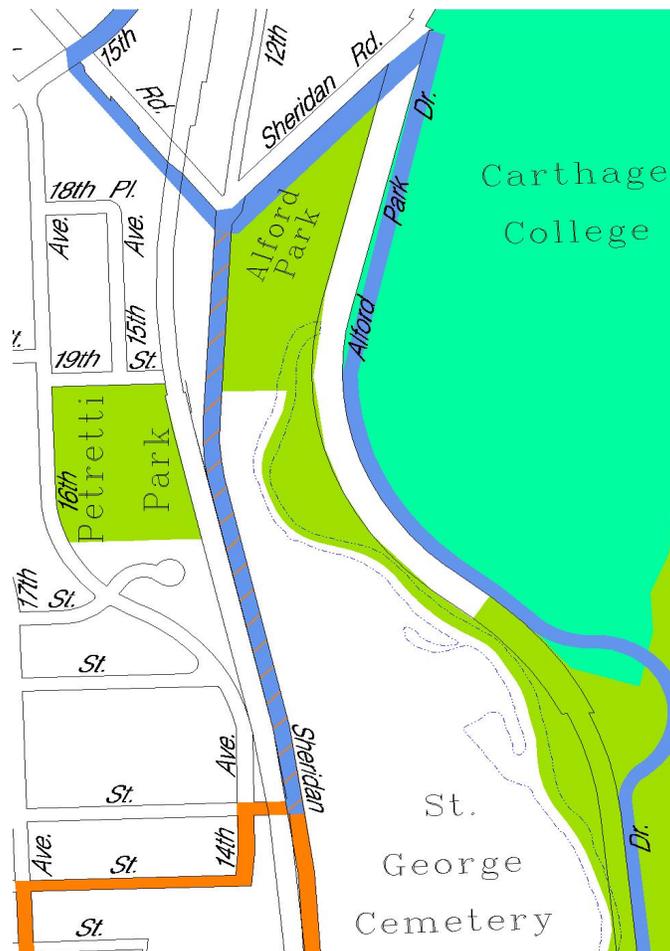


Figure 29. The first Blue-Orange Route connects Blue and Orange Routes along Sheridan Road.

The second Blue-Orange Route is along 45th Street (Figure 30). This segment should consist of segregated lanes. Color-coded signage should also be installed.

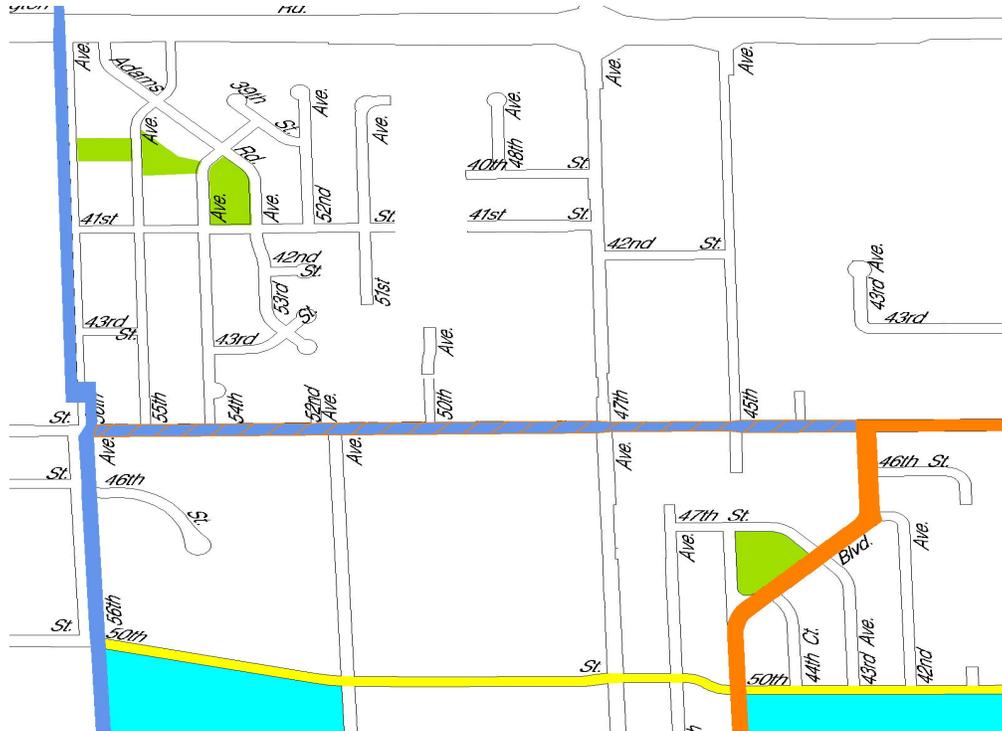
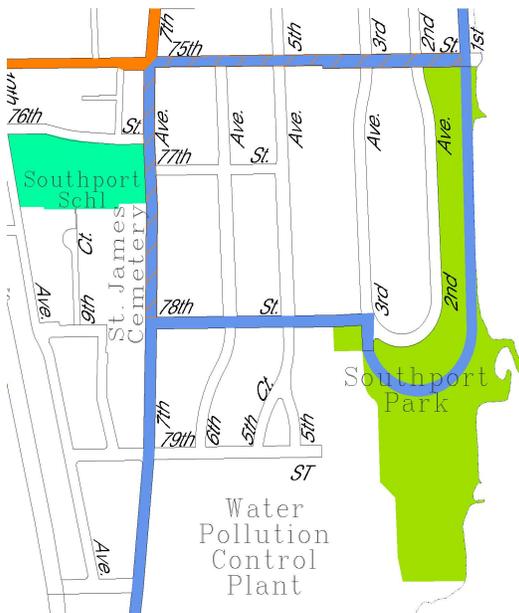


Figure 30. The second Blue-Orange Route follows 45th Street.



The third Blue-Orange Route connects Blue and Orange Routes on 75th Street and 7th Avenue (Figure 31). It begins on 75th Street at 1st Avenue and proceeds west to 7th Avenue, then turns south on 7th Avenue to 78th Street. As a segment intended to primarily serve commuters, it should only receive color-coded signs.

Figure 31. Blue-Orange Route #3 will provide access for students at Southport Elementary School.

The fourth Blue-Orange Route takes advantage of recent improvements to the configuration of 30th Avenue and connects the southern Kenosha County Bicycle Trail to Pershing Boulevard via 30th Avenue and 80th Street. Due to the width of the existing roadway, these should receive separated lanes.

Green-Orange Route

One of the existing bicycle routes in the City connects the Kenosha County Bicycle Trail with the lakefront Pike trail. This segment follows 35th Street east from the Kenosha County Bicycle Trail to 7th Avenue (Figure 32). While this segment is both an existing on-street route and a connection to Kenosha’s Lakefront, the current configuration of the roadway will only allow for color-coded signs.

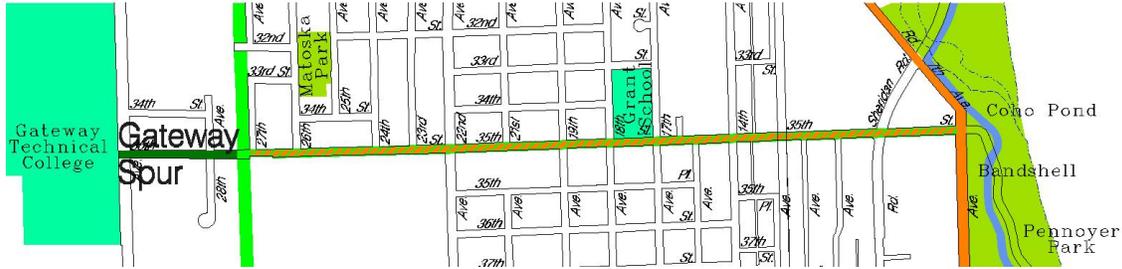


Figure 32. This Green-Orange Route connects the lakefront portion of the Pike Bike Trail to the Kenosha County Bicycle Trail.

The second Green-Orange Route begins on 45th Street north of Bain school and travels west to 39th Avenue (Figure 33). Between Green Route and 30th Avenue, the roadway will only support the addition of color-coded signs; however, west of 30th Avenue there is sufficient roadway width to install shared-use lane markings. Color-coded signage should also be installed.



Figure 33. The second Green-Orange Route provides part of the interconnectivity that makes the route system truly functional

The final Green-Orange Route begins at the intersection of 26th Avenue and 79th Street and proceeds east to Johnson Road (Figure 34). Green-Orange Route veers northeast on Johnson Road to 78th Street, then follows 78th Street to 14th Avenue. This route will only require the installation of color-coded signs.



Figure 34. This Green-Orange Route will act as a collection route for Grewenow Elementary School.

Blue-Green Route

For riders proceeding south on the Kenosha County Bicycle Trail toward Illinois, the Blue-Green Route will provide a more direct connection than following Blue Route to Anderson Park. Blue-Green Route begins on 91st Street at 17th Avenue and proceeds west along 91st Street to 22nd Avenue. At 22nd Avenue Blue-Green Route turns south on 22nd Avenue and continues south and southeast as the road becomes Springbrook Road. The Kenosha County Bicycle Trail crosses Springbrook Road near 93rd Street where there is a trailhead parking area.

As with other portions of the route and trail network, a section of Blue-Green Route crosses jurisdictional lines into the Village of Pleasant Prairie and provides another opportunity for intergovernmental cooperation.

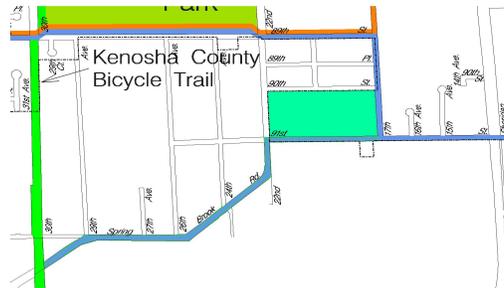


Figure 35. Blue-Green Route provides more direct access for southbound traffic on the Kenosha County Bicycle Trail.

Yellow-Orange Route

Between Yellow and Orange Routes is another connector route that serves both recreational and commuting cyclists. Beginning at 39th Avenue, Yellow-Orange Route follows 45th Street (also one of the Green-Orange Routes) east to 33rd Avenue. This segment will consist of segregated lanes, and color-coded signs. At 33rd Avenue, Yellow-Orange Route turns south and proceeds to 50th Street. This segment is primarily intended for commuters, and will require only the addition of color-coded signs.



Figure 37. Yellow-Orange Route follows a portion of Green-Orange Route while connecting Wilson School to the route and trail system.

Red-Yellow Route

The two Red-Yellow Routes provide connections between the major east-west commuter routes (Figure 37). The first Red-Yellow Route begins on 33rd Avenue at 50th Street and travels south to 51st Street. Red-Yellow Route then turns west on 51st Street to 34th Avenue, and proceeds south on 34th Avenue to the entrance of Sun Plaza. Red-Yellow Route then travels through Sun Plaza to the signalized intersection at 52nd Street and 35th Avenue. The segment of Red-Yellow Route that travels through Sun Plaza will be on private property and will present a prime opportunity to forge a public-private partnership for the benefit of all City residents. At 35th Avenue, Red-Yellow Route proceeds south to 60th Street and joins Red Route. This route is intended primarily for commuter cyclists and will require only the installation of color-coded signs.



Figure 38. Red-Yellow Routes increase the connectivity and usefulness of the overall bicycle network.

The second Red-Yellow Route begins at 50th Street where Green-Yellow Route ends. This segment of Red-Yellow Route will begin an off-street trail and be 10 feet wide asphalt paved. This segment is currently occupied by a private industrial use, but is recommended for open space use as a part of the *Redevelopment Plan for the 14th Avenue Redevelopment Project Area*. A paved off-street trail at this location will provide additional continuity with the existing off-street trails through Nedweski and Washington Parks, and provide a connection to the Metra commuter rail station south of 52nd Street.

Red-Yellow Route crosses 52nd Street and continues south on 13th Avenue to 54th Street, where it turns west and proceeds to 14th Avenue. At 14th Avenue, Red-Yellow Route turns south toward 56th Street where it joins Red Route. The segment of Red-Yellow Route south of 52nd Street will require only the addition of color-coded signs.

Green-Purple Route

There are two Green-Purple Routes which provide increased connectivity between these two primary routes (Figure 38). The first begins on 18th Avenue at 65th Street and travels north to 63rd Street, then turns west on 63rd Street to 23rd Avenue where it joins Green Route. This connector should require only the addition of color-coded signs; however, the reconstruction of 63rd Street should include an assessment of bicycle facilities.

The second Green-Purple Route begins on 64th Street at 26th Avenue and proceeds west on 64th Street. At 32nd Avenue, Green-Purple Route turns south and continues to 67th Street, then turns west toward 34th Avenue. At 34th Avenue, Green-Purple Route turns south to 73rd Street where it joins Purple Route. This route travels on neighborhood-level streets and should only require the installation of color-coded route marking signs.



Purple-Orange Routes

The first Purple-Orange Route begins on 34th Avenue at 73rd Street and travels north to 68th Street (Figure 40). This follows the same route as the second Green-Purple Route that was just discussed. At 68th Street, Purple-Orange Route turns west and continues to 39th Avenue, then turns north to 67th Street and proceeds west to Pershing Boulevard where it meets Blue and Orange Routes.

The second Purple Orange Route provides two connection points between these two routes (Figure 39). This route begins on 18th Avenue at 69th Street and proceeds south to 73rd Street. These routes will require only the addition of color-coded signs.



Figure 40. Purple-Orange Route fills in an important gap while providing a visible collection route for school children.

Red-Orange Route

Red-Orange Route begins on 35th Avenue at 60th Street and travels south on 35th Avenue to 65th Street (Figure 40). Red-Orange Route then turns west on 65th Street and continues to 39th Avenue, turns south and proceeds to 67th Street. At 67th Street, Red-Orange Route turns west and moves to Pershing Boulevard where it joins Orange and Blue Routes.

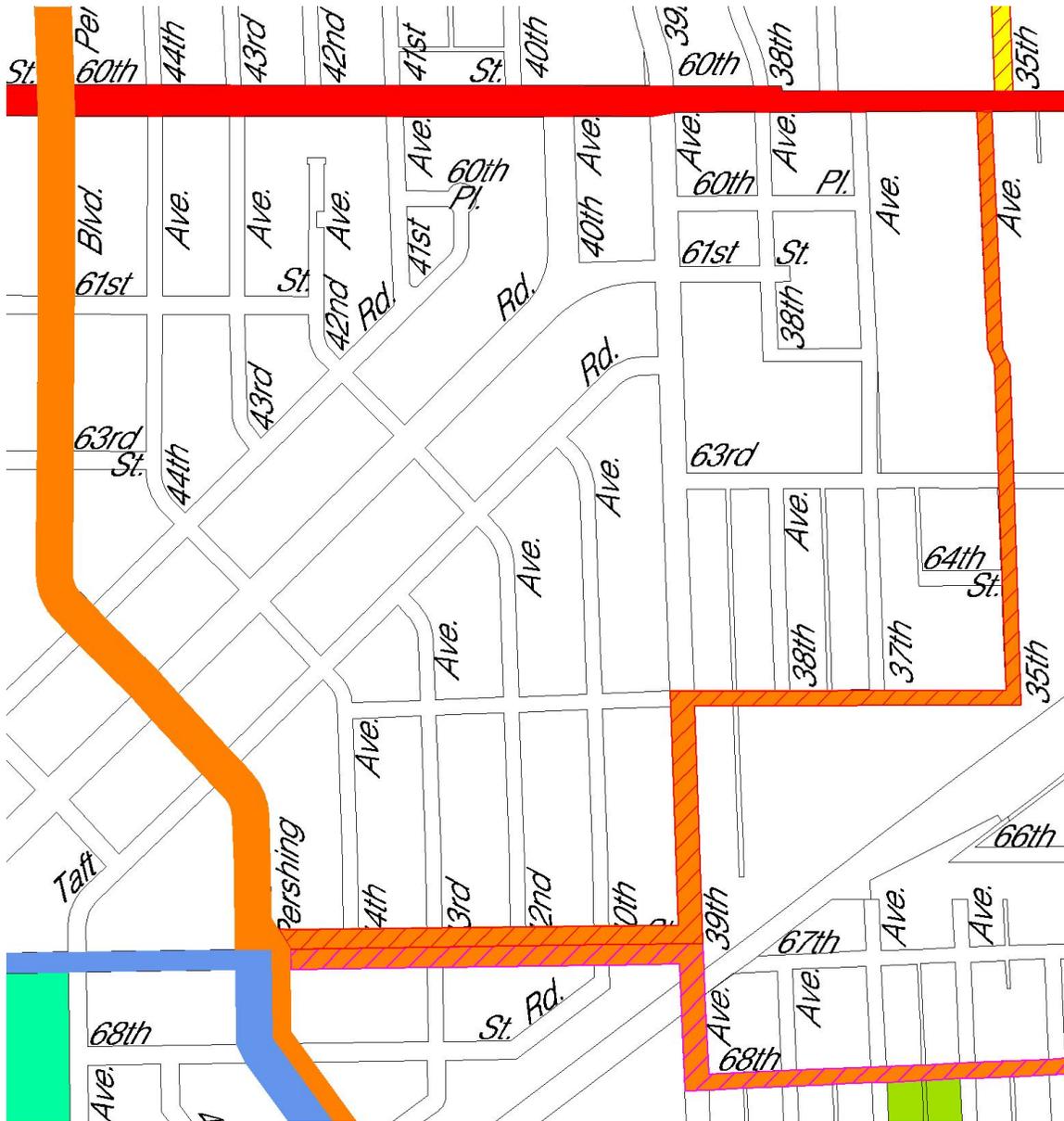


Figure 41. Red-Orange Route is a short-cut for cyclists traveling southwest.

Red-Brown Route

The final portion of the bicycle route network is Red-Brown Route. This route provides access through the western subdivisions, and connects to Red Route for commuters and recreational cyclists traveling toward downtown Kenosha. The route begins at 60th Street, west of the Canadian-Pacific Railroad tracks (approximately 80th Avenue). The initial southbound segment of Red-Brown Route travels through an environmental area in Leona's Rolling Meadows subdivision. Because this is private property, it affords an additional opportunity to forge a public-private partnership between the City and the homeowners' association. This segment of off-street trail should be asphalt paved and 10 feet wide. Lighting should be considered to increase feelings of safety and security.

Upon exiting the environmental corridor, Red-Brown Route changes to an on-street route at 65th Street, and proceeds west to 92nd Avenue. Red-Brown Route then turns south on 92nd Avenue and continues to 66th Street. On 66th Street, Red-Brown Route travels west to 94th Avenue where it will change to an off-street segment and emerge on 96th Avenue. This off-street segment was set aside solely for the purposes of establishing a pedestrian/bicycle connection where a street connection would be impractical. This off-street trail should be paved asphalt and 10 feet wide.

Emerging on 96th Avenue, Red-Brown Route turns south and proceeds to 67th Street, where it turns west and continues on 67th Street to 99th Avenue. At 99th Avenue, Red-Brown Route turns north and travels to 64th Street. Red-Brown Route turns south from 64th Street to 111th Avenue and stops at 67th Street, where the spur to access Brown Route is located in the park. Because these are all neighborhood-level streets, the only improvement should be color-coded signs to aid in navigation.

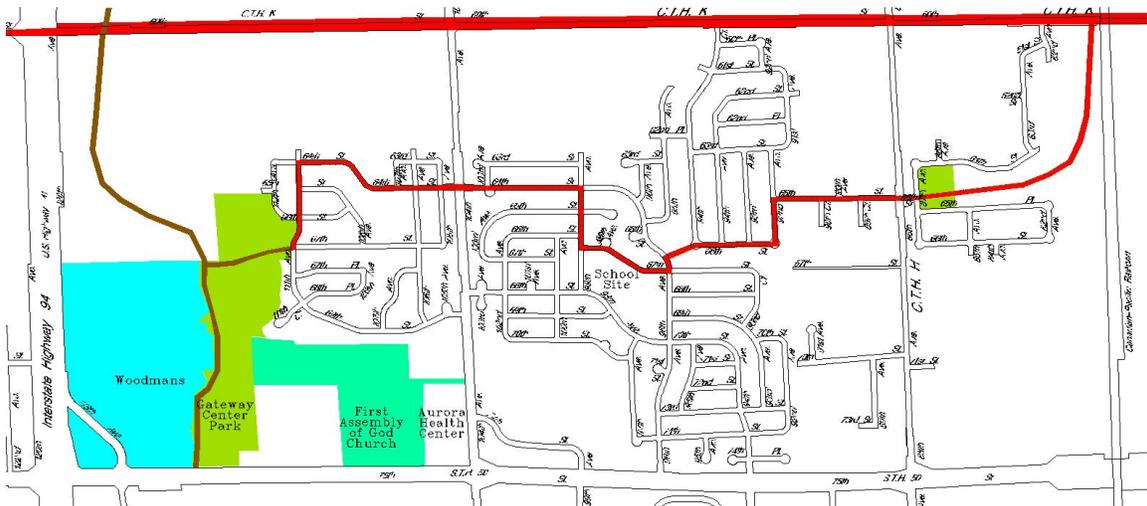


Figure 42. Red-Brown Route provides access through neighborhoods on the western edge of the City.

Standards

Off-street trails shall be constructed to meet Wisconsin Department of Transportation standards and specifications as set forth in *Wisconsin Bicycle Facility Design Handbook*, or City of Kenosha standards and specifications – whichever are more stringent.

On-street routes shall be marked according to the standards set forth in *Milwaukee Bike Lane Design Guidelines* – produced by the Bicycle Federation of Wisconsin, *Wisconsin Bicycle Facility Design Handbook* – produced by Wisconsin Department of Transportation, or City of Kenosha standards and specifications – whichever are more stringent.

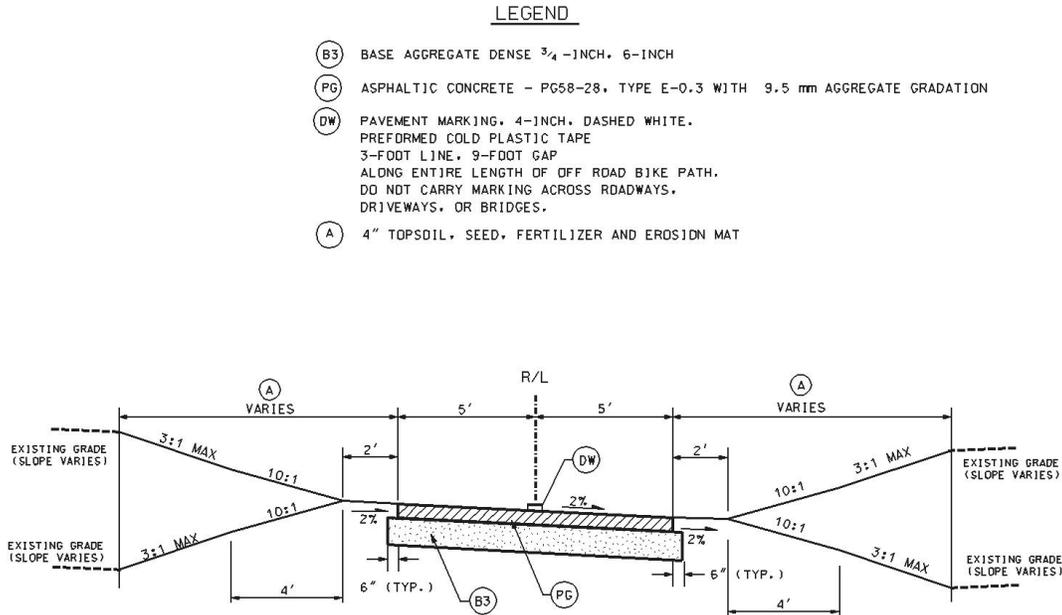


Figure 43. Typical cross-section view per City of Kenosha standards and specifications.

Pedestrian Facilities

All of the previously described routes are accessible to pedestrians. The on-street routes all have sidewalks and the off-street trails will have sufficient width to accommodate multiple users. The primary recommendation for pedestrian improvements is to install additional street lighting. While decorative lighting provides an additional sense of continuity along pedestrian routes, the cost of installing decorative street lighting is prohibitive. Lighting studies should be conducted along the proposed route and trail system, to determine if and how much improvement in lighting will be necessary. Installing additional normal street lights is the preferred recommendation with the caveat that these lights be distinguishable from those on non-pedestrian and bicycle routes.

Sidewalks along proposed pedestrian routes should be systematically inspected to ensure that they are in good condition. When sidewalks along the routes are replaced, every effort should be made to add a color-coding device at intersection approaches. The preferred recommendation is to add a color-coded block near the approaches of sidewalks along each route (Figure 37). All signalized intersections should also be upgraded to include specialized

facilities for the handicapped, and timing of crossing signals should be checked to ensure that it is adequate.



Figure 44. The simplest way to color-code sidewalks is to add a square of color near intersections.

In areas where pedestrian, bicycle and bus routes intersect, rest facilities should be considered for use by all three types of users, including maps of both bus and bicycle routes.



Figure 45. A bicycle and pedestrian rest stop sits close to a Kenosha Area Transit bus stop.

Additional Facilities

Major commercial centers should be equipped with bus stops and bicycle parking. Bicycle parking should consist of appropriate racks or other locking areas and should be located in close proximity to the primary entrances of both customers and employees. New commercial developments should have bicycle parking and access indicated in the plans.

Neighborhood businesses should be equipped with some type of bicycle parking and locking accommodations. Non-commercial employers should also provide facilities for employees who choose to bicycle to and from work.



Figure 46. Bicycle racks provide secure parking for workers and patrons alike.

Funding Options

The principal sources of funding for stand-alone, off-street bicycle projects have been the federal government's Congestion Mitigation and Air Quality (CMAQ) grant program, the State of Wisconsin Coastal Management Program and grants from the National Oceanic and Atmospheric Administration. Local communities like Kenosha also use local tax dollars to match or independently fund bike and pedestrian paths.

Because the bicycle and pedestrian network will provide access to all major educational, commercial and employment centers in the community, the City will continue to pursue these funds. In addition, there are other grants available from both the state and federal governments for transportation enhancements, as well as private grants for programs and facilities that are designed to improve the health of a community. The City may also partner with private organizations to provide funds and fund-raising to support the bicycle and pedestrian network.

Bicycle Route Safety Education and Law Enforcement Program

For Kenosha to be successful in increasing bicycle and pedestrian commuting and recreation; bicyclists, pedestrians and motorists must feel safe and secure that each entity has a clear understanding of its rights and responsibilities.

A safety and law enforcement program would reiterate the rules of sharing the road. Among other things, the public information program would explain how drivers should respond to bike route signage and remind bicyclists that when traveling on the road they need to follow the same rules of the road as motorists. This information would be made available through news releases to the media, appearances on interview programs, brochures distributed through the schools and places of business, and other outlets to be identified.

A bicycle safety program similar to the Drug Abuse Resistance Education (DARE) program could also be implemented through a cooperative effort between the school district, police department and the Department of Transportation. This program could provide bicycles which the police department has confiscated, and be incorporated into a physical education unit of the school's curriculum.

Additionally, enforcement along bicycle routes should be primarily the responsibility of the police department's Bicycle Patrol. This would not only provide enforcement, but would place a consistent bicycle presence on the routes increasing their profile in the community.

Signage and Route Promotion

The task force recommends a plan that would include distribution of maps outlining the routes and color coding signage and maps to better indicate:

1. Whether the route is designed to primarily be a commuter or a recreational route;
2. Where the route ultimately takes the rider or walker;
3. Whether the rider should go straight or which direction to turn.

Large-scale maps should be placed at prominent places along the route and trail system to aid in navigation. Locations could include parking lots that access the routes, bus stops on major routes and in parks that routes go through. Brochures that contain route maps and other informational notes should be made available through local bicycle clubs and shops, as well as the Kenosha Convention and Visitors' Bureau. Maps and information should be available on-line through the official City web site, the Kenosha Convention & Visitors' Bureau's web site, local bicycle club web sites and the WGTD Bike Trail Guide web site.

The proposed signage will include the standard "green signs" as well as a color-coded sign to indicate that a rider is on the Pike Bike Trail of the City of Kenosha. The arrows indicate the direction of the route, as well as whether it is a commuter or recreational route. Informational notes describing the signs should be included wherever a full-sized map is placed. The colors and symbols will aid riders and walkers in quickly recognizing where they are and which way they want to go.

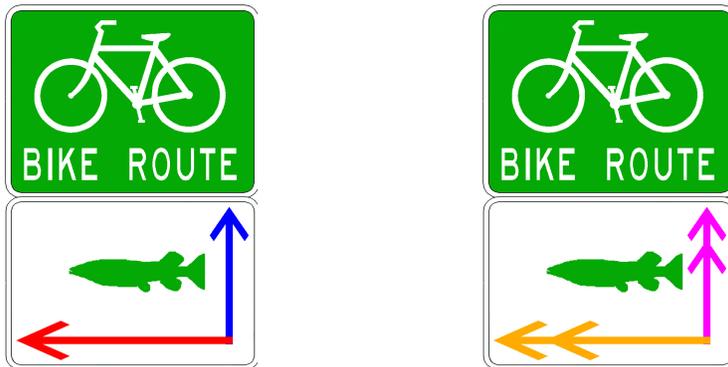


Figure 47. Recreational Routes are indicated with a single arrow, while commuter routes are indicated with a double arrow. Color-coding these symbols will allow riders to quickly and accurately assess where they are and where they are going.

Another recommendation of this plan is to appoint a bicycle and pedestrian facilities coordinator. This is a person whose job duties include periodic inspections to determine the state of maintenance and repairs to the route and trail system, as well as reviewing (re)development plans to ensure that any and all bicycle and pedestrian issues are addressed during the planning phase and do not have to be retrofitted at a later date. The bicycle and pedestrian facilities coordinator would also be responsible for promotion of the route and trail system, and bicycling in Kenosha in general. A permanent task force could also be appointed to address the issue of promoting safe bicycling and walking in Kenosha.

Additional Considerations

The Kenosha Area Transit system has invested in equipping the City buses with bicycle racks to provide additional convenience for cyclists and bus riders. A cyclist does not have to rely entirely upon his/her bicycle for an entire commute. The bus becomes a more viable transportation option to people whose nearest bus stop is several blocks from their departure or destination. The interconnectivity between these two alternative forms of transportation provides a multi-modal approach to public transportation. This approach demonstrates a dedication to bicycles as part of our transportation network, rather than secondary transportation to be merely tolerated upon our roadways.



Figure 48. Most of Kenosha Area Transit's standing routes have buses equipped with bike racks.

Encouragement Programs

Encouraging the use of a bicycle for non-recreational riding is usually a process. This process usually begins with recreational cyclists who eventually decide to run simple errands. They then move on to larger errands and eventually find full-time bicycle riding, including commuting to work, to be a natural progression. The first step is to provide adequate facilities for bicyclists to ride *on* and to ride *to*.

Local bicycle clubs often provide the first steps. They provide organized rides through and to places that some riders are going to for the first time, and encourage repeat trips on a cyclist's own. Recreational cyclists can easily find that the groups of an organized ride provide the safety of numbers that makes recreational cycling more enjoyable for the novice. The more rides a cyclist takes, the more comfortable he/she becomes with riding in general, and the more apt he/she is to ride without the safety net of a large group.

Local clubs should be partnered with tourism departments as a resource for both residents and visitors. This can be through the tourism bureau's advertising efforts, or a simple link to the bicycling clubs' web sites.

Another way to improve the visibility of bicycle routes is through charity rides. Many organizations use bicycle rides as fund raisers, and these are more easily accommodated on existing bicycle routes. They provide high profile positive visibility to local bicycle routes and trails.

Other ways to encourage the use of bicycle routes include:

- Planning a grand opening or introduction bicycling event
- Working with area schools to distribute route information to PTOs
- Media relations campaign
- Working with area employers on bike to work programs
- Emphasizing the cooperation of public and private organizations

Summary

The Bicycle and Pedestrian Facilities Plan for the City of Kenosha is a comprehensive attempt to integrate bicycling and walking into the fabric of our transportation infrastructure. This system of interconnected routes and trails will create an alternative transportation network within the City of Kenosha that provides direct access to the most important places in the community. This network also recognizes the need for the separation of vehicular and non-motorized traffic.

The adoption of the route and trail system outlined in the Bicycle & Pedestrian Facilities Plan will provide functional transportation alternatives that will allow every citizen of Kenosha to go about his/her daily life without becoming dependent on an automobile. The plan will provide the opportunity to navigate through the City in a way that allows each and every citizen the opportunity to interact with their fellow citizens and their community at large.

Appendix A

Bicycle Level of Service (BLOS) and Bicycle Compatibility Index (BCI) are emerging national standards for quantifying the bike-friendliness of a roadway. These indices use several factors; including pavement width, Average Daily Trips made by automobile, speed limit, percent of roadway with on-street parking, etc...; to create an equation that determines a ranking for each portion of roadway. The lower a particular roadway scores, the more attractive for, and safer to, bicyclists the roadway is deemed.

Appendix B: Bibliography

Landis, Bruce, *Real-Time Human Perceptions: Toward a Bicycle Level of Service*, Transportation Research Record 1578 (Washington DC, Transportation Research Board, 1997) www.fhwa.dot.gov

Development of the Bicycle Compatibility Index: A Level of Service Concept, Final Report, FHWA-RD-98-072 (1998) www.fhwa.dot.gov

Development of the Bicycle Compatibility Index: A Level of Service Concept, Implementation Manual, FHWA-RD-98-095 (1998) www.fhwa.dot.gov

Safe Routes to School, DOT HS 809 497 (2002) www.nhtsa.gov

Wisconsin Bicycle Facility Design Handbook, Wisconsin Department of Transportation (2004) www.dot.state.wi.us

Wisconsin Bicycle Planning Guidance, Wisconsin Department of Transportation (2003) www.dot.state.wi.us

Milwaukee Bike Lane Design Guide, Bicycle Federation of Wisconsin www.bfw.org