



The Oak Park Bicycle Plan

August 2008

TYLIN INTERNATIONAL



Proposed Oak Park Bicycle Network



Legend

Proposed Bicycle Network

- Bike Lane (Red line)
- Shared Lane Marking (Orange line)
- Signed Only Route (Yellow dashed line)
- Bicycle Boulevard (Green line)
- Recommended Route* (Orange arrow)

Existing Conditions

- Traffic Signal (Red circle)
- Planned Traffic Signal (Red dashed circle)
- Bike Detector Loop (Red diamond)
- Cul de sac Cut-through (Blue arrow)
- Planned CDS Cut-through (Blue dashed arrow)
- School (Purple house icon)
- Point of Interest (Blue circle with letter)
- Post Office (Blue envelope icon)
- Library (Blue book icon)
- CTA Station (Blue train icon)
- Metra Train Station (Black train icon)
- Park or Open Space (Green square)

* - Recommended Route per Chicagoland Bicycle Map, 4th Edition



Oak Park Bicycle Plan | Proposed Bicycle Network

August 29, 2008



Executive Summary.....	1
Introduction.....	2
Public and Agency Involvement.....	3
Bikeway Types.....	4
Building Oak Park’s Bicycling Network.....	8
Safety and Encouragement Programs.....	24
Evaluation and Implementation.....	31
Appendix A - Bicycle Plan Advisory Committee.....	33
Appendix B - Proposed Bicycle Network Alternatives Map.....	34
Appendix C - Sample Complete Streets Policy.....	35
Appendix D - Cambridge Bicycle Parking Guide.....	37
Appendix E - Facility Implementation Schedule.....	38
Appendix F - Facility Cost Estimates.....	40
Appendix G - Safety & Education Program Implementation Schedule and Cost Estimates.....	48

Executive Summary

The Village of Oak Park produced the 2008 Bicycle Plan to meet two goals: to increase bicycle use and to make Oak Park more bicycle friendly. Although Oak Park is ahead of other suburban communities in levels of bicycle use, many more residents and visitors would use bikes if improvements were made. A Bicycle Plan is a formal planning document that gives Oak Park the tools to move forward in developing a world-class bicycling network and facilities that will be accommodating and safe for all users.

To develop this plan, input was solicited from residents, business owners, local schools, the Park District and Village staff and commissioners. Planners working on this project held seven Bicycle Plan Advisory Committee meetings, three stakeholder meetings, and two public open houses during the plan development process.

The primary objective of the bike plan is to develop a bikeway network of on-street facilities that would place every Oak Park resident and destination within two blocks of an east-west and a north-south bikeway. The types of on-street bikeways that are recommended in this plan include bike lanes, shared lane markings and bicycle boulevards. The type of bikeway that is recommended for each street intends to complement the characteristics of that street. In all cases, the recommended bikeway is the safest and most user-friendly alternative. Trails are also referenced in this plan as potential connectors to existing facilities.

While only certain streets are marked as part of the bikeway network, bicyclists' needs should be considered throughout the planning, design, construction and maintenance of all streets. Thus, a consistent signage system should be implemented throughout the village to direct people to key destinations. Additionally, the Village Board should adopt a Complete Streets Policy that ensures that streets are designed for all users of the road (see Appendix C).

Providing convenient and secure bicycle parking will also encourage bicycle use. The plan recommends bike racks for short-term parking and bike lockers for longer term, more secure bicycle parking. A policy for addressing abandoned bikes should be adopted.

The recommended bicycle facilities should be phased incrementally over time. The plan outlines projects for the short-term (0-2 years), medium-term (3-5 years), and long-term (5-10 years). Additionally, implementation of bicycle facilities should be coordinated with planned roadway improvements, utility upgrades and new development projects.

To promote bike safety and encourage people to ride bicycles, this plan recommends continuing the Bicycling Ambassador Program and Safe Routes to School. In addition, the following projects are detailed: a general education campaign, a Mobility Education program for high school students, a Bicycle Commuter Challenge and enhanced traffic law enforcement.

Another objective is to promote bicycling by providing incentives and marketing the benefits of riding a bicycle. This includes continuing the Bicycle Coordinator position to keep the plan "alive" and staff the Bicycle Advisory Committee. Additional programs suggested include a Shop by Bike program, a Village Bicycle Map, Bike to Work events, a Car-Free Day event, a Village Bicycle Fleet and a Bicycle Sharing Program.

Oak Park is a community with a healthy bicycling culture: it boasts a thriving bicycle club; it has the only suburban Bicycling Ambassador program; the bike racks at the transit stations are frequently full; and in 2006 the League of American Bicyclists recognized Oak Park with an honorable mention in its Bicycle Friendly Communities awards. The Village would like to become more bicycle friendly for its residents. The Village developed this plan, which includes a bikeway network and education and safety programs, to build on Oak Park's solid bicycling history.

The Village's goal is to use this plan to develop a bicycle-friendly environment to:

Increase Bicycle Use

- Increase number of people riding bikes
- Double trips made by bike
- Make bicycling commonplace
- Make bicycling an easy transportation choice

Create a Safe and Inviting Environment

- Improve traffic courtesy
- Educate drivers, cyclists and pedestrians
- Cut cycling crashes in half
- Increase the proportion of the population that feels comfortable riding a bicycle on Oak Park streets by 25 percent

Bicyclists are an indicator species for a healthy community – the more bicyclists you see, the more vibrant and “livable” that community is. With more people bicycling, communities experience reduced traffic demands, improved air quality and greater physical fitness. The best way to create a bicycle-friendly community is to have a bike plan.

This plan serves its community as a blueprint, setting long- and short-term goals. From roadway planning and construction to funds, it infuses bicyclists' needs with the overall plan of a community.

Most importantly, this plan will get more people bicycling.

A bicycle-friendly, healthy and active community that offers safe and fun places to bike benefits an entire community.

Public and Agency Involvement

Oak Park Bicycle Plan Advisory Committee

A committee made up of residents, Village staff and chairs from various commissions guided the planning process. Appendix A is a list of committee members. The committee met 7 times, plus once on bike. The main responsibility of the committee was to review plan documents and provide suggestions to improve the plan. In addition to the outline and draft versions of the plan, committee members were provided with other draft recommendations to review and comment on throughout the process.

Public Input

During the planning process, Oak Park residents were invited to attend two public meetings. The first was in August 2007. Attendees learned that the bike plan will be comprehensive in scope, including not only infrastructure improvements, but also education and marketing initiatives. Attendees were then divided into eight small groups and given a Village map. They were asked to highlight frequent destinations and mark routes that participants regularly use and would use more often, given better bicycling conditions. The maps created in the group exercise formed the base for a recommended Oak Park bicycle network.

A second public meeting was held in June 2008 to provide feedback on the draft plan report.

Comments from residents were also solicited from the Village's bike plan website and newsletter, FYI.

Plan Preview Meetings

The plan was previewed to three stakeholders in May 2008: the business community, the schools and the Park District of Oak Park.

Bikeways include both on-street facilities and off-street trails and paths. Several types of on-street facilities are recommended in this plan. Bike lanes, marked shared lanes and bicycle boulevards will accommodate cyclists with a range of abilities on varying types of roadways. Trails are referenced in the plan as potential future opportunities and as existing facilities that require connections. This section introduces each facility type and explains where they may be applicable.

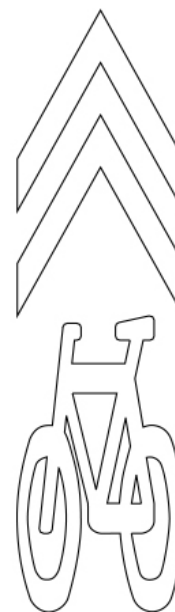
Bike Lanes

Bike lanes dedicate space on the roadway for bicyclists with a solid lane stripe and a bicycle symbol. The recommended minimum width of a bike lane is five feet. Bike lanes are commonly used on arterial and collector streets, as the separation between bicycles and vehicles allows the bicyclist more comfort while riding on streets with higher traffic volumes.

Marked Shared Lanes

Shared lanes are designated by a bicycle symbol with chevrons indicating the direction of travel. Shared lane markings are marked in the travel lane to demonstrate that the lane is intended to be shared between motorists and bicyclists. Shared lane markings are used on streets that are too narrow for a bike lane, but can accommodate a bicyclist in the outside travel lane. Since there is no physical separation between bikes and cars in shared lanes, the traffic volumes on these streets should be low enough to accommodate routine passing of cyclists.

The shared lane pavement marking is placed in the recommended riding location. The placement will depend on the width of the travel lane and the presence or absence of on-street parking. On streets where parking is permitted, the shared lane marking is placed outside the “door zone”, encouraging bicyclists to ride at a safe distance from parked cars. Riding too close to parked vehicles puts cyclists at risk of colliding with doors opened into their paths.



Shared Lane Pavement Marking
(Source: Chicago Department of Transportation)

Shared lane markings are not included in the current version of the Manual of Uniform Traffic Control Devices (MUTCD); however, they have been recommended by the National Committee for Uniform Traffic Control Devices for inclusion in the next version of the MUTCD. Shared lane markings are used extensively in many cities, including Chicago, New York, San Francisco and Portland, Oregon.

Bicycle Boulevards

Bicycle boulevards are designed for young bicyclists and those who are not comfortable bicycling on most streets. Bicycle boulevards are intended almost entirely for residential traffic, but do not restrict traffic altogether.

Bicycle boulevards are distinctive from other local streets, signaling to both bicyclists and motorists that they are on a street designed to give priority to bicyclists. Signs and pavement legends of a consistent design designate the streets comprising the bicycle boulevard system. The signs should complement the wayfinding signs used throughout the bikeway network. Sample signs and pavement legends from Berkeley, California, and Portland, Oregon, are shown. These features provide an opportunity to individualize Oak Park’s bicycle network.

Bikeway Types

The bicycle boulevards should also be evident from intersecting streets to alert motorists that bicyclists may be crossing. Pavement markings or colored bike lanes could be carried through the intersection to denote the bicycle facility. These could also be supplemented by signs indicating a bicycle crossing, similar to those currently used at cul-de-sac cut-throughs. In several locations on the proposed bicycle boulevard system in Oak Park, the street jogs through an intersection. In such cases, pavement legends carried through the intersection would also direct cyclists to continue on the boulevard.

Where possible, bicycle boulevards are given right-of-way priority at intersections. Where the boulevards intersect with local roads and collector streets, right-of-way priority can be achieved by installing two-way stops, thus giving the right-of-way to the bicycle boulevard. Arterial streets will have priority over the bicycle boulevards; however, these intersections should be improved to help cyclists cross without significant delays.



Pavement Legend, Portland, OR
(Source: Portland Department of Transportation)



Bicycle Boulevard Sign
(Source: Berkeley Office of Transportation)

Bicyclists on the boulevard system may have a difficult time crossing an arterial street with an unsignalized intersection. These intersections will require further study to determine if installing a signal is appropriate. In some cases, a high-intensity activated crosswalk (HAWK) signal, which stops traffic only when activated by a pedestrian or bicyclist waiting to cross, may be the best application¹. Depending on the traffic volume and the number and length of the gaps in traffic, a signal may not be necessary. For example, it is possible to create gaps in traffic by coordinating interconnected signals to turn red simultaneously.

HAWK Signals



(Source: www.saferoutesinfo.org)



(Source: www.flickr.com)

¹ A HAWK signal is activated by a bicyclist or pedestrian who is waiting to cross. The signal remains dormant until activated by a push-button, at which point the signal flashes yellow lights warning motorists to slow down. The lights then change to a solid red, allowing the pedestrian to cross while traffic is stopped.

Bicycle push-buttons allow bicyclists to activate a signal without having to dismount or access the pedestrian push-button on the sidewalk. These are useful at both HAWK signals and standard traffic signals that require actuation.

The same measures that make a street more appealing for bicyclists, such as prioritizing boulevards at intersections, also make it ideal for motorists. These devices alone would likely add traffic to residential streets. Thus, bicycle boulevard treatments must include measures that prohibit cut-through traffic, such as median diverters, semi-diverters and forced turn islands. Measures that restrict motor

vehicle access should be designed to allow bicyclists to pass through. An example of a similar measure is a cul-de-sac cut-through, which Oak Park currently uses throughout the Village. Additional traffic calming measures that can be used throughout the boulevard system to reduce speeds, improve crossings and deter non-local traffic, include bulb-outs, traffic circles and speed humps or speed tables.



Bicycle push-button
(Source: www.flickr.com/drdu/)

Greenways and Play Streets

A bicycle boulevard system creates a tremendous opportunity to further enhance the network with environmental and open space features. Reprogramming street space is a unique way to create recreational and natural amenities within Oak Park's built-out urban landscape. Several enhancement options could turn Oak Park's bicycle boulevard network into an international model:

- **Greenways:** Transform local streets into linear parks by replacing the street with trails and open space. This would only work on streets where alleys could be used for access to homes and for emergency vehicles.
- **Permeable pavement:** Replace concrete and asphalt on streets with surfaces that would allow water to permeate.
- **Bioswales:** Create vegetated areas along the sides of a street that collect and clean storm water runoff. The photograph to the right shows a bioswale on a residential street in Portland, Oregon, that also acts as a curb bulb-out, improving the crossing safety for pedestrians.
- **Play Streets/Home Zones:** This is a street design where motorized traffic has been limited to local access only at very slow speeds, using a variety of traffic-calming and design features. Sometimes street painting, colorful pavers or bollards that double as playground equipment are added. This transforms the street into a space that is safe for children to play and for social interaction, but vehicles can still access homes and parking areas. European cities in the United Kingdom, Netherlands, and Denmark have many examples of these street types.



Permeable Pavement
(Source: www.uniqbike.vox.com)

Bikeway Types

- Chicanes: Establish a curvilinear travel path on an otherwise straight roadway by placing parking bays, bioswales or planters along a block on alternate sides of the street. This encourages motorists to slow down.

The north-south corridors in the bicycle boulevard network are more conducive to play streets and chicanes because of the long block faces. Environmental features and traffic calming would work well on all streets in the Village.

Oak Park should consider a mix of these enhancements depending upon community interest, available funding and the current design of the street.

Trails

The Oak Park bikeway network provides an important regional connection, with Augusta Street serving as a portion of the 500-mile, Grand Illinois Trail. In addition, several trails in the vicinity of Oak Park are valuable regional assets to which the Oak Park bicycle network should connect, including the Des Plaines River Trail, Illinois Prairie Path and Salt Creek Trail. Directly bordering the Village is Columbus Park in the City of Chicago, which is recommended as the trailhead for a regional trail proceeding west along the I-290 corridor.

Network Objective: Develop world-class bicycle infrastructure.

To create a world-class bicycle network, it is important to accommodate bicyclists using on- and off-street facilities that provide convenient connections to other existing facilities such as recreational trails, neighboring communities and key destinations.

Oak Park is approximately 4.7 square miles and has roughly 25 miles of arterial streets and 85 miles of local streets, for a total of 110 miles of streets. An objective of the plan is to put every Oak Park resident and every destination within a quarter mile (2 blocks) of an east-west and a north-south bikeway. The Oak Park bicycle network will include 13 east-west routes and 5 north-south routes, for a total of 32 miles of on-street bicycle facilities. This would mean that nearly 30 percent of streets would be designated as bikeways.

Cyclists will often want to travel beyond the borders of Oak Park. Therefore, in addition to providing high-quality bicycle facilities within the Village, it is important to facilitate connections to bordering communities, destinations or facilities. Seamless connections are achieved through both on-street pavement markings and signs. Both existing and potential future connections should be considered.

This section suggests a network of on-street bicycle facilities, details the type of facility appropriate for each street, and highlights both the benefits and challenges of implementing each facility. First, a network of bike lanes and shared lane markings are presented. These streets were analyzed together to determine the best configuration. In some cases, several options are presented. Next, a proposed network of bicycle boulevards is described. Design considerations common to all boulevards are explained, as well as specific issues for each boulevard. In some cases, the possibility of restricting parking to accommodate a bicycle facility is proposed. However, no street closures or changes in traffic patterns are being considered as part of this plan.

Bicycle facilities are complemented by an overall strategy of accommodating bicyclists on all streets. Furthermore, a bicycle network is not complete without secure and convenient bicycle parking. Policies for accommodating bicycles on all streets and recommendations for expanding bicycle parking are also presented in this section.

Bike Lanes and Shared Lane Markings

As a general strategy, facilities are recommended that would provide the highest level of comfort for bicyclists. The Bicycle Level of Service (BLOS) application, developed by Landis, et al.², was used as a guide in determining the best facility for each street. BLOS ranks streets for bicyclists' comfort based on the existing pavement width, traffic volumes, parking restrictions and utilization. This application was used only as a guide because it was developed before marked shared lanes were common and thus did not test bicyclists' comfort level on this facility.

² Landis, Bruce, "Real-Time Human Perceptions: Toward a Bicycle Level of Service," *Transportation Research Record 1578* (Washington D.C., Transportation Research Board, 1997).

Building Oak Park's Bicycling Network

DIVISION STREET – Division Street is 30 feet wide, curb-to-curb, and parking is restricted on both sides for the entire length of the street. It is mostly residential and passes by Taylor Park on the east side of Oak Park and Mann School on the west side.

Recommendation

Bike lanes

Division Street can accommodate bicycle lanes without any changes to the cross-section, besides the addition of the bicycle lane. This would result in two, 10-foot travel lanes with two, 5-foot bike lanes.

Challenge:

The intersection at Ridgeland Avenue should be assessed for vehicle speeds and visibility.

AUGUSTA STREET – Augusta Street is part of the Grand Illinois Trail and is signed as such. It currently has shared lane markings and is the only street in Oak Park with an on-street bicycle facility. Augusta Street is 30 feet wide, with parking permitted on both sides. Traffic volumes on Augusta are relatively low, and the parking is not heavily used, making it an ideal street for bicycling. Augusta also borders Whittier School and Dole Library, two destinations the bike network should serve. Adjacent to Oak Park, the Grand Illinois Trail continues on Augusta Street in River Forest and Chicago. Augusta Street is labeled as a recommended route on the Chicagoland Bicycle Map, 4th Edition.

Recommendation

Re-apply shared lane markings; Modify existing parking restrictions

At 30 feet wide, curb-to-curb, Augusta is not wide enough to accommodate parking on both sides of the street along with two marked shared lanes, based on the standards used by the City of Chicago. Augusta has the same cross-section as Division Street, which does not permit parking.

Due to the low level of parking, bicyclists can ride close to the curb along much of the roadway. However, when a bicyclist encounters a parked vehicle, he or she is forced to move into the travel lane. The non-linear path makes the bicyclist less predictable to motorists. Removing parking on one side of the street would produce wider shared lanes and encourage bicyclists to ride straight, thereby reducing the need to merge with adjacent roadway traffic. Parking utilization was conducted on two separate occasions. Each day indicated very little (less than 10 percent occupied) or no parking, with the exception of one block between Cuyler and Harvey Avenues. This block serves Whittier School and Dole Library.

Challenge:

Restricting parking is often controversial. Parking restrictions on cross-streets within one block of Augusta may need to be revised.

CHICAGO AVENUE – Chicago Avenue is 44 feet wide, curb-to-curb, with parking on both sides for the length of the street. Chicago Avenue has a mix of residential and commercial uses. It also borders Holmes School and the Frank Lloyd Wright Home and Studio, which is a major tourist destination.

Recommendation

Bike lanes

A 44-foot-wide street can accommodate a cross-section of two 10-foot travel lanes, two 5-foot bike lanes, and two 7-foot parking lanes. Bike lanes can be added to Chicago Avenue simply by narrowing

the existing parking lanes and adding striping to denote a bike lane. This facility will service the business districts at Harlem Avenue and Austin Boulevard.

Streetscaping plans were recently completed along Chicago Avenue. Installation of bicycle facilities should be coordinated with these plans.

Challenge:

The bicycle facility should be continuous through major intersections. This may require the use of shared lane markings where bike lanes give way to turn lanes.

LAKE STREET – Lake Street runs through the core of Oak Park's downtown commercial district. This area is often a destination for residents and visitors alike. Lake Street is lively, with high volumes of vehicle and pedestrian traffic and parking along both sides of the street. The parking is heavily used with frequent turnover. The traffic volumes and parking rates make it a complicated street for bicycling; however, these same characteristics keep vehicle speeds low. Low vehicle speeds and the destinations Lake Street serves make it a popular street for cyclists.

Lake Street narrows between Harlem Avenue and Forest Avenue. In this segment, the curb line varies to accommodate parking bays. The travel lanes here measure 13 to 14 feet in width. The cross-section for the remainder of Lake Street is 50 feet wide, with parking, two travel lanes, and either a center turn lane or a median.

Recommendation

Marked shared lanes

Shared lane markings can be added to Lake Street within the existing cross-section.

Challenge:

The variability of the curb line between Harlem Avenue and Forest Avenue creates pinch points for cyclists. The bicycle facility in these areas should be supplemented with signs indicating a shared lane.

NORTH BOULEVARD AND SOUTH BOULEVARD – North and South Boulevards are used by many cyclists as an alternative to Lake Street. The two boulevards straddle the Metra and CTA lines and provide direct access to the stations. Both streets vary between two-way traffic and one-way traffic and accommodate a mix of parallel and diagonal parking. North Boulevard is not continuous across the Village.

Recommendation

Marked shared lanes and speed management

Shared lane markings can be added to the outside travel lane along both streets for the entire length. Traffic calming techniques should be implemented to achieve 15-mile-per-hour speeds.

Challenge:

Diagonal parking poses a danger for cyclists as cars backing out of parking spaces have a limited view of oncoming traffic. The Village should consider modifying the parking to be back-in diagonal parking if on-street bicycle facilities are implemented.

The variation between one-way traffic and two-way traffic may confuse cyclists and cause an inconvenience. Some cyclists may ride the wrong way down the one-way portions to avoid detouring. Signs should be posted to clearly mark the recommended routes.

Alternative: Signed routes

Due to the variability in travel direction and parking configurations, Oak Park may want to avoid on-street facilities along North and South Boulevards at this point. When these streets are scheduled to be redesigned, alternate cross-sections should be explored to better accommodate cyclists. However, at a minimum, these streets should be signed as routes, accompanied by signs that indicate the destinations they serve.

WASHINGTON BOULEVARD – Washington Boulevard is a key component of the bicycle network because it offers an alternative to Madison Street, which has high traffic volumes and speeds. Gwendolyn Brooks and Julian Junior High Schools are both served by Washington Boulevard. Washington Boulevard is labeled as a recommended route in Chicago's bicycle network. This is one of the few recommended routes in Chicago's system that connects to Oak Park, which makes this an important facility.

Washington Boulevard also has signals at all major intersections, which makes crossing those streets easier for bicyclists. The boulevard is 40 feet wide, and parking is used fairly heavily.

Recommendation

Marked shared lanes

Shared lane markings can be implemented along the entire length of Washington Boulevard within the existing cross-section. This facility would serve destinations along Madison Street, which is a major commercial corridor.

Challenge:

Washington Boulevard is under IDOT jurisdiction. Additional steps required to make changes along an IDOT roadway may present challenges for implementing shared lane markings here.

JACKSON BOULEVARD – Jackson Boulevard varies in width from 30 feet to 40 feet, curb-to-curb. It is primarily residential and passes by Fox Park, Longfellow Park, and Longfellow School. It also provides a connection to Columbus Park in Chicago. Along various stretches of Jackson, parking is permitted on both sides of the street, restricted altogether, or restricted at certain times. In the past, high vehicle speeds on Jackson have been a concern for residents. The Village has installed a speed display sign and curb bulb-outs in an attempt to slow traffic and improve pedestrian safety.

Recommendations

Marked shared lanes; Modify existing parking restrictions

Shared lane markings could be implemented along the entire length of Jackson Boulevard. To accommodate shared lane markings, parking should be restricted on one side of the street between Grove and Cuyler. Parking should be maintained along the remainder of Jackson, except between Harvey Avenue and Austin Boulevard, where parking is currently restricted.

Alternative 1: Bike lanes and some marked shared lanes; Major parking restrictions or modifications

As an alternative to shared lane markings, bike lanes can be added along most of the length of Jackson Boulevard, but they would require parking restrictions on one or both sides of the street, depending on the overall width. In order to add bike lanes, parking should be restricted as follows:

- Maple – Cuyler: Both sides
- Cuyler – Harvey: One side

Jackson Boulevard narrows east of Harvey; therefore, shared lane markings should be marked between Harvey Avenue and Austin Boulevard to continue the bike facility.

Alternative 2: Marked shared lanes and some bike lanes; Limited parking restrictions or modifications

A combination of the above alternatives would include restricting parking on one side of the street between Grove and Cuyler to install a bike lane, with shared lane markings along the remainder of the street.

Challenge:

Restricting parking is often controversial. Parking restrictions on cross-streets within one block of Jackson may need to be revised.

Cyclists have complained that the bulb-outs along Jackson Street create a barrier, forcing them into the travel lane. However, the bulb-outs were installed to improve pedestrian crossings. It is recommended that the shared lane markings be installed to encourage cyclists to ride further from the curb, avoiding the bulb-outs. The situation should be assessed after the implementation of the marked shared lanes. If the bulb-outs remain a problem for cyclists, the Village should consider redesigning the bulb-outs to ensure bicycle and pedestrian safety.

HARRISON STREET – Harrison Street is an important link in Oak Park's bikeway network for several reasons. A bicycle and pedestrian bridge provides an important connection across the Eisenhower Expressway, linking Harrison Street and Garfield Street at Home Avenue. Harrison Street also provides a connection to Columbus Park on the eastern border of the Village and serves popular destinations within the Arts District.

Harrison Street varies in width; it is 42 feet, curb-to-curb, east of Oak Park Avenue and only 26 feet, curb-to-curb, west of Oak Park Avenue. Harrison Street has commercial uses on the eastern half of the Village and intersects Oak Park Avenue at a small commercial district. Parking is well used on Harrison, east of Oak Park Avenue and one block west of Oak Park Avenue. Farther west, parking is sparse.

Recommendation**Marked shared lanes, signs and speed management**

Shared lane markings can be accommodated on Harrison Street, east of Oak Park Avenue within the existing cross-section. In order to fit shared lane markings west of Oak Park Avenue, parking would have to be restricted on both sides of the street. In lieu of on-street facilities, the street should be signed as a route, at a minimum.

Traffic speeds west of Oak Park Avenue are a concern for cyclists, particularly at the intersection of Harrison Street and the Home Street Bridge. Speed humps or speed tables could be implemented along this stretch of Harrison Street, particularly on the blocks adjacent to the bridge, to keep speeds low. If warranted, a stop sign at Home Street would also serve to slow traffic. Pavement markings to denote bicyclists' travel paths would highlight to both motorists and bicycles where they should be expected.

Challenge:

The intersection of Harrison Street and the Home Street Bridge is treacherous for bicyclists. Due to space constraints, bicyclists must make a sharp turn to continue eastbound after crossing the bridge from the south. Many cyclists are forced to swerve into the travel lane. There are no traffic controls at this intersection, and vehicular speeds are a concern for bicyclists.

OAK PARK AVENUE – Oak Park Avenue is a major north-south connector through the Village. It is one of the few streets that connect across the expressway as well as under the train tracks. It also serves popular destinations, such as Green Line and Blue Line CTA stations and commercial destinations. For these reasons, it is both popular with motorists and ideal for bicyclists. At the north end of the Village, Oak Park Avenue connects to a recommended route in Chicago.

Oak Park Avenue varies in width from 38 feet to 46 feet, with parking permitted along the entire length. Oak Park Avenue needs ample vehicle parking in the vicinity of the business districts through which it passes.

Recommendations

Marked shared lanes and bike lanes

Shared lane markings can be implemented along the entire length of Oak Park Avenue within the existing cross-section. Bike lanes can be implemented between Lexington Street and Jackson Street within the existing cross-section.

Alternative: Additional bike lanes

Bike lanes could be implemented between Roosevelt Road and Lexington Street and between North Avenue and Chicago Avenue by restricting parking on one side of the street.

Shared lane markings should be implemented where bike lanes are not used to ensure a continuous facility.

EAST AVENUE – Many cyclists use East Avenue as an alternative to Oak Park Avenue because of the high traffic volumes on Oak Park Avenue. East Avenue serves Oak Park/River Forest High School, but the street is discontinuous through the school property and has been replaced by a pedestrian and bicycle mall. The mall is available for public use. East Avenue also serves Fenwick High School. The width of the street is 30 feet, curb-to-curb, north of the expressway and 34 feet south of the expressway.

Recommendation

Marked shared lanes; Modify existing parking restrictions

Shared lane markings can be implemented along East Avenue by restricting parking on one side of

the street. The pedestrian and bicycle mall can be used by cyclists as a continuation of the East Avenue facility. It should be marked as such so bicyclists are aware that they may use it and so motorists are aware of the crossing.

Challenge:

Restricting parking is often controversial. Parking restrictions on cross-streets within one block of East Avenue may need to be revised to accommodate parking demand at peak times.

RIDGELAND AVENUE – Ridgeland Avenue is primarily residential and serves the library; six schools: Beye, Julian, Irving, Longfellow, Hatch, Whittier and Oak Park/River Forest High School; and four parks: Longfellow, Ridgeland Commons, Stevenson Center and Taylor. It is an ideal through-street for bicycling because the major intersections are signalized. However, because it is a wide street with little on-street parking and high traffic speeds, Ridgeland is viewed as a dangerous barrier in the neighborhood. The Village has striped parking lanes and added signs prohibiting driving in the parking lane at the residents' request.

The street varies between 38 feet to 44 feet in width. Parking is striped along the majority of the street, though parking is restricted on portions of the street. Where parking is permitted, it is not heavily used.

Recommendations

Bike lane; Speed and parking management, including bulb-outs

Ridgeland would benefit greatly from shorter crossing distances and a design that would result in 25-mile-per-hour speeds. A bike lane can be added to Ridgeland Avenue by restricting parking on one side of the street, with the exception of South Boulevard to Madison Street, where bike lanes can be added while maintaining parking on both sides. Sidewalk bulb-outs on the parking side would decrease the crossing distance by 6 feet, making it easier to cross the street. The combination of bike lanes, parking, and bulb-outs would achieve a narrower street profile where speeds under 25 miles per hour could be maintained.

Raised crosswalks would be an ideal addition to provide speed management and pedestrian safety on Ridgeland. The goal is to restore Ridgeland as a neighborhood street that fits with Oak Park's character.

Alternative: Marked shared lanes and bike lanes

From South Boulevard to Madison Street, bike lanes can be added to the existing cross-section. For the remainder of the street, shared lane markings can be implemented while maintaining parking on both sides.

Challenge:

IDOT must approve of any changes to Ridgeland as it is under IDOT jurisdiction.

Restricting parking is often controversial. On-street parking restrictions on cross-streets within one block of Ridgeland may need to be revised.

Building Oak Park's Bicycling Network

NORTH AVE, MADISON ST, ROOSEVELT BLVD, HARLEM AVE, AUSTIN BLVD
Streets with higher traffic volumes and speeds, such as North Avenue, Madison Street, Roosevelt Boulevard, Harlem Avenue and Austin Boulevard, call for a higher level bicycle facility to make cyclists comfortable on these streets. Typically, the higher-level facilities are costly and may require a complete reconstruction of the roadway. They should be undertaken when a street is scheduled for major construction. They are well suited for long distances and should be coordinated with neighboring communities to ensure a continuous facility that extends beyond Oak Park's borders.

Recommendation

Raised bike lane or cycle track

Raised bike lanes or cycle tracks are examples of facilities that separate the bicyclist from traffic more than a standard bike lane, without requiring additional right-of-way for a completely separated side path. Raised bike lanes and cycle tracks are bike lanes that have been raised above the travel lane by a mountable curb or completely separated by a standard curb or bollards.

Challenge:

With the exception of Madison Street, these roadways are under IDOT jurisdiction.

The design of these facilities must be undertaken in coordination with neighboring communities, which also adds complexity to designing and approving these types of facilities.

Bicycle Boulevards

The streets identified here are recommended to be part of Oak Park's bicycle boulevard system. This section describes the qualities of each proposed boulevard and indicates locations that may need additional attention in order to accommodate bicyclists.

Many of the streets needing additional treatments at intersections with bicycle boulevards are also part of the bicycle network. Therefore, any treatments considered should accommodate bicycle traffic in both directions.

The Village should implement several common elements along each of these streets to designate them as bicycle boulevards as described above. These include signs, pavement markings and traffic calming measures. Along each boulevard, these elements should be implemented during the same phase because it is important for all elements to be in place to fully convert a typical street into a bicycle boulevard. Oak Park currently implements several measures that would augment the bicycle boulevard system, including traffic signal indicators and cul-de-sac cut-throughs. These elements should be expanded throughout the bicycle boulevard system.

Signs along the boulevard system should include signs directing cyclists to connecting facilities and nearby destinations. Wayfinding signs should direct cyclists to the most appropriate facilities for various destinations, particularly where the boulevard ends.

As a subsequent phase, environmental features can be implemented to complement the bicycle boulevards. Transforming a bicycle boulevard into a green boulevard should be at the discretion of the community, in conjunction with the Village. Boulevards can be converted on a block-by-block basis.

HOME/FOREST AVENUE – This boulevard follows Home Avenue from Harvard Street on the south to North Boulevard, where the street becomes Forest Avenue. It continues on Forest Avenue, north to Lindberg Park. The boulevard then uses Greenfield Street and Kenilworth Avenue to connect to LeMoyné Parkway. As an alternative, bicyclists may use the path through Lindberg Park at Belleforte Avenue to connect to LeMoyné Parkway.

Home Avenue is an important part of the bikeway network as it connects to the bicycle and pedestrian bridge that crosses the Eisenhower Expressway. Many destinations to which both residents and tourists would enjoy cycling, are located along Home and Forest Avenues. They include several parks, the Historical Society, the Visitor's Center and the Frank Lloyd Wright Home and Studio.

This proposed facility already has some of the qualities of a bicycle boulevard, with traffic signals at Madison Street, Washington Boulevard and Lake Street, and a traffic diverter at Ontario Street. The diverter is useful for keeping traffic volumes low, but it may need to be altered to allow bicyclists to continue through.

Additional traffic control and/or crossing measures should be considered at the following intersections:

- Division Street – This intersection may be a candidate for a traffic signal or HAWK signal. The closest existing signals are at Harlem Avenue and Oak Park Avenue. A traffic study should be conducted to determine if a signal is warranted here.
- Augusta Street – Augusta Street has fairly low traffic volumes and will likely have sufficient gaps for a cyclist to cross safely and easily. However, if this intersection proves to be a concern after the bicycle boulevard is implemented, traffic control should be considered.
- Chicago Avenue – This intersection is skewed, which may create a challenge for some bicyclists. However, traffic signals are located roughly 0.1 mile to the east and west of Forest Avenue. These signals may currently provide sufficient gaps for bicyclists to cross, or they could be re-timed to provide gaps. The signal timing and traffic patterns should be studied to determine if additional crossing measures are needed at this intersection.
- Jackson Boulevard – Jackson Boulevard carries a relatively high volume of traffic, compared to other streets in Oak Park. This intersection has bulb-outs along Jackson to improve the pedestrian crossing. A treatment to consider is a traffic circle or a stop sign for Jackson Boulevard traffic. Given the existing bulb-outs, a traffic circle may not be appropriate due to space constraints.
- Harrison Street/connection to Bridge – This intersection is awkward for cyclists making a right turn onto Harrison from the bridge. Furthermore, Harrison Street traffic has no traffic control, and speeds are a concern. Pavement legends and signs should prominently indicate a bicycle and pedestrian crossing. A stop sign along Harrison Street should be considered to improve this crossing. Speed management, discussed as part of the Harrison Street facility, will help keep traffic speeds low.

Alternate connection at Lindberg Park: In the future, a bike path could be added on the east side of Lindberg Park. This would provide a more continuous facility.

Challenge:

The visibility of both cyclists and motorists is poor at the connection of Harrison Street and the bicycle and pedestrian bridge. The connection should be reconfigured to improve the visibility and traffic control added to Harrison Street to slow vehicles at that location.

This boulevard jogs at Lake Street and Chicago Avenue. The route and crossings should be clearly marked at these locations so that they are evident to both cyclists and motorists. The connection to the LeMoyne Parkway bicycle boulevard should also be clearly marked.

The traffic diverter at Ontario Street may need modifications to give cyclists a through path.

LOMBARD AVENUE – The bicycle boulevard that follows Lombard Avenue serves residents in the eastern section of Oak Park. It passes directly by Barrie Park and the Village Hall. North of Pleasant Street, Lombard Avenue is not a through street; therefore, the boulevard jogs west one block at Pleasant Street and follows Harvey Avenue north to Ontario Street, crossing Lake Street at a traffic signal. The boulevard follows Ontario Street back to Lombard Avenue and continues north to LeMoyne Parkway.

Additional traffic control and/or crossing measures should be considered at the following intersections:

- Division Street – This intersection may be a candidate for a traffic signal or HAWK signal for similar reasons as the intersection of Forest Avenue and Division Street. A traffic study should be conducted to determine if a signal is warranted here.
- Augusta Street – Augusta Street has fairly low traffic volumes and will likely have sufficient gaps for a cyclist to cross safely and easily. However, if this intersection proves to be a concern after the bicycle boulevard is implemented, traffic control should be considered.
- Chicago Avenue – This intersection serves school traffic for Whittier School one block west. This intersection may be a candidate for a traffic signal or HAWK signal. Traffic volumes, including pedestrian and bicycle movements, should be investigated to determine if a traffic or HAWK signal would be appropriate here.
- Jackson Boulevard – Jackson Boulevard has a median to the east and west of Lombard Avenue. This median could be extended through the intersection with cut-throughs for bicycles in each direction. This would improve the crossing and keep traffic volumes low on Lombard Avenue.

Challenge:

The bicycle boulevard should be clearly marked where it turns at Randolph Street and South Boulevard. Also, the crossing at Greenfield Street should be obvious where Lombard Avenue jogs slightly.

LEMOYNE PARKWAY – LeMoyne Parkway is the northernmost bicycle boulevard, connecting the boulevards on Forest Avenue and Lombard Avenue. This facility will serve as an alternative to bicycling along North Avenue, which is not comfortable for most cyclists due to the high traffic volume and speeds.

At East Avenue, the current traffic control is a two-way stop sign for East Avenue traffic, giving traffic along LeMoyne Parkway the priority. An existing forced turn diverter at Oak Park Avenue prevents through-movements on LeMoyne Parkway, helping to reduce the traffic volumes.

Additional traffic control and/or crossing measures should be considered at the following intersections:

- **Oak Park Avenue** – A forced turn diverter on LeMoyne Parkway at Oak Park Avenue prevents left turns from westbound traffic, southbound traffic and through-traffic along LeMoyne. This diverter is often ignored, however. Six of nine collisions within a three-year period seem to be caused by motorists disregarding the diverter. It is recommended that bulb-outs be added to the east side of Oak Park Avenue and the existing diverter be extended. Modifying the diverter to allow through-movements by bicycles and prevent motorists from bypassing it would improve the overall safety of this intersection.
- **Ridgeland Avenue** – The intersection of Ridgeland Avenue and LeMoyne Parkway is roughly midway between traffic signals at North Avenue and at Lenox Street. Traffic volumes at this intersection are not likely to warrant an additional signal. Installing bulb-outs where parking is permitted would ease the crossing by shortening the crossing distance. If parking restrictions are to be considered on Ridgeland, bulb-outs should only be installed where parking will be maintained. If traffic speeds and/or volumes continue to make this crossing difficult, a HAWK signal or other speed reduction tools should be considered.

Challenge:

The connection to the Forest Avenue boulevard, with turns on Kenilworth Avenue and Greenfield Street, should be clearly marked.

ERIE STREET – The bicycle boulevard on Erie Street begins at Forest Avenue on Elizabeth Court. The route uses an existing cul-de-sac cut-through at Kenilworth Avenue and jogs to the south to join Erie Street, which it follows to the boulevard at Lombard Avenue. Erie Street passes by the Ernest Hemingway Museum, the Oak Park/River Forest High School and Beye School, all of which are key destinations.

Additional traffic control and/or crossing measures should be considered at the following intersections:

- **Oak Park Avenue** – Erie Street is offset at Oak Park Avenue. This intersection also serves school-related pedestrian traffic. A stop sign at Oak Park Avenue, coupled with pavement markings carried through the intersection, may be sufficient to help bicyclists cross. Given the presence of the school, a HAWK signal may also be warranted.

- Ridgeland Avenue – This intersection also serves school-related pedestrian traffic. To raise awareness of the pedestrian crossing, temporary signs indicating that pedestrians may be present and temporary “No Driving in the Parking Lane” signs should be placed in the roadway during school arrival and dismissal times.

Bulb-outs placed where parking is maintained on Ridgeland would improve the crossing for pedestrians and bicyclists. Bulb-outs would also prevent vehicles from using the parking lane to pass other vehicles. As with Oak Park Avenue, the presence of a school at this intersection may make this a good location for a HAWK signal.

Traffic volumes, including bicycle and pedestrian traffic at school arrival and dismissal times, should be studied to determine the most appropriate traffic control at these two intersections.

Challenges:

This boulevard turns at Kenilworth Avenue and jogs at Oak Park Avenue. These locations should clearly indicate the bicycle boulevard. This is particularly important at Oak Park Avenue, where the traffic volumes are higher and there is currently no traffic signal.

PLEASANT STREET – The Pleasant Street bicycle boulevard provides a family-friendly facility south of the CTA and Metra tracks and north of Madison Street. It connects the two north-south bicycle boulevards and passes by St. Edmund School. Pleasant Street has a traffic signal at Oak Park Avenue. The existing and proposed infrastructure at major crossings makes Pleasant Street an ideal candidate for a bicycle boulevard.

Additional traffic control and/or crossing measures should be considered at the following intersections:

- Ridgeland Avenue - This intersection serves school-related pedestrian traffic for the Intercultura Montessori School and Julian Junior High School. Installing bulb-outs where parking is permitted would improve the crossing. Pavement markings could be added to the intersection to draw attention to both a bicycle and a pedestrian crossing. If speeds are a concern in this area, raised crosswalks to slow traffic should be considered.

Challenge:

Similar to the Erie Street boulevard, Pleasant Street jogs at Oak Park Avenue. The bicycle boulevard should be clearly marked through this intersection.

HARVARD STREET – The boulevard along Harvard Street offers residents a bicycle facility south of the expressway. Harvard Street directly passes Lincoln School, West Suburban Montessori and Irving School; and the boulevard would terminate at Barrie Park. Its close proximity to Roosevelt Road gives cyclists an alternative to access destinations along Roosevelt.

Harvard Street currently has a traffic signal at Ridgeland Avenue, and another signal is planned at Oak Park Avenue. With two of the three major crossings already equipped with traffic signals, this boulevard would be relatively easy to create. The third major intersection, East Avenue, is a four-way-

stop controlled intersection. Therefore, the only additions needed to create a bicycle boulevard along Harvard Street would be traffic-calming devices to maintain low vehicle speeds and volumes.

Future Considerations

Several innovative bicycle facilities could further enhance Oak Park's bicycle network. The on-street facilities recommended above provide a strong basic network of bicycle infrastructure. This foundation, along with effective promotion and education programs, is essential to ensuring the safety and convenience of current cyclists and encouraging new cyclists. With a basic network established, Oak Park can consider more innovative treatments that would distinguish the Village as a national leader in bicycle accommodation. Significant results within a few years will create the public support to reprogram public street space and invest more public funds to take cycling in Oak Park to the next level.

The treatments discussed here are facilities that are new or emerging within the United States. Several concepts are under development in cities such as Chicago, Illinois, and Portland, Oregon. Oak Park should research the best practices of these facilities, as they have been implemented at the time the Village is considering them.

Several options exist for enhancing the on-street bikeways recommended in this plan and for accommodating cyclists on streets that are currently not recommended as part of the bicycle network. One option draws attention to the entire facility or conflict points by coloring the bike lane, either in its entirety or at selected locations. The City of Chicago is currently piloting a few areas of green bike lanes to highlight conflicts between bicyclists going straight and motorists turning right.

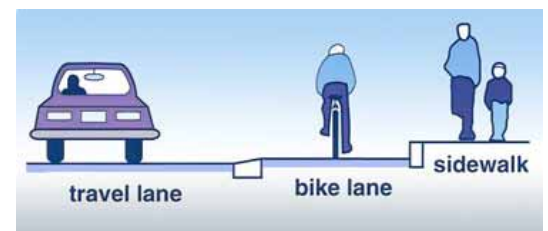
For streets with bike lanes installed, bike boxes can be added to signalized intersections to establish a space for bicyclists in front of the stop bar for vehicles. This increases the visibility of cyclists and facilitates left turns.

Other innovative facilities include raised bike lanes. Raised bike lanes are similar facilities to standard bike lanes, but the roadway is raised using a mountable curb with a smooth transition. This type of facility requires a higher level of design and investment, as it would affect parking and drainage. Major arterials are the most appropriate streets for this type of facility. In Oak Park, the major arterials bordering the Village are under IDOT jurisdiction, which would complicate adding an innovative facility. However, Madison Street, a major arterial that cuts through the center of the Village, is under local jurisdiction and would be a good candidate for a raised bike lane.



Bike Box, Portland, OR

(Source: www.bikeportland.org/JayLawrence)



Raised Bike Lane

(Source: Oregon Department of Transportation)

The bicycle boulevards recommended in this plan provide ideal opportunities to further enhance the roadways to create greenways, community spaces or environmental features. Once the bicycle boulevards have been established, residents may wish to implement the greenways, permeable pavement, bioswales, play streets or chicanes, as describe on page 6. These features can be

Building Oak Park's Bicycling Network

considered and implemented on a block-by-block basis. A near consensus of the residents along the street in question should be achieved before these measures are taken.

Bicycle-Friendly Streets

While only certain streets are designated as part of the bikeway network, bicyclists' needs should be considered throughout the planning, design, construction and maintenance of all streets. The Village of Oak Park can achieve bicycle-friendly streets throughout the Village with the adoption of a few policies and practices.

Wayfinding Signs

A consistent signage system should be used throughout the Village to orient bicyclists and direct them to their destination. A comprehensive system will improve the connectivity of the bicycle network. Directional signs should include popular destinations within Oak Park and adjacent communities, intersecting and nearby bicycle facilities, and trails and bicycle facilities in close proximity.

The City of Chicago has recently installed a network of signs indicating key destinations and the distance and direction of travel to that destination. Signs are placed along the

recommended route to each destination, showing cyclists the most appropriate streets to take.

These signs should be coordinated with the signs associated with the bicycle boulevard system. The wayfinding signs for the bicycle network could also be coordinated with the Tourism Committee's wayfinding efforts.

Berkeley, California, has integrated the bicycle signage into their standard street signs where the street serves as a bicycle boulevard. The Village of Oak Park has installed a network of directional signs that direct bicyclists to bike parking facilities at transit stations and business districts. Wayfinding signs will provide residents with information on the direction and distance to various Oak Park destinations when traveling on the bike network.

Spot Improvements

Minor changes to the existing transportation network can have a big impact on making a community more bicycle friendly. These are generally low-cost measures that are easy to implement. Examples include measures that Oak Park currently implements, such as cul-de-sac cut-throughs and signal indicators at actuated traffic signals. These two measures add continuity and convenience to the network for cyclists, and this practice should be continued as needed throughout the Village. Other spot improvements may include replacing hazardous drainage grates or improving access to bicycle parking through curb cuts.

Input from residents will help determine where spot improvements are needed. A form should be made available at bike shops and libraries and on the Village's web site to solicit requests for spot improvements from residents.



Destination Signage
(Source: Chicagoland Bicycle Federation)



Bicycle Parking Signage
(Source: Village of Oak Park)

Complete Streets Policy

Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities are able to safely move along and across a complete street. Complete Streets policies direct transportation planners and engineers to consistently design facilities with all users in mind. Places that adopt complete streets policies ensure that their streets and roads work for drivers, transit riders, pedestrians and bicyclists, as well as for seniors, children and people with disabilities. (see Appendix C)

Street Resurfacing Policy

A key component of a world-class bicycle network is a policy that enforces routine maintenance of roadways, including bicycle facilities. During the public meeting held in August 2007, residents cited improved pavement conditions as a priority. Cracked or spalled pavement within a bicycle facility poses a danger to cyclists because it may cause them to fall or to swerve into traffic to avoid the hazard. With the installation of on-street bicycle facilities, the street resurfacing policy should be amended to include bicycle facilities on a rotating schedule. The resurfacing policy should include intermediate maintenance on an as-needed basis.

Bicycle Parking

Providing convenient and secure bicycle parking throughout the community is an easy way to encourage bicycling. Short-term bicycle parking should be convenient to destinations, which often means bicycle racks near the entrance of a business. Long-term bicycle parking is usually more out of the way, but it offers a higher level of security. The City of Cambridge, Mass., has recently published a useful resource on bicycle parking, which includes details on types of bicycle parking available and installation guidelines (see Appendix D).

Short-term bicycle parking

The Village of Oak Park has recently made a distinct effort to increase the number of bike parking spaces and provides racks for free on public right-of-way, where space allows. This practice should be continued. To assist the Village in determining need, a request system via e-mail is in place: bikerack@oak-park.us. This system should be regularly promoted and publicized. This system should also double as a means to report maintenance needs. The Village has developed guidelines for bicycle rack installation, making them available to business owners and developers.

Parking meters serve as informal bicycle parking spaces. They can significantly increase the number of bicycle parking spaces available without investing in additional bicycle racks. Parking meters can be used as-is with U-lock bicycle locks. With cable locks, however, a metal ring or loop must be added to the parking meter post in order to secure a bicycle properly. This image shows a modified parking meter from Columbia, Missouri.



Long-term bicycle parking

In addition to standard racks, the Village installed five bike lockers near the Oak Park Transportation Center. Bike lockers provide an added level of security and convenience, protecting the bicycles from theft, vandalism and weather. The lockers are placed at the commuter train station, where bicycles are likely to be left

Parking Meter - informal bike parking

Building Oak Park's Bicycling Network

for long periods of time, and are made available for rental on an annual basis.

Abandoned Bicycles

Maintenance of bicycle parking includes removing bicycles that have been abandoned. Abandoned bicycles tend to get rusty or pilfered for parts, displaying evidence of vandalism and deterring others from using the bike parking. Oak Park should adopt a policy to identify bicycles that have been left, warn the owners of impending seizure, and collect the abandoned bicycles.

Recommendations:

- Add short-term bike parking spaces to the public right-of-way on an annual basis. Locations should be solicited from the public and business community.
- Expand long-term parking at public facilities, including lockers or indoor parking. For instance, the Village may want to consider adding to the existing number of bike lockers at the Oak Park Transportation Center.
- Encourage secure, indoor parking areas in private developments, such as multi-unit residential buildings and employment centers.
- Add bicycle-parking requirements to the zoning ordinance. Requiring developers to include bicycle parking with new or renovated buildings is a cost-effective way to increase bicycle parking throughout the Village. Such a requirement will allow the Village to spread its resources to other areas.
- Adopt a bicycle rack maintenance policy, including removal of abandoned bicycles.
- Upgrade and improve bicycle parking in the Oak Park/River Forest High School parking structure. The bicycle parking should provide secure parking, with adequate lighting to encourage its use.

Safety and Encouragement Objective 1: Improve skills, knowledge and the road-sharing behavior of cyclists, motorists and pedestrians.

Program: Oak Park Bicycling Ambassador

Description: The Oak Park Bicycling Ambassador educates and encourages the public to bike and walk more and to do so safely. The Ambassador gives face-to-face demonstrations to kids, teens and adults by participating in community events and running special programs. The Ambassador works with partners in the community to identify and address local transportation safety concerns.

History: In 2006, Oak Park became the first suburb to have a Bicycling Ambassador. The Oak Park Bicycling Ambassador (OPBA) attended Village events to provide bicycle safety education, distribute literature, and conduct safety demonstrations and on-bike training. This successful and well-received program runs over the summer months. The Ambassador presents approximately 15 to 20 events in a season.

The Village of Oak Park maintains the current contracted program, but expands it in 2009, to allow the Ambassador to offer bicycle safety and encouragement programming to Oak Park schools. If the program is successful, the Village will consider expanding the Ambassador to a year-round program.

The Ambassador will increase the offerings of bicycle education classes through Park District and private camps and through general park district programming. The Ambassador will begin offering bicycle safety and encouragement programming to Oak Park schools and will be available for block parties and other local festivals. During the first year, the OPBA will present at 40 events.

Program: Safe Routes to School in Elementary and Middle Schools

Description: The purpose of Safe Routes to School (SRTS) is to increase the number of children who walk or bicycle to school by funding projects that remove the barriers that currently prevent them from doing so. Those barriers include lack of infrastructure, unsafe infrastructure, and lack of programs that promote walking and bicycling through education/encouragement programs aimed at children, parents and the community.

History: The Village has a \$560,000 Congestion Mitigation and Air Quality Improvement Program (CMAQ) grant to do a complete assessment of the current walking and biking routes for all of the schools in District 97. The second step of the project is to work with the individual schools, determine which routes need new signage and paint markings, and increase the number of kids walking and biking to school. The project is being coordinated with a consulting engineer.

Hatch Elementary School received \$3,765 from the 2007 federal Safe Routes to School program to do a variety of education and encouragement programs, including initiating a walking/biking mileage club and a walking school bus program.



Oak Park Bicycling Ambassador
(Source: Chicagoland Bicycle Federation)

Safety and Encouragement Programs

Two of the eight District 97 elementary schools allow students to bike to school. The principals that do not allow bikes have stated the following reasons for banning bikes:

- Fear for safety of kids dealing with car traffic
- Theft of bicycles left outside of the school
- Fear of children being pushed off their bikes and having their bikes stolen

Objective: The Oak Park Bicycle Advisory Committee will propose to work with public and private elementary and middle schools to create a permanent SRTS program to be run out of their Physical Education Departments by September 2010. The program could include the following education and encouragement projects, as well as facilities assessments each spring and fall:

- Walk and Bike to School Week celebration
- Encourage the inclusion of pedestrian and bicycle safety skills in relevant physical education and extracurricular programs
- Encourage the inclusion of the sustainable transportation benefits of walking and bicycling in relevant health, environmental and academic curricula
- Create a Walking School Bus program

Bicycle safety programs should be considered at all schools. It is important that all children be taught safe bicycling skills. At schools that currently ban bicycles, the programs will not focus on the trip to school, but rather an overview of bicycle safety. The Oak Park Bicycle Advisory Committee will work with the schools that have bike bans to help them to identify and resolve the barriers.

Program: **Mobility Education at High Schools**

Description: Many teens spend hours and hours in driver's education courses preparing to get behind the wheel, but they learn very little about sharing the road with cyclists and even less about the skills to safely ride a bicycle. Mobility education changes the way we think about getting around. It gives teens an understanding of how to utilize all kinds of transportation – bicycling, walking and taking transit. Mobility education also makes sure that all new drivers understand the experience of people on foot, bike and transit, and works to afford greater respect for those modes.

Objective: The Oak Park Bicycle Advisory Committee could work with the Driver's Education Departments at Oak Park public and private high schools to integrate a Mobility Education curriculum into the existing class structure by 2010. Students will learn:

- Rules of the road for bicyclists
- How to map bicycle and walking routes
- Types of illegal motorist behaviors that endanger bicyclists
- Most dangerous types of bicycling behaviors
- Most common causes of bicycle crashes
- Best ways to prevent bicycle theft
- Transportation, health and environmental benefits of bicycling and walking

Program: **Bicycle Commuter Challenge in High School**

Description: A competition between grades, organizations, or high schools to encourage students to bike to school.

History: No such program. Currently, the Chicagoland Bicycle Federation organizes the Bike to Work Week competition for Chicago and suburban businesses, non-profits and government agencies.

Objective: The high school bicycle club, environmental club and Physical Education Departments could organize a Bicycle Commuter Challenge to encourage students to bike to school during the 2010-11 school year. The Oak Park Bicycling Ambassador will offer bicycle skill trainings and rules of the road classes for all students who plan to participate.

Program: **Law Enforcement**

Description: Enforce the traffic laws that improve the safety of bicycling.

History: The Oak Park Police Department has over 120 sworn officers. There are eight officers that patrol on bicycles. Between May and September, those officers primarily conduct patrol on foot or bicycle. The business district patrol officers patrol on foot or Segway. Officers occasionally receive documents from the state or other agencies that reference bicycle safety, and some officers volunteer for, or are assigned to, bicycle-specific education.

Objective: The Oak Park Police Department designates a liaison to communicate with the bicycling community by 2009.

Objective: Police officers are best equipped to respond to bicycle safety issues when appropriate training has been provided. The Oak Park Police Department provides introductory and ongoing training on enforcement of the traffic laws that create a safe bicycling environment by 2009. The curriculum should include:

- Rules of the road for bicyclists
- Types of illegal motorist behaviors that endanger bicyclists
- Most dangerous types of bicycling behaviors
- Most common causes of bicycle crashes
- Importance of reporting bicycle crashes
- Importance of investigating serious bicycle crash sites
- Best ways to prevent bicycle theft
- Advantages to policing by bicycle
- Transportation, health and environmental benefits of bicycling

The League of Illinois Bicyclists and the Chicagoland Bicycle Federation can provide training and resource materials.

Objective: The Oak Park Advisory Committee, in the process of the ongoing evaluation of the bicycle plan and the public use of the bicycle network facilities, and in consultation with the Oak Park Police

Safety and Encouragement Programs

Department, will make recommendations to the Village Board to adapt and amend Village ordinances for the purpose of promoting and enforcing a safe environment for cycling by 2010.

Program: **Education Campaign**

Description: Many bicyclists and motorists do not know or understand the rules of the road for cyclists. Educating these groups on the rules will create a safer environment for bicyclists.

History: The Village uses OP/FYI, the monthly newsletter that reaches all of its residents by mail, to educate motorists and cyclists on safe driving and cycling behaviors. The “Share the Road” signs that are posted at more than 40 entry points to the Village spread the message that motorist must share the road with cyclists in Oak Park. A safe bicycling video was created by staff and volunteer residents and is played regularly on the local cable station.

Objective: Beginning in 2011, the Department of Public Health distributes bicycling information in the following ways:

- Arrange for bicycle information to be reprinted and/or distributed by partner agencies, utility companies and the private sector
- Include information with utility bills and Village parking sticker renewals
- Partner with local bike shops to distribute publications
- Partner with local doctors and hospitals and the Oak Park Department of Public Health to distribute information on health benefits of cycling
- Prepare an updated video for Channel 6

Safety and Encouragement Objective 2: Promote bicycling by providing incentives and marketing the benefits of bicycling.

Program: **Oak Park Bicycle Coordinator and Bicycle Advisory Committee**

Description: An important part of this plan is to make sure the bike plan becomes a living document, which leads to action. A Bicycle Advisory Committee and a designated Bicycle Coordinator would work to ensure the implementation of the bike plan and the attention to bicycling concerns and needs.

History: The Village had a Bike Planning Team (BPT) from December 1998 to April 2002. The BPT was comprised of Oak Park residents and staff from Public Works and the Police Department. Oak Park currently budgets for a half-time Bicycle Coordinator.

Objective: The Village Board appoints the Committee in 2008. The group meets quarterly to review plan progress and catalyze next steps and implementation.

Objective: The Department of Public Works maintains a Bicycle and Pedestrian Coordinator whose responsibility it is to convene the Bicycle Advisory Committee, facilitate and coordinate bike plan implementation, and act as a point of contact for public and partner agencies by 2008. The Coordinator applies to the League of American Bicyclists to attain a Bicycle Friendly Community designation for Oak Park.

Program: **Shop By Bike**

Description: Shop by Bike programs encourage residents to shop locally by taking their bikes on short errands, to add physical activity to their day, to help relieve parking issues, and to support local businesses.

History: In 2006, Downtown Oak Park piloted a short-term program. Cyclists made a purchase of \$5 or more at participating shops and received a sticker on a card. Once the cyclists received five stickers, they returned completed cards for a chance to win in a raffle.

Objective: The Development Services Division expands Shop by Bike Village-wide in 2009 by partnering with the Business Association Council, Oak Park Area Visitor's and Convention Bureau, retailers, merchant associations, and the Chamber of Commerce. Retailers offer year-round discounts and/or promotions for shoppers on bike. The Bicycle Advisory Committee works with the Farmer's Market Board to encourage shoppers to shop by bike at the market. The Oak Park Bicycling Ambassador offers Shopping By Bike classes twice yearly and educates merchants on the advantages of attracting and accommodating bicycle-riding customers and staff.



Shop by Bike Program
(Source: Chicagoland Bicycle Federation)

Program: **Village Bicycle Map**

Description: A Village bicycle map encourages bicycle use by promoting the bicycle network and identifying bicycle-friendly routes to important and popular destinations: parks, schools, libraries and business districts of Oak Park.

History: Public Works created a bicycle infrastructure map that is distributed to people who ask for bike information. The map is used internally to keep track of bike infrastructure.

Objective: The Department of Public Works, Chamber of Commerce and the Oak Park Area Visitor's and Convention Bureau work together to design and publish a free bicycle map in spring 2009 to promote the Village's bike network. The map could highlight the Village's historic district and other key destinations. Copies are mailed to current residents in summer 2009 and included in new resident packets. Consider private sector sponsorship for printing the map.

Program: **Village Employee Bike to Work Incentive Program**

Description: Bicycle commuting enables office workers to fit regular exercise into their busy, but often sedentary, work routines. People who exercise, including those who do it on the way to work, are healthier and more energetic. This translates to employer cost savings: greater productivity, less sick leave time, fewer worker compensation claims, and lower overall health care costs.

History: No current incentive program

Safety and Encouragement Programs

Objective: The Oak Park Department of Public Health creates an incentive program in 2009 to help Village employees choose bicycling. The Department of Public Health works with the Oak Park Cycle Club, pairing experienced riders with new ones, to help riders feel comfortable on the road. The Oak Park Bicycling Ambassador offers regular “Bike to Work” classes.

Program: **Bike to Work Week Bicycle Commuter Challenge**

Description: The Bike to Work Week Bicycle Commuter Challenge gives bicycle commuters and non-commuters alike the chance to learn more about traveling by bicycle. During Bike to Work Week, participating agencies and businesses encourage employees to bike for all or part of their commute.

History: The Village has promoted Bike to Work Week to Village employees since 2000. The Village has also competed in the Chicagoland Bicycle Federation-sponsored Bicycle Commuter Challenge and has won the category of greatest participation in a Public agency, 100-499 employees, in 2001, 2002, 2003, and 2005.

Objective: The Department of Public Works continues participating in the Bicycle Commuter Challenge and works with the Department of Public Health to create incentives that will encourage participation among more employees each year.

Bike to Work classes will be offered to employees by the Oak Park Bicycling Ambassador each May. The Village Manager’s office will challenge neighboring communities to participate in the Bicycle Commuter Challenge and compete against the Village in 2009.

Stage first Bike to Work Week Rally in 2009.

Program: **Public Health Marketing Campaign**

Description: The public health community understands the benefits of getting people to bicycle: it’s a non-polluting, healthy, easy and fun way to combat a sedentary lifestyle.

History: No current campaign

Objective: In spring 2010, the Department of Public Health submits articles in both of the local papers that outline the specifics of the program and follow up with a mailing to residents.

Program: **Car-Free Day**

Description: Fifteen hundred cities in 40 countries staged “car-free” days in 2004 to encourage people to use transit, bicycle, walk and telecommute. Consider staging a “Car-Free Challenge,” encouraging people to leave their automobiles at home or reducing usage. If successful, the Village can expand the initiative.

History: The Energy and Environment Commission sponsored two bike events in 2004 and 2005 where they closed several streets and approximately 24 intersections to vehicular traffic. The bike event started at Pleasant Home, went to the Public Works Facility, and came back to Pleasant Home along the same route. Those events were family-oriented and were held the first Sunday in October,

when school was back in session.

Objective: The Energy and Environment Commission, in 2010, takes the lead on the event and, if successful, expands it, working with several partner agencies, including Park District, Police Department, Public Health and Public Works:

- Three to four streets closed to car traffic, perhaps creating a rectangular network providing access to all parts of Oak Park
- Area merchants offer special discounts to participants
- Oak Park Bicycling Ambassador offers bicycling classes leading up to the event.

If the event is successful, consider expanding it to several dates over a year.

Program: **Village Bicycle Fleet**

Description: Encouraging Village staff to use bicycles for work travel around Oak Park can be considerably cheaper and often more effective than using automobiles. Employees will have better contact with residents in the neighborhoods. Using bicycles for work also improves employee health and fitness.

History: The Public Works Department added six bikes to its fleet in 2008.

Objective: The Department of Public Works increases the use of bicycles on the job by Village agencies and departments in 2008. They prioritize adding bicycles to the Village's fleet whenever replacing or upgrading motor vehicles. The Oak Park Bicycling Ambassador offers twice-yearly classes for Village employees covering basic bike safety, simple roadside maintenance, and commuting/carrying by bike.

Program: **Bicycle Sharing Program**

Description: The Bicycle Sharing Program will encourage bicycle use for short-term transportation and recreation within the Village. Patrons can check out bikes from kiosks located throughout Oak Park and return to any kiosk. Normally a credit card or debit card is required as a deposit. There is commonly no charge for the first 30 minutes, and a nominal charge is applied after that. The costs for the program are covered by a combination of sponsorship, advertising and user fees.

History: None

Objective: The Village and Oak Park Bicycle Advisory Committee will work to secure a vendor to manage the Bike Sharing program by 2011.



Bicycle Sharing Program
(Source: www.flickr.com)

Evaluation and Implementation

Evaluation

The goals of this Bicycle Plan are to increase bicycle use and create a safe and inviting environment for bicycles. To meet these goals, the Village should identify a system for counting bicycles and bicyclists in order to track progress. For example, the Village could conduct annual bicyclist counts at specific intersections that are highly traversed by bicycles and count parked bikes at popular destinations and transit stations. The Village could also keep track of all bicycle-related crashes and report on them annually.

Ideally, the Village would establish the counts before the Bicycle Plan is implemented so that there is a baseline for comparison.

Implementation

This plan recommends that the proposed bicycle network be implemented within 10 years and the safety and encouragement programs become institutions within 3 years. This section breaks down the general timing of the various facility and program implementation.

For bicycle facilities, project phasing should take into account the complexity of the project, the benefits of the improvements, and the available funds. The first phase of implementation includes those projects that are easier to implement and can be initiated right away. Subsequent phases will include projects that require more discussion or a more complicated design.

Short-term (0-2 years)

Facilities

- Division Street: bike lanes
- Augusta Street: shared lanes
- Chicago Avenue: bike lanes
- North Boulevard: shared lanes
- South Boulevard: shared lanes
- Washington Boulevard: shared lanes
- Harrison Street: shared lanes and signed route
- Harvard Street: bicycle boulevard

Programs

- Oak Park Bicycle Program and Oak Park Bicycle Advisory Committee
- Oak Park Bicycling Ambassador
- Safe Routes to School in Elementary and Middle Schools
- Commuter Challenge in High Schools
- Law Enforcement
- Shop By Bike
- Village Bike Map
- Village Employee Bike to Work Incentive Program
- Bike to Work Week Commuter Challenge (Village-wide)
- Public Health Marketing Campaign
- Car-Free Day
- Village Bike Fleet

Medium-term (3-5 years)

Facilities

- LeMoyné Parkway: bicycle boulevard
- Lake Street: shared lanes
- Home/Forest: bicycle boulevard
- Oak Park Avenue: bike lanes and shared lanes
- East Avenue: shared lanes
- Ridgeland Avenue: bike lanes
- Lombard Avenue: bicycle boulevard
- Reconfiguration of Home Avenue Bridge at Harrison Street

Programs

- Education Campaign
- Bicycle Sharing
- Complete Streets Policy
- Street Resurfacing Policy

Long-term (5-10 years)

Facilities

- Erie Street: bicycle boulevard
- Pleasant Street: bicycle boulevard
- Jackson Street: shared lanes

Ongoing Facilities and Projects

- Mobility Education at High Schools
- Bicycle Parking Installation and Maintenance
- Wayfinding Sign Installation and Maintenance
- Spot Improvements

Future considerations

Complete redesigns should be considered for North Avenue, North Boulevard, South Boulevard, Madison Street, Roosevelt Road, Harlem Avenue and Austin Boulevard.

Whenever possible, implementation of bicycle facilities should be done in conjunction with planned roadway improvements. For instance, streets included on the bikeway network for pavement markings should be given priority if that street is planned for street resurfacing. When underground utility improvements are scheduled along the bicycle boulevard system, those streets should be considered for environmental upgrades to be implemented at the same time.

Appendix A - Bicycle Plan Advisory Committee

Member Affiliation	Name	Title
Village Manager's Office	Lisa Shelley	Deputy Village Manager
Public Works Department	John Wielebnicki	Director of Public Works
Public Works Department	Ellen McKenna	Staff Liaison – Bike Plan
Community Planning and Development	Craig Failor	Village Planner
Community Services	Loretta Daly	Business Development Manager
Park District of Oak Park	Mike Grandy	Superintendent of Buildings and Grounds
Police Department	Ofr. Raphael Murphy	Resident Beat Officer
Public Health Department	Jacob Nelson	Health Educator
Board of Health	Brian Crawford	Commission Member
Energy and Environment Commission	Amy Little	Commission Member
Community Design Commission	Gail Moran	Commission Member
Plan Commission	Linda Bolte	Commission Member
Transportation Commission	Paul Aeschleman	Commission Member
Oak Park Cycle Club	Warren King	OPCC Member



Oak Park Bicycle Plan | Proposed Bicycle Network Alternatives

August 29, 2008





City of Roanoke Complete Streets Policy

Complete Streets are streets that safely accommodate street users of all ages and abilities such as pedestrians, bicyclists, transit riders, and motorists. Through this policy, the City of Roanoke intends to ensure that all transportation agencies within the City shall routinely plan, fund, design, construct, operate, and maintain their streets according to the Complete Street principles of the City's "Street Design Guidelines" with the goal of creating an attractive connected multimodal network that balances the needs of all users, except where there are demonstrated exceptional circumstances.

By adopting this policy the City of Roanoke:

- Affirms that *Improving Streetscapes* to create great streets, a strategic initiative of the City's Comprehensive Plan Vision 2001–2020, will improve both Roanoke's image and its function by providing a safe and attractive environment for street users of all ages and abilities such as pedestrians, bicyclists, transit riders, and motorists;
- Recognizes that the development of pedestrian and bicycle infrastructure supports Vision 2001–2020's strategic initiative *Investing in Critical Amenities* because it enhances recreational opportunities and well-designed cityscapes, thus promoting active lifestyles;
- Appreciates the positive role that good pedestrian and bicycle facilities play in attracting population growth and sustainable economic development;
- Values the long-term cost savings of developing pedestrian and bicycle infrastructure as they relate to improved public health, improved environmental stewardship, reduced fuel consumption, and the reduced demand for motor vehicle infrastructure.
- Recognizes that Complete Streets may be achieved through single projects or incrementally through a series of smaller improvements or maintenance activities over time, and that all sources of transportation-related funding be drawn upon to implement Complete Streets.
- Intends to maximize the number of transportation options available within the public right-of-way.

Additionally, Roanoke City Council declares it is the City of Roanoke's policy to:

1. Use the Street Design Guidelines to guide the planning, funding, design, construction, operation, and maintenance of new and modified streets in Roanoke while remaining flexible to the unique circumstances of different streets where sound engineering and planning judgment will produce context sensitive designs.
2. Incorporate the Street Design Guidelines' principles into all City plans, manuals, rules, regulations and programs as appropriate.
3. Keep street pavement widths to the minimum necessary.
4. Provide pedestrian accommodation in the form of sidewalks or shared-use pathways on all arterial and collector streets and on local streets in the Downtown, Village Center, Traditional Neighborhood, Suburban Neighborhood, Local Commercial, Regional Commercial, and Industrial character districts.
5. Provide bicycle accommodation along all arterial and collector streets. Bicycle accommodation on local streets should be provided within the travel lanes shared with motor vehicles and no additional markings, signage, or pavement should be provided unless a designated bicycle route requires the use of a local street.
6. Where physical conditions warrant, plant trees whenever a street is newly constructed, reconstructed, or relocated.
7. The Director of Public Works, Director of Parks and Recreation and the Director of Planning, Building and Development will present a written explanation to the City Manager for approval when policies 3-6 above are not reasonable or feasible per the following exceptional circumstances:
 - a. Public safety would be compromised
 - b. Severe topographic constraints exist
 - c. Environmental or social impacts outweigh the need for these accommodations
 - d. The purpose and scope of the project does not facilitate provision of such accommodation
 - e. The total cost of constructing and/or maintaining the accommodation, including potential right-of-way acquisition, would be excessively disproportionate to the need for the facility
 - f. A public consensus determines the accommodation is unwanted

support of this Complete Streets Policy, the City of Roanoke will:

- o Update all necessary and appropriate codes, standards and ordinances to ensure that design components for all new or modified streets follow the intent of the Street Design Guidelines.
- o Update the process of evaluating requests for new curb and/or pedestrian accommodations.
- o Identify all current and potential future sources of funding for street improvements
- o Continue inter-departmental project coordination among city departments with an interest in the activities that occur within the public right-of-way in order to better use fiscal resources.
- o Train pertinent staff in the engineering, parks and recreation, planning, and transportation departments on the content of the Street Design Guidelines
- o Use the following process when planning improvements within the public right-of-way
 - a. Identify the street type according to Roanoke's street hierarchy
 - b. Identify the current and future character district(s) that pertain to the project
 - c. Identify the most appropriate street typical section according to the street type and character district
 - d. Identify any general elements that may apply to the work
- o Measure the success of this complete streets policy using the following performance measures:
 - a. Total miles of on-street bicycle routes defined by streets with clearly marked or signed bicycle accommodation
 - b. Linear feet of new pedestrian accommodation
 - c. Number of new curb ramps installed along city streets
 - d. Number of new street trees planted along city streets
- o Update the Street Design Guidelines as needed

Appendix D - Cambridge Bicycle Parking Guide

see: http://www.cambridgema.gov/CityOfCambridge_Content/documents/tpat_BikeParkingBrochure.pdf

Appendix E - Facility Implementation Schedule

Street	From	To	Length (Miles)	Facility	Total Construction Cost	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Division Street	Harlem Avenue	Austin Boulevard	1.55	Bike Lanes	\$25,004		\$25,004								
Augusta Street	Harlem Avenue	Austin Boulevard	1.55	Marked Shared Lanes	\$30,705			\$30,705							
Chicago Avenue	Harlem Avenue	Austin Boulevard	1.55	Bike Lanes	\$45,384		\$45,384								
Lake Street	Harlem Avenue	Austin Boulevard	1.55	Marked Shared Lanes	\$26,117	\$26,117									
North Boulevard	Harlem Avenue	Austin Boulevard	1.06	Marked Shared Lanes	\$10,053	\$10,053									
South Boulevard	Harlem Avenue	Austin Boulevard	1.55	Marked Shared Lanes	\$13,604	\$13,604									
Washington Boulevard	Harlem Avenue	Austin Boulevard	1.55	Marked Shared Lanes	\$26,117		\$26,117								
Jackson Boulevard	Harlem Avenue	Austin Boulevard	1.64	Marked Shared Lanes	\$26,117			\$26,117							
Harrison Street	Harlem Avenue	Austin Boulevard	1.01	Marked Shared Lanes	\$17,561			\$17,561							
Oak Park Avenue	North Avenue	Jackson Boulevard	2.24	Marked Shared Lanes	\$57,294			\$57,294							
	Jackson Boulevard	Lexington Street	0.38	Bike Lanes											
	Lexington Street	Roosevelt Road	0.38	Marked Shared Lanes											
East Avenue	North Avenue	Roosevelt Road	2.85	Marked Shared Lanes	\$53,288	\$53,288									
Ridgeland Avenue	North Avenue	Roosevelt Road	3.07	Bike Lanes	\$51,017				\$51,017						
Home/Forest	LeMoynes Parkway	Harvard Street	2.73	Bicycle Boulevard	\$842,282					\$421,141			\$421,141		

Appendix E - Facility Implementation Schedule cont.

Street	From	To	Mi.	Facility	Total Construction Cost	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lombard Avenue	LeMoyne Parkway	Harvard Street	2.80	Bicycle Boulevard	\$679,718						\$339,859	\$339,859			
LeMoyne Parkway	Marion Street	Lombard Avenue	1.28	Bicycle Boulevard	\$508,970									\$508,970	
Erie Street	Forest Avenue	Lombard Avenue	1.09	Bicycle Boulevard	\$345,042										\$345,042
Pleasant Street	Home Avenue	Lombard Avenue	1.05	Bicycle Boulevard	\$182,478							\$182,478			
Harvard Street	Home Avenue	Lombard Avenue	1.03	Bicycle Boulevard	\$185,206							\$185,206			
Wayfinding Signs					\$11,000		\$5,500	\$5,500							
Spot Improvements					\$50,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Bicycle Parking					\$100,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
					\$3,287,000	\$119,000	\$118,000	\$153,000	\$67,000	\$437,000	\$355,000	\$723,000	\$437,000	\$524,000	\$361,000

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Division Street - Bike Lanes										
	4" THPL PVT MK	\$0.50	LF	14,800	\$7,400					
	Symbol	\$265	Each	45	\$11,885					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$20,165	\$1,411.54	\$3,024.73	\$403.30	\$25,004
Augusta Street - Shared Lanes										
	4" THPL PVT MK	\$0.50	LF	7,400	\$3,700					
	Symbol	\$300	Each	67	\$20,182					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$24,762	\$1,733.33	\$3,714.27	\$495.24	\$30,705
Chicago Avenue - Bike Lanes										
	4" THPL PVT MK	\$0.50	LF	29,600	\$14,800					
	Symbol	\$265	Each	45	\$11,885					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
	Remove Stripe	\$1.85	SF	4,884	\$9,035					
						\$36,600	\$2,562.02	\$5,490.04	\$732.00	\$45,384

Appendix F - Facility Cost Estimates cont.

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Lake Street - Shared Lanes										
	Symbol	\$300	Each	67	\$20,182					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$21,062	\$1,474.33	\$3,159.27	\$421.24	\$26,117
North Boulevard - Shared Lanes										
	Symbol	\$300	Each	24	\$7,227					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$8,107	\$567.51	\$1,216.09	\$162.15	\$10,053
South Boulevard - Shared Lanes										
	Symbol	\$300	Each	34	\$10,091					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$10,971	\$767.96	\$1,645.64	\$219.42	\$13,604

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Washington Boulevard - Shared Lanes										
	Symbol	\$300	Each	67	\$20,182					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$21,062	\$1,474.33	\$3,159.27	\$421.24	\$26,117
Jackson Boulevard - Shared Lanes										
	Symbol	\$300	Each	67	\$20,182					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$21,062	\$1,474.33	\$3,159.27	\$421.24	\$26,117
Harrison Street - Shared Lanes										
	Symbol	\$300	Each	44	\$13,282					
	Route Sign Panel	\$40	Each	6	\$240					
	Wayfinding Sign Panel	\$40	Each	10	\$400					
	Sign Post	\$30	Each	8	\$240					
						\$14,162	\$991.33	\$2,124.27	\$283.24	\$17,561

Appendix F - Facility Cost Estimates cont.

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Oak Park Avenue - Bike Lanes and Shared Lanes										
	Lane Symbol	\$345	Each	54	\$18,576					
	4" THPL PVT MK	\$0.50	LF	17,768	\$8,884					
	SLM Symbol	\$300	Each	57	\$16,985					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$46,205	\$3,234.36	\$6,930.76	\$924.10	\$57,294
East Avenue - Shared Lanes										
	Symbol	\$300	Each	137	\$41,215					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$42,975	\$3,008.22	\$6,446.18	\$859.49	\$53,288

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Ridgeland Avenue - Bike Lanes										
	4" THPL PVT MK	\$0.50	LF	30,224	\$15,112					
	Symbol	\$265	Each	92	\$24,271					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
	Remove Stripe	\$1.85	SF	9,974	\$18,452					
						\$41,143	\$2,880.00	\$6,171.42	\$822.86	\$51,017
Home/Forest - Bicycle Boulevard										
	Pavement Markings	\$550	Each	50	\$27,500					
	Intersection Treatments	\$130,000	Each	5	\$650,000					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$679,260	\$47,548.20	\$101,889.00	\$13,585.20	\$842,282

Appendix F - Facility Cost Estimates cont.

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Lombard Avenue - Bicycle Boulevard										
	Pavement Markings	\$550	Each	48	\$26,400					
	Intersection Treatments	\$130,000	Each	4	\$520,000					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$548,160	\$38,371.20	\$82,224.00	\$10,963.20	\$679,718
LeMoynes Parkway - Bicycle Boulevard										
	Pavement Markings	\$550	Each	34	\$18,700					
	Intersection Treatments	\$130,000	Each	3	\$390,000					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$410,460	\$28,732.20	\$61,569.00	\$8,209.20	\$508,970

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Erie Street - Bicycle Boulevard										
	Pavement Markings	\$550	Each	30	\$16,500					
	Intersection Treatments	\$130,000	Each	2	\$260,000					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$278,260	\$19,478.20	\$41,739.00	\$5,565.20	\$345,042
Pleasant Street - Bicycle Boulevard										
	Pavement Markings	\$550	Each	28	\$15,400					
	Intersection Treatments	\$130,000	Each	1	\$130,000					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$147,160	\$10,301.20	\$22,074.00	\$2,943.20	\$182,478

Appendix F - Facility Cost Estimates cont.

Route	Item	Unit Cost	Unit	Qty	Cost	Subtotal	Mobilization (7%)	Contingency (15%)	Traffic Control (2%)	Total Construction Cost
Harvard Street - Bicycle Boulevard										
	Pavement Markings	\$550	Each	32	\$17,600					
	Intersection Treatments	\$130,000	Each	1	\$130,000					
	Route Sign Panel	\$40	Each	8	\$320					
	Wayfinding Sign Panel	\$40	Each	24	\$960					
	Sign Post	\$30	Each	16	\$480					
						\$149,360	\$10,455.20	\$22,404.00	\$2,987.20	\$185,206
<i>Note: Estimates assume that half of the signs can be placed on existing posts.</i>										

Appendix G - Safety & Education Program Implementation and Cost Estimate Schedule

Program	Responsibility	Implementation	Cost	Funding Notes
Oak Park Bicycle Advisory Committee	Newly formed committee	2008	\$0	
Oak Park Bicycle Coordinator	Department of Public Works	2008	\$35,000	Current Staff
Village Bicycle Fleet	<ul style="list-style-type: none"> • Department of Public Works • Oak Park Bicycling Ambassador 	2009	\$6,000 capital (expand current fleet), \$2000 per year maintenance	20 bikes - \$300/bike; \$100 maintenance
Oak Park Bicycling Ambassador	Public Works	2009	\$8,000	
Police Officer Training	Oak Park Police Department	2009	\$500	
Bicycle Liaison	Oak Park Police Department	2009	\$0	Current staff
Bicycle Safety Ordinances	Oak Park Bicycle Advisory Committee/ Oak Park Police Department	2010	\$0	
Bike to Work Week - Bicycle Commuter Challenge	<ul style="list-style-type: none"> • Oak Park Department of Public Works • Oak Park Department of Public Health • Oak Park Bicycling Ambassador • Village Manager's Office 	2009	\$400	Small budget for Bike to Work Day Rally; Use current staff
Shop By Bike	<ul style="list-style-type: none"> • Development Services Division • Business Association Council • Chamber of Commerce • Oak Park Area Visitor's and Convention Bureau • Farmer's Market Board • Merchant Associations Retailers • Oak Park Bicycle Advisory Committee 	2009	\$0	Sponsorship from business community

Appendix G - Safety & Education Program Implementation and Cost Estimate Schedule cont.

Program	Responsibility	Implementation	Cost	Funding Notes
Village Bicycle Map	<ul style="list-style-type: none"> • Department of Public Works • Chamber of Commerce • Oak Park Area Visitor's and Convention Bureau 	2009	\$5,000	Design, printing and distribution
Village Employee Bike to Work Incentive Program	<ul style="list-style-type: none"> • Oak Park Department of Public Health • Oak Park Bicycle Club • Oak Park Bicycling Ambassador 	2009	\$0	Current staff and communications services
Mobility Education at High School	<ul style="list-style-type: none"> • Oak Park Bicycle Advisory Council • Driver's Education Department at OPRF 	2010	\$5,000	Grants
Car Free Day	<ul style="list-style-type: none"> • Energy and Environment Commission • Park District • Police Department • Department of Public Health • Department of Public Works 	2010	\$2,500	Current staff and communications services
Safe Routes to School in Elementary and Middle Schools	<ul style="list-style-type: none"> • Oak Park Bicycle Advisory Committee • Physical Education Departments 	2010	\$0	Current staff and the bicycling ambassador
Public Health Marketing Campaign	Department of Public Health	2010	\$0	Current staff and communications services
Bicycle Commuter Challenge in High School	<ul style="list-style-type: none"> • High School Physical Education Departments • High School Clubs • Environmental and Bicycle • Oak Park Bicycling Ambassador 	2010	\$0	Current staff and communications services
Bicycle Sharing Program	•Village of Oak Park Oak Park Bicycle Advisory Committee	2011	\$225,000	150 bikes start-up minimum, \$1,500/ bike; Private sector funding, advertising and user fees
Education Campaign	Department of Public Health	2011	\$5,000	