

Recommendations for Park Ridge Bike Routes

Ed Barsotti, League of Illinois Bicyclists
February 22, 2005

Introduction

In the summer of 2004, Mayor Michael MaRous and the City of Park Ridge's Public Works Department decided to pursue on-road bike routes in town to improve bicycle safety for recreation and alternative transportation. Plans are to implement two miles of bikeways in 2005 as a demonstration project. These will then be monitored with possible expansion of the system later.

A Bike Path Committee was formed to make recommendations on specific routes. Members include:

Jennifer Statz and Terry Ryan – City of Park Ridge, Public Works Department

Bill Neumann – Park Ridge Recreational and Park District

Cheryll DeYoung – School District 64

Lowell Nelson – Resident

Steve Penio – Resident

Ed Barsotti – League of Illinois Bicyclists (LIB), under a contract to be a technical resource.



Over the following months, the committee discussed the project's goals, route selection criteria, and possible roads to be studied. Fieldwork was done to explore some initial options and their feasibility. On November 9, 2004, the committee held a public "brainstorming meeting", attended by 45 citizens. The goals were to:

- Introduce bikeways and project goals
- Develop consensus on types of routes
- Recommend and prioritize which streets to consider

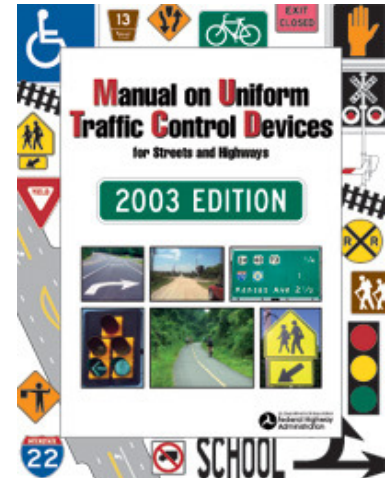
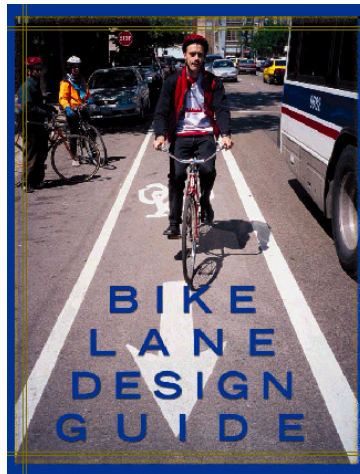
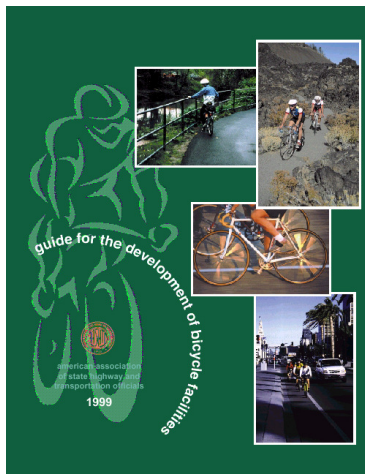
Each attendee marked a City map with their choices for priority bikeways, and some gave reasons. Much useful input was gathered through this exercise. The committee took these

ideas, selected the best candidate routes, and analyzed what bikeway facilities would be appropriate.

On behalf of the committee, LIB would like to offer the City of Park Ridge the following planning recommendations for consideration and approval by the Public Works Department.

The resources used in these recommendations are:

1. The AASHTO Guide for the Development of Bicycle Facilities (1999)¹. This industry standard provides design guidelines for both off-road (trail) and on-road facilities.
2. The Bike Lane Design Guide (2002)². Developed by the City of Chicago and distributed through the national Pedestrian and Bicycle Information Center, this document has detailed engineering diagrams for bike lane implementation on a variety of roads.
3. The Manual on Uniform Traffic Control Devices (2003)³. The Federal Highway Administration's industry standard on signage and road markings. Chapter 9 describes Traffic Controls for Bicycle Facilities.



Left: AASHTO guide. Center: Bike Lane Design Guide. Right: MUTCD.

Selecting Possible Routes

The first task was to develop consensus on the goals of a bike route system and on the bike facility types that would be appropriate in Park Ridge. A major goal is to enhance recreational biking, including routes to access the Des Plaines River Trail on the west side and the North Branch Trail east of town. In addition, residents want to improve their ability to bike to destinations around town (and into neighboring towns) as alternative transportation.

Park Ridge has an extensive sidewalk network. Sidewalks are generally recognized in planning practice to adequately meet the bicycling needs of younger children, who are often not ready mentally or physically to “share the road” with motor vehicles. In this report, the target audience is a broad range of other cyclists, including casual adult and teenage riders and competent pre-teens.

¹ Guide for the Development of Bicycle Facilities, American Association of State Highway and Transportation Officials (AASHTO), 1999. Available from AASHTO, www.transportation.org, 800-231-3475.

² Bike Lane Design Guide, Pedestrian and Bicycle Information Center, 2002. Available at www.bicyclinginfo.org

³ Manual on Uniform Traffic Control Devices, Federal Highway Administration, 2003. Available at mutcd.fhwa.dot.gov

There was a strong consensus that developing on-road bikeways (bike lanes, signed routes) would be better than making off-road improvements, such as widening sidewalks. While it is counter-intuitive to many who don't bike much, it is actually safer (for mature cyclists) to bike on-road than on parallel sidewalks or trails *when there are many crossings* (driveways, commercial entrances, sidestreets) – as in Park Ridge. The vast majority of bike-car accidents take place at intersections, not from bikes being hit from behind. Intersection problems increase when biking off-road, due to lack of expectation and visibility, and questions about right-of-way. This issue is further detailed and illustrated in the AASHTO guide and at <http://www.bikelib.org/muniguide/#alongroads>

Both the committee and the residents at the meeting provided input on the types of roads to use as bikeways. Wider roads with lower traffic volumes and speeds were preferred, as were direct routes with a minimum of stop signs and turns. Bikeways should serve main destinations, such as recreation areas, the town center, transit, schools, nearby trails, and others. The ability to cross busier roads was deemed important, either with stoplights, stop signs, or median refuge areas.

With a general agreement on the types of routes to select, both the committee and meeting attendees chose roads that should be considered for some type of on-road bikeway. The map on the following page presents the results. Roads with more points were mentioned more frequently. Using these results, the committee proposed the following road segments for a planning and feasibility study:

Western, Dempster to Busse
Western, Elm to Peterson

Busse, west-end to Touhy [IDOT road]
Summit, Touhy to east-end (Look at Busse-Touhy-Summit transition)

Sibley, Prospect (or Meacham or Grand) to E-end

Sibley, DesPlaines River Trail to Aldine
Aldine, Sibley to Elm
Elm, Aldine to Greenwood
Greenwood, Elm to Busse
Elm, Busse to Prospect (or Meacham or Grand)

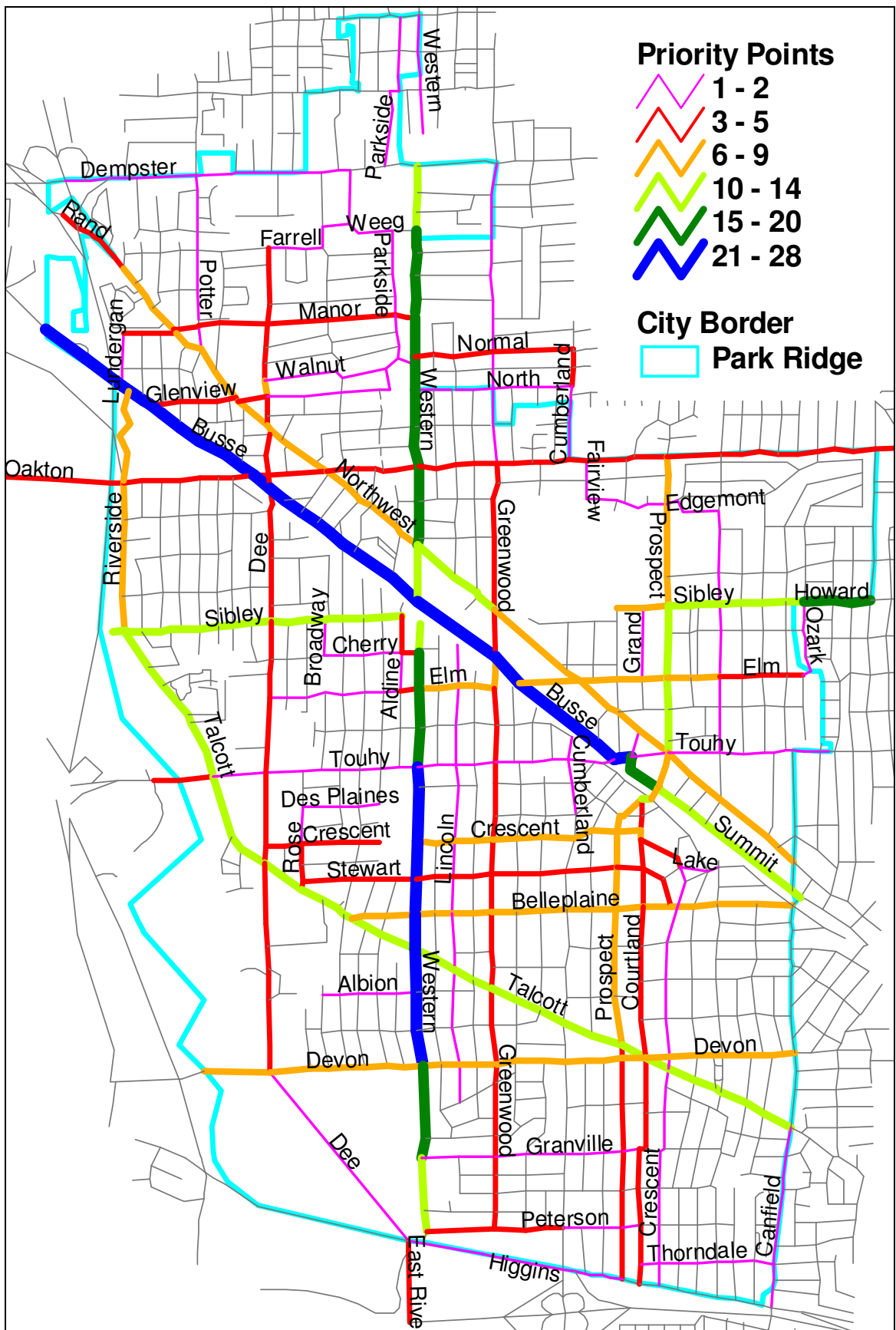
Prospect, N-end to Courtland
Courtland, Prospect to Higgins
Prospect, Courtland to Higgins

Talcott, Oakton to E-end [IDOT road]

Belle Plaine, Talcott to Ozark (or) **Crescent**, Dee to Courtland

Dee, Farrell to Devon

Additionally – **Devon**, W-end to E-end has been added to the list, as the City of Chicago is interested in working with Park Ridge to install bike lanes to O'Hare Airport.



Results of public meeting bike route prioritization process.

Selecting Bikeway Types

The following on-street bikeway types were considered in Park Ridge:



Bike Lanes

Bike Lanes are *on both sides of the road*, typically 5' each (including gutter pan). The three references fully detail the appropriate striping, pavement stencils, and signage – including at intersections. Cyclists in each bike lane travel one-way with the flow of traffic. Bike lanes are intended to delineate the right-of-way assigned to bicyclists and motorists and to provide for more predictable movements by each. Where parking exists, designated bike lanes should be striped between the parking space and the road – no parking should be permitted in bike lanes. Regular sweeping is important, as bike lanes tend to collect debris.

The City of Chicago has embarked on an ambitious bike lane program. Roads with newly installed bike lanes have seen a 25–100% increase in cycling, while accident rates (**predominantly car-car crashes**) decreased by 9.9% at intersections and 15.4% at mid-block. One explanation could be the traffic calming effect of narrowing the travel lanes, which slows traffic closer to the posted speed. Other benefits of bike lanes are given at <http://www.odot.state.or.us/techserv/bikewalk/whyhave.htm>



Bike Routes

The AASHTO guide refers to “Signed Shared Roadways” as those that have been identified by signing as preferred bike routes, because of particular advantages to using these routes compared to alternate routes. Reasons and criteria for signing routes are listed. The goals and criteria determined by the residents at the meeting correlate well with AASHTO. Signed shared roadways, with “Bike Route” signage described below, may be appropriate where there is not enough room for bike lanes, or where there is less of a need for dedicated bike lanes.



The MUTCD standard D11-1 bike route sign at right should be used on the designated roadways not having official bike lanes. According to AASHTO, in urban areas, signs should be placed every 500 m (approx. 1/4 mile), at every turn, and at all signalized intersections. For these signs to be more functional at turns, supplemental destination plates (MUTCD D1-1) and arrows (MUTCD M7 series) should be placed beneath them. Key destinations could be given, or the cross street at the end of the bike route designation. Some Illinois towns have put 2-3 destinations on a single sign, with mileages. Further guidance on signage is available in the MUTCD guide.

Several cities have experimented with on-road markings to improve the position of both motorists and bicyclists on roadways without bike lanes, and to improve motorist and cyclist behavior. If MUTCD approves the “bike-and-chevron” marking in the future, include these with busier Bike Route segments.

Shared Parking Lanes

Bike Lanes are well-defined *sections* of a road, with exclusive use by bicycles and clearly-specified pavement markings and geometry. However, there is more flexibility with signed Bike Routes. A Bike Route may be an unstriped residential street, a road with paved shoulders, and so on. It is simply a preferred roadway, without a specifically-defined geometry.

Very often there is not enough roadway width for bike lanes, so other options must be considered. On-road parking – and occupancy of that parking – is a significant issue. On some residential roads, parked cars are sparse except for special occasions (“party parking”). Sometimes in this case, towns eliminate parking on one side of the road to make room for bike lanes on each side. This can be a politically-charged decision, as many residents do not want to give up any parking.



Proposed striping of west Sibley, showing “Shared Parking Lanes” and sparsely-occupied parking

Another option for roads with lightly-occupied parking is to stripe off areas that can be used by both parked cars and bikes. These “Shared Parking Lanes” are not exclusive “Bike Lanes” and should not have bike lane signage – only use the Bike Route signage above.

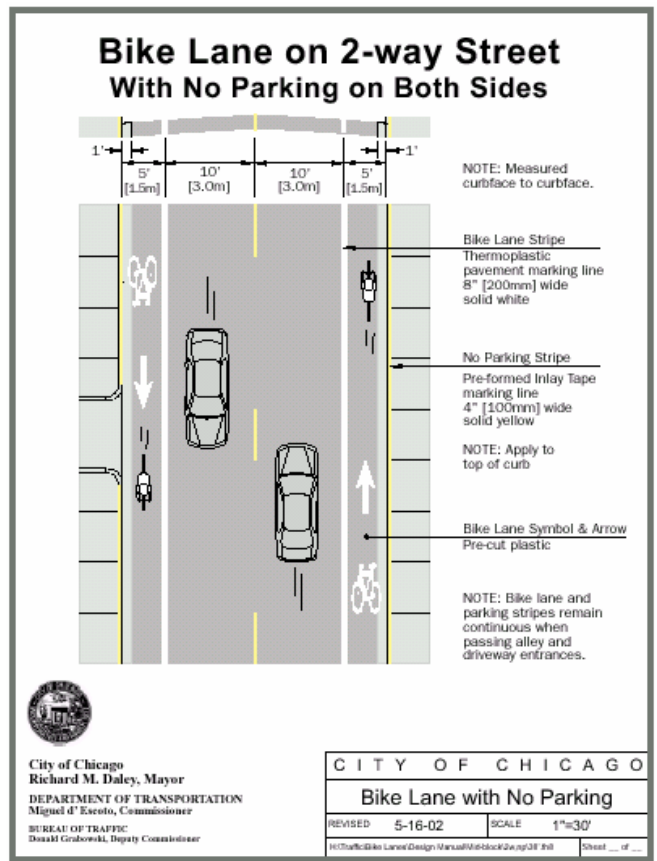
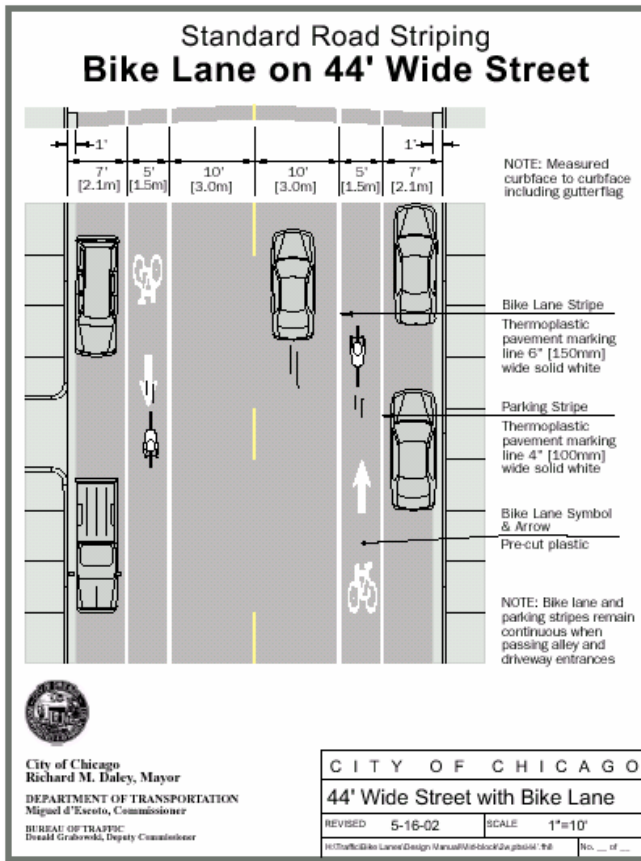
Cyclists in a Shared Parking Lane would have to leave the striped-off area to pass the occasional parked car, but this is very similar to road shoulder biking (with parked cars) and riding on “regular”, unmarked roads. Most of the time cyclists would be riding within the striped lane, which has been shown to increase their comfort level. Also, the occasional parked car benefits from the separation. Shared parking lanes share other benefits of bike lanes, too, such as a traffic-calming effect to slow down cars.

It is worthwhile to lessen confusion about parking on the various types of bike routes. A suggestion is to include any “parking permitted” or parking informational signs on the same post as Bike Route signs. To differentiate from Bike Lanes with an absence of adjacent parking, Bike Lane signs could include “no parking” signs (R8-3a, R7-9, or R7-9a) on their posts.

Selection Guide

Fieldwork was done to investigate what bikeway types would be appropriate for the road segments recommended by the committee. The following guidelines were used, following AASHTO and Chicago’s Bike Lane Design Guide:

- 5’ minimum for bike lanes (both sides) where parking exists (on the outside of the bike lanes)
- 4’ minimum for bike lanes on roads without curb-and-gutters, otherwise 5’ (including the gutter pan, if free of obstructions)
- 7’ minimum for car parking (and Shared Parking Lanes, if parking occupancy is sparse)
- 10’ minimum for car travel lanes



The following minimum roadway widths result, for various situations:

- 44' for car parking, bike lanes, and two travel lanes (see diagram above)
- 37' for car parking on one side only, bike lanes, and two travel lanes
- 30' for no parking, bike lanes, and two travel lanes (see diagram above)
- 34' for Shared Parking Lanes and two travel lanes

In addition to roadway widths and parking conditions, factors were considered including traffic volume, posted speed limits, and adjacent land uses and destinations. Roadway geometry and traffic conditions can be used to calculate the “comfort level” of adult and teen cyclists, using the Bicycle Level of Service measure (www.bikelib.org/roads/blos/losform.htm). BLOS estimates were used when necessary in bikeway type selection.

Specific Recommendations

The following are recommendations for each roadway segment that had been suggested for further study. Existing conditions are described, based on fieldwork and City input. Detailed suggestions are offered for each road including those without many improvement options. Prioritization by the Bike Path Committee follows. A table summarizing recommendations is at the end of this report.

Western, Dempster to Busse

Western is a good route to cross Dempster (stoplight) and access shopping to the north. The road is 31' from Dempster to Weeg Way with no parking and some traffic. Western is blocked at Weeg Way and Manor but bicycles are able to get through. From Manor to Busse, the road is 33-34' wide with lighter traffic. Parking is light (10%) except near Northwest Hwy and Busse (40%). Crossing Northwest and especially Oakton is difficult. Averaged traffic volume for the entire segment is 1241.

Recommend: Bike Lanes (5'-10.5'-10.5'-5') with pavement markings and signage from Dempster to Weeg Way (although Bike Route signage would be also adequate at this traffic level). W11-1 (bike warning) sign on westbound Weeg Way just before Western. Bike Route signs and arrows guiding cyclists through the blocked off section of Western. Given the conditions, Bike Route signage is sufficient from Manor to Busse, although the width is very near the minimum for a Shared Parking Lane configuration (7'-10'-10'-7'), if desired. With higher levels of parking on the southern end, the Shared Parking Lane would not work as well. W11-1 and W16-7p (arrow) signage should be used (on fluorescent yellow-green) on Oakton and Northwest at the Western crossings.

Western, Elm to Peterson

From Elm to Talcott, Western is a 34.5' wide street serving school and recreation areas. Traffic is light, and parking occupancy is relatively light (10-20%). "Turtle signs" near the school indicate a desire to slow traffic. Heading south from Talcott, the road narrows to 24' and then 31', with less traffic and sparse parking (<10%). The south end of Western leads to Peterson and informal bicycle cut-throughs used to get to Higgins and the CTA station. The Touhy crossing is signalized, the Talcott intersection is not, and Devon has a wide median making its crossing easier. Averaged traffic volume for the entire segment is 1241.

Recommend: Shared Parking Lanes (7'-10'-10'-7') from Elm to Talcott. W11-1 and W16-7p warning signs on Talcott and Devon. Bicycle Signal Actuation pavement markings (MUTCD Figure 9C-7) at the Touhy intersection. Bike Route signage from Talcott to Peterson.

Busse, west-end to Touhy

This IDOT road is 58', very wide for the 5500-6500 ADT traffic volume listed in IDOT's database. Parking occupancy varies from very sparse (<5%) on the west end's north side, to heavier (50% or more) from Dee to Greenwood, to full on the south side of the east end. The road is in poor condition – a candidate for a resurfacing project in the future. The outermost lane widths *feel* too narrow when adjacent parking is occupied. Near major intersections, such as Oakton and Dee, the four-lane road expands to include a turn lane while restricting parking. There are many entrances requiring left turns.

Recommend: Request approval from IDOT to decrease to two or three lanes, with exclusive Bike Lanes and parking-only lanes. Configurations could include:

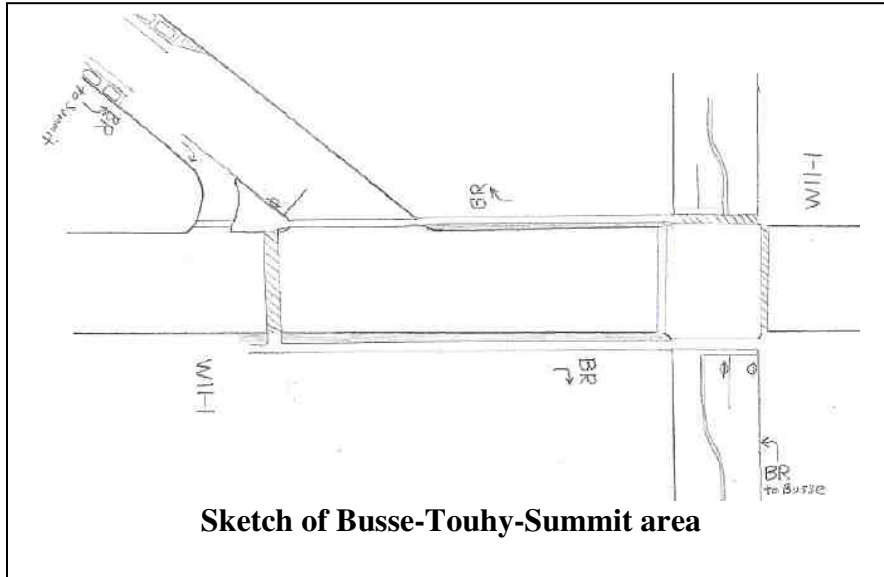
- 8' (parking) – 6' (bike lane) – 15' – 15' – 6' (bike lane) – 8' (parking)
- 7.5' – 5' – 11' (travel lane) – 11' (continuous left-turn lane) – 11' (travel lane) – 5' – 7.5'
- 6' (bike lane) – 12' (travel lane) – 14' (CLTL) – 12' (travel lane) – 6' (bike lane) – 8' (one-side parking only)

For the first option, drop the bike lanes near major intersections (and left-turn lanes), using W11-1 and W16-1 (Share the Road) signs at the beginning of the transitions.

Busse-Touhy-Summit transition

A short segment on Touhy (40900 ADT) is necessary to get from the Busse/Touhy/Meacham signalized intersection to the Summit/Touhy intersection. Uptown redevelopment presents an opportunity to improve access between the potential bikeways on Busse and Summit.

Recommend: Provide Bike Route signage (with arrows) to guide cyclists between Busse's bike lanes and Summit's Bike Route. Include Bicycle Signal Actuation pavement markings on southeast-bound



Sketch of Busse-Touhy-Summit area

Busse and the new signal at northbound Summit. (These also guide cyclists on where to position themselves at the intersections.) Add W11-1 warning signage before the transition on eastbound and westbound Touhy. In addition, for pedestrians and for less-confident cyclists who will not ride on Touhy, provide crosswalk, curb cuts, and other improvements (e.g., slip lane refuge island at Busse/Touhy) between Busse and Summit. See the sketch at right.

Summit, Touhy to east-end

Summit southeast from Prospect has 100% occupied parking in marked stalls on both sides of the street, with 27.5' of travel width in between. The width increases to 31.5' southeast of Ridge. The eastern segment is 37' wide with no marked parking stalls and very sparse (<5%) parking. Traffic volume for the segment is 3953.

Recommend: Bike Route signage on the western segments. *If* parking is eliminated on the railroad side of the 37' segment, then 5' Bike Lanes are possible on that segment [7' (bike parking) – 5' (bike lane) – 10' – 10' – 5' (bike lane)] and the 31.5' segment [parking – 5' (bike lane) – 10.5' – 10.5' – 5' (bike lane) – parking]. If this parking is not eliminated, then Bike Route signage throughout with Shared Parking Lanes (7.5' - 11' - 11' - 7.5') on the 37' segment.

Sibley, Prospect to east-end

Sibley, which has moderate traffic (ADT of 3353), ranges in width from 27' (Prospect to Washington) to 37' briefly and then back to 32-33'. Parking occupancy is relatively light (5-20%). Sibley/Howard provides a route to the North Branch Trail.

Recommend: The traffic level justifies striping treatment, especially since it widens (as Howard) east of Park Ridge. However, there is not enough consistent width for striping, unless parking is prohibited allowing Bike Lanes east of Washington. In addition to standard Bike Route signage, add W11-1 signage.

Sibley, Des Plaines River Trail to Aldine

This western section of Sibley serves the recreation center, a school, and the trail. It is 35' with sparse parking (<5% except near the recreation center), relatively low traffic (ADT of 1256), and a signalized crossing of Dee.

Recommend: This is an very good road for Shared Parking Lanes (7'-10'-10'-7' – see earlier photo). Also, a crosswalk across Talcott is needed to the Des Plaines River Trail access. Include Bicycle Signal Actuation pavement markings (MUTCD Figure 9C-7) at the Dee intersection.

Aldine, Sibley to Elm

This short segment is needed because Sibley does not go east to Western. The 31' road has minimal traffic (ADT of 731) and sparse parking (10%).

Recommend: Bike Route signage.

Elm, Aldine to Greenwood

Elm has moderate traffic (ADT of 2325) and no parking. However, 26' is too narrow for Bike Lanes.

Recommend: Like east Sibley, use Bike Route signage with the addition of W11-1 signage.

Greenwood, Elm to Busse

This short section is a critical railroad crossing. The 27' road has significant traffic (ADT of 17261) and no parking. Southbound Greenwood does not have to stop at the Elm intersection.

Recommend: Insufficient width for striping. Bike Route signage with W11-1 and W16-1 signage.

Elm, Busse to Prospect

Elm has moderate traffic (3514 ADT), 30' width, a signalized crossing of Northwest, and sparse parking (10%).

Recommend: There is room for only Bike Route signage. Include Bicycle Signal Actuation pavement markings (MUTCD Figure 9C-7) at the Northwest intersection.

Prospect, N-end to Courtland

The signalized intersection at Oakton helps make Prospect a good route to the northeast. From Oakton to Grant, the road is 30-31' with light to moderate traffic (ADT of 1065) and very sparse parking (<5%). From Grant to Northwest, the 39' width includes well-used 8' parking stalls on both sides. The intersection with Northwest and Touhy is signalized but difficult. Parking remains full south almost to Crescent, using a combination of angled parking and 8' parking stalls. Total width of the two travel lanes in that area ranges from 22-24'. Traffic volume on the southern part of this segment is 3597.

Recommend: Consider prohibiting parking from Oakton to Grant. If this is done, then add Bike Lanes (5'-10'-10'-5'). Otherwise, sign Bike Routes with W11-1 signs. Use these signs through the Grant-Courtland area, and include the Bicycle Signal Actuation Sign (R10-22) and pavement marking (MUTCD Figure 9C-7) at the signalized intersection.

Courtland, Prospect to Higgins or Prospect, Courtland to Higgins

Courtland is 35' wide from Prospect to the signalized intersection with Talcott and Devon. At its northern end, parking occupancy is high (50%+). Otherwise, parking is relatively light (<20%). South of the stoplight, Courtland becomes a divided boulevard with 17' sides, minimal traffic, and very little parking (5%). Averaged traffic volume for the entire segment is 581.

Prospect from Courtland to Crescent is 40' with full occupancy of 8' parking stalls on each side. Its width is 35' from Crescent to Belle Plaine, with appreciable parking only at the north end. South of Belle Plaine, the width varies from 24-26', with very little parking and minimal traffic south of Devon. The crossings of Talcott and Devon are unsignalized and somewhat difficult, including a jog left at Talcott.

Recommend: While Prospect provides direct access to shopping near Talcott, Courtland is recommended because of its width and the signalized intersection at Talcott/Devon. From Prospect to the traffic signal, Shared Parking Lanes (7.5'-10'-10'-7.5') are recommended with signal activation pavement markings (MUTCD Figure 9C-7) at the light. Bike Route signage is adequate for the low traffic levels south of the signal.

Talcott, Sibley to E-end

This is an IDOT road throughout the entire segment, with ADT of 24100. From Sibley to north of Touhy, the two-lane road is 38' wide with no parking and a wide painted median occasionally used for left-turn lanes. South to Dee, it expands to four lanes, 53', no parking, and a painted median used for left-turn lanes. Dee to Lincoln is four lanes, 47', with no parking. From Lincoln to the east end, there are two 21' lanes with parking restrictions only at rush hour, when traffic travels as four lanes. There are some parking stalls near businesses west of Prospect, and moderate (50%) mid-day parking (without parking stalls) a couple blocks to the east of Courtland. Parking is sparse (<10%) away from these business areas.

Recommend: Bike Lanes could be implemented from Sibley to Lincoln, but it would require a "Road Diet" reconfiguration from 4 lanes to 2 or 3 lanes between Touhy and Lincoln (see Dee Road graphic). *If* engineering analysis shows that this is feasible (and desired) at Talcott's ADT traffic volumes, then the following is suggested:

- Sibley to Touhy (38'): 6' (bike lane) –12'–5' (painted median) –12'–6' (bike lane), except where turn lanes are required. Where there are turn lanes, transition to 12'–14'–12', perhaps with W11-1 and W16-1 signs.
- Touhy to Dee (53'): 6' (bike lane) –12'–17' (left-turn lane/median)–12'–6' (bike lane).
- Dee to Lincoln (47'): 5' (bike lane) –12'–13' (left-turn lane/median)–12'–5' (bike lane).

Like the four lane segments, Talcott east of Lincoln would require some significant decisions. If the present road configuration east of Lincoln (allowing "4 lanes" during rush hour) is maintained, then Bike Route signage, with W11-1 and W16-1 signs, is recommended. If only two lanes of traffic are permitted with parking restrictions lifted, then striping is possible. The 42' road width is too narrow for bike lanes with parking on both sides of the road. Allowing parking on one side only would allow Bike Lanes: 7.5' (parking) – 5.5' (bike lane) – 12'–12'–5' (bike lane). Also, Shared Parking Lanes are an option (7.5'-13.5'-13.5'-7.5'), with W11-1 and W16-1 signage where parking occupancy is higher, near the businesses.

Belle Plaine, Talcott to Ozark

The road width varies from 32.5' on the west end, to 23-25.5' from Western to Courtland, to 30' east of Courtland. There is some parking (20%) on the east, but very little (5%) west of Courtland. Traffic is low to the west and somewhat increases east of Cumberland. ADT for the eastern part is 3942.

Recommend: Bike Route signage is the only real option on this road.

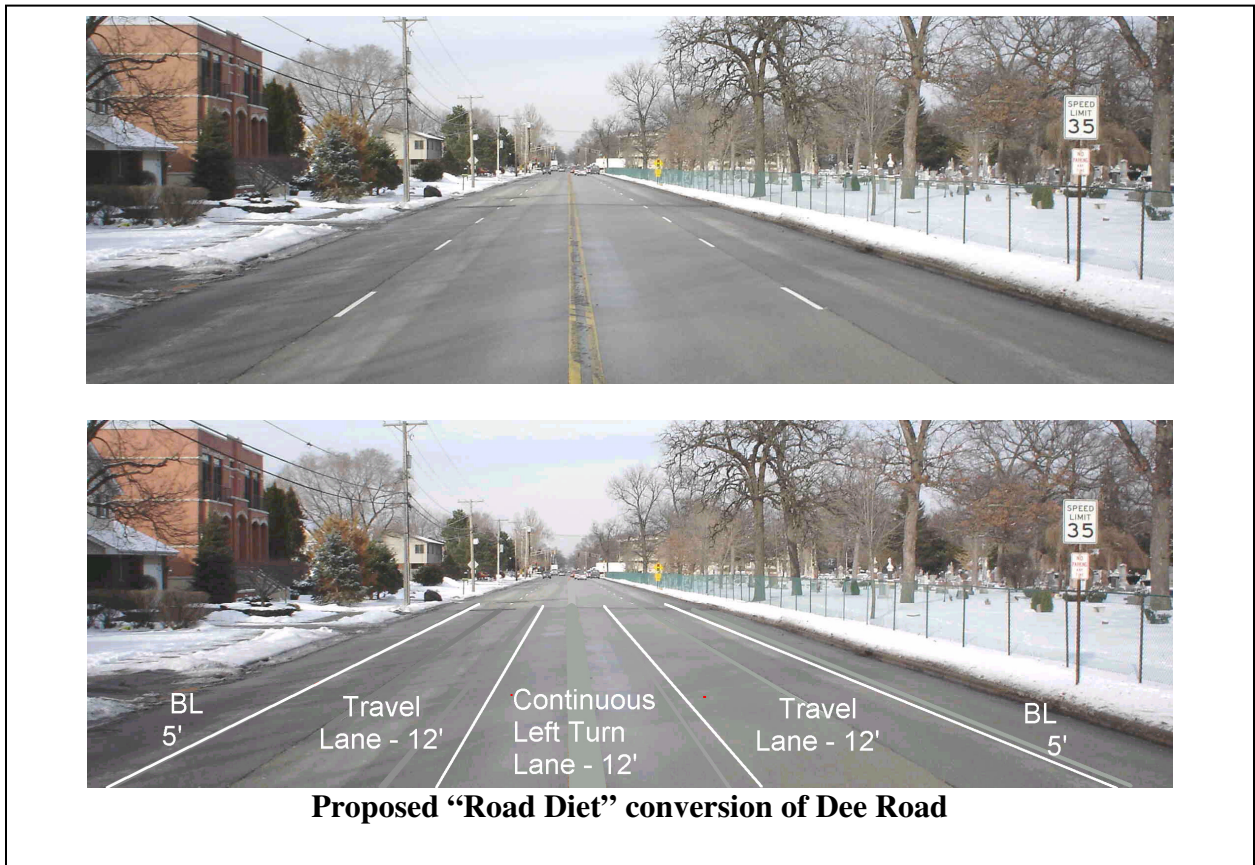
Crescent, Dee to Courtland

From Dee to Rose, Crescent is a narrow and meandering one-lane road. From Rose to an endpoint east of Home, the width is 29.5' with very little parking (5%). At the endpoint, sidewalks lead around the barrier to a path through the park to Western. From Western to Greenwood, the 24' road has very little parking (5%) but east of Greenwood there is significant parking (20%) on the north side of the same 24' roadway. Crescent has low traffic throughout, less than Belle Plaine.

Recommend: Bike Route signage – including wayfinding through the park trail – is the only option possible. Between Western and Courtland, either Crescent or Belle Plaine could be designated as the preferred route, as both options have advantages.

Dee, Farrell to Devon

Dee north of Northwest Highway has minimal traffic and parking occupancy (5-10%), and ranges in width from 28' to 35.5'. After a short left jog on Northwest, Dee is 32' with minimal parking (and AM restrictions) until its turn lanes begin north of Oakton. The widened road has turn lanes until south of the railroad tracks, at which point it becomes four lanes with 46' width and no occupied parking. Near Talcott, Dee expands to include a turn lane. South of Talcott, the 55' wide road has four lanes and no parking. South of Busse, Dee has an ADT of 12692.



Recommend: Bike Route signage from Farrell to Oakton, with W11-1 and W16-7p signs on Northwest. From Virginia to Talcott, study a “road diet” conversion with Bike Lanes, as shown below: 5’ (bike lane)–12’–12’ (left-turn lane)–12’–5’ (bike lane). This segment has many residential and other entrances that would benefit from the turn lane. Such conversions do not generally reduce level-of-service at this traffic volume. Drop the bike lanes for the Talcott turn lanes, using W11-1 and W16-1 signage. From Talcott to Devon, convert to 6’ (bike lane)–13’–17’(turn lane/median)–13’–6’ (bike lane).

Devon, W-end to E-end

Devon is an IDOT road with traffic volumes of 15,000-17,600 ADT. The City of Chicago wants to partner with Park Ridge to develop bike lanes on Devon to get to O'Hare Airport. From Dee to Aldine, Devon is 50' wide with four lanes and no parking. From Aldine to Cumberland, Devon has a large, 23' raised median. Each side of the road is 26' wide with no rush hour parking (and no parking occupancy at other times). From Cumberland to Courtland, each side is 32' with two lanes and parking stalls that are typically full. East of Courtland, Devon resembles east Talcott, with no median, and two 21' lanes that are often used as four lanes.

Recommend: On the west end, curb cuts are needed from Devon to the Des Plaines River Trail. From the 50' width from Dee to Aldine, the City of Chicago's guide suggests 5' Bike Lanes and four 10' travel lanes. From Aldine to Cumberland, the 26' width of each side would permit 5' Bike Lanes and 10.5' travel lanes – *if* parking is formally prohibited. Cumberland to Courtland could be reconfigured to 7' (parking) – 5' (bike lane) – 10' – 10' on each side. East of Courtland, prohibiting parking allows two Bike Lane options:

- Allowing parking on one side only: 7.5' (parking) – 5.5' (bike lane) – 12'–12'–5' (bike lane).
- No parking: 5' (bike lane) – 10' – 12' (left-turn lane) – 10' – 5' (bike lane).

A summary of these recommendations is included as a single-page spreadsheet attachment.

Prioritization

At the committee's February 18, 2005 meeting, priority roads were selected for 2005 implementation. The budget for the fiscal year starting in May is \$10,000. Per unit cost estimates include:

- \$0.40/ft for 4" thermoplastic striping (bike lanes, shared parking lanes). With lines on both sides of the road, a mile costs roughly \$4200.
- \$40 per sign (bike routes, shared parking lanes, bike lanes)
- \$60 per stencil (bike lanes)

For streets where striping is recommended, it makes sense to wait for those roads that will soon be repaved. Striping (and signage) could be added more efficiently, as part of those projects. Relevant roads on the repaving schedule include Busse, Western, Summit, Sibley, Devon, and Prospect.

Four roads were selected for the 2005 program, with an estimated total cost of \$9000:

- **Sibley, from the Des Plaines River Trail (Talcott) to Aldine** – \$5200 – shared parking lanes (\$4800 for 6000' of two-side striping, \$400 for 10 signs).
- **Courtland, from Prospect to Devon/Talcott** – \$3000 – shared parking lanes (\$2760 for 3400' of two-side striping, \$240 for 6 signs).
- **Prospect, from Oakton/N-end to Courtland** – \$320 – bike route signage (8 signs) – bike lanes are not possible, as existing parking will not be prohibited.
- **Belle Plaine, from Talcott to Ozark/Canfield** – \$480 – bike route signage (12 signs).

It is recommended that a simple map be developed showing and explaining the bikeway system and providing bike safety information.

Additional bikeway segments will be subject to budgeting and evaluation of these first four routes.