

“Ledgeview Loops” Recommendations

WE BIKE, etc., LLC

(May 29, 2018)

Introduction

The Town of Ledgeview is located in Northeastern Wisconsin on the southeastern fringe of the Green Bay metropolitan area. It is a fast-growing and affluent community with a developing urban area to the west and a mostly rural area to the east. A dominant environmental feature of the Town is the Niagara escarpment, a limestone ridge which runs roughly north and south through the middle of the Town. Locally this feature is known as the “Ledge.”

Bicycling is very popular in the Town of Ledgeview due to its mostly low-trafficked roads, scenic beauty, and topography. Residents have expressed a strong desire to maintain, and improve the bikability of the Town. The Town’s Comprehensive Plan, Park and Recreation Plan, and “Ledgeview Loops” survey all reflect this. The Town Board, Park, Recreation and Forestry Committee and staff support the needs of bicyclists.

The Town’s Park, Recreation and Forestry Committee has recommended creating “Ledgeview Loops” to increase recreational opportunities for bicyclists. The Town Board and staff support this initiative. “Ledgeview Loops” are on- and off-road, signed, and measured recreational routes designed to serve residents and visitors wishing to enjoy Ledgeview by bicycle. Loops will vary in length and difficulty. The town plans to have Loops mapped and signed by Spring/Summer 2018.

The Town has contracted with WE BIKE, etc., LLC to develop the “Ledgeview Loops” and the Town’s first Bicycle and Pedestrian Plan, which will be completed in the fall of 2018.

“Ledgeview Loops” will help address the needs of residents and visitors alike. They will encourage both to explore and enjoy Ledgeview by bicycle. The loops have the potential to increase health and fitness, decrease traffic congestion, provide a boost to the economy, protect and improve the environment, and create a greater sense of community.

Ledgeview is a fast growing community, currently transitioning from rural to urban. The recommended Loops are the best available now, but other preferable Loops will likely develop in the near future as local roads and trails are constructed to allow connections between residential subdivisions.

“Ledgview Loops” Survey

A “Ledgview Loops” Survey Monkey was developed by the Consultant and staff to gather detailed information about area bicyclists, potential bicyclists, and information related to possible loops. (See Appendix A, Ledgview Loops Survey Results - Partial Summary) The twenty-seven question survey was broadly distributed through traditional and social media from January 3-23, 2018. Town staff and appropriate committee members were also surveyed. There were 503 responses to the survey, which greatly exceeded the expectations of the Consultant and staff.

Survey results

- 71% of respondents were residents
- 82% were bicyclists
- 82% consider themselves to be intermediate or advanced cyclists
- Over 80% of respondents bicycle in Ledgview for recreation (85%) and/or fitness (81%)
 - They bicycle in Town because of low traffic volumes, scenery, and the hills
 - They struggle with traffic, feeling unsafe, and wanting bicycle facilities (bicycle lanes, paths, etc.)
- County Roads G, GV, V, and X are currently the most heavily used roads for bicycling in the Town.
 - Bicyclists are concerned that these roads have heavy traffic, are unsafe, and lack bicycle facilities
 - Non-bicyclists are concerned about traffic and safety issues as well
- Those that do not bicycle:
 - Don’t ride because of a lack of facilities/safety (45%), or they have no interest (10%)
 - For them to bicycle, they will need better facilities (bike lanes/paths, etc.) (74%)
 - If they did bicycle, they would want connections to parks and trails (32%), other neighborhoods (22%)
- The majority of bicyclists (42%) and non-bicyclists (31%) would like loops that accommodate at least intermediate bicycling ability. Non-bicyclists also would like family level loops (43%)

Additional input

In addition to conducting the “Ledgview Loops” survey, Consultants met with Park, Recreation, and Forestry Committee members and Town staff several times to gain their insights and input into the proposed loops. The Consultants also drove the community several times to evaluate possible loops.

Loop Considerations

A number of factors were taken into consideration when evaluating potential bicycle loops.

Bicyclist skill level

An intermediate skill level was chosen as the goal of the proposed loops based on survey results, Committee and staff input, and existing conditions. The Town’s trail and roadway system does not currently support a beginner bicyclist skill level due to a lack of trails, minimal residential street connectivity, and few on-road bicycle facilities (e.g. bicycle lanes), particularly on narrow, high-speed County Roads.

Origins and Destinations

Where do Ledgeview bicyclists want to go? Survey results showed a strong desire to access parks, residential, and commercial areas. Consultants took into account both current and planned parks, residential, and commercial areas. (See Appendix B)

Bicycle Crash History

The Town does not currently have a significantly demonstrable bicycle safety problem. A review of Wisconsin Department of Transportation motor vehicle crash data was conducted for Town roads for the years 2012-2016. The data shows there were two bicycle crashes reported with motor vehicles during that time. One crash occurred in October 2013 and the other in September 2016. Both crashes took place at the intersection of Dickenson Road (CTH G) and Red Bird Circle and involved juvenile male bicyclists. In both cases the bicyclist was riding on the sidewalk against the flow of traffic in the adjacent roadway. Both bicyclists suffered minor injuries.

However, despite a lack of supporting crash data, survey respondents still reported feeling unsafe on some roads within the Town, particularly narrow, high-speed County Roads such as G, V, and X.

Roadway Bicycle Compatibility

The three main factors affecting the bicycle compatibility of a roadway segment are **curb lane width**, **Average Daily Traffic** and **speed**. In order for a motor vehicle (truck) and a bicycle to legally (346.075) share a traffic lane, the lane (including paved shoulder) must be at least 15.5 feet wide (truck 8.5', Min. passing Dist. 3', bicycle 2.5', curb and gutter 1.5'). As traffic volumes increase, bicycle comfort and safety levels decrease. Minimal increases in motor vehicle speeds dramatically decrease bicyclist (pedestrian) safety.



As motor vehicle speeds increase, the risk of serious injury or fatality for a pedestrian also increases (AARP Impact Speed and a Pedestrian's Risk of Severe Injury or Death 2011, p. 1). Also, motorist visual field and peripheral vision is reduced at higher speeds.

(https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/fhwahp16055.pdf) (2018)

Additional considerations

All of the considerations for “Ledgeview Loops,” and more, will be explored in greater depth using the “3Es” approach (engineering, education, and enforcement) in the upcoming Ledgeview Bicycle and Pedestrian Plan.

Loop Recommendations (see maps at end of document)

Loop Name: Ledgeview Park Loop

Location: Creamery Road, County Road X, Swan Road, and Country Road G

Distance: 3.8 miles

Skill level: Intermediate

Elevation Change: 40'

Characteristics: The Ledgeview Park Loop is relatively flat and travels along rural and urban residential streets, improved and unimproved county roads. Bicycle lanes, narrow paved shoulders, wide travel lanes and gravel shoulders are all experienced on this loop. The loop provides access to Ledgeview Park and the trails within, the East River Trail and two schools. Ledgeview Park is a natural starting point providing parking, restrooms, and water. Optional loop additions include Ledgeview Road and County Road GV.

Areas of concern: County Road X is narrow with a minimal paved shoulder and 45 mph speed limit. Traffic volumes can be high at certain times of the day.

Future Opportunities: When County Road X is improved appropriate bicycle accommodations should be included.

Loop Name: Rollercoaster Loop

Location: County Road GV, Oak Ridge Circle, County Road G, Scray Hill Road, Whisper Lane

Distance: 7.4 miles

Skill level: Intermediate/advanced

Elevation Change: 412'

Characteristics: The Rollercoaster Loop features some major climbs and descents while traveling through quiet residential subdivisions, and along collector streets, improved and unimproved County Roads. Bicycle lanes, narrow paved shoulders, wide travel lanes and gravel shoulders are all experienced on this loop. This loop provides access to Scray Hill Park, Town Hall, Ledgeview Golf Course and the future Monroe Road Neighborhood Center District. Scray Hill Park is a natural starting point. Loop additions are endless.

Areas of concern: County Road G is narrow with a limited paved shoulder and 45 mph speed limit. There are no paved shoulders on Scray Hill Road east of Scray Hill Park and the speed limit increases to 45 mph.

Future Opportunities: The addition of a pathway from Oak Ridge Court to Scray Hill Road will allow bicycle and pedestrian access to Scray Hill Road, eliminating the need to travel on a portion of Country Road G. When County Road G and Scray Hill Road are improved, appropriate bicycle accommodations should be included.

Loop Name: Money Maker Loop

Location: County Road G, Whisper Lane, Scray Hill Road, County Road V, Maple Ridge Drive, Euro Lane, Half Crown Run, Dollar Road, Dollar Lane

Distance: 5.6 miles

Skill level: Intermediate/advanced

Elevation Change: 213'

Characteristics: The Money Maker Loop is relatively flat with some minor climbs and downhills while traveling through quiet residential subdivisions, and along collector streets and unimproved county roads. Narrow paved shoulders, wide travel lanes and gravel shoulders are all experienced on this loop. The loop provides access to Town Hall, and residential subdivisions. The future Dollar Park is a natural starting point. An alternate route is Meadow Sound Drive to the new path connecting to Euro Lane.

Areas of concern: County Road G is narrow with a limited paved shoulder and 45 mph speed limit. There are no paved shoulders and a 45 mph speed limit on Scray Hill Road and Country Road V.

Future Opportunities: When County Road G, Scray Hill Road and County Road V are improved, appropriate bicycle accommodations should be included. The planned connection from Dollar Road to Dallas Lane will allow for loop extension to the west on residential streets and keep users off County Road G. The planned road connections on Dollar Road, Copper Lane and Silver Lane will allow for loop extension to the east on residential streets and require users to only cross County Road V and not travel along it.

Loop Name: Dairy Aire Loop

Location: County Road MM, Elmwood Road, Shadow Lane, County Road R, Stagecoach Road, Pine Grove Road, County Road G

Distance: 8.6 miles

Skill level: Intermediate/advanced

Elevation Change: 110'

Characteristics: The Dairy Aire Loop is relatively flat traveling along quiet rural county and town roads. Narrow paved shoulders and gravel shoulders are experienced on this loop. This loop provides access to Fanferrek's Glen County Park and several future parks to the east. This is a nice rural loop with endless loop additions.

Areas of concern: County Road G and MM are narrow with limited paved shoulder and 45 mph speed limits. County Road R has paved shoulders but rumble strips are located on the shoulder making them difficult to bicycle.

Future Opportunities: When County Road MM and County Road G are improved, appropriate bicycle accommodations should be included. When Pine Grove Road is improved, appropriate bicycle accommodations should be included. County Road R should include larger shoulder and breaks in the existing rumble strip to accommodate bicyclists.

Appendix A

Ledgeview Loops Survey Results Partial Summary

Compiled by: WE BIKE, etc., LLC
(February 22, 2018)

1) General Results:

- a. **Number of respondents: 503**
- b. **Resident of Ledgeview: 71%**
- c. **Do you currently bicycle in Ledgeview? Yes 82% No 18% (499 of 503)**
- d. **Sex of respondents: Male 53% Female 47%**
- e. **Age of respondents (334 of 503 possible respondents)**
 - i. **Less than 20** 0% (2)
 - 20-29** 3% (8)
 - 30-39** 27% (90)
 - 40- 49** 39% (130)
 - 50-59** 20% (67)
 - 60-69** 10% (33)
 - 70 plus** 1% (4)
- f. **Do you have children? Yes 85% No 15% (331 of 503)**
- g. **Do you bicycle with your children? Yes 66% No 34% (332 of 503)**

2) Bicycle Experience Results (for bicyclists):

- a. **What level of bicyclists do you consider yourself? (282 of 503)**
 - i. **Beginner** - rider who prefers to stick to the bike path or trail - **18%**
 - ii. **Intermediate** - rider who is not really comfortable riding in most traffic situations – **36%**
 - iii. **Advanced** - confident rider who is comfortable riding in most traffic situations – **46%**
- b. **Why do you bicycle in Ledgeview? (284 of 503) (could select more than one answer)**
 - i. **Recreation** – 243
 - ii. **Transportation** – 61
 - iii. **Fitness** – 232
 - iv. **Other** – 17

- c. **What level of Loop would you use?** (285 of 503)
 - i. **Beginner** -14%
 - ii. **Intermediate** – 42%
 - iii. **Advanced** – 25%
 - iv. **Family** – 19%

- d. **What roads do you typically ride on in Ledgeview?** (top ten responses) (279 of 503) (could give multiple answers)
 - i. **County Highway G** - 141
 - ii. **County Highway GV** – 84
 - iii. **County Highway V** – 68
 - iv. **County Highway X** – 67
 - v. **Scray Hill Road** - 57
 - vi. **Ledgeview Road** – 53
 - vii. **Dollar Road** – 41
 - viii. **Sportsman Drive** – 39
 - ix. **Creamery Road** – 38
 - x. **Oak Ridge Circle** – 34

- e. **What is good about these roads?** (top four responses by category) (267of 503)
 - i. **Low traffic volumes/low speed** – 66
 - ii. **Hills/scenery** - 47
 - iii. **Nothing or unsafe** - 36
 - iv. **Road condition, smooth etc.** – 22

- f. **What is difficult about these roads?** (top two responses by category) (276 of 503)
 - i. **Traffic/unsafe** - 111
 - ii. **Lack of bicycle facilities (bike lanes/paths, etc.)** – 83

3) **Bicycle Experience Results** (for non-bicyclists):

- a. **Why do you not bicycle in Ledgeview?** (top three responses by category) (55 of 503)
 - i. **Lack of facilities/safety** - 25
 - ii. **No interest or bicycle** – 14
 - iii. **Traffic issues** - 5

- b. **What would it take to get you to bicycle in Ledgeview?** (top response in category) (53 of 503)
 - i. **Better Facilities** - 39

- c. **If you would bicycle in Ledgeview, where would you come from and bicycle to on your ride?** (top three responses by category) (50 of 503)
 - i. **Parks or Trails** – 16

- ii. **Friends or other neighborhoods** - 11
 - iii. **Commercial Areas** – 5
- d. **What level of Loop would you use?** – (51 of 503)
- i. **Beginner** -22%
 - ii. **Intermediate** – 31%
 - iii. **Advanced** – 4%
 - iv. **Family** – 43%
- e. **What do you feel is the major benefit to a Bicycle Loop system?** (top three responses by category) (48 of 503)
- i. **Exercise, health, connections** – 19
 - ii. **Safety** – 13
 - iii. **Economic benefit to community and businesses** – 5
- f. **In what areas of community would you like to see Loops placed?** (top three responses by category) (44 of 503)
- i. **County Roads** –13
 - ii. **West side of town** – 6
 - iii. **Dollar Lane/ Dollar Road area** –5

Appendix B

Town of Ledgeview Bicycle Loops Plan

Current and Future Origins and Destinations (February 22, 2018)

Current Origins (Residential neighborhoods)

Euro Lane (Meadow Ridge Lane Subdivision)
Copper Lane (Eagle Bluff Estates)
Winding Waters Way
Oak Ridge Circle
Angles Path
Dollar Lane (The Crossing at Dollar Creek)

Current Destinations

Parks

Ledgeview
Scray Hill
De Pere Middle School
Heritage Elementary School
Fonferek's Glen

Schools

De Pere Middle
Heritage Elementary

Trails

Fox River State Recreation Trail
East River

Municipal Facilities

Town Hall

Commercial Areas

County Roads GV and G

Future Origins (Residential neighborhoods)

Monroe Road Neighborhood Center District
Cottonwood Lane

Future Destinations

Parks

Neighborhood

Dollar Park (short term)
Van Straten Family Park (short term)
Landfill site (Brown Co.) (Long term)
Viking Lane & Swan (Long term)
Oakridge Circle and west of Scenic Way (Unity Hospice) (Long term)
Glenmore Rd. south of Main St. (US 141) (Long term)
East of Glenmore Rd. and North of Dutchman Rd. (Long term)
East end of Silver Lane (Long term)

Community

West of Elm View Rd. or south of Dutchman Rd. (CR MM) (Long term)
East of Main St. (CR. R), West of Trestle Rd. and South of Kewaunee Rd. (STH 29) (Long term)

Schools

None

Trails

High priority

Euro Lane to Meadow Sound (Date?)
Stone Silo Circle to Trumpeter Trail (Date?)
Ledgeview Rd. connection from Creamery Rd. to Winding Waters Rd. (Date?)

Other

Municipal Facilities

None

Commercial Areas

Monroe Road Neighborhood Center District

Appendix C

Ledgeview Bicycle Loops Survey

(<https://www.surveymonkey.com/results/SM-73DB6WCX8/>)