# Vision for North Beach Park

Created in May 2016 for the City of Racine

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# INTRODUCTION

## PURPOSE OF THIS REPORT

**The City of Racine approached the University of Wisconsin-Milwaukee in the winter of 2016 to initiate a planning process centered on the city's North Beach Park. The beach has become extremely popular during the summer months, and has outgrown its built structures and parking facilities. At this time, No master plan guides the park's development or management. the City has a strong desire to begin planning for the future. This project is intended to be the first step in a long-term planning process which will guide the City of Racine toward a sustainable, long-term master plan for North Beach Park. This report provides a menu of options for the park's future management, facilities, and programming, and is intended as a guidebook to start a community conversation.**

## COMMUNITY CONTEXT

The City of Racine is home to approximately 78,000 residents, with an additional 117,000 people living outside the city within Racine County. Overall, residents of the City of Racine earn much less than others in the State of Wisconsin, with a household median income approximately $13,000 below the state average. This also translates into a higher poverty rate, with about 22% of the city's residents below the poverty line, compared to the state of Wisconsin which has a poverty rate of 13%. The City of Racine also has lower educational attainment rates than the State of Wisconsin overall, and its residents are more likely to speak a language other than English.

Children in the Racine Unified School District are much less likely than their statewide peers to score well on Wisconsin's standardized achievement tests. This gap tends to grow as children grow older. For instance, in 2014, 64% of Racine fourth-graders scored advanced or proficient in science, compared to a statewide average of 76%, a difference of 12%. By tenth grade, only 56% of Racine students scored advanced or proficient, compared to 73% of statewide students, a difference of 17%.

This highlights the need for additional educational programming options to engage children in interactive learning options.

In 2012, several local health care organizations, along with the City of Racine Public Health Department, commissioned a Racine City Community Health Survey. This survey helped gather detailed information on the behavioral and lifestyle characteristics of Racine residents.

According to the 2012 health survey, 45% percent of adults reported getting the recommended amount of physical activity each week, with respondents between 18 to 54 years being more likely to report. Older adults (age 55 and older) were less likely to meet the recommended amount of weekly physical activity, along with those with a high school or less education.

Additionally, 72% of respondents were classified as overweight, with adults 35 to 44 years old more likely to be classified as overweight. This is a statistical increase from the number of overweight adults in 2003, and higher than the U.S. average of 64%.

As reported by adult survey respondents, only 59% of Racine's children receive the recommended amount of physical activity each week (60 minutes per day, 5 or more days per week).

The fact that most Racine residents are not getting the recommended exercise, coupled with Racine's low median income, highlights the need for free or low-cost exercise options.

The North Beach neighborhood, defined as three census tracts comprising an area approximately ½ mile surrounding the beach, is home to approximately 12,000 people. The residents in this area are younger than the city overall, with almost one-third of the residents being below of the age of 18.

Though the median incomes in the neighborhood are on par with the overall city, residents of this neighborhood are also more likely to live below the poverty line, including approximately 42% of children. Adult residents are also less likely to have obtained a high school education, approximately 81% of

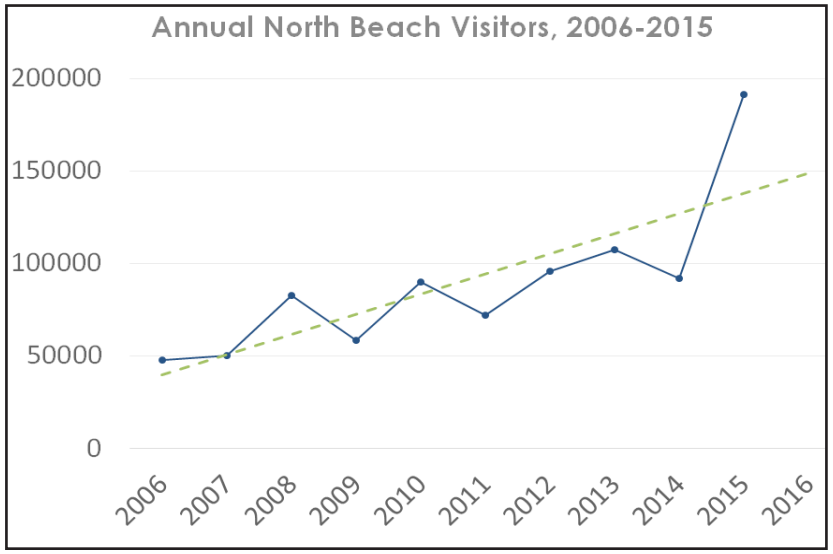
the population, in addition to likely speaking a language other than English within the home.

As a multi-cultural neighborhood, future programming and signage within the park should be offered in both English and Spanish – Racine's second-most common language. Doing this will foster a more welcoming space for individuals of all income and educational levels and creates a more inclusive, community.

## NORTH BEACH PARK BACKGROUND

North Beach has grown rapidly in popularity in the last several years, and is currently regarded as the crown jewel of the City of Racine's recreation system. In 2015, the beach saw just under 200,000 visitors, up from 92,000 in 2014 and 107,000 in 2013. If recent trends continue, the City of Racine expects the beach to attract around 150,000 visitors in 2016, all during the months of June, July and August.

The beach's highest visitation day in 2015 (July 5) drew over 11,000 people, though the average across the season was approximately 2,100. Visitation in July far exceeds the months of June and August, with approximately 3,700 daily visitors in July 2015, compared to only 500 in June and 1,900 in August.




Source: City of Racine North Beach Bather Counts

Sunday is also the beach's busiest day, drawing almost twice as many average visitors in 2015 than on Friday and Saturday, the next most popular days. *(See Appendix, pg. 77)*

During the summer's busiest days, the park's 350 parking spaces fill up quickly, causing spillover into the surrounding neighborhoods and confusion about how to access the park. Signage to direct visitors to the waterfront is currently lacking, with no wayfinding signs along the highway or in the downtown area.

While the city has several under utilized downtown parking structures, they are about a 17-minute walk from the south end of the beach. This missing link poses a problem, as the city would like to have beach users filter into the downtown shops and restaurants. Access to the water for those with disabilities is not as functional as it could be, and the park's ingress and egress can be challenging for even the able-bodied.

The number of beach advisories per year due to high bacteria levels has decreased drastically due to stormwater infrastructure improvements, but beach advisories are still in effect for approximately 6% of the season. Additionally, as the beach has grown in popularity, the protective dunes surrounding the beach have suffered from foot traffic. The City is looking for a way to better protect the natural environment surrounding the beach, including 17 acres of restored coastal habitat, and further improve on the local water quality.

The City of Racine also desires a more effective communication and partnership strategy to reach a variety of audiences. Recent surveys show that the City's communication of health warnings and beach information does not effectively reach its target audience despite signage on the beach and similar information on multiple city webpages. Additionally, the City is interested in bolstering its environmental education efforts, both in partnership efforts with the local schools, and in programming to reach beach visitors.

Finally, the City is looking to explore possibilities to improve on the beach's overall design and appeal to the public, including possible amenity improvements. Due to the beach's popularity, beach facilities are augmented by mobile toilets during the busiest weekends, highlighting the need for improvements. Updated facilities, such as a new bathhouse and multi-use space, could have an immediate and lasting impact on the beach-going experience and transform the beach into a community resource instead of a one-day destination.

Downtown Racine
Marina & Yacht Club

Above: North Beach Park, situated about 1 mile north of downtown Racine, features 2,500 feet of Lake Michigan coastline.

## PROJECT AREA

North Beach Park is a 49-acre park just north of downtown Racine. It features 2,500 feet of sandy shoreline on Lake Michigan and the following major features:

- **Park Beach House: Offers concessions and the park's only bath and shower facilities**
- **Kids Cove Playground: Popular recreational facility for children, as well as a "tot lot" for children under age five**
- **The Gazebo: Open-air pavilion capable of hosting community events**
- **Coastal Sand Dunes: Natural and engineered environmental features**
- **Stormwater Retention and Outfall Features: These have helped reduce the number of beach closures due to discharges of polluted stormwater**
- **Parking: Space is available for approximately 350 cars within three designated parking lots and along Hoffert Drive**

Above: A map generalizing the study area and showing points of interest.

# PLANNING APPROACH

In order to address all aspects of a very broad problem, the planning team divided the analysis into four park elements to ensure the City's concerns were addressed with equal weight. The report is subdivided into sections addressing each of the four park elements – Access & Connectivity; Design & Amenities; Environmental Stewardship; and Operations and Programming. Each section provides a brief analysis of existing conditions followed by plan recommendations and relevant case studies that present how other communities have implemented similar recommendations.

Above: The North Beach Park Beach House provides concessions, bath and shower facilities, and is the park's only enclosed structure. The facilities are inadequate to serve the beach's highest visitation days. (Photo Credit: UW-Milwaukee Project Team)

## Access & Connectivity

This section focuses on improving access to the beach, both from within the park and the surrounding neighborhood. This includes an analysis of the parking conditions, the park's connectivity with Racine's downtown, access for those of limited mobility, and methods for strengthening access while preserving the coastal environment.

## Design & Amenities

This section focuses on improving the park's built structures and amenities, including the Park's beach house. This includes recommendations of what types of amenities might be included in an expanded beach house, improvements that will supplement services for high-visitation days, and other facilities requested by the community that improve the overall park experience.

## Environmental Stewardship

This section focuses on ways to protect the park's natural environment while providing enhanced recreational opportunities. This includes a review of the current stormwater management features with recommendations on ways to balance the beach's stormwater management needs with the park's growing popularity. Each of the proposed recommendations also provides an opportunity to expand environmental education at North Beach Park.

## Operations & Programming

This section focuses on ways to improve the beach's utility as a year-round community resource while minimizing the operational impacts on City departments. This includes an analysis of the community's public health needs, and recommendations for expanding programming options through community partnerships.

# GUIDING OBJECTIVES

In order to develop and analyze the plan's recommendations, a set of goals and objectives were created for each focus area. These goals and objectives were used as one important factor during the analysis of the project's alternatives to ensure that recommendations kept sight of the project's original intent.

Other important considerations in selecting the plan's final recommendations included feedback received during the public input session, in addition to the technical and fiscal implications of each individual recommendation.

## Access & Connectivity

*Goal: The plan will improve connectivity and access between the beach and other local destinations.*

### Objectives

1. Create logical connections to additional/overflow parking for days with very high usage.

2. Improve connectivity between adjacent parking and beach amenities.

3. Improve connectivity between existing and proposed beach amenities including improved handicapped access to the water.

## Design & Amenities

*Goal: The plan will maximize the beach's community utility through innovative design.*

### Objectives

1. Craft an inspiring and environmentally-friendly park design that brings the public to the waterfront.

2. Provide adequate built facilities for high visitation days.

3. Ensure the scale and design of North Beach amenities reflect the community's character.

## Environmental Stewardship

*Goal: The plan will protect and enhance the surrounding restored coastal habitat.*

### Objectives

1. Educate the public on coastal habitat, stormwater management infrastructure, and water quality issues.

2. Improve local coastal habitat and continue to preserve pristine water quality.

## Operations & Programming

*Goal: The plan will develop the beach as a community education and wellness resource.*

### Objectives

1. Design effective all-season outdoor recreation opportunities to provide a healthy exercise alternative.

2. Provide programming alternatives to summer beach activities to activate the beach during the non-peak season.

3. Establish educational opportunities for children.

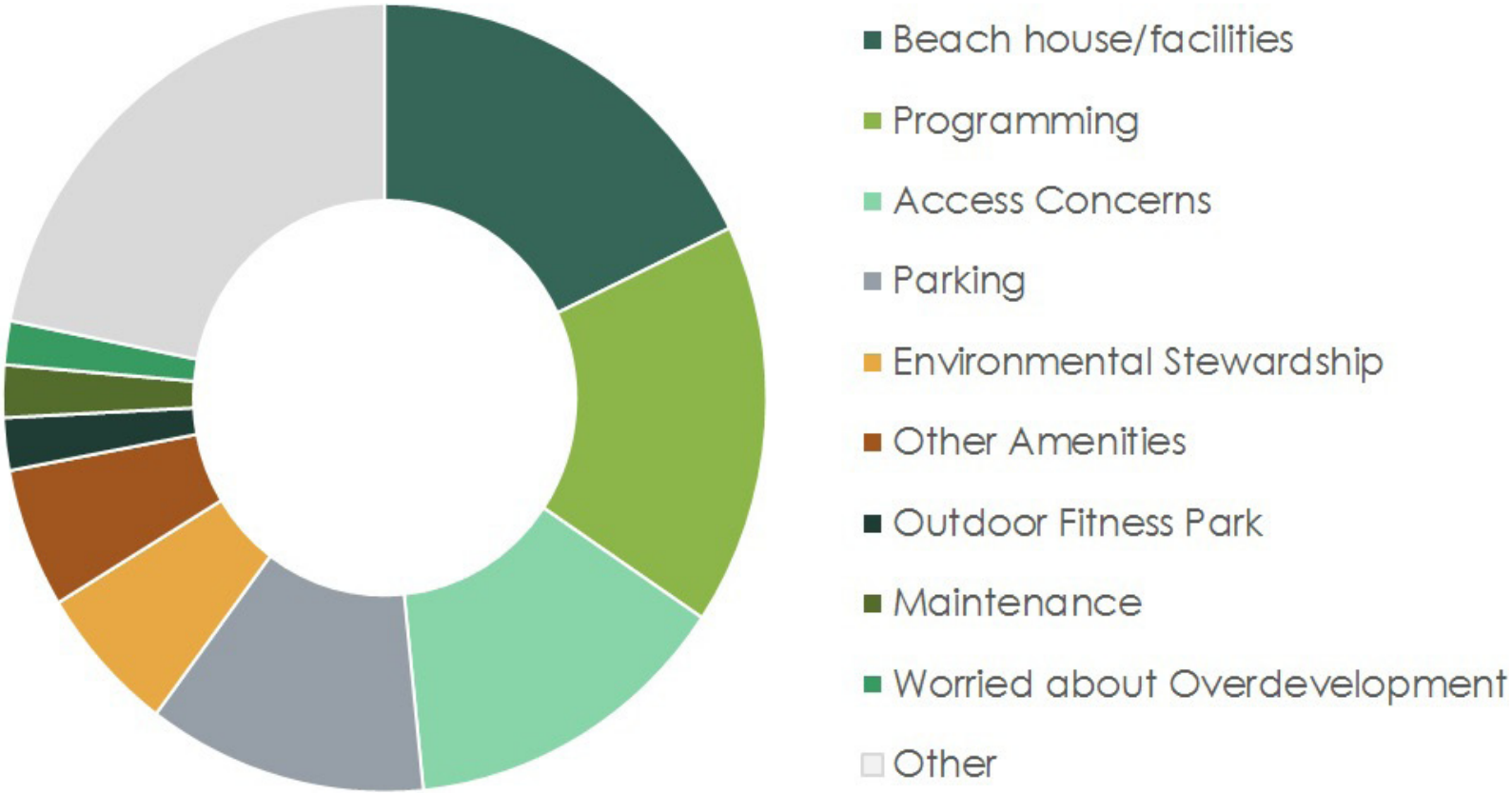
# PUBLIC INVOLVEMENT

A public input session was held on March 21, 2016 to solicit feedback from members of the Racine Community on future development of North Beach Park. The community was encouraged to share their concerns about the beach and provide feedback on the goals outlined early in the planning process.

The event included a short presentation on challenges facing North Beach Park, the planning process, and possible solutions drawn from other parks to encourage community discussion. An open-house style forum followed, with attendees free to view display boards providing information and ideas designed to solicit feedback and chat with members of the planning team and City staff members.

Over sixty members of the community attended the event, and it is clear that the Racine Community cares deeply about North Beach. Their written comments provide a snapshot of the community's priorities. The comments were grouped into broad categories (*shown below*) to aid a systematic analysis, as well as catalogued individually to ensure each individual's opinion was brought into the process.

A brief breakdown of each subject area along with their implications are summarized and discussed in pages 15 - 16.



## Beach House/Facilities

Almost all agreed that the current bath house needed major updating or needed to be replaced. Most were in agreement a future structure should update the facilities to a modern standard, while also possibly providing additional space for community events.

*A future beach house reconstruction would be well-received by the community, and should include additional community space. However, small updates in the interim, such as rinse showers, may relieve pressure while fundraising efforts help defer the community's cost concerns.*

## Programming

Roughly 80% of those who commented about the beach's programming needs believed the park needed more programming options, including equipment rentals, educational and athletic programming, and music. Many wanted to see the continuation of activities into the winter season.

A minority of commentaries did not want to see additional programming at the park, wishing that it remain a more natural space.

*Efforts to activate the beach with programming will need to strike a balance. Success will likely mean reserving a few days per week as "activity-free," or designating the north section of the beach as a more natural area without development and programming.*

## Access

The community's concerns centered on improving access to the water, park pathways, and extending park access through winter months. Many wanted to see additional Mobi-mats® or other ADA access installed, while others focused on the topic of improving the existing walkways.

*Boardwalks through the dunes, or other improved walkways around the beach would be a welcomed addition. The city should maintain park walkways and roads throughout the winter to allow for winter access.*

At Right: The public involvement session held on March 21, 2016 at Memorial Hall in Racine. (Photo Credit: UW-Milwaukee Project Team)

## Parking

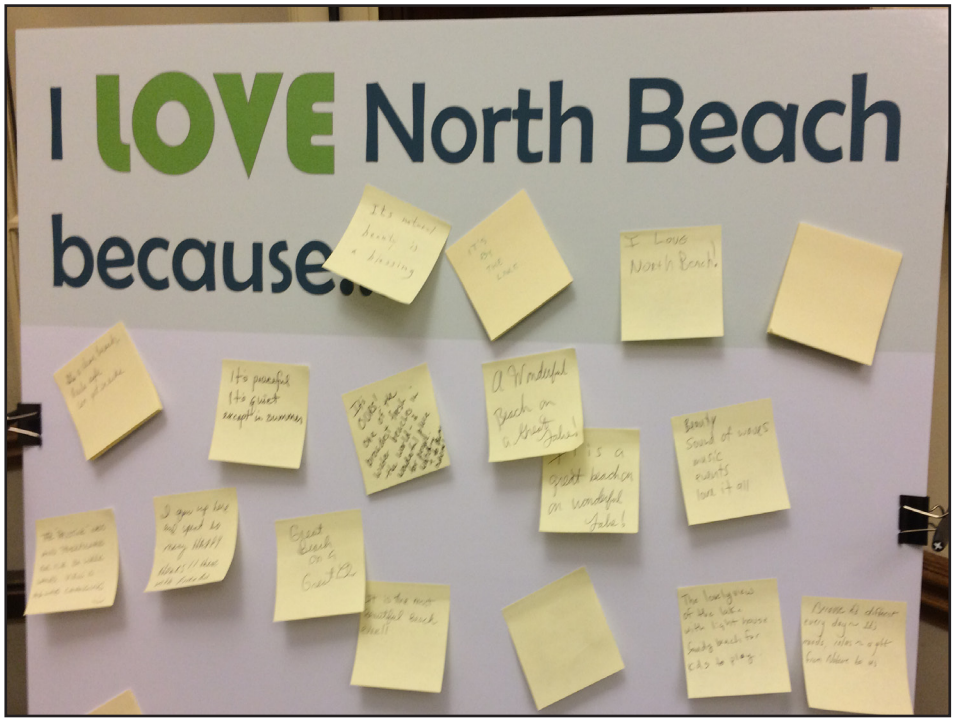
Most are in agreement that North Beach needs additional parking to serve its busiest days. The community also agrees the beach and parking should remain free. However, the community was divided on whether they would support a shuttle to remote parking sites as a solution to the park's parking challenges.

*The community would likely support additional parking, as long as it doesn't take away from park green space. Additional public input from beach visitors is likely necessary to determine the viability of a remote parking shuttle.*

## Environmental Stewardship

Community members who expressed concern about the park's environment wished to see existing environmental features on the beach preserved and maintained, and to see areas of the beach remain natural. Some also provided ideas for ways to incorporate environmental education into the beach experience.

*Though efforts are currently under way to protect the natural environment, the public is generally unaware of them. Elements such as interpretive boardwalks and rain gardens with educational signage would likely be well-received.*




## Other Amenities

Attendees were split about the prospect of an outdoor fitness zone at the park, but brought forward many other ideas for additional amenities to serve the park, including additional picnic tables and sheltered space.

*Additional public input may be needed on the idea of an outdoor fitness zone. However, likely additions that would be well-utilized include a covered picnic shelter, additional picnic tables, and grills.*

## Enforcement and Maintenance

Another common concern was the maintenance and enforcement of current beach amenities, including ensuring dogs were not allowed on the beach, and providing enough trash cans.

*An educational campaign may be necessary to let the community know why dogs are not allowed at North Beach Park, while the placement of additional trash cans and recycling facilities should be evaluated during busy days.*

# IMPLEMENTATION TIMELINE

The following sections of the report recommend a series of changes and improvements to North Beach Park. Most of these recommendations will require the City of Racine to put forth a considerable financial or time investment to implement. Therefore, the recommendations are categorized into three phases to allow the City to implement each part as resources become available. Phasing for the recommendations can be found in the *Appendix* (*pg 73 - 75*).

## Short-Term Recommendations: 1-2 years

Short-term recommendations are those which can be feasibly implemented by summer of 2018. Most require minimal financial investment and can rely strongly on similar programs as examples to ease implementation. Additionally, some recommendations may aid in the implementation of mid to long-term recommendations. For instance, the Friends of North Beach group can provide a base of volunteers for the future Nature Center, and upgrading the park's website can improve communication about future projects or events.

## Mid-Term Recommendations: 5 years

Mid-term recommendations are those which may be completed within five years. Many of these require a more substantial financial investment, and therefore will require a longer-term look at the city's resources. Additionally, some of these recommendations will require coordination between multiple city departments, such as closing Hoffert Drive and creating a policy for contracted recreation. These types of complications have the ability to slow the implementation process, but are feasible to accomplish within a few years.

## Long-Term recommendations: 10+ years

Long-term recommendations are the most complicated, and require significant coordination and financial commitment from the City. They have the ability to transform the North Beach Park experience and that of the surrounding community. Though the City of Racine may not be able to begin construction on a new beach house for several years, planning efforts should begin now. This will ensure that all members of the community have a voice in how the new community space and nature center take place, as well as how they are financed.

## PLAN RECOMMENDATIONS — OVERVIEW

### Short Term

- Parking Shuttle
- Rain Gardens
- Native Landscaping
- Picnic Amenities
- Online Presence
- Friends of North Beach Park

### Mid Term

- Wayfinding Signage
- Boardwalk System
- Hoffert Drive
- Outdoor Rinse Showers
- Fitness Park
- Contracted Recreation

### Long Term

- Pedestrian Improvements
- Bike Share
- Biofiltration Devices
- Permeable Pavement
- Nature Center
- Oasis Beach House

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# ACCESS & CONNECTIVITY

## *I LOVE NORTH BEACH BECAUSE...*

*"THE THING I LIKE ABOUT OUR BEACH IS THAT ALL BEACH-GOERS, I FEEL, ARE ON EQUAL GROUND. YOUNG AND OLD, RICH, POOR AND ALL ETHNIC CULTURES ARE ENJOYING OUR WONDERFUL BEACH."*

Above: The Lake Michigan Pathway running along the Racine Zoological Gardens.
(Photo Credit: UW-Milwaukee Project Team)

# EXISTING CONDITIONS

## Location

As with the city as a whole, North Beach is a considerable distance from the nearest interstate. Visitors from outside of the city or county will likely exit I-94 on either Highway 38 or Highway 20, but still have to drive another 15 minutes before they reach North Beach Park. Currently, no wayfinding signage guides visitors to the beach from outside the City of Racine. The only sign directing visitors to the beach is a small, easily-missed sign on Main Street, approximately 2 blocks from the park itself.

The beach is located about 6 to 8 blocks north of Downtown Racine, just across the Root River. Currently, most visitors access the park by vehicle. There are about 350 spots available in three separate parking lots adjacent to the park, plus room for approximately an additional 100 cars in street parking along Hoffert Drive. Most of the neighborhood streets surrounding the beach also offer unrestricted parking, and it is common for vehicles to park in the neighborhood during the season's busiest days. Approximately 225 street parking spaces are available within a five-minute walk of the beach house, making for an approximate total of 575 spaces.

## Parking

In 2014, a comprehensive survey of North Beach visitors revealed that the average size of a visiting group was 5 people. The City of Racine's census of visitors from 2015 places the average number of visitors over the 2015 season at 2,100. Therefore, on an average visitation day, the average visitor group size would mean approximately 415 cars visiting the beach. While this is more than the available 350 parking spots, it is not a major deficiency if visitors come and go throughout the day.

On the 2015 season's highest visitation day (11,500 visitors), the average visitor group size would mean approximately 2,300 cars traveling to the beach at some point within the day. Many of these visitors would likely be accommodated by on-street parking, putting a strain on the surrounding residential neighborhood. Days of this magnitude are currently rare, but may happen more frequently as the beach continues to increase in popularity.

## Access in the Park

After parking, accessing the water can present additional problems. From the two southern-most parking lots, access to the beach is blocked by large natural dunes with no well-defined path around them. This leads many people to walk over the crucial environmental features, endangering their ability to protect the nearby bathing waters of North Beach.

The beach is separated from the neighborhood by a large bluff that one must descend to gain access to the beach and water. Pedestrian pathways currently traverse this bluff at Hoffert Drive, Kewaunee Street, High Street, and Barker Street, along with a set of stairs at Goold Street that provides access to the Zoo Beach.

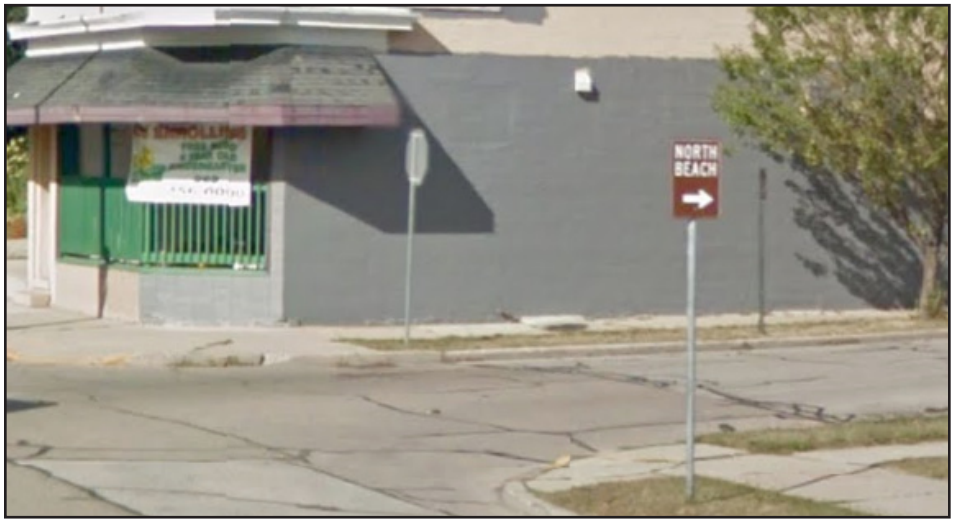
A Mobi-mat® currently provides the only ADA-compliant access to the water's edge, and is a popular choice for all beach-goers to traverse the long stretch of sand. Other pathways within the beach include the Lake Michigan Pathway, which runs along the sand's western edge and has stairs at infrequent intervals, and a ramp from the beach house.

The park is served by routes 2, 4, and 5 of the Belle Urban System. Service is infrequent, with only route 4 operating on the weekend at 60 minute intervals – the beach's busiest days. This significantly impedes the ability of beach visitors to use local transit options to access the beach.

The beach is also accessible by bicycle via the Lake Michigan Pathway, which passes through the park and forms the western edge of the beach. This multi-use pathway connects visitors to the Racine Zoo and residential neighborhoods to the north of the park, as well as downtown Racine to the south. Limited bike parking is available in the park, and the path functions as the park's main north-south corridor. This can sometimes impede bicyclists looking to travel through the park as visitors gather on the path.

Currently, the City of Racine does not maintain access to North Beach Park in the winter. Park pathways, parking lots, and stairs are not plowed or shoveled. In most cases barricades are not erected to keep community members from entering during winter months.

Above: One of two Belle Urban System (BUS) stops along Michigan Boulevard. (Photo Credit: Stephan Kurdas)




Above: The City of Racine's sole wayfinding sign directing visitors to North Beach, as viewed on the corner of Main Street and Barker Street. (Photo Credit: Google Maps)

Above: Shows the existing parking and transit access within a 5-minute walk of the park.

## Existing Access Highlights

- 352 designated spaces within the park
- 225 street parking spaces within five minute walk of the beach house
- Boardwalk to connect the Kids Cove and beach house
- Multi-use trail connecting the Racine Zoo and North Beach
- Two bus stops (Saturday service only)

## Implications for Planning

The beach's location makes walking there difficult, especially for large groups carrying supplies and escorting children. Since service on the Belle Urban System is infrequent, most visitors will continue to drive. This increases the importance of wayfinding signage.

Ensuring that overflow parking does not become an undue burden on the surrounding neighborhood as usage increases will be a key objective.

Finally, connections between parking, pathways, and the water should be located and designed to encourage their use and minimize negative impacts on the natural environment.

# ACCESS & CONNECTIVITY

## Recommendations

# PARKING SHUTTLE

## Short-Term Recommendation

The City of Racine should establish several remote parking areas to handle overflow parking generated on the busiest days. These would be located at the Zoo parking lot off of Wisconsin Avenue and Goold Street, the Shoop parking structure, the parking structure on Gas Light Circle, and the parking structure at Lake Avenue and 4th Street. Signs posted at the beach and notifications online would direct people to designated overflow lots at the Zoo and Downtown on days when park officials anticipate the need. As these days occur occasionally, the city could contract a shuttle service to provide reliable, dedicated transportation between overflow parking and the park.

Above: A beach shuttle used in Cannon Beach.(Photo Credit: George Vetter, Cannon-Beach.net)

The shuttle would stop at the four designated parking areas, Goold and Main Streets with additional flagged stops along Michigan Boulevard (*See Shuttle Route Diagram, pg. 26*). This route would take about 15 minutes to complete, therefore one shuttle could provide half hour service or two shuttles could provide relatively reasonable 15-minute service. Coupling this service with existing public transit would offer greater flexibility to residents and visitors on busy days.

Residents at the public input session expressed interest in a shuttle service between the beach and Downtown, but the local density and transit usage suggest it may not be regularly feasible. However, as the days which demand remote parking occur during scheduled special events, a contracted shuttle service could be employed to provide a flexible and scalable solution. For example, a private contractor could provide two, 35 person capacity, shuttles at a cost of about $3,000 per day. This would require booking the service several weeks in advance as well as staff to monitor the performance.

A shuttle service has been tried in the past and was cancelled due to low ridership. Since that time, beach attendance has increased significantly which, if combined with free fare, could attract enough riders to justify the cost. However, there is enough parking between the three parking lots and street parking to meet demand on all, except heavily attended days. Therefore, if the city wants to pursue a regularly scheduled shuttle service it should explore grants and contributions from the Downtown Business Improvement District (BID) to augment the cost.

### Benefits

- Flexible to provide service when demand is highest
- Provides dedicated connections to downtown and zoo
- Cheaper than expanding parking

### Drawbacks

- Limited service due to event based demand
- Unknown ridership

Above: Proposed parking shuttle route from North Beach Park to Racine's Downtown.

## Community Feedback:

"I would like to see the return of the trolley – that may also help with the parking."

"A shuttle for parking would be better, and cheaper, during peak times than expanding parking north of the Oasis."

## Parking Shuttle Route

The proposed parking shuttle route, blue line, for high visitation days is shown above. This route provides a connection between the Racine Zoo, North Beach Park, and Downtown. It provides direct access to Racine's four largest downtown parking structures, and would take an estimated 15 minutes to complete when employing two shuttles. A more thorough analysis and additional public input will be necessary to determine if the proposed route will meet the needs of its user groups.

# CASE STUDY

## Delray Beach Parking Shuttle

The City of Delray Beach Florida has been offering shuttle service between their Tri-Rail station and the municipal beach for over five years. While Delray Beach is a modestly denser community, it shares many characteristics with Racine. Delray Beach is a town of about 65,000 located about 25 minutes south of West Palm Beach and an hour and fifteen minutes north of Miami. Like Racine, Delray Beach's municipal beach is located about a twenty-minute walk from their downtown and requires diverting to a main street to cross a bridge.

Delray Beach offers the free shuttle service seven days a week from 6am to 11pm. The free shuttle service started in 2013 with a total of three distinct trolley designs that distinguish the service. The capital for the new buses was met with a combination of state DOT grants and a $550,000 grant from the Delray Beach Community Redevelopment Agency. The South Florida Regional Transit Authority also provides $75,000 a year to offset operational expenses.

Above: An informational flyer on the shuttle service. (Photo Credit: City of Delray Beach)

Above: The Delray Shuttle brings beach visitors from remote parking areas to the beach. At left: An informational flyer on the service. (Photo Credit: The Examiner)

The shuttle service has about 650 riders every day, with annual ridership close to 250,000. This puts the average cost per rider at well under $1, which is substantially below industry standards.

While Racine has substantially more parking available at the beach and offers free parking on the surrounding streets, a seasonal shuttle service may still be a viable option in the future, particularly if a commuter rail system between Kenosha and Milwaukee is realized. However, unlike previous attempts, this service should be provided at no cost with the city exploring state and federal grants as well as business partnerships to minimize up-front or long-term fiscal impacts. In the interim, the city could use ridership levels of the recommended remote parking shuttle as an indicator for considering a season long service.

# CLOSE A PORTION OF HOFFERT DRIVE

## Mid-Term Recommendation

In order improve traffic flow in the park and decrease conflicts between beach visitors and vehicles, the City of Racine should alter traffic flow of Hoffert Drive to create two entrances and exits to the park. This recommendation also incorporates a proposal to increase the number of parking stalls in phases following the closure and as resources become available.

The first entrance would be the existing entrance at the intersection of Hoffert Drive and Barker Street. This would provide access to the parks two southern parking lots. The first parking lot would remain unchanged, while the northern parking lot (nearest the beach house) would be expanded west to include one additional row of parking in the Hoffert Drive right-of-way. Vehicles would enter and exit the lot at the south end and loop back along Hoffert Drive to exit on Barker street (*See Hoffert Drive Closure Diagram, pg. 29* ). This would provide about 30 additional spaces to the north parking lot.

The second entrance would be at the intersection of Hoffert, Michigan and English. This portion of Hoffert would be converted to two-way traffic with parallel parking remaining on the west side. The existing turnaround area at the bottom of the High Street stair case could be paved to create 110' by 110' parking area capable of accommodating approximately 56 cars. This would also slow traffic in an area where vehicles and pedestrians frequently interact.

As funds become available, the strip of parking stalls to the north and running parallel to the Lake Michigan Path could also be expanded about 15 feet to the west (into the hillside). This would provide enough room to potentially accommodate an additional 25 vehicles.

The remaining section of Hoffert Drive – south of High Street and north of the beach house parking lot – would be closed to traffic (*See Hoffert Drive Closure Diagram, pg. 29*). This would provide over 8,000 square feet of additional dedicated space for pedestrians directly adjacent to heavily used picnic areas. Using removable bollards, this space could also function as the park's event staging area to accommodate food trucks, tents, or other vendors. Dedicating this space to pedestrian use and special events reduces incidents associated with vehicles driving through a busy park, and provides a new "pedestrian plaza" area for expanded activities.

When fully implemented, added parking and traffic re-configuring for two-way traffic, this plan would provide an additional 66 parking spaces. Using removable bollards also lowers the up-front investment while providing flexibility to accommodate changing needs that might otherwise be lost with permanent bollards.

However, expanding the parking lots into the existing right of way will require time, planning, and materials. More specifically, this would require approximately 25,000 square feet new paved surface. If using concrete, costs to complete the additional paving could range anywhere between $7-11 per square foot. Additional costs such as grading into the adjacent bluff, retaining structures, and potential roadway widening would need to be considered before moving forward.

### Community Feedback:

**"Close Hoffert Drive to motorized traffic - allow pedestrian and bicycles only. Then add bike parking along Hoffert Drive."**

## Parking Access Change Phasing

Because of the large expense and significant change associated with this recommendation, the City should temporarily close off the center section of Hoffert Drive before implementing the larger parking changes. Restricting buses or similarly large vehicles to the Kid's Cove parking lot as well as notifying visitors of parking availability will be necessary to limit turnarounds in the narrow beach house parking lot. Where necessary, removable bollards can provide an exit strategy for vehicles with a large turn radius.

This will also provide time to assess the need for changes to the current right-of-way and responded to unforeseen consequences from altered traffic patterns. The city would also have an opportunity to identify and develop programming for the newly created pedestrian plaza.

Above: Proposed changes that would occur with closing of Hoffert Drive.

## Benefits

- Does not dramatically increase the amount of paved land
- Prevents people from cruising through the park
- Provides additional space for pedestrians
- Can be phased in as resources become available
- Low up-front investment for closing off portion of Hoffert Drive

## Drawbacks

- Eliminates some parking spaces on Hoffert Drive
- Potential for confusing traffic patterns for special events

Above: Proposed portion of Hoffert Drive that could be converted into a pedestrian plaza. (Photo Credit: Stephan Kurdas)

# BEACH BOARDWALK SYSTEM

## Mid-Term Recommendation

The City of Racine should install a boardwalk system to improve beach accessibility and protect the dunes that surround the beach.

Currently, the lack of a logical connection between the parking areas and the main beach area encourages visitors to find the shortest pathway, which is often to walk over dune features. This harms the important ecological features that help to keep the beach environment healthy and clean, and also makes accessing the beach more difficult.

By installing clear gateways from parking areas to a raised boardwalk system that traverses the dunes, visitors will be directed onto an attractive and clearly marked path that allows convenient beach access without diminishing the natural environment. While there is easy access from the largest parking lot to the "Kids Cove" area, direct access to the beach or it's beach house is less well defined. Park space directly east of the bike racks should be redesigned to provide a clear gateway between these destinations. This could be supplemented with an archway or additional signage that conveys a "Welcome to North Beach" message.

### Implementation

Additionally, an interpretive nature trail should be installed through the dunes to encourage people to learn about the dune's purpose and provide a way to explore them. This is important, as most members of the community reported being unaware of their purpose. After learning, some said they would no longer walk on the dunes, highlighting the importance of environmental education. Educational signage along the trail must be available in both English and Spanish, to include more members of the community.

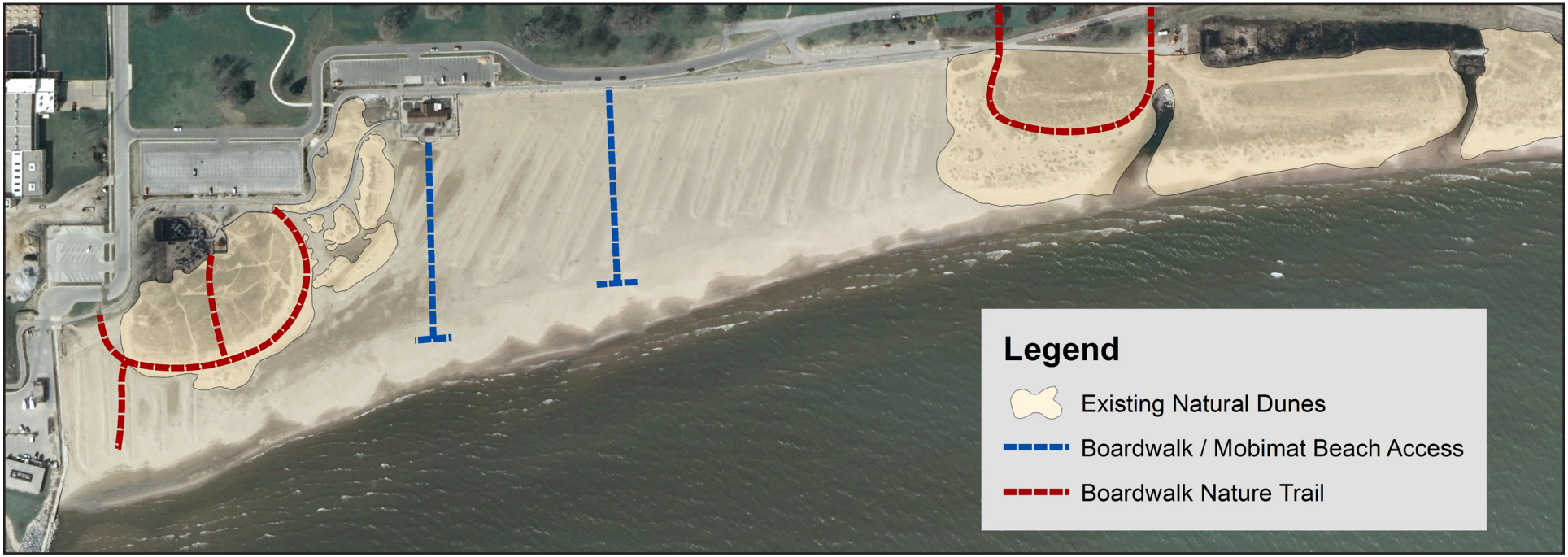
This boardwalk system will be designed to carry people between activity centers on the beach. A network of paths will link the parking lot, swim area, beach house, and Kids Cove Playground (*See Boardwalk System Diagram, pg. 31*). These would be locations of existing foot paths across the dunes which can be seen as bare paths between vegetation and indicate regular use by visitors. By providing improved access, visitors can move freely between activity centers without further encroaching on the existing dune environment.

Above: A boardwalk extending over the dunes will increase accessibility while protecting the fragile ecosystem. (Photo Credit: Konrad Wothe)

### Community Feedback:

**"(I would like to see) nature paths and boardwalks."**

**"We need a low investment boardwalk to protect the dunes and funnel people in and out of the beach."**




Above: The proposed boardwalk system, Mobi-mat® extensions and nature trails.

A second educational nature trail could be installed between North Beach and Zoo Beach with signage to educate the public about the beach's existing stormwater infrastructure features. This trail would also provide a more cohesive feel to the park by providing additional activities on the north end. The additional foot traffic can also deter less desirable activities that occur in this more secluded part of the park.

Boardwalks were heavily supported based upon feedback from the input session. They have the potential to improve both beach accessibility for handicapped visitors while also providing environmental education opportunities and reducing foot traffic on the dunes. From the end of the boardwalks, Mobi-mats® could convey visitors with disabilities the remaining 150 feet to the water's edge. The combination of boardwalk and Mobi-mat® are shown in blue in diagram above.

Boardwalks have been, and continue to be, used successfully at beaches and parks all over the country. While they require a large up-front investment and maintenance, they are a popular way of providing accessibility to all members of a community while encouraging education and preservation.

### Benefits

- Provides ADA access to the dunes
- Restricts visitor access to clearly marked areas within the dunes
- Opportunity for environmental education
- Provides connection between beach amenities

### Drawbacks

- High up-front investment
- On-going and seasonal maintenance

# WAYFINDING IMPROVEMENTS

## Mid-Term Recommendation

Currently, only one roadside sign north of downtown Racine points the way to North Beach, though it is arguably one of the city's most popular destinations. A full one-quarter of visitors reported not observing any signage during their visit to the park, and the suggestion of improving signage was brought up several times during the projects' public input session.

A full complement of wayfinding signage, placed strategically throughout the city, would improve communication for visitors as well as assist with developing the beach's image. Signage could also identify remote parking areas on days with large events, biking and walking routes to the beach.

Similar informational signage placed within the park would allow visitors at the beach to learn more about Racine's other entertainment options and link the beach to the larger community context. Prominent signs in the park would direct visitors to attractions within walking distance, such as the Racine Zoo, as well as point out downtown eateries and destinations to encourage them to make their trip to Racine a full-day event.

Any wayfinding signage positioned along state or federal highways would need to be approved by the Department of Transportation. This may make the process of implementing roadside signage longer and more costly than signage changes within the City. However, with beach visitation increasing, providing clear directions to the beach is important. The City of Racine has recently begun a wayfinding plan, and North Beach should be a consideration in that process.

Above: Examples of branded wayfinding signage to direct visitors easily to the beach. At left: An example of easy-to-use wayfinding to direct visitors to amenities within the park as well as in Downtown Racine. (Photo Credit: Stephan Kurdas)

### Benefits

- Could be incorporated within City's wayfinding plan
- Connects park with other local destinations
- Can help shape the North Beach image

### Drawbacks

- Signs could be target for vandalism
- Requires coordination with WisDOT for highway signage

# BIKE SHARE SYSTEM

## Long-Term Recommendation

Bike Share systems allow people to rent bikes for a short duration, bicycle between local destinations, and return the bikes. These systems have grown in popularity all over the country. For example, in Wisconsin, Bublr Bikes in Milwaukee has 25 existing stations with over 75 more being planned for surrounding areas. The City of Racine should consider partnering with a bike share provider to assess the feasibility of linking the park with downtown destinations.

At this point, it appears the city lacks the population density and density of destinations required to make a city-wide bike share system successful. However, changes in local development and investments in bike infrastructure may mean that a bike share system could be in the city's future. Conducting a pilot program may be one way of determining ridership while also opening dialogue on long-term or expanded bikeshare program.

Specifically, a concentrated bike share system may be viable seasonally to link the Zoo, beach and downtown. Unlike the shuttle, bike share provides on-demand service between destinations that are just outside of comfortable walking distance. Bike stations could be located at Michigan Boulevard and Kewaunee Street, Michigan Boulevard and English Street, the Zoo entrance at Goold and Main Streets, Main and State Streets, and Main and 6th Streets. The 1.5 miles between monument square and the Zoo is an ideal distance for biking (*See Bike Share Station Diagram, pg. 34*).

Stations typically cost about $45,000 and bikes cost about $1,000 each. Efforts are underway to determine the feasibility and details of a Bike Share program through the development of a Bicycle and Pedestrian Master Plan for the City of Racine . As previously mentioned, utilizing a pilot program that maximizes on population and destination densities may be advantageous for future discussion or implementation of a larger scale program.

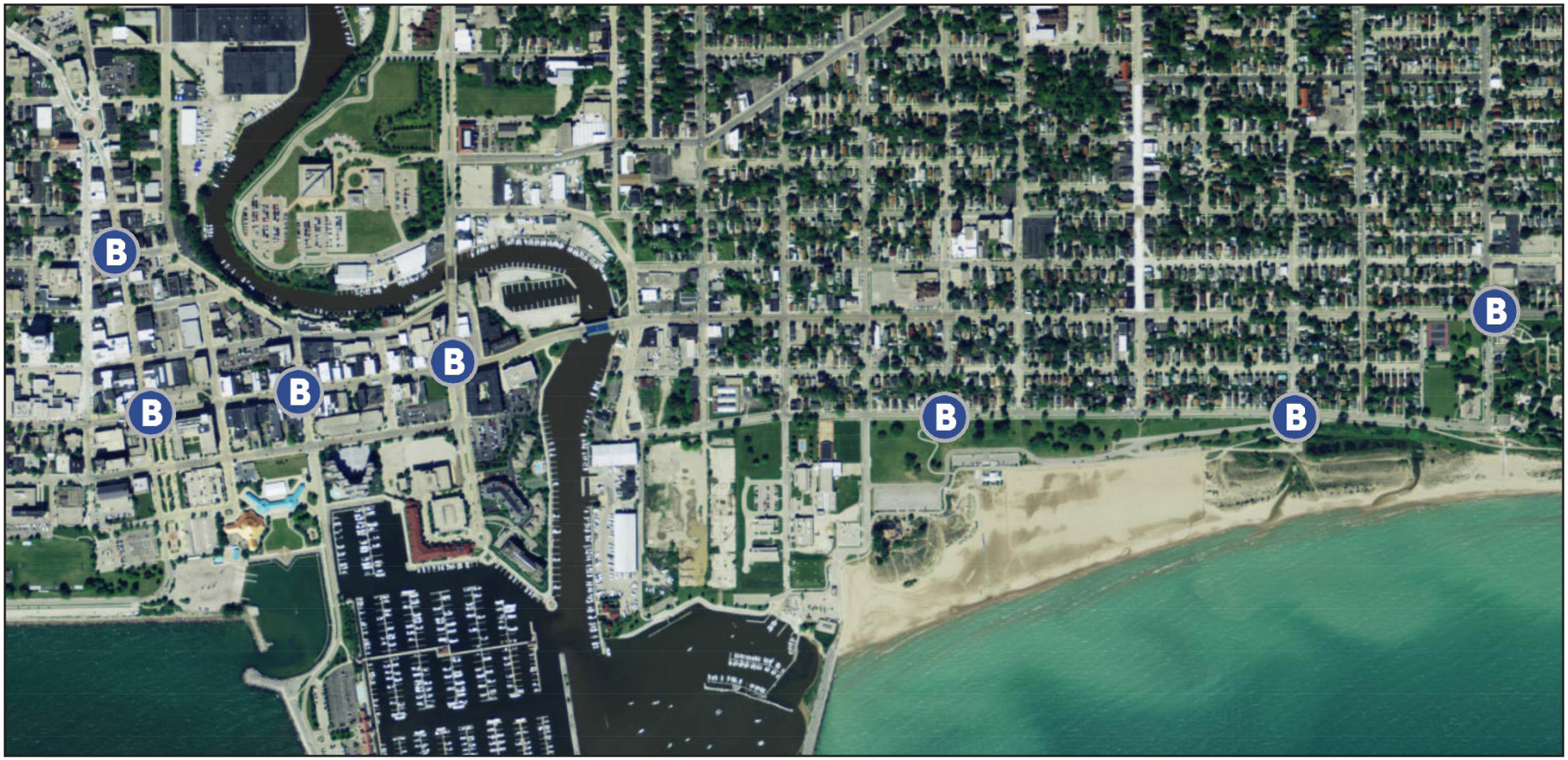
Above: An example of a bike share station by the beach in Chicago. (Photo Credit: City of Chicago)

### Benefits

- Coordinates with the Bicycle and Pedestrian Master Plan
- Supports a healthy community
- Can alleviate parking concerns
- Connects local destinations

### Drawbacks

- High up-front investment
- Need to complete feasibility study
- Requires significant community education




## Recommended Bike Share Station Locations:

- Sixth Street & Park Avenue
- Sixth Street & Main Street
- State Street & Main Street
- Kewaunee Street & Michigan Boulevard
- English Street & Michigan Boulevard
- Goold Street & Main Street

# PEDESTRIAN IMPROVEMENTS

## Long-Term Recommendation

The city should consider pedestrian improvements at the intersections of Michigan Boulevard and Kewaunee, High, and English Streets (*See Pedestrian Improvements Diagram, pg. 36*). The purpose of these improvements is to create cohesion between the park and adjacent neighborhood by way of safe and convenient connections for pedestrians.

Pedestrian improvements would include a combination of strategically placed speed tables, curb extensions, decorative pavement and landscaping. These improvements could be extended to enhance the identity of the North Beach neighborhood and encourage park patrons to explore more of the city.

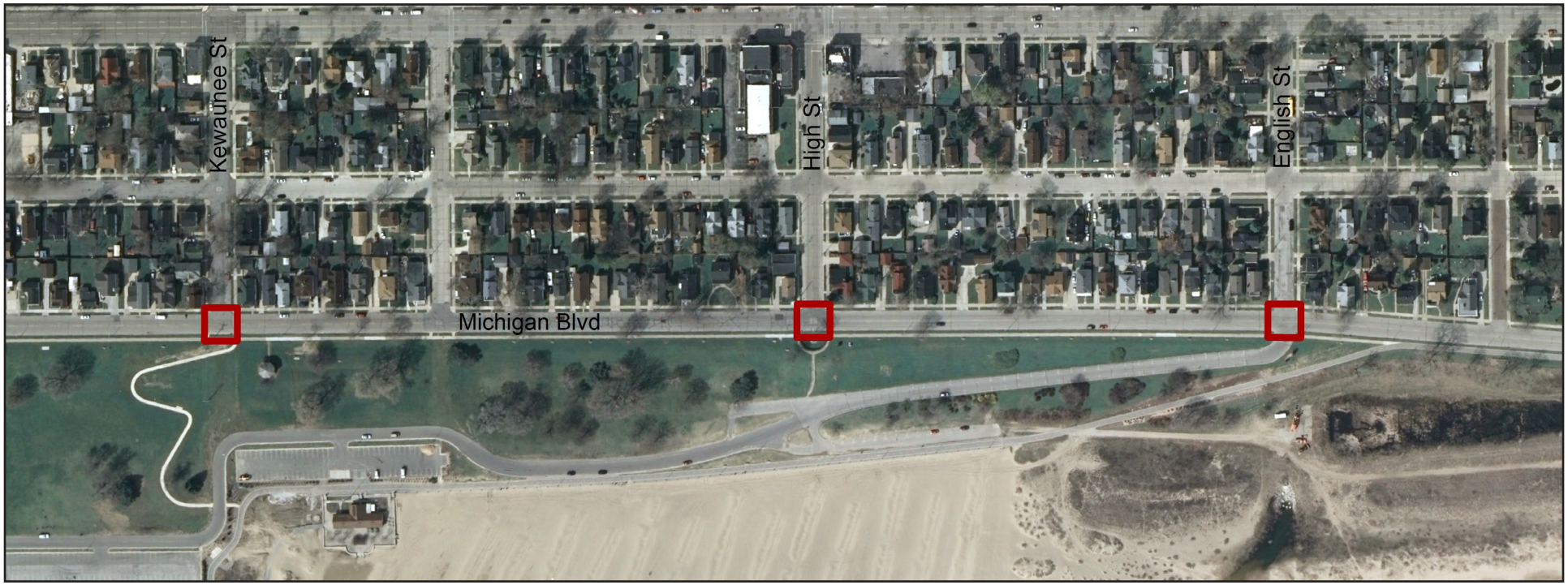
Speed tables provide a raised intersection that slows traffic and provides a more pleasant experience for pedestrians. Colored concrete can be used, to draw attention to pedestrian crossings and develop a more cohesive neighborhood identity. Placing a speed table in an entire intersection can cost upwards of $20,000.

Curb extensions decrease the crossing distance for pedestrians while slowing traffic by narrowing the street. Colored concrete or planters can be added to enhance the appearance and experience of the street for both pedestrians, bicyclists, and motorists. This treatment can be installed at two or all four corners of an intersection and typically cost about $10,000 each.

Stamped concrete can provide the look of brick pavers at a substantially lower cost. Providing the stamped concrete would also clearly mark pedestrian crossings while emulating traditional neighborhood conditions such as lower travel speeds.

Because these improvements to the streetscape require substantial planning and investment, the projects would best be coordinated with the city's street improvement schedule. As a long-term consideration, enhancing Michigan Boulevard as a gateway to the park has the opportunity to improve the experience for those parking in the surrounding neighborhood and crossing the street to access the park. In addition, this project has the opportunity to improve the overall neighborhood for full-time residents, encourage more walking, and better connect neighborhood residents with their local park.

Top: A speed table Indianapolis. Middle: A curb extension in Birmingham, MI. Bottom: A stamped concrete crosswalk in California. (Photo Credits: Yarger Engineering, NACTO, Patternedpaving.com)




Above: The intersections proposed for pedestrian improvements.

## Proposed Pedestrian Improvements

The locations of proposed pedestrian improvements, listed below, are indicated by the red squares in the diagram above.

- Michigan Boulevard & Kewaunee Street
- Michigan Boulevard & High Street
- Michigan Boulevard & English Street

### Community Feedback:

**"Keep free, easy accessibility for residents whether walking, biking or driving."**

### Benefits

- Improves neighborhood aesthetics
- Encourages park visitors to patronize nearby businesses
- Improves pedestrian safety on Michigan Boulevard
- Can be coordinated with capital improvements

### Drawbacks

- High up-front investment
- Can be challenging for transit vehicles to traverse traffic calming devices

# DESIGN & AMENITIES

## *I LOVE NORTH BEACH BECAUSE...*

*"It's different every day. It's moods and colors are a gift from nature to us."*

Above: The North Beach park gazebo sometimes hosts community events such as band concerts. (Photo Credit: City of Racine)

## EXISTING CONDITIONS

There are currently two built structures in North Beach Park – a gazebo on top of the hill near the end of Kewaunee Street, and a beach house located in the center of the park on North Beach.

The gazebo, pictured above, is an open structure approximately 25-feet across, accessible by stairs from Michigan Boulevard. It is utilized by the community for private events, and has been used in the past for community band concerts.

The beach house provides concessions, beverage sales, restrooms and changing facilities for the park. Currently, these services are provided by a third-party contractor with building maintenance remaining with the City. The structure itself is approximately 1,700 square feet, and has inadequate restroom facilities for the number of visitors it currently serves. The City currently augments the facilities with portable toilets during the height of the season, highlighting the need for expanded facilities.

Additionally, several picnic tables are provided in two areas within the park to serve visitors and community members. There are no sheltered picnic areas provided within the park. At the beach house, a handful of hammocks, several beach chairs and picnic tables are made available for dining or relaxing. Directly northeast of the beach house, a full set of beach volleyball courts are available for visitors looking for additional outdoor recreation and entertainment.

### Implications for Planning

As the beach's popularity has increased, the existing beach house has struggled to meet the operational requirements that popularity demands. Any future structure on the beach will require additional changing and restroom facilities.

# DESIGN & AMENITIES

## Recommendations

# EXPAND PICNIC AMENITIES

## Short-Term Recommendation

North Beach Park currently offers picnic tables, but feedback from the public suggests that existing facilities are inadequate to serve the number of visitors to the park during busy days. The City of Racine should provide expanded and improved picnic areas. This would include additional tables, grills, and covered shelters to meet the growing needs of the park.

These improvements would effectively continue to preserve park space treasured by the community while providing a financially feasible way for the City to improve the park experience. Additional picnic facilities are routinely requested, and since the average visitor group includes five people, it is likely that the picnic areas would see sustained use throughout the season. Finally, providing covered picnic shelters would also encourage the grounds to see continued use into the spring and fall, making this another highly effective way to activate the beach throughout the year.

### Implementation

This recommendation could be implemented in phases. For example, as a short-term option, the City could provide additional picnic tables, grills, trash and coal receptacles. In later years, a pavilion or picnic shelter could be added to bring the individual improvements and picnic area elements together. A covered shelter was strongly recommended by members of the public, especially considering those who mentioned there is no place to go in the park to get out of the rain.

### Benefits

- Low up-front investment for grills, picnic tables, trash and coal receptacles
- Will activate the beach throughout the year
- Community supported
- Could be implemented in phases

### Drawbacks

- Possible target for vandalism
- High up-front investment for covered shelter

### Community Feedback:

"Make more picnic areas and grills under big trees. Have charcoal bins for disposing with old used charcoal."

Above: An example of a park picnic area that provides much-needed shelter from the elements. (Photo Credit: Doheny Food Company)

# OUTDOOR RINSE SHOWERS

## Mid-Term Recommendation

As the popularity of North Beach has increased, it has quickly outgrown the current bathroom facilities. Currently, the beach house provides shower facilities capable of serving only a handful of people at a time and only when the building is open to the public. Public input indicated community support for a complete redesign or at least an expansion of the current beach house.

While community support exists, a full redesign or expansion will take considerable time and resources to implement. As such, installing outdoor rinse showers will supplement existing beach house amenities. Providing outdoor showers would allow visitors to rinse off before directly leaving for their vehicles. Where beach usage is heavy and full service facilities limited, rinse showers are an effective method of reducing the need to access bathroom facilities.

Though installation may still require a sizeable investment, implementation will help support the longer planning process required for an new or expanded beach house. Finally, their public nature also means that people spend less time using them, thus serving more people and furthering the City's sustainable image for the park.

As a more feasible short-term investment, outdoor rinse showers can significantly improve the beach-going experience and signal to visitors that the City is making efforts toward a larger goal.

### Benefits

- Lower up-front investment than a full reconstruction
- Interim investment before upgrading full beach house

### Drawbacks

- Requires on-going maintenance
- Added utility fees
- Requires expanding into naturalized park space
- Requires small educational campaign and signage

Above: Beach-goers rinse off at San Clemente Beach in Santa Cruz, CA. (Photo Credit: Benjamin Brayfield KPCC)

Above: A family friendly public rinse shower station at Clearwater Beach, Florida. (Photo Credit: Stephan Kurdas.)

# OUTDOOR FITNESS ZONE

## Mid-Term Recommendation

As healthy lifestyles continue to be at the forefront of local health initiatives, the City of Racine should install a fitness zone at North Beach Park, near the beach house to meet the community's need for additional fitness opportunities.

This free exercise equipment can be utilized by both adults and children, and could help provide a fitness opportunity for Racine residents who are not getting the recommended amount of exercise. The exercise area would promote a healthy lifestyle while signage and regular programming would educate the public on correct workout techniques and practices.

The proposed North Beach fitness zone would also provide year-round activity for the beach, which is currently only activated during the summer months. Though usage at a fitness zone does decline during the winter months, where implemented, officials have noticed residents continue to utilize equipment during the spring and fall. Additionally, about half the attendees of the public input meeting expressed interest in the exercise equipment and would support their installation.

### Benefits

- Year-round activation and recreational benefits
- Usable by all ages and abilities
- Up-front cost can be fundraised
- Helps fulfill community need for fitness opportunities

### Drawbacks

- Develops portion of the park's open expanse
- Could be target for vandalism
- Questionable use during winter months

### Community Feedback:

"I love the idea of an outdoor fitness park. We've seen them in many communities and they get lots of use."

As with any physical improvements, a new fitness park would be a potential target for vandalism. Where residents take ownership of the equipment and use it consistently, the opportunity for vandalism can be minimized. Creating a fitness zone would provide yet another tangible improvement for residents to see that the City of Racine is dedicated to enhancing North Beach Park.

The biggest objection was the large up-front cost to the city that would not be recouped by fees as a result of the equipment and zone's intent. A man-made structure of this size and magnitude would also intrude on the natural landscape of North Beach Park and several citizens had raised this concern. However, the benefits of providing additional recreational opportunities likely outweigh the costs of developing a relatively small portion of the park's open expanse.

### Implementation

A fitness park with 8 to 12 pieces of equipment, including ADA accessible equipment, can be reasonably installed and implemented in a few weeks. Though this recommendation may be implemented within a few years' time, it would be best to continue public engagement and education. Feedback from a wider, more diverse audience will be needed to ensure the park is as inclusive as possible. This would also have the added benefit of growing public support, making the investment more widely accepted.

The proposed fitness zone is estimated to cost between $13,000 and $40,000, with costs varying with the volume or type of amenities and equipment selected. This would again provide another opportunity for a local "Friends of North Beach" group to get involved with fundraising or grant writing that would reduce the up-front investment cost of implementation.

# CASE STUDY

## Bradford Beach Fitness Park

Milwaukee County installed a seven-piece community fitness park on the shores of Lake Michigan in Bradford Beach Park, which has been actively utilized year-round. The equipment is conveniently located along a popular biking and walking trail, in addition to being located along a high traffic boulevard, which has helped to reduce crime and vandalism.

The fitness park is designed for users of all age groups with exercise opportunities inclusive of cardio, flexibility, and strength training. The park is not just targeted at calisthenics workouts, but also for other workouts such as *Freeletics* – a workout plan based around your fitness level, *Parkour Strength Training* – a workout based on overcoming obstacles, yoga, bootcamp, bodyweight, and street workouts.

Above: Bradford Beach Fitness Park in Milwaukee, WI.(Photo Credit: UW-Milwaukee Project Team)

The park is made up of two separate stations, both including pull up bars, incline benches, and low and parallel bars for dips. Of the seven pieces of equipment, the park includes a piece of ADA compliant equipment to encourage exercise across all users regardless of mobility. The equipment is powered by the user body weight, adding resistance to the exercises. A breakdown is listed below.

- 45° back-extension bench
- Abdominal-crunch/sit-up bench
- Chin-up bar (with chin assist function)
- Calf-raise platform
- Triceps-dip station (with dip assist function)
- Elevated push-up platform
- Cardio thigh-squat station

# REBUILD AND EXPAND THE NORTH BEACH PARK BEACH HOUSE

## Long-Term Recommendation

Because of the beach's growth in popularity, North Beach Park has outgrown its existing built facilities. The City of Racine should develop plans for a new, expanded beach house to include restroom facilities, a concession stand, a lifeguard station, as well as a new year-round community facility, and the North Beach Nature Center mentioned in this plan *(See Recommendation: North Beach Nature Center, pg.56).*

While many enjoy the family-friendly "quaint" feeling of the current Oasis concession stand, the City of Racine is in desperate need of a larger, expanded facility that would separate the park's bath and food facilities, provide a permanent lifeguard first-aid station, and provide adequate bath and shower facilities to accommodate the beach's summer demand. Additionally, a new facility should seek to activate the park year-round by providing a new multi-purpose space, rentable for private and community events. This facility would also provide an additional revenue stream for the City.

A space inside the building could also be set aside for the North Beach Nature Center, discussed later in this report . The Nature Center may range in scale from a single room to mini-museum, but any space set aside to display information about the coastal habitat and wildlife would be a big step forward for community environmental education. This space may be staffed by local volunteers and open limited hours of the week, as is done with some small-scale centers, to limit operational costs.

Though many in the community support the idea of a new beach house, many were also uneasy about the idea of an expansion that would not be in line with the local community scale. In order to address the community's concerns, the design of a new structure should fit with the natural environment, and follow suggestions received during the public input session to modernize the space, but remain true to the beach's "community feel." This may include a primarily wooden structure that features colors found in the Lake Michigan Coastal habitat. One wall of the beach house may include a mural or mosaic done by a local artist to portray local historical or natural scenes.

Though the structure should not block the view of any Michigan Boulevard homes, there is a possibility to add a second story to accommodate the additional community space due to its setting at the base of a large bluff. A two-story structure would somewhat separate the two areas – allowing for beach centered-uses on the bottom (concessions, bathrooms, lifeguard station and Nature Center), with the rentable community center on the second floor overlooking the beach. Examples of the listed design elements can be seen on page 45.

A larger structure with greater operational demands will also likely increase the staffing demands on the City's parks and recreational department. Therefore, while the additional revenue from the community space can help defray some of the costs, it will be crucial to ensure that programming and visitation rates on North Beach remain sufficiently high to merit this level of investment.

**Approximate cost:**

**$800,000 - $2 million, based on similar projects**

### Benefits

- Opportunity to make necessary improvements to existing facilities
- Strong community support
- Could incorporate community space and nature center
- Potential revenue stream

### Drawbacks

- Some citizens prefer to keep the current beach house
- Expansion requires larger footprint than current structure
- High up-front investment

Top left: North Hampton State Beach bathhouse in New Hampshire. (Photo Credit: New Hampshire State Parks)

Middle Right: The concession stand at Morgens Bay, U.S. Virgin Islands. (Photo Credit: Traveladdicts.net)

Bottom right: A rentable community space in Daytona Beach, Florida. (Photo: Shoresresort.com)

Bottom left: The Sanderling Nature Center in Kohler Andrae State Park, Wisconsin. (Photo Credit: Friends of Kohler Andrae)

## Community Feedback:

"Replace the existing oasis structure with more of a multi-use facility. Perhaps two or more levels...(This could) serve as a backdrop for summer entertainment."

# ENVIRONMENTAL STEWARDSHIP

***I LOVE NORTH BEACH BECAUSE...***

***"ITS NATURAL BEAUTY IS A BLESSING."***

# EXISTING CONDITIONS

The City of Racine has performed extensive work in recent years to improve the environmental conditions at North Beach Park. Specifically, major investments in stormwater infrastructure reduced stormwater runoff leading to improved water quality during and following rain events. As a result, in 2004, North Beach became the first Wisconsin beach to attain Blue Wave certification.

## Blue Wave Status

Racine's North Beach was the first beach in Wisconsin and the second Great Lakes Beach in the U.S. to receive Blue Wave status. Blue Wave beaches are responsible for managing water quality, beach and intertidal conditions, safety, services, habitat conservation, public information and education, and erosion control. The Blue Wave Program, led by the Clean Beaches Coalition, provides environmental certification for beaches across the country. The seven "Blue Wave Ethics" promoted by the Clean Beaches Coalition are:

1. Leave no trace (what you carry in, carry out)
2. Move your body (walk, run or swim)
3. Don't tread on the dunes (use a walkover or walk-thru)
4. Know your limits (swim, surf and boat safely)
5. You are what you eat (eat healthy seafood)
6. Feed your mind (read a book)
7. Respect the ocean (riptides, storms, natural resources)

Above: An example of the Clean Beaches Coalition Blue Wave Certified Flag.(Photo Credit: Stephan Kurdas)

## Stormwater Infrastructure

A large storm sewer system collects stormwater runoff from an approximate 400 acre drainage area serving a mix of residential, business, school and light industry. In order to clean up stormwater before it is released to Lake Michigan, the city constructed several stormwater management devices within the park and led an educational campaign.

Above: Vorceptor chambers below English Street treat and redirect stormwater. (Photo Credit: Julie Kinzelman)

Devices include a pair of vorceptor chambers that remove solid waste and oils from stormwater (*at right*). These large chambers retain solids and oils ,but allow partially treated stormwater to continue flowing into a series of evaporation-infiltration basins (*bottom right*).

The evaporation-infiltration basins or "wetland cells" are designed to mimic natural wetlands, providing stormwater storage, removing pollutants from the water, and encouraging infiltration and evaporation. By slowing down and storing stormwater, pollutants that aren't collected in the vorceptor chambers settle to the bottom of the basins and are kept out of Lake Michigan. On occasion, intense storms can produce rainfall amounts that exceed the storage capacity of the basins. During these intense events, a bypass outlet connected to the vorceptors is used to direct excess stormwater to Lake Michigan.

Above: Evaporation-Infiltration basins retain and treat polluted stormwater.(Photo Credit: UW-Milwaukee Project Team)

## Storm Drain Decals

Storm drains around the City of Racine are marked to say "No Dumping – Drains to Lake." This ongoing effort informs the public that dumping or draining wasted material into inlets has a direct impact on the quality of the lake. Neighborhoods that receive the storm drain decals are also provided with printed information to further communicate their presence and importance.

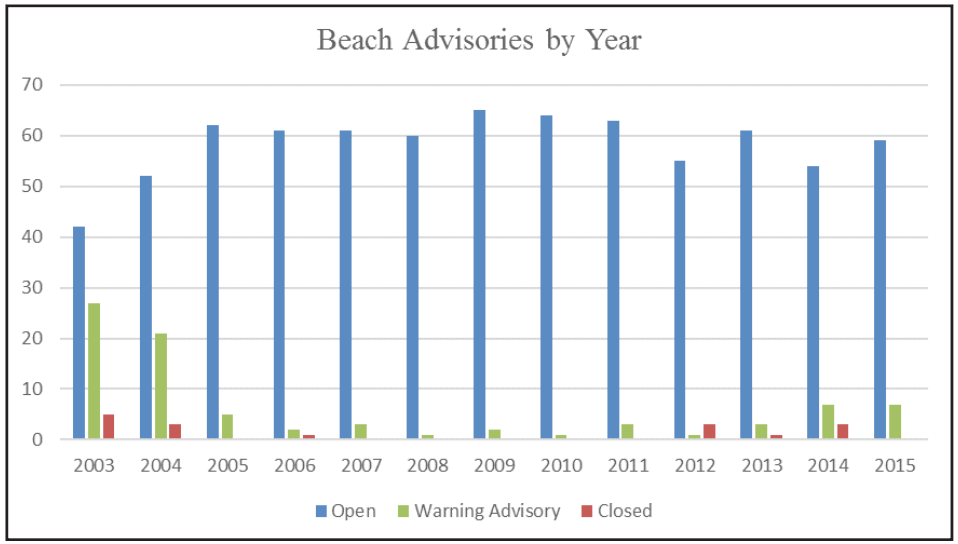
## Beach Advisories and Best Practices

The City of Racine's Public Health Department collects several water samples daily and determines the level of bacteria present, specifically *E. coli*. Data is then used to assess whether swimming is safe, and may result in the City declaring a beach advisory or closure when bacteria levels are unacceptably high. A beach advisory or closure can be observed when green signs and/or flags are changed to yellow or red indicating unhealthy levels of bacteria are present.

In recent years, beach advisories have been dramatically reduced. Between 1997 and 2004, the beach advisory rate ranged from a low of 16% up to 66%. In 2005, the rate dropped to 5% and has remained relatively low. The City has found that the significant investments made in improving stormwater infrastructure accounted for a 35% drop in rainfall associated advisories. The City also established that proper beach grooming can improve surface water quality by reducing *E. coli* levels in beach sands. Of the remaining advisories, most have been attributed to intense storm events and local wildlife (i.e. gulls).

## Sand Dunes

There are several groupings of sand dunes, both natural and engineered, throughout both North and Zoo Beaches. The dunes act as stormwater management devices, trapping and filtering runoff before it reaches Lake Michigan. A portion of the dunes have been replanted with grasses, but are at risk from being trampled by beach visitors, particularly on busy summer days. While there are some areas that are roped off to prevent walking through the dunes, they could still benefit from additional protection from foot traffic.




Source: City of Racine Public Health Department

## Environmental Education

Throughout North Beach Park, there are a number of signs that inform the public of various environmental concerns. However, surveys indicate that most beach visitors do not observe this signage during their visit. Many visitors confirmed during the public input session that they are unaware of the function of the stormwater protection devices located at the beach, including the dunes. The public would benefit from additional opportunities to become aware of the park's environmental concerns and to be a part of any solutions.

Above: An example of current environmental signage at North Beach Park.(Photo Credit: UW-Milwaukee Project Team)

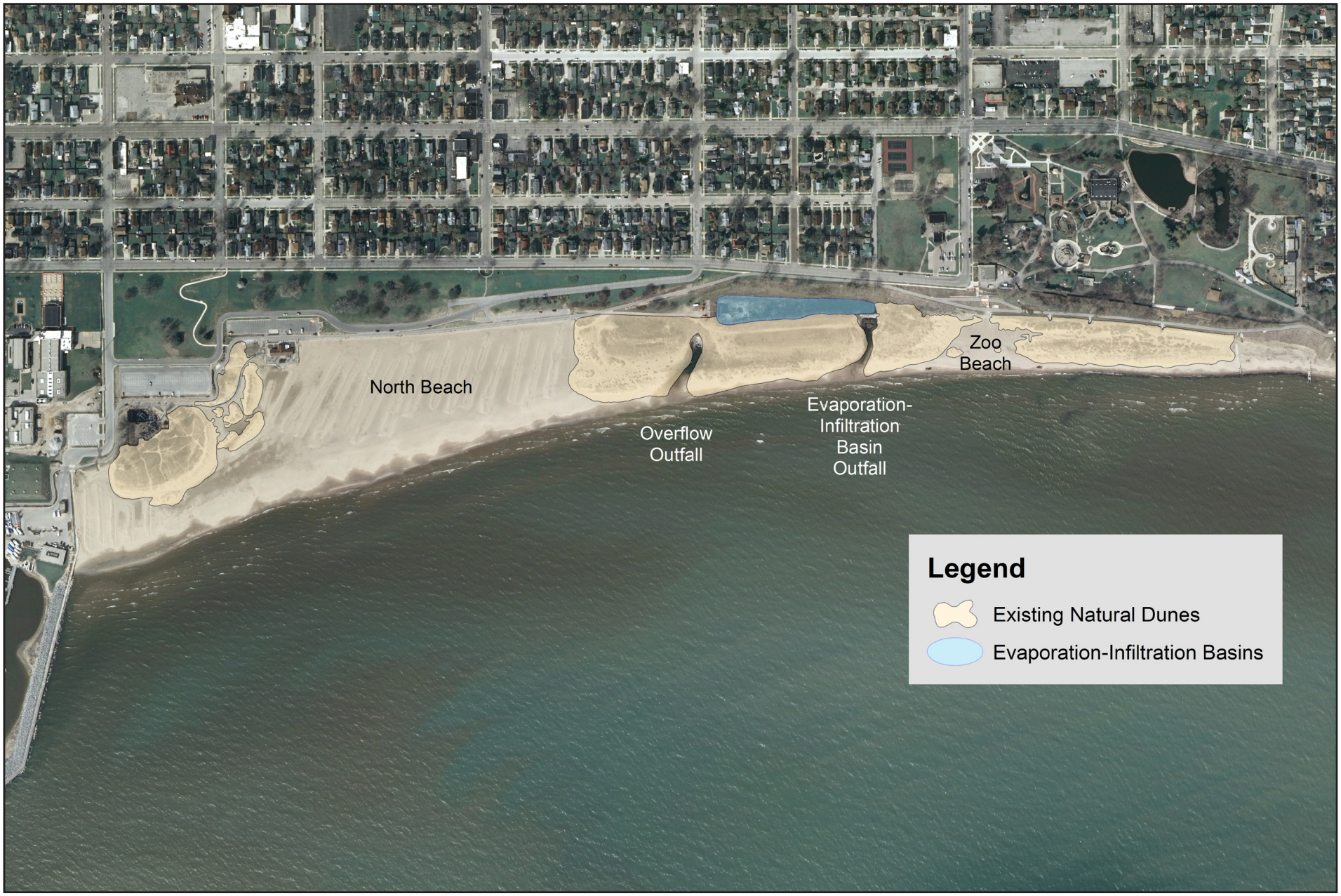
## Implications for Planning

Along with other efforts, stormwater management practices implemented at North Beach Park have been very successful at improving water quality. However, the public is still largely unaware of these efforts and their intended purpose with respect to the park. Improved signage and educational efforts could reduce the number of visitors that trample over dune features, bring dogs to the beach and lead to a greater appreciation for the coastal habitat. Additionally, future development efforts at the park may provide opportunities for even more improvements to protect and preserve the local habitat.

Above: An example of a footpath made by park visitors walking through the sensitive dunes. (Photo Credit: UW-Milwaukee Project Team)

Above: Visitors utilizing footpaths to access the beach area and Lake Michigan.(Photo Credit: Stephan Kurdas)

## Existing Environmental Features




Above: A map showing the locations of existing sand dunes along with the evaporation-infiltration basins used to capture and treat stormwater.

# ENVIRONMENTAL STEWARDSHIP

## Recommendations

# RAIN GARDENS

## Short-Term Recommendation

Rain gardens are an attractive, simple way to reduce stormwater runoff and remove pollutants from stormwater. They provide stormwater storage during rain events through improved infiltration. At North Beach Park, rain gardens should be installed where rain water naturally collects, such as at the foot of grassed slopes as seen in the map below.

Establishing rain gardens at key points intercepts stormwater before it runs onto parking lots and other paved surfaces. While the park's existing stormwater management features function well, rain gardens are a low-cost, efficient way to further reduce stormwater from entering Lake Michigan while adding to the park's character.

Rain gardens are smaller and less expensive than the more highly engineered bioswales or biofiltration basins, generally costing $3 to $4 per square foot. They have minimal design standards and will not require significant knowledge of engineering principles to implement. Without significant engineering requirements, rain gardens can be designed and built by volunteers, allowing them to be tied into public outreach efforts. The addition of rain gardens was firmly supported concept by the community.

As previously noted, beach visitors were unaware of the purpose of current stormwater management features. Therefore, any rain gardens should be accompanied by educational signage to explain their purpose. This would also further the City's goal of educating the public on stormwater management and the coastal habitat.

### Community Feedback:

**"Create a rain garden ...possibly a master gardener project."**

Above: Potential locations for rain gardens adjacent to impervious surfaces are shown in green.

Above: A demonstration rain garden located at Gateway Technical College - Racine Campus. (Photo: Root-Pike WIN)

Above: An example of educational signage to inform visitors on the purpose of a rain garden. (Photo Credit: Stephan Kurdas)

## Partnership Opportunity

The Root-Pike Watershed Initiative Network, has helped fund over 100 rain gardens – on both private and public property – in four southeastern Wisconsin counties, including Racine County. The rain gardens vary in size, but they average approximately 225 square feet. Local demonstration sites are listed below, including the total square feet of rain garden constructed.

Demonstration Rain Gardens in Racine County:

1. Root River Environmental Education Community Center (800 sq. ft.)
2. Gateway Technical College, Racine Building (275 sq.ft.)
3. Walden III Middle and High School (400 sq.ft.)
4. Racine County Food Bank (1,100 sq. ft.)

## Benefits

- Reduces stormwater runoff volumes and peak flow rates
- Removes pollutants from stormwater through infiltration
- Relatively low up-front cost and maintenance
- A variety of plant species can be used to create an attractive environmental feature
- Can be planted and maintained by volunteers

## Drawbacks

- Can become clogged and less effective if subject to fine soils and/or poor maintenance
- Potential for purpose of rain garden to be misinterpreted

# NATIVE LANDSCAPING

## Short-Term Recommendation

North Beach Park provides a great opportunity to incorporate a variety of native landscaping options. Areas of the park that are currently under utilized due to their steep slopes (*shown below*) should be replaced with native vegetation. This will provide ecological benefits, while serving as an educational resource for park visitors regarding native plants without imposing new, long-term operational costs to the City.

Many members of the public mentioned the park's large open space as one of its greatest assets, so enhancing it as an educational and aesthetic resource could bring considerable benefits to the beach experience. Native plant species are more attractive to native bird species and wildlife – providing additional educational and recreational opportunities. Naturalizing areas within the park would also support the City's goal of preserving coastal habitat.

As with all environmental elements of the park, natural areas should be accompanied by educational signage to inform visitors of the purpose of native landscaping. This will help to better inform the public on the local environment and stormwater management practices.

### Community Feedback:

**"I like that natural grasses are allowed to grow; Bradford Beach in Milwaukee looks barren in comparison."**

Though native landscaped areas will reduce the need for traditional maintenance within the park, needs such as weeding or replacing dead plants will be required to maintain benefits of native plantings. Furthermore, community members have expressed concerns of "weeds" and maintenance issues within the park. A well thought-out mix of native species that includes grasses, sedges, and wildflowers will clearly convey plants within landscaped areas are not "weeds" and a defined maintenance schedule will indicate maintenance is

Above: Proposed locations for native vegetation are shown in purple and located east of Michigan Boulevard between High and English Streets.

a priority. This may require hiring a landscape contractor for a period of time following the change to native landscaping and providing the necessary maintenance for newly planted areas.

There are many benefits to planting native vegetation over a traditional turf lawn. Native plants often have deep roots, which encourage more infiltration. Native to the region, plantings typically don't require as much care once established, whereas turf grasses may require fertilizer and pesticide applications, leading to increased maintenance costs. Long-term, native plantings typically cost $3,000 per acre over 20 years, compared to nearly $20,000 for turf grass.

The variety of native species, creates ample opportunity to enhance the local ecosystem by increasing diversity and using plant species welcoming to local wildlife. Native plants are also applicable in rain gardens and biofiltration sites, providing an opportunity to serve multiple locations at North Beach Park (*See Rain Gardens Recommendation, pg. 52*).

## Benefits

- Native plants are adapted to the local climate and site conditions
- Increases biodiversity of local habitat
- Native plants can be incorporated into rain gardens or bioswales
- Native plants can be aesthetically beneficial and create a "natural feel"
- Provides an opportunity to teach visitors about native species and their role in the ecosystem

## Drawbacks

- Up-front cost to implement, site preparation and cost of plantings
- May require hiring landscape contractor to establish newly landscaped areas
- Requires adjusting park maintenance tasks to weeding and dead plant removal

Above: Examples of native prairie plants.(Photo Credit: Prairie Nursery, Inc.)

# NORTH BEACH PARK NATURE CENTER

## Long-Term Recommendation

Informing the public about the importance of the dunes along North Beach and stormwater management devices can go a long way towards creating better acceptance and protection of these natural and man-made features. Maximizing on the benefits of the beach's premium location on the shores of Lake Michigan, the City of Racine should design a small nature center within a new beach house focusing on watershed and coastal environments. This would further the City's goal towards strengthening an educational partnership with local private and public schools.

The Schlitz Audubon Nature Center, located on the shores of Lake Michigan, just north of Milwaukee, is an exceptional example of a nature center. The facility also serves the community by opening the facility to host weddings and private events. Though the North Beach Nature Center would likely be smaller in scale, its programming would be similar. Local schools could take advantage of the center by partnering for programming and field trips to learn about science and local environmental features. This center would provide a crucial source of programming and environmental education, both for local residents and beach visitors who say they are looking for more activities on the beach. Another wonderful example of a Wisconsin nature center that explores the Lake Michigan environment is the Sanderling Nature Center located at Kohler-Andrae State Park *(See Case Study: Sanderling Nature Center, pg.57)*. Additional information, such as programming and events can be viewed on each center's website.

Above: Educational programming at Schlitz Audubon Nature Center (Photo Credit: Schlitz Audubon Nature Center)

### Community Feedback:

**"Use North Beach as a living classroom for school-age kids and families."**

Although the creation and operation of a nature center would be a significant investment, it could be planned in conjunction with the renovation of the beach house to allow space and operate on a modified schedule. Utilizing support from the proposed friends group (*See Friends of North Beach Park Recommendation, pg. 68*), volunteers could support future programming and staffing for the facility. Long-term considerations for the facility should include opportunities to incorporate professional staff to lead programming and coordinate volunteers.

### Benefits

- Creates an environmentally conscious community
- Can coordinate with local schools' educational curriculum
- Can be incorporated during beach house redesign

### Drawbacks

- Added up-front investment to a beach house redesign
- Increased maintenance required to maintain center accessibility
- Requires staff person to coordinate community volunteer and develop programming

# CASE STUDY

## Sanderling Nature Center

The Sanderling Nature Center is located on the shores of Lake Michigan at Kohler-Andrae State Park in Sheboygan, Wisconsin – about 75 miles north of North Beach Park. It is open for a few hours each day from May through October each year. The Nature Center consists of an exhibit area, an auditorium, and an observation deck with a view of Lake Michigan. The exhibit area displays educational material on the history of the park, Great Lakes fisheries, wildflowers, and a displays of wildlife within the park – new displays are constructed regularly. Additional live plant and animal exhibits take place at the center throughout the season. Supplementing the exhibits, the center hosts programs with guest speakers in the auditorium, supplied with multimedia equipment.

Additionally, the center is a useful resource for the local school districts. The park's website contains many resources and activity suggestions for school groups looking to plan field trips to the park, including utilizing the nature center exhibits and video library. Hands-on displays allow children to observe items through a microscope or interact with computer software programs focusing on insects, reptiles, amphibians, birds, and park trivia. Air monitoring equipment provides information about wind, temperature, and ozone. A binocular telescope, mounted on the center's roof, allows for up-close views of passing vessels, birds, and wildlife. Most school groups are greeted and assisted by the center's professional staff.

Above: An example of children's program at Sanderling Nature Center.(Photo Credit: Friends of Kohler-Andrae)

Above: An exterior photo of Sanderling Nature Center. (Photo Credit: Friends of Kohler-Andrae)

A group called the Friends of Kohler-Andrae State Park play a key role in the operations of the Sanderling Nature Center. This is a non-profit organization dedicated to improving and sustaining the interpretive, educational, and visitor service programs offered at the park. Profits from the nature centers gift shop – which offers goods such as clothing, chocolates, badges and postcards – help support future park improvements and operations.

The Sanderling Nature Center is supported by the Wisconsin Department of Natural Resources, and thus may be of a grander scale than a local nature center constructed at North Beach Park. However, as the center explores a similar ecosystem, it can be a great example of the types of exhibits and community role the North Beach Nature Center should strive for.

Above: An interior photo of educational displays at Sanderling Nature Center (Photo: Friends of Kohler-Andrae)

# BIOFILTRATION SWALES OR BASINS

## Long-Term Recommendation

Like rain gardens, biofiltration basins or swales are an attractive and effective way to reduce runoff volumes while also removing pollutants from stormwater. Unlike rain gardens, they are usually larger and require greater engineering knowledge to ensure adequate capacity, infiltration rates, and connections with other stormwater management devices. As such, they cannot be designed or built entirely by volunteers. However, volunteers may be used to implement the landscaping plan, which requires little or no experience with biofiltration devices.

While greater engineering and design requirements are demanded, these devices can store and treat larger quantities of stormwater. As a result, this makes them more costly than rain gardens, ranging between $10 and $60 per square foot. The difference in increased up-front cost of implementation could be offset by other financing sources, such as grants or fundraising.

At North Beach Park, biofiltration devices could be installed adjacent to impervious areas or built structures, where the volume of stormwater management demands greater efficiency. For example, if a new beach house or other facility is built on park property stormwater ordinances may need to be satisfied. Incorporating biofiltration devices into the development may be one method of addressing this challenge.

Bradford Beach in Milwaukee, Wisconsin (*at right*) is an example of a local beach that has successfully implemented engineered biofiltration devices aimed at stormwater runoff reduction and pollutant removal that would otherwise negatively impact Lake Michigan.

As with the proposed rain gardens (*pg. 52*), any biofiltration devices should be accompanied by educational signage to explain their purpose to the public. This would also further the City's goals of educating the public on stormwater management and coastal habitat.

Above: An example of a biofiltration basin and educational signage at Bradford Beach in Milwaukee, WI (Photo: Southeastern Wisconsin Watersheds Trust, Inc.)

### Benefits

- Reduces stormwater runoff volumes and peak flow rates
- Removes pollutants from stormwater through infiltration
- A variety of plant species can be used to create an attractive environmental feature
- Can be used to meet stormwater runoff requirements for new facilities added to the park

### Drawbacks

- Can become clogged and less effective if subject to fine soils and/or poor maintenance
- Professionally engineered design and construction is required

# PERMEABLE PAVEMENT

## Long-Term Recommendation

Permeable pavement reduces stormwater runoff volumes by replacing an otherwise impervious surface – traditional concrete or asphalt. By allowing water to permeate through the pavement, stormwater can be stored underneath the pavement and slowly drained after rain event.

Commercially available permeable pavements include interlocking permeable pavers, porous asphalt, and pervious concrete. This provides a wide variety of aesthetic and cost options for the City. The installation of permeable pavement would be a long-term project for the City, specifically for parking lot resurfacing or other paving projects at North Beach Park as part of the Capital Improvement Program.

Initial surface infiltration rates tend to be extremely high for any of these pavement types, but clogging from fine sediments can reduce these rates over time. Therefore, regular vacuuming and maintenance is an additional cost of utilizing permeable pavement options. Porous pavements should be located far enough from the beach so as to prevent sand from tracking onto the pavement resulting in clogging issues. Permeable pavement has been found to work well in parking lots when installed only in the parking spaces, with

### Comparison of Permeable Paver Systems

| Permeable Paver System | Cost per Square Foot (2009) | Recorded Initial Surface Infiltration Rates (in/hr) | Recorded Reductions of Total Suspended Solids (TSS) |
|---|---|---|---|
| Hot Mix Asphalt | $2.56 - $2.72 | See Notes* | See Notes* |
| Porous Asphalt | $3.44 - $5.38 | 33 - 500 | 59 - 99 % |
| Porous Concrete | $6.75 - $7.91 | 147 - 920 | 79 - 91 % |
| Permeable Pavers | $11.59 - $12.76 | 59 - 770 | 67 - 88 % |

*Notes: Non-porous asphalt and concrete do not provide infiltration or treatment of stormwater. Hot mix asphalt is provided as a comparison to permeable paver systems..

Above: Example of permeable pavers at Beach Park in Egg Harbor, Wisconsin.(Photo Credit: County Materials®)

the remaining driving area and any connecting roadways paved with traditional asphalt pavement. By sloping the impervious pavement areas to drain towards the pervious parking spaces, an entire parking lot can benefit from the underground stormwater storage without needing to use the higher cost pavement throughout the entire lot.

Permeable pavements can also be safer in the winter than traditional pavement because they do not accumulate ice since the surface doesn't develop standing water. Similarly, by permeating rainwater before it freezes, permeable pavements can withstand freeze-thaw conditions and minimize frost heave effects  better than traditional pavements.

As seen in the comparison of paver systems (*pg. 60*), costs can vary quite a bit, depending on the paver system chosen and the design of the underground storage system. Each provides different benefits and drawbacks, including variation in design and infiltration rates.

One example of a permeable pavement system is the parking lot of Beach Park in Egg Harbor, Wisconsin. The Village of Egg Harbor chose to use an attractive interlocking permeable paver system to reduce runoff from their beach parking lot.

### Benefits

- Reduces stormwater runoff peak flow rates and volumes
- Removes pollutants from stormwater runoff through infiltration
- Reduces ice forming on pavement, water permeates before freezing

### Drawbacks

- May be more expensive than traditional impervious concrete or asphalt pavement
- Porous asphalt or concrete can become clogged if subjected to fine sediments or  a poor maintenance schedule
- Regular vacuum sweeping is required for porous asphalt and concrete to maintain permeability

### Community Feedback:

**"Use permeable pavements to control and filter storm water in parking areas and asphalt roads."**

Above: Detail of permeable pavers at Beach Park in Egg Harbor, Wisconsin.(Photo Credit: County Materials®)

# OPERATIONS & PROGRAMMING

***I LOVE NORTH BEACH BECAUSE...***

***"It's Ours! One of the broadest fresh water beaches in the world - a wonderful place for people watching. To swim is divine!"***

Above: Competitors prepare for the 2015 Ironman, hosted at North Beach.(Photo Credit: Ironman®)

# EXISTING CONDITIONS

The City of Racine currently operates all recreational activities at North Beach Park, but contracts beach house concessions to a local company. Per an agreement, the contractor provides a portion of the profits each month to the city.

Organized recreation activities on the beach include volleyball leagues, Zumba, and live music on Friday and Saturday nights. Lifeguards are on duty daily from the first week in June to the first week in September.

The city provides volleyball nets in the back beach to the north and east of the beach house, in addition to operating Kids Cove – a 20,000 sq. ft. children's playground with a Tot Lot. These activities and facilities have contributed to the beach being named one of the "Top Ten Family Friendly Beaches" in the country by Parents Magazine®.

## Community Events

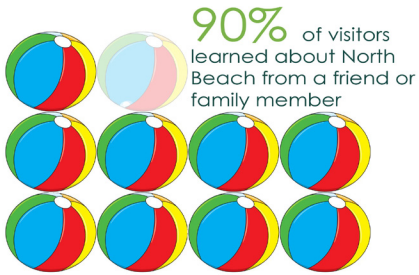
Racine also regularly hosts large events at the park, the two largest being an Ironman® triathlon and EVP® Beach Volleyball National Tour. Both these events assisted in North Beach having a record attendance year in 2015. Beach visitation during each of these events far exceeded daily averages for their respective months. More than 5,000 people were counted on the beach during 2015's EVP® Volleyball tournament, over ten times June's monthly average of 500 visitors. Similarly, the Ironman drew almost 10,000 people to the park, almost tripling July's monthly average of 3,800.

The City of Racine currently maintains information for North Beach within its City website. However, information about beach water quality is found on a separate page on the Public Health Department's website, and recreational programs are found on the Parks and Recreation Department's page. The county's tourism agency, Real Racine®, actively promotes local events, attractions, and businesses within Racine County. This includes an overview of North Beach and events typically held at the Park. There exists no single resource that presents itself as a one-stop shop for identifying policy, public health notices, and entertainment options for visiting families or individuals.

Above: Lifeguards provide rule enforcement and assistance for visitors from June - Sept. (Photo Credit: Stephan Kurdas)

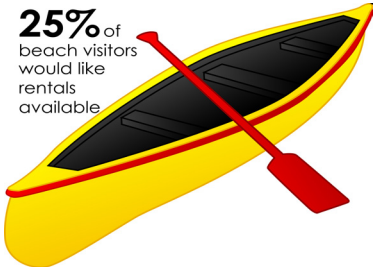
## Visitor Preference Survey

In 2014, a comprehensive survey provided a look into the demographics of North Beach visitors. The results revealed that over half of all visitors are Racine County residents, and most (80%) visitor groups included at least one person under the age of 18. As previously stated, the average size of a visiting group was 5 people. After local residents, residents of Milwaukee County and Illinois were the most common, far outpacing other locations.




Nine out of ten visitors reported learning about the beach from a friend or family member, with all other information sources trailing far behind. Nearly half of survey respondents did not know about the City of Racine website or the Wisconsin Beach Health page. This is a problem because both websites contain vital information on current beach conditions and park policies.

Approximately one-quarter of beach visitors said they did not observe any beach signage during their visit. Of those that were observed, the beach rules and Blue Wave signage was most frequently seen and read, while the "safe and healthy swimming" signage was seen least frequently.




The most frequently cited reasons why visitors chose North Beach as a destination was its proximity to their homes, and its family-friendly environment. Beach cleanliness and water quality was also highly cited, but more frequently by visitors without youth in their visiting party.

Nearly one-quarter of visitors stated they would like to have rental equipment available on the beach, while 18% would like to see improvements to beach amenities, including the bath house and concessions.

## Implications for Planning

North Beach currently functions largely as a local destination, drawing most visitors from Racine County and the surrounding area. Its convenient location, along with its family-friendly environment, is also one of its primary attractions for most visitors. Any future improvements should maintain the beach's family-friendly character, while increasing its usefulness as a community asset outside the swimming season.

Though the vast majority (95%) of people reported a positive experience, park signage and overall communications efforts need improvement to ensure visitors are well informed about beach policy, water quality, and the natural environment.

Future improvements in the park should cater to youth and young families, especially those of low income who may lack the resources to seek other recreational opportunities. As previously mentioned, signage in Spanish – the city's most popular language other than English – would make the park environment more inclusive for all members of the community.

Many residents in the City of Racine have trouble getting the recommended amount of physical activity, which can contribute to obesity and many chronic health conditions. Improvements to North Beach should seek to make the park a more accessible local exercise destination for older adults in particular.

Though North Beach is a prime recreational destination during the months of June, July and August, it lacks opportunities for the Racine community during the remaining nine months of the year. Currently, all efforts on North Beach are organized by the Racine Parks and Recreation Department or the beach house contractor. The creation of a Friends of North Beach Park group could support some of the programming while minimizing operational impacts on the City through volunteer efforts, such as plantings and landscape maintenance.

# OPERATIONS & PROGRAMMING

## Recommendations

# UPDATE ONLINE PRESENCE

## Short-Term Recommendation

The City of Racine should enhance the official North Beach online presence in order to improve the beach's visibility as a local attraction and better communicate with visitors about beach conditions, policies, and events.

Currently, the city maintains multiple pages with information about North Beach. Though information about beach policies, hours, and events can be found on the City's Parks and Recreation page, information about beach safety and water quality is found at the City's Public Health Department's website. Neither of these pages are intuitive to navigate, with the pertinent information usually requiring visitors to scroll down the page. Visitors looking to learn about the day's current water conditions must visit yet another link, which takes them to the Wisconsin Beach Health website. Consolidating these pages will provide a single source of information for visitors.

### Benefits

- Improves communication by consolidating information
- Increases the beach's visibility through better online and social media presence
- May be maintained by existing city staff
- Option for local partnerships

### Drawbacks

- Less control of the message on social media
- Unknown investment cost
- Requires frequent review and updates to remain useful

### Community Feedback:

"More social media & YouTube to promote the beach!"

### Social Media

Despite its popularity, the beach also lacks an official Facebook page connected with the city. Regardless of this fact, the beach has received thousands of Facebook likes and "tags" on many community created pages . This lack of an cohesive online presence may contribute to the fact that over half of beach visitors reported not knowing about existing beach websites.

### Website Features

Because of the growing number of visitors and need to disseminate information more effectively, the city would benefit from creating and managing a single North Beach-specific webpage. This page will include information on upcoming events, beach regulations, and water quality information. In order to better integrate with the overall community, the website could also provide suggestions for additional activities within the City of Racine, overflow parking options, and maps to downtown destinations, further connecting outside visitors with the rest of the city.

A good option to minimize costs while maintaining the functionality of a professionally designed site would be to integrate information within an existing webpage. An example may be to link the information to an agency or organization focused on tourism, such as Real Racine®, which would also provide opportunities for visitors to coordinate with other local events. Other beach destinations have set up their site in a similar way very successfully *(See Case Study: Indiana Dunes Website, pg. 67).*

# CASE STUDY

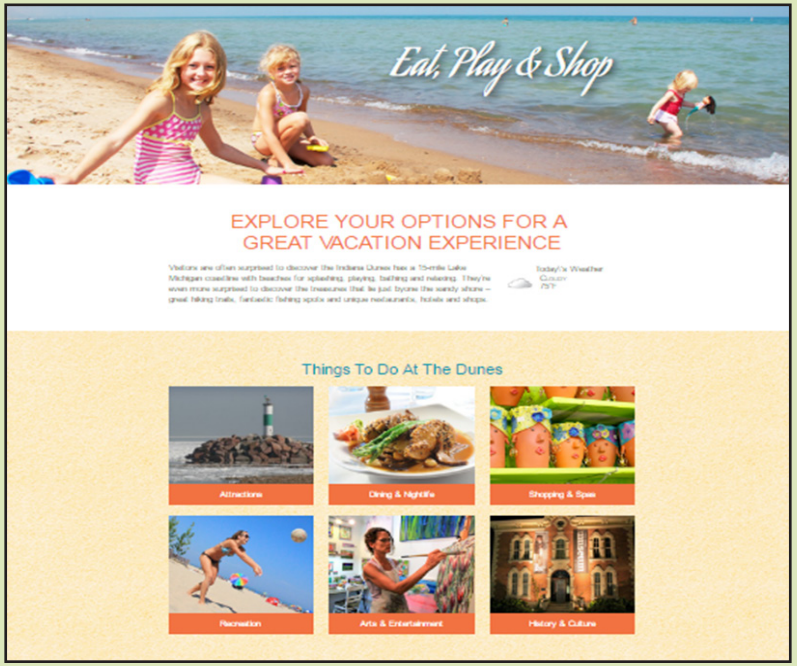
## Indiana Dunes Website

The Indiana Dunes tourism website was examined as an example of a consolidated beach tourism information that sets the standard for a new North Beach website.

Several key pieces of the site make it stand out amongst the competition. At first look, the site is heavily reliant on images, making it very appealing to scroll through. It is also very simply laid out and mobile-responsive, meaning it is as attractive and intuitive for those accessing the site on a mobile device as on a laptop computer.

Second, the site provides all the key information about visiting the dunes in one place. From the home page, one can access information about events and recreation, places to stay, frequently asked questions, safety and beach closures. Notably, the organization does not post water quality information on their site, however, they provide information on how visitors can find water quality information.

Above: Indiana Dunes Tourism website landing page.(Photo Credit: Indiana Dunes Country)




Above:Indiana Dunes provides options for visitors to experience local culture, arts, dining and entertainment.(Photo Credit: Indiana Dunes Country)

Finally, the beach website is integrated with other area tourism websites, making it easy for visitors to find other local attractions and plan a trip. This may be something to consider for the North Beach website. As an example, Real Racine®, the main tourism website for Racine County, operates a comprehensive website with a listing of area attractions. Though North Beach is listed, the information is general, and does not provide up-to-date event information, water quality updates, or even directions to the beach. Merging the North Beach site with Real Racine® could provide mutual benefits for both organizations by attracting more visitors to the area.

## Social Media

The site also provides links to six different social media platforms managed by Indiana Dunes Tourism, including Facebook, Twitter, Pinterest, Google+, YouTube, and Instagram. This scale of social media management may not be necessary for North Beach, but many people already utilize Facebook to post about their North Beach experience and it would benefit the City to be a part of that conversation.

# FRIENDS OF NORTH BEACH PARK

## Mid-Term Recommendation

North Beach currently lacks a volunteer group to aid in fundraising, programming, maintenance and improvement efforts. Friends groups are popular mechanisms all over the country to advocate for park preservation and improvements. They can be useful allies for cities facing large improvement projects that will likely require heavy fundraising efforts, such as a new beach house. Efforts should be made to create a Friends of North Beach Park group as soon as possible to support or promote future development plans, as well as to create a volunteer base for future programming efforts.

Though the city may not create the group itself, staff members can likely help identify community members that could be approached in order to form the group and keep the park moving forward. Several community members who attended the public involvement meeting expressed interest about joining a potential "Friends of North Beach" group and offered to be involved in future discussions. The high turnout for the plan's first public input session is evidence that the Racine community is invested in the park's future.

## Group Creation

The creation of a "friends" group will require a significant time investment from City staff as well as those community members forming the group. Local "friends" groups, including Friends of Estabrook Park and Friends of Bradford Beach, both in Milwaukee, and Friends of Myers Park in Racine, could act as templates for initiating and establishing the organization. All are heavily engaged in volunteer clean-up and restoration efforts, which can help minimize impacts from changes in park operations.

Above: As an example, Kid's Cove was constructed by a volunteer workforce and receives regular mainteanance by local organizations. (Photo Credit: Stephan Kurdas)

Above: Dune clean-up efforts under way in Atlantic City, NJ.(Photo Credit: Coastal Review)

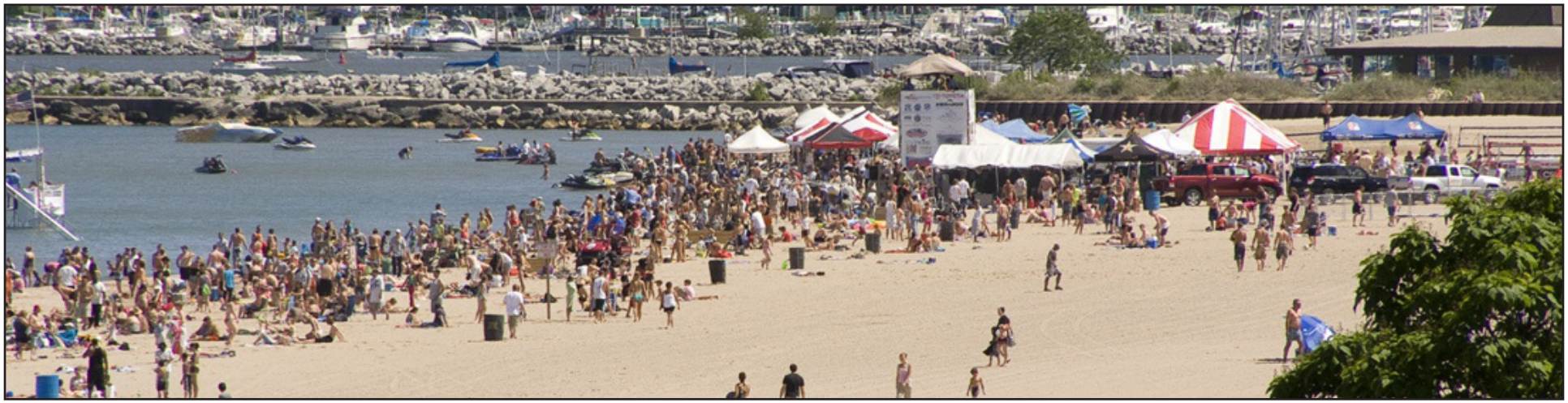
Additionally, some friends groups provide programming in local parks, such as leading birdwatching tours, or staffing visitor centers as in the proposed nature center *(See Case Study: Sanderling Nature Center, pg. 57).* Alternatively, the City may look to existing community organization(s) to fill the needs addressed listed in previous recommendations where enough community members don't come forward to establish the group.

### Benefits

- Involves community members
- Low up-front investment
- Provides operational support for fundraising and programming
- Encourages greater community investment

### Drawbacks

- Group's goals may conflict with City's future goals
- Staff time and attention needed to facilitate friends group



Above: North Beach hosting the Ironman triathlon.(Photo Credit: Real Racine®)

# CONTRACTED RECREATION

## Mid-Term Recommendation

To save costs and provide the residents of Racine with the best possible opportunities, the City of Racine should contract with a third-party to provide rental equipment and additional programming options on North Beach.

In a 2014 survey of beach visitors, nearly one-quarter of respondents said they wanted rental equipment as part of their beach experience. Beaches across the country contract with third-party vendors to provide everything from chairs and umbrellas to kayaks, windsurfing equipment and stand-up paddleboards (*See Case Study: Chicago's North Avenue Beach, pg.70*). With its recent growth in popularity, North Beach is an attractive location for a similar arrangement.

## Potential Partner

Positive feedback for this recommendation has already been expressed with local community groups offering possible opportunities for activities on the south end of the beach that tie into existing services and programming. This arrangement would provide the additional recreational opportunities the public desires, along with the potential for seasonal employment opportunities.

Further discussions between the City and a private contractor will determine pricing strategies and cost of operations, but implementing such a contract could create additional revenue sources, assuming minimal impacts on the city's operational requirements.

This recommendation could require an up-front investment from the City, as a private contractor will likely require a kiosk and storage facility. It could also risk increasing unwanted activity in the swimming portion of the beach if use is not carefully regulated.

### Benefits

- Provides crucial programming requested by beach visitors
- Equipment and programming are maintained by contractor
- Supported by the community

### Drawbacks

- Medium up-front investment
- Minimal storage and operational space exists within the park
- Requires regulation and monitoring by City staff

# CASE STUDY

## Chicago's North Avenue Beach

One of the City of Chicago's most successful public beaches is North Avenue Beach along Lake Shore Drive on the near north side of the city. This almost 20 acre park is designed for all types of public use with a central Beach House as the park's center of activities.

North Avenue Beach opened to the public in the summer of 1940 with an Art Moderne style beach house shaped like a ship. Redesigned in 1999 by Wheeler Kearns Architects, the beach house now contains almost 22,000 square feet of space used for eating, bathing, activities and events. The beach walk and restrooms are ADA compliant with opportunities for wheelchair accessibility to the waterfront and parking options.

### Amenities

Though many amenities and recreational opportunities are provided for beach visitors, most of these are not operated by the City of Chicago. While the City operates the park's volleyball court rentals, all other recreation is contracted to local businesses. These include:

- Castaways® Bar and Grill, operated by Phil Stefani Signature Restaurant Group, a popular restaurant operation in Chicago.
- NAB Sports® operates an open-air sports facility providing fitness classes, dodgeball, hockey and other events.
- Yoga is offered the Monday thru Sunday by Sun & Moon Beach Yoga ®
- Lounge chairs and umbrellas are provided by Boucher Brothers®, a supplier specializing in beach rental equipment within the United States.
- The Great Lakes Board Company® provides wakeboards and paddle board rentals
- Kayak rentals provided through Kayak Chicago®
- Jet ski rentals from Windy City Watersports®
- Many small other retail vendors take up shop along the beach selling items from Havaianas Sandals to clothes, souvenirs and beverages.

Above: North Avenue Beach beach house, built in 1940, is shaped like a lake ship . The beach house is home to dining facilities, restrooms and shower facilities.(Photo Credit: New York Magazine)

Above: North Avenue Beach offers many amenities including paddle boarding, volleyball, and kayak rental.(Photo Credit: Jonathon Meza)

North Avenue Beach is a popular gathering spot not only because of the beach related activities, but also because of the major events hosted at the beach such as the Polar Plunge and the Chicago Air and Water Show. Specifically, the Chicago Air and Water Show draws hundreds of thousands of people to the beach and surrounding community each summer. The beach also offers free Wi-Fi which allows people to come to North Avenue Beach and feel comfortable spending the day without being removed from typical day-to-day activities.

## Lessons

North Avenue Beach has seen relatively few problems alongside of the many successes. The major complaint the beach patrons raise is that swimming is only allowed on the beach during times when lifeguards are on duty. Lifeguards are on duty during June, July, and August months between the hours of 11 AM and 7 PM. This compressed timeline of swimming leads to a very congested beach on weekend and prime summer swimming days.

The beach charges for parking – a $10/day fee – collected at a pay gate as visitors exit. Other ways to access the beach include public transit through Chicago Transit Authority or biking and walking from the nearby neighborhoods. The beach is approximately three-quarter's of a mile from the nearest Metra (El) train stop.

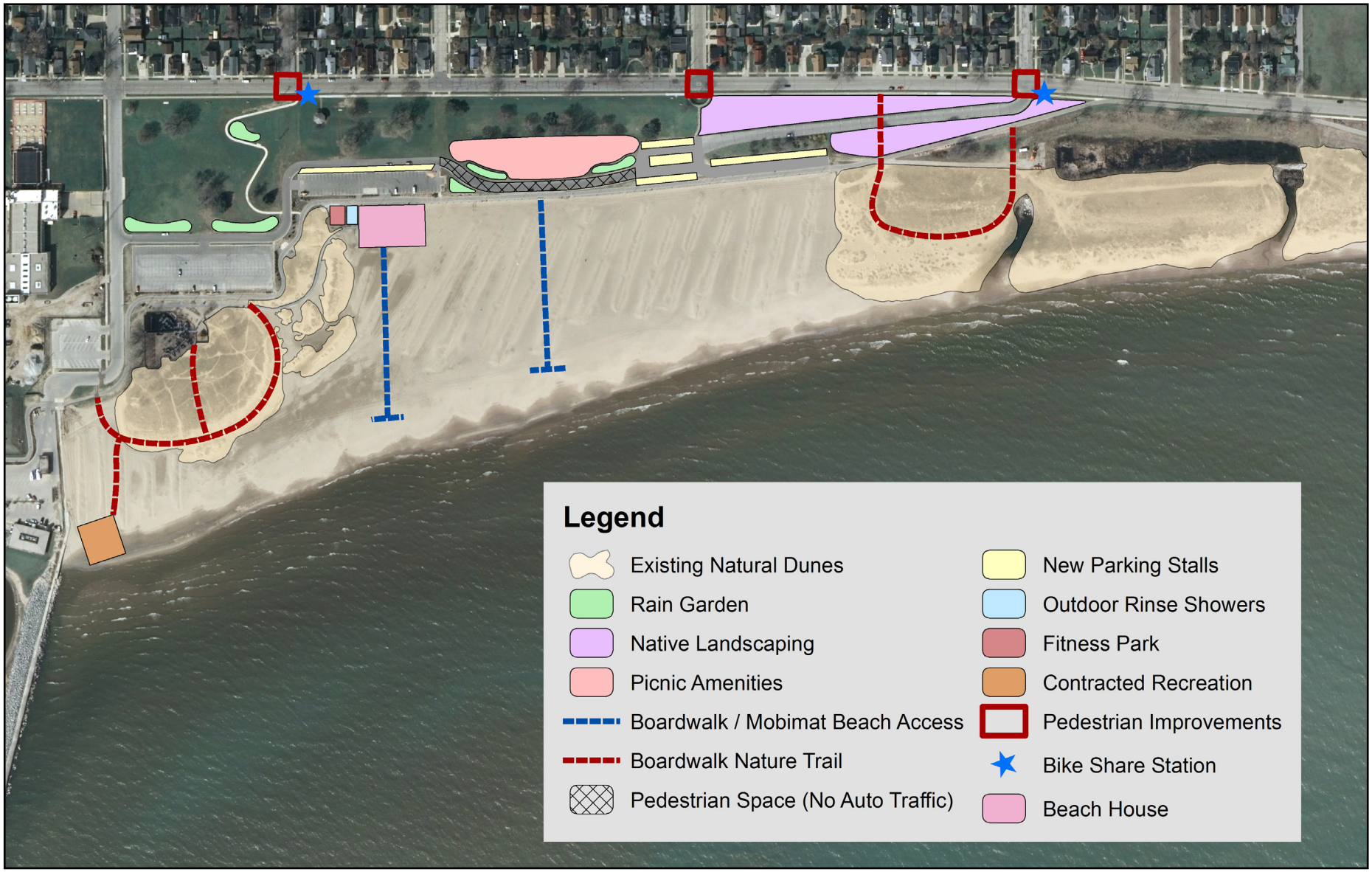
Above: North Avenue Beach is a popular gathering spot in the heart of the City of Chicago.(Photo Credit: menaker.com)

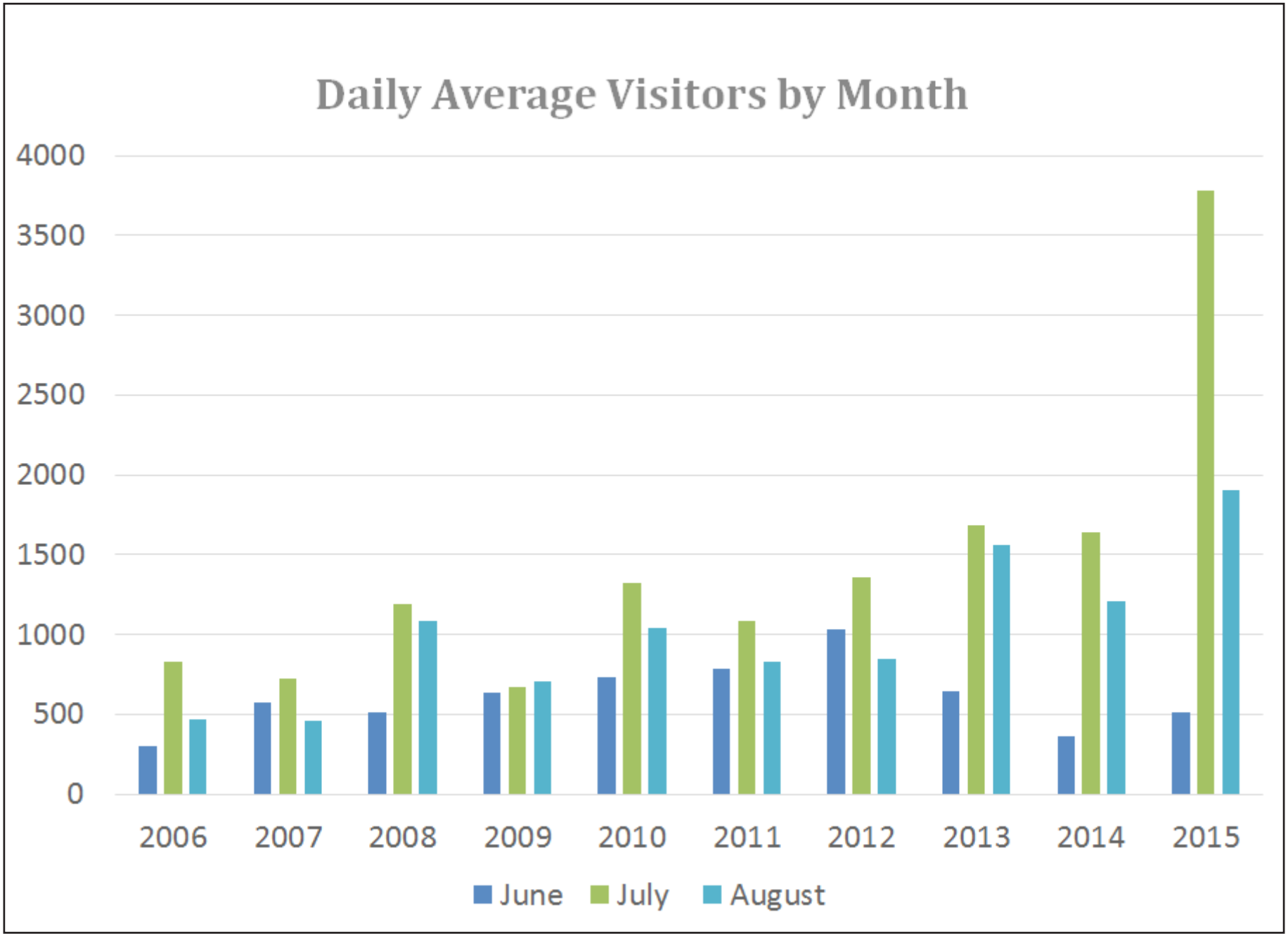
# APPENDIX

# MAP: PROPOSED SHORT-TERM RECOMMENDATIONS

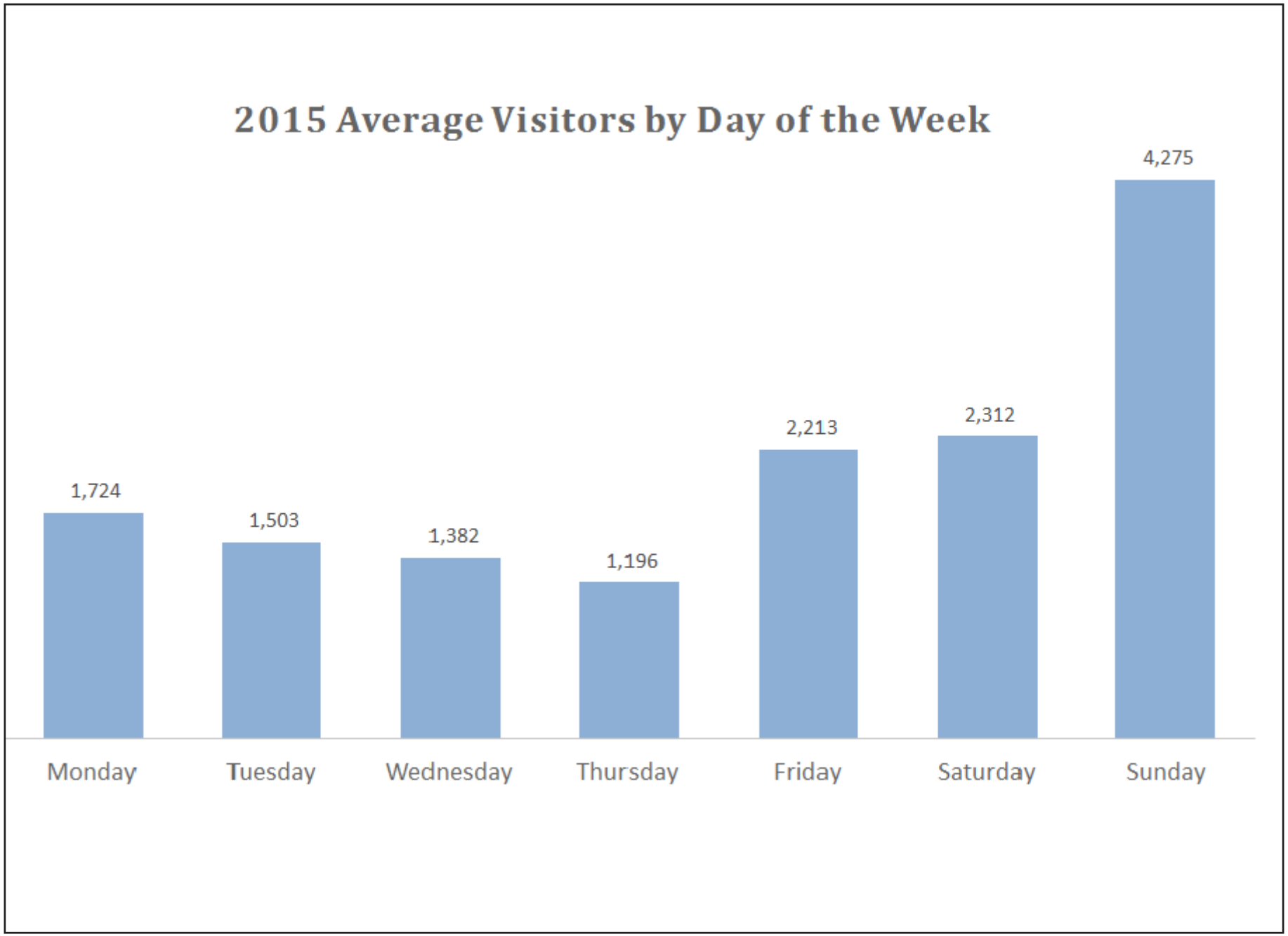
# MAP: PROPOSED MID-TERM RECOMMENDATIONS

# MAP: PROPOSED LONG-TERM RECOMMENDATIONS






Source: City of Racine North Beach Bather Counts




Source: City of Racine North Beach Bather Counts