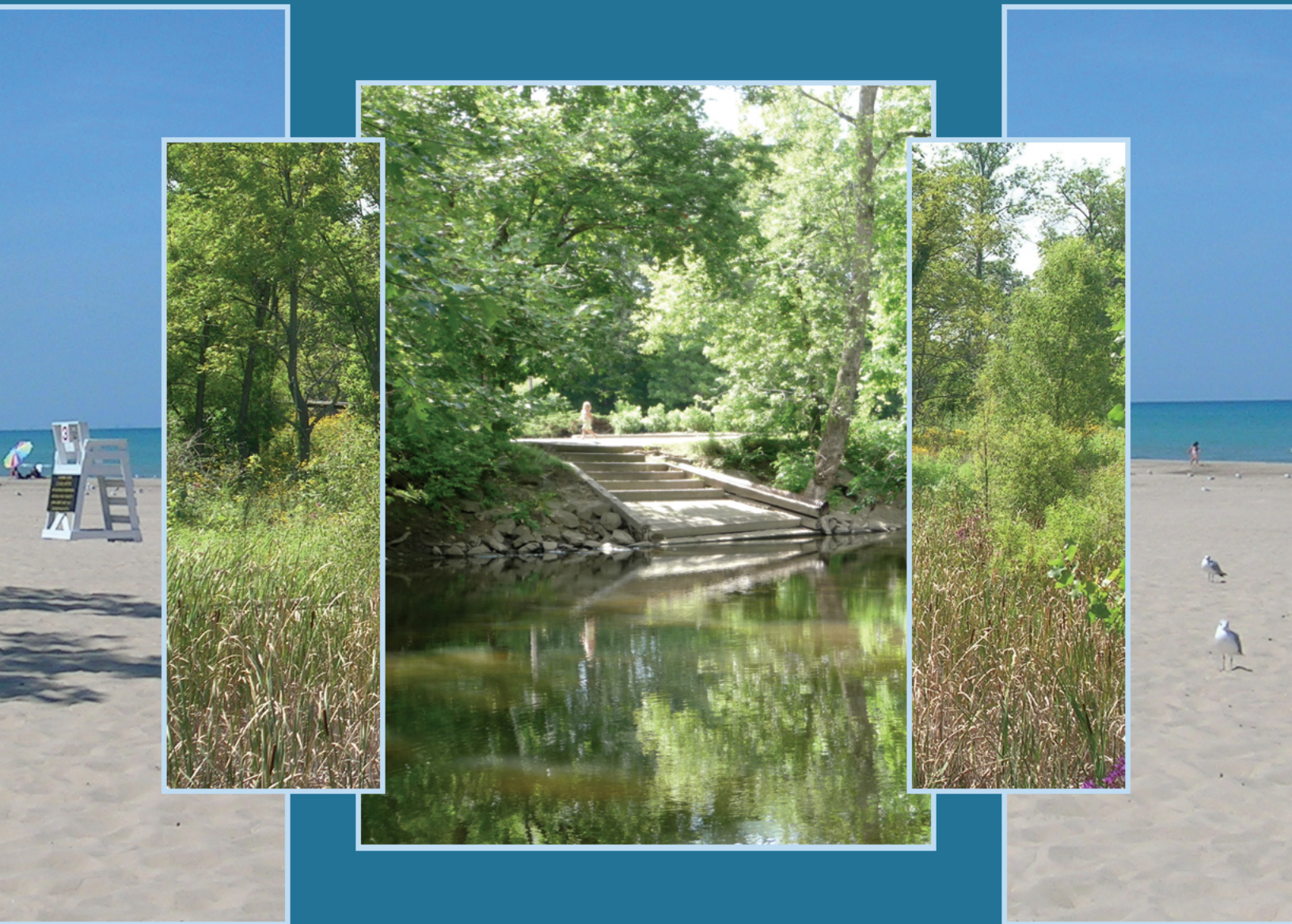


Indiana Department of Natural Resources

Needs Assessment of Public Access Recreation Sites within the Indiana Coastal Area

Summary Report



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Public Access Needs Assessment

Final Report

Indiana Department of Natural Resources
Lake Michigan Coastal Program



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EXECUTIVE SUMMARY

This Public Access Needs Assessment compiles existing data and research to establish a clear plan for the improvement of and increase in public access land in the coastal region of Indiana. This region's unique characteristics—history, varied landscape, industry, and shifting trends in commerce—justify a formal needs assessment to determine appropriate measures to be taken toward its long-term overall improvement.

In order to determine these measures, several methods were employed in three distinct sections, each educated by the others. The research and analysis phase includes a review of local and county parks and recreation master plans, federal, state, and regional planning and policy documents, a benchmarking study, condition assessments, and map development. The public engagement phase includes individual stakeholder meetings, focus group meetings, and a public meeting. The service standards and gaps phase includes the development of level of service (LOS) standards, a gap analysis, and a priority index.

Research and Analysis

The research and analysis phase provides insights on the current state of the region in terms of levels of service as well as a basis for comparison with other similar areas and with local, regional, state, and national guidelines for public access levels of service.

While the Condition Assessment shows an above average overall public land quality among a selection of public access passive recreation sites, opportunities remain for improvement. To illustrate this point, for Outer Park Edges and Entry—the only category in which every park was ranked—the scores are much less one-sided than the other categories. “Excellent” is still the most frequent ranking with 28 parks, but “Poor” has 24 and “Below Average” has 23 out of a total of 120 assessed sites.

The Benchmarking Analysis provides insight on the current state of the region in terms of four similar Great Lakes regions. One of the main differences found between the Indiana coastal region and the benchmark communities is the lack of a thriving, economically stable main city as a solid foundation for the surrounding region. The Coastal Indiana region's comparable city, Gary, is not financially stable and is experiencing a population decline. Another notable difference is the presence of significant acreage of federally managed lands, Indiana Dunes National Lakeshore.

According to the benchmarking study, the Northwest Indiana Coastal Area is:

- Below average in the miles of multi-use walking and biking trails
- Below average in the number of public access launch points for personal watercraft



- Above average in miles of public beaches
- The only region where beach fees are charged for residents
- Far above average in fishing access points
- Above the median in total park acres (Duluth has such a large number of acres for its population size that it skews the average)

While there are many public beaches available, access to them is often limited by a lack of parking and beach access points. Beach access in the benchmark communities is, for the most part, supported by state or municipal protection and easily accessible points near densely populated areas.

Also lacking in the Coastal Indiana region when compared to the benchmarks is public access to boating opportunities. The number of large, well placed public marinas directly on Lake Michigan is substantially lower than that of the benchmarks.

Public Engagement

The results of the stakeholder interviews and the focus groups are similar in many ways and provide many ideas for the improvement of public access in the region. The main ideas are as follows:

- Connectivity between trails and existing natural areas
- Ongoing management of restored natural areas
- Increase public awareness and access through communication and signage
- Implementation of the Marquette Plan
- Regional cooperation
- Increased funding

The public meeting allowed the public to assess the current state of the project, to provide comment and suggest locations, existing and potential, of public access sites. Approximately 15 potential sites were plotted on existing maps.

Service Standards and Gaps

This section synthesizes research from the previous sections by developing level of service standards for public access in the region, assessing gaps in current access, and establishing a method for determining priorities for improvements.

LOS standards were developed based on stakeholder input, benchmarking against similar agencies, current demand for services, parks and recreation industry trends, Indiana recreation trends and standards, anticipated financial and policy opportunities and constraints, and working group discussions of LMCP and NIRPC staff. This approach considers the many facets associated with public access requirements by developing a set of standards unique to the Coastal Indiana Region.

Newly developed standards for public access in the Indiana Coastal area are outlined below:

Facility Type	Access Requirement
Park Acreage	50 acres per 1,000 residents
Hard Surface Multi-Purpose Trails	2 miles per 10,000 residents
Public Access Launch Points for Personal Watercraft	0.45 per 10,000 residents
Public Fishing Access Points	1.14 per 10,000 residents
Natural Surface Hiking Trails	3.0 per 10,000 residents

Figure 1: Level of Service Standards

The Gaps Analysis qualitatively and quantitatively assesses current levels of public access to determine the areas most in need of improvements. The qualitative section provides specific examples of sites and areas within the region where improvements in service should be made. The quantitative section assesses current conditions based on acreage and mileage values compared to the defined LOS standards to illustrate the state of public access land in the region.

The findings from this qualitative gaps analysis include:

- a need for additional public recreation lands and amenities in many communities across the region
- a need for improved signage and wayfinding to direct users to recreation sites
- a need to complete trail connections to complete what is now a fragmented trail system
- a need for connectivity of natural resource lands throughout the region
- a need for the creation of blueways for non-motorized boats in many areas of the region.

The results of the quantitative gaps analysis indicate:

- a need for recreation opportunities in the rural sections of all three counties
- This is most apparent in Porter County, Southeastern Lake County, and Northeastern LaPorte County

There is a need for more public access recreation lands in several pockets in the region:

- To the east of Griffith and Highland, south of Gary
- To the east of Hammond
- To the west of Portage

- To the north of South Haven

Also, the Governor's initiative for trails in Indiana calls for a trail within 7.5 miles of every Hoosier. GIS analysis indicates that the 7.5 mile service area of existing trails in the Lake Michigan coastal area largely serves residents except in Northeastern LaPorte county.

Priority Index

The Priority Index establishes a method by which planners can most efficiently allocate funds for public access improvements. This method reduces subjectivity by creating a scientifically driven process of characterizing sites to determine relative needs of sites. This is based on weighted categories, each of which contains several specific criteria for accurately assessing park attributes. Based on these, each site can generate an individual score that can be used to appropriately allocate funds throughout the region.

The following criteria were discussed and distilled into the following categories by a working group comprised of LMCP staff and NIRPC staff.

- **Uniqueness**
 - Species Diversity
 - Habitat
 - Natural and Cultural Features
- **Location**
 - Within an Identified Gap Area
 - Distance to Coast
 - Connectivity
 - Natural Water Feature
 - Identified in an Existing Planning Document
 - Ecological Impact
 - Located in an area that has a concentration of low income and minority population (Environmental Justice area)
 - Occurrence of water feature
- **Access**
 - To Underserved Populations
 - To Population Centers
 - Parking
 - Access to site features
 - ADA compliant
 - Entry Restrictions
- **Variety of Recreational Uses**
 - Use types
 - Education Value
 - Seasonality
- **Economic Impact**
 - Generates Revenue
 - Likely to attract business start-ups
 - Likely to increase property values
- **Sustainability**
 - Public or Private
 - Funding available for restoration and maintenance

The Public Access Needs Assessment is the result of a collaborative project between the IDNR Lake Michigan Coastal Program and the Eppley Institute for Parks and Public Lands. The Needs Assessment provides recommendations for public parklands and public access sites in the Indiana coastal area of Lake Michigan based on data collected in 2008 that can be incorporated into an overall Public Access Management Plan for the region. The data presented in the accompanying CD will provide support for future public access planning projects. The final data includes an electronic copy of this final report and all appendices presented as a separate document.

The following maps were produced with various GIS resources including DNR data, IDEM data, NIRPC and Openlands data.

- A map of potential public access sites indicating potential public access sites indicated by NIRPC in the Blueways and Greenways Plan, Potential blueways on navigable waters, potential managed open space both public and private, and potential sites identified by the Eppley Institute through the public engagement process and project research.
- Maps with ½ mile, ¾ mile and one mile buffer zones around existing public access sites
- A map with a 7.5 mile buffer around trails indicating the Governor's initiative for trails
- A map of existing sites and trails used in this project.
- A map of NIRPC Greenways and Blueways data

INTRODUCTION

The Eppley Institute for Parks and Public Lands conducted a Public Access Needs Assessment for the Indiana Department of Natural Resources, Lake Michigan Coastal Program to assess levels of service and deficiencies in current public recreation land in the Northern Indiana Coastal Region. This two-phase project consisted of a Coastal Inventory and a Needs Assessment.

Phase I: Coastal Inventory

Phase I of this project was a comprehensive inventory of existing public access recreation sites and trails within the Indiana Lake Michigan Coastal Area. The inventory was conducted in 2008 with funding made available through the Lake Michigan Coastal Program (LMCP) and a federal grant from the National Oceanic and Atmospheric Administration's Coastal Zone Management Program. As part of the deliverables for this project, the Statewide Comprehensive Outdoor Recreation Plan (SCORP) database was updated with information for 712 sites, of which 141 new sites were identified. In addition, approximately 50 miles of trail, or 32 new trails, were also identified. The final corresponding GIS files include 681 sites and 277 parcels.

The Eppley Institute met with 45 agency and organization directors and managers, conducted over 140 site visits, reviewed Master Plans, brochures and conducted web searches. The final Coastal Area Facilities table in the Access database is comprised of 712 new or updated public access recreation sites. Thirty-two new trails were identified, resulting in an addition of almost 50 miles of trails.

Phase II: Needs Assessment

The Indiana Department of Natural Resources (IDNR) recognized the criticality of a needs assessment for the coastal area due to increased demand for public access and a limited amount of quantitative and qualitative site knowledge. The purpose of this Public Access Needs Assessment is to better understand coastal user needs and perceptions and to what level current public access recreation facilities in the coastal area are serving the public. The project was initiated on 15 June 2009 and reached completion 31 December 2009.

The overall goal of this project is to improve the information available to the state regarding public access in the coastal area, specifically by better understanding how to best provide future public access opportunities in the coastal area. This goal is achieved through the following 6 objectives:

1. Assess current levels of service in the coastal area through inventory analysis
2. Assess coastal user needs and perceptions through focus group work and research
3. Evaluate level of service standards through research and benchmarking



4. Develop service standards
5. Identify gaps in service
6. Identify new public access areas and sites

These objectives provided the basis upon which the Needs Assessment was researched and developed. Several steps were taken to reach these objectives, broken into three developmental phases. The research and analysis phase included a review of local and county parks and recreation master plans; federal, state, and regional planning and policy documents; a benchmarking study; condition assessments; and map development. The public engagement phase included individual stakeholder meetings, focus group meetings, and a public meeting. The service standards and gaps phase included a gap analysis, priority index, and the development of level of service standards.

This Needs Assessment provides a clear picture of the state of public access land in the Northern Indiana Coastal Region. The Condition Assessment illustrates the physical status of public access land throughout the region, while the Public Engagement results display the views and desires of the residents and stakeholders with vested interest in the region. Levels of Service standards were developed based on current individual community standards and through comparison to other similar regions in the Benchmarking Study. The Site Priority Index provides a framework by which public access improvements can be logically made to most effectively utilize resources.

This Public Access Needs Assessment will provide planners with a clear, concise starting point for the development of efficient, informed plans for overall improved public access in the region.

FEDERAL/STATE POLICY GUIDELINES FOR RECOMMENDED LEVELS OF RECREATION FACILITIES

Level of Service (LOS) standards provide a means of quantifying public access recreation opportunities by establishing accepted goals for regional recreation land acreages. To appropriately determine realistic goals it is necessary to consider all existing standards. These include those defined by the National Recreation and Park Association (NRPA), the Statewide Outdoor Recreation Plan, and local and county recreation master plans.

The Eppley Institute conducted research on Federal and State Policy Guidelines for recommended levels of recreation. The Eppley Institute reviewed National Recreation and Park Association level of service standards and Indiana SCORP research for state and regional LOS, as well as other industry standards.

National Recreation and Park Association Summary

Review of Recommended Park Guidelines

The “Park, Recreation, Open Space and Greenway Guidelines” document has long defined level of service standards for parkland in the United States. The National Recreation and Park Association (NRPA) has maintained these standards, updating the Guidelines to correspond with trends and developments in the parks and recreation field. None of the versions claim to be absolute directions by which parkland should be maintained, but rather basic national standards meant to be adapted over time as a basis for management decisions. A major example of this evolutionary nature is a general shift from the broad application of generic standards to a more individualized style of standards development.

Before the 1996 version of the Guidelines, the NRPA standard for park access was accepted as 10 acres of parkland per 1000 people. This is maintained in the 1990 Guidelines, in which the basic level of service standards are defined as requiring between 6.25 and 10.5 acres per 1000 residents of a community. This was based on land requirements for three different types of park land within “Local/Close-to-Home Space,” making up the “core” park system in a community. These include:

- Mini-Park/Block Park: 1 acre or less; < ¼ mile service area radius; ¼ to ½ acre/1000 population
 - Neighborhood Park/Playground: 15+ Acres; ¼ to ½ mile service area radius (up to 5,000 pop.); 1 to 2 acres/1,000 pop.
 - Community Park: 25+ acres; 1 to 2 mile service area radius; 5 to 8 acres/1,000 pop.
- Regional Space
- Regional Space: 1 hour driving time; 15 to 20 acres/1,000 population
 - Regional/Metropolitan Parks: 200+ acres



- Regional Park Reserves: 1000+ acres

This long-held standard went out of favor in 1996 when a more individual, tailored approach to park development was adopted in which communities were encouraged to determine levels of need themselves. The 1996 Guidelines take away the general acreage requirement and instead focus on public access to amenities and passive recreational facilities provided, such as baseball diamonds, trails, and tennis courts. This format of national standard rather than a specific parks system size requirement allows for its application to a broader range of community types.

By defining these minimum level-of-service standards for public access facilities, NRPA has established a means by which to develop regional spatial analysis, etc. NRPA makes recommendations for the population level served and the radius, based either on travel time or mileage to the facility.

- A basis for relating recreational needs to spatial analysis within a community-wide system of parks and open space areas
- One of the major structuring elements that can be used to guide and assist regional development
- A means to justify the need for parks and open space within the overall land-use pattern of a region or community

These goals establish the Guidelines as an important document intended to provide clear direction for park managers and developers on the national scale. These provide a basic outline for public park access that can be applied to anywhere in the country. Indiana has established similar standards specifically suited to communities within the state in the Indiana Statewide Outdoor Recreation Plan.

Summary of Indiana Statewide Outdoor Recreation Plan

The purpose of the Indiana Statewide Outdoor Recreation Plan (SCORP) is to qualify for funding through the Land and Water Conservation Fund and other federal programs and to assess needs in Indiana for other agencies throughout the state. The plan also aids in planning and program development for local governments with the intention of providing outdoor recreation for all users. To this end, six surveys were conducted to determine what needs might exist. These included 2003 Outdoor Recreation Participation Study, 2004 Boaters Survey, 2004 Designate Trails Survey, 2005 National Survey of Recreation and the Environment (NSRE) 2004 Recreation Issues – Professional Survey, and 2004 Trails-Provider Survey. The first four were for the general public or for specific user publics while the last two were for outdoor recreation professionals. The needs assessment conducted in the SCORP is used as a basis for the development of the rest of the plan.



While the NRPA Guidelines for park land standards are based on a population level per specific park type, Indiana has adopted a set of standards that better caters to the individual needs of the state. Rather than an arbitrary population ratio method, Indiana has established

Level of Service (LOS) standards based on “demand for recreation opportunities within the community, current resources available, and opinions and views of the population.” Comparing supplies and demands for park land yielded these standards based on geographic location rather than park type. The following are the accepted standards for Indiana park land:

- Counties: 20 acres per 1,000 people (0.02 acre per person) of public local recreation acres (i.e., owned by township, municipal, county, or privately owned but open for public use)
- Regions*: 35 acres per 1,000 people (0.035 acre per person) of public regional recreation acres (i.e., owned by State or federal entities)
- State: 55 acres per 1,000 people (0.055 acre per person) of total public recreation acres (i.e., a total of all acres in the above categories)

*"Regions" refers to 15 planning regions within the state that were established in the late 1960s and are maintained today for the sake of the SCORP. Three of the regions have each been subdivided into two sub-regions, including region 1. Region 1A now refers to Lake, LaPorte, and Porter Counties.

These standards were applied to Indiana in the individual categories to determine current LOS and thus current needs. Indiana was found to be deficient in local public recreation acreage in 70 out of 92 counties and in 13 out of 15 regions, and to have a statewide deficit of 33,411 acres based on the above standard. Deficiencies in regional public recreation areas were found in 40 out of 92 counties and 4½ out of 15 regions (one of the subdivided planning areas had sufficient acreage in one half but not in the other). Statewide, total regional recreational acreage exceeds recommendations. Deficiencies in total public recreation acres are found in 40 out of 92 counties and 4½ out of 15 regions. Statewide, total public recreation acreage exceeds recommendations.

Region 1A, consisting of Lake, LaPorte, and Porter Counties, was found to have a 623 acre deficit in local public recreation land (Lake: +771; LaPorte: -60; Porter: -1,334), a 6,810 acre surplus in regional public recreation land (Lake: -11,328; LaPorte: +7,920; Porter: +10,217), and thus a 6,187 acre surplus in total public recreation land (Lake: -10,556; LaPorte: +7,860; Porter: +8,882).

While Indiana currently exceeds park acreage standards statewide, the acreage recommended in the SCORP is a statewide goal and was not broken down to the regional levels; large disparities exist between available acreage in different areas of the state. Individual areas such as the Lake Michigan Coastal area can consider service areas on a regional basis to more precisely represent LOS in the individual area. Population growth can, as in the “Critical” counties section of the SCORP, be assessed to see that current recreation acreage is not surpassed by population.

LOCAL/COUNTY/REGIONAL PLAN REVIEWS

In addition to NRPA and SCORP standards, the Eppley Institute evaluated municipal and county recreation master plans to assess existing and planned local development standards and policies related to parks services. Long-term recreation plans were evaluated for reference or recommendations for implementation of Development Impact Fees. These fees levy a defined dollar amount on each new residential development to offset the costs of increased use on Parks and Recreation.

The Eppley Institute conducted research on local government policies providing for development impact fees via web searches, municipal code information, and phone calls and emails to park and recreation directors and city planners. If applicable, information and guidelines for the implementation of Development Impact Fees are provided for the three counties within the coastal area, based on Indiana state law and known stakeholder opinion as defined in municipal and county recreation master plans.

Plan Reviews

Guidelines

For most communities, an important aspect of the parks and recreation planning process is the establishment of level of service standards to be used as a basis for accepted levels of public access to recreation opportunities. Most communities in the coastal region of Indiana use one of the following three defined sets of standards. Some communities amend them to better suit their individual parks system, as is indicated in the following Parks and Recreation Master Plan reviews.

National Recreation and Park Association (NRPA) LOS Guidelines, 1983

- Mini-Park: 1 acre or less; < ¼ mile service area radius; ¼ to ½ acre/1000 population
- Neighborhood Park/Playground: 15+ Acres; ¼ to ½ mile service area radius (up to 5,000 pop.); 1 to 2 acres/1,000 pop.
- Community Park: 25+ acres; 1 to 2 mile service area radius; 5 to 8 acres/1,000 pop.

Regional Space

- Regional Space: 1 hour driving time; 15 to 20 acres/1,000 population
 - Regional/Metropolitan Parks: 200+ acres
 - Regional Park Reserves: 1000+ acres

NIRPC Guidelines

- Sub-neighborhood parks: <1 acre; 8 acres/1000 pop.
- Neighborhood parks: 4-20 acres; 10 acres/1000 pop.
- Community parks: 25+ acres; 2 acres/1000 pop.



Purdue University LOS Guidelines

- Block Parks: < 1 to 5 acres; ½ acre/1,000 pop.
- Neighborhood Parks: 4 to 15 acres; 3 acres/1,000 pop.
- Community Parks: 10 to 25+ acres; 7 acres/1,000 pop.
- Special Recreation Areas: Varies

Plan Reviews

LOS Standards	Recommendations/conclusions from each plan based on Level of Service Standards and local development standards
Public Engagement	Public needs - Public Access sites (parks, marinas, golf course, nature preserves, etc.)
Development Impact Fees	Development Impact Fees/Recommendations for Implementation

Review of County Master Plans

Lake County

LOS Standards	Lake County does not adhere to specific level of service standards, stating that as a county parks department it provides services separate from those provided by municipalities. NRPA standards are mentioned as a valuable basis for comparison but for a county agency these guidelines should only be applied on a site-by-site basis. Therefore, the needs assessment is “not based on a quantification of amenities, but rather on needs found during visioning, public and park assessment phases of plan development.”
Public Engagement	In order to involve the public, the Lake Co. Parks Department (LCPRD) conducted impromptu discussions with park visitors as well as user surveys and public meetings. Individual park managers were also interviewed to determine specific needs. Based on these the LCPRD made several recommendations, including improving existing facilities, increasing maintenance personnel, developing an improvement schedule, increasing volunteerism, improving and increasing signage throughout the park system, increasing programming, and improving the department’s image. A specific plan for implementation with a timeline and priorities is not contained in this plan. Projects and costs for each park are detailed in the plan.
Development Impact Fees	The plan does not mention development impact fees.

LaPorte County
LOS Standards

The plan uses the 2000 SCORP Regional Park Standards for their level of service standards. These include standards for district parks, community parks, natural resource areas, and trail systems. Review of existing LaPorte County parkland shows that natural resource areas and greenways and trail systems are lacking.

Public Engagement

The public was surveyed to determine their opinion on the state of the county parks system. Based on these results and research by the parks department and the plan commission (made up of senior LCPRD staff, Planning and Development Division staff, and a Parks and Recreation Board representative), several areas of focus were determined and rated based on their feasibility and necessity. These issues include maintaining and improving existing facilities, trails, and picnic areas, developing new facilities, improving planning and administration, increased programming, and increased water access. An implementation plan includes a yearly breakdown of projects with costs and sources of funding.

Development Impact Fees

The plan does not mention development impact fees but does mention tax increment financing as a potential source of funding.

Porter County
LOS Standards

The national park standards developed by NRPA are the basis for level of service in Porter County. The plan states that they will be applied on a case-by-case basis and not strictly adhered to due to the nature of county parks. The plan suggests improvements to existing facilities, land acquisition, landscape improvements, and improved signage. The implementation plan includes goals with prioritized actions followed by a yearly breakdown of actions with costs and funding sources.

Public Engagement

The public was encouraged to engage in public workshops, public comment, and focus group and stakeholder meetings. Changes were made to the plan based on comments made by the public during the review process. A major focus of the plan is the development of a more extensive multi-use trail network in the area.

Development Impact Fees

The plan mentions development impact fees as a potential funding source that should be explored but is not a high

priority. It is to be considered and discussed with other Porter County departments but will not likely be implemented within the time that this plan is in effect.

Review of Local Master Plans

Chesterton LOS Standards

The study mentioned below that was the basis for the implementation of the park impact fee involved a city-wide park inventory and the establishment of Recreational Community Level of Service Standards. Park land standards are defined in the Chesterton Master Plan based on those established by Purdue University, with the slight modifications of defining Special Recreation Areas as 0.5+ acres, providing ½ acre/1,000 population to better accommodate Chesterton.

Based on these standards and population projections it was determined that Chesterton required 19.85 additional park acres for 2007 and 81.34 by 2016. In addition to acreage standards, amenity standards were applied. The Park Board was able to determine current deficiencies in level of service (LOS) and future needs based on the population growth projections. The most substantial deficiencies in current amenities were baseball diamonds and multi-use trails. 2016 projections also indicated that softball diamonds, basketball courts, playgrounds, multipurpose fields, park shelters, and park restrooms would be required.

Public Engagement

The plan does not mention public engagement in regard to its development or otherwise aside from the needs for which the Parks Department must provide.

Development Impact Fees

A study was conducted by the Chesterton Park Board, the result of which was the enactment of a Park Impact Fee Ordinance in fall 2007. The amount of the fee was determined by estimating the Recreational Facility Cost over the next ten years, subtracting the amount of non-local revenue through donations, and dividing by the anticipated number of residential building permits issued over the next ten years. Developers can be considered for partnerships in which they would be able to count park infrastructure components against their impact fees.

Crown Point

The Crown Point Parks and Recreation Master Plan on file is relevant to the years 1998-2003. This information may be out of date.

LOS Standards

The needs assessment performed for this plan was conducted based on the LOS standards established by NRPA. The results show that Crown Point was lacking land in the “community parks” classification. Amenity deficiencies include a golf course, bicycle and other trails, sledding hills, and tennis courts.

Public Engagement

The city held a public workshop to help determine deficiencies and issues associated with current park lands and to define actions to be taken toward their improvement. From these meetings the city was able to determine several issues which were thought to be pressing by the community. These issues include inadequate park land, existing facility improvements, need for new facilities, need for increased activities, and administration improvements.

Development Impact Fees

The plan does not mention development impact fees.

Dyer

LOS Standards

Dyer has created an individualized plan for LOS standards. The NRPA guidelines are taken into consideration and set as goals, but actual park land needs in the town are determined on a case-by-case basis. Information was gathered through site analysis, survey data, public input, park location, and capital costs, but this information was used primarily to inform the planning process. The plan states the results of the public engagement but does not compile them into specific deficiencies. Some examples from public input include a desire for more consistent planning and direction; improved facilities, including a community center; and increased programming. The plan is broken down by year for anticipated implementation steps with several actions expected for each year.

Public Engagement

A community focus group was created and public meetings were held in order to assess the needs of park land in Dyer. Telephone and mail surveys were also conducted to contribute to the needs assessment. From these meetings themes were identified which helped the Parks Department to more effectively address issues concerning Dyer parks. These themes include increasing trails and sidewalks in and among parks, building a community rec. center, increasing

revenue through profitable facilities and partnerships, land acquisition, and thoughtful planning.

Development Impact Fees

The plan mentions a desire to establish a developer land/cash development ordinance that would aid the town in maintaining desired park land acreages by setting aside portions of new developments for park land. Development impact fees are not specifically mentioned.

East Chicago
LOS Standards

The plan uses the NRPA LOS standards for park land as a basis for comparison. The needs assessment is determined based on input from the public, the park board, and the park staff, which was combined to establish issues. These issues were summarized into four basic needs: consistent funding, new and accessible play equipment, more programming, and more parks and park space. The plan includes a detailed list of park improvements to be made in individual parks over the course of the five years, with their anticipated year of completion.

Public Engagement

Three public meetings were held in which the public, park staff, and other planning staff were in attendance. Two focus group meetings were also held, one of which included the public, the park board, park staff, and other municipal staff, the other of which included 7th through 11th grade students. A phone survey of approximately 800 East Chicago residents was also conducted. Several themes were determined from the public input section, including safety and lighting, handicap accessibility, increased diversity in recreational opportunities, more supervision, and improved maintenance.

Development Impact Fees

The plan does not mention development impact fees.

Gary
LOS Standards

The Gary Master Plan utilizes LOS standards based on citizen input, benchmarking against similar agencies, current demand for services, parks and recreation industry trends, Indiana recreation trends and standards, and anticipated financial and policy opportunities and constraints. Due to budget cuts, increased park land is not recommended in Gary. For this plan the LOS standard was set at the current level. Recommendations include improving current facilities. Implementation is broken down into 13 strategies, as well as

a list of specific tasks with associated priority levels and years of anticipated completion.

Public Engagement

The public was involved through individual stakeholder interviews, focus group meetings, workshops with community leaders, and open public forums to review the plan draft. Through public involvement, several issues were determined, including improved maintenance, increased programming and facilities, action to improve perception of the Parks Department, finance management, and revenue generation.

Development Impact Fees

This plan does not mention development impact fees.

Griffith

The Griffith Parks and Recreation Master Plan on file is relevant to the years 2001-2006. This information may be out of date.

LOS Standards

Griffith LOS standards were determined with the help of NIRPC and are similar to those of the NRPA guidelines. These guidelines also include recommendations for specific facilities such as softball diamonds, basketball courts, picnicking, swimming pools, and golf courses. Analysis of the current LOS indicates that both increases park land and all facilities except baseball fields are required. Projected population growth shows deficiencies in both neighborhood (49.3 acres) and community parks (28.6) by 2010.

Public Engagement

The public was engaged through a mail survey which provided a sense of the public opinion of the park system. The results showed that in general, the public was satisfied with current park land and that they would prefer to see improvements on existing parks rather than new park development.

Development Impact Fees

This plan does not mention development impact fees.

Hammond

LOS Standards

The Hammond plan does not use specific park land acreage guidelines so specific deficiencies are not discussed. The plan instead includes recommendations for improvements at each park as well as broader goals with recommended solutions and an action plan that includes anticipated dates of completion. Goals and objectives show that current deficiencies include playground and park condition, pathways and trails, park and recreation buildings, swimming

pool conditions, and other park amenities such as passive recreation opportunities.

Public Engagement

Public involvement was attempted but there was no attendance at the open public meeting and only six surveys were returned. The limited response showed that the public was interested in increases in safety, trails and paths, large amenities such as skate parks and splash parks, and investment in the parks.

Development Impact Fees

This plan does not mention development impact fees.

Hobart

The Hobart Parks and Recreation Master Plan on file is relevant to the years 2002-2007. This information may be out of date.

LOS Standards

The Hobart plan uses acreage recommendations from the NIRPC guidelines. Based on these, Hobart was found to be deficient of 11 acres of parkland as well as softball fields, tennis courts, basketball courts, playgrounds, and other facilities. Population projections show that there will be a 76 acre deficiency by 2010. The implementation plan includes yearly goals as well as a list of short- and long-term goals with their corresponding priority.

Public Engagement

The public was involved through mail surveys and open public meetings. The primary results were the development of a bike trail and specific suggestions for improvements in facilities and programming.

Development Impact Fees

Development impact fees are not specifically mentioned, but the plan mentions a 1% of house value tax abatement up to \$1000 to be paid before an occupancy permit is issued, followed by a 6-year tax abatement. This is not a fee on development but it is a fee on homeownership that would specifically fund park improvements.

Lake Station

The Lake Station Parks and Recreation Master Plan on file is relevant to the years 2000-2005. This information may be out of date.

LOS Standards

The Lake Station plan uses the NIRPC guidelines for acreage recommendations. It was found that the town meets these guidelines in every aspect but a community center, which is in the plan to be developed.

Public Engagement	To involve the public, a citizen advisory committee was established that frequently met with the park manager to discuss the plan in its preliminary stages. They also helped draft the survey questionnaire that was sent to a random sampling of the Lake Station population. The draft version of the master plan was opened to public review through a presentation at a public meeting. It was determined through public input that more funds needed to be allocated to the parks department to accomplish the desired goals. These include increased programming, boating access in Riverview Park, and improvement of current facilities.
Development Impact Fees	Development impact fees are not mentioned in this plan.
<u>Merrillville</u> LOS Standards	This plan compares Merrillville parks to the NRPA guidelines, finding that it has substantial acreage deficiencies in the overall park system and in community parks. Merrillville is found to have the lowest ratio of parkland and park spending per capita in the region. The town also shows deficiencies in tennis courts, exercise courts, playgrounds, and volleyball courts. The plan contains a list of goals separated into priority levels for each park.
Public Engagement	A survey was distributed to 2,500 citizens by mail, was given to all elementary school children, and was available at the Town Hall and other locations for public availability. Public meetings were also held to gather input. Based on this input, five themes were determined: more park facilities (particularly in underserved areas), improved existing facilities, a community park for special events, expanded facilities and programming, and improving the town image and the sense of community.
Development Impact Fees	Impact fees are mentioned as a potential future means of generating income for the parks department.
<u>Michigan City</u> LOS Standards	The Michigan City Parks and Recreation Master Plan does not discuss LOS or park acreage requirements. This plan contains a yearly breakdown of projects, including estimated costs and funding sources.
Public Engagement	Michigan City conducted a public survey specifically for their Parks and Recreation Master Plan as well as one for Washington Park, which was used for this Master Plan. In

addition, public hearings were held at various stages in the planning process. The primary issues raised by the public engagement involved Washington Park, neighborhood parks, a municipal golf course, Patriot Park, and budget/financing.

Development Impact Fees
Munster

Development Impact Fees are not mentioned in this plan.

The Munster Parks & Recreation Master Plan was not available at time of research.

Portage
LOS Standards

Portage recreational standards were established as a part of a study that was conducted to develop the recently enacted Recreation Impact Fee (RIF). This study determined that the acreage standard, including school sites, for Portage was 26.03 acres/1000 pop. This is based on individual standards for Block parks (0.61 acres), neighborhood parks (4.69 acres), community parks (12.92 acres), and special parks (7.81 acres). Since these figures reflect the current level of service in Portage, which overshoots the national standard for each park type, there are no current needs for park land in the town. The RIF study also determined deficiencies in facilities to include football fields, outdoor volleyball courts, an ice skating area (in the plan for development), interpretive and environmental centers, an outdoor entertainment venue, climbing facilities, a splashpad, a dog park, and multi-use trails. Implementation goals are broken down into priorities and anticipated year of completion.

Public Engagement

Public meetings were held and public input surveys were distributed to engage the citizens. Meetings to review the master plan draft were also held. This engagement led to the definition of the following issues: existing parks and facilities, new park and facility development, trail development, Salt Creek Corridor, programming, maintenance, staffing, and budget.

Development Impact Fees

The RIF study conducted determined that a fee should be enacted. Portage enacted a \$700 fee on new developments in July 2007 to aid in park funding.

Porter
LOS Standards

This plan does not discuss LOS standards. The issues defined include primarily insufficient budgeting, improvements to existing facilities, some new facility developments, and infrastructural improvements.

Public Engagement	Public engagement is not mentioned in this plan.
Development Impact Fees	Development impact fees are not mentioned in this plan.
<u>Schererville</u> LOS Standards	The Schererville Master Plan uses the NRPA guidelines for their park LOS standards. Comparison with these standards shows that the town is lacking substantially in overall park acreage in every park type except community parks. It is also shown that many facility types are lacking, that the town meets standards in only baseball and softball diamonds, soccer fields, trails, and playground equipment.
Public Engagement	A household survey was distributed randomly to residents, personal interviews were conducted with government officials, sports group, and park staff, and public meetings were held. Results included support for a new community center, a desire for increased parkland and open space, and for improved programming.
Development Impact Fees	The plan does not mention development impact fees, but Schererville has enacted a fee of \$1328.93 on new residential development.
<u>St. John</u> LOS Standards	St. John's park acreage exceeds NRPA standards. The plan does not mention specific amenities deficiencies that should be addressed. It does discuss the importance of focusing development on the largely aging population of the town. There is an Action Plan for implementation, which includes projects, sources of funding, and years of anticipated completion.
Public Engagement	A survey was distributed to all St. John citizens with a 25% return rate and public meetings were held to engage the public. From these it was determined that the town was felt to be lacking in recreational programming, cultural opportunities, park connectivity, and a central parks and recreation building.
Development Impact Fees	St. John does levy a development impact fee of \$1652.00 on new development. The fee was established in 1997.

Valparaiso

The Valparaiso Parks and Recreation Master Plan on file is relevant to the years 2002-2006. This information may be out of date.

LOS Standards

The Valparaiso Master Plan uses a modified version of the LOS standards developed by Purdue University. These standards differ in:

- a. Community Parks Acres: 14/1,000 pop.
- b. Special Park Acres: 0.5/1,000 pop.

Based on these standards, Valparaiso is found to currently have sufficient park land but will be lacking by 2006 if updates are not made. Also, the city currently has insufficient softball diamonds, basketball hoops, neighborhood/recreation centers, and ice skating rinks. The plan contains an implementation plan, including plans of action broken into individual years with estimated costs and funding sources.

Public Engagement

Valparaiso conducted six focus groups with total participation of over 150 people as well as held public park board meetings to review the plan. Issues determined by the focus groups include public desire for improved programming, trail development, increased maintenance (cleanliness, restroom facilities, parking), additional staff, upgrade of current facilities and development of new facilities, and improved communication.

Development Impact Fees

Valparaiso levies a \$1331.00 fee on new development.

Whiting

The Whiting Parks and Recreation Master Plan on file is relevant to the years 2002-2006. This information may be out of date.

LOS Standards

Using the NRPA guidelines, Whiting was determined to be deficient in both park land acreage and all major facilities. An implementation plan contains projects, funding sources, and estimated expenditures on each over the course of the five years the plan is current.

Public Engagement

A public survey was distributed and public hearings were held. These, combined with park staff and park board inputs, led to the following conclusions for improvements: continuation of the Whiting Shoreline Improvement Project, development of new facilities (skate park, dog park, shooting and archery facility, and other parks throughout the community), and increased programming (soccer and the arts).

Development Impact Fees This plan does not mention development impact fees.

Review of Regional Plans

The following plans were reviewed for public access site recommendations and information.

Little Calumet River Watershed Management Plan

Little Calumet River Watershed Management Plan, Little Calumet River Watershed Group. 2008.

The Little Calumet River Watershed Management Plan is a regional planning document from a much more scientific perspective. This plan discusses the ecological condition of the watershed through a number of tests and observations and determines the best courses of action for addressing the problems found. Neither park land nor recommendations for park management are discussed beyond maps of existing recreational areas. The area of research is split between three smaller watersheds within the region: Little Calumet River Watershed E-W Split, Deep River/ Little Calumet River Watershed, and Burns Ditch/Willow Creek Watershed.

This plan outlines several issues currently being faced by the area and references plans that have previously dealt with these and other issues. These issues are studied in this plan through technical research and observations within the watersheds. Detailed information about the region, including specific data and charts, includes land use, elevation, soil types, recreation areas/publicly controlled lands, riparian buffers, and the results of many tests in the area. From the data collected, they were able to establish critical areas to more appropriately direct remediation efforts, determine the most pressing problems in the area, and create goals to mediate those issues.

The objectives determined by the project include reducing levels of undesirable materials in the water, restoring ecological elements that have been negatively affected, increasing public awareness, and increasing river connectivity and public access sites in the area. No specific sites were mentioned as potentially viable for public access. These objectives are split into seven specific goals, each of which includes several aggressive actions for the short, medium, and long terms.

The Marquette Plan

The Marquette Plan: The Lakeshore Reinvestment Strategy. City of Portage. 2005.
<http://nirpc.org/transportation/pdf/Marquette%20Plan%20One.pdf>

The Marquette Plan: A Vision for Lakeshore Reinvestment. Northwestern Indiana Regional Planning Commission. 2008. <http://nirpc.org/transportation/pdf/Marquette%20Plan%20II.pdf>

The Marquette Plan is a two-phase planning project that outlines a redevelopment strategy for the Coastal Indiana region. Phase I was completed in 2005 and aims to create a “livable lakefront” in this area from the Indiana/Illinois border to the Port of Indiana. This region contains East Chicago, Hammond, Portage, Gary, and Whiting. Phase II contains the region between the Port of Indiana and the Michigan/Indiana border along Lake Michigan. The plan

hopes to bring together these communities in order to create a better quality of life by linking green space and improving infrastructure. The plan, conceived by US Congressman Pete Visclosky, establishes a dialogue among the involved communities and the Indiana Department of Natural Resources. This partnership is intended to aid in the Marquette Plan's implementation both through cooperation between the concerned entities and through proposed legislation by Representative Visclosky to support the goals of the plan by providing funding and political support.

The Marquette Plan uses a tiered approach to the development of its strategy. The first tier includes several principles through which the goal of a "livable lakefront" can be accomplished, including showcasing heritage, redefining edges, bridging gaps, preserving, protecting, and enhancing environmental systems, protecting drinking water, and formulating an effective management and funding strategy. Based on these principles, five frameworks were developed to more clearly address the goals of the plan. They are industry and infrastructure, motorized transportation, greenways, multi-use trails, and community investment. For each of these frameworks general policy recommendations are made, followed by specific project areas to be addressed with encouraged actions for each. For example, developing trails or public parks as parts of private development is an example of these policy recommendations.



The plan contains several "catalytic projects" which are to be completed in the short-term and act as examples through which other development can more readily occur. These include major near-lake projects in each of the five communities.

One of the primary supporting themes of the plan is a focus on regional cooperation in order to maintain consistency throughout and to see that the goals are reliably accomplished long-term. To head this management the plan suggests the Shoreline Development Commission, which is an existing entity made up largely of major Marquette Plan stakeholders. They would see to the continued management and implementation of the plan.

Salt Creek Watershed Management Plan

Salt Creek Watershed Management Plan. Save the Dunes Conservation Fund. 2008.

The Salt Creek Watershed Management Plan is much like the Little Calumet Watershed Management Plan in its utility and form. There is a site assessment of the physical characteristics of the watershed, focusing specifically on smaller sub-watersheds that make up the larger. The plan provides water quality data from several sampling sites within the area. The sources of concern outlined include sediments, nutrients, E. coli, impaired biotic communities, and potential unverified and other sources. Based on these findings, intermediate, priority, and critical sites were established and goals were set to address the concerns within them. These goals include reducing nitrate, reducing E. coli, improving public involvement, and improving habitat. The plan also recommends several implementation strategies both specific to the individual goals and for the overall success of the plan.

Trail Creek Watershed Management Plan

Trail Creek Watershed Management Plan. American Structurepoint, Inc. 2006.

The Trail Creek Watershed Management Plan is much like the Little Calumet and Salt Creek Watershed Management Plans. There are assessments of the current characteristics of the watershed and existing concerns. These are supported by historical and current water quality data from several sampling sites within the area. The sources of concern outlined include E. coli, erosion and sedimentation, nutrient loading, and hydromodification. The sources of these issues are discussed and critical sites are established, with goals set to address the concerns within them. These goals relate directly to the four sources of concern and involve reaching specific concentrations of E. coli, sedimentation, and nutrient pollution.

Hydromodification remediation calls for the restoration of natural stream channel and flow. The plan also recommends several implementation goals and strategies for both the stated goals and also other issues determined to be of concern. Public cooperation is a very important aspect of these strategies as the land is primarily privately owned. Low-impact development is encouraged, such as riparian buffers and best management practices.

REVIEW OF NIRPC GREENWAYS AND BLUEWAYS PLAN

The Northwest Indiana Regional Greenways and Blueways Plan was developed jointly by the Northwestern Indiana Regional Planning Commission (NIRPC) and the Openlands Project and was published in 2007. This effort represents a culmination of research, review, and analysis of local, regional, state, federal, and private endeavors that aim to preserve and restore linear open space corridors in the Northwest Indiana landscape.

Greenways and Blueways: Northwest Indiana Regional Plan, Northwest Indiana Regional Planning Commission. 2007.



<http://www.csu.edu/cerc/documents/GreenwaysBluewaysNWIndianaRegionalPlan2007.pdf>

The Northwest Indiana Greenways and Blueways Regional Plan provides a clear path by which the coastal region of Indiana in Lake, LaPorte, and Porter Counties can combine the efforts of many otherwise disparate entities, establishing a dialogue aimed at the development and conservation of greenways. The plan contains information relevant to eight different stakeholder groups, all of whom have a presence in the region and stand to benefit from the expansion of the greenways and blueways system. These eight include “local governments,” “private property owners,” “corporate property owners,” “land trust/advocacy groups,” “linear corridor owners,” “land developers,” “federal and state agencies,” and “institutions of education.”

Greenways and Blueways aims to cohere the efforts of these highly varied groups in order to ease the burden of implementation. By normalizing the process and providing a concise course of action for each entity a regional effort can be executed most efficiently. The plan contains individualized information for each group, outlining the opportunities and benefits provided by expanding greenways and blueways.

While the plan does not outline explicit development standards, it does provide a list of sites in the Northwestern Indiana area that would be suitable for blueways, as well as detailed information about the utility and maintenance of both blueways and greenways. The blueways site information gives a brief description of each location with individual observations and

potential points of access. The plan does not include specific recommendations regarding public access beyond a call for more preserved land. This call, however, is voiced in the recommended implementation strategies for “local and county governments,” suggesting they pursue property acquisition beyond strictly developmental aims to include land for increased passive recreational opportunities.

Additional information provided by Greenways and Blueways includes case studies of successful partnering projects in the area and resources for assistance in funding, education, and training. The case studies are intended to show the potential for successful cooperation between the entities discussed in the document. In the assistance section, examples of resources that could help with funding, education, or training are listed along with which of the eight entities would be potentially eligible for the programs.

No mention is made of development impact fees in this document. The “federal, state, and regional entities” section contains a call to alter Indiana law to lift a restriction on the power of governmental taxing authorities to issue “a referendum on open space and conservation funding measures.”

CONDITION ASSESSMENT

Introduction

A reconnaissance-level condition assessment is an examination of a site to determine its current state and to identify obvious and apparent deficiencies. A condition assessment is a vital step in most asset management procedures – it provides a starting point from which to plan and make decisions – after identifying the inventory of facilities. Site visits give plan developers a sense of the current state of the region and a more realistic idea of the planning area. A condition assessment of a selection of parks throughout the planning area will allow for the extrapolation of data to the entire region. This information can then be used to make informed decisions about the focus of planning efforts.

Methodology

The Eppley Institute and the IDNR determined criteria to be considered to serve as the basis for condition assessments. The Eppley Institute then developed a condition assessment scale guidance document that detailed what site elements were to be inspected. IDNR determined 120 sites to be visited and assessed by the Eppley Institute. Eppley Institute staff members were trained to perform condition assessments prior to travelling to the assessment region.

A total of 120 condition assessments were performed in August 2009 based on the criteria defined in conjunction with the DNR and NIRPC. The standardized criteria included a 1-5 rating denoting "Poor," "Below Average," "Average," "Above Average," and "Excellent" based on cleanliness, structural, safety, appearance, and functionality in the categories Outer Park Edges and Entry, Active Recreation Areas, Passive Recreation Areas, Playgrounds, Pathways, and Greenspace. The complete list of criteria, assessment template, and results can be found in Appendix C. The standardization of the process allowed for consistency in rating by reducing subjectivity in assessments.

Results

The table below illustrates the resultant rank groupings from the Condition Assessments.



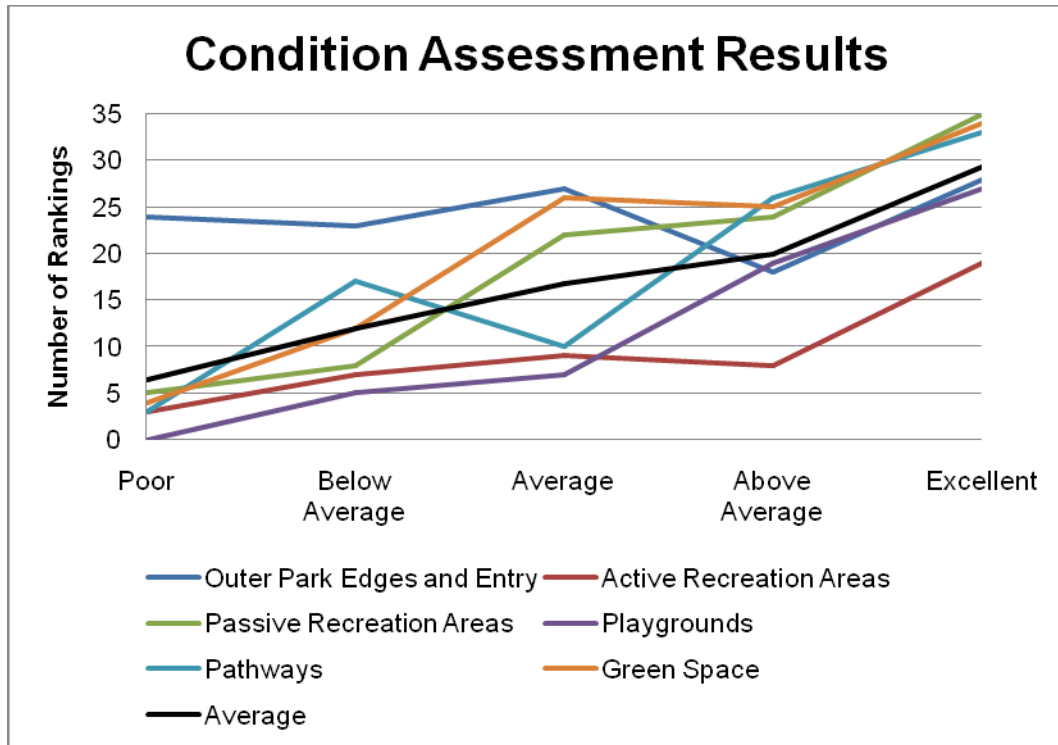


Figure 2: Condition Assessment Results

Overall, these results show that in each category “excellent” is the most frequent rating. In all categories but Outer Park Edges and Entry, rankings tend to be on the higher end of the scale, with the largest number of rankings in “excellent” and the fewest in “poor.” In the Outer Park Edges and Entry category, rankings are relatively evenly distributed through the scale. That category had by far the most responses, with one for each site. For most sites, one or more categories were determined not to apply. For example, many passive recreation sites do not have playgrounds.

The categories that show the greatest need for improvement are Outer Park Edges and Entry, Pathways, and Green Space. This is based on the number of sites with “poor” and “below average” rankings in these categories. In the case of Green Space and Pathways, however, it seems to indicate a larger number of applicable sites since both still received high responses for higher rankings.

Passive Recreation Areas, Active Recreation Areas, and Playgrounds all had a substantial number of rankings as “average” or above. None of the categories is completely one-sided, but these three are very nearly so. Active Recreation Areas and Playgrounds both received many more “excellent” ratings than anything else.

Limitations

Some limitations exist in the application of the assessment process. Despite standardization efforts and the simplistic, reconnaissance-level approach taken to this Condition Assessment, it is impossible for all assessments to be perfectly consistent. Overall, the results illustrate an

accurate portrayal of the parks in the region, but some issues will inevitably distort results. The standardization of the process is intended to reduce this distortion as much as possible. Passive Recreation Areas, Active Recreation Areas, and Playgrounds all show primarily positive results. This is most likely due in part to the fact that there were fewer parks to which these categories applied. Because of this, parks with these amenities were likely either perceived to be of better quality overall or to be newer, more recently updated parks.

Conclusion

Overall, the Conditions Assessment shows positive results for the condition of park lands in the Coastal Region of Indiana, though steps should still be taken toward improvement. The parks selected for this assessment represent a cross-section of the public access system currently in place in the region, and thus can be extrapolated to the entire region.

The table below was created using the overall average ranking from each park. The number of parks that fell into each ranking was totaled illustrating the average condition of the parks in the region.

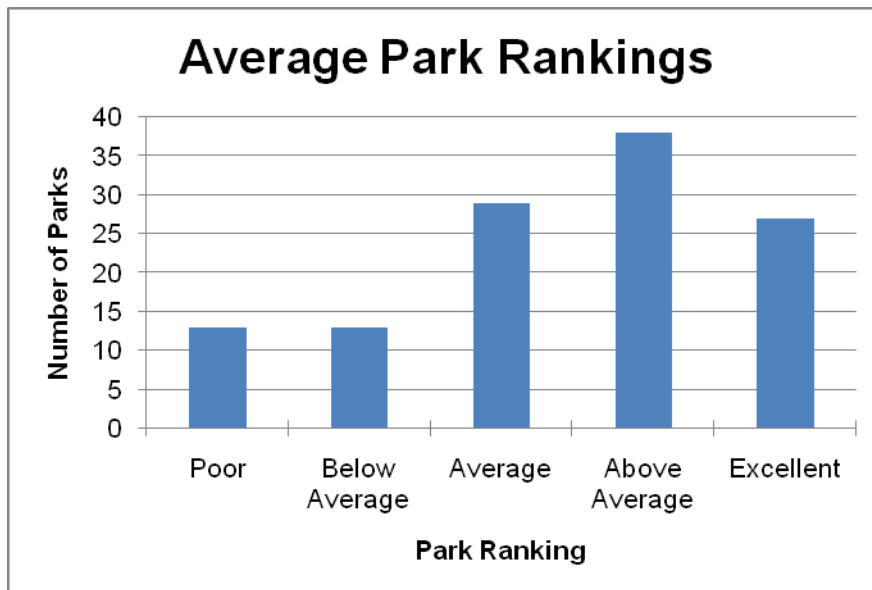


Figure 3: Average Park Rankings

Overall, the conditions of the selected park lands in the Lake Michigan Coastal Region are on the upper scale of rankings, with the most parks in the Above Average category. However, the rankings on the low end cannot be overlooked. While they are fewer than those with higher rankings, there is still a substantial amount ranked as Below Average or Poor. These parks can use those with higher ranks as examples to improve levels of public service.

For every park visited in this Condition Assessment there was a ranking for Outer Park Edges and Entry. This category received similar results for each ranking, illustrating varied conditions throughout the region.

Low rankings do not necessarily indicate a poor-quality park, though some sites did receive multiple low rankings. If poor rankings were a reflection of poor overall site quality then rankings were more uniformly lower.

PRIORITY INDEX FOR EXISTING PUBLIC ACCESS SITES

Introduction

The Site Priority Index is a balanced scorecard approach that creates a method by which the regional entities including LMCP, NIRPC, and RDA can compare the relative importance of sites in relation to one another. This metric, in conjunction with other public access management considerations, can be used to create an overall public access management or resource allocation strategy for the LMCP. For example, the LMCP may use this metric as a compelling, data-driven case for projecting funding priorities. Similarly, it may indicate where sites could be targeted for disposition during long-range planning, as well as reducing funding to one site type where similar sites exist.

Creation of a Site Priority Index requires a metric that will allow the LMCP to address specific, mission-driven goals using level of importance ratings of sites. The outcome of this process will be an important part of the LMCP site management plan that enables prioritizing of investment needs, determining service levels to these sites, and, finally, influencing business decisions related to sites.

The LMCP and its parent federal program have a primary focus of protecting and preserving the natural features and the recreational value of those natural features in a coastal area. This site priority index was developed with that focus. The parameters defined for scoring priorities are based on the premise of providing passive recreation opportunities within the coastal area. Passive recreation opportunities are defined as human, non-motorized access to natural water features, waterways, undeveloped natural lands, and partially developed terrestrial corridors. Examples of passive recreation opportunities might include hiking, biking, and walking trails; boat ramps; fishing access sites; beach access; nature preserves; and some city and county parks.



Outline of Process

Step 1-Establish Criteria: The criteria selected must reflect the agency's mission and must also be universally accepted by all divisions in the organization.

Step 2-Weight Criteria: Once the criteria definitions and examples have been agreed upon, the next logical step is to weight them according to agreed upon importance.

Step 3-Create Scoring Guidance: It is not only important to identify criteria, but to provide specific definitions and examples to assist in determining an accurate score.

Step 4-Pilot Results: It may be necessary after initial acceptance to score a portion of the agency sites to determine if adjustment or revision is necessary for the criterion, weighting, or scoring guidance.

Step 5-Implement

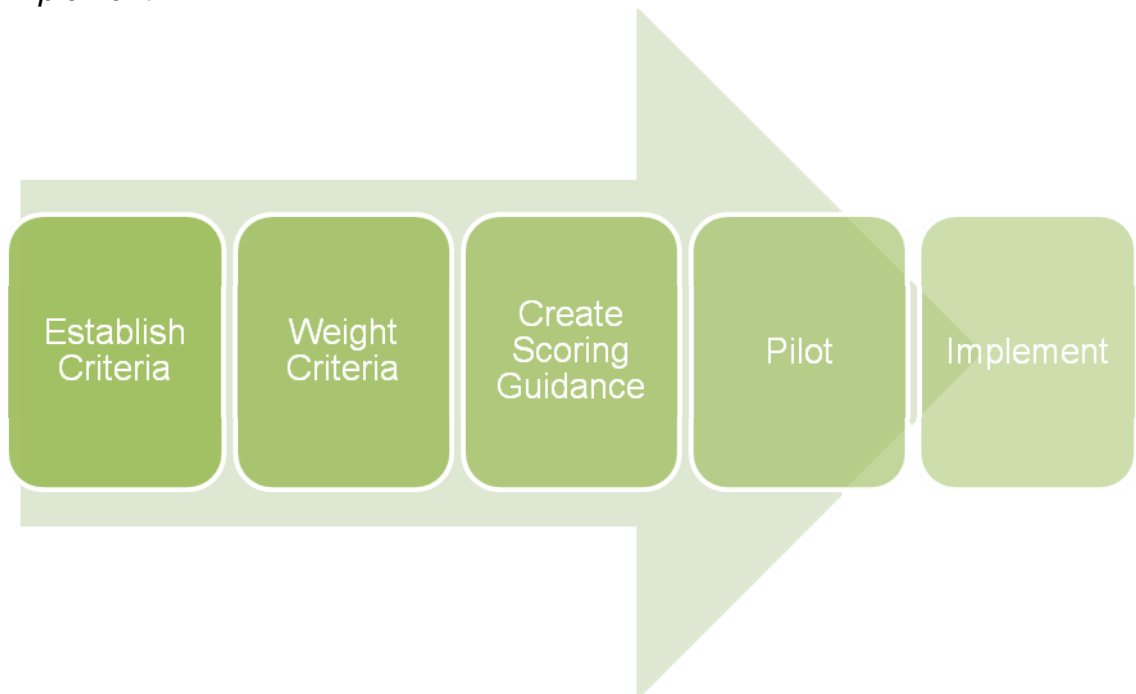


Figure 4: SPI Process Model

Review of LMCP and NIRPC Input

On October 20, 2009 a meeting was held with representatives from the Lake Michigan Coastal Area Program and the Northwest Indiana Regional Planning Commission to determine appropriate criteria for the LMCP Site Priority Index. During the meeting, the following criteria were suggested:

- Species Diversity
- Uniqueness
- Parking
- Level of Community Support
- Access to Underserved Communities
- Education Value

- Existing Planning Documents
- Safety
- Access to Population Centers
- Distance to Coast
- Public or Private
- Ecological Impact
- Connectivity
- Habitat
- Water Access
- Natural Features
- Revenue Generation
- Economic Impact
- Location
- Health and Wellness
- Business Start-ups
- Use Types
- Within an Identified Gap Area

Criteria

These criteria were distilled into the following categories

- **Uniqueness**
 - Species Diversity
 - Habitat
 - Natural and Cultural Features
- **Location**
 - Within an Identified Gap Area
 - Distance to Coast
 - Connectivity
 - Natural Water Feature
 - Identified in an Existing Planning Document
 - Ecological Impact
 - Located in an area that has a concentration of low income and minority population (Environmental Justice area)
 - Occurrence of water feature
- **Access**
 - To Underserved Populations
 - To Population Centers
 - Parking
 - Access to site features
 - ADA compliant
 - Entry Restrictions
- **Variety of Recreational Uses**
 - Use types
 - Education Value
 - Seasonality
- **Economic Impact**
 - Generates Revenue
 - Likely to attract business start-ups
 - Likely to increase property values
- **Sustainability**
 - Public or Private
 - Funding available for restoration and maintenance

Criteria Weight

These six categories become the Site Priority Index criteria with the following weights:

Uniqueness	10%
Location	25%
Access	25%
Variety of Recreational Uses	20%
Sustainability	15%

Economic Impact

5%

Scoring Guidance

The Site Priority Index scoring guidance specifies a clear and concise definition for each criterion. Most importantly, a rating scale for each criterion is defined.

Uniqueness

Uniqueness is a factor that determines the impact on the LMCP if the site were to be lost. It considers the impact to the area if an available site was lost to a developer or could not be acquired because of available funding. This measure also considers whether an existing site could be given up, such as in a land swap or in a fee simple sale to create a better position for acquiring a similar site in a nearby location.

Criterion	Rating Scale	Weight
Uniqueness	Low Medium High 1 2 3 4 5 6 7	10%
High	Definition	Site is highly unique. It contains high species diversity, important habitat, and/or unique natural or cultural features. Loss of the site would have a high impact on the mission of the program. There are no similar sites nearby.
Medium	Definition	Site has unique features. There is some species diversity, good habitat, and/or interesting natural or cultural features. Loss of the site would have a medium impact on the mission of the program. There is at least one similar site nearby.
Low	Definition	Site is not unique at all. Species diversity, important habitat, and/or unique natural or cultural features are not defining factors. Loss of the site would have little or no impact on the mission of the program. There are numerous similar sites nearby.

*Nearby – within the Coastal Area/Region

Location

This factor deals with the value of a site relative to its immediate surrounding area. It considers service area gaps, ecological impact, proximity to the Lake Michigan shoreline; previous identification of the site in existing planning documents; water features; whether it is in an area that has a concentration of low income and minority population (Environmental Justice); and whether it provides connectivity to other recreational or public sites.

Criterion	Rating Scale	Weight
Location	Low Medium High 1 2 3 4 5 6 7	25%
High	Definition	Site is located within an area identified in the gap analysis as lacking in service; it is located in an Environmental Justice area; it has a high ecological impact within its immediate area; it is within ½ mile of the Lake Michigan shoreline; it is specifically identified within an existing planning document; it has natural water features; and it provides connectivity with other sites.
Medium	Definition	Site is near an area identified in the gap analysis as lacking in service. It has some ecological impact within its immediate area; it is located within 1 mile of the Lake Michigan shoreline; it is in a general area identified within an existing planning document; and it provides the potential for connectivity in the future if other nearby sites are acquired.
Low	Definition	Site is in an area that is already well-served. It has no obvious ecological value within its immediate area; it is not identified in any existing planning documents; it does not have any water features; and it has little or no connectivity potential.

Access

This criterion considers accessibility of the site to the public. Its parameters include access to underserved population and/or population centers; whether adequate parking is available, entry restrictions (i.e., open daily, with permit, closed except for research, etc.), access to site features (i.e., kayak launch), ADA accessibility, and site development potential.

Criterion	Rating Scale	Weight
Access	Low Medium High 1 2 3 4 5 6 7	25%
High	Definition	Site is located within an area identified as underserved and/or as a population center. It provides ample parking for visitors. Site is open daily and has no entry limitations; has developed access to features such as kayak launch, hiking trails, etc. All site facilities are ADA-compliant.
Medium	Definition	Site is near an area identified as underserved and/or as a population center. It has some parking available for visitors. Site is open on a limited basis with permission and has potential for developed access to features such as kayak launch, hiking trails, etc. Some site facilities are ADA-compliant.
Low	Definition	Site is in an area where there is already good outdoor recreation access to underserved populations or a population center. It has no parking for visitors. Site is open only for research with permission only and does not have potential for developed access to features such as kayak launch, hiking trails, etc. None of the existing site facilities are ADA-compliant.

Variety of Recreational Uses

This factor considers whether a site has a single recreational use or has multiple recreational uses. It especially considers the use type compared to a demonstrated need for that use in its immediate area, as well as specific consideration of any educational uses that could occur on the site.

Criterion	Rating Scale	Weight
Variety of Uses	Low Medium High 1 2 3 4 5 6 7	20%
High	Definition	Site has multiple recreational uses year round; provides a recreational use that uniquely meets a demonstrated need in its immediate area; and/or has a high educational value
Medium	Definition	Site has more than one recreational use; meets a demonstrated need in its immediate area but other sites in the area also meet this need; and/or site provides some possible educational opportunities.
Low	Definition	Site has a single recreational use that is seasonally limited; this use exists at other sites in the immediate area; and/or has little or no educational value.

Sustainability

This factor considers the direct sustainability of the site: whether it is a publicly or privately owned site; and whether the owner has the funding and resources available to restore and maintain the site in its desired state.

Criterion	Rating Scale	Weight
Sustainability	Low Medium High 1 2 3 4 5 6 7	15%
High	Definition	Site is publicly owned by an established, well funded, well staffed agency that has experience and resources to restore and maintain the site in its desired state. Or, site is privately owned by an established, well-financed individual or corporation that is capable of securing the expertise and resources needed to restore and maintain the site in its desired state.
Medium	Definition	Site is publicly owned by an agency that has experience and resources to restore and maintain the site in its desired state, but an unsteady funding stream. Or the site is privately owned by an individual or corporation that has a fluctuating financial stability.
Low	Definition	Site is owned by a public or private entity that is underfunded; does not have the resources; and/or is not easily able to secure the resources or expertise to restore and maintain the site in its desired state.

Economic Impact

This criterion considers whether a site has potential to generate notable revenue for its managing agency; whether it could be a catalyst for new businesses on or near the site; and its likelihood of increasing the value of private properties near the site.

Criterion	Rating Scale	Weight
Economic Impact	Low Medium High 1 2 3 4 5 6 7	5%
High	Definition	Site has potential to generate revenue equating to over 75% of its management and maintenance costs; it supports a type of use or is located in an area that would attract businesses or private commerce on or near the site; and/or is located in an area with notable amounts of private property around it and the value of that property is likely to increase because of the site.
Medium	Definition	Site has potential to generate revenue equating to up to 75% of its management and maintenance costs; it might attract some businesses or private commerce to a nearby area; and/or it is located in an area with medium to large tracts of private property around it and the value of that property might increase because of the site.
Low	Definition	Site has no potential to generate revenue or potential to generate a small amount of revenue that equates to less than 20% of its management and maintenance costs; it is not likely to attract new businesses or private commerce; and/or it is located in an area with large tracts of land around it and is not likely to have an effect on property values.

Scoring

Each criterion is scored using the seven-point Likert scale described within the scoring guidance section. That score is then multiplied by the percentage weight of each criterion and the products are then added together for a site score.

If there are multiple assessments for a site, then the mean of each criterion score is multiplied by the percentage weight and the products are added to reach the final score.

Scoring Example—Site Alpha			
Criterion	Rating	Weight	Product
Uniqueness	5.5	10%	0.55
Location	6.3	25%	1.575
Access	5.5	25%	1.375
Variety of Recreational Uses	3.0	20%	0.6
Sustainability	4.5	15%	0.675
Economic Impact	5.0	5%	0.25
Total Score			5.025

BENCHMARKING STANDARDS

Introduction

The purpose of benchmarking is to assist the planning team in setting level of service standards for passive recreation sites in the Lake Michigan Coastal Area of Indiana. The benchmarking study provides an exploration of the passive park and recreation facilities of five cities determined to be comparable to cities in the planning area. Possessing this information, the Lake Michigan Coastal Program (LMCP) can decide how they wish to compare with these other cities. Goals can be set, standards redefined, and priorities established.

The benchmark process is not intended to find cities that match the planning area exactly. The main purpose is to assist the LMCP in finding comparisons for measurement and setting standards. By delineating the parks and recreation system of any one of the benchmark cities, LMCP can compare, contrast and emulate its future facilities in a measurable context. The benchmark cities in this study were chosen because of their comparable context of being shoreline communities that are interwoven with industrial interests.

The cities chosen were:

- Duluth, Minnesota
- Erie, Pennsylvania
- Waukegan, Illinois
- Holland, Michigan

Profile of Northern Indiana Coastal Area

History

The coastal region of Northern Indiana is comprised of three converging biomes—prairie, eastern deciduous forest, and northern boreal forest—which create several natural communities existing in close proximity to one another. Glacial outwash led to the formation of the Valparaiso/Tinley Moraine, leaving the characteristic unsorted sand, rubble, and clay soil makeup of the area. The periodic recession of the Lake Michigan shore piled this soil into the dunes, for which the region is well-known. Interdunal wetlands separate these dunes and combine with oak savannas and prairies to create the unique, biologically and geographically diverse ecosystem of this area (Indiana Lake Michigan Coastal Program and Final Environmental Impact Statement, 2002).

Economics/Industry

The supply of iron ore and limestone from Michigan and Minnesota and coal from Ohio by rail, as well as access to other raw materials, provided the means for rapid industrial



growth within the coastal region of Indiana. In the early 20th Century this industry was comprised primarily of steel refining, rail car production, and oil refining. Steel is still a primary industry today, with 25% of US production capacity for steel on the Indiana coast. Improvements in production efficiency have decreased the jobs in the steel industry by 75% since the 1970s. The Whiting Refinery is the third largest oil refinery in the United States and is capable of producing over 410,000 barrels per day. Agriculture and coal-burning power plants are also economically important to the region (Indiana Lake Michigan Coastal Program and Final Environmental Impact Statement, 2002).

Nearly two-thirds of employment in the region takes place in the top five industries. These include nonfarm proprietors (15.74% of total employment in 2007 in Lake, LaPorte, and Porter Counties), manufacturing (11.85%), retail trade (12.36%), health care and social assistance (12.47%), and government and government enterprises (12.02%). Employment decreases have taken place in manufacturing (-18.35%), retail trade (-0.2%), and government and government enterprises (-2.43%). Both nonfarm proprietorships and health care and social assistance increased markedly between 2001 and 2007 (20.53% and 14.32% respectively), making those two the highest employed industries in the region. Currently, the unemployment rates in the region are 6.2% in Lake County, 6.2% in LaPorte County, and 4.8% in Porter County (Stats Indiana).

Between 2002 and 2007 there was a slight increase in farmland (3.61%) in the region. This was due primarily to a substantial (21.08%) increase in Porter County while the increase was negligible (0.51%) in Lake County and LaPorte County saw a slight (-5.22%) decrease (National Agricultural Statistics Service).

Culture

While slavery was outlawed in Indiana as a part of the Northwest Ordinance, segregationist attitudes prevailed in much of the state, contributing to cities like Gary as population centers for African-Americans. Early industry also drew many Eastern Europeans and Latinos. These factors combined to create a rich ethnic heritage in the region.

The area developed culturally in tandem with its industrial growth, aided greatly by the Lake Michigan shoreline. Industrial districts drew neighborhood development near factories. The landscape was changed drastically in the wake of emerging industry. Wetlands were drained and rivers were redirected to allow for more efficient development. Many communities developed in the area as suburbs and resort towns emerged in the area. The region has two private universities, Valparaiso University and Calumet College of St. Joseph, as well as regional campuses for Purdue and Indiana Universities (Indiana Lake Michigan Coastal Program and Final Environmental Impact Statement, 2002).

Park and Recreation History

The Indiana Dunes State Park was first established in 1925 after residents called for the preservation of the land and industry pushed for the development of a port. In 1966, the

Indiana Dunes National Lakeshore was created as part of a congressional compromise, the other part being the building of the Port of Indiana (Indiana Dunes National Lakeshore Park Statistics, 2007).

Recreation and Tourism Profile

In 2007, Indiana Dunes State Park counted approximately 726,013 visitors. The Indiana Dunes National Lakeshore received over 2 million visitors in 2007 and has shown steadily increasing visitor numbers over the past 10 years. This activity generates approximately \$26 million annually. Public campgrounds are available at Indiana Dunes State Park and Indiana Dunes National Lakeshore. Other important recreational uses of the shoreline include picnicking, nature study, bird watching, and walking (Indiana State Parks and Reservoirs, 2007).



Data from the 2006 National Survey of Fishing, Hunting, and Wildlife Associated Recreation estimates that 46,000 residents and non-resident anglers age 16 and over took fishing trips on the Great Lakes, for a total of 759,000 fishing days. Total spending by anglers for Great Lakes fishing trips totaled \$91,200,000 in 2006, an average of \$1,901 per angler. In 2007, the estimated trout and salmon harvest was 42,607 fish for 187,785 hours of effort.

Access for fishing on Lake Michigan is provided at various sites along the 43 miles of shoreline. Marinas supporting boat launches, boat storage, public fishing, public beaches and parks have been developed in Michigan City (Washington Park, Trail Creek and Sprague Point), Portage, East Chicago and Hammond. In total, approximately 2155 marina slips were available in 2009 (918 in Hammond; 225 in Portage; 294 in East Chicago; 580 in Washington Park; 73 at Trail Creek; and 65 at Sprague Point). Additionally, Wihala Beach provides a boat launch (National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 2006).

Public fishing sites for shoreline anglers exist at the Michigan City DNR building (handicap accessible), Port of Indiana and Portage Lakefront and Riverwalk which provides parking for 125 vehicles, a handicap-accessible fishing pier, a riverwalk along Burns Waterway, a rehabilitated breakwater, hike/bike trails, beach access and a pavilion (Fishing Northwest Indiana's Lake Michigan Shoreline and Tributaries, 2008).

In the past, limited access to warm-water discharges has been provided by the industrial plants located on the shoreline. However, high national threat levels through the United States Department of Homeland Security have influenced access and restrictions at these privately owned industrial properties (Charter Boat Catch and Effort, Indiana Waters of Lake Michigan 2007).

Public access to the tributaries of Lake Michigan is limited to county parks, city parks and state access sites. Main tributaries of the Lake Michigan coastal area include: the

Little Calumet River, Grand Calumet River, Turkey Creek, Deep River, Salt Creek, Coffee Creek, Dunes Creek, Trail Creek, Galena River, and several smaller tributaries and man-made ditches.

Access to Trail Creek is provided at ten public fishing sites, of which two are handicap accessible. Public fishing sites along Trail Creek include: the DNR Building; Hansen Park (E Street); Winding Creek Cove (8th/Dickson Streets); Fire Station #2 (2005 E. U.S. Hwy 12); Robert Peo Public Access (Liberty Trail); Karwick Nature Park (Karwick Road); U.S. 35 (Chapala Parkway); Trail Creek Forks (U.S. 20; Johnson Road (Johnson/Wozniak Roads) and Creek Ridge Park (7943 W. 400 North). The DNR public access site and Creek Ridge Park are both handicap accessible.

Public Access for fishing opportunities is provided along Salt Creek at Imagination Glen Park and Haven Hollow Park as well as state-managed Chustack PFA and Salt Creek PFA. Public Access is provided along the East arm of the Little Calumet at Deer Creek Path (Ameriplex Woods at S.R. 249/Ameriplex Drive) and Burns Harbor Public Access (S.R. 149/ Navaho Drive). Portions of the East arm of the Little Calumet River are accessible through the Indiana Dunes National Lakeshore property.

The DNR Division of Fish and Wildlife has stocked trout and salmon along the shoreline of Lake Michigan since 1969. The area stocked extends from Michigan City to Whiting and includes sites along Trail Creek and the East Branch of the little Calumet River. The number of trout and salmon stocked in Indiana waters of Lake Michigan by the IDNR has averaged 1.2 million fish per year from 1995 to 2007 (Fishing Northwest Indiana's Lake Michigan Shoreline and Tributaries, 2008).

The number of charter licenses issued to fish Lake Michigan rose to 55 in 2005 and 2006 and fell to 50 licenses issued in 2007. The number of licenses issued between 1997 and 2007 has ranged between 39 and 55 (Charter Boat Catch and Effort, Indiana Waters of Lake Michigan, 2007).

According to the 2008 IDNR Lake Michigan Coastal Program inventory of all public access recreation sites, 712 public access recreation sites provide 32,768 acres of publicly accessible lands. Approximately 414 sites are park and recreation areas, accounting for 22,086 acres; 40 nature preserves account for 4,926 acres; and 18 forests account for 442 acres.

Northern Indiana's varied public access opportunities provide a unique recreation system. The purpose of this Benchmarking Study is to compare this system with those of the selected communities to more effectively determine ideal levels of service to require of the region. The uniqueness of each benchmark requires that four different regions are included so that an overall comparison can be made.

Review of Benchmark Communities

Duluth, Minnesota

Duluth, Minnesota was once a thriving industrial city with strong industries in steel, shipbuilding, and other production. The population grew rapidly to 107,884 in 1960. In the late 1970s and early 1980s, many of these plants were forced to shut down due to foreign competition. Following these closures, the unemployment rate grew to 15% by the end of the 1980s. Duluth has managed to combat this economic hardship by maintaining its shipping industry and by shifting much of its commerce to tourism. Renovating its downtown and lakefront areas, the city established itself as a tourist destination, leading to its development as a regional center for medicine and banking.

Duluth and the surrounding region have grown together with an emphasis on tourism, both within the city and recreationally in the surrounding areas. Many outdoor companies offer opportunities for excursions in and around Duluth, increasing the tourism draw and contributing to the local economy.

Erie, Pennsylvania

As industry and lake trade declined, Erie experienced the same hardships as many other industrial cities of the time. These declines led to increased suburbanization starting in the 1970s, contributing to the significant economic lag in the city. Erie has had to shift its industries and focus on tourism to bolster its economy.

Recently, Erie has taken advantage of Presque Isle State Park as a popular tourist destination, drawing over 4 million visitors per year for camping, hiking, boating, and other outdoor recreation. The State Park is located on a peninsula that protects the Presque Isle Bay, which is Erie's lakeshore. The lakeside has aided in attracting visitors by providing recreational tourism such as fishing and boating. Erie Bluffs State Park, another option for outdoor recreation, is 12 miles away from the city.

Holland, Michigan

Holland faced the same challenges of industrial decline and suburbanization as other communities throughout the country in the 1970s. The city maintained the downtown area largely through a strong sense of community. Manufacturing still plays a significant role in the city's economy, but tourism has grown to become an integral aspect.

Its position on Lake Macatawa and Lake Michigan has allowed Holland's development as a destination for outdoor recreational tourism. Holland State Park is between the two lakes with access to both. The beaches along the lakes are largely private in Holland, but there is public access in the State Park as well as to the southwest. Charter fishing, beach-going, camping and hiking all contribute to Holland's economy, drawing 2.5 million tourists per year.

Waukegan, Illinois

Waukegan's industrial history has left it with three Superfund sites currently on the National Priorities List as well as one site that is currently being monitored after cleanup and remediation concluded in 2005. Waukegan has adopted a Downtown and Lakefront Redevelopment Master Plan entitled *Waukegan Vision*, in which they have made vast

improvements to the downtown and lakefront areas in order to attract new businesses and residents. By developing portions of their lakefront for residential and commercial purposes, Waukegan is hoping to improve the local economy and revitalize their community. The Master Plan calls for new lakefront neighborhoods and downtown renewal, as well as an ecological improvement area to the north of the downtown where the Superfund sites exist.

Methodology

The Eppley Institute, in conjunction with the LMCP staff, listed 10 cities as potential benchmarks for Gary and the coastal area. The Eppley Institute conducted preliminary research on those 10 cities and reported back to the group. Based on the results of this preliminary research, the group selected five cities for the benchmarking study. However, four cities were actually included in the benchmarking study due to the unresponsiveness of the fifth selected city. The four cities included in the benchmarking study are listed above.

The Eppley Institute then worked with the LMCP team to decide on the variables that were to be included in the study. Those variables included such things as population, linear trails, water trails, beach acreage, etc. (The complete list can be seen in the results table following). The data were collected using information from the benchmark cities' websites and through phone and email communications with the departments.

Regional Perspectives

Northwest Indiana

The Northwest Indiana region is very near the Chicago Metropolitan area. The region covers a three county area of Lake Michigan shoreline and offers multiple passive recreation opportunities within the Lake Michigan watershed. These opportunities include the Indiana Dunes National Lakeshore, Indiana Dunes State Park, three marinas, and multiple city-, town-, and county-owned and operated parks and beaches. The shoreline in this region is a mixture of large industrial uses, medium density residential, and public recreation uses. From the City of Gary to the Illinois border, the population density increases greatly as a result of the proximity to Chicago, and shoreline access decreases because of a larger concentration of industrial uses.

Duluth, Minnesota

Duluth is essentially a region all its own. Located on the Minnesota/Wisconsin state line, the areas along the shoreline outside of the Duluth area are very sparsely populated. The recreation opportunities in this region are well represented by the figures in the benchmarking results table below. Besides the public recreation opportunities, in the heart of Duluth there is a large amount of tourism development, such as hotels and resorts, along the shoreline. This is also true moving northeast along the Lake Superior shoreline, where the area along the shoreline is mostly in its natural state with residential development mixed in with tourist facilities.

Erie, Pennsylvania

Erie is located on the Lake Erie shoreline and its region consists of all the shoreline between the Ohio and New York borders. At the core of the Erie shoreline is the Presque Isle State Park, which surrounds the Presque Isle Bay. Along the Presque Isle Bay shoreline there are four marinas and one public beach. To the West of Erie along the shoreline there is one large community park and the rest of the shoreline is given to residential housing, small industrial uses, and a few large swaths of undeveloped land. To the East of Presque Isle Bay, there is a large golf club, Shades Beach State Park, and a marina near the town of Orchard Beach. The rest of the shoreline east of Presque Isle Bay to the New York State Line is much the same as on the west side: mostly residential development with some smaller swaths of undeveloped land.

Waukegan, IL

Waukegan is located on Lake Michigan in northern Illinois, a short driving distance from the Illinois/Wisconsin border and only about 20 miles from Kenosha, Wisconsin. The shoreline region for Waukegan extends northward to the state line and southward to the Chicago Metropolitan Area. Waukegan's recreation resources are managed by two separate entities. The Waukegan Park District manages all the parks, trails, and recreation facilities except the North Shore Beach, which is operated by the City of Waukegan.

It is difficult to delineate Waukegan from the Chicago Metro Area and it is within the Chicago Area Metropolitan Planning (CAMP) area. The shoreline areas to the south of Waukegan are densely populated with a variety of land uses, including residential, industrial, institutional, and recreational. There are several large golf courses on the shoreline, as well as marinas, parks, and beaches. These facilities are managed by the many park districts located between Waukegan and Chicago.

Immediately to the north of Waukegan are the Illinois Beach State Park and the Spring Bluff Forest Preserve, which encompass the entire shoreline from Waukegan to the state border. The forest preserve has a marina at its north end and the City of Waukegan has a marina just south of its North Shore Beach.

Holland, Michigan

Holland is located about 30 miles from Grand Rapids, which is a large metropolitan area. It is situated around Lake Macatawa, a large lake mostly surrounded by residential development with three city parks on its shores. Within the immediate area of Holland are Holland State Park, situated with its boundaries on both Lake Macatawa and Lake Michigan, and Hoffmaster State Park, which is adjacent to Holland State Park and offers parking and lots of beach access. Holland Harbor Light provides boat access between Lake Macatawa and Lake Michigan. Within Lake Macatawa there are five large marinas and hundreds of private docks.

The shoreline region reviewed for Holland extends northward to the City of Grand Haven and southward to the town of Douglas. The northern part of this region has mostly residential development along the shoreline of Lake Michigan. There is one large

park, Port Sheldon Park, which offers access to Pigeon Lake with a small marina and lots of private docks, but does not offer access to the Lake Michigan beach. There is also a private retreat center and an elementary school within a mile or so of the shoreline. Otherwise, the area east of the Lake Michigan shoreline is mostly sparsely populated with residential and agricultural uses.

The southern part of this region is nearly all parkland along the shoreline, interspersed with some residential development. From Holland south to Douglas is Castle Park, Laketown Park, Saugatuck Dunes State Park, and Douglas Beach Park, all offering access to the Lake Michigan beaches. As with the northern part of this region, east of Lake Michigan is sparsely populated with residential and agricultural uses.

Regional Analysis

The most prominent difference between the comparison regions and the Northwest Indiana region is the existence of large swaths of industrial land on the shoreline. Erie, PA, has industry along the shoreline as well as Duluth, MN in Duluth Harbor. Industrial uses in these cities are minor compared to Northwest Indiana. The large industrial uses along the Indiana shoreline are so prominent they are, in fact, part of the landscape itself whereas much of the industry has been removed from the benchmark cities from the shoreline or the metro areas.

Another prominent difference between Northwest Indiana and the comparison regions is the vitality of the region's largest city. All the comparison regions have thriving, financially stable, population-stable cities as their anchors; whereas the anchor city in Northwest Indiana, Gary, is struggling financially, losing population, and struggling to maintain economic vitality.

Access to the beach is a third notable difference between Northwest Indiana and the comparison regions. Although there is a large amount of shoreline in Northwest Indiana protected by Lake County, the City of Gary, Indiana Dunes National Lakeshore, and the Indiana Dunes State Park, there is limited parking and few access points to the beach. The comparison regions, for the most part, have state or municipal recreation areas with easy access and parking within the most densely populated areas, whereas in Northwest Indiana, the best access seems to be in the less densely populated areas.

Another notable difference is the placement of marinas. Three marinas directly on Lake Michigan and 21 marinas throughout the coastal area provide access to Lake Michigan or the Coastal Area in Northwest Indiana. The marinas are spread out across the entire region. The comparison regions have numerous large marinas, well-placed in the highest density areas with direct access to the respective Great Lake.

Quantitative Analysis

In addition to the qualitative analysis above, the Eppley Institute also conducted a quantitative analysis of the benchmark regions. Data for this analysis was collected by sending a questionnaire by email to the agencies and asking them to provide the requested information. Preliminary phone calls were made to each agency asking if they

were willing to participate, and follow-up phone calls were also made to resolve any questions regarding the data provided.

The table below presents the results of this data collection effort. Analysis of these data indicates the following notable conclusions for the Northwest Indiana Coastal Area in comparison to the benchmark regions. The Northwest Indiana Coastal Area is:

- Below average in the miles of multi-use walking and biking trails
- Below average in the number of public access launch points for personal watercraft
- Above average in miles of public beaches
- The only region where beach fees are charged for residents
- Far above average in fishing access points
- Above the median in total park acres (Duluth has such a large number of acres for its population size that it skews the average)

Public Access Needs Assessment
Indiana Department of Natural Resources Lake Michigan Coastal Program

	Indiana Lake Michigan Coastal Area	Duluth, MN	Erie, PA	Waukegan, IL	Holland, MI	Average	Median
Population	686,318	86,918	280,843	154,909	47,474	142,536	120,914
Total Trail Miles--Linear Parks	47.23*	85	64	4	4	39	34
Trail Miles per 10,000 Population	0.69	9.78	2.28	0.26	0.84	3.3	1.6
Total Water Trail Miles	62.5	25.0			3.5	14.3	14.4
Water Trail Miles per 10,000 population	0.91	2.88			0.74	1.8	1.8
Total Trail Miles (Linear Parks) within 1/2 mile of shoreline	21*	50			1.5	25.8	25.8
Trail Miles within 1/2 mile of shoreline per 10,000 Population	0.31	5.75			0.32	3.0	3.0
Total number of public access launch points for personal craft	16**	5	16	4	1	6.5	4.5
Public access launch points per 10,000 population	0.23	0.58	0.57	0.26	0.21	0.4	0.4
Total number of public beaches	16**	3	2	1	3	2.3	2.5
Number of Public Beaches per 10,000 population	0.23	0.35	0.07	0.06	0.63	0.3	0.2
Miles of Public Beaches	23	5	2	1	4	2.8	2.8

Public Access Needs Assessment
Indiana Department of Natural Resources Lake Michigan Coastal Program

	Indiana Lake Michigan Coastal Area	Duluth, MN	Erie, PA	Waukegan, IL	Holland, MI	Average	Median
Miles of public beaches per 10,000 population	0.34	0.07	0.02	0.06	0.84	0.2	0.1
Total number of fishing access points	78***	4	18	4	3	7.3	4.0
Fishing access points per 10,000 population	1.14	0.46	0.64	0.26	0.63	0.5	0.5
Beach Fees	Entrance, Parking, Boat Launch**	No	No	Yes--Non residents only	No		
Total Park Acreage	29,992****	11,000	4,677	721	502	4,225	2,699
Park Acreage per 1,000 Population	43.7	126.56	16.65	4.65	10.57	39.6	13.6
Camping Opportunities	5**	2	20	1		7.7	2.0
Camping Opportunities per 10,000 population	0.1	0.2	0.7	0.1		0.3	0.2
Number of Hiking Trails	71*****	11	25		5	13.7	11.0
Hiking Trails per 10,000 population	1.03	1.3	0.9		1.1	1.1	1.1
Miles of Hiking Trails	165.5*	35			4	19.5	19.5
Miles of Hiking Trails per 10,000 population	2.41	4.03			0.84	2.4	2.4

Figure 5: Benchmark Comparison Table

* Trails data was derived from the DNR GIS trails file data in addition to the Eppley data collected in 2008.

** Data was derived from the DNR database updated in 2008.

*** Data was derived from the DNR database updated in 2008 and includes all sites providing for/allowing fishing access. This includes all Public and State Fishing areas (DNR).

**** Data was derived from the DNR database. Although Indiana Dunes National Lakeshore acreages count approximately 15,000 acres, only 12, 857 are included in this calculation because the remaining 2200 acres is land in the National Lakeshore's jurisdiction but not owned or

Public Access Needs Assessment
Indiana Department of Natural Resources Lake Michigan Coastal Program

managed by the National Lakeshore, meaning the State Park which is already accounted for in the database and thus in the total park acreage.

***** Data includes hiking and linear trails. All trail calculations include Indiana Dunes National Lakeshore and Dunes State Park trails. Trails data was derived from the DNR GIS trails file data in addition to the Eppley data collected in 2008.

Conclusions and Recommendations

Based on these two analyses of the selected benchmark coastal regions, some common findings among the two lead to the following recommendations for areas of concentration and improvement of the public recreation resources in the Indiana Lake Michigan Coastal Area:

- Improve beach access in the more densely populated areas. This could be accomplished by improving existing transportation routes; creating new transportation routes; clearly marking transportation routes; increasing the number of parking areas within one quarter mile of the shoreline; and/or improving public access easements leading to the beach
- Implement and complete existing trails plans. Regional cooperation is essential for this because these planned trails cross multiple jurisdictions
- Provide more public access points for boaters. This includes both access points along rivers and streams for non-motorized personal watercraft and marinas for larger boats
- Provide assistance to the City of Gary in developing its shoreline and shoreline access. This need is currently being met through a Coastal Grant for a Shoreline Management Plan and a large grant from the RDA for shoreline redevelopment. This assistance should also take into account educational and advisory components.
- Devise different methods to generate revenue related to beach recreation. Keep beach access free and accessible to all. Other methods could include commercial development near the beach and along transportation corridors leading to beaches; permitting of personal services at popular beach access points; and/or through programming and more efficient use of existing facilities on the shoreline
- Capitalize on the unique combination of industry and nature. Create programs that emphasize the ability of the region to integrate these two opposing land uses; re-frame the enormous steel works facilities as works of art; develop an industrial tourism market; work with industry to create natural buffers in strategic areas to create unique view sheds

The following public engagement components of the Needs Assessment provide for additional public access recommendations.

PUBLIC ENGAGEMENT

Introduction

The Indiana Coastal Area Public Access Needs Assessment evaluated coastal user needs to better understand how to best provide future public access opportunities in the Lake Michigan coastal area. The Needs Assessment critically analyzed public access recreation facilities to determine current levels of service. Based on these, recommendations for future levels of service based on user needs, benchmarks, and local, regional, state, and national guidelines have been established. User needs have been determined through the public engagement portion of this Assessment.

Public engagement is a critical aspect of developing a well-designed plan. It is essential to include the opinions and concerns of individuals who have a vested interest in the plan area. To this end, the Eppley Institute has conducted individual stakeholder interviews, focus group meetings, and a public meeting. The individuals involved in these discussions come from varied backgrounds, including local government, Parks and Recreation Departments, user groups, businesses, and non-governmental organizations.

The individual stakeholder interviews were designed to provide a venue through which interviewees could freely express their opinions without worry of outside reactions. The focus groups were intended to allow for an open forum to facilitate a discussion among individuals from similar backgrounds. The public meeting was intended to allow members of the public to voice their concerns and to provide an outlet for their unique knowledge of public access in the region. Together, these methods of public engagement have provided a clear picture of the perceived state of the Lake Michigan coastal region and also its current needs.

Stakeholder Interviews

Methodology

Stakeholders are individuals who represent the community as a result of their position, involvement, interest, or identity in the community. The stakeholders of a community generally represent a cross-section of the community and are interviewed in order to obtain a sense of overall public opinion.

Seven community stakeholders were identified by a team of individuals, including staff at LMCP and the Eppley Institute, and were invited to participate in the individual stakeholder interviews.



Stakeholder interviews were conducted on August 19 and 20, 2009, by an Eppley staff member. Each of the stakeholders was interviewed individually. Interviews were scheduled as one-hour time slots. Stakeholders were contacted by phone or email to arrange an interview. All interviews were conducted in a standardized format, following a questionnaire developed by the Eppley Institute.

Results

A total of seven key stakeholders were interviewed individually on August 19 and 20, 2009.

An interview guide was created by the Eppley Institute and served as the agenda for all stakeholder interviews to ensure consistency of questioning. All responses were recorded and analyzed using standard qualitative data analysis techniques. The results indicated five core themes that occurred consistently among stakeholders:

- Connectivity between existing natural areas
- Ongoing management of restored natural areas
- Trail linkages and connections: water and land
- Increase public awareness and access
- Implement the Marquette Plan

The most common stakeholder comments were related to **connectivity between existing natural areas**. All stakeholders expressed the importance of linking and buffering the natural areas that are already protected to create contiguous wildlife and recreational corridors. The currently protected natural areas are fragmented and under the ownership of multiple jurisdictions. Stakeholders stated the importance of coordinating efforts to acquire key parcels that will provide the desired connectivity. Some of these parcels are currently on the market and there is a need to identify funding sources that can be leveraged by the different types of agencies and non-profits involved in land protection efforts.



A second common theme among stakeholders was **ongoing management of restored natural areas**. Most of these key stakeholders feel it is important to ensure appropriate management of the restored natural areas already under protection. A certain amount of funding must be directed to maintenance and management efforts to preserve the high quality of these natural areas.

Another commonly discussed theme during the stakeholder interviews was **trail linkages and connections: water and land**. The existing land trail system in Northwest Indiana is well developed and there are some key pieces that need to be acquired and added to the system to complete the network. Most of the stakeholders believe that these linkages are a high priority for adding value to the recreational needs of the area. In addition, most stakeholders agreed that water trails and water access, especially along the Little Calumet River, are important. Other waterways need to be opened to paddlers, and there are some legal hurdles regarding designation as

navigable waterways that need to be overcome. Some stakeholders feel that continued development and improvement of the shoreline water trail is also important to pursue.

Stakeholders expressed a notable amount of concern about **public awareness and access**. All of the stakeholders believe the general public still has a perception that the Lake Michigan shoreline and much of the Coastal Area landscape is polluted, contaminated, and unsafe. The restoration efforts and natural area protection that has taken place over the past decade or so have gone mostly unnoticed by the general public. Stakeholders believe there is a need to enlighten the public through education and marketing campaigns. Stakeholders also agree that increased access to the restored and protected areas would instill a sense of stewardship among residents. The high quality and rare ecological resources being restored and protected need to be better understood.

Most of these key stakeholders mentioned the **Marquette Plan** as an important reference document and a plan that needs to be implemented. These stakeholders agreed that most of the high priority issues discussed in the interviews are covered in this document.

These key stakeholders each provided substantial detail in their area of expertise. Each of them expressed passion for the continued development of passive recreation areas and the protection of the vital natural resources in Northwest Indiana. In every case, issues of multiple jurisdictions, government red tape, and limited funding were mentioned as things that need to be overcome to realize the ultimate vision of the Marquette Plan and multiple other planning documents that call for the protection of green corridors. With continued efforts of regional-level coordination, appropriation of funding, cooperation with industry, and increasing public awareness and participation, the vision held by these stakeholders and many others in the region will be realized.

Focus Groups

Methodology

Focus group meetings were held on September 16 and 17, 2009. Five meetings were held, separated into the following groups: parks and recreation, user groups, government, NGOs, and businesses. Stakeholder focus group meeting topics were determined based on the results from the individual stakeholder meetings.

Each meeting was run in the same panel discussion or group interview format. Up to 20 stakeholders were invited to participate in each focus group meeting. Two Eppley Institute staff members acted as facilitators for the discussion.

A discussion guide for each meeting was developed based on information that was gathered in earlier research—most importantly, issues identified in the stakeholder interviews and site research analysis. This discussion guide appears in Appendix B. The focus group emphasized the creation of potential solutions, and attempted to form

well-agreed-upon options for consideration. These data and other pertinent information were the basis for the discussions on each topic in each of the focus group meetings.

An Eppley Institute staff member recorded notes on a flip chart. All recorded notes were then analyzed according to standard qualitative research methods in order to identify emerging trends and important issues.

Results

On September 16th and 17th, five focus group meetings were conducted at the Northwest Indiana Planning Commission offices. The five meetings consisted of representatives from Government agencies, User Groups, Businesses, Non-profit corporations, and Parks and Recreation agencies, with three to eight participants in each group; invitations were sent to approximately 20 people per group totaling 100 invitees.

The questions used to conduct these meetings were kept consistent for all focus groups. The meetings were started by discussing the positive aspects of public access to recreation in the region, followed by needs, issues associated with meeting these needs, and, finally, opportunities for collaboration to resolve the issues.

Many positive attributes of the region were mentioned, including existing public access, available natural resources and the opportunities they create, recent and planned development of recreation access, and both terrestrial and water trail access. The needs determined by the focus groups were funding, regional cooperation, increased communication, wayfinding and signage, marketing, and trail access and connectivity.

Participants identified the issues associated with meeting these needs as political stratification, disparate regional entities, a lack of communication, and a lack of funding. The focus group participants identified several methods for coordinating efforts to overcome the issues, including fostering partnerships, establishing a regional entity with the authority to implement existing plans, increasing connectivity, increasing communication, and the development of commercial services around the lakeshore.

Based on these discussion points, four major themes emerged that represent the main concepts of the focus groups:

- Regional cooperation
- Trail access and connectivity
- Increased communication
- Increased funding

Regional cooperation was seen by participants as an essential aspect of a positive future for the coastal region. Unifying efforts of various entities will ultimately lead to a better outcome for the whole. Effective regional marketing could develop economic opportunities by creating a brand for the coastal area and helping visitors find the recreation opportunities they are seeking by increasing awareness. Cooperation between governments in coordinating regulatory efforts is important to the future of the

region. This can be through legislation as well as planning. In planning, various levels of government should work together with non-governmental agencies to reach decisions for the best management practices for the area.

The theme of **increased communication** was similar to improving regional cooperation. A major aspect of this is creating a regional identity and brand to use as a marketing tool. Combining advertising efforts and establishing consistency in branding throughout the region would help create a sense of regional unity and establish the region as a destination. This brand could also help to increase consistent signage and wayfinding to aid in recreation access. Through signage and well-designed regional marketing, awareness of opportunities would be enhanced for residents as well as visitors.

Focus group participants expressed that improving signage and wayfinding would also help to improve **trail access and connectivity** by increasing awareness and support for needed connections. Routes that can be used as alternative transportation would provide increased recreation opportunities, reduce traffic and parking concerns on the shoreline, and improve safety for pedestrians. A major aspect of the trails system that is currently missing from the region is north-south connecting trails that run from inland areas to Lake Michigan. There are also multiple opportunities for blueways or water trails to be established in the region. Incremental steps have been made and are currently in process but legal challenges exist; primarily the lack of state-designated navigable waterways. Designating the waterways as navigable or recreational waterways for public use would greatly improve public access to these recreation resources.



Participants expressed that the implementation of any of these themes will require **increased funding**. To achieve the desired ends, alternate funding methods may be required to generate sufficient capital. Funding could be developed incrementally alongside the other themes as the economic potential of the area is realized. Increasing awareness will help to garner support for increasing funding through marketing and completing high-profile projects that draw public attention. An example of this is the Portage Lakefront. Tangible progress can be a significant factor to overcoming public apathy.

These steps were all mentioned frequently in the focus groups as essential to the long-term improvement of public access to recreation in the Lake Michigan Coastal Area. These complex issues require complex solutions. All responsible parties in the region must work together to achieve these goals and to realize the potential for mutual gains for all stakeholders of the region.

Public Input Physical Sites Review

During the stakeholder interviews and focus groups conducted during the public input phase of the project a common theme among all participants was connectivity. Stakeholders and focus group participants were concerned with the current fragmentation in protected natural areas. With unprotected parcels of land consuming space between the protected areas, maintenance and continued protection and restoration efforts are more difficult. More high-quality natural areas need to be acquired to create natural corridors and protection buffers.

Connecting existing trails was also included in this theme. These connections are important for creating longer, more useable non-motorized routes; better access to protected sites; and better linkages between the shoreline and the inland natural areas. This theme refers to both terrestrial trails and water trails.

The following list represents specific sites that were mentioned in the public input process:

- Complete connections between and plans for the Iron Horse Trail, Prairie Duneland Trail and the Duneland–Kankakee Trail
- Change legal designation to “Navigable” or “Recreational” waterway for Trail Creek, Salt Creek, Deep River, Cedar Creek, and Plum Creek and clear debris to open these waterways (Deep River has 13 miles open but not designated as navigable)
- Need portage easements at some existing Lamprey barriers on waterways and need to include portage easements when new barriers are added
- Develop North-South Trails such as the Monon Trail and the Duneland–Kankakee Trail
- Develop a paved trail from Schererville to Chesterton
- Create bike lanes or widen shoulders on County Line Road and Meridian
- Need to work with South Shore Line to allow bicycles on trains
- Shorebird habitat is extremely important in East Chicago, Whiting, and up the Illinois Lakeshore. Need to acquire and preserve sites in this area
- Little Calumet River has 16-18 miles that could be easily opened up by removing log jams and creating public access points
- Little Calumet River Basin has at least 1000 acres of wetlands that need to be acquired for restoration and stewardship
- Hobart Marsh project is a good place for land acquisitions
- Oak Ridge Prairie (Lake County Parks) could benefit from more awareness/use. Same for Hoosier Prairie (DNR nature preserve)
- High priority should be placed on informing the public about the resources. For example, the Ivanhoe Dune and Swale (nature conservancy) is a globally rare resource. Only 3 other land formations like this exist in the whole world. Needs to be more known, have more access to build growing public support of these high-quality, rare natural lands
- Complete northern trail along IHB rail line—County Line Road to Broadway to Hammond

- Focus on improvements at Whihala Beach. Amoco is investing \$2 billion into their refinery in that area. City of Whiting has a TIFF district in that zone and has more money than they can spend. Lake County Parks is working with City of Whiting to improve Whihala Beach and Whiting Marina by expanding the Fishing Pier and the breakwater for boating access, and Whiting marina plans to use the breakwater as western wall of marina
- Acquire Tolleston Ridges/Tolleston Woods adjacent lands
- Restore Shell-owned land as buffer to INDU
- Acquire Seidner Dune and Swale
- Acquire Dupont Tract
- Acquire Grand Calumet Terminus
- Acquire land around new Lake County Parks facility, Bellabooz

This list represents specific sites and actions that were mentioned during the stakeholder interviews and focus group meetings. In addition to this information, there are far more specific details to be found in the Lake County Parks 2007 Master Plan, which lists specific tracts of land desired for acquisition by this agency. The Shirley Heinze Land Trust also has very detailed information that includes natural quality analyses and identifies specific tracts of land that are desirable for preservation. Finally, the Chicago Wilderness Green Infrastructure Plan is a valuable resource for identifying general areas of need.

Conclusion

The results of the public engagement were enlightening toward the current state and the needs of the Lake Michigan Coastal Region. The stakeholder interviews and the focus groups were complementary, highlighting many similar points and expanding on one another. Each method of public engagement provided unique perspectives.

The stakeholder interviews and the focus groups produced many similar responses. Increases in connectivity and public access were most frequently mentioned. The individual stakeholders called for increased connectivity in terms of linkages between trails and between natural areas to improve recreation access and reduce fragmentation in the area. This is similar to the results from the focus group meetings, which primarily centered on connecting trails to improve public access for recreation and transportation. Both groups saw improvements in water access as important to public access. This will require addressing legal designations and maintenance of blueways.

Increasing communication was also considered important by both groups. Raising public awareness and education would help local residents and visitors to be aware of the available resources and their proper use. Improving signage is a major aspect of this, as is effective marketing and regional cooperation. Signage and wayfinding would establish pedestrian and automobile routes through the region, help visitors find resources, and improve safety. Marketing to local residents and nearby population centers would help draw visitors to the resources that best fit their recreational goals. Regional cooperation would help provide consistency, improving regional navigability.

Establishing a regional embodying entity was seen by the focus groups as essential to the long-term success of the Lake Michigan coastal area. Such an organization could help bridge the gaps between various governing bodies and planning agencies such as NIRPC and other groups with interest in the region. This would provide a means by which to develop consistent regional signage and wayfinding, marketing strategies, and coordinated development efforts. It would help to foster a sense of identity in the area, aiding with regional planning and development.

A major theme of the stakeholder meetings was the continued preservation of natural areas and increased acquisition of land for protection. Stakeholders also mentioned the importance of the Marquette Plan and its implementation in the region.

This public engagement has provided a clear view of the perceived needs of the Lake Michigan coastal region of Indiana. A great deal of cooperation will be required by various entities to effectively address the issues raised. Funding will also be necessary to meet these needs and was a constant theme in both the stakeholder interviews and the focus groups.

Public Meeting

Summary

A public meeting was held on the evening of October 20, 2009 in Portage, Indiana. Focus group participants and the public were invited to attend this meeting by representatives of IDNR.

An Eppley Institute staff member began the meeting by giving an update of the process and reviewing the main issues and trends that have been revealed in all prior research. The current status of the research was discussed, as well as the direction it is headed and the anticipated finished products.

Following the introduction by the Eppley Institute, attendees were asked to review the provided posters and maps and to discuss with one another. Eppley staff was available to answer questions and participate in discussions.

Attendees were encouraged to provide input on the status of the project as well as add their expertise to sections that appeared to be lacking. Comment cards were available for written comments, Eppley staff was available to hear comments, and attendees were encouraged to mark the provided maps with additional or overlooked sites.

The Eppley facilitators recorded important points and issues during the workshop discussions. Also, any important comments made during the summary session were recorded. Eppley staff members analyzed and evaluated these recorded data to include them in project research.

Public Input Sites

The sites listed below are the results of the public input:

- Wet wood with small creek entering at south boundary: 10 acres owned by Porter Co. Chapter Frank Halton League of America; for info call Herb Read at 219-926-2224
 - East boundary Porter County Line Road
 - South boundary is south boundary of Pine Township
- Bluhm Trail: North-South on 421 in LaPorte Co.
- Dunes-Kankakee: North-South on 49 in Porter Co.
- Parking sites in INDU should be mentioned for public access

LEVEL OF SERVICE STANDARDS

Introduction

Level of Service (LOS) standards are recommendations for a minimum level of service for park acreage and facility types. These standards are developed using a multi-faceted process, which incorporates research conducted throughout the planning process. Data considered in developing the LOS standards include stakeholder input, benchmarking against similar agencies, current demand for services, parks and recreation industry trends, Indiana recreation trends and standards, and anticipated financial and policy opportunities and constraints.

The standards provide guidelines for the Lake Michigan Coastal Program (LMCP) that will assist in planning for outdoor recreation facility improvements and land use planning for acquisition and transfer of park lands to adequately serve the area. Application of the LOS standards does not carry regulatory status; rather the standards should be considered guidelines to provide a balanced and equitable distribution of outdoor recreation facilities.

Because the application of these LOS standards is directly impacted by the area's land supply, tax base, willingness to fund, and recreational demand, they are provided as minimum standards. The goal of the LMCP should be to maintain these minimum standards as a first priority. When budgets and resources allow, or if community recreation preferences change, the LMCP should strive to exceed the minimum standards to match community needs.

The use of LOS standards for park and recreation facilities is based on national trends in the profession and the National Recreation and Park Association (NRPA) 1995 publication Park, Recreation, Open Space and Greenway Guidelines. It is important to remember that standards are based on a variety of methodologies that are subjective in nature. Ultimately, communities must reach a consensus about the amount of parkland, open space, and recreation facilities required to maintain the quality of life that is desired.

Park Acreage Level of Service

50.0 Acres of parkland per 1000 residents

There are 29,992 acres of parkland in the Lake Michigan Coastal Area, which equates to a current level of service of 43.7 acres per 1000 residents. The median level of service for the benchmark regions is 39.6 acres per 1000 residents. This means the LMCP current LOS is higher than the average LOS of the benchmark areas. One of the benchmark areas, Duluth, MN, has a significantly higher LOS than all the others at



126.56 acres per 1000 residents, which raises the average by a notable amount. When comparing to the median acreage of the benchmark areas (13.6), the LMCP is providing a much higher LOS.

Public participation results indicate that there is a need to acquire more park lands in order to protect important natural areas in the region and provide recreational access. These natural areas have recreational value for the public as well as the predominantly expressed value of preservation of lands that have habitat, species diversity, and natural and historical values.

The Indiana Statewide Outdoor Recreation Plan (SCORP) recommends an LOS for park acreage of 55 acres per 1000 residents. A review of municipal and county parks and recreation master plans in the Lake Michigan Coastal area also reveals deficiencies in park lands within the region. Purdue University and NIRPC offer LOS guidelines for the region as well. Their guidelines are divided into park types; however, when adding the guidelines to obtain an overall park acreage level of service, they recommend 20 acres and 10.5 acres per 1000 residents, respectively.

The inconsistencies in LOS recommendations among these various entities require a method for equalizing them in order to draw some conclusions. The average recommended LOS standard among these entities comes to 28.5 acres per 1000 residents, which is still lower than the actual current LOS.

With a current LOS of 43.7 acres per 1000 residents, setting a standard equal to the SCORP recommendation of 55 acres per 1000 residents, although pertinent statewide, may be slightly unrealistic for this particular region. Although such a level may be attainable in the long-term and applicable on a statewide level, it seems to be a high standard to attain within the next 10 years or so in the coastal area, especially given the expected population growth in Lake and Porter Counties, which are expected to have more than 36,000 residents each by 2025, according to the Indiana Business Research Center.

With the Lake Michigan Coastal Area on the high side of the comparison regions, but on the low side of State recommendations, it is difficult to draw any conclusions for growth or retractions. However, with clearly expressed public desire for more passive recreation opportunities, notable population growth expected, and a high state standard, it makes sense to set an LOS standard that will favor a policy of growth and acquisition of appropriate recreational lands. Therefore, it is recommended that the park acreage LOS standard be set at 50 acres of parkland per 1000 residents.

Hard Surface Multi-Purpose Trails ***2.0 miles per 10,000 residents***

There are currently 47.23 miles of hard surface trails in the Lake Michigan Coastal Area. This represents an LOS of 0.69 miles per 10,000 residents. The benchmark cities' median LOS for hard surface trails is 1.6 miles per 10,000 residents. Again, the anomaly of Duluth, with 9.8 miles of hard surface trails per 10,000 residents, throws off

the average, making the median a better comparison tool. Currently, the LMCP LOS for hard surface trails exceeds the benchmark median.

The trails in the Indiana Coastal area also meet the Governor's trails initiative to provide a trail within 7.5 miles of every Hoosier. Appendix D includes a map demonstrating that trails in the Indiana Lake Michigan Watershed meet the Governor's initiative except in Northeastern LaPorte County. The map also indicates a gap around Valparaiso because the GIS data for these trails is not yet available.

Public participation results indicated a general desire by stakeholders and residents to have more hard surface trails in the region. Many of the existing trails have opportunities for connections to other trails and/or for extension of the current trail. These connections were expressed as an important need in the region. Regional trends also demonstrate a high demand for regional, hard surface trails and there are several regional planning documents published that call for trails and connections to parks, schools, and other public facilities throughout the area. National trends also show strong, continuing demand for hard surface, multi-use trails.

Given the public's expressed desire for more hard surface trails, and regional and national trends, it would be a disservice to the LMCP if the current LOS were accepted as the standard. Clearly there is a demand for more hard surface trails in the region, and that demand must be acknowledged and planned for by setting an LOS standard that will encourage the development and completion of more of these trails. It is also important to set this standard as a realistic and achievable goal over the next 10 years. It is therefore recommended that the LOS standard for hard surface trails be set at 2.0, which equates to an addition of about 20 miles of trails.

Public Access Launch Points for Personal Watercraft ***0.45 per 10,000 residents***

There are currently 16 public access launch points in the Lake Michigan Coastal Area. This represents an LOS of 0.23 launch points per 10,000 residents. The benchmark regions' average LOS for launch points is 0.4 per 10,000 residents. Currently, the LMCP LOS for launch points is nearly 50% below the benchmark average.



Public participation results indicated a demand for more public access launch points. This demand is in conjunction with a need to overcome some issues regarding designation of waterways in the region to "recreational" or "navigable". However, even with this caveat, there is an expressed desire for more launch points in the region.

The 2009 Outdoor Recreation Participation Report indicates that recreational canoeing and kayaking are growing in popularity. According to the report, 3.6% of the American population participates in canoeing and that participation level showed an increase of 1.4% from 2007 to 2008. This report also indicates that 2.2% of the American

population participates in recreational kayaking and this activity showed a 23.1% increase from 2007 to 2008.

The Northwest Indiana Regional Planning Commission (NIRPC) Greenways and Blueways plan calls for approximately 15 new public access launch points. If this goal were to be achieved it would equate to an LOS for the region of 0.45 public access launch points per 10,000 residents, thereby exceeding the benchmark regions' average.

Given the expressed desire by the public through both this study and the Greenways and Blueways plan process; the number of waterways in the region; and the increasing popularity of canoeing and kayaking on a national level, it is recommended that the LOS standard for public access launch points be set at the level that is essentially recommended in the NIRPC Greenways and Blueways Plan, which is 0.45 public access launch points per 10,000 population.

Public Fishing Access Points

1.14 per 10,000 residents

There are currently 78 fishing access points in the Lake Michigan Coastal Area. This represents an LOS of 1.14 fishing access points per 10,000 residents. The benchmark average LOS for launch points is 0.5 per 10,000 residents. Currently, the LMCP LOS for launch points is over 100% above the benchmark average.



Public participation did not indicate any expressed demand or desire for more fishing access sites in the region. The 2009 Outdoor Recreation Participation Report indicates that freshwater fishing is decreasing in popularity. According to the report, 14.4% of the American population participates in freshwater fishing and that participation level represented a decrease of 8% from 2007 to 2008. The Indiana Department of Natural Resources reported an increase in fishing license sales from 2008-2009, however it is not clear whether this is a result of a policy change or increased popularity of the sport in Indiana.

Since the region's current LOS is well above the benchmark average, there was not an expressed need for additional fishing access, and national trends show a decrease in popularity of this activity, it is recommended that the LOS standard for fishing access remain at the current LOS level of 1.14 access points per 10,000 residents.

Natural Surface Hiking Trails

3.0 per 10,000 residents

There are currently 165.5 miles of hiking trails in the Lake Michigan Coastal Area. This represents an LOS of 2.41 miles of hiking trails per 10,000 residents. Duluth and Holland, MI, were the only two benchmark regions that provided information about hiking trails in their area. The Holland LOS is 0.84, while the Duluth LOS is 4.03, putting the LMCP directly in the middle.

Although there was a general desire for more trails expressed by the public during the public input process, this desire really focused more on linear, hard surface trails rather than just hiking trails. That being said, any expressed desire for trails in general by the public can be interpreted as a desire for all kinds of trails.



Hiking and walking are always very popular according to national trends. From 2007 to 2008, 11.6% of the American population participated in hiking, representing an increase of 8.5% for the year.

Given the recommended increase in land acquisition, the expressed desire for more trails in the region, and the continually increasing popularity of hiking on a national level, it is recommended that the LOS standard for hiking in the LMCP represent a target that increases the availability of hiking trails over the next 10 years. An LOS standard of 3.0 hiking trails per 10,000 residents is equivalent to adding approximately 40 miles of trails in the region, and should be achievable during the plan timeframe.

GAPS ANALYSIS

The purpose of the Gaps analysis is to determine the specific areas within the Lake Michigan Coastal area that are in most need for public outdoor recreation opportunities. In other words, to identify where there are gaps in serving the outdoor recreation needs of the population. This section presents the results of two different types of gaps analysis: qualitative and quantitative.



Qualitative Gaps Analysis

Analysis of Research Findings

The qualitative gaps analysis was completed using information gathered from several sources to determine current service gaps in public outdoor recreation access in the Lake Michigan Coastal Area. These sources are a combination of the research conducted during the planning process and include national and state trends, public engagement results, and research conducted evaluating local and county master plans as well as Northwest Indiana regional plans.

These sources were analyzed for commonalities, things that appeared frequently and commonly across all the research results. The findings from this qualitative gaps analysis include:

- There is a need for additional public recreation lands and amenities in many communities across the region.
- There is a need for improved signage and wayfinding to direct users to recreation sites
- Trail connections need to be made to complete what is now a fragmented trail system
- Connectivity of natural resource lands is needed throughout the region
- Creation of blueways for non-motorized boats is a need in many areas of the region

Given the general nature of the above findings, a complete review of the results from the stakeholder meetings and focus group meetings was conducted to identify specific sites and strategies that were mentioned by these representatives of the general public. The following is a list of those specific sites that were mentioned for acquisition during the stakeholder interviews and focus group meetings:

- Complete connections between and plans for the Iron Horse Trail, Prairie Duneland Trail and the Duneland–Kankakee Trail

- Develop North-South Trails such as the Monon Trail and the Duneland–Kankakee Trail
- Develop a paved trail from Schererville to Chesterton
- Create bike lanes or widen shoulders on County Line Road and Meridian
- Shorebird habitat is extremely important in East Chicago, Whiting, and up the Illinois Lakeshore. Need to acquire and preserve sites in this area
- Little Calumet River has 16-18 miles that could be easily opened up by removing log jams and creating public access points
- Little Calumet River Basin has at least 1000 acres of wetlands that need to be acquired for restoration and stewardship
- Hobart Marsh project is a good place for land acquisitions
- Complete northern trail along IHB rail line—County Line Road to Broadway to Hammond
- Acquire Tolleston Ridges/Tolleston Woods adjacent lands
- Restore Shell-owned land as buffer to INDU
- Acquire Seidner Dune and Swale
- Acquire Dupont Tract
- Acquire Grand Calumet Terminus
- Acquire land around new Lake County Parks facility, Bellaboo

Analysis of GIS Maps

A second type of qualitative gaps analysis was also completed using GIS mapping of existing public outdoor recreation sites, population densities, and service area buffers. The maps used can be viewed in Appendix D. For this particular analysis, one-mile service area buffers were used.

All the public outdoor recreation sites in the current inventory were identified on the map, which was then overlaid with shaded buffers representing a one-mile radius from each site location. Generally, this one mile radius represents a reasonable walking distance for residents who live within the buffer zone.

Next, a layer of population density was overlain the other two layers to provide a better indication of whether the one-mile buffer was the most appropriate. For example, in a high population density area, the one-mile buffers will serve many more residents and are likely to be accessible by foot; whereas in a rural area the one-mile buffer may be a less appropriate measure since fewer residents will live within the buffer zone or service area; but at the same time, those residents have less of a need for access to natural outdoor areas since they are in a rural setting.

The primary limitation to this method is that the one-mile buffers or service areas do not account for barriers to access such as busy streets, rivers or streams, railroads, or other such features that would prevent access to a site by a resident or residents that are located within the buffer zone. In the case of the Lake Michigan Coastal Area, this limitation may be an issue in the high population density areas, especially in areas like Gary, Whiting, and East Chicago where the industrial infrastructure is more likely to create access barriers.

The results of this analysis indicate:

- There is a need for recreation opportunities in the rural sections of all three counties
- This is most apparent in Porter County, Southeastern Lake County, and Northeastern LaPorte County

There is a need for more public access recreation lands in several pockets in the region:

- To the east of Griffith and Highland, south of Gary
- To the east of Hammond
- To the west of Portage
- To the north of South Haven

Also, the Governor’s initiative for trails in Indiana calls for a trail within 7.5 miles of every Hoosier. A 7.5 mile shaded buffer was overlaid on the existing trails map found in Appendix D. This map indicates that the 7.5 mile service area of existing trails in the Lake Michigan coastal area largely serves residents except in Northeastern LaPorte county. The map shows a gap around Valparaiso; however the gap will be eliminated when data is made available for the existing trails in this area.

Quantitative Gaps Analysis

The quantitative gaps analysis uses the Level of Service standards to evaluate surpluses and deficiencies of a given passive recreation opportunity type. By comparing the existing level of service for each type of recreation opportunity with the LOS standard set by the planning team, a specific quantity of deficiency is indicated.

Figure 5 presents the results of the quantitative gaps analysis for the passive recreation opportunity types for which LOS standards were set.

	Indiana Lake Michigan Coastal Area	Current LOS	LOS Standard	Deficiency
Population	686,318			
Total Park Acreage	29,992	43.70	50.00	-4280
Total Trail Miles--Hard Surface	47.23	0.69	2.00	-89
Total number of public access launch points for personal craft	16	0.34	0.45	-15
Total number of fishing access points	78	1.14	1.14	0
Miles of Hiking Trails	165.5	2.41	3.00	-38

Figure 6: Gaps Analysis Results

CONCLUSION

The Public Access Needs Assessment is the result of a collaborative project between the IDNR Lake Michigan Coastal Program and the Eppley Institute for Parks and Public Lands. The Needs Assessment provides recommendations for public parklands and public access sites in the Indiana coastal area of Lake Michigan based on data collected in 2008 that can be incorporated into an overall Public Access Management Plan for the region. The data presented in the accompanying CD will provide support for future public access planning projects. The final data includes an electronic copy of this final report and all appendices presented as a separate document.

The following maps were produced with various GIS resources including DNR data, IDEM data, NIRPC and Openlands data.

- A map of potential public access sites indicating potential public access sites indicated by NIRPC in the Blueways and Greenways Plan, Potential blueways on navigable waters, potential managed open space both public and private, and potential sites identified by the Eppley Institute through the public engagement process and project research.
- Maps with ½ mile, ¾ mile and one mile buffer zones around existing public access sites
- A map with a 7.5 mile buffer around trails indicating the Governor's initiative for trails
- A map of existing sites and trails used in this project.
- A map of NIRPC Greenways and Blueways data



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County Master Plans

Lake County: 2008-2013

LaPorte County: 2006-2010

Porter County: 2007-2011

Local Master Plans

Beverly Shores: N/A

Chesterton: 2008-2012

Crown Point: 1998-2003

Dune Acres: N/A

Dyer: 2007-2011

East Chicago: 2008-2012

Gary: 2009-2013

Griffith: 2001-2006

Hammond: 2008-2012

Hobart: 2002-2007

Lake Station: 2000-2005

Long Beach: N/A

Merrillville: 2005-2009

Michiana Shores: N/A

Michigan City: 2006-2010

Munster: 2008-2012

Ogden Dunes: N/A

Portage: 2007-2011

Porter: 2009-2013

Schererville: 2008-2012

South Haven: N/A

St. John: 2008-2012

Town of Pines: N/A

Trail Creek: N/A

Valparaiso: 2002-2006

Whiting: 2002-2006