

Letter from the Commission Chair

May 2015

To the Residents of Northwest Indiana:

In 2011, the Northwestern Indiana Regional Planning Commission (NIRPC) approved the award-winning *2040 Comprehensive Regional Plan* -- the first such document with a vision for sustainable growth and development in Lake, Porter and LaPorte Counties. The *2040 Plan* represented an ambitious initiative to bring together the complex issues which shape the three counties of Northwest Indiana, from transportation and the environment to economic development and regional stewardship & governance. The overwhelming support for the *2040 Plan* by the NIRPC Commission demonstrated our region's mutual desire to provide the best possible planning practices to enhance the quality of life for our region's citizens.

The *2040 Plan* looks at transportation issues within a much broader, integrated framework of issues related to how our region grows into the future. NIRPC is required by Federal mandate to update the region's transportation plan (contained within the larger *2040 Plan*) every four years. To meet this requirement and ensure the *2040 Plan* remains current and relevant for our future, NIRPC has adopted the *2040 Comprehensive Regional Plan Update Companion*, which provides a snapshot of our regional advancements since 2011, as highlighted in all chapters of the plan. The process towards the adoption of the *Update Companion* included extensive public outreach including a number of listening sessions with residents in the three county region. Further input was gathered with the release of the draft document during several open houses ahead of its final adoption.

The *Update Companion* does not attempt to rewrite the *2040 Comprehensive Regional Plan* of 2011, but updates key elements while leaving intact its goals and objectives and a number of initiatives proposed to advance the vision of a more vibrant, revitalized, accessible and united region.

The *Update Companion* highlights a number of successes since the *2040 Plan* was adopted, including the establishment of the "Creating Livable Centers" Initiative, the update to the Marquette Plan, and the adoption of Complete Streets policies.

Overall, the *Update Companion* continues to promote the vision of the *2040 Comprehensive Regional Plan*, leaving in place key strategies to help provide guidance for our decision-makers at all levels of government. The *Update Companion* keeps us on track for a bright future for Northwest Indiana, with your continued involvement critical to this success.

Sincerely,

A handwritten signature in black ink, appearing to read "Blair Milo". The signature is stylized and fluid, with a large, sweeping flourish at the end.

Blair Milo
Mayor, City of LaPorte, and Chair, Northwestern Indiana Regional Planning Commission



RESOLUTION 15-12

A RESOLUTION OF THE NORTHWESTERN INDIANA REGIONAL PLANNING COMMISSION ADOPTING THE 2040 COMPREHENSIVE REGIONAL PLAN UPDATE COMPANION FOR NORTHWESTERN INDIANA

May 21, 2015

WHEREAS, the Northwestern Indiana Regional Planning Commission, hereafter referred to as "The Commission", being designated the Council of Governments, representing all local governments in the region has established a comprehensive planning process including the three domains of environmental, economic development and transportation planning; and

WHEREAS, the Commission, being designated the Metropolitan Planning Organization for the Lake, Porter and La Porte County Region, has established a regional, cooperative and comprehensive planning program to develop the unified planning work program, long-range transportation plan and transportation improvement program; to annually endorse the plans and programs; to facilitate federal transportation funding for the Indiana Department of Transportation, regional communities and transit operators, and to provide technical assistance and expertise to regional transportation interests; and

WHEREAS, the Commission performs the above mentioned activities to satisfy regional requirements under the Moving Ahead for Progress in the 21st Century Act of 2102 (MAP-21), as well as other federal, state and local laws mandating 3-C transportation activities; and

WHEREAS, the Commission has conducted the 2040 update planning process in an open and participatory manner, involving numerous people, with a specific effort to engage low income and minority populations and soliciting public comment at various points in the process, including requesting public comment on the draft 2040 Comprehensive Regional Plan Update Companion, and the Commission has reviewed and considered the comments received; and

WHEREAS, the citizens of Northwest Indiana require a safe, efficient and effective regional transportation system that maintains and enhances regional mobility and contributes to improving the quality of life in northwest Indiana; and

WHEREAS, the Commission has analyzed the benefits and burdens of the implementation of the plan and has found that there are no unfair burdens, nor unfair lack of benefits for low income and minority populations; and

WHEREAS, the Commission has developed a working Congestion Management Process to consider multi-modal solutions to traffic congestion problems; and

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WHEREAS, the 2040 Comprehensive Regional Plan Update Companion is the product of a continuous, cooperative, and comprehensive planning process; and

WHEREAS, the Commission has determined that the draft 2040 Comprehensive Regional Plan Update Companion conforms to the State Implementation Plan for Air Quality; and

WHEREAS, the Commission has solicited public comment on the draft 2040 Comprehensive Regional Plan Update Companion; and

NOW, THEREFORE, BE IT RESOLVED that the Commission officially adopts the 2040 Comprehensive Regional Transportation Plan Update Companion this 21st day of May, 2015.

Blair Milo
Chairperson

ATTEST:

Robert J. Schaefer
Secretary

Comprehensive Regional Plan Update Companion



Overlooking Long Lake at West Beach.
Photo by Mitch Barloga.

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Acknowledgments

2015 NIRPC APPOINTMENTS

APPOINTING AUTHORITY

MEMBER

LAKE COUNTY

Lake County Commissioners	Roosevelt Allen, Jr., Treasurer
Lake County Council	Jamal Washington
Lake County Surveyor	Bill Emerson, Jr.
Mayor of Gary	Karen Freeman-Wilson
Mayor of Hammond	Thomas M. McDermott, Jr.
Merrillville Town Council	Richard Hardaway
Munster Town Council	Joe Simonetto
Mayor of Hobart	Brian Snedecor
Mayor of East Chicago	Anthony Copeland, Executive Board
Griffith Town Council	Stanley Dobosz
Highland Town Council	Michael Griffin
Schererville Town Council	Tom Schmitt, Executive Board
Mayor of Crown Point	David Uran
Mayor of Lake Station	Keith Soderquist
Mayor of Whiting	Joseph M. Stahura
Dyer Town Council	Jeff Dekker
Cedar Lake Town Council	Robert Carnahan
Lowell Town Council	Chris Salatas, Jr.
Winfield Town Council	David Anderson
New Chicago Town Council	Lori Reno
St. John Town Council	Michael Forbes
Schneider Town Council	Richard Ludlow

LA PORTE COUNTY

La Porte County Commissioners
 La Porte County Council
 La Porte County Surveyor
 Mayor of Michigan City
 Mayor of La Porte
 Trail Creek Town Council
 Long Beach Town Council
 Kingsford Heights Town Council
 Kingsbury Town Council
 Michiana Shores Town Council
 Wanatah Town Council
 LaCrosse Town Council
 Pottawattomie Park Town Council
 Westville Town Council

Dave Decker, Executive Board
 Cary Kirkham
 Anthony Hendricks
 Richard Murphy, Executive Board
 Blair Milo, Chairman
 John Bayler
 Bob Schaefer, Secretary
 Patty Arnett
 Mark Ritter
 Jean V. Poulard
 Diane Noll
 vacant
 Roger Miller
 Ronald Stallings

PORTER COUNTY

Porter County Commissioners
 Porter County Council
 Porter County Surveyor
 Mayor of Portage
 Mayor of Valparaiso
 Chesterton Town Council
 Hebron Town Council
 Porter Town Council
 Kouts Town Council
 Ogden Dunes Town Council
 Burns Harbor Town Council
 Beverly Shores Town Council
 Dune Acres Town Council
 Pines Town Council
 Porter Township Trustee
 Union Township Trustee

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 Jeremy Rivas
 Kevin Breitzke
 James Snyder
 H. Jonathan Costas
 James G. Ton, Vice-Chair
 Don Ensign, Executive Board
 Greg Stinson, Executive Board
 James Murphy
 Tom Clouser
 Jeff Freeze
 Geof Benson
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 vacant
 Edward K. Morales
 George H. Topoll

Governor of Indiana

State Rep. Ed Soliday, Executive Board



Downtown Art in Michigan City. Photo by Stephen Sostaric.

PATHWAY TO 2040 - CRP IMPLEMENTATION COMMITTEE MEMBERS PAST & PRESENT

Nancy Adams	Porter County Plan Commission (Vice-Chair)
Vanessa Allen	Urban League of Northwest Indiana
Bruce Bendull	Indiana Dept. of Workforce Development
Mark Cassello	Calumet College of St. Joseph
Joan Crist	Calumet College of St. Joseph
Alice Dahl	Cedar Creek Township
Jeff Dekker	Town of Dyer
Amy Delahunty	South Shore Clean Cities, Inc
Dale Engquist	Shirley Heinze Land Trust
Angie Fegaras	INDOT LaPorte District
Michael Griffin	Town of Highland, Chair
Richard Herr	Hoosier Environmental Council
George T. Janiec	Disability Community Board Member
Eugene Guernsey	Town of Merrillville
Jim Jessup	Leadership LaPorte County
Earl Jones	IUN Environmental Justice Partnership
Tyler Kent	City of Valparaiso
Jennifer Kharchaf	Envirotest Systems/Clean Air Car Check
Keith Kirkpatrick	KPM Group, Leadership Northwest Indiana
Sharron Liggins	Continuum of Care Network, NWI
Carl Lisek	South Shore Clean Cities, Inc
George Malis	Sierra Club Dunelands Group
Sergio Mendoza	City of Hobart
Nicole Messacar	LaPorte County Soil & Water Conservation District
Christopher Meyers	City of Crown Point
Amlan Mitra	Purdue University Calumet
AJ Monroe	City of Portage
Edward Morales	Porter Township
Tim Morgan	LaPorte County Parks Department
Richard Morrisroe	City of East Chicago
Richard Murphy	City of Michigan City
Ian Nicolini	Town of Cedar Lake
Sandy O'Brien	Sierra Club Dunelands Group
Charles Oberlie	Michigan City



Street in Chesterton. Photo by Stephen Sostaric.

Don Parker	South Shore Trails
Kris Parker	Purdue Extension, Porter County
John Parsons	Northern Indiana Commuter Transportation District
Dewey Pearman	Construction Advancement Foundation (CAF)
Cecile Petro	Town of Highland Redevelopment
Craig Phillips	City of Michigan City
Sylvia Planer	Hispanic Coordinating Council
Dan Plath	NW Indiana Paddling & NiSource
Brian Poland	City of Hammond
Pat Pullara	Greater Northwest Indiana Association of Realtors
Rev. Cheryl Rivera	NWI Federation
Sandra Rodriguez	Miller Beach Farmers Market
Cindy Rojas	Citizen
Anthony Sindone	Purdue University North Central
Bob Thompson	Porter County Plan Commission
Jim Ton	Town of Chesterton
Dwayne Williams	City of Gary
David Wright	Gary Public Transportation Corporation
Joseph Wszolek	Greater Northwest Indiana Association of Realtors

NIRPC COMMITTEES

Transportation Policy Committee Members
 Environmental Management Policy Committee Members
 Land Use Committee Members
 Ped, Pedal & Paddle Committee Members
 Congestion Management Sub-Committee

NIRPC CONTRIBUTING STAFF

Mitch Barloga	Jody Melton	Scott Weber
Gabrielle Biciunas	Belinda Petroskey	James Winters
Gary Evers	Amanda Pollard	
Joe Exl	John Smith	
Sarah Geinosky	Stephen Sostaric	
Eman Ibrahim	Steve Strains	
Kathy Luther	Ty Warner	

U.S. Steelyard, Gary. Photo by Stephen Sostaric.



Introduction

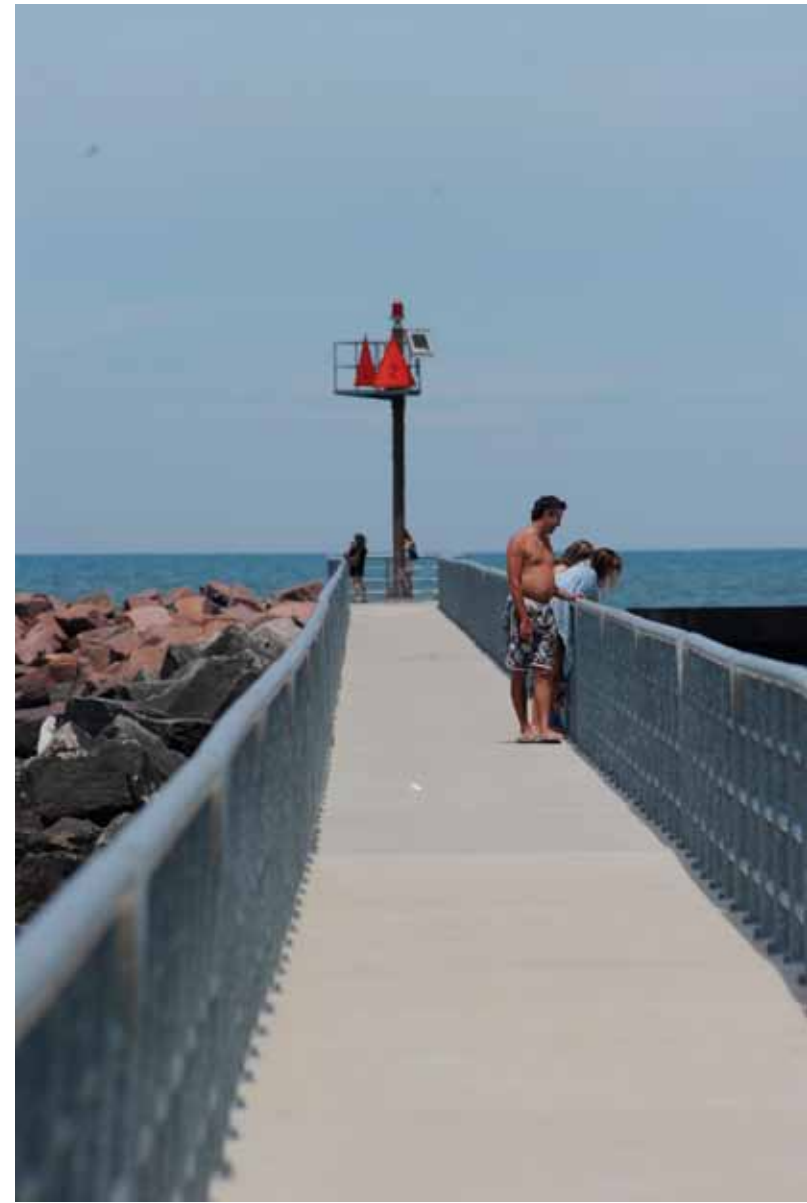
A Unified Vision for Northwest Indiana

With a legacy of economic accomplishment and unrivaled natural beauty, Northwest Indiana remains a region rich with opportunity and hope. Situated on the southern shores of Lake Michigan, and part of one of the world's largest metropolitan areas, the region enjoys a strategic advantage from both a transportation and environmental perspective. Taken together the future of the Northwest Indiana region remains bright, with the challenge to corral these opportunities for the benefit of the region's residents and businesses alike.

Serving Lake, Porter and LaPorte Counties, the Northwestern Indiana Regional Planning Commission (NIRPC) represents a council of local governments providing a forum for elected officials and the general public to address regional issues relating to transportation, environment, and community and economic development. NIRPC also functions as the Metropolitan Planning Organization (MPO) for the region in its transportation capacity. NIRPC's adopted purpose is to create the conditions within which policy makers can create a sustainable, vibrant regional community and quality of life for Northwest Indiana.

In 2011, NIRPC adopted the *2040 Comprehensive Regional Plan (CRP)*. The CRP represented the first comprehensive vision encompassing both land use and transportation development strategies in Lake, Porter and LaPorte Counties combined. The CRP was developed over the course of a year with significant public input, aiming to inspire sound policy programs throughout all the municipal jurisdictions in the NIRPC region.

The CRP represents a vision document where a number of implementation goals have been advanced since its adoption. Key among these are the Creating Livable Communities Initiative, the Local Food Study, the Marquette Plan Update and Green Infrastructure Vision. These achievements, along with other notable advancements, have helped position the Northwest Indiana region towards realizing the vision as outlined in the CRP.



Portage Lakefront and Riverwalk. Photo by Stephen Sostaric.

The 2040 Regional Comprehensive Plan Update Companion

Any good plan, no matter how well-written and agreed upon, still requires a fresh review every few years. In May of 2015, the *2040 Comprehensive Regional Plan* was updated as mandated by the U.S. Department of Transportation's (USDOT) Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) through provisions in the Moving Ahead for Progress in the 21st Century Act (MAP-21). MAP-21 represents the current federal transportation program authorizing legislation of the time of the update's adoption. Current transportation planning regulations require Metropolitan Planning Organizations such as NIRPC to update their regional transportation plans every four years. The main idea behind the update is to revisit the goals and objectives as outlined in the CRP, and gauge their progress to date. Also included are any major planning initiatives that have been accomplished. Furthermore, the update provides the public another opportunity to provide critical input into the continued success of implementing the CRP. Thus, NIRPC held a series of public meetings both before and after the preparation of the final draft in order to maximize feedback regarding the update. A detailed report of the public meeting feedback, including staff responses, can be found in the appendix.

This document represents an *Update Companion* to the original 2040 CRP, and has been organized under the five key elements that include:

- Growth & Conservation
- Transportation
- Environment & Green Infrastructure
- Human & Economic Resources
- Stewardship & Governance

The *2040 CRP Update Companion* does not seek to rewrite the original plan, but to provide an overview of the changes which have occurred since 2011, and the progress achieved since the plan's adoption. What follows is an update of the plan, where the vision, goals

and objectives have not changed. The update includes a review of major planning initiatives launched and/or continued in this interim, including any progress on advancing the CRP's stated goals and objectives. The update further includes a few new transportation expansion projects.

The *Update Companion* references the CRP on a number of occasions. As such the 2040 CRP is available for viewing online at www.nirpc.org/2040-plan.

The 2040 CRP Update Companion does not seek to rewrite the original plan, but to provide an overview of the changes which have occurred since 2011, and the progress achieved since the plan's adoption.



Glen Park Neighborhood, Gary. Photo by Stephen Sostaric.

Performance Based Planning - Performance Measures

As part of Section 1203 of the Moving America for Progress in the 21st Century (MAP-21) requirements, the update of the *2040 Comprehensive Regional Plan* focuses on transitioning and establishing a performance based planning approach to transportation decision making. A performance based planning process focuses on a performance-driven, outcome-based program that provides a greater level of transparency and accountability, improved project decision-making, and more efficient investment of Federal transportation funds. State Departments of Transportation (DOTs), MPOs and transit providers will use performance measures and targets based upon the national performance measures established from FHWA and FTA in the goal areas of: safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. The objective of the performance measures is to invest resources in projects to achieve targets that collectively will make progress toward national goals.

The National Performance Goals for the Federal highway programs as established in MAP-21 are as follows:

- **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair
- **Congestion Reduction** - To achieve a significant reduction in congestion on the National Highway System
- **System Reliability** - To improve the efficiency of the surface transportation system

- **Freight Movement and Economic Vitality** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment
- **Reduced Project Delivery Delays** - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

According to MAP-21, (23 U.S.C. 134(c)(1) & (h)(2); 49 U.S.C. 5303(c) (1) State DOTs, MPOs and public transportation providers must establish a planning process that is performance-driven, outcome based and supports the seven National Goals and general transit purposes identified in MAP-21.

Long Range Transportation Plan (Plan)

1. The Plan will include a description of the performance measures and performance targets used in assessing the performance of the transportation system.
2. The Plan will also include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the established performance targets.

MPOs must establish performance targets that reflect national performance goals and measures and must be coordinated with state DOTs and transit providers. Within 180 days of the state DOTs or transit agency's establishment of performance targets, MPOs are to set performance targets that reflect national performance goals and measures. To ensure consistency, selection of targets must be coordinated with state DOTs and transit providers to the maximum extent practicable.

At the time of adoption of this update, NIRPC is awaiting the finalized USDOT performance measures, but has considered the MAP-21 Planning Factors and National Performance Goals in this update.

FHWA and FTA have published Notice of Proposed Rulemakings (NPRM) aimed at establishing the performance management framework required by MAP-21. Additional NPRMs scheduled for future publication will propose the process for developing State asset management plans and performance measures for system performance, traffic congestion, on-road mobile source emissions, and freight movement.

Published NPRMs include:

- Safety Performance Measures NPRM
- Highway Safety Improvement Program NPRM
- Planning NPRM
- Pavement and Bridge Condition Performance Measures NPRM

The 2040 CRP includes a set a performance measures for each element of the plan. The performance measures and their associated analysis are embedded within the document. Work is ongoing and will continue in greater detail.



January sunset over the East Chicago train station. Photo by Ann Fisher.

Downtown Whiting. Photo by Stephen Sostaric.



Chapter I: **Regional Growth & Conservation**

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Overview

This section of the *2040 Plan Companion Update* summarizes what has been changed or achieved since the adoption of the CRP in 2011, and where the region should continue or concentrate its efforts to achieve the 2040 Growth and Conservation Vision.

As explained in the CRP, the Growth and Conservation element serves to focus resources in a manner that enables the region to be economically competitive and successful. Concepts of urban growth, development, conservation, transit and directed infrastructure, when properly guided, create an investment framework that builds communities and strengthens regional economies. This section is covering three elements: the demographics and housing trends in 2013, growth patterns, and the local food system. In this update of the Growth and Conservation section, NIRPC focused on four priorities that are reflected in the CRP regional goals, including:

- **Livable Urban, Suburban, and Rural Centers**
- **Revitalized Urban Core Cities**
- **Managed Growth that Protects Farmland, Environmentally Sensitive Areas and Important Ecosystems**
- **Linked Land Use and Transportation**

Following the plan's adoption, NIRPC focused its efforts in the implementation of the 2040 Plan through new projects, programs, funding priorities, and providing technical assistance by participating in a variety of local and regional initiatives. This chapter will highlight work completed or ongoing that is related to the four priorities as mentioned above.



Residential street in Griffith. Photo by Stephen Sostaric

Demographics

This chapter starts with an overview of the changes in demographics and housing trends for Northwest Indiana over the last four years.

In the four years since the *2040 Comprehensive Regional Plan* was adopted, the region has experienced small demographic shifts mostly in line with the projections in the 2040 Plan.

Trends and Analysis

Since 2010, the region has lost 2,521 people, a minor change of -0.33%. This change, relative to the region's 769,295 people, does not indicate a major long-term trend of population loss.

A Familiar Pattern (Shifts)

Population continued to grow in some of Northwest Indiana's suburban communities, but many of the communities which saw growth in recent decades also experienced population loss. Dyer, Schererville, Hobart, Munster, and Highland experienced small population loss since 2010. Population gains were instead further south in Lake County and in Porter County. Additionally, both unincorporated Lake and La Porte Counties saw population loss, while unincorporated Porter County gained population.

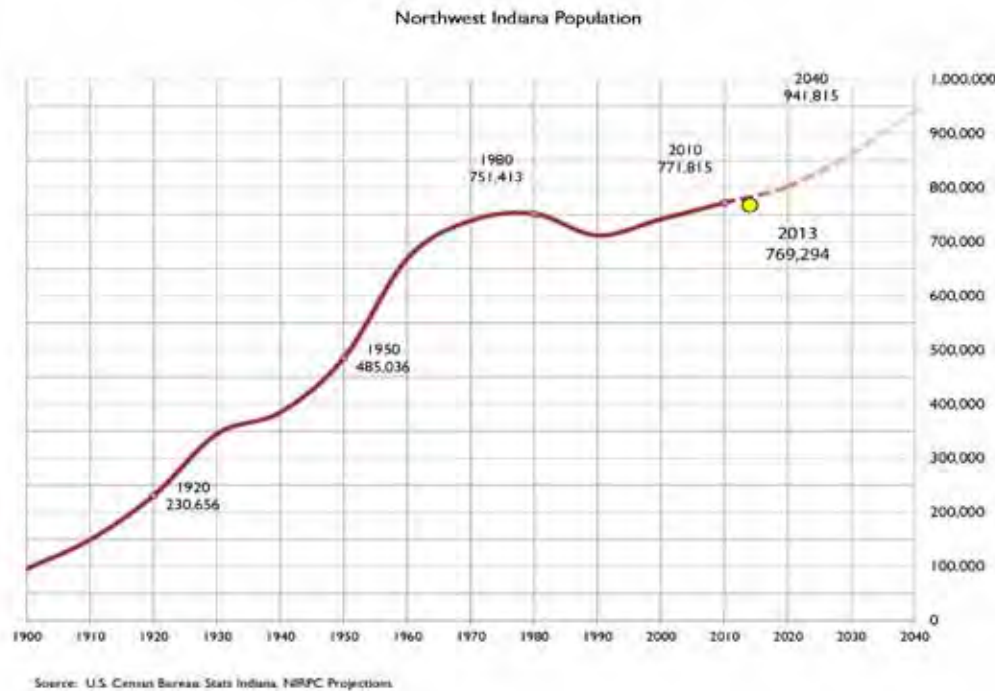


Figure I-1 NW Indiana Population Change Over Time

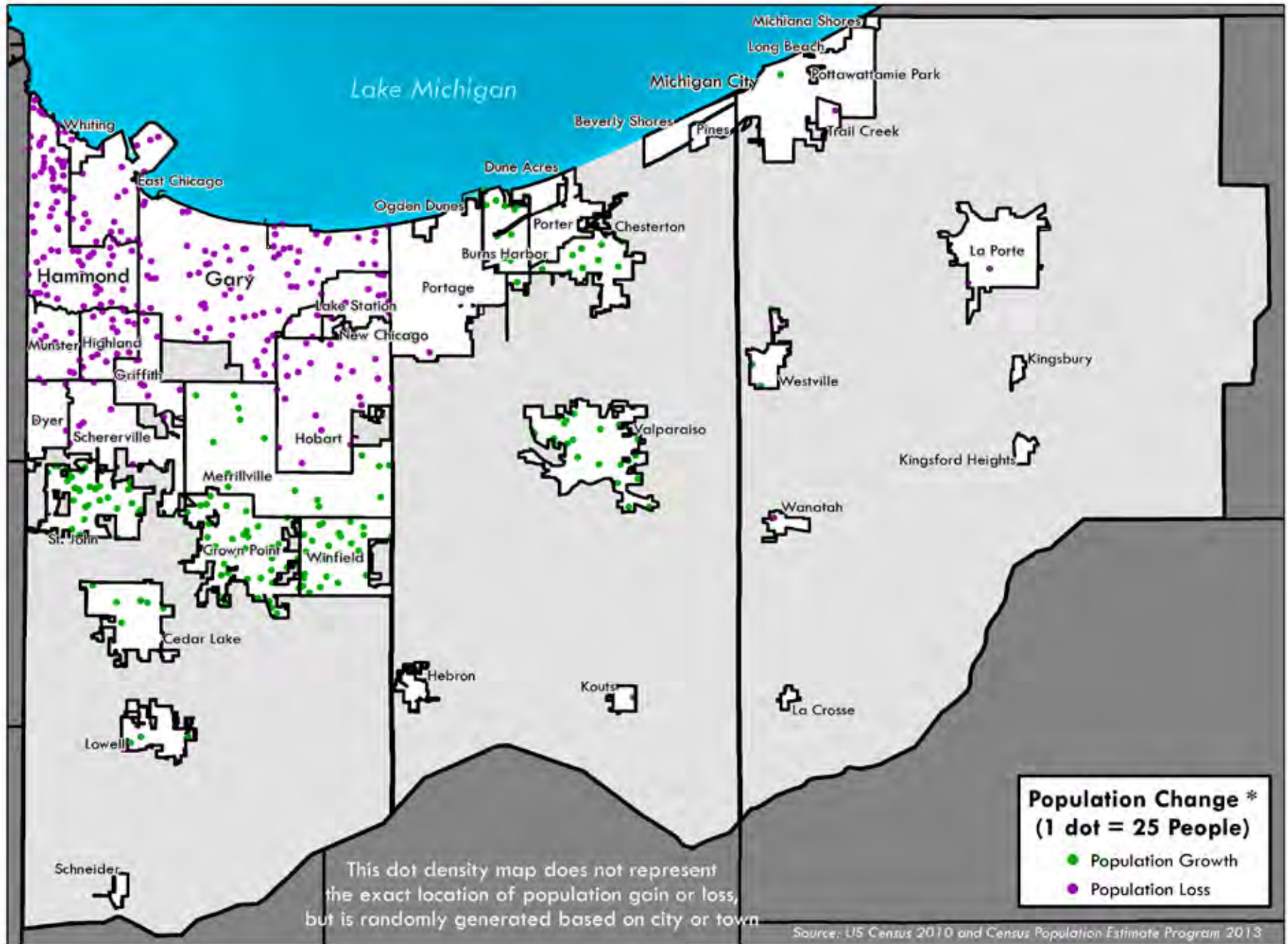


Figure I-2 Population Change since 2010

Urban Core Communities

Since 2010, three of the four once-thriving industrial communities continued to lose population. Population losses in Hammond, Gary, and East Chicago were all around 2%. However, Michigan City experienced modest growth despite losing population for the last three decades.

Porter County

Growth in Porter County has continued in both the unincorporated and incorporated areas. Burns Harbor has grown the greatest at 18%. Most other communities in the county experienced slower growth, most likely due to the slow recovery of the economy following the recession years from 2007-2009. Additionally, Portage experienced no population growth, despite growing steadily in the last three decades.

La Porte County

La Porte County experienced small population losses in most of its municipalities and unincorporated area, with the exception of Westville and Michigan City.

Central and South Lake County

The trend of rapid growth in Lake County grew more complicated since 2010. Municipalities which had been growing before, or actually experienced small losses, while communities south of US 30 continued to grow, albeit at a much slower rate. Winfield grew at the highest rate (13.6%), followed by St. John (5.3%) and Crown Point (3.9%). Furthermore, population decreased in the unincorporated area by -2.8%.

Our Increasing Diversity

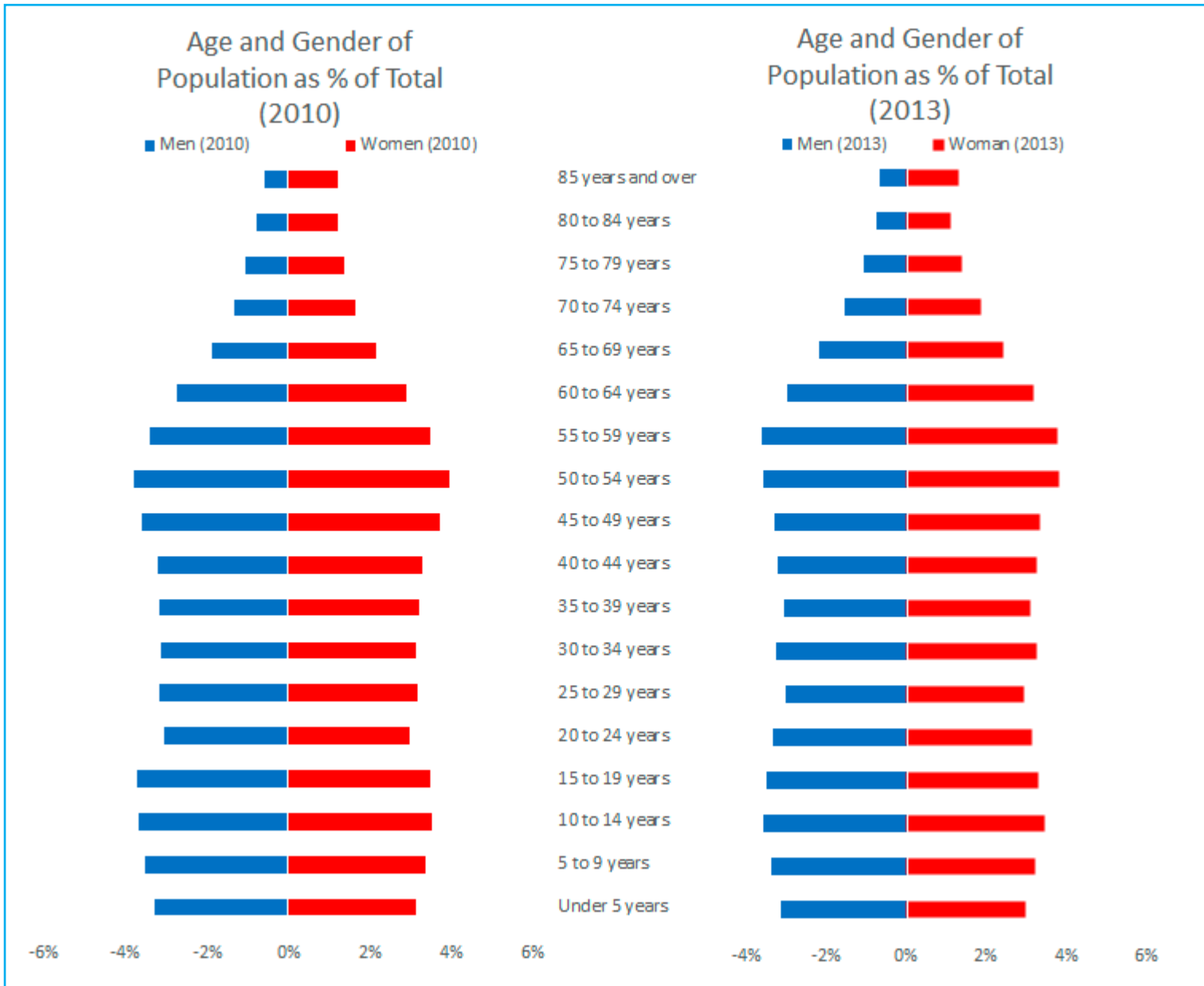
Northwest Indiana has seen little change in its racial diversity since the CRP was released in 2011, but the Hispanic population as a percentage of the region has continued to grow. In 2010 the Hispanic population was 13.3% of the population, and in 2013 it was 14.2%.

Our Aging Population

Northwest Indiana continues to be older than the United States and Indiana as a whole. Today the median age of the NIRPC region stands at 38.6, compared to 37.9 in 2010. For comparison, the United States' median age changed from 37.2 to 37.6 today. (Refer to Figure I-3 for a detailed breakdown of age and gender populations for both 2010 and 2013.)



Northwest Indiana neighbors. Photo courtesy of the Times of Northwest Indiana



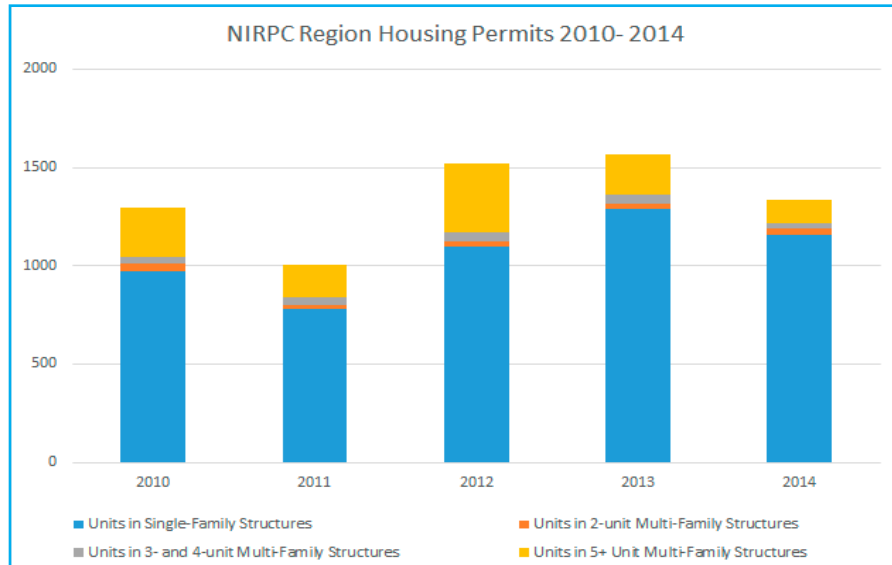
From US Census Population Estimates

Figure I-3 Age and Gender of NW Indiana Population 2010 & 2013

Housing

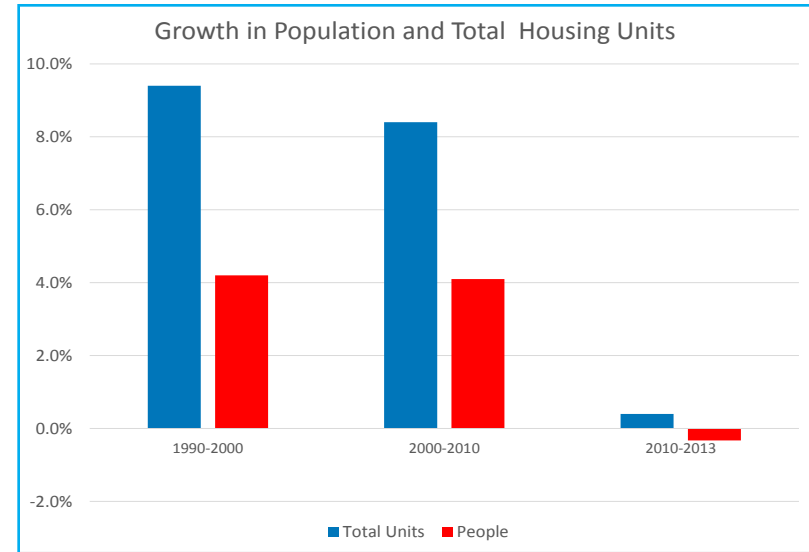
Housing Supply

The region's housing supply continued to grow between 2010 and 2014, despite population loss. While the total population decreased by 0.3%, housing units grew by 0.4%. Additionally, the majority of new housing continues to be single family units. For every two people the region lost in the last three years, one housing unit was added. Housing continues to be overbuilt in a region with considerable housing vacancies. Figure I-4 provides an overview of the housing growth, with Figure I-5 comparing this to population growth in the region.



*2014 Numbers are corrected. Data is from the State of the Cities Data System (SOCDS) Building Permits Database

Figure I-4 Northwest Indiana (Lake, Porter and LaPorte Counties) Housing Permits



From US Census 2013 Population Estimates

Figure I-5 Growth in NW Indiana Population and Housing Units

Residential Vacancies

Certain areas in the urban core communities of Hammond, Gary, East Chicago and Michigan City continue to experience considerable residential vacancies. In a two year period, some areas of Gary and East Chicago experienced vacancies exceeding 30%. Additionally, 53% of the region's vacancies have been vacant for more than 3 years. These vacancies continue to occur in areas that have lost significant population, indicating a continued serious challenge to regional improvement in housing.

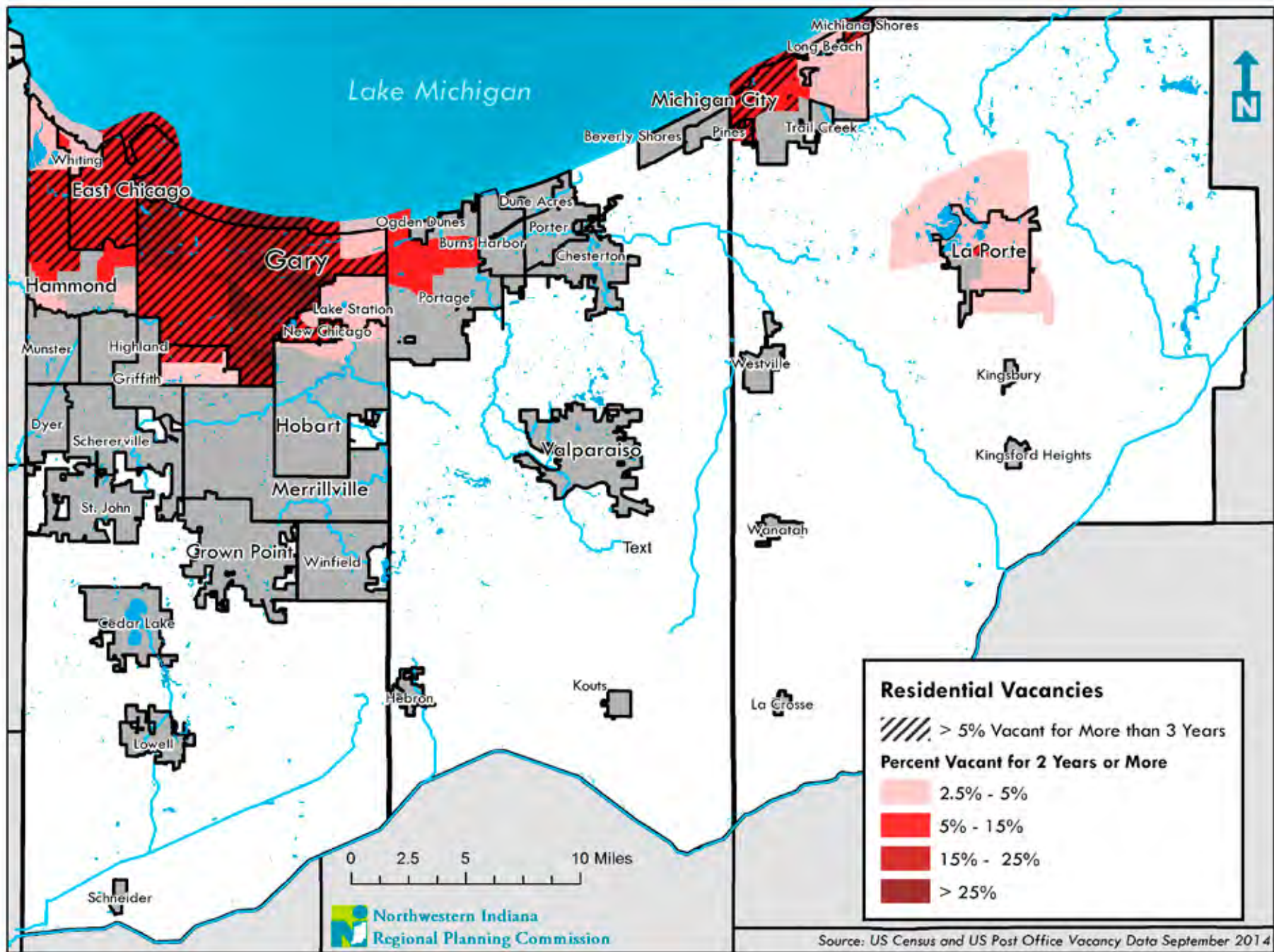


Figure I-6 Residential Vacancies

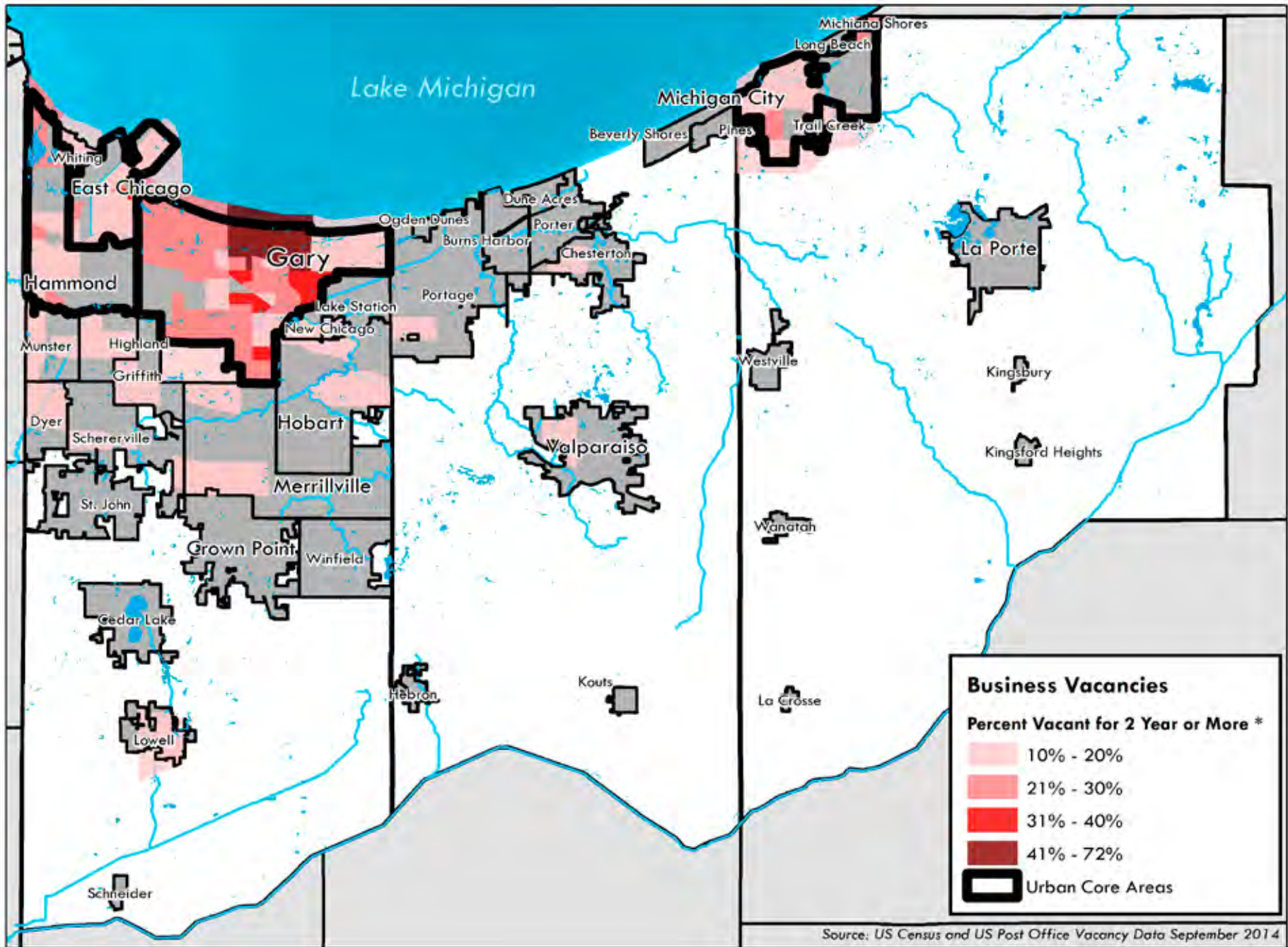


Figure I-7 Business Vacancies

Growth & Conservation Priorities

Livable Urban, Suburban & Rural Centers

The vision of the 2040 CRP is a vibrant, revitalized, accessible and united Northwest Indiana. The key strategy to accomplish this vision is an ambitious growth and revitalization framework that focuses new growth and development in “Livable Centers” within existing communities. Revitalizing and renewing the region’s centers with livable urban, suburban and rural areas represents the tool for protecting and preserving our unique land uses.

Implementation Items (2011-2015):

NIRPC Creating Livable Communities (CLC) Initiative

Beginning with NIRPC’s 2040 CRP, a strong focus was placed on the concept of concentrated growth within the region’s identified “Livable Centers” as a means of revitalizing Northwest Indiana’s urban areas. By leveraging its existing infrastructure and promoting a modal shift towards public transportation, walking, and biking, developing Livable Centers is reversing the trend of suburban sprawl and protecting the region’s many natural assets and ecosystems. In 2012, NIRPC introduced the Creating Livable Communities (CLC) initiative to implement the 2040 Plan and to promote transportation investment and redevelopment in places where people already live and work to create a better range of working, housing and travel choices.

During the past decade, urban core communities like Gary, Hammond, East Chicago, and Michigan City have had a high vacancy rate of buildings and continue to lose population and jobs (Figure 1-6). The CLC Initiative recognizes the urgent need to counter this trend and spark reinvestment and revitalization in these and other urban areas. It allows the region to preserve its environmental assets and use dollars more efficiently to create livable, pedestrian-friendly communities that offer a high quality of life for all residents. It en-

courages the compact mixing of uses, diversifies the mix of housing types and affordability levels near job centers and transit routes and facilitates the remediation and redevelopment of abandoned and underutilized land, including brownfields and grayfields. It also promotes community green infrastructure and access to public open space, the preservation of historic and cultural resources, and the integration of Context Sensitive Solutions (CSS) into transportation planning projects.

CSS represents a collaborative, interdisciplinary approach that involves all stakeholders in providing a transportation facility that fits its setting. It is an approach that leads to preserving and enhancing scenic, aesthetic, historic, community and environmental resources, while improving or maintaining safety, mobility and infrastructure conditions.



Michigan City Uptown Arts District. NIRPC Photo.

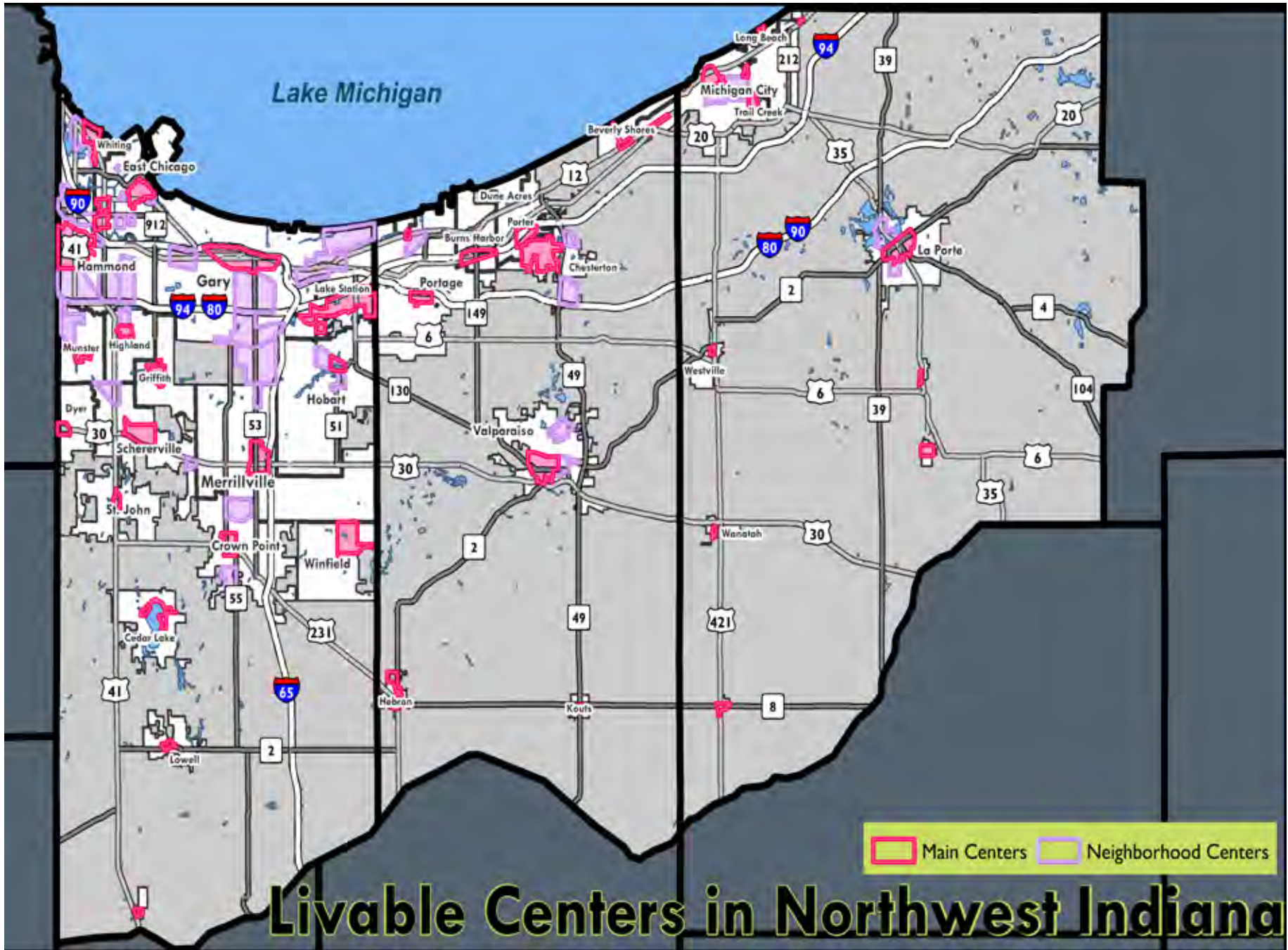


Figure I-8 Livable Centers Map

NIRPC led local governments and planners to define the boundaries of the livable centers in their communities based on the place-making principals of the Livable Centers program. NIRPC staff analyzed these centers for 41 municipalities in the region using innovative Geographic Information Systems (GIS) techniques. This method utilized the agency’s customized “livability parameters”, which were based on data such as block length, street grid, residential density, employment density, transit, land use, and zoning codes. The various analytical tools and engagement strategies that were utilized for this program can readily be adapted to other regional and local planning efforts. All data and analyses were documented in the Creating Livable Communities report. The report serves to educate



and guide the region’s cities and towns on how and where they can feasibly achieve this development within their own communities. With the recommendations of the CLC report, Northwest Indiana communities have the opportunity to build and revive the region’s livable centers as a means of promoting population and employment growth.

Additionally, to help drive the implementation of the policies and projects highlighted in the report, NIRPC has established a new funding program called Creating Livable Communities (CLC) to ensure that transportation investments will be linked to the vitality of Northwestern Indiana’s communities. Establishing the CLC funding program also increases the opportunities for community planning, particularly those that are limited with funding resources, to initiate and implement plans within their identified livable centers.

With the use of United States Department of Transportation (USDOT) Surface Transportation Program (STP) dollars and after

considerable consultation with the funding stakeholders, a sustainable funding source was established in 2013 for local governments to finance projects that advance livability in Northwest Indiana. The ultimate goal of this program is to link land use and transportation, and encourage in-fill development, mixed use development, transit-oriented development, complete streets policies, accessibility to jobs, housing and open space, strong street network connectivity, and multi-modal transportation options.

Northwest Indiana’s Livable Centers (Figure I-8) vary widely in scale, use, mix and purpose within each community today, but all represent areas of regional significance. There are 73 total Livable Centers and neighborhood centers in the region.

In February of 2014, NIRPC awarded CLC grants to seven different communities in the region to help finance a diverse array of projects:

- **Gary:** Urban Revitalization Planning in the Downtown, Emerson, and Horace Mann neighborhoods
- **Crown Point:** North Street Corridor & Guidelines Plan
- **East Chicago:** Transit-Oriented Development in the Roxana, Calumet, and South Side neighborhoods
- **Winfield:** Downtown Master Plan
- **Porter:** Downtown Sidewalk & Streetscape Design Planning
- **Chesterton:** Calumet Connection-Dunes Kankakee Trail Project to downtown Chesterton
- **Highland:** Downtown Highland-Kennedy Avenue Corridor Plan

Revitalized Urban Core Cities

There was broad consensus in the region that investment and revitalization of the region's core urbanized areas, generally located along the lakefront, are critical for long-term regional, social and economic stability. Revitalizing the urban core cities of Hammond, Gary, East Chicago, and Michigan City is a challenge. However, working together as partners can nurture the development of livable, mixed-use downtowns, promote adaptive reuse, infill development and the remediation and reuse of underutilized properties, particularly brownfields. In 2012 NIRPC formed an Urban Core Subcommittee of the Pathway to 2040 Implementation Committee. NIRPC staff, in consul-

tation with the subcommittee, has identified the following objectives for the group:

1. Articulate the priorities of the urban core for the purpose of integrating them into existing programs, e.g. NIRPC transportation funding programs, Marquette Advisory Committee (Lake Michigan Marina and Shoreline Development Commission) activities, and plan for Economic Development District funding.
2. Enable partnerships: Provide a meeting place where grants can be identified and discussed and where partnerships can form.
3. Knowledge and information exchange.

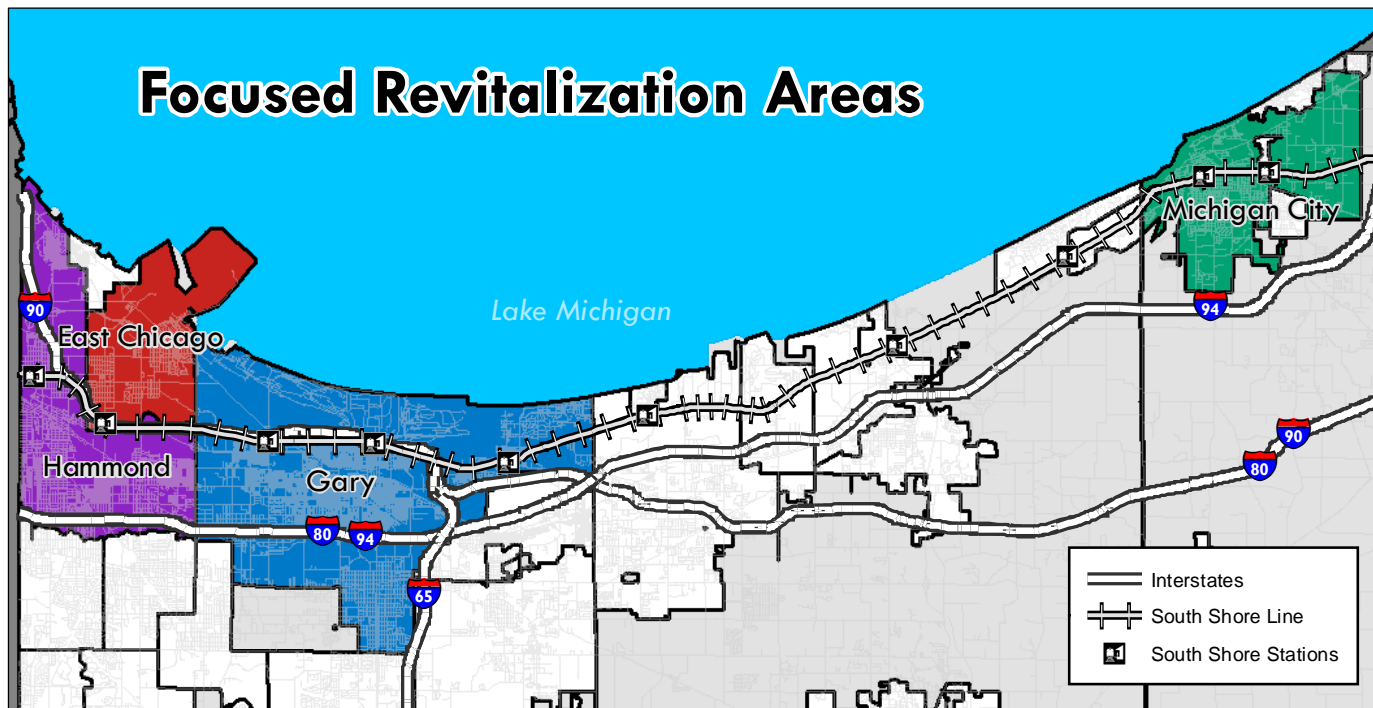


Figure I-9 Focused Revitalization Areas

The urban core cities share a number of characteristics that distinguish them from the rest of Northwest Indiana communities. Each of these characteristics is not exclusive to any one of the cities and not present to the same degree. Taken as a whole, though, they set the urban core apart. The most prominent urban core characteristics include:

- Higher than average vacancy rates
- Continued population losses
- Concentrations of low-income and minority populations
- Significant industrial land
- Brownfields
- Lake Michigan shoreline and access
- Significant existing infrastructure
- Traditional urban design
- Major employment centers
- Major regional institutions

NIRPC staff worked closely with the staff of the four urban core communities to identify priorities and implementation action items. These priorities were assigned to the following active programs areas:

1. Placemaking & Revitalization
 - Livable Centers
 - Marquette Plan Update
2. Transit–Oriented Development
 - TOD Mapping for Transit Operators
3. Brownfield Redevelopment
 - Environmental Boot Camp*
 - Regional Brownfields Coalition**
 - Regional Brownfields Data Inventory
4. Infrastructure Planning
 - Regional At-Grade Crossing Study
 - Regional Port Study
 - Airport Studies
5. Cargo–Oriented Development
 - Regional Intermodal & Logistics Study
 - Rail VISION Working Group
6. Green Infrastructure/Environmental Planning
 - East Chicago Green Infrastructure Initiative

* NIRPC designed a Boot Camp to address the various steps needed to remain in compliance with environmental rules and regulations, proactively to protect the four urban core communities from environmental risk, and obtain technical and financial assistance from state and federal agencies. Boot Camp provided an intensive overview of the many laws, rules, and regulations that local communities must follow. It also included resources to assist and support communities to both meet these requirements and to take the next step into restoration, retrofit, and sustainability. It provided real-life examples of projects or sites with environmental issues to be identified and addressed.

** The Northwest Indiana Regional Development Authority (RDA), Northwestern Indiana Regional Planning Commission (NIRPC), and the Cities of East Chicago, Gary, and Hammond, Indiana have formed a coalition (the Coalition), which applied for a FY 2014 Environmental Protection Agency (EPA) Brownfields Assessment Grant. The Coalition requested a total grant award of \$600,000 – which includes \$400,000 in Hazardous Substance Assessment Grant funds and \$200,000 in Petroleum Assessment Grant funds. The grant was awarded to the Coalition.

Cultural & Historic Inventory Mapping Project

One of the strategies that promotes the preservation of historic and cultural resources is infill and adaptive reuse, which is listed as an objective for the revitalization of the region's urban core and the development of livable centers.

In 2012, NIRPC conducted a mapping project to create a geographic information system (GIS) inventory of historic landmark buildings (Figure I-10) in the three counties and update the County Inventory of Historic Structure Interim Reports. The goal of this project also, in addition to the above strategies, is to identify public and private historical sites that are required for the Federal Highway Administration (FHWA) to protect during the National Environmental Policy Act (NEPA) process.



Downtown Crown Point. Photo by J. Stephen Conn via Flickr, CC BY-NC 2.0 License.

Prioritize Transportation Funding to Support Centers, Revitalization Areas and Infill & Growth Areas

Since NIRPC is responsible for the planning and programming of federal surface transportation funds, the 2040 CRP is the policy plan that guides this process. As part of the *Update Companion*, NIRPC updated its transportation project selection criteria to support the goals and objectives of the CRP and to prioritize transportation projects that support the development of Livable and Economic Centers, Revitalization Areas, and Infill and Growth Areas.

Gary Northside Redevelopment Project

A project born from a collaboration between USDOT, the United States Environmental Protection Agency (US EPA), United States Housing and Urban Development (US HUD), the City of Gary, and other regional partners focused on urban revitalization, sustainable development, and quality of life improvements in the City of Gary. The program focuses specifically on improvements in the Aetna/Miller Beach, Emerson, and Horace Mann neighborhoods of the city. NIRPC is providing technical assistance for the project that includes:

- Planning for a transit-oriented development around the Miller commuter rail station
- Establishment of a light industrial district and new commercial services along the US 12 & 20 corridor, that come accompanied with green infrastructure development and new development guidelines
- Guidance in channeling brownfield remediation funding for redevelopment projects in the project study area
- Guidance on the development of a neighborhood revitalization plan for the Emerson and Horace Mann neighborhoods under the Creating Livable Communities grant
- Support in programming Hardest Hit funding for targeted demolition
- Coordination with other federal agencies, as part of the City of Gary's SC2 (Strong Cities Strong Communities designation)

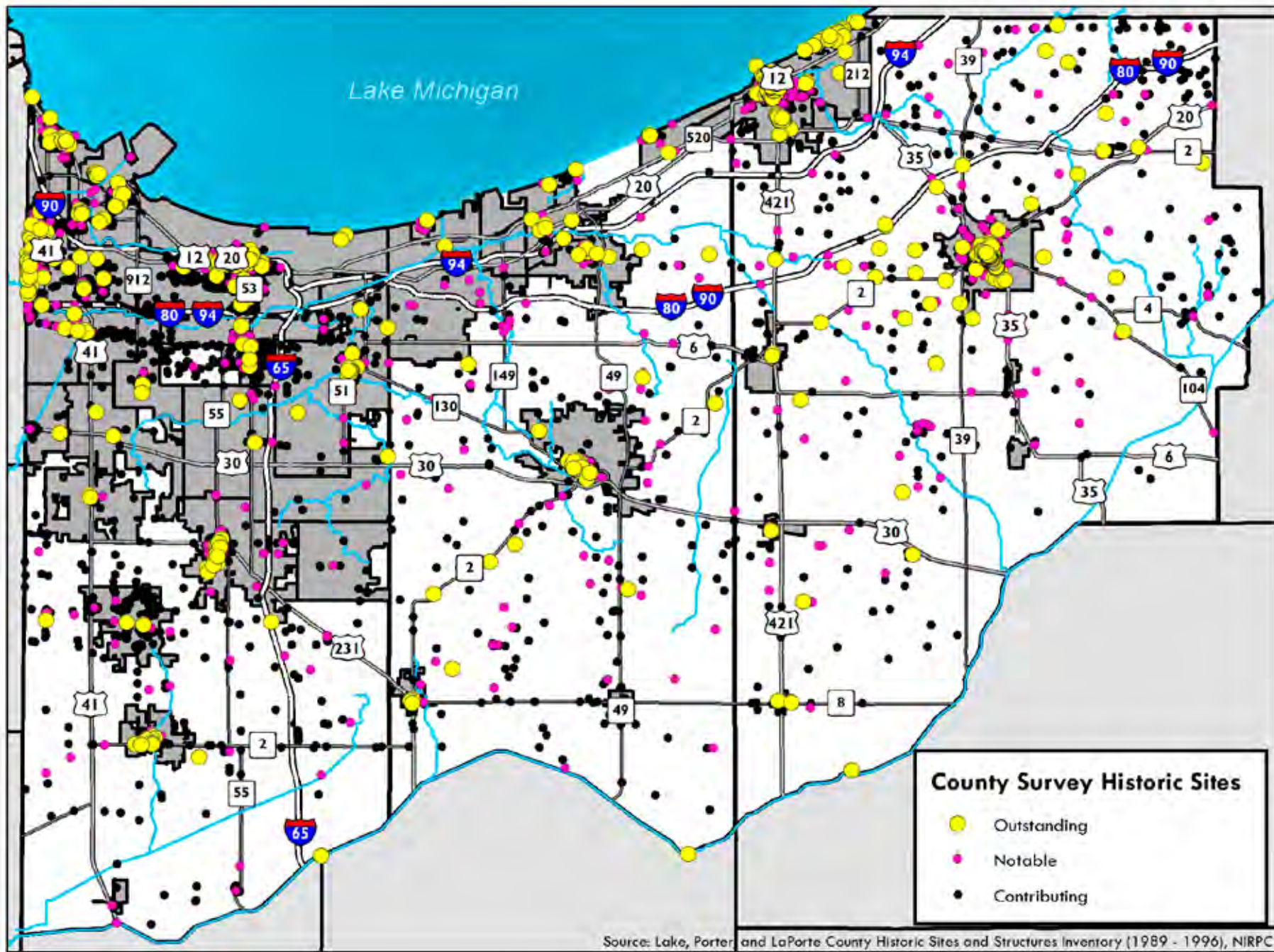


Figure I-10 County Survey Historic Sites

Roxana Transit Oriented Development Project in East Chicago

The Roxana Area project encompasses the South Side and Roxanna neighborhoods, along with the South Shore train station and surrounding commercial district. NIRPC is part of the steering committee to provide technical assistance and oversee the CLC grant for the Transit Oriented Development (TOD) project. The Roxanna area includes the East Chicago South Shore train station, which is one of the busiest stations on the line. This project will leverage this asset, along with opportunities identified through stakeholders. This project area was established because:

- The South Shore train station has the potential to become an anchor for economic development through a mix of retail, housing and office space
- Complete green streets strategies are considered to create a safe multi-modal (cars, bikes, pedestrians), aesthetically pleasing environment, and bring environmental benefits to the community through improved storm water management, etc.
- Improved connectivity will help residents to access regional transportation networks
- The project area provides a number of opportunities to construct a portion of a larger regional trail network and to provide recreational and community building opportunities that support healthy and active lifestyles



East Chicago NICTD Station. NIRPC Photo.

Lake Michigan Gateway Implementation Strategy in Michigan City

In October 2014, the Lake Michigan Gateway Implementation Strategy (LMGIS) was approved by the Michigan City Common Council. The LMGIS is the culmination of several plans targeted toward revitalizing the city's north side. The LMGIS takes the city from the planning and studying stages and commences the action and implementation stages. Primary targets are the lakefront, Washington Park and the surrounding areas such as the U.S. Highway 12 corridor and the downtown.

The LMGIS is a strong and compelling vision for the future of Michigan City's urban core. It includes plans for bringing investors and developers to the area as well as the implementation of branding, the addition of year-round attractions and reverting downtown streets to two-way to allow better transportation connectivity and movement. Components of the strategy include refining the Michigan City brand, bringing more attractions to the city, installing simple connections throughout the city and creating a memorable appearance of the city.

The LMGIS provides a solid and achievable means to implementing NIRPC's plans and programs, such as the *Marquette Plan* and *Creating Livable Communities* in Michigan City. The LMGIS provides specific recommendations for a series of coordinated and incremental public and private sector improvements, operational improvements and public policies that when systematically completed will help unlock the tremendous potential of the study area. The goal is to make Michigan City "Indiana's Great Lakefront Destination Community."

The LMGIS provides recommendations to ensure that by 2020 local residents and visitors will:

- Support a cluster of year-round activities and destinations for the whole family
- Easily access and navigate the area

Figure I.11 Lake Michigan Gateway Plan - Framework Plan



North Franklin Street looking south towards library



Interstate 421 @ I-94 Bridge Proposed Design

- Experience an extraordinarily attractive environment
- See increased private sector investment; produce more jobs and more tax revenue

The LMGIS describes how the alignment of market, brand and place will position Michigan City to achieve its ambitious goal. The LMGIS also includes prioritized step-by-step implementation actions for each of the recommendations into specific, prioritized projects and actions that are organized as Capital Improvements, Land Improvements and Development, Operational Improvements, and Public Policy projects.



Michigan City Lighthouse. Photo by Stephen Sostaric

Marquette Plan Update 2015

The *Marquette Plan Update* serves to integrate the vision and strategies of the two earlier phases by establishing more consistency amongst the plan's priorities and policy frameworks across the entire region. This update will celebrate successes achieved since the *Marquette Plan's* inception in 2005, identify challenges towards implementation, explore new opportunities, and review shifts in the economic development, environmental conservation, and neighborhood development goals across different subareas of Northwest Indiana's lakefront.

The *Marquette Plan Update* builds on the vision and principles of the original phased plans. It continues to emphasize the importance of Lake Michigan as the greatest natural asset of our region, and the need to increase public access to its shoreline. The plan prioritizes improving the physical, social, and economic connections throughout Northwest Indiana's lakefront communities, expanding and improving the region's off-road trail and transportation infrastructure, and protecting the long term health of our environment and natural resources. The new update includes recommendations regarding the cultural and historic resources within the *Marquette Plan* study area. These resources are valuable assets that support the heritage of the region's coastline, the identity of individual communities, regional sustainability, and the economic potential of the tourism industry.

Neighborhood Reinvestment & Redevelopment Projects

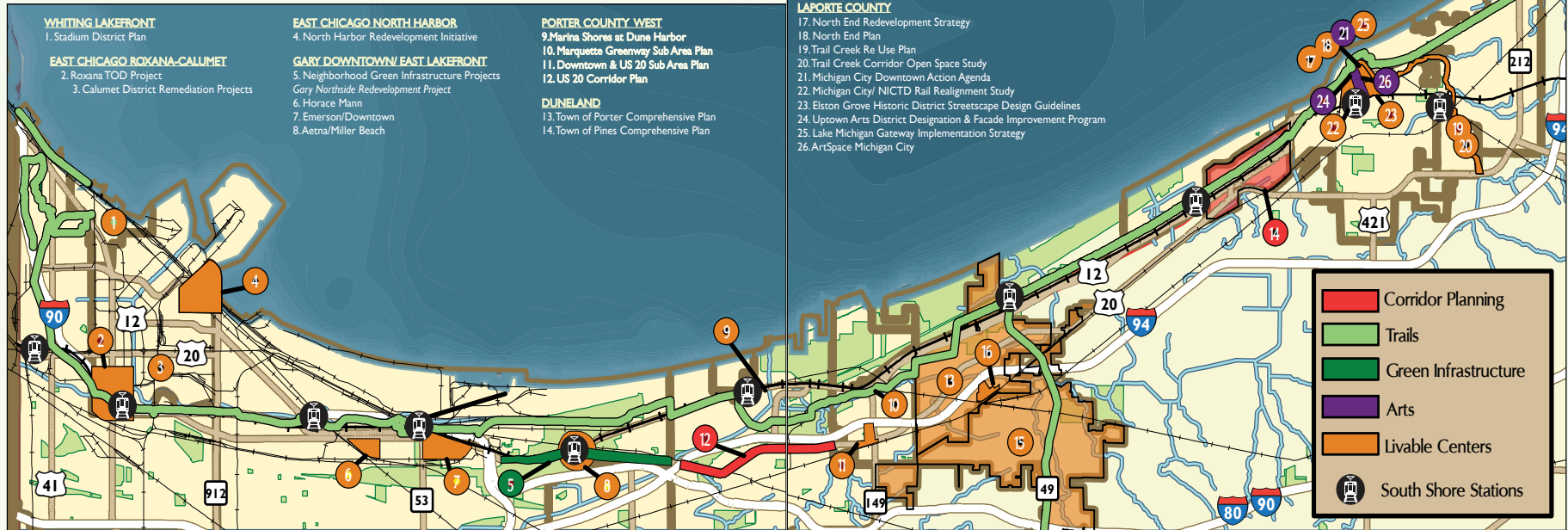


Figure I-12 Marquette Plan Policy Frameworks Excerpt

Managed Growth that Protects Farmland, Environmentally Sensitive Areas & Important Ecosystems

The 2040 Plan embraces constrained, planned growth and encourages sustainable development within existing communities whose population centers will be livable and vibrant. Infrastructure will be constrained, as the 2040 Plan Vision calls for balanced, sustainable growth throughout the region. This growth is focused through application of the Livable Centers concept and protecting the identified network of natural areas that includes protected open space, conservation areas and agricultural lands. The 2040 Plan recommends a Green Infrastructure approach to the protection of waterbodies, wetlands, floodplains, groundwater protection areas, high-quality forest, prime agricultural land and areas of biodiversity and wildlife habitat.

The Green Infrastructure approach is explained in more detail within the Environmental Section. The 2040 Plan implementation strategies are focused on the conservation of land uses that lead to infill growth strategies succeeding within the region's core communities and livable centers.

Implementation Items (2011-2015):

NIRPC focused its implementation efforts to manage growth by encouraging the concentration of development around existing infrastructure and the redevelopment of infill sites within the established Livable Centers and through the allocation of the transportation improvements funds. Livable Centers promote compact development and smart growth through techniques such as mixed use, high density of population and housing, transit-oriented development, and traditional neighborhood development and conservation design.

In the 2040 Plan, NIRPC performed analysis from 1992 to 2006 on the extent of the region's growth and urbanization areas. In this Plan Update, NIRPC continued to analyze population and land use changes across the region. With the availability of the 2010 land cover data and the 2013 population data, NIRPC performed analyses to trace development trends within the region.

Development Patterns

Within the three-county region, development trends, particularly for residential uses, are continuing somewhat to shift away from the more historically urban portions of the region. As shown in Table I-1, the total population of the region has slightly decreased by 0.3% from 2010 to 2013. These population losses were largely in Lake and La Porte Counties, which is offset by population gains in Porter County. The unincorporated areas population slightly decreased between 2010 and 2013, also 0.3%. In unincorporated Porter County, there was an increase of about 1,091 people (2%) that represents about 49% of the total population increase in Porter County (2,214). However, in Lake and La Porte counties, the rate changed to -3.0% in Lake and about -5.0% in La Porte.



Aerial view of La Porte. Photo by Stephen Sostaric

Counties	Total 2013	2013 % of region	Total 2010	2010 % of region	Total Pop Change 2010-2013	Total Pop Change %	Unincorp 2013	Unincorp 2013 %	Unincorp 2010	Unincorp 2010%	Unincorp Pop change 2010-2013	Unincorp change %
Lake	491,456	63.9%	496,005	64.3%	(4,549)	-0.9%	42,566	8.7%	43,755	8.8%	(1,189)	-3%
Porter	166,557	21.7%	164,343	21.3%	2,214	1.3%	69,578	41.8%	68,487	41.7%	1,091	2%
LaPorte	111,281	14.5%	111,467	14.4%	(186)	-0.2%	44,840	40.3%	47,385	42.5%	(2,545)	-5%
Totals	769,294	100.0%	771,815	100.0%	(2,521)	-0.3%	156,984	20.4%	159,627	20.7%	(2,643)	-2%

Table I-1 Northwest Indiana Population Change 2010-2013 (Source: U.S. Census Population Estimate)



Development trends are reflected in the patterns of the region's land use. Between 2010 and 2013, an additional 4 square miles (2,608 acres) of unincorporated land was developed. The additional 4 square miles of developed unincorporated land accounted for 25% of the region's 17 square miles (11,060 acres) of additional development between 2006 and 2010.

What implications do these trends have for the region? In comparison to the 2040 analysis, the unincorporated developed land has increased over the last 15 years by 125% versus the new analysis (2006-2010) which only shows the unincorporated areas development 25% of the total new development. About 76% of the new development occurred within the incorporated areas. Figure I-13 details each municipality and the unincorporated area's land development per acre from 2006-2010. As shown in the chart, the vast majority of development is absorbed by unincorporated Porter County, St. John, unincorporated Lake County, Crown Point, Merrillville, Portage, Hobart, Gary, and Valparaiso, which all represent 72% of the additional development. As shown in Figure I-13 the urban core communities Hammond, Gary, East Chicago, and Michigan City contributed about 11% (1,204 acres) of the total development. Although the residential and commercial vacancy rates remain high in these communities, new growth has emerged due to revitalization or re-development.

Land Developed in Acres from 2006-2010 By Municipality

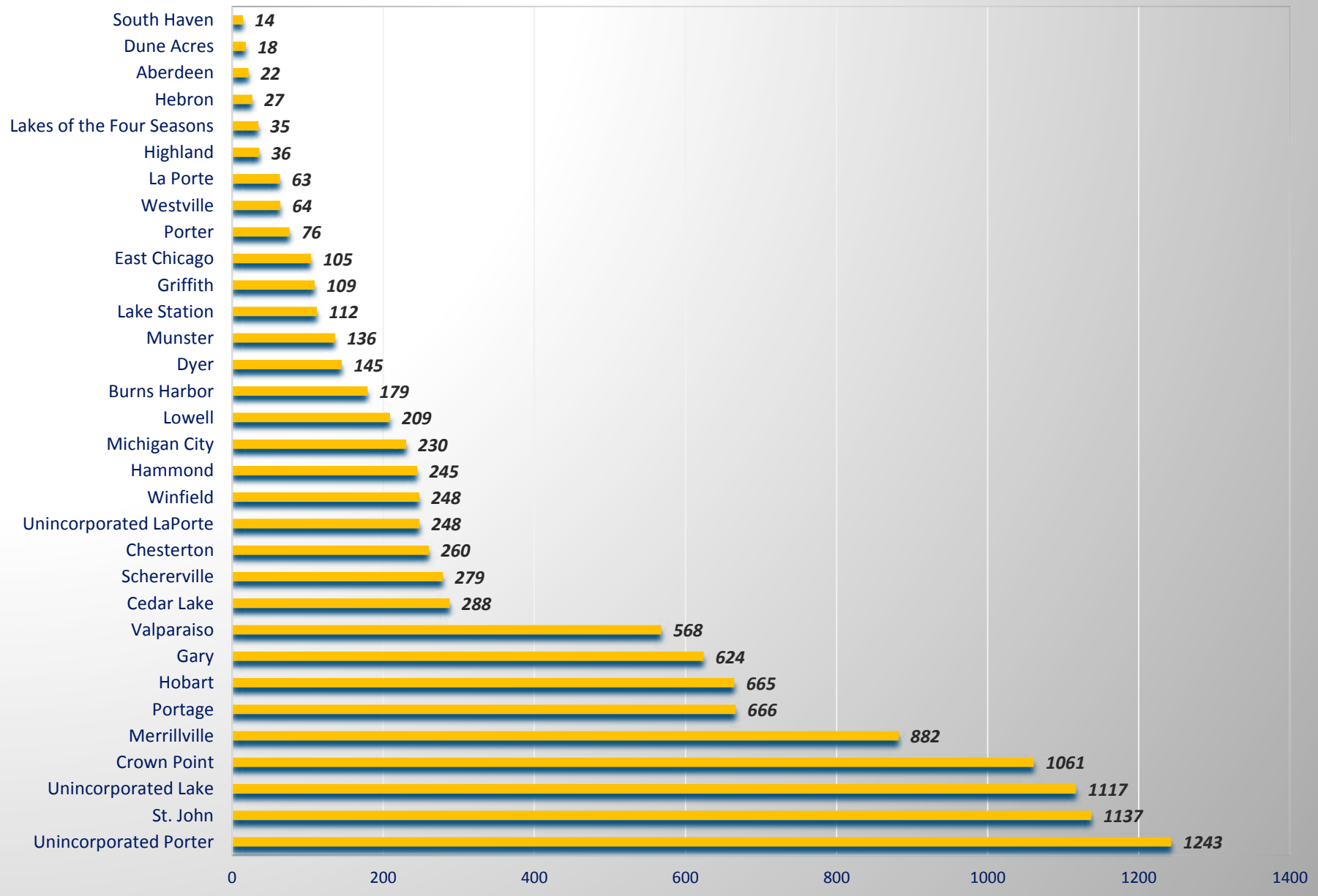


Figure I-13 Land Development 2006-2010

Land Use Changes by County 2006-2010

The charts on this page display the net change of every land use category between 2006 and 2010. The charts and analysis were developed by the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center in January of 2015. In Lake County the maximum gain was low intensity development with a net change of 4,896 acres. This number represents about 67% of the total new development in the county. The maximum loss was in agriculture land with a net change of -3,660 acres. Porter County trends are similar to those of Lake County. The maximum gain is in the low intensity development with a net change of 2,182 acres, which represents about 71% of the total new development within the county. The maximum loss is in agriculture land with a net change of -1,440 acres. La Porte County land use changes are different from Lake and Porter trends. The maximum gain was in agricultural land with a net change from 2006-2010 of 114 acres. However, the county significantly lost 582 acres of agriculture land. The maximum loss in La Porte County was in forested land with a net change of -576 acres.

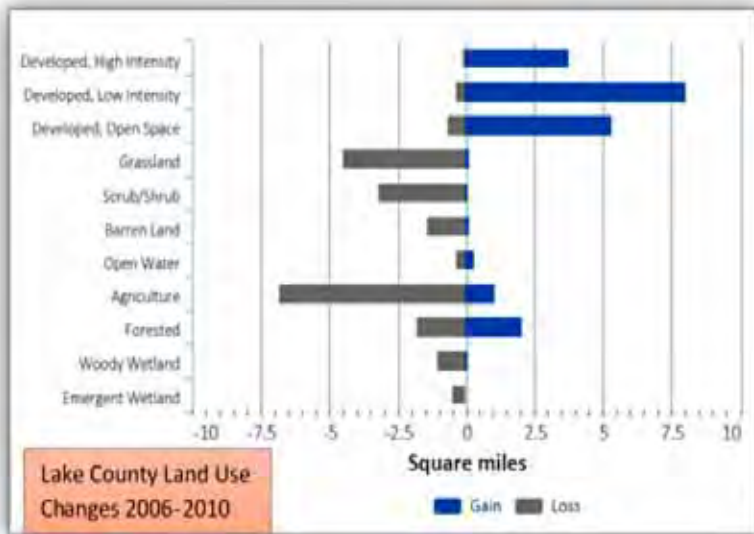


Figure I-14 Lake County Land Use Changes



Figure I-15 LaPorte County Land Use Changes

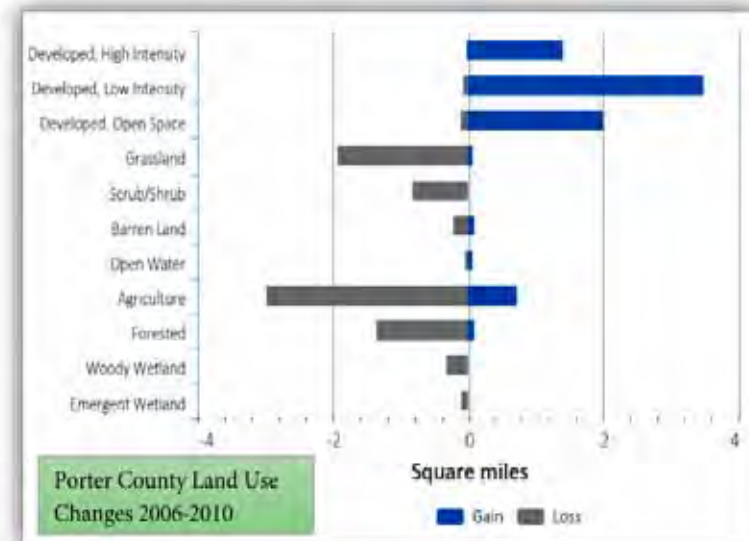


Figure I-16 Porter County Land Use Changes

Conversion of Agricultural & Open Space

Table I-2 reveals that from 2010 to 2013, the amount of developed land used for residential, commercial and industrial uses increased by 6% (11,060 acres), while agriculture and open space areas decreased by 0.6% (3,166 acres) and 4% (7,894 acres), respectively. In Figure 1-17, degradation of natural areas and agricultural land is concerning, but not as significant in comparison to the decline which occurred between 1992-2006. However, this degradation has impacts not only on the quality of life, but also affects regional finances resulting in higher taxes for taxpayers to support more infrastructure.

County	Developed	Ag Lost for Development	Open Space Lost for Development
Lake	7362	-2087	-5275
Porter	3077	-900	-2177
LaPorte	621	-179	-422
Totals	11060	-3166	-7894

Table I-2 Loss of Agricultural & Open Space for Development 2010-2013

Figure I-18 shows that most of the additional development occurred within the incorporated areas (75%). The unincorporated development was established near municipalities but most is concentrated around Valparaiso, Crown Point and St. John.

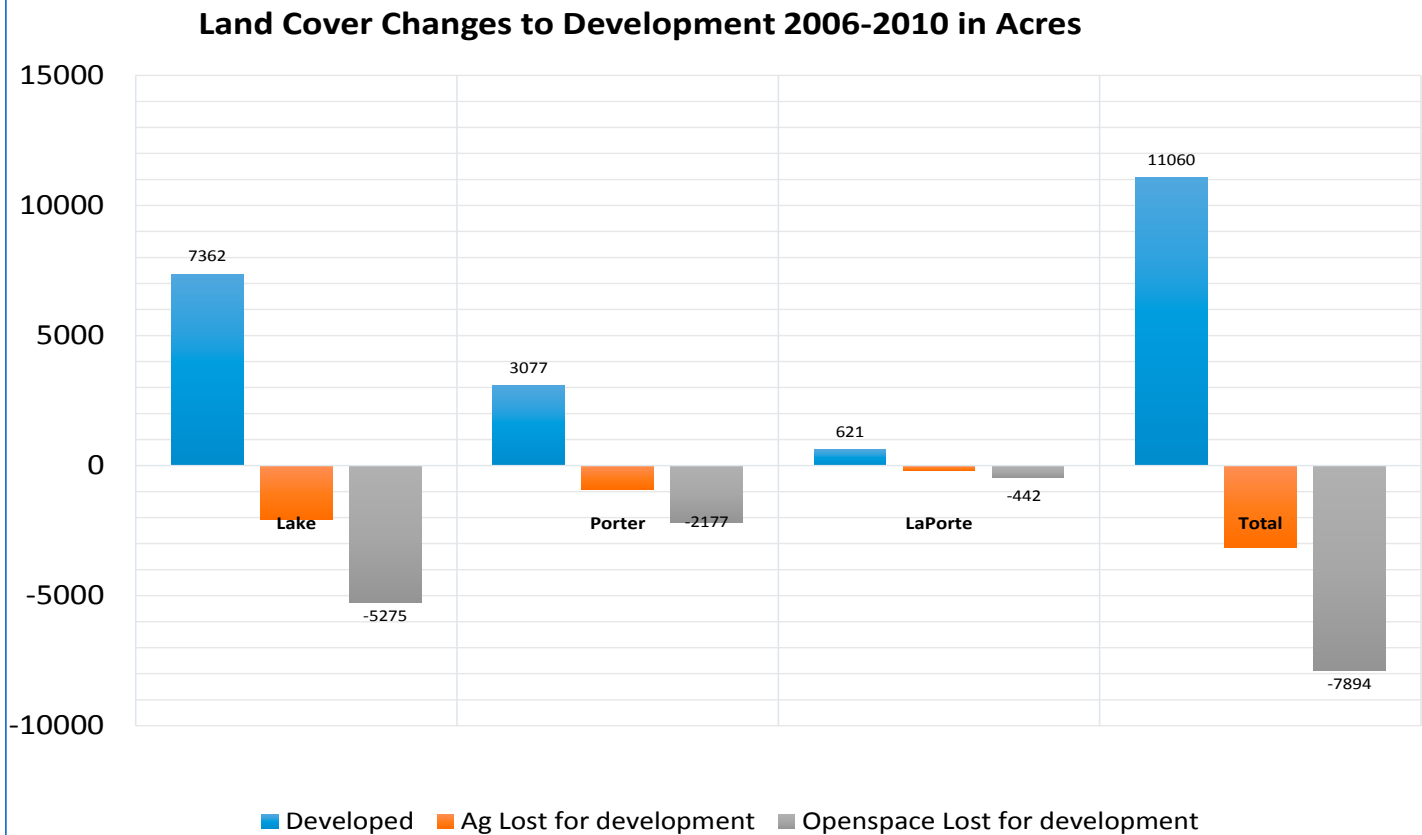


Figure I-17 Northwest Indiana Land Cover Changes Development from 2006-2010 by County in Acres

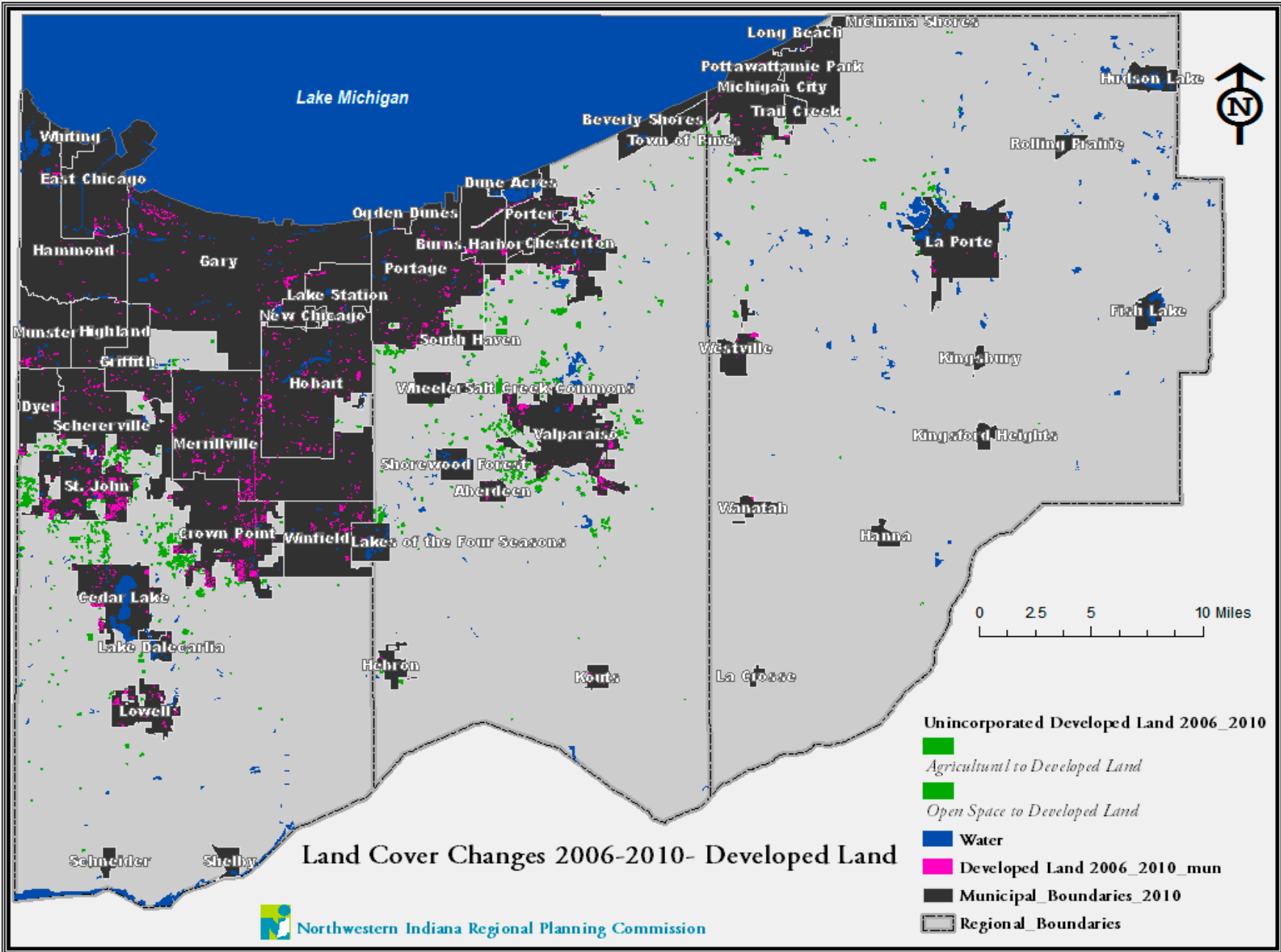


Figure I-18 Northwest Indiana Municipal & Unincorporated Developed Land from 2006-2010

Summary of Land Use Changes

NIRPC's analysis of existing development patterns and land use trends present the following:

- Between 2010 and 2013, the unincorporated areas population decreased slightly by 0.3%.
- Between 2006 and 2010, an additional 4 square miles (2,608 acres) of unincorporated land was developed, which represents 25% of the total new development. About 76% of the additional development occurred within the incorporated areas. In comparison to the 2040 Plan analysis between 1992 and 2006, an additional 68 square miles of unincorporated land was developed. That represents a 125% increase in unincorporated development in fifteen years (on average an additional 22 square miles every five years) from 1992 to 2006. To put this in context, the additional 68 square miles of developed unincorporated land accounted for 76% of the region's additional development between 1992 and 2006.
- Land development is continuing to occur at a rate inconsistent to population growth. Although the total population between 2010 and 2013 slightly decreased by 0.3%, land development increased by 6%. This development pattern has implications for quality of life and the sustainability of the region (as shown in the map Figure I-18), including the region's loss of agricultural lands and open space for development. Instead, the region should make the most of reuse and infill opportunities throughout the existing urbanized areas.

Continued efforts at revitalizing and renewing the region's centers and planning for growth with livable urban, suburban and rural centers will help break this cycle of inconsistent land development. It will also aid in protecting and preserving the rural and natural areas of the region.



New homes in Chesterton. NIRPC Photo

Link Land Use & Transportation

In a region such as Northwest Indiana, where significant physical constraints to ever-expanding developed areas often do not exist, strong and consistently implemented public policies regarding land use and transportation benefits are needed to ensure that population and employment growth occurs in a sustainable and responsible manner. NIRPC established projects to improve land use and transportation connectivity. NIRPC staff also is playing a role in regional projects that have been conducted between 2012 and 2015 by providing technical assistance, serving on steering committees, or by participating as a stakeholder. In these ways NIRPC can help guide and monitor implementation of the CRP. These projects include:

- Transit Oriented Development (TOD) projects
- Corridor Studies
- Creating Livable Communities (CLC)

Implementation (2011-2015): NIRPC Projects

Creating Livable Communities (CLC) for TOD

NIRPC developed a number of tools for the CLC (as mentioned earlier) which are now being made available to local governments as a means of improving their planning capabilities. CLC projects are identified in two emphasis areas:

1. Livable Centers Map (Figure I-8)
2. Transit Area Map (within the urbanized area)

The Transit Area Map (Figure I-19) includes areas within a half mile of a transit stop or station. The goal of this map is to support more transit oriented development projects around transit stops and sta-

tions and to encourage more transit use in the region. Projects identified in this emphasis area must meet the minimum requirements of the Livable Centers goals to receive CLC funding.

NIRPC Regional Corridors Study (RCS)

The main purpose of the RCS is to accomplish the 2040 Plan regional goals and objectives that aim to improve connectivity and access to employment, major interstate highways, metro centers, and highly dense residential areas. It will also improve mobility across the region and reduce congestion and travel time

The focus of the study is to fill a gap between regionally significant highways and limited access local arterials. Currently there are 14 interchanges within almost 45 miles on interstate 80/94. Only 6 of them are regionally connected, through major arterials, to US 30 the major east-west connector in the region.

The study is explained in more detail within the Congestion Management element as part of the Transportation section.



A NICTD train departs East Chicago. Photo by Stephen Sostaric.

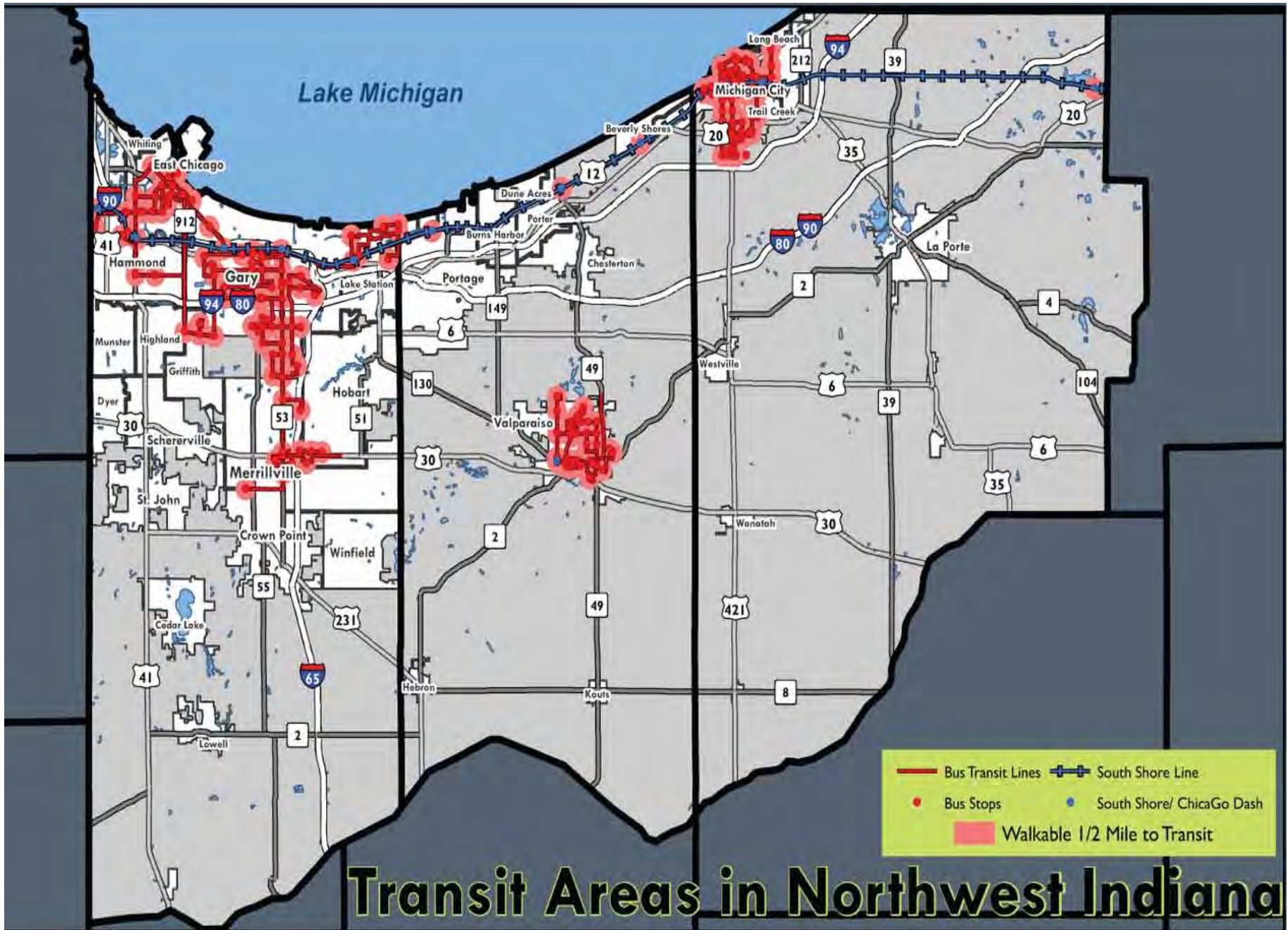


Figure I-19 Northwest Indiana Transit Area within Half a Mile of a Transit Stop

Implementation Items (2011-2015): Regional Studies

US 421/South Franklin Street South Gateway Corridor Plan

In late 2014, Michigan City embarked on a plan to revitalize the South Gateway Corridor due to a combination of visual clutter, underutilized properties, a lack of a cohesive design and land use theme, and a gateway. The ultimate goal of the project is to revitalize the US Highway 421/South Franklin Street “South Gateway” corridor and to provide an enhanced entrance to the City. The study area includes the area of Highway 421/Franklin Street stretching from Coolspring Avenue to the Interstate 94 interchange between Ohio Street and Woodland Avenue. During a 10-month study, a team composed of local and national experts will collect data and compose a comprehensive plan of action for the city. The plan also aims to increase economic redevelopment in this area while also improving aesthetics and vehicle, pedestrian and bicycle traffic. The key goals identified for the plan are to improve traffic flow, create a pedestrian and bicycle-friendly environment, give the corridor a unique identity, enhance landscaping and streetscaping amenities, improve overall safety, and diversify the area with retail, office and residential uses.

Porter County: Willowcreek Extension

The purpose of this study is:

- To create a new economic development corridor to provide north-south access on the west side of Porter County.
- To connect 100S to Willowcreek Road providing direct access via 249 to the Indiana Toll Road and I-94.
- To provide an alternative to traffic from south Porter County to north Porter County relieving some congestion on I-65.

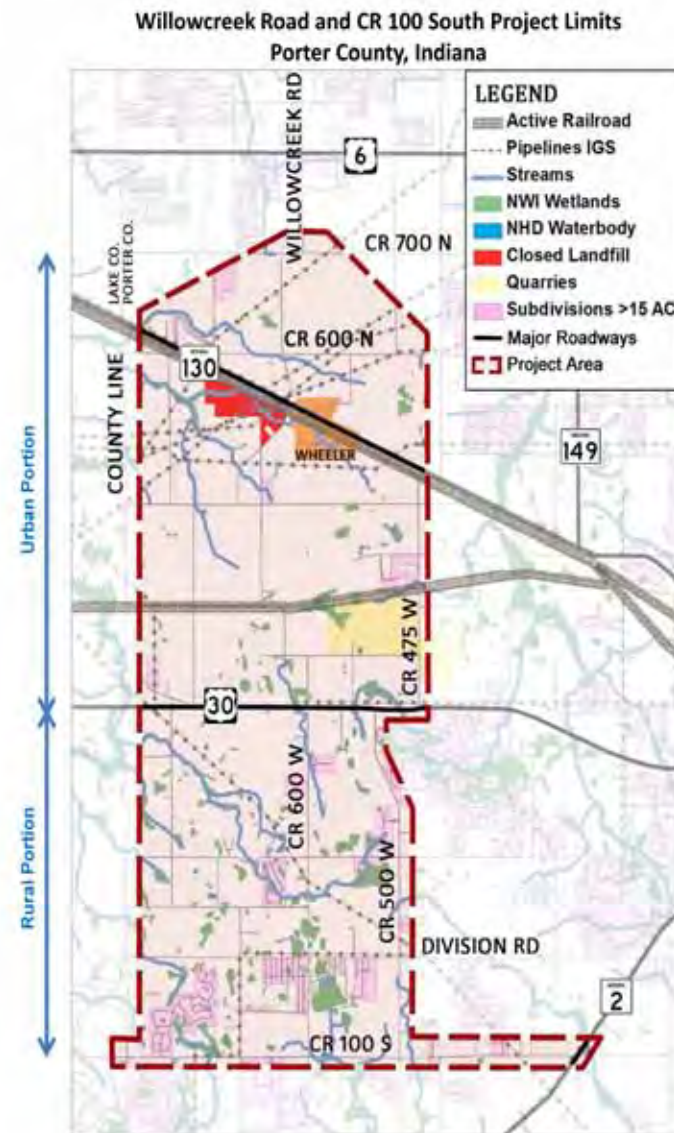


Figure I-20 Willowcreek Road Extension

NICTD conducted a Strategic Business Plan with the Regional Development Authority (RDA) to focus on the needed investment to maintain the service of the South Shore, and to connect residents of Lake County to downtown Chicago for job opportunities through the proposed West Lake Corridor (the West Lake Corridor would add a commuter rail extension in western Lake County through Hammond, Munster and Dyer initially). The Strategic Business Plan also addressed the needed major improvements to the existing South Shore stations and provided policy recommendations and funding possibilities for the station areas TOD.

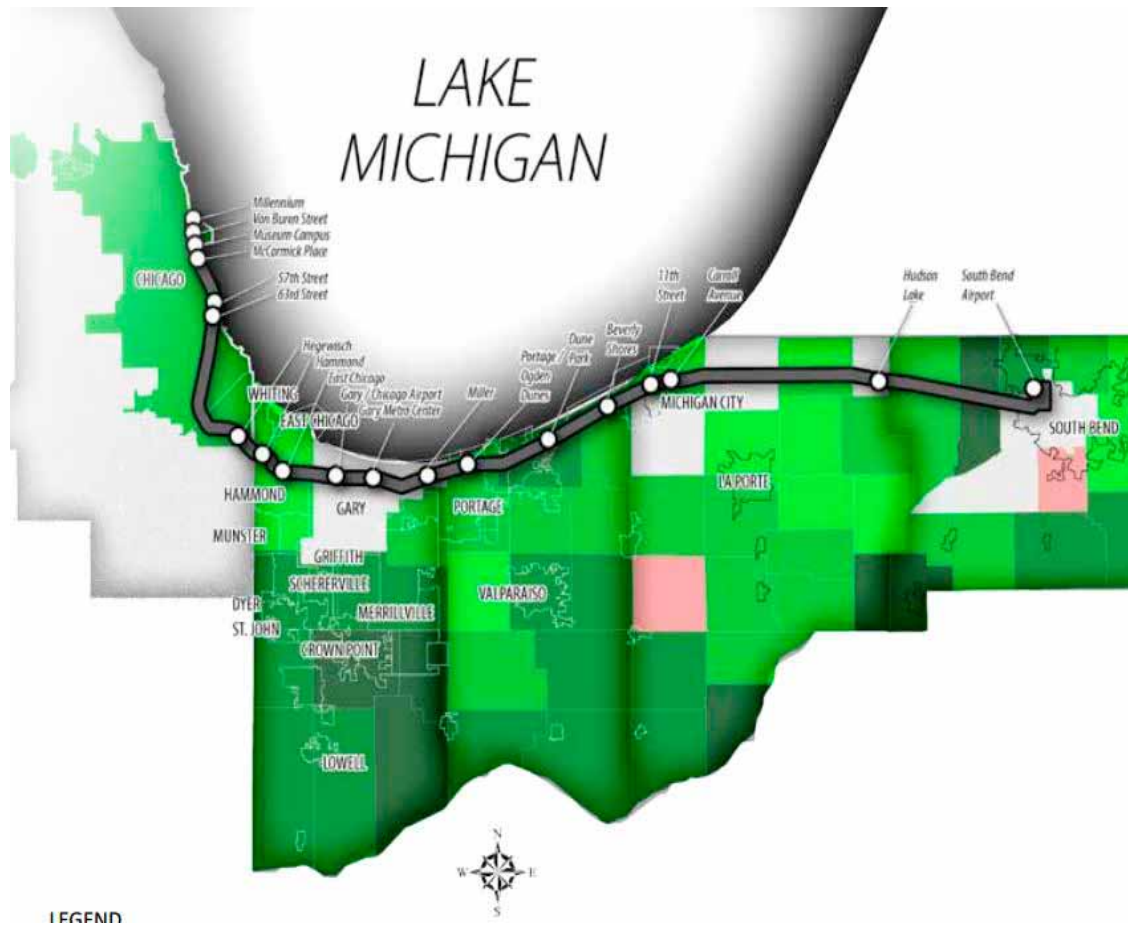


Figure I-21 South Shore Study Area

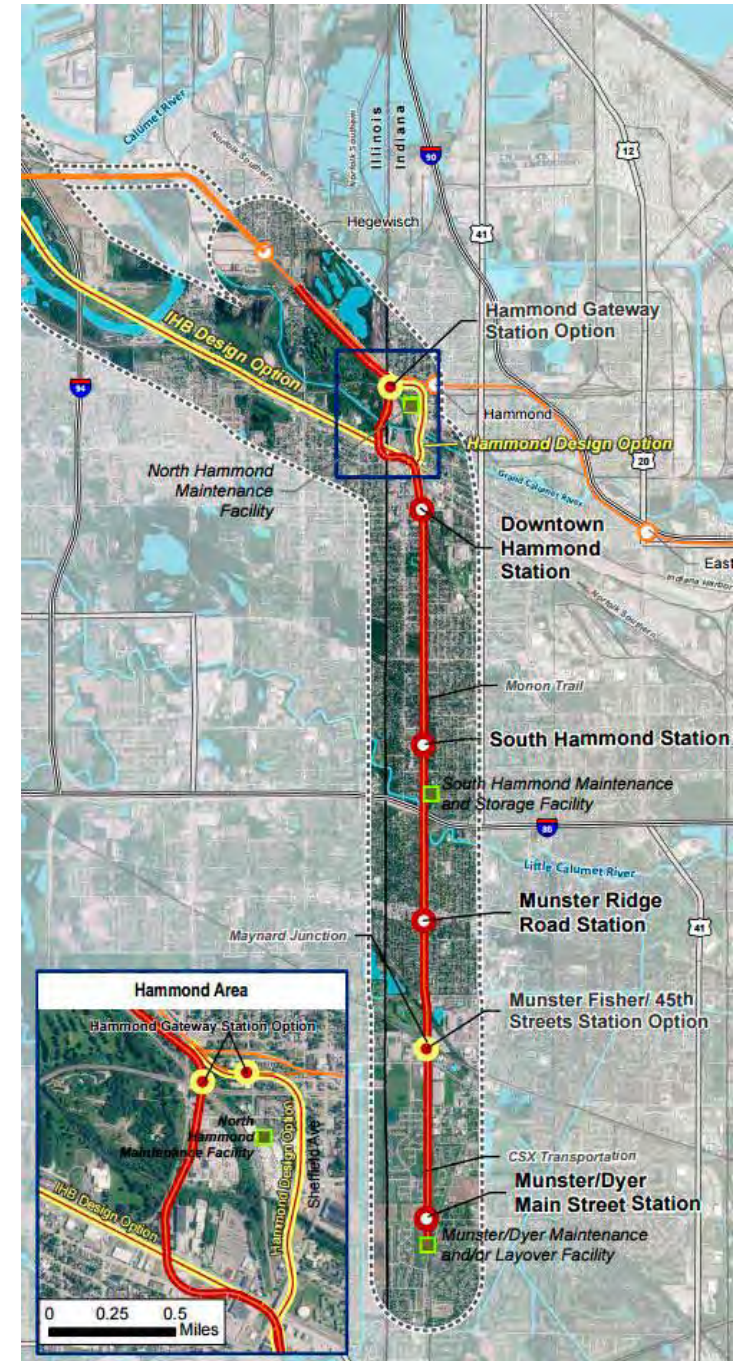


Figure I.22: Westlake Corridor Study Area

Livable Broadway (Gary Public Transportation Corporation)

The purpose of the Livable Broadway Plan is to assess opportunities for promoting livability within the corridor by enhancing economic development, environment, and land uses that will lead to improved bus service within and between Gary, Merrillville, and Crown Point. The critical objectives of the plan are to:

- Assess the current state of transit on Broadway Avenue
- Improve connectivity
- Determine modal conflicts and accessibility issues
- Develop growth scenarios
- Assess opportunities for alternative modes and related infrastructure
- Recommend transit improvements
- Recommend infrastructure improvements that emphasize sustainability

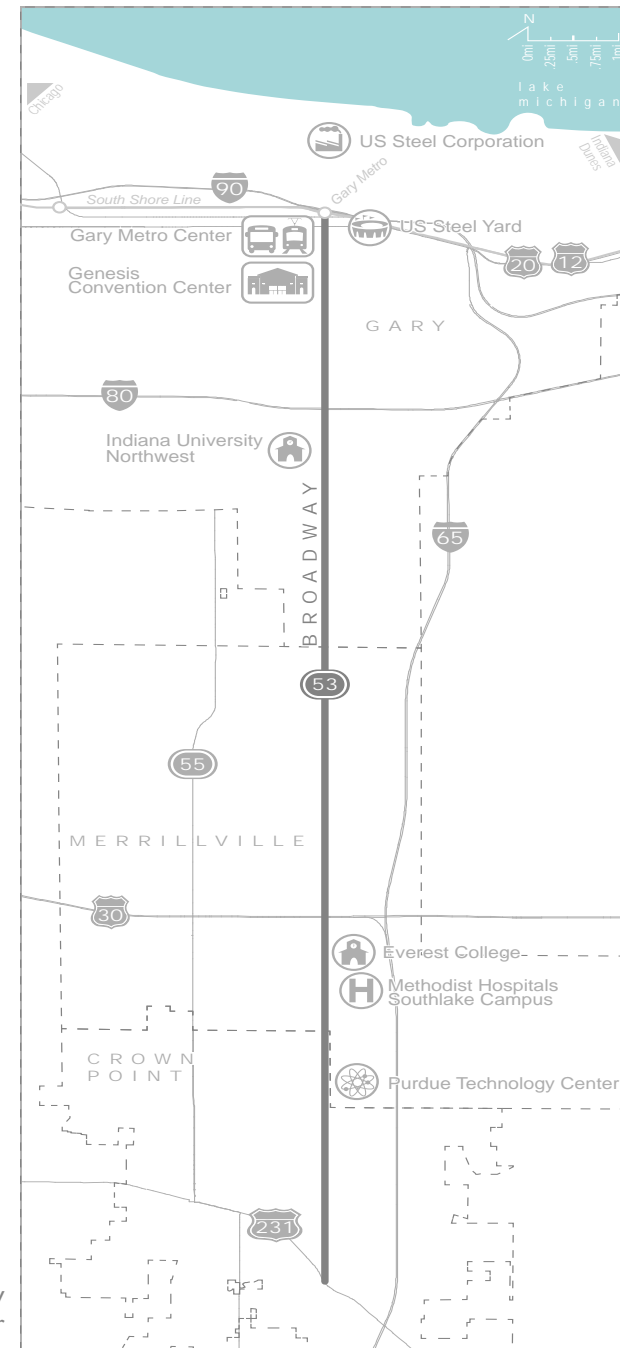


Figure I-23 Livable Broadway Planning Corridor

Local Foods

In March of 2012, NIRPC completed the Northwest Indiana Local Food Study. The Study looked in depth at the components of the local food system and established a baseline to understand existing conditions and explain the key issues and challenges the system faces. The Study recommended two actions:

1. Transition the Food Study Advisory Committee (Food SAC) into a more permanent Action Committee to act as a policy and project driven group to advance the local food movement.
2. Develop an action agenda for developing our local food system with clear goals, objectives, and indicators based on information contained in the Study.

NIRPC, through its planning efforts and work with partners, will continue to address major food system issues as it relates to the following:

- Transportation and food access
- Rural development and farmland preservation
- Urban agriculture and revitalizing core communities
- Environmental impacts of agriculture
- Local ordinances and the food system

The Study listed potential actions or projects to advance the local food system:

- Regional food summits
- Food hub feasibility study
- Food access study
- Health food financing initiatives

Regional Food Summit

To advance the recommendations of establishing connections in the local food system, NIRPC collaborated with Valparaiso University Law School and Purdue University Extension to host a Regional Food Summit in April 2015. The purpose of the Summit was to convene and establish relationships between farmers, producers, buyers and consumers, to highlight local success stories and to provide possibilities to work together, create jobs and expand the economy.

Northwest Indiana Food Council

A task force was convened during the summer of 2015 to lay the foundation for the Food Council, prompted by the tremendous response at the Regional Food Summit. The Northwest Indiana Food Council was created in fall of 2015 to oversee the policies, issues and overall structure of the Food system. The NWI Food Council is a multi-stakeholder alliance that builds a just, sustainable, and thriving locally-oriented food system for all in Northwest Indiana through networking, education, advocacy, and projects.



Pumpkins at County Line Orchard in Hobart. Photo by Stephen Sostaric

Food Hub Feasibility Study

Indiana State Department of Agriculture is preparing a Feasibility Study for Food Hubs in Indiana. A food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers in order to satisfy wholesale, retail, and institutional demand. The purpose is to assess the needs of growers and consumers regarding the potential for regional food hubs operating as part of a statewide network to facilitate the marketing and access to specialty crops.

The New Indiana Grown Program

The Indiana State Department of Agriculture (ISDA) is revamping the current Indiana Grown program to meet the needs of Hoosier consumers. In 2015, the new Indiana Grown program aims to significantly enhance Indiana's strong agricultural presence by promoting locally grown foods, local employment opportunities, and economic growth, while at the same time building sustainable communities.

Green Sense Farms

Opened in 2014, and located in Portage's AmeriPLEX Business Park, Green Sense Farms is the country's largest indoor, commercial, vertical year-round farm, and provides produce to local supermarkets and restaurants. This is a local urban farm that grows pesticide/herbicide free and GMO-free vegetables all year long that guarantees fresh herbs, leafy greens, and lettuces every day, unaffected by rain, heat or dark of night. The vertical growing system allows the farm to grow more produce in a short time using a footprint that is one tenth of the space of a traditional farm. Locating to grow vegetables near population centers cuts down on the miles food is transported, reducing air emissions and traffic, and conserving fuel - all a major factor in choosing to locate in a central location near highway hubs. The footprint is 30,000 square feet and can grow fresh produce that can be distributed within 100 miles to 20 million people. With the use of indoor sustainable farming technology and LED grow lights, Green Sense Farms can achieve higher crop yields, conserving water and electricity.



Riders disembark from a NICTD train in Michigan City.
Photo by Stephen Sostaric



Chapter II: **Transportation**

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Overview

The Northwest Indiana transportation network comprises a vast array of travel modes, and thus places the region in a unique geographic advantage. The location of Lake Michigan and the City of Chicago have meant a number of regional and national transportation routes traverse the region. The routes support an economic engine that sustains the region's quality of life.

The 2040 CRP addresses the myriad of transportation modes in great detail, and their collective impact on the Northwest Indiana area. A key CRP vision theme is accessibility – connecting people with opportunities – and a sustainable transportation network strongly fosters this vision. Although there are strains to the network, most notably traffic congestion and diminished mobility, significant opportunities to modify our transportation options exist, so as to create efficiencies that aid with wise land use choices that advance regional connections for all residents, no matter their age or physical ability.

Transportation Goals & Objectives

The CRP Update Companion touches on several areas of transportation that have experienced change over the last four years, and are noted within this chapter. Carrying forward throughout are the goals expressed in the 2040 CRP which address the “Accessible Region” theme:

An accessible region: Our people are connected to each other and to equal opportunities for working, playing, living and learning.

Four main goals and their related objectives provided the framework for further action. These goals include the following:

- ***A safe and secure transportation system***
- ***Increased mobility, accessibility and transportation options for people and freight***
- ***Adequate transportation funding and efficient use of resources***
- ***A transportation system that supports the health of all people***



US 30 in Hobart. Photo by Stephen Sostaric

Safety

The original 2040 Comprehensive Regional Plan (CRP) contained data for the years 2005-2009. As part of this CRP Update Companion, crash data for Lake, Porter, and La Porte Counties was obtained for the years 2010-2014.

As with the CRP, crash data was derived from the Indiana State Police's Automated Reporting Information Exchange System (ARIES), which provides source data for all road crashes. For railroad crossing crashes, NIRPC obtained Federal Railroad Administration (FRA) data from INDOT's Rail Office. This data was then analyzed in Excel and NIRPC's geographic information system (GIS) software to provide the following updated tables, graphs, and maps.

The analysis of the 2010-2014 crash data for the three counties in the NIRPC region shows an average of 24,491 crashes per year. This is a reduction from the 2005-2009 average of 26,337 per year. In each of the five years studied, crashes occurring in Lake County accounted for approximately two-thirds of all crashes. A further examination of the types of crashes in the region can provide a clearer picture of the crashes listed here. Four categories of crashes are examined:

- Vehicular crashes with non-motorized vehicles
- Crashes involving trucks
- Crashes involving buses
- Crashes occurring at railroad crossings

Traffic crashes from 2010-2014 in Northwest Indiana saw a 3.5% increase, from 25,179 in 2010 to 26,074 in 2014. The number of fatalities, however, saw a 14% decrease from 95 in 2010 to 81 in 2014.

The total crashes in the three counties saw an increase of 3.5% between 2010 and 2014, while the fatality rate continued its decline, which started after 2005. Encouragingly, even as travel increased following the dramatic decrease as a result of the economic recession of 2007, the number of crashes in the region continued to decline until 2012. The increases of 2013 and 2014, however, are most likely attributable to the uncharacteristically severe winter of 2013-2014, and probably show nothing more than the impacts of the extremely hazardous conditions the region experienced.

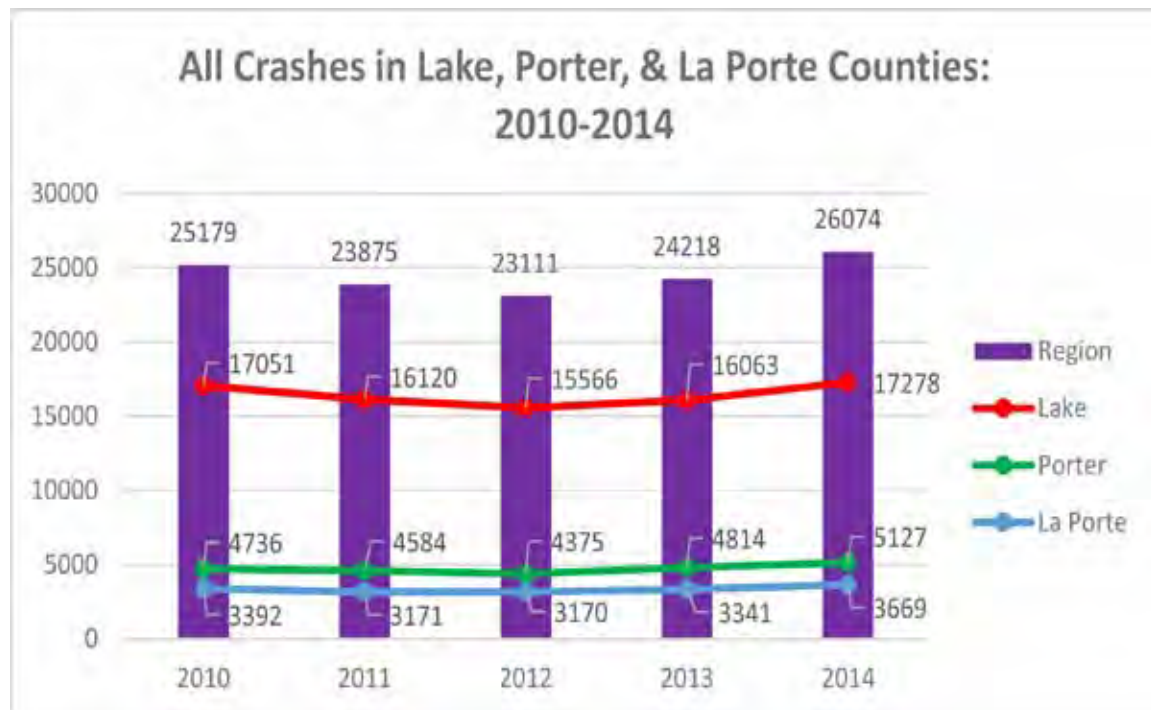


Table II-1: Regional Vehicular Crash Breakdown in Northwest Indiana 2010-2014

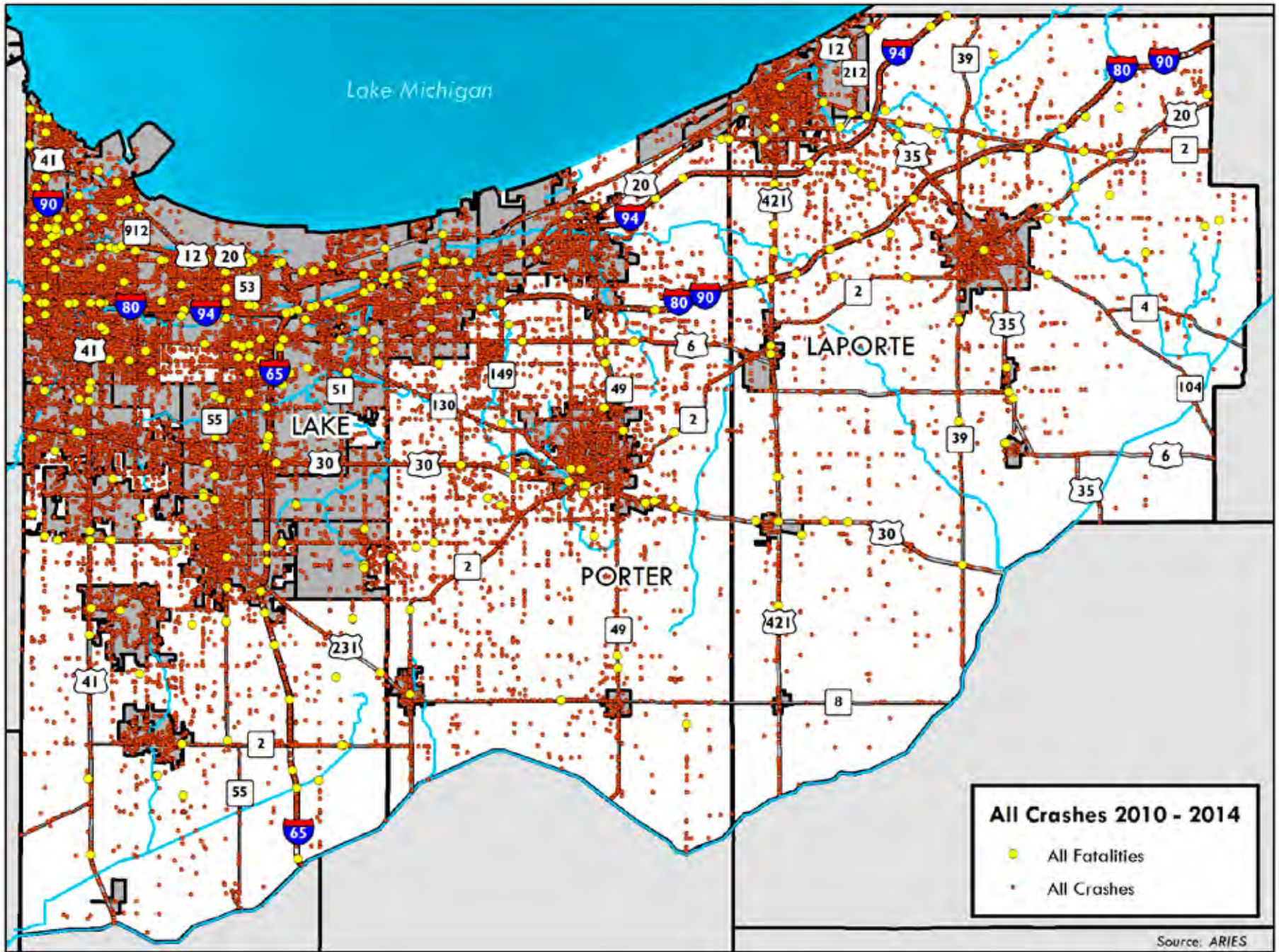


Figure II-2: Crash Locator Map

Crashes	2010	2011	2012	2013	2014	Total
Total Crashes	25179	23875	23111	24218	26074	122457
Fatal Crashes	86	74	68	78	74	380
% of Crashes with Fatality	0.34%	0.30%	0.28%	0.32%	0.28%	0.31%
Crashes with Injury	4606	4428	4385	4339	4476	22234
% of Crashes with Injuries	18%	19%	19%	18%	17%	18%
Total Fatalities	95	77	71	88	81	412
Total Injuries	6426	6045	6024	6048	6096	30639

Figure II-1: All crashes in the NIRPC Region 2010-2014

The percentage of crashes that resulted in a fatality was .31% for the five-year period from 2010 to 2014, a decrease from the .43% for the five year period from 2005 to 2009. Based on the five years of traffic crash data, there are 67 traffic crashes per day and one fatality crash every five days in Northwest Indiana. This is an improvement from one fatality every three days for the five year period of 2005 to 2009.

Crash Rate

The crash rate was calculated for each of the 25 corridors with the most crashes for each county. The Average Annual Daily Traffic (AADT) within the corridor boundaries indicated on the table was then determined using data from INDOT. By dividing this amount by the number of crashes, the crash rate was determined. As a result, a more accurate picture can be obtained, because the crash rate shows the relation of the number of crashes to the amount of traffic on the road. For example, in Lake County, I-80/94 between the state line and the I-90 merge is ranked first in number of crashes, but ninth in terms of crash rate. The following tables show the results for the top 25 corridors for crashes for each of the counties in the NIRPC region. The source of the information is found in the Indiana State Police's Automated Reporting Information Exchange System.

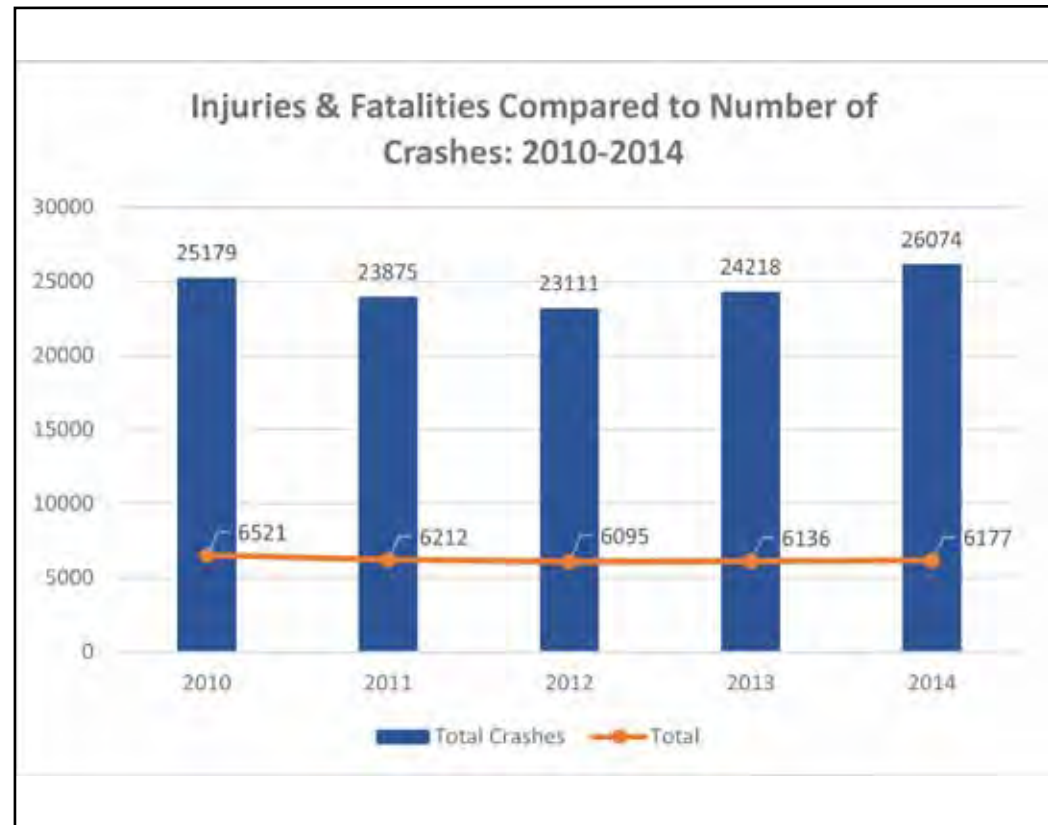


Figure II-3: Injuries & Fatalities Crash Ratio 2010-2014

Top 25 Corridors for Crashes in Lake County					
Name	Corridor Endpoints	Crash Rate Rank	Crash Rate	Crash Count	Crash Rank
US 41	Main St / US 30	1	40.66	970	8
Columbus Dr	Cline Ave / McCook Ave	2	39.24	393	25
Ripley St	US 20 / 37th Ave	3	37.85	558	17
Calumet Ave	Ridge Rd / US 30	4	35.39	420	23
I-90	149th St/ I-94 Merge	5	35.31	854	9
Main St (Crown Pt)	93rd St / US 231	6	33.39	456	21
Taft St	61st Ave / 91st Ave	7	32.86	590	15
5th Ave	Cline Ave/ Broadway	8	29.52	477	19
I-80/94	State Line/ I-90 Merge	9	27.02	5993	1
Grant St	4th Ave / Ridge Rd	10	24.23	558	18
Wicker Ave	77th St / Newton County Line	11	21.95	792	11
Main St	Calumet Ave / Kennedy Ave	12	20.89	456	22
I-65	Begin/ Newton County Line	13	17.52	3228	3
73rd Ave	Burr St / Broadway	14	17.43	460	20
45th St	Indianapolis Blvd/ Cline Ave	15	16.31	584	16
Indianapolis Blvd	State Line/ Main St	16	15.00	1652	5
173rd St	Hohman / Kennedy Ave	17	14.66	411	24
Hohman Ave	Ridge Rd / 137th	18	14.11	811	10
US 30	State Line/County Line	19	13.12	3523	2
Broadway	US 12/20 / US 30	20	13.10	1384	6
Ridge Rd	Calumet Ave/ Broadway	21	12.32	1297	7
Columbia Ave	141st St / 45th St	22	12.23	593	14
165th St	State Line/ Kennedy	23	11.13	654	13
Calumet Ave	Indianapolis Blvd/ Ridge Rd	24	10.90	1799	4
169th St	Calumet Ave/ Cline Ave	25	8.39	662	12

Table II-2: Top 25 Crash Corridors in Lake County

Top 25 Corridors for Crashes in Porter County					
Name	Corridor Endpoints	Crash Rate Rank	Crash Rate	Crash Count	Crash Count
US 30	County Line / Joliet Rd	1	110.91	234	14
US 20	CR 100E / Golf Wood Rd	2	95.78	112	25
Laporte Ave	Sturdy Rd / Rigg Rd	3	84.66	144	20
SR 49	US 30 / SR 8	4	82.40	138	21
SR 2	CR 400E / County Line	5	61.83	120	23
Roosevelt Rd	Calumet Ave / Lincolnway	6	60.83	150	18
Sturdy Rd	US 30 / Lincolnway	7	56.98	160	17
SR 130	County Line / SR 149	8	47.94	208	16
US 6	County Line / Worthington Ave	9	45.91	353	8
SR 2	200 S / US 30	10	42.65	309	10
I-80/90	County Line / County Line	11	41.96	746	2
Indian Boundary Rd	Calumet Rd / Brummitt	12	37.76	301	11
I-94	County Line / County Line	13	34.21	1846	1
Central Ave	County Line / Samuelson Rd	14	34.03	337	9
Calumet Ave	CR 1100N / Voyage	15	33.38	116	24
N 475 W	US 30 / SR 130	16	30.05	138	22
Campbell St	600 N / US 30	17	29.93	245	13
Willowcreek Rd	Old Porter Rd / US 6	18	28.33	401	6
SR 149	Old Porter Rd / SR 130	19	27.76	372	7
Silhavy Rd	Burlington Beach Rd / SR 2	20	25.70	213	15
Melton Rd (US 20)	County Line / Waverly Rd	21	20.05	666	4
US 6	Willowcreek Rd / County Line	22	17.48	728	3
Calumet Ave	SR 49 / SR 49	23	15.34	254	12
Calumet Ave	Poplar St / Edgewater Beach St	24	13.40	581	5
N 400 W	700 N / I-80/90	25	12.25	150	19

Table II-3: Top 25 Corridors in Porter County

Top 25 Corridors for Crashes in La Porte County					
Name	Corridor Endpoints	Crash Rate Rank	Crash Rate	Crash Count	Crash Count
US 421	400 N / Snyder Rd	1	141.61	128	12
W 400 N	US 421 / I-94	2	119.62	87	25
US 30	Porter Co. Line / Starke Co. Line	3	117.04	114	18
US 20	Range Rd SR 2	4	109.60	126	14
SR 2	150 E / St. Joseph Co. Line	5	109.34	99	23
US 35	SR 39 / Pine Lake Center Dr	6	90.78	248	8
Indiana Ave	Pine Lake Ave / Kingsbury Ave	7	84.88	182	10
US 35	US 20 / Severs Rd	8	78.21	108	21
SR 2	500 W / 6th St	9	74.40	116	16
US 12	Michigan Blvd / Meer Rd	10	69.59	120	15
Lincolnway	1st St / Fail Rd	11	67.69	292	5
Coolspring Ave	Franklin St / Johnson Rd	12	67.14	102	22
SR 212	Michigan Blvd / US 12	13	59.03	111	20
I-94	County Line / State Line	14	57.59	770	3
Monroe St	Lincolnway / 150 E	15	53.77	115	17
Woodland Ave	Michigan Blvd / Pahs Rd	16	53.50	128	13
Michigan Blvd	US 12 / I-94	17	52.05	279	7
Johnson Rd	350 N / Admore Rd	18	50.88	113	19
Boyd Blvd	SR 2 / US 35	19	49.98	161	11
SR 39	State Line / Severs Rd	20	36.46	207	9
I-80/90	Porter Co. Line / St. Joseph Co. Line	21	31.52	820	2
US 20	Porter Co. Line / I-94	22	29.40	529	4
US 421	Stark Co. Line / I-80/90	23	27.82	281	6
SR 39	400 S / Starke Co. Line	24	22.76	94	24
Franklin St	9th St / 400 N	25	18.53	1233	1

Table II-4: Top 25 Corridors in La Porte County

Non-Motorized Transportation

Crashes involving vehicles and non-motorized transportation (i.e. pedestrians and bicyclists) are of great concern as they directly reflect the livability of our centers and influence the willingness of our residents to use alternative transportation. As the road network is made more bicycle- and pedestrian-friendly and the region's trail network is expanded, safety for those users becomes an ever-larger concern. While non-motorized transportation is growing within the region, both as a means of recreation and active transportation, data for non-motorized crashes for the region for the five year period between 2005 and 2009 showed a significant increase in the number of crashes. After peaking at 444 in 2010, the number of crashes began to decline (from 444 in 2010 to 372 in 2014), resulting in a 16% decline during the five year period.

Non-motorized crashes represent 1.7% of all crashes in Northwest Indiana. Despite the initial increase from the 2005-2009 time period, the decrease could reflect a growth in not only facilities, policies, and programs (such as trail crossing grade separations, NIRPC's Complete Streets Policy, and the Safe Routes to School Program), but also a greater awareness of, and road users who are more accustomed to the presence of, non-motorized traffic. As projects are implemented and other programs like NIRPC's Creating Livable Communities program come online, this reduction should hopefully be a trend that continues. As always, continued education of how to share the road and proper safety education will play an important role.

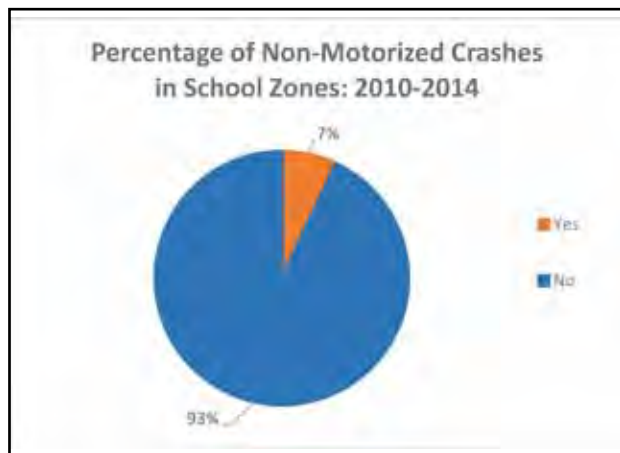


Figure II-6: Non-Motorized Crashes in School Zones

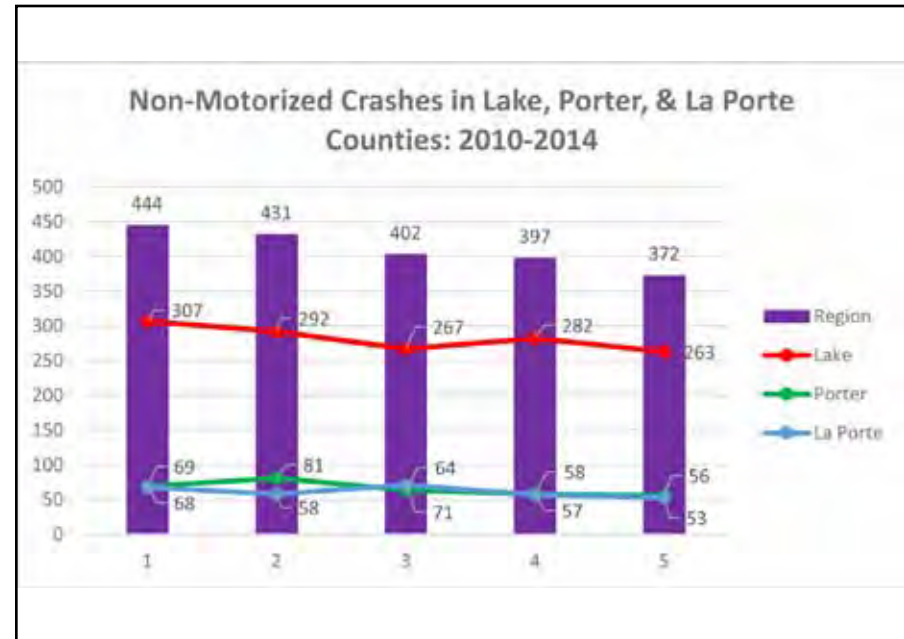


Figure II-5: Non-Motorized Crashes in NIRPC Region 2010-2014

County	Name	Crash Count
Lake	Calumet Ave	35
La Porte	Franklin St	34
Lake	Indianapolis Blvd	31
Lake	Hohman Ave	27
Lake	169 th St	26
Lake	Broadway	25
Lake	Columbia Ave	21
Lake	I-80	18
Lake	165 th St	17
Lake	Sibley St	15

Table II-5: Top Regional Non-Motorized Crash Locations

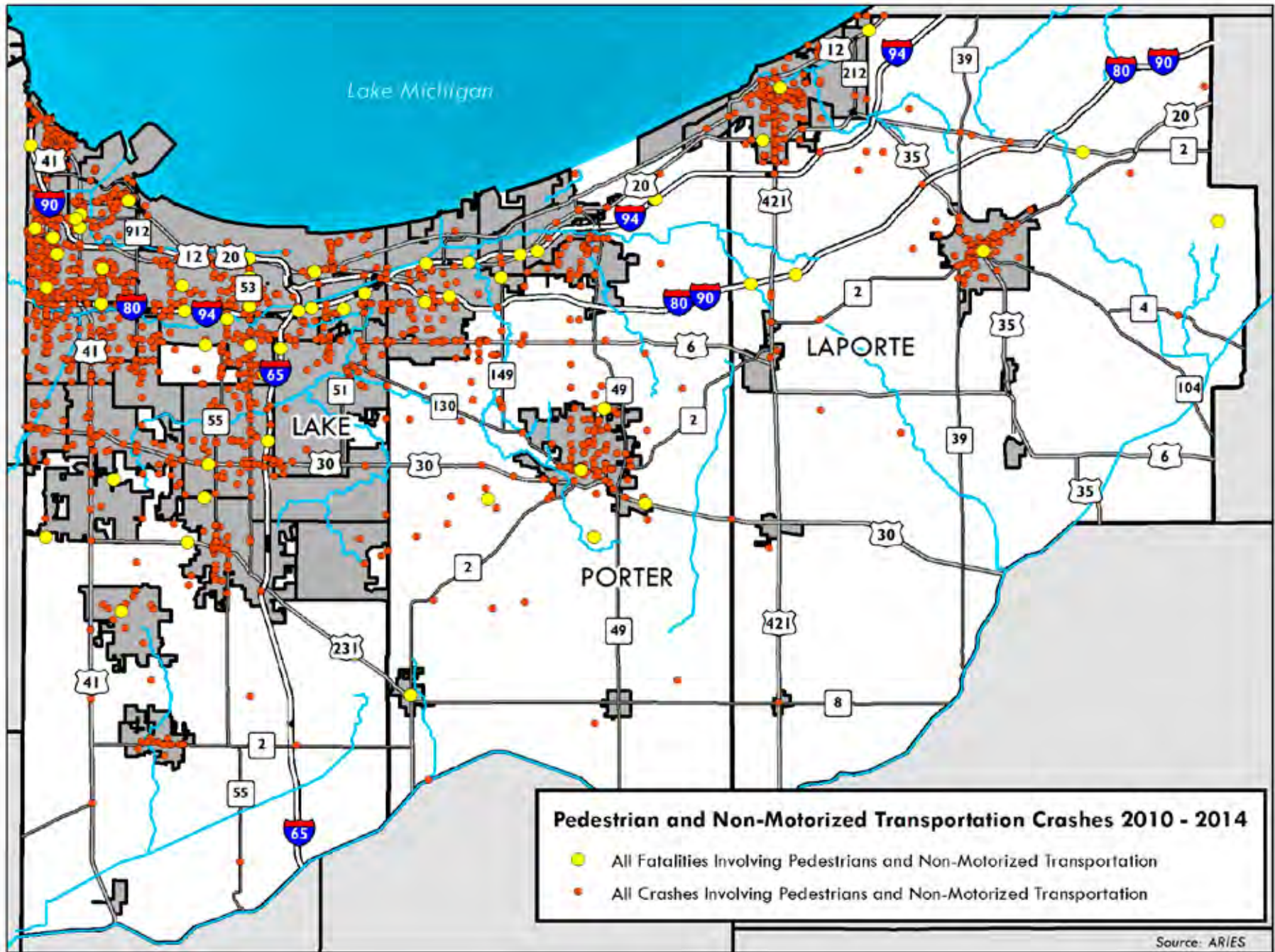


Figure II-4: Non-Motorized Transportation Crashes Map

Truck Crashes

Northwest Indiana contains a dense freight network due to the confluence of interstates and the region's port facilities. This network relies largely on trucks for movement of cargo, and because of the larger size and heavier weight of these vehicles, the resulting crashes are usually much more severe. Therefore, this category warrants special attention. Between 2010 and 2014, crashes involving trucks averaged 2,046 crashes per year. Most truck crashes in Northwest Indiana occur on interstate highways. The truck crashes data reflects the general trend shown in the "All Crashes" data of a decline from 2010 to 2012, with increases in 2013 and 2014. Again, this most likely reflects the especially severe winter of 2013-2014 and the resulting higher number of crashes. Additionally, after a decrease due to the dramatic reduction in traffic due to the economic recession in 2009, numbers experienced an increase in 2010. Even with the overall increase from 2010 to 2014, the 2014 number of crashes (2,417) is still lower than the 2005 number (2,842). Since the amount of traffic is tied to the health of the economy, it will still be important to monitor this number as the economy continues to improve.

Truck crashes represent 8.3% of all crashes in Northwest Indiana from 2010-2014. The fatality rate is 0.7%. When large trucks are involved in crashes, it is generally more severe than other motor vehicle crashes. Special attention should be given to commercial motor vehicle crashes, particularly as a large number of trucks pass through the region everyday because of a concentration of industrial sites and the amount of freight traffic that goes through Chicago.

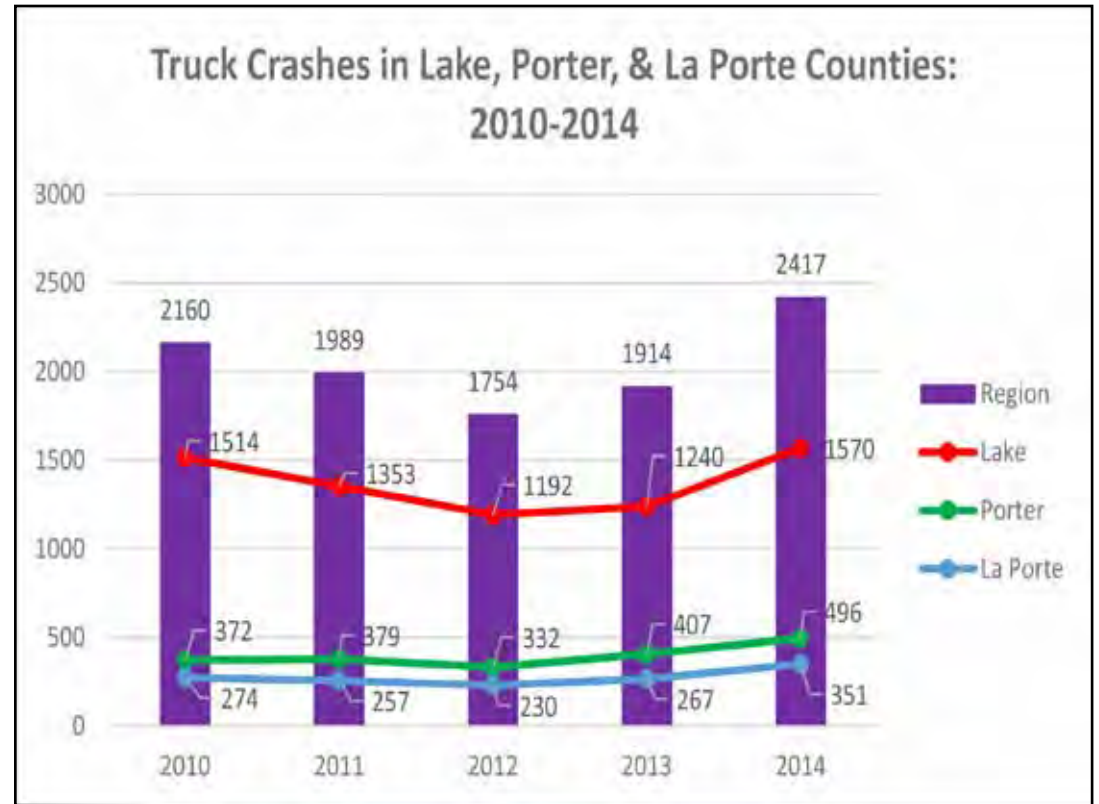


Figure II-7: Truck Crashes 2010-2014

County	Name	Corridor	Crash Count
Lake	I-80	Lake County	1830
Lake	I-65		594
Porter	I-94	Porter County	477
Porter	I-80	Porter County	251
La Porte	I-94	La Porte County	186
Lake	I-90	Lake County	166
La Porte	I-80/90	La Porte County (West of US 20)	151
Lake	Ripley St		147
Lake	Calumet Ave		139
La Porte	I-80/90	La Porte County (East of US 20)	122

Table II-6: Top Regional Truck Crash Locations

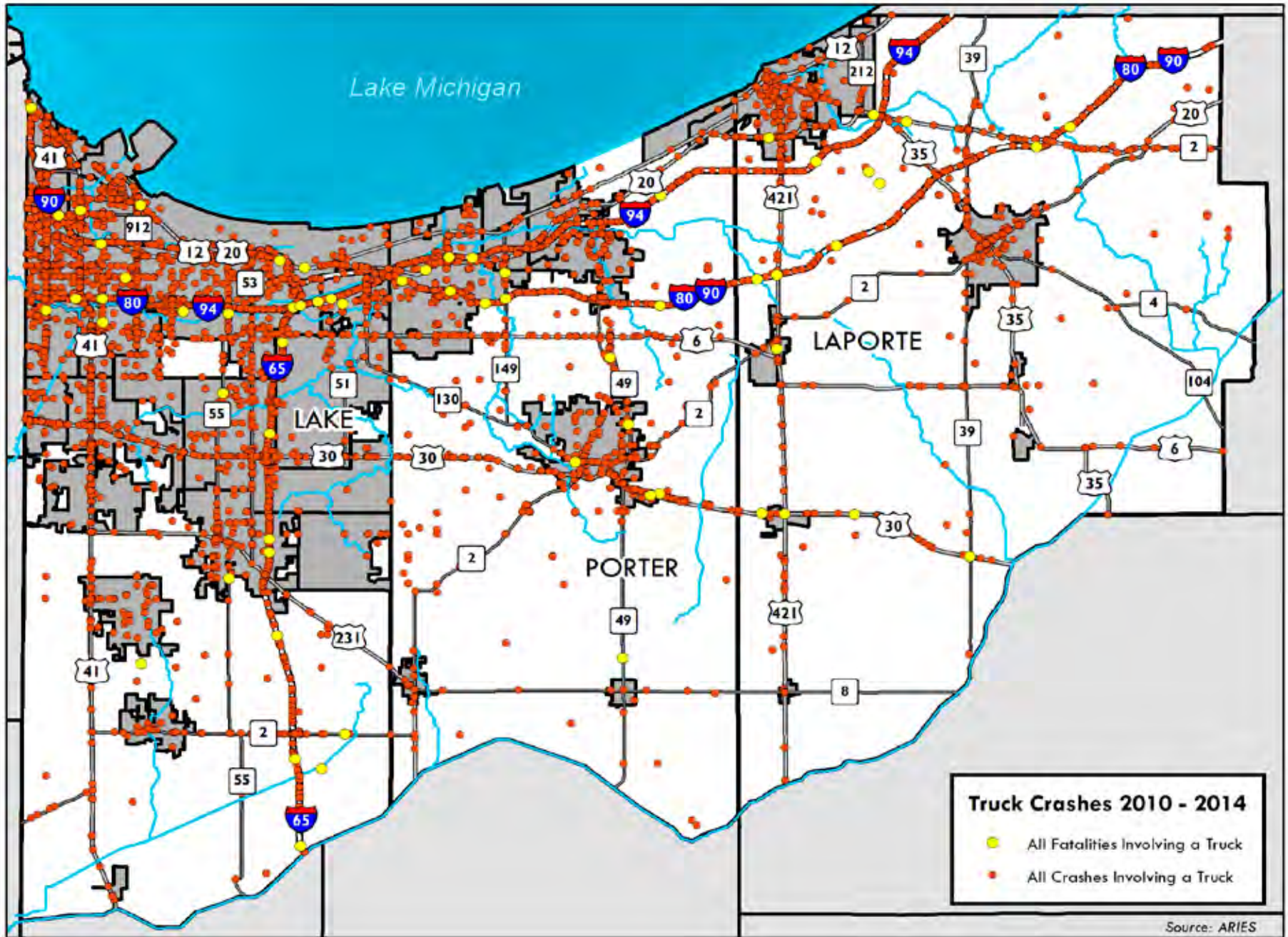


Figure II-7: Truck Crashes in NIRPC Region 2010-2014

Bus Crashes

According to the National Safety Council, bus riding is the safest form of surface transportation. Between 2010 and 2014, an average of 213 bus crashes occurred in Northwest Indiana each year. In urban areas, the concern for bus safety is even greater: 73% of all bus crashes occurring between 2010 and 2014 took place in Lake County, the most urbanized of the three counties and therefore the one with the most extensive use of both transit and school buses. Whether it is transit, school, or private buses, efforts must be continually made to ensure the safety of all passengers, especially those in urban centers where bus service is most concentrated.

County	Name	Crash Count
Lake	Indianapolis Blvd	21
Lake	I-80	19
Lake	I-90	14
Lake	Broadway	12
Lake	I-65	12
La Porte	Franklin St	12
Lake	Hohman Ave	10
Lake	5 th Ave	10
Lake	7 th Ave	10
Lake	Calumet Ave	8

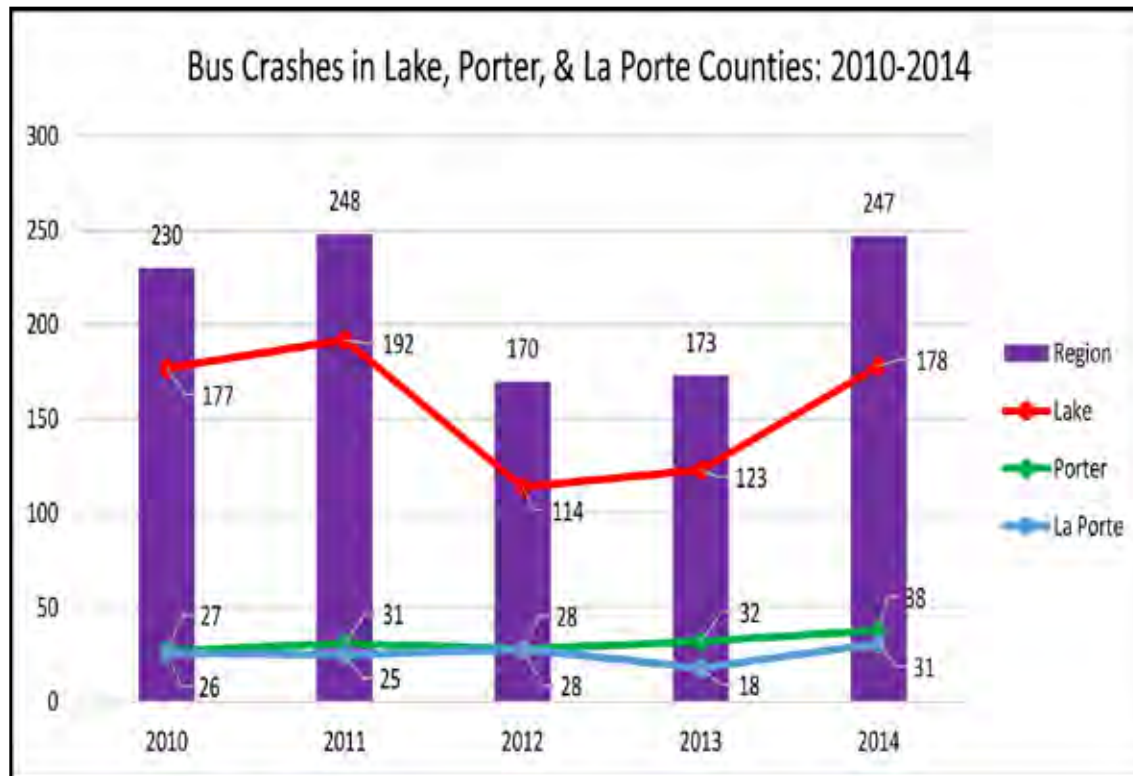


Figure II-9: Bus Crash Locations in NIRPC Region 2010-2014

Table II-7: Top Regional Bus Crash Locations

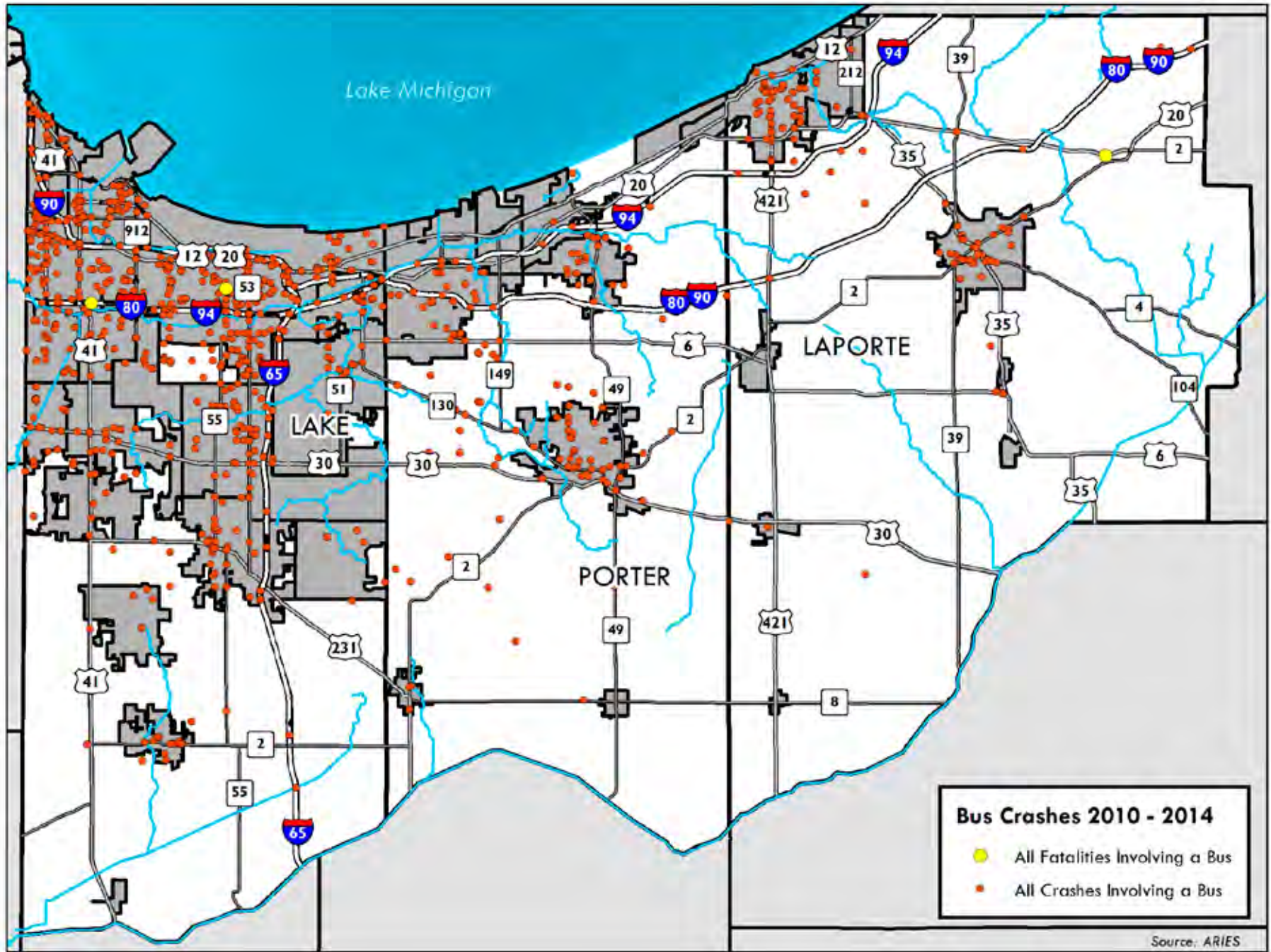


Figure II-10: Bus Crash Locations in NIRPC Region 2010-2014

Railroad Crossing Crashes

On average, there are 27 vehicle-train crashes each year. While the instances of crashes occurring at railroad crossings are considerably lower than other types of crashes in the region, this type of crash has a much greater potential to be fatal due to the weight and speeds of the vehicles involved. Further, the number of rail lines passing through an urbanized area is directly related to the number of crashes. As a result, Lake County, with its more urbanized geography, has the highest number of railroad crossing crashes not only of the three counties, but of all counties in the state in each year from 2010-2014 according to Federal Railroad Administration (FRA) data obtained from INDOT. In addition to the high fatality rates for crashes of this kind, the 2040 CRP's focus on the revitalization of urban centers and the creation of livable centers makes it necessary to prioritize safety improvements to reduce crashes at railroad crossings. NIRPC has already been working toward this through its efforts with the Northwest Indiana Rail VISION work group and Purdue University Calumet. Its purpose is to identify crossings that would make effective candidates for grade separation to remove the point of conflict.

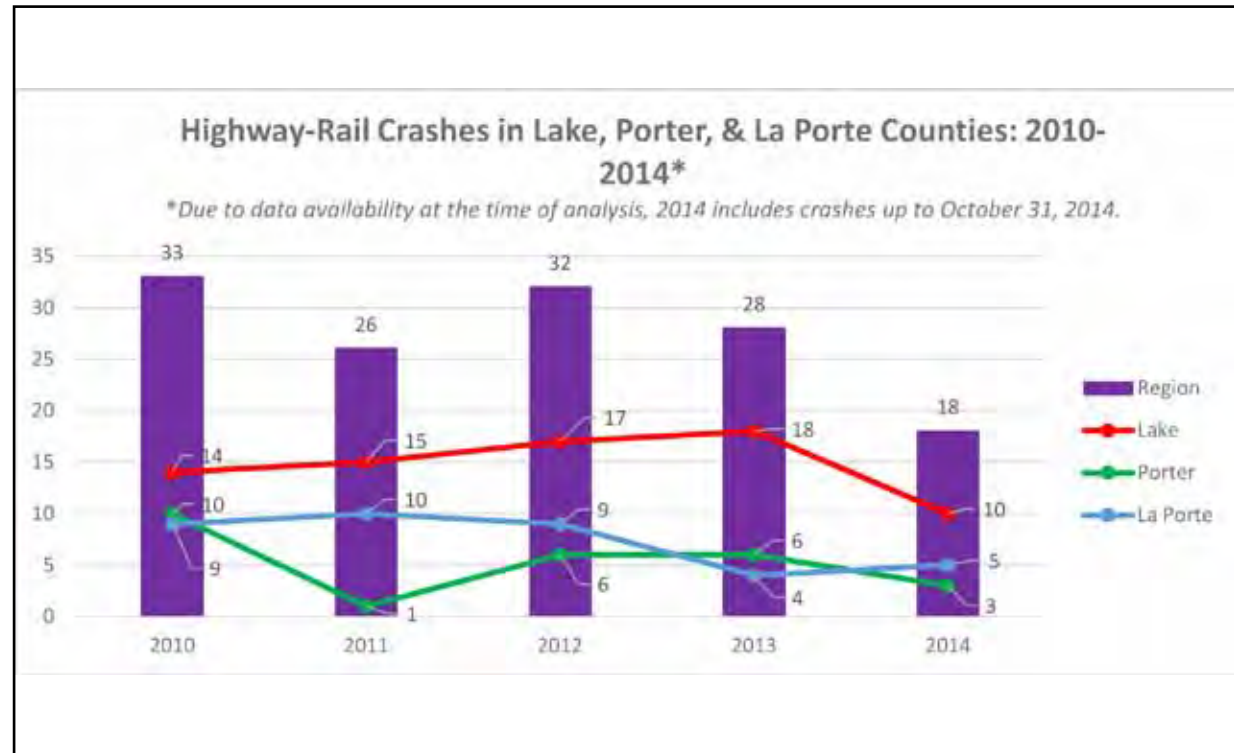


Figure II-11: Highway-Rail Crashes in NIRPC Region 2010-2014



Freight train in Whiting. Photo by Stephen Sostaric.

Congestion Management

The NIRPC Congestion Management Process, adopted by the Transportation Policy Committee (TPC) on June 14, 2011, remains effective. The only major difference is that in 2012, the Congestion Management Subcommittee of the TPC dissolved. Now the TPC and NIRPC Commission directly makes decisions about the Congestion Management Process. There are also some minor differences that help inform staff and the TPC. Newly available information and data will enhance the Congestion Management Process to make decisions recommended by staff more informed. In calculating the Level of Service for corridors as explained on pages C-81 and C-82 of the CRP appendix, the “V/C Ratio” and “Model Average Speed/Posted Speed” metrics will be measured using now available 2012 data instead of 2008. Also, probe data from the National Performance Measure Research Data Set as well as survey results from NIRPC’s newly launched Regional Corridor Study provide NIRPC with more information with which to make findings and decisions.

National Performance Measure Research Data Set (NPMRDS)

The NPMRDS is a massive probe travel time data set released each month since 2012 by HERE (corporation that provides map data), under contract with the FHWA Office of Freight Management and Operations. It is a probe dataset in that the sources of the data are “probes” (in-vehicle GPS units or Bluetooth-enabled devices including cell phones) that automatically ping the telecommunications network that HERE has access to at 5-minute intervals. The contract between HERE and the FHWA Office of Freight Management and Operations allows FHWA to release the data free to all state departments of transportation and metropolitan planning organizations, including NIRPC. NIRPC has been able to access and analyze the NPMRDS for Northwest Indiana for the six-month period from July to December 2014. Specifically, NIRPC analyzed the travel network



Photo by Washington State Dept. of Transportation via Flickr, CC BY-NC-ND 2.0 License.

in Northwest Indiana for which NPMRDS data was available on four congestion performance measures: Delay, Speed Ratio, Travel Time Index, and Travel Time Reliability. While the coverage of the NPMRDS data is limited to roads on the National Highway System (Interstates, U.S. Highways, and some State Roads and Other Principal Arterials), the analysis shows the daily experience of congestion in Northwest Indiana. It is also important to note that this analysis is limited to vehicles included in the NPMRDS dataset, which includes both cars and trucks. Research on congestion statistics suggests that even as little as three percent of the traffic stream being sampled is sufficient to decipher performance measures, and the NPMRDS data easily meets this threshold.

Delay

Delay is a measure of time spent experiencing congestion. While the experience of congestion differs by road user, delay is defined here as number of hours per month spent traversing a road under its posted speed limit.

Delay is not typically expressed on a per capita basis but rather a sum total of all hours of delay, so it is sensitive to the number of samples in the dataset. That explains why the segment of US-30 between Valparaiso and Wanatah appears very congested (Figure II-12), even though common local knowledge suggests otherwise. Also, the fact that the Borman Expressway (I-80/94 in Lake County) appears to have absolutely no delay may be attributed to the fact that traffic routinely exceeds its low 55 mile per hour speed limit. The same applies to I-65 north of US-30. Despite these and a few other exceptions, the Delay analysis shows pockets of congestion around major activity clusters (i.e. Southlake Mall on US-30) and in areas with a high density of intersections and driveways (i.e. Indianapolis Blvd in the Whiting/East Chicago area).

Speed Ratio

Speed Ratio is a measure of what percentage the experienced speed of vehicles on a road segment is below the road segment's posted speed. This analysis breaks down Speed Ratio into three time segments: 24-Hour typical weekday (typical weekday is Tuesday, Wednesday, and Thursday excluding holidays), the AM Peak Period typical weekday between 6 AM and 9 AM, and the PM Peak Period typical weekday between 3 PM and 6 PM.

In general, the Speed Ratio is significantly higher (more below the posted speed limit) on surface arterials than on Interstates in Northwest Indiana. Ridge Rd/US-6, Broadway (SR-53), US-12 in the Gary-Ogden Dunes corridor, and US-231 in the St. John-Crown Point corridor appear to have the highest Speed Ratios. Also, the PM Peak Period Speed Ratios are much higher in general than the AM Peak Period Speed Ratios.



Photo by Kelly Wilson. Copyright 2015, American Planning Association.

Delay Measure of Congestion

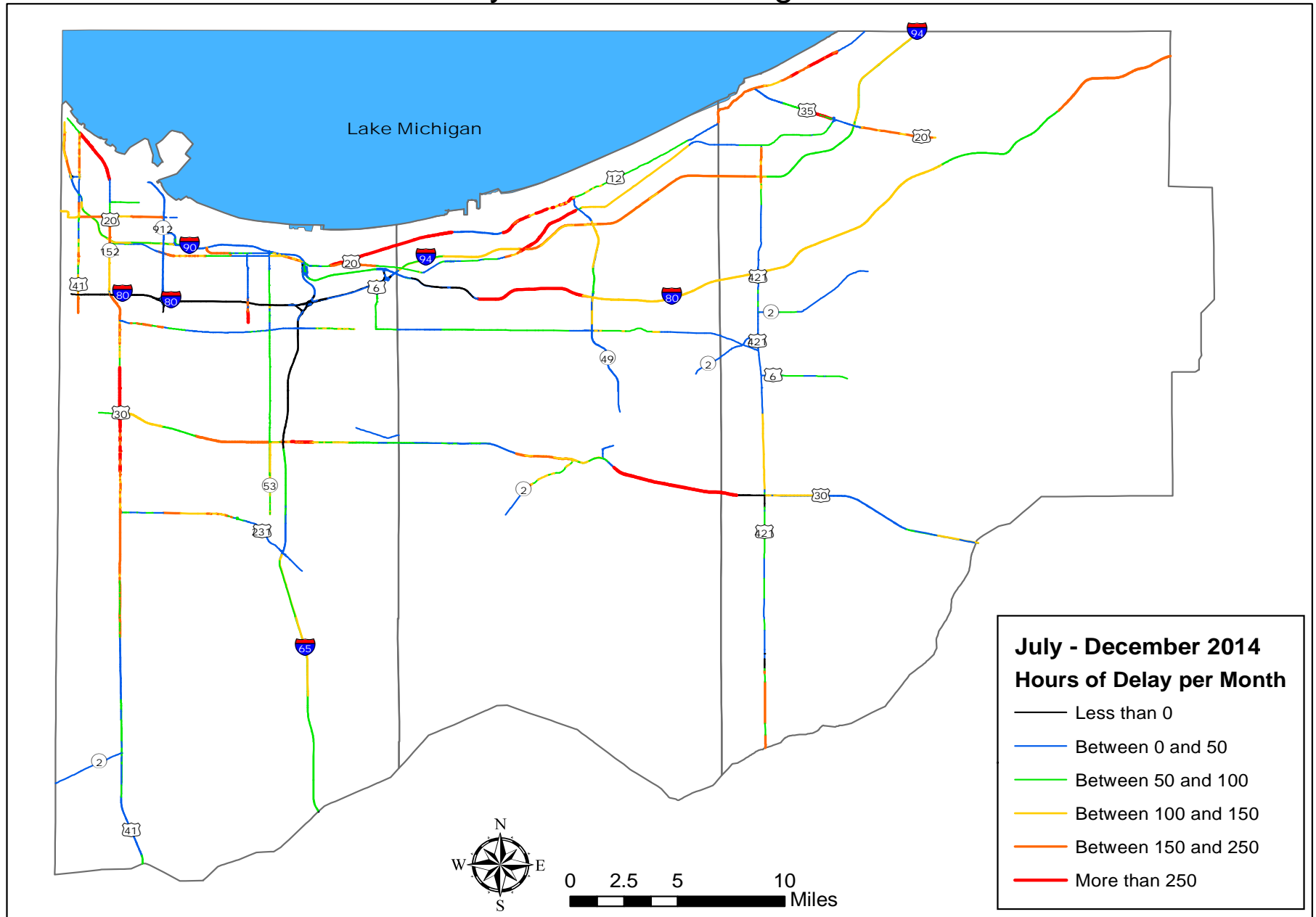


Figure II-12: Delay Measure of Congestion

24-Hour Speed Ratio Measure of Congestion

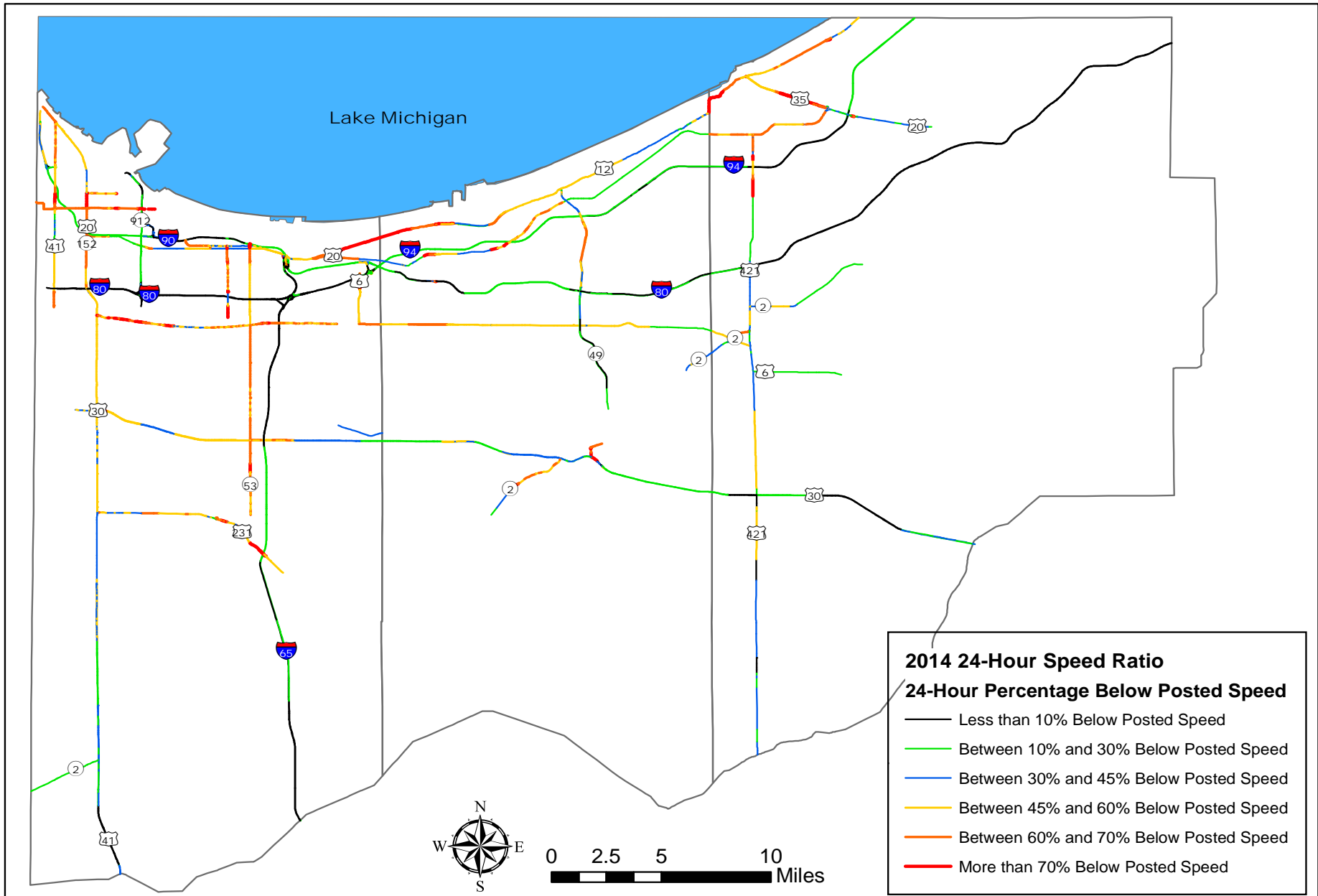


Figure II-13: 24-Hour Speed Ratio Measure of Congestion

AM Peak Period Speed Ratio Measure of Congestion

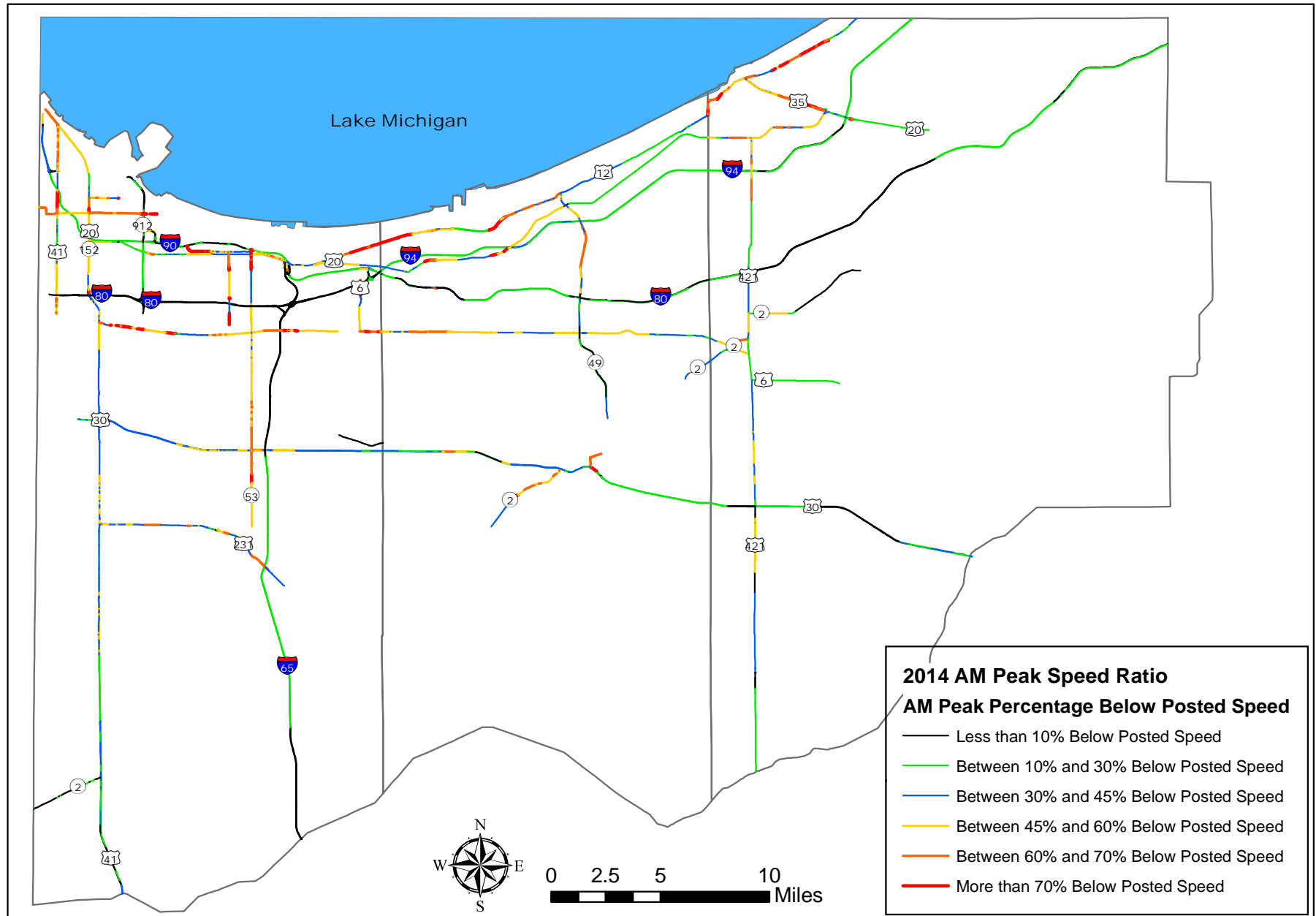


Figure II-14: AM Peak Period Speed Ratio Measure of Congestion

PM Peak Period Speed Ratio Measure of Congestion

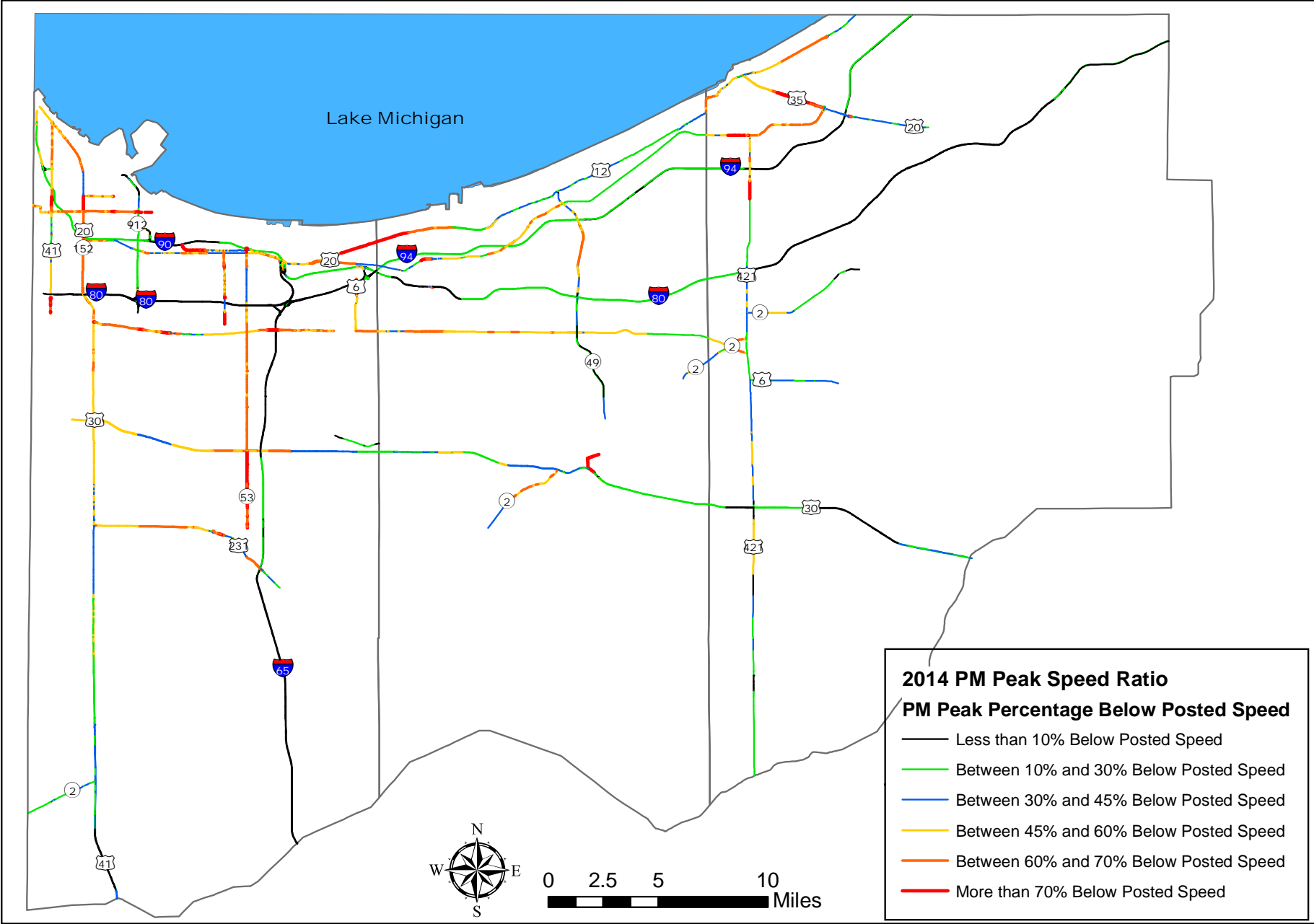


Figure II-15: PM Peak Period Speed Ratio Measure of Congestion

Travel Time Index

Travel Time Index (TTI) is a road segment's peak period travel time divided by its free flow travel time. It is a measure of how much affect there is on congestion from peak period travel.

In general, the surface arterials experience higher TTI than Interstates in Northwest Indiana. Cline Ave, SR-49 in the Porter-Chesterton corridor, Indianapolis Blvd in the Whiting-East Chicago corridor, US-30 in Schererville, and US-231 in the St. John-Crown Point corridor have the highest TTI. Overall, TTI is low in Northwest Indiana, meaning most of the congestion experienced by road users is not due to recurring peak period travel. This suggests that most of the congestion experienced in Northwest Indiana is instead non-recurring congestion, meaning obstacles like road construction, inclement weather, traffic incidents, seasonal shopping and leisure travel, etcetera are better explanations for congestion than weekday work trips.



Rush hour on the Borman Expressway. Photo by Stephen Sostaric.

Travel Time Reliability

Travel Time Reliability is a measure of how much variation in travel time there is on a road segment. It is measured by taking the standard deviation of all travel times in the NPMRDS dataset for each road segment and dividing it by the road segment's length. A lower value indicates more reliable travel (less uncertainty for a road user about how long it will take to traverse the road segment) while a higher value indicates less reliable travel.

It is clear that the Interstates in Northwest Indiana are very reliable compared to most of the surface arterials. Not surprisingly, Broadway (SR-53) and Ridge Road appear to have the highest values because these roads have a high density of intersections and driveway access. The Michigan City area has a high value. This may be because Michigan City is heavily influenced by a seasonal traffic flow, weekend casino events, and outlet mall shopping.

Travel Time Index (TTI) Measure of Congestion

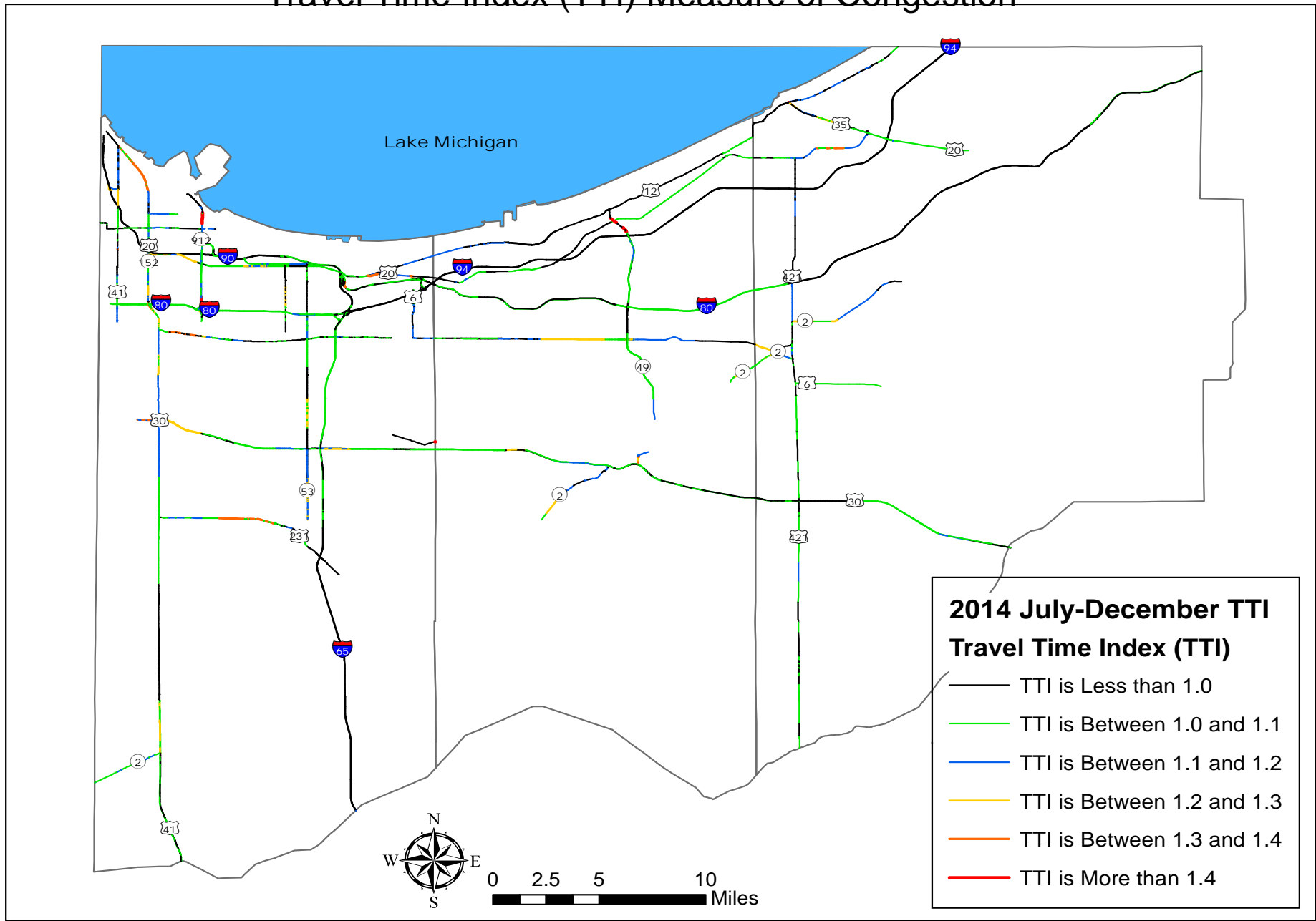


Figure II-16: Travel Time Index (TTI) Measure of Congestion

Travel Time Reliability Measure of Congestion

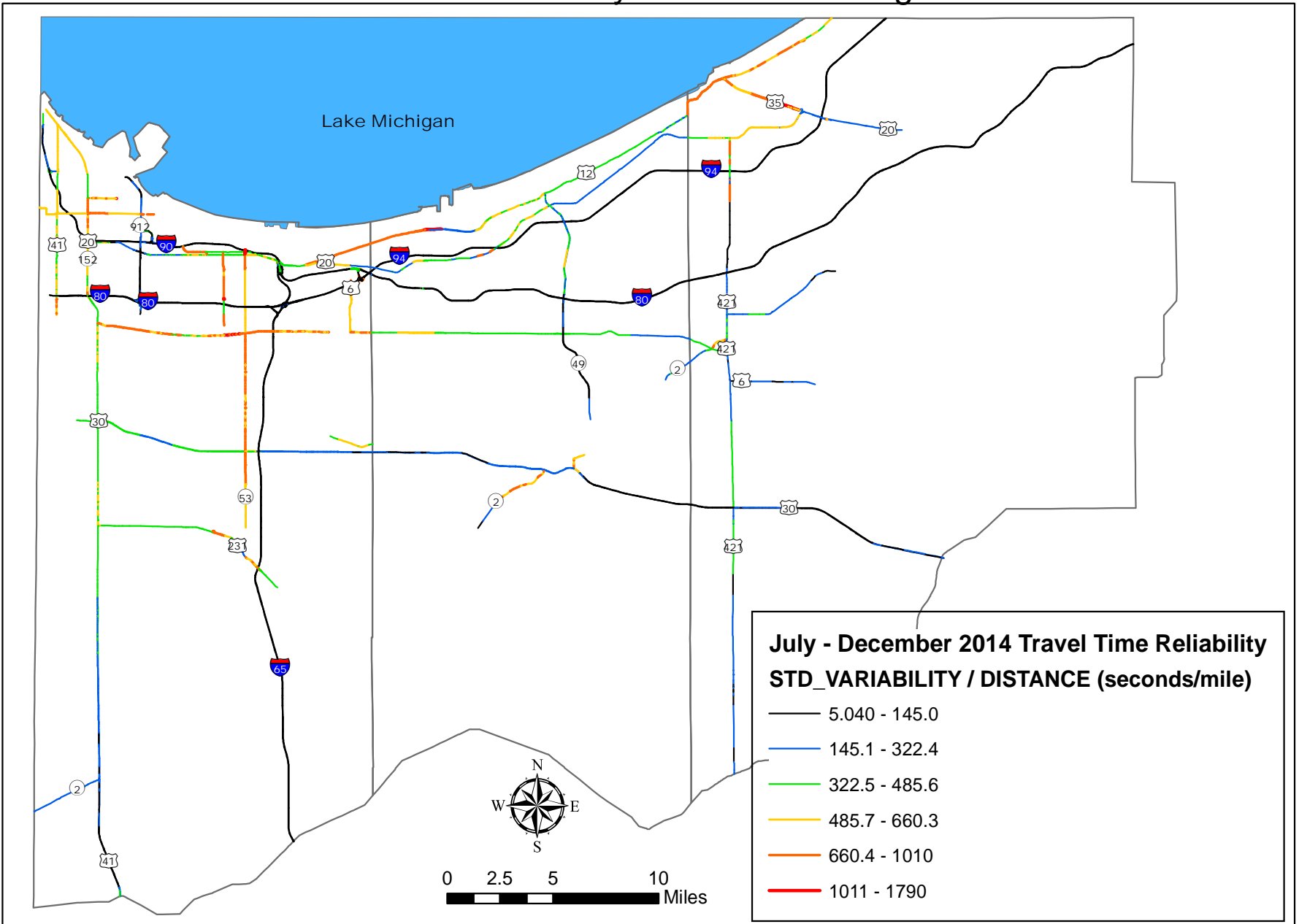


Figure II-17: Travel Time Reliability Measure of Congestion

Regional Corridor Study

The Regional Corridor Study is a project launched in NIRPC's 2015-2016 Unified Planning Work Program aimed at improving regional mobility and accessibility through enhanced connectivity. NIRPC sent out a survey to users of the transportation network throughout Northwest Indiana and received 300 responses. A few questions in particular on the survey are very helpful to NIRPC's Congestion Management Process: Question 6: What major roads do you travel to reach your main destina-

tion? Question 7: Do you experience delay/congestion during your main travel? Explain Where?; and Question 8: What alternate routes do you use when your primary route is congested, if any?

Major Roads in Northwest Indiana Traveled by Regional Corridor Study Survey Repondents

Figure II-18 shows the major roads in Northwest Indiana that respondents of the Regional Corridor Study reported using most often. Clearly I-80/94 was the predominant road of choice for the respon-

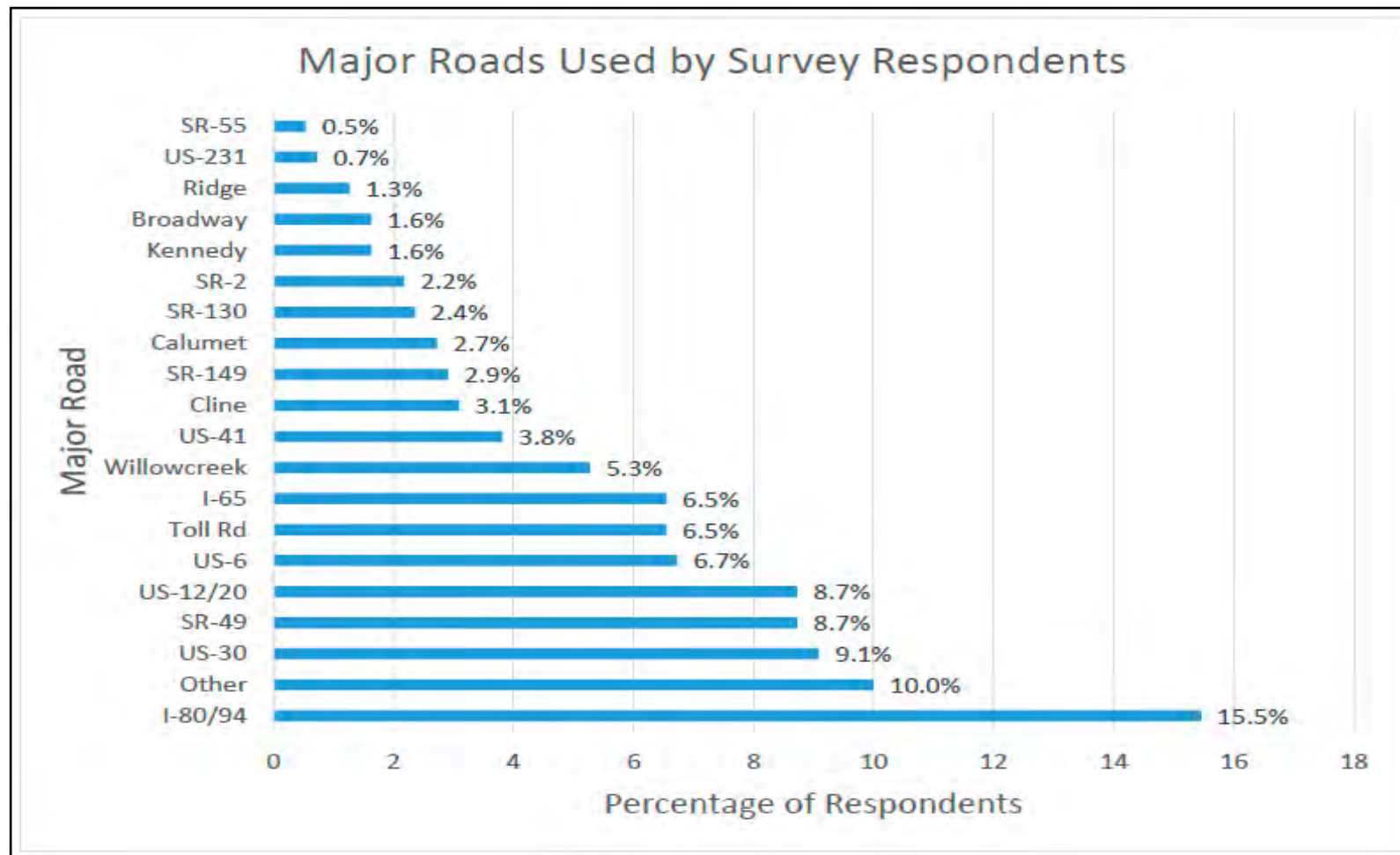


Figure II-18: Major Roads Used by Survey Respondents

dents. It is somewhat surprising from the results that the surface arterials US-30, SR-49, US-12/20, and US-6 were used more by the respondents than the other Interstates I-65 and the Toll Road (I-80/90). This can be partially explained by the fact that the survey received the greatest amount of response from Porter County residents.

Congestion Experienced by Regional Corridor Study Survey Respondents

Overall, 53.5 percent of the Regional Corridor Study Survey respondents reported experiencing congestion during their normal driving, while 46.5 percent did not report experiencing congestion. This is significant since it suggests that congestion is experienced by a majority of drivers in Northwest Indiana at some point during their normal driving. The survey question also asked respondents to specify where they experienced congestion. Figure II-19 shows the results.

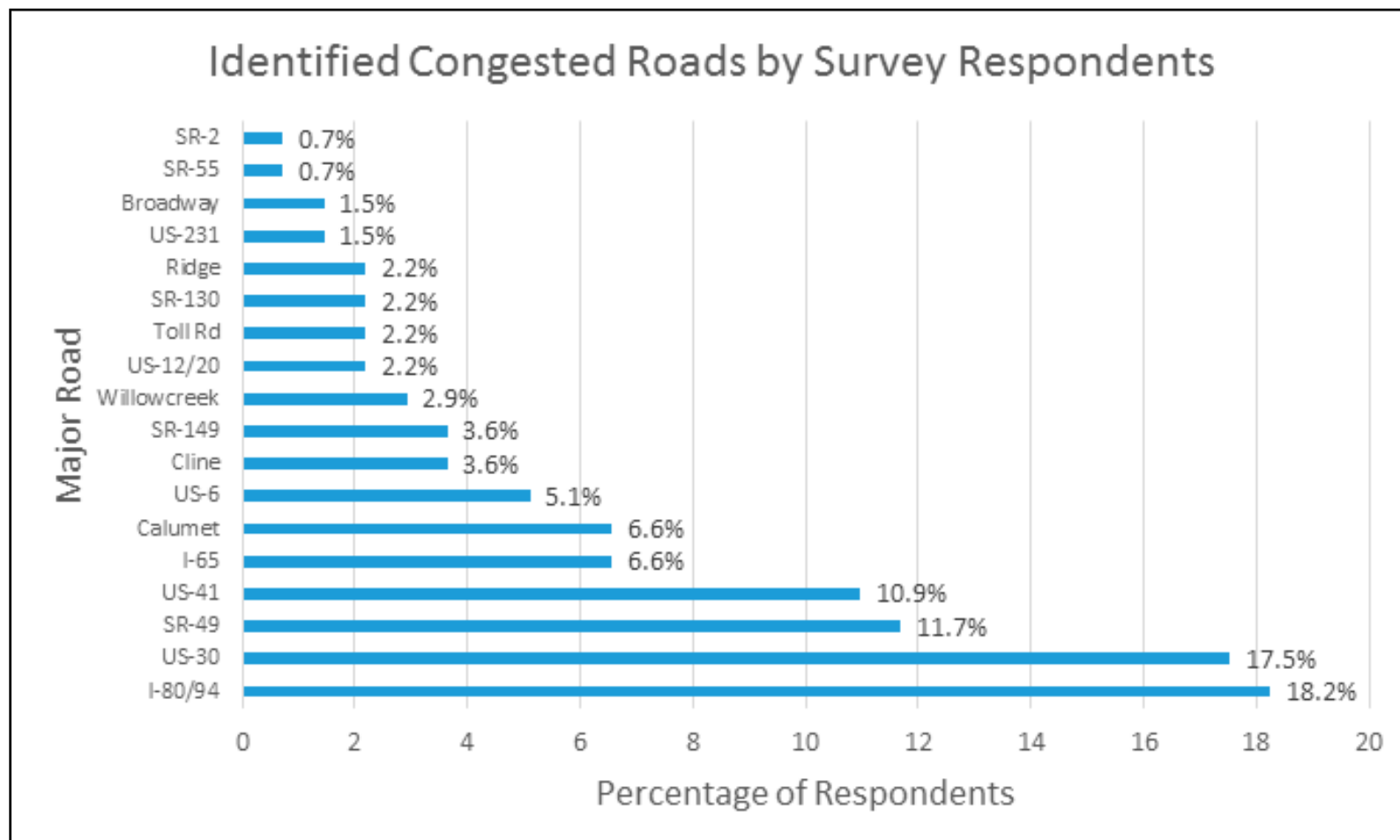


Figure II-19: Identified Congested Roads by Survey Respondents

Alternate Routes Taken by Regional Corridor Study Survey Respondents When Primary Route is Congested

Finally, the Regional Corridor Study Survey asked respondents to specify what alternate route, if any, they took when their primary route was congested. NIRPC categorized the results by the major roads reportedly used in Question 6 (what major roads respondents used) and then indicated the alternate routes for those major roads. Table II-8 explains the results.

The alternatives marked with an asterisk (*) indicate that the alternative was mentioned by several respondents as an alternate and therefore NIRPC highlights as an especially important alternative. Noteworthy about these results as seen in the table is that there is rarely if ever an obvious alternative for each of the major roads. Instead, it appears that drivers who experience congestion on these major roads are confronted with multiple choices of alterna-

Major Road	Percentage Used	Functional Classification	Alternatives
I-80/94	15.5%	Interstate	Ridge Rd* US-12/20* Toll Road* 173rd St 45th Ave US-30 Kennedy Ave to Alternate Cline Ave to Alternate Burr St to Alternate
US-30	9.1%	Principal Arterial	77th Ave* 73rd Ave* US-231* Main St* US-6* 93rd Ave SR-8 Hart Rd to Alternate Kennedy Ave to Alternate Broadway to Alternate
SR-49	8.7%	Principal Arterial	Meridian Rd* SR-149* I-65 US-20 to Alternate US-30 to Alternate
US-12/20	8.7%	Principal Arterial	US-20/12 I-94 15th Ave
US-6	6.7%	Principal Arterial	1050 N I-94 Central Ave 700 N

Major Road	Percentage Used	Functional Classification	Alternatives
Toll Road	6.5%	Interstate	I-80/94* US-12/20 US-6 US-30 US-41 to Alternate
I-65	6.5%	Interstate	Broadway* Cline Ave SR-49 US-41 SR-51/Grand Blvd County Line Rd US-30 to Alternate Toll Road to Alternate
Willowcreek Rd/SR-249	5.3%	Principal Arterial	County Line Rd US-20 to Alternate
US-41/Indianapolis Blvd	3.8%	Principal Arterial	Kennedy Ave* Cline Ave* Calumet Ave Hohman Ave Hart Rd Broad St I-65 US-231 Ridge Rd to Alternate
Cline Ave	3.1%	Other Freeway/Expressway	Kennedy Ave US-41 Broadway
SR-149	2.9%	Principal Arterial	Willowcreek Rd 450 W SR-49
Calumet Ave	2.7%	Principal Arterial	Sheffield Ave Columbia Ave Kennedy Ave Indianapolis Blvd/US-41 Burnham Ave (IL)
SR-130	2.4%	Principal Arterial	SR-19 US-6
Broadway	1.6%	Principal Arterial	US-231 SR-55

Table II-8: Major Road Alternatives Based on Survey Results

tives. It is also interesting that of the 14 major roads in the above table, 11 are identified as congested in the NIRPC Congestion Management Process Regionally Significant Congested Corridors tables on pages C-28 – C-29. Moreover, of the 70 alternatives in the above table, 43 are identified as congested.

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) are arrangements of electronic and communications technologies that are used to help manage and operate the highway and transit systems in the most efficient and safest way possible. The purpose of using ITS technologies is to help make the highways and transit systems safer and to move people, goods and vehicles more efficiently. Federal metropolitan planning legislation also requires regions with over 200,000 people to develop a regional ITS architecture to ensure that ITS technologies are coordinated and interoperable with the National ITS Architecture.

NIRPC, in conjunction with several stakeholders, developed the Northwest Indiana Regional Intelligent Transportation Systems Architecture 2015 Update. This update, after being vetted through the NIRPC Transportation Policy Committee, was formally adopted by NIRPC on January 15, 2015, by Resolution 15-06. The Indiana Division of the Federal Highway Administration (FHWA) found the updated regional ITS architecture for Northwest Indiana to satisfy the federal requirements of a regional ITS architecture.

Sections of the Northwest Indiana Regional ITS Architecture 2015 Update

- Introduction
- Development of the Regional Architecture
- Description of the Region and Definition of Scope (and Systems Engineering Analysis)
- Stakeholder Identification
- Operational Concept
- Element Inventory
- Functional Requirements of the Elements
- ITS Services
- Information Flows of the ITS Services
- ITS Standards
- ITS Agreements
- ITS Projects
- Use of the ITS Architecture
- Maintenance Plan of the ITS Architecture



Example of an electronic alert sign on westbound Borman Expressway. Photo from INDOT.

Public Transportation

System Changes since CRP 2040 Adoption

Throughout the 2040 planning process, participants supported the concepts of Livable Centers, urban revitalization, sustainable communities and in-fill development as the preferred scenario for future growth and development in Northwest Indiana. Linking existing communities, regional employment and activity centers, and recreational amenities was recognized as essential to achieving the 2040 vision of a vibrant, revitalized, accessible, and united region. This is reflected in the CRP goals of creating livable urban, suburban and rural centers, furthering a safe and secure transportation system, establishing adequate transportation funding and efficiently using resources.

In the four years since the CRP was adopted, several changes have taken place in the system. Some of the changes have been beneficial, increasing the areas covered by transit and opportunities for connectivity among providers. Following are improvements by fixed route and demand response providers.

1. Gary Public Transit Corporation – GPTC has been very successful in establishing new services in the city of Hammond. The loss of the Regional Bus Authority service in 2012 left one of the region’s major cities without fixed route transit. Under its own initiative, GPTC has worked to fill the gap in service in a very vital part of the urbanized area of north Lake County. Continued expansion in Hammond and Whiting has been planned, but local funding is lacking.
2. The North Township Trustee Dial-A-Ride was successful in obtaining a CMAQ grant to expand their demand response service to help replace some of the service lost with the demise of the RBA. The ridership grew in the first year of operation of the expansion from 12,000 to almost 34,000.



South Lake County Community Services Vehicle.
NIRPC photo.

3. GPTC has also extended service to connect Merrillville and parts of Hobart to the system. While not covering both communities entirely, opportunities now exist to access the GPTC system thereby gaining access to all of north Lake County.
4. South Lake County Community Services has completed three successful years of expanded transit for the disability community. Through a partnership with The ARC of Northwest Indiana, the agency has more than doubled the number of its trips, increasing access to employment and support services for the disabled.
5. The regional dispatch service shared by three of the demand response operators was recently upgraded. The shared service improves the scheduling efficiency of each provider thereby increasing capacities in both Lake and Porter Counties. Participants in the service are the North Township Dial-A-Ride, South Lake County, and Porter County Aging and Community Services. South Lake County serves as the lead agency for the program.

6. Both Porter County and Opportunity Enterprises (OE) have extended their service areas to include St. Mary's Hospital in Hobart. OE now goes as far west as Broadway, and goes as far south as 109th Avenue. Crossing county lines remains one of the most desired improvements to the regional system and these two demand response operators have taken a giant step towards improving that important connection.
7. The Valparaiso transit services of the V-Line and Chicago Dash commuter bus continue to grow at impressive rates. A fourth bus was added to the commuter service which has already outgrown the original station and parking lot. Ridership on the deviated fixed route service continues to grow. The City is reviewing its new Route Study recommendations to determine its future expansions and/or changes to address the service's large growth in ridership.
8. In LaPorte County, the long planned-for Triangle Transit Service connecting Michigan City, LaPorte and Purdue North Central in Westville started its first week of service in February of 2015. This service has been talked about, planned for and anxiously awaited by people in LaPorte County for almost twenty years. A partnership was formed among the cities, university and county officials committed to sharing the cost of the local match for a Congestion Mitigation Air Quality Demonstration Grant to get the service started. The service is operated as a commuter bus with three round trips per day on each leg of the route. The project sponsors are committed to working together to create a permanent source of local match.
9. In the commuter rail service area, the Northern Indiana Commuter Transportation District (NICTD) recently announced the addition of an express service with limited stops to improve travel time to Chicago from South Bend. Express trains will lessen travel times.
10. NICTD was also successful in obtaining commitments from the Lake County local and county governments for the matching funds for the expansion of commuter rail down the west side of Lake County.
11. As can be seen in Figures II-20 through II-23, ridership across the entire system and all modes has been growing or at least remained stable since the CRP was adopted. This speaks to continued and growing need for public transit in northwest Indiana. As the services are improving their coordination and connectedness, more of the region's citizens are trying them out and discovering that one can travel from one city to another.
12. Also underway is a GPTC-sponsored Broadway Corridor study that potentially could lead to bus rapid transit-type improvements to service the corridor from downtown Gary to Crown Point. The study is looking at land uses as well and will include recommendations on increasing the densities in the study area. The intent is to truly develop the corridor as the backbone of a regional system. More information on the Broadway Corridor project is contained in the Growth and Conservation chapter.
13. At the time of adoption of this update, two of the region's larger cities have opted to explore the feasibility of establishing city-wide public transit in their respective communities. The mayors of Hobart and Portage have committed to the local match and NIRPC is facilitating the hiring of consultants to conduct the transit studies. The studies will be completed in early 2016. Opportunities exist in both communities to work with existing operators to provide new services.

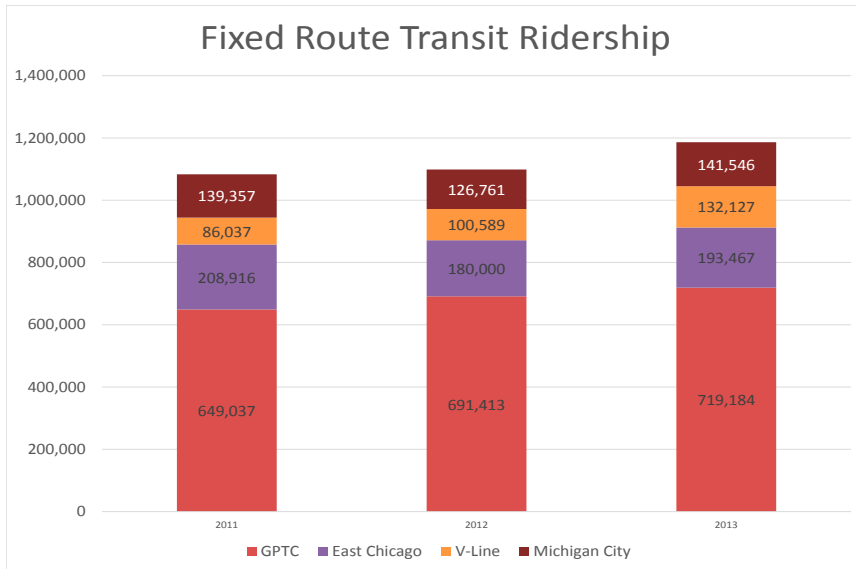


Figure II-20: Fixed Route Transit Ridership

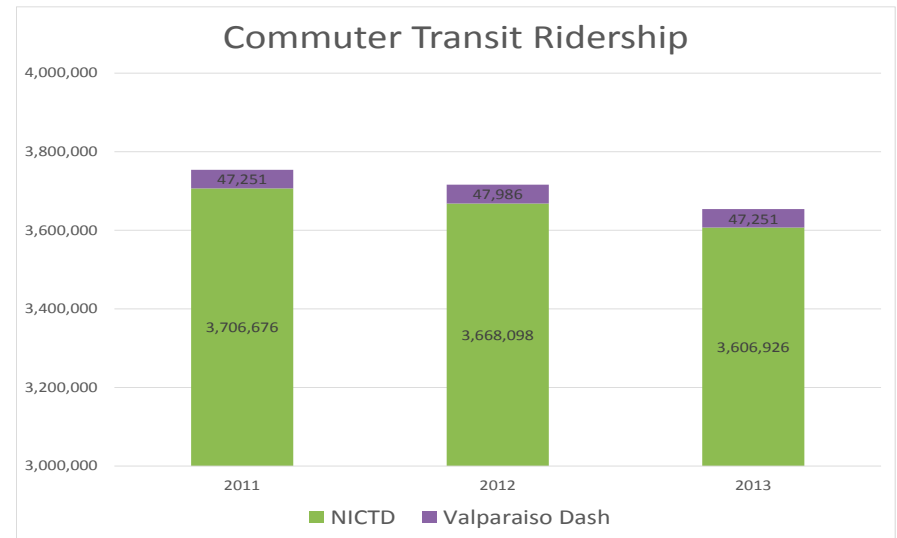


Figure II-22: Commuter Transit Ridership

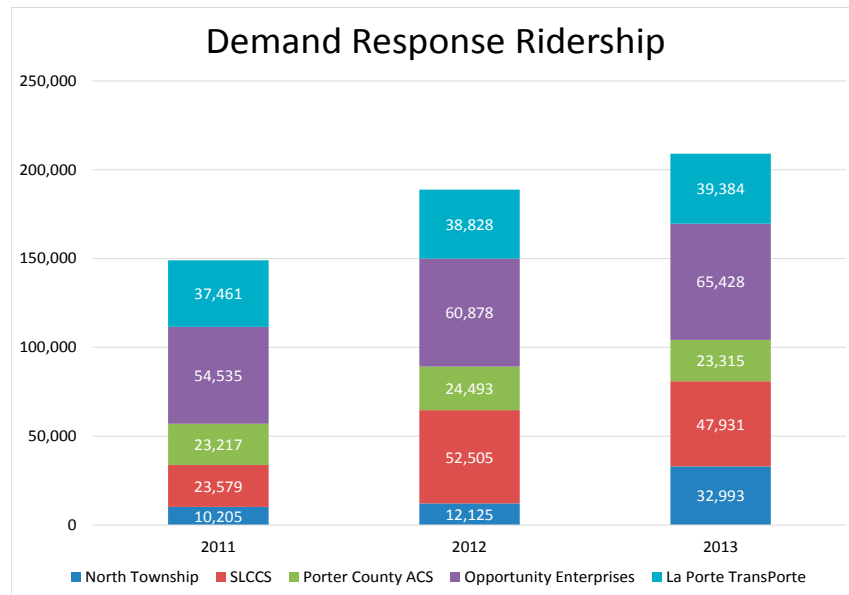


Figure II-21: Demand Response Ridership

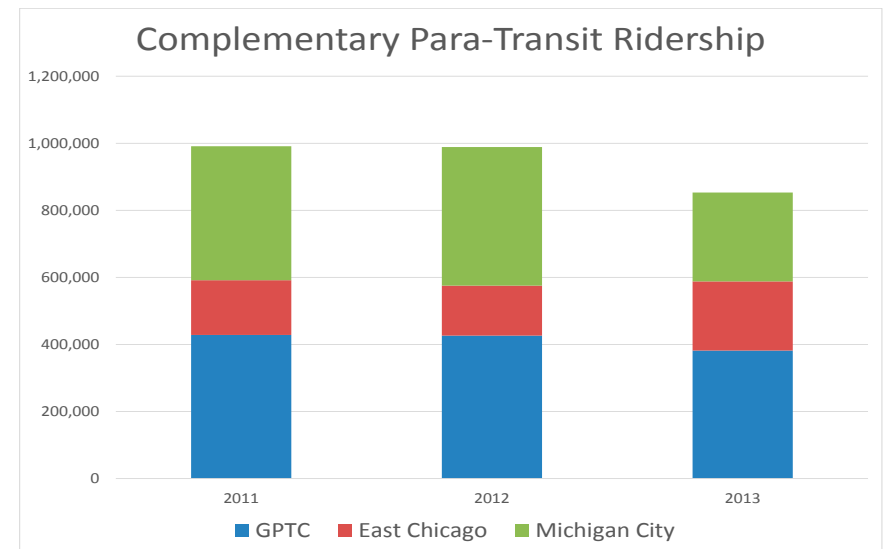


Figure II-23: Complementary Paratransit Ridership

Issues and Challenges

Local Funding

While ridership is going up and connectivity has improved, it is still too difficult to traverse the region via public transit. The recommendation to have a regional organization to operate a regional transit system was identified in many major studies since the first regional transit study was produced in the late 1970's. While transit ridership has been increasing, there is still significant unmet need. The need for transit has been documented repeatedly and there has been little difference between recommendations except to show increasing needs based on the aging of the population and growing traffic congestion. The projected costs for a regional system, whether it be a two-county or three-county system, have of course escalated, much like the cost of living since 1978. As was noted in the CRP document, without bold leadership and management the RBA was at risk. The region is now back where it started, with multiple providers struggling to meet the needs and interests of the riding public.

Additional studies have advocated for more connectivity and coordination between existing agencies. In one example from Arizona cited by the Northwestern Indiana Regional Development Authority (RDA), a single oversight agency manages independently-owned and operated transit agencies that demonstrate unified, cooperative service by operating under a single brand: Valley Metro. This could be a model for cooperative transit in northwest Indiana.

The lack of a dedicated local source of funding to support public transportation remains as the acknowledged number one problem for transit in northwest Indiana. New sources of local matching funds are critical to creating a more seamless, efficient system that serves and connects all of northwest Indiana.

Aging Population

As noted in the demographics analysis, northwest Indiana continues to be older than the U.S. and Indiana as a whole. The median age of



South Shore train in Michigan City. Photo by Stephen Sostaric.

the three-county area is 38.6, compared to 37.9 in 2010. In comparison, the U. S. median age changed from 37.2 to 37.6. As the population ages, the region must improve its services such as more public transit and a heightened sensitivity and commitment to improving mobility for the elderly, the disabled community and all who do not drive.

The Future of Commuter Rail

In order to unlock the full economic potential of northwest Indiana, NICTD adopted a 20-year strategic plan that calls for a multi-million dollar series of investments to improve access and reduce overall travel time from its four-county service area to Chicago. Besides keeping the South Shore in a state of good repair, the plan includes expanding commuter rail from the South Shore Line through Hammond to Munster/Dyer along the former Monon Corridor. Partnering with the Northwestern Indiana Regional Development Authority, NICTD is currently preparing a draft environmental impact statement for the West Lake Corridor.

Over the past 25 years NICTD has concentrated its resources on rebuilding the South Shore commuter service following decades of disinvestment. The strategic plan establishes a new, more aggressive vision for the South Shore by identifying investments to reduce travel time and increase service frequency, including: installation of federally mandated positive train control; double tracking the railroad between Gary and Michigan City; installing “high-level” (floor level) platforms in Gary, Portage/Ogden Dunes and Michigan City; track realignment, station consolidation and double tracking through Michigan City; purchasing new cars to replace older cars built from 1982 to 1992; improving terminal facilities at Millennium Station in Chicago to allow for better on-time performance, expanded South Shore service, and future West Lake service; and realigning the route at the west side of the South Bend Airport. Expanding South Shore service will require additional rail cars and a new car storage and light maintenance facility planned in the Town of Pines. The NICTD 20 Year Strategic Business Plan can be seen at nictd.com.

Uncertain Future for Intercity Passenger Rail

The fate of the intercity passenger rail service operated by Amtrak was decided by INDOT in March of 2015 when it announced that the Hoosier State passenger rail line, which operates four days per week between Indianapolis and Chicago, would have its last day of service on April 1st.

The service of fragmented areas occurs at the expense of employers, businesses, job seekers and others. An organization with members who have credibility, expertise and authority to make decisions is critical to meeting the challenges of funding and providing the regional transportation that will assure northwest Indiana’s future success.



Amtrak intercity passenger train. Photo by Stephen Sostaric.

Recommendation: A Regional Transit Framework

The update to the CRP included nine public meetings in the fall of 2014, offering opportunities to comment on and suggest improvements to the plan update. Additionally, two meetings were held for the specific purpose of obtaining public input into the transit planning process. The consensus of the public discussion was that people wanted a transit system that afforded them access across the region, not just limited to one or two towns. Connectivity from residential areas to regional employment, shopping, health, and entertainment centers was overwhelmingly cited as the greatest need. Improvements in capacity for demand response services was also a high priority. Other needs noted in the discussions were for travel training to improve riders' knowledge of the existing systems and improved access to transit stops including sidewalks, ramps and bike/hike trails.

A regional Transit Framework was prepared for the original 2040 Plan, providing a vision of how a transit investment program could support the Livable Centers strategy that is key to realizing NIRPC's 2040 CRP (Figure II-24). The vision synthesizes information from several recent planning efforts (including the Midwest Regional Rail Initiative, INDOT Rail Plan, NICTD West Lake Corridor Study, RBA Strategic Plan, and Marquette Plan), the locations of the Livable Centers identified in the CRP, the alignments of existing and proposed transit services, multimodal connection opportunities, and the major corridors and focal points identified in CRP workshops.

Key Concepts of the Transit Framework Include:

1. A focus on high capacity transit services that have the ability to support desirable development patterns, including high speed rail, commuter rail and regional bus service. Supportive fixed route, demand response, and other local transit services are to be provided. While some examples are shown, the specific characteristics of these supporting services are considered to be a subject for future study.
2. The vision draws extensively on projects that have already received some level of planning scrutiny. It assumes that the south-of-the-lake high speed rail improvements are completed in the Norfolk-Southern corridor currently used by Amtrak for its Michigan and Ohio services, that both legs of the West Lake corridor are implemented to extend NICTD commuter rail service to Lowell and Valparaiso, and that the local and regional bus services in the RBA Strategic Plan are fully implemented.
3. The Gary/Chicago International Airport is identified as an opportunity for a major regional multi-modal transit hub. This facility, at the nexus of high-speed rail, NICTD, and bus services, as well as a connection with the lakefront trail, could attract new airline service to the airport as part of Chicago's airport system, link important regional and national transportation services, and help to organize and stimulate the redevelopment of part of Gary.
4. The implementation of high speed rail also appears to provide some good opportunities to advance the West Lake Corridor concept, in particular if the southern route via Fort Wayne is selected to replace the current Amtrak alignment through South Bend.
5. There is potential for Bus Rapid Transit (BRT) in northwest Indiana, including transit corridors identified in the former Regional Bus Authority Strategic Plan. BRT is a mode of bus transit that includes concepts such as higher bus frequencies and/or bus speeds, more visible transit stations, and road treatments that prioritize transit (signalization, bus lanes, etc.). In addition to increasing transit capacity and attractiveness as well as promoting sustainable, pedestrian-friendly development patterns, BRT-infused transit corridors offer opportunity to expand local and feeder service into areas in need of new transit.
6. These potential BRT corridors also provide the backbone of a network of services connecting rail stations and other activity centers. Elements of BRT are already being explored for Broadway in Gary, Merrillville, and Crown Point, connecting up to four livable centers on the corridor and promoting a "toolbox" of land use recommendations that complement transit. A seventh route has been proposed as a circumferential route between Ogden Dunes and Merrillville via Portage and Hobart.

7. Adequate intermodal connectivity is critical for regional public transportation. Many South Shore stations are served by fixed route bus routes, particularly the Gary Metro Center and East Chicago stations. A “seamless” transportation network removes barriers to travel and feeder bus service should be an integral part of planning for the West Lake commuter rail corridor.
8. The vision provides high quality transit services to, or near, each of the metro, large, and medium centers identified in the planning process. Over the long term it will be worthwhile to study whether La Porte could be added to the system, if the level of demand for a high intensity service type between La Porte and Michigan City and/or Valparaiso increases over time.
9. New local bus services in areas where the population density would support it will be critical to connecting the livable centers with each other and the regional employment, shopping and services centers. Likely areas of such service include Schererville, Dyer and St. John; 45th Avenue corridor on the west side of Lake County; Hobart, Lake Station and New Chicago; Portage and South Haven; Chesterton, Burns Harbor and Porter; and a service corridor that encompasses Michigan City, La Porte and Westville.
10. Expanded capacity for public demand response paratransit in areas not served by fixed-route bus is a critical component of the regional system. Added capacity and increased coverage is especially important in all of La Porte and Porter Counties, and south Lake County.

The Transit Framework will require additional study and refinement, including objective and quantitative information on travel patterns, road and rail right-of-way availability, traffic conflicts, and capital and operating cost estimates. More extensive feasibility studies and alternatives analysis should be performed to refine the alignment, operating concepts, and other features that this vision may suggest for each element of the system. To support the Transit Framework and transit in Northwest Indiana in general, the 2040 plan offers policies including:

- Support and promote the creation of a local source of funding to be dedicated to public mass transit
- Support and promote a consolidated structure for the efficient and effective provision of public mass transit
- Support and promote transit-friendly land use practices
- Support and promote public transit services that connect the region with jobs, neighborhoods, shopping, medical, entertainment, recreational and educational facilities
- Support and promote increased capacity of public demand response services where fixed route is not feasible and/or available
- Support and promote increased accessibility for those who do not drive

If Northwest Indiana is to realize the vision of a vibrant, revitalized, accessible and united region, a dedicated source of long-term local funding must be created to support the types of services that will help achieve it. To achieve the regional vision and ensure the viability and longevity of a regional transit system, strong leadership and coalition building is necessary. The dialogue on the need for regional transit and a local dedicated funding source needs to be elevated beyond local politics and parochial interests and communicated to the state with one cohesive voice so that the needs of the entire region are met.

Northwest Indiana must have a regional transit service delivery mechanism. Maintaining multiple local operators has resulted in services responding to only localized needs at the expense of broader regional mobility needs. The success of regional public transit is dependent upon the participation of the entire region. The fragmentation of service occurs at the expense of employers, businesses, job seekers and others. An organization with members who have credibility, expertise and authority to make decisions is critical to meeting the challenges of funding and providing the regional transportation that will assure northwest Indiana’s future success.

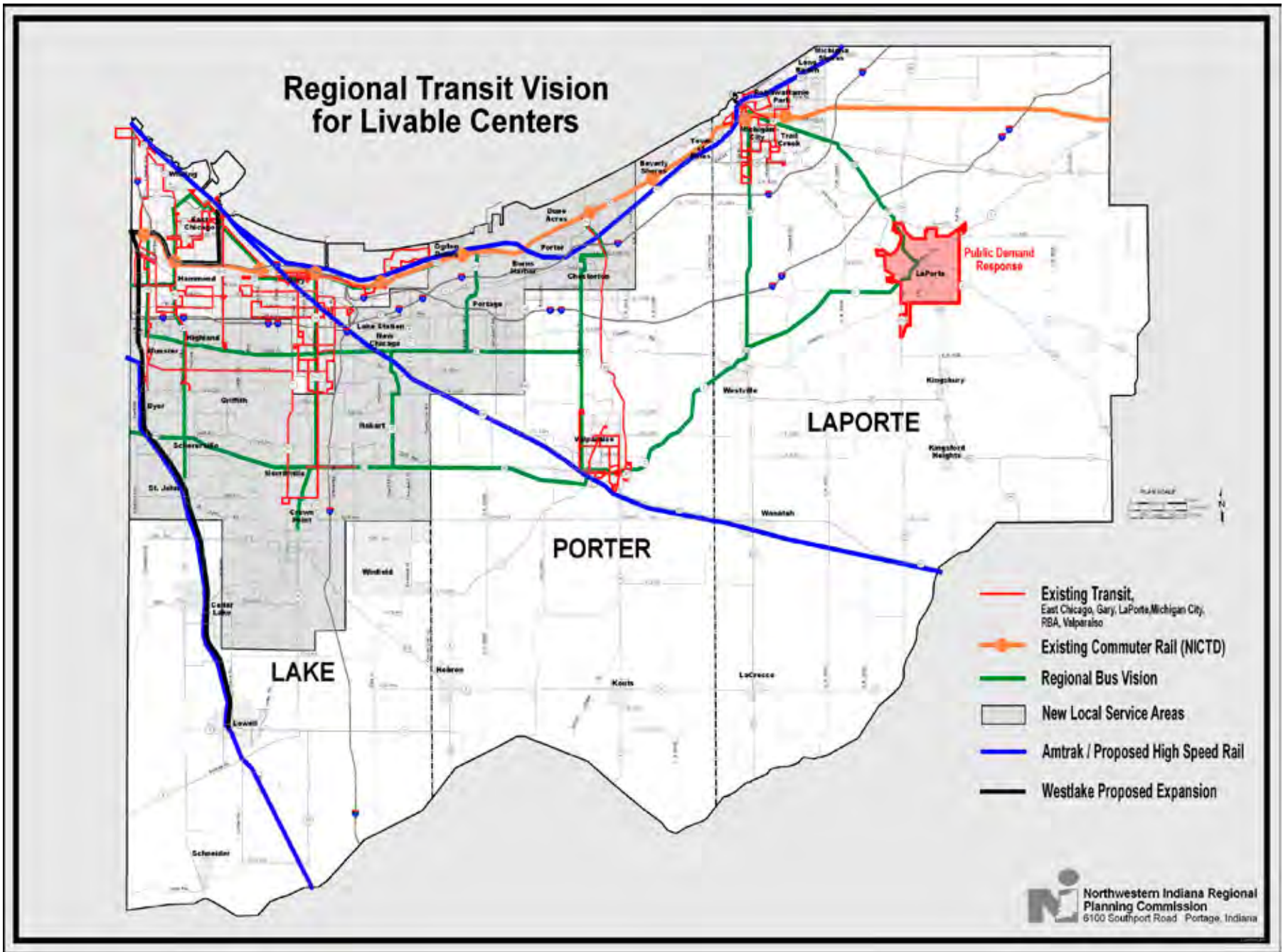


Figure II-24: Regional Transit Vision for Livable Centers

Non-Motorized Transportation

Major progress continues to take place regarding the development of routes and policies accommodating pedestrian, bicycle and canoe/kayak travel throughout all of Northwestern Indiana. Since the adoption of the CRP, several more off-road trail miles have been constructed, as well as new bike lanes installed on a number of region roadways. Coordination with neighboring regions in Illinois and Michigan continue to be fruitful with significant progress achieved on interstate trail routes. On a number of fronts, NIRPC continues to champion non-motorized transportation options towards the quality of life benefit for all region residents and visitors alike.

Land-Based Routes

Since the adoption of the CRP in 2011, nearly 40 miles of off-road, multi-purpose trails have been constructed, primarily in Lake and Porter Counties. Combined, the NIRPC region now boasts over 130 miles of trail, which traverse through 19 municipalities. Of these, the largest route is the Erie-Lackawanna (EL) Trail, which runs contiguously for 17 miles from downtown Hammond south to downtown Crown Point. Major segments of the EL Trail were completed over the last four years, including an underpass at U.S. 41 between Highland and Wicker Park, and a route around the Cabela's store in Hammond. In 2014, Hammond also installed a new pedestrian and bicycle bridge over 167th and Columbia Avenues, with future plans to include another bridge over Calumet Avenue near downtown.

Another major non-motorized addition in Hammond involved the construction of the Monon Trail from Douglas Street south to the Little Calumet River. The Monon connects with the EL Trail at Douglas, and a new bridge was constructed over the Little Calumet River in 2014, linking it to the existing Monon Trail segment in Munster. The bridge was built in partnership with the Little Calumet River Basin Commission, and opens up a contiguous five-mile trail between the two communities.

Another major facility experiencing growth was the Pennsy Greenway in both Munster and Schererville. In 2012, Schererville opened up a 2-mile segment in the heart of their community from Redar Park to Rohrman Park, which took advantage of an existing box culvert structure under US 30. The route has provided a traditionally disconnected community the opportunity to safely traverse between local destinations and several residential subdivisions. In Munster, the long-awaited connection of the Pennsy into Lansing, Illinois took place in 2013 during a "Golden Spoke" ceremony involving officials in both states. This connection became the first off-road trail connection between Indiana and a neighboring state.



The Oak Savannah (OS) Trail in north-central Lake County also experienced growth with the completion of the route through Hobart. For years a critical gap existed between the east and west segments of the OS, which is a Lake County Parks and Recreation-managed trail on either side of Hobart. The city took the initiative to finish the OS, and opened the final leg on the east side in late 2014.

In the Town of Porter, a major connection between the Prairie-Duneland Trail and Calumet Trail was completed in 2013. Named the Porter Brickyard Trail, this facility provides a critical link between a large trail corridor and the Indiana Dunes. The Brickyard Trail runs for nearly three miles, and includes two new pedestrian and bicycle bridges over US 12 and US 20, and utilizes an underpass at I-94. The Brickyard was developed in cooperation with the Indiana Dunes National Lakeshore who helped fund a portion of the route.

Figure II-21 shows an updated Priority and Regional Trails and Corridors map which highlights 34 corridors for potential trail development within the three counties.

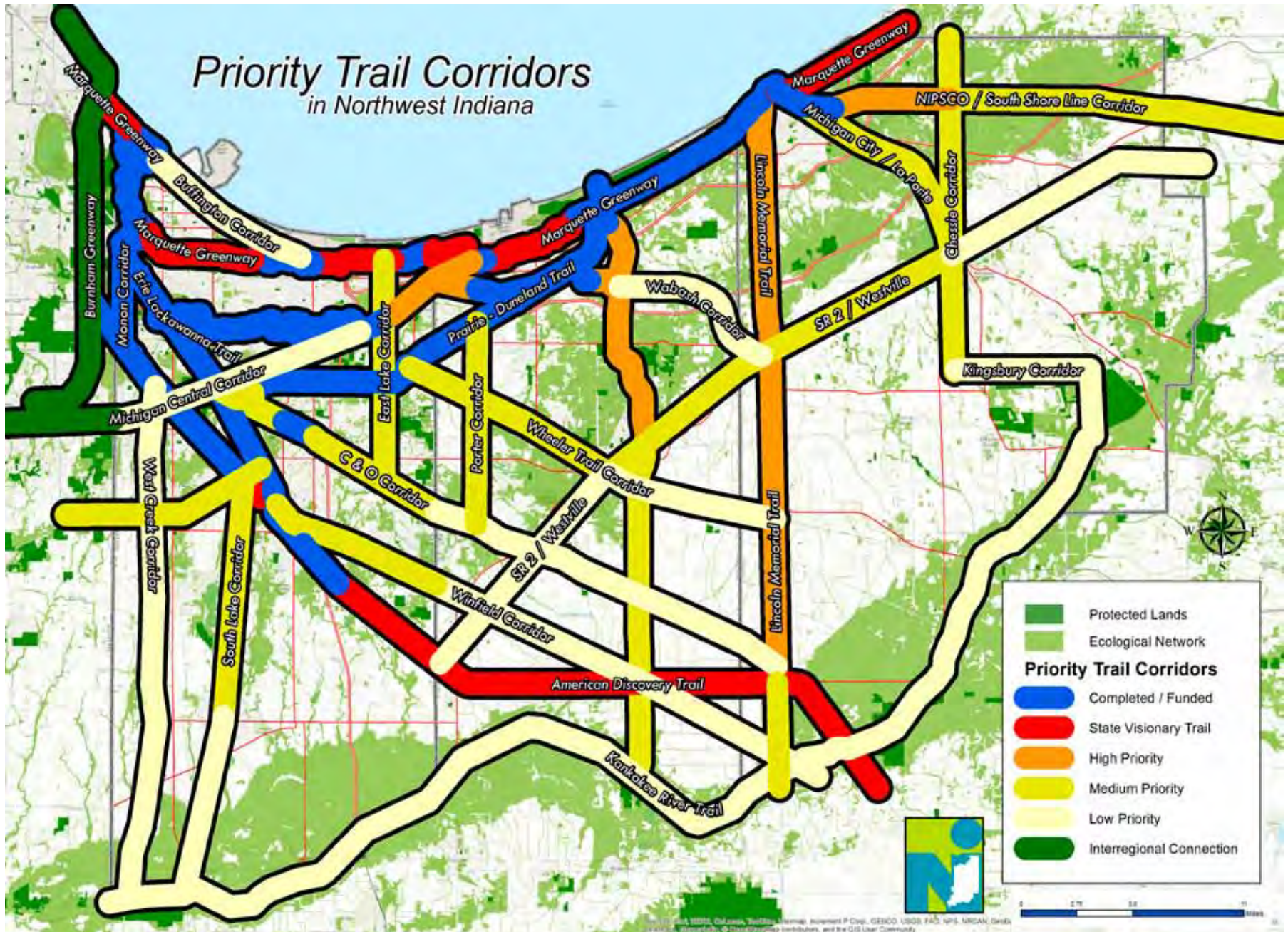


Figure II-21: Priority Trail Corridors in Northwest Indiana

Regional Development Authority (RDA) Investments

The Northwest Indiana Regional Development Authority (RDA) was created in 2005 by the Indiana General Assembly to invest in the infrastructure and assets of Northwest Indiana, with a particular focus on shoreline redevelopment. Since its creation, the RDA has invested well over \$100 million towards a number of brick and mortar projects in both Lake and Porter Counties near Lake Michigan. A major element of many of these projects have included off-road trails.

Since the 2040 CRP adoption, four major RDA-funded projects have been constructed that include significant trail mileage. These include the following examples:

- **Wolf Lake Trail:** A five-mile loop facility that rings around the Hammond side of Wolf Lake. The trail was included as an element of the redevelopment of Wolf Lake and Forsythe Parks. A landmark feature of the route includes a 1000-foot concrete boardwalk bridge over Wolf Lake near the Indiana Toll Road. The trail also includes a connection west into Illinois, and the nearby Burnham Greenway.



Wolf Lake Bridge in Hammond. Photo by Mitch Barloga.



George Lake Bridge. Photo by Mitch Barloga.

- **George Lake Bridge:** An iconic trail bridge between Hammond and Whiting was opened over U.S. 41 and New York Avenue. The George Lake Bridge provides a safe crossing at a dangerous intersection, with the added benefit of aesthetic enhancements. These include planters alongside the path on the bridge, and a steel lattice structure over each road crossed. Parking is also provided at the base of the bridge.
- **Dunes Kankakee Trail:** The first major section of the Dunes-Kankakee Trail, a facility which will connect the Indiana Dunes to the Kankakee River, was completed in 2015 between the Indiana Dunes State Park and the Indiana Dunes Visitors Center. A connection from the Dunes Park South Shore Line Station north to the State Park entrance was completed in 2013, and has proven extremely popular to visitors.
- **Marquette Park Trail:** In 2009 the RDA awarded the City of Gary funds to restore their Marquette Park facility as a modern attraction for residents and visitors alike. Part of the renovation included nearly two miles of newly installed trails, helping to connect the adjacent neighborhoods to amenities in the park proper.

Marquette Greenway Progress

In 2009, NIRPC released the *Marquette Greenway - National Lakeshore Connection Poster Plan* as part of the Centennial Anniversary of Daniel Burnham's landmark 1909 *Plan of Chicago*. The poster plan presented the first detailed route analysis of the Marquette Greenway between Calumet Park in Chicago, east into New Buffalo, Michigan – a grand total of approximately 50 miles. This tri-state route has been the visionary goal of leaders in all three regions, and picked up considerable momentum with the 2005 release of the Marquette Plan – Lakefront Reinvestment Strategy document, which highlighted the trail and detailed the proposed route.

The poster plan identified 20 planning segments of the Greenway that broke down largely along municipal boundaries. As of early 2015, over half of the route has either been built, or funded. All but one segment has been planned for future funding as well, including a stretch between Michigan City and New Buffalo that was the focus of several stakeholder meetings during 2014. NIRPC will continue to work with all relevant stakeholders – both public and private – bringing to fruition this major regional initiative.



Complete Streets Policy

In the summer of 2010, the NIRPC Board adopted a Complete Streets Policy and Guidelines for all projects attributable to NIRPC programmed federal funds. Complete Streets is a national movement to assure all roads safely accommodate all intended users of the corridor. These users include pedestrians, bicycles, transit, along with cars, trucks and buses. As part of the policy adoption, NIRPC staff incorporated Complete Streets standards into application forms for all federally-funded programs. Further cooperation with INDOT La Porte District staff assured compliance with policy standards to the most practicable extent possible by project sponsors.

NIRPC also promotes Complete Streets to all member communities and encourages them to adopt similar policies for local road projects. In 2014, the Town of Lowell became the first such NIRPC community to adopt a Complete Streets ordinance on the local level, with additional communities considering a policy for adoption within the year.

Water-Based Routes

NIRPC continues to partner with members of the Northwest Indiana Paddling Association (NWIPA) on expanding recreational opportunities for water trail enjoyment. NWIPA has become a regional leader in promoting water trail development throughout the entire NIRPC three-county region, and has accomplished a number of successful ventures over the last few years.

Of prime note includes opening up water trail routes along the Little Calumet River in the Town of Porter and through the Indiana Dunes National Lakeshore. Working with these entities along with the Shirley Heinz Land Trust, NWIPA aims to open up a 16-mile segment of river from the Burns Waterway in Portage nearly all the way to the Heron Rookery near Pines. This scenic stretch of river passes through some of the most bio-diverse regions in this country, and NWIPA hopes to make this a showcase for recreational use of our waterways and an example of what dedicated volunteers can do to improve the region.

NWIPA has also achieved success along the historic Kankakee River with the establishment of the first campground for paddlers in 2013. Current efforts are now underway to designate a 133-mile stretch of the river as a National Water Trail, which would run from South Bend west to the Illinois River. This would be in line with NWIPA's successful work in designating Lake Michigan as a National Recreational Trail in 2011.

Apart from the large regional visions of NWIPA, a number of municipalities have begun plans to open up their local waterways to canoes and kayaks. These include Trail Creek in Michigan City, where NWIPA is working on installing the first ADA-accessible ramp for disabled users, and Lowell, where Cedar Creek runs clear of major obstructions through the center of town.

Greenways+Blueways 2020

In 2015 NIRPC staff, with public input, began preparing updates to both the 2007 Greenways and Blueways Plan and the 2010 Ped and Pedal Plan. Entitled Greenways + Blueways 2020, NIRPC will combine aspects from both planning documents into a cohesive relationship along the major topics of conservation, recreation and transportation. The plan will incorporate elements of natural habitat preservation, with water and surface trails, and their relationship with non-motorized transportation uses. The ambitious goal will be to present a unified vision that uses off-road surface trails as a backbone of planning for both conservation and transportation uses that enhance both the physical environment, and personal health.



Paddlers on Lake Michigan. Photo by NWIPA.

Environmental Justice

The maps in this section update and enhance the Environmental Justice (EJ) section from the original 2040 Comprehensive Regional Plan. These include:

- An updated base map
- EJ Communities and Transportation Improvement Program (TIP) projects map
- EJ Communities and Livable Centers map

These reflect new developments since 2014, such as the new Creating Livable Communities (CLC) grant program and updated information such as changes in transit throughout the region and current TIP projects.

Environmental Justice Areas

Figure II-26 provides a basic representation of many of the inputs used in the analysis. For example, it does not show the entire EJ population, but it shows the areas with the greatest concentration of EJ populations in the yellow, blue, and green areas. It also shows the major destinations used for the proximity performance measures, along with major public transit and major roads that are in the Travel Demand Model (TDM). The analysis is based on the 455 Traffic Analysis Zones (TAZs) used in the TDM. The map does not show the total population or total employment of each TAZ, both of which were used in the analysis. The next section describes performance measures in detail.

Importantly, this map reflects the changes which have occurred in transit service since the adoption of the original 2040 CRP in 2011. In 2012, the City of Hammond lost its fixed route bus service after the Regional Bus Authority ceased operations there. Initially, nearly the entire City of Hammond was without fixed route transit service, but South Hammond (along with Munster and Highland) is now served by Gary Public Transportation Corporation's Lakeshore

South fixed route service. Additionally, in La Porte County the new Triangle Service between Michigan City, LaPorte, and Purdue North Central in Westville is expanding opportunities for access to jobs, education, and resources there. This map could change again depending on the progress of current proposals for transit in North Hammond, Hobart, and Portage.

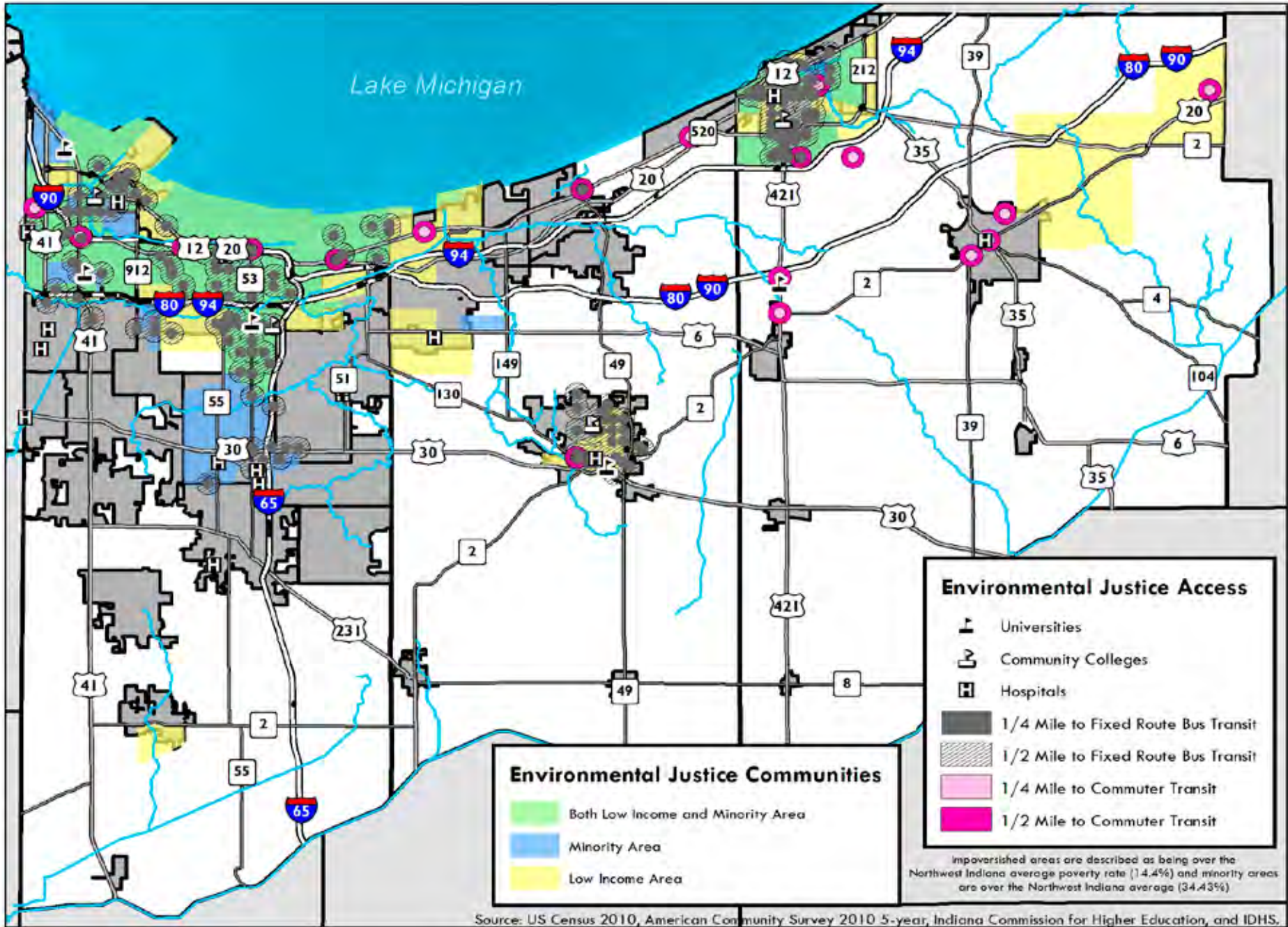
EJ & Transportation Projects

NIRPC's EJ analysis is based heavily on transportation. Figure II-27 shows the projects in NIRPC's current Transportation Improvement Program (TIP) as of December, 2014 in relation to Northwest Indiana's EJ communities. Projects are distributed throughout the region in both EJ and non-EJ communities, especially where there are centers of population. Clusters of projects also exist in areas where EJ populations are found.

EJ & Creating Livable Centers Program

In 2013, NIRPC, working with municipal representatives, conceptually defined livable centers in 40 of the 41 established municipalities in Northwest Indiana. These livable centers vary widely in scale, use, mix, and purpose within each community today, but all represent areas of regional significance. Some of these locations already exhibit many of the desirable features of livable centers, while others are works in progress. In 2014, seven communities were awarded the first grants under NIRPC's Creating Livable Communities (CLC) program. Of these seven communities in Lake and Porter Counties, two contain EJ communities: East Chicago and Gary.

Figure II-28 shows the livable centers defined under the CLC program. Each community has at least one main center, with larger cities and towns also having neighborhood centers. The EJ communities defined on the map overlap with several of these main and neighborhood centers, showing that the basic elements for livable centers exist. As work continues on the CLC, both EJ and non-EJ communities are positioned to benefit.



Source: US Census 2010, American Community Survey 2010 5-year, Indiana Commission for Higher Education, and IDHS.

Figure II-26: Environmental Justice Base Map

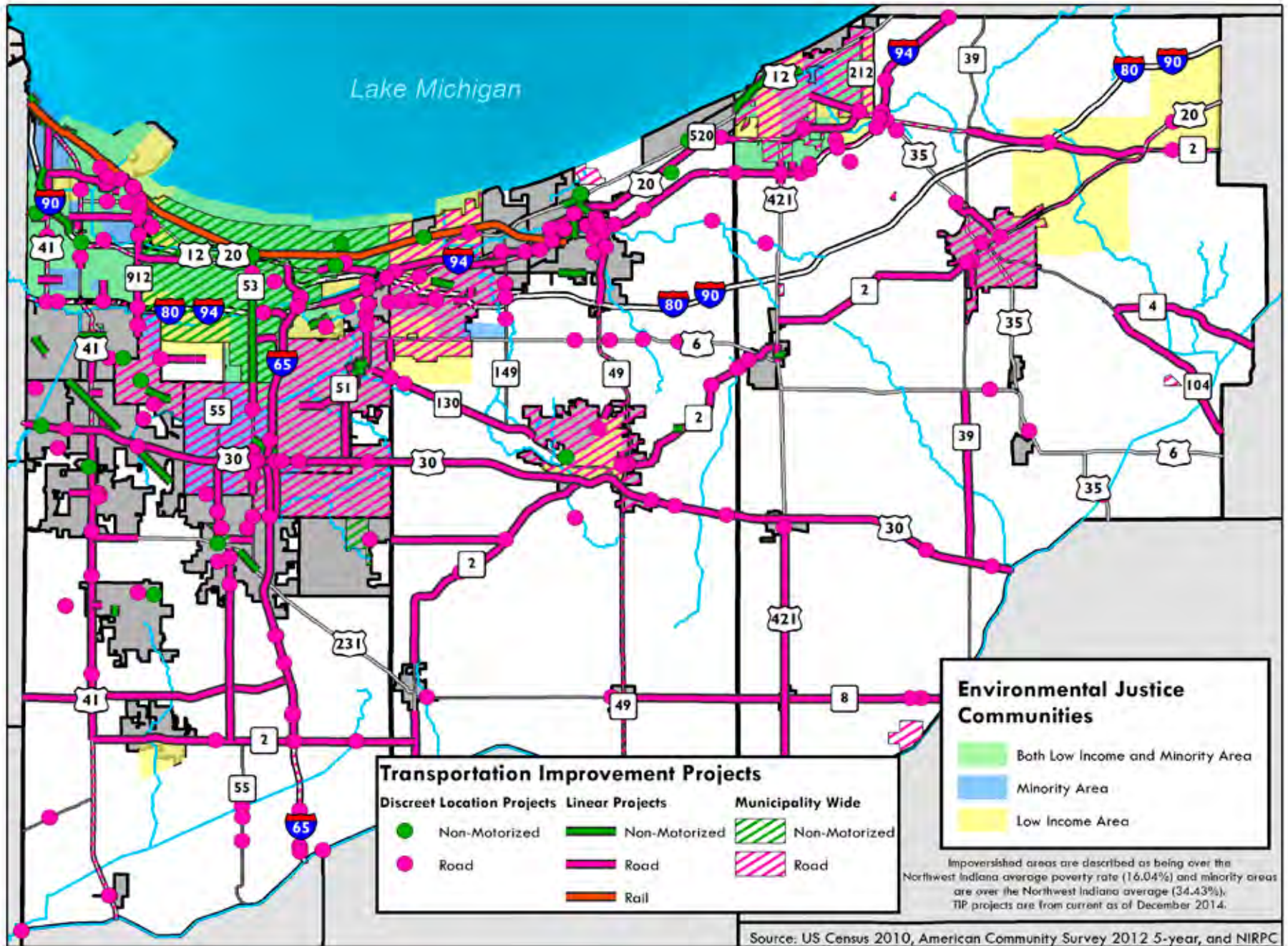


Figure II-27: EJ Communities and TIP Projects

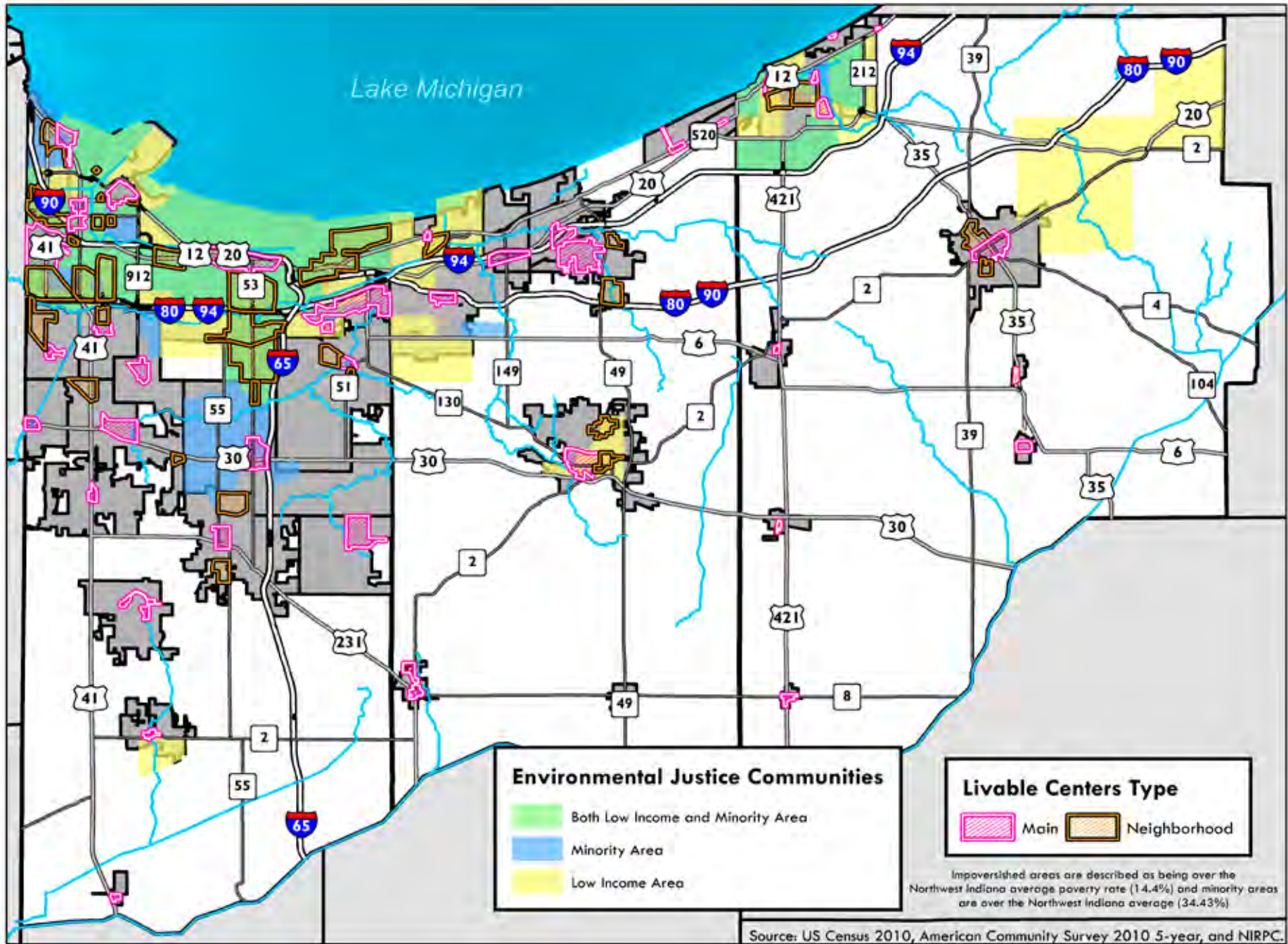


Figure II-28: EJ Communities and Livable Centers

Transportation Improvement Program Guidance (TIP)

Background

Each year Congress appropriates federal funds for surface transportation projects to two parts of the U.S. Department of Transportation. Highway-oriented funds are assigned to the U.S. Federal Highway Administration (FHWA) and public transit-related funds are appropriated to the U.S. Federal Transit Administration (FTA).

FHWA distributes their funds to each of the 50 states. The states, in turn, sub-allocate a portion of these funds to the Urbanized Areas¹ (UZAs) within the state. In Indiana, the Indiana Department of Transportation (INDOT) sub-allocates 25% of its total annual federal surface transportation highway funds to urbanized areas and other units of government in the state with surface transportation operations and maintenance responsibilities. The FTA allocates funds directly to urbanized areas.

In order to spend these federal funds, they must be assigned to individual projects and published in a Transportation Improvement Program (TIP) document. Northwest Indiana has two urbanized areas: Portions of Lake and Porter Counties lie within the Chicago, IL/IN

urbanized area. Northwestern LaPorte County (and extreme northeastern Porter County) is within the Indiana portion of the Michigan City/LaPorte, IN/MI urbanized area. NIRPC develops a TIP that shows how these federal surface transportation funds are to be spent.

¹ Areas of concentrated development with a population of 50,000 or more persons.

MPO-Allocated Federal Funds 2016-2019			
Annual Allocations by Urbanized Area and Type (2015 Base Year)			
Program	Chicago UZA	Michigan City-LaPorte UZA	Total
FHWA Surface Transportation Program	\$ 10,545,025	\$ 981,988	\$ 11,527,013
FHWA Highway Safety Improvement	2,752,256	308,261	3,060,517
FHWA Congestion Mitigation/Air Quality	3,345,842	587,952	3,933,794
FHWA Transportation Alternatives	961,809	93,608	1,055,417
Subtotal FHWA	\$ 17,604,932	\$ 1,971,809	\$ 19,576,741
FTA Sec 5307 Urban Area Formula Grants	11,510,760	900,010	12,410,770
FTA Sec 5337 State of Good Repair	15,078,820	-	15,078,820
FTA Sec 5310 Seniors & Persons with Disabilities	431,993	-	431,993
FTA Sec 5339 Bus Capital	448,756	-	448,756
Subtotal FTA	\$ 27,470,329	\$ 900,010	\$ 28,370,339
Total	\$ 45,075,261	\$ 2,871,819	\$ 47,947,080
INDOT Prior Year Balance (PYB) Funds*	23,431,537	2,603,847	26,035,384

* Non-Recurring--One Time Only.

Table II-9: MPO-Allocated Federal Funds

What is a Transportation Improvement Program?

A Transportation Improvement Program (TIP) is a short-term (four-year) list of federally funded surface transportation investment projects in a metropolitan planning area². Surface transportation projects include those for public transit, local and state highways, and bicycle/pedestrian projects. (The entire three-county area constitutes the metropolitan planning area.) A TIP will also include all regionally significant³ surface transportation projects funded with or without federal funds. All projects contained in a TIP must be consistent with the current regional transportation plan (included in NIRPC's CRP). Additionally, all capacity-increasing projects (such as added travel lanes projects or regionally significant new roadways) must be specifically identified in both the long range regional transportation plan and its accompanying Air Quality Conformity Determination. In summary, the TIP is the short range program of projects derived from the long range list of transportation improvements recommended in the transportation plan. Both the plan and TIP must conform to the State Implementation Plan for Air Quality.

Who Develops the TIP?

Regulations of the U.S. Department of Transportation require that Metropolitan Planning Organizations (MPOs), in cooperation with the State and affected transit operators, develop a transportation improvement program (TIP) for a designated metropolitan area. The Northwestern Indiana Regional Planning Commission (NIRPC) is the designated MPO for Northwest Indiana and is responsible for developing the TIP. There is an MPO in every metropolitan area of the country, including 14 in Indiana. Each MPO, however organized and governed, is responsible for developing a long-range plan and short-range program, which is a TIP.

² A metropolitan planning area is the land mass that is expected to become urbanized over a period of time.

³ NIRPC adopted policy defining Regionally Significant transportation projects.

Stakeholder Involvement in TIP Development

Eligibility to Receive Federal Surface Transportation Funds

Most federal surface transportation funds identified in a TIP are for either state highway projects, local highway or bicycle/pedestrian projects undertaken by units of government with surface transportation operations and maintenance responsibilities, and public transit operators. In some rare instances, when permitted by the federal funding program, there are projects for miscellaneous public entities (e.g., state universities, local school districts, park boards, etc.) or private sector interests.

Stakeholder Committees

For those federal funds that are assigned to the urbanized areas (either directly by FTA or indirectly by INDOT), the TIP development process is largely carried out by groups of stakeholder committees. Because NIRPC's metropolitan planning area includes two urbanized areas (one with a population over 1,000,000 and the other with a population under 200,000), there are two separate allocations of federal funds. Until very recently, NIRPC maintained separate stakeholder committees and project selection systems for each federal-aid category (e.g., highways, transit, highway safety, and Congestion Mitigation and Air Quality or CMAQ, and Transportation Alternatives). FHWA Transportation Alternatives (TAP) funds are separately allocated to each urbanized area but are combined into a single pool of funds (there is a single stakeholder committee instead of two).

Each stakeholder-level committee reviews and reaches consensus upon the project selection criteria and relevant selection policies to be used in the selection process. Each stakeholder committee reviews results of their project solicitation process and recommends a list of projects to be selected for funding. Projects are currently selected competitively under each funding category.

INDOT maintains its own separate project development processes for those highway and transit funds that it sub-allocates to local projects.

Transportation Policy Committee

Stakeholder committees report to the Transportation Policy Committee (TPC). The general purpose of the Transportation Policy Committee (TPC) is to oversee the development of a multi-modal system of transportation in Lake, Porter and LaPorte Counties. This is primarily done through TPC actions on regional transportation plans, transportation improvement programs, studies, analyses, planning work programs, and other special programs. The TPC functions primarily as a technical committee—it hears recommendations from transportation stakeholder committees and makes recommendations for official action to the Commission or Executive Board.

Functions of the metropolitan area transportation planning process of particular interest to the TPC are:

- Identifying and analyzing transportation problems
- Developing and recommending solutions
- Fostering the development of projects, monitoring progress
- Allocating available federal funds
- Selecting and prioritizing projects of regional significance
- Coordinating activities and projects among local units of government within northwest Indiana with adjacent areas and with state and federal agencies.

Comprehensive Regional Plan (CRP) Impact on TIP Project Selection

The CRP establishes one vision statement, 14 goal statements, and 94 objectives. These were adopted by the Commission in December 2010 and are found in an appendix to the plan. Many, but not all of

the objectives offer specific guidance pertaining to the investment of U.S. Department of Transportation funds.

Following the December 2010 solicitation for capacity increasing projects, a project selection process was developed around a core set of 30 indicators that measured the impact of each project in relation to the plan's 94 objectives. These 30 indicators (also called criteria elements) were divided into five broad thematic areas. Evaluation criteria were established for each. The same five thematic areas used in the 2011 process for the Plan (including the 30 indicators) were overlaid onto the existing project selection systems within each funding category.

- Mobility Improvements: Six (6) Criteria Elements (9 Points)
- Transportation & Land Use: Four (4) Criteria Elements (6 Points)
- Highway Safety: Two (2) Criteria Elements (3 Points)
- Environmental: Seven (7) Criteria Elements (9 Points)
- Quality of Life: 11 Criteria Elements (13 Points)

The one key difference between the original process criteria and that used in the selection of new projects for the TIP in 2011 and 2013 was the elimination of the weighting mechanism that gave higher priority to some geographic areas over others. NIRPC's experience with STP Group I solicitations in 2011 and 2013, and with Congestion Mitigation and Air Quality (CMAQ), Highway Safety Improvement Program (HSIP), and Transportation Alternatives Program (TAP) solicitations in 2014, was that the system did not perform as intended. The most significant issue was that the 30 indicators did not function well as anticipated in evaluation or scoring mechanisms. In some cases these criteria elements were anecdotal and not data-driven. There were few distinguishing differences between projects submitted. Additionally, prioritizations of certain safety, congestion relief, and Livable Centers projects made in separate sections of the plan were not retrofitted into the various project selection systems.

In 2014 INDOT overhauled the MPO funding programs and now permits NIRPC to spend federal aid dollars where they are needed. The long-term goal (for the 2019 Plan update) is to retool the now separate (multiple) project selection systems into a single unified system that directly reflects the Plan's spending priorities in a comprehensive manner.

In 2016 the NIRPC Board will begin implementing a new NIRPC committee structure to improve transparency, accountability, and fiscal control. Over the next several years, the functions of the existing CRP Implementation Committee will be combined with the TPC to enable them to guide the development of the project selection system(s), establish federal-aid spending priorities, and to serve as the last step before Commission endorsement on matters related to interpretation of the Plan. These changes should be in full effect for the 2019 Plan and TIP Update.

General TIP Policies - TIP Updates: Content, Format & Frequency

The 2007 U.S. DOT Transportation Planning regulations require that the metropolitan area TIP's be updated at least every four years. NIRPC will normally update its TIP every other year. TIP updates are always done in written form (i.e., published), exposed to public comment, and acted on by the NIRPC Transportation Policy Committee and NIRPC Board. Each Update will be prepared within a time frame that is consistent with INDOT's normal Indiana State Transportation Improvement Program (INSTIP) development and approval cycle.

Incomplete projects from a prior TIP will be included in the updated TIP as appropriate and listed as an "ongoing" or "carryover" project in Year #1 of the new TIP. The purpose of this will be to maintain current TIP support for such projects in the event that additional funds need to be assigned to the project. Planning projects funded with formula (FHWA STP and FTA Section 5307) funds will appear in the TIP for informational purposes only. The controlling document for these projects is the Unified Planning Work Program (UPWP).

Since the development of the *2020 Transportation Plan* in 1998, funding targets have been developed and used within each category of federal funding.

Stakeholders first reach consensus on the funding targets for each category of federal aid and then construct a project selection system beneath each target. For instance, the STP I has six funding targets (Capacity Expansion, Roadway Reconstruction, Signals, Intersection Improvements, Bridges, and Other). Funding targets are intended to be flexible tools for ensuring that each project selection process reflects current needs and demand. They also serve to ensure the submission and selection of a variety of projects across the urbanized area. Stakeholder committees are required to review the funding targets for appropriateness prior to each solicitation for projects. With the changes in the NIRPC committee structure coming in the next few years, it is anticipated that there will be a complete revision of all project selection processes by 2019 to conform to the anticipated new guidance and direction.

The current Plan requires that the existing transportation network be preserved and states that "investment priority" is to be given to projects involving network preservation and maintenance. For the purpose of programming federal funds in the TIP, this means "at a level of funding greater than that provided for network expansion." Functionally, at least 51% of the STP and Section 5307 funds programmed for new projects added to the TIP (during each update) must be for preservation and maintenance purposes.

TIP Update Procedures

Each TIP will encompass a four-year period—identifying projects that will receive federal funding over four State Fiscal Years. Stakeholder committees may recommend that certain projects be placed on an "illustrative list" of projects that is separate from the official TIP. The NIRPC Board will determine the status of these projects (if any) in its resolution adopting the new TIP.

The general process to be followed in performing a TIP Update follows:

- *Stakeholder Review/Modification of Selection Systems.* The stakeholder committees will be responsible for reviewing and updat-

ing each existing project selection system prior to a TIP Update. The purpose of this effort is to ensure that the subject system remains consistent with the Regional Transportation Plan, federal requirements, and local priorities.

- *Solicitation for Projects.* The Transportation Policy Committee (TPC) may review the Project Selection systems and authorize a solicitation for projects prior to a TIP Update. Alternatively, staff may issue the solicitation and inform the TPC afterward. A notice of each solicitation will be posted on the NIRPC website and emailed to stakeholders and other individuals and groups whose e-mail address is on file.
- *NIRPC Staff Review of Applications.* The Notice of Funding Availability (NOFA) document for each solicitation will disclose how NIRPC staff will handle and process the applications received, including procedures to follow when applications are received incomplete or late. Applicants will be afforded an opportunity to correct errors or to supply missing or supplemental information within a time frame made known in the solicitation document or NOFA.
- *Financial Constraint.* Federal regulations require that Transportation Improvement Programs be financially constrained by year and include a financial plan that:
 1. Demonstrates how the approved TIP can be implemented;
 2. Indicates resources from public and private sources that are reasonably expected to be made available to carry out the TIP;
 3. Recommends any additional financing strategies for needed projects and programs.

NIRPC will consult with the public transit operators of record and INDOT in developing projections of available funds for a TIP Update. Federally funded projects included in the first year of the TIP shall not exceed the level of funding actually committed by FTA, FHWA, and other federal agencies. Federally funded projects included in the second through fourth year of the TIP may not exceed levels of funding committed, or reasonably expected to be available.

- *Stakeholder Committee Selection of New Federal-Aid Projects.* Each stakeholder committee charged with the responsibility of reviewing and recommending new federal-aid projects will reach consensus on the list of projects to receive funding and recommend a (draft) program of projects to the Transportation Policy Committee.
- *NIRPC Approval of TIP.* The Transportation Policy Committee (TPC) will be provided a draft version of the updated TIP (including the program of projects or “agreed-to” list) and release it for public comment. The TPC will afterward consider all public comments received, authorize a response to each, and then forward the edited draft TIP and public comments (and responses issued thereto) to the NIRPC Board with a recommendation that it be approved. The Commission (or Executive Board) will take action to adopt the TIP. Alternatively, the TPC may decline or opt to not recommend the draft TIP to the NIRPC Board for adoption. The NIRPC Board may also decline or opt to not adopt the draft TIP pending the resolution of outstanding public comments or for other issues of substance.
- *NIRPC Public Participation Plan.* In 2014 an updated Public Participation Plan was adopted, which identifies three types of TIP amendments: minor, major and emergency-based. Administrative modifications were also identified, which involve changes to air quality-exempt, non-Regionally Significant projects already in the TIP.



Financial Capacity and Projections

The development of reliable funding estimates is essential to the development of a realistic transportation plan that is consistent with the federal requirements for fiscal constraint. Funding for operating, maintaining and improving the transportation system is available from federal, state and local sources. In accordance with the provisions of 23 CFR §450.322, a metropolitan regional transportation plan must demonstrate how the transportation plan is to be implemented:

“System-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways.

All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.

Revenue/Cost estimates that support the transportation plan must use an inflation rate(s) to reflect year of expenditure dollars.”

Federal transportation funding from the U.S Department of Transportation is derived primarily from federal taxes imposed on motor fuels. The State of Indiana derives transportation funding from a motor fuels tax, vehicle license, title and driver license fees, motor carrier surtax, tolls and state general sales and use tax. Local transportation funding is derived from a variety of sources including user fees and fares, local property and income taxes, vehicle registration fees, casino revenues and special purpose bonds.

Routine maintenance of existing local highway infrastructure is typically funded with revenues from those state and local sources permitted by the Indiana General Assembly. These funds are considered to be marginally adequate for maintaining the local highway infrastructure in its current condition with funding for local highway reconstruction, rehabilitation and expansion historically provided from limited state and federal sources. The maintenance of designated Interstate, national and state highways is the jurisdiction of the Indiana Department of Transportation (INDOT).

Annual local revenue for roadways is about \$100.5 million per year for local units of government (\$80.9 million for operations/maintenance and \$19.6 million per year in federal aid). A further \$143.5 million is expected per year for state projects. Annual transit revenue of \$53.9 million are also forecast. In total, about \$297.9 million will be received each year to maintain and operate the entire three-county transportation network, or about \$7.5 billion over the life of the plan.

State Sources of Revenue

Resources for operations and maintenance costs for the existing INDOT highway network were most recently quantified in a January 2014 update of their 2014-2017 Statewide Transportation Improvement Program (STIP). The Indiana General Assembly appropriates funds into four expense categories for routine operations and maintenance in the state’s biennial budget. Actual budgeted and projected expenses for the 2014-2015 biennium and annual averages are shown in Table II-10.



The portion of INDOT’s operations and maintenance expense attributable to Northwest Indiana are estimated. These estimates are based on the percentage of INDOT system miles that are located in Lake, Porter, and LaPorte Counties. The most recent data (from 2007) indicates that about 8.2% of all INDOT road miles are within the region. NIRPC estimates an investment of just over \$700 million over the life of the plan for Operations and Maintenance.

NIRPC used the 2014 STIP data and the 8.3% multiplier to project the level of spending on construction projects from 2016-2040. As shown in the Table II-11, NIRPC projects that INDOT will invest just under \$2.9 billion in construction projects over the life of the plan.

Total investment by INDOT for Operations, Maintenance, and Construction is projected at \$143,500,357 annually and \$3,587,508,928 over the life of the plan.

Local Sources of Revenue - Highways

Routine maintenance, operations and improvements of existing local road and highway infrastructure is typically funded with revenues from local sources. For the purpose of the 2040 Plan, the sources of revenue and cost estimates were derived from the 2013 Indiana State Board of Accounts Audit Reports, as reported on Indiana's Gateway for Governmental Units <https://gateway.ifonline.org/>. Revenue for the period 2016-2040 have been flat-lined with no inflation factor applied. Expense data was inflated at one quarter of one percent (0.025%) per year.

The principal source of funds for local road and street construction and maintenance operations comes from the Motor Vehicle Highway (MVH)

Projected INDOT Investments for Highway Operations and Maintenance 2016-2040				
Fund	2014-2017 Total	Average Per Year (Statewide)	Average per Year (Region)	2016-2040 Total (Region)
Highway Operating				
Personal Services	\$ 836,544,996	\$ 209,136,249	\$ 17,149,172	\$ 428,729,310
Other Operating Expense	227,252,424	56,813,106	4,658,675	116,466,867
Highway Vehicle & Road Maintenance Equipment	61,200,000	15,300,000	1,254,600	31,365,000
Highway Maintenance Work Program	268,000,000	67,000,000	5,494,000	137,350,000
Subtotal Highway Operations & Maintenance	\$ 1,392,997,420	\$ 348,249,355	\$ 28,556,447	\$ 713,911,178

Table II-10: Projected INDOT Investments for Highway Operations and Maintenance

Projected INDOT Investments for Highway Construction 2016-2040				
Fund	2014-2017 Total	Average Per Year (Statewide)	Average per Year (Region)	2016-2040 Total (Region)
Highway Construction--State Funds	2,963,420,000	740,855,000	60,750,110	1,518,752,750
Highway Construction--Federal Funds	2,643,600,000	660,900,000	54,193,800	1,354,845,000
Subtotal Highway Construction	\$ 5,607,020,000	\$ 1,401,755,000	\$ 114,943,910	\$ 2,873,597,750

Table II-11: Projected INDOT Investments for Highway Construction

and Local Road and Street (LRS) Accounts. Under Indiana law, the following accounts serve as the basic local sources of revenue :

Motor Vehicle Highway (MVH)

This accounts for the construction and maintenance of streets, alleys and the operations of street maintenance activities of the public works department. Resources are derived from state motor vehicle (gasoline tax) distributions. It also includes the purchase of materials, labor and/or equipment required in the maintenance and construction of roads and bridges.

Local Road and Street (LRS)

This accounts for the operation and maintenance of the local and county road and street systems. Resources are derived from state gasoline tax distributions. These funds are used for engineering, construction or reconstruction of roads, streets or bridges.

Cumulative Capital Improvement Funds (CCI)

The money from this fund may be used for road construction or improvement, acquisition of land or right-of-way for streets, roads, alleys, sidewalks, thoroughfares and maintenance. CCI is collected from the state cigarette tax.

Cumulative Capital Development Funds (CCD)

This fund provides money for any purpose for which property taxes may be imposed.

Cumulative Bridge Fund

This source of revenue provides funds for the cost of construction, maintenance, and repair of county highway bridges, approaches, and grade separations. County Commissioners may levy a tax in compliance with IC 6-1.1-41 in assessed valuation of all taxable personal and real property within the county.

Expense Transfers from General Fund and Other Sources

Indiana law requires all funds to be balanced at the end of the year. When over-spending has occurred in one or more accounts, a transfer of funds from another account is made so that the account will balance (i.e., expenses will equal revenues).

Local Financial Summary

The 2040 NIRPC projections show that in each year there will be about \$77.3 million in revenues and \$72.6 million in expenses. For the period of the plan (2012-2040), NIRPC projects revenue approaching \$2.1 billion and expenses of \$1.8 billion (see Table II-12) With no changes in the funding mechanisms, there is and will likely be sufficient local financial resources to maintain the current rate of expenditure for operations and maintenance.

However, in most cases this funding is less than the minimum needed in order to bring the entire local highway network to a state of good repair and maintain it in that condition. Estimates indicate not more than 15 percent of the total funds expended on local highway maintenance and operations were expended on preventative maintenance work beyond small hole-patching, crack sealing, and other similar low-cost, minimal maintenance methods. In other words, about \$13.0 million (of \$72.6 million) was being expended each year on local, non-federal aid construction projects. At this rate of expenditure, existing resources would be sufficient to mill and resurface only about half of the region's 5,145 miles of locally owned roadways over a 25-year period.

With no additional sources of revenue it will take at least 50 years to mill and resurface all of the region's roads once. Data supplied to the General Assembly in 2013 indicated that an additional \$84.7 million was needed annually for roadway maintenance and an additional \$82.1 million was needed for bridge replacement.

(Data does not include sources such as improvements in highway infrastructure made by municipal water and sewer agencies, improvements made with federal funds from either the U.S. Department of Housing and Urban Development (HUD), the U.S. Department of Transportation, U.S. Economic Development Administration (EDA), local Tax Increment Finance (TIF) Districts or other governmental bonding entities.)

Highway Operations and Maintenance: Baseline Annual Financial Data by Fund for Counties and Municipalities
Base Year: 2013

<i>(For 2012)</i>	MVH (Highway)		LRS		CCI		CCD		Cum Bridge		Expense Transfers
	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	
Lake County	\$ 4,999,855	\$ 4,941,171	\$ 810,130	\$ 762,641	\$ -	\$ -	\$ 9,483,240	\$ 8,327,811	\$ 3,002,973	\$ 1,545,825	\$ -
Cedar Lake	338,523	309,514	125,715	104,380	30,661	35,181	181,993	289,707	-	-	61,890
Crown Point	2,495,320	2,096,123	363,629	357,587	76,041	163,359	716,174	1,624,885	-	-	590,790
Dyer	437,357	382,354	158,293	158,355	60,135	-	344,928	559,891	-	-	99,887
East Chicago	818,842	815,624	270,973	300,749	78,767	99,134	-	-	-	-	46,925
Gary	2,403,441	2,263,087	976,258	1,391,271	213,300	242,183	358,972	73,367	-	-	17,937
Griffith	759,681	757,128	163,463	125,061	52,036	16,203	-	-	-	-	-
Hammond	2,612,188	3,471,251	781,255	991,633	214,382	399,469	218,629	12,562	-	-	1,048,461
Highland	960,418	921,838	294,961	358,204	71,474	68,102	623,060	362,819	-	-	-
Hobart	1,316,092	1,345,492	317,529	-	77,071	-	825,232	1,139,899	-	-	-
Lake Station	731,304	651,238	147,575	258,538	33,345	74,951	-	-	-	-	72,503
Lowell	952,482	865,283	88,841	61,035	24,603	26,217	141,373	-	-	-	-
Merrillville	915,507	888,029	369,122	379,686	438,482	369,939	647,565	188,194	-	-	-
Munster	1,654,694	1,633,224	264,668	251,231	67,751	121,888	283,251	252,748	-	-	-
New Chicago	58,759	72,272	25,585	6,497	5,398	12,705	-	-	-	-	1,732
St. John	605,144	540,294	166,691	118,509	39,387	17,467	157,605	261,883	-	-	-
Schererville	1,268,353	1,064,690	283,097	218,858	77,559	69,318	700,441	761,080	-	-	-
Schneider	22,324	15,371	6,175	3,144	735	2,433	-	-	-	-	-
Whiting	136,727	75,397	45,490	59,162	13,254	-	-	-	-	-	-
Winfield	348,582	298,232	58,782	27,865	11,625	11,571	125,056	93,535	-	-	-
Totals	\$ 23,835,593	\$ 23,407,612	\$ 5,718,232	\$ 5,934,406	\$ 1,586,006	\$ 1,730,120	\$ 14,807,519	\$ 13,948,381	\$ 3,002,973	\$ 1,545,825	\$ 1,940,125

<i>(For 2012)</i>	MVH (Highway)		LRS		CCI		CCD		Cum Bridge		Expense Transfers
	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	
Porter County	\$ 3,476,776	\$ 4,130,821	\$ 963,166	\$ 562,317	\$ -	\$ -	\$ 1,706,527	\$ 2,129,918	\$ 640,789	\$ 1,106,752	\$ 1,142,550
Beverly Shores	106,041	91,801	25,683	27,588	1,626	614	10,574	3,208	-	-	-
Burns Harbor	152,420	48,995	15,960	1,600	3,066	-	32,438	84,810	-	-	-
Chesterton	861,508	942,542	131,350	70,775	34,670	-	270,731	186,887	-	-	-
Dune Acres	5,934	36,470	5,605	8,594	615	1,012	9,840	11,406	-	-	35,488
Hebron	99,715	96,918	35,429	43,568	9,877	15,256	25,345	32,331	-	-	17,707
Kouts	89,647	76,082	19,665	20,227	4,984	3,088	5,779	8,953	-	-	-
Ogden Dunes	198,591	178,888	18,283	18,304	2,944	1,665	-	-	-	-	-
Portage	2,947,799	3,002,930	353,379	480,880	694,677	597,000	429,944	470,823	-	-	125,834
Porter	539,227	606,862	59,145	5,712	12,885	-	100,651	79,502	-	-	-

Table II-12: Highway Operations and Maintenance - Baseline Data for Counties and Municipalities (Part 1)

(For 2012)	MVH (Highway)		LRS		CCI		CCD		Cum Bridge		Expense Transfers
	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	Receipt	Disbursement	
Town of Pines	31,581	20,611	11,379	13,410	1,878	2,630	-	-	-	-	-
Valparaiso	1,412,266	1,562,136	345,217	610,690	84,156	-	281,196	258,400	-	-	308,391
Totals	\$ 9,921,505	\$ 10,795,056	\$ 1,984,261	\$ 1,863,665	\$ 851,378	\$ 621,265	\$ 2,873,025	\$ 3,266,238	\$ 640,789	\$ 1,106,752	\$ 1,629,970

LaPorte County	\$ 3,447,902	\$ 3,060,659	\$ 740,934	\$ 635,001	\$ -	\$ -	\$ 444,626	\$ 110,798	\$ 893,869	\$ 1,184,990	\$ -
Kingsbury	6,466	-	2,733	3,000	642	197	-	-	-	-	-
Kingsford Heights	40,204	33,026	17,195	14,125	3,956	20,000	2,906	-	-	-	2,890
La Crosse	15,075	14,610	7,839	3,151	1,462	-	1,175	-	-	-	-
LaPorte	1,037,388	853,571	205,938	142,526	58,490	6,503	436,036	222,032	-	-	-
Long Beach	485,790	376,385	16,364	-	15,347	-	40,816	-	-	-	-
Michiana Shores	11,184	-	15,619	17,808	8,830	-	3,148	-	-	-	-
Michigan City	2,089,591	1,943,950	299,556	291,904	83,590	102,576	909,014	789,123	-	-	-
Pottawattamie Park	7,469	3,000	5,934	-	-	-	-	-	-	-	-
Trail Creek	92,700	107,771	31,541	49,981	2,878	14,297	10,907	60,000	-	-	94,023
Wanatah	292,951	110,532	11,427	-	2,780	-	14,650	1,714	-	-	-
Westville	149,156	172,626	44,743	46,868	15,524	15,000	19,045	-	-	-	6,026
Totals	\$ 7,675,876	\$ 6,676,130	\$ 1,399,823	\$ 1,204,364	\$ 193,499	\$ 158,573	\$ 1,882,323	\$ 1,183,667	\$ 893,869	\$ 1,184,990	\$ 102,939

REVENUES										
County	MVH	LRS	CCI	CCD	Cum Bridge	Other	Total Revenues	Expense Transfers	Adjusted Total Revenues	Estimated 2016-2040 Revenue Projection
Lake	\$ 23,835,593	\$ 5,718,232	\$ 1,586,006	\$ 14,807,519	\$ 3,002,973	\$ -	\$ 48,950,323	\$ 1,940,125	\$ 50,890,448	\$ 1,272,261,200
Porter	9,921,505	1,984,261	851,378	2,873,025	640,789	-	16,270,958	1,629,970	17,900,928	447,523,200
Laporte	7,675,876	1,399,823	193,499	1,882,323	893,869	-	12,045,390	102,939	12,148,329	303,708,225
Totals	\$ 41,432,974	\$ 9,102,316	\$ 2,630,883	\$ 19,562,867	\$ 4,537,631	\$ -	\$ 77,266,671	\$ 3,673,034	\$ 80,939,705	\$ 2,023,492,625

COSTS (EXPENSE)										
County	MVH	LRS	CCI	CCD	Cum Bridge	Other	Total Costs (Expense)			Estimated 2016-2040 Costs (Expense) Projection
Lake	\$ 23,407,612	\$ 7,158,029	\$ 3,061,050	\$ 7,386,014	\$ 2,812,369	\$ -	\$ 43,825,074			\$ 1,095,626,844
Porter	10,795,056	1,863,665	621,265	3,266,238	1,800,279	-	18,346,503			458,662,575
Laporte	6,676,130	1,204,364	158,573	1,183,667	1,184,990	-	10,407,724			260,193,100
Totals	\$ 40,878,798	\$ 10,226,058	\$ 3,840,888	\$ 11,835,919	\$ 5,797,638	\$ -	\$ 72,579,301			\$ 1,814,482,519

Table II-12: Highway Operations and Maintenance - Baseline Data for Counties and Municipalities (Part 2)

Sources of Revenue - Public Transit

Public transit in Indiana is financed through a variety of funding mechanisms that vary in accordance with the transit operator's organizational structure. Northwest Indiana has five (5) transit operators that are departments of a unit of government, one (1) that is organized under Indiana's Public Transportation Corporation statute, three (3) that are not-for-profit corporations, and (1) one commuter rail operator. Each is governed under a different set of rules. Table II-13 is a summary of projected public transit investments in northwest Indiana over the 25-year life of the plan.

Public transit is financed, in general through a combination of multiple sources of funding—some of which subsidize the service itself

and some of which subsidize the service user. Table II-14 shows projected transit revenue by type over the life of the plan.

Expected Federal Aid for Local Projects

NIRPC anticipates that funding in all federal aid categories will be flat-lined for the foreseeable future. Amounts shown are reflected in "Year of Expenditure" amounts.

NIRPC predicts that approximately \$48 million in federal aid will be received annually under 10 different types of federal aid from the U.S. Department of Transportation. The total funding anticipated over the life of the plan is about \$1.2 billion. Of this total, NIRPC projects that about 86% (\$1.04 billion) will be used for reconstruction, preservation, and maintenance.

Projected Public Transit Operating and Capital Expenses 2016-2040				
Transit Operator	Base Annual Operating Expense (2013)	Base Annual Capital Investment (2013)	Total: Base Annual Operating Expense & Capital Investment	Life of Plan Operating Expense & Capital Investment
East Chicago Transit	\$ 1,054,128	\$ 250,000	\$ 1,304,128	\$ 32,603,200
Gary Public Transportation Corporation	5,873,832	3,911,883	9,785,715	244,642,875
Michigan City Transit	1,325,492	394,000	1,719,492	42,987,300
Valparaiso V-Line	1,572,052	233,000	1,805,052	45,126,300
City of LaPorte (TransPorte)	566,417	160,000	726,417	18,160,425
NIRPC Subrecipients*	3,107,562	552,977	3,527,854	88,196,350
NIRPC	484,744	-	484,744	12,118,600
NICTD Commuter Rail	39,554,146	15,175,590	54,729,736	1,368,243,400
LaPorte County Commuter Bus (Triangle)*	393,710	232,000	625,710	15,642,750
Totals	\$ 53,932,083	\$ 20,909,450	\$ 74,708,848	\$ 1,867,721,200

* Includes North Township Government (Lake County), Opportunity Enterprises, Inc., Porter County Aging & Community Services, Inc., and South Lake County Community Services, Inc..

Table II-13: Projected Public Transit Operating and Capital Expenses

Projected Public Transit Operating Revenue 2016-2040						
Transit Operator	Farebox Revenue (2013)	Local Assistance (2013)	State Assistance (2013)	Federal Assistance (2013)	Total Annual Revenue	Total Revenue over Life of Plan
East Chicago Transit	\$ -	\$ 390,525	\$ 290,319	\$ 373,284	\$ 1,054,128	\$ 26,353,200
Gary Public Transportation Corporation	772,355	1,287,908	728,603	3,084,966	\$ 5,873,832	\$ 146,845,800
Michigan City Transit	95,299	374,444	247,144	608,605	\$ 1,325,492	\$ 33,137,300
Valparaiso V-Line	340,531	775,118	148,693	307,710	\$ 1,572,052	\$ 39,301,300
City of LaPorte (TransPorte)	101,948	178,852	70,430	215,187	\$ 566,417	\$ 14,160,425
NIRPC Subrecipients*	500,643	759,630	973,922	873,367	\$ 3,107,562	\$ 77,689,050
NIRPC Subrecipient Oversight	-	96,949	-	387,795	\$ 484,744	\$ 12,118,600
NICTD Commuter Rail	19,341,086	3,741,506	11,885,600	4,585,954	\$ 39,554,146	\$ 988,853,650
LaPorte County Commuter Bus (Triangle)*	-	78,742	-	314,968	\$ 393,710	\$ 9,842,750
Totals	\$ 21,151,862	\$ 7,683,674	\$ 14,344,711	\$ 10,751,836	\$ 53,932,083	\$ 1,348,302,075

* Includes North Township Government (Lake County), Opportunity Enterprises, Inc., Porter County Aging & Community Services, Inc., and South Lake County Community Services, Inc..

Table II-14: Projected Public Transit Operating Revenue

nance activities and that the balance of \$162 million (24%) will be used for capacity expansion projects. Tables II-15 and II-16 show anticipated federal funding.

MPO-Controlled Federal Funds: U.S. Federal Highway Administration (FHWA)

Surface Transportation Program (STP) Group I

STP funds are apportioned to states by a formula embedded in federal law by Congress. This formula also allocates funds to each state's urbanized areas. Portions of Lake and Porter Counties lie within the Chicago Urbanized Area—the third most populous urbanized area in the nation. NIRPC anticipates approximately \$10.5 million in STP Group I funds per year over the life of the Plan—or a total of \$263 million.

Surface Transportation Program (STP) Group II

STP funds are also allocated by INDOT to the Michigan City/LaPorte Urbanized Area. The population of this urbanized area is under 200,000. NIRPC



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Financial Projections FFY 2016-2040: MPO-Controlled Federal Funds

Source of Funds	Apportioned Federal Funds Only		P&M	Expansion
	Annual New Funds (\$\$\$\$)	Total New Funds (2016-2040)	Total over Life of Plan	Total over Life of Plan
Highways				
FHWA STP Group I	\$ 10,545,025	\$ 263,625,625	\$ 197,719,219	\$ 65,906,406
CMAQ Large Urban	3,345,842	83,646,050	59,388,696	24,257,355
HSIP Large Urban	2,752,256	68,806,400	68,806,400	-
TAP Large Urban	961,809	24,045,225	6,011,306	18,033,919
FHWA STP Group II	981,988	24,549,700	20,867,245	3,682,455
CMAQ Small Urban	587,952	14,698,800	11,024,100	3,674,700
HSIP Small Urban	308,261	7,706,525	7,706,525	-
TAP Small Urban	93,608	2,340,200	585,050	1,755,150
Subtotals	\$ 19,576,741	\$ 489,418,525	\$ 372,108,541	\$ 117,309,985

Table II-15: Financial Projections for MPO-Controlled Federal Funds - Highway

Financial Projections FFY 2016-2040: MPO-Controlled Federal Funds

Source of Funds	Apportioned Federal Funds Only		P&M	Expansion
	Annual New Funds (\$\$\$\$)	Total New Funds (2016-2040)	Total over Life of Plan	Total over Life of Plan
Transit				
FTA Sec 5307/5340 Large Urban	\$ 11,510,760	\$ 287,769,000	\$ 244,603,650	\$ 43,165,350
FTA Sec 5307/5340 Small Urban	900,010	22,500,250	22,500,250	-
FTA Sec 5337 State of Good Repair*	15,078,820	376,970,500	376,970,500	-
FTA Sec 5310 Seniors & People with Disabilities	431,993	10,799,825	9,179,851	1,619,974
FTA Sec 5339 Bus Capital	448,756	11,218,900	11,218,900	-
FTA Sec 5309 New Start (Rail)	-	-	-	-
Subtotal	\$ 28,370,339	\$ 709,258,475	\$ 664,473,151	\$ 44,785,324
Grand Total (Transit & Highways)	\$ 47,947,080	\$ 1,198,677,000	\$ 1,036,581,692	\$ 162,095,308
<i>* Includes Funds Apportioned to the South Bend Urbanized Area</i>			86%	14%

Table II-16: Financial Projections for MPO-Controlled Federal Funds - Transit

anticipates receiving just under \$1.0 million per year over the life of the Plan for a total of \$25.5 million.

Congestion Mitigation/Air Quality (CMAQ) Program

Congestion Mitigation and Air Quality (CMAQ) funds provide a flexible funding source to state and local transportation agencies for transportation projects and programs that contribute to improved air quality. Eligible activities include (among others) traffic signal, signal interconnect, intersection improvements and other direct traffic congestion relief projects, new public transit services, alternative fuel infrastructure, bicycle and pedestrian facilities, and diesel retrofit and repower projects.

CMAQ funding is intended for use in areas that are or were identified as non-attainment of the National Ambient Air Quality Standards (NAAQS), as well as former nonattainment areas that are now in compliance (maintenance areas). Currently all three counties within our metropolitan planning area are classified as maintenance areas.

INDOT makes separate allocations of CMAQ funds to each urbanized area. NIRPC anticipates CMAQ apportionments of about \$3.3 million per year in the Lake-Porter County Maintenance Area and about \$0.59 million per year in LaPorte County. Over the life of the plan we anticipate new funding of about \$83.6 million in the Lake-Porter Area and \$14.7 million in LaPorte County is expected.

Highway Safety Improvement Program (HSIP)

This program provides federal funds on an annual basis for highway safety-related projects. Fundable projects are those that are likely to reduce vehicle crashes. The Lake-Porter County area is allocated about \$2.7 million per year and LaPorte County receives about \$0.3 million per year. NIRPC anticipates that, over the life of the plan, new HSIP funding for Lake and Porter Counties to be about \$68 million and \$7.7 million for LaPorte County.

Transportation Alternatives Program (TAP)

Congress established the TAP program in 2012 as a replacement for the Transportation Enhancement (TE) Program. TAP-funded activities encompass a broad range of activities, including bicycle/pedestrian recreational trails, streetscaping projects, and similar projects. Since its inception in 1991,

transportation enhancement projects were selected competitively by INDOT. This changed in 2008—these projects are now selected by the MPOs, although INDOT does still approve each project for eligibility.

The Lake-Porter County area is allocated about \$1.0 million per year in TAP funds and LaPorte County receives just under \$0.1 million per year. Over the life of the plan NIRPC expects \$24 million for use in Lake-Porter and \$2.5 million for use in LaPorte County.

INDOT-Controlled Federal Funds: U.S. Federal Highway Administration (FHWA)

Interstate Maintenance

The State of Indiana has about 135 miles of Interstate highways located in the three-county metropolitan planning area. INDOT anticipates spending an average of \$10.3 million per year in Interstate Maintenance funds over the four year period beginning in 2012. NIRPC would anticipate that INDOT would invest a similar amount per year over the life of the plan with a total investment of \$283 million.



Oak Savannah Trail - Hobart. Photo by Bob Huffman.

National Highway System (NHS)

In addition to 135 miles of Interstate highway, there are 103 miles of other expressways and principle arterial highways that comprise the NHS in northwest Indiana. INDOT anticipates spending an average of \$14.9 million per year in NHS funds over the four year period beginning in 2012. Based upon this current spending, NIRPC anticipates that INDOT will invest a similar amount per year over the life of the plan with a total investment of \$419 million.

Surface Transportation Program (STP)

STP funds provide states and local agencies with flexible funding that may be used for projects on any Federal-aid highway facility, including the NHS. As noted earlier, INDOT allocates some STP funds to Indiana's urbanized areas (for use on local projects). It utilizes the balance for its own projects. A wide variety of projects are eligible for STP funding, but INDOT uses these funds primarily for roadway maintenance, bridge rehabilitation and replacement, and safety improvement projects. INDOT anticipates spending an average of \$4.1 million per year in STP funds within the three-county area over the four year period beginning in 2012. Based upon this current spending, NIRPC anticipates that they will expend about \$115 million in State STP funds over the life of the plan.

INDOT-Selected Local STP Projects

STP Group III funds are apportioned for use in all incorporated areas in Indiana with a population between 5,000 and 49,999. STP Group III funds are not available to cities and towns in the STP Group I and II fund categories (i.e., those within the urbanized areas). STP Group III funds are administered by INDOT and made available to qualifying municipalities on competitive basis. In Northwest Indiana, only the Towns of Lowell and Westville qualify for STP Group III funding.

STP Group IV funds are apportioned for projects in areas where the population does not exceed 5,000 or in unincorporated areas. STP Group IV projects are competitively selected (like those under the Group III program) by INDOT. In Northwest Indiana, Lake County, LaPorte County and Porter County are eligible for STP Group IV funds in addition to incorporated rural communities of Hebron, Kingsbury, Kingsford Heights, Kouts, LaCrosse,

Schneider and Wanatah. During the period 2008 through 2011, INDOT selected only one Group III and no Group IV projects for funding in Northwest Indiana. For this reason, NIRPC does not project that there will be any significant sum of money allocated to these types of projects on an ongoing basis.

Bridge (BR) Funds

For the years 2007 through 2010, the three counties in Northwest Indiana have been relatively successful in receiving INDOT-allocated Bridge funds in that funding for five (5) projects has been approved. The total amount of federal funds approved is \$8.2 million. NIRPC does anticipate that this assistance will continue to be available and project that about \$0.95 million per year will be received over the life of the plan—resulting in the investment of about \$26.6 million for bridges.

MPO-Controlled Federal Funds: U.S. Federal Transit Administration (FTA)

Urban Area Formula Grants Sections 5307/5340 Growing States

The FTA Section 5307/5340 formula grant program provides subsidies for public transit service provided within an urbanized area having a population of 50,000 or more. FTA makes grant awards directly to the eligible recipients for each UZA as designated by the Governor. Funds may be used for any eligible mass transportation project contained in Part 53 of Title 49, United States Code. FTA distributes Section 5307 funds to large urbanized areas (i.e., those with a population greater than 200,000) in accordance with a formula that considers population, population density and service statistics reported by transit operators. FTA distributes Section 5307 funds to small UZAs on the basis of population and population density only. Funds are apportioned to individual urbanized areas and not to specific transit providers. Thus, FTA makes separate apportionments to the Chicago urbanized area and the Michigan City urbanized area.

Chicago Urbanized Area

NIRPC, the Regional Transportation Authority of Northeast Illinois (RTA) and the Chicago Metropolitan Agency for Planning (CMAP) maintain a written Letter of Understanding which governs the manner in which the Section 5307/5340 funds allocated to the Chicago urbanized area are divided between Northwest Indiana and Northeast Illinois. The most recent Letter, executed in 2013, allocates these funds on the same basis that FTA uses in allocating them across the nation. It is likely that, when new Letters are executed, this same distribution mechanism will be retained.

There are three (3) FTA Section 5307/5340 grantees in the Indiana portion of the Chicago UZA. These are the Gary Public Transportation Corporation (GPTC), Northern Indiana Commuter Transportation District (NICTD) and

NIRPC. NIRPC provides Section 5307 assistance, on a pass-through basis to seven (7) other eligible transit operators: City of East Chicago, Opportunity Enterprises, Inc., the Trustee of Lake County's North Township, South Lake County Community Services, Inc., Porter County Aging & Community Services, Inc., and the City of Valparaiso.

The Indiana portion of the Chicago Urbanized Area is sub-allocated about \$10.7 million per year in Section 5307/5340 funds. At this rate of apportionment, this portion of the urbanized area reasonably expects a total of \$317 million in FTA Section 5307/5340 funds over the life of the plan.



Michigan City Urbanized Area

The Michigan City urbanized area is under 200,000 in population--therefore, the Section 5307/5340 funds allocated there are apportioned to the Governor, who has designated the City of Michigan City and NIRPC (on behalf of the City of LaPorte) to administer grants for the two transit operators. The urbanized area's two public transit operators desire to maximize their use of their annual apportionment for operating assistance and to seek alternative means of funding capital equipment.

The Michigan City urbanized area receives about \$900,000 per year in Section 5307/5340 funds. It is reasonable to expect that a similar sum will continue to be received each year over the life of the plan for a total of \$27 million.

FTA Capital Investment Grants - Section 5309 (Rail Modernization)

Rail Modernization funding is intended to support the modernization of urban commuter rail systems throughout the country. By definition, these systems include only facilities that are at least seven years of age. Section 5309(m)(2)(B) funds are apportioned to each UZA with a qualifying commuter rail system.

Chicago Urbanized Area

Like the FTA Section 5307/5340 program within the Chicago UZA, there is a Letter of Understanding between NIRPC and the Regional Transportation Authority of Northeast Illinois (RTA) that governs the distribution of rail modernization funds. The most recent Letter, executed in 2013, allocates 6.29% of the entire Chicago urbanized area's rail modernization apportionment to northwest Indiana. Each preceding Letter (beginning with the first one issued in 1992) has featured this same percentage split. It is thus reasonable to expect that this same distribution formula will be utilized indefinitely and that NW Indiana will receive an average of \$10.8 million per year from the Chicago UZA, for a total of \$304.5 over the life of the Plan.

South Bend Urbanized Area

The Northern Indiana Commuter Transportation District is also the sole recipient of FTA Section 5309 Rail Modernization funds apportioned to the South Bend urbanized area. Funds from the two urbanized areas are co-mingled into a single FTA grant each year. In FFY 2011, there was \$1,127,931 in rail modernization funds apportioned to the South Bend urbanized area. At this rate of apportionment, about \$31.6 million would be received over the life of the plan.

Job Access/Reverse Commute Program (Section 5316)

FTA Job Access/Reverse Commute (FTA Section 5316) funds are allocated to the Chicago Urbanized Area and to INDOT for other portions of the three-county area. This grant program provides transit service subsidies targeted to lower income persons for employment-related trips. FTA makes grant awards directly to designated recipients in each large UZA. These funds may be used for either operating, capital, or planning assistance.

The Indiana portion of the Chicago UZA is allocated about \$0.4 million per year. Over the life of the plan NIRPC expects to receive \$11.2 million.

New Freedom Program (Section 5317)

FTA New Freedom (FTA Section 5317) funds are also apportioned to the Chicago Urbanized Area and to INDOT for other portions of the three-county area. This grant program provides transit service subsidies targeted to enhanced services for persons with disabilities directly to designated recipients in each large UZA and to the state for all other areas. These funds may be used for operating, capital, or planning assistance.

The Indiana portion of the Chicago UZA is allocated about \$0.3 million per year. Over the life of the plan NIRPC expects to receive \$8.4 million.

Capacity Expansion Projects

Table II-17 represents an updated list of capacity expansion projects that have been selected for inclusion in the plan. Like previous projects selected in the original 2040 CRP, these projects were scored using the project selection criteria and compared with future revenues to maintain financial constraint. The projects were segmented into groups representing the milestone years of implementation for air quality conformity analysis purposes. Table II-17 also includes an illustrative list of projects that are beyond the means of the region to implement, given current identified resources.

Additions to the original project list include the following:

- Illiana Expressway (voted in as a CRP amendment in December of 2013)
- I-65 from US-30 to SR-2 (voted in as a CRP amendment in December of 2013)
- Chicago Avenue in Hammond
- 45th Street Alignment in Munster
- 93rd Avenue in St. John

Projects Complete by 2020	Beginning Point	End Point	Sponsor
Illiana Expressway	I-55 Near Wilmington	I-65 Near Lowell	INDOT/IDOT
I-65 from US-30 to SR-2	US-30	SR-2	INDOT
US-41 from US-231 to 93rd Ave	93rd Ave	US-231	INDOT
SR-912 over Indiana Harbor Canal	Riley Rd	Michigan Ave	East Chicago
45th Street realignment	Calumet Ave	White Oak Ave	Munster
61st Avenue	Arizona St	SR-51	Hobart
Broadway Rapid Transit	Gary Metro Center	US-231	GPTC
Projects Complete by 2025			
Chicago Avenue	Stateline (Gostlin/Sheffield)	White Oak Ave	Hammond
45th Avenue	Whitcomb St	Grant St	Lake County
Mississippi Street	US-30	101st Ave	Merrillville
101st Avenue	SR-53	Mississippi St	Merrillville
Kennedy Avenue	Main St	US-30	Schererville
93rd Avenue	White Oak Ave	US-41	St. John
Projects Complete by 2030			
Main Street Extension	Burnham Ave	Columbia Ave	Munster
Willowcreek Extension	700 N	100 S	Porter County
Vale Park East	Calumet Ave	Silhavy Rd	Valparaiso
Projects Complete by 2040			
Division Road	SR-2	US-30 (E of 450 E)	Valparaiso
Illustrative List of Projects			
<i>Projects that are not included in the fiscally-constrained conforming plan</i>			
Westlake Commuter Lines	Hammond	Lowell	NICTD
Boyd Boulevard Expansion	SR-2	US-35	LaPorte
Economic Development Corridor NE	SR-39 (S of Toll Rd)	SR-2 (at Fail Rd)	LaPorte

Table II-17: List of Capacity Expansion Projects

Functional Classification

As a regional partner in the transportation system, NIRPC has a role in ensuring that the roads across the region are properly classified based on function. This concept is called Functional Classification. Functional Classification plays a role in determining the federal apportionment. MAP-21 requires a 7 classification system down from the 12 classification system used prior. The seven classes are generally divided into 3 categories: Arterials, Collectors, and Local Roads. Arterials are roads that primarily carry through traffic of regional importance, usually at distances that link 2 or more municipalities or across an entire county. Collectors are roads that collect traffic from Local Roads and distribute the traffic to Arterials. Local Roads are roads that provide access to local neighborhoods and specific sites. Table II-18 lists the 7 Functional Classifications by category with examples.

NIRPC launched a holistic process to update the Functional Classification system from the previous 12-classification system to the 7-classification system. NIRPC staff started from scratch and prepared unclassified road maps for each of the 44 jurisdictions (41 municipalities and 3 counties). Staff met individually with staff from the majority of the jurisdictions to ask how the roads in each of their jurisdictions function, marking the draft classifications on the map. For the communities unable to meet in person, NIRPC staff prepared draft classifications and received feedback electronically from those communities. NIRPC staff then met with INDOT and FHWA in Indianapolis on February 13, 2015 and at NIRPC on March 23,

2015 to review the draft classification system from all of the jurisdictions combined. After NIRPC staff revised the draft classification system based on these reviews, staff presented the final proposed Functional Classification system for the region to the NIRPC Transportation Policy Committee at its April 14, 2015 meeting and received approval. A regional map of the Functional Classification system can be found in Figure II-29 and at <http://nirpc.org/transportation/functional-class.aspx>.

The mileage breakdown of road centerline miles by Functional Classification in the NIRPC Region is shown in Table II-19. The mileage breakdown compares well against the guidance for urban systems from FHWA according to the Highway Functional Classification Concepts, Criteria and Procedures 2013 Edition. That guidance calls for 1% - 2% Interstate, 0% - 2% Other Freeway or Expressway, 4% - 5% Other Principal Arterial, 7% - 12% Minor Arterial, 7% - 13% Major Collector, 7% - 13% Minor Collector, and 67% - 76% Local Roads. The mileage breakdown for the NIRPC region in Table II-19 shows figures that are close to the FHWA guidance.

Category	Classification	Example
Arterials	Interstate Highway	I-80/94
	Other Freeway or Expressway	Cline Ave
	Other Principal Arterial	US-30
	Minor Arterial	Mississippi St
Collectors	Major Collector	Euclid Ave in East Chicago
	Minor Collector	Detroit St in LaPorte
Local Roads	Local Road	Southport Rd in Portage

Table II-18: Functional Classifications by Category with Examples

County	Total	Interstate	%	Other Frwy or Expsrwy	%	Other Principal Arterial	%	Minor Arterial	%	Major Collector	%	Minor Collec-tor	%	Local	%
Lake	3233.3	136.5	4%	39.2	1%	186.6	6%	266.7	8%	210.2	7%	267.4	8%	2127.6	66%
LaPorte	1774.7	50.5	3%	0	0%	110.6	6%	194.1	11%	150.5	8%	184	10%	1085.0	61%
Porter	1734.2	40.0	2%	0	0%	124.9	7%	130.5	8%	184.4	11%	158.9	9%	1095.5	63%
Total	6742.2	227.0	3%	39.2	1%	422.2	6%	591.3	9%	545.1	8%	610.3	9%	4308.0	64%

Table II-19: Mileage Breakdown of Road Centerline Miles by Functional Classification in the NIRPC Region

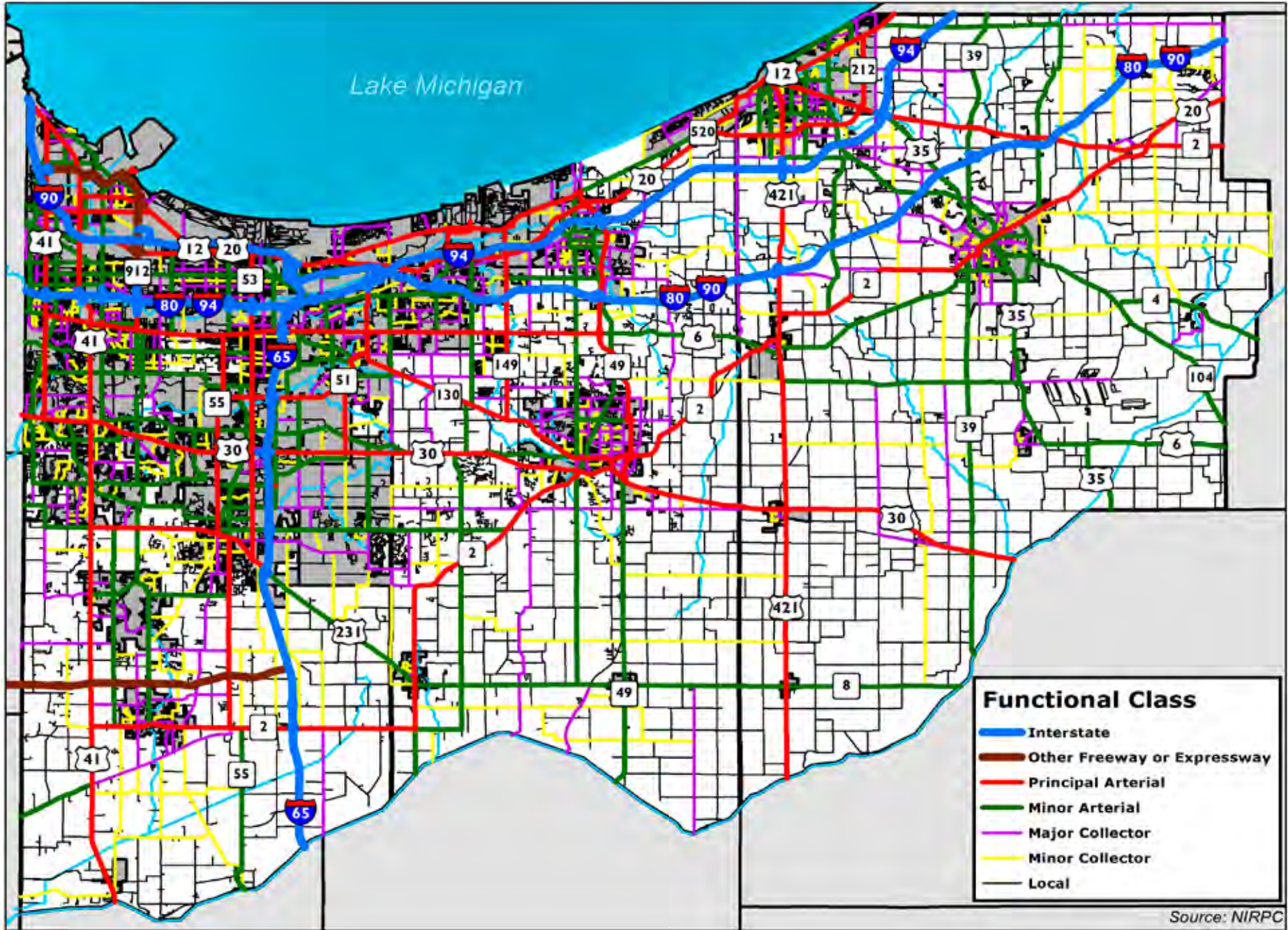


Figure II-29: Functional Classification of Roads in Northwest Indiana

Autumn leaves in the dunes. Photo by Stephen Sostaric.



Chapter III: **Environment & Green Infrastructure**

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Overview

The environment is one of the three pillars often recognized at the foundation to building a sustainable and vibrant future. Its importance was recognized by Northwest Indiana residents throughout the public input process NIRPC engaged in to develop the *2040 Comprehensive Regional Plan* (2040 CRP). Environmental planning is also one of the core functions assigned to NIRPC by the state of Indiana in the 2003 enabling legislation amendment. The environmental focus of the 2040 CRP can be best envisioned as an overarching network of green infrastructure for the region (Figure III-1).

While the ecosystem approach helps to protect the ecological integrity of our region, a green infrastructure approach focuses on planning to maintain and enhance the many valuable services and functions that the natural environment provides to the economy and the residents of the region. This approach enables the evaluation of land use decisions and conservation opportunities based on their practical value and focus on the cost effectiveness of protecting the environment and using environmentally based approaches to solving human problems. This Update Companion to the 2040 CRP Green Infrastructure Network incorporates new information on the quantifiable dollar values associated with these services.

In this latest update of the 2040 CRP, NIRPC transitions from the Green Infrastructure Network identified in the 2011 2040 CRP to the more refined Chicago Wilderness Green Infrastructure Vision 2.1 (GIV 2.1). GIV 2.1 was developed in 2012 with data and input from region conservation stakeholders to focus on landscape functionality. This refinement still captures the convergence of an Ecosystem Approach, Green Infrastructure Approach, and the Urban Revitalization and Livable Communities strategies that are described at length in the Growth and Conservation chapter. Establishing a network of green infrastructure that co-exists with urban development and the transportation network, will consist of agricultural and natural

areas that merit protection connected by well-buffered streams, trails and recreational open space. The results of this combined approach include:

- Local Watershed Management Plans:
 - Little Calumet River East Branch- Save the Dunes, est. 2015
 - Deep River-Portage Burns Waterway- NIRPC, est. 2015
- Indiana Wetland Program Plan – IDEM, 2014 DRAFT
- Indiana Comprehensive Wildlife Strategy – Indiana Department of Natural Resources (IDNR), 2015 DRAFT
- Chicago Wilderness Green Infrastructure Vision 2.1 - Chicago Wilderness, 2012
- Chicago Wilderness Green Infrastructure Vision 2.3 Ecosystem Service Valuation- NIRPC, 2015

The chapter ahead provides an update of current conditions and progress on implementation of recommended strategies to make more effective use of existing resources and pursue new opportunities. A new framework to start understanding the status of regional solid waste and recycling activities is added, as this was not included in the original 2040 CRP. Many of the initiatives and goals in this chapter will require the commitment and participation of many partner organizations and member governments to realize.

An ecosystem approach requires looking beyond project boundaries, specific pollutants or species, regulatory programs and checklists.

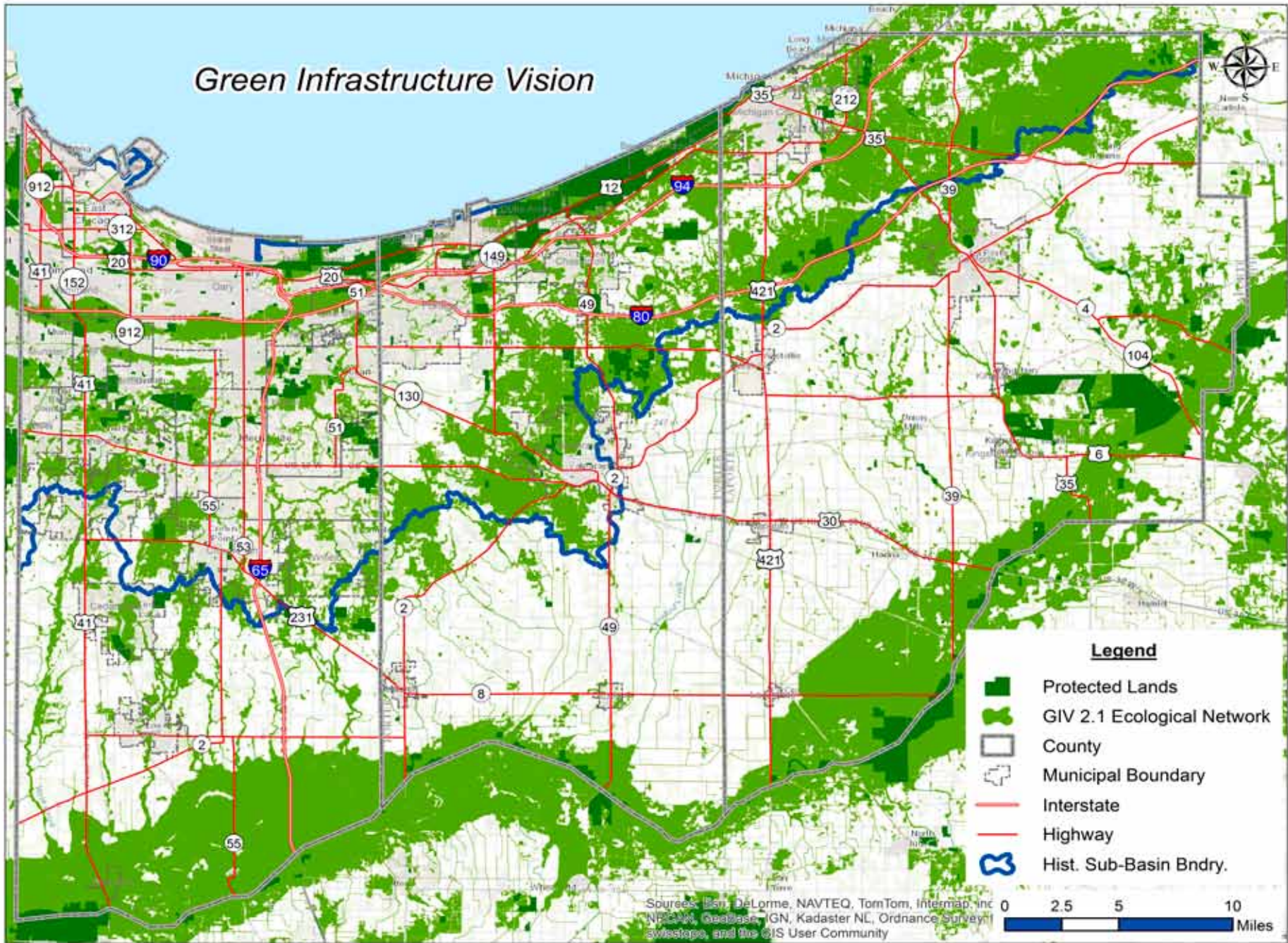


Figure III-1 Green Infrastructure Vision, Chicago Wilderness GIV 2.1

Water Resources

Lakes & Streams

The Impaired Waters map has been updated to reflect the Indiana Department of Environmental Management (IDEM) 2014 draft 303(d) list (Figure III-3). This list is required to include all waterbodies that data indicates do not meet both numerical chemical water quality standards and narrative standards such as “fishable” and “swimmable.” The new list identifies nearly 1,500 miles of streams and three square miles of lakes as “impaired.” The 303(d) list is heavily influenced by the amount of sampling data available for waters in the state. The substantial increase in impaired stream miles from 622 on the 2008 list to 1,500 now is primarily due to new information collected by IDEM in the Deep River Portage Burns Waterway in support of Total Maximum Daily Load and Watershed Management Plan development.

The IDEM Office of Water Quality updates this list every two years, identifying the waters that do not or are not expected to meet water quality standards as required by the Clean Water Act. The most common impairment for our region’s waterways is E. coli, which is an indicator of fecal contamination. Potential sources of E. coli can vary by watershed, but in general include combined or sanitary sewer overflows, failing septic systems and pet and livestock waste. Each year, elevated E. coli levels result in swimming advisories and closures along the Lake Michigan shoreline. Another water quality concern is those stream segments in which a fish consumption advisory is in place. This is especially true for low-income areas, such as Environmental Justice zones, where subsistence fishing may be more prevalent.

Despite these impairments, rivers and streams provide valuable economic services to the region. An ecosystem services valuation study completed for NIRPC by the Conservation Fund in 2015 indicated lakes within Northwest Indiana’s GIV ecological network provide an

estimated economic benefit of \$37,000/acre/year for water flow regulation/flood control. Streams and riparian areas provide another \$6,500/acre/year for water flow regulation/flood control. Lakes provide \$566/acre/year for groundwater recharge.

Wetlands

Wetlands within Northwest Indiana’s GIV ecological network provide an estimated economic benefit of \$22,000/acre/year for water flow regulation/flood control, \$4,300/acre/year for water purification, and \$660/acre/year for groundwater recharge to Northwest Indiana based on the Ecosystem Services Valuation Report (2015) completed for NIRPC by the Conservation Fund.

Floodplains

The Indiana Department of Natural Resources (IDNR) updated the 100 year flood plain maps in 2014, which is reflected in the updated Water Resources Map. This change is also reflected in the Development Suitability analysis presented in previous chapters. Floodplains must be preserved from development and used only for compatible, beneficial uses. Protection of cropland must be weighed with the value of floodwater storage. Areas where floodplains can be restored should be a high priority, especially in the Lake Michigan watershed.

Floodplains within Northwest Indiana’s GIV ecological network provide an estimated \$4,806/acre/year economic benefit for groundwater recharge. Additionally, they benefit fish and wildlife resources by providing nesting and feeding areas.

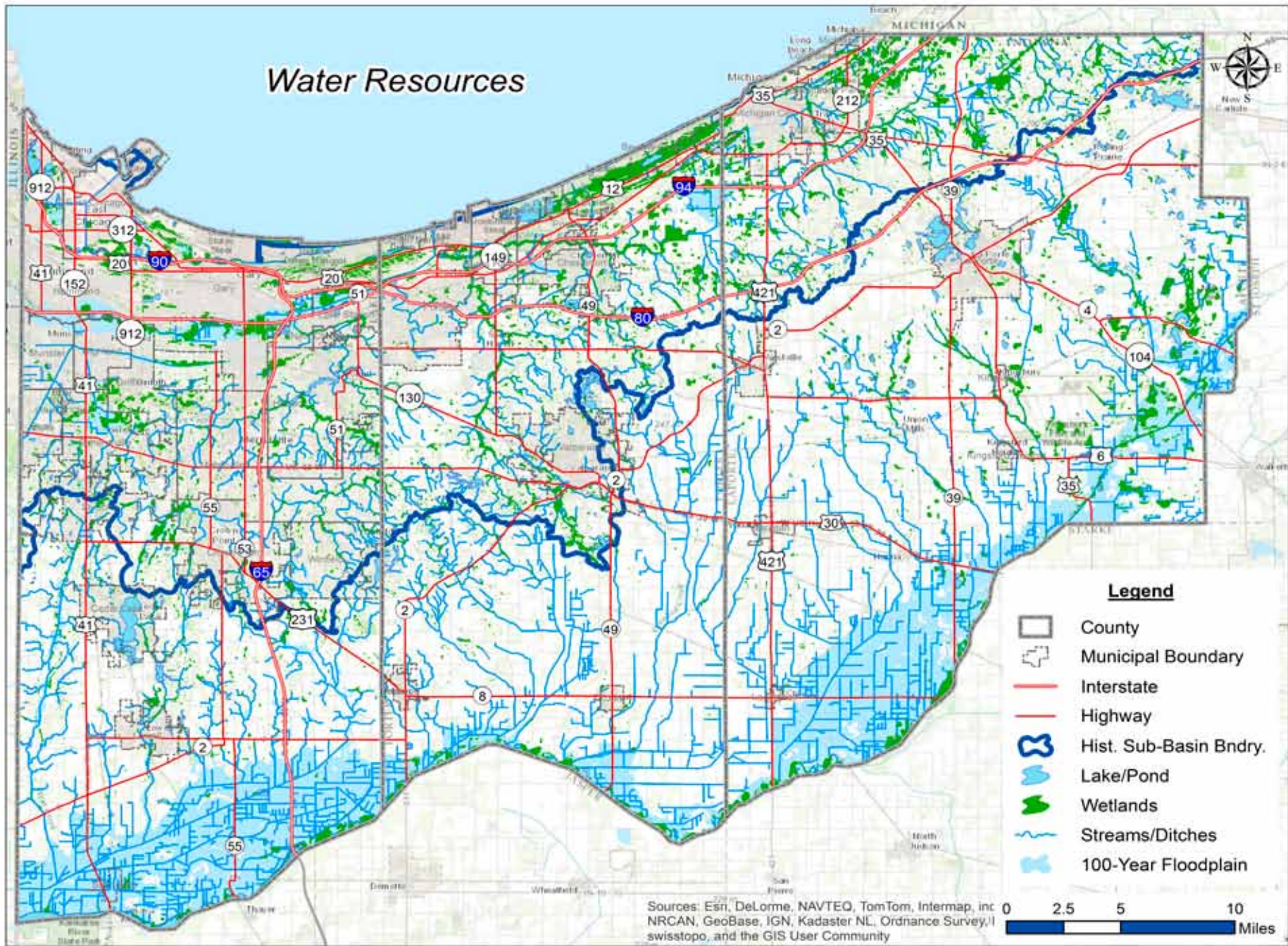


Figure III-2: Surface Water Resources of Northwest Indiana, NIRPC GIS Database 2015

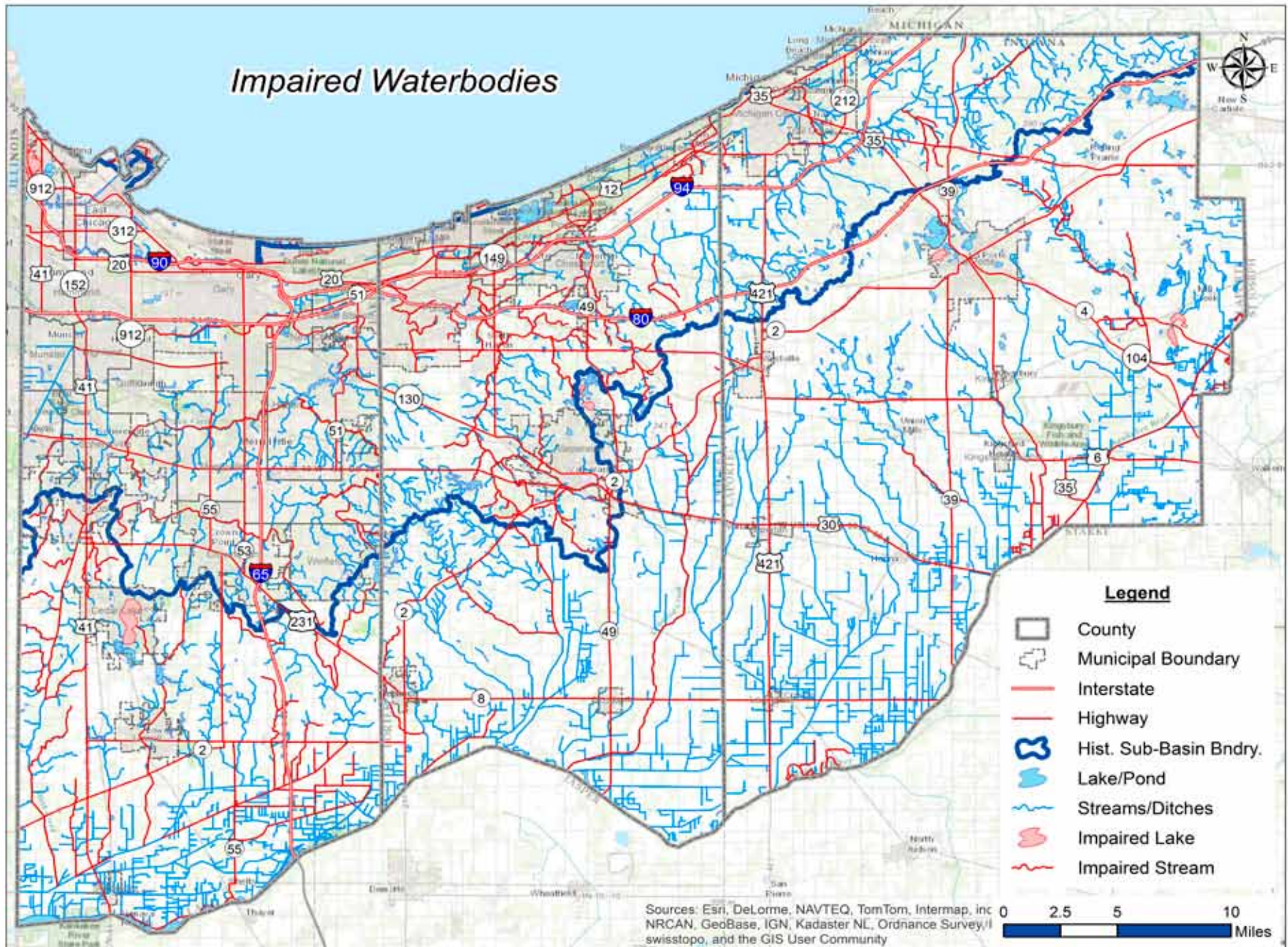


Figure III-3: Impaired Water Bodies, Indiana Department of Environmental Management Draft 2014 303(d) List

Water Withdrawal, Consumption & Supply

Charts and discussion are updated to reflect additional data collected by IDNR through 2014.

The Great Lakes Water Consumption Coefficients Table (Table III-1) is updated to reflect data on Great Lakes Water consumption rates presented in a 2008 United States Geological Survey Publication. An additional discussion of key points is identified in a 2014 water resources report released by the Indiana Chamber of Commerce.

IDNR Significant Water Withdrawal data from 2010 through 2013 was added

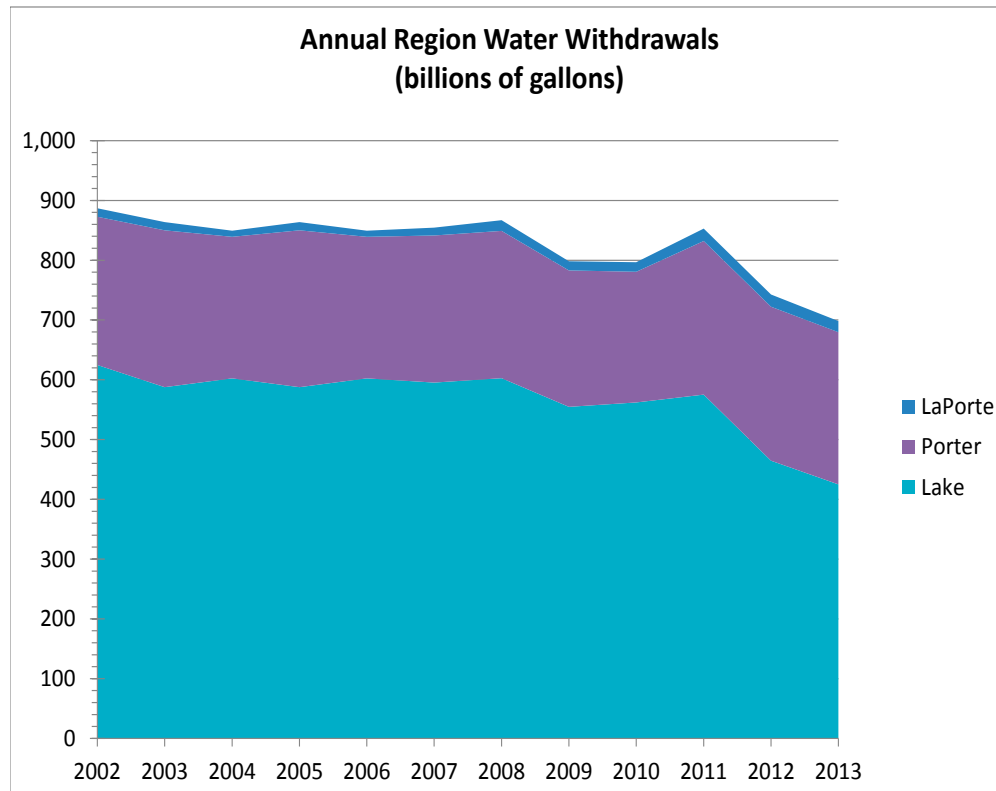


Figure III-4: Trends in Significant Water Withdrawals by County

to previous analysis of 2002-2009 information, providing a full decade for trend analysis. Overall, a look at county-level data in Figure III-4 shows a general decrease, primarily in Lake County. This can be largely attributed to the closure of the State Line Energy facility in April of 2012.

Significant Water Withdrawals include all registered water users with capacity to pump 100,000 gallons per day from either wells or surface intakes. IDNR categorizes users by various sectors of the economy. Those relevant to Northwest Indiana are described below.

- **Energy production** – Power generation, cooling water, oil recovery
- **Industry** – Process water, cooling water, mineral extraction and quarry dewatering, waste assimilation
- **Irrigation** – Crop and golf course irrigation, farm field drainage, agricultural services
- **Miscellaneous** – Fire protection, amusement parks, construction dewatering, dust control, pollution abatement, hydrostatic testing, recreational field drainage
- **Public Water Supply** – Drinking water, sanitary facilities
- **Rural use** – Livestock, fisheries

Great Lakes Regional Water Consumption Coefficients	
Sector	Consumptive Rate
Electricity Production	2%
Industrial	10%
Irrigation	90%
Public Water Supply	12%
Livestock (Rural)	83%

Table III-1: Great Lakes Consumption Rates

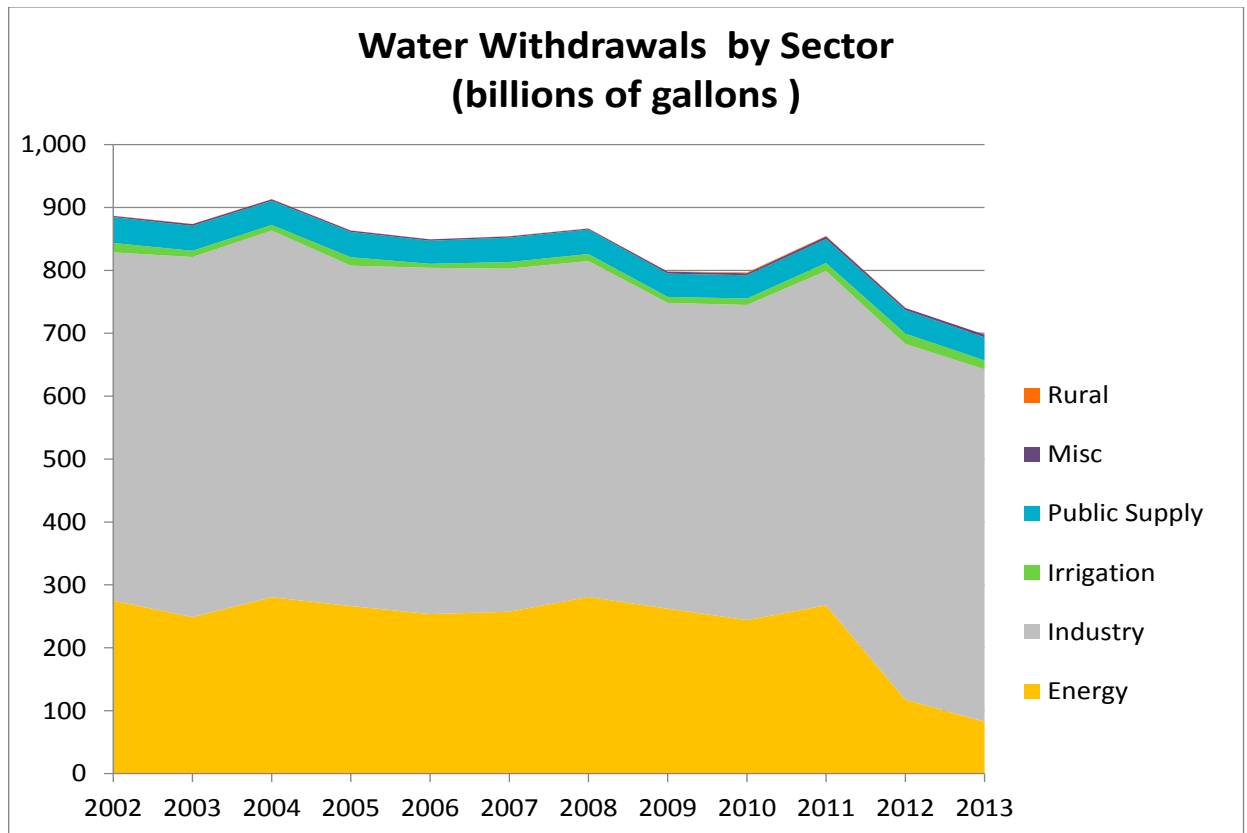


Figure III-5 Surface Water Resources of Northwest Indiana, NIRPC GIS Databases. 2010

Most categories do not show any significant trends during the 2002 to 2012 period, with the notable exception of energy production. In Northwest Indiana this category includes NIPSCO, two BP Whiting Refinery pumps, Stateline Energy, and the Westville Correctional Facility. The closure of State Line Energy in April of 2012 resulted in a 69% reduction in water withdrawal from that sector. This caused total water withdrawals in the region to be 19% lower in 2013 than the previous decade annual average. Industrial withdrawals appeared to be declining in the mid to late 2000s, but have since rebounded, as shown in Figure III-5.

Figure III-6 shows that “Industry” used by far the largest percentage of the water withdrawn in 2013. “Energy production” remains in second, but is a much smaller piece of the total than in previous years due to the closing of State Line Energy. “Public water supply”, which includes residential, commercial and institutional use, would be a distant third. The large quantity of noncontact cooling water used daily by the large refinery and integrated steel mills in our region likely sets it apart from other parts of the state in this regard. It is important to remember that much of this is non-consumptive use, and is returned to our local waters. If we want to maintain or reduce water withdrawals in our region, this data would suggest that our priorities for conservation should be industry.

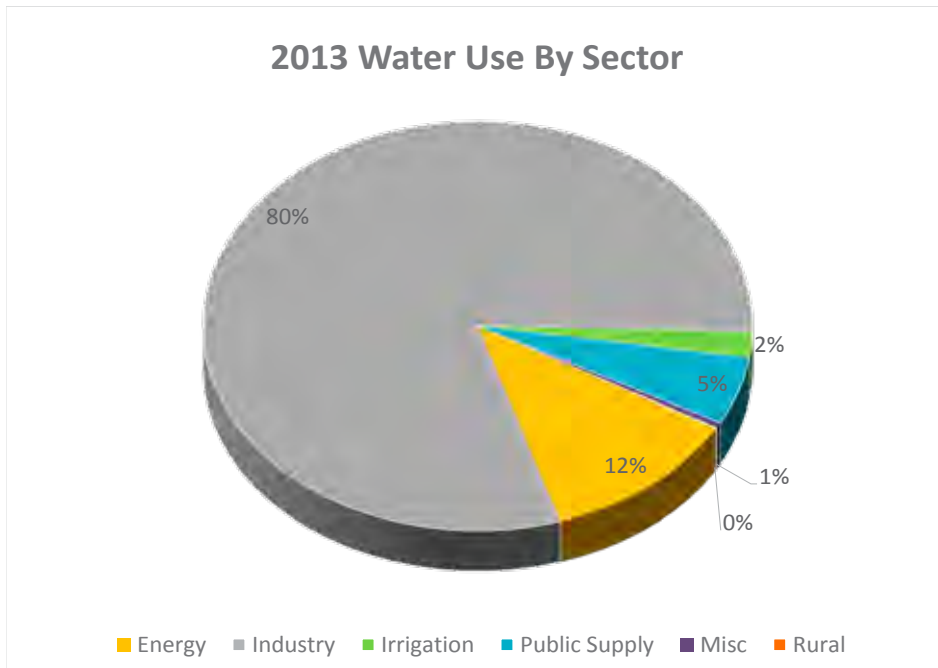


Figure III-6: Northwest Indiana Significant Water Withdrawal by Sector

Based on 2013 Census Bureau population estimates for municipalities, and 2010 unincorporated population statistics, approximately 85% of the population of the three counties lived in the Lake Michigan basin, a 2% increase from 2008. In Lake County that percentage remains 92%. Access to Lake Michigan surface and groundwater resources becomes complicated in communities outside of that basin, requiring approval from all eight Great Lakes States.

Existing registered water uses in the Great Lakes Basin will be authorized for use at their current withdrawal capability. Employing water conservation practices can enable existing users to create spare capacity to allow for economic growth. All proposals for new or increased water withdrawals must incorporate sound and economically feasible water conservation and efficiency measures in order to minimize the waste of water within the Great Lakes Basin. Indiana’s implementation of the The Great Lakes Compact establishes that conservation and efficiency programs for the basin are voluntary and have been outlined in IDNR’s “Report on Indiana Water Use Efficiency and

Conservation.” Voluntary water conservation and efficiency programs also will be encouraged statewide by the IDNR⁴.

Water withdrawals are important, but perhaps more important to the long-term sustainability of our water supply is the amount of water that is actually removed from the system by its use versus that which is returned to streams, ditches and aquifers. While this sounds simple in practice, it is a complicated topic that differs by sector, facility, scale, geology, and weather. For example, water pumped from Lake Michigan that evaporates from a cooling water facility might be calculated as a consumptive use by the facility because it is not returned to the water body through a regulated outfall; however, in reality this water may condense and fall back on the lake as rain. Conversely, water loss through leakage from public water supply pipes also would be calculated as a consumptive use, although this water may in effect be recharging valuable groundwater aquifers. Water that is incorporated into products that may then be exported from the basin or sold and used within it also makes this a highly challenging factor to quantify. A summary of consumptive water use data from the Great Lakes published by the US Geological Survey⁵ was used to estimate the region’s actual consumption of water. In general, Indiana uses consumptive use coefficients to calculate water return rates for use categories as shown in Table III-1.

Applying these factors to the 2013 Water Withdrawal data reflects a somewhat different picture as to which sectors have the biggest impact on local water resources. The 698 billion gallons of water pumped in the region during that year was 155 billion gallons, or 18% less than the last year State Line Energy was in full operation. However, overall consumptive water use reduction was only 3.6%. Of the current large scale uses (private wells are not tracked), 89% of the water pumped from the Lake and the ground is being returned to the

4 Indiana Department of Natural Resources Water Use Section, Significant Water Withdrawal Facility Data Reports.

5 USGS Fact Sheet 2008-3032. Consumptive Water Use in the Great Lakes Basin. April 2008.

environment – ideally after appropriate treatment. Note that the sectors with the lowest return rate are agriculture uses such as irrigation and livestock. This is because much of the water use in that sector is absorbed by plants and released to the atmosphere in evapotranspiration, or is incorporated into animals and their products, such as milk. Figure III-7 shows the relative percentage of consumptive use by category.

A 2014 Study released by the Indiana Chamber of Commerce⁶ reported that we do have abundant water supplies in Northwest Indiana. The sector most likely to experience increasing water demand is agricultural irrigation. This is being driven largely by market forces that offer a high return on investment for row crop irrigation, and the value of insurance against dry periods.

⁶ Indiana Chamber of Commerce “Water and Economic Development in Indiana: Modernizing the State’s Approach to A Critical Resource”. August 2014.

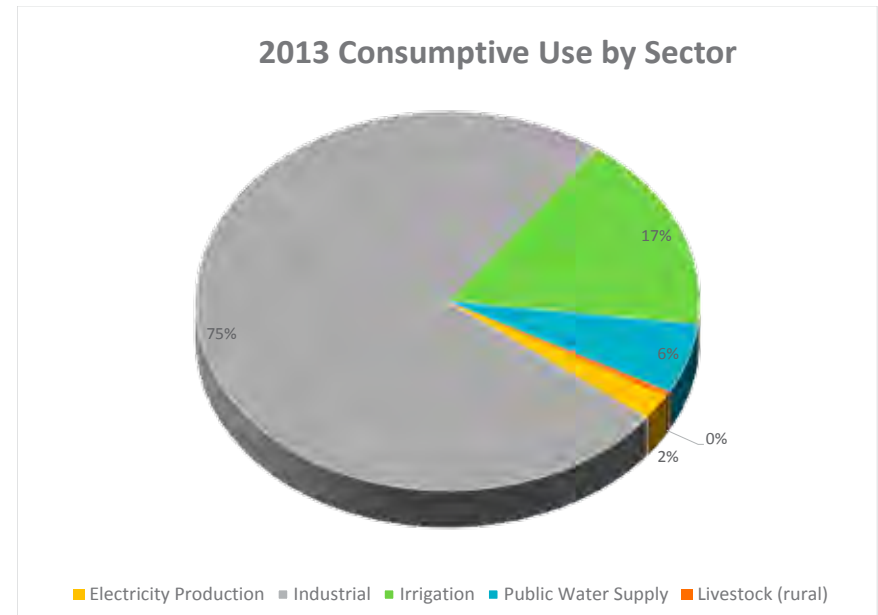


Table III-7: NWI Consumptive Water Use by Sector



Photo by Peter Dutton, via Flickr. CC BY 2.0 License.

Wastewater Treatment

Progress has been made in Combined Sewer Overflow control. While more than 40 CSO points remain within Northwest Indiana as documented on the EPA's *EnviroMapper for Water* website, many are stored for treatment, but for the greatest storm events - and are receiving direct treatment even then. The highest concentrations of CSOs exist on the Grand Calumet River and West Branch of the Little Calumet River. In all but a few cases, the CSOs discharge into waters included on the Indiana 303(d) List of Impaired Waterbodies, and therefore are likely one of possibly many contributing factors to their impairment.

CSO communities are required by IDEM to develop Long Term Control Plans (LTCP). In Northwest Indiana, these communities include Chesterton, Crown Point, East Chicago, Gary, Hammond, LaPorte, Lowell, Michigan City and Valparaiso. Table III-2 provides a summary of progress on CSO LTCP to date in the region. Of nine CSO Communities, seven have submitted approved plans, and three of those have completed all construction projects and have fully implemented plans. The remaining four with approved plans have numerous projects completed or underway. Should all construction projects be completed according to scheduled projections in their plans, all LTCP for these four communities should be completed by 2020. Not surprisingly, the greatest official need identified by facilities in Northwest Indiana was for CSO correction, with more than \$800 million to prevent or control the periodic discharge of mixed storm water and untreated wastewater.

CSO Control Status in Northwest Indiana					
Number of CSO Communities	LCTP Submitted	LCTP Approved	# Fully Implemented	#Partially Completed	# Projects Remaining
9	7	7	3	4	10

Table III-2: CSO Control Status in NWI



Wastewater Treatment Plant. Photo by Montgomery County Planning Commission, via Flickr, CC BY-SA 2.0 License.

Green Infrastructure

Managed Lands

The Indiana Department of Natural Resources (IDNR) released an updated “Managed Lands” dataset in 2012. The new information shows that there are approximately 294 natural or recreational areas within Northwest Indiana that are owned or managed by local, state or federal agencies, and non-profit organizations (Figure III-8). While this appears to be a reduction of 21 managed areas, a closer look at the data shows the opposite has occurred. Based on data obtained from INDR’s managed lands dataset, there are approximately 39,500 public and 3,100 private acres of managed open space in the entire NIRPC three-county region, which is a total increase of 6,500 acres.

Prime Agricultural Lands

Indiana currently ranks second in the nation in total acreage of prime farmland being lost at the rate of 100,000 acres/year or 10 acres/hour. Between 2006 and 2010, nearly 5 square miles of agricultural land was converted to developed land uses in Lake, Porter and LaPorte counties. This represents an annualized rate of 1.25 square miles per year. The previous decade of 1996 to 2006 reported conversion of 13 square miles, or approximately 0.76 square miles per year.



Red Mill County Park in LaPorte County. Photo by Stephen Sostaric.



Door Prairie in LaPorte County. Photo by Tom Gill via Flickr, CC BY-NC-ND 2.0 License.

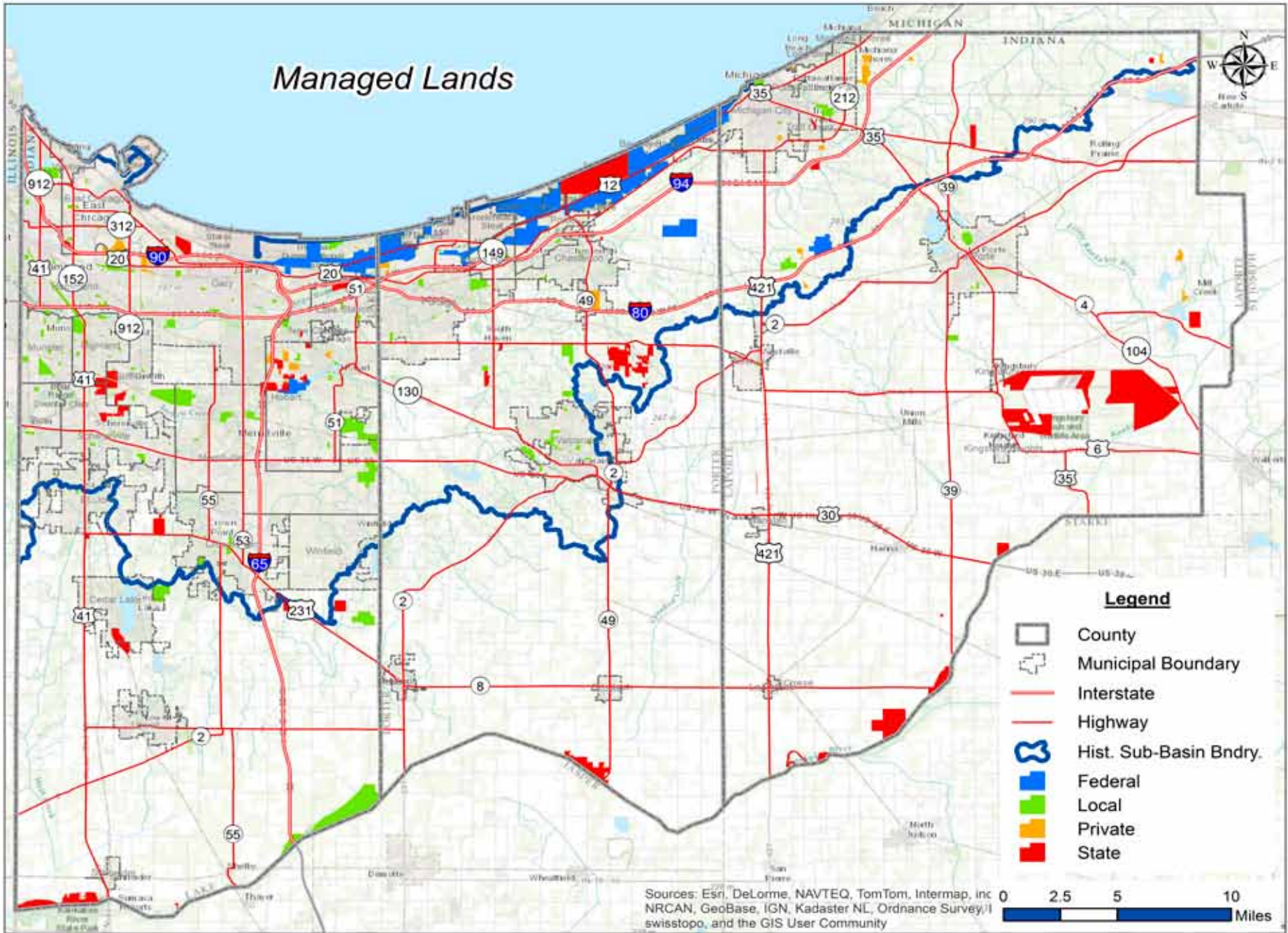


Figure III-8: Managed Lands Ownership, Indiana Department of Natural Resources, 2012

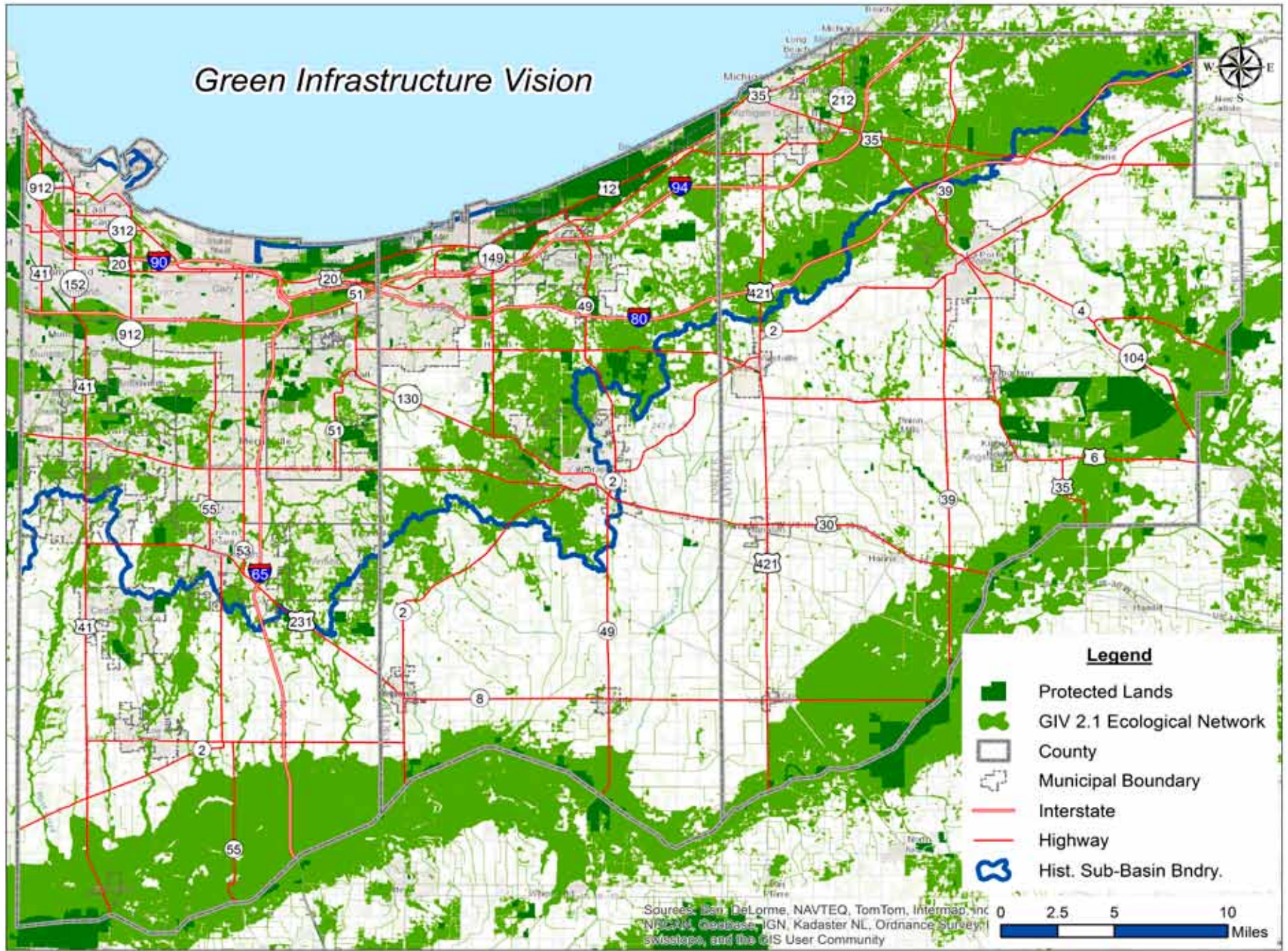


Figure III-9: Green Infrastructure Vision, Chicago Wilderness GIV 2.1

Air Quality

There are many aspects of air quality that are important to the environment, health, and quality of life of our region residents. Clean air is vital to the productivity of people, land and businesses in Northwest Indiana. Poor air quality can cause a wide variety of health problems, contributing to premature death from cardiovascular and respiratory diseases such as asthma. These problems are often worse in poor urban communities. Air pollution comes from many different sources such as factories, power plants, dry cleaners, cars, buses, trucks, windblown dust, and even fires. It can harm plant life, causing negative impacts on our natural areas, forests, and farms. Air quality problems can also be a barrier to economic development. Failure to meet, or be designated by EPA as meeting National Ambient Air Quality Standards (NAAQS), places additional costs for air emission permitting, treatment, and compliance on manufacturing facilities that might choose to locate here.

Air quality continues to improve in the region. Significant investment by local industries in pollution reduction to comply with federal and state regulation of air emissions has contributed to this improvement. Other significant contributors to this progress include implementation of vapor recovery requirements on area gas stations, mandatory vehicle emission testing, and congestion mitigation and air quality improvement in transportation planning.

National Ambient Air Quality Attainment Status

Within the context of air quality, the most important driver of improvements and most heavily measured and reported on with regard to attainment of the NAAQS. The federal government established the NAAQS for six criteria air pollutants, all of which, in concentrations above certain levels, have adverse effects on human health. These criteria pollutants include: carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), ozone (O₃), particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}). NAAQS attainment status achievements are one of the strongest demonstrations of air quality improvement over time. Table III-3 shows the years in which attainment of ambient air quality standards was achieved in Northwest Indiana

counties that were previously designated in non-attainment for each of the various pollutants.

In 2012, IDEM petitioned the US EPA to redesignate Lake and Porter Counties in attainment of the 2008 Ozone standard based on monitoring data. However, EPA denied this petition in 2014 based on monitoring data in Illinois because Lake and Porter counties are part of the Chicago-IL non-attainment area.

Also, on December 14, 2012, the US EPA strengthened the annual primary standard for the pollutant Fine Particulate Matter, (PM_{2.5}) down to 12 micrograms per cubic meter (µg/m³). Attainment of the 2012 annual primary and secondary PM_{2.5} standards are determined by evaluating the three-year average of the annual arithmetic mean PM_{2.5} concentration at each monitoring site in the area. In 2015, US EPA declared Lake and Porter Counties as unclassifiable for this standard due to technical data collection issues.

What does all of this mean for the region? Despite the visible and measurably vast improvements in air quality, we are not in the clear. Our region must remain committed to ongoing efforts to maintain the progress we have made and continue to improve our air quality. New and expanded manufacturing operations in our region still face additional permitting and emission control requirements. Transportation projects must continue to demonstrate that they meet regional air pollution budgets. Residents will continue to endure vehicle emission testing, a small inconvenience for healthier air. For purposes of regulatory requirements, transportation planning, and all other activities that impact our air, the region continues to operate as a non-attainment area for the foreseeable future.

Pollutant	Year Attained		
	Lake	Porter	LaPorte
(NL = Never Listed)			
Carbon Monoxide (CO)	2000	2000	NL
Nitrogen Dioxide (NO2)	NL	NL	NL
Sulfur Dioxide(SO2)	2005	NL	1997
Lead (Pb)	NL	NL	NL
Ozone 8 Hour Std (1997)	2010	2010	2007
Ozone Revoked 1 hour Std (Revoked)	2008	2008	NL
Ozone 8 Hour Std (2008)	*	*	NL
Particulate Matter (PM 10)	2003	NL	NL
Fine Particulate Matter (PM 2.5) 1997 Std.	2012	2012	NL
Fine Particulate Matter (PM 2.5) 2006 Std	NL	NL	NL
Fine Particulate Matter (PM 2.5) 2012 Std	UNCL	UNCL	NL

Table III-3: CSO Control Status in NWI

NL = Not Listed means that this area was never found to be in non-attainment for this pollutant.

UNCL = U.S. EPA has determined that this area is unclassifiable due to insufficient information

* Redesignation petition and maintenance plan for Lake and Porter Counties was submitted to U.S. EPA on 12/5/12. On 12/10/14, U.S. EPA denied the redesignation petition and maintenance plan

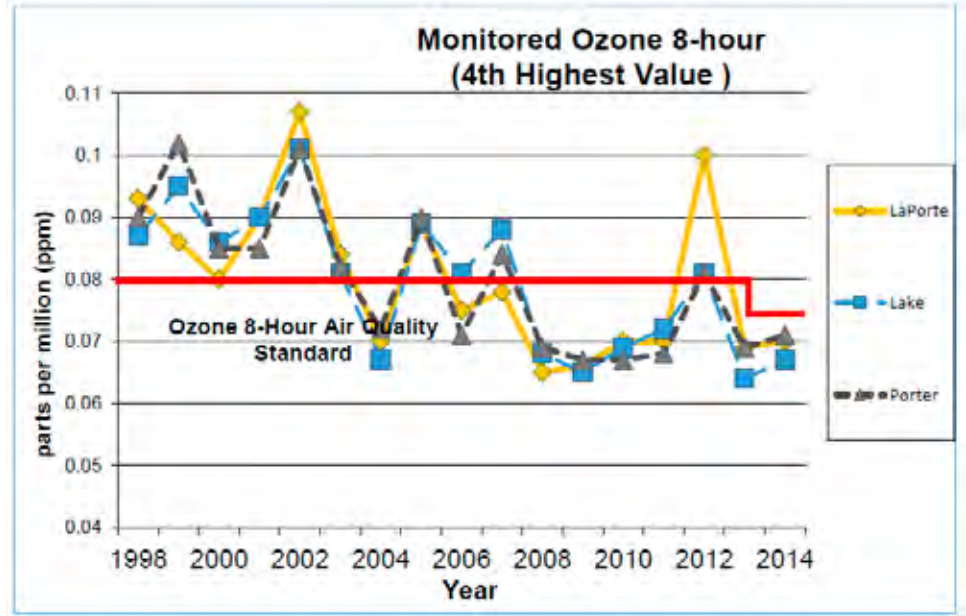


Figure III-10: Monitored Ozone 8-hour

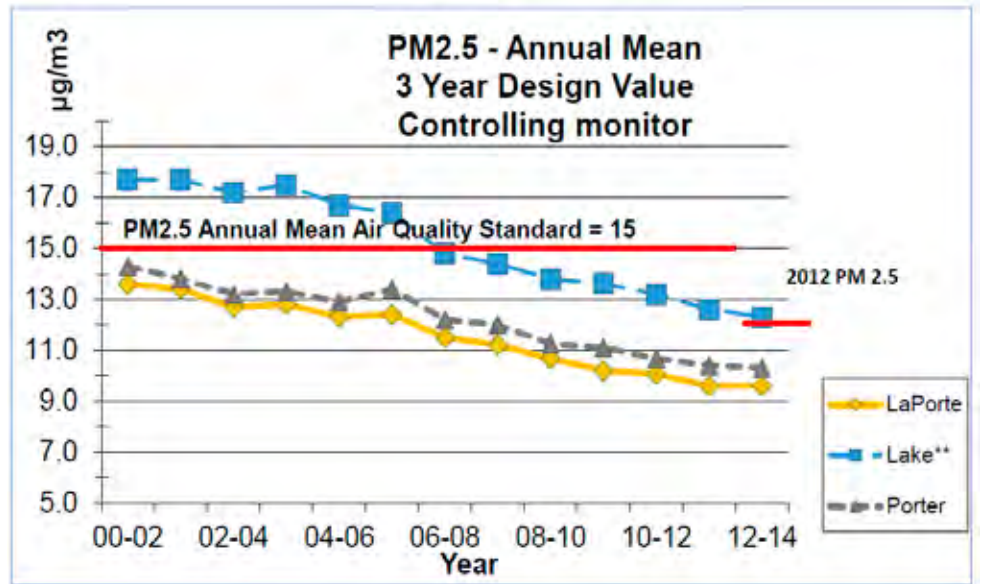


Figure III-11: PM 2.5 Annual Mean

** Data presented from Lake County control sites is from IDEM PM2.5 Annual Reports. However, technical concerns regarding data collected at Lake County PM 2.5 monitors have been flagged as unusable for purposes of determining attainment. As a result, US EPA has listed Lake and Porter Counties as "Unclassifiable" for the 2012 PM 2.5 standard.

Brownfields

Many people may think of brownfields as abandoned gas stations or shuttered factories. The term “brownfield” is defined by the US EPA as “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.” In this usage, brownfields can be a catch-all phrase for any land or building that is vacant, unused, or underutilized, but that previously had some urban use in or around it. Older buildings that are in use, but find their resale opportunities constrained by the presence of asbestos or lead paint, can be brownfields. Parkland, vacant lots, or unsecured buildings in urban areas with visible evidence of open dumping, old foundations, or nearby industrial use can be brownfields. The term brownfield may also be applied specifically to sites which have been cleaned up using state or federal brownfield program funding.

A number of cleanup programs have evolved over the years to assess and, where necessary, clean up contaminated sites, facilities and properties. Cleanups may be done by the US EPA, other federal agencies, states or municipalities, companies or parties responsible for the contamination, or other organizations. They may be funded by various levels of government, private parties and other organizations. Cleanup requirements, including reporting requirements, vary by program and sometimes even within a program, and not all information is reported to, or available to, the US EPA. In some cases, a particularly piece of property is impacted by more than one program. In other cases, a spill, or other contamination, may be cleaned up by an active facility that continues to operate - so that the site has no impact on the health of the people or economy of the surrounding community.

Figure III12 visually depicts the general concentration of documented brownfield and remediation sites in northwest Indiana. Some of the highest concentrations occur within Environmental Justice zones. These sites may be in various stages of the remediation process. The map serves to provide a historical overview of industrial operations, and to a lesser extent historic commercial operations, that have resulted in contamination issues that must now be addressed.

It is important to realize that this documentation represents only those contaminated sites that have been identified, verified, and enrolled in some type of state or federal regulatory or funded clean-up program. An unknown number of additional properties may be impacted by the presence or perception of contamination. Many sites represented on the map may be properties that have already been cleaned-up and even returned to productive use. Others may have been cleaned-up to reduce public risk, but retain strict development restrictions that limit their potential future use.



Abandoned industrial property in East Chicago. Photo by Mitch Barloga

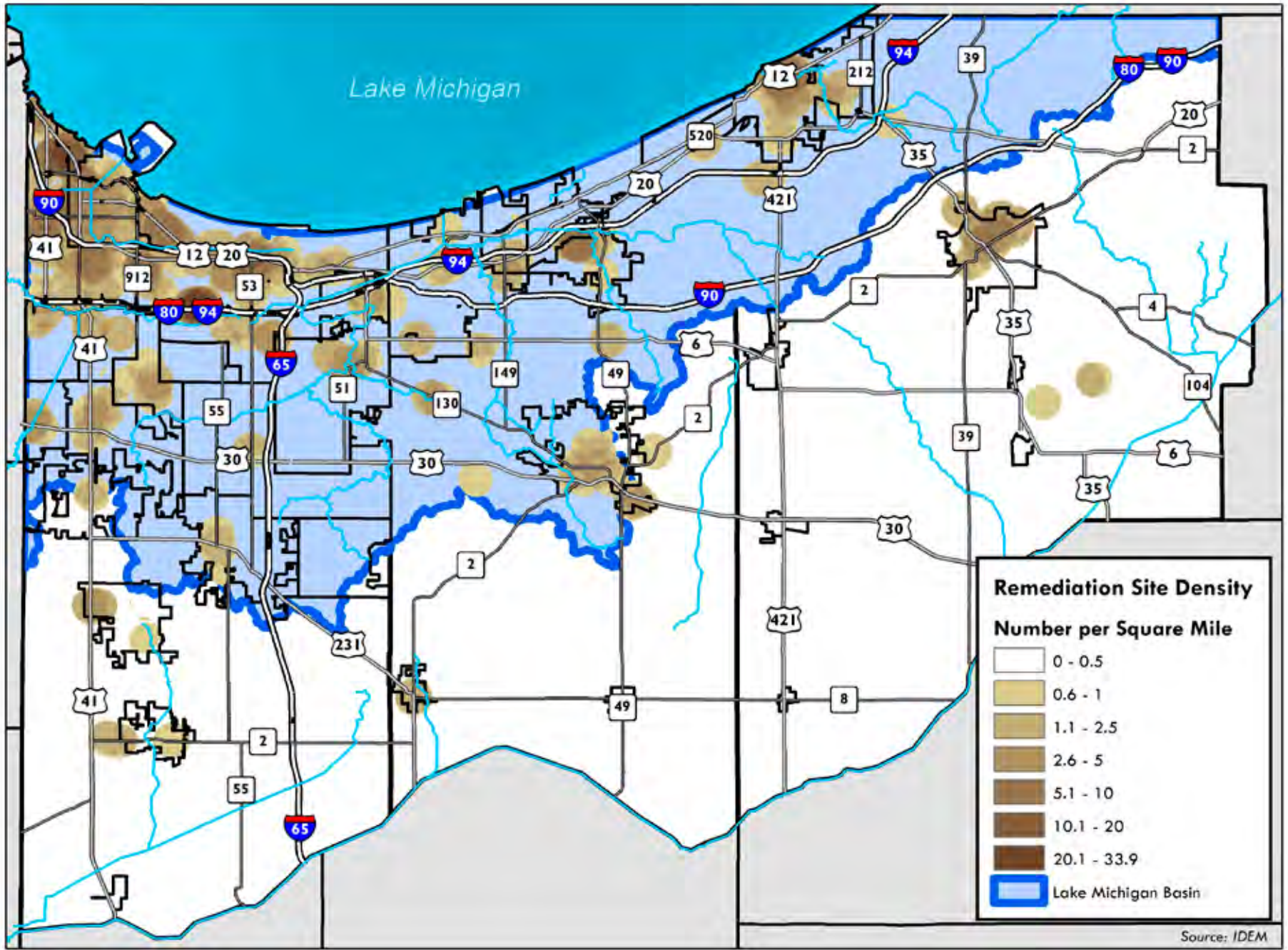


Figure III-12: Remediation Site Density, NIRPC Analysis, 2015

Implementation

NIRPC Actions: Implementation Examples:

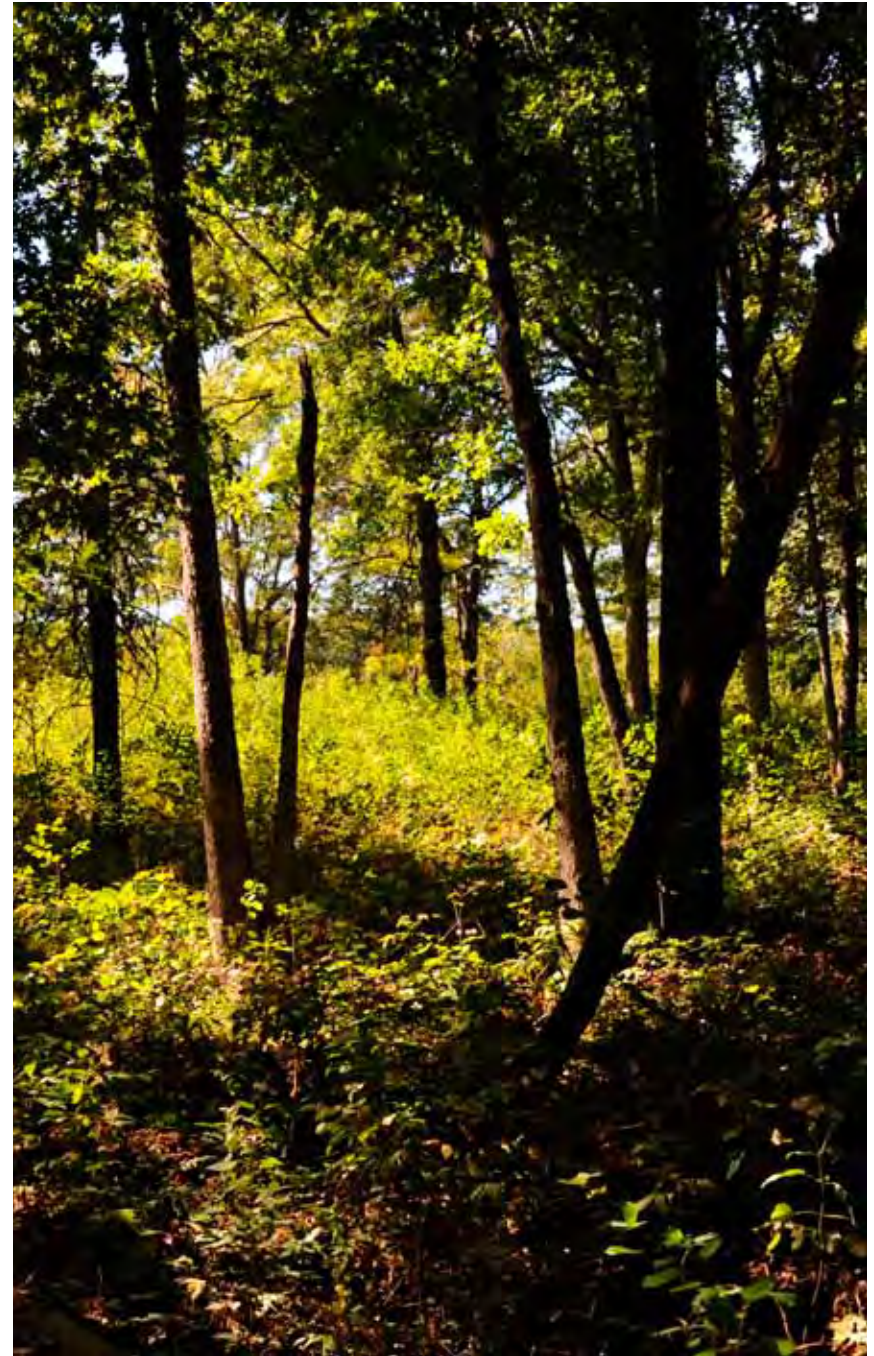
1. Encourage, review and comment on proposed open space acquisitions as requested, in particular as they relate to the Greenway Infrastructure Network.
 - **Implementation Action:** NIRPC has provided recommendations to the Illiana Expressway Corridor Team regarding priority areas for mitigation and acquisition.
2. Maximize all opportunities to protect the environment in the transportation planning program
 - **Implementation Action:** NIRPC continues to explore and encourage utilization of Federal Highway Transportation Funding Programs for all environmental activities that may be eligible under federal guidance. NIRPC created guidance and an application for utilizing Transportation Alternatives Funding in transportation stormwater mitigation, wildlife habitat connectivity, and invasive species management.
3. Provide technical assistance to revise codes and develop standards/guidelines
 - NIRPC has secured funding to provide technical assistance to communities regarding solar photovoltaic (the process of converting light to electricity) practices, standards, and codes.
 - NIRPC has conducted workshops into best practices such as Green Streets and Alleys.
4. Collect and maintain current “best practices” information, including economic benefits and local successful examples of open space protection, private sector “green” development, and “green” municipal practices (hybrid fleet vehicles, natural de-icing agents, etc.). Encourage use of the information through easily available distribution.
 - NIRPC secured funding and contracted with the Conservation Fund to extend an ecosystem services valuation study conducted for the



Rooftop solar panels at Porter County Career & Technical Center.
Photo by Ty Warner.

- Chicago Metropolitan Agency for Planning (CMAP). As a result, this update can include additional details relating the economic benefits of green infrastructure, water resources, and other aspects of Northwest Indiana’s natural environment.
5. Develop “model” code and development regulation concepts to address the following:
 - Facilitating use of alternative energy sources- wind, solar, geothermal, etc.
 - NIRPC has secured funding to provide technical assistance and model ordinances to communities regarding best solar photovoltaic practices.

6. Implement the Greenways & Blueways Plan components of the Green Infrastructure Network, in particular improving north-south linkages for species mobility and linking the trail network to local parks and recreation facilities
 - Approximately 63 stream miles are open for paddling on the Kankakee Water Trail.
 - An update on the *Greenways and Blueways Plan* coming in Spring of 2016
7. Engage in watershed scale planning initiatives, in particular for the watersheds that do not yet have a watershed management plan in place, including:
 - NIRPC has secured funding and is in the process of working with stakeholders to develop and implement a Watershed Management Plan through the Deep River Portage Burns Waterway Initiative.
 - NIRPC's Senior Water Resources Planner contributes technical support to all ongoing watershed planning efforts throughout Northwest Indiana.
8. To the extent possible, track local codes and regulations with the 2040 CRP to support the Green Infrastructure Network in both land use pattern and site development practices.
9. Maintain and update the Green Infrastructure Vision network map and encourage partners to assist with updates.
 - NIRPC Participated in the Chicago Wilderness GIV 2.1 planning project. As a result, the Green Infrastructure Vision map is updated to incorporate enhanced functional assessment of natural areas and connecting corridors in the region.



Oak Ridge Prairie in Lake County. Photo by Stephen Sostaric.



Chapter IV : **Human & Economic Resources**

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Overview

The 2040 CRP Vision Statement addresses human and economic resources in its Vibrant Region vision theme: Our economy is thriving and our people are well-educated. Northwest Indiana competes in the Midwest, the nation and the world to attract business, industry and economic development opportunities. Economic revitalization is dependent on the collaboration and cooperation between business, government and other institutions to improve workforce skills, develop infrastructure and create reinvestment opportunities. A major emphasis of the Plan is reinvestment and redevelopment of the region's core communities, with particular focus on Gary, Hammond, East Chicago and Michigan City. NIRPC continues to support the economic development advancements that are underway.

NIRPC will continue to support the following key strategies necessary to achieve the Region's economic health and vitality goals:

- Continued operation and staffing of the Northwest Indiana Economic Development District, a partnership between NIRPC and the Northwest Indiana Forum
- Advance top industry clusters which include:
 - Transportation, distribution and logistics.
 - Advanced manufacturing
 - Information Technology
 - Professional and medical services
- Leverage land use and multimodal transportation
- Support education and job development partners

NIRPC continues to partner with the Northwest Indiana Forum as well as entities such as One Region, The Northwest Indiana Regional Development Authority, the Center for Workforce Innovations, and the Lake County Indiana Economic Alliance and other area Economic Development Commissions in carrying out the Economic Development goals and objectives. NIRPC will continue to support

and work with other partner agencies in their efforts to improve the economic vitality and health of the region.

A key ingredient to economic health is the investment in educational and job development networks. An educated workforce is vital for the Region's prosperity, and educational institutions help the Region compete for quality jobs. The Center for Workforce Innovations annually produces a State of the Workforce Report. According to the 2014 report, the current economy is "one on the mend." As the economy grows, the need for educated and skilled workers will rise. READY NWI is a regional partnership between schools, employers, economic development groups, and the community aimed at ensuring prosperity by meeting the skill and education needs of employers. The vision of READY NWI is "by 2025, a talent pool for our Northwest Indiana employers where 80 percent of the labor force has a post-high school credential aligned with employers' needs." The alignment of workforce, education and economic development in targeting the industries is promising for growing the regional economy.



The BP Refinery in Whiting. Photo by Stephen Sostaric.

To build on the region's strengths and support economic development targets, efforts are underway in the region to coordinate workforce training programs and institutions to improve the experience for workers and businesses. Ivy Tech Northwest offers certificates in manufacturing operations mechatronics, computer information systems and computer information technology; and industrial technology, logistics associate and logistics technician. Purdue University Calumet awards degrees in engineering technology, computer information technology, mechanical engineering and electrical and computer engineering. Purdue North Central offers computer network information and technology. Professional and medical credentials can be obtained in schools across the region. The Center of Workforce Innovations partnered with Conexus Indiana to expand the Dream It Do It campaign among regional high schools in support of manufacturing and conducted manufacturing summit roundtables.

Northwest Indiana Economic Development District (NWIEDD)

NIRPC continues to provide staffing and accounting services for NWIEDD. NWIEDD is a separate, nonprofit federally designated organization established through a partnership between NIRPC and the Northwest Indiana Forum. NWIEDD was created to maintain and implement the Comprehensive Economic Development Strategy (CEDS) and secure economic development-related grant opportunities from the Economic Development Administration (EDA), a bureau of the U.S. Department of Commerce. NWIEDD serves as a bridge between the private and public sectors and networks area leaders in readying economic development projects potentially eligible for grant funding.

The CEDS represents the confluence of local public and private interests intended to be a roadmap to a bright future in Northwest Indiana. The deliberation and forethought incorporated into the CEDS is intended to help create jobs, foster a more stable and diversified economy, and improve quality of life. It provides a mechanism to coordinate the efforts of individuals, organizations, local governments, and private industry concerned with economic development. The CEDS was updated in 2013.



US Steelyard, Home of the Gary RailCats. Photo by Stephen Sostaric.

In 2014, NWIEDD applied for District status from the EDA. It also received an operational planning grant from the EDA and solicited a staffing entity to carry out the District's activities. Staffing was added via a consultant. NIRPC will continue to assist NWIEDD's future organizational capacity for the purpose of enhancing other economic development activities in the region.

Alliance for Regional Development

The Alliance for Regional Development is a coalition of high-level leaders in business, government, and academia working together to strengthen the economic competitiveness of Chicago's 21-county tri-state region, including Northeast Illinois, Northwest Indiana, and Southeast Wisconsin. The Alliance's common goal is to provide a cross-jurisdictional, multi-sector response to the Organization for Economic Cooperation and Development's Territorial Review of the tri-state region that recommended specific and coordinated improvements in four key areas—workforce development, innovation, transportation and logistics, and green growth—to overcome growth and job creation rates well below national and international averages for large metropolitan areas.

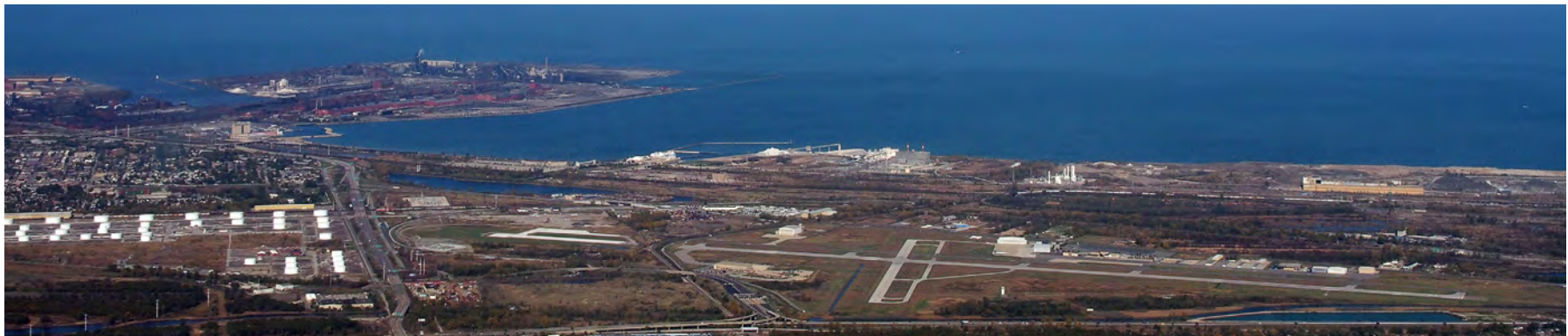
In order to ensure that the region profits from an economically strong and competitive future, the Alliance organized working teams in the four key areas. The working teams, comprised of leaders in government, academia, and the private sector from all three states, collaborated to develop regional economic development strategies.

Alliance Transportation & Logistics Working Team

With leadership from planning agencies, the private sector, and universities in all three states, the Alliance Transportation & Logistics Working Team focused on the Milwaukee-Chicago-Gary corridor as the nation's premier transportation and logistics hub and a major continent-wide player in air travel, air cargo, railways, and freight. NIRPC collaborated extensively with the Purdue Calumet Center for Innovation through Visualization and Simulation (CIVS) and Purdue West Lafayette Center for Regional Development (PCRD) to create a regional planning and economic development Geographic Information Systems (GIS) tool (Figure IV-1) for showcasing regional infrastructure across the three-state region and leveling land use data for economic development purposes. NIRPC worked with its partner Metropolitan Planning Organizations in Southeast Wisconsin and Northeast Chicago to share and level data for seamless analysis across state lines for the use and benefit of the private sector. The interactive GIS map and analysis tool will help close the gaps in the regional transportation system by allowing decision makers in Northeast Illinois, Northwest Indiana, and Southeast Wisconsin to coordinate federal funding requests across state lines. Creating the tool required close collaboration on the part of leaders and staff from NIRPC, the Chicago Metropolitan Agency for Planning, the Southeastern Wisconsin Regional Planning Commission, the Purdue Center for Innovation through Visualization and Simulation, and the Purdue Center for Regional Development.



Ship unloading cargo at Buffington Harbor in Gary. Photo by Stephen Sostaric.



Aerial view of the Gary-Chicago International Airport and Indiana Harbor. Photo by Stephen Sostaric.

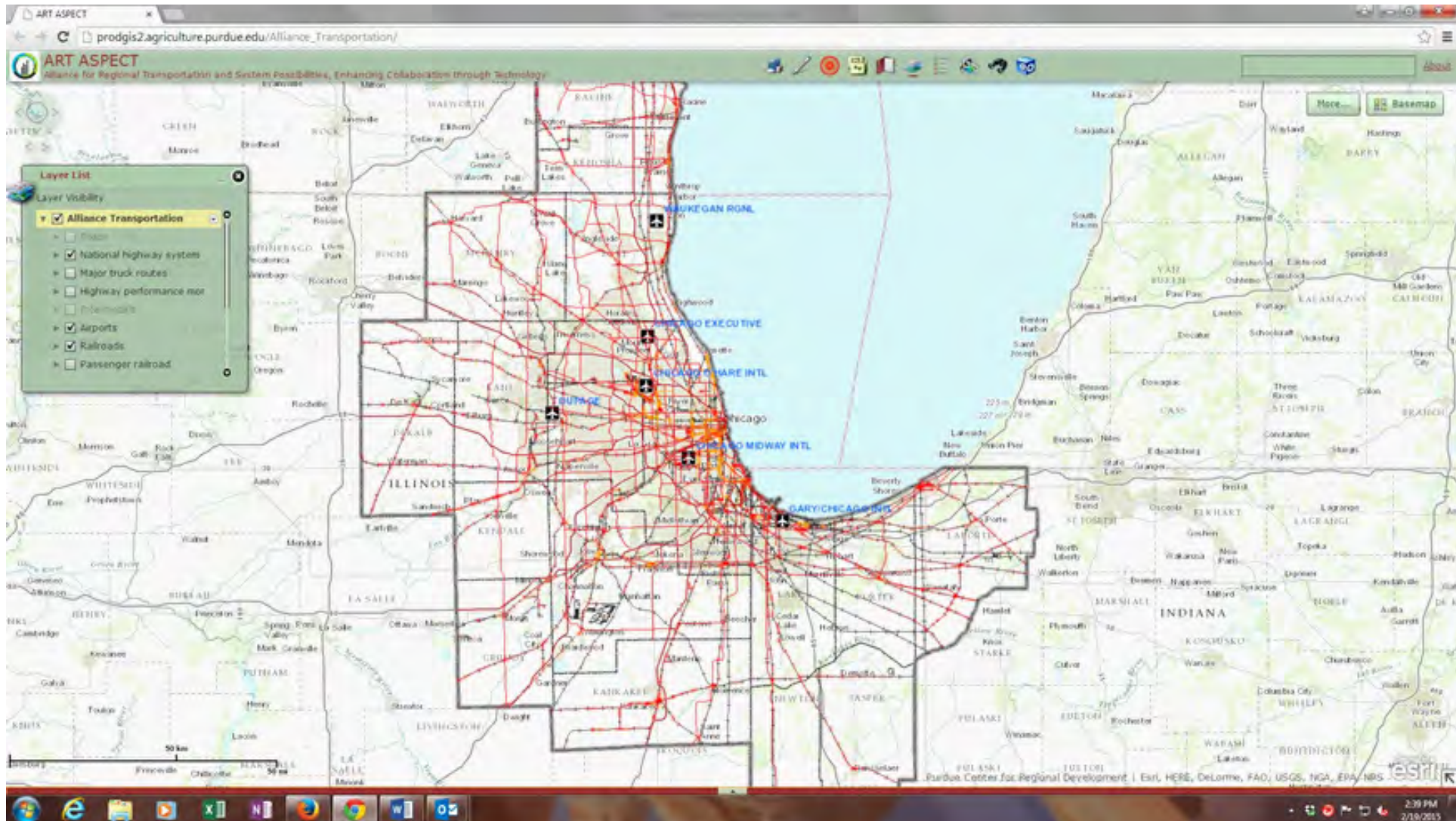


Figure IV-1: Screenshot of Regional Development and Economic Development GIS Tool

Regional Development Authority (RDA) Economic Impact

The Northwest Indiana Regional Development Authority (RDA) was created by the Indiana General Assembly in 2005. The RDA has invested \$210 million in projects across the region, which leveraged \$667 million in spending by local governments, federal government, and private parties. For every one dollar of RDA funds invested to date, a return of an additional \$3.17 is generated toward implementing regional development priorities. The RDA continues its mission to invest in regional economic development, creating jobs and fund projects that will have a lasting economic impact on the Northwest Indiana region. The RDA has partnered with the Indiana Economic Development Corporation on economic development projects. Through this partnership, RDA's investments helped bring nearly 1,000 jobs and half a billion dollars in investment. Combining those economic and construction jobs with those created by the Lake Michigan shoreline and Gary Airport projects, a proposed 5,500 jobs will be created by 2025.

Indiana Economic Development Corporation (IEDC)

The IEDC is the State's lead economic development agency. This public-private partnership focuses its efforts on growing and retaining businesses in Indiana and attracting new business to the State of Indiana. Maximizing incentives provided through the IEDC, approximately 32 businesses took part in either attracting or expanding their business and creating nearly 2,000 new jobs in the Northwest Indiana region between 2012-2014.



Whiting Lakefront Park. Photo by Stephen Sostaric.

Performance Measures

The following performance measures are used to measure the success of the economic development goals, objectives and efforts.

- Employment
- Unemployment
- Per capita income
- Population growth
- Job Growth/Number of jobs created
- Median household income
- Educational attainment levels

Employment

The heart of an economy is its workforce. In June of 2010, roughly 279,953 were employed in Lake, Porter, and LaPorte Counties. As of June of 2014, there were 289,196 employed, an increase of approximately 3%. See Table IV-1.

Unemployment

Unemployment may still be higher compared to Indiana's employment rate as a whole, but it is trending downward. From 2010 to 2013, the unemployment rate has decreased in all of Lake, Porter and LaPorte Counties. See Table IV-2.

Employment						
County	Q2 2010	% of Total	Q2 2014	% of Total	Change in Total	% Change
Lake	184,041	66%	188,506	65%	4,465	2%
Porter	54,398	19%	59,107	20%	4,709	9%
LaPorte	41,514	15%	41,583	14%	69	0%
Totals	279,953		289,196		9,243	3%

Source: United State Department of Labor
Table IV-1: Employment in NWI

Unemployment					
Area	Year	Labor Force	Employed	Unemployed	Unemployment Rate
Lake	2013	221,661	201,229	20,432	9.2%
LaPorte	2013	48,905	44,291	4,614	9.4%
Porter	2013	83,291	77,126	6,165	7.4%
Chicago Metro Region					9.1%
Indiana					7.5%
Area	Year	Labor Force	Employed	Unemployed	Unemployment Rate
Lake	2010	221,728	197,568	24,160	10.9%
LaPorte	2010	51,271	45,222	6,049	11.8%
Porter	2010	81,918	74,748	7,170	8.8%
Chicago Metro Region					10.4%
Indiana					10.0%

Source: Labor Force Data by County, 2013 Annual Averages
Table IV-2: Unemployment

Per Capita Income

Per capita income is a meaningful measure to indicate trends in income. In the past three years, income has remained unchanged with little to no increase. This is true throughout the entire country. See Table IV-3.

Per Capita Income 2013				
Per capita income in the past 12 months (in 2013 inflation-adjusted dollars)	Lake County Estimate	LaPorte County Estimate	Porter County Estimate	NIRPC Region
	23,918	22,852	28,669	\$24,792.42

2010				
Per capita income in the past 12 months (in 2010 inflation-adjusted dollars)	Lake County Estimate	LaPorte County Estimate	Porter County Estimate	NIRPC Region
	23,142	22,599	27,922	\$24,081.39
In 2013 inflation dollars	24,730.90	24,143.32	29,830.07	\$25,731.81

Source: American Community Survey 2013
Table IV-3: Per Capita Income

Population Growth

Also see Growth and Conservation chapter. Lake and LaPorte Counties have seen a slight decrease in population in the last three years. However, Porter County has seen an increase of about 1.35% in population. See Table IV-4.

Population Growth						
Counties	Total 2010	Percent of Total	Total 2013	Percent of Total	Total Change	Percent Change
Lake	496,005	64%	491,456	64%	-4,549	-0.92%
Porter	164,343	21%	166,557	22%	2,214	1.35%
LaPorte	111,467	14%	111,281	14%	-186	-0.17%
Total	771,815		769,294		-2,521	-0.33%

Source: 2013 Population Estimates and 2010 Census
Table IV-4: Population Growth

Job Growth

Job growth is key in measuring economic vitality. Lake, Porter and LaPorte Counties have each seen an increase in job growth. Roughly 3% increase from 2012 to 2014. See Table IV-5.

Job Growth				
	Jun-10	Jun-14	Change	% Change
Lake	184,041	188,506	4,465	2.00%
Porter	55,162	59,696	4,534	8.00%
LaPorte	41,514	41,583	69	0.00%
Total	280,717	289,785	9,068	3.00%

Source: BLS Quarterly Reports QCEW
Table IV-5: Job Growth

Median Household Income

As of 2013, Lake County's median household income was \$49,035; Porter County had a median household income of \$62,794, and LaPorte County had a median household income of \$47,538. Each County had a slight increase since 2010. Indiana had a median income of \$48,248 in 2011. With the exception of Porter County, all median household incomes were below that of the US at \$53,046.

Median Household Income			
County	2010	2013	2010 (2013 Inflation)
Lake	\$48,723	\$49,035	\$52,053
LaPorte	\$46,014	\$47,538	\$46,158
Porter	\$60,889	\$62,794	\$65,050
Indiana	\$47,697	\$48,248	\$50,956
US	\$51,914	\$53,046	\$55,462

Source: US Census American Community Survey Five-Year Estimate
Table IV-6: Median Household Income

Educational Attainment Levels

Educational attainment helps to highlight the important role of education and workforce development. Generally, higher levels of education are associated with lower rates of unemployment, a higher skilled workforce and a more economically thriving region. In the last three years, education attainment has seen a slight increase with graduates' receiving some college and higher degrees. See Table IV-7.



At right, from top to bottom:
Pierogi Fest, Whiting, photo by M. Jeremy Goldman via Flickr, CC BY-NC 2.0 License.;
Portage Lakefront Pavilion; Old Lake County Courthouse, Crown Point

2013 Educational Attainment (Population Over 25 Years)								
	Pop of 25 years	Less than 9th Grade	9th to 12th Grade, no diploma	High school graduate	Some college, no degree	Associate's degree	Bachelor's degree	Graduate or professional degree
Lake	325,401	15,369	26,979	117,410	76,546	24,728	42,667	21,682
Porter	110,462	2,461	7,008	38,870	23,906	10,185	17,947	10,085
LaPorte	76,715	2,626	7,701	30,420	16,289	6,392	8,571	4,686
Total	512,578	20,456	41,688	186,700	116,741	41,305	69,185	36,453
Percent		4%	8%	36%	23%	8%	13%	7%

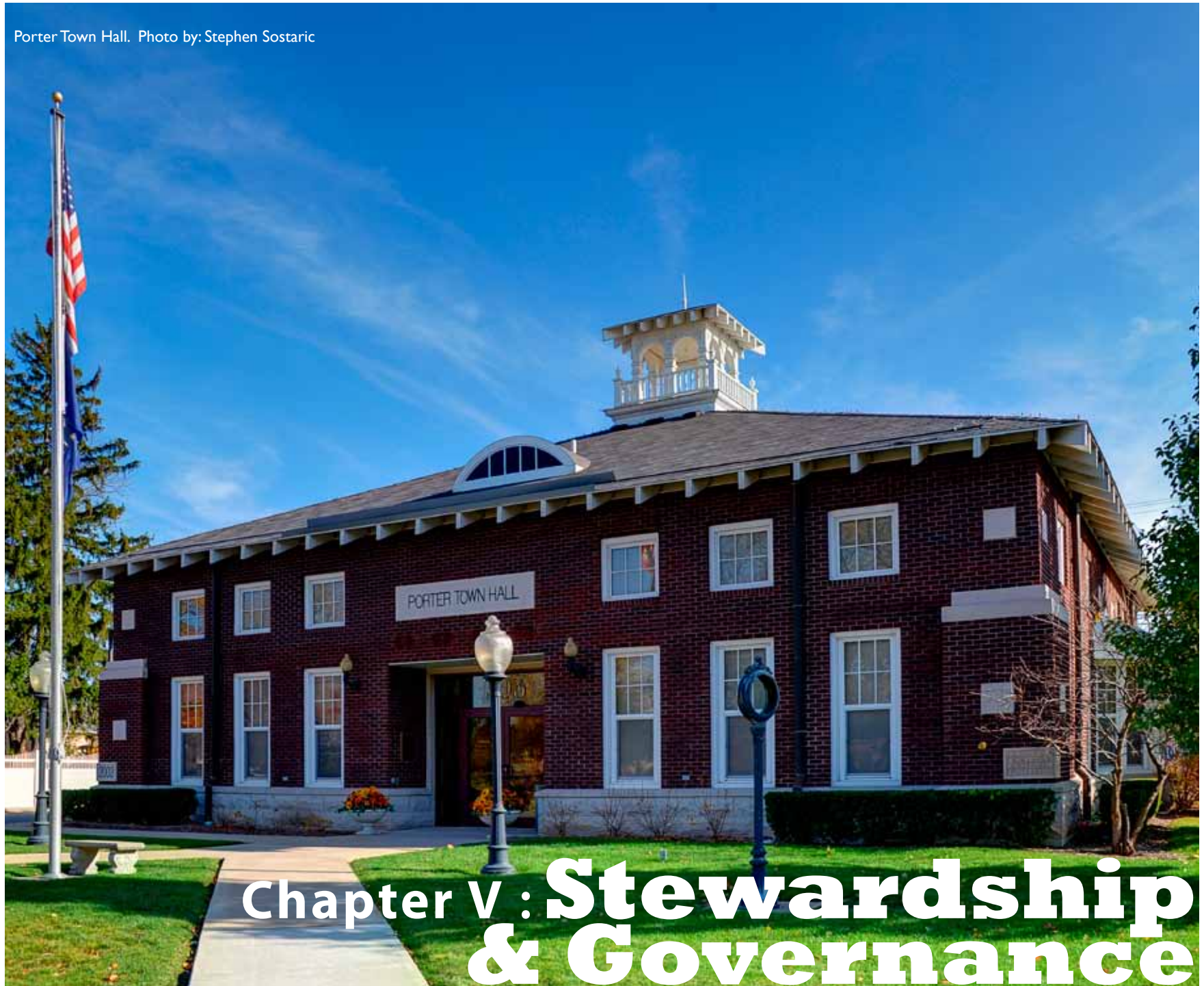
2010 Educational Attainment (Population Over 25 Years)								
	Pop of 25 years	Less than 9th Grade	9th to 12th Grade, no diploma	High school graduate	Some college, no degree	Associate's Degree	Bachelor's degree	Graduate or professional degree
Lake	322,775	15,684	29,207	120,268	73,237	23,384	40,827	20,268
Porter	107,034	2,654	6,696	38,208	23,636	8,851	17,426	9,563
LaPorte	75,996	2,839	8,224	30,084	15,917	6,227	8,286	4,419
Total	505,805	21,177	44,127	188,560	112,790	38,462	66,539	34,250
Percent		4%	9%	37%	22%	8%	13%	7%

Source: American Community Survey 2013
Table IV-7: Educational Attainment

Conclusion

Economic development is advancing, and educational attainment is the reason. Jobs are growing and income is rising regionwide. They are all positive signs of progressing toward the Vibrant Region vision theme of a thriving economy where people are well-educated.

Porter Town Hall. Photo by: Stephen Sostaric



Chapter V : Stewardship & Governance

Stewardship & Governance

The breadth of the 2040 CRP is significant in scope. To accomplish the recommendations of the plan, an entire chapter was devoted to identifying the key stakeholders and committees that would assist in this process. Goals were set, challenges recognized and leadership assigned towards the robust mission of implementing the best practices as touted throughout the CRP.

Since the adoption of the CRP, those committees and stakeholders have held in place, and have carried through several important proposals from the CRP. The Update Companion identified these achievements in previous sections of this document.

One group that did come together was borne out of the steering committee for the CRP. The Pathway to 2040 – Implementation Committee began soon after the adoption of the CRP. This chapter will focus entirely on the role of this important group of regional decision makers.

The Pathway to 2040 - Implementation Committee

The purpose of the Comprehensive Regional Plan (CRP) Pathway to 2040 implementation committee (the Committee) is to concentrate on the implementation of regional planning that is predicated on a growing concern of regional sustainability by stakeholders and the need to focus on development from a regional perspective.

The Committee facilitates implementation processes and partnerships, building links between jurisdictional boundaries. The Committee serves as a conduit to the region in helping to identify, organize, prioritize, target and support specific actions and recommendations of the CRP. The committee does not function in a policy role, but rather a technical role in the implementation and monitoring of progress.



The roles and responsibilities of the Committee are to provide advisory input to the NIRPC Board local governments, and other committees on the implementation of the CRP by:

- Encouraging local jurisdictions to understand the CRP and that their planning practices and decisions should be viewed in a broader framework that may have consequences influencing and affecting the region. To accomplish this goal, NIRPC staff, along with Committee members, should develop an outreach approach to meet with local government elected officials to present the plan vision and recommendations. Plan recommendations should be tailored per community size and type (urban-suburban-rural).
- Participating in facilitating and organizing a meaningful launch of the plan event.
- Formulating a Core Communities subcommittee of the Implementation Committee. This group will be formed by representative interests to include, at a minimum, Gary, Hammond, East Chicago and Michigan City. The Core Communities subcommittee will focus on advancing those recommendations of the CRP intended to realize revitalization of the region's historic central cities. It will also provide technical support and assist in securing resources from federal and other external sources.
- Facilitating increased understanding and meaningful discussion of social justice issues, in particular as they relate to the relationship between land use, transportation and environmental planning efforts specifically in the core communities.

Roles and Responsibilities

- Promoting an educational process that emphasizes the importance and interdependency of regional issues related to the successful integration of land use and transportation planning such as environment, economic development, open space, water, public health, education, etc.
- Mobilizing the Northwest Indiana region through coordinated leadership and common implementation strategies.
- Focusing on special projects with tangible outcomes.
- Reviewing the CRP sets of implementation recommendations and action items then prioritizing recommendations. The degree of complexity, difficulty, time frame and cost of implementation of these actions vary significantly.
- Developing a five- and ten-year implementation plan that prioritizes actions within a constrained funding plan. NIRPC staff will be working closely with the implementation committee to accomplish this task. This approach is necessary to realistically assess and identify the commitments NIRPC and its partners can make toward implementation of the CRP.
- Instituting new recommendations as needed. It is expected that the number, type and priority of implementation actions identified in the CRP will change and evolve over time.
- Identifying legislative initiatives relative to creating authorities and funding mechanisms for implementation.
- Identifying local assistance needs and best practices that support enhanced local planning.
- Monitor the progress toward achieving the recommendations.



LaPorte County Courthouse. NIRPC Photo.

Conclusion

NIRPC has built solid partnerships through the CRP development process, and has continued to foster these relationships since the CRP adoption. NIRPC intends to continue work with regional stakeholders on advancing the goals and recommendation of the CRP.

Marina Shores in Portage. Photo by Stephen Sostaric.



Chapter VI :
Implementation

Continuing A Pathway to Success

The 2040 Comprehensive Regional Plan stands as a landmark document for Northwest Indiana. The CRP charts a bold course of visionary actions across a number of planning areas with a variety of partners, and positions NIRPC as a prime mover in the process. Implementation of the CRP remains a top priority of NIRPC.

Born from the intense public participation process, which created the CRP, a Vision Statement emerged where all goals and their related objectives were categorized into four broad themes. The Vision Statement is as follows:

Stretching from the treasured shores of Lake Michigan to the historic banks of the Kankakee River and committed to an ethic of sustainability:

- **A *Vibrant* Region – Our economy is thriving, our people are well educated, growth is planned, and natural and rural areas are valued and protected;**
- **A *Revitalized* Region – Urban areas are renewed and our environment is clean;**
- **An *Accessible* Region – Our people are connected to each other and to equal opportunities for working, playing, living and learning;**
- **A *United* Region – Celebrating our diversity, we work together as a community across racial, ethnic, political and cultural lines for the good of the region.**

Breaking down roles and responsibilities regarding implementing the many goals and objectives as outlined in the CRP is a daunting task. To aid in this effort, NIRPC worked with the Pathway to 2040 Implementation Committee on the preparation of an implementation matrix, which breaks each goal into a series of action steps, complete with timeframe, responsible party, funding avenues and best practices examples. The matrix was created in 2012, a

year after the CRP was adopted. It represents a list of activities and responsibilities that will continue to be advanced and updated.

Embedded within this matrix are the roles NIRPC and regional stakeholders must play to successfully implement the 2040 CRP, and lay the groundwork for a sustainable and livable region that provides a strong quality of life for all today, and in the foreseeable future. Please refer to Appendix B to read the matrix in its entirety.



Autumn Sunset over Lake Michigan. Photo by Mitch Barloga.

Appendix A: Public Comment Report

In anticipation of updating the 2040 Comprehensive Regional Plan (CRP) as required by federal regulation, the Northwestern Indiana Regional Planning Commission (NIRPC) conducted a series of listening sessions to gain public input on the areas of motorized surface transportation, public transportation, and the environment and land use. This input was used to inform the update process. A series of fifteen public meetings were held during September and October. The schedule was as follows:

Motorized Surface Transportation

- Thursday, September 18, 2014, 1:00 pm-3:00 pm & 4:00 pm-6:00 pm, Michigan City City Hall, 100 East Michigan Boulevard, Michigan City
- Wednesday, October 1, 2014, 2:00 pm-4:00 pm & 5:00 pm-7:00 pm, Merrillville Town Hall, 7820 Broadway, Merrillville
- Tuesday, October 21, 2014, 1:00 pm-3:00 pm & 4:00 pm-6:00 pm, Munster Town Hall, 1005 Ridge Road, Munster
- Wednesday October 22, 2014, 1:00 pm-3:00 pm & 4:00 pm-6:00 pm, Valparaiso Public Library, 103 Jefferson Street, Valparaiso

Public Transit

- Monday, September 22, 2014, 2:00 pm-4:00 pm, Dyer-Schererville Public Library, 1001 W. Lincoln Highway, Schererville
- Wednesday, September 24, 2014, 2:00 pm-4:00 pm, East Chicago Public Library Main Branch, 2401 E. Columbus Drive, East Chicago
- Monday, October 6, 2014, 2:00 pm-4:00 pm, Crown Point Public Library, 122 N. Main Street, Crown Point
- Tuesday, October 7, 2014, 4:00 pm-6:00 pm, Adam Benjamin Metro Center, 100 W. 4th Avenue, Gary
- Tuesday, October 14, 2014, 5:30 pm-7:30 pm, Portage City Hall, 6070 Central Avenue, Portage
- Wednesday, October 15, 2014, 2:00 pm-4:00 pm, Valparaiso

City Hall, 166 Lincolnway, Valparaiso

- Thursday, October 16, 2014, 2:00 pm-4:00 pm, La Porte City Hall, 801 Michigan Avenue, La Porte
- Thursday, October 16, 2014, 5:00 pm-7:00 pm, Michigan City City Hall, 100 East Michigan Boulevard, Michigan City
- Thursday, October 23, 2014, 4:00 pm-6:00 pm, Hammond Public Library, 564 State Street, Hammond

Environment

- Tuesday, September 16, 2014, 2:00 pm-4:00 pm, Room 002 of the Library-Student-Faculty Building at Purdue University North Central, US 421, Westville
- Wednesday, October 29, 2014, 1:00 pm-3:00 pm & 4:00 pm-6:00 pm, Merrillville Town Hall, 7820 Broadway, Merrillville

The 2040 CRP contains NIRPC's long range transportation plan, which federal regulations require be updated every four years.

Notification of the meetings was distributed to NIRPC's media contacts, as well as NIRPC's stakeholder and committee lists, including the Transportation Policy Committee and NIRPC Commission. Information was also distributed via the NIRPC website (www.nirpc.org) and NIRPC's social media outlets.

The comments received at the meetings as well as through other means such as the NIRPC comments email at comments@nirpc.org have been compiled into the following report.

NIRPC would also like to thank the public officials and transit operators who assisted staff at the meetings.

Environmental

The following comments were received during the environmental meetings at Purdue North Central on September 16, 2014 and Merrillville Town Hall on October 29, 2014.

Comment: Include Lake Michigan Coastal Program as an existing Program.

NIRPC Response: *NIRPC will include the LMCP as an existing program in the CRP update.*

Comment: Include the number of communities that adopt/ implement model ordinances as a performance measure.

NIRPC Response: *NIRPC will work with the Pathway to 2040 committee to identify a feasible process to collect this information.*

Comment: Include Hazwopper training performed regionally as a management practice to prepare for possible pipeline failure into Lake Michigan.

NIRPC Response: *NIRPC will consider adding this as a BMP in a future update to the CRP. The current version of the CRP does not include information on environmental threats posed by pipelines.*

Comment: Include Gary interest in fishing pier.

NIRPC Response: *This could potentially be included in the Marquette Plan update but will not be incorporated into this CRP update.*

Comment: Include information on invasive species threats such as Emerald Ash Borer impacting woody debris into streams.

NIRPC Response: *Although an important topic, NIRPC does not currently have the capacity (staff knowledge) to address the invasive species issue in great detail. NIRPC will work with partners to determine if it is feasible to include the topic in the current CRP update.*

Comment: May want to include information from the Indiana State Forestry Action Plan.

NIRPC Response: *NIRPC will review the most current Indiana State Forestry Action Plan to identify elements to be included in the current CRP update.*

Comment: Include information on the urban forestry canopy assessment (taking place soon).

NIRPC Response: *NIRPC will include information from the assessment if it is completed in a timeframe that aligns with the current CRP update. If it is not NIRPC will consider adding information in a future update.*

Comment: Purdue University is currently studying all the BMPs Save the Dunes funded in the Salt Creek Watershed to see who is still maintaining them.

NIRPC Response: *NIRPC will consider including this information if the study is completed in a timeframe that aligns with the current CRP update. Most likely this would be done as a case study.*

Comment: Where is the information on the National Park Service land?

NIRPC Response: *NIRPC uses the “Managed Lands” GIS data collected and made available by the Indiana Department of Natural Resources. This dataset includes land areas owned and managed by the NPS. NIRPC will include an update to this information if new data is available.*

Comment: Hammond removed several outfalls.

NIRPC Response: *The current CRP does not include information on NPDES permitted facilities or outfall structures and likely will not be included in the current update. This information is addressed at the municipal level through their MS4 programs, state Total Maximum Daily Load (TMDL) studies and local watershed management plans.*

Comment: Add Salt Creek watershed management plan is being updated by EPA.

NIRPC Response: *NIRPC will include an update on local watershed planning efforts.*

Comment: Add East Branch Little Calumet River woody debris studies and Environmental Assessment (EA) to review stream use and management through the Indiana Dunes National Lakeshore.

NIRPC Response: *NIRPC will consider including these as case studies, however it is our understanding that neither of these studies have been completed at this time.*

Comment: Page III-20: Chesterton's Long Term Control Plans for CSOs has been approved.

NIRPC Response: *NIRPC will update the status of Combined Sewer Overflow Long Term Control Plans in the region to extent data is available from IDEM.*

Comment: Page III-58 Need to Update Statement about Save the Dunes watershed planning efforts to include the East Branch of the Little Calumet, including tributaries.

NIRPC Response: *NIRPC will include an update on all local watershed planning efforts.*

Comment: Page III-10 Floodplains: FEMA recently updated floodplain maps in NWI.

NIRPC Response: *NIRPC will include an update to the floodplain map in the CRP.*

Comment: Do we want to mention those communities that participate in the National Flood Insurance Program? They must adopt ordinances that protect flood plains from development.

NIRPC Response: *To the extent new information is available on requirements and participation in the National Flood Insurance Program, and resources permit we will consider how best to incorporate that information into the 2040 CRP, and whether that is best handled in the environment section.*

Comment: Page III-59: Should MS4 Erosion and Sediment Control for Construction Activities, as well as BMP performance criteria for post construction be added to the Storm Water Quality Manual Section, or the National Management Measures Section?

NIRPC Response: *Erosion and Sediment Control for Construction Activities have not been included as specific BMPS in the plan due to their temporary nature on the landscape. Supporting local*

governments to implement these activities in an implementation action identified in the current CRP and can be strengthened in the update.

Performance criteria for Post-Development specific BMPs may be too detailed to include in the CRP given the resources available. However, supporting local governments understanding of these performance measures is an implementation action identified in the current CRP and could be strengthened in the update.

Comment: IDEM has a program for recycling that provides guidance & maybe funding for companies that want to use recyclable products to produce new consumer products. Should programs like this be included somewhere with the plan to enhance economic development/minimize environmental impacts? Maybe Chapter 4- Green jobs?

NIRPC Response: *NIRPC will review this program and determine how it may be best incorporated into the 2040 CRP Update given resources available to us.*

Comment: Issues to consider including:

- In-lieu fee proposals for wetland mitigation
NIRPC Response: *The comment refers to a proposed addition to the Indiana Wetland Mitigation program allowing for wetland impacts to be mitigated through payment of fees to the state, as an option in addition to the current programs of on-site mitigation and wetland mitigation banking. The Us Army Corps of Engineers public comment period on this proposal closed on August 18, 2014. Should this program be approved prior to completion of the 2040 CRP Update, NIRPC will explore its relevance for incorporation as appropriate to the Environmental Mitigation process.*
- Waters of the United States rules proposed by EPA
NIRPC Response: *The comment refers to a rulemaking concerning clarification of the types of waters covered under the federal Clean Water Act. The rulemaking should not however broaden coverage or add new types of waters to those CWA jurisdiction, therefore it should not impact the environmental and natural resource basemap underscoring the Green Infrastructure or the Development Suitability maps presented in the 2040 CRP.*

- Indiana Chamber of Commerce Water Resources Study
NIRPC Response: *The comment refers to “Water and Economic Development in Indiana: Modernizing the State’s Approach to A Critical Resource”, a report published by the Indiana Chamber in August, 2014. NIRPC plans to incorporate key findings and relevant data from this report into the 2040 Update Water Supply section of Chapter 2.*
- DNR Water Conservation and Efficiency Rule
NIRPC Response: *The comment refers to IC 14 Section 4.2 Water Conservation and efficiency program, which was originally developed to meet the requirements of the Great Lakes Compact, but which is applied state wide. NIRPC can include a brief discussion of the goals and objectives of this program in the Water Withdrawal, Consumption and Supply section of Chapter 2 of the CRP, as well as recommend the model conservation ordinance provided by the DNR as an implementation tool. As resources and time permit, NIRPC will review the IDNR program information for any significant and relevant changes or new information since the 2011 publication of the 2040 CRP.*

Comment: Brownfields- Reach out to Jim VanderKloot with the USEPA Strong Cities Strong Communities Program at the City of Gary

NIRPC Response: *NIRPC plans to incorporate all of the progress and potential progress that have been underway in the area of brownfield cleanup and redevelopment into the CRP update. The Strong Cities Strong Communities program is an important part of this progress.*

Comment: Brownfields Job Training Program in Gary

NIRPC Response: *NIRPC will include reference to previous Environmental Workforce Development and Job Training Grants completed by the City of Gary, as well as include the program as an ongoing implementation opportunity and recommendation.*

Comment: Climate Change-

- The Alliance for the Great Lakes has done work in Michigan City to map climate change valuable (vulnerable?) areas.
- Look at USACE Study- they discuss breakwater wall failure and more coastal storms as a result of climate change – they map the value of properties that would be impacted. (Great Michigan City Example)

NIRPC Response: *As time and resources permit, and if NIRPC can obtain data from the two projects mentioned, we will attempt to incorporate this*

into the existing CRP framework as appropriate.

Comment: Solid Waste – Have you talked with Harvey Abramowitz at Purdue Calumet? He cites on different solid waste committees- also has done many local studies.

NIRPC Response: *NIRPC will pursue this recommendation as time and resources permit.*

Comment: Water Withdrawal – nice to talk about well testing weeks

NIRPC Response: *As time and resources permit, NIRPC will explore making recommendations about promotional well testing programs.*

Comment: Anything change due to Pratt Industries Expansion? This resulted in major updates to the Valparaiso Waste Water Treatment Plant?

NIRPC Response: *Pratt Industries Expansion and its relationship to water infrastructure capacity could be a good case study on the connection between water resources and economic development. NIRPC will try to include this in the 2040 CRP Update as time and resources permit.*

Comment: Natalie Johnson, Urban Waters Coordinator has latest stats for limited soil ratings of septic as well as other information about why it’s important to maintain. Also Dunes Creek was targeted and not necessarily based on sound science- better explanation is needed.

NIRPC Response: *Thank you for volunteering Natalie! NIRPC will discuss ways to incorporate new information you may have available into the 2040 CRP Update as time and resources permit.*

Comment: Include information about the Jeorse Park Beach project and Deep River dam (Lake Station).

NIRPC Response: *NIRPC will consider including information about the Jeorse Park Beach project as a potential case study. The Deep River dam study through the US Army Corps of Engineers is currently on hold due to lack of local matching funds to complete the study.*

Comment: Include information on septic study (focus groups).

NIRPC Response: *The study has not been completed at this time. NIRPC will however include information on the NWI Septic System Working Group.*

Comment: Include Urban Waters Federal Partnership in existing programs.

NIRPC Response: *NIRPC will include this information in the CRP update.*

Comment: Include update to floodplain information.

NIRPC Response: *NIRPC will include an update to the floodplain map in the CRP.*

Motorized Surface Transportation

The following comments were received during the motorized surface transportation meetings at Michigan City City Hall on September 18, 2014, Merrillville Town Hall on October 1, 2014, Munster Town Hall on October 21, 2014, and the Valparaiso Public Library on October 22, 2014.

Comment: We need to support the train, because if we want economic development and growth, we need to have those types of connections in our community.

NIRPC Response: *We agree—NIRPC supports the Westlake line. This commuter rail line has the potential to both reduce expected traffic congestion and encourage population growth in the areas served by the route that are outside of the urban core.*

Comment: There needs to be concern for/things to consider in terms of the proposed NICTD Expansion in Dyer such as location of the maintenance facilities.

NIRPC Response: *All construction-related aspects of the Westlake line will be known many years ahead of construction. Placement of maintenance and other facilities will be in/at locations that have been appropriately zoned by the local planning and zoning officials.*

Comment: If Main Street is connected to Joe Orr Road in Illinois, there is more work that needs to be done. There are still two lane sections between Calumet Avenue and Indianapolis Boulevard that would also need expansion in order to avoid becoming a bottleneck for traffic.

NIRPC Response: *We understand. NIRPC cannot independently dictate the construction of a roadway. The Main Street project in our transportation plan runs from the state line to Calumet Ave because those are the beginning and ending points specified by the Town of Munster in their request to us.*

Comment: Valparaiso University is planning a large expansion of its student population. Is NIRPC planning for this?

NIRPC Response: *Not really. Planning for additional road or transit services related to population shifts in group quarters (e.g., colleges, universities, prisons, etc.) is largely the responsibility of the host city. NIRPC would expect the city itself to address by bringing projects to NIRPC for funding.*

Comment: We should look at alternative modes such as an overhead monorail from Porter County airport to Gary Airport or even Midway. This could even have connections into GPTC's current Livable Broadway project.

NIRPC Response: *Construction of any new fixed guideway type of transit system requires years of planning and immense amounts of capital. In contrast, a bus rapid transit service is able to use existing roadways, can be implemented quickly, and operates at a fraction of the cost of a fixed guideway system. We can review other modes of public transit service, but until a dependable and permanent source of local funds for public transit is established, bus service remains the most cost-effective mode.*

Comment: Make sure that there is a system created to make sure that we are getting the most return for the dollars that we are investing. We should evaluate the cost effectiveness of projects to see what their economic impact is to make sure that we are getting the most bang for our buck.

NIRPC Response: *NIRPC's transportation plan calls for the maintenance of the existing surface transportation network. However, transportation projects selected by NIRPC to construct or rehabilitate*

with federal funds are limited to those pre-identified road segments on the “Federal-Aid Highway System.” Cost-effectiveness is a consideration when we select federally funded road projects. The current federal transportation authorizing statute (MAP-21) calls for the establishment of a data-driven, performance-based project selection.

Comment: The true cost of environmental damages should be part of general considerations when planning and making transportation decisions.

NIRPC Response: *Each federal aid project selected is subject to the requirements of the National Environmental Policy Act (NEPA). A NEPA review and clearance (by the State and Federal officials) is required at the design stage. Conducting a detailed environmental impact assessment prior to our selection of the project for funding would impose an undue financial burden on sponsors. It could, however, be included as part of the NEPA process.*

Other comments received outside of meetings:

Comment: We were pleased to see the recent support for the Illiana Expressway in the 2040 Plan. We feel this will address the safety and traffic flow for the east/west traffic in the region, and promote economic growth. We also support the 45th Avenue/Calumet Ave improvement in the 2040 plan. The positive impact this improvement would have on both north-south and east-west travel and safety, along with eliminating the rail crossing safety issues and traffic delay concerns, and quality of life will have a very positive impact on Munster and the surrounding communities.

There are many areas of need, and we understand that planning is not just static, but dynamic, and as needs change, both long term and short term plans must be looked at throughout the entire area serviced by your office.

Given that, we would ask you to revisit the Main Street project located in Munster currently included in your 2040 plan, and strongly support that Main Street Extension should be eliminated from your 2040 plan.

We have lived in various cities and towns while a resident and taxpayer in Northwest Indiana (including Munster), so we have experienced first-hand traffic and residential quality of life living in these different communities. While we feel the expense to improve the Calumet/45th street intersection is justified, we feel this improvement also makes the Main Street project

not needed at all. Also, why should our resources support a project with negative benefits to local residents, when there are other projects with positive benefit in other parts of the county and northwest Indiana?

Besides being an unnecessary expense, the Main Street Extension is one that many local residents do not want. Having attended information meetings on this project, including one at the Dyer Town Hall, where the meeting room was packed over capacity, with residents not just from Dyer, but also Munster, opposed to this project. Hopefully those from your office updated you with all of the concerns expressed at that meeting, including traffic concerns this would add to the surrounding area, additional rail crossing now added along with the safety and traffic bottleneck it would add to the system, environmental concerns, safety, school bus delays, airport concerns, quality of life, elimination of scarce green-space, and other issues and concerns voiced at that meeting. Unlike the 45th/Calumet, which improves on an existing route, eliminates rail crossing issues, and has residential support from residents in the immediate and surrounding areas, this Main Street extension would eliminate another open-area/green-space in the northern part of the county, and create undue harm to the quality of life to the many living in that area, along with adding no benefit and taking the place of more pressing needs in the Northwestern Indiana Region.

The burden on the local residents with additional traffic along Main Street from Calumet Avenue to Indianapolis Blvd would also be created. In addition, 45th Street will now be a better east-west route connecting to the 80/94 at Cline and going beyond Colfax if needed, unlike Main Street which dead ends. Using existing Burnham Avenue would easily make that connection to 45th if it was still determined the additional connection was to be needed.

There has also been articles in the Times indicating that if the Main Street extension is added, Illinois communities that are looking to have casino gambling down the road see the Main Street extension as an opportunity to draw casino dollars from Northwest Indiana casinos, money that is spent on infrastructure and other quality of life improvements in Northwest Indiana.

James & Sara Saltanovitz

NIRPC Response: *The Main Street extension project from the State Line to Indianapolis Boulevard will remain as a “committed” project in our long range transportation plan. Being so included should not be confused with a selection, by NIRPC, to receive federal funds for construction (it hasn’t). This project will need to compete for the opportunity to be allocated federal construction dollars. The next window of opportunity for funding will be in 2019. Then, Munster may or may not choose to submit the project for funding consideration.*

Munster has the option of pursuing a connection of 45th Street with Glenwood-Lansing Road at or near Calumet Avenue instead of improving Main Street.

Our long range transportation plan indicates near-gridlock conditions for all east-west roadways crossing the State Line by 2040. Either of the above noted projects will address this condition.

Comment: I am writing to say that I feel the Main Street extension connecting Joe Orr Road in Illinois to Main Street in Munster, Indiana is a complete waste of time and money, not to mention the environmental impact it will have to the residences along this corridor. I feel this project should be removed from any future consideration and I appreciate your time.

Regards,
Jeff Van Hecke

NIRPC Response: *Please refer to the prior response.*

Public Transportation

The following comments were received during the public transportation meeting at Dyer-Schererville Library on September 22, 2014.

Comment: The South Shore Line is too far/too difficult to get to from Dyer area. The service can be inconsistent, and couldn’t be depend on to get to work on time. The South Shore Line needs to go to where the people are moving. There should be later weekday trains for people going to events like concerts, even special service when these events are scheduled. The extension of the South Shore Line would be a great thing.

NIRPC Response: *Planning for the extension of the South Shore is underway. It is a highlight of the 2040 CRP. The recommendation for later trains for special events will be passed on to NICTD.*

Comment: There are so many fiefdoms in this area, and everyone is more concerned with their own interests rather than those of the region as a whole.

NIRPC Response: *NIRPC as a regional body works to bring the region together.*

Comment: What are INDOT’s plans for the intersection of 231 & 41?

NIRPC Response: *This was referred to INDOT.*

The following comments were received during the public transportation meeting at the East Chicago Public Library on September 24, 2014.

Comment: Would love to have better bus service to connect between towns and Chicago.

NIRPC Response: *Support for a connected system will be expressed in the update to the Plan.*

Comment: How is Section 5307 used? What is the criteria for these transit systems getting the money?

NIRPC Response: *Section 5307 funds are prioritized using criteria based on the goals and objectives listed in the 2040 CRP.*

Comment: Are factors such as the number of people with disabilities in a system's area considered?

NIRPC Response: *The number of people, riders, elderly and disabled are considered in the federal funding formula that distributes what Congress appropriates annually. While we can get more federal money, problem is rooted in the lack of local match. Operators do not have enough.*

Comment: Is anyone using Lake County income tax or advocating for its use for transit?

NIRPC Response: *Not so far. Elected leaders are the ones that control the funds. It can be done...the V-Line and Chicago Dash in Valparaiso are both examples.*

Comment: Busses can be unpredictable, and it makes it hard to rely on them for getting to jobs.

NIRPC Response: *Reliability of the transit system is critical. Improvements to reliability may be emphasized in the criteria.*

Comment: Safety of the system (stops especially) is a factor to be considered as well.

NIRPC Response: *Improvements to safety are also critical needs. Criteria will be reviewed for emphasis.*

Comment: It can be confusing to deal with the disparity in fares between operators. For example, ECPT is free, but the Gary bus requires payment.

NIRPC Response: *The need to improve rider education will be conveyed to the operators.*

Comment: The customer service experience can be lacking and confusing. You get passed around to multiple people at multiple numbers and no one seems to care if there is a problem.

NIRPC Response: *Improving customer relations will be addressed with the operators. Staff will be sure to talk with ECPT regarding the erratic service and find out what is going on.*

Comment: The bus needs to connect well with the South Shore Line.

NIRPC Response: *This recommendation will be passed on to East Chicago Transit for further consideration.*

The following comments were received during the public transportation meeting at the Crown Point Public Library on October 6, 2014.

Comment: It's nice that there is some transit in the region, but it could really use improvement.

NIRPC Response: *Improvements to the existing services is a high priority of the 2040 plan.*

Comment: Northwest Indiana Community Services provided a good service, but the court order made it impractical and now it has been lost. When Crown Point tried to implement some sort of bus service, the meetings were so unruly that nothing got done and the state walked away. Have had several people give stories of not being able to work because of lack of transportation that provides access to jobs. Loss of regional bus system was a disaster. Biggest hurdle for bringing in new jobs is transportation.

NIRPC Response: *The 2040 Plan identifies the need for a regional public transit system that better connects people with jobs and other desired locations and supports the creation of regional source of funding to implement such a system.*

Comment: The Town of Merrillville has been deferring any responsibility for transportation onto Ross Township. Municipalities must also consider changing demographics of the community (income, etc). If you are going to accept these new members of the community, then you should also be willing to provide the services that they require. Quality of life issue. Divisions (Town organization) can be frustrating and confusing. Timeframe for meetings can make it hard to get to town council meetings, etc.

NIRPC Response: *The 2040 Plan will continue to identify and prioritize an improved public transit system that supports the travel needs of the region. Continued conversations with your elected officials are highly recommended.*

Comment: How can the three counties work together to provide the needed services to all three? Is this a possibility?

NIRPC Response: *With the current state of things, that is not a possibility, but it does not eliminate the possibility of it happening in the future. When the RBA existed, both Lake and Porter be-*

longed to it, so it has happened and can happen again.

Comment: Is it possible for there to be longer hours? What has to happen?

NIRPC Response: *It costs money. Federal and local funds are needed to hire additional drivers to operate over the longer hours.*

The following comments were received during the public transportation meeting at the Gary Public Transportation Corporation's offices in the Gary Metro Center on October 7, 2014.

Comment: The current GPTC system is poor. Timing (buses run every hour), routes, and a poor Saturday schedule make it difficult to do things like go to Chicago. It is hard to use when you're working, and it can take away from what you enjoy doing. It's good to have SOME bus service rather than none, but there could still be improvements.

NIRPC Response: *Comments referred to GPTC. However, it must be noted that GPTC faces the same financial constraints as do other public bodies who rely on the property tax.*

Comment: There are a lot of people going into Chicago for work, and sometimes those jobs go late. Transit timing - both train and bus - can make such a job difficult or even impossible to maintain. South Bend Airport can be a good model to strive toward in continuing to improve Metro Center and the connections and services that are provided. Metro Center is a good asset, but improvements can always be considered.

NIRPC Response: *Improving connectivity between modes was also noted in East Chicago. NICTD and GPTC will be informed of the comments. Improved connectivity will be a focus of the updated Plan.*

Comment: Elected officials should be attending these meetings as well to hear this input themselves and to support their positions.

NIRPC Response: *It's also important for transit supporters to speak at city and town council meetings and at the county council and Board of Commissioners' meetings.*

Comment: Bus service also needed on Sunday for everything for

church to jobs. People have things to do and places to go. Not having transportation on Sunday is a concern and can cause complications for riders and their plans.

NIRPC Response: *Comments referred to GPTC. However, it must be noted that GPTC faces the same financial constraints as do other public bodies who rely on the property tax.*

Comment: I am happy that the complimentary paratransit is being expanded and that it's available to use.

NIRPC Response: *Complementary paratransit is a critical component of the transit system.*

Comment: Audio prompts are needed for the busses to make it easier for the blind to use the transit system. Knowing what the stops are as you are going and what bus it is as they pull up would be very helpful and make riding easier.

NIRPC Response: *Comment will be forwarded to GPTC. Improving accessibility of the transit system is a major goal of the 2040 Plan.*

Comment: Can GPTC possibly work with the Blind Social Center on Broadway in Gary and make it possible for the regular bus to also stop there to lessen the need for complementary paratransit? Center staff are providing transportation with personal vehicles in some cases. Better connections to Chicago, Hammond and East Chicago are also needed.

NIRPC Response: *GPTC staff noted the potential for using the Lakeshore Connector and Lakeshore South as ways to connect. GPTC will work with the Center for additional service improvements.*

Comment: Drivers can be insensitive to some of the riders. Sensitivity training may need to be revisited.

NIRPC Response: *GPTC staff recommended that whenever there is an issue, please be sure to report it so the details can be determined and the problem pinpointed.*

Comment: Can the vans possibly also be retrofitted with the audio system?

NIRPC Response: *GPTC staff responded that that is something that would need to be looked into because the vans are sometimes substituted onto the fixed routes.*

Comment: Are there connections from Gary to Portage?

NIRPC Response: *Opportunity Enterprises goes west into Lake County as far as Broadway, and as far south as 109th Avenue, but it does cost more to use OE as they are not as highly subsidized.*

Comment: Is there a way to get reimbursed for trips not taken or at least credited to a future ride on OE?

NIRPC Response: *OE staff responded that OE does not have a system of pre-paid rides. Instead, the fare is charged when the trip is actually taken.*

Comment: We need more funding for GPTC.

NIRPC Response: *The 2040 Plan supports the creation of a regional transit system funded by a dedicated source of local funds to match federal and state money.*

Comment: The hourly schedule can make it difficult. Passengers would like to see service extended to 10 pm as it would help facilitate access to jobs, at the mall for example.

NIRPC Response: *Comments referred to GPTC. However, it must be noted that GPTC faces the same financial constraints as do other public bodies who rely on the property tax.*

Comment: Seniors need transportation. GPTC is a lifeline for a lot of people to get anywhere and be able to get done what they need to get done. Not everyone can afford cars, and those outside of the service area of transit are forced to get cars or figure something else out.

NIRPC Response: *The need for transit is well established in the three-county area. The major obstacle is a regional source of funding to dedicate to local match for the federal and state funds, which are not sufficient to fund a system totally.*

Comment: The developments at Gary Airport and in University Park are good, but busses will be needed for it too.

NIRPC Response: *GPTC staff indicated that improved services to the airport are possible if passenger service returns. The University Park development does include a transit component.*

Comment: There could be a potential impact soon if there are changes or elimination in the school busses provided for children to get to and from school.

NIRPC Response: *This is a pending issue which the Gary Community School Corporation must address.*

Comment: Metro Center is a good asset. It's nice that there is somewhere to come into and wait and have this place that provides connections in the community so that it's not always necessary to go to Chicago. Thankful that there is still a bus service in the city for people to use. If there was easier transportation across county lines, it would help people to get better access to jobs there as well (in places such as Portage).

NIRPC Response: *Jobs access is an area needing major improvement for many people who don't drive. The update to the 2040 Plan will reflect this.*

The following comments were received during the public transportation meeting at Portage City Hall on October 14, 2014.

Comment: The Mayor's Senior Citizen Advisory Committee has identified providing public transit as its highest priority.

NIRPC Response: *This is a great first step in creating a system. The needs in Portage have long been identified. Portage is recommended as a service area for a local system that could interconnect with Valparaiso for a more regional approach in Porter County.*

Comment: It would be good to have a point where riders of a potential Portage or Hobart system could transfer from one system to the other.

NIRPC Response: *Such connections would be an integral part of a regional system.*

Comment: Porter/Starke Services is slowly building its clientele without transportation, but there are several people who could use the services if they had transportation.

NIRPC Response: *Staff asked if the agency could use a fixed route system and recommended contacting the V-Line in Valparaiso. The transportation culture in Valparaiso with the V Line is now such that entities like Porter/Starke can depend on it and encourage its use for its clients.*

Comment: Transit linkages are needed between Bonner Senior Center and Porter Regional Hospital. There is some demand for

affordable and senior housing in Portage and Portage Township, and it is growing. Transit isn't just for older people, but for younger people as well. We need to see a shift in mindset in Porter County that transit is a good thing and something worth having. We need to teach people how to use the transit and take the mystery and fear out of the service that exists.

NIRPC Response: *Public education on the importance of transit is part of the solution, as is raising a dedicated source of local matching funds. Travel training is another element that could improve the use of existing services and will be supported in the updated Plan.*

The following comments were received during the public transportation meeting at Valparaiso City Hall on October 15, 2014.

Comment: The V-Line is complicated to use and changing buses is a problem.

NIRPC Response: *Better travel training can be done. It is possible to do a regional training program to improve coordination and accessibility.*

Comment: Some low-vision people have been denied rides on PCACS.

NIRPC Response: *PCACS Director Bruce Lindner explained about the loss of some funding which resulted in a loss of capacity. Also, they have a "no-show" policy after 3 missed appointments that prohibits use for a limited amount of time.*

Comment: Will the capacity go back up?

NIRPC Response: *If the funding is restored, service could be increased.*

Comment: Service to Portage and Chesterton is needed.

NIRPC Response: *The 2040 Plan supports an interconnected system of service for Porter County. A source of local funding is needed.*

Comment: How can I get to the V-Line if I live outside the city limits?

NIRPC Response: *PCACS Director Bruce Lindner recommended*

using either his or OE demand response ride to the City.

Comment: Sunday service and service to the new hospital are needed.
NIRPC Response: *V-Line staff noted that service to the hospital is being reviewed in the course of the route study Valparaiso is just completing. The recommendation for Sunday service will be forwarded to the City.*

Comment: How does one use the V-Line deviated route?

NIRPC Response: *V-Line staff explained the procedure for making a request for deviation 24 hours in advance of the ride.*

The following comments were received during the public transportation meeting at La Porte City Hall on October 16, 2014.

No comments were made in La Porte.

The following comments were received during the public transportation meeting at Michigan City City Hall on October 16, 2014.

Comment: What is happening with the 11th Street Station? Will there be speed improvements to reduce travel time to Chicago?

NIRPC Response: *NICTD staff Joe Crnkovich responded that the 11th St. Station would be the consolidated station with a full-length high level platform. The goal is to shorten travel time to under two hours with the potential to increase speeds to 90 mph in the country.*

Comment: Hope that there is some merit given to being innovative for adding projects to the plan. Try to push the envelope.

NIRPC Response: *The current 2040 CRP contains some visionary projects. New projects may be added so recommendations are welcome.*

Comment: What about consideration for high speed rail?

NIRPC Response: *High speed and traditional intercity passenger rail is something that NIRPC is keeping a close eye on as projects progress. Changes have been happening the past couple years with Amtrak's existing Hoosier State service from Chicago to Indianapolis, while other projects such as Michigan DOT's high speed rail project, which will come through Northwest Indiana, is also important to the future of passenger rail in Northwest Indiana. NIRPC will continue to participate in high speed rail initiatives and inform local transit operators of future*

multi-modal connections.

The following comments were received during the public transportation meeting at the Hammond Public Library on October 23, 2014.

Comment: Public transit needs to come back to Hammond. I want the bus back in Hammond like it was three years ago. We need the funding to continue so Hammond does not lose service again. They should try contacting big employers to see if they would contribute.

NIRPC Response: *The 2040 Plan identifies the need for a regional public transit system that better connects people with jobs and other desired locations and supports the creation of regional source of funding to implement such a system. The 2040 Plan will continue to identify and prioritize an improved public transit system that supports the travel needs of the region. Continued conversations with your elected officials are highly recommended.*

Partnerships are one way to fund certain types of public transit and should be considered and explored where possible.

Comment: We want service to the north side of town and Whiting.

NIRPC Response: *GPTC has proposed a route to serve that area. A request for local funding to match federal and state funds has been made and is under consideration. The 2040 Plan update will support and recommend expanded and improved fixed route service across the urbanized area.*

Comment: We must now walk over a mile just to access the Gary buses.

NIRPC Response: *GPTC staff were present and took note of the comment. While expanding the service is the preferred solution, funding must first be identified and committed to.*

Comment: It's hard to do basic things like shopping for groceries or other items. Trips can require multiple legs and connections across multiple providers to go to places that previously only required a trip on one route.

NIRPC Response: *The loss of the Regional Bus Authority service was the result of the lack of an agreed-to dedicated source of local funding. The funds initially provided by the Regional Development Authority were only meant to be for a limited time. While it was demonstrated to be a highly successful service, the lack of sustainable long-term local funding caused it to end. The 2040 Plan update will continue to recommend and support a*

regional system of transit that better serves all trip purposes.

The following comments were received on the topic of public transportation via telephone on NIRPC's public comment phone line at 219-763-6060, ext. 160.

Comment: I know this isn't your jurisdiction, but we really, really, really need a Greyhound Bus station in Hammond. I've had to quit going to see my son in Michigan because I have no way of getting there. I can't go to Gary or Chicago to get a Greyhound bus. Please, please, please bring back the Greyhound bus station and make the Amtrak station in Hammond easier for us to able to get out there. Let the station be open.

NIRPC Response: *Inter-city and overland bus services are an important part of the regional public transit package. Baran's Bus has started operating in northwest Indiana and may provide a link to Greyhound. The City of Hammond is also working with GPTC to re-open the Rabin Plaza transit station.*

Comment: All communities need public transportation, especially Chesterton which doesn't have any. The older senior citizens, a lot of them don't have cars like me, and I'm 80 now. I have trouble getting to the store or getting somebody to take you there. It's about time they do something in these towns where we pay our taxes. Thank you.

NIRPC Response: *The 2040 update will continue to advocate for and support a sustainable source of local funding to implement transit services to meet the needs of seniors as well as the youth,*

disabled, those without cars, and those who would just like to take transit.

The following comments were discussed with a staff person on the phone rather than left in a verbatim message.

Comment: The caller was frustrated and angry over the lack of transportation for demand response users. More money is needed for more drivers and vehicles because the caller had to arrange a ride on PCACS a month in advance if a ride is needed. The V-Line doesn't go to the Senior Center in Valparaiso. The caller does appreciate that the V-Line and PCACS staff are very receptive to the calls the caller makes.

NIRPC Response: *The 2040 Plan supports and will continue to support the creation of a regional system that would address these issues. The funding mechanisms for public transit were explained as well as the need for local resources. The caller was encouraged to contact local elected officials about increasing local support.*

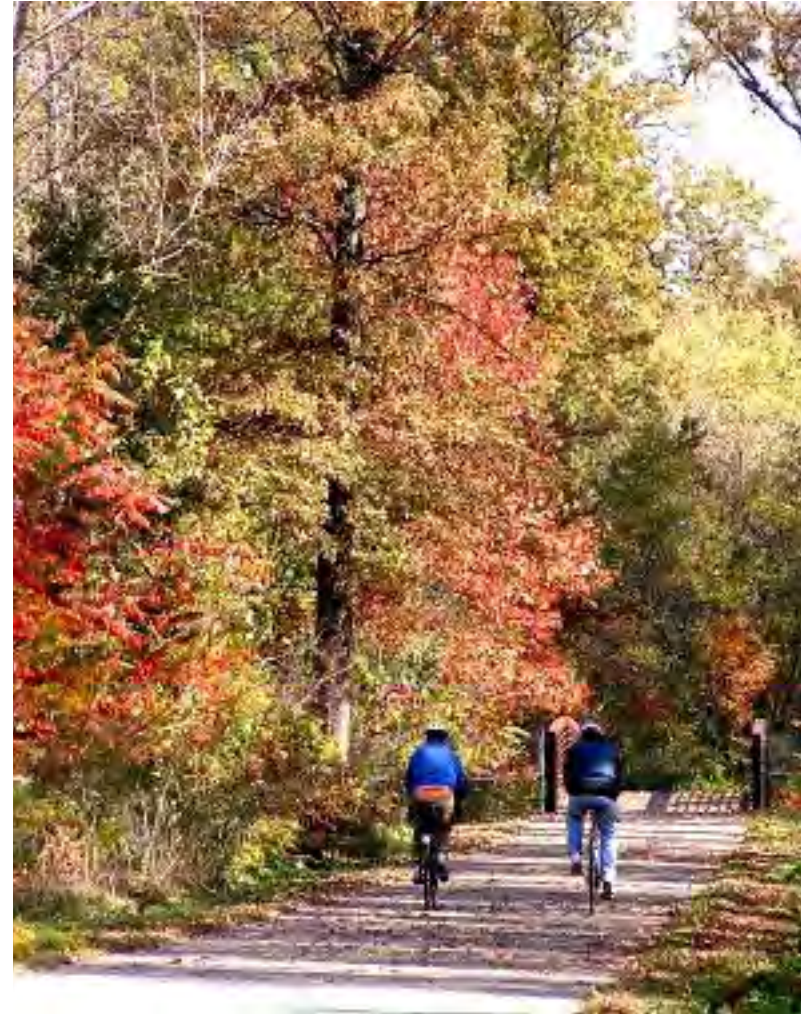
Appendix B: Pathway to 2040 Implementation Matrix

The following pages detail a matrix which outlines every goal and objective as proposed in the *2040 Comprehensive Regional Plan*. Each objective is broken down into implementable items which include the following:

- Action Steps
- Term
- Responsible Parties
- Funding Source
- Success and Best Practices

This exhaustive breakdown has been prepared to help gauge progress on the 2040 CRP visions for the future of Northwest Indiana. These will form the foundation for a comprehensive performance measures oversight which will aid both NIRPC staff and regional stakeholders on channelling proper time and resources towards the implementation of the CRP goals.

NIRPC staff plans on creating an online version of this matrix which will be updatable in real time, and applicable to future NIRPC planning documents, most especially the next major update of the CRP.



Riders on the Praire-Duneland Trail. Photo by Mitch Barloga

Growth & Conservation

Goal G&C-1: Livable urban, suburban and rural centers

Objective 1-A: Encourage the compact mixing of uses

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Create Livable Centers.	S / M / L	NIRPC will provide critical technical assistance to local communities as they plan for and implement improvements to support Livable centers. NIRPC will encourage and support the preparation of local plans specifically addressing Livable Centers. It will provide model ordinance language and advising communities on achieving desirable regional outcomes through their planning initiatives as local policies are developed. - Develop "model" code and regulatory guidance to address the following: <ul style="list-style-type: none"> • Promoting housing choice and affordability in livable centers • Promoting transit-oriented development in livable centers • Promoting complete streets policies in livable centers • Sustainable and "green" development practices in urbanized areas • Conservation development standards Local: local communities as they plan for and implement improvements to support Livable Centers, and reflect a preference for investment in Livable Centers in funding allocation decisions.	NIRPC established a funding mechanism called Creating Livable Communities (CLC) program to help implementing variety of transportation-related land use projects. Current NIRPC transportation formula funds [STP, CMAQ, Transportation Enhancement (TE), etc.], with the corresponding local share will be used for funding planning and implementing capital projects such as: • Access management - A model transit oriented development (TOD) ordinance, or • Redevelopment of urban livable centers to support transit facilities, and transit corridor plans. Search for other sources of funds to continue and expand the planning program and for construction projects.	1- Houston-Galveston Area Council (H-GAG) for Livable Centers Incentives 2- Transit-Oriented Development Program by Metro in Oregon www.oregonmetro.gov/tod 3- Livable Centers Initiative by Atlanta Regional Commission
Promote adaptive reuse of existing buildings and facilities and infill development will help to minimize the occurrence of single-use types.	S/M	Local: Develop conventional rezoning to allow higher densities and mixed-uses or different scales, such as smaller setback requirements, is helpful.	Land Banks; Tax Increment Financing; Tax Abatement; Community Development Block Grant (CDBG) New Market Tax Credit Program; Community Revitalization Enhancement District; Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs)	1- University Park Neighborhood, Gary, IN 2- Fall Creek Place, Indianapolis, IN. 3- Horace Mann Hope VI neighborhood, Gary, IN 4- Small Farms, Gary, IN
Where possible create small mixed-use areas in existing single-use neighborhoods.		Local: Identify possible sites to accommodate mixed-use development and compatible with local zoning ordinances.	Tax Increment Financing; Tax Abatement; CDBG New Market Tax Credit Program; Community Revitalization Enhancement District; Community Development Block Grant	1- Courtesy of Planning with Power Project, Purdue University, West Lafayette, Indiana 2- Zona Rosa, Kansas City, Missouri. 3- Aberdeen, Valparaiso, IN
Objective 1-B: Encourage a diverse mix of housing types and affordability levels near job centers and transit routes				
Coordination between local governments and prioritization of investment in centers will further improve development opportunities and facilitate mixed-use centers.	S	Local: Facilitating the rehabilitation of neighborhoods and the maintenance of high-quality and affordable housing will help to stabilize neighborhoods. Additional efforts, such as inclusionary housing policies, must be undertaken now to preserve the affordability of the region's housing stock before market conditions change (e.g. interest rates increase) and as the region is revitalized.	CLC Program; Tax Increment Financing; Tax Abatement; BID New Market Tax Credit Program (NWTCP); CDBG; Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs)	1- Lakefront redevelopment, Gary and Portage, IN 2- NIRPC new CLC Program 3- Gary Northside Redevelopment Project: A multi-faceted collaboration between USDOT, US EPA, US HUD, the City of Gary, and other regional partners that is focused on urban revitalization in
Consider making strategic land use decisions and providing for transit and complete streets, the region can ensure that all residents have access to good schools, grocery stores, community centers, medical facilities, reliable transportation and job opportunities.	S/M	Local: Provide incentives for developers to integrate features of traditional neighborhoods and walkable communities.	CLC Program	1- livable centers by Houston-Galveston Area Council www.h-gac.com/community/livablecenters/default.aspx 2- Livable Centers Initiative by Atlanta Regional Commission 4- Contra Costa Centre Transit Village, California www.contracostacentra.com/

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective 1-C: Facilitate the remediation and redevelopment of abandoned and underutilized land, including brownfields and greyfields.				
Promote infill and adaptive reuse	S/M	NIRPC can offer technical assistance and facilitate sharing of information between communities. Local: To encourage and incent it as a preferred choice of development over the option of developing previously undeveloped lands. Infill and adaptive reuse are most successful where there is some degree of regulatory flexibility. - Conventional rezoning to allow higher densities and mixed-uses or different scales, such as smaller setback requirements, is helpful. This allows adaptive reuse without requiring special approvals and streamlines the development process.	Tax Increment Financing; Tax Abatement; Industry Development Grant Fund (IDGF); CDBG New Market Tax Credit Program; Business Improvement District; Brownfield Tax Incentives; Land Banks; Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs)	1- Near West Side Residential/Retail Development, City of Chicago, IL. 2- Fall Creek Place, Indianapolis, IN. 3- Portage, IN Lakefront Redevelopment. 4-Horace Mann Hope VI neighborhood, Gary, IN 5- East Chicago, IN: North Harbor Redevelopment and Waterfront Revitalization Initiative. 6- Gary, IN: East Lakefront Marquette Park Improvements.
Prioritize Transportation Funding to Support Centers, Revitalization Areas and Infill & Growth Areas	S	NIRPC will incorporate policies and strategies in transportation funding to support Centers, Revitalization Areas and Infill & Growth Areas. Fed/State: Support NIRPC's strategies and develop similar policies /strategies within their agencies.	CLC Program	1- Thomas Jefferson Planning District Commission (TJPD) for Jefferson Area Eastern Planning Initiative - Building Livable Communities 2-San Diego Area Council of Governments Transportation Enhancement Activities (TEA) Program 3-City/County Association of Governments of San Mateo County Transit Oriented Development (TOD) Incentive Program 4-The Sacramento Area Council of Government's Metropolitan Transportation Plan for 2035
Objective 1-D: Promote community green infrastructure and access to public open space.				
Concentrating new growth around infrastructure will allow preservation of environmental assets.	S/M/L	NIRPC: Use NIRPC funds more efficiently to create livable, pedestrian-friendly communities that offer a high quality of life for all residents.	CLC Program; Tax Increment Financing; Tax Abatement New Market Tax Credit Program (NWTCP); CDBG;	1- Near West Side Residential/Retail Development, City of Chicago, IL. 2- West Pullman Industrial Park, City of Chicago, IL. 3- Small Farms, Gary, IN. 4- Siena at Renaissance Park, Atlanta, Georgia.
Objective 1-E: Promote the preservation of historic and cultural resources.				
Identifying the purpose and function of the necessity and benefit of having the historic districts.		Local: Designate historic districts based on a national or state level of significance. Establish local historic register and special zoning.	Indiana Landmarks; Historic Preservation Fund Program	1- Burlingame Historic District, San Diego, California 2- SurveyLA (Los Angeles) Public Participation Program is to identify, inventory, and document historic resources in the city. 3- NIRPC Cultural & Historic Inventory Mapping Project
Identifying the difference between National Register and local districts.		NIRPC: Mapping historic preservation districts and sites. Local: Identify the function and classification of each landmark and historic district.	PL initially, and find alternative source of funds to continue	Lafayette Historic Preservation Commission and Local Historic Districts http://www.lafayette.in.gov/egov/docs/1337275547814.htm
Objective 1-F: Promote the integration of Context Sensitive Solutions into transportation planning projects.				
See Transportation matrix				

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Goal G & C-2: Revitalized urban core				
Objective 2-A: Foster the development of livable, mixed-use downtowns				
Reuse historic buildings	S/M	<u>Local:</u> Provide incentives for Downtown investment. <u>Other Entity:</u> Work with Historic Preservation entities	Historic Rehabilitation Tax Credits; Low-Income Historic Tax Credits; TIF; Land Banks;	1- Brentwood Apartments, 4130-4140 Parkside Avenue, Philadelphia, Pennsylvania 2- Denny Row Housing Development, Pittsburgh, Pennsylvania 3-Freese Building Rehabilitation Project Bangor, Maine 4- The Broad Street Historic District Preservation
Reclaim Downtown to anchor and enhance City	S/M	<u>Local:</u> Update zoning and approvals process to expedite Downtown infill.	CLC Program; TIF; CDBG; Downtown Development Authority (DDA) Business Improvement District; Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs)	1- One Day 4-H Downtown Revitalization, Madison County, Texas 2- Lake Michigan Gateway Implementation Strategy in Michigan City, IN
Introduce additional housing	S/M/L	<u>Local & Housing Authorities</u>	Land Banks; TIF; CDBG; Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs)	Siena at Renaissance Park, Atlanta, Georgia.
Objective 2-B: Promote adaptive reuse, infill development and the remediation and reuse of underutilized properties, particularly brownfields				
Repair and restore the fragmented urban fabric.	S/M/L	<u>NIRPC:</u> Use NIRPC CLC Program to revitalize and restore downtowns and older neighborhoods. <u>Local:</u> Allow for the reuse of vacant buildings, restore sidewalks and repair streets.	Tax Increment Financing; CDBG; New Market Tax Credit Program; Community Revitalization Enhancement District Business Improvement District; Brownfield Tax Incentives; Land Banks; Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs) NIRPC CLC Program and STP funding	1- West Pullman Industrial Park, Chicago, IL 2- Near West Side Residential/Retail Development. City of Chicago, IL. 3-Camden Crossing , City of Baltimore, MD: 4-Atlantic Steel Brownfield Tax Allocation District, Atlanta, GA
Objective 2-C: Facilitate the rehabilitation of neighborhoods and maintenance of high-quality and affordable housing				
Inclusionary housing policies, must be undertaken now to preserve the affordability of the region's housing stock before market conditions change (e.g. interest rates increase) and as the region is revitalized.	S	<u>Local:</u> Provide incentives to developers to include affordable housing as part of the development of market-rate housing. Provide housing policies to allow inclusionary housing. Provide local ordinance or policy that require development of certain size to include some percentage of affordable housing.	HUD Local Housing Authorities local funding	Regulatory Barriers Clearinghouse-solutions that support affordable housing http://www.huduser.org/rbc/search/rbcdetails.asp?DocId=1832
Improve public infrastructure in great older neighborhoods.	S/M	<u>NIRPC:</u> Prioritize transportation improvement in the urban core communities.	Tax Increment Financing; CDBG New Market Tax Credit Program; Community Revitalization Enhancement District Community Development Block Grant; Renewal Communities (RCs), Empowerment Zones (EZs) and Enterprise Communities (ECs); NIRPC CLC and STP Funding	1- West Pullman Industrial Park, Chicago, IL 2- Small Farms, Gary, IN
Objective 2-D: Promote the preservation of historic and cultural resources				
See Goal 1 objective C Assess historic structures and aim to preserve them.	S	<u>Local:</u> Allow for reuse of historic structures, including changing building uses. Provide incentives for investment into historic structures.	Historic Rehabilitation Tax Credits; Low-Income Historic Tax Credits; Indiana Landmarks; Historic Preservation Fund Program; Federal Historic Preservation Tax Credits	1- Brentwood Apartments, 4130-4140 Parkside Avenue, Philadelphia, Pennsylvania 2- Denny Row Housing Development, Pittsburgh, Pennsylvania 3-Freese Building Rehabilitation Project Bangor, Maine 4- The Broad Street Historic District Preservation Project Newark, New Jersey

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective 2-E: Expand visual and physical access to Lake Michigan and other open space				
Implement the Marquette Plan	S/M/L	<u>Other Entity:</u> The Regional Development Authority should continue to fund projects within the lakefront communities of Northwest Indiana that are located in the Focused Revitalization Area.	Funded by The Cities of East Chicago, Gary, Hammond, Portage & Whiting and Indiana Department of Natural Resources; RDA	In 2015 NIRPC completed the Marquette Plan 2015 Update on behalf of the RDA with the support of the Indiana DNR Lake Michigan Coastal Program. Local Implementation
Objective 2-F: Partner to protect threatened natural remnants				
Assess the region's natural resources to provide guidance as to where conservation is desirable and land is less suitable for development.	S	<u>NIRPC:</u> developed a systematic approach to evaluate the region land development suitability based on both natural and built environments by assessing and mapping all environmental assets in a single composite map. NIRPC should make this system available for use and support to the region's planning and development agencies and organizations, development interests and other stakeholders for the use in local planning activities. <u>Local:</u> The system would be used by local government in the preparation of local land use and development planning programs. <u>Other Entity:</u> Planning & Economic Development	PL; Conservation Reserve Program; Resource Conservation and Development Program (RC &D); Calumet Land Conservation Partnership	In 2014 NIRPC and the Conservation Fund, updated the Green Infrastructure Vision map using metrics consistent with Chicago Wilderness and CMAP to identify high priority ecosystem hubs, key connecting corridors, and economic valuation data on ecosystem services provided by these areas.
Avoid floodplains, and integrate preserved open spaces into new neighborhoods	S/M/L	<u>Local:</u> Improve City regulations to help preclude unnecessary destruction of natural features. Provide incentives for developers to preserve natural areas and use them as neighborhood focal points and open space. <u>Other Entity:</u> Parks and Recreation	Resource Conservation and Development Program (RC &D), FEMA Pre-Disaster Hazard Mitigation Funds	Aberdeen, Valparaiso, IN, Harrington West, Valparaiso IN, Tryon Farms, LaPorte County, Porter County Unified Development Ordinance includes Conservation Subdivision Section 6.09-6.11, a Greenway Zoning District, and a Watershed Overlay District. LaPorte County Joint Development Ordinance, Article 22 Natural
Objective 2-G: Enhance community design and aesthetics				
Suburban Retrofit or Sprawl Repair: This technique involves reworking conventional, automobile-oriented areas like single-use housing developments, office parks and shopping centers into more walkable, mixed-use, transit-ready urban places.	S/M	<u>NIRPC:</u> proposes the I-65 and U.S. 30 Retrofit Project into a livable urban center. A pragmatic plan is needed that can demonstrate this opportunity and guide development to correct its current deficiencies.	CLC	1- The country's best suburban retrofit: Bethesda Row: http://switchboard.nrdc.org/blogs/kbenfield/the_best_suburban_retrofit_t_h.html 2- Retrofitting Washington's Suburbs: http://www.dmsas.com/resources/docs/23_1298_245997_Bulletin-Feb-2010-RetrofittingWashingtonSuburbs.pdf
Goal G&C 3: Managed growth that protects farmland, environmentally sensitive areas and important ecosystems				
Objective 3-A: Promote the development and preservation of regional greenways and blueways (water trails) and establish linkages between them				
Implement the Greenways & Blueways Plan, in particular improving north-south mobility and linking the trail network to local parks and recreation facilities.	S/M/L	<u>NIRPC:</u> Update plan for the next five years, and link regional priority corridor trails to federal funding programs. <u>Local:</u> Identify regional corridor opportunities to link to community destinations.	Transportation Alternatives Program (TAP), CMAQ, STP, HSIP, local revenues, bonds, Gaylord and Dorothy Donnelley Foundation; Greenways Foundation; other foundations.	The Gary Green Link Plan, a 2005 effort, and one of the best examples of local environmental planning, with an exhaustive analysis of sensitive environmental areas and greenway linkages for potential conservation and/or restoration. The Gary Green Link is a master-planned, 30-mile, multi-use trail. The trail is a green infrastructure project that connects the unique Lake Michigan shoreline with the Little Calumet and Grand Calumet Rivers.
Objective 3-B: Encourage the concentration of development around existing infrastructure				
See objective 1-A & 1-d				

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Need to have strong and consistently implemented public policies regarding land use and transportation benefits to ensure that population and employment growth occurs in a sustainable and responsible manner.	S/M	<u>Local:</u> Propose growth management strategies that promote future development to occur where utilities and infrastructures exist.	IDNR Coastal Program Local governments Local foundations	1- Transportation for Livable Communities program by: Metropolitan Transportation Commission (MTC) www.mtc.ca.gov 2- Transit-Oriented Development Program by: Metro in Oregon www.oregonmetro.gov/tod 3- Puget Sound Regional Council for its Transportation 2040 plan
Financial incentives could be offered for using existing infrastructure and not requiring the construction and future maintenance of new infrastructure.	S/M	<u>NIRPC:</u> will support financial incentives. <u>Fed/State:</u> Promote and implement this action. <u>Local:</u> Promote and implement this action	BID, CDBG, CRED, NMTCP, TIF	1- West Pullman Industrial Park, Chicago, IL; 2- Small Farms, Gary, IN
Objective 3-C: Encourage redevelopment of infill sites within established centers				
See objective I-C				
Objective 3-D: Promote compact development&smart growth thru techniques; transit-oriented development, traditional neighborhood development&conservation design				
Establish policies that address the appropriate location and scale of transit-oriented development	S	<u>NIRPC:</u> encourages the development of a regional South Shore Corridor TOD Study to develop context-appropriate strategies for creating a network of transit-oriented places and sites that integrate different functions and activities within easy access of transit. <u>Local:</u> associated local governments should work with NIRPC. <u>Other Entity:</u> NICTD	CLC NICTD RDA Local communities	1- San Diego Area Council of Governments Transportation Enhancement Activities (TEA) Program; 2- City/County Association of Governments of San Mateo County Transit Oriented Development (TOD) Incentive Program 3- NICTD Strategic Business Plan- 2014 4- Livable Broadway Plan (GPTC), Gary, IN
Objective 3-E: Foster the development of local food systems and a local food economy				
Implement the recommendations of the Northwestern Indiana Local Food Study	S/M/L	<u>NIRPC:</u> Continue and strengthen NIRPC's role as the forum for local food stakeholders to convene, discuss issues, and develop solutions for strengthening the local food system. Form the Local Food Systems Action Committee (Food SAC) to address local and state food policy and to implement the recommendations of the Local Food Study. Provide technical and other assistance to local food stakeholders.Share best practices and information with counties and municipalities for reviewing ordinances to ensure local food-friendliness. <u>Fed/State:</u> Support policies and programs that encourage and enhance local food system activities. <u>Local:</u> Review ordinances to ensure local food systems projects are permitted and encouraged. Encourage local food systems projects.	USDA, local foundations	Stewart House Urban Farm, Gary, IN; NWI Local Food Summit held in April 2015 at Valparaiso University; Task Force to plan/build NWI Food Council; Creation of NWI Food Council
Objective 3-F: Preserve prime agricultural land and rural landscapes				
To the extent possible, align, and make uniform, county land use regulations with the 2040 CRP to support sustainable development patterns and continued local farming	S/M/L	<u>NIRPC:</u> Work with counties and adjacent municipalities in developing "rural area plans" in locations experiencing development pressure and related infrastructure issues (with counties and adjacent municipalities). <u>Local:</u> 1- Establishment of agricultural districts, review of unincorporated residential plans or other development proposals. 2- Requirement of appropriate buffers adjacent to active agricultural uses. 3- Development of incentives to encourage cluster developments that maintain agriculture and habitat areas.	PL	GIS Mapping for Prime Farmland &Conversion - Prime Farmland acreage changes were analyzed in the 2040 CRP Update.

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Discourage development of farmland or environmentally sensitive lands.	S/M/L	<u>Local:</u> New programs can transfer development rights to land more suitable for development.	CRP, local foundations	LaPorte County Joint Unified Development Ordinance Article 03 is designed to protect agricultural areas from residential and commercial encroachment. The Porter County UDO also incorporated strong agricultural development protection in Prime Agricultural Districts.
Discourage outward expansion, unless it's demonstrated to be essential to accommodate growth.	S/M/L	<u>Local:</u> Address the preservation of prime agricultural land and specify programs and techniques for protection.	Local Funding IDNR Coastal Program	1- Plan for the Valleys Baltimore County, Maryland 2- Clark County, WA: Comprehensive Growth Management Plan Implementation 2009
Objective 3-G: Encourage and plan for the protection and responsible use of shoreline areas				
Implement the Marquette Plan	S/M/L	Local communities, RDA, NIRPC, IDNR	Funded by The Cities of East Chicago, Gary, Hammond, Portage & Whiting and Indiana Department of Natural Resources;RDA	1- vision 2020, New York Comprehensive Waterfront Plan; 2- Portage Lakefront 3- City of Whiting 4- City of Hammond 5- City of Gary 6- Michigan City 7-City of East Chicago
Objective 3-H: Improve access to major regional parks and preserved open lands, including the Indiana Dunes				
Transportation				
Goal T-1: A safe and secure transportation system				
Objective A: Reduce the number and severity of motor vehicle crashes				
Compile crash data	S	<u>NIRPC:</u> Work with INDOT and local entities on existing data. <u>Fed/State:</u> State Police and INDOT to provide data to entities. <u>Local:</u> Supply NIRPC and INDOT crash data	5303; PL	Houston Galveston Area Council for the Transportation Safety Program. The program used GIS exercise to geocode crash data to help reduce the number of crashes in the region.
Provide safety training	S	<u>Fed/State:</u> Offer classes at BMV <u>Local:</u> Local police departments can offer safe driving classes	Need local dedicated source	1- the Cheyenne MPO for their Transportation Safety Management Plan; 2- North Florida TPO for their Safety Video Series
Objective B: Improve the safety of non-motorized transportation through education, enforcement, engineering, design and construction				
Provide education and training for non-motorized facility design	S	<u>NIRPC:</u> Offer courses at NIRPC, and encourage attendance at NIRPC Ped, Pedal and Paddle Committee (3PC) meetings. <u>Fed/State:</u> Offer webinars for professionals on best practice designs; INDOT to offer courses to engineers. <u>Local:</u> Attendance at NIRPC 3PC meetings and promoting Complete Streets policies at local level. <u>Other Entity:</u> South Shore Trails to promote design standards.	Safe Routes to School program	NIRPC Safe Routes to School Workshops; Cornucopia State of Our Trails Meeting; Local law enforcement Bike Rodeos
Supply funding for non-motorized improvements	S	<u>NIRPC:</u> Open up all NIRPC-attributable funding for non-motorized improvements. <u>Fed/State:</u> Provide funding for NIRPC and local entities. <u>Local:</u> Use local monies for match and to build new facilities, including maintenance policies. <u>Other Entity:</u> Local and state foundations to fund infrastructure projects.	All federal, state and local funding outlets should be eligible for improvements; Greenways Foundation and South Shore Trails	1- NIRPC Rack em' Up! Bike rack and locker subsidy program; 2- The long range plan of Flagstaff MPO called for compact development, punctuated by activity centers and the emphasis on walking and bicycling modes. The MPO played a central role in a tax campaign that yielded dedicated taxes of more that \$800,000 annually for pedestrian and bicycle safety and capacity projects. With this money, they were able to increase their bike lane miles from 59 to 117.

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
3. Publish Route Maps and install signage	S	NIRPC: to update 2012 NWI Greenways & Blueways Map in Spring of 2016. Create wayfinding design guide for all new trail development. Manage sign installation project on trails devoid of proper wayfinding. Fed/State: INDOT to install "Share the Road" signs along popular bike routes. Local: Local bike and pedestrian route maps should be developed and wayfinding signage created. Other Entity: South Shore Trails to promote maps and signage	NIRPC CMAQ funding; Local budgets	1- NIRPC 2012 NWI Greenways & Blueways Map; 2- Central Ohio Greenways Project Vision which represents an overall guide for all trail wayfinding developed on routes in the Columbus, OH vicinity.
4. Promote Bicycle-Friendly Community (BFC) Status	S	NIRPC: to provide education on standards necessary to attain BFC status. Local: Local entities to work on several areas of improvement to attain BFC status. Other Entity: South Shore Trails and Calumet Crank Club to promote BFC in locals	Local, state and federal funding available for nearly all BFC-related qualifications	1- California's Complete Streets Act; 2- Kentucky's Pedestrian and Bicycle Travel Policy 3- Oregon's statutes related to the provision of bicycle and pedestrian facilities by public agencies.
Objective D: Reduce emergency response times				
Rail-Highway Grade Separations - See Goal T-2.B.1	S	NIRPC: Convene stakeholders working group, collect data, draft report, prioritize infrastructure improvements Fed/State: INDOT and US DOT provide increased funding for rail improvements, Participate as stakeholder, provide data (FRA - train counts, INDOT - traffic counts). Local: Participate as stakeholder, provide data - traffic counts.	PL; STP; HSIP	The Wichita Area MPO (WAMPO) in Wichita, Kansas for their Railroad Crossing Plan, which examines safety and congestion issues at almost 300 railroad crossings in the region. CREATE Program
Highway-Rail Grade Crossing Separation	S	NIRPC: Convene stakeholders working group, collect data. Fed/State: INDOT and US DOT provide increased funding for rail improvements, Participate as stakeholder, provide data (FRA - train counts, INDOT - traffic counts). Local: Participate as stakeholder, provide data - traffic counts. Other Entity: Railroads: provide data - train counts, participate as stakeholder	PL; STP; HSIP	1- the Wichita Area MPO (WAMPO) in Wichita, Kansas for their Railroad Crossing Plan, which examines safety and congestion issues at almost 300 railroad crossings in the region. 2- CREATE Program
Signal Pre-emption	M	NIRPC: Assist with data to determine where need for these systems exist. Fed/State: Signal modifications on roads within jurisdiction. Local: Signal modifications on roads within jurisdiction, Stakeholders in determining where need exists. Other Entity: Other emergency service providers not under a governmental agency as stakeholders	STP; CMAQ; HSIP	Installed traffic signal pre-emption systems at 22 intersections, Houston, TX, reported a decrease in the average emergency vehicle travel time of 16 to 23 percent.
Incident Management Plans	S	NIRPC: Include in the ITS architecture update. Attend and Promote Indiana IN-TIME Training. Fed/State: Indiana State Police & Hoosier Helper training; Indiana IN-TIME Training; plan development & refinement with relevant stakeholders. Local: First responder and Indiana IN-TIME training; plan development & refinement with relevant stakeholders.	STP; PL	Indiana IN-TIME program; the North Florida TPO for the Traffic Incident Management Handbook and Safety Video Series, which focused on incident management training for responders
Traditional street grid development	S	NIRPC: Support projects that contain a traditional street grid. Local: Implementing authority; require/encourage developments with a traditional street grid	PL; Local foundations	Porter County, IN proposed TND Plan,, which provides an effective connectivity to the surrounding neighborhood.
County Evacuation Plans		NIRPC: Support efforts, monitor progress, provide data Local: Coordinate resources, gather data, disseminate strategies	PL; STP	1-Gulf Coast States 2- The Texas Task Force on Evacuation, Transportation, and Logistics was established in direct response to the evacuation concerns brought on by Hurricanes Katrina and Rita on 2005. 3-Florida Statewide Regional Evacuation Study Program
Objective F: Improve the safety and security of transit facilities including stations, stops and vehicles				
Video Surveillance Systems	S	Transit Operators	FTA Section 5307 and 5339	Local operators have installed security systems

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective G: Utilize technology, including Intelligent Transportation Systems and other strategies, to improve transportation safety				
New Traffic Signal	S	<u>NIRPC:</u> Support if placement can have safety benefits. <u>Fed/State:</u> Consider if safety benefits exist. <u>Local:</u> Consider if safety benefits exist	STP; CMAQ; HSIP	Real-Time Work Zone Traffic Control System - Using an Automated Traffic Information System to Reduce Congestion and Improve Safety During Reconstruction of the I-55 Lake Springfield Bridge in Illinois
Incident Management Plans	S	<u>NIRPC:</u> Include in the ITS architecture update. <u>Fed/State:</u> Indiana State Police & Hoosier Helper training; plan development & refinement with relevant stakeholders. <u>Local:</u> First responder training; plan development & refinement with relevant stakeholders. <u>Other Entity:</u> Other emergency service providers not under a governmental agency.	STP; PL	the North Florida TPO for the Traffic Incident Management Handbook and Safety Video Series, which focused on incident management training for responders
Dynamic Messaging System	S/M	<u>NIRPC:</u> Include in the ITS architecture update. Convene stakeholders for planning and feedback. <u>Fed/State:</u> Continue implementing the system in Northwest Indiana. <u>Local:</u> Consider implementation of dynamic messaging on local roads if necessary.	STP; CMAQ; HSIP	INDOT ITS Program and Hoosier Helper Patrol Zone
Traffic Signal Equipment Modernization	S	<u>NIRPC:</u> Support if modernization has safety benefits. <u>Fed/State:</u> Consider if safety benefits exist. <u>Local:</u> Consider if safety benefits exist.	STP; CMAQ; HSIP	Real-Time Work Zone Traffic Control System - Using an Automated Traffic Information System to Reduce Congestion and Improve Safety During Reconstruction of the I-55 Lake Springfield Bridge in Illinois
GOAL T-2: Increased Mobility, accessibility, and Transportation Options for People and Freight				
Objective A: Integrate local, regional and national transportation systems to facilitate movement of people and freight between modes				
ITS Architecture		<u>NIRPC:</u> Develop and Maintain the ITS Architecture, convene stakeholders. <u>Fed/State:</u> Review the ITS Architecture. <u>Local:</u> Participate in the ITS Architecture development and maintenance as stakeholders.	STP; HSIP; PL funding can be used for ITS.	1- OKI (OH/KY/IN) regional ITS Plan ; 2- Leon County, FL regional architecture 3- Northern Virginia Regional ITS Arch See http://ops.fhwa.dot.gov/its_arch_imp/examples.htm for detail
Multimodal Center at Gary Airport	L	<u>Fed/State:</u> Project funds. <u>Other Entity:</u> NICTD, City of Gary, RDA, State of Indiana	STP; RDA; Project funding	Portland Airport
Bus Rapid Transit on Corridors	L	Transit Operators, INDOT, FTA	STP; FTA Sec. 5307 and 5309, CMAQ	GPTC has new plan for Broadway Corridor
TOD	M	NICTD, GPTC, FTA, and NIRPC	STP; CMAQ; PL; CLC; NICTD; RDA; GPTC.	Transit-Oriented Development Program by: Metro in Oregon www.oregonmetro.gov/tod
Interconnected Regional Bus	L	NIRPC, Municipal and County Governments, RDA, FTA, INDOT	FTA Sec. 5307 and 5339; STP; CMAQ; RDA	Denver Regional Council of Governments has embarked on an ambitious effort to construct rapid transit in nine regional corridors along with other improvements associated with this
Illiana Expressway	M	NIRPC, INDOT, IDOT	NHS; HSIP; STP	Richmond Area MPO for a container barge service called the "64 express".
Develop multimodal and intermodal hubs	M / L	<u>NIRPC:</u> Provide data, Program transportation projects. <u>Other Entity:</u> Ports of Indiana, Railroads, Gary/Chicago Int'l	Various	Salt Lake City, Utah, Amtrak
1. Expand "Short Sea Shipping" on the Great Lakes	M/L	<u>NIRPC:</u> Support efforts and monitor progress. <u>Fed/State:</u> US Maritime Administration: develop marine highways. <u>Other Entity:</u> Ports of Indiana	State Funding	Great Lakes St. Lawrence Seaway System: St. Lawrence Seaway Development Corporation
2. Develop a short-haul intermodal corridor between Louisville and Chicago following the I-65 corridor	L	<u>NIRPC:</u> Support efforts, monitor progress, provide data. <u>Fed/State:</u> INDOT, US DOT. <u>Other Entity:</u> Railroads	STP; PL; CMAQ	Richmond Area MPO for a container barge service called the "64 express".

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
3. Develop an Indiana Coal Corridor between southern Indiana coal mines and Northwest Indiana power plants	L	<u>NIRPC:</u> Support efforts, monitor progress, provide data. <u>Fed/State:</u> INDOT <u>Other Entity:</u> Purdue University - conduct research	STP; PL;CMAQ	Richmond Area MPO for a container barge service called the "64 express".
4. Construct a new lock at the Soo Locks in Sault St. Marie, Michigan	M	<u>NIRPC:</u> Monitor progress <u>Fed/State:</u> US Congress - Appropriate funding for construction	U.S. Congress	US Army Corps of Engineers: Olmsted Locks and Dam
Objective B: Improve freight facilities connecting the region to national and global markets				
1. Develop a regional rail improvement plan with a focus on highway-rail grade crossing separations	S	<u>NIRPC:</u> Convene stakeholders working group, collect data. <u>Fed/State:</u> INDOT and US DOT provide increased funding for rail improvements, Participate as stakeholder, provide data (FRA - train counts, INDOT - traffic counts). <u>Local:</u> Participate as stakeholder, provide data - traffic counts. <u>Other Entity:</u> Railroads: provide data - train counts, participate as stakeholder.	PL; HSIP	CREATE Program
2. Improve the Extra Heavy Duty Truck Route	S	<u>NIRPC:</u> Program funding, Corridor Study. <u>Fed/State:</u> Provide funding, develop transportation projects	STP; CMAQ; HSIP	Richmond Area MPO for a container barge service called the "64 express".
3. Study extension of Extra Heavy Duty Truck Route to IL	M/L	<u>NIRPC:</u> Corridor Study. <u>Local:</u> Participate as stakeholder, provide data. <u>Other Entity:</u> Illinois DOT, City of Chicago	TIGER, PL	Richmond Area MPO for a container barge service called the "64 express".
4. Develop multimodal and intermodal hubs	M / L	<u>NIRPC:</u> Provide freight movement data, Program transportation projects. <u>Fed/State:</u> Provide funding for transportation projects. <u>Local:</u> Update plans and ordinances to facilitate compatible development, provide incentives. <u>Other Entity:</u> Ports of Indiana, Railroads, Gary/Chicago Int'l, RDA	Various including STP, RDA, local, CMAQ, TIGER	Salt Lake City- Intermodal hubs, Utah. Amtrak
5. Maintain a regional freight infrastructure map	S / M / L	<u>NIRPC:</u> Update and publish map. <u>Fed/State:</u> Provide data. <u>Local:</u> Provide data. <u>Other Entity:</u> Provide data.	PL	GIS Mapping for Regional Freight Infrastructure Map
Objective C: Reduce congestion on major freight and passenger routes				
See Goal T-2, Objective B				
Objective D: Improve the internal connectivity of the transportation network				
Support Complete Streets	S	NIRPC to educate and promote, Municipal and county governments to implement.	All NIRPC-attributable funding is subject to Complete Streets Policy & Guidelines	Mid-Ohio Regional Planning Commission has adopted a Complete Streets policy and created a Complete Streets toolkit, which is available online, and an equipment library.
Traditional Neighborhood Design	L	<u>NIRPC:</u> Project Selection Criteria. <u>Local:</u> Ordinances	CLC	1- Coffee Creek, Chesterton 2- Millennium Place, Muncie, IN
Objective E: Enhance connectivity between housing, jobs, services, and educational facilities				
Invest in improvements to jobs access for low-income and minority residents	L	<u>NIRPC:</u> Priority Criteria. <u>Local:</u> Match funds. <u>Other Entity:</u> County	CDBG; Need local dedicated source	National Capital Region Transportation Planning Board (TPB) in Washington, DC for their Coordinated Human Services Transportation Plan and Program.
Proactive and balanced approach to transportation funding decisions, with emphasis on ensuring that public investments improve access and mobility in Livable Centers and the core cities.	L	<u>NIRPC:</u> Priority Criteria, Education of Local Officials. <u>Fed/State:</u> INDOT adopt criteria. <u>Local:</u> Implementation Authority	CLC	1- Transportation for Livable Communities program by: Metropolitan Transportation Commission (MTC) www.mtc.ca.gov 2- Transit-Oriented Development Program by: Metro in Oregon www.oregonmetro.gov/tod 3- Livable Centers Initiative by Atlanta Regional Commission

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective F: Improve system accessibility for people with special transportation needs including persons with disabilities, the elderly, the young and low-income populations				
Invest in improvements to jobs access for low-income and minority residents.	L	<u>NIRPC:</u> Priority Criteria <u>Fed/State:</u> Increase Operating Funds <u>Local:</u> Match Funds <u>Other Entity:</u> County	CDBG; FTA Section 5310, and Section 5339, need local dedicated source of matching funds	National Capital Region Transportation Planning Board (TPB) in Washington, DC for their Coordinated Human Services Transportation Plan and Program.
Support projects that encourage affordable housing creation in locations near jobs and transit.		<u>Local:</u> Establish zoning that allow mixed use and variation of housing options and TOD district.	NIRPC CLC Program Local Funding RDA	1- National Capital Region Transportation Planning Board (TPB) in Washington, DC for their Coordinated Human Services Transportation Plan and Program. 2- Tysons Corner Fairfax County, Virginia for its Comprehensive Plan, the plan includes a tiered approach to density that is focused around four transit stations.
Create an interconnected transit system including BRT, commuter rail and regional and local bus and demand response paratransit.	L	<u>NIRPC:</u> Promote, Advocate <u>Fed/State:</u> Increase Operating Subsidies <u>Local:</u> Matching Funds	FTA Section 5307, 5339, CMAQ	Portland, Oregon.
Promote Complete Streets (CS) policies and designs	S/M	<u>NIRPC:</u> Apply NIRPC CS policy to all attributable projects. <u>Fed/State:</u> INDOT to use CS standards on state roadways. <u>Local:</u> Local entities to utilize CS design standards in transportation corridors. <u>Other Entity:</u> South Shore Trails and Indiana AARP to promote regionwide	All NIRPC-attributable funding; State funding; Local funding	Examples at www.completestreets.org
Objective G: Increase access to and improve the reliability of public mass transit				
Proactive and balanced approach to transportation funding decisions, with emphasis on ensuring that public investments improve access and mobility in Livable Centers and the core cities	L	<u>NIRPC:</u> Priority Criteria, Education of Local Officials. <u>Fed/State:</u> INDOT adopt criteria <u>Local:</u> Implementation Authority	MPO role	City of Valparaiso; Envision Missoula guided the decision-making process for making sound transportation investments in the region.
Project Selection Criteria	S	<u>NIRPC:</u> Staff support to stakeholders to do new criteria <u>Fed/State:</u> INDOT adopt criteria <u>Local:</u> Participate in criteria development <u>Other Entity:</u> Developers	PL	New transit criteria developed to reflect new CRP
Objective H: Improve the non-motorized transportation network by building Complete Streets that accommodate bicycles, pedestrians and transit users				
Adopt local Complete Streets policies	S	<u>NIRPC:</u> Promote policy templates for community review and action <u>Fed/State:</u> Engage with communities through statewide CS committee <u>Local:</u> Adopt either resolutions, ordinances, plans or other mechanisms to recognize Complete Streets adherence <u>Other Entity:</u> South Shore Trails to promote by working with local entities	All NIRPC-attributable funding is subject to Complete Streets Policy & Guidelines	NIRPC Complete Streets Policy and Guidelines; Mid-Ohio MPO (MORPC) Complete Street Policy; Town of Lowell Complete Streets Policy; City of LaPorte Complete Streets Policy
Develop On-line Toolkit of Best Practices	S	<u>NIRPC:</u> Adopted toolkit based on template from Active Transportation Alliance. <u>Local:</u> Review NIRPC-based toolkit to incorporate into local projects	PL	Active Transportation Alliance's Complete Streets Toolkit at www.atpolicy.org

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Develop Statewide CS Policy	M	<u>NIRPC:</u> Work with NIRPC Legislative Committee to make priority <u>Fed/State:</u> INDOT to support legislative policy and apply to project designs <u>Local:</u> Contact state legislators to promote support of policy <u>Other Entity:</u> South Shore Trails & Indiana AARP to promote with legislators	PL	State of Illinois Public Act 095-0665; State of Michigan Public Act 135
Encourage INDOT development of CS designs on state roadways	M	<u>NIRPC:</u> Review INDOT projects and work with LaPorte District on CS standards <u>Fed/State:</u> INDOT to develop CS design guidelines in project scopes <u>Local:</u> Partner with INDOT projects within jurisdictions to aid in development of CS standards <u>Other Entity:</u> South Shore Trails to promote CS standards with INDOT	All FHWA-based funding programs are eligible	Preservation of trail access under I-65 and US 30; Trail lanes on SR 49 bridges over US 12 and 20; Lincoln Memorial Trail section along US 421 in LaPorte County
Objective I: Encourage land use policy that supports access for disabled persons, efficient mass transit and non-motorized travel				
Link funding decisions with Complete Streets, expanded trails, improved public transit and multimodal freight and passenger hubs.	L	<u>NIRPC:</u> Priority Criteria, highway and transit planning <u>Fed/State:</u> INDOT adopt criteria <u>Local:</u> Help do priority criteria, modify practices <u>Other Entity:</u> Developers, Industry, Transit operators, Counties	MPO role	Puget Sound Regional Council for its Transportation 2040 plan; Nashville (TN) Area 2035 Regional Transportation Plan
Support projects that encourage affordable housing creation in locations near jobs and transit	L	<u>NIRPC:</u> Transit and economic development, project selection criteria, policies <u>Local:</u> Modify practices <u>Other Entity:</u> QLC, GNI Realtors Association, Northwest Indiana Forum, Mayors' Roundtable, Towns and Smaller Cities	CLC	Mercantile Square, Denver : Workforce Housing Soars Near Emerging Transit Hub
Promote transit supportive land use patterns including TOD, TND and Conservation design	L	<u>NIRPC:</u> Advocate educator, project selection criteria for economic development and transportation <u>Fed/State:</u> Project funds	PL; STP	Puget Sound Regional Council for its Transportation 2040 plan
Goal T-3: Adequate transportation funding and efficient use of resources				
Objective A: Increase the level of federal and state funding flowing into the region and improve the ability to provide local matching funds				
Create dedicated source of local funding for public transit		<u>NIRPC:</u> Advocate, Educate, Coordinate <u>Local:</u> Support from local elected officials & County Councils <u>Other Entity:</u> Urban League, NAACP, QLC, Riders, Operators, Social Service Agencies, Churches, Everybody Counts	Consult with elected officials to pursue support from additional taxes	Illinois RTA
Objective B: Protect previous investments through maintenance and improvements to existing transportation infrastructure, operations and service				
Maintain and improve existing infrastructure to maximize the efficiency of scarce public resources	L	<u>NIRPC:</u> Priority Criteria <u>Fed/State:</u> INDOT adopt Criteria <u>Local:</u> Submit appropriate projects	STP;	Central City Community Transportation Plan, Los Angeles, California
Objective C: Devote sufficient resources to address reconstruction and maintenance needs				
See Goal T-3, Objective B, #1				
Objective D: Utilize the Congestion Management Process to optimize the efficiency of the transportation network				
Establish data collection activities to determine areas with recurring congestion	S	<u>NIRPC:</u> research and deploy data collection methods <u>Fed/State:</u> support with existing data sources. <u>Local:</u> support with existing data sources	PL, STP	Boston Regional MPO Congestion Management Process
Evaluate Congestion Mitigation Strategies	S	<u>NIRPC:</u> analysis <u>Fed/State:</u> participation on Transportation Policy Committee <u>Local:</u> participation on Transportation Policy Committee	PL	Southwestern Pennsylvania Commission, Congestion Management Process Strategies: Evaluating Congestion Management Mitigation Strategies
Implement strategies	M	<u>NIRPC:</u> Review progress on implementation of strategies <u>Fed/State:</u> Implement strategies <u>Local:</u> Implement strategies	STP, CMAQ, 5307	Boston Regional MPO Congestion Management Process

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Evaluate the effectiveness of implemented strategies.	M	<u>NIRPC</u> : analysis <u>Fed/State</u> : participation on Transportation Policy Committee <u>Local</u> : participation on Transportation Policy Committee	PL	Southwestern Pennsylvania Commission, Congestion Management Process Strategies: Evaluating Congestion Management Mitigation Strategies
Objective E: Prioritize transportation investments that support land use and economic development goals				
Continue to update the TIP project evaluation criteria to coincide with the vision, goals and objectives of the current CRP (as amended), many of which are land use and economic development related.	S	<u>NIRPC</u> : This activity will be carried out through the work of the new Technical Planning Committee, the new Transportation Resource Oversight Committee and transportation planning stakeholders relative to implementation of the CRP.	This planning process is supported by PL funds. It pertains to all of the federal transportation fund categories that NIRPC programs.	The TIP is the primary tool to implement the long-range transportation plan, in this case the CRP. Decades ago NIRPC developed similar criteria that was in keeping with the then long-range transportation plan. It has been revised numerous times to stay in sync with the current iteration of the plan. Over the years the best projects have consistently risen to the top of the list of priorities and have been programmed within available resources. NIRPC is a best practice, and can always improve. Research can be done as necessary to find other best practices.
Objective F: Encourage investments that consider long range impacts of changing transportation systems and anticipate future technologies				
Determine long term impacts	S	<u>NIRPC</u> : analysis	PL	Michigan Connected Vehicle Infrastructure Plan
Evaluate the effectiveness of investments	L	<u>NIRPC</u> : analysis	PL	To Be Determined
Goal T-4: A transportation system that supports the health of all people and places				
Objective A: Improve the integration of environmental planning activities into transportation planning				
Prioritize projects that have no adverse impacts		<u>NIRPC</u> : Project Selection Criteria	PL;	SEMCOG in Detroit, MI for their regional analysis of the impact of planned transportation projects on the environment and the series of guidelines they developed for mitigating those impacts
Objective B: Reduce the levels and impacts of pollution (air, noise and vibration) caused by transportation, particularly freight in environmental justice areas				
1. Incorporate freight "Good Neighbor" practices - buffers, open space requirements, low impact design, context sensitive lighting, etc. - into zoning ordinances	M	<u>NIRPC</u> : Research and distribute local and national examples of best practices <u>Local</u> : Update zoning ordinances	PL;STP	1 - Delaware Village Regional Planning Commission, Good Neighbor Practices 2 - FHWA Freight and Land Use Handbook: Freight as a Good Neighbor- Land Use, Transportation System, and Environmental Considerations
Objective C: Improve the non-motorized transportation network by building Complete Streets (CS) that accommodate bicycles, pedestrians and transit users				
See Goal T-2, Objective H				
Objective D: Expand environmental mitigation efforts				
Best Management Practices	L	<u>NIRPC</u> : Research best practices and provide technical support. <u>State/Fed</u> : Technical support, incorporate BMPs into transportation projects,	PL	The City of Cedar Rapids River Corridor Redevelopment Plan
Environmental Resource Maps on NIRPC Website	S	<u>NIRPC</u> : Maintain database of regional environmental mapping efforts and projects.	PL	NIRPC has made available the Green Infrastructure Vision maps, summarizing the
Objective E: Conduct outreach to determine the negative impacts of transportation investments and to ensure environmental justice				
Host workshop with environmental justice community stakeholders	S/M/L	<u>NIRPC</u> : Conduct workshop with environmental justice stakeholders to determine potential project concerns and impacts <u>Fed/State</u> : Attend workshop, technical assistance <u>Other Entity</u> : Community organizations, citizen groups	PL	Environmental justice outreach was done for the 2040 Comprehensive Regional Plan and the Illinois Expressway amendment to the 2040 Comprehensive Regional Plan
Objective F: Promote energy efficiency and alternative energy				
Develop alternative energy infrastructure	M	<u>Local</u> : construct stations for electric vehicle charging and alternative fuel pumping <u>Other Entity</u> : South Shore Clean Cities, Retail outlets	PL; Local foundations	Due to efforts of SSCC and private partners such as Family Express and others, NWI has 60 public Alt Fuel stations and 14 Private. These include
Promote alternative energy vehicle purchases	M	<u>Fed/State</u> : Legislation, regulation	PL; Local foundations	Several businesses and municipalities have expanded alternative fuel vehicles for both fuel

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Increase Gasoline Tax	S	Fed/State: Legislation, regulation		
Environment				
Goal: Reduce flooding risks and improve water quality				
Objective A: Achieve water quality standards and designated uses of our lakes and streams.				
Review and develop/improve ordinances for water quality enhancement	S/M	NIRPC: will work with stakeholders to develop a watershed protection capabilities audits and identify/ develop model ordinances Fed/State: EPA has a variety of model ordinances available to assist local governments Local: Municipal and County reps.	Water Quality Management Planning-205; Water Quality Cooperative Agreements-104; Capitalization Grants for State Revolving Funds	Conduct audit of local watershed protection capabilities
Conduct watershed resource inventory and information analysis	S/M/L	NIRPC: will make resource data readily available via web-based GIS and other products such as the Northwest Indiana Watershed Management Framework. NIRPC will update this information as significant changes or information becomes available (approx. every 5 yrs.). NIRPC will help raise stakeholder awareness of nonpoint source water quality issues within the region. Fed/State: The following agencies collect and make data available that can assist in watershed characterization and may also be able to provide technical support: IDEM, DNR, NRCS, ISDA, ISDH, USGS, USFWS, INDU, FHWA, INDOT, NOAA Local: Municipal and county reps., SWCDs Other Entity: universities, conservation organizations	PL funding can be used to maintain resource data for Env. Mit. Water Quality Management Planning-205; Water Quality Cooperative Agreements-104; Capitalization Grants for State Revolving Funds	GIS mapping for open space and water resource protection
Establish institutional structure for watershed management planning program including adequate funding and staff.	S	NIRPC: Technical support Fed/State: Technical support: IDEM, DNR, NRCS, ISDA, ISDH, USGS, USFWS, INDU, FHWA, INDOT Local: Municipal and county reps., SWCDs Other Entity: universities, conservation organizations	Need Local Dedicated Source	Watershed Management Program MOU
Objective B: Complete, improve, and implement watershed management plans.				
Identify WMP opportunities and prioritize watersheds for plan development/ improvement	S	NIRPC: Technical support and coordination Fed/State: Technical support: IDEM, DNR, NRCS Local: Municipal and county reps., SWCDs Other Entity: universities, conservation organizations, citizen groups	Water Quality Management Planning-205; Water Quality Cooperative Agreements-104; Need Local Dedicated Source	Hilltop Hanover, A Westchester County Farm and Environmental Center, Westchester County, New York
Develop WMPs or watershed diagnostic studies and coordinate with adjacent counties and states that share watershed boundaries with Northwest Indiana	S/M/L	NIRPC: will support stakeholders interested in WMP development by creating "watershed templates" for their watershed of interest. NIRPC will also assist by providing watershed characterization data and participating on WMP committees as requested. Fed/State: Technical support: IDEM, DNR, NRCS, ISDA, ISDH, USGS, USFWS, INDU, FHWA, INDOT Local: Municipal and county reps., SWCDs, Other Entity: universities, conservation organizations, citizen groups	IDEM- 319 Program, Water Quality Management Planning-205; DNR- LARE Program	1- Coffee Creek Watershed Preserve, Chesterton. 2-India Creek Watershed Management Plan, Indianapolis
Implement WMPs	M/L	NIRPC: Technical support Fed/State: Technical support: IDEM, DNR, NRCS, ISDA, ISDH, USGS, USFWS, INDU, FHWA, INDOT Local: Municipal and county reps., SWCDs Other Entity: universities, conservation organizations, citizen groups.	IDEM- 319 Program, IDEM- 205 Program, DNR- LARE Program, DNR- Coastal Program, SRF/CGSRF NRCS, local storm water programs	1- Coffee Creek Watershed Preserve, Chesterton. 2-India Creek Watershed Management Plan, Indianapolis

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Evaluate WMP implementation effectiveness	S/M/L	<u>NIRPC:</u> Technical support <u>Fed/State:</u> Technical support: IDEM, DNR, NRCS, ISDA, ISDH, USGS, USFWS, INDU, FHWA, INDOT <u>Local:</u> Municipal and county reps., SWCDs <u>Other Entity:</u> universities, conservation organizations, citizen groups.	IDEM- 319 Program, DNR- LARE Program; Water Quality Cooperative Agreements-104	St. Clair County's Northeastern Watersheds (NEW) Watershed Management Plan (WMP) http://www.cis.stclaircounty.org/Watershed_Management_Plan/Chapter_9_Evaluation_Process.pdf
Objective C: Promote stormwater best management practices, including the development of green infrastructure and the reduction of impervious surfaces.				
Pursue opportunities to restore and expand existing wetlands	S/M/L	<u>NIRPC:</u> Coordinate with agencies and local partners to identify areas for wetland restoration <u>Fed/State:</u> Technical support: IDEM, NRCS, DNR, USFWS	USDA-CRP, USDA-CTA, WRP, Wetlands Protection Development Grants Program; Small Watershed Program; NAWCA	1- Spring Creek Greenway, Joliet, Illinois; 2- Wetland Restoration at Grand Kankakee Marsh
Target implementation of stormwater management practices toward highly erodible lands	S/M/L	<u>NIRPC:</u> has already identified highly erodible soils within the Watershed Framework using NRCS soils data and query function in GIS. NIRPC will make this data available to stakeholders via GIS or similar format <u>Fed/State:</u> Technical support and data: NRCS- soils survey	IDEM-319; Water Quality Cooperative Agreements-104; Small Watershed Program; EWP; Urban Conservation Program	Stormwater Management Ordinance, St. Mary's County, Maryland
Plan and design channel modification activities to mitigate negative physical, chemical and habitat impacts, restore natural hydrology patterns	S/M/L	<u>NIRPC:</u> can provide mapping data and facilitate stakeholder and agency involvement <u>Fed/State:</u> IDNR, INDOT, NRCS, <u>Local:</u> SWCD, local counties, cities, towns	SRF; Water Quality Cooperative Agreements-104;	Natural channel design (ex. two-stage ditches)
Promote practices that manage stormwater as close to its source as possible		<u>NIRPC:</u> will collaborate with groups and organizations such as the NWI MS4 Partnership and Save the Dunes to promote and convey a consistent message on the use and applicability of LID techniques. NIRPC will also collaborate with partners to identify most effective methods for promotion.	NIRPC can promote and educate on this with MS4 dollars in member communities. Water Quality Management Planning-205	Low Impact Development techniques (ex. bioretention facilities, rain gardens, and pervious pavement)
Identify, map, and protect aquifer recharge areas with appropriate buffers	S	<u>NIRPC:</u> Promote need, facilitate or coordinate efforts <u>Fed/State:</u> Technical assistance or study by: IDEM, DNR, USGS <u>Local:</u> Local Water Utilities, counties	Water Quality Cooperative Agreements-104; Small Watershed Program; Watershed Surveys and Planning;	Spring Creek Greenway, Joliet, Illinois
Protect streambank and riparian habitat areas, limit active use of sensitive shoreline and streambank, with significant buffers, may be coordinated with expansion of regional	S/M/L	<u>NIRPC:</u> Data and mapping, facilitation and coordination <u>Fed/State:</u> NRCS, IDNR <u>Local:</u> SWCD, Counties, cities, towns, park departments <u>Other Entity:</u> Conservation Organizations, private land owners	Small Watershed Program; Coastal Wetlands Planning, Protection, and Restoration Act; Conservation Reserve Program	Ex. Riparian Buffer Preservation- Trail Creek, Michigan City
Encourage adoption of tree preservation ordinances and urban forestry	S/M/L	<u>Local:</u> Local counties, cities, towns	Forestry Incentive Program; Cooperative Forestry Assistance; Classified Forest Program; Urban Forest Conservation Grants; Arbor Day Grant Program; Homestead Indiana Grants	Porter County Tree Preservation section of UDO; Harrison West, Valparaiso, IN
Objective D: Facilitate regional planning for adequate collection and treatment of wastewater and the elimination of inappropriate use of septic systems.				
Study the feasibility of county on-site wastewater districts	S	<u>NIRPC:</u> Facilitate/Coordinate discussion on this topic <u>Fed/State:</u> ISDH Tech Assistance <u>Local:</u> County	Water Quality Management Planning-205; Water Quality Cooperative Agreements-104;	Study and Recommendation of Consolidating Wastewater Systems in Dearborn County, Indiana Study the feasibility of county on-site wastewater districts
Develop and implement on-site wastewater districts	M/L	<u>NIRPC:</u> Facilitate/Coordinate discussion on this topic <u>Fed/State:</u> ISDH Tech Assistance <u>Local:</u> County	SRF, IDEM-319;	Allen County created an On-site Wastewater Management District in 2003 in order to provide oversight and management of septic systems in
Document all new and existing on-site wastewater disposal systems in the ISDH iTOSS tracking system	S	<u>NIRPC:</u> Facilitate/Coordinate discussion on this topic <u>Fed/State:</u> ISDH Tech Assistance <u>Local:</u> County	PL funding can be used to maintain resource data for Env. Mit. SRF, Local foundations	NIRPC is an active participant in the NWI Septic System Task Force, under the facilitation of the IDNR Coastal Program. This group of local, state, federal, and NGO officials is working together to
Identify strategies to assist property owners in the elimination of the inappropriate use of on-site wastewater disposal systems	S/M	<u>NIRPC:</u> education and outreach <u>Fed/State:</u> ISDH Tech Assistance <u>Local:</u> County	NIRPC can promote and educate on this with MS4 dollars in member communities.	City of Valparaiso began a weekly pilot recycling program in 1990 and was expanded to the entire city.

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective E: Promote the upgrading of aging water infrastructure.				
Audit water systems to detect leaks and inefficiencies	S/M	<u>NIRPC</u> can share information and promote this practice <u>Fed/State:</u> IDEM/IDNR/IURC technical support <u>Other Entity:</u> Local Utilities, AWWA	SRF; DWSRF	Valparaiso City Utilities performed a Community Wide Water Audit using free software from the AWWA.
Target upgrade efforts to systems that experience the most water loss through leakage		<u>Fed/State:</u> IDEM/IDNR/IURC technical support <u>Other Entity:</u> Local Utilities, AWWA	Safe Drinking Water RLF; SRF	Valparaiso City Utilities performed a Water Leak Survey. http://www.ci.valparaiso.in.us/index.aspx?nid=234
Encourage model water use conservation ordinance	L	<u>NIRPC:</u> Public Education and Outreach in MS4 Communities <u>Fed/State:</u> Fed/State: IDEM/IDNR/IURC <u>Local:</u> Counties, Cities, Towns	MS4 Program Fees in Member Communities	St. Johns River Water Management District, Florida
Encourage water conservation strategies for residential and commercial development to reduce burden on aging infrastructure	S/M	<u>NIRPC:</u> Public Education and Outreach in MS4 Communities	MS4 Program Fees in Member Communities	Water conservation plan for Valparaiso City Utilities
Objective F: Facilitate the development of a regional stormwater strategy.				
Encourage and support consideration of stormwater quantity on a watershed basis, integrated with watershed management plans.	S/M	<u>NIRPC</u> will develop watershed templates for those watersheds in which groups are requesting technical support. NIRPC will coordinate WMP development at the request of stakeholders within NIRPC planning area.	IDEM- 319 Program, Water Quality Management Planning-205; Water Quality Cooperative Agreements-104;	Gary Storm Water Management District
Objective G: Facilitate regional planning for water supply and demand.				
Coordinate regional water supply and demand planning and data collection efforts	L	<u>NIRPC:</u> Facilitate/Coordinate discussion on this topic <u>Fed/State:</u> IDNR, IDEM, IURC, USGS <u>Other Entity:</u> Local utilities	PL funding can be used to maintain resource data for Env. Mit.	Recommendation of the Indiana Water Shortage Task Force
Improve regional water conservation, allocation, and management through establishment of regional water supply and demand management districts		<u>NIRPC:</u> Facilitate/Coordinate discussion on this topic <u>Fed/State:</u> IDNR, IDEM, IURC, USGS <u>Other Entity:</u> Local utilities	Small Watershed Program; DWARF	Recommendation of the Indiana Water Shortage Task Force
Fund and pursue studies of critical groundwater recharge areas to document and enforce necessary recharge area protection buffers		<u>Fed/State:</u> IDNR, USGS: Tech Assistance and Study Implementation	Small Watershed Program; Water Quality Management Planning-205; Water Quality Cooperative Agreements-104;	Ohio-Kentucky-Indiana Regional Council of Government for Great Miami Drinking Water Protection Project Cincinnati, Ohio.
Promote growth in areas with access to Lake Michigan water rather than in the Kankakee River sub-basin or in areas without existing water service	L	See infill and reinvestment strategies	DNR- LARE Program; USEPA-GLRI; Great Lakes Program	NIRPC will evaluate the growth and conservation metrics presented in the 2015 2040 CRP Companion through the lense of the Lake Michigan basin.
Promote source water planning in the Kankakee River sub-basin	S	<u>Fed/State:</u> IDEM regulatory authority <u>Local:</u> County Coordination very beneficial for small systems <u>Other Entity:</u> Local utilities	DNR- LARE Program; Small Watershed Program	This is a required activity for Public Water Supply Systems. Lake County joint Source Water Protection Plan is a best practice
Expand the metering of water use to raise awareness and enable cost recovery mechanisms		<u>Fed/State:</u> IDNR, IDEM, IURC, USGS <u>Other Entity:</u> Local utilities	Individual local utilities	Indiana Water Shortage Task Force recommendation: Valparaiso Utilities has good example of informative bills that can promote water conservation.

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective H: Preserve floodplains and wetlands.				
Prioritize wetland restoration and conservation		<u>NIRPC:</u> Coordination and technical assistance <u>Fed/State:</u> Technical support: IDEM, DNR, USACOE, USFWS, NRCS <u>Local:</u> SWCD, environmental/ conservation organizations	USDA-CRP, USDA-CTA, WRP, Wetlands Protection Development Grants Program; Small Watershed Program; NAWCA	Indiana Wetlands Conservation Plan criteria. Possible partnership with ACOE for an ADID user guide.
Discourage or restrict development activity with designated floodplains and recharge areas of wetlands	S/M/L	<u>NIRPC:</u> Mapping and data <u>Fed/State:</u> Technical support for mapping and data: DNR, FEMA, USACOE, USGS <u>Local:</u> Local Zoning or Planning commissions	USDA-CRP, USDA-CTA, WRP, Wetlands Protection Development Grants Program; Small Watershed Program; NAWCA	Indiana Wetlands Conservation Plan criteria.
Goal: Improved air quality				
Objective A: Achieve national ambient air quality standards for all pollutants including ozone and particulates. *				
Objective B: Reduce air toxins, greenhouse gases and other harmful emissions.*				
Objective C: Improve the aesthetics- noise, odor, discoloration- of air.*				
Objective D: Reduce the disproportionate impact of industrial and transportation emissions on environmental justice communities. *				
Prioritize Transportation Investment Dollars on Congestion and VMT Reduction	S/M/L	<u>NIRPC:</u> Project Selection Criteria, Adherence to CMP and ITS Architecture <u>Fed/State:</u> Draft guidelines and rulemaking <u>Local:</u> Submit Congestion Projects	PL, STP; CMAQ	Maryland Greenhouse Gas Emissions Reductions Act Plan San Joaquin Council of Governments Draft Regional Transportation Plan 2014-2040
Prioritize CMAQ investment dollars on Congestion Reduction Air Emission Reductions	S/M/L	<u>NIRPC:</u> Project Selection Criteria <u>Fed/State:</u> Draft guidelines and rulemaking <u>Local:</u> Submit CMAQ Projects	CMAQ	Delaware Valley Regional Planning Commission 2015 Competitive CMAQ Program Guidance
Fund and Promote Transit		See infill and reinvestment strategies	STP	Puget Sound Regional Council for its Transportation 2040 plan
Promote growth in areas Livable Centers		See infill and reinvestment strategies	CLC	1- Thomas Jefferson Planning District Commission (TJPD) for Jefferson Area Eastern Planning Initiative - Building Livable Communities 2-San Diego Area Council of Governments Transportation Enhancement Activities (TEA) Program 3- The San Francisco Bay Area Metropolitan Transportation Commission's (MTC) Transportation for Livable Communities Program (TLC) 4-City/County Association of Governments of San Mateo County Transit Oriented Development (TOD) Incentive Program 5-The Sacramento Area Council of Government's Metropolitan Transportation Plan for 2035
Promote and fund Clean Diesel and Diesel Emission Reduction Projects		NIRPC: CMAQ Air Quality Public Education subcontracts with South Shore Clean Cities to conduct an annual Green Fleets education and technical support program focusing on diesel fleet operators.	National Clean Diesel Funding Assistance Program; Pollution Prevention Grants Program; Reauthorization of Diesel Grants ; Clean Diesel Grants; CMAQ	NIRPC and SSCC have worked together to retrofit 180 regional diesel vehicles with Diesel Oxidation Catalysts or Auxiliary Heating Units. In addition, several diesel retrofit projects were submitted in the 2015 CMAQ solicitation and will be submitted for eligibility to INDOT and FHWA. The NIRPC sponsored SSCC Green Fleets program has
Promote and facilitate opportunities for alternative energy and energy conservation		NIRPC: Education and Best Practices	CMAQ; TIGER; DOE	During 2013-2015 NIRPC has participated with the
Promote tree planting and native prairie restoration for carbon sequestration		See Green Infrastructure Section above and Clean Land Section below.	Arbor Day Grant Program; Hometown Indiana Grants; FIP;	Harrison West, Valparaiso, IN

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective E: Coordinate land use and transportation policies to reduce motor vehicle trips.				
Prioritize Transportation Investment Dollars on Congestion and VMT Reduction	S/M/L	<u>NIRPC:</u> Project Selection Criteria, Adherence to CMP and ITS Architecture <u>Fed/State:</u> Draft guidelines and rulemaking <u>Local:</u> Submit Congestion Projects	PL STP; CMAQ	Maryland Greenhouse Gas Emissions Reductions Act Plan San Joaquin Council of Governments Draft Regional Transportation Plan 2014-2040
Prioritize CMAQ investment dollars on Congestion Reduction Air Emission Reductions	S/M/L	<u>NIRPC:</u> Project Selection Criteria <u>Fed/State:</u> Draft guidelines and rulemaking <u>Local:</u> Submit CMAQ Projects	CMAQ	Delaware Valley Regional Planning Commission 2015 Competitive CMAQ Program Guidance
Goal: Clean land				
Objective A: Maximize the number of brownfields returned to productive use.				
Establish current information on existing sites that meet the definition of Brownfield	S	<u>NIRPC:</u> Can be a partner in regional brownfield coalitions, and provide technical support. <u>Fed/State:</u> Funding and Technical Support: <u>Local Governments and LEDOs</u> should take the lead on identifying local brownfields, creating redevelopment plans, marketing brownfields, and applying for federal funding.	USEPA CERCLA Brownfield Grants, RDA, Private Redevelopers	NIRPC, the RDA, and the Cities of Gary, Hammond, and East Chicago have formed the Northwestern Indiana Brownfield Coalition. The NWIBC has successfully acquired \$1.4 in federal funding to create a brownfield inventory, produce Environmental Assessments for underutilized properties, and to establish a Brownfield Revolving Loan Fund. The Brownfield RLF has executed its first loan to the City of Gary
Support development of local capacity and funding to promote and implement the redevelopment of Brownfields	L	<u>NIRPC:</u> Can be a partner in regional brownfield coalitions, and provide technical support. <u>Fed/State:</u> Funding and Technical Support: <u>Local Governments and LEDOs</u> , especially those with significant numbers of vacant properties, can take the lead on identifying local brownfields, learning best practices, creating redevelopment plans, marketing brownfields, and applying for federal funding.	USEPA CERCLA Brownfield Grants, RDA, Private Redevelopers	Indiana 15 RPC has been very successful at development or brownfield capacity and attaining federal funding for brownfield redevelopment its 6 rural southern Indiana counties. The Downriver Community Conference, a coalition of 20 cities, towns, and townships in SE
Objective B: Facilitate a regional solid				
Collect and Integrate information available from existing county solid waste management plans and metrics to establish a regional baseline.	S	<u>NIRPC:</u> Coordinate or facilitate information gathering from county solid waste management districts (SWMDs) <u>SWMDs:</u> Share existing plans and data collected on various waste streams, disposal quantities, recycling rates, etc.	No known funding source for this activity	Lake Michigan District Household Hazardous Waste is a joint effort of the Lake, Porter, LaPorte Counties SWMDs. This partnership could form the backbone of a data collection and sharing
Objective C: Promote the acquisition and protection of greenspace.				
Prioritize wetland restoration and conservation		<u>NIRPC:</u> Coordination and technical assistance <u>Fed/State:</u> Technical support: IDEM, DNR, USACOE, USFWS, NRCS <u>Local:</u> SWCD, environmental/ conservation organizations	USDA-CRP, USDA-CTA, WRP, Wetlands Protection Development Grants Program; Small Watershed Program; NAWCA	Indiana Wetlands Conservation Plan criteria
Pursue strategic open space acquisition that provides opportunities to expand existing open spaces and improve network connectivity for the benefit of regional trail system, wildlife and biodiversity		<u>NIRPC:</u> Coordination, mapping, facilitation, identifying grant opportunities <u>Fed/State:</u> Technical Support and funding <u>Local:</u> Local Governments and NGOS can acquire property for conservation and open space recreation.	Some PL funding can be used to maintain resource data for Env. Mit. IDNR provides state funding through Bicentennial Nature Trust, and federal funding through the Lake Michigan Coastal Program for natural resources conservation land acquisitions and public access.	Ex. Riparian Buffer Preservation- Trail Creek, Michigan City - Hobart Marsh has an expansive patchwork of critical habitat that has been acquired by the City, The Nature Conservancy, Shirley Heinze Land Trust, Lake County Parks, IDNR, Save the Dunes, and the Indiana Dunes National Lakeshore.
Protect sensitive areas and forestlands through creation of sufficient buffer zones		<u>NIRPC:</u> Coordination, mapping, facilitation, identifying grant opportunities <u>Fed/State:</u> Technical Support and funding <u>Local:</u> Local Governments and NGOS can acquire property for	EQIP; FIP; CRP; Cooperative Forestry Assistance; EFI	Ex. Coffee Creek Watershed Conservancy-Chesterton
Seek opportunities to maintain or restore habitat corridors		<u>NIRPC:</u> Coordination, mapping, facilitation, identifying grant opportunities <u>Fed/State:</u> Technical Support and funding	FIP; WHIP; CRP; Partners for Wildlife Habitat Restoration Program	Ex. Coffee Creek Watershed Conservancy-Chesterton
Preserve and enhance strategically sited green areas in developed areas to mitigate impacts on region's ecosystem and wastewater system		<u>NIRPC:</u> Coordination, mapping, facilitation, identifying grant opportunities <u>Fed/State:</u> Technical Support and funding <u>Local:</u> Local Governments and NGOS can acquire property for conservation and open space recreation.	Some PL funding can be used to maintain resource data for Environmental Mitigation. Need Local Dedicated Source	NIRPC, with funding from the Garlord and Dorothy Donnelly Foundation partnered with The Conservation Design Forum and the Town of Cedar Lake to identify strategic parcels along Founders Creek for creation of a community

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Encourage habitat protection, restoration, and cooperative land management agreements on both public and private lands through appropriate regulation and incentives		NIRPC: Data, mapping, facilitation and coordination	FIP; WHIP; CRP; Partners for Wildlife Habitat Restoration Program	Habitat Conservation Plans: The Quiet Revolution : This U.S. Fish and Wildlife provides basic information about habitat conservation plans as well as a number of case studies on the use of these plans. [http://www.fws.gov/endangered/hcp/Quiet/quietrev.html]
Coordinate education, training and technical assistance especially to develop strategic partners in open space management		Other Entity: NWI CWMA	Soil Conservation Education Program; SARE	Hilltop Hanover, A Westchester County Farm and Environmental Center, Westchester County, New York
Objective D: Mitigate transportation and land use impacts.				
Identify proposed transportation projects that may have an environmental impact for early coordination with state and federal agencies		NIRPC: Data, mapping, facilitation and coordination	PL to update and maintain data for Env. Mit.	Updated the Green Infrastructure Vision with more substantial data and conservation metrics, as well as research based Ecosystem Services Valuation data developed by the Conservation Fund for Chicago Wilderness.
Make environmental resource data readily available and accessible to transportation planners and decision makers		NIRPC: Data, mapping, facilitation and coordination	PL to update and maintain data for Env. Mit.	NIRPC conducts Red Flag Investigations for all transportation projects we receive information on and provide this information to project sponsors.
Where deemed beneficial to the region, support artificial habitat creation in areas where natural habitat areas are too degraded or fragmented to restore effectively	L	NIRPC: Data, mapping, facilitation and coordination	WHIP; CRP; Partners for Wildlife Habitat Restoration Program; Wildlife Conservation and Appreciation Program	Cowles Bog Restoration plan-Indiana Dunes National Lakeshore
Prioritize environmental resource/ asset areas regionally to assist with transportation planning and assist with decision making		NIRPC: Data, mapping, facilitation and coordination	PL to update and maintain data for Env. Mit.	Updated the Green Infrastructure Vision with more substantial data and conservation metrics, as well as research based Ecosystem Services Valuation data developed by the Conservation Fund for Chicago Wilderness.
Identify mitigation areas/ opportunities that have the greatest ecological value to enhance regional restoration and preservation efforts		NIRPC: Data, mapping, facilitation and coordination	PL to update and maintain data for Env. Mit.	Updated the Green Infrastructure Vision with more substantial data and conservation metrics, as well as research based Ecosystem Services Valuation data developed by the Conservation Fund for Chicago Wilderness.
Economic Development				
Goal H & E-1: A globally competitive, diversified economy that protects & enhances our natural environment				
Objective A: Maximize technology, productivity and efficiency of existing core industries				
Provide broadband fiber optics		NIRPC can offer technical support and GIS data mapping Other Entity: The Forum will pursue recommendations from the Broadband Study such as identifying hot spots	EDA; NWIEDD	
Maximize Economic Development impacts of major employers		NIRPC: GIS data and mapping Other Entity: Technical Support from NWI Forum, RDA and Local Governments.	EDA; NWIEDD	Comprehensive Plan implementation of City of Gary identified several priority projects include Route 912 Business Park Development, and Interstate 90/65 Business Park Development.

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective B: Create diverse, emerging and sustainable industries				
Support the Regional Entrepreneurial Action Plan (REAP)	S	<u>NIRPC</u> can offer technical support, provide data and act as a convener / facilitator <u>Other Entity:</u> NWIEDD & Forum	RDA; NWIEDD	Elevate Ventures fund \$1.6 million pilot program called "Quickstart" - staff hired to be NWI representative (effective Jan. 1, 2012)
Provide Economic Development impacts of identified "industry clusters"		<u>NIRPC:</u> Supply data and coordinate with the Forum and IEDC <u>Fed/State:</u> IEDC <u>Other Entity:</u> Forum	EDA; NWIEDD; IDGF	Comprehensive Plan of City of Gary aims to establish a tax increment finance (TIF) district to finance infrastructure costs, expand the Gary-East Chicago-Hammond Empowerment Zone and Gary/Chicago International Airport Development Zone to encompass the Business Park and provide incentives to new businesses and developers including Foreign Trade Zone Benefits.
Objective C: Strengthen public/private partnerships resulting in increased regional investment				
Update CEDS	S	<u>NIRPC</u> will support the NWIEDD and provide data <u>Other Entity:</u> Include criteria in NWIEDD call for projects	EDA	Comprehensive Economic Development Strategy, 2010
Maximize Economic Development impacts of NWIEDD's requests and EDA funds		<u>NIRPC</u> can offer technical assistance and align transportation funds to maximize economic development impacts and opportunities	EDA; NWIEDD	
Airport		<u>Other Entity:</u> RDA	RDA	Gary- Chicago International Airport Project
Objective D: Redevelop urban core areas				
Pursue catalytic projects in the Marquette Plan		<u>NIRPC</u> can facilitate sharing of information, act as a convener and facilitator, provide technical assistance and coordinate with the RDA to pursue the Advisory Committee <u>Other Entity:</u> The RDA will continue to fund projects within the lakefront communities of Northwest Indiana that are located in the Focused Revitalization Area.	RDA	Portage Lakefront
Pursue catalytic projects in the GRIP project.		<u>NIRPC & RDA:</u> Marquette Plan Update <u>EPA:</u> Provide planning and technical assistance	EZ; RDA; NWIEDD	Marquette Plan; Gary- Chicago International Airport Project
Objective E: Use/expansion of transportation and other infrastructure advantages				
Prioritize transportation investments which achieve improved connectivity		<u>NIRPC:</u> Formulate project selection criteria based on objectives outlined in	PL; STP	South Shore Rail Line
Provide cutting-edge utilities, services and Broadband fiber optics, See Goal H & E-1, Objective A, #1		<u>NIRPC:</u> Will manage data and provide GIS mapping of utilities, services, and broadband fiber optics when the data is available. <u>Local:</u> Will manage data and provide data when necessary. Will work with Utilities and Economic development groups to expand access. <u>Other Entity:</u> Utilities, Economic Development groups, and other organizations which manage data will provide it with the understanding it will be managed confidentially. Utilities and Economic Development groups will work together to expand access.	EDA; NWIEDD	NIPSCO Economic Development Efforts
Objective F: Promote growth that protects and enhances the environmental assets of Northwest Indiana				
Pursue land assembly and site preparation efforts		<u>NIRPC</u> will provide technical assistance, data and GIS mapping and continue to partner with the Forum to promote land assembly needs using land use and transportation infrastructure components <u>Local:</u> LEDO's <u>Other Entity:</u> The Forum will continue to support LEDO efforts and host additional seminars with NIRPC and develop programs	CLC; Land Banks; Brownfields Program	Portage Lakefront recovers abandoned brownfields along its waterway

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Objective G: Improve the region's workforce to accommodate growth in emerging industries				
Provide Economic Development impacts of emerging "Green Economy" jobs		<u>NIRPC</u> : Coordinate with Forum	EDA; NWIEDD; TIF; Tax Abatement;	South Shore Rail Line
Create programs to support job and economic growth		<u>NIRPC</u> : Assist with grant opportunities and coordinate with NWI Forum and RDA <u>Other Entity</u> : Center for Workforce Innovations; NWI Forum; NWI Ready Program; and Local Governments	RDA; NWIEDD; local Government	NWIEDD
Objective H: Improve overall quality of life to attract businesses and residents				
Create regional identity to support Economic Development opportunities		<u>NIRPC</u> : Coordinate with Forum <u>Local</u> : Chamber of Commerce <u>Other Entity</u> : The Forum will continue to market NWI to developers, site selectors, real estate brokers and targeted industries	RED; NWIEDD	Marquette Plan
Goal H & E-2: Expanded access to knowledge & educational opportunities				
Objective A: Develop a transportation system that provides safe and reliable access to educational facilities				
Prioritize transportation investments which achieve improved connections		<u>NIRPC</u> : Include in Project Selection Criteria	PL; STP	South Shore Rail Line
Objective B: Maintain strategic partnerships with educational institutions				
Create data base of education/occupation opportunities		<u>NIRPC</u> : Supply information/data and provide contacts <u>Local</u> : Education Institutions, Universities <u>Other Entity</u> : NWIWB & CWI supply data & reports	PL	Work One Northwest Indiana
Establish partnerships between industry and educational institutions for purposes of job training		<u>NIRPC</u> : Provide contacts and connections	RDA; EDA; EPA	U.S. Steel partnered with Purdue University. Calumet Visualization lab
Objective C: Provide critical information to the public to enable meaningful public participation				
Provide "forum style" events	5	<u>NIRPC</u> : Offer forums with keypad polling <u>Local</u> : Work with NIRPC to educate on Plan recommendations, etc.	PL; other grants and sponsorship for larger events.	Hammond Elementary school forum Dec. 6, 2011
Objective D: Educate leaders about best practices in urban and regional planning and public policy				
Conduct civic and governmental activities in locations convenient to the urban core		<u>NIRPC</u> can act a facilitator, share information and provide technical assistance and support	PL;	Public meeting at Chesterton Town Hall
Objective E: Improve infrastructure connectivity and access to the technology that supports distance education				
Prioritize transportation investments which achieve improved connectivity		<u>NIRPC</u> will include in Project Selection Criteria	PL; STP	South Shore Rail Line
Stewardship & Governance				
Goal S&G-1: Environmental justice: shared benefits and burdens				
Objective 1-A: Increase outreach in environmental justice communities and improve the public involvement process to eliminate barriers and engage minority, disabled, elderly, and low-income populations in regional decision-making.				
Host an annual regional forum addressing progress in 2040 CRP implementation and issue-oriented roundtables, as appropriate.	S/M/L	<u>NIRPC</u> : Lead the outreach efforts to ensure that all groups are well represented. Host forums and roundtables at appropriate and easily accessible sites. <u>Fed/State</u> : Attend annual forums <u>Local</u> : Assist NIRPC in outreach efforts to reach E.J. communities in your local jurisdiction.	PL	Listening sessions held in the areas of Motorized Transportation, Public Transit, and the Environment as part of the 2040 Comprehensive Regional Plan update. Listening sessions held as part of the Greenways + Blueways 2020 planning process on non-motorized transportation.
Provide ongoing communication to regional stakeholders on a quarterly basis.	S/M/L	<u>NIRPC</u> : Publish a quarterly newsletter.	PL	Plan Cheyenne includes a unique structure and online RFP process, and incorporation of cutting edge public participation strategies.

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Support and facilitate meaningful public participation in planning efforts at all scales, including expanding NIRPC's online capabilities.	S	NIRPC: Develop a Social Equity section on the NIRPC website.	PL; Foundations	Best Practice Website: Metro Boston Indicators Project (www.regionalindicators.org/equity/)
Objective 1-B: Improve capacity to identify residential, employment, and transportation patterns of low-income and minority populations so that their needs may be identified and addressed, and the impacts of transportation can be fairly distributed				
Establish a Core Communities Committee to provide technical support and assist in securing resources from federal, philanthropic and other external sources.	S	NIRPC: Reach out to core community leaders, seeking representatives for the Core Communities Committee. Local: Identify leaders to participate in the Committee.	Need Local dedicated source	Staff serve on Urban Core Communities (Gary, East Chicago, Michigan City) Steering Committees for various plans and projects. Walkable and Livable Communities Institute Conducted a research about implementing projects to support active living, This handbook provides guidance of
Objective 1-C: Avoid disproportionately high and/or adverse impacts on minority, disabled, elderly and/or low-income populations.				
Consider the benefits and burdens of potential decisions on environmental justice communities.	S/M/L	NIRPC: Build upon the Environmental Justice Analysis conducted for the 2040 CRP to develop tools to evaluate benefits and burdens of projects on E.J. communities. Explore the potential for providing E.J. analysis tools and technical support for local governments. Local: Develop plans and tools to address benefits and burdens of local projects.	Environmental Justice Community Impact Grant Program	The Executive Office of Energy and Environmental Affairs (EEA) of Massachusetts provides this Smart Growth/Smart Energy Toolkit on the website. http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-ej.html
Objective 1-D: Minimize and/or mitigate unavoidable impacts on low-income and/or minority populations by providing offsetting initiatives and enhancement measures to benefit affected communities and neighborhoods				
Objective 1-E: Increase awareness and understanding of environmental justice issues among decision makers				
Facilitate increased understanding and meaningful discussion of social justice issues, in particular as they relate to the relationship between land use, transportation and environmental planning efforts in the core communities.	S/M/L	NIRPC: Increase and broaden public participation activities to ensure an ongoing and meaningful process for citizens. Educate NIRPC Commissioners and other local decision makers on the importance of ensuring social justice in our region.	PL	1-The Executive Office of Energy and Environmental Affairs (EEA) of Massachusetts provides this Smart Growth/Smart Energy Toolkit on the website. http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-ej.html 2- Environmental Justice workshops for the CRP and Iliana Expressway projects
Build local capacity and understanding of the regional impacts of local planning and promote "best practices" among both the general public and elected/appointed officials, as described elsewhere in this Plan.	S/M/L	NIRPC: Maintain an active and meaningful role in ongoing regional initiatives, including: Quality of Life Council, Quad-State Accord, Great Lakes Restoration Initiative and other initiatives described elsewhere in the CRP, as well as any other regional initiatives. Ensure public & media appearances by staff as well as public input sessions include these themes when appropriate	PL	1- Transit Listening Sessions prior to 2040 CRP Update explaining how transit is funded in the region and the process behind it 2- NIRPC's CLC program
Objective 1-F: Mitigate displacement of local residents and the loss of property investments when redeveloping the urban core				
Provide support for integration of livable communities' standards and social equity considerations into local planning decision-making.	S/M/L	NIRPC: Use the Core Communities Committee to provide support and advocacy in the urban core communities. Local: Use plans and policies to encourage the retention of existing residents while allowing for redevelopment.	CLC	Livable Center Initiative by Atlanta Regional Commission
Goal 2: Efficient and coordinated local government				
Objective 2-A: Facilitate the consolidation of redundant local government services				
Shared service and utility agreements, coordination and consolidation	S/M/L	NIRPC: Facilitate and foster opportunities for shared local government services and improving the fiscal sustainability of the counties and existing cities and towns.	NIRPC Local Government Assistance Committee meet with regional finance experts, other local elected officials and members of the Indiana General Assembly	Ask the Indiana Association of Cities & Towns and Association of Indiana Counties for examples in Indiana that work. In addition, the following

Action Step	Term (S/M/L)	Responsible Party	Funding	Successes/Best Practices
Shared purchasing agreements	S/M/L	NIRPC: Facilitate and foster opportunities for shared purchasing agreements. Bundle this task with the shared service agreement task above.	NIRPC Local Government Assistance Committee meet with other local elected officials to devise a financial strategy. Include members of the Indiana General Assembly if state enabling legislation might be required.	Approach the Indiana Association of Cities & Towns and Association of Indiana Counties for examples in Indiana that work. In addition, see the paper "Municipal Cooperation: Sharing Services in New York" http://www.empirecenter.org/publications/municipal-cooperation-sharing-services-in-ny/
Objective 2-B: Promote coordination of land use and corridor planning across jurisdictional boundaries				
Review and advise communities in the region as intergovernmental agreements (IGAs) are developed to address various issues of mutual and broader regional benefit.	S/M/L	NIRPC: Discuss at the new Technical Planning Committee regarding implementation of the 2040 CRP what can be accomplished across community and county boundaries regarding land use and planning coordination.	PL, and search for other sources of funds for land use planning to expand NIRPC role as needed.	Ask the American Planning Association - Indiana Chapter for examples in Indiana.
Objective 2-C: Foster better communication, cooperation, and coordination to better leverage resources				
Communicate shared regional priorities to the federal and state agencies	S/M/L	<u>NIRPC:</u> Flexible regional financing options for initiatives that cross municipal and county lines. Provide ongoing community revenue sharing opportunities to better align regional resources with regional needs/cation to regional stakeholders on a quarterly basis. Provide ongoing education to state and federal agencies regarding vision, goals & objectives of the CRP. <u>Fed/State:</u> State and federal tax policy favorable to achieving Livable Centers and Focused Revitalization	Pursue state and federal tax policy and the allocation of other resources favorable to achieving Livable Centers and Focused Revitalization. Consult with members of the Indiana General Assembly and members of Congress if new enabling legislation is required.	Research and come up with examples.
Explore funding resources for NIRPC and regional partners to support greater cooperation and interaction among non-traditional partners	S/M/L	NIRPC: Research	Search for other sources of funds for this expanded level of activity.	Research and come up with examples.
Objective 2-D: Promote the sharing of benefits, burdens and costs among governments				
Consider the benefits and burdens of potential decisions on environmental justice communities.		<u>NIRPC:</u> Provide support for integration of livable communities' standards and social equity considerations into local planning decision-making.	CLC	The Executive Office of Energy and Environmental Affairs (EEA) of Massachusetts provides this Smart Growth/Smart Energy Toolkit on the website. http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-ej.html