The Northwest Indiana Center for Data and Analysis: A Case Study of Academic Library Community Engagement

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Abstract

This paper details community engagement activity of an academic library coordinated within a broader university strategic plan. The Anderson Library at Indiana University Northwest (IU-Northwest) supports a service called the Northwest Indiana Center for Data and Analysis. Created in 1996 with funding made available from the Indiana University Strategic Directions Initiative, the center provides value-added demographic data services to support economic development and quality of life projects in the city of Gary and Northwest Indiana.

Community-based engagement and outreach is integral for Indiana University—Northwest (IU–Northwest), one of eight Indiana University campuses across the state. Located in the most diverse and industrialized area in Indiana, the school is strongly dedicated to the values of education, diversity, lifelong learning, collaboration of cultures, and opportunity for all, as well as being an active participant in the sustainable economic development of the region and of the state (Trustees of Indiana University 2013). Similarly, community-based engagement and outreach is vital to the existence of the John W. Anderson Library and the Northwest Indiana Center for Data and Analysis. The creation of the center in 1996 further expands the ability of IU–Northwest to fulfill its obligations to the city of Gary and the Northwest Indiana (NWI) community.

On July 1, 2007, Indiana University (IU) President Michael A. McRobbie described a new vision for the institution in which "new initiatives in engagement and economic development would play a lead role" (Buse 2012). Hence, various departments at IU—Northwest developed new, and fostered existing, community engagement activities thereby maintaining an important aspect of the university's metropolitan mission. The College of Arts and Sciences hosts an annual regional Science Olympiad event, which is designed to create friendly competition among area high school students around fun science projects. The School of Business and Economics has a Center for Management Development that provides professional continuing education training for business and industry. The Accounting and Business Students Organization (ABSO) offers free income tax assistance on campus through the Volunteer Income Tax Assistance Program (VITA). The Continuing Studies program hosts a "Kids College Summer Program," as well as the Gary Glen Park neighborhood Conversations series. The

School of Education has an Urban Teacher Education Program that works exclusively with teachers who wish to teach in urban classrooms. The College of Health and Human Services and the School of Public and Environmental Affairs (SPEA) host an annual Public Affairs Week of activities involving the community. Also, for thirty years SPEA has hosted an all-day regional Child Abuse Prevention Summit on campus. The IU School of Medicine Northwest Campus provides medical school students with an International Human Cadaver Prosection Program that honors those who have donated their bodies for research purposes. Finally, the campus' annual career fair for students consists of community businesses and organizations; it is hosted and coordinated with the Office of Student Affairs.

Community Engagement at IU Northwest and the Center for Urban and Regional Excellence (CURE)

Students, faculty, and staff have committed much time and energy to the Gary and surrounding communities for almost two decades. To support the institution-wide commitment to engagement, Academic Affairs created the Center for Urban and Regional Excellence (CURE) in 2004 as a resource to help faculty and students across the university, including the library, engage with the community. CURE is an umbrella organization for several other initiatives, such as Northern Indiana Consortium for the Environment and the Non-Profit Institute. This institute provides education, research, and technical assistance in several areas—including the environment, arts, and senior issues—to local non-profit groups whose mission is to collaborate with organizations in all sectors in order to address challenges and co-create solutions in diverse areas. These areas include economic development, government efficiency, nonprofit leadership development, public safety, transportation policy, environmental sustainability, health disparities, and arts and culture.

CURE continues to develop and grow as it coordinates community engagement across campus, in particular activities involving faculty and students in research and experiential learning. CURE oversees a collaborative endeavor comprised of faculty from IU-Northwest, Calumet College of St. Joseph, Purdue University Calumet, and the Northwest Indiana Forum known as the Northwest Indiana Consortium for the Environment (NICE). An example of a NICE activity currently underway is the Northwest Indiana Restoration Monitoring Project, which seeks to facilitate and administer the long-term monitoring of ecological restorations in the Northwest Indiana region. CURE also oversees the Non-Profit Institute providing grant-seeking assistance and training for increasing the capacities of area not-for-profit organizations. Currently, the campus has Lilly Endowment funding to support a faculty member's engagement in community projects involving IU-Northwest students and a community partner. In 2011, IU-Northwest Chancellor William Lowe, along with IU-Northwest administrators and faculty, devised a project titled Institutionalizing Community Engagement, utilizing the Carnegie Foundation for the Advancement of Teaching Elective Classification for Community Engagement as a framework (Higher Learning Commission 2011). That same year, the campus undertook a new strategic-planning

process resulting in six strategic priorities. Soon after, the Anderson Library began collaboration with CURE to create an inventory addressing the transportation options for Northwest Indiana.

Library Engagement Activities

In accordance with its mission, the Anderson Library's highest priority is to deliver information to meet the research needs of IU-Northwest students and faculty as well as the community's research needs. In his 2013 inaugural address, Chancellor Lowe stated, "The health, quality of life, and future of the communities where our students live is a mutual interest of our campus and the Northwest Indiana region, IU-Northwest, and the communities that we serve count on each other and have a stake in each other's successes. A thriving IU-Northwest contributes to regional revitalization, in the same way that a prosperous region enhances the campus's success." (Indiana University Northwest News 2013). The Anderson Library has remained proactive in addressing needs of the community. For example, the continuing financial woes of the Gary Public Library have forced administrators to cut costs dramatically, shuttering the main library, and cutting hours at branches throughout the city. This dilemma created an opportunity for the Anderson Library to expand its already present community footprint even further into the community with a grant from the Indiana State Library and the Institute of Museum and Library Services to expand access to computers and software. Nearly one-fifth of the 12,000 questions received at the two library reference desks come from community patrons.

The newest library service, the Adaptive Technology Room, provides computers equipped with software designed for the visually and hearing impaired and is available to students and members of the community. The IU–Northwest Diversity Library is a collaboration of the Anderson Library and the IU–Northwest Office of Diversity Programming (ODP), and is designed to provide information resources about multicultural diversity (John W. Anderson Library 2013). This collection exemplifies the fact that the library staff and librarians are committed to representing the diversity of the Northwest Indiana region, as represented through this service.

The Calumet Regional Archives, part of the library for the past thirty years, has collected and made available the rich historical collections from the Calumet region of Indiana. A popular credit course regarding the history of Indiana, and in particular the northwest region, is offered by archivist Steve McShane with the intent to educate IU–Northwest students on how this region helped build twentieth-century America (Sheid 2009). Steve travels throughout the area sharing the interesting history of this industrial hub as well as the area's environmental importance as a Lake Michigan watershed.

Some of the library's building space is used to host campus centers devoted to engagement, such as CURE, Non-Profit Institute, Community Grants Information Center, and the Gary Glen Park Weed and Seed Crime Prevention office. The library also helps host community events, such as the monthly Gary Glen Park Conversations

program, which brings together community leaders to discuss interesting activities occurring in the neighborhood and within Gary.

Every facet of the Anderson Library is designed to educate and serve the surrounding community. IU—Northwest celebrated its fiftieth anniversary in 2009. IU—Northwest has grown from an Indiana University extension campus into a master's-level, degree-granting institution in its own right (Sheid 2009). It has also become a vital hub of education and culture in the city of Gary and in Northwest Indiana with the Anderson Library not only playing an educational role, but also serving as a focal point for students and community members for state of the art technology currently unsurpassed in the area in scope and content. Likewise, the fifteenth anniversary of the Northwest Indiana Center for Data Analysis marks another milestone for the library and university. Since the center's inception in 1996, its staff has played a vital role in providing critical information for numerous projects and reports, supporting ideas created by academics and non-academics alike.

Northwest Indiana Center for Data and Analysis

There are five aspects of the Northwest Indiana Center for Data and Analysis: (1) local demographic data analysis, (2) information resources about urban environmental health, (3) geographic information system (GIS) map creation and display, (4) grant-seeking information and activities, and (5) government and legal information. The activities in these five areas will be explained, and one project will be focused on as an example. This project is one of numerous activities and projects undertaken since the Data Center's inception. It involved center staff, students, a faculty member, social service organizations, community partners, the Lake County Geminus Organization, and a funder (the Indiana State Department of Health), all working together to address substance abuse issues facing youth in East Chicago, Indiana.

Data Center Activities

The Northwest Indiana Center for Data and Analysis was created in 1996 with funding through the Indiana University Strategic Directions program. In his 1997 State of the University address, former IU President Myles Brand (1998) highlighted the many ways Indiana University "has reformed and refined itself in accordance with our Strategic Directions Charter." He noted that significant progress has been made in defining IU as America's New Public University, and he issued the challenge to take the next step and "move to the front of the line of public, research-intensive universities." The university allocated \$25 million in one-time monies for successful project proposals over the course of three rounds. The Office of Research and the University Graduate School (RUGS) set up review panels that received and commented on pre-proposals during each of the three rounds for funding. The first round of proposals emphasized innovations in the areas of teaching, learning, and building stronger bridges between the university, K–12 schools, and community agencies. The second round focused on the need to support research. The third round stressed selective investments in excellence by campus chancellors rather than faculty

members (Trustees of Indiana University 1996). Over the years, Data Center activity has centered on assisting IU–Northwest faculty, staff, and various community organizations. Demographic data concerning the region/state/nation are always in demand for regional not-for-profit, university, and local governmental agencies. While this type of data exists online and is freely available through numerous agencies, finding what is needed can be time consuming and expensive for nonprofits in particular. Furthermore, placing the data into an appropriate format can be challenging because much of the data the center works with is obtained from state and federal agencies in a raw state. The center analyzes the numbers and places this data within maps to bring clarity and context to the information.

Local Demographic Data Analysis

Discovering raw data and then adding value to it by creating tabular or graphical elements play a part in most of the Data Center's activities. Over the years, the Northwest Indiana Center for Data and Analysis has also conducted focus groups and surveys for reporting comments and opinions on various issues. For example, in July 2007, Geminus Corporation received a block grant from federal and state mental health organizations. This block grant was named the Strategic Prevention Framework State Incentive Grant (SPF-SIG). "The SPF-SIG grant program represents a continuation of ongoing Center for Substance Abuse Prevention initiatives to encourage states to engage in data-based decision-making in the area of substance abuse prevention planning and grant making" (Indiana Prevention Resource Center 2008). The SPF-SIG uses a five-step process known to promote youth development, reduce risk-taking behaviors, build assets and resilience, and prevent problem behaviors across the life span. Efforts have been directed at reducing cocaine use among eighteen to twenty-five year olds (Vasquez et al. 2008, 5).

The Northwest Indiana Center for Data and Analysis provided a variety of graphical elements for the four-year project with the Geminus Corporation. Demographic information was converted to charts, graphs, and maps for inclusion in the East Chicago Local Epidemiology Profile annual reports to serve as a vehicle for the development of collaborative relationships in social service program development in the areas of child welfare, early childhood development, and behavioral health services for persons of all ages. These reports were written for state policy-makers and community leaders to present data and analysis to support the development of a framework for advancing the mission of the Indiana Substance Abuse Prevention System. Data describing graduation rates (see Figure 1), numbers and types of substance abuse treatments (see Figures 2, 3, and 4), and drug-related crime data, population changes, and community assets were included (see Maps 1 and 2). In 2010, the center facilitated a focus group with East Chicago clergy to get their thoughts on the state of drug abuse and available treatment found within the city. For the 2011 report, a focus group, comprised of an East Chicago neighborhood watch group, was conducted to discuss how they perceived their neighborhood. Related to our Geminus project, data describing the number and types of drug treatment admissions in East Chicago was collected and graphically displayed during the four-year project. Data

describing graduation rates (Figure 1), numbers and types of substance abuse treatments (Figures 2, 3, and 4), and drug-related crime data and population change are included in the Appendix as examples (Maps 1 and 2).

Environmental Resources Center

In 1997, the Northwest Indiana Environmental Justice Resource Center was created with funding awarded to IU-Northwest from the U.S. Environmental Protection Agency through its Environmental Justice Partnership program. IU-Northwest is one of the ten universities nationwide that received the grant. Environmental justice refers to the perception that minority communities are burdened with more environmental risks than in other areas. Although not a legal clinic per se, the center is intended to assist municipalities like East Chicago, Gary, and Hammond, Indiana, in educating residents about the pollution in their communities. The Resource Center's collection contains various reports that describe the environmentally sensitive nature of the region related to past heavy industry. The School of Public and Environmental Affairs (SPEA) at IU-Northwest has partnered with the Resource Center on a number of projects including the Gary CARE Partnership Project, whose mission is to engage in a collaborative community-based process to identify and prioritize risks and create an action plan to address environmental health issues that affect health, quality of life, and sustainable economic development (City of Gary, Indiana 2012). The Environmental Resource Center continues to participate with the Department of Environmental Affairs within the city of Gary as they administer a U.S. EPA Community Action Renewed Environment (CARE) Partnership grant. Discussions with citizens continue concerning occurrences of asthma and other respiratory ailments, low birth weight, diabetes, learning disabilities, and heart disease.

Geographic Information Systems (GIS) Office

Visualizing data in different ways for different purposes has been another goal of the Northwest Indiana Center for Data and Analysis because the layering of several factors on a map can give the community a new insight into the nature, extent, and distribution of a condition, and also can make it easier to compare it with other issues in the same area. Geographic Information Systems (GIS) is a system to display, store, analyze, and manage information about objects on earth. This technology grew through the 1990s and developed as another method to visualize data. Gaining familiarity with the technology has been a valuable asset for the center.

In the mid to late 1990s, GIS technology began a transformation to a more user-friendly interface. Prior to this, the technology was limited in use by those with heavy duty computer programing skills. Today, the technology is easily accessible and can be used by anyone. Google Earth is a common GIS application used by the masses. More sophisticated software such as ESRI ArcGIS provides a way to visualize common datasets such as census information, and can be learned easily with a little training.

Partnerships have always been an important element in the Data Center's success as it relates to GIS. For example, the center began a partnership with the Northwest Indiana

GIS Forum, first serving as co-host, and later co-chairing the organization. Bimonthly meetings are currently held drawing participants from five counties in Northwest Indiana. These meetings have been a good way to keep updated with data created in the region and also provide networking opportunities. Besides the Northwest Indiana GIS Forum, the Data Center also participates with the Indiana Geographic Information Council (IGIC). IGIC provides statewide coordination of Indiana GIS through the dissemination of data and data products, education and outreach, adoption of standards, building partnerships, and the online interactive mapping website IndianaMap. Participation in IGIC provides links to numerous resources from a statewide level to the regional Northwest Indiana GIS Forum.

In an effort to promote GIS technology at IU-Northwest, a library computer lab was converted to a GIS lab. Taking advantage of the academic lab licensing agreement between the software vendor and Indiana University made it possible to create an eighteen-seat computer classroom. As a result, GIS training, advertised through the Northwest Indiana GIS Forum, has been offered free to regional GIS professionals. The Hammond Sanitary District supplies the certified trainer, the Indiana Department of Environmental Management (IDEM) furnishes the training materials, and IU-Northwest provides the computer lab.

Other GIS education and outreach activities have been administered by the Data Center as a result of several successful grant opportunities. Federal grant dollars received from the U.S. EPA Region 5 and the Federal Geographic Data Committee were used to teach local GIS personnel how to properly document the data they create via geospatial metadata. Funding through the Lake Michigan Coastal Program designated for environmental resource education in the watershed was geared towards persons with less familiarity of GIS, as well as those with less available funding for purchasing pricey GIS resources.

In addition, the Data Center has also worked with the campus Geosciences Department to offer an introductory GIS college credit course for undergraduates. The Schools of Public and Environmental Affairs and Business and Economics (SPEA) have also used the GIS lab for credit GIS courses.

GIS was an integral part of the project with Geminus. Maps were created for the Geminus/East Chicago Epidemiology project to visualize East Chicago demographics, such as population change by census tract and community assets including the locations of churches, schools, and parks. In addition, the city's police department provided the locations of drug-related crimes that were mapped for each year for annual reports. Crime mapping over the four-year project indicated that drug-related crime in a specific part of the city decreased over time. It was noted that in this neighborhood a crime watch group had been initiated at the beginning of the project's period. As part of the project's outcomes, it was stated that perhaps the decrease in neighborhood crime was a result of actions taken by this watch group. Creating

additional neighborhood crime watch groups within the city might be an avenue to pursue as a way to decrease drug-related crime.

Community Grants Information Center

The Data Center also actively sought external funding for projects. The Foundation Center Cooperating Collection and Foundation Center Online is an online database that provides detailed profiles of all active U.S. foundations. This database—as well as GrantStation, an online funding resource for organizations seeking grants throughout the world—has been extremely useful in the search for alternative funding for community partners, for faculty and staff, and for the Data Center projects. In addition, grant-seeking assistance has been provided by the Non-Profit Institute, which provides access to major grant search engines for any nonprofit at no charge.

Government and Legal Information

Finally, we rely on the Government Publications department and the Lake County Central Law Library, found within the Anderson Library at IU–Northwest, to supply our needs on various projects. The organization Indiana Networking for Documents and Information of Government Organizations (INDIGO) has proven to be extremely helpful when faced with perplexing questions involving government data. One of INDIGO's purposes, providing a forum for discussion of problems and concerns regarding government documents and exchanging ideas by librarians working with government information (INDIGO 2011), has proven to be extremely helpful when faced with a perplexing question involving government information or data.

Furthermore, federal data sources, such as the National Archive of Criminal Justice Data (NACJD) and the Substance Abuse and Mental Health Services Administration (SAMHSA), were invaluable in the building of the epidemiological reports for East Chicago. NACJD arrest statistics provided information on the adult/juvenile status of offenders. These arrest statistics were gathered from the NAJCD website and analyzed. The NAJCD compiled Federal Bureau of Investigation (FBI) Uniform Crime Reporting (UCR) data, estimated the monthly missing data, and released it to the public for research purposes. Equally important, the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the U.S. Health and Human Services Administration, provided Treatment Episode Data Sets (TEDS), a national database maintained by SAMHSA. This database records the demographics of individuals entering treatment for substance abuse or substance dependence (alcohol, cocaine, and marijuana), providing critical information for the construction of the East Chicago epidemiological profile.

In addition to federal data sources, the Data Center also relies heavily on state data sources. STATS Indiana is the official statistical portal for digital data for the state of Indiana (STATS Indiana 2013). It furnishes data concerning state, county, and metropolitan areas, which can be retrieved by topic. STATS Indiana is maintained by the Indiana Business Research Center at Indiana University's Kelley School of Business. The Indiana Department of Workforce Development supplies the Data

Center with Indiana economic statistics, including unemployment numbers. The Indiana Department of Education provides us with valuable statistics concerning student demographics, drop-out and graduation rates, suspension rates, etc. The Indiana Prevention Resource Center (IPRC) provides us with Indiana county statistics and was instrumental in the composition of the epidemiology reports. IPRC is operated by the Indiana University Department of Applied Health Science and School of Health, Physical Education and Recreation.

Partners

There are many important community and campus partners who have been assisted in community projects because the Data Center service is largely dependent on external funding through grants and contracts. Most successful projects involve a campus faculty member, student(s), Data Center staff, and a community organization partner. Funding is usually obtained from a federal, state, or local source, often matched by the library or Data Center. The Data Center proactively participates in campus and community events, and joins committees to identify potential projects that could benefit from the university's expertise.

Here are the external partners:

- Boys and Girls Clubs of Northwest Indiana
- (U.S.) Department of Housing and Urban Development (HUD)—Hope VI Program
- (U.S.) Environmental Protection Agency (EPA) Region 5
- Gary Community Action for a Renewed Environment (CARE)
- Gary Glen Park Weed and Seed Project
- Geminus Corporation
- Hammond Sanitary District
- Indiana Department of Environmental Management (IDEM)
- Indiana Department of Natural Resources-Lake Michigan Coastal Program
- Indiana Geographic Information Council (IGIC)
- Indiana Geological Survey
- Non-Profit Institute
- Northwest Indiana GIS Forum

- Northwest Indiana World Trade Council
- Northwestern Regional Planning Commission (NIRPC)
- Town of Highland, Clerk-Treasurer's Office

Here are the campus partners:

- Campus Community Garden
- Campus Development Office
- Center for Urban and Regional Excellence (CURE)
- Department of Geosciences
- IU Foundation
- Northwest Indiana Consortium for the Environment (NICE)
- School of Business and Economics (SOBE)
- School of Public and Environmental Affairs (SPEA)

Conclusion

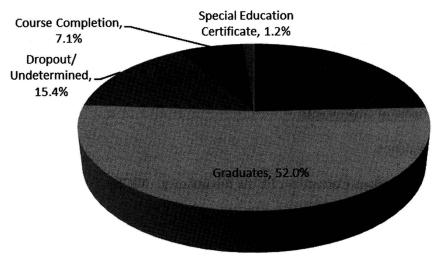
The Northwest Indiana Center for Data Analysis has been able to sustain itself for the last fifteen years due to project funding from national, state, and local agencies. From the beginning, the center was never intended to be a profit maker for the library. As a nonprofit, the Data Center has to be realistic in the projects it undertakes due to size and responsibilities to our employer, IU–Northwest. In addition, the Center also looks carefully at potential collaboration to ensure it does not compete with nor undercut the efforts of any other Northwest Indiana service similar in scope. Excellent customer services skills have enabled professional staff to be proactive in the approach to offering services and successful in seeking project funding. Additionally, the center has been very opportunistic. For example, when Gary's Housing Authority HOPE VI evaluation was presented to SPEA, which was not in a position to take on the project, the center took the job. It resulted in a five-year funded project that assessed and documented the impact on residents' displacement and relocation within various types of public housing developments in the city.

The Northwest Indiana Center for Data and Analysis' objectives echo the Anderson Library's mission: "To promote life-long learning skills and continuous educational achievement, the Indiana University Northwest Library is dedicated to meeting the diverse education and research needs of students, faculty, staff, and other customers in an environment of free and open inquiry, and with a commitment to excellence." The

Northwest Indiana Center for Data and Analysis adds value to existing data and information. The center always seeks to uphold the reputation of Indiana University for promoting objectivity, fairness, and accuracy.

Figure 1.

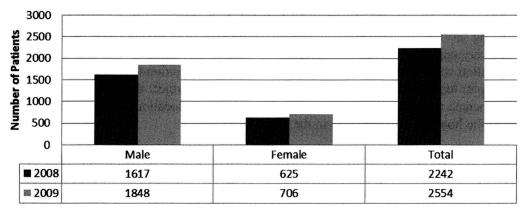
2009-10 Graduation Rate School City of East Chicago, Indiana



Source: Indiana Department of Education.

Figure 2.

Lake County, IN Total Drug Related Episodes 2008-2009



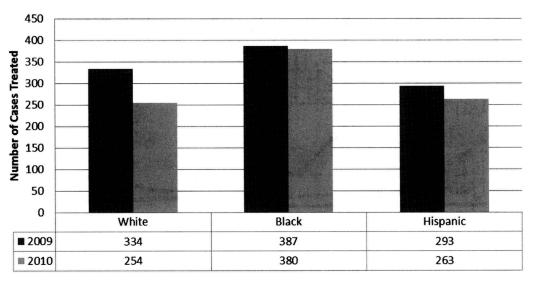
Source: IPRC PREV-STAT.

Figure 3. Percent Patients/Diagnosis-Regional Mental Health														
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	Mr	hol	100	ind tence	/ 100	nahis	Can	nabis Ependence	Car	dine	Con	aine dence	111	A Pendence
	VI	hise	Mic	Ellelle	Car	nuse	Car	Elelle	Ca	DUSE	Ca	ebeng	So.	Elle
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
East Chicago	18%	28%	18%	21%	7%	19%	15%	5%	N/A	4%	5%	13%	9%	8%
Gary	5%	0	19%	0	4%	0	12%	0	N/A	0	10%	0	10%	0
Hammond	15%	26%	16%	16%	9%	16%	9%	15%	N/A	3%	5%	10%	8%	12%
Hobart	14%	10%	18%	20%	9%	6%	4%	23%	N/A	5%	5%	25%	10%	9%
Merrillville	13%	8%	16%	44%	7%	9%	3%	15%	N/A	3%	8%	19%	5%	1%

Source: Regional Mental Health.

Figure 4.

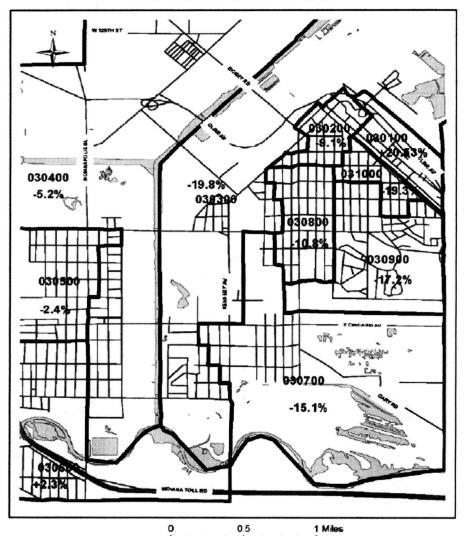
Drug Related Treatments by Ethnicity 2009-2010 Comparison

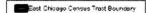


Source: St. Catherine Hospital.

Map 1.

East Chicago, Indiana Census Tract Population Change U.S. Census 2010 vs. 2000



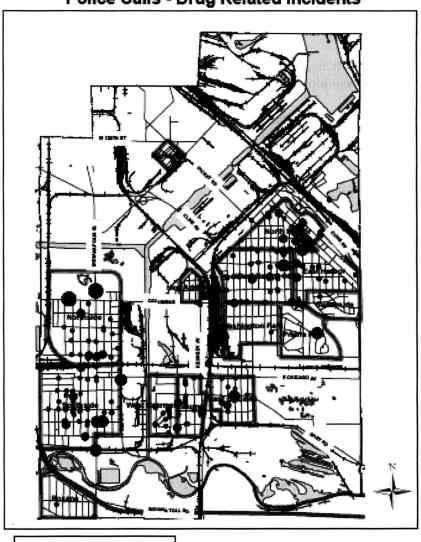


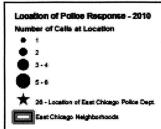
Cernus Tract	2009 Census Populates IB	2010 Centus Population S	CHANGE	Percent	
030000	1208	14%	248	2053%	
030200	1580	1436	144	91%	
030300	1214	2577	637	-19.8%	
030400	16/98	3505	191	-5.2%	
030500	4306	4201	305	-2.4%	
050600	493/	3052	115	2.514	
C30700	2430	2064	366	-15.1%	
000000	4799	42.72	517	16.9%	
030900	1332	35.75	743	-17.2%	
091000	1931	1560	374	-19.3%	

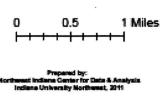
Prepared by: Northwest indiana Center for Data & Analysis Indiana University Northwest, 2011

Source: United States Census Bureau 2010 Redistricting Data SF (PL 94-171)

2010 East Chicago, Indiana Police Calls - Drug Related Incidents







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References

Brand, Myles. 1997. "The Next Step' State of the University." Accessed November 5, 2013. http://www.iu.edu/brand/9.9.97_StateOfUniversity.pdf

Buse, Greg. 2012. "Michael A. McRobbie Biography." Accessed November 5, 2013. http://pres.iu.edu/about/biography.shtml

City of Gary. Indiana Department of Environmental Affairs. Accessed November 5, 2013. http://www.gary.in.us/environmentalaffairs/purpose.asp

Higher Learning Commission. 2011. "Action Learning Project." Accessed November 5, 2013. http://www.iun.edu/aqip/docs/AQIP/2011%20Action%20Project/Community%20Engagement_Submitted_sept_2011.pdf

Indiana University Northwest News. 2013. "In Inaugural Campus Address, Chancellor Lowe Discusses Priorities, Plans, Impact for Students, Surrounding Communities." Accessed November 5, 2013. http://www.iun.edu/news/2013/campus-address-2013.htm

INDIGO. "Purposes." Last modified June 10, 2011. http://guides.lib.purdue.edu/indigo

John W. Anderson Library. 2013. "Diversity." Accessed November 5, 2013. http://www.iun.edu/library/diversity-library.htm

Sheid, Christopher. 2009. "Steel Giants' Looks Back at the Founding and Heyday of U.S. Steel and Inland Mills in Northwest Indiana." Indiana University Northwest Office of Marketing and Communication. Accessed November 5, 2013. http://www.iun.edu/~newsnw/pg/2009/091207_steelgiants.shtml

Sheid, Christopher. 2009. "IU Northwest to Host Free 50th Anniversary Celebration Event on Campus Friday, Sept. 18." Indiana University Northwest Office of Marketing and Communication. Accessed November 5, 2013. http://www.iun.edu/~newsnw/pg/2009/090827_50thevent.shtml

STATS Indiana. "What is STATS Indiana." Accessed November 5, 2013. http://www.stats.indiana.edu/

Trustees of Indiana University. 1996. "The Strategic Directions Charter 'Becoming America's New Public University ." Accessed November 5, 2013. https://web.archive.org/web/19970614072906/http://www.iupui.edu/it/stratdir/sdcfinal. html#sec1

Trustees of Indiana University. 2013. "IU Northwest Bulletin 2012-14 Indiana University Vision." Indiana University Northwest Bulletin. Accessed November 5, 2013. http://www.iun.edu/bulletin/

Vasquez, Ann M., Guadalupe P. Lopez, and Meredith McGinley. 2008. Consumption and Consequences of Cocaine and Crack in East Chicago, IN: A Local Epidemiological Profile 2008. Merrillville, IN: Geminus Corporation.

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