RockfordRegion

VITALSIGNS

Regional Plan for
Sustainable Development

**REGIONAL PLAN FOR
SUSTAINABLE DEVELOPMENT**

ROCKFORD METROPOLITAN AGENCY FOR PLANNING

March 2014

ourmap

Rockford Metropolitan Agency For Planning

Report Preparations Completed By:

Our Vital Signs Co-Director - Genevieve Borich, PhD, AICP

Our Vital Signs Co-Director - Steve Ernst, RMAP Executive Director

Our Vital Signs Project Facilitator - John Lewis, PhD

RMAP Staff - Jon Paul Diipla, AICP

RMAP Staff - Colin Belle

RMAP Staff - Colleen Hoesly

RMAP Staff - Michael Hren

Table of Contents

List of Figures

Initiative Background

Mission & Scope

The Importance of Being a Sustainable Community

The term sustainability may mean a lot of things to a lot of individuals. Yet, being a sustainable community is universal to all residents. The goal of sustainability is for community members to commit to incrementally make better decisions and habits in the short-term, with the aim to keep the social, economic, and environmental well-being of their region thriving in the long-term.

The Sustainable Communities Federal Partnership

In 2009-2010 three federal departments came together to form the Partnership for Sustainable Communities, including the Department of Transportation (DOT), Environmental Protection Agency (EPA), and the Department of Housing and Urban Development (HUD). With HUD as the lead agency this federal partnership is guided by "Livability Principles" that seek to enhance the sustainability of local communities. The principles are:

1. Provide more transportation choices

Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce the nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health.

2. Promote equitable, affordable housing

Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing and transportation.

3. Enhance economic competitiveness

Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers as well as expanded business access to markets.

4. Support existing communities

Target federal funding toward existing communities—through such strategies as transit-oriented, mixed-use development and land recycling—to increase community revitalization, improve the efficiency of public works investments, and safeguard rural landscapes.

5. Coordinate policies and leverage investment

Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

6. Value communities and neighborhoods

Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

Developing a Regional Sustainability Plan

In 2010, the U.S. Department of Housing and Urban Development's Partnership for Sustainable Communities awarded the Rockford Metropolitan Agency for Planning (RMAP) a $600,000 grant to create a Regional Plan for Sustainable Development (RPSD) and a "data commons" that would house regional indicators and sustainability metrics. In addtion, $400,000 of local match was paired with the initiative. With RMAP as the grantee, the sustainability initiative is known as the Rockford Region Vital Signs project.

Vital Signs seeks to provide community leaders with measurable data across a broad spectrum of sustainability topical areas, and then use that data to drive decision-making. The data elements provide a baseline (current conditions) that can be used to track success, return on investment, and quality of life. The metrics will then be used to develop a regional sustainability plan that promotes tactics and action steps to help the region achieve its sustainability goals.

Looking at Regional Sustainability Through 16 Topics

A crucial component of the process to develop a regional sustainability plan is to measure regional sustainability indicators. These measurements help the region understand the social, economic, and environmental impact of the area's 16 different areas of sustainability.

RPSD Initiative Deliverables

The Vital Signs project included five agreed upon deliverable products to HUD:

- An open data platform consisting of a "data commons" that contains publicly-available and privately-purchased data sets to help document the current conditions of the region and to guide future performance measurement of sustainability implementation. The Vital Signs website is www.ourvitalsigns.com.
- A regional governance model that empowers the region to

Figure 1. Regional Plan Integration

Long Range Transportation Plan (DOT)	Comprehensive Economic Development Strategy (EDA)	Consolidated Plan (HUD)	Water Quality Plans (EPA)
State Implementation Plans (EPA)	Public Housing Authority Strategic Plans (HUD)	Workforce Investment Plan (DOL)	Prisoner Re-Entry Plans (DOJ)
Homelessness Plans (HUD)	Public Education Plans (DOE)	Human Service Plans (HHS)	Health Needs Assessment Plans (HHS)
	Agriculture Plans (USDA)	Disaster and Hazard Mitigation Plans (FEMA)	

compete, receive and implement sustainability initiatives and to plan for the entire area. RMAP has already received "Preferred Sustainability Status" from HUD, but currently the RMAP Policy Committee is only empowered to act on behalf of the census-defined urban areas within the two counties. As of this writing the recommendation of a regional governance model has passed the RMAP Policy Committee, and community leaders are working to adopt the model.

- A formal regional analysis of housing, defined for grantees as a "Fair Housing Equity Assessment" by HUD. Additionally, RMAP has agreed to also include a regional "Analysis of Impediments to Fair Housing Choice". This additional work will position entitlement grantees within the region (City of Rockford, Rockford Housing Authority) to align their HUD-required plans with a regional focus.
- A toolkit of model codes, ordinances, policies, incentives and agreements known as "implementation tools" that can assist the implementation of the RPSD. Implementation tools are found as side-bars within each sustainability topic chapters found later in this document.

- The final Regional Plan for Sustainable Development document. This RPSD has a 20-year horizon and include goals and strategies for the 16 areas of sustainability identified for all levels of the region including local governments, businesses, non-profits, neighborhoods and individual citizens.

Overview of RMAP Sustainability Booklet: A Blueprint to a More Sustainable and Dynamic Rockford Region

Shortly after the Rockford MPO was reformulated in 2008, from RATS to RMAP, the Long Range Transportation Plan was in need of updating. The previous LRTP, approved in 2005, had a planning horizon of 2035 and was based on a healthy forecast of growth in both population and employment. The updated plan would have a planning horizon of 2040 and would significantly scale back forecasted growth as the early stages of the Great Recession were being felt. Moreover the concept of smart

RMAP Sustainability Booklet

A Blueprint To a More Sustainable and Dynamic Rockford Region

ourmap

2010 - 2040 PLAN

Rockford Metropolitan Agency For Planning

growth had become part of the MPO lexicon, and transportation planners were looking towards transit-friendly, walkable neighborhoods as a fundamental component of future planning efforts.

The RMAP Policy Committee directed the staff and members of the Technical Committee to develop a set of guiding principles that would frame the 2040 update of the LRTP, but also would provide a framework for all future MPO planning work. The principles should be developed to:

- Discourage the continuation of urban sprawl
- Concentrate growth in the central core of existing cities and villages
- Advocate for compact, transit-oriented, walkable, bicycle-friendly land use
- Provide a healthier mix of housing choices close to job centers and schools
- Feature the "complete streets" design philosophy on infrastructure projects
- Include the redevelopment of traditional neighborhoods

The planning focus of the MPO was changing from a short-term focus to a longer range focus on regional sustainability. The goal was to achieve a unique sense of community and place; expand the range of transportation, employment and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; increase security and safety; and promote public health. It was felt that this change in planning focus would lead to savings on infrastructure, minimize congestion, increase transit options, and relieve the pressure to increase road capacity at a time when families and businesses needed smarter investment decisions. The resultant work effort created five fundamental principles, each with its own set of high-level goals. They are:

1. The region shall promote the development of an integrated, multi-modal, metropolitan transportation system that facilitates the efficient, safe and economic movement of people and goods. Cornerstone objectives of the transportation system shall be right-sized and goal-driven to maximize effectiveness.
2. The region shall seek a coordinated growth strategy that enhances livability of neighborhoods, balances development pressure with infill development, promotes the agriculture economy, reduces greenhouse gas emissions, introduces walkable landscapes, conserves natural resources and rejuvenates historical economic centers.
3. The region shall focus and prioritize transportation investments that promote financial and environmental sustainability, foster a healthy business climate that encourages private sector partnerships, spurs economic competitiveness and creates jobs, utilizes the strengths of an exceptional local labor pool, develops world-class neighborhoods and maximizes the quality of life for the citizens of the region.
4. The regional planning framework shall integrate the disparate activities of transportation, land use, education, housing, economic development, human capital development, and human services to amplify the incremental value associated with coordinated planning.
5. The region shall develop metrics that provide transparent reporting and analysis of community health indicators framed around equity and environmental justice.

The document created to memorialize these principles was called "A Blueprint To A More Sustainable And Dynamic Rockford Region", and was published on April 14, 2010. The Blueprint document became one of the foundations for the HUD-DOT-EPA Sustainable Community's Regional Planning Grant application that was developed after the NOFA was released on June 24, 2010.

Integrated Regional Planning

As many as nine federal departments and five independent agencies are authorized to compile regionally focused policy and plan documents, but have never required coordination of these disparate plans to achieve federal goals. Many local and regional stakeholders find that these federally-required plans do not enhance the concept of livability or sustainability due to the silo-ed or stove-piped nature of the actions that

Figure 2. Sustainability Process for Metropolitan Planning Organizations

TRANSPORTATION DECISIONMAKING PROCESS

KEY FACTORS

- Air Quality
- Fiscal Constraint
- Public Involvement
- Socioeconomic Data
- Economic Development
- Transportation Choice
- Housing Affordability
- Environmental Issues
- Non-discrimination
- Safety

- Regional Vision & Goals
- Alternative Improvement Strategies
- Evaluation & Prioritization of Strategies
- Development of Transportation Plan
- Development of Transportation Improvement Program
- Project Development
- Implementation & System Operations
- Monitoring & System Performance

FEEDBACK AND REFINEMENT

Source: Creating Livable Communities, US DOT, FHWA Division
Date: October 2011

they inform or generate. The Regional Plan for Sustainable Development, or RPSD, is intended to break down the silos into an integrated framework for local decision-making. On the front end this change will require flexibility from federal partners in exchange for regional accountability on the back end.

The key to success for the RPSD is to be continually updated as a living document and not fall into the cycle of 5-year or 10-year updates. The use of regional indicators or metrics is key to gauging success and feeding that information back into the planning process to modify and refine planning strategies and tactics. This feedback loop provides the necessary local or regional accountability required by oversight partners at the federal or state level, but also provides local decision-makers with the necessary information to prioritize and make strategic investment and programmatic decisions. The existing MPO planning process is well-suited to accommodate the continuous update cycle for the RPSD. In the Rockford region changes are already underway that have brought new stakeholders to the table including education partners, economic development partners, community health partners, and environmental partners.

The integration of the disparate plans shown in the graphic above will not happen on initial adoption of the RPSD in 2014, but will happen over time. With the White House announcement in January 2014 of acceptance of the Rockford region into the Strong Cities, Strong Communities (SC2) collaborative it is highly desirable to focus energy on agreements that will foster flexibility, possibly through waivers of federal rules, that will allow the aforementioned integration to occur. It is recommended that the MPO Certification review process, which by law is required every four years, is used to examine the success and difficulties of the RPSD integration. Figure 2 above displays the recommended process refinements to MPO planning.

The integrated RPSD will also allow local staff expedited access to focused sustainability indicator data that can be used to fulfill discretionary grant requirements and performance analyses. This will foster more integration of grant writing opportunities that will support regional goals that have been identified in the aforementioned livability process. And rather than applying for planning grants in a narrow range of focus, the writers can focus on implementation grants that support the RPSD.

Figure 3. Regional Timeline

October 1994 — United Parcel Service (UPS) opens a parcel sorting hub at the Rockford airport (RFD).

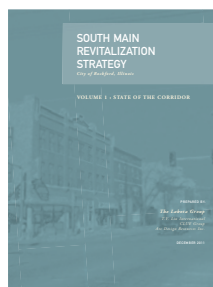**September 2002** — US Senator Richard Durbin & US Congressman Donald Manzullo provide a $200,000 earmark of transit dollars to fund a commuter rail feasibility study. The Northern Illinois Commuter Rail Initiative (NICRI) is created.

July 2002 — Belvidere Mayor Fred Brereton & Rockford Mayor Doug Scott gather over 50 elected officials from the region to advocate for passenger rail.

March 2004 — The Rockford Global TradePark is created from the Industrial Jobs Recovery Act with 6,600 acres around RFD in the planning area and 3,600 acres in TIF districts. The TradePark becomes a highly successful public-private partnership (PPP).

July 2005 — Rockford MPO releases a new 2005-2035 Long Range Transportation Plan (LRTP). The LRTP contains a comprehensive analysis of regional economic development linked to transportation. Air cargo, logistics, intermodal facilities & rail freight improvements are cornerstones of the new transportation plan.

January 2007 — Daimler-Chrysler announces a $419 million expansion and retooling of the Belvidere Assembly plant as an industry-leading model of flexible manufacturing.

March 2007 — Rockford Mayor Larry Morrissey & Winnebago County Chairman Scott Christiansen celebrate the opening of a 1.5 million sq. ft. Lowes distribution facility designed to serve 200 Lowes Home Improvement stores in the midwest.

May 2007 — The Winnebago County Rail Authority is created by the Illinois General Assembly.

Summer 2007 — The City of Rockford builds Logistics Park, a 40 acre industrial park featuring rail access. Located within the Global TradePark the investment includes water & sewer extensions and a new industrial grade roadway (Logistics Parkway).

May 2008 — NICTI and RMA... the Union Pacific... Subdivision rou... the Locally Pref... Alternative. Am... IDOT are asked... inter-city passer... and commuter... the same rail co... match regional... consensus. Re... call for co-locat... most prudent e... public funds.

February 2009 — Presiden... the US C... approve... Recovery... Reinvest... (ARRA). S... dollars ar... for the up... of rail ass... to promo... recovery...

1990 | **TIMELINE FOR PLANNING, INVESTMENTS AND MAJOR E...**

September 1995 — RFD receives US Customs Port of Entry status.

Foreign Trade Zone #176 approved at RFD.

November 1999 — Boone County & the City of Belvidere Approve a new Comprehensive Plan that has passenger rail as a major focal point of downtown development and the Flora Neighborhood Plan for transit-oriented development near Interstate 90 (the Jane Addams Memorial Tollway).

September 2003 — The City of Rockford releases a comprehensive Rail Consolidation Study that details strategies for future freight rail investments for the four rail companies serving the region.

November 2004 — NICRI releases the final report on commuter rail feasibility. The report overwhelmingly demonstrates the need and sustainability of commuter rail for the region.

March 2006 — US Senator Richard Durbin & US Congressman Donald Manzullo provide a $3 million earmark for a formal Alternatives Analysis in the Federal Transit Administration's (FTA) New Starts program. The steering group is changed to the Northern Illinois Commuter Transportation Initiative (NICTI) to reflect the New Starts guidance.

Spring 2007 — Anderson Packaging builds a $15 million, 260,000 sq. ft., 150 employee building expansion and pedestrian bridge project in the Global TradePark, marking it the largest pharmaceutical packaging site in the world at 1.2 million sq. ft. It is the 3rd expansion project for the company in the Rockford Global TradePark.

November 2006 — UPS expands their capacity at RFD by 50%. The $25 million project increases sorting capability from 82,000 packages per hour to 121,000. As many as 200 new jobs are added to the existing UPS workforce in Rockford of 1,450 employees. In addition UPS invests $7.4 million to build a 70,000 sq. ft. heavy freight facility at RFD.

June 2007 — Illinois DOT releases an Amtrak Feasibility Study for new inter-city passenger rail service between Chicago and Dubuque.

April 2008 — The Tri-State Alliance... formed and holds its first regional summit in Freeport, IL. Regional leaders from Iowa, Illinois and Wisconsin meet to advocate for inter-ci... passenger rail (Chica... Dubuque) and sever... surface transportatio...

2008-2009 — The econo... downturn... and local... manufactu... companies... hit particu... hard, esp... in the auto... Boone & W... County are... 1st and 2n... unemploym... economic...

WANXIANG AMERICA CORPORATION
The United States Incorporated Office of Wanxiang China

March 2009

Illinois Governor Pat Quinn, Rockford Mayor Larry Morrissey and Winnebago County Chairman Scott Christiansen announce Chinese Manufacturing company, Wanxiang America Corporation, to build a solar panel manufacturing facility and solar farm at the Rockford Global TradePark. The project is part of a renewable energy cluster at RFD and the Global TradePark. The new facility is the first direct foreign investment project in the Global TradePark.

ROCKFORD REGION My EDD

August 2010

Boone and Winnebago Counties partner with RMAP, Growth Dimensions, and the RAEDC to found the region's Economic Development District -- a quasi-governmental agency founded to oversee the implementation of the CEDS plan as well as serve as a liasion to the EDA.

... P select ... ic Belvidere ... ite (CR6) as ... erred ... trak and ... to co-locate ... nger service ... service in ... rridor to ... planning ... gional leaders ... ion as the ... xpenditure of

... Obama & ... ongress ... the American ... y & ... ment Act ... Significant ... re programmed ... pgrade ... sets ... te economic ... and job creation.

Summer 2011

SOUTH MAIN REVITALIZATION STRATEGY
City of Rockford, Illinois
VOLUME I - STATE OF THE CORRIDOR

The City of Rockford releases the South Main Revitalization Strategy. The planning work details strategies for a blighted and neglected corridor that connects downtown Rockford to the Chicago Rockford International Airport (RFD). The strategies include transit oriented development (TOD) adjacent to the planned Amtrak station on S. Main Street (IL 2). The TOD plan utilizes environmental programs (EPA Brownfields) to remediate old railyard property, leverages federal and state transportation programs and includes design or affordable housing. Moreover, the TOD plan leverages all of the work on rail infrastructure, commuter rail and intercity passenger rail over the previous 10 years.

Spring 2012

HUD awards a $300,000 Choice Neighborhood Planning Grant to the Rockford Housing Authority. RHA is one of 13 grants issued nationwide to revitalize the Fairgrounds Valley public housing site and the Ellis Heights neighborhood.

RMAP launches the Our Vital Signs website (www.ourvitalsigns.com) as a Data Commons portal to provide access to 700+ community indicators and data visualizations. Vital Signs also initiatives a town hall meeting tool called Mindmixer to aid in community engagement.

November 2013

Several CEOs of the largest regional employers launch Transformation Rockford, a vision to transform the region to a top 25 community by 2025. The Vital Signs data provides the "brutal facts" as 1,400 members of the community gather to participate in the launch. The effort promises to expand stakeholder engagement with 100% private funding and a commitment to take as much time as necessary to let all voices be heard. The project seeks to make transformational change, not simply incremental change as many other efforts have promised.

2014 and Beyond

Social | Economic | Environmental

The region moves from planning to implementation with the guidance from the extensive work of the previous two decades. Implementation consists of growth and development guided by the principles of sustainability, more compact development, with walkable, transit-served housing and infill opportunities. Value will be placed on existing neighborhoods and commercial corridors. Economic resilience will be fostered by the production of jobs close to transit and housing, while economic diversification will guide future wealth creation.

... mic ... starts

... ring ... s are ... arly ... cially ... o industry. ... Winnebago ... e ranked ... d in ... ment and ... distress.

... e is ... s ... m ... ty ... go to ... l major ... n projects.

May 2009

The Rockford Area Economic Development Council, Growth Dimensions and Northern Illinois University complete a Comprehensive Economic Development Strategy (CEDS) and begin the process of securing Economic Development District (EDD) status.

BOONE AND WINNEBAGO COUNTIES
DEVELOPMENT STRATEGY
ECONOMIC 2009-2014
WINNEBAGO BEAUTIFUL ROCKFORD BOONE

July 2009

ILLINOIS JOBS NOW

The IL General Assembly approves a $31 billion Capital Program. Substantial funds are committed for the upgrade of rail assets.

February 2011

RMAP hosts a regional Sustainability Summit at the NIU Rockford campus to launch the Vital Signs project. Following the summit a Steering Team representing 75 key stakeholders is formed to guide the Vital Signs work. Randy Blankenhorn from the Chicago MPO and Charlotte Kahn of the Boston Indicators Project are the keynote speakers.

January 2011

RMAP joins with the City of Rockford, Winnebago County, the Rockford Housing Authority, RREDD and 40+ other regional partners to submit for the inaugural round of grants for Sustainable Communities Regional Planning. The local Consortium is one of 45 grantees across the nation to receive an award. The initiative is called The Rockford Region Vital Signs Project and the scope of the grant work is rooted in furthering the Livability Principles of the HUD-DOT-EPA Sustainability Partnership. The grant award includes $600,000 federal matched with $475,000 local dollars.The 3-year grant cycle will run until January 2014.

ourmap
Rockford Metropolitan Agency For Planning

Spring/Summer 2013

RMAP publishes three current condition reports (State of Social, Economic and Environmental Well-being) as part of the RPSD process. Also published are three housing reports which will form the basis of a Consolidated Plan in the coming months. Included in the housing work are a Fair Housing Equity Assessment, an Analsysis of Impediments to Fair Housing Choice, and a De-Concentration Plan for the public housing authorities. The housing work also leverages the Choice Neighborhood planning work of the Rockford Housing Authority.

January 2014

RMAP completes the final submittals to HUD for the Vital Signs project. FY10 Sustainable Communities grantees are awarded Preferred Sustainability Status for an additional 3 years by HUD Secretary Shaun Donovan. Implementation of the RPSD commences in 2014. The federal partnership (HUD-DOT-EPA) will guide implementation and allow resources to be made available to further the Livability Principles.

RockfordRegion
VITALSIGNS
Regional Plan for Sustainable Development

Regional Governance

Coordinating the Region

One of the deliverables outlined within the process to develop a regional plan for sustainable development was to establish a regional governance model. The high-level mission of this model was to establish a group able to help coordinate the implementation of the adopted regional sustainability plan.

Regional Planning is implemented in a number of different ways. Regional planning organizations range from organizations created by state legislatures with specific legislated powers to simple interagency agreements among government bodies or public/private sector cooperation. Likewise the activities of regional organizations range from a very narrow purpose and set of powers to broad areas of responsibility and powers. Three basic structural questions that must be addressed in organizing a regional planning organization are 1) the organizational structure including the purpose of the organization and the organizational powers, 2) the range of services/issues that the organization will have responsibility for, and 3) the decision making process within the organization.

Organizational Purpose and Powers

In the State of Illinois planning districts are organized under two statutes, the Regional Council Act (50 ILCS10/) and the Regional Planning Commission Act (50 ILCS 15). The Regional Council Act allows for establishment of a regional council of public officials and must be established by agreement of two or more governmental units and membership includes one representative from each governmental unit. Private regional organizations can be included but cannot represent more than 33% of the total membership. Powers of the regional council include:

- Study such area governmental problems common to two or more members of the council as it deems appropriate, including but not limited to matters affecting health, safety, welfare, education, economic conditions, and regional development
- Promote cooperative arrangements and coordinate action among its members
- Make recommendations for review and action to the members and other public agencies that perform functions within the region
- All such powers are advisory

Examples of regional councils in Illinois include various councils of government (COGS) such as North Central Illinois Council of Governments, McHenry County Council of Governments, and the South Suburban Mayors and Managers Association. There are also a number of other organizations that provide for regional cooperation and planning, such as the Will County Governmental League, that are not formally organized as a COG but serve much the same purpose.

The Regional Planning Commission Act legislatively creates regional planning commissions (RPCs) and there is general revenue funding for these commissions. The Board of a regional planning commission has the power to:

- Provide a policy framework under which all regional plans are developed
- Coordinate regional transportation and land use planning
- Identify and promote regional priorities
- Serve as a single point of contact and direct all public involvement activities
- Create a Citizens' Advisory Committee

Examples of regional planning commissions in Illinois include Chicago Metropolitan Agency for Planning (CMAP), the Tri-County Regional Planning Commission, and the

Boone-Belvidere Regional Planning Commission. The Rockford-Winnebago County Planning Commission was dissolved in the early 1980s but was a full-service RPC. RMAP, and its predecessor RATS, were created under simple intergovernmental agreements and is designated as a Metropolitan Planning Organization (MPO) under federal transportation law. RMAP is neither a COG nor an RPC. Several communities in Boone and Winnebago County are outside the boundaries of RMAP, some because they are in SLATS and some because they are situated in the rural areas of the two counties. The City of South Beloit and the Villages of Rockton, Durand, Pecatonica, Caledonia, Capron, and Garden Prairie currently are not represented in RMAP.

Identifying the Local Model for the Rockford Region

Implementation of the RPSD will require that a separate

body will need to exist or several intergovernmental agreements will need to be expanded or developed. The range of options include:

- Expand the authority of RMAP by Intergovernmental Agreement (IGAs)
- Organize a Regional Planning Commission (RPC) to cover both counties
- Organize a Council of Governments (COG) or Regional Council to cover both counties
- Expand the authority of the Boone-Belvidere Regional Planning Commission into Winnebago County
- Introduce special legislation in the Illinois General Assembly

A smaller group of leaders volunteered from the RPSD Steering Team to identify a model for regional governance. Currently the region does not have a Metro-wide (two-county) regional planning commission or entity capable of overseeing the implementation of the regional plan. This group was charged with developing a governance model

Figure 4. Recommended Regional Governance Model

MPO POLICY COMMITTEE

Geography: Census-Defined Urbanized Area

Board Composition Regulated
By Federal Law

REGIONAL PLANNING BOARD

Geography: MSA (Expandable)

Board Composition – Chief Elected Officials
                 - Chief Appointed Officials

SCHEDULE I SERVICES

MPO / TRANSPORTATION

Funding: 80% Federal / 20% Local
     Local Share → Population
     Leverage State Planning Fund

SCHEDULE II SERVICES

REGIONAL COORDINATION
"PUBLIC GOOD" - RPSD

Funding: Fixed Fee (Blending)
     Match Additional Grants
     HUD – DOT – EPA
      Regional Government Affairs

SCHEDULE III SERVICES

A LA CARTE PLANNING

Funding: Cost Reimbursement
     (a) Fixed Fee, (b) Hourly Fee

Future Implementation

SCHEDULE IV SERVICES

DATA COMMONS

Funding: Subscription
     Tiered for Non-Profit,
     Government, Private
     Estimate $200k per Year

Highways	
Transit / Commuting	
Bike / Pedestrian	
Congestion Management	
Freight & Cargo	
Air Quality Monitoring	
Modeling & Forecasting	
ITS / Traffic Technology	
Complete Streets / CSS	
Public Participation / Outreach	
Federally Required Documents	
LRTP, UWP, TIP, HSTP	
EJ, Title VI, PPP	

Sustainability	**Groundwater**
Schools / Education	**Watershed**
Utilities	**Wastewater/FPA**
Public Facilities	**Solid Waste**
Housing	**Health**
Urban Design	**Tax Policy**
Comp Planning	**Revenue Sharing**
NEPA / Brownfields	
Ag / Farm Preservation	
Corridor Planning	
Workforce / Human Capital	
Human Services	
Crime / Prisoner Re-entry	

Cartography	**Tourism**
Energy	**Surveys**
Geography / Soils	**Social Media**
Local Foods	
Historic Preservation	
Parking	
Fiber Optic / Broadband	
Hazard Mitigation	
Fiscal Impact	
Land Capacity Modeling	
Open Space / Green	
LEED ND	
Management & Operations	

Demographics
Indicators
Performance Metrics
Visualizations / WEAVE
Data Tables
Training

capable of putting the plan in to practice and enable the region to work towards a more equitable and sustainable future.

After considerable deliberation from Vital Signs stakeholders the final governance recommendation is to create a Regional Planning Board under the umbrella of the RMAP organization, as shown in Figure 4. The initial composition of the Regional Planning Board would cover the MSA (Boone & Winnebago County), but could be expanded to adjacent counties. The Ogle County communities along IL 72 are close, and in some cases contiguous, to Winnebago County communities and may wish to participate at some time in the future. The new board would have responsibility for regional coordination of the RPSD and the topics germane to the "public good" shown as Schedule II services. Funding for Schedule II services is recommended to be based on a fixed fee approach using a "blending" formula, similar to the formula that is used for the Winnebago County GIS consortium (WinGIS). Revenue collected for Schedule II services could be used as match for additional grants, especially implementation grants that

are anticipated to become available through the federal sustainability partnership of HUD-DOT-EPA. In addition the revenue collected could be used for regional government affairs and advocacy.

Schedule III services are anticipated to be developed in the future on an as-needed basis. Schedule IV, on the other hand, is anticipated to be a regional need after the current grant cycle of the Vital Signs project expires. The recommendation is to establish a subscription service model for the data commons, also similar to the existing subscription model that WinGIS uses for specialized data and applications.

The introduction of a regional planning board would slightly change the existing planning relationship with members, with a formal review role of all land use decisions that affect the RPSD or would be considered as regionally significant. The formal review role would continue to be advisory, but not an ad-hoc staff relationship as currently exists. This would be similar to the original A-95 review role that planning commissions had in the 1970's and 1980's.

Figure 5. Regional Model for Policy Direction and Engagement
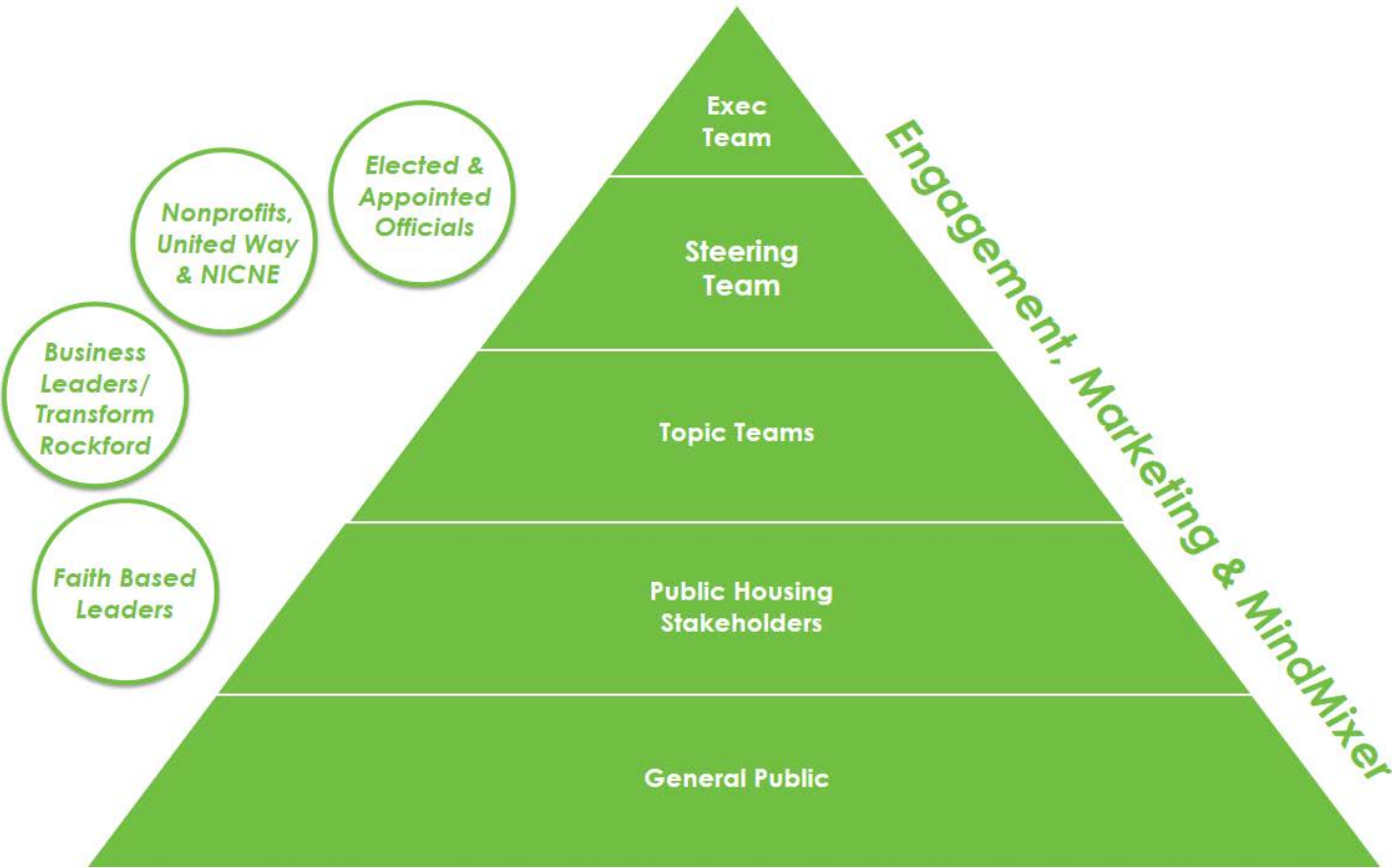
Civic and Stakeholder Engagement

Broad-based stakeholder engagement was crucial to the success of this process (empowering and engaging informal and formal community members). Local ownership of the final regional sustainability plan was key for the successful engagement and eventual implementation of marginalized populations (including low-income, minority and economically-disadvantaged) and integrate indigenous knowledge into the RPSD. The aim of public engagement was to raise the capacities of community stakeholders needing to both develop and then implement the Plan. This includes both informal (district, business, organizational, and other key community leaders without traditional titles in community planning processes) and formal stakeholders (those with formal titles in community planning processes such as elected officials, municipal staff, and appointed committee members).

Measuring the 'health' of a region has a direct impact on public decision-making. Understanding trends can lead a community to have more effective engagement and subsequently a higher quality of life, a more robust economy, and natural environments.

A. Identifying Community Stakeholders

Staff conducted a preliminary diagnosis on civic leadership using the snowball survey method. Snowball surveys identify a social network of "who knows who". To begin with, one community leader from each county was interviewed and asked for three individuals they regularly work with on community issues. Survey administrators then interviewed these individuals at a later date. This method continued until 1) few new individuals were named and 2) individuals named had already been interviewed. At this point the core social network of who is readily engaged in working on formal community issues were identified. Interviews typically lasted about an hour.

Results included an initial reading of which stakeholders are engaged and participating, what sorts of issues they are working

on, who they are working on these issues with, and how they go about working on them. This effort helped staff be more effective in organizing engagement over the term of the initiative. This process was based on the Engaged Planning Communities Diagnostic Tool, a process developed by Dr. Genevieve Borich. (www.engagedplanningcommunities.com)

Overview of Results

Over 120 confidential community leader interviews were conducted over the course of six months between 2011 and 2012. An overview of participants includes:

- 48% interviewed classified their community as urban, 27% as metropolitan, and 26% as rural.
- 6% of participants were 34 or younger, 45% were 35-54, 26% were 55-64, and 24% were 65 or older.
- 81% of participants were male, and 19% were female.
- 8% of participants considered themselves lower income, 41% middle income, 39% upper-middle income, and 16% upper income.
- 46% of those interviewed considered themselves to primarily be community leaders, 16% elected officials, 16% city or county staff, 12% of a special interest group, and 10% of the general public.
- 58% of respondents were originally from the Region, 23% were originally from out of Illinois, and 17% were from elsewhere in Illinois. 84% of respondents had lived in the region 11+ years, another 10% had lived 6-10 years.
- 5% of respondents considered themselves extremely liberal, 12% liberal, 50% moderate, 26% conservative, and 7% extremely conservative.
- 84% of those interviewed were White, 12% African American, 4% other, and 1% Asian.
- 11% had a J.D., 8% had a Ph.D., 22% had a Masters degree, 40% had a Bachelors degree, 9% had an Associates Degree, 10% had a High School Diploma, and 1% had less than a High School Diploma.
- 43% of respondents most commonly tend to work with folks they have a close working relationship with, and 31% tend to most commonly work with those that have different knowledge and resources than they readily have.
- 87% formally learned of community issues through public

Community Leader Interviewees' Place of Residence

Community Leader Interviewees' Place of Work
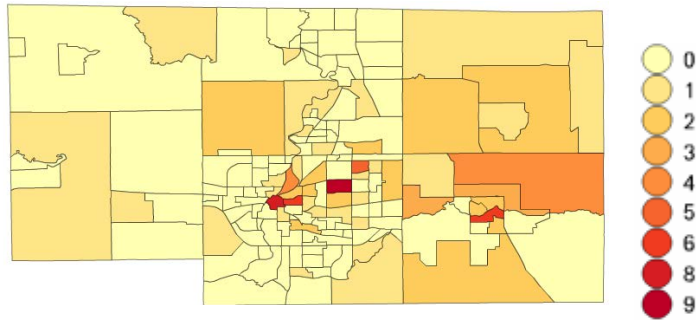
Source: RMAP Community Leader Interviews
Date: 2011-2012

meetings, 77% through email, 76% through boards and commissions, 71% through elected officials, 68% from city or county staff, 62% from public reports, 58% via phone, 38% via mail, and 22% other ways.

- 77% of respondents said they informally learned of community issues through the newspaper, 67% through friends, 64% through informal meetings, 62% from the internet, 56% from email, 55% from co-workers, 51% via radio, 50% from acquaintances, 50% through community organizations, 48% via phone, 46% from business meetings, 45% from neighbors, 35% from community hotspots, 32% from relatives, and 27% from bulletin boards.
- Most participants said they engage in the community through city or county halls, coffeeshops, work, community meetings, church, restaurants, country clubs, and pubs.

Qualitative and quantitative data was aggregated and can be summarized as follows:

- 79% of respondents believe local sustainability efforts were inadequate at the time of their interview.
- 61% of respondents felt planning implementation efforts were not being practically aligned.
- A remarkable 83% of community leaders interviewed felt not enough of the right people were engaged in planning efforts.
- 57% of participants said both formal and informal power and influence were both equally important in the region, 33% said behind-the-scenes and informal influence was most important, and 10% said formal influence.
- 76% of respondents felt short-term interests were more influential than long range planning.
- 65% felt the local political climate was harming the region.
- 82% of participants felt the region does not have a collective vision and knows what it wants to be.
- 74% of participants felt the region did not have a solid comprehensive plan.

A few take-aways of the results:

- There is a much higher concentration of formal community
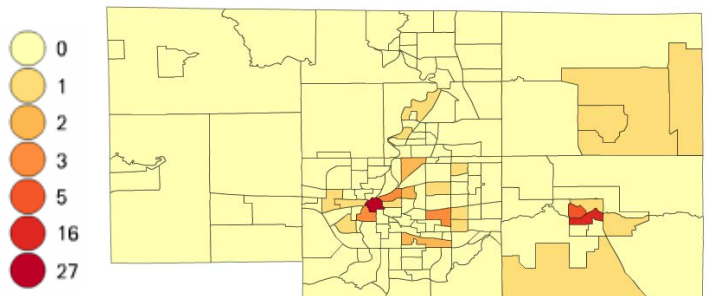
leaders engaged in the region. This means there is a lack of community activists, neighborhood leaders, and everyday citizens regularly engaged in community initiatives in the region.

- The majority of folks engaged in the community have been residents for 11+ years. The majority of those regularly engaged are from the Region originally, indicating the training of new community leaders is rare.
- Most engaged community leaders are middle aged within the region. There appears to be a lack of young adults highly engaged in the community.
- There is a lack of representation of low-income, minority, and lower-education members of the core stakeholder group of engaged residents.

B. Regional Sustainability Summit

To launch the regional sustainability planning process a regional sustainability summit was held at NIU-Rockford. Over 300 community members participated in the event in February of 2011. Following the summit a Steering Team representing 75 key stakeholders was formed to guide the Vital Signs work. Randy Blankenhorn from the Chicago MPO and Charlotte Kahn of the Boston Indicators Project were the keynote speakers.

C. The Consortium

The project management of the RPSD was based on inclusion of broad community involvement. This involvement began with engaging and getting commitment, in the form of a consortium agreement, with a target list of 100+ community organizations. The final Consortium was comprised of 30+ agencies in Boone and Winnebago Counties agreeing to support and align their strategic plans and long-range visions into a set of common goals and action steps. The local consortium is anchored by the Rockford Metropolitan Agency for Planning (RMAP), the regional metropolitan planning organization. These organizations provided grassroots input into the process and served as a source for identifying members of the Topic Teams.

Building a Regional Plan for Sustainable Development for:
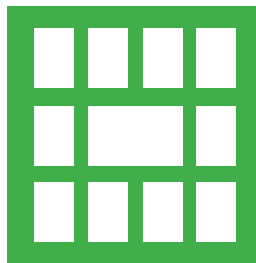
| Households | Neighborhoods | Organizations | Businesses | Local Governments |

D. The Steering Team

From the Consortium a Steering Team was established representing major stakeholders in the region and consisting of around 90+ positions. This group was appointed by the RMAP Policy Committee. The Steering Team was organized into six (6) groups (caucuses) each representing a set of regional organizations or entities with common purposes. Responsibilities of the Steering Team included serving on Topic Teams and serving as Community Liaisons about the RPSD initiative.

E. Community Presentations/Focus Groups

Over the three year initiative RMAP staff additionally met with individuals from community groups and organizations in over 73 meetings for a total reach of over 5,170 community members. Over 2,700 unique visitors visited the Our Vital Signs website to view over 20,000 pages on the online data commons. In addition, three videos were produced to introduce the region to the initiative. These videos can be viewed on the Our Vital Signs' YouTube Channel.

F. Topic Teams

Topic Teams were created after the Steering Team and Community / Focus Groups reviewed the current condition information that was documented in a 3-volume set of reports. Staff worked with leadership and interested parties to create the Social, Economic and Environmental Topic Teams to craft goals, strategies and tactics for the final RPSD. The teams were focused on the following sustainability areas although there was cross-over:

SOCIAL: housing, safety, civic vitality, cultural life, health & wellness, food

ECONOMIC: transportation, education, economic development, technology, energy

ENVIRONMENTAL: land, water, biodiversity, built infrastructure, waste management

These teams met between June, 2013 and the following October. Team members included representatives of:

- Elected Officials
- Content Specialists
- Business Leaders
- Community Leaders
- Designated Staff
- Neighborhood Leaders

G. Open Houses

Once goals and strategies were set by the Topic Teams three open houses were held at the Regional Center for Planning and Design at the RMAP office in October of 2013. The events were held on different days of the week and at different times. Showcased was the entire body of work produced over the course of the three-year grant cycle.

The Future: Coordinating Implementation of the Regional Sustainability Plan

The Consortium intends to implement the plan, once it is adopted, over a 20-year horizon. Some of the strategies will be the responsibility of local units of government while others will need to be implemented by local districts, business, or organizations in the public sector. Existing staff will carry the plan implementation thru to fruition over this time period and provide ongoing support and maintenance for the indicators.

The RPSD planning process aims to address HUD's Departmental Policy Priorities. Specifically, it aims to increase the skills and technical expertise of partner organizations in the integration of the regional plans currently in existence. This includes transportation, housing, economic development, water, human services, and land use. It also aims to align federal planning and investment, through the local alignment of regional governance, implementation tools, and key informal and formal stakeholders as outlined above. Furthermore, it aims to increase participation and decision-making locally. In short, it aims to do tri-fold: to implement a long-range planning vision for the sustainability of the Rockford Region, align existing regional plans, and reduce social disparities for low-income and communities of color.

Creating a Data Commons

The Importance of Regional Data

Current models define sustainability as "overlapping" economic, environmental, and social spheres made up of disparate sectors, usually at one geographic level (local, regional, state, federal). These do not reflect the complexity of challenges facing communities, the difficulty of identifying and gaining public support for high-leverage strategies balancing competing interests and priorities. Moreover, in the absence of sophisticated instruments to weigh costs and benefits, plans are revealed to be more aspirational than executable. Furthermore, communities seeking to achieve sustainable futures through planning and policy 1) are challenged in developing effective regional policy interventions that are effectuable for voters and opinion leaders; and 2) find it difficult to empirically identify which policy level (local, regional, state, federal) is most appropriate to effect identified interventions.

The Rockford HUD Regional Plan for Sustainable Development (RPSD) process worked to address these gaps. This process was based on cross-sectorally (socially, economically, and environmentally) examining 16 areas of sustainability. For instance, housing has social, economic, and environmental components to examine and plan for. See the Wheel of Sustainability on graphic F.5 to the right. 16 core areas of sustainability were identified as key components to address in this sustainability plan. In addition, one cross-cut topic was identified that can be approached by members of each of the 16 sustainability components listed above: poverty reduction and access to opportunity. Because this topic is systemically shaping the sustainability of each of the aforementioned areas of sustainability, this topic was given special consideration through process.

Assessing Current Conditions of 16 Areas of Sustainability

Vital Signs collected measurable data for the 16 areas of sustainability and synthesized content of existing regional plans into a format that empowers regional coordination. Over 700+ community sustainability indicators were collected and built into the online data portal, www.ourvitalsigns.com. Indicators were compiled from what other communities are measuring from around the world. In addition, three reports were released summarizing the current state of social, economic, and environmental well-being of the region. This portion of the initiative took approximately 18 months.

Introducing www.OurVitalSigns.com

By partnering with computer scientists at the University of Massachusetts Lowell Institute for Visual and Perception Research and Center for Industrial Competitiveness, staff at the Boston Indicators Project, and practitioners at MetroBoston (the Metropolitan Area Planning Council), the region integrated a high performance data analysis and visualization platform that better informs what steps the two counties need to take to achieve higher degrees of sustainability. The Rockford Region is now a member of the Open Indicators Consortium, the network of communities through which this tool, "WEAVE" (Web-based Analysis and Visualization Environment), was created and disseminated. The resulting website is called the Our Vital Signs online portal, and it serves as a centralized monitor empowering the Rockford Region's community leaders to continually measure performance of the region's sustainability indicators. The website URL is http://www.ourvitalsigns.com.

The aim of the Vital Signs website is to empower informed decision-making and provide critical feedback of performance and monitoring of the strategies of the final RPSD and the regional goals therein. It includes online mapping that provide a wealth

Figure 6. Wheel of Sustainability

Health & Wellness
Food
Cultural Life
Housing
Civic Vitality
Education
21st-Century Economic Strategies
Safety
Economic Development
High Quality of Life
Vital Signs Sustainability Indicators
Technology
Waste Management
World-Class Sustainable Environmental Systems
Energy
Transportation
Biodiversity
Built Infrastructure
Land
Water
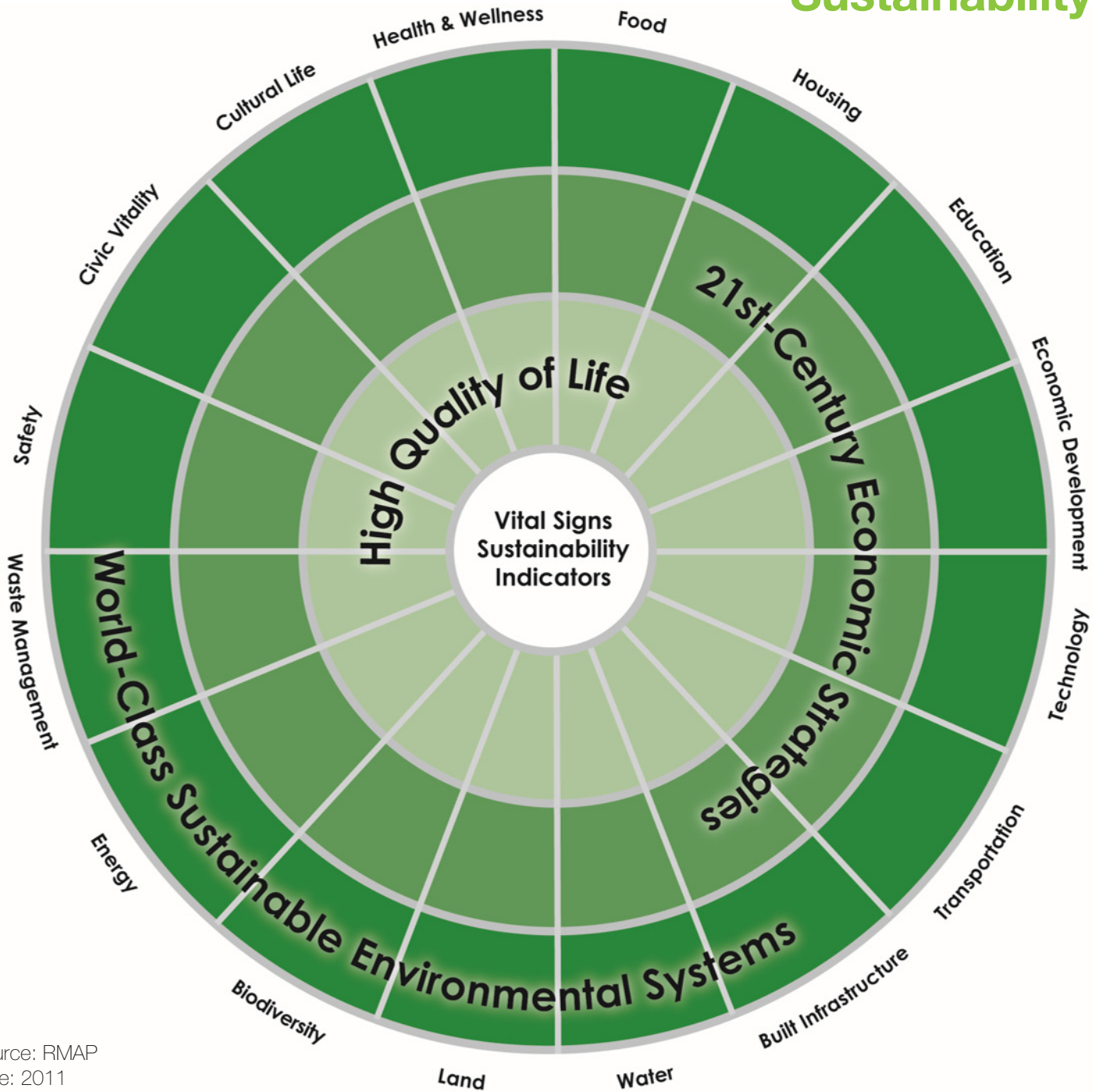
Source: RMAP
Date: 2011

of information about the region's people, communities, and neighborhoods through a wide variety of topics -- from economic development and arts to the housing and transportation. A resource for all those seeking to understand how the area is evolving with our Region's sustainability goals, it helps residents, businesses, organizations, municipal staff, elected officials, and journalists explore options and make more strategic and informed decisions on how to help the region's well-being. Community members are encouraged to explore the region's

data, community snapshots, and maps on this site. Collectively these are called Visualizations (maps, charts, graphs, etc).

Data has been mined from reputable local, state, and federal sources. In addition, quality privately-produced datasets, such as the Consumer Expenditure Survey, are also used. For a full list visit Appendix III. Once new data is released from various sources staff work to update the online visualizations.

Raw Data Sources

Data sets relied upon for the online Data Commons as well as the current conditions analysis were obtained from reputable public and private data sources. Sources include federally published data sets, state-level data sets, locally-produced data sets (i.e. brownfield sites), and privately-produced data sets from vetted sources. Below is a list of sources utilized in the various data visualizations and analyses.

Federal

- US Department of Commerce - Bureau of Economic Analysis (BEA)
- US Department of Labor – Bureau of Labor Statistics (BLS)
- US Bureau of Justice Statistics
- Center for Disease Control and Prevention (CDC)
- US Census Bureau
- US Environmental Protection Agency (EPA)
- Federal Communications Commission (FCC)
- Federal Financial Institutions Examination Council (FFIEC)
- US Department of Housing and Urban Development (HUD)
- US Internal Revenue Service (IRS)
- US Department of Commerce – International Trade Administration (ITA)
- US Department of Interior – National Park Service
- US Department of Education – National Center for Education Statistics
- US Department of Commerce – National Oceanic and Atmospheric Administration (NOAA)
- US Department of Agriculture
- United States Postal Service
- Corporation for National & Community Service (CNCS)

State

- Illinois Department of Children and Family Services (IDCFS)
- Illinois Department of Corrections (IDOC)
- Illinois Department of Transportation (IDOT)
- Illinois Department of Aging
- Illinois Department of Employment Securities
- Illinois Department of Human Services
- Illinois Department of Natural Resources (IDNR)
- Illinois State Police
- Illinois Interactive Report Card (IIRC)
- Illinois State Board of Education (ISBE)

Local

- Comprehensive Annual Financial Reports
- Rockford Health Council
- WinGIS
- RMAP
- Winnebago County Clerk
- Boone County Clerk

Other

- CNT
- Economic Profile System-Human Dimensions Toolkit (EPS-HDT)
- Esri
- Feeding America
- Fitzgerald Health Education Associates, Inc (FHEA)
- Foreclosure-Response.org
- Gallup
- Institute for Health Metrics and Evaluation (IHME)
- STATS America – Innovation Index
- Bank On
- Americans For the Arts
- Location One Information System (LOIS)
- National Establishment Time-Series (NETS)
- The Urban Institute
- US Green Building Council (USGBC)
- Woods & Poole
- Leopold Center for Sustainable Agriculture

Figure 7. Regional Sustainability: Social, Economic, Environmental

Rockford Region VI

State Line Rd
Pann Rd
Shirland Rd
Gardner St
43
44
120
125
Yale Bridge Rd
128
Prairie Hill Rd
Will Rd
N 2nd St
Wilbrook Rd
133
132
104
114
E Rockton Rd
W Rockton Rd
S Bluff Rd
W Rockton Rd
69
106
McCurry Rd
86
123
75
77
Freeport Rd
90
56
64
Burr Oak Rd
Elevator Rd
Hartman Rd
Best Rd
78
Rock Grove Rd
Goodrich Rd
Richie Rd
Baker Rd
Patterson Rd
118
Weber Rd
Freeport Rd
133
Freeport Rd
125
Roscoe Rd
Roscoe Rd
56
125
141
131
143
N Goeke Rd
N Pecatonica Rd
Center Rd
133
133
Owen Center Rd
127
62
134
131
143
133
Knapp Rd
N Main St
141
71
251
126
Trask Bridge Rd
127
Latham Rd
87
West Lane Rd
126
Cemetery Rd
145
127
52
88
126
135
145
N Winnebago Rd
Trask Bridge Rd
47
74
105
Harlem Rd
126
16
92
Telegraph Rd
Elmwood Rd
141
9
17
96
91
Windsor Rd
119
Sumner Rd
135
58
84
79
83
98
50
103
103
Lundgren Rd
Main St
W Riverside Blvd
144
W State Rd
142
70
28
15
10
80
65
136
145
8
18
61
60
Rote Rd
145
22
20
19
37
102
S Pecatonica Rd
97
39
11
26
12
31
38
W State St
School St
40
67
95
89
53
27
13
23
14
51
81
72
E Mcnair Rd
122
121
13
24
7
30
21
2
107
46
N Elida St
Westfield Rd
36
25
4
85
63
Cunningham Rd
139
59
6
29
1
82
Kendall Rd
Kelley Rd
S Meridian Rd
76
41
5
68
54
49
138
Montague Rd
130
139
100
45
Prairie Rd
93
101
Tipple Rd
124
55
57
48
W Montague Rd
E Severson Rd
129
94
99
S Main St
66
138
140
Baxter Rd
137
137
138
Edson Rd

Boone and Winnebago County Township Locator Map

LAONA SHIRLAND ROCKTON ROSCOE MANCHESTER LEROY
DURAND HARRISON OWEN HARLEM CALEDONIA POPLAR GROVE BOONE
PECATONICA BURRITT ROCKFORD BELVIDERE BONUS
SEWARD WINNEBAGO ROCKFORD FLORA SPRING
ROCKFORD CHERRY VALLEY

Boone and Winnebago County

Roadways
Hydrography

1 inch = 12,500 feet
1 inch = 2.37 miles

N W E S

Figure 8.
District Numbers

Source: RMAP
Date: 2014.

Formation of District Boundaries

Sustainability "Districts" were established as the basic unit of measurement for the Vital Signs project. Districts are based on census block groups and were defined for urban, suburban and rural geographies within the region. Urban districts were formed from 2-6 census block groups combined so that they encompass approximately one square mile, which is considered the basic walkability standard in the United States. Suburban districts were formed from 1-2 block groups, and in many cases, were already one square mile in size. Rural districts were formed from one census block group and cover the greatest territory. The RPSD has distinct goals, objectives and action steps for urban areas different than suburban, and suburban different than rural. A map of the Vital Signs Districts is seen here in graphic F.7. Urban districts can be found within the City of Rockford, the City of Loves Park, the City of Belvidere and the City of South Beloit. The area delineated by the combination of urban and suburban districts is similar to the census-defined urban area that governs the traditional planning area for RMAP as the Metropolitan Planning Organization (MPO) for Boone and Winnebago County.

ITAL SIGNS District Locator Map

Legend

County Boundary

District Boundary

Production Date: May 2013

THE DATA PROVIDED IN THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY AND THE ROCKFORD METROPOLITAN AGENCY FOR PLANNING, RMAP, ASSUMES NO LEGAL RESPONSIBILITY FOR THE INFORMATION CONTAINED IN THIS DATA. THE BURDEN FOR DETERMINING FITNESS FOR THE USE OF THIS INFORMATION RESTS SOLELY UPON THE USER. RMAP ASSUMES NO LIABILITY FOR THE ACCURACY OF THE DATA OR RESPONSIBILITY FOR DIRECT, INDIRECT, SPECIAL, CONSEQUENTIAL, EXEMPLARY OR OTHER DAMAGES.

Concentrated Poverty

When poverty concentrations reach a certain threshold within a neighborhood or segment of a region, generally accepted as 10%-20%, a tipping point is reached. Those living in poverty have a very difficult time. One of the greatest challenges to equity within a community is achieving a reduction of poverty while having a larger distribution of income and sustaining high economic growth. There are many different studies that suggest that those living in disadvantaged, inner-city neighborhoods characterized by high levels of poverty and social inefficiency

have poorer health, lower levels of academic achievement, fewer employment opportunities and high unemployment rates, property maintenance deteriorates, high school dropout levels tend to increase, heightened exposure to gang recruitment and violence compared to those people that live in more advantaged neighborhoods and regions. In the district map the areas that are delineated by dark black lines indicates neighborhoods with 15% or higher poverty as of 2011.

Figure 9. Districts with Poverty Over 15%

*The districts enclosed with a thick African American line in all maps contained within this report indicate districts with poverty above 15%.

Source: US Census Bureau
Date: 2010

- 0% to .02%
- .02% to .8%
- .8% to 1.4%
- 1.4% to 2.2%
- 2.2% to 3.2%
- 3.2% to 4.5%
- 4.5% to 7.2%
- 7.2% to 15.5%
- 15.5% to 31.5%
- 31.5% to 69%
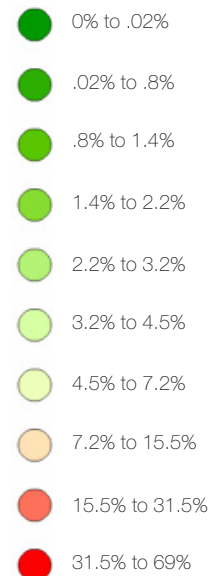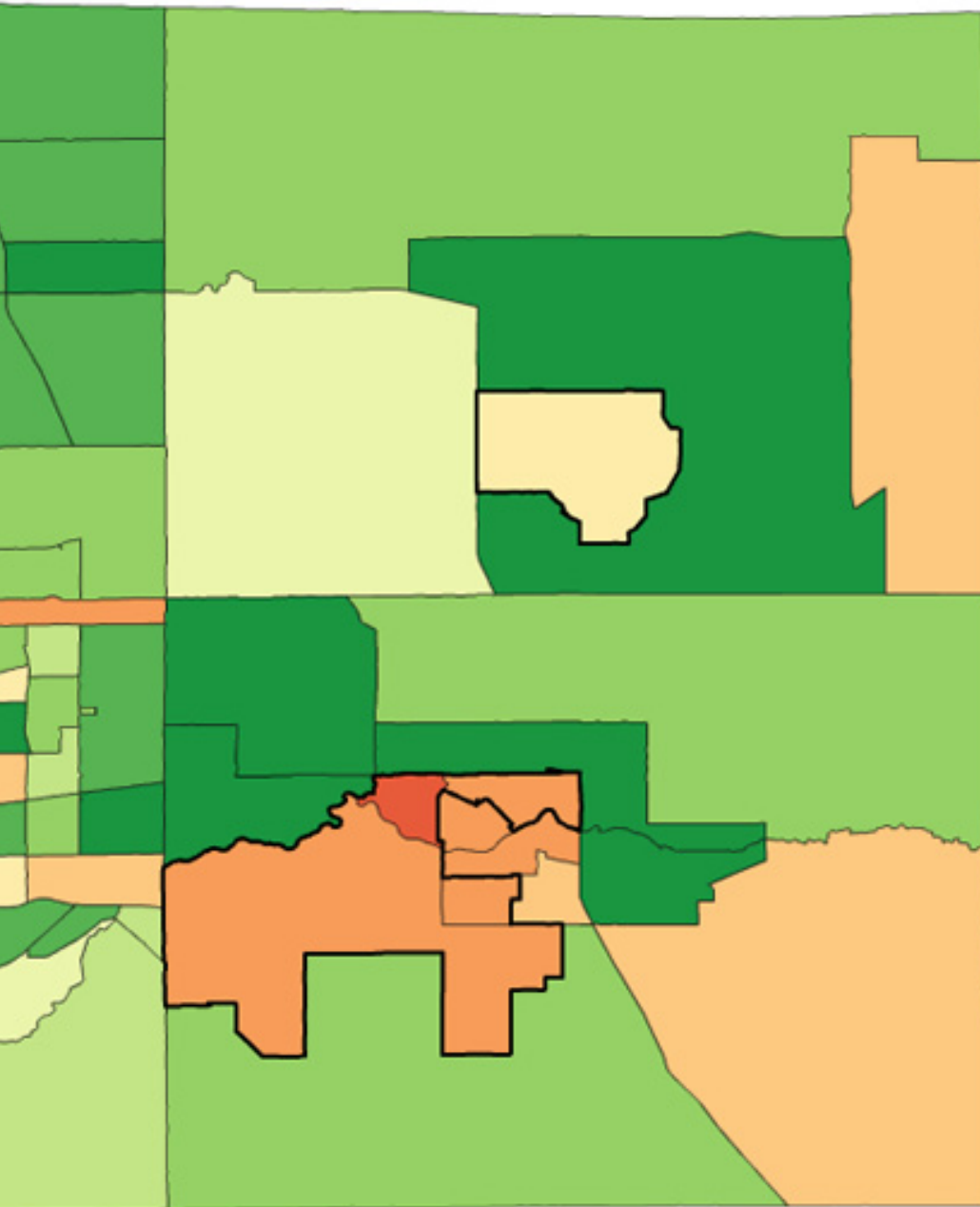
Regional Sustainability Plan Components

Developing a Regional Plan

The Rockford Region Plan for Sustainable Development was designed to be a plan the region is empowered to take ownership of. After all, to truly achieve regional well-being both now and in the long-term, there is a responsibility of all to assist. The Rockford Region Sustainability plan has been outlined to serve as a "guide" of sorts for households, neighborhoods, organizations, businesses, and local governments. Together, these groups will aim to work to implement regional goals through strategies with the help of implementation tools. And, it is the intention to track the implementation of these goals through the measuring of metrics. The graphic to the right shows a hypothetical example of how these elements work together within the regional sustainability plan.

Developing Regional Goals and Strategies

Topic Teams worked closely to develop regional goals and strategies for the 16 sustainability topic areas for the final Regional Plan for Sustainable Development. Team members were asked to review the current conditions analysis and three reports to understand where the region was "at" to then identify where it needed to "go". Topic Team members' charge was to develop five high-level goals for each of the 16 areas, and for each goal somewhere between 4-12 strategies or tactics.

The mission of their work was to establish high-level goals and strategies that were of the highest priority for the region to coordinate and implement. It was not the intention to eliminate existing local planning documents but to coordinate them. The goals and strategies matrices for each of the 16 sustainability topics within this RPSD were developed as almost a playbook for the region, specifically charging households, neighborhoods, community organizations, businesses, and local governments to each do their part in the future well-being of the region.

Mindmixer was used as an online platform to help prioritize goals and strategies among the Topic Team members. It can be viewed at http://speakup.ourvitalsigns.com. 240 local residents participated in the online forum; their average age was 45 years old. These individuals submitted over 150 ideas and left over 225 comments on the site to develop regioanl goals and strategies. In addition, staff worked to seed the goals and strategies reviewed by each team by mining over 50 local planning documents published over the last two decades. And, staff aided Team Members to develop new goals and strategies not found in existing adopted regional planning documents and fill gaps on priorities for the region.

The Implementation Tools

In addition, staff worked with community leaders to identify recommended implementation tools. These tools are best case practices for the region. They are found in the format of incentives, policies, codes, regulation, etc. and will further empower the region to implement the RPSD further and faster so the future well-being is ensured. The aim of this process was to help the region eventually align investment opportunities, regulatory policies, administrative programs, resources, other plans, and incentives relating to the 16 topic areas of the RPSD both in the public and private sectors in Boone and Winnebago Counties. These Implementation Tools, or "Best Practices" can be found in each of the 16 Sections as green sidebars.

Figure 10. Example Goal, Strategy, and Metric for a Regional Sustainability Plan

GOAL

Maintain existing number of acres of farmland

Strategies

Strategy One: Local Governments

Creation of an urban growth boundary and amend in to local land use plans

Strategy Two: Local Organizations

Use brownfield programs to get environmentally sensitive properties to be infill development ready

Strategy Three: Citizens & Organizations

Expand use of tools to include programs such as purchase of agriculture conservation easements and expand the Boone County Farmland Preservation Commission in to Winnebago County

Strategy Four: Citizens

Create a housing choice incentive program to empower greater housing choices

Strategy Five: Local Governments

Moratorium on the creation of new Facility Planning Areas (FPAs) and limited expansion of existing FPAs

METRIC

0 acres converted into urban land uses

Source: Vital Signs Topic Teams
Date: 2013

Regional Analysis of Impediments and Fair Housing Equity Assessment

The Regional Analysis of Impediments (RAI) and Fair Housing Equity Assessment (FHEA) are integral components and contribute to the critical underpinnings of the Sustainable Communities Regional Planning Initiative. Through the planning process and analyses, Rockford Metropolitan Agency for Planning (RMAP) strives to create a more inclusive conversation on regional issues, with a particular emphasis on engaging those who have traditionally been marginalized from the community planning process. Through the inclusion of these two components in the planning process, the resulting plan provides new insight into the disparate burdens and benefits experienced by the diverse populations across the RMAP Region. The RAI and FHEA recommendations are intended to address these

Figure 11. Components of Fair Housing Analysis

disparities.

Regional Analysis of Impediments

The regional analysis of impediments led to the identification of issues to fair housing choice through a study methodology that includes Community Engagement by gathering community input through public meetings, interviews and focus group sessions; the construction of a demographic analysis resulting in a Community Profile, Fair Housing Index, Home Mortgage Disclosure Act Analysis; and the analysis of Fair Housing Law, and Public Policy including court litigation, legislation, regulatory, fair housing ordinances and entitlement grant and public housing program impact.

The Community Profiles and Home Mortgage Disclosure Act analyses provide the basis for the demographic assessment, including a disparate impact analysis to determine if the protected class members afforded protection under the Federal Fair Housing Act are disproportionately impacted when compared to Whites or regional and citywide medians. The Fair Housing Index examines the standardized form of ten total variables providing a means of identifying individual census tracts where fair housing choice is at high risk due to demographic factors most often associated with housing discrimination.

Fair Housing Equity Assessment

The Fair Housing Equity Assessment documents the extent to which the most critical demographics impacting fair housing choice are contributing to protected class members who are documented as performing below the regional or area median. Most important to the process are measuring and reducing racial and ethnic isolation and segregation in the region; identifying and reducing racially and ethnically concentrated areas of poverty; and identifying and reducing social and economic disparities. A reversal in the trends for demographics performing below the area median and those with disparate impacts is viewed as most impactful in removing the barriers to housing choice.

Source: J-Quad Planning Group
Date: 2013

A Dissimilarity Index designed to measure the evenness of a group's population distribution across a broad region was used. The resulting index indicates the percentage of the two measured groups' population that would have to change residence for an even distribution of the two races. The Dissimilarity Index reveals that 54.5 percent of the White population of Winnebago and Boone Counties (0.545) would have to move to even the population distribution of African Americans and Whites across all census tracts. Similar results (0.358) were determined for Hispanic populations relative to Whites. This analysis was done with 2010 Census data (100% count vs. estimate).

RAI / FHEA Goals

- Assess current public and private strategies to meet the Region's housing, infrastructure, and community development needs and identify new strategies and approaches to enhance Fair Housing choice among residents.
- Raise awareness of housing, infrastructure, and community development needs among local and regional officials, service providers, enforcement staff and the private sector.
- Identify and cultivate areas for potential governmental, nonprofit and private sector partnerships within the RMAP region.
- Foster coordination among service providers and jurisdictions throughout the region to maximize the use of limited fiscal resources to improve housing choice.
- Broaden housing opportunities for low to moderate income residents and strengthen neighborhoods by stimulating community development and investment.
- Provide direction to the counties and municipalities of the RMAP region to foster an ongoing commitment to ensuring fair housing choice.
- Analysis of existing socio-economic conditions and trends, with a particular focus on those that affect housing and special populations;
- Evaluates public and private organizations' impact on regional housing issues, their practices, policies, regulations and insights relative to fair housing choice;
- Assesses the range of impediments to fair housing choice that exist within both urban and rural jurisdictions of the region;
- Identifies specific recommendations and activities for the RGMA, Rockford and Winnebago Housing Authorities, as well as other local jurisdictions in the region to address any real or perceived impediments that exist;
- Develops effective measurement tools and reporting mechanisms to assess progress in meeting fair housing goals and eliminating barriers to fair housing choice;
- Identifies racial and ethnic segregation and integration, including factors contributing to segregation and drivers of integration in the region;
- Identifies racial and ethnic concentrated areas of poverty, race and ethnicity, and public and assisted housing including location of RCAP / ECAP census tracts and racial and ethnic groups most impacted;
- Identifies location of opportunity areas, disparity in access to opportunity areas, barriers inhibiting certain groups from accessing such areas, and address inequities in access to opportunity through public investments; and
- Documents and assesses fair housing infrastructure including fair housing services and activities, current level of fair housing enforcement, complaints and housing

discrimination in the region, and available resources to address discrimination.

RMAP Region's Impediments to Fair Housing Choice and Social Equity

The Community Profile, Fair Housing Index and Home Mortgage Disclosure Act analyses have demonstrated that segregation and concentrated poverty have historically and currently perpetuate in the Rockford City jurisdiction of the RMAP region. The maps and analyses depict Regionally Concentrated Areas of Poverty (RCAP) and demonstrate how these areas are also concentrated racially and ethnically, and impacted by historical concentrations of public and assisted housing. The RCAP area characteristics and physical conditions are indicative of the ways in which the economy has suffered as a result of housing market distortions and disinvestment, and proven that public policy and programmatic investments have only minimally improved the situation. Policies and strategies that the RMAP Region collectively, and its individual counties and local governments should undertake to remove and lessen segregation and concentrated poverty, in collaboration with the community, non-profit and private sectors are presented in the final report.

Impediments to fair housing choice and social equity, and remedial actions to remove or lessen their impacts are detailed in this Section 6 of the report. This section draws on the information collected and analyzed in previous sections to provide a detailed analysis of impediments to fair housing choice impacting the Rockford MSA and RMAP Study Area. Five major categories of impediments were analyzed and identified: Real Estate and Housing Market Related Impediments; Public Policy and Fair Housing Infrastructure Impediments; Banking, Finance, and Insurance Related Impediments; Socioeconomic Impediments; and Neighborhood Conditions, Natural Barriers, Historical Events, Trends, and Development Pattern Related Impediments. For each impediment identified, issues and impacts are detailed. Remedial actions represent alternative ways to address each impediment. Some of the remedial actions recommended in this section are conceptual frameworks for addressing the impediments. This means that the recommended actions will require further research, analysis, and final program design by the City of Rockford, Rockford and Winnebago Housing Authorities, other individual jurisdictions in the MSA and RMAP for implementation.

Figure 12. Fair Housing Process

Source: J-Quad Planning Group
Date: 2013

Figure 13. R/ECAP Areas

RCAP is defined as:
Poverty Rate >= 40% OR >=300% of the Metro Average
AND majority non-white population (>50%)

Source: HUD
Date: 2013

RCAP/ECAPs must have a non-White population of 50 percent or more. Regarding the poverty threshold, Wilson (1980) defines neighborhoods of extreme poverty as census tracts with 40 percent or more of individuals living at or below the poverty line. Because overall poverty levels are much lower in many parts of the country, we supplement this with an alternate criterion. Thus, a neighborhood can be an RCAP/ECAP if it has a poverty rate that exceeds 40% or is three times the average tract poverty rate for the metro/micro area, whichever threshold is lower. Census tracts with this extreme poverty that satisfy the racial/ethnic concentration threshold are deemed RCAPs/ECAPs.

Figure 14. Fair Housing Index

High Risk

Moderate Risk

Low Risk

Very Low Risk
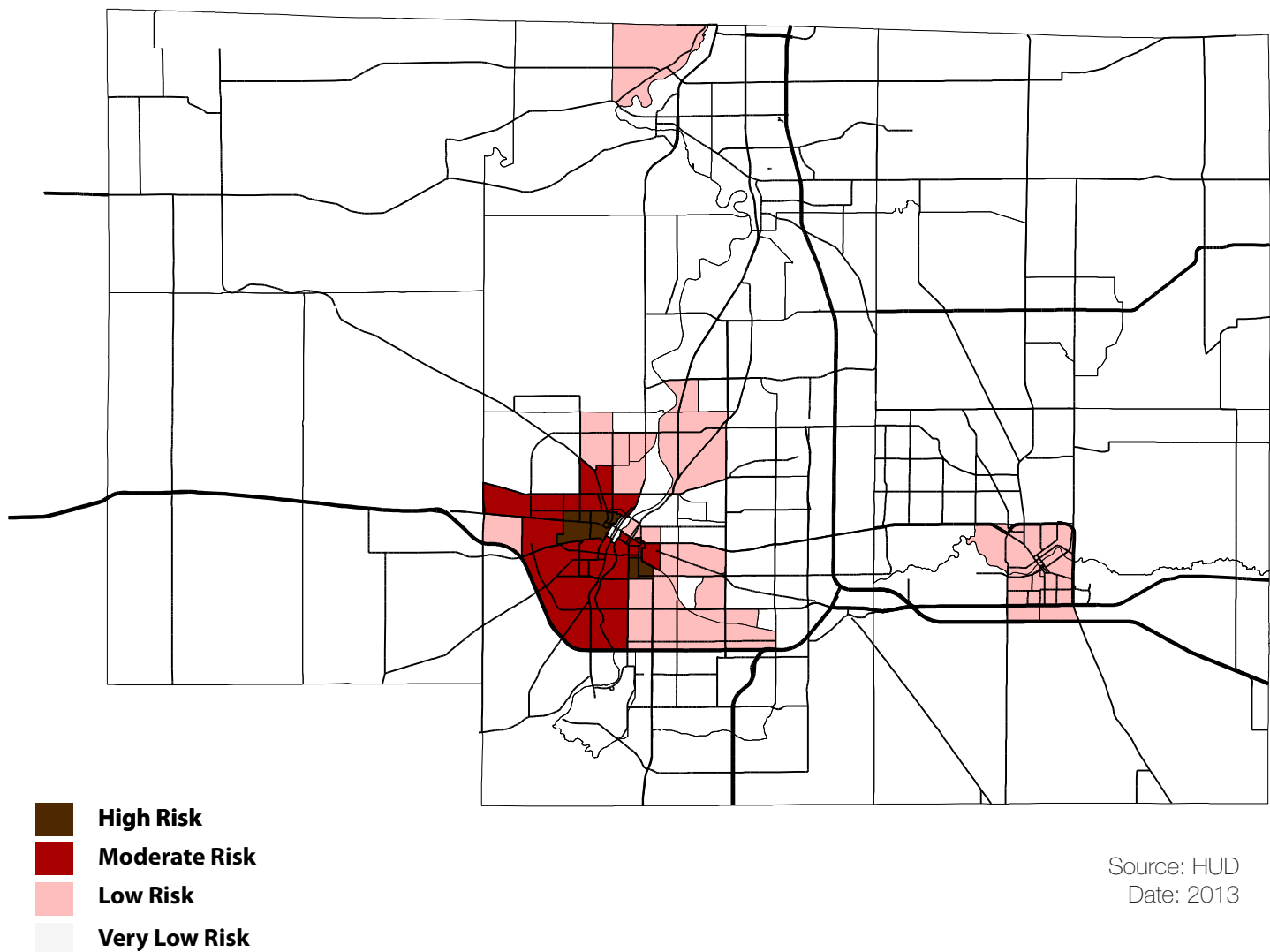
The Fair Housing Index is a measure developed specifically for Analyses of Impediments to Fair Housing. The index combines the effects of several demographic variables with Home Mortgage Disclosure Act (HMDA) data and maps the results by census tract. The map provides a general indication of geographic regions within Winnebago and Boone Counties where residents may experience some level of housing discrimination or have problems finding affordable, appropriate housing.

HISTORY OF FAIR HOUSING CHOICE

Post-Civil War Era to 1970

- Over 6 Million African Americans began to move from the south to the north to be more integrated

Early 1900s

- Communities began adopting measures to separate housing for African Americans, and establishing zoning codes designating neighborhoods by race.
- Later, the Supreme Court overturned constitutionality of zoning codes by race.
- In addition, real estate agents wrote "code of ethics" including bans on selling homes to African Americans outside of African American areas. Neighborhoods formed associations to block African Americans from moving in through organization and covenants.

1930s

- Segregation practices became systemic
- Home Owners' Loan Corporation adopted measures to practice redlining
- Federal Housing Administration adopted same practices (98% of FHA insured loans between 1934 and 1962 went to White borrowers)

- Vets Administration and FHA officially supported racial covenants banning African Americans from new suburban developments until 1950
- 1950s and 60s: Federal housing and development programs systemically bulldozed African American and integrated neighborhoods for redevelopment of infrastructure; African Americans were forced to relocate through real estate practices to poorer neighborhoods and public housing

1960s

- Race riots broke out in hundreds of cities in America. Violence was largely concentrated within African American neighborhoods by African Americans protesting conditions they were living in
- President Johnson worked with Walter Mondale to get fair housing legislation adopted banning segregation practices; multiple attempts to pass through Congress failed
- Johnson formed the Kerner Commission to assess the cycle of violence from the race riots; Commission found the U.S. was "moving towards two societies, one African American, one White - separate and unequal"

1964

- Civil Rights Act passed

1968

- Dr. Martin Luther King Jr. was assassinated
- Fair Housing Act passed a month after MLK's assassination
    - Act requires communities to promote integrated housing by banning racial discrimination in the sale or rental of housing, block busting (real estate agents moving African Americans into White neighborhoods to frighten Whites into selling), racial steering to certain neighborhoods, and to affirmatively further fair housing
    - Failed to put in place adequate, publicly enforceable fines or define what affirmatively further fair housing meant
    - HUD Secretary George Romney (former Michigan governor and witness to 1967 Detroit race riots) ordered HUD officials to reject applications for infrastructure projects from communities and states where local policies and regulations fostered segregated housing practices

1970

- President Nixon ordered the enforcement of Romney's program of tying withholding federal infrastructure dollars to local housing integration to be ended

1972

- President Nixon asked for Romney's resignation
- HUD formed Block Grants program, a consolidation

of their programs allowing communities to decide how to spend funds; new program did not require communities to comply with Fair Housing Act, only Civil Rights Act

1974

- Watergate Scandal; Nixon resigns
- Equal Credit Opportunity Act requires lending institutions to tabulate race of clients they accept and reject for home loans
- 1974-1983: HUD did not withhold a single block grant from communities

1975

- Home Mortgage Disclosure Act requires financial institutions to report which neighborhoods receive mortgages

1977

- Community Reinvestment Act requires lending institutions to demonstrate they have provided credit to areas unable to secure capital in the past

1988

- Congress passed Amendments to Fair Housing Act giving HUD more authority to penalize local discrimination practices; gave longer periods for filing time for housing discrimination complaint and

empowered HUD Secretary and the Attorney General to initiate investigations without waiting on private lawsuits. Number of African Americans in poverty continued to increase as HUD's focus was on building new housing units for concentrated poor.

1992

- President Clinton appoints Henry Cisneros to begin enforcing fair housing practices

1994

- House slashed HUD's budget

1996

- HUD released Fair Housing Planning Guide giving communities receiving block grants advice on compliance with Fair Housing Law but set no requirements

1997

- Andrew Cuomo replaces Cisneros

1998

- Cuomo proposed regulation defining what affirmatively further fair housing meant; U.S. Conference of Mayors protested its enactment and in 1999 it was dropped

2008

- President Obama elected and appointed Shaun Donovan to run HUD

2009

- Internal HUD study found many communities were not completing required fair housing paperwork for block grants

2010

- Government Accountability Office found that of 441 recipients of block grants:
  - 1/3 of recipients failed to comply with fair housing and materials were out of date
  - 1/10 materials hadn't been updated since 1990s
  - 25 communities had filed no fair housing analysis
  - HUD staff in seven regions had read only 17 of 275 block grant recipient's compliance paperwork.

2011

- HUD establishes the HUD Sustainable Communities Program, an initiative to help region's address fair housing choice in concert with regional planning.

Source: RMAP Library

Date: 2011-2013

Transportation

Energy

Built
Environment

Housing

Biodiversity
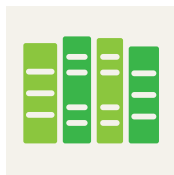
Education
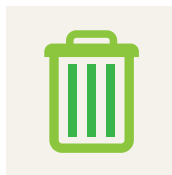
Waste
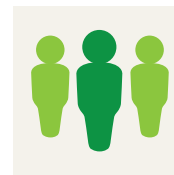
Civic Vitality

Health

Culture

Land

Water
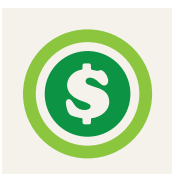
Economic
Development

Technology
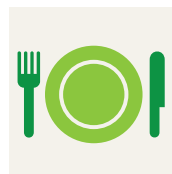
Food

Safety

Vital Signs Regional Plan

The Vital Signs initiative established 16 areas of sustainability to include in the Regional Plan for Sustainable Development. Enclosed are 16 Chapters for each of these areas. Each Chapter includes an overview of a current conditions analysis, regional goals and strategies as set forth by the Topic Teams, and implementation tools (best practices).

Additional information on the region's well-being can be found on the www.ourvitalsigns.com website.

Key for Sustainability Matrices

Since 2000 Column

This column shows if the region has improved, worsened, or flatlined/N/A.

Improved

Flatlined or N/A

Worsened

Current Benchmark Column

This column shows how each strategy can be measured. If in italics the metric has not been measured yet. If in bold the information is current-to-date for the metric.

2034 Target Column

This column shows how each strategy should trend over time. Boxes with a solid outline refer to a 5-year timeframe. Boxes with a dashed outline refer to a 5-10 year timeframe. Boxes with no outline refer to a 10-20 year timeframe.

Increase

Establish or Maintain

Decline

Green Icon Columns

These columns show which level of assistance is needed for implementation of that strategy.

Households

Neighborhoods

Organizations

Businesses

Local Governments

Executive Summary

This section is intentionally being left blank until after the public comment period has passed to review the RPSD.

Biodiversity

Introduction

When settlers first arrived to the region the landscape that greeted them was a mosaic of forest, prairie, and wetlands; each comprised of an array of habitat subtypes- oak savannas, African American soil forests, dolomite and gravel prairies, marshes, bogs and fens. Each of these habitats was home to distinctive plant and animal species specially adapted to thrive under the unique conditions present in these natural communities. This landscape has since been transformed into a patchwork of farm fields, paved surfaces, and buildings, all shaped by the human hand.

This collective assortment of plant and animal life-all the way down to the level of bacteria and microorganisms-and the habitat in which they reside, and the complex interaction between them are the building blocks that form our ecosystem. The ecosystem provides humans with vital life supporting services-it purifies the air we breathe and water we drink, provides our food and nutrients, decomposes waste, moderate's weather, provides shelter, controls pests and much more. Biodiversity is the term used to describe the composition of the ecosystem. Biodiversity can be measured by three different levels: species diversity, which includes all living organisms; habitat diversity; and genetic diversity. Each species within a habitat has a complex interaction with other species in that area; remove just one and the effects will be felt across the whole system. The more species that disappear the more fragile the remaining ecosystem becomes.

Human alteration of the landscape represents the single greatest threat to biodiversity. Actions like residential development and the clearing of the landscape for agriculture has led to critical habitat loss and fragmentation. The introduction of non-native species poses a serious threat as they often choke out native species and alter the function of the ecosystem.

Perhaps the most alarming threat though is that the younger generations are losing touch with the land. The USEPA has estimated that American children now spend 90% of their time indoors; this number is even greater for children from low-income backgrounds. Researchers have come to call this "nature-deficit disorder," or the alienation from nature.

The biodiversity challenge as a Region over the next 20 years is twofold: protect our most sensitive habitats and cultivate the next generation of environmental stewards.

Biodiversity

Wetlands historically covered 16% of the region, compared to only 4% presently.

Overview

Environmentally Sensitive Areas

Environmentally Sensitive Areas are places that have special or unique environmental attributes which make them worthy of different attention or care. These areas are critical to the maintenance of the regions diverse plant and wildlife populations so as to ensure a healthy and productive environment. Environmentally sensitive areas can enhance the quality of life where people live, work, and play while even helping to raise property values.

Examples include rare ecosystems such as old growth forests, habitats for species at risk, and areas that are significantly impacted by human activity (floodplains and steep slopes). Some of these environmentally sensitive areas are home to species which are nationally protected such as the bald eagle, others are more important at the local level such as river otters. These areas can range greatly in size from very small patches of ground or a single nest to vast landscapes and geographical formations, most of which will contain rare and common habitats, plants or animals. All aquatic and riparian ecosystems such as lakes, rivers, streams and wetlands are also considered to be environmentally sensitive areas.

In 1996 an assortment of natural resource agencies and conservation organizations from across the region came together to create the first Greenways Map, which is currently in its fourth revision. The map illustrates the environmentally sensitive lands of the region, offering a framework for habitat protection and ecological connectivity. This effort is intended to provide a comprehensive regional planning tool for government agencies and other involved in land use planning, natural areas preservation, transportation and recreation, to coordinate transportation planning with the greenways planning process, and to reduce conflicts with development activities and offset the negative and costly impacts of urban sprawl.

Wetlands

Wetlands are defined as areas where water covers or is at or near the surface of the soil throughout the year. They play an unrivaled role in the ecosystem. With their highly saturated soils and diverse plant species, wetlands act like a sponge, trapping pollutants and sediments before they can harm the rest of the system. Wetlands also offer the benefit of excess capacity detention during flooding events, helping to manage stormwater runoff. According to the Illinois Department of Natural Resources 46 of 59 native mammals and as many as 274 bird species are dependent upon wetland habitat at some point during their lifecycle. In northern Illinois wetlands are key surface water recharge areas. Beyond their important role in the natural environment, wetlands can provide both active and passive outdoor recreation, creating places

Figure 15. Acres of Environmentally Sensitive Areas

- .04 to 9.09
- 9.09 to 24
- 24 to 38
- 38 to 63
- 63 to 110
- 110 to 210
- 210 to 330
- 610 to 1400
- 1400 to 13000
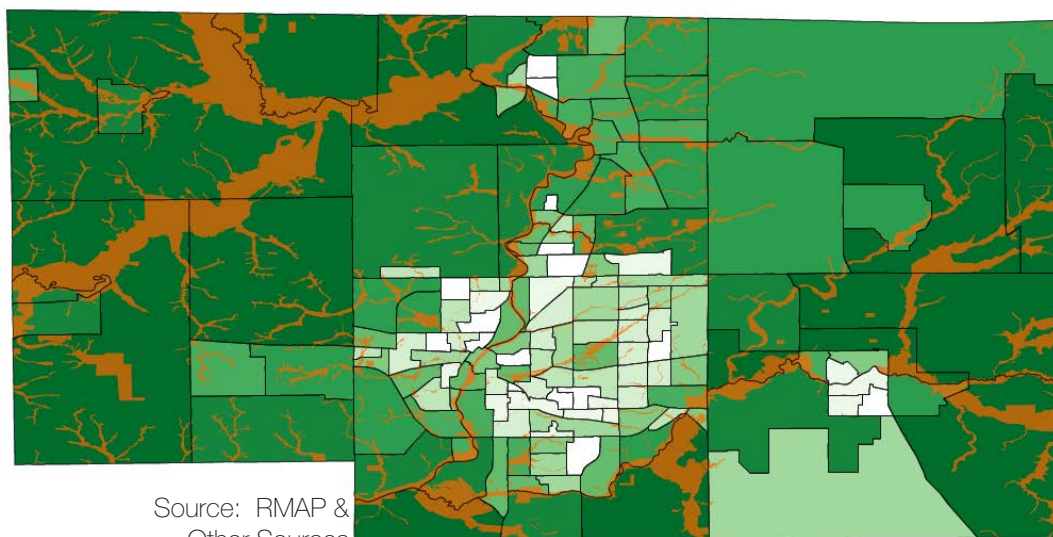
Source: RMAP & Other Sources
Date: 2013
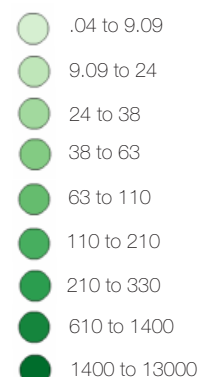
to hunt, fish, boat, birdwatch, or simply enjoy the scenic landscape.

Presettlement it is estimated that wetlands covered 21% of Boone County and 14% of Winnebago County. Largely as a result of drainage of farm fields and the increasing urban footprint those numbers have been reduced to just 3% and 5%, respectively. Wetlands were once widely dispersed across the landscape in a variety of different forms. Due to human modification most of our remaining wetlands are located within close confines of the river and stream corridors. Few of these remaining wetlands are considered to be of high quality.

Altered Landscapes

Wetlands are not the only native habitat that has been negatively impacted by human alteration. The native forests and prairies that once dominated the landscape are now largely just memories. Despite Rockford's reputation as "The Forest City," the forests of the region are just a sliver of what they use to be. The timber of the region was harvested for building and fuel, and the prairies were plowed up for row crops or converted to grasslands for grazing. It is estimated that the Sugar and Pecatonica River watershed, which covers the western half of Winnebago County and extends into neighboring Stephenson County, had a historical

composition of 36% woodland- today that figure is closer to 6%. For the Kishwaukee River watershed, covering Boone County and extending eastward into neighboring McHenry County, an estimated 74% of the watershed was covered by forestland, compared to an approximate 5% remaining today. The remainder of the Kishwaukee River watershed, about 26%, was covered with prairie- today a mere .01% of high quality prairie remains in the watershed. The remaining natural habitat of the region is severely fragmented, posing further threats to biodiversity as it is difficult for the remaining plant, animal, and insect species to interact and safely migrate across the landscape.

Preserving biodiversity is essential to maintaining ecosystem health.

Threatened and Endangered Species

Sustainable ecosystems are home to a diverse range of plant and animals. Each plant or animal species plays a role in the stability of that system. Given the highly interdependent nature of ecosystem ecology the Illinois

Department of Natural Resources uses a house of cards analogy- the removal or elimination of any one species has the potential to negatively impact many other species. Unfortunately, due to problems such as over hunting, loss of critical habitat and the introduction of non-native species, many of the plants and animals once found readily in the region are now at risk of vanishing from the landscape.

Under the Illinois Endangered Species Protection Act of 1972 the Department of Natural Resources (DNR) is required to monitor and update a listing of Threatened and Endangered Species for each county in the State. Endangered Species are defined as any species which is in danger of extinction in Illinois; threatened refers to any species which is likely to become endangered within the foreseeable future. Winnebago County has 56 Threatened or Endangered Species, the majority of which are plants, followed by birds and fish. Boone County has 14 listed species, again the majority being plants, followed by invertebrates, fish and birds.

Invasive Species

Aside from habitat destruction the greatest threat to the region's biodiversity is the introduction of non-native species. According to a critical trends analysis performed by the Illinois DNR for the

Figure 16. Regional Wetlands
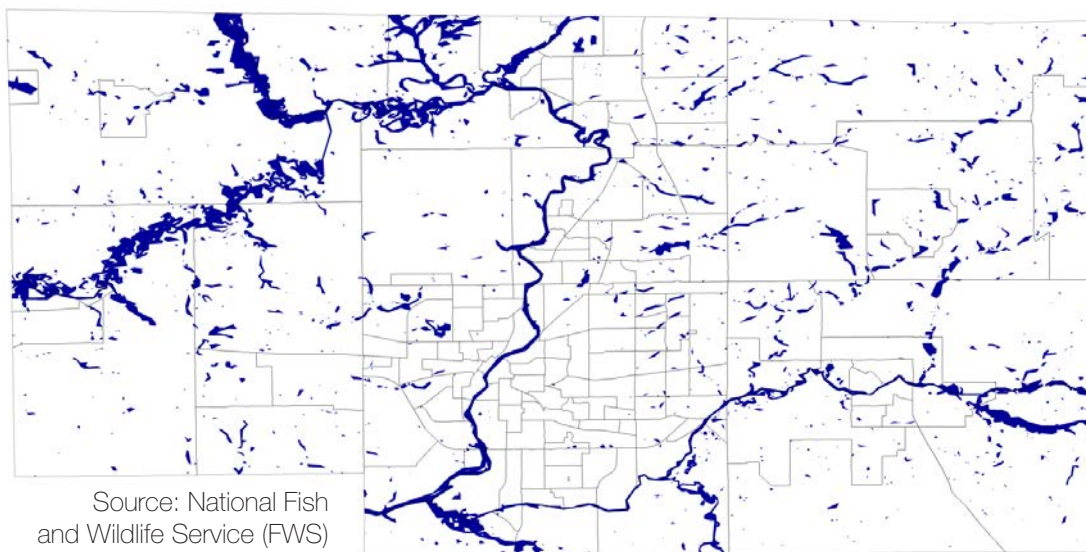
Source: National Fish and Wildlife Service (FWS)
Date: 2013

Kishwaukee River Basin approximately 21% of the plant species in the area have been introduced from elsewhere and become naturalized. Many of these are considered invasive- as the name implies, invasive species overrun native habitat, disturbing the natural balance and adversely impacting native species competing for limited resources. Local examples of invasive species include reed canary grass, garlic mustard, Canadian thistle and bush honeysuckle. Invasive species are not limited solely to plant species: high profile threats in Illinois include the Emerald Ash Borer beetle threatening the State's ash tree population, and Asian carp which are causing widespread impacts to the State's fisheries.

The Vision

The region seeks a coordinated growth strategy that enhances the livability of existing neighborhoods, balances development pressure with infill development and promotes the agriculture economy all while conserving our natural resources. Protection of these natural resources supports smart growth goals by bolstering local economies, improving our region's quality of life, and guiding new growth into existing communities. The region is committed to conserving the most critical habitat and maintain a healthy ecosystem balance that can fully support all naturally occurring species. These protected habitats are often the most economical way to safeguard drinking water, clean the air and support diverse ecosystems, all while offering residents and visitors alike with prime outdoor recreational opportunities.

Prairie habitat historically covered 26% of the Kishwaukee River watershed; less than .01% remains as prairie.

Preserve and protect environmentally sensitive areas from development.

The region recognizes it must value what environmental resources are left and seek to preserve and enhance them for the future. The region continues to pursue a combination of regulatory, acquisition and educational policies and strategies, offering the flexibility to balance natural resource protection with development needs. Regulatory approaches are often needed to cushion these resources from incompatible surrounding land uses. These approaches typically include setbacks, buffers, or environmental overlay districts, all which should be applied in conjunction with the comprehensive planning process. Development in environmentally hazardous locations including floodplains, steep slopes, or poor soil capability classes should be explicitly avoided. Conservation design principles should be applied to new developments to accommodate growth needs with natural resource protection.

The region should continue its efforts to prioritize high quality natural habitat and resource areas for priority protection and acquisition. Resource agencies and conservation organizations across the region have demonstrated enhanced collaboration and partnership as part of the Greenways Plan initiative, which should continue to be fostered in order to maximize investments in protection and restoration efforts of regional significance.

In effort to mitigate the effects of decades of fragmentation the region should focus on reconnecting the links between habitats by expanding the network of interconnected natural areas, as first established by the Greenways Plan. Shifting greenfield development to infill development can achieve a compact growth policy that would preserve existing habitat and natural resource areas, limiting further impacts

of fragmentation.

Much of the region's sensitive lands are under private ownership. Educational programming and outreach can assist landowners with identifying and carrying out effective resource management strategies to protect these lands. Many incentives and cost-share programs are available to landowners to help implement innovative conservation practices, and should be strongly encouraged.

Maintain ecosystem balance of plants, insects, and animals while reducing the number of invasive species.

There is no calculation for what constitutes a balanced ecosystem, yet one fact is sure: more is better. Targeted restoration efforts can help the region to reestablish rare plant and animal communities. In a movement to actively promote corporate responsibility businesses across the country have found great benefit in partnering with local agencies and conservation organizations to improve their sites with native vegetation and green infrastructure solutions. The use of native plantings in residential landscaping can also have a positive effect on local biodiversity and should be strongly encouraged. The region can continue to foster improvements in the health and vitality of our ecosystem through ongoing efforts to reduce air and water pollution.

The region must continue to support ongoing efforts to eradicate non-native invasive species. The most effective way to handle invasive species is to prevent them from ever being introduced. Most invasive species are primarily introduced and spread through unintentional human activities. Transporting firewood from one location to another can spread pests such as Gypsy Moths and Emerald Ash Borer, and spread pathogens such as Dutch Elm Disease. Another common issue is the spread of aquatic "hitchhikers" between waters from the failure to clean boats, trailers and other equipment. Measures should be taken to control

the spread of established invasives in the region. These strategies will vary depending on each species being targeted. While complete eradication of established invasive species is quite difficult to accomplish, it should be the goal.

Protect area wetlands.

Wetlands play an unrivalled roll in the environment. In an effort to protect fish and wildlife habitat, enhance water quality, control stream bank erosion, restore hydrologic and ecologic functions, and maintain scenic beauty the region should seek to maintain a zero net-loss policy for area wetlands. Nature is a dynamic force, not easily replicated through human engineering. The region must strive to preserve remaining wetlands in their natural state. In situations where wetland disturbance is unavoidable great care must be taken to ensure that mitigation strategies achieve equal if not better wetland conditions. Opportunities should be sought to restore historic wetlands to add to the regions inventory. Efforts need to be made to continuously update wetland maps, as changes in climate, land use, and a whole host of other factors may alter wetland hydrology.

The region will also be tasked with ensuring the quality of the remaining wetlands. Pollution and mismanagement can have devastating consequences. Excess runoff from increasing amounts of impervious surfaces, the utilization of fertilizers and pesticides, waste dumping, overgrazing and introduction of invasive species can all threaten the function of wetlands. Watershed planning can help identify strategies for addressing water quality issues.

Increase environmental awareness.

The Rockford region should seek to ensure that all residents are aware of how their actions may affect the environment, and are provided with the information and tools necessary to reduce their impact. With the ever gaining popularity of digital technology society is losing touch with the environment around them. This is

BIODIVERSITY BEST PRACTICES

Leader in the Field

The Rockford Region has been a leader in efforts to save the best of the region's natural treasures before it is too late. In 1963 Rockford native George Fell was instrumental in creating the Illinois Nature Preserve Commission. Since this time 14 state nature preserves have been established in the two county region, in addition to the many high quality parks and preserves developed by various local agencies and conservation organizations. Perhaps most remarkable of these efforts is the restoration of the Nygren Wetlands. When this property was first acquired in 2000 a survey of the Raccoon Creek on the property yielded just one fish. Through partnerships and funding by local, state and national government agencies, a host of not-for-profit and charitable organizations and individual supporters this preserve now is a haven of biological diversity. The restored prairie is full of an ever changing assortment of colorful wildflowers spring through summer. River otters have returned to the area, along with beavers, fox, and badgers. Birdwatchers flock to the preserve overlook to observe thousands of songbirds and migratory waterfowl, including many threatened and endangered species. These are successes that demonstrate the region's commitment to protecting our natural resources for the benefit of generations to come.

especially true for children: according to the USEPA children across the nation spend approximately 90% of their time indoors; this figure increase for children of low-income backgrounds. Recently researchers have come to term this trend as "Nature Deficit Disorder," or the disconnect of humans from nature. They claim that isolation from nature may carry such ramifications as increases in attention disorders, escalating rates of childhood obesity due to a sedentary lifestyle, loss of creativity and even depression. Increased emphasis will be placed on developing programs and outreach to get children back outside to become more active, appreciate their natural surroundings and develop an environmental consciousness. Schools will be encouraged to develop an educational curriculum that focuses on environmental awareness and understanding of environmental processes so that the region might grow the next generation of environmental stewards.

Increase ecotourism and agritourism.

The Rockford region seeks to celebrate the natural treasures of the area through an effort to increase ecotourism, defined as tourism involving travel to areas of natural or ecological interest, for the purpose of observing and interacting with nature. These activities help to bolster the local economy, offer health and recreational benefits, and increase environmental awareness and connection to the land.

From the enjoying the "Class A" waters

of the Kishwaukee River to hiking one of the regions many parks and preserves, the Rockford region should work toward developing a strategic marketing effort to brand the area as an outdoor recreation destination. The region can capitalize on its close proximity to Chicago, Milwaukee and Madison to attract visitors while also seeking to increase attendance in the parks and preserves by local residents.

Children now spend greater than 90% of their time indoors, leading to a growing disconnect with the natural environment.

Likewise, the region should promote its rich agricultural heritage through the promotion of agritourism. Agritourism typically focuses on sustainable agriculture practices, which takes an ecological approach to balancing the needs for fuel, fiber, and energy with enhancing the quality of the natural resources from which the vitality of agriculture depends upon.

REGIONAL BIODIVERSITY GOALS

- Maintain ecosystem balance of plants, insects, and animals and reduce the number of invasive species.

- Preserve and protect environmentally sensitive areas from development.

- Protect area wetlands and reduce the rate of natural habitat destruction.

- Increase environmental awareness.

- Increase ecotourism and agritourism.

Goals	Biodiversity Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👪	🛒	🏛
Maintain ecosystem balance of plants, insects, and animals and reduce the number of invasive species.	Identify a set of best practices to increase the balance of the ecosystem.	👍	# Best practices	⬆	X		X		
	Encourage local nurseries to sell native plants and develop branding of local plants and species.	→	# Nurseries with programs	⬆	X		X	X	
	Determine the locally important and rare species and habitats in need of protection.	→	**59 endangered or threatened species**	→			X		
	Increase amount of habitat corridors where needed.	👍	**15.1% if acreage environmentally sensitive**	⬆		X	X		X
	Create a tree planting program with a variety of native species and locations.	👍	# Trees planted	→	X	X	X	X	X
Preserve and protect environmentally sensitive areas from development.	Use local biological information and knowledge on landscape context to determine the amount and location of land to conserve.	→	# Acres conserved	⬆			X		X
	Conserve natural areas with additional policies and programming.	👍	# Dollars spent	⬆		X	X		X
	Support ecological connectivity through continued greenways planning.	👍	# Greenways improved	⬆		X	X		X
	Use local biological information and knowledge on landscape context to determine buffer size and structure.	→	Buffer characteristics established	⬆			X	X	X
	Establish a purchase of development rights program.	→	Program established	→			X	X	X
Increase the biodiversity awareness.	Increase K-12 curriculum to create awareness of the importance of biodiversity and habitat protection.	→	# Participants	⬆	X		X		
	Publicize list of endangered and protected species in the region.	👎	**59 endangered or threatened species**	⬆	X		X		
	Create an audit and public report of the state of biodiversity within the region.	→	Audit created	→	X		X		
	Publicize Kishwaukee River as a prime example of a highly diverse ecosystem.	→	# Dollars spent	⬆			X		

Goals	Biodiversity Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👪	🛒	🏛
Protect area wetlands and reduce the rate of natural habitat destruction.	Designate, mitigate, and restore historic wetland areas and create buffers along rivers and corridors to reduce siltation.	👍	# Acres served	⬆	X	X	X	X	
	Develop education programs about the importance of streambed maintenance and keeping flood plains clear of structures and debris.	→	# Participants	→	X	X	X	X	
	Identify linear corridors along waterways and abandoned railroads to serve as habitat connections between open spaces, providing a continuous route for wildlife.	→	# Miles	→			X		X
	Preserve adequate buffer zones around "core" areas and provide links among natural areas, paying special attention to major bio-reserves.	👍	Amount in buffers	⬆			X		X
Increase ecotourism and agritourism. $244,000 in receipts for agritourism & agricultural recreation (2010).	Audit and remove barriers to market entry for ecotourism and agritourism businesses.	→	# Businesses	⬆			X	X	
	Create a regional marketing strategy for ecotourism and agritourism businesses.	→	# Dollars spent	⬆			X	X	
	Develop a rural tourism program and create branding and materials.	→	# Dollars spent	→			X	X	
	Organize a regional agritourism network.	→	# Businesses	→			X	X	

Built
Environment

Introduction

The built environment consists of facilities and structures that human beings have created within the surrounding natural environment. Office buildings, commercial stores, roadways, utility lines and housing are all components that can be categorized within the built environment. The way in which the built environment is situated and the way in which it evolves has a direct impact on the natural environment. As a result of this relationship, much thought and planning must go into the future development of the built environment so as to minimize negative impacts to and preserve the surrounding natural environment. In developing the Regional Plan for Sustainable Development for the Rockford Region, numerous elements of the built environment were examined so as to guide future investment in a manner that will make best use of existing infrastructure while providing balance between the built and natural environments.

According to studies the Rockford Region has the third worst healthy behavior and tenth worst emotional health in the nation. Vital Signs analyses point to the way the region has been built during our generation as a major contributing factor. It is estimated the footprint of the built environment has nearly quintupled since 1940 while the population has roughly doubled. While only 3% of the two counties were covered by the built environment in 1940 nearly 20% of the land is covered within the Region now. These striking statistics provide compelling evidence that sprawl is detrimental to regional well-being.

Built Environment

Those living in compact, walkable neighborhoods are shown to drive 26% fewer miles a day.

Overview

Density

Density is of primary concern when discussing how to build and expand a region's built environment. It can take the form of density of people or of buildings. Proponents of dense development tout low-cost of per-capita resource use, reduction in greenhouse gases, and lower vehicle miles traveled. Density also promotes increased interaction with neighbors and an increased likelihood of proximity to locally-owned stores (which tend to be located in smaller store footprints).

Less dense neighborhoods make walkability and transit less feasible and make it challenging for those without cars (youth, poor, and the elderly) to get to needed services. Opponents to density cite a loss of privacy, parking, and quality of life. Others cite increased crime with an increase in density; yet most often higher crime rates in denser neighborhoods are due to the age of the housing stock. In order to build densely the numbers have to add up; sales and rents must be high enough in dense areas to fund a project.

The number of housing units (or dwellings) per acre is one of the most commonly used indicators of density within a region. Within the Rockford Region there is a large concentration of density within neighborhoods with 15% poverty or higher

as shown in Figure 9. Top districts range from 5-7 dwellings per acre in downtown Rockford to the least dense districts in the rural areas with .02 dwellings per acre (1 dwelling unit per five acres).

There appears to be a strong relationship in the Region between low median household incomes and high density. Affordable housing tends to be located in older neighborhoods while large lot single-family housing is dispersed throughout the newer, less walkable neighborhoods. While there is a higher propensity for low-income households to be without a car, a significant portion of jobs in the area for low-income individuals are outside of the dense core areas. This can make it challenging to access needed services and support especially without public transit. In addition, this lack of housing choice makes it challenging for young professionals and elderly to find housing that supports lifestyles of their choice – walkable, diverse neighborhoods with a high number of amenities. The average size of lots exponentially increase outside of a communities' core.

Safety and Infrastructure

The proximity of safety services (fire, police, and emergency) within the Region to households as well as the number of households each serves is another component to examine the impact of development patterns within a region. The

Figure 17. Footprint of the Built Environment in 1940 and 2012
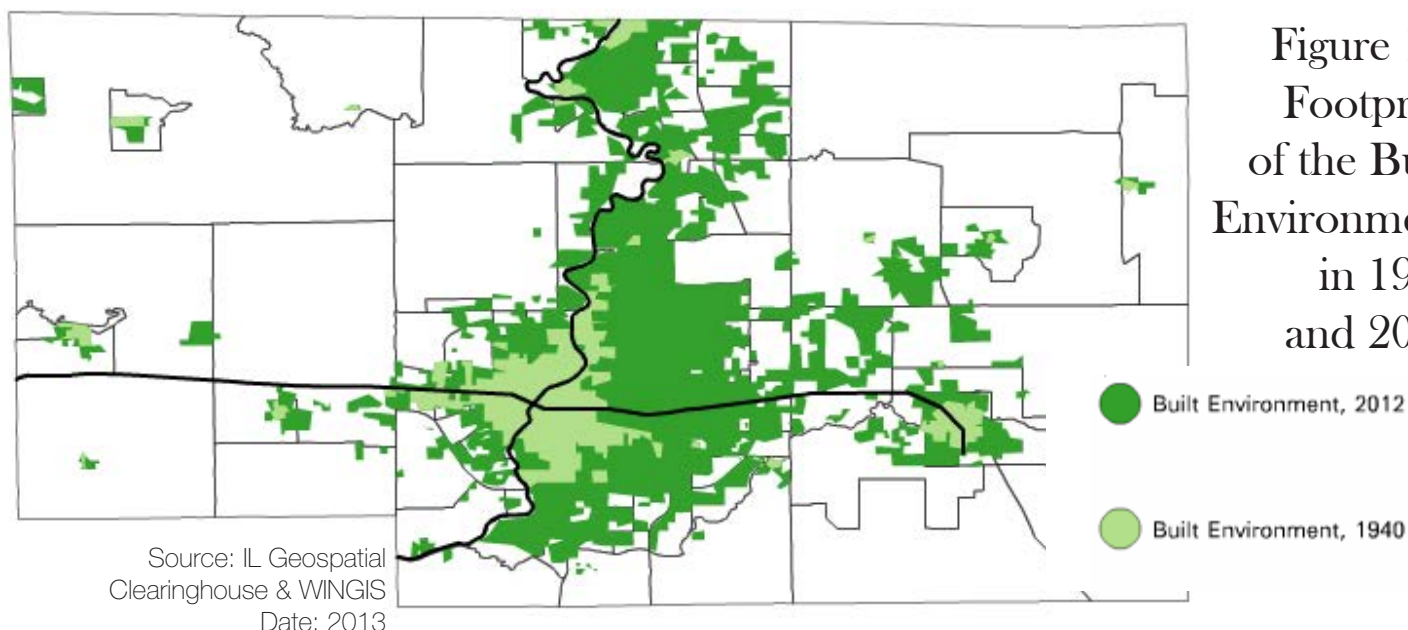
Built Environment, 2012

Built Environment, 1940

less households and the farther a safety service needs to travel to reach its destination can be directly related to the efficiency of a service for a region.

Generally, fire departments are part of a city or county government, funded through the city or county's general fund budget, derived from sales, property, and other taxes. However, within the region special taxing fire districts have been created to provide for fire protection, suppression and rescue services. It is very common for a Fire District to have a property tax and a special tax assessment on properties within its district.

Compact, safe and vibrant urban neighborhoods attract people and business.

Fire Departments and Fire Districts are the first responders to natural and unplanned disasters. There are high associated costs with preserving the readiness of such a quick response. There is a much higher density of households within the Rockford and Belvidere Fire Districts, the two districts

with much older housing stock within the two counties. In the future Vital Signs is looking to develop maps showing household density for additional services within the region.

Leadership in Energy and Environmental Design (LEED)

LEED certified buildings are intended to use resources more efficiently when compared to conventional buildings simply built to code. LEED certified buildings often provide healthier work and living environments, which contributes to higher productivity and improved employee health and comfort. The US Green Building Council states that higher initial costs of construction can be effectively mitigated by the savings incurred over time due to the lower-than-industry-standard operational costs typical of a LEED certified building. This life-cycle costing is a method for assessing the total cost of ownership, taking into account all costs of acquiring, owning and operating, and the eventual disposal of a building. Additional economic payback may come in the form of employee productivity gains incurred as a result of working in a healthier environment. Studies have suggested that an initial up-front investment of 2% extra will yield

over ten times the initial investment over the life-cycle of the building. As shown in Figure 21, there has been a handful of LEED designed and constructed buildings in the region, and some have received LEED certification.

Professional LEED Accreditation

The Green Building Certification Institute describes Professional Accreditation as follows: "LEED Professional Credentials demonstrate current knowledge of green building technologies, best practices, and the rapidly evolving LEED Rating Systems. They show differentiation in a growing and competitive industry, and they allow for varied levels of specialization. A LEED Professional Credential provides employers, policymakers, and other stakeholders with assurances of an individual's level of competence and is the mark of the most qualified, educated, and influential green building professionals in the marketplace." Credentials include the LEED Green Associate (GA) and the various types of specialized LEED Accredited Professionals (AP). As more local government incorporate LEED principles into their local codes, the higher the demand for certification of industry professionals.
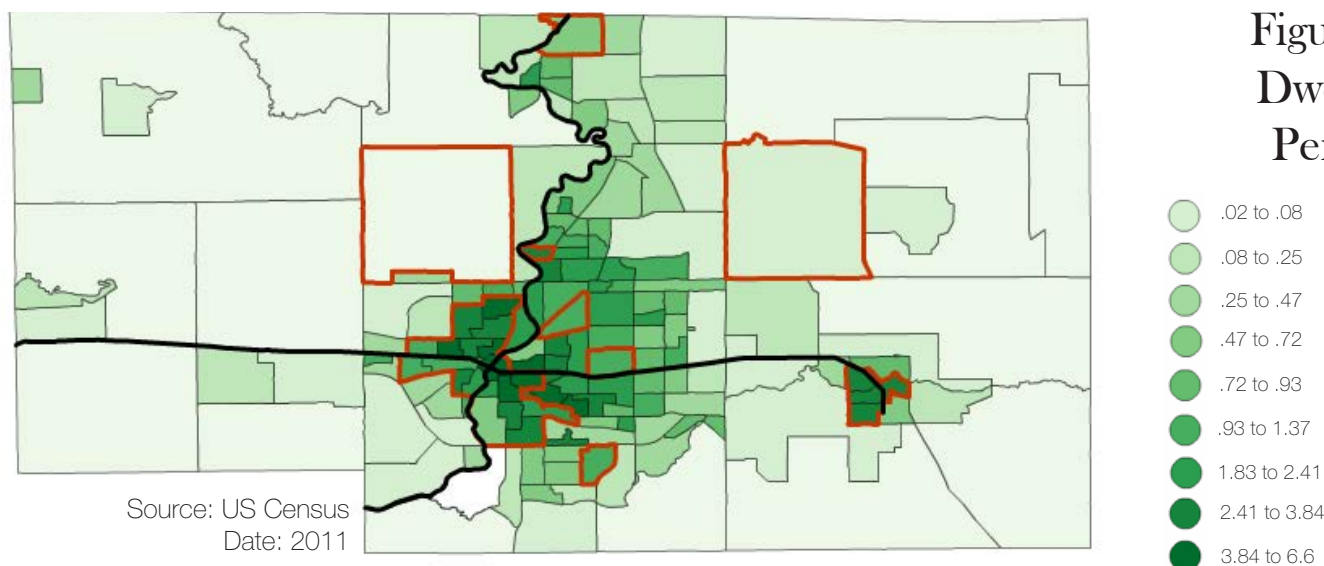
LEED for Neighborhood Development (LEED-ND)

LEED for Neighborhood Development integrates the principles of smart growth, urbanism and green building into the first national system for neighborhood design. Whole neighborhoods, portions of neighborhoods, multiple neighborhoods—there is no minimum or maximum size for a LEED for Neighborhood Development project. The character of a neighborhood, including its streets, homes, workplaces, shops and public spaces, affects quality of life and can encourage open space and access to parks.

Thoughtful neighborhood planning can limit the need for automobiles and greenhouse gas emissions. Mixed-use development and pedestrian-friendly streets encourage walking, bicycling and public transportation. Green buildings and infrastructure also lessen negative consequences for water resources, air quality and natural resource consumption.

LEED for Homes

LEED for Homes promotes the design and construction of high-performance homes – energy efficient, resource efficient, and healthy for occupants. A home that achieves LEED certification has been designed to maximize fresh air indoors, minimizing exposure to airborne toxins and pollutants. It also has the potential to use 20-30% less energy—and some up to 60% less— than a home built to code, resulting in lower utility bills every month.

Deterioration of the Regions' Bridges

The FHWA Annually updates the National Bridge Inventory (NBI) database of the bridges longer than 20ft (6.1m) on public traffic roads based on mandatory biennial inspection reports submitted by all state departments of transportation and local agencies. The FHWA uses the NBI data to submit a biennial report on the condition of the nation's bridges to Congress and identify bridges to rehabilitate or replace with federal aid under the Highway Bridge Replacement and Rehabilitation Program. While the NBI database contains individual bridge condition data for more than 30 years, it is not designed to assess bridge performance over time nor does it contain specific bridge deterioration information. The program resulting from the NBI is intended to detect structural and functional deficiencies to minimize

the probability of structural failure and to improve bridge traffic safety. The Illinois Department of Transportation, IDOT, maintains the regions computerized bridge inventory system designated as the Illinois Structure Information System (ISIS). The ISIS provides the base data to determine Illinois funding allocation from the Federal Highway Bridge Replacement and Rehabilitation Program (HBRRP).

The deterioration of bridges and other vital infrastructure necessary for travel within the region is a pressing issue. It is one that is currently being felt around the nation and is not a unique occurrence to Rockford and the surrounding areas. While this issue effects everyone it is felt the hardest by the nation's trucking companies, industrial plants, shipping and receiving hubs and the nation's dependence on just-in-time transportation systems, JIT. Another vital service that is overlooked is that of large emergency vehicles. When a bridge has deteriorated past a certain point it is deemed unsafe for fire trucks, tow trucks and other large emergency response vehicles but will still be open for normal traffic operations. In these cases emergency vehicles will have to take an alternate route to get to the destination waiting important time that could mean the life

Figure 19.
Average
Lot Size
in Acres

Source: WINGIS
Date: 2013

⬤	.144 to .203
⬤	.203 to .239
⬤	.239 to .356
⬤	.356 to .482
⬤	.482 to .564
⬤	.564 to .741
⬤	.741 to 1.075
⬤	1.075 to 1.659
⬤	1.659 to 3.173
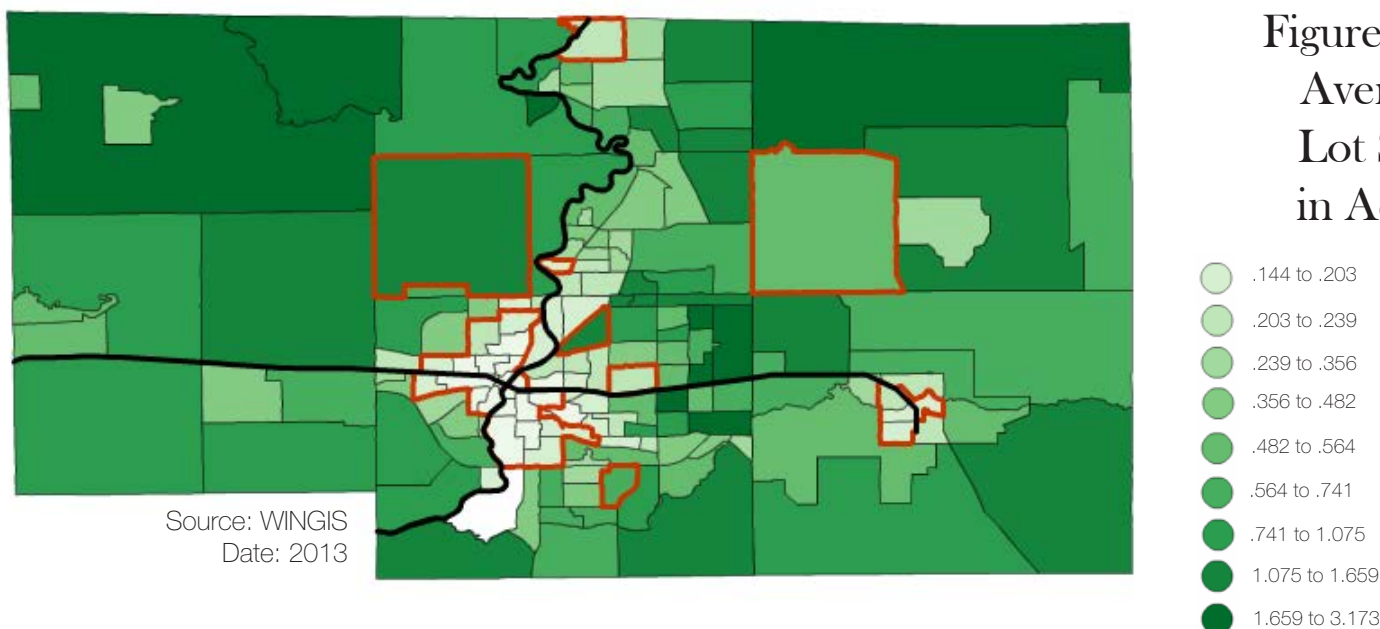
or death of someone at an accident or fire scene.

Infrastructure Per Capita

With the built environment growing from only 3% of the land in the two counties in 1940 to nearly 20% in 2012, the choices made about development patterns is critical for the region. One way to measure the impact of the built environment on the region is examining the lineal feet of infrastructure built per capita within each district. Simply put, more infrastructure costs more to build and maintain. And, public safety response times can be lengthy in districts with low densities.

In the Rockford Region, with the exception of the South Main Street corridor, there is a much lower ratio of roads per capita in the older areas of the communities (ranging from 17 to 40 feet per capita). This may be explained by the largely industrial properties in this area requiring additional roadway. Suburban and rural districts have anywhere from 57 to 541 feet per capita.

On the website www.ourvitalsigns. com there are additional visualizations examining the relationship between feet of infrastructure built per capita.

Vision

Decrease blighted or underutilized properties in impacted geographies.

Blighted (or distressed) and underutilized properties are a concern on a regional level. Properties types whether residential, commercial or industrial can fall into a state of disrepair if they are not properly maintained. Blighted properties can have several repercussions to the surrounding area. Results in areas with higher concentrations of blighted or vacant properties can include decreased property values, increased crime (actual or perceived), and decreased local municipal tax base, etc. Methods that can be implemented to mitigate and/ or prevent properties from becoming blighted include code enforcement, encouraging and supporting large scale redevelopment in distressed geographies, removal of blighted properties that pose public safety risks, providing incentives through such mechanisms as forgivable loans and land banking.

Increase density and concentrating on infill development between raw land and vacant and abandoned property.

Smart Growth is one of the guiding principles on which RMAP bases its land use policies. This method analyzes specific features within the community and moves towards logical outcomes based upon systems capacity, environmental impact, job creation, livability, density, etc. All of these factors play a role in determining the best scenario to follow in the creation of the built environment. Smart Growth also focuses on the interconnectivity of residential and commercial uses, the composition of developments, and the functionality in terms of efficiency of the built environment. Many mantras in the planning world have fallen under Smart Growth principles such as livability, walkability, and sustainability practices. "Smart growth" has a number of definitions, but generally incorporates a range of development and conservation strategies that help protect the natural environment and make communities more attractive, economically stronger and more socially equitable. A smart growth strategy

Figure 20.
Structurally
Deficient
Bridges

Source: FHWA
Date: 2011

SufficiencyRating

0 to < 50
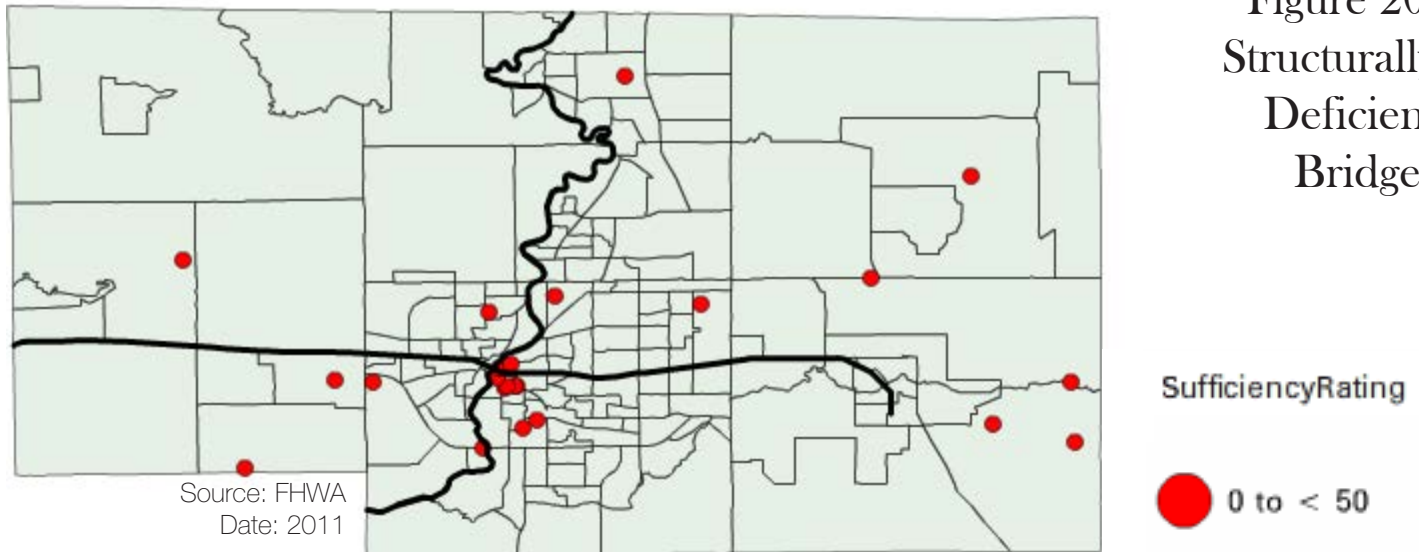
focuses on the long-term implications of growth and development decisions, and how it may affect communities at various geographic and time scales. Smart growth has become a label for traditional comprehensive planning activities that seek to integrate core planning elements such as land use and transportation with emerging ecological and social concerns with the intent to create an integrated policy structure for approaching growth and change in communities over time.

For example, smart growth incorporates the concept of infill development which is the process of placing new development / redevelopment on land served by existing infrastructure. This process lessens the need for "greenfield" development and additionally makes use of existing infrastructure.

The most widely used tool for achieving smart growth is the local zoning law. Through zoning, new development can be restricted to specific areas and additional density incentives can be offered for brownfield & greyfield land. Zoning can also be used to require set-asides for parks and other community amenities. The result of such policy initiatives can be more open space, cleaner air, less congestion and a generally more desirable community.

Compact, safe and vibrant urban neighborhoods attract people and business. Creating such neighborhoods is a critical element of reducing urban sprawl, protecting the region's air quality and enhancing citizens' safety and general quality of life. Success might include redevelopment strategies and zoning policies that channel housing and job growth into urban centers and neighborhood business districts. The goal is to create compact, walkable, bicycle and transit-friendly hubs. This sometimes requires local governmental bodies to implement code changes that allow increased height and density, plus regulations that eliminate minimum parking requirements for new development and establish a maximum number of allowed parking spaces. The result can be urban environments that actually encourage people to live healthier active lifestyles.

Increasing the livability of the communities is critically important to the plan's goals. Moderately dense development that focuses on reinvestment can have significant positive impacts in lowering the costs of infrastructure, reducing congestion, supporting alternative transportation modes, improving housing affordability and minimizing environmental impacts. Supportive land use is also critically important to support the expansion of public transit, another key element of this plan for sustainable development.

Adopt conservation design principles for the development and redevelopment of commercial and residential property to include natural landscaping.

The following explanation of definitions and principles related to conservation design comes directly from work developed by the Chicago Metropolitan Agency for Planning (CMAP) document Conservation Design Resource Manual (2003). This document provides a solid foundation and explanation of elements that are necessary to implement conservation design principles into planning and development process:

Principle 1 -- Site Design and Lot Size

Lot design standards, especially zoning

Figure 21.
LEED
Certified
Buildings
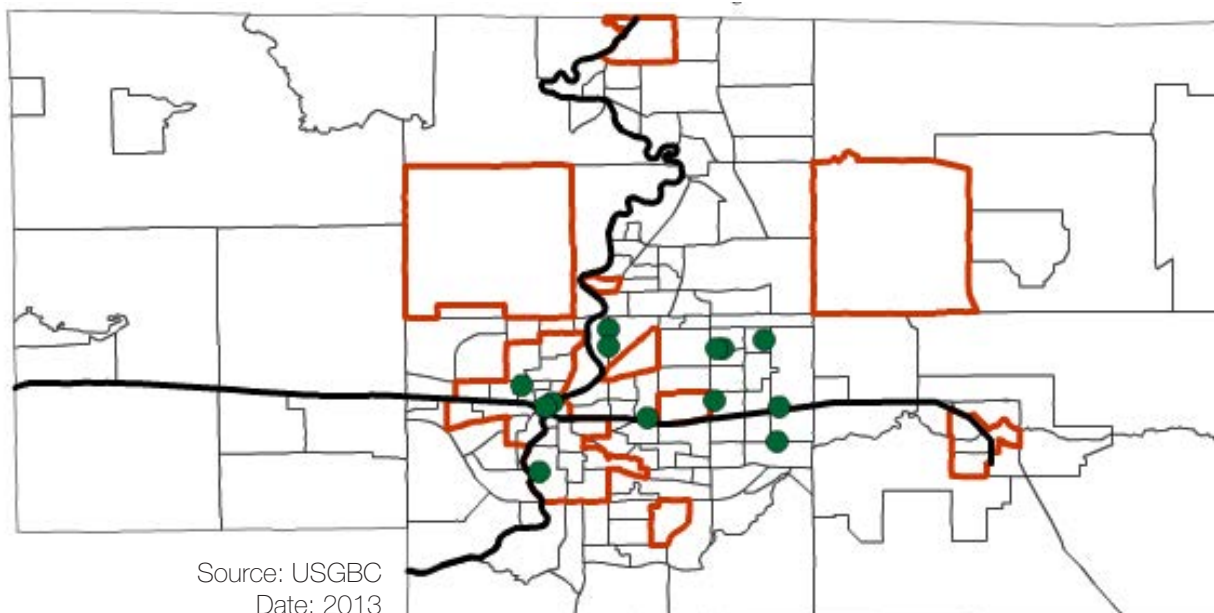
Source: USGBC
Date: 2013

and subdivision regulations pertaining to residential subdivisions, often limit site design options. This often leads to developments in which all land is divided up into building lots and streets, with natural areas and open space limited to undevelopable land and wetlands. In particular, minimum lot size requirements—often mandated to insure homeowners maximum private front, back, and side yards—tend to minimize the ability to conserve, enhance, or even recover natural areas within a site.

By allowing flexible lot design standards that are density neutral, such as implementing standards for the overall density on a site without minimum lot size requirements, it is possible to meet the concerns of developers while conserving natural areas and systems. Through this strategy, an equivalent number of residences can be clustered, yielding an added benefit to developers by reducing the development costs of the site's infrastructure (roads, sewer, streetlights, water, etc.), as well as the long-term infrastructure maintenance costs carried by the public sector. Site and lot design in more urban environments can be less flexible in order to incorporate existing infrastructure.

Creating compact neighborhoods is a critical element of reducing urban sprawl, protecting the region's air quality, and enhancing citizens' safety and general quality of life.

Perhaps the key benefit of flexible lot design standards is its facilitation of designs that are sensitive to the unique natural features and systems of each development site. Randall Arendt, a national expert in conservation design, outlines the following four step process for arranging the development site

1. Identify all potential conservation areas, taking into consideration all inherently unbuildable areas (floodplains, wetlands, steep slopes), along with buildable areas that are environmentally sensitive (stream and wetland buffer areas, woodlands) or historically and culturally significant.

2. Locate the house (or other building) sites, taking care to maximize views and access to natural areas and other amenities (typically the developers will ensure that this is done, in order to maximize the value of each residence).

3. Design the street and trail systems, maximizing the efficiency of the street system and ensuring easy access to walkways and trail systems within the development.

4. Draw in the lot lines.

Principle 2 -- Protection and Management of Natural Areas

Planning for open space and natural resource protection through conservation design must include short- and long-term management. There are four approaches to managing natural areas: (1) The natural area may be dedicated to the municipality or county, or another public agency such

BUILT ENVIRONMENT BEST PRACTICES

TOD Application

Currently there are not any high density clusters of development to support specific transit hubs in the Rockford Region. Planning efforts are underway to develop the South Main Rail Yards into Rockford's first TOD location. This would take advantage of the future downtown stop of proposed AMTRAK service. The vision for the yards is to create a development structure based around the rail line and incorporates:

- Multi-story structures ranging from 3 to 10 stories in height
- Mixed-uses of commercial office space, retail, open space, and most importantly residential dwelling units
- A mixture of market rate and below-market rate dwelling units to add a diversity of income levels
- Units that are available for rent and units available for purchase
- Integration of bicycle, pedestrian, bus, and automobile access with the emphasis being on walkability due to the sites connection to downtown
- Connection to shared-use paths along the river
- A mix of architecturally significant aesthetics that both tie into a historically significant area and modern structures

In proceeding with planning initiatives and capital improvements projects, the region must consider walkability as new development is created and existing infrastructure is enhanced (i.e. complete streets methodologies, etc.) . This will require that local comprehensive plans include and stress the importance of elements such as mixed-used developments, TOD and mandatory sidewalk requirements. Through the inclusion of these elements, future developments will mitigate shortcomings of past development patterns.

as a park district, forest preserve, or conservation district; (2) A homeowners association may take possession of the natural area; (3) A conservation easement can be granted to the government (local, state or federal) or to a non-profit organization whose primary purpose is in assisting with conservation development and design; or (4) The natural area may remain in the private ownership of the developer or another entity.

Principle 3 -- Reduction of Impervious Surface

The reduction of impervious surfaces is a principle of conservation design that yields multiple benefits when implemented. New development typically results in the conversion of natural land to impervious surface cover. Common impervious surfaces include sidewalks, parking lots, building footprints, roads, swimming pools, roof tops, garages, and patios. All of these surfaces can be designed or retrofitted to redirect stormwater runoff away from the sewers opting for absorption directly into the ground or into a holding mechanism (natural or man-made). By keeping excessive stormwater runoff out of the sewer system and closer to the point of origin, water quality is increased because the stormwater accumulates fewer pollutants on its shortened path. Additional benefits include recharged soils, reduced flooding and reduced sewer overuse and related maintenance costs.

Reducing impervious surface areas also has a substantial impact on the natural landscape. Increased impervious cover and the subsequent increased stormwater runoff can negatively impact stream functions, cause stream bank erosion, degrade stream habitats, increase pollutant loads in streams, deplete the surrounding wetlands and prairies, and lower the diversity of native fish species, insects, and fresh water organisms.

The design of new development and its amenities should consider the reduction of impervious cover in the early stages of project conception. For example, interior roads within suburban developments can be narrowed and curbs reduced. Setbacks can also be reduced, and houses clustered, shortening roads and driveways, decreasing the amount of concrete

poured and the cost to the developer for supplies and construction time. This also decreases the amount of water infrastructure needed to carry the stormwater runoff to the sewers. A particularly effective—and far-reaching—means of reducing impervious surfaces is for municipalities to design flexible ordinances that allow for the opportunity to utilize these conservation design techniques.

Green roofs, landscaped parking lots, and permeable pavement/pavers are a few practices that can also help reduce impervious cover and runoff. These are strategies especially beneficial to urban environments, where impervious surface is denser and less green space is available. It should be noted that these practices should take into consideration the accessibility (ex: sidewalks) and topography of a site and maybe not be appropriate for all situations.

Moderately dense development focusing on reinvestment can lower costs of infrastructure, reduce congestion, support alternative transportation modes, improve housing affordability, and minimize environmental impacts.

Principle 4 -- Sustainable Stormwater Management Techniques

Seeing as so much of conservation design is focused on improving the way water relates to a site, implementing sustainable stormwater management techniques is the next logical principle to be applied in conservation design. The benefits include decreased flooding, improved water quality, decreased erosion and sedimentation, and improved groundwater recharge.

Sustainable stormwater management techniques can be implemented in

Figure 22.
Linear Feet
of Roads

17.3 to < 28.7
28.7 to < 32.7
32.7 to < 39.5
39.5 to < 47.5
47.5 to < 57
57 to < 66.6
66.6 to < 80.4
80.4 to < 117.4
117.4 to < 287
287 to 541.8

Source: RMAP,
WINGIS, and US Census
Date: 2013
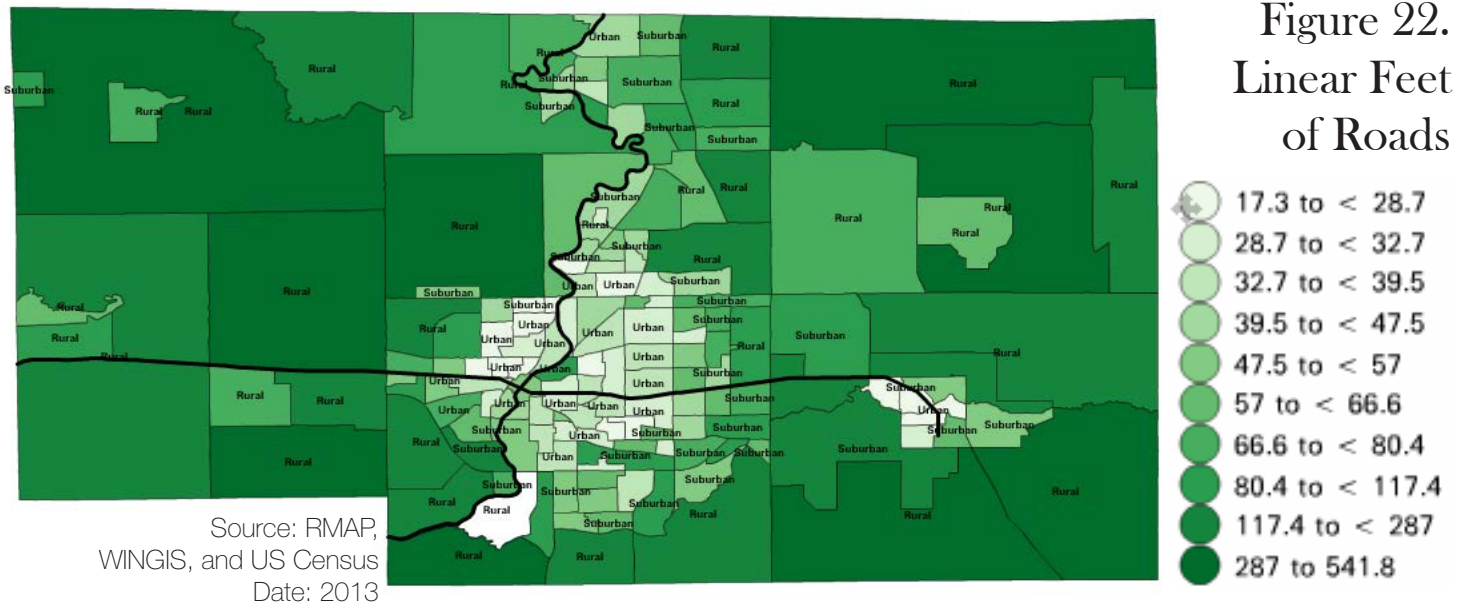
a variety of ways, depending on the characteristics of land as well as its surrounding environment and current ordinances.

Best Management Practices (BMPs) defined as "structural, vegetative, or managerial approaches designed to reduce stormwater runoff volume, maximize natural groundwater recharge, and treat, prevent, or reduce degradation of water quality due to stormwater runoff," are often used to return water directly to the ground thus bypassing the sewer system. Biofilteration, filter strips, swales, infiltration trenches, green roofs, rain gardens, natural landscaping, naturalized detention basins, and permeable pavement/pavers are among the most common BMPs.

Increase quality of built infrastructure and buildings.

Leadership in Environmental Education and Design (LEED) was started as a consensus based organization comprised of multiple professions within the building trade and developed by the U.S. Green Building Council (USGBC). Its main purpose is as a rating system for buildings that incorporate eco-friendly techniques. There are six categories in which a particular building design will be judged: sustainable site, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation and design process. Within these categories several specific metrics have been formulated to evaluate the use of green technologies and practices when designing and constructing a building. Different LEED versions exist depending upon "prerequisites" for the different types of construction proposed. If enough points in all of the categories are tallied, four different levels of LEED Certification could potentially be met: bronze, silver, gold and platinum.

Establish a coordinated redevelopment plan for neighborhoods to maximize walkability.

Walk Score is a national index that was developed to help evaluate how walkable a place is to live or work in. Measuring walkability for a region is extremely important as not everyone has access or desires to have a car. Many prefer a quality of life without vehicle ownership. In addition, walking is a critical component of health -- according to the 2012 Gallup-Healthways Index of Well-being the Rockford Region ranks among the bottom of healthy behaviors in the nation.

The national Walk Score is a number between 0 and 100 and measures the walkability of any address. However, because very few communities have a digital map of sidewalks or parcels, this national index can be flawed at times.

As a result, the Rockford Metropolitan Agency for Planning partnered with the Winnebago County GIS (WinGIS) Department to develop a more accurate "home-grown" Walk Score for the Rockford Region. The goal of this walkability analysis was to come up with a way to score the Vital Signs "Districts" within Winnebago and Boone counties on how easy or difficult it is to walk to amenities. There were 9 amenities taken into consideration: grocery stores, restaurants, retail, coffee shops, banks, parks, schools, book stores, and entertainment.

Step 1 was to calculate the distance between each parcel and each of these amenities. Steps 2 through 4 included

BUILT ENVIRONMENT BEST PRACTICES

Conservation Design

Conservation design is a design system that takes into account the natural landscape and ecology of a development site and facilitates development while maintaining the most valuable natural features and functions of the site. Conservation design includes a collection of site design principles and practices that can be combined to create environmentally sound development.

The main principles for conservation design are:

- Flexibility in site design and lot size
- Thoughtful protection and management of natural areas
- Reduction of impervious surface areas
- Sustainable stormwater management

an analysis of the amount of sidewalk within each district, number of major road intersections per district, and finally average size of the commercials parcels within a district. Sidewalks were a major factor taken into consideration; this factor affected the final score more than any other because for walking purposes it is the most critical. Major intersections can inhibit the walkability of an area. Each district was given a penalty depending on the number of pedestrian non-friendly intersections. The last factor was the size of the commercial parcels within the district. The size of the parcel could discourage walking if the parcel is requires long walks to traverse its boundaries.

As seen on the final Rockford Region Walk Score in Figure 56, there is a high concentration of walkable neighborhoods in south central and north central Rockford. Several other districts in Belvidere, Loves Park and east Rockford also score fairly high.

According to FHWA, while cars are often the most popular form of transportation, people will use other transportation options if they are available (i.e. walking, bicycle, public transit, etc.). Individuals are receptive to a walking distance of ¼ mile to reach destinations or services. Those living in compact neighborhoods where they can walk and bike to nearby destinations are shown to drive 26% fewer miles per day than those living in less compact areas. Attentive neighborhood planning can limit the need for automobiles and reduce greenhouse gas emissions. Mixed-use development and pedestrian-friendly streets encourage walking, bicycling and public transportation. Green buildings and infrastructure also lessen negative consequences for water resources, air quality and natural resource consumption.

Resources

- NIPC / CMAP Conservation Design Resource Manual, March 2003 http://www.cmap.illinois.gov/about/2040/supporting-materials/process-archive/strategy-papers/conservation-design/introduction
- CMAP Go to 2040 http://www.cmap.illinois.gov/about/2040
- Federal Highway Administration Livability Initiative http://www.fhwa.dot.gov/livability/
- RMAP 2040 Long Range Transportation Plan http://www.rmapil.org

REGIONAL BUILT ENVIRONMENT GOALS

- Decrease blighted or underutilized properties in impacted geographies.
- Increase density and concentrating on infill development between raw land and vacant and abandoned property.
- Adopt conservation design principles for the development and redevelopment of commercial and residential property to include natural landscaping.
- Increase quality of built infrastructure and buildings.
- Establish a coordinated redevelopment plan for neighborhoods to maximize walkability.

Goals	Built Environment Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase density and concentrating on balanced infill development between raw land and vacant/abandoned property.	Build on the progress made in the Rockford Riverwalk Vision Plan by engaging the private sector more closely in riverfront development efforts.	👍	*# Private dollars invested*	↑ (dashed)			X	X	X
	Review and update existing zoning ordinances and facility planning areas based on building type, not use, to identify zones where density can be increased.	→	*# Codes updated*	↑			X		X
	Develop a parking management strategy to decrease the number of surface parking lots with street frontage within core commercial districts.	→	*# Surface lot spots*	↑		X	X	X	X
	Increase amount of zero-setback buildings within commercial core districts.	👎	*# Units setback*	↑			X	X	X
	Offer financial incentives, such as density bonuses, to encourage developers of mixed-use and center-oriented projects to increase floor area ratio.	→	*# Dollars incentivized*	→ (dashed)			X		X
Adopt conservation design principles for the development and redevelopment of commercial and residential property to include natural landscaping.	Increase natural landscaping to reduce stormwater runoff and increase natural habitat.	👍	*# Landscape improvements*	↑ (dashed)	X		X	X	X
	Create a local profile of native plants and conservation design-friendly plants and develop a list of best available practices to educate home and business property owners.	→	*Profile created*	→			X		
	Increase bioswales to reduce stormwater runoff and increase natural habitat.	👍	*# Bioswales*	↑ (dashed)			X	X	X
	Educate local staff and elected officials and property owners about conservation design principals and the benefits to the region.	→	*# Educated*	→			X	X	X
	Include conservation requirements during the plat approval process to retain or restore native topsoil on new developments.	→	*# Plats including*	↑			X	X	X
Increase quality of built infrastructure and buildings.	Create a regional plan to reinvest in built structures through public-private investments and also leveraging local funds in federal and state grant programs.	→	*Plan created*	→			X		X
	Develop a regional audit of public infrastructure with a poor rating.	→	*Audit conducted*	→			X		X
	Increase amount of LEED-certified or qualified buildings.	👍	*# Certified*	↑ (dashed)				X	X
	Create awareness among elected officials, staff, and property owners about state of disrepair of key public infrastructure sites.	👍	*# Educated*	↑			X	X	X
	Mitigate the urban heat island effect by increasing amount of green roofs, sustainable roof coverings, and foliage.	👎	*# Green roofs*	↑	X		X	X	X
	Privatize public infrastructure to encourage renovation or rebuilding.	→	*# Infrastructure privatized*	↑ (dashed)			X	X	X

Goals	Built Environment Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Decrease blighted or underutilized properties in impacted geographies. *Concentration of properties with more than 10% residential vacancy is located just south of the downtown E. State street area (2nd Qtr. 2013)*	Increase demolition of blighted properties.	👍	# Units demoed	↑				X	X
	Promote infill development by establishing a qualified sites program and consolidate smaller parcels for development where possible.	→	# Qualified sites	↑			X		X
	Increase capacity of small businesses and small- to mid-sized developers to conduct brownfield cleanup and redevelopment, including additional grant writing.	👍	# Brownfields cleaned	↑		X	X		X
	Increase investment by commercial and industrial building owners by promoting public and private financing options for redevelopment and renovation.	→	# Dollars invested	↑		X	X		X
	Assess and revise regulations preventing redevelopment of commercial and industrial properties.	👎	# Regulations revised	↑		X	X		X
	Leverage public investments along the Rock and Kishwaukee Rivers to generate private sector-driven urban revitalization.	👍	# Dollars invested	↑		X	X		X
	Establish additional neighborhood associations to prioritize the rehab of blighted properties.	→	# Neighborhood Associations	→		X	X		X
	Identify vacant or under-utilized government-owned properties in downtown areas able to attract additional economic activity and private investment and support the growth.	👎	# Properties	→			X	X	X
	Bring tax-delinquent vacant parcels under control.	👍	# Properties	↑			X	X	X
Establish a coordinated redevelopment plan for neighborhoods to maximize walkability.	Increase amount of bars, restaurants, recreational activities, and outdoor-oriented businesses through zoning, programming, and small business growth practices.	👍	# Establishments	↑			X	X	X
	Create and leverage public-private partnerships to increase walkability.	👍	Walkability scores	↑	X	X	X		X
	Create a sidewalk monitoring program, increase walkability signage, and increase amount of pedestrian amenities (ie crosswalk demarcation).	→	Walkability scores	→		X	X		X
	Convert non-residential to residential use to create mixed-use in commercial core districts.	👍	# Units converted	↑	X	X	X	X	X
	Identify specific opportunities to renovate buildings for large-scale employers to locate in core central business districts.	👎	# Sq ft renovated	↑			X	X	X

Civic
Vitality

Introduction

Civic vitality in the Rockford Region is about how individual relationships, networks, groups, institutions, and organizations are connected and working to improve the community. This means how well folks trust each other, work on initiatives collaboratively, and are well-connected. Networks, organizations, institutions, and gathering places involve individuals in community leadership working to achieve a quality of life that keeps talent within the region, connects people and businesses to resources they need, and gives a forum for governments to interact with those that elected them. Communities with high civic participation are able to better address issues as they arise. But consensus building is difficult is the community faces the "have's" and "have-nots". The unfortunate reality is that residents that are economically challenged often become excluded.

Changing demographics are altering the future social and economic base for years to come. Loss of young adults, an aging population, and a diversifying population are some of the trends being measured by Vital Signs. Residents of neighborhoods in poverty do not appear to be connected through place or through relationships to those with resources and connections to help them achieve greater social and economic mobility. Strain on family units seem to be quite prevalent in the neighborhoods experiencing high levels of concentrated poverty. Traditional community participation, such as voting, is also lower. Work to raise community participation benefits the sustainability metrics of the region that are linked with Civic Vitality.

Civic Vitality

When neighborhood poverty reaches a certain threshold (generally accepted as 10%-20%) a tipping point is reached and systems of neighborhood self-sufficiency break down.

Overview

The Importance of Equity

Examining the equity of the region helps preserve and grow the people, culture, relationships, and safety of the community. Equity often circles around the discussion of equality. Since the Civil Rights Movement of the 1960s and 1970s, there has been a common emphasis on equal opportunity for all, regardless of race, ethnicity or gender.

The discussion of equity is a balance between opportunity and the dispersion of income. The hope for equity points to equal access to the resources needed to be successful in life. There is a wide-body of literature stating that concentrated and generational poverty actually hinders the growth of income and wealth for the entire region. So it is in everyone's personal best interest to work to achieve equity.

Challenges Brought About By Concentrated Poverty

When concentrations of poverty reach a certain threshold within a neighborhood, generally accepted as 10%-20%, a tipping point is reached. Those living in poverty have a very difficult time. One of the greatest challenges to equity within a community is achieving a reduction of poverty while having a larger distribution of income and sustaining high economic growth. Regions with concentrated poverty find it difficult to allocate resources across industries and occupations that create labor specialization. These regions have difficulty with human capital accumulation that promotes entrepreneurship, risk taking, and innovation. Economically speaking, neighborhoods of concentrated poverty have a more difficult time

The average age in Winnebago County has increased from 27 years old in 1970 to 38 years old in 2010. The average age in Boone County increased from 26 years old to 37 years old during the same time period.

Figure 23. Self-Sufficiency Wages for a One-Parent Family
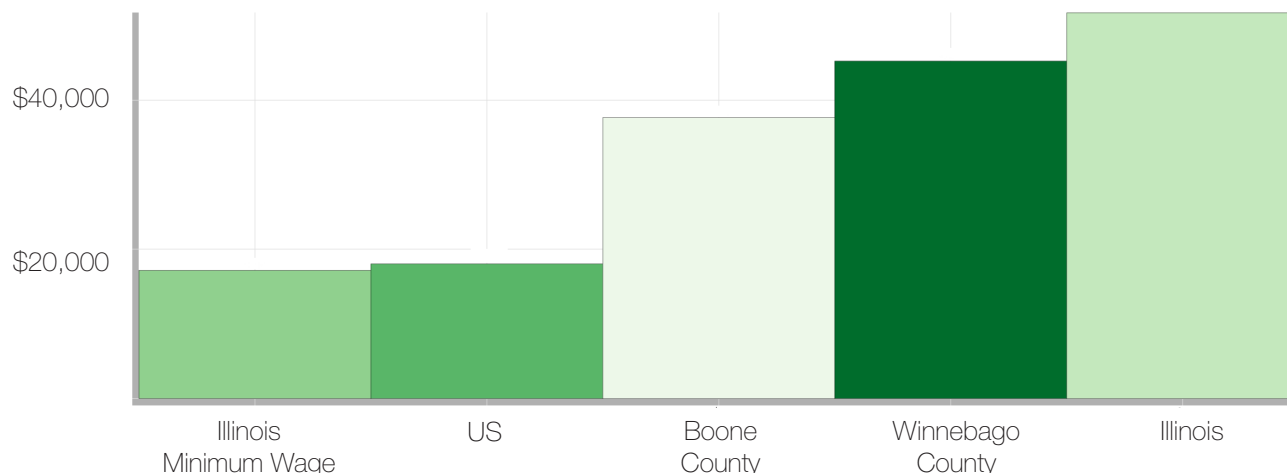
attracting and retaining business because of issues related to property maintenance, crime rates, abundant parking, and access to regional transit systems.

Those in poverty often experience:

- **Economic exclusion** - Exclusion from the formal labor market often results with informal labor market jobs (cash only or off the books employment). Those in poverty can remain outside the connections of stable, better-paying jobs often found in the formal employment network.
- **Social exclusion** – Living in poverty makes traditional social contact difficult and reduces the ability to afford to fully participate in society. This can occur because individuals in poverty don't have many resources.
- **Spatial exclusion** – Concentrated poverty is occurring in aging urban core neighborhoods where resources and middle- and upper class residents have left for more affluent areas. Those in poverty may experience hardship due to social and physical immobility.
- **Institutional exclusion**

– Those in concentrated poverty experience exclusion from key resources and institutions for life success (i.e. quality schools). Instead those living in poverty are forced to navigate a different set of institutions centered on social services. Capital is often not available for business starts, entrepreneurship, and overall economic growth.

HUD developed a Poverty Index to determine how well local residents perform against others in the nation. Currently, the Rockford Region scores in the 53rd percentile nationally for all of its residents. This means nearly half of all communities in the country are faring better with poverty challenges; the index is calculated from the family poverty rate and percent of households with public assistance. However, residents in poverty score only in the 35th percentile among communities nationally, and residents in public housing only score in the 22nd percentile. In 2012, the 15.9% of residents fell below the poverty line.

There are large concentrations of African Americans in the urban core areas and the immediate vicinity west of downtown Rockford. 47% of African Americans in the City

of Rockford were in poverty in 2011. 45% of the entire region's African American population lived in poverty. 43% of Hispanics in the City of Rockford were in poverty, in Boone County and Winnebago County the amount was 10% and 37% respectively. The region was at 32% in 2011. For Caucasians population in poverty was only 14% in the City of Rockford, 10% in Boone County, 11% in Winnebago County, and 11% overall in the region.

Another indicator of the impact that economic equity has on civic well-being of a region is the distribution of households in poverty with children. 40% of children within Rockford were at or below poverty – nearly half. The child poverty rate for Winnebago County in 2010 was 29.1% -- a rise of 12.9% in the last decade. Of the 156 districts in the region 36 had no households below poverty while in 17 districts more than 30% of the households were in poverty. Of the households in poverty the percent with children ranged from 64% to 95%. Concentrated poverty is a regional issue as there was a 208% increase in poverty from 2000 to 2010.

When poverty levels remain high
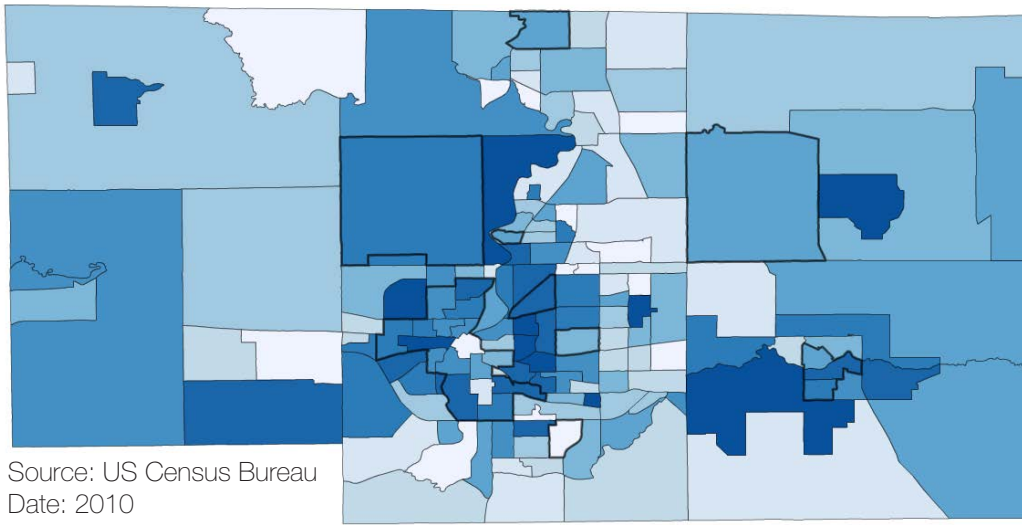
Figure 24. Percent Decrease in Young Adults

Source: US Census Bureau
Date: 2010

- -42% to -8.9%
- -8.9% to -7.6%
- -7.6% to -6.3%
- -6.3% to -5.6%
- -5.6% to -4.9%
- -4.9% to -3.7%
- -3.7% to -2.9%
- -2.9% to -2%
- -2% to .2%
- .2% to 10.1%

over the long-term there is lower per capita personal growth and overall community wealth (gross metro product or GMP). An upward trend of the size of the middle class often results in increased long-run economic growth because there is more human capital (i.e. education), infrastructure accumulation, and social capital. This is especially true if there is sufficient income mobility. Personal income rises and overall community wealth improves.

Places for Civic Participation

Socializing is a vital component to the well-being of a region. Having quality spaces and places empowering residents to socially connect with one another is an additional important component of civic well-being. Examples of third places are cafes, restaurants, the Rockford City Market, busy bus stops, and other impromptu gathering spaces. The number of third places (informal community gathering spaces and places) residents can easily access have shown to increase community participation and engagement. The more engaged residents are, the

more support there is for personal, neighborhood, and regional challenges. In the last decade there has been a loss of third places within the Region as a whole, especially within the East side of Rockford and in Belvidere.

The Vision

Increase number of residents achieving the standard of self-sufficiency, especially among youth.

45% of African Americans in were in poverty in 2011. 32% of Hispanics were in poverty. Only 11% of Whites were in poverty the same year.

Self-sufficiency is an important component of measuring vitality. At the aggregate level, the personal income earned by residents determines the level of economic activity that can be sustained. This includes the potential to attract and retain business as well as the ability to fund public infrastructure. At the individual or household level the issue is more related to the distribution of personal income. As the percentage of the population receiving public services increases, the percentage of the population contributing to the tax base that funds public services decreases. Ultimately, more inequity in the distribution of income leads to increased need for public services and strains regional growth. Collectively, equity at the aggregate level of income (compared to other regions) and the distribution of personal income within a region are fundamental to a region's growth and sustainability.

Recessionary times create a disproportionate impact on lower-income families because of rising unemployment, a reduction in work hours, and the stagnation of family incomes. In addition to regional wealth being lower than comparison

regions, income for minority groups is consistently lower for Boone and Winnebago County compared to Illinois or the U.S. For Boone County, the biggest discrepancy between the statewide per capita income is for African Americans at 80% of the state average. The comparable figure for whites is 86%. Winnebago County has a similar pattern with per capita income for African American at 71% of the state average and 80% for whites. In the region as a whole per capita income for whites is nearly triple that of African Americans and double that of Hispanics ($27k, $10k, and $13k respectively). Median earnings for the same groups were $30k (Whites), $16.5k (African Americans), and $19.5k (Hispanics) in 2011.

Vital Signs recommends setting a higher bar by establishing a "Self-Sufficiency Standard" for the region rather than a "Poverty Standard". A Self-Sufficiency Standard starts with an assessment of the real cost of living for basic needs of housing, food, transportation, health care, household and personal items, and taxes. This "no frills" calculation does not include savings, monthly cost of debt, or emergency funds. In 2011, a minimum wage worker in the Rockford Region earning $8.00 per hour would have to work 67 hours a week to afford an average 2-bedroom dwelling. Using the revised self-sufficiency standard the minimum hourly wage would have to be $13.81 per hour, which equates to an annual income of $28,725. Currently 49%, or roughly half of workers within the region, do not meet this revised self-sufficient standard of income.

Elderly Financial Stability

Elderly financial stability is a critical challenge for the region given its aging population. The majority of the Vital Sign's districts have lower than expected elderly residents on fixed income, perhaps due to individuals working longer than ever before due to the recession.

Investment in Children

Investing in children has a direct relationship to success in life with income earned, martial success, happiness levels, overall health, and life expectancy. As detailed in the Education chapter there are several issues related to investments in education for many families with children.

Developing programs and resources to support increased self-sufficiency, especially among the youth, is critical. Moneythink, a nonprofit based in Chicago, is one such program to use as a model. They developed their Economic Opportunity Curriculum (EOC), a first-of-its-kind syllabus aimed at increasing economic opportunity and enabling social mobility by teaching students how to make and manage money.

Increase self-esteem, pride of the region, and regional optimism.

Stress and lack of upward social and economic mobility is not tied to only the youth. In 2012, the Rockford Region had the third worst measure of civic pride and optimism. Only 36.5% of residents say the area where they live is getting better. This is a decrease from nearly half of residents with the same sentiment in 2009. The region has an opportunity to increasingly support local initiatives like Our City, Our Story which is a video campaign to promote civic pride. Changing attitudes about the region, and therefore its ability to attract and retain employees and resources, begins at "home".

Increase civic leadership and participation in community, local government, political, and electoral processes.

As a whole across the nation people are participating less in local community events and organizations such as bowling leagues, the

CIVIC VITALITY BEST PRACTICES

How does the Self-Sufficiency Standard differ from the Federal Poverty Measure?

First conceived nearly five decades ago by Molly Orshansky, the official federal poverty level has now become out-of-date. The federal poverty level (FPL) is based on USDA food budgets that meet minimal nutritional standards. Because families in the 1950s spent an average of one-third of their income on food, it was assumed that multiplying the food budget by three would result in an amount that would be adequate to meet other basic needs as well. Since its creation, the FPL has only been updated for inflation. FPL thresholds reflect the number of adults and children, but they do not vary by age of children, nor by place.

In contrast…

The Self-Sufficiency Standard is based on ALL major budget items faced by working adults, not just food. These basic needs include housing, child care, food, health care, transportation, taxes, and miscellaneous costs. The Self-Sufficiency Standard calculates the most recent local or regional costs of each basic need. Accounting for regional or local variation is particularly important for housing because housing costs vary widely (e.g., the most expensive areas of the country, such as Manhattan, can cost four times as much as in the least expensive areas, such as Mississippi, for equivalent size units).

The Standard's real-world assumptions allow the costs of all basic needs—not just food—to vary over time and across geographic locations. With this up-dated and detailed approach, the Standard is able to develop a realistic measurement of the income requirements for 70 different family types across each county in a given state.

women's club and other social clubs. It appears that professional organizations have not seen similar effects on membership.

Regions with strong community health tend to prosper during periods of growth as well as recession. Common findings of healthy regions include:

- Participation in society spreads information
- Participation is strongly correlated with trust in other people -- these connections are residents' social networks
- Residents find steady jobs through their social networks
- Communities and political jurisdictions with stronger participation are more likely to have good governments
- Civic engagement encourages residents to feel attached to their communities
- Residents with community pride tend to take care of their properties, watch out for neighborhood safety, and support local organizations and businesses

Participating in elections is one way to measure civic participation in a community. National elections tend to have the most participation. The map in Figure 25 shows voter turnout for 2008, the last national election for which data is currently available. The white outline shows the voting precincts with the least amount of residents participating.

Increase the retention and recruitment of the 25-44 age cohort to achieve more balanced demographics.

Demographics are changing throughout the region. The country and the region are aging and the diversity profile shows just 20% of seniors are non-White. The average age in Winnebago County has increased from 27 years old in 1970 to 38 years old in 2010. The average age in Boone County increased from 26 years old to 37 years old during the same time period. Within communities

throughout the Region minority populations are growing, especially with Hispanics. The City of Rockford is over 40% minority.

The number of young adults leaving the region is troublesome. Almost all districts experienced a loss of population aged 18 to 39 years old. The future workforce of the community, if given the opportunity, is choosing to leave instead of grow roots. Of those young adults who choose to stay in the region there is a large percentage of single female-led households.

In 2012, the marriage rate was at 49.6% for the total population. This is slightly less than the rate for the US. For Whites the marriage rate was 52.7%, for African Americans the rate was 25.3% and for Hispanics the rate was 47.9%.

Within the Rockford Region there is a high propensity for female-led single households, especially in neighborhoods of poverty. Data for single female-led households with children is even more telling.

Currently 49%, or roughly half of workers within the region, do not meet a level of self-sufficiency with their level income.

In Winnebago County, 84% of African American infants are born to unwed mothers. There are direct relationships between minority female-led households and households in poverty. The relationship is reversed for White female-led households.

Increase coordination and cooperation among social service providers.

Vital Signs research points to the need for coordination among social service providers, and the term "collaborative case management" has become synonymous with that coordination. Unfortunately

Figure 25. Voting Rates in the 2010 National Elections

Source: Boone and Winnebago
County Board of Elections
Date: 2010

🔴 38.5% to 55.8%	🟡 68.5% to 70.8%
🔴 55.8% to 60.2%	🟢 70.8% to 73.3%
🟠 60.2% to 64.2%	🟢 73.3% to 75.8%
🟠 64.2% to 66.5%	🟢 75.8% to 78.7%
🟡 66.5% to 68.5%	🟢 78.7% to 82.2%
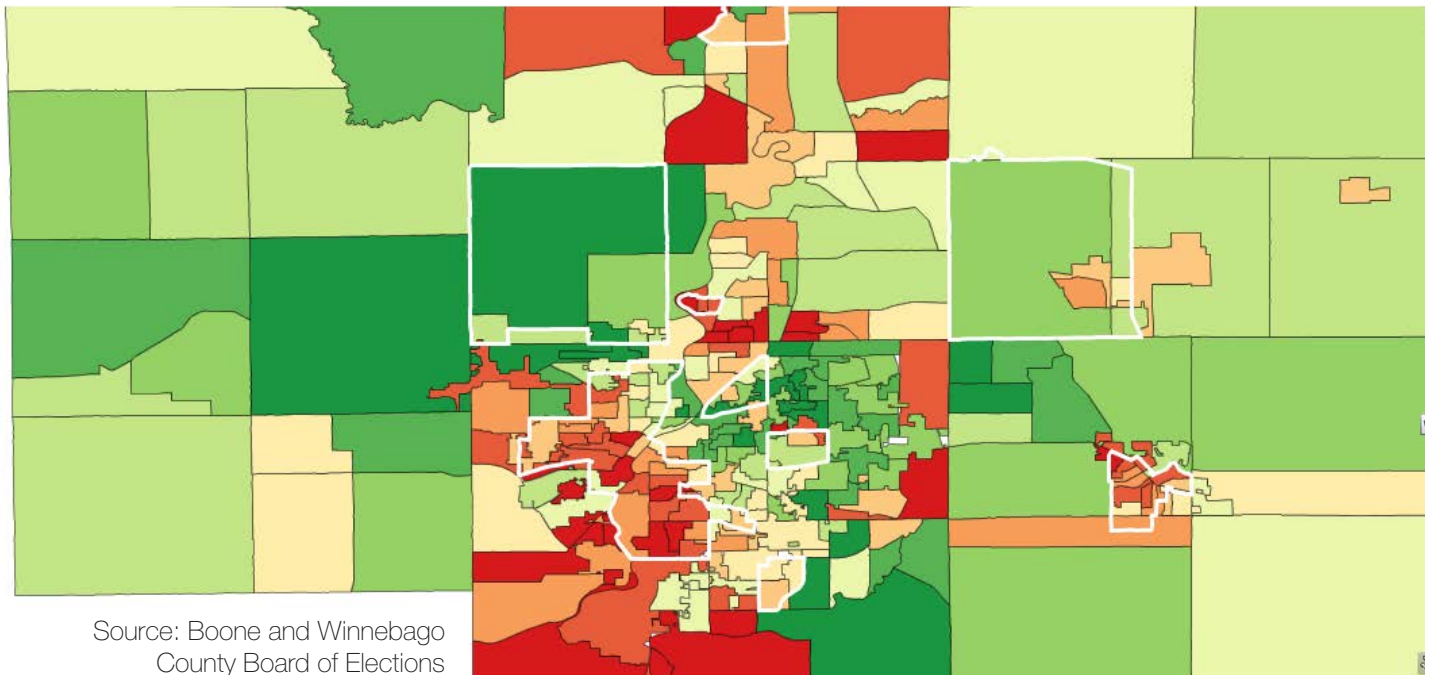
many social service providers, and the funding they rely on, base their measurement of success on how many individuals they serve. Few providers measure the number of individuals that move out of poverty. Therefore a defacto "Poverty Standard" has been created. Vital Signs recognizes that federal programs, such as Moving to Work, are necessary to reverse the existing measurement of success among social service providers. The public housing authorities have taken the lead in the collaborative case management movement.
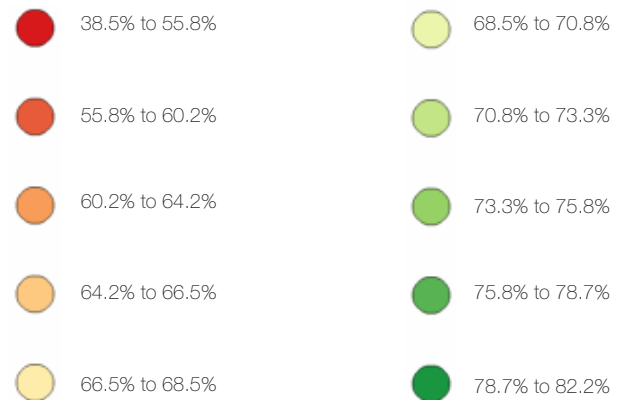
REGIONAL CIVIC VITALITY GOALS

- Increase number of residents achieving the standard of self-sufficiency, especially among youth.

- Increase self-esteem, pride of the region, and regional optimism.

- Increase civic leadership and participation in community, local government, political, and electoral processes.

- Increase the retention and recruitment of the 25-44 age cohort to achieve more balanced demographics.

- Increase coordination and cooperation among social service providers.

Goals	Civic Vitality Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase number of residents achieving the standard of self-sufficiency, especially among youth. *48.6% of the population living above self-sufficiency*	Expand financial support of self-sufficiency programs at the local, state, and federal levels.	👍	*# Dollars*	⬆	X		X	X	X
	Expand retirement planning programming.	👍	**$14,431 annually saved towards retirement (2010)**	⬆	X		X	X	
	Expand small business, craft, and trades programming for underemployed and low-income unemployed youth and adults within the region.	👍	*# Dollars for programming*	⬆			X	X	X
	Increase coordination and programming among religious, social service, education, and economic development organizations to support increased self-sufficiency achievement.	👎	*# Residents achieving self-sufficiency*	⬆	X		X	X	X
Increase civic leadership and participation in community, local government, political, and electoral processes.	Increase presence of local government and political events in impacted areas within the region.	➡	*# Events in impacted areas*	⬆		X	X		X
	Collaborate with representatives of disadvantaged populations on messaging and agenda preparation.	➡	*# meetings*	⬆	X	X	X		X
	Increase the health, membership, and activity of neighborhood organizations and associations.	👍	*Total budget size*	➡	X	X			X
	Join regional organizations for comprehensive focus (i.e. housing authorities with RMAP).	➡	*# Dollars aligned*	⬆			X		X
	Increase voting rates through increased collaboration between civic organizations and neighborhood associations.	👎	**63.9% voter turnout rate (2012)**	⬆	X	X			
	Establish mentorship programs for young adults with existing local leaders.	➡	*# Participants*	➡	X	X	X	X	
	Develop youth and young adult civic leadership program.	➡	*# Participants*	➡	X		X		X
	Build more awareness and participation in volunteer programs and opportunities.	👎	*# Participants*	⬆	X		X		X
Increase coordination and cooperation among social service providers. *25.9% of metro pop. between 25-44.*	Build on existing momentum to launch the region into a new era of regional collaboration among area economic development partners, businesses, governments, and citizens.	➡	*# Participants*	➡		X	X	X	X
	Increase public-private partnerships with social service providers to increase mission and programming to reflect achieving a higher level of self-sufficiency among residents within the region.	➡	*# Self-sufficient residents*	⬆	X		X		X
	Introduce a collaborative case management system among social service, education, health, safety, and workforce providers to help social service recipients achieve greater self-sufficiency.	➡	*# Users tracked and aided*	➡			X		X
	Develop a set of dashboards to share publicly and track the transition from low income to self-sufficiency.	👍	*# Users*	➡			X		X

Goals	Civic Vitality Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase the retention and recruitment of the 25-44 age cohort to achieve more balanced demographics.	Increase the number of and participation in leadership groups and positions for young adults.	👍	# Participants	↑	X		X		
	Increase access and multi-modal traffic to downtown.	👍	Traffic counts	↑	X				X
	Establish a cultural events app geared towards smart-phone users with a full directory of the places, events, and issues that matter to the next generation.	→	# Users	→			X		
	Proactively market the Rockford region as a low-congestion, low-stress, low-cost alternative for young adults to the Chicago region and other metro regions within a 250 mile radius.	👎	# Dollars spent on campaign	↑			X	X	X
	Develop a downtown-centric marketing and branding campaign geared towards attracting young adults to the area and increase downtown cultural events programming for young adults.	→	# Dollars spent on campaign	→			X	X	X
	Increase marketing of urban-lifestyle downtown living options for young adults.	→	# Dollars spent on campaign	↑				X	X
Increase self-esteem, pride of the region, and regional optimism. *38% are optimistic about region.*	Increase highly visible gateway signs at the region's primary access points as well as signage within the city to help communicate accessibility of quality of life amenities.	👎	# Signs	↑		X			X
	Publicly celebrate and aggressively promote recent success stories (Chrysler, Woodward) and business/job opportunities.	👍	# Stories	↑			X	X	X
	Create and promote a unified marketing/branding program that highlights key assets and enhances the image of the Rockford region to those outside of the region.	→	# Viewers reached	↑			X	X	X
	Support regional marketing efforts that build on the Rockford region's sports tourism brand.	👍	# Dollars spent	↑			X		X
	Host training sessions for service industry works so that they can become the region's top sales people and provide visitors with a more positive impression of the Rockford area.	→	# Sessions	→			X		
	Financially and programmatically support positive messaging (i.e. Our City, Our Story).	👍	# Dollars spent	↑	X	X	X	X	X

Culture

Introduction

Tourism, ethnic and neighborhood identities, visual art, and performance art make up cultural life. Festivals, parades, and museums also add experiences and education. Together these create jobs, bring visitors to town, and make the Rockford Region an attractive place to live and work. Often viewed as a discretionary element within a region, a community's arts and culture are large components to economic, social, and environmental well-being.

Culture within a region relates to the history and identity of a community, the changing cultural traditions, and the richness of the local flavor. Protecting the past while supporting an increasingly diverse population can be challenging but this collective identity is what makes the Rockford Region unique. Capitalizing upon this unique flavor can be an asset to the region.

With sustained private and public sector support the arts and culture can be a major contributor to a region's economy. And, creative class workers engage in tasks to "create meaningful new forms". They design new products, develop new ideas, create new strategies for solving problems, and compose new music. These workers are creating the future as opposed to continuing the past. Creative class workers are key to a position on the leading edge of the future as opposed to simply following development trends. Culture is also about the history and local identity of the spaces and places within the region. Communities with high levels of cultural amenities have high quality of life.

Culture

Overview

Creative Class Workers

One key component of an economically viable community is the existence of creative class workers. Creative class employees are entrepreneurs and innovators. And, they often willing to work in unique places and can be a vital part of community revitalization. Creative workers tend to gravitate to other creative workers. It is critical that the region embrace an effort to attract and retain the growth of its culture and creative class.

Creative class workers have higher wages than working class workers or service class workers. At the entry level working class occupation workers earn 85% of creative class occupation workers, and service class workers earn only 62% of their counterparts in the creative class occupations. The gap becomes larger with experience. Experienced working class occupation workers earn only 64% of creative class occupation workers, and service class workers only 58% of their creative class counterparts. These wage gaps are less pronounced compared with state-level data, with the exception of experienced service class workers.

The presence of creative class workers in the region is less than would be predicted by the state-level averages. In the region creative class workers account for 34.7% of all workers compared to 42.0% for the state. The lower percentage of creative class workers is a result of the high presence of the manufacturing sector and the working class occupations associated with it. In the region 30.8% of the workers are in working class occupations as opposed to 21.5% for the state. The share of workers in service class occupation is similar to the state, 34.3% vs. 35.7%.

There is an uneven concentration of creative class workers throughout the districts in the region, ranging from a low of 3% to as high as 42%. Similar to other poverty-based metrics, the higher concentration of creative class workers are located in districts away from the central core of Rockford and Belvidere. The central core areas show the opposite pattern, where some districts show a concentration of service class workers is as high as 51%. In the districts that surround the central core areas the concentration of service class workers is as low as 23%. But throughout the entire region no district has less than 20% service class
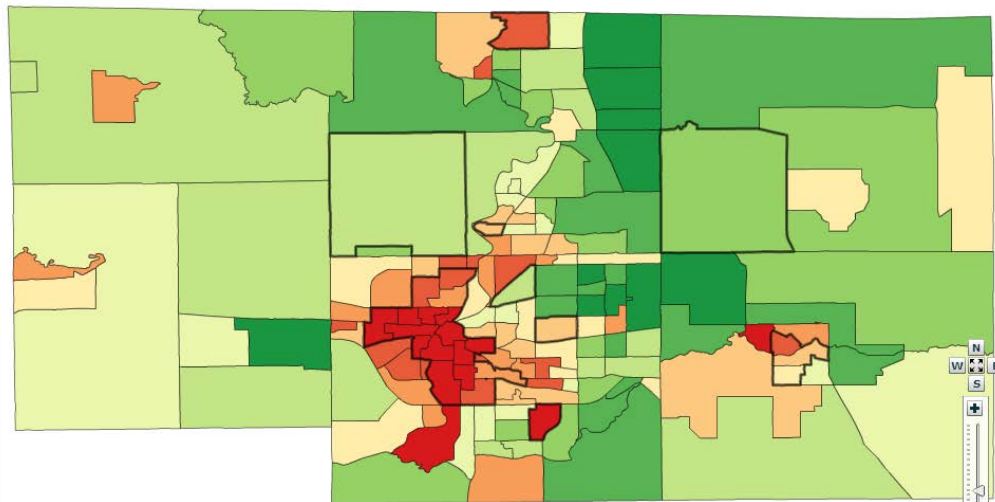
Experienced working class occupation workers earn only 64% of creative class occupation workers, and service class workers only 58% of their creative class counterparts.

● $198.85 to $406.89

● $406.89 to $523.07

● $523.07 to $563.32

● $563.32 to $604.35

● $604.35 to $702.35

● $702.35 to $775.51

● $775.51 to $824.43

● $824.43 to $912.63

● $912.63 to $1,208.21

● $1,208.21 to 2,455.91

workers, indicating the much broader geographic distribution.

The number of creative employees has been decreasing since 2000. From 2000 to 2010, the number of employees with publishing firms has decreased 56.5%, 37.6% for television, 56.4% for museums, 40% for crafts, and 17% for photography. Some expansion has occurred, however. The number of employees with design firms has increased 114%, radio employees 917%, and visual arts employees 63.6%.

Average Household Expenditures on Entertainment

Entertainment is a large component of community culture. An index was developed to show household expenditures on active forms of entertainment. Expenditures included in the index include fees for participant sports and recreational lessons, recreational vehicles, and sports/recreation/exercise equipment. As seen in Figure 26, households spending the most on active entertainment are largely in the suburban growth areas.

The Vision

Increased access, diversity, and participation in cultural events, resources, and arts, and recreation.

Cultural facilities and their accessibility is vital to help making a community more thriving and sustainable in the long run. The proximity of cultural facilities has a direct impact on residents' ability to use them and creates a greater overall sense of community within a neighborhood by creating more social connections and positive social environments.

According to the Consumer Expenditure Survey, in 2010 there was a direct relationship between the average household amount spent on entertainment plus recreation and the per capita income of each district. The relationship tracks well for amounts spent on photography equipment and supplies, reading, travel, and sports and recreation equipment.

The further away cultural facilities and community events are for residents the less likely individuals will be willing to attend. It is important therefore to have community and cultural facilities dispersed to the greatest extent evenly throughout the region, as seen in Figure 27. If cultural facilities are walkable it has been shown that there is increased participation by community members. For example, having

Figure 27.
Cultural Places
of Interest
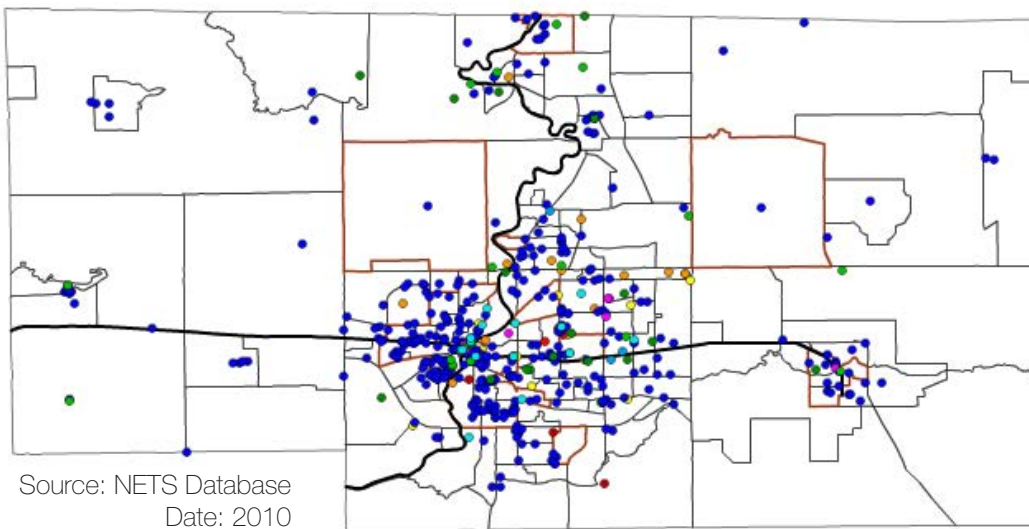
Source: NETS Database
Date: 2010

Art Gallery

Art Supply Store

Church

Mosque

Museum

Music Stores

Music Studio

Sports Venue

Synagogue

Temple

Theater

Venue
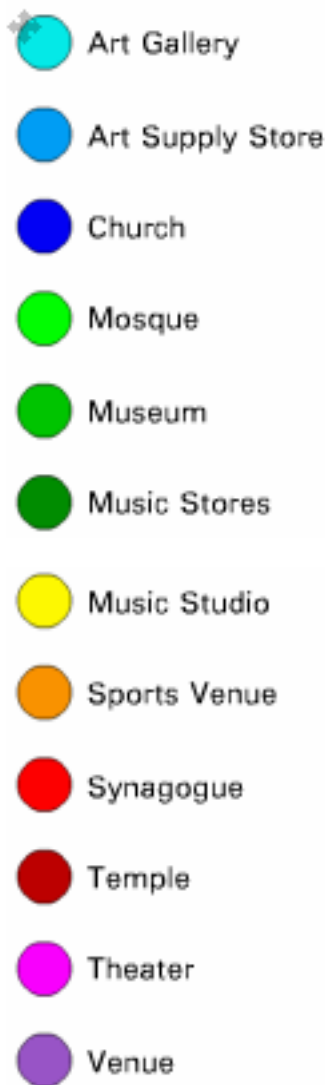
cultural facilities located in close proximity to neighborhoods generally attracts more children, elderly, and those without access to a vehicle (transit-dependent populations). Unfortunately many of the most walkable neighborhoods contain few cultural amenities. Currently in the Rockford Region there is a lack of cultural facilities, with the exception of churches, in areas of concentrated poverty. Residents lack easy access to theaters, music stores, art supply stores and art galleries. While it is desirable to make as many cultural amenities neighborhood-based, some regional attractions such as sports venues, museums and performing arts venues will predominantly remain located in downtown Rockford and Belvidere.

Figure 30 shows land available for recreation. The darker the green the more acres available within that District. As seen, the vast majority of land available for recreation within the Region is outside of the urban core areas but the Greenways Plan contains vital links to these amenities via walking and biking. Obviously regional transportation has a profound effect on access to major recreational areas.

Increase collaboration, communication, and financial support of local cultural organizations.

The economic impact of the arts is notable for the region. In 2010, a study conducted by the Rockford Arts Council in partnership with the Americans for the Arts was released exploring the scale of the economic benefit arts and culture have on the region. While the study mainly focused on Winnebago County, many of the main cultural events are hosted

Currently in the Rockford Region there is a lack of cultural facilities, with the exception of churches, in areas where there is high poverty (+15% of individuals in the area living below the poverty line).
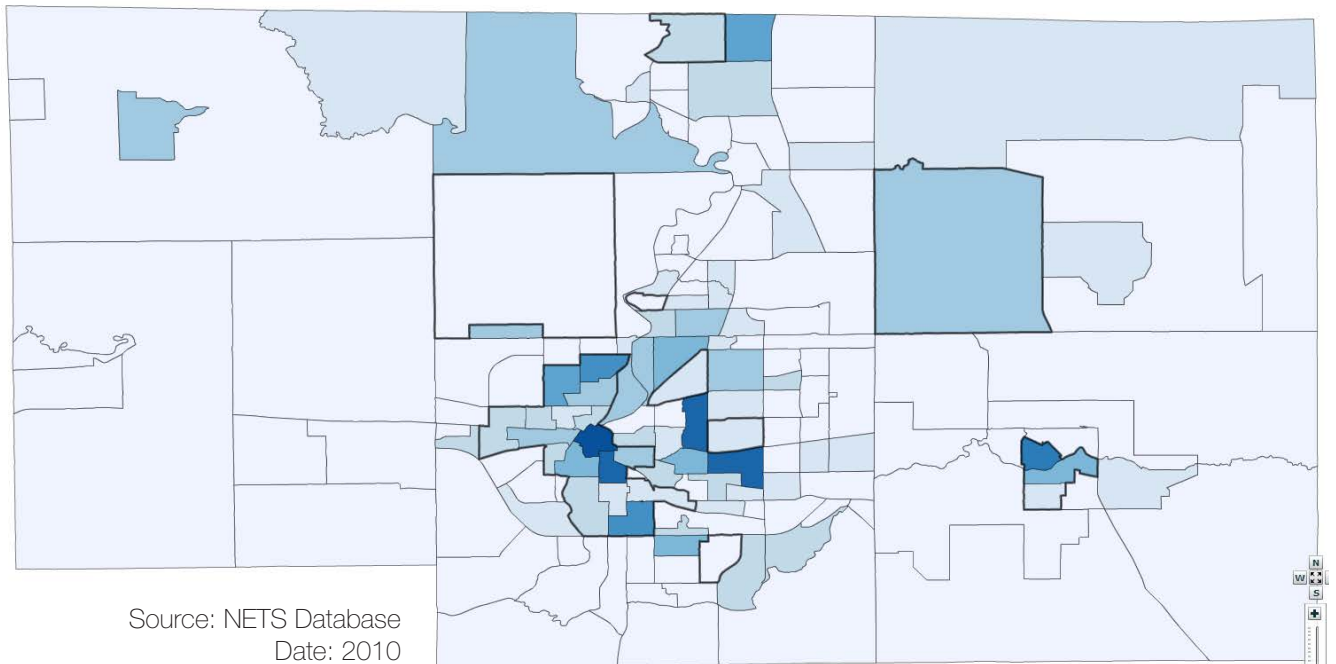
Figure 28. Third Places in 2000

⬤ 10.1 to < 20.2	⬤ 60.6 to < 70.7
⬤ 20.2 to < 30.3	⬤ 70.7 to < 80.8
⬤ 30.3 to < 40.4	⬤ 80.8 to < 90.9
⬤ 40.4 to < 50.5	⬤ 90.9 to 101
⬤ 50.5 to < 60.6	
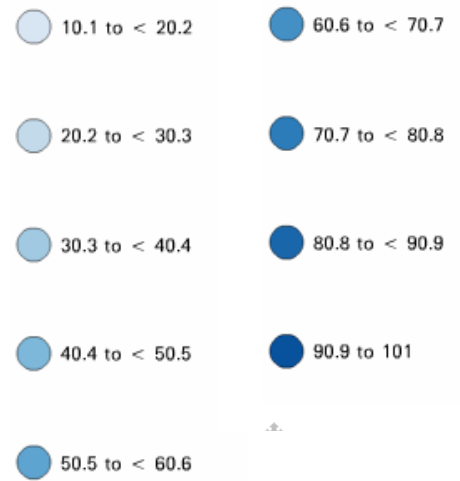
Figure 29. Third Places in 2010
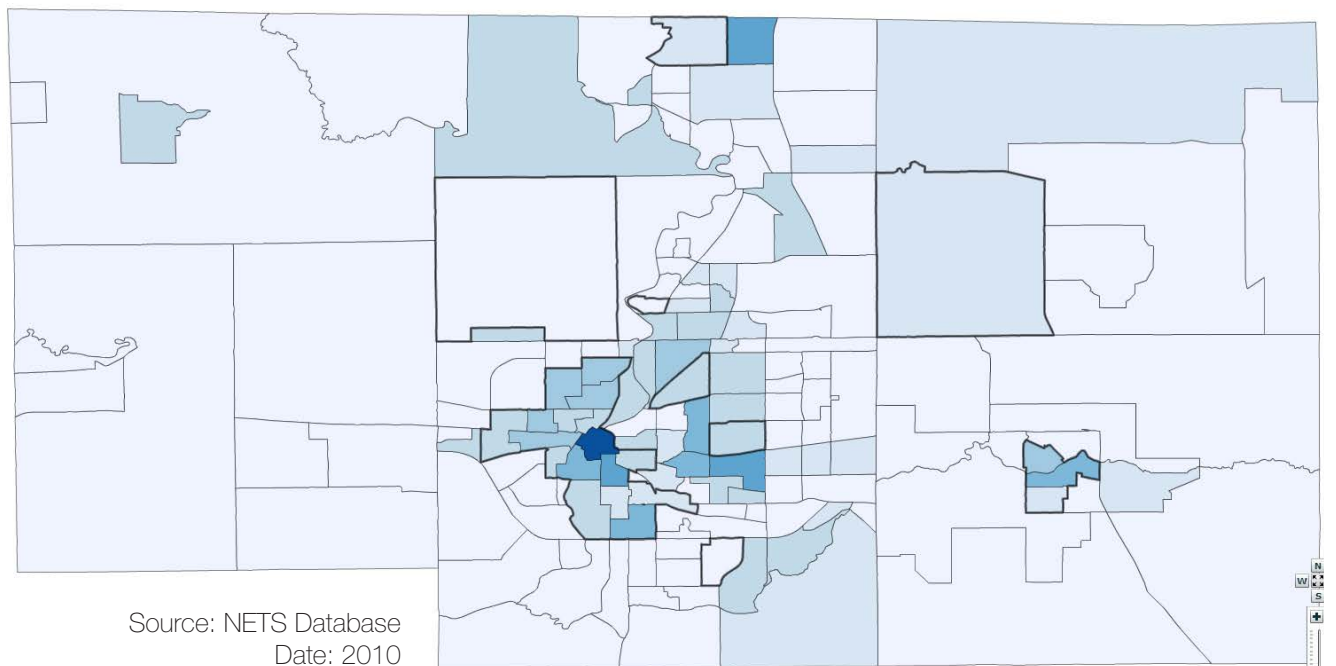
Culture | 79

CULTURE BEST PRACTICES

Adaptive Reuse of Buildings

Across the country, historic structures within downtown cores still stand. With new eligibility for the region for historic tax credits, turning the area's architectural legacies into renewed economic and cultural drivers for the region is an opportunity to build upon. Adaptive reuse of a space, structure, or building to accommodate today's needs is a vital component of culture, but financial concerns of the value of the investment after renovation have caused recent concern. There has been considerable debate about the use of short sales and foreclosures as comparable for the calculation of current value.

Facade Design Guidelines

A welcoming, eye-catching storefront sends a positive message to potential customers and draws them into businesses. And, well-designed storefronts create a streetscape that increases the quality of life for pedestrians, motorists, and residents alike. Creating design guidelines is an important task to be undertaken. The Civic Design Advisory Group (CDAG) has placed this task high on their priority list. Initially it make take the form of a "preference survey" but ultimately could be part of a regional complete streets and land use design guide.

Storefront Activation Program

A final program that can be considered to bolster the cultural identity of the region is developing a storefront activation program to 1) help existing storefront businesses to engage potential clients and 2) dress up empty storefronts to instill civic pride and activity in the business corridors within the region. Many best practices exist throughout the nation.

for the greater region's residents and many of the employees of the Winnebago County cultural industry live throughout the region. In the future, this same study can be replicated to include Boone County. Findings include:

- Non-residents of the region spend on average $24.09 per event attended while local residents spend $15.59. This may be attributed to increased spending on transportation and lodging.
- In total, residents spent over $4.5M on events in 2010 while non-residents spent over $2M.
- Nearly $1.5M in revenue was generated for local government.
- Over $21M in revenue was paid to local residents.
- Over 1,000 full-time jobs were supported by the local cultural economy.

Religious institutions can supplement the work and support of charities and local cultural organizations within the region. Generally local residents attend and financially support churches near to their residences or in adjacent neighborhoods. But donation size varies consistent with the income of the congregation, which makes it more difficult for some churches to support or lead as many programs as they would like.

Donations to political organizations ranged in size from $7 per household to $87 per household, but was much less pronounced as religious donations.

In the last decade there has been a loss of third places within the region as a whole, especially within the east side of Rockford and in Belvidere.

Increase tourism and promotion of cultural events, resources, and locations with special attention to local residents.

A number of residents over the course of the three-year initiative commented on the lack of tourism marketed to local residents. There is a desire for more events related to the wonderful cultural resources, amenities, and events for local residents.

The Rockford Area Arts Council study found the following indicator data:

- Local residents account for 77% of attendees to local cultural events. Nearly 300,000 attendees of cultural events were residents in 2010 in the Rockford Region.
- Per event, non-residents spent on average $12.49 on meals and refreshments, $2.20 on souvenirs and gifts, $3.27 on ground transportation, $4.85 on lodging, and $1.28 on other expenses.
- Per event, residents spent on average $10.47 on meals and refreshments, $1.55 on souvenirs and gifts, $1.52 on ground transportation, and $1.92 on other expenses.

Preserve and re-use properties that are culturally significant, including historic properties.

The historical properties of the region are important to local identity. Historic preservation of culturally-significant properties is important for the region's cultural well-being. The region has a strong base of local historic properties and districts. Currently there are 29 historical buildings, sites, and structures registered with the National Trust for Historical Places within the region. The majority of the locations are within the cores of Belvidere and Rockford.

Figure 30. Acres of Recreation

Source: RMAP
Date: 2010

Legend:
- 0 to < 50
- 50 to < 100
- 100 to < 150
- 150 to < 200
- 200 to < 250
- 250 to < 300
- 300 to < 350
- 350 to < 400
- 400 to < 450
- 450 to < 500
- 500 to < 1,000
- 1,000 to < 1,500
- 1,500 to < 2,000
- 2,000 to < 2,500
- 2,500 to 3,000
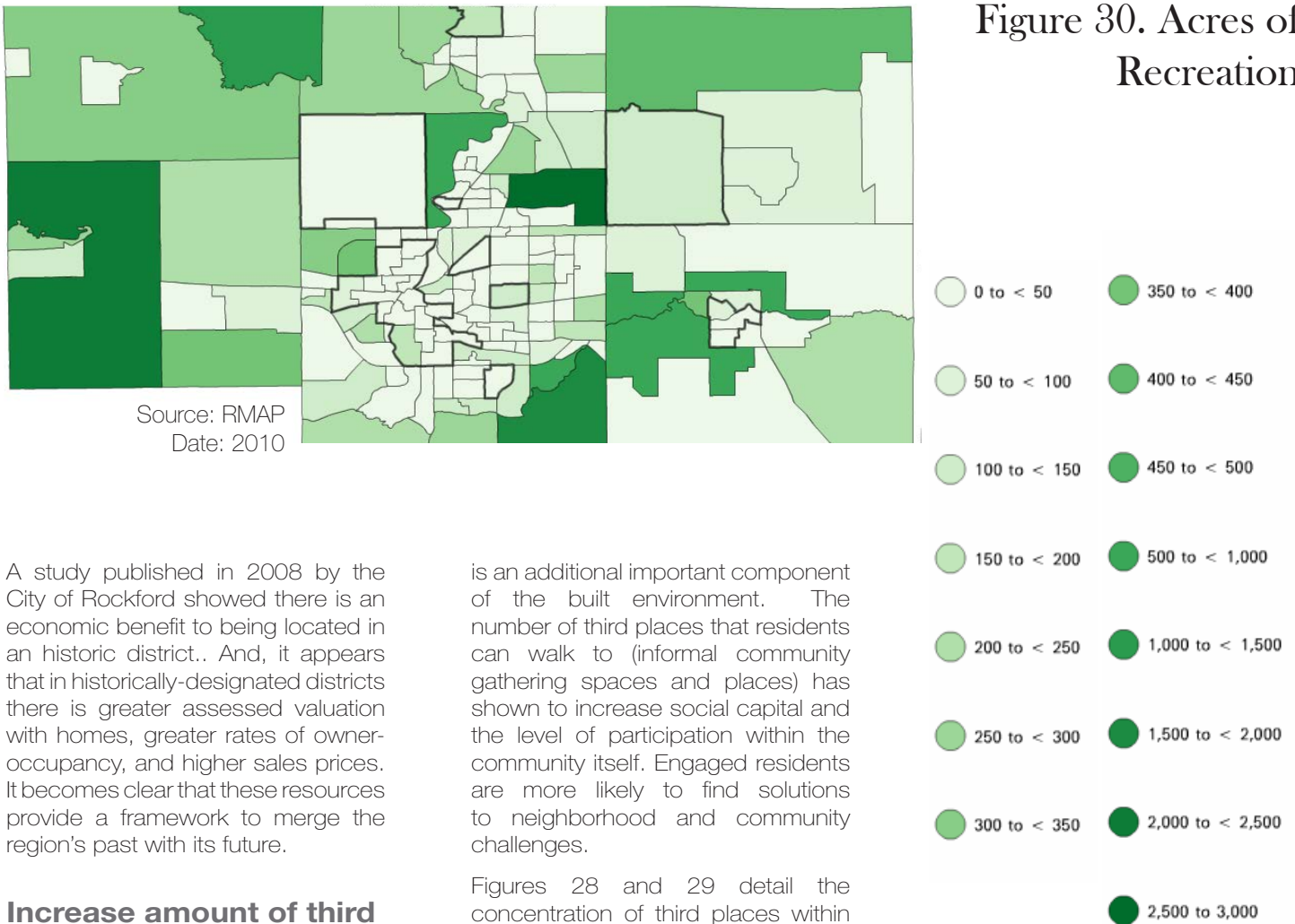
A study published in 2008 by the City of Rockford showed there is an economic benefit to being located in an historic district.. And, it appears that in historically-designated districts there is greater assessed valuation with homes, greater rates of owner-occupancy, and higher sales prices. It becomes clear that these resources provide a framework to merge the region's past with its future.

Increase amount of third places within the region (informal community places and spaces).

Socializing is a vital component to the well-being of a region. And, having quality spaces and places (called Third Places) empowering residents to socially connect with one another is an additional important component of the built environment. The number of third places that residents can walk to (informal community gathering spaces and places) has shown to increase social capital and the level of participation within the community itself. Engaged residents are more likely to find solutions to neighborhood and community challenges.

Figures 28 and 29 detail the concentration of third places within the region. Lighter blues indicates from 10 to 30 third places (cafes, local restaurants, libraries, pubs, etc.), while darker blues indicate upwards of 100+ third place locations per District. As seen, in the last decade there has been a loss of third places within the region as a whole, especially within the east side of Rockford and in Belvidere.

REGIONAL CULTURE GOALS

- Increased access, diversity, and participation in cultural events, resources, and arts, and recreation.
- Increase tourism and promotion of cultural events, resources, and locations with special attention to local residents.
- Increase collaboration, communication, and financial support of local cultural organizations.
- Preserve and re-use properties that are culturally significant, including historic properties.
- Increase amount of third places within the region (neighborhood meeting places and spaces).

Goals	Culture Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increased access, diversity, and participation in cultural events, resources, and arts, and recreation. (2012) *There are 96 cultural places of interest.*	Increase more riverfront restaurants within the region.	👍	*# Restaurants*	↑	X		X	X	X
	Create and upgrade flagship parks.	→	**3 flagship parks (1 multiuse park, 2 sports parks)**	↑			X	X	X
	Increase outreach to and access for disadvantaged residents to encourage participation in cultural, art, and recreational events and programs.	👎	*# Participants*	→	X		X		
	Review municipal codes and increase number supporting façade design guidelines, outdoor dining, etc.	👎	*# Codes*	↑					X
	Create centralized app for cultural events beyond print paper.	→	*# Users*	→			X		
	Reduce number of inactive storefronts in commercial cores within the region.	👎	**2Q 2013 - 2047 vacant business properties**	↓		X	X	X	
	Establish cultural and historical education program for youth.	👎	*# Participants*	→	X		X		
Increase tourism and promotion of cultural events, resources, and locations with special attention to local residents. *92,797 local resident attendees and 85,494 non-resident attendees at arts and cultural events (2010)*	Promote the local arts community to residents.	→	*# Dollars spent*	↑			X	X	
	Increase the marketing of existing amenities to local residents.	→	*# Dollars spent*	↑			X	X	X
	Increase promotion of cultural events, resources, and locations to disadvantaged residents.	👎	*# Dollars spent*	→	X	X	X	X	X
	Grow Boone and Winnebago CVB marketing activities both within the community and outside.	→	*# Dollars spent*	↑			X		X
	Create a brand and sense of place by promoting the region's ethnic diversity.	👎	*# Dollars spent*	→	X		X	X	X
Increase collaboration, communication, and financial support of local cultural organizations.	Increase training for local staff to better utilize innovative communication methods to reach residents, especially for the youth, young adults, and disadvantaged population.	👎	*# Training sessions*	↑			X	X	X
	Increase presence of events and programming of local cultural organizations within local traditional and non-traditional media sources (ie social media).	👎	*# Outlets*	↑			X	X	X
	Establish semiannual summit of cultural organizations to discuss collaboration and alignment opportunities.	👍	*# Events*	→			X		

Goals	Culture Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase amount of third places within the region (neighborhood meeting places and spaces). *There are an estimated 867 third places. (2010)*	Work to map and identify additional third places and open underutilized spaces as playgrounds or part-time public spaces.	→	# Places	→		X	X	X	X
	Create a plan and tools to identify parks and public space priority areas.	→	Plan created	→		X	X		X
	Grow number of local organizations and groups working to grow number of third places (i.e. Chambers of Commerce and the Rockford Region Civic Design Advisory Group).	👍	# Places	↑			X		X
	Develop local private-public financial support for the establishment of additional third places through online crowdfunding through Neighbor.ly.	👎	# Dollars invested	→	X		X	X	X
	Educate (through programming and print/online materials) municipal staff, elected officials, business district property owners, business district residents on the benefits of third places.	👍	# Reached	→	X	X	X	X	X
Preserve and re-use properties that are culturally significant, including historic properties. *29 nationally registered historical sites (2012)*	Foster the adaptive re-use of historic properties for cultural clusters by actively developing programming encouraging private investment paired with public revitalization programs.	👍	# Dollars invested	↑	X	X	X	X	X
	Appropriately adjust the building code requirements for historic downtown properties.	👍	# Codes	↑					X
	Increase marketing and visitorship of historical and architectural heritage sites.	→	# Dollars spent	→		X	X		X
	Develop programming partnering local craftsman with culturally-significant property owners to both train and assist in the preservation and re-use of these properties.	→	# Dollars invested	→	X	X	X	X	X
	Advocate for a regional historic preservation policy and a single point of contact.	👎	# Points of Contact	→			X		X

Economic Development
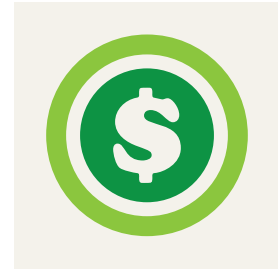
Introduction

Economic development is best defined as a process that communities, regions, states and the nation embrace to create, retain and reinvest wealth and improve regional quality of life. A number of strategies are commonly used to spur the economic development process. The core of these strategies are designed to 1) recruit and attract business, 2) retain and expand existing industry, 3) promote entrepreneurship and small business development, 4) retain and expand commercial and retail activity, and 5) promote tourism.

Each of these five strategies is designed to create wealth in the region by:

- Expanding employment which leads to increased income and wealth of individuals and the region.
- Maintenance and growth of business which impacts the local assessed value for the region and thus the region's wealth and ability to fund basic public services.
- Increasing the retail sales activity in the region resulting in sales tax revenue which is an outcome of increased wealth of the region and increases the ability to fund basic public services.

A variety of tools can be used for the economic development effort. One common tool is the use of incentives to retain and attract business. The incentives could include property tax abatement, sales tax abatement, use of Tax Increment Finance Districts, Enterprise Zones and provision of infrastructure at reduced costs.

Economic development is interdependent with the sustainability of the economic, social and environmental ecosystems of the region. Economic sustainability is dependent on a quality educational system to prepare a quality work force. A prepared and talented workforce is critical to economic development.

Social sustainability is dependent on individuals and families earning a livable wage and communities being able to provide a viable set of public services such as healthcare, police and fire protection and quality education which are all dependent on the regions wealth.

Environmental sustainability requires the ability of the region to maintain and invest in infrastructure such as roads and streets, water and sewer. The ability to sustain this infrastructure is dependent of the wealth of the region. While economic development can create wealth, it cannot create wealth without the region having environmental sustainability.
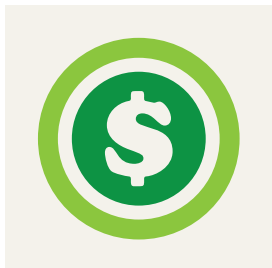
Economic Development

In 2010, unemployment for high school dropouts within the Region was at 22.9%.

Overview

Declining Economic Resiliency

A good metric for the economic sustainability of a region is the wealth, often measured by the income earned by residents in the region. Income is a combination of:

- Wages and salary earned from working,
- Income from rent, interest and dividends (often referred to as passive income), and
- Income from government transfer payments which would include social security payments, aid to dependent children, welfare payments, and other government income support programs

The "wealth Index" is developed by comparing the regional per capita personal income to the per capita income for all US residents. Using per capita income takes into account changes in population.

Over the past 40 years the wealth of the Rockford metropolitan region has declined from being 2.2% above the national average to 19.5% below the national average. This decline in wealth has impacted the region's sustainability. The relative reduction in per capita income has reduced the ability of regional residents to purchase goods and services which

then impacts all three areas of regional sustainability; economic, social and environmental. The decline in regional wealth is also an indication that economic development in the region has lagged behind the nation.

While the "wealth Index" provides a summary of how the region is doing, components of the index provide information on how different sources of income have changed since 1969. In 1969 six percent of the Rockford MSA's income was received through transfer payments and that was 1.6% below the national average. In 2011 the percent of regional personal income from transfer payments had increased to 20.4% compared to the national figure of 16.7%. While social security benefits account for a large portion of transfer payment income, it does not account for the increase in income received from transfer payments in the region compared to the nation. The percent of the population 65 and over in the region is very close to the nation. Thus, residents of the Rockford MSA receive a disproportional amount of their income from unemployment and other government income maintenance programs.

Cost of Government

One indicator of the sustainability of a community is the cost of government. In comparing the relative cost of government it is necessary to take into consideration

Figure 31. Total Public Safety Expenditures of Local Municipalities *(normalized to population of City of Rockford)*
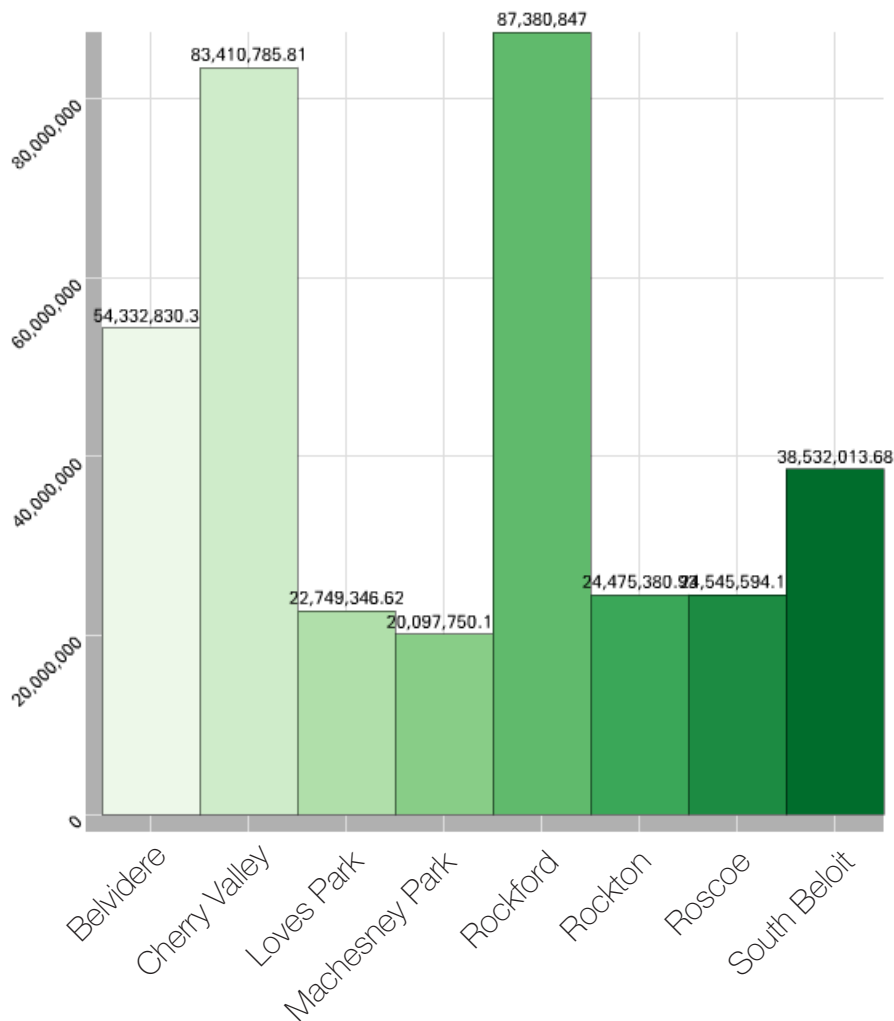
the population served. The revenue collected by municipalities in the Vital Signs Region varies significantly. By normalizing revenue to Rockford's population, revenue would range from a low of $78 million to serve the population to a high of $289 million. Two municipalities, Rockford and Cherry Valley, are much higher than the others. Looked at differently, the revenue generated by the eight of the local municipalities ranges from a low of $512 per capita to a high of $1,900 per capita. All but Rockford and Cherry Valley have total revenues between

$512 and $646 per capita.

Sources of Revenue

Another indicator of the impact of government activity on the region is how the revenue is generated. Some communities rely heavily on taxes and others on various user fees. For the eight municipalities in the Vital Signs Region, Cherry Valley receives 93% of its revenue from taxes but South Beloit receives only 20% of its revenue from taxes. The reliance on taxes verses user fees is often a function

of the make-up of the community. For example, Cherry Valley has the highest reliance on taxes but a vast majority of the revenue is from sales tax generated at the regional mall.

Public Safety

Another indicator of the sustainability is the cost of providing public safety. Public safety is a primary function of local government and in many respects is dependent on the strength of the local economy. Vibrant economies with low unemployment

Figure 32. Percent Outbound from Rockford MSA
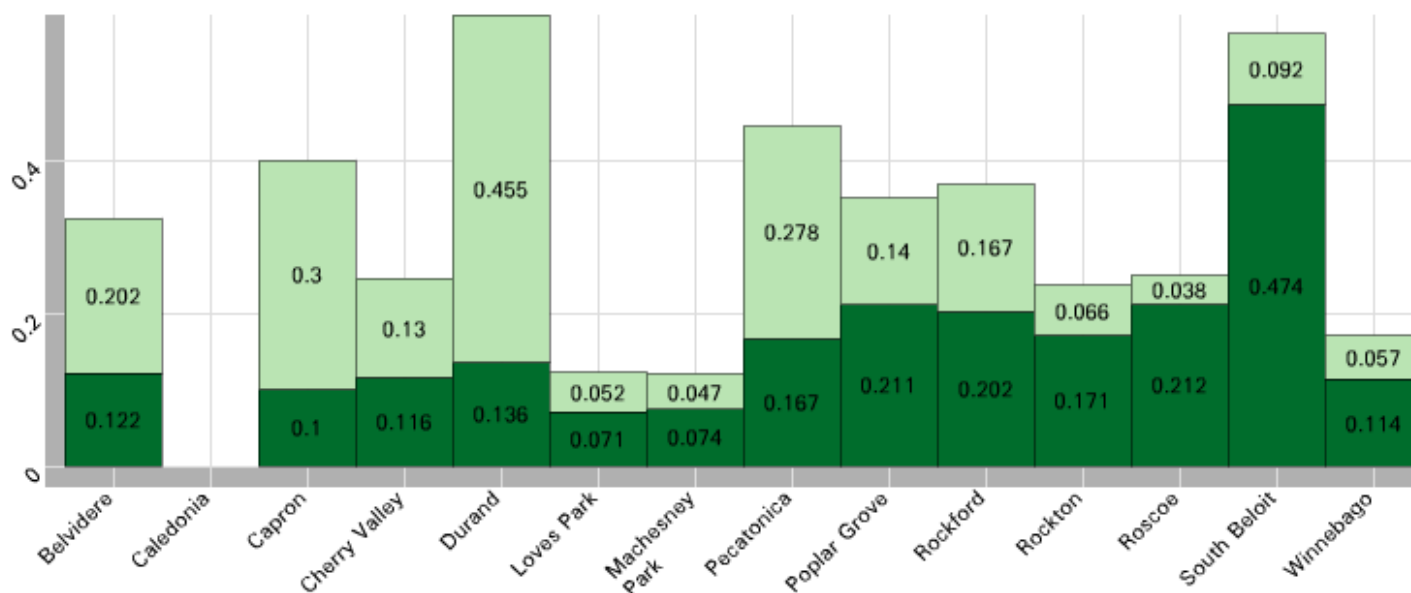
Legend:
Pct Outbound to Illinois, except Rockford MSA

Pct Outbound to Different State

rates and low poverty rates tend to have lower per capita costs for public safety. Normalizing for differences in population, the public safety cost for the municipalities in the region range from a low of $20 million to a high of $87 million. The normalized cost of providing public safety in Rockford and Cherry Valley is almost double the cost in other municipalities. The per capita cost for public safety ranges from a low of $132 in Machesney Park to a high of $574 in Rockford. All but three of the municipalities have per capita costs for public safety less than $253.

Churn Rate

A measure of a vibrant economy is the churn rate of companies. While one may think that it is bad for business to close, in reality there will always be businesses closing, expanding, and being created. As markets change some products will lose favor with consumers and others will gain favor. This creative destruction in the market place will result in businesses being created and closing. This constant movement of companies into and out of the market is referred to as churning. The average churn rate for the US is .80 and the average churn rate for counties in the US is .74.

While Churn is useful in analyzing the overall mobility of establishments by industry, it is also useful in analyzing establishments by size. The overall churn rate for the period 1990-2010 for self-employed establishments with between 2 and 9 employees, establishments with between 10 and 99 employees, establishments with between 100 and 400 employees, and establishments with 500 or more employees within the region ranged from .6 to .65 with the exception of large

firms in Boone County. The churn rate by firm size followed a pattern similar to that churn rate for establishments by industry. There was a uniform increase in the churn rate for establishments of all sizes between 1995 and 1999. However, the churn rate since then has experienced little change.

A look at births, expansions, deaths, and contractions of firms by size provides additional insight into the region's economy. For the very small firms (less than 10 employees) the number of new and expanding firms was 50 percent of the firms going out of business or contracting. For establishments 10 to 99 employees the number of new and growth establishments was 40 percent of the number that went out of business or contracted. This would indicate a lack of entrepreneurial activity in the region. At the other end of the spectrum, while there was a net loss of 2 establishments with more than 500 employees, the number of new plus expanded enterprises was 45 percent higher than closures and contractions.

Establishment Movement

The movement of business establishments into and out of a region is another indicator of economic vitality

of the region. There are many reasons why a region may experience a net flow of firm movement. Factors such as business conditions (such as taxes and regulation), quality of labor force and safety of the region are most easily controlled within the region. If a region is a net exporter of business enterprises it is a symptom of other problems that could lead to a loss in economic activity. Likewise, if a region is a net importer of business establishments it is a sign of a positive economic and social climate and an indication that the region is primed for economic growth.

Over the past 40 years the wealth of the Rockford metropolitan region has declined from being 2.2% above the national average to 19.5% below the national average.

The Vital Signs region experienced significant movement of establishments into and out of the region between 1990 and 2009. In total 5,628 firms changed location of operation during that period of time. This includes firms that moved into the region, out of the region or relocated within the region. Positive news for the regional economy is that 74% of these moves were within the region meaning that establishments changed location but did not leave the area.

Of the remaining 1,480 firms, 711 moved out of the region and 768 moved into the region. The majority of movement into the region took place between 2000 and 2009 (76%). A similar pattern held true for establishments leaving the region. Of all firms leaving the region only 72% percent left between 2000 and 2009.

Of the 711 leaving the region 312 relocated out of state and 399 relocated within Illinois. The most common state of relocation was Wisconsin (41%).

Of the establishments moving to Wisconsin, 55% moved just over the border into Rock County, Wisconsin.

Of the establishments moving into the region 514 moved from another Illinois location and 255 came from another state. Wisconsin was also the original location of 39% of the companies that moved to the region from another state. Of the establishments moving from Wisconsin 60% were from Rock County.

The size of firms that move into and out of the region is also important. If the establishments moving out of the region are large and those moving in are small there is a greater impact on employment. Ninety-six percent of all firms moving into or out of the region had less than 50 employees. There was a net loss of six firms that had employment of 250 or more at the time of leaving.

In addition to the number and size of firms moving into and out of the region, the type of industry is also important. The Vital Signs Regions has a strong history of manufacturing. Typically jobs in manufacturing pay more than service industry jobs. Over the 20 year period, the region had a net increase of 35 manufacturing establishments and a net loss of 61 service establishments.

Of the establishment movement within the region 80% moved to five of the fourteen municipalities. Rockford was the chosen location for 33% and Loves Park following with 18%, Machesney Park with 12% and Belvidere and Roscoe with 8.5% and 8.3% respectively.

The outbound destination for intra-regional movement followed a similar pattern. Eighty-one percent chose five cities: Rockford (43%), Loves Park (17%), Machesney Park (8%), Belvidere (7%), and Roscoe (6%).

The municipality of Rockford had the largest net loss showing a net loss of 198 establishments and over 3,200 jobs.

Retail Sales

Retail sales are a commonly used metric for evaluating the sustainability of an economy. On a national level,

personal consumption expenditures account for 70% of economic activity while retail purchases account for about 25% of economic activity. One measure of regional vitality is the degree of positive or negative retail leakage. Stated differently, are retail sales in the region greater or less than expected based on the personal income and demographics of the region? Ideally, a region would have retail establishments to serve the demands of the residents and there would be little leakage and, ideally, a point of destination for out of region shoppers that results in retail sales surpluses.

For the Boone and Winnebago County regional retail sales are 15% below the potential demand. This amounts to over $419 million in net loss of retail sales. The only retail category with a net gain in Winnebago County was in retail sales for furniture and home furnishings. Both counties also experienced a net loss in total retail sales. In 2010 Boone County had a net loss of retail sales of almost $192 million while Winnebago County experienced a net loss of over $228 million.

Total net loss in retail trade may not be solely dependent on residents leaving the region to do their shopping. The actual retail sales do not include purchases that may have been made by mail order or over the internet.

As retail trade is a key factor in economic vitality, it is also important for the sustainability of the region and the regional neighborhoods. One way to look at the sustainability of neighborhoods within the region is by analyzing retail trade activity and how it is dispersed within districts based on need. That is, are actual retail sales in a district equal to the potential of the residents to purchase goods and services?

Of the 153 districts in the study area 47 have retail sales in excess of the potential need of residents in the district. The gap between potential sales and actual sales ranges from a low of negative $15.8 million (meaning that actual sales are higher than potential) to a high of $111.3

million (indicating potential sales are greater than actual). The districts with a surplus of retail sales tend to be disbursed throughout the region with no evidence of concentration within a given area.

The total leakage of retail sales for Boone County in 2010 was almost $200 million and for Winnebago County almost $230 million. The retail sales gap for Boone County is greater than for Winnebago County when population is taken into consideration. In Boone County the potential retail sales per capita is $3,537 greater than actual per capita retail sales. The corresponding number for Winnebago County is $733. Thus there appears to be more room for expansion of retail establishments in Boone County.

Unemployment

Breaking down the unemployment rate in 2012 by race, gender, age, and educational attainment helps paint a clearer picture of where the social challenges lie within economic development for the region. The average annual unemployment rate of African Americans was 29.2%, double that of Hispanics at 15.9% and triple that of Whites at 11.1%. The unemployment rate of males was higher than that of females by four and a half percentage points. Unemployment for high school dropouts was at 22.9%, double that of those with a high school diploma (12.9%), and nearly five times those with a bachelor's degree (5.6%). Unemployment was the highest for those 16 to 19 at 31.2% and 20 to 24, at a rate of 22.8%. It decreases until the ages 65 to 74 where it ticks up from 8% for those 55 to 64 to 11.6%. Currently, in October of 2012 the unemployment rate remains high for the MSA at 11% -- the highest in the State of Illinois.

Commuting Patterns

Commuting patterns are an important indicator for measuring the sustainability of a region's labor markets. A labor shed is the area from which a region draws it workers, whereas a commuter

shed is where a region's residents are employed. A balanced and sustainable economy will not depend on outside markets to supply jobs and labor. Residents should not have to travel great distances in order to secure employment, and employers seek to locate in areas which may supply a ready pool of qualified workers.

Boone County's labor shed is heavily dependent on drawing workers from outside the county, however is still largely contained within the Rockford Region. While only 36% of the county's workforce both lives and works in Boone County, when adding in the 40% of workers from Winnebago County, just over 75% of the county's labor shed is contained within the region. The remaining 65% of the County's residents commute outside the county for employment. The commuter shed is closely divided between the Rockford job market and greater Chicagoland job market, with just over 40% of workers commuting to Winnebago County and another 40% of workers traveling to jobs in either Cook or the Collar Counties. Boone County clearly is a commuter county, however this is largely due to personal preference; many people seek the rural residential lifestyle available in Boone County and willingly make the tradeoff to travel greater distances for employment.

In contrast 65% of Winnebago County's workforce both lives and works within the County. When factoring in Boone County, 70% of Winnebago County's labor shed is contained within the region, and rises to 80% when including the remaining adjacent counties. Of the 37% of residents commuting outside of the county for work the Chicago area dominates the commuter shed, with 26% of commuters working in Cook County and another 29% in the collar counties.

When looked at as a whole the numbers reflect that the Rockford Region is able to sustain its own economic base. The region is not reliant upon outside counties for their jobs, allowing the Region to be self-reliant and less susceptible to fluctuations in nearby

Figure 33. Retail Surplus-Leakage Index

Source for both: ESRI
Date: 2010

⭕	0 to < 0.02
⭕	0.02 to < 0.06
⭕	0.06 to < 0.14
⭕	0.14 to < 0.29
⭕	0.29 to < 0.52
⭕	0.52 to < 0.82
⭕	0.82 to < 1.05
⭕	1.05 to < 1.58
⭕	1.58 to < 3.2
⭕	3.2 to 24.25
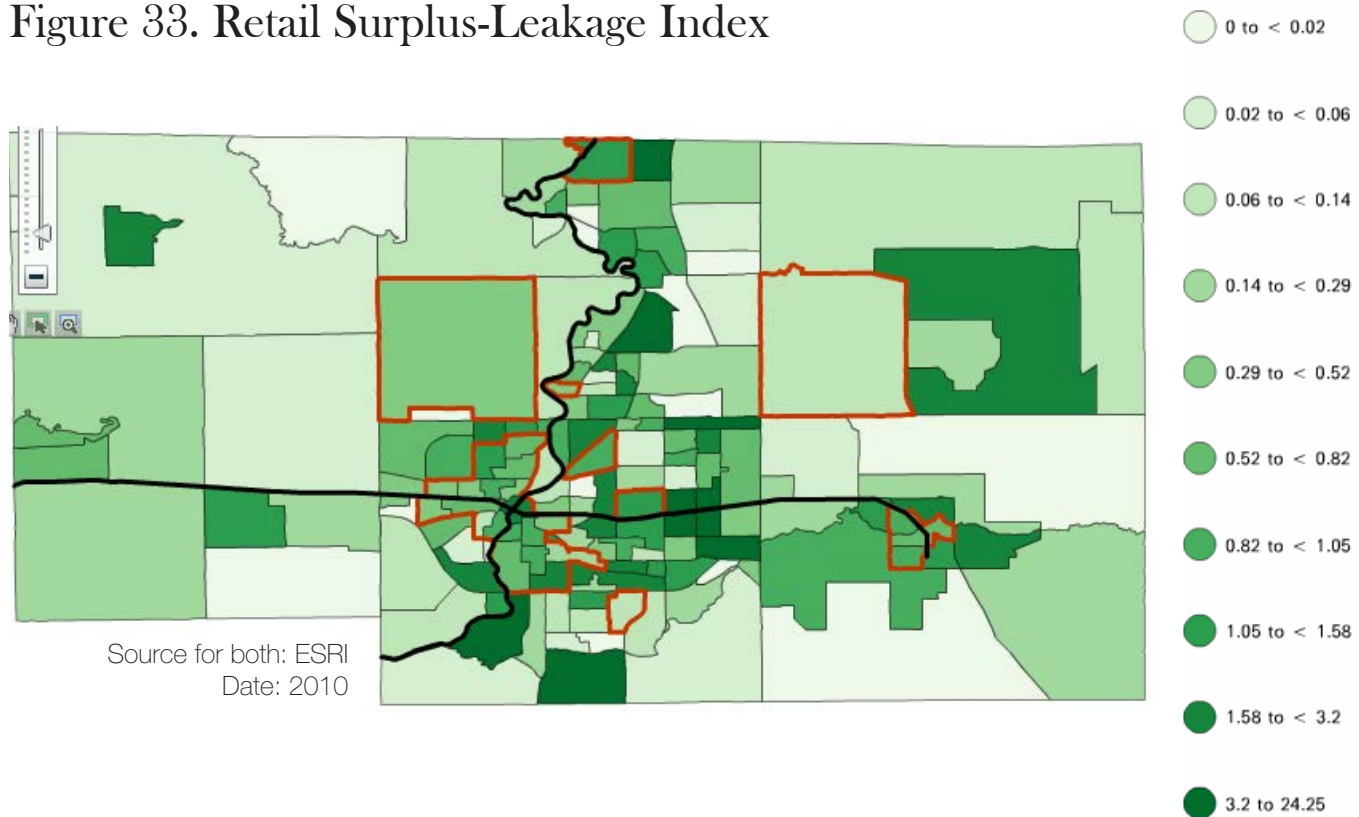
markets.

Consumer Expenditures

Consumer expenditures are an important element for the economic sustainability of a region. Consumer expenditures account for 60% of economic activity in a region and are highly dependent on the earnings of residents. In general the higher the household income the larger the consumer expenditures and the greater the economic vitality. From a sustainability perspective how consumers spend their income is as important as the variation in expenditures among groups and subregions. Expenditures can be on basic necessities like food and housing to more discretionary spending like entertainment and contributions to charitable organizations. In general, the higher the discretionary spending the more sustainable the region as households can adjust their

expenditures to reflect changes in general economic condition.

Another way to view household expenditures is by looking at the percent of expenditures on basic needs (housing, food, transportation, healthcare and education) compared to the percent of expenditures on future well-being (insurance, pensions, and investment) and the percent spent on disposable expenses (apparel, entertainment, and other categories). While the range for the percent of expenditures going to food and housing is fairly large (28.3% to 45.7%), the range for expenditures on the more general basic needs category is fairly narrow (64.5% to 68.4%) indicating that as household expenditures increase a larger portion is being spent for basic needs other than food and housing. The pattern for average household expenditures also shows that there are minimal expenditures for community investment (donations to

various charities) which ranges from a low of 0.03% to a high of 0.06%.

The Vision

Increase the availability of jobs with paying wages that meet a self-sufficiency standard.

Earnings are an important metric for regional sustainability. If earnings are too low it is an indication that residents of the region may not have sufficient income to meet a self-sufficiency standard. This results in increased poverty, people living in inadequate housing, lack of good nutrition, etc.

There are a number of metrics that can be used to assess the availability of jobs that pay a living wage. Wages earned in the MSA compared to the State of Illinois is one possible metric.

ECONOMIC DEVELOPMENT BEST PRACTICES

Living Wage Incentive

Promote the creation of living wage jobs by lowering fees such as sewer and water capital impact fees, permit application fees, school impact fees, etc. for companies that create jobs that pay a living wage ($18.00) per hour or more. Businesses that receive the incentive would be required to submit an annual report demonstrating the number of employees that are paid a living wage. The government entity that provides the incentive could take a lien on the real property that would be removed after a specified time (say 3 years) if the company meets the conditions of the incentive.

Innovation Based Economic Development

Create an innovation network that provides technical support to government and businesses in attracting and retaining innovative businesses. Services could include technical support to communities and economic development organizations, as well as companies, through activities such as needs-based profiling/clustering, innovation assessments, opportunity scouting, boundary spanning, open innovation, design thinking, incubation, regional competitiveness, social networking, innovation network development, IT-based strategies, and innovative information visualization approaches.

Entry level workers in the Vital Signs region earn slightly less than their counterparts statewide (3.2%). The disparity increases significantly when comparing the earning of experiences workers. The Vital Signs region earns 14% less than experienced workers statewide. Another measure ia per capita income and the region's is 11% lower than the nation.

Another factor in determining earning is the type of jobs available in the region. One way to classify jobs is through the categories of creative class, working class and services class occupations. Creative class occupations are those that are creating the future as opposed to continuing the past. These workers earn higher salaries than those in working class or services class occupations. In the Vital Signs region, experienced individuals in working class occupations earn 62% of experienced individuals in creative class occupations. In addition to working class occupation paying less than creative class occupation, there are fewer creative class jobs available in the Vital Signs region than in the state. In the Vital Signs region 34.7% of the jobs are creative class compared to 41% for Illinois.

Increase innovation and entrepreneurship within the region.

Innovation and entrepreneurship are often sighted as critical to job creation and economic vitality. Innovation often results in the creation of new and better products that meet the desires of consumers. Entrepreneurship results in transforming innovation into businesses that create new employment. Having an innovative and entrepreneurial culture assures that existing businesses will be at the forefront in developing new products which are highly valued. These characteristics also result in companies continually evaluating the production processes they use and then modifying production processes based on changes in technology.

Another metric of innovation and entrepreneurship is the presence of high technology jobs in the region. A relatively large presence of high technology jobs would indicate the

region has a stronger innovative culture. For the Vital Signs region the percent of jobs that are classified as high technology in 2009 was 2.2%. This is compared to 4.2% for the State of Illinois and 4.7% for the nation.

For the Boone and Winnebago County regional retail sales are 15% below the potential demand.

Reduce the number of unemployed and underemployed workers.

Employment is the foundation of a healthy economy. Employed persons produce goods and services resulting in increased wealth of a region. In addition these individuals use their earnings to buy goods and services.

Unemployment is the most common measure of the strength of a regional economy, usually presented as the unemployment rate. The unemployment rate measures the percentage of the currently unemployed civilian labor force that is actively looking for work but does not take into consideration other factors that reflect labor underutilization. The civilian labor force does not include discouraged workers. Discouraged workers include: 1) people who want and are available to work but have not actively looked for work within the past 4 months and 2) people who are working less than 35 hours per week but are willing and able to work full time. As would be expected, the traditional unemployment rate is smaller than the unemployment rate if discouraged workers are included. For the State of Illinois, average unemployment between the 4th quarter of 2012 and the third quarter of 2013 was 9%. However, if discouraged workers were included the unemployment rate would have been 15.9% or a rate 75% higher than the traditional unemployment rate.

In October 2013 there were 17,000 people unemployed in the Rockford

MSA resulting in an unemployment rate of 10.5%. Including discouraged workers would result in an unemployment rate of 18.4%. This would indicate there are another 12,700 individuals who are able and willing to work that have dropped out of the labor force, indicating that expanding jobs for those who are unemployed as well as discouraged works is important.

Increase the number of small to mid-sized locally-owned businesses.

Small and medium size businesses are the foundation of an economy and account for a large percent of job growth. In the United States 90% of all businesses have fewer than 20 employees. At the opposite extreme 0.3% of firms have more than 500 employees. The small establishments are also responsible for a significant number of new jobs. Businesses with fewer than 20 employees accounted for 55% of the jobs created by startup firms.

Small business is also strong in the Vital Signs Region. Between 1990 and 2010 89% of new companies had employment of less than 10 people and 98% of the new firms had employment of less than 100. The same holds true for firms that increased employment between 1990 and 2010. Firms with less than 10 employees accounted

for 87% of firms that expanded. It is important to continue to increase the number of small and medium size firms since these firms are also the most likely to go out of business or close.

In addition to job creation, small and medium size businesses are vital to social sustainability. Leaders of locally owned businesses are more likely to be involved in the community activity and civic activities. Involvement of business leaders in civic activities leads to a stronger social infrastructure and increased sustainability of the region.

Increase amount of active, utilized and development-ready commercial and industrial property.

A region's economic sustainability requires the continued attraction and retention of business. A key site selection criteria when firms look to relocate or expand is the availability of development ready property or, property that has the proper zoning and utilities in place. Having development ready property reduces the time needed for firms to start construction for the new or expanded facility and eliminates risks such as not being able to get the proper zoning for the property.

In the Vital Signs region there are 247 available commercial sites (includes

sites zoned commercial, retail, office and business park). These sites are distributed throughout the region and do not appear to be concentrated in any one area. Of the 247 sites the majority are zoned commercial (185). However, 31 sites are zoned retail, 28 zoned office and 3 are zoned as planned business parks.

One important factor in the attraction of large commercial development is the availability of large sites. Of the 142 commercial zoned sites there are only 16 that are greater than 20 acres and one greater than 100 acres. There are 30 commercial sites listed in Boone County.

Availability of industrial sites is important to manufacturing firms. In general manufacturing requires industrial zoning. There are 37 industrial sites listed in the LOIS database. Most of these sites are in areas of the region where current manufacturing is located. Of the 37 industrial sites listed, five are in Boone County.

One important element for industrial sites is the size of the property. Of the 35 sites that have size listed, 25 are less than 20 acres and four are over 100 acres. Of the large sites one is in Boone County and the other three are in Winnebago County.

REGIONAL ECONOMIC DEVELOPMENT GOALS

- Increase the availability of jobs with paying wages that meet a self-sufficiency standard.

- Increase innovation and entrepreneurship within the region.

- Reduce the number of unemployed and underemployed workers.

- Increase the number of small to mid-sized locally-owned businesses.

- Increase amount of active, utilized and development-ready commercial and industrial property.

Goals	Economic Development Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase the availability of jobs paying wages that meet a self-sufficiency standard.	Expand business attraction and small business growth to target wage brackets meeting self-sufficiency.	👎	# Self-sufficient residents	↑	X	X	X	X	X
	Promote availability of existing jobs meeting self-sufficiency standard.	👎	# Jobs identified	↑			X	X	
	Create incentive programs for local business owners that offer a living wage for employees living within the region.	→	# Businesses participating	→			X	X	
	Educate business owners on benefits of providing a living wage.	👎	# Educated	↑			X	X	
Increase innovation and entrepreneurship within the region.	Fully capitalize on the entrepreneurship opportunities provided by the greater Chicago region.	→	# Entrepreneurs	↑			X	X	X
	Seek innovative opportunities to grow niches in target industries.	👍	# Jobs in targeted industries	↑			X	X	X
	Develop a regional entrepreneurial growth plan.	👎	Plan created	→			X	X	X
	Work with area foundations to establish of a fund-of-funds to assist Rockford region entrepreneurs in securing start-up or expansion capital.	→	# Funds disbursed	↑			X	X	X
	Continually highlight entrepreneurial success stories and opportunities; get the message out there that the Rockford region is a place where current and aspiring entrepreneurs gather.	→	# Dollars spent	↑				X	X
	Improve awareness of existing small business and entrepreneur support programs and better connect small businesses, particularly minority-owned firms, to available resources.	👍	# Participants	↑	X	X	X	X	X
	Elevate the global presence of the Rockford region and expand opportunities for international trade, and develop marketing collateral that is internationally-focused.	👍	# Dollars spent	↑			X	X	X
Reduce the number of unemployed and underemployed workers. 10.7% unemployment rate (Aug. 2013)	Partner with WIB and the higher education institutions to establish adult-retraining programs to meet the needs of today's labor force.	👍	# Participants	↑	X		X	X	
	Create a talent bank of potential (currently underemployed) employees to support small business and entrepreneurs in the region.	→	# in bank	↑	X		X	X	
	Establish a temporary Citizen Conservation Corps type program to both employ the unemployed and underemployed in various public work projects such as cleaning up vacant lots, removing graffiti, etc. while providing soft skills training to transition to permanent employment in the private sector.	→	# Participants	→			X	X	X
	Expand programming helping both youth and adult low-income underemployed/unemployed residents develop soft-skills needed to compete in the labor market.	👎	# Participants	↑	X		X		
	Conduct an audit comparing the skill sets of unemployed and underemployed to the number of jobs available and develop a workforce growth plan for local companies fitting this skill gap.	👍	Audit created	↑			X	X	

Goals	Economic Development Strategies	Since 2000	Current Benchmark	2034 Target	🏠	🏢	👥	🛒	🏛
Increase amount of active, utilized, and development-ready commercial and industrial property. *284 vacant commercial and industrial sites available (current)*	Conduct a thorough analysis to identify the "highest and best use" for all planned industrial parks.	→	# Sites analyzed	→			X		X
	Work with local governments, land owners, and public and private utility providers to ensure that all necessary infrastructure is in place for planned industrial parks.	👍	# Certified properties	↑			X	X	X
	Develop the region's top two industrial park sites into purpose-built districts that provide ample capacity to accommodate a substantial share of the Rockford region's major business locations/expansions.	👍	# Jobs created	→			X	X	X
	Hosting a Site Selectors Guild familiarization tour for the Rockford area as a way to market it to site selectors and enhance business attraction efforts.	→	# Tours	→			X	X	X
	Expand grant writing to prepare additional properties for development.	👍	# Grant dollars	↑			X		X
	Create certification program for local properties.	👍	# Certified properties	→			X	X	X
Increase the number of small to mid-sized locally-owned businesses. *19,398 small to mid-size business locally-owned.*	Train small business startups to utilize neighborhood data available through the online Vital Signs Data Commons.	→	# Users	↑	X	X			
	Implement targeted industry and diversification plans, ensuring a match between the local workforce and the needs of local small to mid-sized businesses.	👍	# Employed	↑	X	X	X	X	X
	Develop business ownership training with matchmaking and succession planning for transitioning small- to mid-sized companies.	👎	# Participants	→	X	X			
	Simplify and revise regulations to bring about timely small business development.	👎	# Regulations updated	↑			X		X
	Support stronger business associations in commercial corridors to aid with small business growth.	👍	Budget size	↑		X	X	X	X

Education
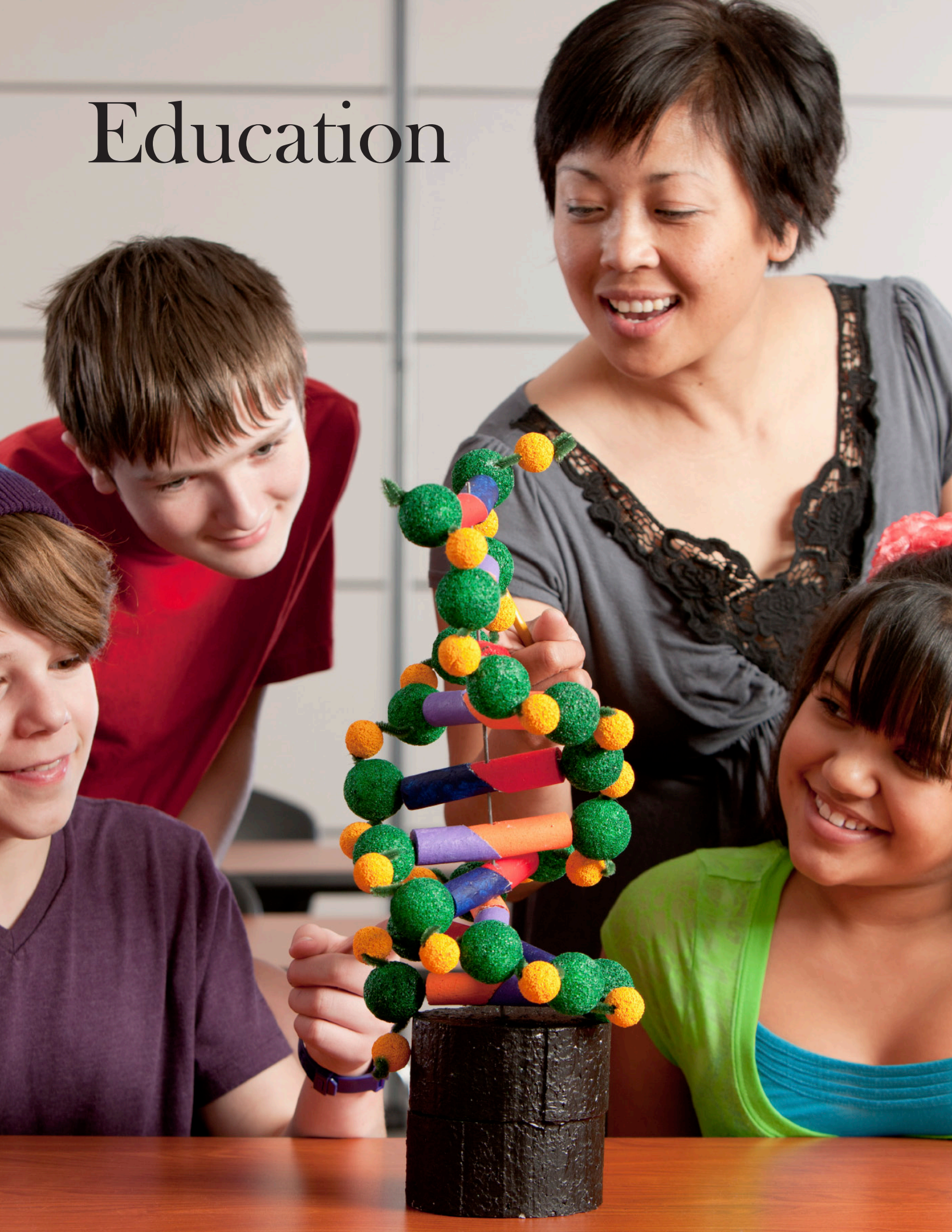
Introduction

Education is the prime component of human capital development and is intricately linked to many of the sustainability topics. Educational attainment and educational equity are important indicators of a sustainable and healthy community. Educational levels of residents affect regional economic indicators such as unemployment rates, the consumer markets, and the degree to which a region can attract and retain quality businesses and higher paying jobs. Disparities in educational equity impede long-term growth and regional stability in both the economic and cultural sectors. Equity in education enhances a region's overall success while also increasing awareness and emphasis on building strong foundations in educational systems. Educational equity (or inequity) is often a by-product of socioeconomic, racial and cultural segregation.

Public, private, and parochial schools give students the opportunities to succeed in life, and the economic well-being is tied to growing the workforce pipeline. It is estimated that if the region raised the number of college graduates to the national average, community wealth would grow by over $1 Billion dollars annually.

But equity in education has been very problematic for the region, with graduation rates by minority and lower income students well below that of their white peers. Intricately linked to regional sprawl and unsustainable growth, many of the region's higher income students left the inner city school districts. Coupled with the desegregation lawsuits the Rockford public school student population is currently mostly minority and low income, although that situation is starting to reverse itself. Minority enrollment in the Rockford public schools is 52% while the average is 17% for the remaining school districts combined. Minority enrollment in private schools averages around 18%. Figure 34 details this situation.

Education

Overview

Legacy of School Segregation

During the 1980s most communities made gains to desegregate local school districts. But families who were socially and economically mobile moved out of the inner city school districts which made true desegregation difficult. Many students that lived in areas of concentrated poverty found it difficult to thrive in a non-mixed learning environment. The personal stresses of life in poverty, documented in the Health chapter, were brought into the learning environment and created unstable and challenging classrooms, regardless of the quality of teaching and curriculum. In a general comparison for schools in middle-class areas, schools in poorer neighborhoods have:

- lower average test scores
- fewer students in advanced placement courses
- more limited curricula
- less qualified teachers
- less access to serious academic counseling
- fewer connections with colleges and employers
- more deteriorated buildings
- higher levels of teen pregnancy
- higher dropout rates

Consequence of Dropping Out

The cost of dropping out is profound, both for the individual as well as society. Dropouts have more unemployment and for longer periods, lower rates of marriage, reduced home-ownership, and reduced economic metrics. The following are some startling statistics about dropouts nationally:

- High school students from low-income families are 6x more likely to drop out of school than their high-income peers.
- Dropping out of high school means a 63x higher rate of being institutionalized than a four year college grad.
- For male high school dropouts, 1/10 are institutionalized in their lifetimes compared to 1/500 with a bachelor's degree.
- The net cost of a high school dropout on society over the course of their lifetime is estimated to be a $5,200 negative burden while the net gain from a high school graduate on society is $287,000.
- The net impact of an individual with a bachelor's degree is nearly $800k.
- Female dropouts are 6x more likely to give birth unwed

Figure 34. White
Enrollment
by School Type

Private   Public
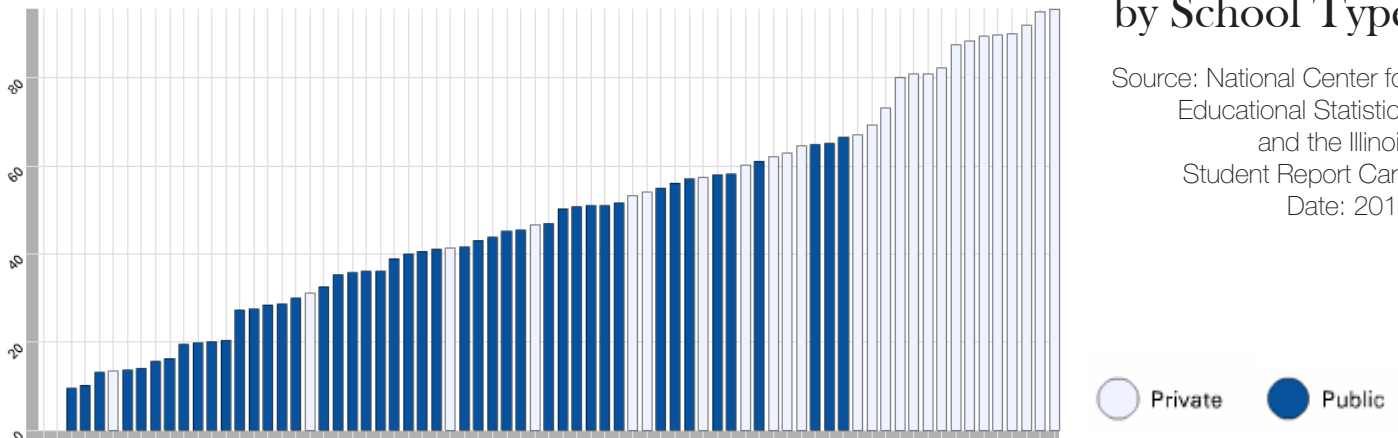
- Young high school dropouts are 9x more likely to be single moms than those with a bachelor's degree.
- Annually dropouts cost the country over $200 billion in transfer payments, lost income, and support systems through social services and the court system.
- Dropouts have an unemployment rate estimated at 54% in the U.S.

Locally these trends are appearing in large numbers. Figure 35 shows a map of the percent of dropouts (not achieving a high school diploma or equivalent) per district. Red indicates dropout rates anywhere from 30-65% of all adult residents.

Investment in Education

One way to measure the community's investment in education is by comparing cost per pupil. There are 13 school districts in the region, two in Boone County and eleven in Winnebago County. Of the eight unit school districts in the region three have per pupil operating expenses above the state average, with the highest school district at 17% above the state average. In contrast the lowest school district is 20% below the state average for per pupil investment. All four of the elementary school districts have per pupil operating expenses below the state average as does the high school districts. The range for these school districts is from 26% below for Kinnikinnick to 13% below for Shirland.

There are a number of reasons that per pupil expense may vary. These factors include the percent of the enrollment of students from low income households and percent of the enrollment that are minorities. The Illinois State Board of Education's school funding formula allows for higher per student state funding for districts with these high metrics of low income and minority student bodies.

Total minority enrollment in RPS is 52% while minority enrollment in the other public school districts within the Region averages around 17%%. Minority enrollment in private schools averages around 18%.

The Vision

Increase percentage of residents with high school or equivalent educational attainment.

Overall educational attainment and educational equity in a region are important factors in creating sustainable communities. The general educational level of residents impacts a region's contribution to the consumer market, the ability to attract and maintain quality businesses and jobs, the degree of civic engagement, and the ability of a community to invest in education. Educational equity also plays a key role in all of the Social metrics that form the measures of sustainability.

Children in poverty often have no books or computers and can be distracted by difficult home lives. Issues such as neighborhood decay, poor role models, a higher exposure to crime and drugs, and unsupportive and dysfunctional families have a profound influence on the ability to learn. Prolonged exposure to high levels of stress has a physical impact

Figure 35.
Percent Residents
Over 25 - High
School Dropouts

Source: US Census
Date: 2010

> 2 SD below mean

1 - 2 SD below mean

0 - 1 SD below mean

0 - 1 SD above mean

1 - 2 SD above mean

> 2 SD above mean
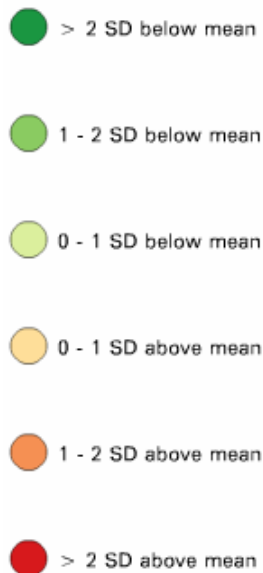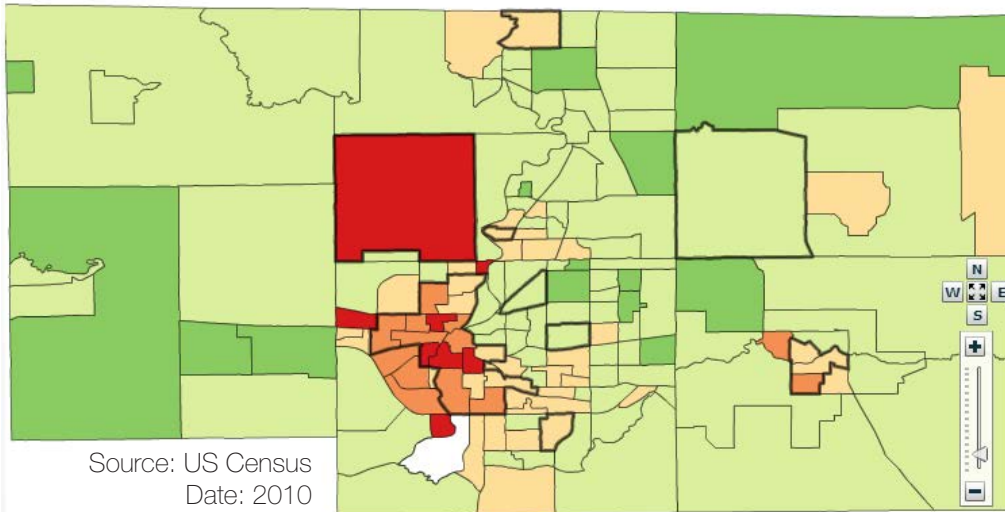
in reading and math proficiency. However, students in poverty score in the 29th percentile, and students in public housing score in the 16th percentile.

An important indicator of secondary education performance is the region's ISAT scores. Locally, the test scores are below the state average. When all public school ISAT test scores from the region are combined, half of the region's students are below state standards in reading, writing and science - 93% are below in writing, and– 32% in math.

Graduation rate data indicates that RPS 205 is 71% and 87% for other public schools. Regionally, graduation rates of low income students steadily increased over the last decade. The graduation rates of males vs. females remained relatively consistent since 2002. Figure 36 details the performance of the region's high schools.

However, educational disparity can be seen in the indicator of graduation rates by race. Although graduation rates for Asians have been relatively stable, the graduation disparity between Whites, African Americans

Only 66% of low-income students (79% of the student body) in RPS 205 are graduating; in other school districts in the Region they have a much higher graduation rate at 84%.

and Hispanics in both counties are significant. The graduation rate for African Americans in RPS 205 is only 65%, while in the other school districts it is 86%. Only 66% of low-income students in RPS 205 are graduating, while in the other school districts it is 84%. Some schools have graduation rates for low income students in the low 60%'s. These same schools have high chronic truancy.

on the part of the brain that enables focus, perseverance, and anger management. This, in turn, can result in greater declines in health, resulting in lower student achievement. There is a direct correlation between student achievement, home background, peers, school quality, school funding, and curriculum.

HUD developed a School Index to determine how well local schools perform against others in the nation. Currently, the Rockford Region scores in the 45th percentile nationally for all of its students

Increase participation in trades and crafts programs.

According to the Bureau of Labor and Statistics more than one third of skilled tradesmen are over the age of 50. For every three tradesmen who retire, only one is in the education pipeline to replace them. Nationally, there is an increasing body of research exploring non-traditional education and employment pathways. In line with this trend, within the Rockford Region there is a movement to grow the access and participation in trades and crafts programs. Providing skills and resources to help residents "grow their own jobs" is an entirely different approach to growing the region's economy. Not all students have the desire or need for a higher education pathway.

Continued support for short-term, upward economic mobility is critical to break the cycle of generational poverty within the region. Developing a partnership with Etsy, classes such as the "Creating the Creative Business", and the SBDC outreach programs are just some of the few opportunities available to local residents.

Increase percentage of residents with advanced degrees.

Half of all new jobs over the next 10 years will require postsecondary education. For the region as a whole, advanced educational attainment falls below state and national norms. The percent with a bachelor's degree or above was 21.2% for Winnebago County, 19.8% for Boone County and 30.7% for Illinois. The difference in educational attainment tracks well against per capita income. Total per capita income in 2010 in Winnebago County was $33,840, $32,407 in Boone County and $43,249 for Illinois.

Advanced educational attainment also has an impact on unemployment rates. An analysis of unemployment rates for workers with a bachelor's degree is significantly higher. Of the 84 Census tracts in the two-county region, only 16 had an unemployment rate for workers with a bachelor's degree higher than 10%. The tracts with higher unemployment rates among workers with a bachelor's degree are also those that are "at risk".

Increase percentage of employees with career-readiness knowledge and skills for the workforce.

GED do not fare well compared to high school diploma graduates. GED rates for unemployment, incarceration, income earned, and marriage failure are close to that of high school dropouts. Experts point to the importance of learning non-cognitive skills (focus, determination, perseverance, motivation, tenacity, reliability, self-discipline) at a young age as a determinant of future life success. While IQ will always be limited to one's biology, non-cognitive skills can be learned.

Best practices, such as the Chicago region's has after-school program model and support organizations to supplement the lack of soft-skills development within the school day. Additional mentorships, apprenticeships, and internships can be developed to better prepare future workers.

Increase value placed on educational achievement, career aspirations, and life-long learning.

Education and life-long learning should be supported and be an expectation, not the exception. James Heckmann, University of Chicago Professor and Nobel Prize winner has documented the following pertinent facts:

EDUCATION BEST PRACTICES

Etsy and Rockford Team Up on Craft Entrepreneurship

Etsy, an online marketplace for home-crafted goods and products, teamed up in 2013 to establish their first entrepreneurship program in the country. Recognizing the strong manufacturing history of the region and the increasingly high-skilled jobs associated with advanced manufacturing, the Mayor of Rockford and several community members set out to create a new local program of high impact. The vision for the program is to give residents the tools they need to create individual economic opportunity through creating craft-based goods. The group is working to establish a Craft Entrepreneurship Curriculum.

- Many major economic and social problems such as crime, teenage pregnancy, dropping out of high school, and adverse health conditions are linked to low levels of skill and ability in society.
- Policies that foster skills and abilities should recognize the multiplicity of human abilities.
- Currently, public policy in the United States and many other countries focuses on promoting and measuring cognitive ability through IQ and achievement tests. A focus on achievement test scores ignores important non-cognitive factors that promote success in school and life.
- Socio-emotional skills, physical and mental health, perseverance, attention, motivation, and self-confidence contribute to performance in society and help determine scores on tests that are commonly used to measure cognitive achievement.
- Ability gaps between the advantaged and disadvantaged occur early in the lives of children.
- Family environments of young children are major predictors of cognitive and socio-emotional abilities, as well as of a variety of outcomes such as crime and health.
- Family environments in the United States and many other countries around the world have deteriorated over the past 40 years. A greater proportion of children are being born into disadvantaged families, including minorities and immigrant groups.
- Experimental evidence on the positive effects of early interventions on children in disadvantaged families is consistent with a large body of non-experimental evidence showing that the absence of supportive family environments harms child outcomes.
- Early intervention can improve cognitive and socio-emotional abilities, and the health of disadvantaged children.
- Early intervention can promote schooling, reduce crime, foster workforce productivity, and reduce teenage pregnancy. These interventions are estimated to have high benefit-cost ratios and rates of return.

In 2013 US Secretary Shaun Donovan of HUD stated, ""The single biggest predictor of children's life chances, even their lifespan, is the zip code they grow up in. The effect of concentrated poverty is an economic calamity for our cities and our nation". Early interventions in the life cycle of disadvantaged children have much higher economic returns than later intervention, and can reduce the need for public job training, convict rehabilitation programs, adult literacy programs, tuition subsidies, or expenditure on police.

Within the HUD School Index the Rockford Region scores in the 45.5th percentile nationally for all of its students in reading and math proficiency. However, students in poverty score only in the 29.5th percentile, and students in public housing only score in the 15.9th percentile.

Figure 36. Graduation Rates by School

Figure 36. Graduation Rates by School

ACADEMIC CAREER ED HIGH SCHOOL

AUBURN HIGH SCHOOL

BELVIDERE HIGH SCHOOL

BELVIDERE NORTH HIGH SCH

DURAND HIGH SCHOOL

GUILFORD HIGH SCHOOL

HARLEM HIGH SCHOOL

HONONEGAH HIGH SCHOOL

JEFFERSON HIGH SCHOOL

NORTH BOONE HIGH SCHOOL

PECATONICA HIGH SCHOOL

ROCKFORD EAST HIGH SCHOOL

SOUTH BELOIT SR HIGH SCHOOL

WINNEBAGO HIGH SCHOOL
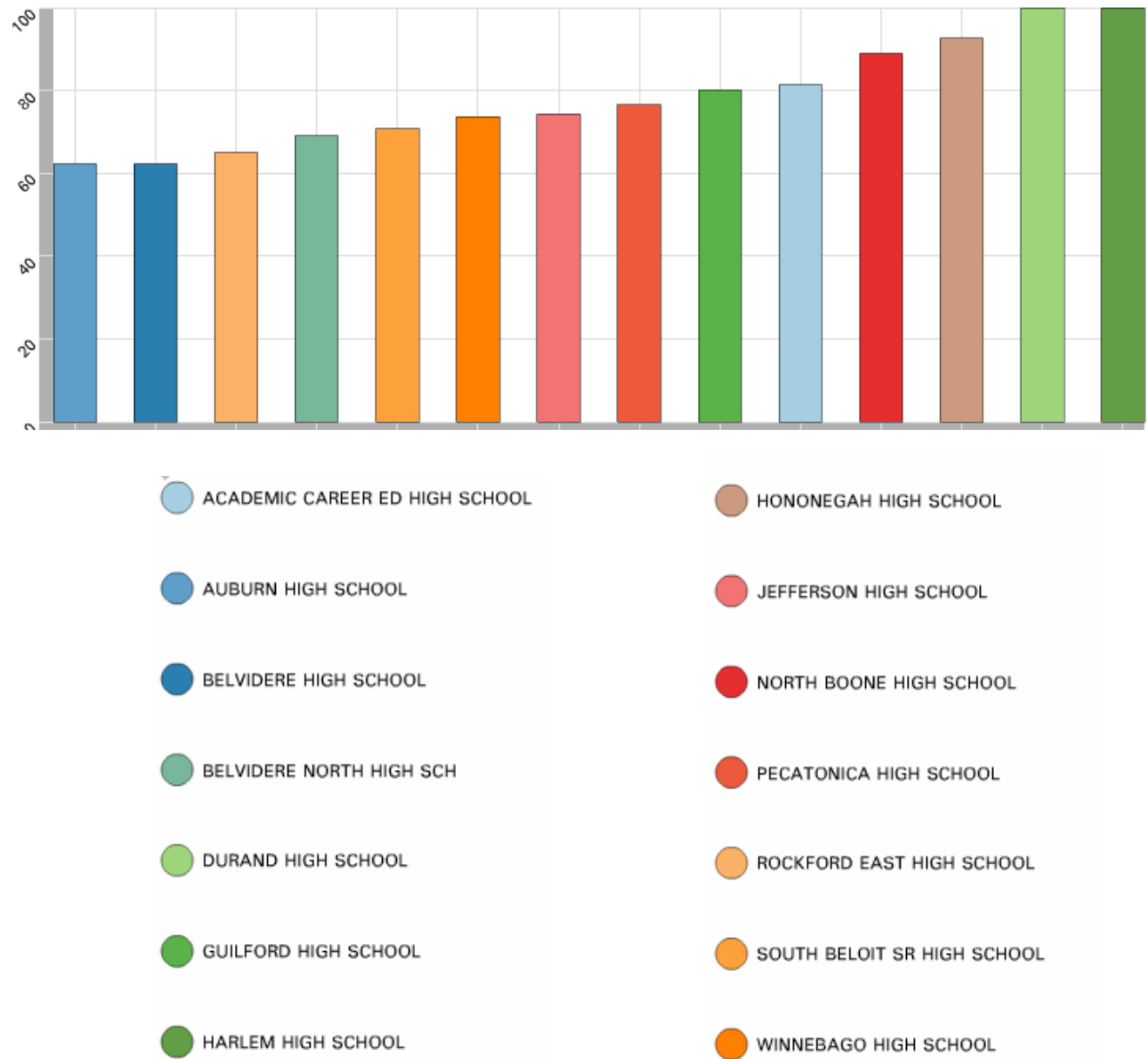
REGIONAL EDUCATION GOALS

- Increase percentage of residents with high school or equivalent educational attainment.
- Increase participation in trades and crafts programs.
- Increase percentage of residents with advanced degrees.
- Increase percentage of employees with career-readiness knowledge and skills for the workforce.
- Increase value placed on educational achievement, career aspirations, and life-long learning.

Goals	Education Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase percentage of residents with high school or equivalent educational attainment.	Increase G.E.D. attainment rates by targeting youth and adult drop-outs with additional counseling and support (daycare, donated study resources, etc).	(orange thumb)	**14.7% adults no high school diploma (2011)**	↑	X	X	X		
	Continue to address the challenges facing the region's public schools by working with regional business, academic, and government leaders to maintain widespread community support.	(green thumb)	*# Graduated*	↑	X	X	X	X	
	Increase educational aspirations for all residents, from students to parents.	(green arrow)	*# Graduated*	→	X		X	X	
	Increase test scores by increasing availability of after-school mentoring programs.	(orange thumb down)	*Increased test scores*	↑	X	X	X		
	Decrease truancy rates by creative a positive-reinforcement program for attendance for students.	(orange thumb down)	**Median chronic truancy rate is 6 (2011)**	↑	X		X		
	Enhance programs related to school safety, including additional safe-routes-to-school programs.	(green thumb)	*# Safe routes to school*	↑	X	X	X		X
	Increase percent of elementary students attending neighborhood schools.	(green thumb)	*# Students*	↑	X	X			X
	Establish a design/visual arts school that can draw a high level of energy and activity into a concentrated area in downtown Rockford and provide the necessary level of public incentives.	(green thumb)	*# Participants*	→			X		X
Increase participation in trades and crafts programs.	Leverage public and private and local, state, and federal sources to establish larger amounts of trades and crafts programs.	(green thumb)	*# Programs*	↑			X	X	X
	Promote and market trades and crafts programs.	(green thumb)	*# Dollars spent*	↑			X	X	
	Grow programs to coach entrepreneurs in trades and crafts to start a business, especially for low- to moderate-income residents.	(green thumb)	*# Dollars invested in programming*	→	X	X	X		
	Develop an audit of trades and crafts programs.	(green arrow)	*Audit conducted*	→			X		
	Work with labor and trade unions to encourage expansion of guild and trade craft programs through apprenticeships.	(green arrow)	*# Apprenticeships*	↑			X	X	
Increase value placed on educational achievement, career aspirations, and life-long learning.	Grow readership at libraries in both print and digital books.	(orange thumb down)	*Readership*	↑	X	X	X		
	Institute counseling for youth on financial planning activities for future education, home purchasing, employment choices, retirement, etc.	(orange thumb down)	*# Participants*	→	X		X		
	Grow presence of life-long learning classes through online matchmaking services such as Dabble (hobby online matchmaking platform).	(green arrow)	*# Users*	↑	X		X		

Goals	Education Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase percentage of residents with advanced degrees. *20.9% of the population had a bachelor's degree or higher (2011)*	Advocate for the implementation of a dual-credit program whereby high school students can take courses at any of the Rockford area colleges to accelerate students' progress through the educational system.	→	# Participants	⬆	X		X		
	Increase participation in community college programming.	👍	# Participants	⬆	X		X	X	
	Increase presence and availability of higher education within core downtown areas.	👍	# Classes	→		X	X	X	X
	Expand programming and participation of community college classes.	👍	# Dollars supporting programming	⬆	X		X	X	X
	Lean on the local populace to fund more scholarship opportunities.	→	# Dollars raised	⬆	X		X	X	
	Create more job-training programs and facilities at local colleges that suit the current and future needs of local employers and targeted industries.	👍	# Participants	⬆			X	X	
	Leverage NIU-Rockford's existing presence to encourage further expansion of NIU into the Rockford region.	👍	# Dollars invested in NIU's presence	⬆			X		
Increase percentage of employees with career-readiness knowledge and skills for the workforce.	Develop curriculum for a mandatory high school community service program for graduation.	→	# Participants	→		X	X		X
	Develop a summer internship/job program for high school students.	→	# Participants	→	X	X	X	X	X
	Develop a mentorship program between retirees and youth at developing career-readiness skills.	→	# Participants	→	X		X		
	Enhance educational opportunity tracts that lead to a specific career or vocation.	👍	# Tracts	⬆			X		
	Develop soft-skills training programs for youth of low-income families to prepare them for life-long success.	👎	# Participants	→	X	X	X		

Energy
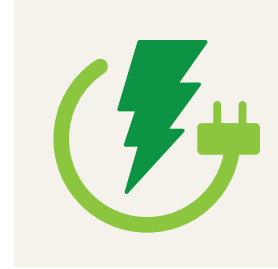
Introduction

Cities are arguably the most important engine for economic growth and socioeconomic development. It is estimated that by the year 2030 almost 5 Billion, or about 60% of the global population at that time, will live in cities, leading to massive requirements for energy to power the growth and construction as well as to expand the existing infrastructure and maintain it for future needs. But access to electricity and clean cooking solutions still remains a global development challenge that must be solved before there is equity in relationship to energy supply. Around the world, about 1.4 billion people lack access to electricity, and 2.7 billion people continue to rely on traditional use of biomass fuels for their cooking and heating needs.

Being more energy efficient can offer practical solutions to budget constrained cities and metropolitan areas to still meet their energy needs without sacrificing their development priorities, growth strategies, and probably most importantly without degrading or damaging the natural environment. Becoming an energy efficient society will take major upfront investment but the return on that investment will be substantial.

Energy

According to studies by the Sierra Club, the operation, heating and cooling of buildings contribute nearly 40% of global warming emissions and consume over 70% of the electricity in the world.
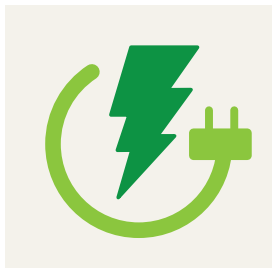
Overview

Energy Efficiency and Conservation Block Grant, EECBG

The Energy Efficiency and Conservation Block Grant, EECBG, Program, funded for the first time by the American Recovery and Reinvestment Act of 2009, represents a Presidential priority to deploy the cheapest, cleanest, and most reliable energy technologies available. It is intended to assist U.S. cities, counties, states, territories, and Indian tribes to develop, promote, implement, and manage energy efficiency and conservation projects and programs designed to: reduce fossil fuel emissions; reduce the total energy use of the eligible entities; improve energy efficiency in the transportation, building and other appropriate sectors; and to create and retain jobs related to the energy sector of the economy.

The Energy Efficiency and Conservation Block Grant (EECBG) program in the Rockford Region provided direct funding to entitlement agencies and discretionary funding for the remaining jurisdictions. From the discretionary pool the Village of Machesney Park was awarded $29,250 to replace the HVAC system in their Village Hall, and the Harlem School District, in partnership with the City of Loves Park, was awarded $72,000 to renovate the lighting system in Windsor Elementary School.

The Village of Machesney Park upgrades are projected to provide energy savings of a reduction in electricity usage of 16.1 kWh, 0.17 million Btu and .02 metric tons of CO_2, which is also a $3,220 annual savings. In addition, the new system replaces one using refrigerant 22, which the government has deemed harmful to the environment.

The Harlem School District, in conjunction with the City of Loves Park, used its awarded EECBG monies to renovate the building lighting of Windsor Elementary School, making the building more energy efficient and increasing the foot-candles in the learning environments to current standards. This project benefited from an earlier-performed energy audit, which showed that Windsor School has the lowest rating, 17 out of a possible 100, out of all audited schools in the district. The renovations save 13.71 percent of energy costs, amounting to an annual savings of $4,113, which equates to 40 kWh, 0.4136 million Btu, and .03 metric tons of CO_2.

Reducing Energy Consumption

Energy efficiency is the act of reducing the amount of energy that is required to provide products and services to consumers; or in other words using less energy to provide the same service. Energy efficiency is not energy conservation. Energy conservation is reducing or going without a service in order to save money. Energy efficiencies are almost always the result of new technologies being introduced or improved upon, while other times they can be the result of negotiations or policy changes in government. Improving the region's energy efficiency in the industrial, commercial, residential, and government sectors saves money long after the initial upfront investment has been recouped. Not only does it make financial sense to the region but the environmental benefits that are associated with a reduction in the output of greenhouse gases and particulates that are tied to climate change is also just as important.

According to studies by the Sierra Club, the operation, heating and cooling of buildings contribute nearly 40 percent of global warming emissions and consume over 70 percent of the electricity in the world. A national evaluation has shown that household energy consumption can be reduced by an average of 30 percent if comprehensive energy retrofits using existing technologies are implemented. Most low-income housing units are not the most energy efficient structures and the occupants could benefits the most from cost savings of these magnitudes. In the commercial and industrial sector buildings can be built as EnergyStar Rated, which is an international standard for energy efficiency achieved through building design and a reduction in energy consumption through the adoption of use policies and best management practices. A

recent accomplishment within the Vital Signs Region is the introduction of Open Road Tolling on interstate-90 at the South Beloit Toll Plaza and the Belvidere Toll Plaza. By eliminating the need to slow, stop and wait in traffic to pay tolls, congestion on the tollway is heavily reduced. Because of this reduction on congestion, the flow of vehicles is much smoother and faster, decreasing the emissions from vehicles on the tollway in the region dramatically. This significantly reduces one of the main transportation-related contributors to air pollution within the region. In fact, according to studies performed by the Illinois Tollway Authority, open road tolling improves the quality of life with a 41 percent reduction in carbon monoxide emissions.

Average Household Expenditures on Energy

As seen in Figure 37, there is a stark difference within the region comparing the average household expenditures on energy. Within the areas of concentrated poverty (found with a red outline) a much lower amount is spent on energy. While this is not surprising due to their lower household budgets, this does point to a demand for energy retrofits for low-income housing.

Greenhouse Gas (GHG) Reduction and Mitigation

A variety of federal policies and programs are directly and indirectly reducing GHG emissions. In addition, U.S. state and local governments have authority to adopt GHG-reduction policies, and some locales are taking noteworthy actions, including the Rockford Region. Most GHG emissions stem from the burning of fossil fuels and the largest contributors are vehicles and

ENERGY
BEST PRACTICES

Provide a financial framework and plan for retrofit/best management practices.

Support the development, coordination and delivery of financing products targeted across retrofit customer segments. Help to support a market transformation to broaden retrofit demand and to give private lenders the confidence to lend to customers for energy efficiency upgrades and new technologies. Utilities and municipalities should emulate the Illinois Department of Commerce and Economic Opportunity (DCEO) program for financing energy and water efficiencies, and partner with retailers to conduct rebate programs to replace appliances/fittings with more efficient models.

Create model codes and ordinances to promote energy efficiency.

Assist communities in amending or adopting codes or ordinances for water conservation by providing ordinance language and related resources. Encourage incorporation of sustainability plans or codes in local planning practices during energy-related grant award processes by prioritizing funding to communities that have taken these initiatives. Allocate funding for the development of green codes.

the energy used to create and distribute electricity. GHG emission reductions and related climate change mitigation has become a prominent component of regional transportation plans.

GHG reduction can also be impacted in a major way by changing a few small habits around the house; big impacts can be made with minimal investments and efforts. Some of these methods can include changing lighting to LED, increasing the R-value of insulation to help with retaining heat in the winter and cooling in the summer, using roofing materials that are EnergyStar qualified and attract less thermal radiation from the sun's rays by lowering the roofs surface temperature by up to 100F, and upgrading your hot water heater to an energy saving unit. Also household recycling can help to reduce landfill volumes and therefore reduce GHG emissions. Food material and other organic material that makes it to landfills as waste decomposes and is turned into Methane, which is the 2nd most prevalent GHG emitted in the United States from anthropogenic activities.

Vision

Increase energy efficiency of businesses, homes, and vehicles.

Since heating and cooling of buildings currently consumes the most energy municipalities should collaborate with neighborhood associations to create awareness and incentives for energy efficiency upgrades and best practices. In the private and commercial sectors the Chamber of Commerce and Economic Development Councils should encourage fleets of local businesses to be more energy efficient and should think about cleaner burning fuel options. The city of Rockford has lead the way when it comes to improving building codes and regulations to increase the sustainability and

efficiency of our buildings, and as such should be used as a model for the surrounding municipalities.

Decrease reliance on non-renewable energy sources.

The best local resource and ally for renewable energy is freedom field, a not-for-profit organization formed to facilitate the development and operation of a renewable energy solutions center. New regional programs that leverage the research of Freedom Field is beneficial to the vision of energy solutions but also provides career path and economic development opportunities for new technology companies. The Vital Signs region needs to continue to support the linkage between Freedom Field, Rock Valley College and the local school distritcs.

Landfills are the 3rd largest source of Methane emissions in the United States.

Establish a reputation (brand) as a region for reliable and innovative energy delivery systems.

It is highly desirable to create a coalition or network of providers so that there is a similar structuring to that of the Rockford Area Aerospace Network. Once a coalition or network has been established, develop an inventory of innovative energy projects and tools that regional business, home owners, and solution providers have already utilized and are known to work in the area. And then use this knowledge to attract energy related companies to the region.
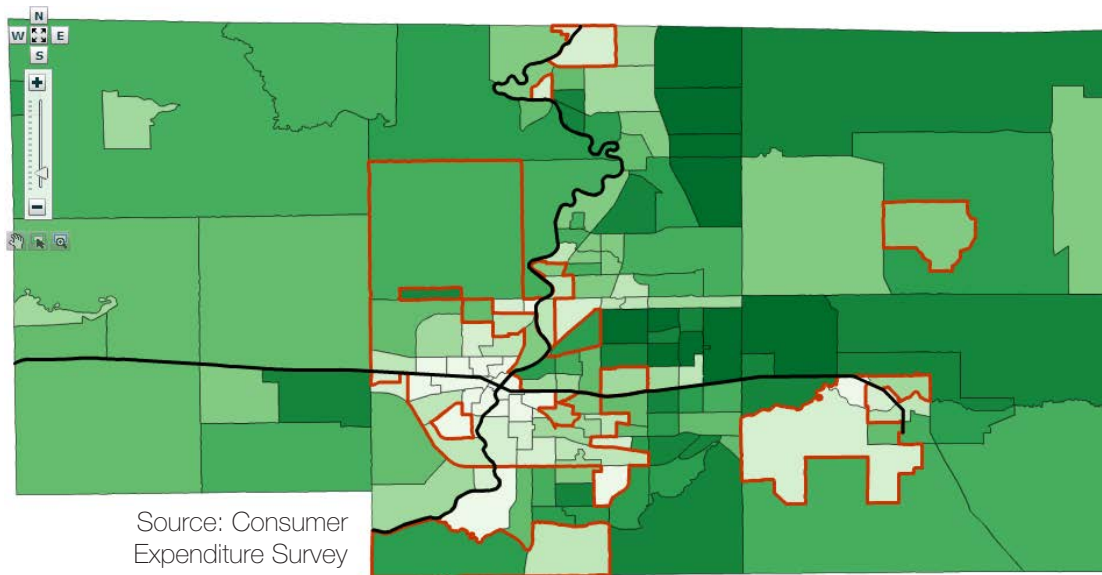
Figure 37.
Average Household
Expenditures
on Energy

$1,049.02 to $1,830.82

$1830.82 to $2,152.70

$2,152.70 to $2,286.40

$2,286.40 to $2,427.70

$2,427.70 to $2,569.06

$2,569.06 to $2,717.07

$2,717.07 to $2,938.29

$2,938.29 to $3,089.87

$3,089.87 to $3,711.16

$3,711.16 to $6,996.49

Source: Consumer
Expenditure Survey
Date: 2012
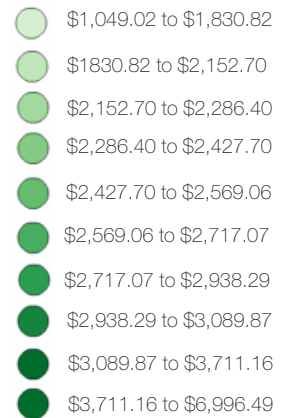
Balance needs for safe, reliable energy with quality of life standards.

Major road improvements and other construction projects offer opportunities to work with utilities remove overhead facilities as much as practical and replace them with underground facilities. Local governments could then work with the adjacent home and business owners to relocate utility entrances to the basement level where available. This approach greatly reduces the need for emergency maintenance during storm events but also improves the streetscape of the adjacent roadway corridor.

Increase number of local jobs within the alternative energy sector.

Collaborate with local organizations and agencies to create training, programs and curriculum for jobs in the alternative energy sector. Priority could be given to certification of energy auditors that can inspect homes, businesses and industries and make energy saving recommendations.

REGIONAL ENERGY GOALS

- Increase energy efficiency of businesses, homes, and vehicles.

- Decrease reliance on non-renewable energy sources.

- Establish a reputation (brand) as a region for reliable and innovative energy delivery systems.

- Balance needs for safe, reliable energy with quality of life standards.

- Increase number of local jobs within the alternative energy sector.

Goals	Energy Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Decrease reliance on non-renewable energy sources.	Establish standards at municipalities and increase use of renewable energy.	→	Amount of renewable energy used	→					X
	Develop and implement a smart grid regional plan.	→	Plan established	→				X	X
	Develop a regional program to research and implement renewable energy sources in collaboration with Freedom Field.	→	# Participants	→			X	X	X
	Promote the use of natural gas as a fuel source for vehicles to reduce energy costs and the use of imported fuel, which should save money, create jobs and improve air quality.	👎	# Users	↑			X	X	X
Establish a reputation (brand) as a region for reliable and innovative energy delivery systems.	Create regional promotion of available energy-star rated appliances and products.	→	Program created	→	X		X	X	X
	Create website where residents can share their own stories of personal actions taken toward reliable and modern energy solutions.	→	# Users	→	X		X		
	Work with Freedom Field to develop asset inventory of private and public existing innovative energy solution providers. Create coalition/network of these providers.	→	# Network users	→			X	X	X
	Once coalition/network is established, develop inventory of innovative energy projects and tools that regional businesses, home owners and solution providers have already established.	→	Inventory taken	→	X		X	X	X
	Develop communication/marketing/public relations plan to start sharing with federal, state and regional partners highlighting the success of our region.	→	Plan created	→			X	X	X
	Utilize communication and marketing tools, while at state, national and international conferences, to establish brand for region and attract more service providers to the region.	→	# Dollars spent	→			X	X	X
Balance needs for safe, reliable energy with quality of life standards.	Work to include the burying of utilities on major infrastructure projects.	👎	# lines buried	↑				X	X
	Develop clean distribution generation.	→	Program established	→					X
	Create an energy efficiency web-portal.	→	# Users	→	X	X	X	X	X

Goals	Energy Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase number of local jobs within the alternative energy sector.	Collaborate with local organizations and agencies to create additional training programs and curriculum for jobs in the alternative energy sector.	👍	# Participants	→	X		X	X	
	Establish a promotional program to establish a 21st century energy efficiency workforce.	→	# Dollars spent	→			X	X	
	Complete audit of current jobs available in the alternative energy sector.	👍	Audit conducted	→			X	X	
	Increase number of businesses using Freedom Field as a research laboratory.	👍	# Bsuinesses	↑			X	X	
Increase energy efficiency of businesses, homes, and vehicles.	Increase planning and coordination to promote clean, reliable, and affordable energy.	👍	# Dollars supporting	↑			X	X	X
	Work with Chamber of Commerce and EDCs to encourage fleets of local businesses to be energy efficient.	→	# Fleet cars	→			X	X	
	Improve compliance with energy code and track green building improvements region-wide.	👍	# Compliances	↑	X		X	X	X
	Collaborate with neighborhood associations to create awareness about energy efficiency opportunities and best practices.	👎	# Reached	→	X	X	X		X
	Improve codes and regulations to increase the sustainability of our buildings with the principles of LEED in new construction.	→	# Codes improved	↑					X
	Collaborate with community organizations to distribute materials showing return on investment on energy efficiency measures.	→	# Dollars spent	↑			X	X	
	Local banks to create a loan-loss reserve as part of Community Reinvestment Act obligations for energy-efficient rehabs.	→	Amount dollars in program	↑				X	X
	Increase number of trained individuals that are certified to perform energy audits.	→	# Certified	↑					X
	Create youth education programs by developing K-12 curriculum on renewable energy best practices.	→	# Participants	→	X		X		

Food

Introduction

Food is one of the basic necessities of life along with water, shelter and clean air. Food plays a vital role in the region's health, economy and culture and is a critical component to a sustainable and resilient community or region as a whole. Everyone should be entitled to equal access to healthy and affordable food options. However, many rural and urban residents have limited access to fresh produce and other healthy affordable food options. Disparities in access to food are influenced by geographic, economic, and social factors, but also by a regions food production, processing, consumption, and distribution levels. Access to food is therefore not only a health issue but it is also directly connected to an area's economic development and cultural health. Food security isn't just about getting enough food; it's about getting enough of the right food.

Food deserts currently affect several low-income neighborhoods within the MSA. Residents in these food deserts have poor access to a supermarket or large grocery store, usually because there are none within a reasonable distance. Residents of food deserts have access to convenient stores, fast food, gas stations and other places that sell predominantly processed foods and sugar laden beverages. Many low income residents lack consistent and reliable transportation which exacerbates the food desert problem. Common dietary problems and complications from food desert include obesity, diabetes and the many symptoms associated with poor health from eating a diet full of processed foods and high sugars.

A new report from the Leopold Center for Sustainable Agriculture shows that institutional purchases of local food added nearly $9 million to the Iowa economy in 2012. This report points out enormous opportunities for local foods that could benefit rural communities and farm-based business. Investigators measured significant sales from only a small segment of potential markets for local foods among grocery stores, restaurants, hospitals, nursing homes, college and school food services and other institutions.

Food

Only 50% of the Region's residents eat produce frequently, and less than 50% exercise frequently.

Overview

From growing to production, and from distribution to consumption, food systems are being recognized internationally as having a large effect on community well-being. Food processing and local food systems are both opportunities for job creation but also for community health. The local food system is capable of attracting and retaining jobs and improving overall community wealth.

Food Security & Food Access

Diets that are high in vegetables, fruits, whole grains and lean proteins can help maintain a healthy body weight while helping to avoid chronic diseases such as diabetes, cancer and heart disease. But for many people, eating a consistently healthy diet is not always as simple as just choosing to do so. Some neighborhoods and regions do not have grocery stores or locations that sell healthy foods or sometimes the healthier food options are too expensive for people to buy. This is an issue of food access. In order for people to eat a healthy balanced diet they must have access to these healthy

and affordable options, but this is not a viable choice for some. According to Gallup the Rockford Region has the fourth highest obesity rate in the entire nation. Graphic XX shows the number of households within 1 mile of a supermarket or large grocery store versus the population within ½ mile of healthy food location. The size of the dot corresponds to the amount of food purchases spent on fruits and vegetables.

While access to food has become a major issue so too has food security (or insecurity) concerns. As defined by the USDA food insecurity is "a household-level economic and social condition of limited or uncertain access to adequate food." These areas that suffer from food insecurities are generally referred to as a food desert because there is limited access to healthy, nutritious food. Again these areas tend to be in low-income neighborhoods. The USDA reported that 14.5% of American households were food insecure at least some time during 2010, and in those homes with children it was reported that over 20% were food insecure in 2010.

Currently there are several neighborhoods in the region with food
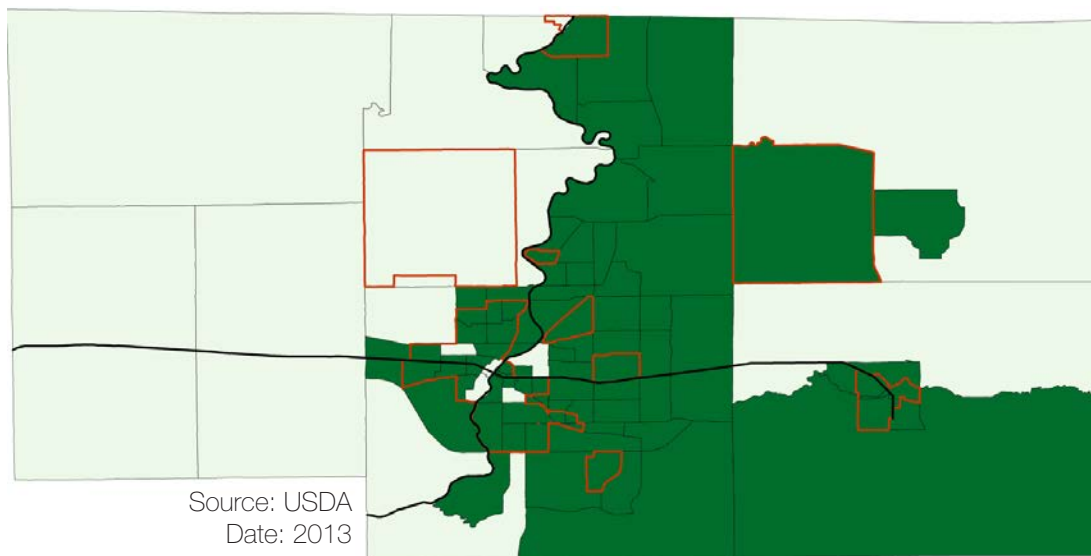
Figure 38. Tracts with Low Access to Healthy Food *(1/2 mi Urban/1 mi for Rural)*

● Yes
○ No

Source: USDA
Date: 2013

deserts. Residents of these low-income census tracts have low-access to a supermarket or large grocery store. In addition, there are many more residents in the community that are experiencing food insecurity, where the food they do have access to is not healthy. 20% of Winnebago County residents and 17% of Boone County residents are considered to be food insecure. 70% of children in the region have difficulty accessing healthy food.

Food Stamps

More than 45 million Americans are now on food stamps. The number of Americans on food stamps has increased 74% since 2007. Today, one out of every four American children is on this subsidy program.

In 2010 25% of residents in Winnebago County were on food stamps; 13% of residents in Boone County. From 2008 to 2010 food stamp use increased by 53% in Winnebago County and an incredible 93% in Boone County. Half of the students in Winnebago County were eligible for free lunch through the public schools,

and 40% of students in Boone County. 20% of single mothers in Winnebago County were eligible for the Women, Infants, and Children (WIC), with17% in Boone County.

However, despite poverty levels rising dramatically, WIC redemptions at authorized stores decreased 33% and 24% in Winnebago and Boone Counties respectively from

---

Boone County's obesity rate for low-income preschoolers is 18.5% and 13.7% for Winnebago.

2008-2011. In close to ten districts 100% of food stamp recipients have children under 18. In three districts more than 75% of all African Americans are on food stamps largely within areas of concentrated poverty.

Food Nutrition & Health Education

The middle and upper-income districts are also eating unhealthy. Figure 39, shows the average spent by households on fast food. Regardless of the location, there is a widespread consumption of foods bad for one's health. What is surprising, however, is the greater propensity of the poorer neighborhoods to purchase healthy foods for home as a portion of their total food expenses. These facts point out the need for continuing health education especially at the adult level.

Obesity Rates & Nutrition

Obesity has become a national epidemic that has hit the Rockford region hard. Being obese rapidly increases the risk of diseases that can damage health and shorten life. Obesity increases the chances of getting hypertension, heart disease, diabetes and many other leading causes of death in this country. According to the CDC from 2009-2010, 35.7% of U.S. adults were obese. As seen in Figure 40, 35.5 % of the residents of the region have a BMI of higher than 30, which is

Figure 39. Average Percent Household Consumption of Fast Food as a Portion of Total Food Expenses

Source: Consumer Expenditure Survey
Date: 2011

0 to 14.7%
14.7% to 15%
15% to 15.1%
15.1% to 15.2%
15.2% to 15.5%
15.5% to 15.6%
15.6% to 15.1%
16.1% to 16.3%
16.3% to 16.5%
16.5% to 18.4%
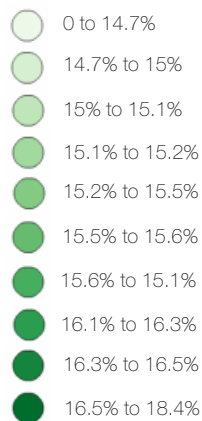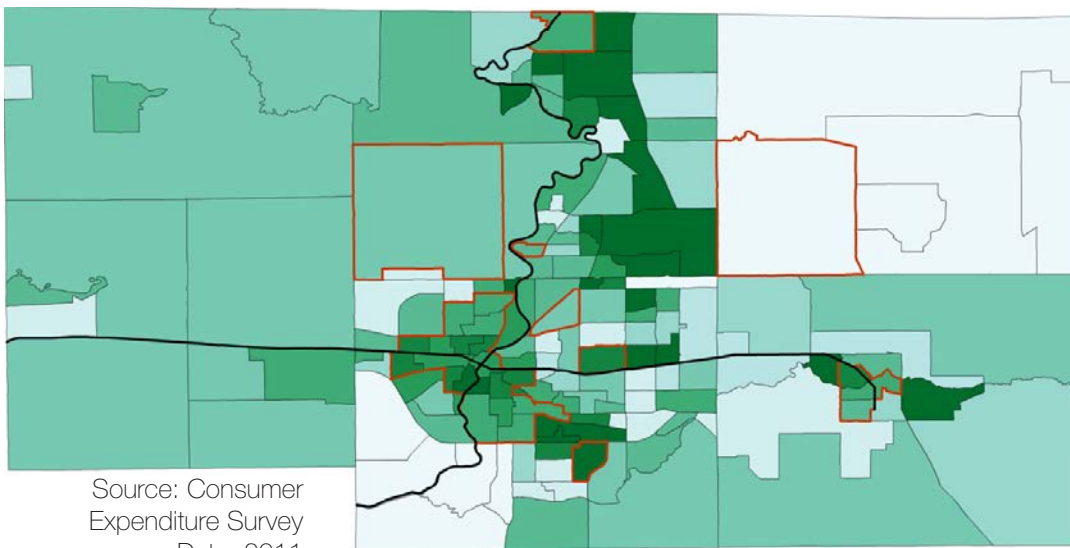
considered to be obese, tracking similar to the national average. According to Gallup only half the residents nationally eat produce frequently and less than half say that they frequently exercise. This condition also predisposes children to a much higher risk of being obese.

The obesity rate in Boone County for low-income preschoolers is 18.4% and 13.7% in Winnebago County. However, it should be noted that obesity and extreme obesity among U.S. low-income, preschool-aged, children went down for the first time in recent years, according to

the CDC's first national study. The most powerful piece of information is knowing that the treatment which leads to relief for the symptoms of obesity is regular exercise and a healthy, clean diet.

Diabetes

The prevalence of diabetes has shown growth throughout the U.S. since 2000. This increase also occurred at the state level and both within Boone and Winnebago Counties. Winnebago County experienced the largest increase from 5% of the population having diabetes to 9% of the population being diagnosed. Type 2 Diabetes is by far the most common form of diabetes and constitutes a large proportion of all recorded cases worldwide. It comprises approximately 85-95% of all diabetes cases, with type 1 diabetes filling the remainder which is predominantly a childhood disease. Type 2 diabetes has become a significant public health issue in nearly all developed

countries with the U.S. leading the way. Although there is still no definitive proof of the root cause of Type 2 diabetes, there is increasing scientific and medical research to suggest that it is a consequence of increasing levels of obesity, decreased levels of activity, and increased access to non-healthy food. It most commonly develops in people over 40 years of age and is primarily managed through diet and exercise.

35.5% of Boone and Winnebago residents have a BMI of 30 or higher, making them obese.

Figure 40. Percent Obese Adults

Source: CDC
Date: 2003, 2006, 2009

○ Boone County, Illinois   ● Illinois   ● Winnebago County, Illinois
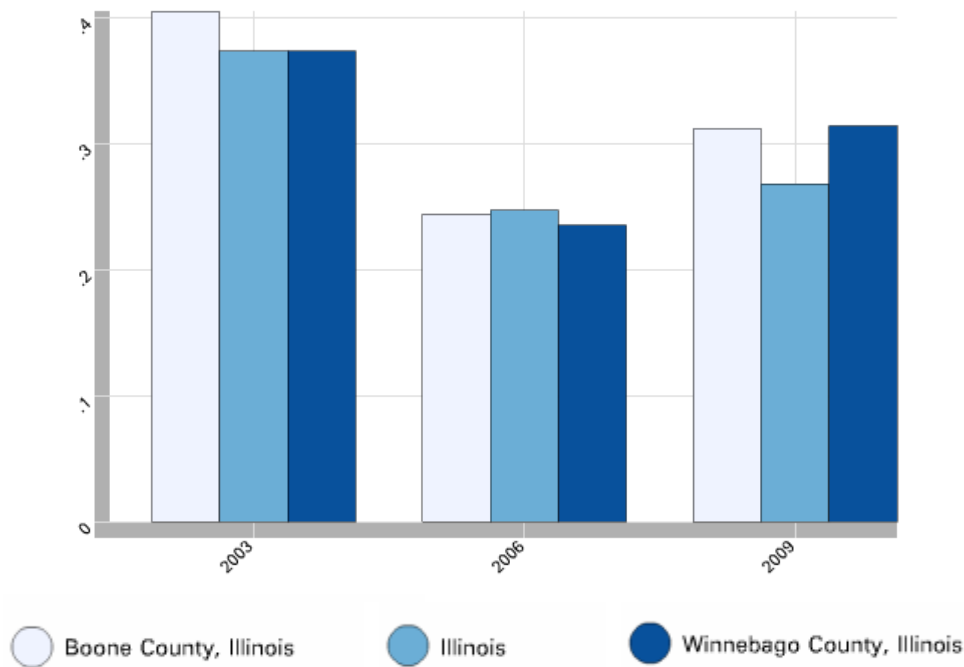
Vision

Increase accessibility, awareness, and consumption of healthy food for all residents.

The City of Rockford and many of the surrounding municipalities already have community gardens and farmers markets at various locations. The region needs to capitalize on the existing stock as well as to expand both the local growing capacity and the means to distribute products directly to the consumer. While local farmers markets are doing well they still have room for growth. It is recommended to continue to grow the Rockford City Market and to use it as a working example and success story. With the vast number of vacant and abandoned properties within the region it would be extremely easy and cost effective to open raised bed community gardens as an adaptive reuse. At the existing markets it is recommended that SNAP cards be accepted to encourage the consumption of locally produced healthy food products. .

Increase local farm-produced food for local processing and consumption including food entrepreneurship.

Eating locally produced food is beneficial to the environment, overall community health and puts dollars

FOOD
BEST PRACTICES

Obesity is common, serious, and very costly. Help take action in the community to combat the obesity epidemic by learning what hospitals, neighborhoods, schools, and worksites can do to help make the choice easier.

Hospitals should work on improving their environment to better support the health of their employees and patients and embody the mission of their organization by leading through example. At the neighborhood level there needs to be a full assessment of the retail food environment to better understand the current landscape and the differing levels of accessibility to healthier foods. Schools can increase the amount of time students are being moderately to vigorously physically active during education class while limiting foods and drinks with added sugar, fat and salt that can be obtained on school grounds. Worksites can provide healthier food in cafeterias, vending machines and snack bars while instituting a reward based program for providing proof of a gym membership or activity leading to weight loss success.

Help to curb and control Diabetes within the community through prevention and control education through Diabetes Self-Management Education (DSME).

Diabetes self-management education is a process of teaching those who are affected by diabetes that they can manage and sometimes reverse the symptoms and conditions. The overall goal of DSME is to control the rate of metabolism (which affects diabetes-related health), to prevent short and long term health conditions that result from diabetes, and to achieve the best possible quality of life.

back into the community and thus directly supports local farmers and food makers. Produce that is purchased in the supermarket has often been in cold storage for days and weeks, while produce grown locally and purchased at a farmers market or fresh food store has been picked within 24hrs. Fresher food not only tastes better but has a higher nutritional value. Only 18 cents of every dollar spent goes to the grower when food is purchased food from a large supermarket. A purchase of local foods could return a much higher ratio of dollars spent to local growers. In addition locally produced food eliminates huge transportation costs which can increase substantially with oil price increases. Residents can start to build a resilient agriculture economy by supporting energy efficient growing and production methods such as smaller-scale, organic agriculture and local production methods.

Increase local processing of locally-grown food for industrial and commercial use.

Food-based commercial and industrial businesses that concentrate activities locally can maximize the benefit to the region as well as the individual business. Local coordination with the Farm Bureau's local Extension Services program can create matchmaking programs for locally produced food goods for processing and consumption locally, within 50 miles. Local food processing does not have to mean small unregulated kitchens or home kitchens. Recent technology advancements in agricultural processing has allowed for increased efficiencies and permitted less capital intensive operations at smaller scales with similar productivity of larger plants. The region does not need large monolithic food processing plants in order to handle the demand of

fresh local foods. Local foods can be grown, gathered and processed nearby in ways that would be impossible for the large processing plants to reproduce. It is possible to achieve the same economies of scale by using best management practices and organizational models to help local farmers, processors and local distributors obtain and retain more local business. This focus on local processing also helps to further the idea of farmland protection that is detailed in other chapters of the RPSD.

Prevalence of diabetes within Winnebago County increased from 4% to 9% recently.

Increase Distribution of locally-produced food to local industry, business and consumers.

Eating local foods has started to become mainstream in the past few years as committed and educated eaters have gone out of their way to find local foods by buying directly from the farmer, regular visits to roadside stands, weekly visits to farmers markets and Community Supported Agriculture (CSA's) drop-off sites. Institutional uses of local foods such as schools, hospitals, nursing facilities and assisted living centers offer significant growth potential. Also local consumers can request that locally produced fruits and vegetables, baked goods, herbs and other items be made available in local supermarkets and grocery stores. Until recently most farmers have been hesitant to scale up for the institutional marketplace, and traditional distribution systems have been much too slow to adapt. It is evident that programs that support

Figure 41.
Percent of
Households
Receiving
Food Stamps

Source: USDA
Date: 2013

.5% to 7%

7% to 12.6%

12.6% to 18.6%

18.6% to 24.7%

24.7% to 30.8%

30.8% to 36.8%

36.8% to 42.9%

42.9% to 48.9%

48.9% to 55%

55% to 61.1%
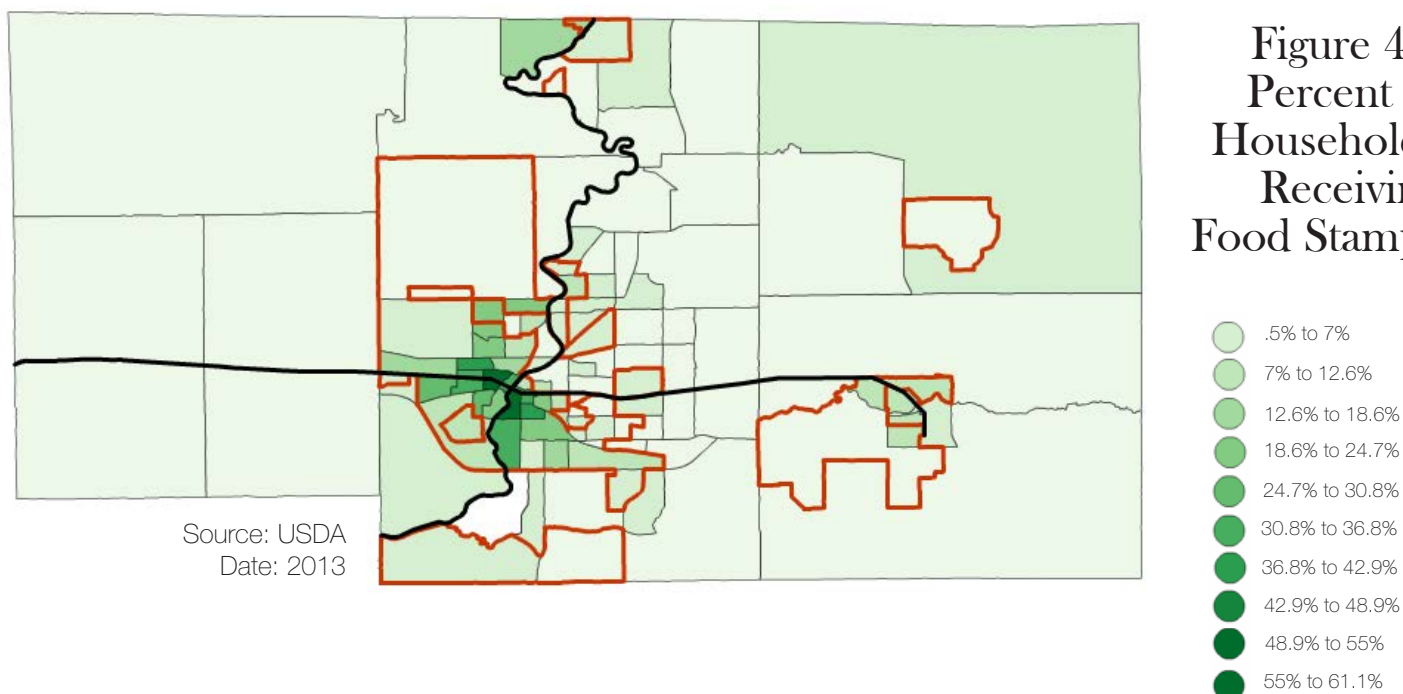
local food processing, aggregation, short-term storage and distribution infrastructure are greatly needed and must be in place before a local food distribution system can be successful.

Increase business and personal disposal of food waste using environmentally conscious methods.

More food and organic materials derived from foods reaches the landfill and incinerators than any other single material in municipal solid waste. In 2011 alone, more than 36 million tons of food waste reached landfills in the United States (21% of the total waste stream), with only 4% diverted from landfills and incinerators for composting and other reuse processes. Reducing the amount of food wasted has significant social, environmental and economic benefits. By reducing food waste in landfills there is a comparable reduction in the amount of methane produced from rotting food. Methane is a greenhouse gas with 21 times the

global warming potential of carbon dioxide. By reducing food waste from entering local landfills it will decrease the associated disposal costs for both businesses and residents. Businesses may even be eligible to receive tax benefits if excess foods where donated to a local food bank or rescue mission. An estimated 50 million American don't have access to enough food. Food donations to a food bank or similar organization will reduce food waste sent to the landfill and feed those in need.

REGIONAL FOOD GOALS

- Increase local farm-produced food for local processing and consumption including food entrepreneurship.

- Increase business and personal disposal of food waste using environmentally conscious methods.

- Increase Distribution of locally-produced food to local industry, business and consumers.

- Increase local processing of locally-grown food for industrial and commercial use.

- Increase accessibility, awareness, and consumption of healthy food for all residents.

Goals	Food Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase accessibility, awareness, and consumption of healthy food for all residents.	Work to get the local farmer's markets (i.e. Rockford City Market) to accept SNAP.	👎 (orange)	No local farmer's markets take SNAP (2013)	→	X		X	X	X
	Increase programming to teach about food prep and food safety.	👍 (green)	# Programs	↑	X		X		
	Survey municipal lands to identify underutilized properties that may be suitable for urban agriculture or community gardens and expand community gardens programs, especially in underutilized lots.	👍 (green)	# Properties identified	→		X		X	X
	Work with PTAs to set higher food standards for K-12 students.	👎 (orange)	# Higher standards	↑ (dashed)	X				X
	Increase the number of healthy food locations.	👎 (orange)	39 grocery stores & speciality food stores (2010)	↑ (dashed)	X	X	X	X	
Increase local farm-produced food for local processing and consumption including food entrepreneurship.	Increase amount of financial support for food entrepreneurship within the region including writing grants to establish regional education, training.	👎 (orange)	# Dollars invested	↑			X	X	X
	Establish a local commercial kitchen program with the support and collaboration of local k-higher education organizations, the SBDC, the WIB, the economic development agencies, and the local governments within the region.	👎 (orange)	# Users	→ (dashed)			X	X	X
	Review and revise local codes and policies regulating food to promote food entrepreneurship.	→ (green)	# Codes	→					X
	Increase entrepreneurship related to the healthy food industry.	👎 (orange)	# Entrepreneurs	↑			X	X	X
	Increase amount of small-business startup vending booth opportunities (both outdoor and indoor) for food entrepreneurs.	👍 (green)	# Entrepreneurs	↑	X	X	X		X
Increase local processing of locally-grown food for industrial and commercial use.	Educate local commercial and industrial businesses about availability and benefits of using of locally grown food (food within 50 miles).	→ (green)	# Dollars spent	→			X	X	
	Create programs and supply resources to local farmers related to supply chains.	👎 (orange)	# Users	→ (dashed)			X	X	
	Increase the quantity of locally produced foods and encourage local processing.	👎 (orange)	Amount food locally processed	↑			X	X	
	Collaborate with Farm Bureau the Extension Services and other local partners to create matchmaking program for locally produced food for processing and consumption.	👎 (orange)	# Users	→			X	X	
	Introduce lean practice programming for local food processing companies to better utilize local foods.	👎 (orange)	# Reached	→ (dashed)			X	X	

Goals	Food Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👪	🛒	🏛
Increase business and personal disposal of food waste using environmentally-conscious methods.	Develop matchmaking service to connect commercial and industrial businesses to re-use food waste as part of their supply chains.	👎	# Participants	→			X	X	X
	Develop a local governmental policy and a commercial and industrial composting program in conjunction with local waste-disposal companies.	👎	# Participants	→			X	X	X
	Develop educational programming for youth on the benefits to compost food waste.	→	# Participants	→	X		X		X
	Increase educational outreach to increase household composting practices.	→	# Participants	↑	X		X		X
	Develop a local governmental policy and residential composting program in conjunction with local waste-disposal companies.	👎	# Participants	→	X	X	X		X
Increase distribution of locally-produced food to local industry, businesses, and consumers.	Establish distribution assistance for local production and consumption by industry, businesses, and consumers.	👍	# Users	→	X		X	X	
	Develop a marketing and branding program for local businesses and consumers to identify locally-produced food.	👎	# Dollars spent	→	X		X		
	Develop process to track and monitor amount of locally-produced food distributed locally.	👎	Amount food locally processed	→			X		
	Develop educational and awareness programming of local health department and USDA food production standards necessary for the distribution of locally-produced food.	→	# Participants	→			X	X	
	Work with local food outlets to educate local food producers on standards needed for distribution to local businesses and consumers.	👎	# Participants	→	X		X	X	

Health

Introduction

In any measurement of quality of life, health and wellness of those within the boundaries of the region must be assessed. Vital Signs analyzed health indicators including life expectancy, incidence of chronic disease, obesity, and diet. The Rockford Health Council has initiated a comprehensive look at both individual health and health equity. For Vital Signs health equity is measured by access to health care and health status, and includes some regional comparisons with other geographic regions.

The health and wellness of a region relates inextricably to a number of the other indicators measured by Vital Signs. Food, the availability thereof, and the ability of residents to acquire healthy options critically inform the health of the population. Transportation infrastructure, including the availability of recreational facilities to allow for active transportation, and the prominence of multimodal connections play heavily into a community's ability to undertake healthy practices. Several other indicators play key roles in influencing the health and wellness of the residents.

Health and wellness are areas that are not simply limited to individual choices, though each person does have the greatest say and the greatest stake in their own health. Funding decisions on measures such as preventative care, awareness programs for all types of health and health care, as well as the overall culture of a region relating to health and health care, contribute to the wellness, or lack thereof, of each person in the region.

Health

In the MSA, 71% of African American children are born to single mothers, compared to 34.4% of White children and 51.5% Hispanic.

Overview

In Boone and Winnebago Counties, the state of health at present is hardly ideal. According to the Illinois Department of Health over 31% of adults in each county qualify as obese, which occurs when a person's body mass index exceeds 30 kilograms per meter squared. Obesity means that excess body fat has accumulated to the point where it may have an adverse effect on health, lead to increased health risks and problems, and reduce life expectancy. A poll done by Gallup-Healthways in 2011 suggests that the percent of obese adults plus children in the region are even worse: 35.5%, placing it as the fourth most obese MSA in the entire nation.

Lead paint risk

More than 80% of all homes built in the U.S. before 1978 contain lead-based paint according to the U.S. Environmental Protection Agency (EPA). Housing built before 1950 poses a greater risk for children because the paint might contain higher concentrations of lead. Lead-based paint may deteriorate as visible paint chips but is more commonly found as fine dust, which looks like ordinary house dust. Lead-painted windows can be especially problematic due to dust settling on floors and window wells, even when new paint covers the old. Remodeling old homes can create large quantities of lead dust that may be accidentally breathed or eaten, especially by children according to the Centers for Disease Control and Prevention (CDC).

There are 25 Vital Sign's districts that have 40% to 80% of the homes having high risk of lead paint. This is 15% of all districts within the region. An additional 25 districts have medium risk of lead paint as seen in Figure 43.

Air Quality

Asthma results in lifelong adverse outcomes for residents. Asthma in America has increased 75% since 1980, and for children under the age of 5 it increased 160%. African Americans are twice as likely to have asthma over other ethnicities. This may be due to the likelihood to be in poverty; lower access to quality healthcare and housing; a higher prevalence of smoking among mothers; and higher exposure to pollution and toxins in poorer neighborhoods. The air quality of the region is measured by the EPA for three major pollutants. These are Ground-level ozone (Ozone), Carbon Monoxide (CO) and Particulate Matter smaller than 2.5 micrometers (PM2.5). This data on air pollution can be found on the EPA website, www.epa.gov/airdata.
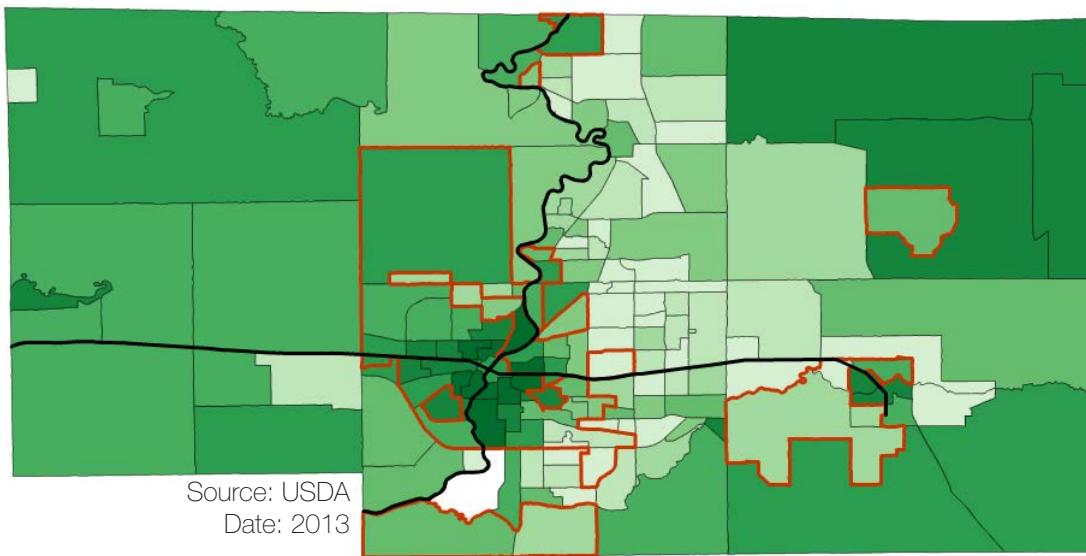
Figure 43. Percent of Homes with High Lead Paint Risk *(Built Before 1950)*

- 0 to 2%
- 2% to 3.7%
- 3.7% to 7.5%
- 7.5% to 12.7%
- 12.7% to 23.1%
- 23.1% to 31.5%
- 31.5% to 41.5%
- 41.5% to 61.9%
- 61.9% to 73.9%

Source: USDA
Date: 2013
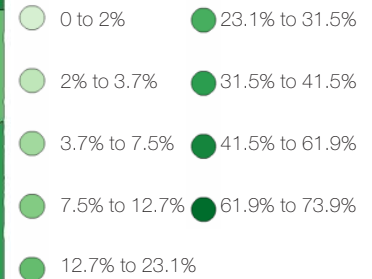
Ozone is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are major sources of NOx and VOC. Breathing ozone, a primary component of smog, can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. Ground-level ozone also damages vegetation and ecosystems. The EPA standard for Ozone is 0.075 parts per million (ppm). The Rockford Region's current value, based on the previous three years' averaged values, is 0.068 ppm, within the limits of the standard. While encouraging, this data has been on the rise in recent years, and with the uncharacteristically low values from 2010 about to cycle out of the three year rolling average, the region must continue to find new and improved ways to combat the ozone pollution to maintain healthy air quality.

Carbon monoxide is emitted directly from vehicle tailpipes. In urban areas, the motor vehicle contribution to carbon monoxide pollution can exceed 90 percent. CO can cause harmful health effects by reducing oxygen delivery to the body's organs and tissues. At extremely high levels, CO can cause death. The EPA standard for CO is 9 ppm, and the Rockford Region's current value is 1.1, well below the standard. Presently, there is little CO pollution in the Rockford Region, but continued cooperation to preserve air quality must be maintained.

Particle pollution contains microscopic solids or liquid droplets that can get deep into the lungs and cause serious health problems including premature death in people with heart or lung disease, heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Fine particles (PM2.5) are the main cause of reduced visibility, or haze, in parts of the United States. The EPA standard for PM2.5 is 35 micrograms per cubic meter (ug/m3). The 98th percentile of values for a year may not exceed

In Winnebago County 53.3 teenagers out of every 1,000 give birth; in Boone County the rate is 28.1

this level. Additionally, the annual average concentration may not rise above 15.0 ug/m3. The Rockford Region's 98th percentile value is currently 23.3 ug/m3 and the annual average is 9.83 ug/m3, both well below the standards. PM2.5 has been declining in recent years, and the region can benefit by continuing to introduce methods to control it and other air pollutants.

Poor Health

Poor health tracks well with the presence (or absence) of a regular health care provider. In 2003, 95% of the Boone county population had a regular health care provider but that rate has declined to 84% in 2009. In contrast the population with a regular health care provider in Winnebago County rose from 78% in 2003 to 92% in 2009. The State of Illinois average over the same time period rose from 82% to 86%.

Access to Health Care

Primary indicators of access to health care include the percent of the population with health insurance and the availability of a regular primary care physician. The percent of the population within the Vital Signs region without health insurance has historically been below the state

Figure 44. Percent of Leisure Time with Physical Inactivity
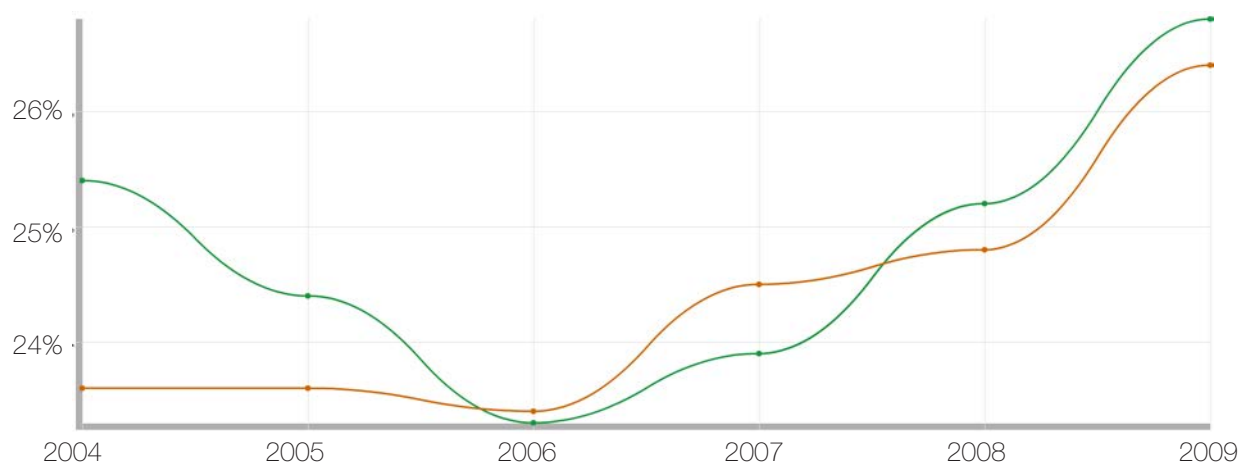
average but has improved in recent years. And, with the Affordable Health Care Act coming in to effect in 2013 these numbers will change.

Figure 44 shows the trend lines for physical inactivity. This can often lead to poor health outcomes. The percent of Boone County residents that had eight or more days of poor physical health per month is lower than for Winnebago or the Illinois rate. The percent for the state and Winnebago County tend to be more variable over time.

Health and Social Stress

Prolonged exposure to stress results in both a physical reaction and an emotional reaction that is detrimental to health. This phenomenon is often of great concern in neighborhoods of concentrated poverty. Exposure to violence and crime, abuse, poor living conditions from inadequate housing, negative influence from peer groups, and often hunger create a set of conditions where children are stressed. They can be conditioned to continually release adrenaline in "alert mode". Physically when the body is exposed to this chemical response, brain growth in the areas needed for non-cognitive skill

development and neural networks are stunted. When this occurs the body physically can affect the ability of an individual to make positive life choices; stunted prefrontal cortical function and other altered physical functionality has been tied to perpetuating violence and illicit drug use. Over time these stress-related make the individual more prone to cardiovascular disease, hypertension, hyperlipidemia, asthma, metabolic abnormalities, obesity, infections, and other disorders. In children these stresses can lead to depression, anxiety disorders, dependence, and even alcoholism.

Vision

Reduce the number of teen pregnancies and unplanned births among young single women.

Even in the most prepared of circumstances, pregnancy and raising children is not an easy task. For teenagers and young single women unprepared for the costs and difficulties of pregnancy and supporting a child, it is a life-

changing event. Without the financial resources and life experience of an adult to guide the development of children, their development and long-term success is greatly challenged; similarly the lives of teenagers and young women are dramatically impacted, creating financial, educational and social hurdles during a time of their own greatest need for development.

Over 31% of residents, 73,466 people, in both Winnebago and Boone counties counted as obese in 2009.

Statistics on teenaged mothers in Winnebago County have been consistently higher than the national or state averages in the past 5 years, as seen in Figure 45. Though the overall rate is 52.3 (per 1,000) births to mothers aged 15 to 19, the rate of births to African American mothers aged 15 to 19 is 103.9, nearly double that total, and four

times the rate of births to White teens, which is 35.

Education programs on teen pregnancy awareness, sexual education, and the impacts of teen pregnancy on life-long success can be expanded and cover more students. These efforts can be made not only through traditional education systems, but also through youth-centric local agencies and organizations, thus broadening the reach and scope of the programs.

Additionally, reaching out to parents for their cooperation, and even their education, can be a powerful tool to aid in the reduction of teenage and young, single pregnancies. This can foster an overall culture of pregnancy planning within the region, especially among youth.

Decrease percent of low-birth weight children.

The health of children is often a fragile thing, but never more so than when the child suffers from troubles immediately upon birth. Children with low birth weight, usually defined as less than 5.5 pounds, often results from a child being born too early, too small or both. The reason for low birth weights can vary, including smoking, which causes growth retardation during pregnancy. Compared to infants of normal weight, these infants can develop perinatal morbidity, a sickness developed in the first six days after birth, can be more likely to develop infections and potentially suffer from longer-term problems including delayed motor and social development as well as learning disabilities.

The rate of low-birth weights in Winnebago County has been largely consistent in recent years, slightly higher than the state and national rates. African Americans have a much higher prevalence of low-birth weight among all ethnicities. 8.4% of all babies born in Winnebago County have a low birth rate; in Boone County it is 6.3%.

To decrease the rate of low-birth weights, many things can be improved. Awareness of healthy eating habits and exercise can be improved among expectant mothers, as can the programming for education of expectant mothers on preventative health care resources and practices. Further, the region needs to decrease alcohol use, smoking, and narcotic consumption among expectant mothers through additional educational programming and messaging on the risks and consequences of those behaviors to the birth-weight of their child as well as the impacts of low birth weight specifically.

Perhaps most critically, increasing the use of pre-natal care resources and services, especially for minority and low-income residents, can go a long way towards monitoring and caring for children even prior to birth. Diagnostic medicine, while not a panacea for all prenatal issues, can aid in preventing low-birth weights in cases that would otherwise result in them.

Increase access to health care to all residents, especially low-income and senior citizens.

Beyond the Affordable Care Act the region can take several steps to increase access to health care. Partnering with the Rockford Health Council to increase awareness about the availability, programming, and terms of the Affordable Health Care Act to residents is an important step. With large amounts of miscommunication and technical difficulties arising in the initial implementation steps of the Affordable Care Act, awareness and understanding of the new regulations and options is paramount to achieving progress. More broadly, the region needs to work with social services to communicate to residents the health care resources and services available to them, as well as

Bike Share Program

To take cycling for health a step further beyond racks on busses and at businesses and public locations of interest, the Vital Signs region could benefit from investigating a bike-sharing program. These programs feature bicycles available at numerous locations throughout a city, available to be rented and used, then returned to any of the other locations, all with simple touchscreen interfaces for the transactions. While this concept has been well-explored in Europe, places as nearby as Chicago have successfully implemented bike-sharing programs, encouraging significantly more active transportation, providing residents with new ways to navigate their hometown, and providing opportunities for tourism and job creation.

Source: CDC
Date: 2005-2011

Figure 45. Rate of Births to Teens Aged 15-19 Per 1,000 By Race
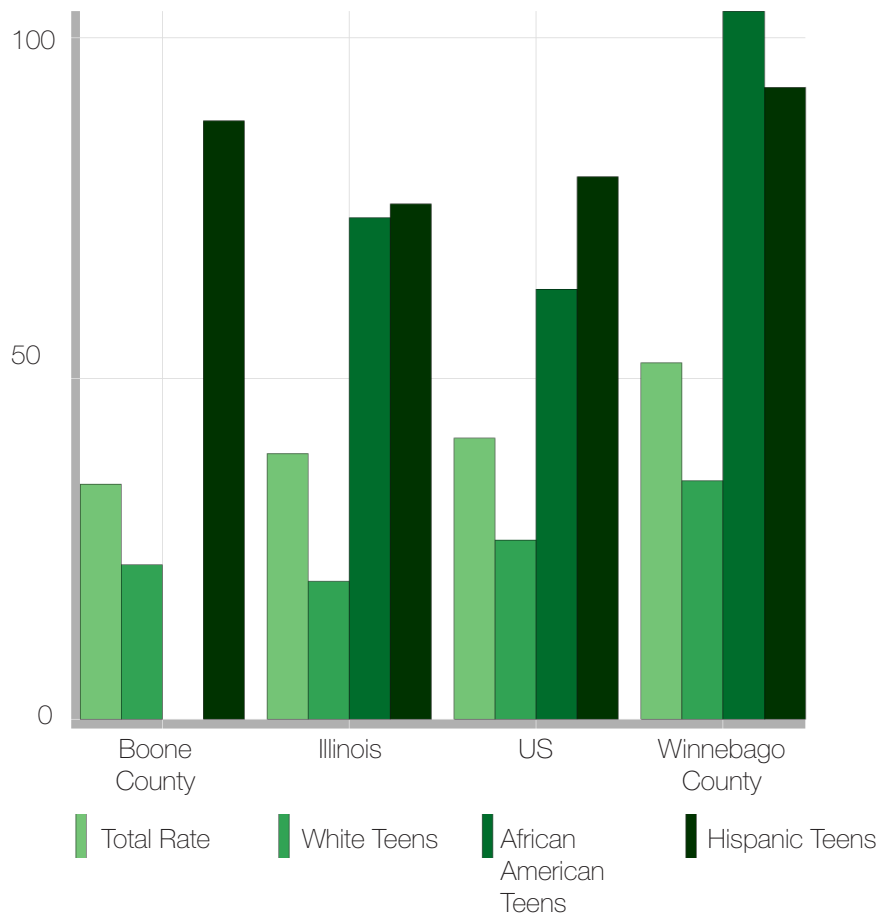
Legend: Total Rate | White Teens | African American Teens | Hispanic Teens

develop a regional assessment of gaps in health care for low-income and senior citizen residents, in order that the best steps may be taken in the future. Improved access to oral healthcare, particularly for disadvantaged citizens, as well as a temporary clinic program at public housing authority locations and senior citizen centers can also improve the general health and overall quality of life of the region.

Increase the local awareness, access, and care for those with mental health care needs and decrease the impact of mental health-related challenges.

Mental disorders are common in the United States and internationally. According to the National Institute

for Mental Health, an estimated 26.2 percent, slightly more than one in four, of Americans aged 18 and older suffer from a diagnosable mental disorder in a given year. When applied to the 2010 U.S. Census residential population estimate for ages 18 and older, this figure translates into 61.8 million people. In addition, mental disorders are the leading cause of disability in the U.S. and Canada. Many people suffer from more than one mental disorder at a given time. Nearly half (45 percent) of those with any mental disorder meet criteria for 2 or more disorders, which in many cases aggravates the severity of the illness. Worse still, the social stigma of mental illness, the cost of mental health care and the lack of awareness of mental health issues all contribute to such issues going

undiagnosed, untreated, and further impacting people's lives. Periods of poor mental health, consisting of 8-30 days in a one-month period, have been of more frequency in Winnebago County than the state average since at least 2000. Boone County had a rate close to the state rate in 2000 and 2003, but in 2009 the percentage of adults with poor mental health periods increased to 15.5%, 1.7% higher than the state and 1% lower than Winnebago County. In order to reduce the impact of mental health issues on the region's citizens, an increase in the awareness and availability of resources for those with mental health care needs should be prioritized. Facilities treating young residents should establish and expand programs that provide counseling and health support for youth showing early signs of mental health-related challenges, and outreach should be undertaken in partnership with social service providers to identify residents of all ages with mental-health related challenges. Education regarding the link to substance abuse for those with mental health challenges may help to combat the effects and possibly lead to prevention.

In 2012, the Rockford Region had the third worst city optimism rate according to Gallup with only 36.5% of residents saying their area is getting better as a place to live.

Increase healthy behaviors and preventative health care practices with a specific target of obesity.

Overall healthy behaviors should be a goal of every individual citizen, and programs and practices promoting these behaviors should be a goal of public and private organizations. Healthy behaviors, such as not smoking, moderate alcohol consumption, exercise, and eating fruits and vegetables daily makes it significantly more likely people will stay healthy as they age, according to published studies. Preventative health care creates many benefits as well, reducing the cost both to the individual and the health care system, avoidance of

illness and the symptoms thereof, as well as less time spent ill and unable to work. Obesity is one of the most common health problems, with over 31% of residents in both Winnebago and Boone counties reported in 2009, totaling 73,466 cases. Relatedly, the leisure time physical inactivity prevalence in the region totals 67,859 cases. The health impacts of obesity include, but are not necessarily limited to high blood pressure, diabetes, heart disease, joint problems including osteoarthritis, sleep apnea and other respiratory problems, cancer, metabolic syndrome and psychosocial consequences. While many factors contribute to obesity, diet and exercise are two key components to preventing or treating it. Awareness of the benefits of regular healthcare and awareness of obesity-related diseases in general needs to be prioritized. Physical education programs and nutrition education for youth and adults needs expansion and improvement. The creation of a regional weight-loss program with goals for regional health improvements could incorporate aspects of community into the health awareness and maintenance process. Lead paint abatement, and the consequences of living in structures with such hazards is also of regional concern.

REGIONAL HEALTH GOALS

- Reduce the number of teen pregnancies and unplanned births among young single women.
- Decrease percent of low-birth weight children.
- Increase access to health care to all residents, especially low-income and senior citizens.
- Increase the local awareness, access, and care for those with mental health care needs and decrease the impact of mental health-related challenges.
- Increase healthy behaviors and preventative health care practices with a specific target of obesity.

Goals	Health Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Reduce the number of teen pregnancies and unplanned births among young single women. *6.2% of births were to single teen mothers (2010)*	Develop a culture of pregnancy planning within region, especially among youth, to the availability and access of resources within the greater region (including Chicago).	👎	*# Participants*	→	X		X		
	Expand education program on teen pregnancy awareness within the K-12 school systems.	👎	*# Dollars invested*	↑	X		X		
	Establish educational curriculum for pre-teens on the effects of teen pregnancy on life-long success.	→	*# Teen pregnancies*	→	X				X
	Create awareness of teen pregnancy prevention among parents within region.	👎	*# Teen pregnancies*	↑	X		X		X
	Expand education program on teen pregnancy awareness through youth-centric local agencies and organizations.	👎	*# Participants*	↑	X		X		X
Decrease percent of low-birth weight children. *8.6% of all births were low-birth weight (2010)*	Increase awareness of healthy-eating habits and exercise among expectant mothers.	👎	*# Participants*	↑	X		X		
	Increase the use of pre-natal care resources and services, especially for minority and low-income residents.	👎	**95% of women utilized prenatal care (2009)**	↑	X	X	X		
	Decrease smoking, alcohol, and narcotics consumption among expectant mothers through additional educational programming and messaging on the risks to low-birth weight consequences.	👎	**18% women used tobacco (CDC, 2010)**	↑	X	X	X		
	Educate expectant mothers on the impact of stress on the health of the pregnancy.	👎	*# Participants*	↑	X		X		
	Increase programming to educate expectant mothers on preventative health care resources and practices.	→	*# Dollars spent*	↑	X		X		
Increase and improve access to health care to all residents, especially low-income and senior citizens. *13.1% total population uninsured, .5% elderly population uninsured, and 22.5% low-income population uninsured.*	Improve the access to oral healthcare, especially for disadvantaged residents.	👎	**29% no oral health insurance coverage (2009)**	↑	X	X	X	X	
	Establish a temporary-clinic program at public housing authority locations and senior citizen centers.	→	*# Participants*	→	X	X	X		
	Work with social services to communicate about health care resources and services available to residents.	👍	*# Participants*	→		X	X		
	Develop a regional assessment of gaps in health care for low-income and senior citizen residents.	👍	*Assessment created*	→			X		X
	Partner with the Rockford Health Council to increase awareness about the availability, programming, and terms of the Affordable Health Care Act to all residents.	👍	*# Participants*	↑			X		X

Goals	Health Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👪	🛒	🏛
Increase healthy behaviors and preventative health care practices with a specific target of obesity.	Improve the awareness of benefits from regular use of healthcare.	👎	**13.1% residents no contact health provider (2009)**	↑	X		X		
	Establish area-wide wellness goals.	👍	*# Goals*	→	X		X	X	X
	Expand physical education programs for youth.	👎	*# Participants*	↑	X		X		
	Coordinate with Rockford Health Council to create awareness and lead-paint abatement measures.	👍	**65.3% of homes have lead paint risk (2011)**	→	X	X	X	X	X
	Create regional weight loss program with goals for regional health improvements (i.e. regional walk program).	👎	*# Pounds lost*	→	X		X	X	X
	Increase or improve awareness of obesity-related diseases and improve nutrition education.	👎	*# Participants*	↑	X		X	X	X
Increase local awareness, access, and care for those with mental health care needs and decrease the impact on the community.	Increase the local awareness and availability of resources for those with mental health care needs.	👎	*# Participants*	↑	X		X		
	Partner with social service providers to create additional outreach to identify residents with mental-health related challenges.	→	*# Dollars spent*	↑	X		X		
	Continue to support and create additional awareness and availability about addiction programs.	👍	*# Dollars spent*	→	X		X		
	Increase education about the link to substance abuse to those with mental health challenges.	👎	*# Substance abusers*	↑			X		
	Establish additional counseling and health support for youth showing early signs of mental health-related challenges.	👍	*# Dollars spent*	→	X		X		

Housing

Introduction

A region's range of housing choice for residents is an important component of sustainability. The overall quality of the housing stock is an important quality of life indicator as is the affordability of housing. Vital Signs analysis of housing was predominantly focused on public and assisted housing and the impact of concentrated areas of poverty. Vital Signs was able to complete a Fair Housing Equity Assessment, an Analysis of Impediments to Fair Housing Choice, and a De-Concentration Plan for the Public Housing Authorities. Separate documents are available for each of these analytics and plans.

Historical and sustained patterns of segregation and concentration of racial/ethnic minority populations, poverty and low income population, and public and assisted housing exist in the region. The goal of de-concentration would be to achieve lower minority concentrations and poverty levels and to transform these areas of concentration into "Opportunity Areas", offering access to quality goods and services, exemplary schools, health care, range of housing, transportation to employment and service centers, adequate public infrastructure, utilities, and recreation.

During the Vital Signs grant cycle the Rockford Housing Authority was awarded a Choice Neighborhood grant to look at the Ellis Heights neighborhood and the Fairground's Valley public housing development. The planning work for Vital Signs and Choice Neighborhoods have been managed to be complementary and leverage each other and include corrective actions and strategies recommended for redevelopment, policy, regulatory, legislative, admissions, operations, and fiscal aspects of housing authority programs. These tasks include identification of development opportunities, programs, joint development opportunities, demolition and replace strategies, and funding opportunities.

Housing

Overview

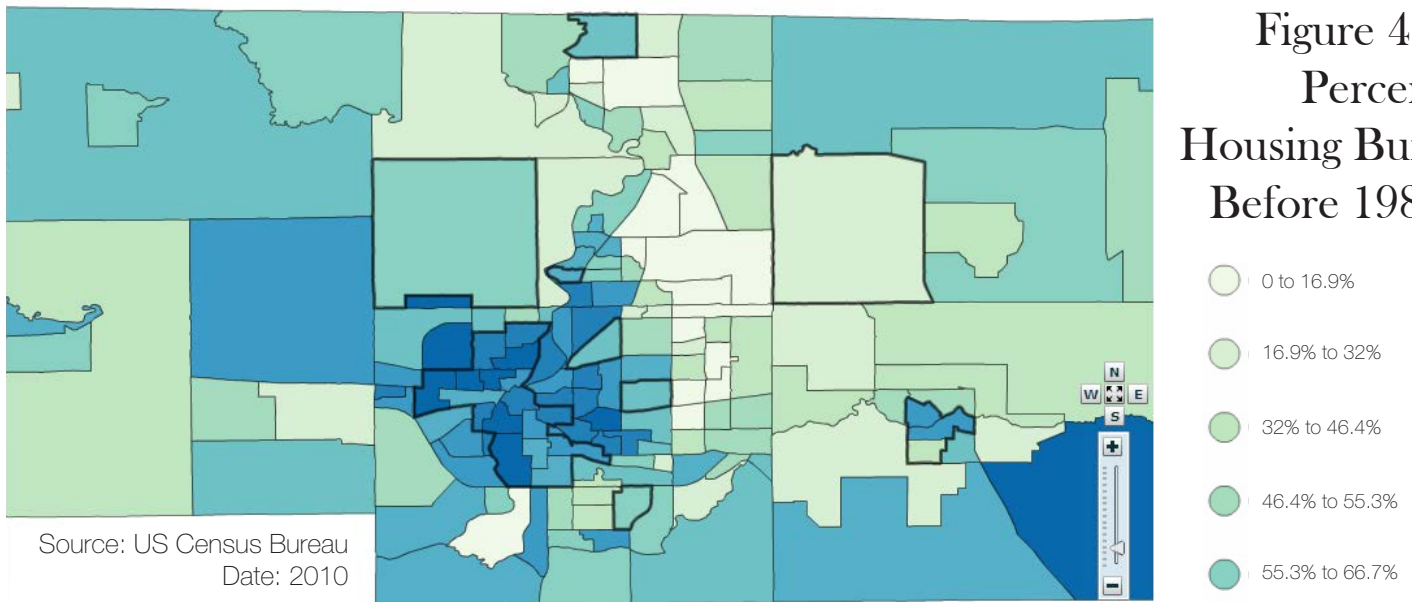### Fair Housing Equity Assessment & Analysis of Impediments

The Regional Analysis of Impediments (RAI) and Fair Housing Equity Assessment (FHEA) are integral components and contribute to the critical underpinnings of the Sustainable Communities Regional Planning Initiative. RMAP and the public housing authorities strive to create a more inclusive conversation on regional issues, with a particular emphasis on engaging those who have traditionally been marginalized so that the resulting plan can provide new insight into the disparate burdens and benefits experienced by the diverse populations across the region. The RAI and FHEA recommendations are intended to address these disparities.

The Regional Analysis of Impediments is designed to identify impediments to fair housing choice through a study methodology that includes Community Engagement by gathering community input through public meetings, interviews and focus group sessions; the construction of a demographic analysis resulting in a Community Profile, Fair Housing Index, Home Mortgage Disclosure Act Analysis; and

the analysis of Fair Housing Law, and Public Policy including court litigation, legislation, regulatory, fair housing ordinances and entitlement grant and public housing program impact. The Community Profiles and Home Mortgage Disclosure Act analyses provide the basis for the demographic assessment, including a disparate impact analysis to determine if the protected class members afforded protection under the Federal Fair Housing Act are disproportionately impacted when compared to Whites or regional and citywide medians. The Fair Housing Index examines the standardized form of ten total variables providing a means of identifying individual census tracts where fair housing choice is at high risk due to demographic factors most often associated with housing discrimination.

The Fair Housing Equity Assessment is designed to document the extent to which the most critical demographics impacting fair housing choice are contributing to protected class members who are documented as performing below the regional or area median. Most important to the process are measuring and reducing racial and ethnic isolation and segregation in the region; identifying and reducing racially and ethnically concentrated areas of poverty; and identifying and reducing social and economic disparities. A reversal in the trends for demographics

> Much of Winnebago County is at or below the 30% threshold of household budgets spent on housing; however exurban portions of Boone County show many districts spending as much as 44% of their household budgets on housing expenses.

Figure 46.
Percent
Housing Built
Before 1980

Source: US Census Bureau
Date: 2010

- 0 to 16.9%
- 16.9% to 32%
- 32% to 46.4%
- 46.4% to 55.3%
- 55.3% to 66.7%
- 66.7% 75.7%
- 75.7% to 86%
- 86% to 91.8%
- 86% to 91.8%
- 91.8% to 100%

performing below the area median and those with disparate impacts is viewed as most impactful in removing the barriers to housing choice.

A calculation of the Dissimilarity Index was performed by Vital Signs to measure the evenness of a group's population distribution across a broad region. The resulting number indicates percentage of the two measured groups' population that would have to change residence for an even distribution of the two races. The Dissimilarity Index reveals that 54.5% of the White population of Winnebago and Boone Counties (0.545) would have to move to even the population distribution of African Americans and Whites across all census tracts. Similar results (0.358) were determined for Hispanic populations relative to Whites.

Housing Affordability

Affordability is impeding housing choice in the region. The high cost of housing compared to the incomes of many households; the limited supply of affordable and subsidized

In Boone and Winnebago counties, 70% of districts had a decrease in owner-occupied housing since 2010.

housing in the region, much of which is in poor and deteriorated condition; subsidized housing that is largely concentrated in the City of Rockford in concentrated areas, particularly concentrated west of the river in Rockford; a lack of affordable housing in close proximity to minimum to low wage job centers outside of the City of Rockford; the lack of affordable housing for seniors and people with disabilities; and the lack of units for large and extended family households are some of the impediments that must be overcome.
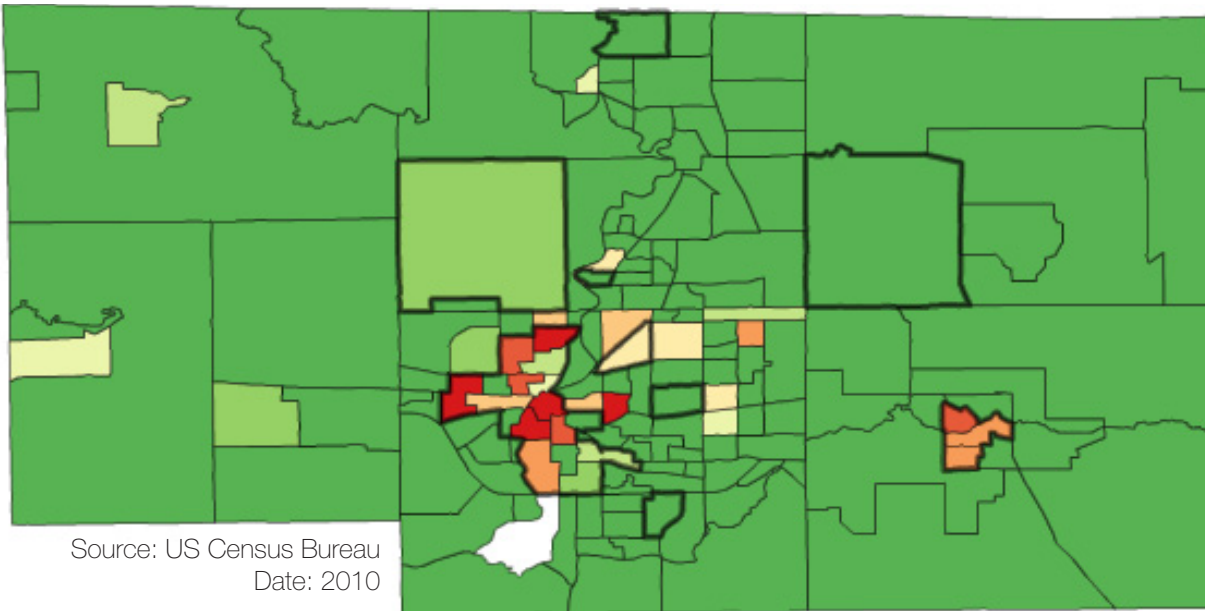
The availability of financing presents a primary barrier to producing new subsidized housing. Although

the cost of land and construction have declined in recent months, the tightened credit market, and decline in federal, state and local subsidies, have made it challenging for affordable housing developers to take advantage of lower costs.

Equity in Lending Practices

Another indicator of equity in housing is lending practices. While redlining has been ruled illegal, there are stark differences in loan award rates among races within the region. For individuals applying for loans in 2011 to FHA with an income at 120% or above the median income of the area, there was a 41% denial rate for African Americans, 13.5% for

Figure 47. Percent Subsidized Housing Units

Source: US Census Bureau
Date: 2010

- 0
- 0 to .3%
- .3% to .6%
- .6% to .7%
- .7% to 1%
- 1% to 2.5%
- 2.5% to 2.7%
- 2.7% to 3.1%
- 3.1% to 4.7%
- 4.7% to 25.8%
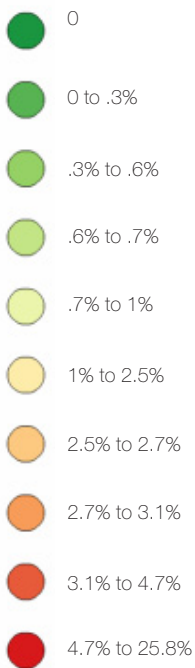
The Vision

Increase the production of affordable housing

Support the increased production of affordable housing through public private partnerships with developers and capacity building for nonprofits by working with local banks, developers and non-profit organizations to expand the stock of affordable housing. A continuation of these efforts should increase the production of new affordable housing units and assistance toward the purchase and renovation of housing in existing neighborhoods. Greater emphasis should also be placed on capacity building and technical assistance initiatives aimed at expanding non-profit, faith based organizations and private developers' production activities in the region. Alternative resources for Entitlement funded housing programs and to leverage increased capacity among the public and private sector should be sought from Fannie Mae, U.S. Department of Treasury Community Development Funding Institution (CDFI) program, Federal Home Loan Bank and other state and federal sources.

Assistance to affordable housing developers by advertising the availability of below-market-rate units via their jurisdictions' websites, referral phone service, and other media outlets is critical. Local staff members can also work with affordable housing developers and nonprofit agencies receiving entitlement funds to revise their housing applications to reduce the obstacles that persons with limited English proficiency, and those who are disabled, elderly or homeless may have in submitting completed paperwork within the allowable time.

A Regional Tax Credit Location Criteria and Local Support Policy should be adopted by each government in the region to document local support to the State for Low Income

For individuals applying for loans in 2011 to FHA with an income at 120% or above the median income of the area, there was a 41% denial rate for African Americans, 13.5% for Whites, and 12.5% for Hispanics.

Whites, and 12.5% for Hispanics. For conventional loans, African Americans have a 25% denial rate overall while Hispanics have a 19% rate and Whites have 11% rate. FHA loan denial rates in 2011 for several of the neighborhoods within the areas of concentrated poverty have denial rates anywhere from 45% to 100%.

Housing Tax Credit Applications. The region should lobby the State of Illinois for criteria changes in their LIHTC evaluation policy and scoring system (developer selection and tax credit award process) emphasizing development standards, amenities in developments and a location preference in non-minority / non poverty concentrated areas.

> Residents that are mobile within the region are choosing to live in neighborhoods with newer housing, lower property crime, and less low-income households.

Create a Land Acquisition and Land Bank Program

The Land Bank Concept involves acquiring unproductive, vacant and developable lots for affordable single-family and scattered site multifamily housing development. The Land Bank helps to both reduce unproductive expenditures and increase local government revenues. This approach is being implemented in a number of cities largely through a process of acquiring tax foreclosure property. Cities have established certain criteria for acquiring properties and for properties to be considered for Land Bank use. These criteria include: 1) the property must owe five years or more in back taxes; 2) the total taxes and liens must be greater than the value of the property; 3) the purchaser must demonstrated the financial ability to immediately develop the property for affordable housing. The Land Bank generally acquires the foreclosure properties from the Sheriff Sale, maintains the properties and assembles parcels for sale to for-profit and nonprofit developers. Land Bank properties are sometimes

acquired as donations by property owners, purchases from owners willing to sale property at reduced prices, and as surplus City-owned land deemed no longer needed for any public purpose.

Create Neighborhood Revitalization Plans

Key to the creation of Opportunity Areas is the need to have neighborhood revitalization plans for all neighborhoods of concentrated poverty, similar to the Choice Neighborhood plan for Ellis Heights. Neighborhood revitalization plans and redevelopment initiatives are needed to transform concentrated and distressed neighborhoods into viable and sustainable mixed-income neighborhoods. The planning process can provide guidance for linking housing improvements, diversification of housing types, and reductions in public and assisted housing with appropriate services that improve the quality of life in neighborhoods including, schools, public assets, transportation, and access to jobs. Revitalization plans and reinvestment strategies should be created for defined areas and areas experiencing disinvestment in an effort to transform these neighborhoods into Opportunity Areas. Planning efforts should focus on both the de-concentration and improvement of public and assisted housing and the housing and neighborhoods surrounding such developments.

De-Concentrate Public and Assisted Housing

The evolution of public housing and its role in racial segregation in this nation has been a storied history. As a significant factor in concentrating poverty, it has undermined the ability of minorities –especially African Americans- to have social and economic mobility into the middle class. The quality of a neighborhood a community member grows up in has a direct correlation with that individual's life chances. Racial segregation created and perpetuated
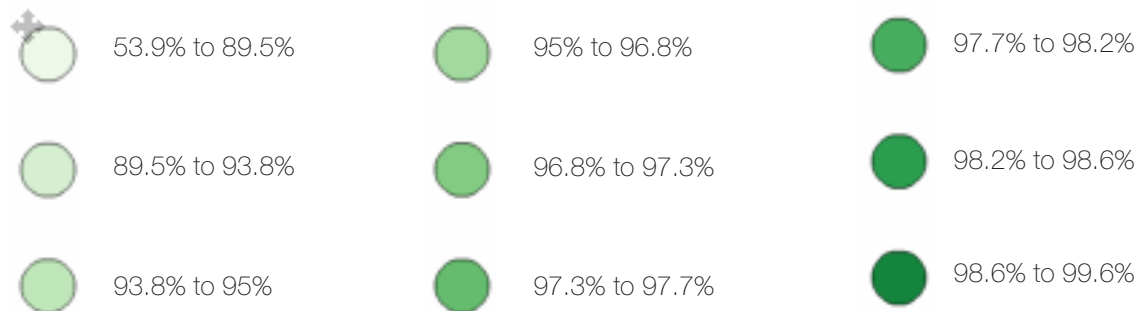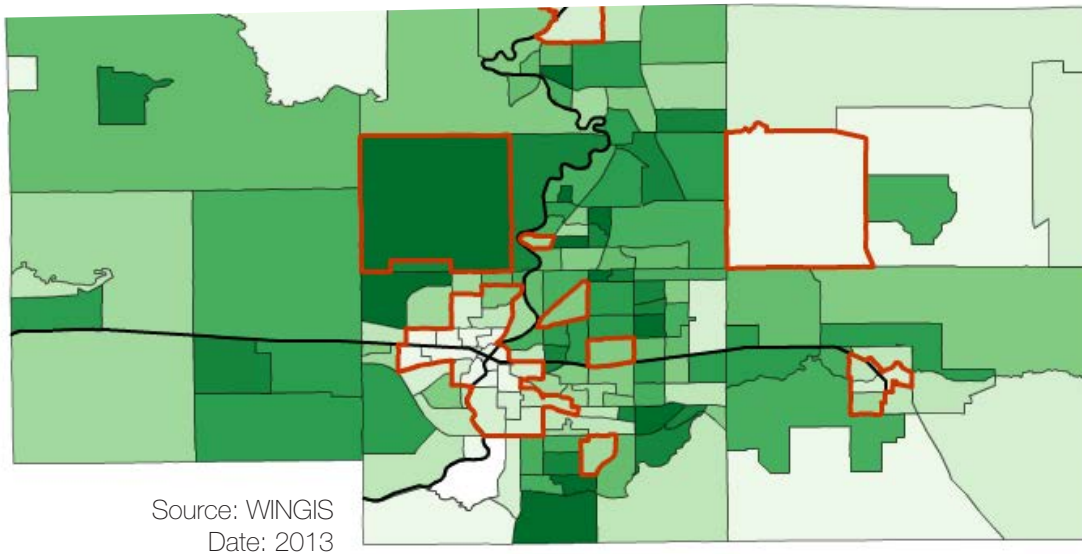
Figure 48.
Percent
Residential
Properties with
Owners in the
Region

Source: WINGIS
Date: 2013

53.9% to 89.5%

95% to 96.8%

97.7% to 98.2%

89.5% to 93.8%

96.8% to 97.3%

98.2% to 98.6%

93.8% to 95%

97.3% to 97.7%

98.6% to 99.6%

through public housing confines minorities to a disadvantage, and it has profound consequences on individual, familial, neighborhood, and regional well-being.

A voucher disbursement strategy should be created which results in a 30% reduction of Section 8 voucher utilization in concentrated poverty and minority impacted census tracts, and no more than 30% utilization in any census tract in Boone and Winnebago Counties, or any census tract in any of the immediately adjacent counties and cities. A Move to Opportunity Advisory Group should be charged with mapping, tracking, and analyzing the locations of units under contract between both the Rockford Housing Authority and the Winnebago County

Housing Authority's housing choice vouchers. This would enable a more regional approach to the strategy of managing housing choice vouchers for the entire region.

Figure 47 shows the concentration of subsidized housing units within the Region by district. In sustainable communities, the location of subsidized housing is balanced throughout the region. When subsidized housing is concentrated in a small percentage of the geography, then housing and property values tend to decrease. In Boone and Winnebago counties subsidized housing is concentrated in less than 20% of the districts and one district has a 26% concentration.

In Winnebago County nearly 11% of residents are over-housed. Average

tenure in subsidized housing is nearly 5 years for both counties. The wait time to get into subsidized housing is a half-year for Boone County, and a year for Winnebago County. 63% of Rockford Housing Authority's population is African American, and 35% is White. 66% is female, and 34% male for a total of 1,805 residents over 18 years old. Of those under 18 years old, 83% are African American while only 17% are White. The youth are evenly split between male and female.

One measurement of equity in housing is to measure the amount of affordable housing available with the Section 8 voucher from HUD. The concentration of housing affordable with the value of the voucher for efficiency, 1 bedroom,

and 2-bedroom apartments is largely concentrated in the areas of poverty. In 2011, 42 districts within the region had 67% or more of housing units with two or fewer bedrooms available as unaffordable with Section 8 housing vouchers.

Create New Zoning Regulations

Incentivized / Inclusionary Zoning refers to a set of strategies that aims to create balanced housing development and mixed-income communities by ensuring that some portion of new housing development is affordable. This strategy may be appropriate to encourage a mix of incomes in the city where development may create neighborhoods of homogenous home prices and residents of similar incomes. Mixed-income communities broaden access to services and jobs, as well as provide openings through which lower-wage earning families can buy homes in appreciating housing markets and accumulate wealth.

Inclusionary Zoning policies can be voluntary or mandatory. Austin, Texas is an example of a city with a voluntary inclusionary zoning policy implemented through its Safe, Mixed-Income, Reasonably-Priced, Transit-Oriented (SMART) Housing program. The program provides fee waivers and other incentives on a sliding scale according to the share of affordable units included in new developments. An example of a mandatory inclusionary zoning policy is that of Montgomery County, Maryland, which was enacted in 1974. The policy requires developments of more than 50 units to include 15 percent moderately priced dwelling units. Of that 15 percent, two-thirds are sold to moderate-income first-time home buyers and the remainder can be purchased by the local housing commission or local non-profits for use in their affordable rental programs.

Develop a healthy mix of housing choice, tenure, and cost, especially within impacted neighborhoods

A healthy regional economy not only depends on jobs, but also on the availability of housing choices for employees and their families. When residents live near their place of work commuting times and costs are reduced. Residents are increasingly desirous of housing choices that fits their lifestyle. Elderly and young adults are desiring walkable, downtown neighborhoods. Young families are looking for safe neighborhoods to raise children. And other residents are looking for affordable housing near social groups and close friends.

Development of Cottage or Cluster rental and homeownership housing for seniors could be used as a means of providing replacement units required under the Jane Addams Consent Decree. – Cottage housing, or cluster housing as it is sometimes called, provides a smaller unit for the elderly as a homeownership or rental option or as an alternative to continuing ownership of a larger unit that essentially over-houses them or has become too costly to maintain. It could also be considered a joint development alternative between RHA and City CDBG grant-funded major rehabilitation when an elderly applicant is living in unsafe conditions and the rehabilitation costs exceed the projected value of the completed structure.

Additionally, a Lease Purchase finance program could be created as a means of providing replacement units. Lease/purchase is an alternative option for higher income applicants for RHA public housing rental and Section 8 Voucher programs interested in qualifying for eventual mortgage financing. A viable tool for cash-poor, but gainfully employed households, lease/purchase programs traditionally allow a person to rent a home for some preset period of time with a portion of the rental payment going toward the down-payment to help purchase the rented property. Some programs allow a buyer to make rental payments virtually equal to the mortgage payments they will eventually pay on a loan they can assume after several years of adequate credit and loan payment behavior. RHA could serve as developer and landlord during the interim period of rental and home ownership.

REGIONAL HOUSING GOALS

- Increase local ownership in impacted neighborhoods.

- Increase accountability & responsibility of residents and property owners.

- De-concentrate public and assisted housing.

- Improve quality and environmental health of existing housing stock and infrastructure to promote neighborhood reinvestment.

- Develop a healthy mix of housing choice, tenure, and cost, especially within impacted neighborhoods.

Goals	Housing Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👪	🛒	🏛
De-concentrate public and assisted housing. *All public housing units are currently located in downtownRockford in 16 census tracts.*	Create Neighborhood Revitalization Plans for existing concentrated areas as a means of elevating those areas to Opportunity Areas.	→	**33.2% in poverty concentrated areas are self-sufficient**	↑			X		X
	Develop cottage or cluster rental and homeownership housing for seniors as a means of providing replacement units for public housing choice.	→	# Units	↑				X	
	Pursue more Private/Public joint development ventures that focus on non-impacted areas of the City and Counties.	→	# Dollars	→				X	X
	Leverage existing bond programs, and public and private dollars as a means of improving infrastructure in the concentrated areas and implementing revitalization plan.	👎	# Dollars invested to improve infrstructure	↑				X	X
	Give priority to scattered sited development which focuses on non-impacted areas of the Cities, or Counties such as a land swapping.	→	# Scattered site development units	↑		X	X		X
	Create a voucher disbursement strategy and provide mobility counseling.	→	# Voucher holders disbursed	↑			X		
Improve quality and environmental health of existing housing stock and infrastructure to promote neighborhood reinvestment.	Align availability and location of affordable housing to mass transit, schools, and jobs.	👎	# Units in proximity	↑		X			X
	Develop a targeted list of infrastructure improvements and implement list by partnering public and private investment through Neighbor.ly.	→	# Dollars invested to improve infrstructure	↑			X	X	X
	Work with neighborhood associations to establish a bi-annual region-wide resident-led neighborhood clean-up day and develop an ongoing mindset of clean and safe neighborhoods.	→	# Events	↑	X	X		X	X
	Improve the health of existing neighborhoods by increasing the level of local investment in public infrastructure (streets, sidewalks, alleys, curbs, etc).	👎	# Dollars invested to improve infrstructure	↑		X			X
	Utilize vacant lots and demolitions to promote infill housing.	👍	**2Q - 2013: 4,974 vacant residential properties**	↑				X	X
	Continue to support strategies that reduce unhealthy conditions in pre-1978 housing.	👍	# Lead-abated units	↓					X
Increase accountability & responsibility of residents and property owners.	Improve the standard of quality of local infrastructure by strengthening codes and regulations to meet higher standards.	👎	Codes improved	↑					X
	Establish aggressive and creative housing policies and enforcement for both new and existing housing.	→	New policies	↑					X
	Better the condition of rental property by enforcing property standards, HQS inspections (for Section 8), and demolish properties that continue to fall below livable conditions.	👍	# Demolished properties	→					X
	Expand the registration program to create a mandatory landlord licensing program.	→	# Licensed landlords	↑				X	X
	Continue to assist "underwater" homeowners in region by expanding counseling and financial support services available.	👎	# Underwater homeowners	↓	X	X	X		
	Develop a mentorship and home training program for disadvantaged and low income residents.	→	# Participants	↑		X	X		

Goals	Housing Strategies	Since 2000	Current Benchmark	2034 Target	🏠	🏢	👥	🛒	🏛
Increase local ownership in impacted neighborhoods. *92% of residential properties are locally owned in high poverty areas.*	Establish programming to educate young adults (both within the region and boomerangers) on home ownership opportunities locally.	→	*Home ownership*	↑	X		X		
	Promote self-sufficiency programs with Habitat and the housing authority's Family Self Sufficiency and others to encourage low-income home ownership.	→	**17.3% mortgage holders have income <$34,999. (2012)**	↑	X		X		
	Preserve and upgrade existing affordable housing and increase the quality and sustainability of public housing.	👍	*Status of affordable and public housing*	↑				X	X
	Coordinate with banks and financing programs to identify absentee-ownership properties and develop programming to target local purchasing when a property becomes available.	→	*Rate local home ownership*	↑	X			X	X
	Increase the local ownership of quality rental property that qualifies for the Section 8 voucher program.	👎	**1,095 subsidized Section 8 units (2012)**	↑	X		X		
Develop a healthy mix of housing choice, tenure, and cost, especially within impacted neighborhoods.	Offer tax relief or other incentives to businesses providing employer-assisted housing programs.	→	*# Participants*	↑				X	X
	Implement employer-assisted housing programs to help employees purchase a home near their job, using Fannie Mae Employer Assisted Housing Program model.	→	*# Participants*	↑	X		X		
	Increase amount of senior housing in walkable neighborhoods.	👎	*# Units*	↑		X		X	X
	Improve housing choice by creating opportunity areas in "non-impacted" locations and allowing voucher holders to choose to relocate from impacted areas to opportunity areas.	👎	*# Voucher holders relocating*	↑	X	X			X
	Increase availability of affordable housing units in middle- to upper-income neighborhoods.	👎	*# Units increased in key neighborhoods*	↑		X		X	X
	Assemble parcels, including tax-delinquent properties and vacant or abandoned buildings, for affordable housing development projects.	→	*# Parcels*	↑					X
	Require a percentage of affordable dwelling units in market-rate developments.	→	*# New affordable units*	↑					X
	Increase amount of affordable housing to 40% within the region by establishing affordable housing inclusionary zoning practices.	→	**48.2% of renter-occupied units are affordable**	↑					X
	Strategically use public funds to leverage private investment in affordable housing.	→	*# Dollars invested*	↑				X	X
	Consider the use of incentives to stimulate additional housing development in downtown Rockford and downtown Belvidere.	👍	*# Units*	↑		X		X	X
	Change zoning regulations to support regional land use planning (such as inclusionary zoning).	→	*# Regulations changed*	↑					X

Land

Introduction

Local governments regulate the use of private land for a variety of reasons. Sustainable regions typically have a broad distribution of land types and usages. A balanced mix of land uses also provides for a stable tax base that can provided services for the public good.

The Vital Signs region was broken up into urban, suburban and rural districts because these areas each have a unique set of issues and concerns and the methods to address them differ. Rural land use is about more than just producing food, timber, and raw goods. It provides jobs for the people who live there and an economic basis for rural communities that influence quality of life

Rural land management practices have become more intensified and specialized due to the pressure of urban and suburban sprawl, which has continued to grow steadily in the region. These pressures have been linked to declines in biodiversity and reductions in soil and water quality

Suburban land use is located on the edges of urban areas where the majority of land use is low density residential, with a limited mix of service and goods businesses. Most suburban residents have the income and security of employment to afford more expensive properties and taxes, but also the longer journey to work. The delicate balance of suburban land use and rural areas is critical to sustainable development. Many communities have successfully implemented urban growth boundaries to plan for agriculture preservation and controlling sprawl.

Urban areas generally contained the most dense land use and housing, and often are the economic centers of a region. Due to the industrial history of the Rockford region the urban core areas also contain most of the brownfield properties and challenged land. Infill opportunities are most prevalent in the urban core areas and may utilize brownfield sites that have received environmental mitigation.

Land

The region's most prevalent land use is classified as farm land, 61% of total land coverage.

Overview

Brownfields

Brownfields are lands that were previously used for industrial purposes or some commercial use and have been contaminated by hazardous waste or pollution and have the potential to be reused once cleaned thoroughly. Generally, brownfield sites exist in a city or towns industrial areas, on locations with abandoned factories or commercial buildings, or other previously polluting operations. Other times they can be the result of a toxic spillage or from many years of illegally dumping or burying debris that is of hazardous nature. Brownfields impact communities in a variety of ways. Abandoned or dilapidated buildings on brownfield sites show neglect even in an otherwise well-maintained neighborhood. Contaminants found on brownfield sites can pollute soil, air and water resources both on and off the site through leaching.

Over the few past years the City of Rockford has made a priority work effort to identify and record the brownfield sites. In total the City has been awarded approximately $6 million dollars, from both the EPA and IEPA, for assessment and clean-up of sites including the River Edge Zone. Recently a detailed inventory of brownfield sites in the 2-county region was completed by Fehr Graham

Engineering & Environmental Consultants as part of the Vital Signs project. The study identified and categorized 1,431 parcels and ranked them on a scale of 1-4 based on the severity of pollution coupled with the level of clean-up needed to bring the property back to its original state, as shown in Figure 49. They were ranked as follows:

1. Negligible/Low Risk of Negative Environment Impact
2. Moderate Risk of Negative Environmental Impact
3. Elevated Risk of Environmental Impact
4. Severe Risk of Environmental Impact.

Brownfields can play an important role in infill development. Many brownfield sites are large and are already served with utilities and public infrastructure. Some of the large brownfield sites are located along freight rail lines and have the potential for transit-oriented-development or cargo-oriented-development, which are both key economic development strategies.

Changes in Land Use and Urban Sprawl

It has been calculated that the footprint of the region's built environment has nearly quintupled since 1940 while the population has roughly doubled in this same time period. While only 3% of the two counties consisted of built environs

Figure 49.
Brownfield Sites
by Ranking

Source: RMAP
Date: 2012
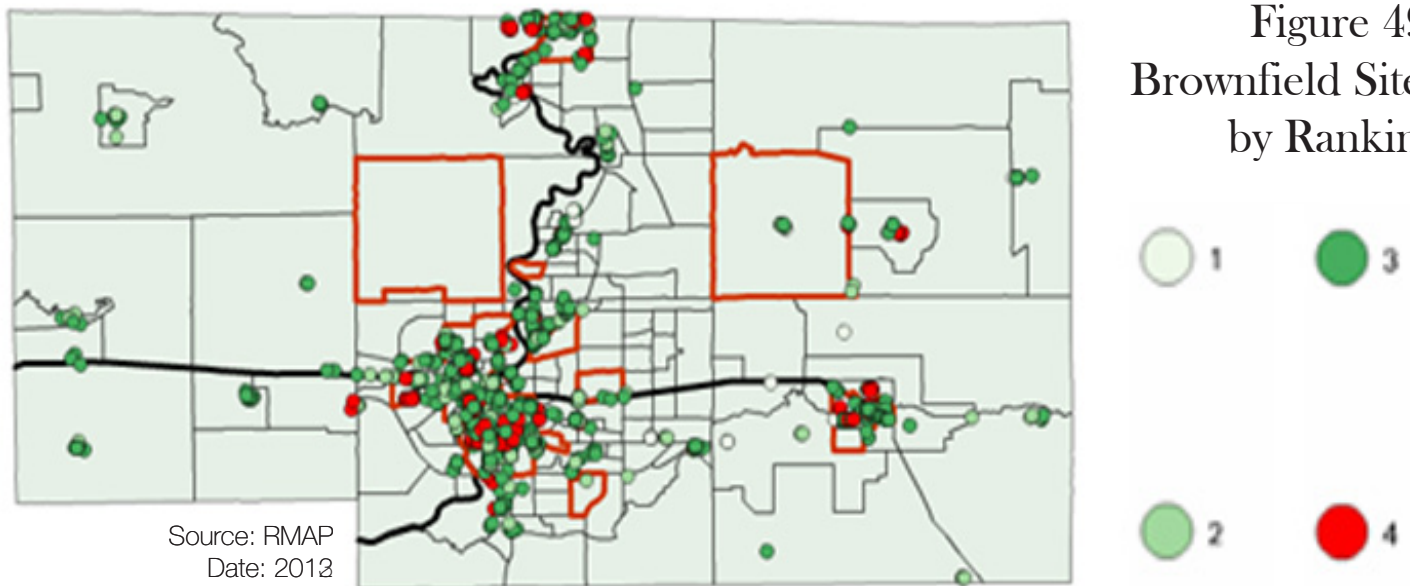
in 1940, nearly 20% of the land is covered within the region now, as shown in Figure 17. The MSA as a whole is comprised of 61% farmland, 21% residential, 3% commercial, 2% industrial, 6% is classified as tax exempt and 8% miscellaneous other land uses.

Compact development lessens the strain on public infrastructure and minimizes the need for utility and road extensions, and maximizes protective services such as fire, police and emergency response. Compact development limits the needs for well & septic development and can be augmented by conservation design principles. Compact and concentrated development is more sustainable, has lower cost per-capita resource usage, is more walkable and pedestrian friendly, has a lower carbon footprint and has less vehicle miles traveled on average per person.

The number of housing units per acre is one of the most commonly used indicators of compactness or density. Within the Rockford Region many neighborhoods with higher densities have a high low-income population (greater than 15%) which has linked the two metrics. Compact future development must be planned to provide a more balanced mix of incomes. This is discussed in more

detail in the Housing chapter. In particular the de-densification of public housing authority property will be key to the achieving a more balanced mix of incomes.

In 1940, 3% of the region was built environment, today it is 20% but population only doubled.

Agricultural Land Preservation and Protection

While the majority of the region's population resides in urban areas, the majority of land cover in the region is agricultural, just over 60%. Farmland is imperative for local and regional food and crop production, but also supports the growing local food movement. Farmland also provides additional benefits, such as wildlife habitat, protection against flooding, groundwater recharge areas, and can improve air and water quality. Illinois has some of the most productive soils in the entire world. Only 20% of soils nationwide rank as prime. In Boone County 65% of the soils are classified

as prime or important, and the figure increases to 70% within Winnebago County. Suburban sprawl puts this local farmland resource at risk. Between 2002 and 2007 there was a 7% decrease in farmed lands within Boone County and a 4% decrease in Winnebago County.

Recently farm markets have taken a dramatic upswing due to increasing crop yields and higher than average profits. From 2002-2007 the region saw a market value increase of over 70%. But even scattered and sparse development in farming areas removes agricultural land from production both directly and indirectly. The "hollowing out" of the urban core, a phenomena experienced by many cities in the US, simply transfers residents and wealth within the area. But this does not contribute to real growth, just redistribution. Most states have recognized the need to preserve good agricultural land and have provided tax and other incentives to farmers to continue farming. But only a few, such as Wisconsin, have linked the incentives to development controls. Vital Signs recommends several best practices in the area of agriculture preservation, many of which are modeled after Wisconsin.

Underutilized Property and Infill Development Opportunities

Abandoned buildings and vacant

Source: Winnebago and Boone Counties
Date: 2013

Figure 50. Percent Difference Between Average Fairmarket Value and Sale Value of Parcels

🔴 -6,400% to -500%		🟡 -5% to 5%	
🟠 -500% to -80%		🟡 5% to 10%	
🟠 -80% to -60%		🟢 10% to 15%	
🟠 -60% to -40%		🟢 15% to 20%	
🟠 -40% to -30%		🟢 20% to 25%	
🟠 -30% to -20%		🟢 25% to 30%	
🟠 -20% to -10%		🟢 30% o 40%	
🟠 -10% to -5%			
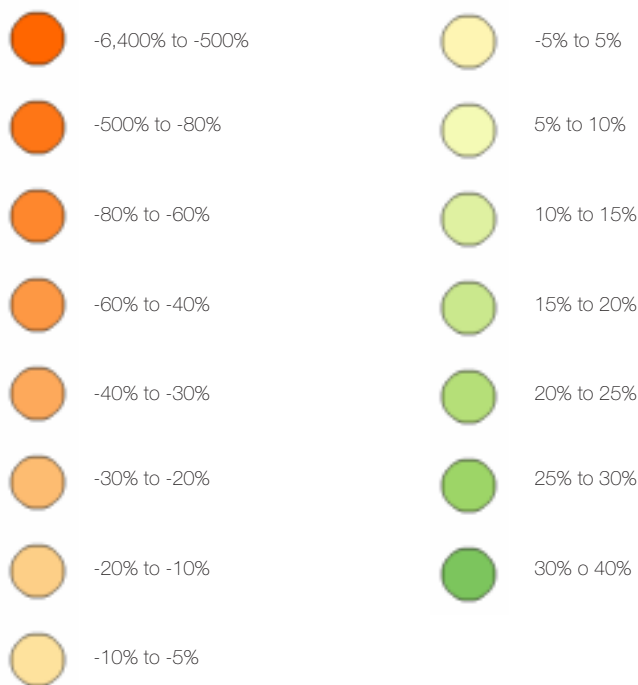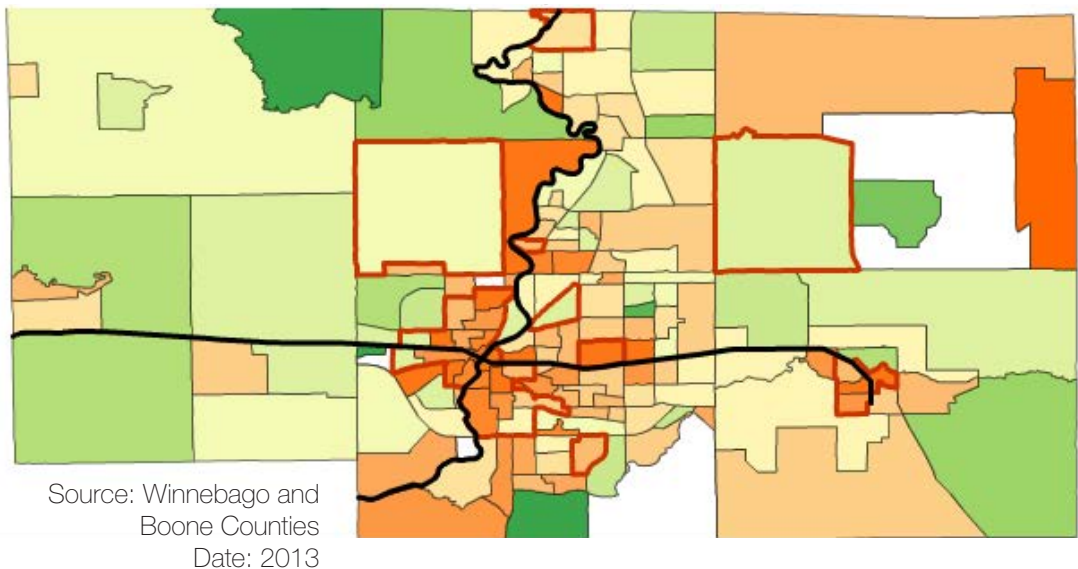
properties are rare in neighborhoods where demand for property is high. But in lower income neighborhoods they are much more common, often due to absentee owners or landlords. Neglected properties can induce a snowball effect by lowering adjacent property values, attracting crime and illegal activities, squatters and eventually leading to more dilapidated and underutilized buildings and vacant lots. Some neighborhoods have an absentee owner rate as high as 47%.

Infill development allows vacant or underutilized properties that are already served with utilities and public infrastructure, or are in close proximity to these amenities. At the core of this development method is choosing to forego greenfield development as the first option. Infill development can preserve farmland and at the same time revitalize a region's inner core. The potential for infill development in the Rockford region is vast and encouraging and can be seen in Figure ???. Recently the City of Rockford has budgeted twice the annual funding for demolitions which could lead to property assembly to allow certain types of infill development.

Property Assessments and Market Sales

Local governments, schools and other taxing districts rely heavily on property tax revenue to fund the services and programs they provide. The largest portion of property tax revenue is generated from residential property. For most communities between 60% and 75% of the value of their property assessment comes from residential properties with the remaining value assessment coming from commercial, industrial, farmland, and railroad properties. For the Vital Signs Region the assessed value of property is generally considered to be 1/3 of the fair market value.

Residential Property Fair Market Value

The fair market value of property varies significantly among districts in the region. In 2011 two districts had an average fair market value of residential property of less than $40,000. On the high end of the scale, six districts had average fair market value of over $200,000. Intercity districts within Rockford, Belvidere and South Beloit show residential properties values less than $100,000. The recent foreclosure turmoil in the residential market has caused residential property values to plummet as appraisers use foreclosures and short sales as comparables.

Changes in Fair Market Value

The major decline in residential value was in districts that had an average market value between $100,000 and $140,000 in 2007. The percent of districts with housing market value less than $100,000 increased from 41% to 49% between 2007 and 2011. The percent of districts with market value between $100,000 and $140,000 increased from 58% to 72% during the same period of time. The number of districts with fair market value of housing over $140,000 declined from 63 districts to 33 districts. This decline in fair market value of residential housing can induce tax rates to rise to meet the demands of the tax levies.

1,431 Brownfield Sites in the Region, 2/3 in Rockford and all severe risk sites are in Rockford.

Regional Land Use

Over the 2010-2012 time period there were slight changes in land type allocations. The change in tax exempt property, which rose from 5.7% to 6.0%, is of concern and poses a challenge to sustainable development. Twenty-six of the 153 districts experienced an increase

in tax exempt property. The majority of the districts with the largest increase in tax exempt property were the rural areas in southern Boone County and western Winnebago County, plus the central city of Rockford. There were also districts in the region that experienced a decline in tax exempt property. Notable is a district along Riverside Blvd. at the eastern edge of Winnebago County that experienced a decline in tax exempt property of 38%. Overall, 21 districts experienced a decline and 43 districts experienced an increase in tax exempt properties.

Vision

Preserve prime agricultural lands and the beneficial effects attributed to aquifer recharge, production of local foods, and a rural lifestyle.

Recognizing the important role agriculture and farmland plays in the economic, environmental, and social quality of life of the region, Vital Signs recommends the adoption of a farmland protection "toolbox" to help ensure the preservation of this resource across the region. Key to preserving agriculture in the region is ensuring that a "critical mass" of land is protected. When farmland becomes fragmented by sprawling residential development it becomes increasingly difficult for farm operators to continue with normal farm practices, and places increased development pressures on surrounding farmland. Land use planning is fundamental for ensuring farmland preservation, guiding decisions on where growth should occur and where rural amenities should be protected. Other strategies including agriculture protection zoning, enhanced subdivision regulations, agriculture districts and conversion fees can help quell the rate of conversion of farmland. Programs such as purchase of development rights (PDR) and transfer of development rights (TDR) offer permanent protection

LAND
BEST PRACTICES

Develop a list of brownfield locations that are prime locations for redevelopment.

Using the current inventory collected for the Vital Signs project develop a list of the brownfield sites that when remediated would be the most sought after properties. Most of the brownfields are located downtown and if available for development would have the best chance of being purchased. Using GIS a ranking system should be developed and those properties should be expedited, remediated and assembled.

Formation of a Regional Planning Board to facilitate and establish regional partnerships.

 The new board would have responsibility for regional coordination of the RPSD and other issues of public good under the RMAP umbrella. Implementation grants for the RPSD that are anticipated to become available through the federal sustainability partnership of HUD-DOT-EPA could be prioritized by the new planning board. The introduction of a regional planning board could include a formal review role of all land use decisions that affect the RPSD or would be considered as regionally significant. The formal review role would continue to be advisory, but not an ad-hoc staff relationship as currently exists.

of these resources. The Boone County Agriculture Conservation Easement and Farmland Protection Commission was created in 2006 to help permanently protect important farmland in the County. The Commission has been successful in acquiring two easements, however limited funding has proved a challenge, requiring creative implementation strategies. Programs such as this should be widely promoted and expanded into Winnebago County.

It must be emphasized that land use controls alone are not sufficient means for maintaining a core agriculture base. Supporting a strong and vibrant farm economy is essential for the long term viability of farming in the region. Farming as an industry must be included in economic development plans. A need's assessment can help the region determine what infrastructure and support services are required to better support the agricultural livelihood of the area. A continual challenge for the region will be facilitating the transfer of farmland between retiring operators and new farmers. Helping to promote agribusiness in the region will be crucial to ensuring that land remains in agricultural production into the future.

Create an urban growth boundary, UGB, to mitigate the adverse effects of sprawl.

In order to plan for and officially establish an Urban Growth Boundary some type of oversight group needs to be established. The Vital Signs recommendation for a Regional Planning Board (see Figure 4) could provide the needed oversight and implementation. A UGB could be established through ordinances that make infill development the most viable option for residential, commercial and even industrial projects by utilizing the vast collection of brownfields, vacant lots, abandoned buildings and other underutilized properties. A UGB would benefit agricultural protection

and closely regulate private well and septic development. Along with infill development mixed use zones should be encouraged and special financing programs or districts should be put in place to help jumpstart the process.

179,200 acres of active cropland in Winnebago County, 100,000 acres is highly erodible land.

Increase lands available for recreational use, open space and greenways as a means of protection and conservation.

By maximizing open space opportunities and developing an interconnected and interrelated system of protected lands the region as a whole will become more attractive on many different fronts. Open space buffers will help to protect and maintain the quality of streams and lakes, including surface and groundwater alike, the region's good standing air quality, and help to reduce runoff, soil erosion and leaching of chemicals and sediments along sensitive hydrological corridors. Methods that concentrate on the public sector may include the purchase of development rights from willing sellers, allowing and promoting reasonable conservation development, establishment of conservation easements, and providing tax benefits to landowners that are willing to forgo the right to develop some or all of their property. Additionally, municipalities need to encourage participation of the private sector in open space acquisition and protection. The region as a whole needs to establish open space guidelines for new development and require developers to dedicate a

Figure 51.
Transportation
Routes and
Percent Industrial
Land Use

Source: WINGIS & RMAP
Date: 2013

- 0
- 0 to .2%
- .2% to 1%
- 1% to 2.3%
- 2.3% to 4.1%
- 4.1% to 10%
- 10% to 24%
- 24% to 56.3%
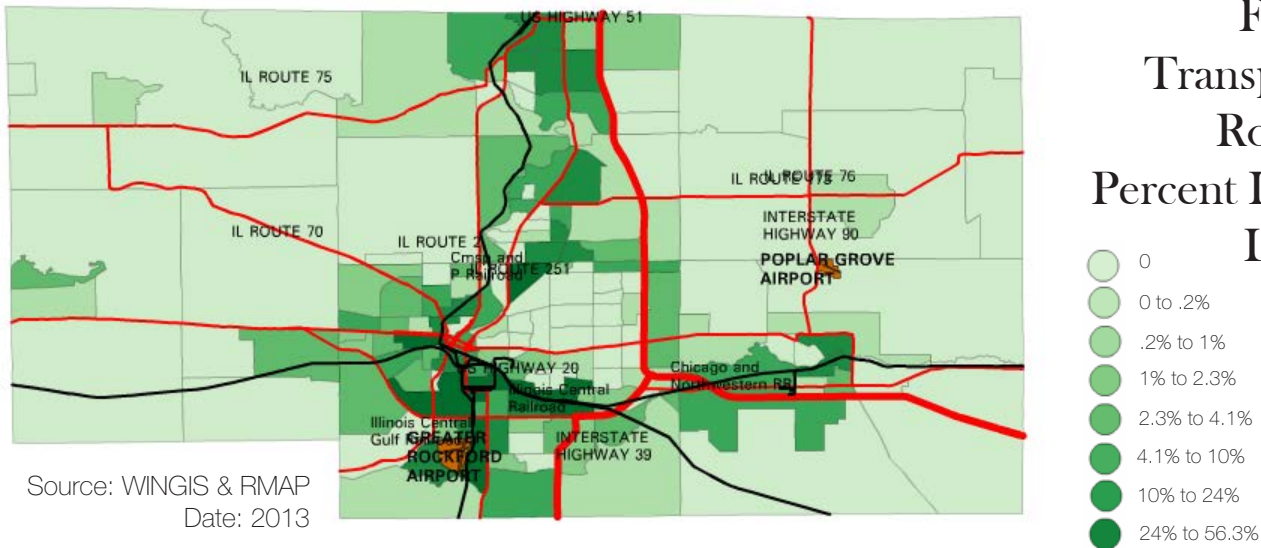
certain amount of a site as dedicated green space.

Reduce number of tax-exempt, underutilized and developable properties.

A large concentration of tax exempt properties can actually hurt a region as a whole even though many of the properties are associated with the public good. Public officials, property owners and the community in general need to be educated about the volume of tax-exempt properties. Local governments, and even realtors, should create a database of tax-exempt properties that are readily available for purchase. This will allow dialogue to expedite the return of the properties to the tax rolls.

Align fair market value to market sales for industrial, commercial, and residential properties.

Currently the region compared to the Nation has lower property values in industrial, commercial and residential lots. The region also has tax rates that are higher than the Nation, in some instances by a considerable margin. Undervaluation at the assessment level is the primary source for lower market values, especially for commercial buildings. One recommendation is to establish an assessment standard that includes building improvement and renovation costs in the assessment. Additionally the introduction of computer-assisted mass appraisal, similar to that used for residential property, should be instituted for commercial and industrial property. Other changes could be instituted by referendum, including property tax calculation within the tax cap law, possibly by removing the adjustment clause within the property tax code to create a fair and consistent playing field. A multi-year reform strategy is recommended for the property appraisal system.

REGIONAL LAND GOALS

- Preserve prime agricultural lands and the beneficial effects attributed to aquifer recharge, production of local foods, and a rural lifestyle.
- Create an urban growth boundary, UGB, to mitigate the adverse effects of sprawl.
- Increase lands available for recreational use, open space and greenways as a means of protection and conservation.
- Reduce number of tax-exempt, underutilized and developable properties.
- Align fair market value to market sales for industrial, commercial, and residential properties.

Goals	Land Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Create an urban growth boundary to mitigate the adverse effects of sprawl and water runoff. *483.7% of the built environment footprint since 1940 (2012).*	Advocate with regional partners to redirect greenfield fringe growth to traditional urban core neighborhoods.	👎	# Infill properties	↑	X		X	X	X
	Reduce the effects of sprawl by prioritizing transportation investments where partnerships exist to rehabilitate blighted and distressed areas.	👍	# Dollars invested in distressed areas	↓	X		X		X
	Increase acres of mixed use zoned areas.	👍	# Acres	↑			X	X	X
	Encourage financing programs for mixed use development.	→	# Dollars leveraged	→				X	X
	Establish a regional governance board to coordinate implementation of an urban growth boundary and open space.	→	Board established	→			X		X
	Limit development on private well and septic systems.	👎	# Wells developed	→	X			X	X
Increase land for open space, recreational, and greenway uses. *21375.61 acres of land for open space, recreational, and greenway use (2012)*	Maximize open space by utilizing existing building stock and concentrating development in mixed-use mixed, income developments of moderate to high density.	👎	# Infill dollars invested	↑	X	X	X	X	X
	Develop a complete regional inventory of environmentally sensitive areas to include Boone County.	👍	Develop inventory	→			X		X
	Parks or high quality open spaces should be within a three-minute walk of every dwelling, including re-use of underutilized properties.	👍	# Houses	↑	X		X	X	X
	Establish open space guidelines for new development and require developers to dedicate a certain amount of development sites as green space.	→	# acres open space	→			X	X	X
	Encourage participation of the private sector in open space acquisition and protection.	→	# Participants	↑			X	X	X
	Create buffers along streams, shorelines, utility and highway rights of way, and abandoned rail lines.	👍	Amount buffers	→			X	X	X
	Allow and promote conservation development, and seek conservation easements.	👍	# Conservation easements	↑	X		X	X	X
	Streamline permitting processes and reduce development fees.	→	# Permits and time	↓					X
	Provide tax benefits to landowners willing to forgo the right to develop some or all of their property.	→	# Participants	↑	X			X	X

Goals	Land Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Preserve prime agricultural lands and the beneficial effects attributed to aquifer recharge, production of local foods, and a rural lifestyle. *There are 264,688 acres of prime farmland.*	Implement design principles, review zoning codes, and eliminate spot zoning in and around existing prime agricultural farmlands to sensitively integrate development with agricultural preservation.	👎	# Sites spot zoning	↑			X		X
	Educate elected officials and local government staff as to the importance of prime agricultural land preservation for local food production and habitat protection.	👍	# Educated	↑			X		X
	Develop a long-term agricultural farmland preservation toolbox to discourage conversion of prime farmland to non-agricultural purposes.	→	# Acres converted	→		X	X		X
	Identify available counseling and financial assistance to existing farmers and ensure adequate awareness of services available.	→	# Participants	↑			X	X	
Align fair market value to market sales for industrial, commercial, and residential properties.	Increase fair market value of downtown commercial and industrial properties by developing a targeted support program with redevelopment and financing counseling for property owners.	👎	# FMV	↑			X	X	X
	Increase city revenues from property tax by increasing fair market value of commercial and industrial along river and key corridors.	👎	**FMV commercial properties $105,597 & FMV industrial properties $101,255 (2011)**	↑			X	X	X
	Establish regional property assessment standards and digitize the property assessment process.	→		→					X
	Consider a ballot referendum to change how property taxes are calculated in the tax cap law or remove the adjustment clause within the property tax code.	→	Ballot created	↑					X
	Centralize assessments at county level from township level.	→	Assessments centralized	→					X
Reduce number of tax-exempt, underutilized developable properties. *4,225 properties with tax-exempt codes (2011)*	Identify underutilized nonprofit properties and work with owners to either activate properties to a higher use or to return properties to private ownership.	👎	# Properties	→			X	X	X
	Educate public officials, property owners, and community leaders about volume of tax-exempt, underutilized properties and the strain it has on the local property tax base.	👎	# Educated	↑			X		X
	Local governments develop a plan to sell all underutilized publically-held property to activate towards private use and reinvestment.	→	# Properties sold	↑			X	X	X
	Create a database and platform with a clear list of tax-exempt properties available for purchase.	→	# Properties	→			X	X	X

Safety

Introduction

Police officers, fire personnel, and EMS providers protect the community so residents may enjoy the region at any time of day, and in any neighborhood. Crime levels affect not only personal well-being but the ability to grow business and industry. Regional safety indicators explore how people support each other within neighborhoods, how they help each other with crime problems, and how the police and fire departments support the neighborhoods.

One in every 100 adults is now confined in prison or jail in America. For African American males between 20 and 34 years of age, 1 in 9 adults is behind bars nationwide. Men are 10x more likely to be in prison. 50% of offenders will re-offend within three years. It is estimated that it costs $65,000 per year to maintain each bed in an incarceration facility. In America more money is spent on jails than is invested and spent on education. It is estimated the average crime victimization cost per resident is $1,000 annually. And, it is estimated that for every 10% increase in local crime there is a corresponding decrease of 1% in a region's population.

It is critical to understand how crime affects the region as a whole and that the more affluent neighborhoods are not immune to its effects. Crime is not limited to low-income persons and affects more than just neighborhoods of concentrated poverty. Reducing crime, especially violent and serious crime, has extremely positive benefits to all of the sustainability indicators and overall quality of life for the entire region. Unfortunately the analysis of local crime data was not possible during the grant cycle of the Vital Signs project. More analysis will be necessary in the future.

Safety

Overview

Propensity for Crime

In 2011 Forbes recently released a report reviewing violent crime trends in the nation from the FBI Informed Crime Reports. While violent crime has decreased 4% nationwide, the majority of the decrease is in smaller cities. The City of Rockford had been in the top 10 worst violent crime cities in the nation but has recently seen a decrease of 7% and is trending in the right direction. However, the crime rate for the community is still extremely high relative to other similarly sized communities. This high propensity for crime is one of the factors affecting the region's ability to attract jobs, retain quality businesses, and severely affects the quality of life for many residents.

Figures 52 and 53 show propensity for different crime types in 2010. The Vital Signs website has more visualizations of crime data. Any district or neighborhood exceeding the "100" threshold has a higher propensity for that crime type than the nation as a whole. The core of Rockford is 2x (or more) as likely as the nation to have crime as a whole. Collectively these maps demonstrate
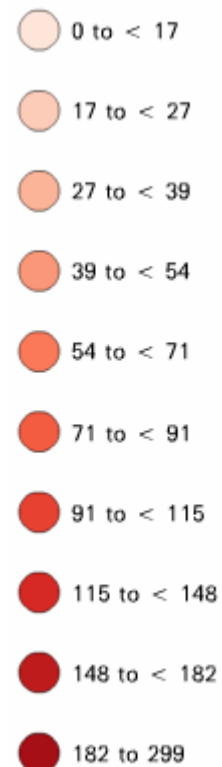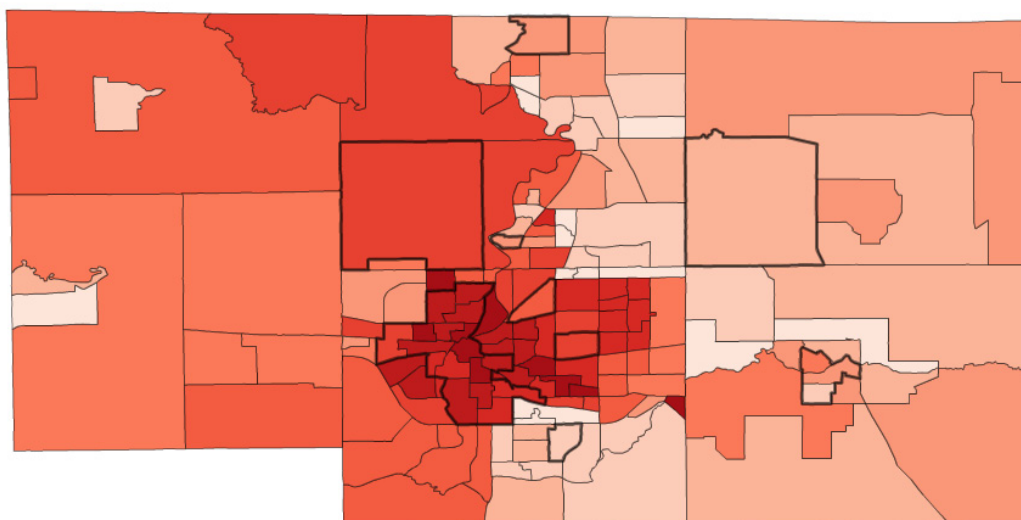
the broad reach of crime in the region.

Safety and Infrastructure

The proximity of safety services (fire, police, and EMS) within the Region to households, as well as the number of households each serves, can provide an important component of the analysis of the impact of development patterns within a region. The less households and the farther a safety service needs to travel to reach its destination can be directly related to the efficiency of a service for a region.
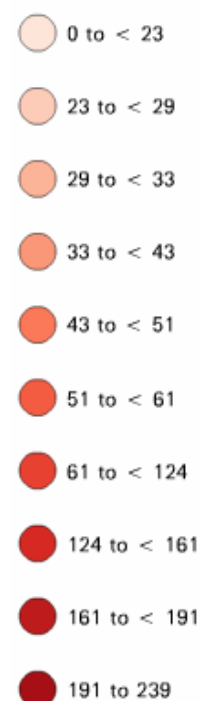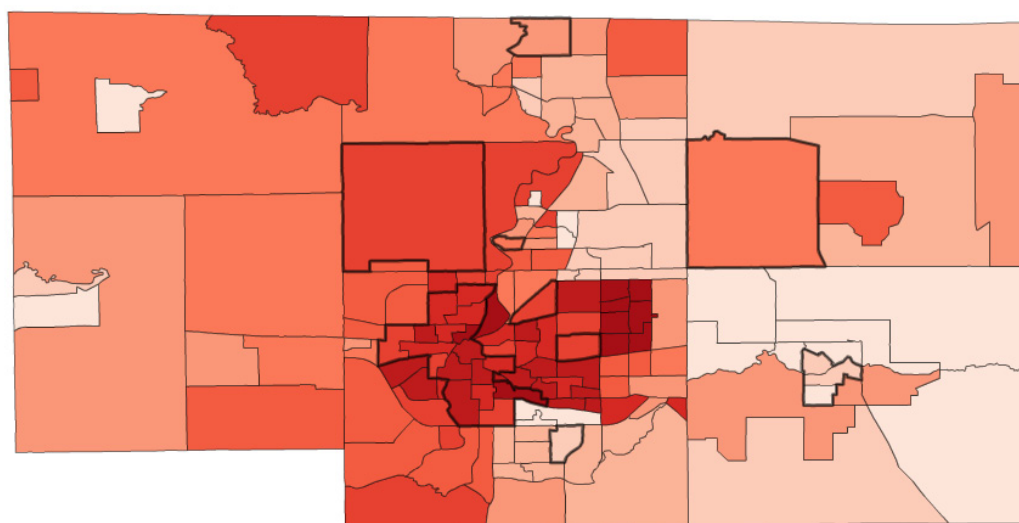
Generally, fire departments are part of a city or county government, funded through the city or county's general fund budget, derived from sales, property, and other taxes. However, within the region special fire districts with taxing powers have been created to provide for fire protection, suppression and rescue services. There are high costs associated with preserving a quality and quick response. There is a much higher density of households within the Rockford and Belvidere Fire Districts, the two districts with much older housing stock. In the future Vital Signs is looking to develop maps showing household density for additional services within the region.

The crime rate for the Rockford Region is still extremely high relative to other similarly-sized communities.

Figure 52.
Propensity for
Crime Index

⬤	0 to < 17
⬤	17 to < 27
⬤	27 to < 39
⬤	39 to < 54
⬤	54 to < 71
⬤	71 to < 91
⬤	91 to < 115
⬤	115 to < 148
⬤	148 to < 182
⬤	182 to 299

Although poverty is concentrated on the West side, the highest rates of robbery robberies are found in the neighborhoods in deep red on the East side of Rockford. These areas are nearly 5x as likely to have robbery occur as the nation as a whole.

Figure 53. Personal Crimes Index

⬤	0 to < 23
⬤	23 to < 29
⬤	29 to < 33
⬤	33 to < 43
⬤	43 to < 51
⬤	51 to < 61
⬤	61 to < 124
⬤	124 to < 161
⬤	161 to < 191
⬤	191 to 239

Crime Prevention Strategies

Examples of crime prevention strategies are numerous. Some of the following approaches are in place within the region.

- Crime Prevention Through Environmental Design (CPTED) & "Hot Spot" Policing
- Neighborhood watch programs
- Community policing - a policing approach that promotes and supports strategies to address crime-related problems through police-community partnerships
- Weed & Seed - promote the involvement of multiple partners to respond to violent crime and drug abuse and improve the quality of life in communities
- Improving community conditions for youth
- School classroom curricula promoting life skills
- After-school programs
- Street worker programs
- Violence prevention
- Crisis intervention
- Crime tip rewards
- Directory of Safety Services
- Educational Presentations by Police to Businesses and Employees
- Empowering public housing residents to reclaim their neighborhoods
- Promoting open space and environmental clean-ups
- Celebrating neighborhood accomplishments
- Requiring inmates to perform community service
- Safer design of public areas
- Using media as an ally
- Increase victim assistance services
- Youth-led community service projects

Perceived Safety

Perceptions of safety are important as well. If residents do not perceive they have a safe environment in which to live, they may leave the region or withdraw from participation, affecting the well-being of neighborhoods and the local economy. The Rockford Health Council performed a survey of perceived safety within the community in 2010. A little over half of residents in many areas of Rockford responded that they feel safe walking. Respondents in the south and southwest portions of Rockford felt the least safe walking with only 44% feeling safe. Of School District 205 parents only 35% of respondents felt safe walking or have reported being a victim of a crime. Within the City of Rockford as a whole 15-20% of residents reported as being crime victims.

The Vision

Reduce property and personal crime throughout the region.

There appears to be a striking relationship between older housing and the higher propensity for property crime. This substantiates the effect of sprawl and the flight of high income families from the older sections of the region. Neighborhoods of concentrated poverty, largely located in older sections of the region, have experienced the personal and property crime the most. Some neighborhoods are nearly 4x more likely to have murder than the rest of the nation. Vital Signs will continue to track the indicators related to crime, housing age and condition, and household income.

The highest rates of robbery are found in the neighborhoods on the east side of Rockford. These areas are nearly 5x as likely to have robbery occur as the nation as a whole. Robberies are when someone takes something of value by force from the owner.

The highest concentration of burglaries, however, is found in the neighborhoods closest to the core of Rockford. These neighborhoods are anywhere from 2.5x to 4.5x as likely to be experience

burglary as the nation. Burglaries occur when someone trespasses and commits harm to property or the intent to commit harm (such as vandalism).

Larceny has a higher propensity to occur in the neighborhoods within and just outside of those in concentrated poverty. In these neighborhoods the larceny rate is anywhere from 2.5x to 10x more likely than the nation. Larceny is the wrongful acquisition of personal property of another person.

Finally, motor vehicle theft is occurring more often in the core of the region. Rates in these neighborhoods are 1.5x to 2.5x more likely to have theft than the nation.

Improve the collaboration between public safety agencies, members of the judicial system, and other safety organizations.

Increasing coordination, collaboration, and cooperation among local partners is an opportunity to improve the region's ability to fight crime and promote safety more effectively and efficiently. Significant reduction in crime levels require that everyone from the neighborhoods, local businesses, the judicial system and law enforcement strive to work together in an increased capacity. And, working to identify areas for synergies and efficiencies requires a regional assessment of strengths and opportunities for alignment of work to be completed.

Prioritize community policing strategies and participation to include neighborhood organizations throughout the region.

Neighborhood organizations are organized groups that have the potential to help assist with community policing strategies. Effective localized support can supplement the work of law enforcement by providing extra eyes on the street. Collaborations between agencies and neighborhoods will require financial support as well as the commitment of resources and time

to train neighborhood organizations to be increasingly effective partners for regional safety.

Develop and implement strategies focusing on crime prevention.

It is estimated 50-60% of parolees re-offend within three years without proper support. More than 40% of probationers and more than half of parolees do not complete their supervision terms successfully. Locally, in Boone and Winnebago Counties the jail booking rate has increased from 5,000 (for every 100,000 people) to 6,000 between 1990 and 2009. For Winnebago County the arrest rate has decreased from nearly 1,700 arrests (per 100,000 people) to 1,500, but for Boone County it has increased from 900 to 1,200 during this same period. Grams of drugs seized in Winnebago County has increased from 3,500 grams (per 100,000 people) in 1989 to 26,200 grams in 2012. Boone County seizures have doubled in the same time frame.

The three most pressing challenges to post-incarceration success are housing, drug treatment/medical care, and employment. Deficiencies in any one of these areas makes for a serious risk for relapse. And, it is often more affordable to give aid to avoid recidivism than to incarcerate re-offenders. The idea of "collaborative case management" can have positive benefits to post-incarceration success and should be a priority safety program. Within the Rockford Region, several strategies have been successful such as the Weed and Seed program. However, expansion of existing programs and establishment of new programs is critical.

Introduce technology solutions to aid crime reporting by residents and business owners.

Technology is being increasingly relied upon to empower safety and neighborhood well-being. Several neighborhoods within the region are already relying on technology solutions to aid crime reporting. An investigating of the potential for region-wide technology solutions is a Vital Signs priority. Currently, the average amount spent on home security systems services ranges from nearly $100 for more affluent neighborhoods to around $8 for neighborhoods in low-income areas, most like a direct correlation to owner occupancy.

REGIONAL SAFETY GOALS

- Reduce property and personal crime throughout the region.
- Improve the collaboration between public safety agencies, members of the judicial system, and other safety organizations.
- Prioritize community policing strategies and participation to include neighborhood organizations throughout the region.
- Develop and implement strategies focusing on crime prevention.
- Introduce technology solutions to aid crime reporting by residents and business owners.

Goals	Safety Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Introduce technology solutions to aid crime reporting by residents and business owners.	Develop programming between local police forces and residents and business owners to identify and implement best practices when using technology solutions to report crimes.	👍	# Dollars spent	→	X	X	X	X	X
	Research technology solutions available to aid in crime reporting by residents and business owners.	👎	# Solutions identified	→	X	X	X	X	X
	Work to raise the level of comfort for citizens wishing to report crimes using technology through education programs via neighborhood associations and groups.	👎	# Users	→	X		X	X	X
	Establish regional neighborhood watch programs through the wide-spread adoption of neighborhood watch tech services (utilizing email, calls, and texts).	👎	# Programs	→	X	X	X	X	X
	Identify public and private funding sources to subsidize implementation of crime-reporting technology solutions, especially in impacted areas.	👎	# Dollars spent	→		X		X	X
Improve the collaboration between public safety agencies, members of the judicial system, and other safety organizations.	Improve the coordination of public safety efforts for natural disasters and hazards.	👍	# Programs coordinated	↑			X	X	X
	Merge public safety and fire districts.	→	# Merged	→					X
	Institute region-wide bi-annual summits to discuss regional safety concerns and potential for increased alignment among public safety agencies, members of the judicial system, and other safety organizations.	👎	# Summits	→			X		X
	Continue to refine community metrics and dashboards for neighborhood based crime (crime mapping).	👍	# Users	→			X		X
	Implement inter-agency purchasing programs to share cost of goods.	→	# Dollars saved	→			X		X
Reduce property and personal crime throughout the region.	Implement programs that improve safety and decrease perceptions of crime in concentrated areas.	👎	Crime rate	↑	X	X	X	X	X
	Reduce the culture of gang influence within region.	👎	# Gang members	↑	X	X	X	X	X
	Improve lighting in high-crime areas by increasing the amount of energy-efficient fixtures that target walkways, etc.	👎	# Lights upgraded	↑					X
	Institute additional safe-routes-to-school paths.	👍	# Routes	↑		X	X		X
	Increase counseling and education for youth in supporting the reduction of crime occurrence.	👍	# Educated	↑	X		X		
	Increase awareness of crime-reporting methods available in alerting local police forces to criminal activity occurring.	👍	# Reported crimes	↑			X		X
	Increase amount of crime-watch cameras in high-crime areas.	👍	# Cameras	↑					X

Goals	Safety Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Develop and implement strategies focusing on crime prevention.	Establish leadership and workforce skills training programs for formerly incarcerated.	👎	# Educated	→	X		X	X	X
	Work with local businesses to employ formerly incarcerated.	👎	# Employed	↑	X		X	X	
	Increase counseling and transitional programming for incarcerated.	👎	# Participants	→			X		X
	Introduce a halfway house program for parolees.	👎	# Residents	↑			X		X
	Educate business and property owners on crime-preventative measures.	→	# Educated	→	X	X	X	X	X
	Increase the amount of citizen volunteers engaged in neighborhood safety.	→	# Volunteers	↑	X		X	X	X
	Increase amount of community events to create more "eyes on the street".	→	# Events	↑			X	X	X
	Increase awareness and availability of victim assistance programs to reduce vulnerability of repeated victimization.	👎	# Participants	↑	X		X		
	Establish and grow programming for youth-led community service projects.	👍	# Participants	→	X		X		
	Increase safety through the design of public areas.	👍	# Dollars invested	→		X	X		X
Prioritize community policing strategies and participation to include neighborhood organizations throughout the region.	Engage senior citizens through local senior citizen organizations and groups in serving as neighborhood policing activists.	👎	# Engaged	↑			X		
	Establish regular safety summits for neighborhood organizations.	→	# Summits	→	X	X	X	X	X
	Coordinate and collaborate with business districts to establish neighborhood watch programs.	👍	# Programs	→	X	X		X	X
	Develop curriculum and awareness of community policing strategies for youth.	→	# Educated	→	X	X	X		X
	Develop educational programming for residents on innovative and best-practice community policing strategies.	→	# Educated	→	X	X	X		

Technology

Introduction

Technology impacts every aspect of life. From the shifts in workplace paradigm that the desktop computer brought about to the simplification of paying bills through debit cards and automatic online payments, it influences every decision. Mobile phones, particularly smartphones, have capabilities once the stuff of science-fiction, and they have changed the way many things work, from education to business to leisure time activities. The backbone of these developments is the industry behind them, the businesses and workers that produce or work closely with hi-tech materials and practices. Technology, like most of the indicators, has close implications and connections to several of the other indicators within the Vital Signs project. Technology and Economic Development are closely linked, as much work in the Technology arena is driven in one way or another by financial concerns. The Economic Development section of the RPSD details the important linkage between technology and creative class jobs, and the Education section details the need to provide education and training necessary to attract and retain creative class jobs. Most high-tech industries require workers with advanced degrees and certifications. Technology also links heavily to the Environment, as new methods of creating and storing energy, particularly in the arena of automobile power (thus also relating Technology to Transportation), can have a drastic impact on air quality and other environmental issues.

The current conditions of the region regarding technology are slightly more difficult to assess than some of the other indicators. While there are clear metrics and constantly-gathered data available for many of the indicators, Technology is a bit more abstract. The climate of the general business culture in the region is competitive, but the both the region and the State of Illinois need to make changes that will attract technology companies.

Technology

Overview

Trade organizations, tech programs, tech education and technology partners give the region the tools to pursue technological advances, not only for the region, but for the nation as well. Identifying entrepreneurs and helping them succeed will grow jobs faster. Technology accessibility and innovation levels affect the ability of the region to attract and retain talent. Technology helps community members connect and is a vital component of community health.

Technology as a Portion of Household Expenditures

As the role of information technology increases, there is an expectation that expenditures on technology would increase. For the region as a whole, the average expenditures on technology range from a low of $106.00 per month to a high of $662.00 per month. Of these expenses telephone services account for about half of the expenditures on technology. The 50% figure holds for districts that are on the low end of the technology expenditures as well as on the high end. The total expenditures on technology track with household income.

Wifi Access

Wireless Internet access being provided to the public free of charge is a valuable consumer marketing and productivity tool. With the proliferation of smartphones, tablet computers, laptop computers and other mobile devices, many people prefer to never be away from their digital devices and information.

There are 120 wireless access hotspots spread across the region. A large quantity of these are contained within the State Street/Business 20 corridor. Other high density locations of wireless hotspots include areas of retail sales and restaurants. The region could benefit from not only the addition of more, but the diversification of location of those access points. There are many districts with no free wireless access throughout them. Expanding wifi access free of charge to these areas could be an important economic development tool and could help eliminate technology deserts. Other locations that could benefit from wireless internet include the area near

Figure 54. Wifi Locations per District
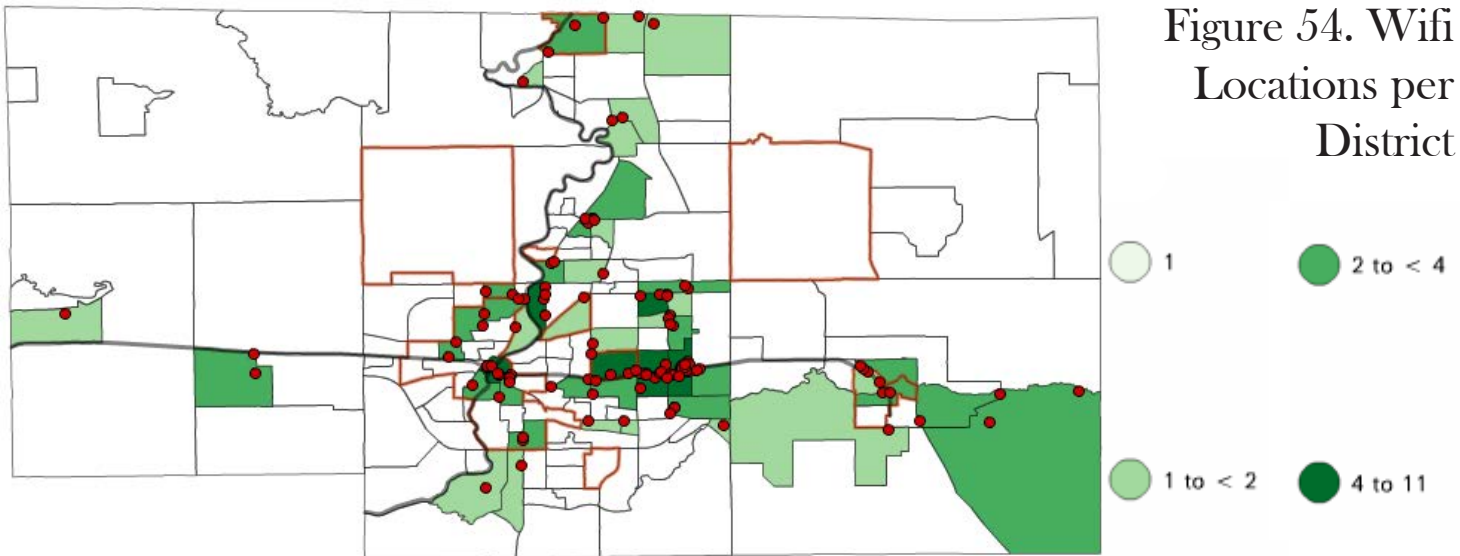
the Chicago-Rockford International Airport and the shopping corridors in Machesney Park and Loves Park, as well as CherryVale Mall.

Technology Partnerships

The region has benefitted from partnerships such as the Illinois Science and Technology Coalition and the Smart Chicago Collaborative that have promoted the Illinois Open Technology Challenge that is working to grow local technology clusters. Additional they have promoted the il.data.gov website as a resource for showcasing local "open data" from the public sector, and this led to the creation of a microsite at data.il.gov/Rockford, and included a technology contest to award a $15,000 prize to the best open technology application.

The region was also a foundational partner for the iFiber project. iFiber is part of the national broadband technology opportunities program (BTOP). The grant portion of the iFiber project was completed Dec. 31, 2013. iFiber was developed to address the issue of limited broadband capacity, speed,

and service in nine counties of northwest Illinois, including Boone and Winnebago County. Partner organizations are Blackhawk Hills Regional Council, The City of Rockford, Boone County, North Central Illinois Council of Governments, LaSalle County and Northern Illinois University. iFiber is a provider of extremely high speed (up to 1Gb) network transport services to both the public and private sector. It provides subsidized access directly to eligible public sector organizations such as schools, community colleges, libraries, healthcare facilities, municipalities, county and public safety facilities. Bringing together the resources of iFiber and the TriRivers Health Partners, and

---

The Rockford Region has 120 wireless access hotspots spread across the Region.

---

their TriLightNET Fiber Connectivity Project, a transformational effort is underway to create a Regional Health Information Organization that can benefit health outcomes for citizens of the region.

Vision

Increase the technology skill set of the regional workforce.

Instrumental to the long-term health and economic viability of the region is the workforce within it. The skills gap is widening in the modern American economy. In years past, the crux of this problem was the lack of available jobs, but today, the issue has become an issue of finding skilled and knowledgeable workers to fill positions that require such specialized training and expertise. While just under a third of the existing jobs in the nation's 100 largest metropolitan areas require a bachelor's degree or more, about 43 percent of newly available jobs demand this degree.

According to a report by the

Organization for Economic Cooperation and Development, the skill level of the American labor force has fallen dangerously behind that of other developed nations. The report is based on assessments of literacy, math skills and problem-solving using information technology that were performed on people age 16 to 65 in 22 advanced nations. This problem is encapsulated in the Vital Signs region, with local residents' skill sets rating even worse than that of the United States. In Boone and Winnebago counties, fewer than 11% of women and fewer than 22% of men have baccalaureate degrees or higher, according to the US Census, compared to 14% for women and 28% for men nationally. At a fundamental level, this restricts the region's workforce from taking advantage of many opportunities. Whether on an individual basis, preventing persons from finding a position to pay them a living wage, or on a regional scale, dissuading highly technical or progressive companies from locating in the region, this education and skills gap is a problem that needs to be addressed.

The skills gap is quite acute with underprivileged citizens of the region. With limited financial resources simple subsistence and survival must preempt advanced degrees, certifications, or training. This quality of life tradeoff needs to be made a regional priority. Finding ways and places to provide the ability to interact with computers free of charge is an important step in that process to access the wealth of information and communication available through the internet.

In general, the region must look for partners to assist with offering technical training to the general public, particularly through the existing educational framework within the region, including institutions and public libraries. Increased education and training opportunities for technologically advanced business startups and occupations should be a high priority for such training, preparing residents with not just the tools to survive, but the tools to thrive and prosper in the future.

Increase use and access to affordable and modern broadband technology.

With the advent of affordable broadband technology, the vast benefits that are now possible are staggering. The ability to communicate cheaply and efficiently via webcam, instant messaging, email and other services allows people to connect over vast distances. Digital webinars have become massively popular, allowing important information and dialogue to be shared at small fractions of the cost of travel, hotel and other fees. Broadband decreases download times, improves the speed at which websites load, effectively eliminates buffering times on videos, and makes many things possible that

---

Telephone services account for about half of average household expenditures on technology.

---

are inconvenient or simply not an option using older technology. In addition, broadband connections are "always on", thus avoiding the need to connect and disconnect at the start and end of each session;

and unlike dial-up, broadband does not require exclusive use of a phone line so one can access the Internet and at the same time make and receive phone calls without having to pay for a second phone line.

These services only benefit the region if the citizens and businesses owned by those citizens have access to and awareness of the possibilities of modern broadband technology. A primary focus for the region is to connect public infrastructure to the ever-expanding network of fiber-optic cable in northern Illinois. The iFiber network should be showcased, promoting its benefits, and connecting as close to the entire public infrastructure in the region as possible. Capital planning of all the technology partners to include broadband components, including fiber optics, can help to finish the "last mile" components of the network. Ultimately this could lead to "fiber to the home" or high speed "broadband to the home". Another opportunity would be to develop a high speed wireless internet access system in key core districts within the region. To make the downtowns, the major retail corridors, and other areas of the region more attractive wireless internet access goes a long way to promoting continuing success.

Upgrade the quality of technology infrastructure available to households and businesses within the region.

The region should not simply rest on the hope of iFiber expanding, however. Working with other providers of broadband service, whether existing or new to the region, in order to lower prices and increase availability to more potential consumers should be a priority.

Businesses and public buildings can provide wireless internet access free of charge, increasing their own traffic, as well as offering availability to those who might otherwise be unable to connect.

Other technological infrastructure can be improved as well. Rather than discarding outdated technologies from public facilities such as schools and local governments (things such as computers, copiers, business hubs, cellular phones, and many other devices), they should be collected and provided to members of the public who could otherwise not afford them. Zoning codes, regulations, and ordinances should be reviewed and updated to ensure that they facilitate, rather than impede the development of and access to digital infrastructure. Many of these regulations were written prior to the advent of many of the current technologies, and as such the impacts on them were not taken into consideration. In some cases, these policies hinder useful innovation or access to digital and other technological infrastructure, and as such they should be reconsidered in the light of modern innovation and practice.

Target technology-driven companies to locate within the region.

Technology-driven businesses and organizations provide obvious benefit wherever they are located. Whether they are producers of new goods that make lives better, for companies in services and distribution, or applying technologies developed by others to create a competitive advantage in operations, they make some aspect of their headquartered location a better place. These advantages can be as huge as the innovation of new storage methodologies

for solar power, or as everyday as aggregators for restaurants to order takeout or delivery from. To use that last example as an indicator of the current status, of the four biggest and most highly used companies that perform this service, one restaurant can be ordered from in the Vital Signs region. In comparison, a single neighborhood of Chicago offers over 600. Small suburbs of Chicago offer dozens. For the Vital Signs region as a whole to be completely isolated from this area of enterprise shows the opportunity present in such technologically-driven companies.

Establish a reputation (brand) as a state-of-the-art technology region.

The region needs to create and maintain a business climate to attract companies of all sorts, especially technologically-driven ones. Cities like Detroit became synonymous with the automotive names that were huge innovators in the last century. Building a technology brand for the region could have similar effects in the years to come. Working with partners such as the Illinois Science & Technology Coalition can maximize the job creation potential of the brand.

When someone mentions a place, certain images and descriptors are always heavily connoted with it. Silicon Valley brings to mind the microchip and the innovators responsible for the advent of the digital age. Portland conjures images for many of social innovation and progressive culture. When people think of the Rockford Region now, what do they think of? Forbes magazine's third most miserable city, behind only Flint and Detroit? The Gallup poll's angriest city of 2012? The image of the region needs an

TECHNOLOGY BEST PRACTICES

Why Broadband for public agencies (con't.)

Healthcare

Connects doctors and healthcare specialists to any part of the world for collaboration, consultation, and the sharing of diagnostic results for faster and better results.

Allows doctors to send prescriptions directly to pharmacies, reducing errors and allowing for automatic checking for interactions between medications, saving money and lives.

Best Practice: Text-to-911

Text-to-911 is a development that allows citizens to send a text or SMS message to a 911 service provider. Texting during an emergency is valuable to deaf persons, those with hearing impairment, speech disabilities, or at times when a voice call to 911 might otherwise be dangerous or impossible. Though it is preferable when possible to make a voice call, in these and other scenarios, text-to-911 makes communication with emergency services providers possible to more people and in more situations. A large number of people have phones capable of and are already comfortable and familiar with sending and receiving these types of messages, making the user training for the general public incredibly simplistic. Text-to-911 is not yet available locally, owing to its relative infancy as a service and the upgrade cost and coordination that is often required amongst wireless phone companies, equipment vendors/manufacturers, and state/local public safety agencies. It is likely that in the near future text-to-911 will see a rise in prevalence, possibly even in the Vital Signs region.

update, and it should market itself as a technology-driven, state-of-the-art community. Helpful in recruiting new businesses, young professionals, and citizens in general, rebranding the region as well as living up to that branding are necessary steps to move out of the past and into prosperity. The first step is identifying the gap between the current state of affairs and a state-of-the-art technological climate and environment, and then finding ways to permanently fill that gap. Once that is accomplished, the region needs to improve and increase the digital presence of governments, businesses and community organizations. Increasing not only the amount but the quality of the content that each of these groups produces will allow for many benefits, including greater regional interconnectivity, reduced duplication of efforts, and more widely used services that previously went unknown or underutilized. The www.ourvitalsigns.com website that was produced as part of the Vital Signs project is a mature example of a "data commons" or data portal that can reduce duplication.

Aggressively marketing the region on highly-trafficked websites, including Twitter, Facebook, LinkedIn, Reddit and Tumblr, as well as other social media sites, can benefit the region's image in the young professional community, as well as help get the word out about career opportunities, the vast network of public amenities and benefits to living, working, shopping, or just visiting the Vital Signs region. Another way to increase visibility is through ease of access. Creating or publicizing an existing regional website that has links to community events, local business and government websites, as well as other items useful to the average visitor would go a long way toward promoting interconnectivity and showing off technical prowess.

While just under a third of the existing jobs in the nation's 100 largest metropolitan areas require a bachelor's degree or more, training the future workforce with techology and advanced skills is evermore important.

REGIONAL TECHNOLOGY GOALS

- Increase the technology skill set of the regional workforce.
- Increase use and access to affordable and modern broadband technology.
- Upgrade the quality of technology infrastructure available to households and businesses within the region.
- Target technology-driven companies to locate within the region.
- Establish a reputation (brand) as a state-of-the-art technology region.

Goals	Technology Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase the technology skill set of the regional workforce.	Develop a public/private partnership to work with businesses to identify technology skill sets that are in demand in business and implement a targeted program to fill the skill gap.	→	# Participants in program	→			X	X	
	Increase education and training opportunities for tech-related business startups and occupations.	👎	# Participant companies	↑			X	X	
	Encourage businesses to offer technical training courses to their employees. (ArcGIS, Google Earth, MS Office, HTML, programming languages, modeling, and many other areas could be covered).	→	# Participants	→			X	X	
	Provide more opportunities and locations for the underprivileged to interact with computers and partner with education institutions to grow programs available.	👎	# Users	↑	X	X	X		
Increase use and access to affordable & modern broadband technology for businesses, residents, and local governments. *There are 41 broadband providers (2009)*	Connect all public infrastructure to the iFiber network, promote the availability and benefits of the existing infrastructure, and provide a clear timeline of upgrades and improvements.	👍	# Connections achieved	↑			X		X
	Help business and government understand the "return on investment' for dollars invested in technology upgrades and employee training.	→	# Participant companies	↑			X	X	X
	Work with iFiber and other partners to deliver "fiber to the home" and "fiber to the business" with G-Bit speeds.	👍	# Homes and businesses connected	↑	X	X	X	X	X
	Develop a public/private to create a free public high speed wifi system in key core districts within the region.	→	# Users	→	X	X	X	X	X
	Provide a constantly updated and publicly accessible map of locations where broadband service is available and connected.	👍	Map established	↑			X		X
Target technology-driven companies to locate within the region.	Create and maintain a business climate to attract additional high-tech companies.	👎	# High-tech workers	↑			X	X	X
	Create and inventory and strategy to sell unused public lands (brownfields/greyfields) to high-tech companies with a strong value proposition.	👍	# Sites sold	→		X	X		X
	Develop a marketing and branding campaign to promote assets and cluster built in the tech arena.	→	# Dollars spent	→			X	X	X
	Give preference to local contractors and consultants when pursuing technologically-driven projects (public works, etc.).	→	# Local Contractors hired	↑				X	X

Goals	Technology Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Establish a reputation (brand) as a state-of-the-art technology region	Increase digital presence of local governments, businesses, and community organizations.	👍	# Represented organizations	↑			X	X	X
	Create a regional website that links to as many local websites as possible (local governments, businesses, park districts, social groups, neighborhood groups, workforce development agencies, etc.)	👎	# Links	→			X	X	X
	Work to identify and promote existing tech companies and capabilities.	👍	# Companies identified	→			X	X	X
	Identify gap to achieve a state of the art tech climate and environment.	→	Gap identified	→			X	X	X
	Aggressively market the Region via the internet on social media sites to encourage the region's image in the young professional community.	👍	# Dollars spent	↑			X		X
	Create a public information program to market the telecommunications potential of the community as part of an economic development strategy.	👍	# Dollars spent	→			X	X	X
	Create a standard of measurement for business to increase productivity by better use of current technology, such as "cloud" related services for certain target industries.	→	# Businesses reporting upgrades	→			X	X	
Upgrade the quality of technology infrastructure available to households and businesses within the region.	Maximize the value and use of iFiber to bring the private sector additional bandwidth capacity and eventually last mile opportunities for consumers.	👍	Bandwidth capacity	↑			X	X	X
	Attract, work with existing, and explore new providers of broadband service to the region to compete with existing providers.	👍	Average amount for service	↑			X	X	X
	Provide wireless internet access at local businesses and public buildings free of charge.	→	# Hotspots	↑			X	X	X
	Rather than discard outdated public technologies, collect them and provide them to members of the public who could otherwise not afford them.	→	# Units "recycled"	↑	X	X	X	X	X
	Review zoning codes and ordinances to ensure that they facilitate, rather than impede, the development of and access to digital infrastructure.	👍	# Codes reviewed	→					X

Transportation

Introduction

Planning for the transportation needs of the Rockford Region is an ongoing process that has been performed by the Rockford Metropolitan Agency for Planning (RMAP) for the past 50 years. RMAP is also known as an MPO, which is a federal designation used for government agencies responsible for transportation planning in urban areas. Local, state and federal governments have the responsibility of constructing, operating, and maintaining most of the transportation system.

The overall goal of the planning process is to promote a safe and efficient transportation system for the movement of people and goods. This goal is to be achieved through a balanced multi-modal system which takes into account bicycle & pedestrian, public transit and highway elements to promote various options for travel. Economic, Social and Environmental benefits can be derived from such a system as; people and goods are moved through the region more efficiently thus reducing traffic congestion; alternative non-motorized options promote active transportation and encourage healthy activities within the community; existing infrastructure is more effectively used so as to lessen the need for expansion of the existing system.

The Regional Plan for Sustainable Development has provided an opportunity for RMAP and a multitude of local agencies to further explore these relationships through the social, environmental and economic lenses and has set forth the precedence to move beyond traditional silos to advance the common goal of improving the region.

Transportation

Overview

Neighborhoods in poverty have by far the lowest average numbers of cars per household.

Multi-modal Transportation and Land Use

The coordination of transportation planning issues and land use decisions is commonly considered today as one of the facets of smart growth and sustainable development practices. Regional planning efforts require planning and transportation professionals to understand how transportation investments can be consistent with the principles and practices of land use planning and development. The coordination of land use and transportation initiatives requires that those concerned with the well-being of a community or region assess and evaluate how land use decisions effect the transportation system and can increase viable options for people to access opportunities, goods, services and other resources to improve the quality of their lives. This multifaceted approach to planning tends to foster a balance of mixed uses (including housing, education, employment, recreational and retail) which recognize the importance of spatial or geographic proximity and the interdependence on an efficient transportation network for all users of the system. In addition to new approaches to maintain and enhance livability elements of communities the most recent Federal Transportation Bill, Moving Ahead for Progress in the 21st Century (MAP-21), reconfirms the need to proactively coordinate with land use planning through the federally-supported transportation planning program.

The Rockford Mass Transit District fixed transit route system provides access from places of residence to employment within the Cities of Belvidere, Loves Park and Rockford as well as the Villages of Machesney Park and Cherry Valley. This system is vital in that it provides an alternative to single-occupancy vehicle usage as well as provides a means of transportation for individuals who may not own a personal vehicle. From an environmental perspective, increased ridership on the fixed route system reduces the number of vehicles on the road and by doing so, benefits the environment through decreased vehicle emissions.

RMTD monitors the development of major employment centers and coordinates with various entities responsible for the recruitment and retention of area-wide employers. The siting of future employment centers must take advantage of the fixed route system. By placing future employment

Figure 55.
Average Number
of Cars Per
Household

○	0.797 to < 1.36
○	1.36 to < 1.559
○	1.559 to < 1.689
○	1.689 to < 1.781
○	1.781 to < 1.933
○	1.933 to < 2.048
○	2.048 to < 2.165
○	2.165 to < 2.271
○	2.271 to < 2.518
●	2.518 to 2.764
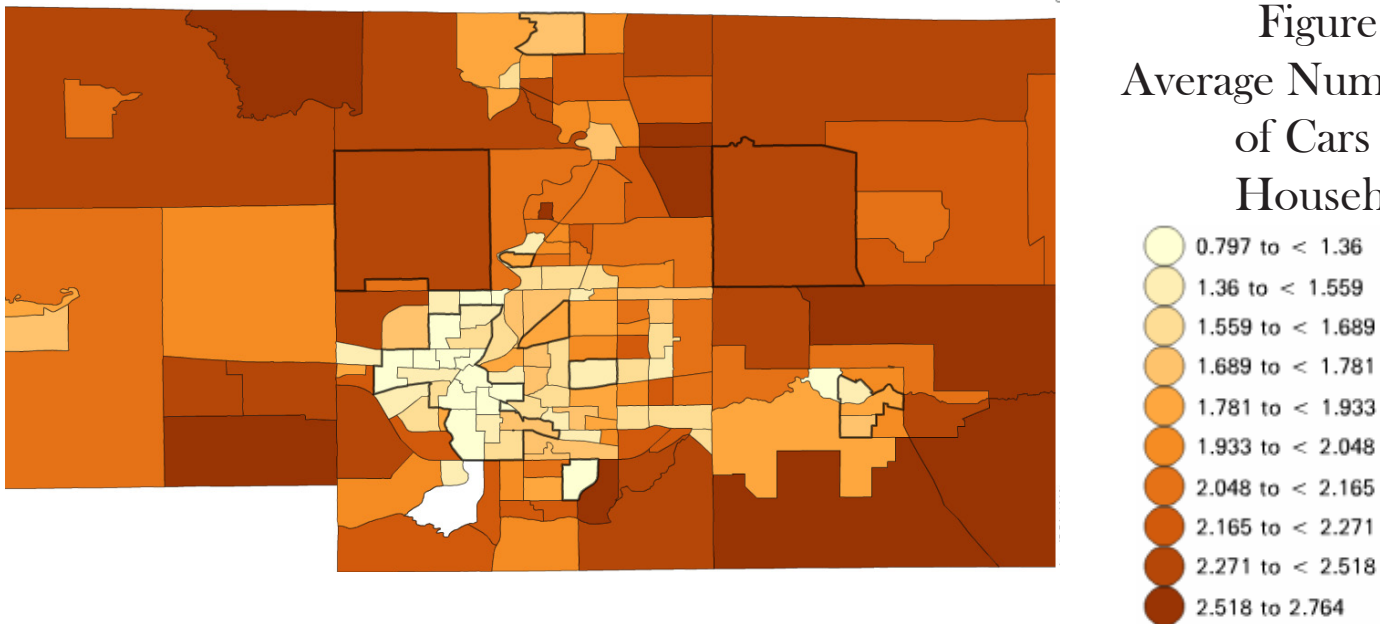
centers near the existing route structure, the current infrastructure is utilized more efficiently (i.e. built environment) and the propensity to site employment centers in outlying Greenfield areas (i.e. natural environment) is reduced. This coordination also places fewer burdens on limited public transit resources. Additionally, future commuter/passenger rail service would significantly impact transportation related infrastructure quality, safety, congestion, access, affordability, greenhouse gas emissions reduction and air quality. Regional planning for passenger rail includes inter-city passenger rail, commuter rail, high speed rail and urban circulators.

A growing body of evidence indicates a direct correlation between access to safe, convenient trails, walkways, parks, and natural areas and the overall health and vitality of citizens. There is a potential for the RMAP Greenways Plan and on-going sustainability initiatives to be more successful by engaging healthcare and educational institutions to help implement the plan and raise awareness about the resulting benefits to health, learning, local economy, and overall quality of life.

The most recent 2011 Greenways Plan for Boone and Winnebago Counties outlines an exceptional regional-scale greenway network that includes both current and future greenways and trails, increasing accessibly between homes, business, schools, and parks, open space, and natural areas. In order to capitalize on the benefits offered by this expanding system, citizens, educators, healthcare providers, and others need to be aware of the greenway system and the potential to enhance their efforts to improve health and community wellness.

When housing and transportation costs are combined much of the region greatly exceeds the recommended 45% threshold, with a number of districts with households spending as much as 70-75% of their budgets on these costs.

Housing and Transportation

Housing affordability has traditionally been defined as a measure of annual household income spent on housing rents or mortgages (utilities included). Housing is often termed affordable if expenditures constitute no greater than 30% of household income. A family spending greater than 30% of income on housing is considered cost burdened, leading to possible hardships for affording other necessities such as food, clothing and medical care. Given that transportation costs typically represent the second highest household expenditure, the combined costs of housing and transportation are increasingly becoming an important measure of affordability. According to a report by the Center for Neighborhood Technology (CNT), transportation costs can range from 10% of household income in cities served by efficient transit networks to costs exceeding 25% in exurban and rural areas. While housing may be more economical to construct in greenfields distant from the city center, these cost savings are quickly negated by the increased costs of having to travel greater

distances to reach school, work, shopping and entertainment. Given that transportation costs may become increasingly burdensome, the CNT recommends that for household finances to remain at a sustainable level, the combined costs of housing and transportation should not exceed 45% of the household income.

Much of the region is at or below the 30% threshold, however the exurban portions show many districts spending as much as 44% of their household budgets on housing expenses. As expected, the further one lives away from employment the greater the transportation expenses; transportation costs range from 22-28% in the urbanized portions of the region and rises to 33-36% in the rural portions. When these costs are combined much of the region greatly exceeds the 45% threshold, with a number of districts with households spending as much as 70-75% of their budgets on housing and transportation alone. As many of these household that spend in excess of 65% of their budgets tend to be in the higher earning income brackets their high housing burden may not interfere with their other bills and living expenses, however these households may be particularly vulnerable to the effects of a change in circumstance such as a lost job or sudden illness.

Mobility

In looking at mobility in a national context, HUD developed a Job Accessibility Index to determine how well local communities perform against others in the nation. Currently, the Rockford Region scores in the 50th percentile nationally for all of its neighborhoods. Neighborhoods of poverty score in the 58th percentile, and residents in public housing score in the 79th percentile.

Additionally, HUD also developed an Opportunity Index to determine how well local residents have opportunity to find employment compared to others in the nation. Currently, the Rockford Region scores in the 48th percentile nationally for all of its neighborhoods. Residents in poverty score only in the 28th percentile, and residents in public housing score only in the 18th percentile. Not surprisingly the average number of cars per household is lowest in neighborhoods of poverty. While this is eco-friendly, it limits residents' ability to get to work and other resources. The vast majority of residents outside of the neighborhoods in poverty drive alone to work. While the neighborhoods in poverty have much greater rates of carpooling to work (anywhere from 15% to 31%), they are currently challenged by work place accessibility.

Residents of walkable communities are more likely to be more active, socially engaged and reported being in better health.

Walkability

Studies have shown more walkable neighborhoods are traditionally better-off economically, have lower crime rates, and have lower transit costs. Yet they also traditionally have higher housing costs indicating demand. The higher quality of life afforded within a functioning walkable neighborhood means non-drivers (seniors, youth, and those without a car) can get around and be more socially active. Children can walk to the library or pool, the elderly can visit neighbors more easily, and

those who cannot afford a car can get to education and employment. These places, referred to as "third places", often serve as hotspots for connecting with folks who can share news of job openings, reliable child care, and community updates.

However, the most walkable neighborhoods in the community, those that make commercial and residential easily accessible to one another, are those experiencing decline. Many of these neighborhoods have the highest levels of poverty. These neighborhoods have historical infrastructure amenable to walking and have high concentrations of people most needing community resources.

Walk Score is a national index that was developed to help assess how walkable a place is to live or work in. Measuring walkability for a region has become increasingly important as not everyone has access or desires to have a car. Many prefer a quality of life without one. In addition, walking is a critical component of health. The national Walk Score is a number between 0 and 100 and measures the walkability of any address. However, because very few communities have a digital map of sidewalks or parcels, this national index can be flawed at times.

As a result, the RMAP partnered with WinGIS to develop a more accurate Walk Score for the region. The goal of this walkability analysis was to come up with a way to score the Vital Signs "Districts" within Winnebago and Boone counties on how easy or difficult it is to walk to destinations. There were nine destinations taken into consideration: grocery stores, restaurants, general retail, coffee shops, banks, parks, schools, book stores, and entertainment.

Step 1 was to calculate the distance between each parcel and each of these destinations. Steps 2 through

Figure 56. RMAP WalkScore for Rockford Area
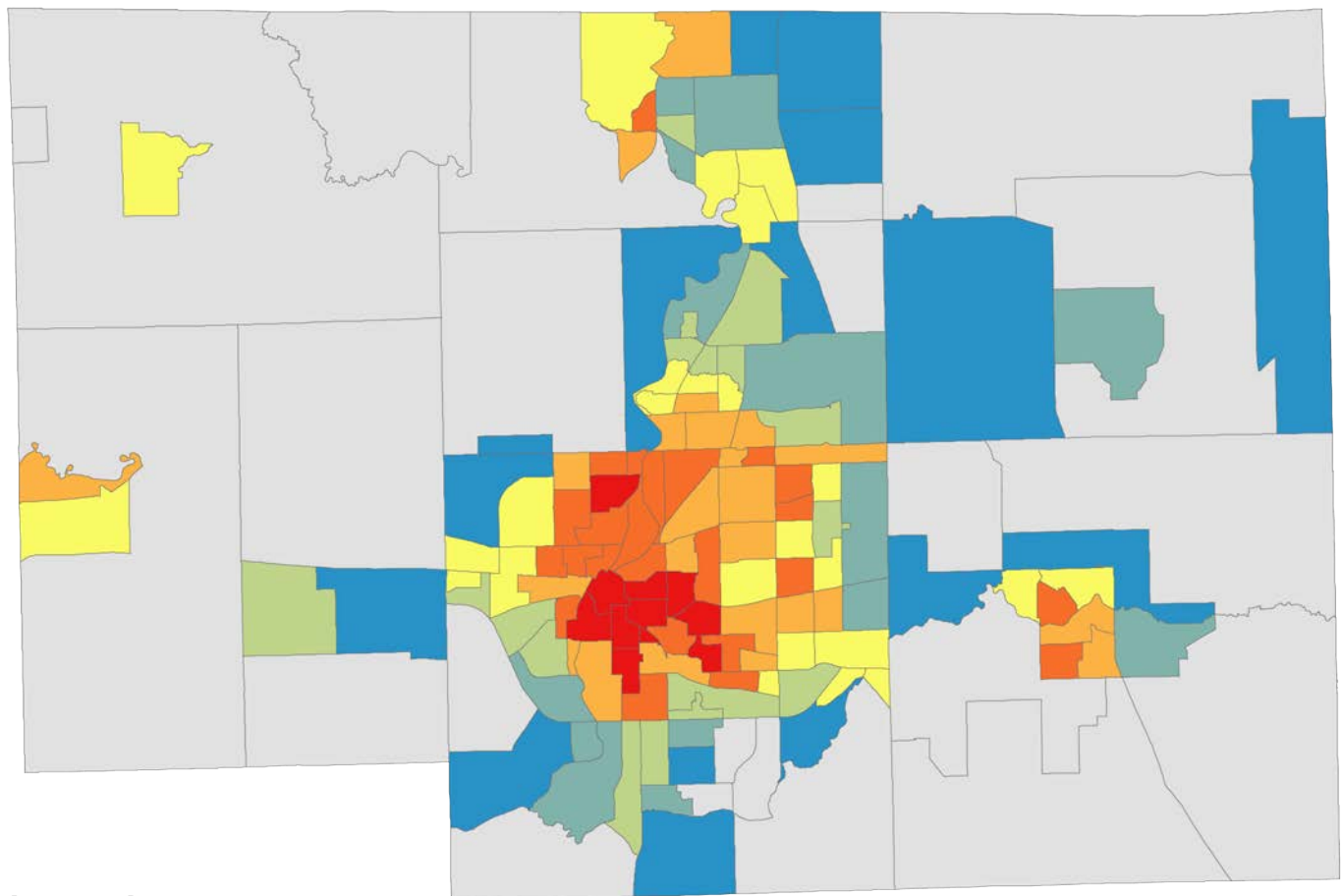
Legend

Final Score (Out of 100)
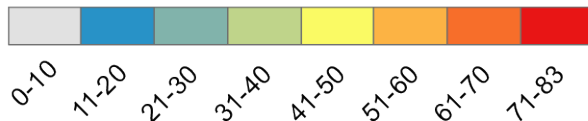
0-10 11-20 21-30 31-40 41-50 51-60 61-70 71-83

4 included an analysis of the amount of sidewalk within each district, number of major road intersections per district, and finally average size of the commercials parcels within a district. Sidewalks affected the final score more than any other because for walking purposes it is the most critical. Districts were given a penalty depending on the number of pedestrian non-friendly intersections. The last factor was the size of the commercial parcels within the district. The size of the parcel could discourage walking if the parcel is requires long walks to traverse its boundaries. As seen in Figure 56 there is a high concentration of walkable neighborhoods in south central and north central Rockford. Several other districts in Belvidere, Loves Park and eastern Rockford also scored fairly high.

State of Infrastructure

Deterioration of the Regions Bridges

The FHWA Annually updates the National Bridge Inventory (NBI) database of the bridges longer than 20ft on public roads based on mandatory biennial inspection reports submitted by all state departments of transportation and federal agencies. The FHWA uses

TRANSPORTATION BEST PRACTICES

P3 Partnerships

Public-private partnerships (P3s) are contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects. Risks, rewards and resources are shared between government and private sector stakeholders engaged in this cooperative endeavor.

In order to assist with the development and implementation of P3 for transportation projects, the FHWA's Office of Innovative Program Delivery is producing a P3 toolkit comprised of tools and guidance documents to assist in educating public sector policy-makers, legislative and executive staff, and transportation professionals. The P3 Toolkit addresses four key phases in P3 implementation:

- Legislation and policy;
- Planning and Evaluation;
- Procurement; and
- Monitoring and Oversight.

Expanding the private sector role allows public agencies to tap private sector technical, management and financial resources in new ways to achieve public agency objectives. These objectives include greater cost and schedule certainty, supplementing in-house staff, innovative technology applications, access to specialized expertise, or access to private capital. The private partner can expand its business opportunities in return for assuming the new or expanded responsibilities and risks. Some of the primary reasons for public agencies to enter into public-private partnerships include:

- Accelerating the implementation of high priority projects by packaging and procuring services in new ways
- Turning to the private sector to provide specialized management capacity for large and complex projects
- Transferring risk to the private sector in exchange for a return on investment
- Encouraging the use of new technologies and innovations developed by private entities
- Drawing on private sector expertise in accessing and organizing the widest range of private sector financial resources
- Providing access to private equity and commercial financing that would not otherwise be available to public sector project sponsors
- Encouraging private entrepreneurial development, and operation of highways and/or related assets

the NBI data to report on the condition of the nation's bridges to Congress and identify bridges to rehabilitate or replace with federal aid. While the NBI database contains individual bridge condition data for more than 30 years, it is not designed to assess bridge performance over time nor does it contain specific bridge deterioration information. The program resulting from the NBI is intended to detect structural and functional deficiencies to minimize the probability of structural failure and to improve bridge traffic safety.

The deterioration of bridges and other vital infrastructure necessary for travel within the region is a pressing issue. It is one that is currently being felt around the nation and is not a unique local occurrence. While this issue affects everyone it is felt the hardest by the nation's trucking companies, emergency vehicles, industrial plants, shipping and receiving hubs and the nation's dependence on just-in-time transportation systems. When a bridge has deteriorated past a certain point and it is deemed unsafe for fire trucks, tow trucks and other large emergency response vehicles it may remain open for normal traffic operations.

Maintenance of the Existing Roadway System

It is the consensus of the planners, engineers and administrators involved in the development of this plan, that the existing transportation system be adequately maintained and operated and that roadway infrastructure maintenance is not being deferred in favor of new construction, equipment or activity. Expenditures for the operation and maintenance of public transit facilities and equipment, and for surface roadway system repairs such as city-wide resurfacing, striping, sealing, sidewalk and alley repairs and similar activities are essential to the

preservation of the existing system. The majority of projects listed in the region's capital programs represent projects considered "State of Good Repair" which are directed at maintaining and repairing the current transportation system.

Vision

Allow an uninhibited interchange of highways, rail, bicycle/pedestrian, transit, air, freight, and other transportation assets.

The intent of this goal is to further enhance the existing transportation system by providing linkages between the various modes of transportation resulting in increased mobility options for citizens. Currently, the transportation system consists of a network of roadways, greenways, trails, shared-use paths and public transit routes. While the existing infrastructure serves its function well in moving goods and people throughout the region, measures can be taken to strengthen the system.

Passenger rail provides tremendous opportunity to have a significant impact on transportation-related infrastructure quality, safety, congestion, access, affordability, greenhouse gas emissions reduction and air quality. Successful integration of passenger rail transportation with land use and housing can:

- Reduce congestion, improve mobility and increase access to transportation choices and important destinations
- Reduce household spending on transportation, which now consumes roughly 20% of a household budget (as much as 40% for low income residents)
- Significantly assist in the

revitalizing and character of town centers or urban cores by promoting mixed use, mixed income development

- Strategically prioritize improvements that respond to the growing demand for public transportation
- Have a profound impact on development patterns which can and should lead to more sustainable communities
- Promote transit-oriented development and location-efficient development near job centers and public transportation centers

Additionally, urban circulators (which include streetcars and trolleys both in fixed guideway and rubber tired implementations) provide a convenient and popular transit option that can link intercity and commuter transit stops with travel destinations that are not within walking distance. They also provide an excellent opportunity to adaptively reuse freight rail corridors that are made available as a result of rail asset consolidation and also provide another form of public transportation that can be used to access employment centers and services.

From a highway perspective, many arterial corridors have a functional classification and design level-of-service that is difficult to achieve because of access considerations of the adjacent parcels. As a result of numerous access points along high traffic arterial corridors, reoccurring congestion results. Access consolidation, or even access restriction, can lead to improved traffic operations and economic benefit. Opportunities should be explored in the context of a strategic regional arterial system. Additionally, land use decisions must consider potential impacts on the nearby transportation network so as to insure that development/redevelopment efforts do not impact

the transportation system in such a way that impedes the flow of people and goods throughout the roadway network. Through better integration of land-use and transportation planning decisions, persons and goods can move about the region more quickly thus providing benefits through time, money and fuel saved. This coordination also provides additional support for transportation options such as rail, bicycle paths and public transit.

Broaden the regional scope of transportation partnerships to include opportunities outside of the MSA.

Working partnerships are an essential component to planning and implementation of transportation projects. RMAP has strong standing relationships with the Illinois Department of Transportation, Federal Highway Administration, Federal Transit Administration and the Illinois Tollway Authority. The Rockford Region has also been actively involved with the Tri-State Alliance; a partnership organization that spans Northern Illinois, Northeastern Iowa and Southwestern Wisconsin. The mission of the Tri-State Alliance is to gather regional leaders to explore and address issues that affect commerce so that the quality of life is improved and that economic development is advanced in the Tri-State region with anchor cities being Rockford, IL; Janesville, WI; and Dubuque, IA. It is the goal of the Tri-State Alliance to work together to build a unified plan for:

- A 4-lane divided US 20
- Passenger and commuter rail
- Broadband infrastructure
- Rivers

The Illinois Tollway Authority has made significant investment in the Rockford Region through its

TRANSPORTATION BEST PRACTICES

Complete Streets

Complete Streets policies direct transportation planners and engineers to consistently design with all users in mind. This include drivers, public transportation vehicles and riders, pedestrians, and bicyclists as well as older people, children, and people with disabilities. Complete streets are designed and operated to enable safe access for all users. Through providing the opportunity to easily access and utilize various modes of transportation along a roadway, complete streets encourage walking and bicycling. This promotes active transportation, assists in preventing obesity and encourages use by all. There is no singular design prescription for Complete Streets; each one is unique and responds to its community context.

An ideal complete streets policy:

- Includes a vision for how and why the community wants to complete its streets
- Specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses and automobiles.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is adoptable by all agencies to cover all roads.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Directs the use of the latest and best design standards while recognizing the need for flexibility in balancing user needs.
- Directs that complete streets solutions will complement the context of the community.
- Establishes performance standards with measurable outcomes.
- Includes specific next steps for implementation of the policy

Figure 58. Average Household Expenditures on Transportation

Legend:
- 0 to 15.6%
- 15.6% to 15.9%
- 15.9% to 16%
- 16% to 16.3%
- 16.3%
- 16.4% to 16.5%
- 16.5% to 16.7%
- 16.7%
- 16.7% to 17.1%
- 17.1% to 18.4%
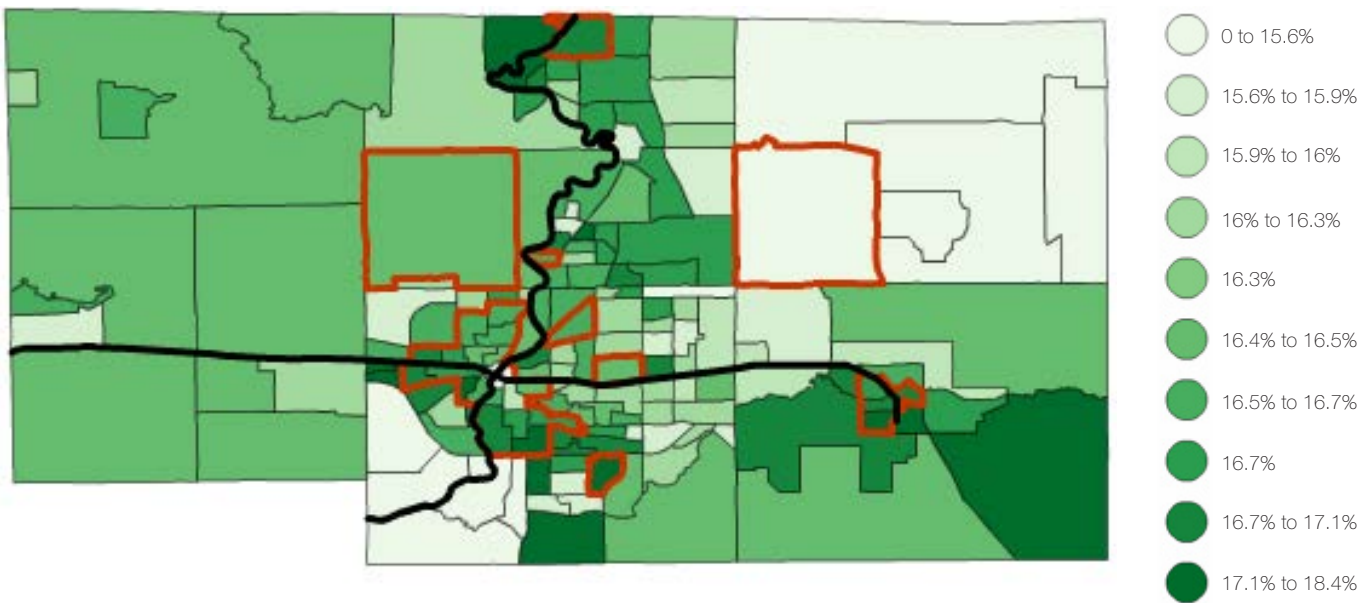
various capital programs, including the massive rebuilding of the Jane Addams Memorial Tollway between I-39 in Rockford and O'Hare Airport. Within the Rockford Region, this improvement will provide three lanes in each direction and the eastern segment of the project (Randall Road to the Kennedy Expressway) will widen to four lanes in each direction. Coinciding with the rebuilding/widening project is the reconstruction of numerous mainline and local bridges to accommodate the new and widened tollway and the rebuilding of the Business U.S. Route 20 / State Street Interchange.

Increase the amount of Regional Transit and Active Transportation options.

The RPSD is designed to increase the quality of life for all of our region's citizens by examining areas with a high potential for change of a transformational nature. One step to achieving a greater level of active transportation within the region is to institute a complete streets policy which ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind-including bicyclists, public transportation, and pedestrians of all ages and abilities. Elements that may be found on a complete street include sidewalks, bicycle lanes(or wide paved shoulders), special bus lanes, comfortable and accessible transit stops, frequent crossing opportunities, median islands, accessible pedestrian signals, curb extensions and more. A regional complete street methodology and policy will promote alternative forms of transportation and afford health benefits as individuals will be encouraged to walk or bicycle for daily activities such as work, shopping, services, etc.

Perceptions of public transit must be changed from that of a service that is primarily used by transit-dependent populations to a viewpoint of public transit being an asset which is a viable form of transportation for all citizens (regardless of economic status); to use for both work and non-work related trips. The current RMTD fixed route system provides a reliable system for individuals to access employment opportunities and services throughout the region. Utilizing mass transit promotes healthy activities such as walking to and from bus stops to points of interest. Connections already exist between bicycling and public mass transit as all of the RMTD fixed route buses are equipped with bicycle racks. Bicyclists in the region are able to ride to a bus stop location, mount their bicycles on the bike rack

and continue to their destination on the bus. Bicycle rack equipment will continue to be placed on all fixed route buses that RMTD operates. Moving forward, local units of government should continue to support public transit initiatives through coordination of land use and transportation planning as well as through providing additional funding to assist increasing the areas serviced by the RMTD.

Structure a mix of funding streams that maximizes federal and state investment to leverage public/private partnerships.

Private sector partnerships are a new concept in transportation, and legislative changes are necessary to modify the culture of infrastructure development. Traditionally, transportation projects have only engaged the private sector in the construction aspects of projects, and to some extent the design and maintenance of projects. The RPSD supports the idea of engaging the private sector in the areas of operation, maintenance and finance. Through the creation of these partnerships within the region, transportation investments will be prioritized that promote financial and environmental sustainability. This process will also foster a healthy business climate that encourages private sector partnerships with

local governments, spurs economic competitiveness and job creation and will utilize the strengths of the local labor pool. It is also crucial that state and federal governmental agencies restructure programs to move away from rigid, silo-based formula programs in favor of regional block grant style flexible programs. This restructuring will allow regions to use allocated funding to address needs that have been prioritized by a transparent local process that can demonstrate a significant return on investment.

> Investments to achieve a state-of-good-repair of existing assets can extend the useful life of infrastructure and reduce lifecycle costs.

Work to achieve a State-of-Good-Repair for existing transportation assets.

The region has a wealth of physical infrastructure, and maintaining it can be costly. Investments to achieve a state-of-good-repair of existing assets can extend the useful life of infrastructure and reduce lifecycle

costs. Just as businesses invest in their physical assets, governments must invest in transportation infrastructure strategically and willfully. The region must recognize that one of the most negative effects of sprawl is that it necessitates an ongoing need for new roads and other infrastructure to serve fewer residents in a given geographic space. Utilizing strategies such as infill development on underused or vacant parcels within the urban areas will decrease the need to build outside of the existing urban footprint and as a result, lessen the strain existing limited funding sources for maintenance.

Resources:

- Illinois Tollway Authority: http://www.illinoistollway.com/construction-and-planning/capital-programs
- Federal Highway Administration: (Office of Planning, Environment and Realty) Livability Initiative http://www.fhwa.dot.gov/livability/fact_sheets/
- Smart Growth Online: http://www.smartgrowth.org/principles/walkable.php
- Smart Growth America: http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/complete-streets-faq
- Tri-State Alliance: http://www.tristatealliance.com/

REGIONAL TRANSPORTATION GOALS

- Allow an uninhibited interchange of highways, rail, bicycle/pedestrian, transit, air, freight, and other transportation assets.
- Broaden the regional scope of transportation partnerships to include opportunities outside of the MSA.
- Increase the amount of Regional Transit and Active Transportation options.
- Structure a mix of funding streams that maximizes federal and state investment to leverage public/private partnerships.
- Work to achieve a State-of-Good-Repair for existing transportation assets.

Goals	Transportation Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛️
Allow an uninhibited interchange of highways, rail, bicycle/pedestrian, transit, air, freight, and other transportation assets.	Build a prescribed set of highways that can support heavier loads (i.e. 120,000 lbs.) to reduce transportation costs and energy usage linking to intermodal hubs and/or other transportation systems.	→	# MIles highway	↑			X		X
	Improve east/west and north/south access across the Rockford Region.	👍	Traffic counts	↑					X
	Develop a long-range strategic plan for Chicago-Rockford International Airport that focuses primarily on leveraging RFD's potential for further development as a major goods movement hub.	👍	Plan established	→			X	X	X
	Improve the walkability of the region by increasing connectivity of sidewalks, walkways, and bikeways.	👍	**Average neighborhood walk score 40.3 (2013)**	↑		X	X		X
	Require building designs that make commercial areas more pedestrian-friendly.	→	# Buildings retrofitted	→		X	X		X
	Designate protected bike lanes along non-arterial streets to core business districts.	👍	# Miles lanes	→					X
	Develop a web-based, interactive ridesharing database developed for commuters.	→	#Database users	→			X		
Broaden the regional scope of transportation partnerships to include opportunities outside of the MSA.	Continue to build broad-based regional support for passenger rail connections between Chicago and the Rockford region.	👍	# Riders	↑	X		X	X	X
	Align long-range transportation plans to include the transportation authorities of the Chicago, Madison, and Milwaukee regions and their service boards.	→	# Plans aligned	↑			X	X	X
	Leverage and strengthen the platform afforded by the Tri-State Alliance and its member organizations.	👍	# Dollars invested in infrastructure	↑			X	X	X
	Collaborate with Rochelle area to foster the movement of freight through their intermodal freight facilities to a greater degree.	👍	# Freight transported	↑			X	X	X
	Initiate coordination of inland ports on the Great Lakes waterway system with local intermodal activity.	→	Partnership established	→			X	X	X
Work to achieve a state-of-good-repair for existing transportation assets.	Develop a database of deficient infrastructure and target transportation corridors with quality design improvements where high return on investment can be demonstrated.	👍	# Sites included	→			X		X
	Ensure that zoning and land use plans along major transportation corridors slated for expansion or re-construction allow and encourage uses that enhance the economic viability of these corridors.	👍	# Dollars Invested	↑			X		X
	Implement regional complete streets policy.	👍	Program implemented	→			X		X
	Publicize the economic and community development benefits of infrastructure investments, promoting the high-quality design elements of these projects to raise the bar for future investments.	👎	# Dollars spent	↑			X	X	X

Goals	Transportation Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase amount of regional transit and local active transportation options.	Improve and expand bus service throughout the city, especially for the efficiency of East to West express service.	👍	**20 bus routes w/ avg travel time of 52 minutes (Current)**	⬆	X	X	X		X
	Support the development of high speed or commuter rail through the Northern Illinois Commuter Transportation Initiative (NICTI).	👍	*# Riders*	⬆	X		X	X	X
	Take actions to increase walkability by enhancing the safety and aesthetics of the walking experience.	👍	*# Private dollars invested*	➡	X	X	X	X	
	Improve transit signage on arrival times, stops, etc with innovation and technological practices for all residents.	👎	*# Dollars invested*	⬆			X		X
	Continue to develop alternative modes of transit and intercommunity transit options, including instituting car and bike share programs.	👍	*# Dollars invested*	⬆	X	X	X		X
	Create a culture of public transportation.	👎	*# Riders*	➡	X		X	X	X
	Encourage intra-regional use of mass transit.	👎	*# Riders*	⬆	X		X		X
	Create visible bike routes and increase a culture of bike riding within the region.	👍	*# Miles Upgraded*	➡	X		X		X
	Increase programming, awareness, and participation in car-sharing and ridesharing.	👎	*# Users*	⬆	X		X	X	X
Structure a mix of funding streams maximizing federal and state investment to leverage public/private partnerships.	Capitalize on the economic development potential of current and planned roadway improvement projects from IDOT and the Illinois Tollway.	👍	*# Private dollars invested*	⬆			X	X	X
	Leverage new loan and bonding programs from the federal government for transportation infrastructure improvements (called the infrastructure bank).	➡	*# Dollars*	⬆			X	X	X
	Incentivize public-private partnerships by establishing a tax-credit program for infrastructure improvements.	➡	*Program established*	➡			X	X	X
	Leverage public-private and local-state-federal partnerships for infrastructure improvements through innovative methods such as crowdfunding.	👎	*# Dollars raised*	⬆			X	X	X
	Diversify the mix of funding sources to become less reliant on motor fuel taxes.	👎	*# Dollars diversified*	⬆			X		X
	Explore the privatization of select transportation infrastructure to improve and maintain a good state of repair.	➡	*Amount infrastructure privatized*	⬆			X	X	X

Waste

Introduction

Recycling and how the Rockford Region plans for waste management is an integral part of sustainable development. Understanding the interrelated nature of this area helps residents, businesses, and governments plan for the region's future and reduce the area's dependence on non-renewable resources. From a macro level, exploring alternative means for handling waste produced by the region can span from economic generation from diverting waste into reuse to producing energy from by-products. From a micro level numerous opportunities exist for households, neighborhoods, and businesses to improve waste management practices both on-site and collectively.

Monitoring waste production and recycling practices in the region's well-being identifies recycling opportunities and the available avenues behind reuse. Indicators for waste and recycling are largely raw data still needing to be collected. This in part is due to a lack of precedence by local agencies and businesses collecting the data to track waste collection, recycling, and waste diversion practices. Look to see them released in the future.

Waste

Winnebago Landfill in the City of Rockford ranked first in the state by accepting almost 5.7 million gate cubic yards.

Overview

Landfills

All seven landfills in the Region One remained open throughout 2011. The Illinois Environmental Protection Agency places the Illinois counties of Bureau, Carroll, DeKalb, JoDaviess, LaSalle, Lee, Ogle, Putnam, Stephenson, Whiteside and Winnebago in Region One: Northwestern Illinois. Four landfills in Region One were in the top ten rankings of all the state's landfills in terms of waste receipts in 2011. Winnebago Landfill ranked first in the state by accepting almost 5.7 million gate cubic yards. Veolia ES Orchard Hills Landfill in Davis Junction was second, accepting almost 5.1 million gate cubic yards; Prairie Hill RDF, Morrison was seventh, receiving more than 2.1 million gate cubic yards; and Lee County Landfill in Dixon was tenth with more than 1.5 million gate cubic yards of municipal solid waste accepted for disposal.

Region One's seven active facilities received more than 15 million gate cubic yards of municipal waste in 2011, down 1.2 million gate cubic yards from the year before. Overall waste receipts declined year to year by 7.3 percent. Even so, these Region One landfill operations managed 33.3 percent of the waste accepted for disposal in the State of Illinois, more than any other region.

Out-of-State Waste Accepted from Iowa and Wisconsin

Prairie Hill RDF reported accepting waste from the State of Iowa. Veolia ES Orchard Hills Landfill accepted waste from Iowa and Wisconsin. All together a total of 265,805 gate cubic yards was accepted from out-of-state, about 1.7 percent of the total waste accepted in the Region's landfills.

Capacity available for waste disposal in the region increased by 6.6 percent from 2011 to 2012, by a total of more than 15.0 million gate cubic yards. The reported remaining available capacity in the region was almost 244 million gate cubic yards. This region was one of three in the state reporting increasing capacity. This region is second in the state in remaining capacity, with a 23.3 percent capacity share. Veolia ES Orchard Hills Landfill reported almost 91.2 million gate cubic yards of space available as of Jan. 1, 2012, making it third in the state in capacity rankings on that date. Lee County Landfill reported the fifth largest capacity, at more than 58.2 million gate cubic yards. Prairie Hill RDF reported more than 42.1 million gate cubic yards of capacity available and ranks eighth.

The Region's seven active landfills may provide 16 more years of waste disposal capacity for the region, compared to 23 years of landfill life for the entire state. A permit application (Log No. 2009-445) that was submitted by the owners and

Figure 59. Non-Hazardous Solid Waste

	1995 Amount Deposited (cubic yards)	1995 Available Capacity (cubic yards)	2000 Amount Deposited (cubic yards)	2000 Available Capacity (cubic yards)	2005 Amount Deposited (cubic yards)	2005 Available Capacity (cubic yards)	2010 Amount Deposited (cubic yards)	2010 Available Capacity (cubic yards)
Winnebago County	375,524	10,326,918	1,098,657	7,641,000	1,358,524	6,912,000	5,173,144	51,073,000
Ogle County	224,741	3,554,400	2,888,000	48,990,000	5,421,255	101,513,000	6,796,963	111,598,000
DeKalb	288,143	4,477,735	245,694	5,041,000	320,943	3,067,000	321,515	2,472,000
Region 1-NW Illinois	1,894,308	71,727,406	8,550,620	159,606,000	12,960,037	186,215,000	16,500,000	228,600,000

Source: IL-EPA
Date: 2011

Figure 60. Recycling

	1995 Amount Recycled (tons)	1995 Percent Recycled of Waste Stream	2000 Amount Recycled (tons)	2000 Percent Recycled of Waste Stream	2005 Amount Recycled (tons)	2005 Percent Recycled of Waste Stream	2010 Amount Recycled (tons)	2010 Percent Recycled of Waste Stream
Winnebago County	62,586	20%	67,100	21%	63,600	19%	70,518	21%
Boone County	5,207	22%	8,802	28%	8,946	24%	8,946	24%
Ogle County	5,857	15%	8,297	21%	14,162	34%	13,948	33%
DeKalb	35,591	38%	101,825	68%	69,599	55%	41,857	44%
Stephenson	4,888	16%	1,244	3%	2,190	5%	2,190	8%
Region 1-NW Illinois	170,228	21%	245,786	30%	224,315	25%	189,075	22%

Source: IL-EPA
Date: 2011

operators of Rochelle Municipal Landfill for horizontal expansion was approved on July 17, 2011. The design airspace is 9.2 million cubic yards.

The Winnebago Landfill has submitted a permit application (Log No. 2010-133) for a lateral expansion consisting of 8.0 million cubic yards. On March 7, 2013 the Illinois Pollution Control Board upheld Winnebago County's approval of the Winnebago Landfill expansion plan. The IEPA permits needed before expansion can begin are anticipated to be filed by late summer of 2013, but may take 3-4 years for final approval. This expansion will provide for local solid waste needs for the next 25-35 years according to testimony by the landfill owners, extending the useful life until 2045.

Solid Waste Disposal

Figures 59 and 60 show the historical solid waste disposal data for Winnebago, Ogle, and DeKalb counties as documented by the IEPA in 2011. In Winnebago County the amount deposited in landfills has increased 13x since 1995, and the available capacity increased 5x.

In Winnebago County the amount deposited in landfills has increased 13x since 1995, and the available capacity increased 5x.

The Vision

Increase recycling awareness and participation among households, businesses, and local governments.

The immediate region of Winnebago, Boone, Stephenson, Ogle and DeKalb counties has historical recycling data found in Figure 60. For Winnebago County, the amount recycled of the waste stream has maintained fairly constant since 1995 at around 20%. Boone County has maintained a level slightly higher at around 23%.

Figure 61. Average Household Amount Spent on Waste Services

Legend:
- $49.03 to $98.65
- $98.65 to $115.49
- $115.49 to $124.10
- $124.10 to $134.61
- $134.61 to $144.23
- $144.23 to $161.15
- $161.15 to $171.31
- $171.31 to $189.19
- $189.19 to $231.36
- $231.36 to $430.84

WASTE REDUCTION BEST PRACTICES

<<As Recommended by the US EPA>>
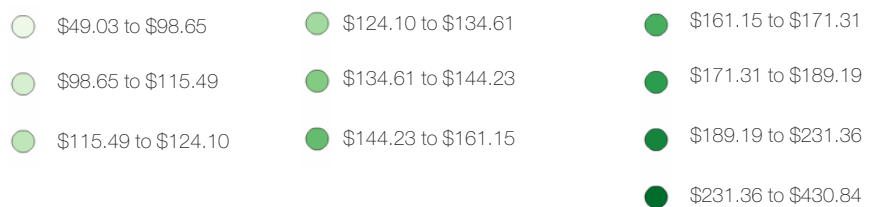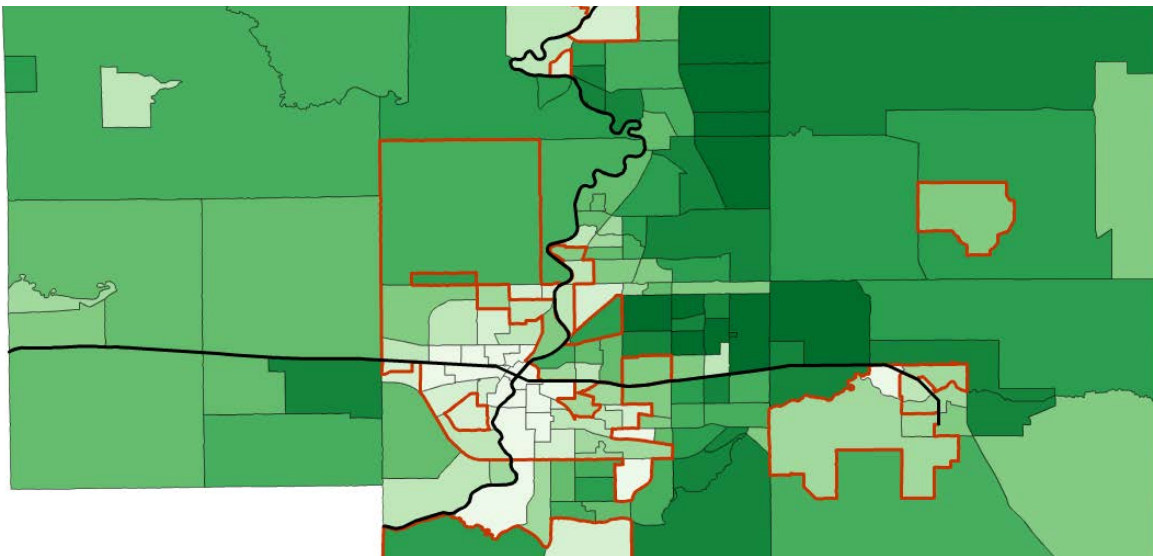
Using "Pay-as-you-Throw" Trash Fees

Under pay-as-you-throw (PAYT) systems, residents pay by volume or weight for trash they set out at the curb. Such fees are a direct economic incentive to reduce trash and recover as much as possible. Eleven of the record-setters use PAYT fees.

Requiring Resident Participation

Local requirements and mandates encourage program participation. Eleven of the record-setters have some type of local ordinance requring residents to source-separate or banning set-out of designated materials with their trash.

Develop a trash-collection fee structure to maximize diversion of recyclables from the waste stream.

One method of encouraging the minimization of waste stream volume is to divert waste into recyclable processes. If there is a monetary value placed on waste collection, residents and businesses become incentivized to reassess their practices of throwing out materials. Instead of charging for an additional service to recycle, a fee-structure based on the volume of waste produced could be developed.

Increase the collaboration between contracting agencies and collection/disposal companies to foster recycling.

Currently little collaboration exists between trash contracting agencies, and collection and disposal companies. Since local companies are not required to share the volume of trash collected there is little capacity for residents or businesses to measure the amount of diversion of waste occurring to recycling practices. If recycling and reuse are to increase incentives and best practices must be developed based on the types

of materials available to divert.

Create local businesses around the by-product reuse of materials that are traditionally landfilled.

Once the waste stream is "mapped", an economic opportunity exists to build industry that diverts materials from the waste stream. Products that can be re-made into materials needed for local supply chains. By-product reuse facilities must be able to create a product that has value and a market. Water-to-energy conversion, especially via methane gas extraction, should continue to be explored.

The Region's seven active landfills may provide 16 more years of waste disposal capacity for the region, compared to 23 years of landfill life for the entire state.

Best Practices for Recycling

The support of on-site management plays an important role in the recycling program's success. There are several things that can be done to help make recycling in multifamily complexes convenient and understandable. Setting up convenient carts or bins and educating tenants are essential to the program's success. We recommend the following:

Convenience

Recycling should be just as convenient as taking out the garbage. Keep the recycling carts in a location that is convenient to tenants and protected from theft. Recycling containers should be located in the same area as the garbage containers so it is easy for tenants to recycle when they take out their trash. Place recycling containers in common areas such as the mail area and laundry room.

Capacity

Recycling and garbage containers must have enough capacity to hold the materials that accumulate between collections.mlf your garbage bin is consistently partially empty, contact your service provider or city recycling program to find out about getting a smaller bin. It is often more cost effective to call the garbage hauler for occasional special pick-ups, than to maintain peak capacity year round. Cardboard: If your complex generates a lot of cardboard, consult with your service provider or city recycling program to find out about getting a bin for cardboard collection. See the Recycling Wizard's Cardboard section for other resources.

Labels & Signage

Make sure that your garbage and recycling bins are clearly labeled. Place posters and signage near the recycling bins and in common areas. Your service provider or city recycling program may be able to help provide signage.

Education

Provide recycling information to your tenants at least once per year and to all new residents when they move in. Find your city recycling and garbage contact information.

REGIONAL WASTE GOALS

- Increase recycling awareness and participation among households, businesses, and local governments.

- Develop a trash-collection fee structure to maximize diversion of recyclables from the waste stream.

- Increase the collaboration between contracting agencies and collection/disposal companies to foster recycling.

- Create local businesses around the by-product reuse of materials that are traditionally landfilled.

WASTE REDUCTION BEST PRACTICES

"The Waste Reduction Record-Setters Project fosters development of exceptional waste reduction programs by documenting successful ones. These programs can be used as models for others implementing their own programs to reduce waste. This fact sheet packet highlights record-setting waste reduction programs in 18 communities and summarizes information presented in the EPA report EPA-530-R-99-013,Cutting the Waste Stream in Half: Community Record-Setters Show How."

Targeting a Wide Range of Materials

Accepting a wide range of materials increases the proportion of recoverable waste. These record-setting communities recover 17 to 31 different types of materials. Paper and yard trimmings are especially important. Paper recovery contributes 12 to 45% of residential materials diverted. Composting of yard debris diverts 17 to 43% of total residential waste in these communities.

Composting

For ten of the 18 record-setters, composting accounts for more than half of all residential waste reduction. Fall leaf collection may be the single largest contributor to waste reduction in communities with fall seasons.

Designing for Convenience

Residents are more likely to participate if set-out requirements are uncomplicated and recyclables collection is frequent. Providing adequate containers for material storage and set-out also improves convenience. Providing both curbside collection and drop-off sites for materials gives residents more recycling options. On-site recycling at multi-family buildings makes recycling convenient to more residents.

Goals	Waste Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Increase recycling awareness and participation among households, businesses, and local governments.	Identify and improve the ease and convenience of recycling within businesses, households, and local governments and increase recycling amounts by 50% - especially in unincorporated areas.	👎	# Recycled	↑	X		X	X	X
	Develop additional curriculum for K-12 students and programming for residents to understand benefits and best practices of recycling.	👍	# Educated	↑	X		X		
	Create a culture of recycling regionally and develop a set of household, business, and local government incentive programs to increase recycling.	👎	# Recycled	→	X		X	X	X
	Promote waste prevention opportunities to residents, businesses, and local governments.	→	# Recycled	↑	X		X	X	X
	Revise local government procurement practices.	→	Revisions made	→			X	X	X
Develop a trash-collection fee structure to maximize diversion of recyclables from the waste stream.	Identify best practices, including incentives, in setting fee rates for trash collection to divert recyclables.	→	# Best practices	→	X		X	X	X
	Develop and implement fee rates in conjunction with waste management companies.	→	Fees established	→				X	X
	Promote new program and benefits to region in diversion of waste towards recycling practices.	→	# Recycled	→	X		X	X	X
Increase the collaboration between contracting agencies and collection/disposal companies to foster recycling.	Develop a public-private partnership to remove toxic materials from the general waste stream.	→	# Diverted	→			X	X	X
	Work with waste haulers to ensure that entities can document waste stream.	👎	% Documented	↑				X	X
	Establish region-wide residential and business composting program.	→	# Composted	→	X		X	X	X
	Develop a regional waste management and recycling committee to help coordinate and oversee increased recycling.	→	Committee established	→			X	X	X

Goals	Waste Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👪	🛒	🏛
Create local businesses around the by-product reuse of materials that are traditionally landfilled.	Reduce landfill waste by 90% by diverting household and business waste into new economic development uses.	👎	*# Dollars raised from diversion*	⬇	X		X	X	X
	Develop a waste profile and identify additional markets for recycled and reusable materials.	➡	*Waste profile established*	➡			X	X	X
	Develop pilot waste-conversion technologies.	➡	*# Piloted*	➡			X	X	X
	Develop biomass co-generation facility.	➡	*Program established*	➡			X	X	X
	Establish incentive programs to start new waste-diversion businesses.	➡	*# Businesses*	➡			X	X	X

Water

Introduction

From drinking, cooking, and washing, to using the restroom we rely on water for our essential daily needs. Water is used to grow our food, generate power and is a key input in most manufacturing and industrial processes. Despite this great importance many people still take water resources for granted. Water is a limited resource; though much of the planet is covered by it, only 1 % of Earth's total water is available for human use. This 1% is strained by increasing demands from a growing population as well as threats from contamination.

Planning for water will be one of the most important tasks in the coming decades. Water related challenges do not recognize political boundaries; a regional effort is critical to the success of the water planning process. The region has a collective responsibility to maintain its water quality and quantity. It will strive to develop and maintain a regional consensus on water resource and stormwater management issues. It is critical to ensure high quality water access for residents and businesses, without threatening the availability and affordability of this resource for future generations. By protecting and promoting the area's abundant water resources and natural amenities the region can become a more attractive place for people to live, play and work.

The region has experienced its fair share of storm water challenges in the past and future occurances may be curbed through the innovative use of green infrastructure solutions. The flooding and stormwater concerns that have plagued the region may be curbed through the innovative use of green infrastructure solutions. Advances in best management practices over the years has greatly improved water quality. The region has devised many goals and strategies to address groundwater, surface water, and wastewater related concerns. Given the interrelated nature of the water cycle, if these strategies are to be successful the region must develop an integrated approach to systemically manage water resources.

Water

Overview

Rivers and Streams

The Rockford Region is home to the Rock, Kishwaukee, Pecatonica and Sugar Rivers. These four rivers provide scenic enjoyment, plentiful outdoor recreation opportunities, including boating and fishing, and rich plant and animal habitat. The Rock River borders Loves Park, Machesney Park, Roscoe, Rockton, and South Beloit and bisects Rockford. Its riverbanks offer a largely untapped economic development asset. Beaver Creek, a tributary of the Kishwaukee River, is prized as a Biologically Significant Class "A" Stream, meaning it has the highest order of biodiversity. Unfortunately these rivers were not always treated as the treasures that they are. Decades of pollution from industrial, agricultural and even residential uses threaten these water resources.

Section 303(d) of the Federal Clean Water Act requires states to submit a list of all waterways that are threatened or impaired, meaning existing regulations and pollution controls are not stringent enough to meet established water quality standards. The two county region has 178 miles of impaired waterways, in addition to 162 acres of Pierce Lake. All four major rivers, plus Mill Creek and Coolidge Creek have at least one impairment (pollutant), while sections of these waterways have as many as six different impairments. The most common impairment is PCBs, which were used as coolants and lubricants. PCBs have been banned since the 1970s due to their carcinogenic nature; however the toxins still linger in river sediment and fish tissue. Mercury is found in the Rock River, which can make consumption of fish from these waters a health hazard, particularly for children and pregnant women. Pathogens caused by fecal coliform are the second leading cause of impairment. Fish contaminated by pathogens, as well as swimming in contaminated waters, can lead to illness. Other pollutants found in these waters include nitrogen, dissolved oxygen and sedimentation. These impairments can cause fish kills and threaten the overall biodiversity of the system.

Stormwater

Any water accumulated during precipitation is considered stormwater. Stormwater either soaks directly into the ground or becomes runoff. Runoff can flow directly into surface water, such as lakes and rivers, or become channelized into storm sewers. The amount of stormwater runoff increases as impervious surface increases. Impervious surface is any type of impenetrable material such as asphalt, concrete and rooftops which do not allow water to soak into the ground.

Runoff creates two problems: flooding and water pollution. Stormwater that is not immediately soaked up by the ground or conveyed away by storm sewers can

Figure 62. Regional Watersheds

- Sugar
- Pecatonica
- Middle Rock
- Lower Rock
- Kishwaukee
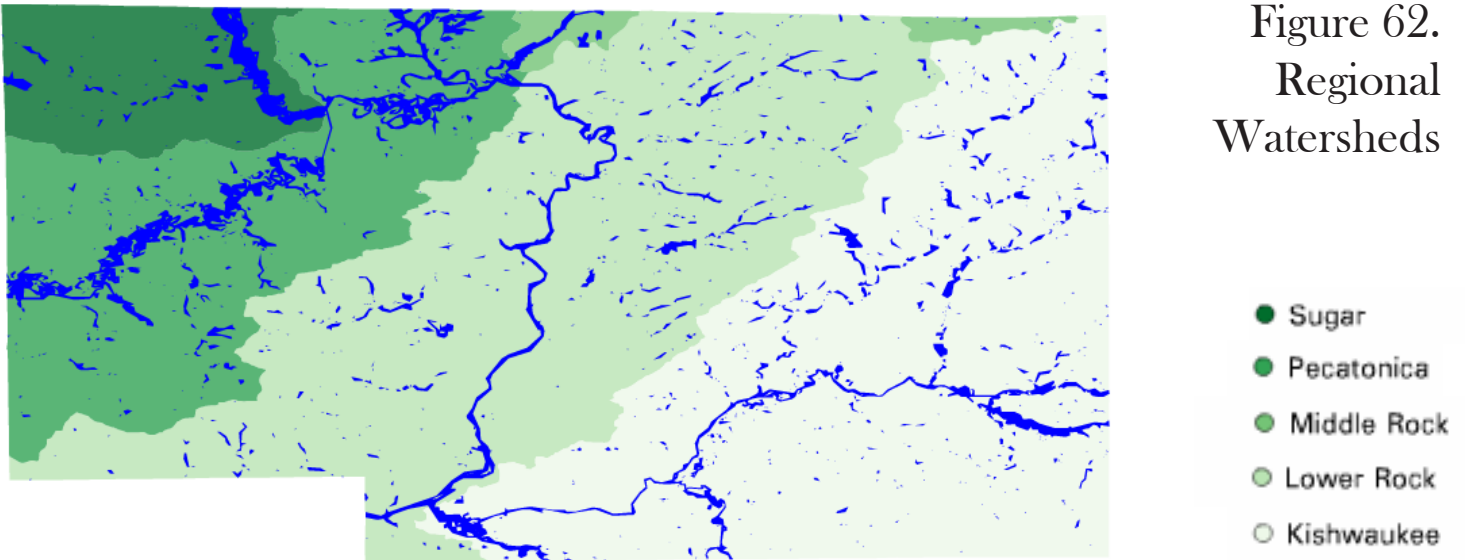
cause localized flooding. This flooding is typically not long lasting, but can still cause severe property damage. Second, as stormwater flows across the ground surface it picks up pollutants and deposits them in the surface water, often times resulting in water quality degradation. In rural areas runoff can carry agricultural pollutants and contaminants such as pesticides, fertilizers, and animal waste into lakes and streams. In more urban areas it can carry contaminants such as road salts, gasoline, motor oil and lawn fertilizers into the surface waters.

The abundant streams and rivers that flow through the Vital Signs Region offers residents many recreational and aesthetic benefits, however they also bring the risk of flooding. The Federal Emergency Management Agency (FEMA) maps floodplains to identify areas at risk of flooding. These areas may experience anywhere from occasional to frequent flooding. If structures such as houses are built within these floodplains landowners may experience costly damage to their property. FEMA estimates that for a typical 1,000 sqft home one inch of floodwater within the home averages around $10,600 in damages. FEMA updates these maps on a regular basis to account for changes in natural conditions such as new development including buildings and parking lots which can alter the natural drainage

patterns and exacerbate local flood risks. Mortgaged properties at high-risk of flooding are federally required to carry flood insurance; flood insurance is not mandated for moderate-to-low risk areas, however it is greatly encouraged.

Protection of the region's water resources is essential to ensure the region's environmental health, economic prosperity, and desirable natural amenities.

Groundwater

Groundwater is perhaps one of the most vital natural resources. It is the source of close to 50% of the Nation's drinking water, and supplies the entirety of the Region's domestic water supply. Groundwater is drawn from underground water-bearing rock formations called aquifers. Water from the Earth's surface moves downward to the aquifer through a process called aquifer recharge. If water is pumped out of an aquifer at a faster rate than the aquifer can recharge the aquifer runs the

risk of being depleted. For a sustainable water system it is crucial that the region does not withdraw water at a rate faster than it can be replenished.

The State of Illinois requires that all public water supply systems which pump their water from wells must annually report the amount of groundwater withdrawn. When looking at the Region as a whole there appears to be a consistent downward trend of water usage between 1980 and 2011. The region is consuming nearly three billion gallons of groundwater on an annual basis less than it was thirty years ago. The City of Rockford is by a wide margin the leading water consumer in the Region, however its demand has steadily decreased over time, nearly 35% less in 2011 than it was in 1980. Rockford experienced peak water demand in the mid 1970's; as manufacturing and industry have declined across the city, so has the demand for water. During this same time water-saving efficiencies such as enhanced leakage detection, low flow toilets and high efficiency washing machines have also helped to reduce water consumption. It is important to note that when excluding Rockford from the data water consumption across the region is actually increasing over time. It will be important to continue monitoring the water consumption trends for communities as they continue to develop and expand.

Figure 63.
Flood Plain
Coverage
by District

.2% to 1.2%

1.2% to 2.9%

2.9% to 4.8%

4.8% to 6.7%

6.7% to 9.1%

9.1% to 11.8%

11.8% to 15.5%

15.5% to 20.2%

20.2% to 34%

34% to 60%
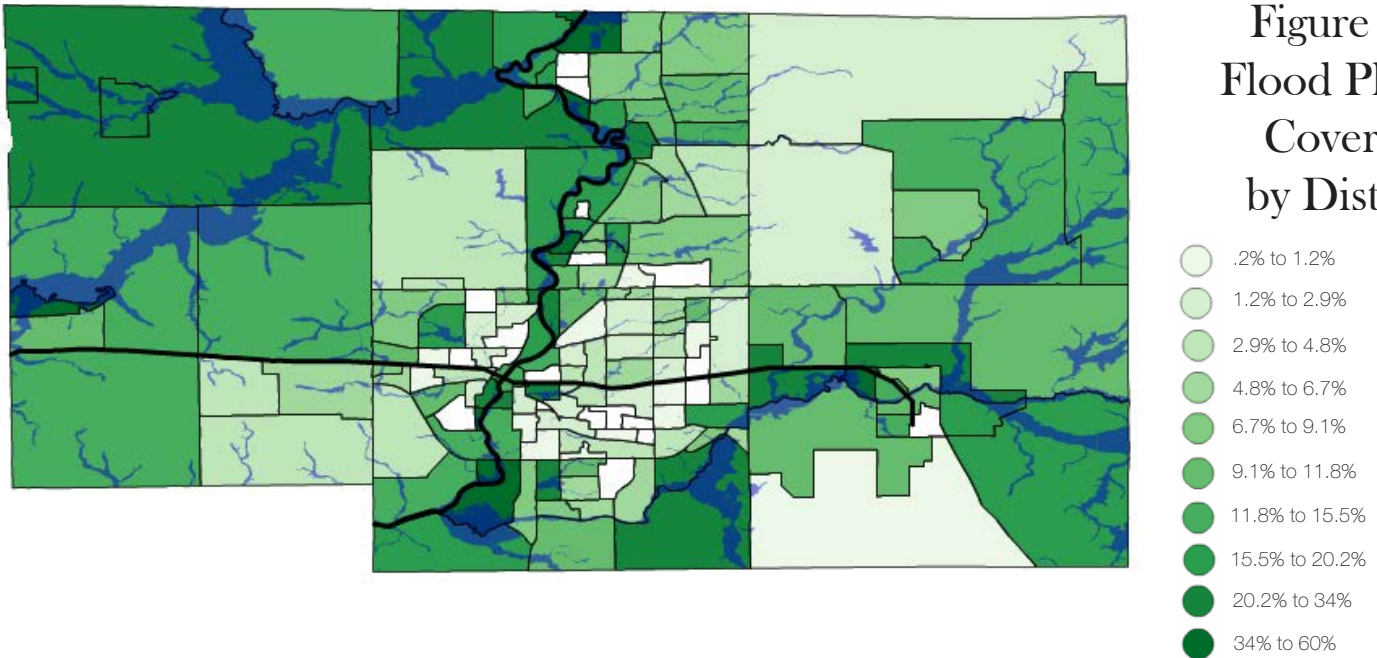
Water infrastructure

Aging water infrastructure is a great concern for communities across the United States. The core of most drinking and wastewater systems were constructed prior to World War II and are nearing the end of there useful life. Sprawling low density urban development places an increasing burden on these systems by diverting often tight funds towards extending infrastructure to newer developments rather then towards maintaining existing infrastructure. Researchers estimate that between 20% -25% of all water that enters distribution systems in the US is lost due to leakages. The risk of failure for aging infrastructure carries the prospect of significant economic hardship, treats to public health, and threats to the environment. Communities are now struggling to address this backlog of needed replacements and repairs during an era of tight budgets and limited funding.

The Rock River Water Reclamation District (RRWRD) maintains the largest wastewater treatment facility in the region, inventorying 1,114 miles of sanitary sewer in Winnebago Country. Approximately 65% of the system is located within the City of Rockford, where the average age of the system tends to track with the age of the

housing stock. In some neighborhoods this can date as far back as the early 1900s. In Boone County the City of Belvidere maintain 91 miles of sanitary sewer.

The City of Rockford is home to the second largest public water supply in Illinois. Its system is capable of producing up to 55 million gallons of water a day. Due to water quality issues, service quality and aging infrastructure a $75 million capital improvement program was completed in 2012 to rehabilitate key infrastructure and increase the level of service. North Park Water is the second largest public water supply in the region, with a capacity to produce up to 20 million gallons of water per day. The City of Belvidere is capable of producing up to 9 million gallons per day.

Community water supplies in the

Due to manufacturing and industry decline water consumption has decreased over 35% during the past 30 years.

region not only have to address aging infrastructure concerns, many have had to also combat contamination and water quality problems. Both Belvidere and Rockford are home to toxic Superfund sites, which forced the closure of at least 3 municipals wells during the 1990's due to contamination. Radium is also an issue in the region, most recently causing the village of Rockton to begin construction of a new municipal well.

The Vision

The Rockford region will take a comprehensive unified approach to dealing with water concerns. The following strategies address individual water components, but can only be truly effective when integrated together into one overarching regional water policy.

Protect the quality and quantity of the groundwater supply.

The Rockford region is reliant on groundwater for all its water needs. This emphasizes the importance of protecting both groundwater quantity and quality. The creation of a unified regional water supply plan will be a crucial step to guide the region towards

a more sustainable water future. The planning process should bring together the region's water supply operators and key stakeholder groups to inventory current use and conditions, in order to create a forecast of future water demand. Other components would include the identification of future infrastructure needs, opportunities for collaboration, groundwater recharge and resource protection, and recommendations for demand-reducing conservation measures. While the region is not currently projected to face any imminent water shortages, the close proximity to the Chicago region may place greater stress on the system in the future.

Protecting groundwater quality may be of even greater importance for the region. Having a plentiful water supply is of little use if contamination yields that water unusable. Rockford and Belvidere have both had to abandon wells due to contamination. To avoid the threat to public health as well as the costly remediation expenses, the implementation of source water protection plans are critical to ensuring the quality of our drinking water.

Unused wells should be properly abandoned to eliminate direct lines of contamination to the groundwater supply. Outreach efforts to landowners on private septic systems can help to ensure that systems are working properly.

The NPDES permit system is designed to prevent contamination from point source pollutions, however due to the interconnected nature of the surface and groundwater systems non-point source pollution can also affect groundwater quality. Best management practices included in the stormwater strategy can help address those issues.

Minimize the impacts of stormwater runoff.

In efforts to reduce damaging flooding, cut down on treatment costs and improve water quality the region will strive to minimize the damaging impacts of stormwater runoff. Historically stormwater management techniques have focused on strategies to quickly remove runoff from the site. Science has revealed that this caused as many issues as it was designed to solve. Infiltration is now viewed as the most effective way to minimize the effects of runoff. Infiltration absorbs stormwater directly into the ground rather than releasing it to the rest of the watershed. This aids in aquifer recharge and reduces the volume of water downstream. Reducing impervious surfaces and minimizing floodplain development are key strategies for increasing infiltration.

Stormwater that is not soaked into the ground is conveyed into an engineered system, typically storm sewers that discharge the runoff into surface waters. This type of traditional storm sewer system is called grey infrastructure. Green infrastructure offers a natural alternative for stormwater management. Though the use of native plantings, soils, and biological engineering it mimics natural hydrologic processes. Green solutions promote practices such as permeable pavements, bioswales, green roofs and rain gardens. Green infrastructure is a cost effective way to augment traditional grey systems, protect and enhance natural habitat and also provide aesthetic benefits, and can be implemented at the local government, business, and residential levels.

Nonpoint source pollution associated with stormwater runoff can be mitigated through the widespread adoption of best management practices (BMPs). In rural areas nonpoint source pollutants typically are a result of agricultural runoff. Many farm operators already employ a wide range of BMPs to reduce production costs associated with expensive fertilizers and pesticides, and to conserve soil and water resources vital to their operations. Incentives and cost sharing can help to defray the costs associated with other practices such as riparian buffers which can benefit the entire watershed. In urban areas nonpoint source pollution can be caused by roadway deicing, automobile fluids, pet waste, and lawn fertilizer. Green infrastructure, BMPs, and public education are all necessary to combat this water quality challenge.

WATER
BEST PRACTICES

Water Conservation

The simple act of flushing a toilet accounts for greater than 25% of all domestic water consumption. Many rebate incentives exist to assist homeowner and businesses to upgrade to high efficiency water fixtures which can greatly reduce wasteful water consumption and help them reduce their water costs. The US EPA's WaterSense partnership can help homeowners and businesses find water efficiency rebates and provides detailed guides to help residents, commercial businesses, and local governments reduce their water footprint.. The WaterSense program can be accessed at www.epa.gov/watersense.

Maximize health of watersheds and ecosystems.

Following a watershed approach framework is the most effective method to addressing water resource issues. Land use is the major determinate in watershed health. The watershed approach framework recognizes that what happens upstream impacts conditions downstream. Taking a watershed approach can seek to address the cause of water impairment rather than solely focusing on treating the symptom.

Past efforts have led to the creation of a handful of watershed plans throughout the region. The recommendations outlined in these plans should continue to be activated. Watershed plans will need to be developed for areas without an existing plan. Heightened levels of public participation increase the overall success rate of implementing these plans.

Many segments of the regions waterbodies are affected with water quality impairments. Water quality plans should be developed in attempt to minimize or eliminate these impairments. Priority should be given to addressing levels of impairment with the potential to require the establishment of a Total Maximum Daily Load (TMDL), which often results in cumbersome pollution control regulations. Section 319 of the Clean Water Act created a funding program to address nonpoint source pollution which may contribute to these impairments. These funds can be used for technical assistance, education, pilot projects, monitoring and more to help improve the health of the watershed and the quality of the water. Rockford and Winnebago County have received Section 319 grants in the past to address problem watersheds. The region should look to this and other similar programs to continue to address water quality.

Maximize efficiency of water infrastructure.

The region should seek to achieve a water infrastructure system that is both cost effective and conserves important natural resources. Sprawl greatly reduces the return on investment for new infrastructure.

Low density development requires greater infrastructure input for a smaller percentage of the population. This in turn raises the operating costs per capita and allows for more water leakages, which also drives up prices. Compact growth not only reduces infrastructure costs, it also reduces the amount of water consumed per capita. Efforts should focus on improving delivery while reducing wasteful consumption.

The region should promote infill development as a means to better utilize existing infrastructure and to support existing communities. The creation of an urban growth boundary could allow for new development while reducing the burden to the existing system. Infill development can also help assure that any industries wishing to come into the area have sufficient access to water and sanitation services.

> Integrating water and land use planning is the most effective method for protecting the regions water quality.

Through focusing development to maximize existing infrastructure, municipalities and water service providers can focus their often tight budgets on maintaining existing infrastructure. Often times this is referred to as a state of good repair or fixing it first strategy. While the region has recently seen some positive capital improvements, there is still a great deal of aging infrastructure that will need to be updated or replaced during the next 20 years.

Increase recreational opportunities afforded by waterways.

Protecting the aesthetic quality of the region's waterways will be a key task to maintain water-based recreation. Aesthetic qualities can range from the actual conditions of the water to the state of the surrounding landscape. Conditions such as turbidity, odor
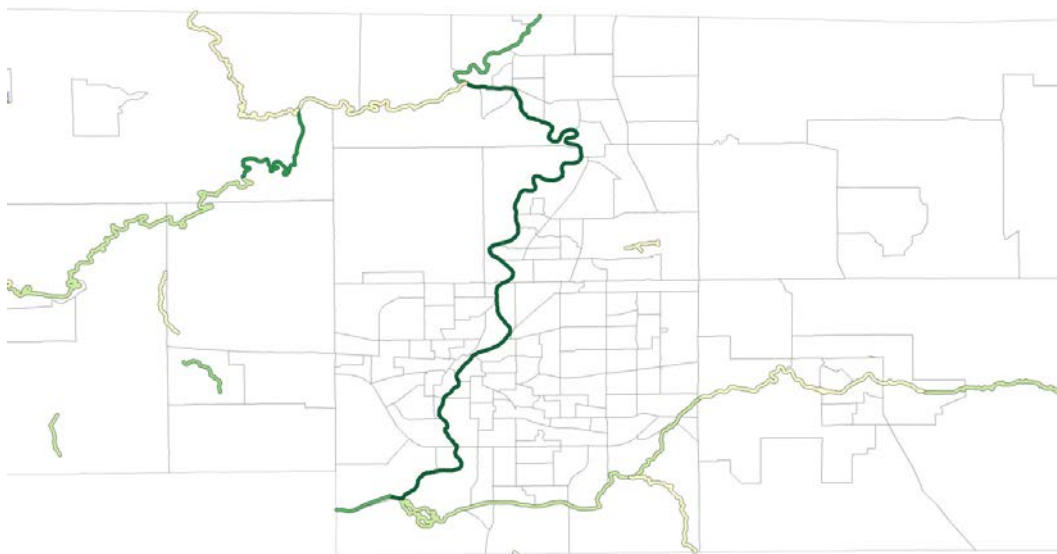
Figure 64. 303(d) Impaired Waterways

and color greatly detract from the recreational appeal of the water. These conditions are typically a function of the surrounding land uses, many times caused by stormwater runoff which can bring nutrients such as phosphorus which can cause algal blooms and sediments which cloud the water. Conservation measures such as vegetated buffer strips along waterways and strategies to reduce nonpoint source pollution are efforts that are needed to keep water conditions favorable for recreation.

The landscape surrounding the region's waterways is an important factor in attracting recreational users. In the more rural segments of waterways users typically seek a more natural setting. Many locations in the US have chosen to implement specific setbacks for new development to ensure the scenic integrity of the waterway. In the urban area many municipalities in the region have vast expanses of riverfront that they can capitalize upon to stimulate economic development and to bring urban inhabitants to the waterfront. Efforts should be made to redevelop vacant and underutilized riverfront property to transform urban waterways into vibrant intersections of recreation, commerce, and social interaction.

Waterways should be kept clear of navigational hazards in order to ensure minimal disruption for recreational users, as well as to facilitate healthy aquatic habitats. This includes keeping waterways clear of debris such as downed trees and litter. The success of this depends on the combined actions of private landowners, public agencies and conservation organizations to facilitate cleanup efforts. Efforts should also be made to minimize any further human alteration of natural waterway courses with artificial barriers such as damns and culverts.

REGIONAL WATER GOALS

- Protect the quality and quantity of the groundwater supply.

- Minimize the impacts of stormwater runoff.

- Maximize health of watersheds and ecosystems.

- Maximize efficiency of water infrastructure.

- Increase recreational opportunities afforded by waterways.

Goals	Water Strategies	Since 2000	Current Benchmark	2034 Target	🏠	▦	👥	🛒	🏛
Protect the quality and quantity of the ground water supply.	Protect groundwater recharge areas.	👍	# Protected areas	⬆ (target)		X	X	X	X
	Promote landowner education for residents on private wells and septic systems.	→	# Educated	⬆	X	X	X		
	Reduce potable water consumption by 30%.	👎	# Consumed	→	X			X	X
	Implement Source Water Protection Plans for Community Water Supplies.	→	Plan Established	⬆			X		X
	Increase awareness of benefits of improved water quality.	→	# Educated	⬆	X		X	X	X
	Develop a Unified Regional Water Consumption Plan with a regional consensus on water resources.	👍	Plan Established	⬆			X		X
Increase recreational opportunities afforded by waterways.	Protect the aesthetic quality of recreational waterways.	👍	# Dollars invested	⬆	X	X	X	X	X
	Promote the restoration of native riparian habitat.	👍	# Acreage restored	⬆ (target)			X		X
	Remove or mitigate navigation hazards.	👍	# Miles navigable	⬇			X		X
	Promote increased use of recreational water opportunities.	👍	# Participants	⬆	X		X		X
	Add more access points, docks, and onshore facilities to ensure residents can both reach and use the water.	👍	# Points, etc.	⬆	X		X		X
Decrease adverse impacts of storm water runoff.	Modify codes and create regulations that retain surface water on-site before releasing in to watersheds.	→	# Codes	⬆					X
	Evaluate existing infrastructure for stormwater runoff mitigation.	→	Evaluation complete	→			X		X
	Increase density to minimize impact of sprawl on stormwater runoff.	👎	Density rate	⬆		X	X	X	X
	Promote Low Impact Development (LID) designs.	→	# Designs implemented	⬆	X		X	X	X
	Encourage innovative stormwater management techniques to reduce discharge and water pollution in urbanizing areas.	👎	# Educated	⬆	X		X	X	
	Retrofit existing stormwater basins to improve water quality.	👍	# Basins retrofitted	⬆			X	X	X

Goals	Water Strategies	Since 2000	Current Benchmark	2034 Target	🏠	🏙	👥	🛒	🏛
Maximize health of watersheds and ecosystems.	Encourage waterway protection through land use planning.	👍	# Waterways "protected"	⬆			X		X
	Develop a Water Quality Plan to address specific 303(d) issues.	👍	Plan Established	→			X		X
	Promote landowner education on urban/suburban waterway corridor management.	→	# Educated	⬆	X		X		
	Restore native vegetation along waterways.	👍	Restoration rate	⬆	X	X	X	X	X
	Actively participate in water-way cleanup efforts.	👍	# Participants	⬆	X	X	X	X	X
	Restore and create additional wetlands by developing an inventory, and implement a restoration plan.	→	# Wetland acres	⬆			X	X	X
	Encourage the adoption of county-wide watershed development ordinances to protect wetlands, stream corridors and improve storm water quality.	→	# Ordinances	⬆			X		X
Maximize the efficiency of the water infrastructure.	Target water infrastructure projects to support existing community infrastructure and encourage redevelopment.	→	# Projects	→		X			X
	Identify new development that is causing too much water use.	→	# New developments meeting needs	⬆			X	X	X
	Identify leaking infrastructure that is in need of replacement and increase funding to update aging infrastructure systems.	👍	# Infrastructure with good rating	⬆			X	X	X
	Promote green infrastructure solutions.	👍	# Dollars invested	⬆			X		X
	Reduce vulnerability to water supply disruption or contamination.	→	# Points disruption	⬆			X		X
	Increase viability and accessibility of water for industrial use.	👍	# Jobs created	⬆			X	X	X
	Develop biological wastewater treatment systems.	→	# Systems	⬆			X	X	X

Appendix I: Additional Data Visualizations

Social

The following is a list of additional social visualizations available at www.ourvitalsigns.com. These provide a deeper insight in to the State of Social Well-being for the Rockford Region.

BUILT ENVIRONMENT

- Public Spaces with Amenities
- Brownfield Sites
- Land Available for Recreation
- Third Places

CIVIC VITALITY

- Mobility from the US Census Bureau
- Voter Turnout
- Single Parents and Children in Poverty from the US Census Bureau
- Linguistic Isolation from the US Census Bureau
- Ability to Speak English from the US Census Bureau
- Moved to Region and City Optimism
- Strength of Family Households from the US Census Bureau
- Segregation RCAP Index from the Department of Housing and Urban Development
- Change White vs Minority Population 2000 to 2010 from the US Census Bureau
- Percent Change of Young Adults Residents 2000 to 2010 from the US Census Bureau
- Elderly Characteristics from the US Census Bureau
- Black Population Characteristics from the US Census Bureau
- White Population Characteristics from the US Census Bureau
- Hispanic Characteristics from the US Census Bureau
- Average Household Expenditures on Communications Technology from the Consumer Expenditures Survey
- Armed Forces from the US Census Bureau

CULTURE

- Average Household Expenditures on Passive Entertainment from the Consumer Expenditure Survey
- Average Household Expenditures on Active Entertainment from the Consumer Expenditure Survey

ECONOMIC DEVELOPMENT

- Households in Poverty from the US Census Bureau
- County Income From Transfer Payments from Woods and Poole
- Elderly Financial Stability from the US Census Bureau
- Portion of Income Coming from Transfer Payments from Woods and Poole
- Income by Gender from the US Census Bureau
- Male Households in Poverty from the US Census Bureau
- Female Households in Poverty from the US Census Bureau
- Unemployment by Race from the US Census Bureau
- Self Sufficiency Wage from Heartland Alliance
- Per Capita Income from the US Census Bureau
- Change in Per Capita Income from the US Census Bureau
- ousehold Income by Race from the US Census Bureau
- Population Lacking Self Sufficiency from the US Census Bureau and HUD
- Concentrations of Poverty from the US Census Bureau
- Percent Change White Collar Employees 2000 to 2010 from the US Census Bureau
- Population Lacking Self Sufficiency
- Income Characteristics by Race from the US Census Bureau
- Average Household Expenditures on Children from the Consumer Expenditures Survey
- Child Expenditures from the US Census Bureau
- Unemployment and Educational Attainment from the US Census Bureau
- Welfare Recipients from the US Census Bureau
- Women and Minority Owned Businesses from the NETS Database
- Income and Unemployment from the US Census Bureau
- age Characteristics from the US Census Bureau
- Transfer Payments from Woods and Poole
- Percent Households with Children Below Poverty from the US Census Bureau
- Unemployment Characteristics by Race and Education in 2000 from the US Census
- Unemployment Characteristics by Race and Education in 2010 from the US Census Bureau
- Additional Unemployment Characteristics by Race and Education in 2010 from the US Census Bureau
- 2011 Unemployment Rates for Metro from the US Census Bureau
- No Retirement Income from the US Census

EDUCATION

- ISAT Scores from the Illinois Student Report Card
- Unemployment Map vs Bachelors Degrees from the US Census Bureau
- High School Graduation Rates by School from the Illinois Student Report Card
- Graduation Rates with Truancy and Dropping Out and Low Income from the Illinois
- Enrollment by Race to Low Income from the Illinois Student Report Card
- Attendance and Truancy by School from the Illinois Student Report Card
- Enrollment by Race and School Type
- Educational Attainment by Gender and Race from the US Census Bureau
- Educational Make Up by Race from the Illinois Student Report Card
- Unemployment vs High School Diplomas and Bachelors from the US Census Bureau
- Class Size vs Test Scores of High Schoolers from the Illinois Student Report Card

- Minority Enrollment and Low Income Students from the Illinois Student Report Card
- High School Graduation Rates from the Illinois Student Report Card
- Test Scores Below Standard by Socioeconomic Status from the Illinois Student Report
- Test Scores Exceeding Standards by Socioeconomic Status from the Illinois Student Report Card
- Test Scores Exceeding Standards by Gender from the Illinois Student Report Card
- Comparative Test Scores from the Illinois Student Report Card
- Dropout Rates, Graduation, and Attendance from the Illinois Student Report Card
- Change in Enrollment by School Type from the Illinois Student Report Card
- Percent Public School Attendance by Race from the Illinois Student Report Card
- Percent Attending Public and Private Schools from the Illinois Student Report Card
- Test Scores below Standard by Gender from the Illinois Student Report Card
- Percent Change College Graduates 2000 to 2010 from the US Census Bureau
- Selected Characteristics of Dropouts from the US Census Bureau

FOOD

- Proximity to Healthy Food
- Average Household Fruit and Vegetable Expenditures from the Consumer Expenditures Survey
- Unhealthy Food Index from the Consumer Expenditures Survey
- Analysis of Average Household Food Consumption Patterns as Percent of Total Food Expenses from the CES

HEALTH

- Health Insurance Coverage by Race from the Illinois Department of Health
- Average Household Expenditures on Smoking Products from the Consumer Expenditure Survey
- Average Household Expenditures on Alcohol Products from the Consumer Expenditure Survey
- Birth Statistics from the Illinois Department of Health
- Causes of Death from the Illinois Department of Health
- Obesity Statistics from the Illinois Department of Health
- Healthcare and Wellbeing from the Illinois Department of Health
- Health Conditions from the Illinois Department of Health
- Birth Statistics from CDC
- Selected Health Characteristics from the CDC

HOUSING

- Loan Denial Rate by Race
- HUD Disparity Indices from HUD
- Owner Occupied Units vs Public Housing from the US Census Bureau
- Owner Occupied
- Minority Owner Occupied
- Population Change in Built Area from the US Census Bureau
- Subsidized Housing by Neighborhood from the Department of Housing and Urban Development
- Family Poverty Statistics from the US Census Bureau
- Characteristics of Average Household Size from the US Census Bureau

- Characteristics of Household Income from the US Census Bureau
- Housing Type by Minority Concentration from the US Census Bureau
- Housing Vacancies
- Subsidized Housing Characteristics from the Department of Housing and Urban Development
- Subsidized Housing Additional Facts from Department of Housing and Urban Development
- Subsidized Housing Additional Facts from Department of Housing and Urban Development
- Total Households from the US Census

LAND

- Proximity to Recreational Space

SAFETY

- Arrests and Jail Data from the Department of Justice
- Perceived Safety from the Healthy Communities Survey Study
- Crime vs Education and Income from the ESRI Crime Index and the US Census Bureau
- Crime vs Income from the ESRI Crime Index and the US Census Bureau
- Crime vs Population Characteristics from the ESRI Crime Index and the US Census Bureau
- ime vs Race from the ESRI Crime Index and the US Census Bureau
- Crime vs Housing vs Expenditures from the ESRI Crime Index, US Census Bureau, and the Consumer Expenditures Survey
- Characteristics of Crime Propensity from the ESRI Crime Index

TECHNOLOGY

- Wifi Sites

TRANSPORTATION

- Accidents from National Highway Traffic Safety Administration
- Accessibility of Cultural Resources
- Means of Transportation to Work from the US Census Bureau
- Number of Cars Per Household from the US Census Bureau

METRO-WIDE SOCIAL DATA VISUALIZATIONS

- Community Race and Ethnicity from the US Census Bureau
- Community Age Distributions from the US Census Bureau
- County Income From Transfer Payments from Woods and Poole
- County Income From Transfer Payment Bar Chart from Woods and Poole
- Wealth Index Line Chart from Woods and Poole
- Portion of Income Coming from Transfer Payments Bar Chart from Woods and Poole
- Age Distribution from the US Census Bureau
- Black Population from the US Census Bureau
- Income and Poverty from the US Census Bureau

- Hispanic Population from the US Census Bureau
- Community Snapshot Educational Attainment from the US Census Bureau
- Race Distribution from the US Census Bureau
- Gender Distribution from the US Census Bureau
- Population Growth Trends from the US Census Bureau
- Winnebago County Origins and Destination from the IRS Migration Data
- Child Poverty and Educational Attainment by Community from the US Census Bureau
- Disparity Index from the Department of Housing and Urban Development
- Poverty by Race from the US Census Bureau
- Population Ages by Decade from Woods and Poole
- Race by Decade from Woods and Poole
- Age Projections from Woods and Poole
- Demographic Projections from Woods and Poole
- oone County Origins and Destination from the IRS Migration Data
- Migrant Trends Inbound from the IRS Migration Data
- Migrant Trends Outbound from the IRS Migration Data
- Unemployment Rates for Metro from the US Census Bureau

Environmental

The following is a list of additional Environmental visualizations available at www. ourvitalsigns.com. These provide a deeper insight in to the State of Environmental Well-being for the Rockford Region.

BIODIVERSITY

- Farm Practices from USDA
- Agricultural Land Treated from USDA
- Cropland Harvested by Crop Type from the USDA
- Types of Agricultural Land from the USDA
- Land Enrolled in Crop Insurance and Conservation Programs from the USDA
- Total Cropland from USDA
- Woodland and Pastureland from the USDA
- USDA County Profiles
- Environmentally Sensitive Areas
- Wetlands
- Environmentally Sensitive Areas in Detail from USDA
- Endangered Species from the EPA

BUILT ENVIRONMENT

- LEED Certified Buildings and Professionals
- Brownfields Sites Map
- Built Environment Bridges
- Bridges from IDOT
- Brownfields from RMAP

- Costs of Infrastructure per Capita by District from RMAP
- Structurally Deficient Bridges
- Built Environment Footprint
- EPA Regulated Facilities
- EPA Regulated Facilities
- EPA Regulated Facilities Map

CIVIC VITALITY

- Child Care and Elderly Facilities from the NETS Database
- Civic Organizations and Non-Profits from the NETS Database

CULTURE

- Distribution of Cultural Institutions from NETS
- Map of Cultural Places of Interest

ECONOMIC DEVELOPMENT

- Local Multiplier Effect from RMAP
- USDA Animal and Animal Products Sales from the USDA
- Farm Asset Values from USDA
- Farm Production Expenses from USDA
- Vacant Commercial Sites from LOIS
- Vacant Industrial Sites from LOIS

EDUCATION

- Elementary School Districts Locale Codes
- Secondary School Districts Locale Codes
- Illinois School Maintenance Project Grant Recipients
- Before and After School Programs
- School Construction Grants
- School Building Conditions

ENERGY

- Energy Star Labeled Buildings

FOOD

- Healthy Food Locations from RMAP
- Food Insecurity and Food Cost from the USDA
- USDA Population with Low Access to Healthy Food
- USDA Children with Low Access to Healthy Food
- USDA Seniors with Low Access to Healthy Food
- Food Access Tract Information
- Child Food Insecurity and Food Cost
- Locations of Food Pantries and Households in Poverty from NETS and Census
- Estimated Tons of Food Consumed
- Estimated Tons of Food Production Needed
- Major Food Production Needed and Consumed

HEALTH

- Radon Levels by Zipcode from the Illinois Emergency Management Agency
- Lead Paint Risk from US Census Bureau
- Air Quality for Carbon Monoxide from the EPA
- Air Quality for Particulate Matter from the EPA
- Air Quality for Ozone from the EPA
- Lead Poisoning in Children Six and Younger from the Illinois Department of Public Health
- Lead Poisoning for Children Under Three from the Illinois Department of Public Health

HOUSING

- Housing Built Before 1980 with Property Crime and Income from the US Census Bureau and the ESRI Crime Index
- Vacancies Vs Occupancies from the US Census Bureau
- City of Rockford Percent Vacant Residential Addresses from RMAP
- Housing Units Per Acre from the US Census Bureau
- Average Lot Size
- Rooms per Unit from the US Census Bureau
- Bedrooms per Unit from the US Census Bureau
- Locally Owned Residential Properties

LAND

- District Classifications
- Land Use in Acres by District from RMAP
- Change in Land Use from 2010-2012 from RMAP
- Soil Types by District
- Soils Map
- Acres of Greenways and Open Space
- Prime Farmland by County
- Prime Farmland
- Map of Greenways and Open Space from RMAP

SAFETY

- Historical Hail Map
- Historical Locations of Tornadoes
- Households within Fire District Boundaries
- Fire Districts Map
- Crash Characteristics by County from IDPH
- Age and Gender of Motor Vehicle Occupants from the IDPH
- Occupants of Motor Vehicle Incidents

TECHNOLOGY

- Land Mobile Radio Services from FCC
- Radio Broadcast Stations from FCC
- Wireless Telecommunications from the FCC
- Television Broadcasting Stations from the FCC
- Registered Antenna Structures from the FCC

- Wifi Sites from RMAP
- Wifi Locations by RMAP

TRANSPORTATION

- Average Annual Daily Traffic
- Roadway Improvements from FY2012 to FY 2013
- Transportation and Land Use from RMAP
- Bus Routes
- Bus Routes with Amenities
- Transportation Bus Routes
- Bus Routes with Times and Stops from RMTD
- Public Transportation Accessibility with Major Employers from RMAP

WASTE

- EPA Toxics Released Over Time
- Toxic Chemicals Released from the EPA
- Greenhouse Gas Emissions from the EPA
- Estimated Pounds of Recycled Material Collected
- Solid Wastes Deposited from RMAP
- Recycled Materials in Tons

WATER

- Watersheds within MSA
- Water Floodplains Map
- Percent of District within Floodplain
- Water Impairments
- Historic Pumpage Data by Major Suppliers
- Floodplains vs Foreclosures and Vacancy

METRO

- Mobility from the US Census Bureau
- Quality of Life Amenities by Community from the NETS Database

Economic

The following is a list of additional Economic visualizations available at www. ourvitalsigns.com. These provide a deeper insight in to the State of Economic Well-being for the Rockford Region.

EDUCATION

- Assorted Statistics by School District from the Illinois Student Report Card
- Sales and Money Spent on Elementary and Secondary Education from the Consumer Expenditures Survey

- Money Spent on College and Trade Schools from the Consumer Expenditure Survey
- School District Finances from the NETS Database
- HS Graduation versus Unemployment from the US Census Bureau

BUILT ENVIRONMENT

- Address Vacancies by County from the USPS
- 2011 Farm Parcel Sales and Assessment from RMAP
- 2011 Commercial Parcel Sales and Assessment from RMAP
- 2011 Industrial Parcel Sales and Assessment from RMAP
- 2011 Residential Parcel Sales and Assessment from RMAP
- 2011 Tax Exempt Parcel Assessment from RMAP
- 2007-2011 Residential Parcel Analysis by District from RMAP
- 2007-2011 Commercial Parcel Analysis by District from RMAP
- 2007-2011 Industrial Parcel Analysis by District from RMAP
- 2007-2011 Farm Parcel Analysis by District from RMAP
- Average Sales and Assessment Value by District for 2007-2011 from RMAP
- Difference Between Fairmarket Value and Sale Price for 2007 to 2011 from RMAP
- Difference Between Sale Price and Fairmarket Over Time from 2007 to 2011 from RMAP

CIVIC VITALITY

- Sales and Money spent on Children and Elderly from the Consumer Expenditure Survey and the NETS Database
- Donations to Non-Profits and Organizations from the Consumer Expenditures Survey
- Insurance, Pensions and Similar Expenditures from the Consumer Expenditures Survey
- Insurance Carriers and Profits from the NETS Database
- Non-Profit Data Over Time from the NETS Database

CULTURE

- Economic Impact of Nonprofits and Audiences from Americans for the Arts
- Economic Impact of Audiences from Americans for the Arts
- Creative Industries from the NETS Database
- Average Household Expenditures on Active and Passive Entertainment from the Consumer Expenditure Survey
- Spent on Sports Hobbies and Travel from the Consumer Expenditures Survey
- Establishment Churn by Industry from the NETS Database
- Entertainment Establishments and Revenues from the NETS Database

ECONOMIC DEVELOPMENT

- Top Destination of Outbound Companies from NETS Database
- Employees and Sales from the NETS Database
- Employment Size and Categories from the NETS Database
- Self Employed Companies from the NETS Database
- Per Capita Income Rate Change 2000 to 2010 from the US Census Bureau
- Concentrations of Stage 2 Companies from the NETS Database

- Concentrations of Stage One and Two Companies from the NETS Database
- Businesses by NAICS from the NETS Database
- Businesses by SIC from the NETS Database
- Destinations of Outbound Companies from the NETS Database
- Origination of Inbound Companies from the NETS Database
- Companies with Risk of Late Payment from the NETS Database
- Private Establishments from the NETS Database
- Legal Status of Companies from the NETS Database
- Minority Foreign and Female Owned Establishments from the NETS Database
- Importing and Exporting Establishments from NETS Database
- Retail Gap Analysis from the ESRI Retail MarketPlace
- Potential Retail Sales from the ESRI Retail MarketPlace
- Boone County Commuting Patterns from the US Census Bureau
- Winnebago County Commuting Patterns from the US Census Bureau
- Occupations from the US Census Bureau
- Wages for the MSA from the IDES
- MSA Wage Comparisons to State from the IDES
- Headquarters and Standalone Establishments from the NETS Database
- Net Opened and Expanded Businesses from the NETS Database
- Establishment Churn by Establishment Stage from the NETS Database
- Establishment Stages from the NETS Database
- Employees by Industry from the NETS Database
- Cottage Establishment from the NETS Database
- Wealth Index by Decade from Woods and Poole
- Establishment Churn by Industry from the NETS Database
- Retail Leakage/Surplus Index from the ESRI Retail MarketPlace
- Wealth Index Line Chart from Woods and Poole
- Retail Business Information from the ESRI Retail MarketPlace
- Total Retail Sales from the ESRI Retail MarketPlace
- Industry Concentrations Over Time from the NETS Database
- Creative, Production, and Service Workers from the US Census Bureau
- Average Household Expenditures by Category from the Consumer Expenditure Survey
- Retail Sales Tax Revenue from the NETS Database
- Retail Sales Tax Revenue from ESRI
- Outbound and Inbound Businesses in Illinois from the NETS Database
- Outbound and Inbound Companies from Different States from the NETS Database
- Exporting Companies in the MSA from the NETS Database
- MSA Exports from ITA
- Commercial Vacancies by District from the USPS
- Occupational Class Wages from the IDES
- Percentage by Category of Average Household Expenses of Four Categories from the Consumer Expenditures Survey
- CAFR Net Assets by Municipality from RMAP
- CAFR Changes of Net Assets by Municipality from RMAP
- CAFR Government Funds by Municipality from RMAP
- CAFR Normalized Net Assets by Municipality from RMAP
- CAFR Normalized Changes in Net Assets by Municipality from RMAP
- CAFR Normalized Governmental Funds by Municipality from RMAP
- Industries Over Time from the NETS Database
- Innovation Index from StatsAmerica.org
- Industry and GMP from BEA

ENERGY

- Average Household Expenditures on Energy Types from the Consumer Expenditures Survey

FOOD

- Population Characteristics of Food Stamp Recipients from the US Census Bureau
- Average Household Expenditures Spent on Food and Beverages from the Consumer Expenditure Survey
- Food Stores and Sales from the NETS Database
- Household Expenditures on Healthy Food from the Consumer Expenditure Survey

HEALTH

- Health Care and Social Assistance Facilities from the NETS Database
- Health Insurance Coverage by Race from the Illinois Department of Health

HOUSING

- Foreclosures and Other Housing Statistics for 2007 to 2008 from HUD
- Percent Rental Housing Units Unaffordable with Section 8
- Percent Change Housing Value 2000 to 2010 from the US Census Bureau
- Median Rental Rate 2000 to 2010 from the US Census Bureau
- Conventional Loans from the Federal Financial Institutions Examination Council
- FHA Loans from the Federal Financial Institutions Examination Council
- Home Improvement Loans from the Federal Financial Institutions Examination
- Average Household Expenditures on Mortgages and Taxes by Homeowners from the CES
- Average Household Expenditure on Home Maintenance from the CES
- Average Household Expenditures on Rented Dwellings from the Consumer Expenditures Survey
- Average Household Expenditures on Other Types of Housing from the CES
- Average Costs of Housing as a Part of Total Budgets from CNT
- Real Estate Agents and Brokers from the NETS Database
- Home Maintenance Stores and Services from the NETS Database

SAFETY

- Average Household Dollars Spent on Safety from the Consumer Expenditures Survey
- Safety Oriented Establishments from the NETS Database

TECHNOLOGY

- Average Household Expenditures on Technology from the Consumer Expenditure Survey
- Telecommunications and Computer Establishments from the NETS Database

TRANSPORTATION

- Average Household Expenditures on Vehicle Purchases from the Consumer Expenditure Survey

- Average Household Expenditures on Transportation (nonvehicle purchases) from the Consumer Expenditure Survey
- Transportation as a Portion of Total Budget from the CNT Database
- Transportation Oriented Businesses from the NETS Database

WASTE

- Average Household Dollars Spent on Water from the Consumer Expenditures Survey
- Average Household Expenditures on Waste Disposal from the Consumer Expenditures Survey
- Waste Oriented Businesses from the NETS Database

Appendix II: Raw Data Sources

List of Sources by Agency Type

Federal

- US Department of Commerce - Bureau of Economic Analysis (BEA)
- US Department of Labor – Bureau of Labor Statistics (BLS)
- US Bureau of Justice Statistics
- Center for Disease Control and Prevention (CDC)
- US Census Bureau
- US Environmental Protection Agency (EPA)
- Federal Communications Commission (FCC)
- Federal Financial Institutions Examination Council (FFIEC)
- US Department of Housing and Urban Development (HUD)
- US Internal Revenue Service (IRS)
- US Department of Commerce – International Trade Administration (ITA)
- US Department of Interior – National Park Service
- US Department of Education – National Center for Education Statistics
- US Department of Commerce – National Oceanic and Atmospheric Administration (NOAA)
- US Department of Agriculture
- United States Postal Service
- Corporation for National & Community Service (CNCS)

State

- Illinois Department of Children and Family Services (IDCFS)
- Illinois Department of Corrections (IDOC)
- Illinois Department of Transportation (IDOT)
- Illinois Department of Aging
- Illinois Department of Employment Securities
- Illinois Department of Human Services
- Illinois Department of Natural Resources (IDNR)

- Illinois State Police
- Illinois Interactive Report Card (IIRC)
- Illinois State Board of Education (ISBE)

Local

- Comprehensive Annual Financial Reports
- Rockford Health Council
- WinGIS
- RMAP
- Winnebago County Clerk
- Boone County Clerk

Other

- CNT
- Economic Profile System-Human Dimensions Toolkit (EPS-HDT)
- Esri
- Feeding America
- Fitzgerald Health Education Associates, Inc (FHEA)
- Foreclosure-Response.org
- Gallup
- Institute for Health Metrics and Evaluation (IHME)
- STATS America – Innovation Index
- Bank On
- Americans For the Arts
- Location One Information System (LOIS)
- National Establishment Time-Series (NETS)
- The Urban Institute
- US Green Building Council (USGBC)
- Woods & Poole
- Leopold Center for Sustainable Agrictulture

Appendix III: Datasets by Agency

TEMPLATE

Dataset:

Description:

URL:

Release Date:

FEDERAL

Bureau of Economic Analysis

Dataset: Interactive Data – Regional (GDP & Personal Income)

Description: Contains the real number and percent change of GDP, Per Capita GDP, and Real GDP over several years for the Rockford MSA, State, and US.

URL: http://www.bea.gov/iTable/index_regional.cfm

Release Date: Varies (recommend checking quarterly)

Bureau of Labor Statistics

Dataset: Local Area Unemployment Statistics – County Data

Description: Contains the annual averages of the total number in the labor force, plus the number unemployed and the unemployment rate by county from 1990 - 2012

URL: http://www.bls.gov/lau/#tables

Release Date: Annually

US Bureau of Justice Statistics

Dataset: Arrest Data Analysis Tool

Description: Annual agency-level counts for arrests by age, sex, race, and type of offenses.

Note: Rockford Police department is the only agency in which data is available.

URL: http://www.bjs.gov/index.cfm?ty=datool&surl=/arrests/index.cfm#

Release Date: Annually

CDC

Dataset: VitalStats (National Vital Statistics Systems)

Description: Contains data tables on births, perinatal mortality, and population counts for county- and state-level from 1990 – 2008.

URL 1: http://www.cdc.gov/nchs/VitalStats.htm (Homepage)

URL 2: http://205.207.175.93/VitalStats/ReportFolders/ReportFolders.aspx (Data Server)

Note: Log-in required. Username: rrvitalsigns; Password: HUDrpsd20

Release Date: As published by BRFSS

Dataset: Diabetes Interactive Atlases

Description: Contains data on diagnosed diabetes and its incidence, as well as obesity and leisure-time physical inactivity.

URL: http://www.cdc.gov/diabetes/atlas/countydata/atlas.html

Release Date: Unknown - Recommend checking biannually

US Census Bureau

Dataset: American Community Survey (ACS)

Description: Yearly data on the demographics of a community (age, sex, race, family and relationships, income and benefits, health insurance, education, veteran status, disabilities, etc.). Not all topics are available at all of the census geography levels.

URL: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

RELEASE DATES: 2012 ACS 1-year estimates – 9/19/2013; 2012 ACS 3-year estimates – 10/24/2013; 2012 ACS 5-year estimates – 12/5/2013

Dataset: American Housing Survey (AHS)

Description: Contains information on housing units (vacancies, physical condition, characteristics of housing subjects, neighborhood quality, mortgages, housing costs, home values, etc.) and is conducted biennially in odd-numbered years. Only available for selected metro areas

URL 1: http://www.census.gov/housing/ahs/data/metro.html

URL 2: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Release Date: 2014

Dataset: County Business Patterns

Description: Contains data by industry for the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll. This data is available at state- and county-level as well as zip code annually.

URL: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Release Date: 2012 CBP is scheduled for release April 2014; 2012 ZBP is scheduled for release June 2014.

Dataset: Decennial Census

Description: Contains similar data to the ACS survey.

URL: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Release Date:

Dataset: Economic Census

Description: Contains statistics covering American businesses and economy (employment, assets, business characteristics, establishments and firms, expenses, inventories, etc.). Conducted every five years and covers most geography levels (excluding tract and blockgroup)

URL: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Release Date: 2012 Economic Census – Beginning March 2014 (delays will occur in release dates)

Dataset: Survey of Business Owners

Description: Dataset contains information on the gender, ethnicity, race, and veteran status of business owners as well as the business characteristics. Conducted every five years for most geography levels (National, state, MSA, and County)

URL: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Release Date: June – December 2015

Dataset: Small Area Income and Poverty Statistics – School Districts

Description: Contains the estimates of the population and poverty within each school district.

URL: http://www.census.gov/did/www/saipe/data/schools/

Release Date: Annually

EPA

Dataset: EnvironMapper/Facility Registry Service (FRS)

Description: Provides the facility and location of facilities monitored by the EPA based upon topic (air, land, water, waste, toxics, radiation, facility, compliance, etc.)

URL 1: http://www.epa.gov/enviro/html/fii/index.html (FRS)

URL 2: http://www.epa.gov/emefdata/em4ef.home (EnvironMapper)

Release Date: Dependent upon specific report

Dataset: Toxics Release Inventory (TRI) Program

Description: Contains information of the quantities of toxic chemicals disposed, released, transferred, or managed. Available for state- and county-level as well as zip code

URL: http://iaspub.epa.gov/triexplorer/tri_release.chemical

Release Date: Annually

Dataset: Air Data - Monitor Values Report

Description: Displays annual summary air pollution measurements for individual monitoring

sites. There are three sites within Rockford Region for (ozone, carbon monoxide, and particulate matter.

URL: http://www.epa.gov/airquality/airdata/ad_rep_mon.html

Release Date: 2013 annual statistics final on May 1, 2014

Federal Communications Commission

Dataset: Geographic Information Systems

Description: Contains the locations and technical details of the existing towers the FCC collects data on

URL: http://wireless.fcc.gov/geographic/index.htm?job=home

Release Date:

Federal Financial Institutions Examination Council

Dataset: Home Mortgage Disclosure Act

Description: Provides data on home mortgage lending activity by MSA

URL: http://www.ffiec.gov/hmda/hmdaproducts.htm

Release Date: September of the Following Year (2012 HMDA data – Sept. 2013)

HUD

Dataset: CHAS (Comprehensive Housing Affordability Strategy)

Description: Contains data on the extent of housing problems and housing needs, particularly for low income households

URL: http://www.huduser.org/portal/datasets/cp.html

Release Date: Varies

Dataset: Neighborhood Stabilization Program

Description: Information on the estimated number/percent of foreclosures, the foreclosure rate, and vacant addresses.

URL: http://www.huduser.org/portal/datasets/NSP.html

Release Date: Program has ended.

Dataset: Fair Market Rents

Description: FMRs are gross rent estimates. They include the shelter rent plus the cost of all tenant-paid utilities, except telephones, cable or satellite television service, and internet service. Done annually for the following year (Ex. 2014 comes out in 2013)

URL: http://www.huduser.org/portal/datasets/fmr.html

Release Date: Around October

IRS

Dataset: SOI Tax Stats – County-to-County Migration Statistics

Description: Consists of the number of households, population, and the estimated gross income moving in and out of a county.

URL: http://www.irs.gov/uac/SOI-Tax-Stats-County-to-County-Migration-Data-Files

Release Date: As complied

International Trade Administration

Dataset: Metropolitan Export Series Database

Description: Contains yearly data for MSAs on merchandise export totals, exports to ten regional destinations, exports as a percent of the state total, top global exports, and major exports by industry.

URL: http://tse.export.gov/metro/SelectReports.aspx?DATA=Metro

Release Date: twice yearly, with one release for the first half of the year and a second release of the annual data.

National Park Service

Dataset: National Register of Historic Places

Description: Consists of an inventory of the register historic places by location, type, and name.

URL: http://www.nps.gov/nr/research/data_downloads.htm

Release Date: Annually

National Center for Education Statistics

Dataset: Integrated Postsecondary Education Data System (IPEDS)

Description: Contains data on enrollment, tuition, degrees offered/awarded, etc. for colleges, universities, and technical and vocational postsecondary institutions

URL: http://nces.ed.gov/ipeds/datacenter/

Release Date:

National Oceanic and Atmospheric Administration (NOAA)

Dataset: SVRGIS

Description: Contains spatial data on storms from 1950 thru 2012

URL: http://www.spc.noaa.gov/gis/svrgis/

Release Date: Yearly

USDA

Dataset: Natural Resources Conservation Service - Soils

Description: Consists of geographic locations of the various soil types

URL: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Release Date:

Dataset: USDA National Farmers Market Directory

Description: Lists all farmers markets' locations, directions, operating times, product offerings, and accepted forms of payment

URL: http://search.ams.usda.gov/farmersmarkets/default.aspx

Release Date: Reflects current information available

Dataset: Food Access Research Atlas

Description: Provides information on the food access for the population (totalm chilern, elderly, and low-income) by census tract

URL: http://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx#.UgQK4JKkrw8

Release Date:

Dataset: National Agricultural Statistics Service

Description: Consists of data collected in the agricultural census with information on the

demographic, animals and products, crops, economics, and environmental elements of farms and ranches. Conducted every five years (1997, 2002, 2007, 2012).

URL: http://quickstats.nass.usda.gov/

Release Date: Unknown

USPS

Dataset: HUD Aggregated USPS Administrative Data on Address Vacancies

Description: Contains quarterly aggregate data on addresses identified as having been "vacant" or "No-Stat" in the previous quarter

URL: http://www.huduser.org/portal/datasets/usps.html

Note: Log-in required. Username: gborich@ourvitalsigns.com; Password: HUDrpsd20

Release Date: Quarterly

Corporation for National & Community Service (CNCS)

Dataset: Volunteering in America and Civic Life

Description: Provides data on the volunteer rates, number of volunteers, and volunteer hours by state yearly.

URL: http://www.volunteeringinamerica.gov/

Release Date:

STATE

Illinois Department of Children and Family Services

Dataset: Reported and Indicated Child Abuse/Neglect and Child Sexual Abuse

Description: Excel spreadsheet containing number and rate of child abuse and neglect cases.

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=290

Release Date: Check quarterly (Current dataset: 2/5/2013)

Illinois Department of Corrections

Dataset: IDOC Adult Admissions

Description: Number of admissions to Illinois Department of Corrections by type of offense and by sex

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=110

Release Date: Check quarterly (Current dataset: 4/25/2013)

Dataset: IDOC Jail Bookings

Description: Number of jail bookings into county jails

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=110

Release Date: Check quarterly (Current dataset: 7/30/2012)

Illinois Department of Transportation

Dataset: Average Annual Daily Traffic

Description: Average annual daily traffic count at points measured by IDOT.

URL2: http://idot.ms2soft.com/tcds/tsearch.asp?loc=ldot&mod=

Release Date: Current

Dataset: Bridges

Description: Bridges with rating and inspection information

URL: http://wrc.dot.il.gov/bridgeinformation/ (Excel data)

   http://gis.dot.illinois.gov/gist2/ (Shapefiles)

Release Date: Check annually (Current dataset: 2012)

Illinois Department of Aging

Dataset: Elder Abuse Offenses

Description: Number of Elder Abuse cases and rate per 100,000 people

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=020

Release Date: Check annually (Current dataset: 1/13/2010)

Illinois Department of Employment Securities

Dataset: Current Employment Statistics Program

Description: Illinois Employment data for the current year by industry

URL: http://www.ides.illinois.gov/page.aspx?item=915

Release Date: Updated monthly. (Current Dataset: 6/27/2013)

Illinois Department of Human Services

Dataset: Temporary Assistance for Needy Families

Description: Average monthly number of children under age 19 receiving TANF grant payments, and rate per 100,000

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=360

Release Date: Check Annually (Current dataset: 4/30/2012)

Illinois Department of Natural Resources

Dataset: Illinois Endangered/Threatened Species

Description: Lists of endangered species

URL: http://www.dnr.illinois.gov/espb/Pages/default.aspx

Release Date: Check Quarterly (Current dataset: 6/2013)

Illinois State Police

Dataset: Attacks against school personnel

Description: # of attacks against school personnel, also as a rate per 100,000 people

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=040

Release Date: Check Annually (Current dataset: 5/6/2011)

Dataset: Crimes against children

Description: # of crimes against children, also as a rate per 100,000 people

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=050

Release Date: Check Annually (Current dataset: 5/6/2011)

Dataset: Domestic Violence Offenses

Description: # of domestic violence offenses, also as a rate per 100,000 people

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=060

Release Date: Check Annually (Current dataset: 5/6/2011)

Dataset: Drug Seizures

Description: Drug seizures in grams. Drug types include Cannabis, Cocaine, Crack Cocaine, Heroin, Methamphetamine, and total.

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=160

Release Date: Check Annually (Current dataset: 7/8/2013)

Dataset: Hate Crimes

Description: # of hate crime offenses, also as a rate per 100,000 people

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=030

Release Date: Check Annually (Current dataset: 5/6/2011)

Dataset: I-UCR Arrests

Description: Illinois Uniform Crime Reports (I-UCR) Violent Index arrests (murder, criminal sexual assault, robbery, and aggravated assault) .

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=220

Release Date: Check Annually (Current dataset: 5/6/2011)

Dataset: I-UCR Drug Arrests

Description: I-UCR Drug Index arrests. Drug Index arrests include Cannabis Control Act violations, Controlled Substance Act violations, Hypodermic Syringes and Needles Act violations, and Drug Paraphernalia Control Act violations.

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=170

Release Date: Check Annually (Current dataset: 5/6/2011)

Dataset: I-UCR Offenses

Description: Illinois Uniform Crime Reports (I-UCR) Violent Index offenses (murder, criminal sexual assault, robbery, and aggravated assault)

URL: http://www.icjia.org/public/sac/index.cfm?metasection=forms&metapage=rawMetadata&k=210

Release Date: Check Annually (Current dataset: 5/6/2011)

Illinois Interactive Report Card

Dataset: Illinois Report Card

Description: Educational data by school district.

URL: http://iirc.niu.edu/State.aspx (NOTE: Data was acquired through a request made to the Illinois Report Card. It is not downloadable.)

Release Date: Check Annually (Current dataset: 1999-2011)

Illinois State Board of Education

Dataset: Before and After School Programs

Description: List of before and after school programs

URL: http://www.isbe.state.il.us/research/htmls/before_after.htm

Release Date: Last updated 2005.

Illinois Department of Public Health

Dataset: IQuery

Description: Large variety of health indicators related to Alcohol, births and deaths, diseases, drugs, emergency room visits, hospitalizations, maternal and newborn, and substance abuse.

URL: http://iquery.illinois.gov/Default.aspx

Release Date: Check annually (Current dataset: 2007-2009)

Dataset: Illinois Behavioral Risk Factor Surveillance System

Description: County level prevalence data for alcohol, arthritis, asthma, cardiovascular, colorectal, demographics, diabetes, STDs, health care utilization, health status, immunizations, injury, nutrition, oral health, physical activity, prostate cancer, quality of life, tobacco, weight control, and women's health.

URL: http://app.idph.state.il.us/brfss/countydata.asp

Release Date: Check annually (Current dataset: 2007-2009)

LOCAL

Comprehensive Annual Financial Reports

Dataset: Comprehensive Annual Financial Reports

Description: CAFRs for regional governments.

URL: n/a

Release Date: Released annually. (Current: 2011, 2012)

Rockford Health Council

Dataset: Healthy Community Survey

Description: Rockford health and wellbeing survey.

URL: http://www.rockfordhealthcouncil.org/RHorg2013/?page_id=1205

Release Date: One time survey. (Current: 2010)

WinGIS

Dataset: Parcels

Description: Winnebago county parcels. Boone County parcels also included (from Boone County GIS Department)

URL: n/a

Release Date: n/a (Current: 2013)

RMAP

Dataset: Air Quality

Description: Rockford Air Quality monitoring data

URL: n/a

Release Date: n/a (Current: 2013)

Winnebago County Clerk

Dataset: Parcel Sales and Assessments, Land Use Codes

Description: Property sales and assessments and their land use in Excel form, keyed using PINs.

URL: n/a

Release Date: n/a

Boone County Clerk

Dataset: Parcel Sales and Assessments, Land Use Codes

Description: Property sales and assessments and their land use in Excel form, keyed using PINs.

URL: n/a

Release Date: n/a

OTHER

CNT

Dataset: CNT household transportation data

Description: Private dataset from CNT including vehicle ownership rates, miles traveled, and annual/monthly cost.

URL: N/A

Release Date: N/A

Economic Profile System-Human Dimensions Toolkit

Dataset: Economic Profile System

Description: .pdf documents containing economic and industry data.

URL: http://headwaterseconomics.org/tools/eps-hdt

Release Date: Check annually (Current: 6/24/2013)

ESRI

Dataset: ESRI Business data

Description: Business and leakage data. This is a paid dataset.

URL: http://www.esri.com/data/esri_data/business-overview/business

Release Date: (Current: 2010)

Dataset: CES data

Description: Database of consumer expenditures. This is a paid dataset.

URL: http://www.esri.com/data/esri_data/spending-overview/consumer-spending

Release Date: Released annually, 2012 data is available. (Current: 2010)

Dataset: ESRI Crime data

Description: Crime indexes and statistics. This is a pad dataset.

URL: http://www.esri.com/data/esri_data/business-overview/crimerisk

Release Date: Released annually, 2012 data is available. (Current: 2010)

Feeding America

Dataset: Food Insecurity

Description: Rates of food insecurity at county level.

URL: http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap.aspx

Release Date: Updates annually (Current: 2011)

Fitzgerald Health Education Associates, Inc (FHEA)

Dataset: FHEA Disparity in Access to Opportunity

Foreclosure-Response.org

Dataset: Metro delinquency rates

Description: Metro level foreclosure rates, prime foreclosure rates, and subprime foreclosure rates.

URL: http://www.foreclosure-response.org/maps_and_data/all_data.html

Release Date: Updated quarterly (Current: 9/2012)

Gallup

Dataset: Gallup U.S. City Wellbeing

Description: Health/wellbeing of cities in U.S.

URL: http://www.gallup.com/poll/145913/City-Wellbeing-Tracking.aspx

Release Date: Updates annually (Current: 2011)

Institute for Health Metrics and Evaluation

Dataset: IHME Life Expectancy

Description: County level life expectancy data by race and sex from 1989-2012

URL: http://www.healthmetricsandevaluation.org/news-events/multimedia/presentation/latest-life-expectancy-estimates-county-reveal-big-differences-n#/data-methods

Release Date: Check annually (Current: April 19, 2012)

Stats America – Innovation Index

Dataset: Innovation Index

Description: County/MSA data showing competitiveness in innovative categories.

URL: http://www.statsamerica.org/innovation/innovation_index/region-select.html

Release Date: Check annually

Bank On

Dataset: Bank On Under/Unbanked Households

Description: National/State/MSA/County/Municipal data for household that underutilize banking services.

URL: http://webtools.joinbankon.org/community/search

Release Date: Check annually (Current: 2013)

Americans for the Arts

Dataset: Locally Collected

LocationOne Information System (LOIS)

Dataset: LOIS Vacant Industrial Sites / Vacant Commercial Sites

Description: List of vacant industrial and commercial sites in Boone and Winnebago counties.

URL: Winnebago: http://www2.locationone.com/%28S%28qkmgdw45as3glr45asa4m245%29%29/PropertySearch.aspx?display=results&section=sites&ssp=&asf=&ht=

(linked from www.rockfordil.com)

Boone: http://www2.locationone.com/%28S%28dbm0xzuflx0rm3yvshanfv55%29%29/PropertySearch.aspx?display=results&section=buildings&ssp=&asf=&ht=

(linked from www.growthdimensions.org)

Release Date: Updated continuously. Check monthly.

National Establishment Time Series

Dataset: NETS database

Description: Database that tracks business establishments over time

URL: http://youreconomy.org/pages/walls.lasso

Release Date: NETS is a paid database. (Current: 2010)

The Urban Institute

Dataset: Home Mortgage Disclosure Act data

Description: Tract level mortgage data.

URL: http://www.metrotrends.org/natdata/hmda/hmda_download.cfm

Release Date: Check annually. (Current: 2010)

US Green Building Council (USBGC)

Dataset: LEED Certification

Description: LEED Certified buildings and their level of certification and stage in the certification process. LEED certified professionals.

URL: http://www.usgbc.org/projects

Release Date: Updated continuously. Check quarterly. (Current: June 2013)

Woods and Poole

Dataset: Woods & Poole

Description: Economic database showing estimates over time.

URL: http://www.woodsandpoole.com/

Release Date: Paid database (Current: 2012)

Leopold Center for Sustainable Agriculture

Dataset: Leopold Center Sustainable Agriculture Food Market Estimator

Description: Estimates for the annual amount of food required and the annual amount of food grown by food group.

URL: http://www.ctre.iastate.edu/marketsize/

Release Date: Check Annually (Current: 2012)

Appendix IV: Engagement/Outreach Timeline

SECTION 1: PRE-GRANT ACTIVITIES

March 3, 2010   Conversation between Steve Ernst of RMAP and John Cressman of RHA about the advance notice of funding availability for the proposed Sustainable Communities Regional Planning Grant program. The parties agreed to share information as it becomes available.

April 8-9, 2010   RMAP staff and other members of the community are invited to join the RHA on field tours of major housing authority development projects in Milwaukee and Chicago. Considerable discussion occurs during the trips about sustainable development and the link between housing, transportation and economic development. During the trip RMAP and RHA staff agree to create a working group with other core partners so that a single, coordinated grant application can be submitted on behalf of the entire region. As a result of this consensus a core group of individuals are selected to meet weekly (more often if needed) to develop a grant application for the Sustainable Communities Regional Planning Grant program. Steve Ernst and Genevieve Borich, along with John Lewis from NIU, agree to become the grant management team, thereby assuming the duties of authoring the grant and providing leadership.

April 14, 2010   RMAP publishes "A Blueprint To a More Sustainable and Dynamic Rockford Region" as part of the adoption of the 2040 Long Range Transportation Plan. The document presents policy statements and high level goals related to sustainable transportation, land use and the environment. The Blueprint becomes one of the foundations of the Sustainable Communities Regional Planning grant application.
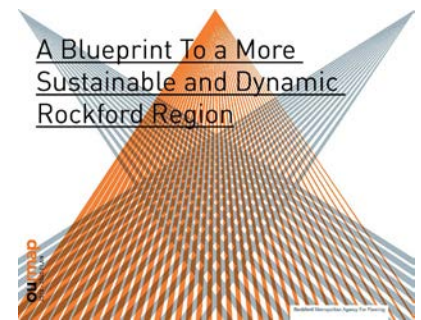
April 27, 2010   Members of the core working group attend "The Great Communities Collaborative: Adapting a New Model for Sustainable Place-Based Investment" at the Metropolitan Planning Council in Chicago. Shelly Poticha is the keynote speaker. RHA, RMAP, RREDD and City members of the group debrief after returning from the event. Genevieve Borich provides considerable research.

Apr-Jun, 2010   Core working group meets and further refines potential grant application research. Vicky Pruitt provides details of the RHA Strategic Plan and how it will fit into the grant application. While the NOFA has not yet been released there is considerable intelligence provided by national organizations such as NARC.

June 24, 2010   NOFA is released. Core working group agrees to meet as often as necessary to produce a grant application by the August 23rd deadline. Both RHA and City of Rockford staff provide considerable housing research developed in the NSP and NSP II programs. Although the NOFA only allows a limited number of attachments to the grant application, several map products from the NSP effort are included.

July 6, 2010   RMAP sends out a "Dear Interested Party" letter announcing the Sustainable Communities program to all potential regional partners covering housing, transportation, environment, economic development, workforce, education and health. By the grant deadline 31 organizations agree by letter or resolution to become a member of the Consortium that is required by the NOFA. All 3 housing authorities agree to become members. Several not-for-profits also agree to join.

Aug 22, 2010   Grant application is submitted. The grant is structured around topical working groups which includes a "Housing & Human Services" committee. Vicky Pruitt of the RHA agrees to chair the committee [Note: Vicky would leave employment at RHA prior to grant award to be replaced by Jodi Stromberg]. A formal Regional Plan for Sustainable Development Steering Committee is required under the NOFA. The RHA Board agrees to appoint a member to the RPSD Steering Committee. Also, although not required under the NOFA, a formal quality assurance / quality control (QA/QC) panel is placed into the governing structure of the RPSD. John Cressman, Executive Director the RHA, agrees

to chair the panel. Mr. Cressman's work while a member of the Clinton White House and his staff work at HUD headquarters in Washington DC places housing in a strong position within the local sustainability process.

Oct 14, 2010 Sustainable Communities grant awards are announced. A press event at the Rockford Housing Authority to announce the grant award is scheduled, but does not occur due to scheduling conflicts with elected officials. The partners decide to wait to have an announcement ceremony until the actual Cooperative Agreement with HUD is signed. The press event occurs as part of the February 2011 Sustainability Summit at Northern Illinois University.

I Guest column

$600K will help Rockford develop smarter regional planning

By Shaun Donovan
SPECIAL TO THE REGISTER STAR

Although the economic recession has hit hard all across America, people in rural regions have faced a special challenge.

In areas with smaller populations, there is often a great distance between where people live and where they work. Workers who lose their jobs can have difficulty finding another one within commuting distance. Rural residents also must travel farther to school, stores and doctor's offices.

Rural companies also face unique challenges. When business owners want to expand and create jobs, they can have a difficult time finding communities with sufficient broadband or infrastructure support.

As a result, rural communities can be slower to recover from recession, and commuting times get longer and longer.

The Obama administration believes that there's a better way. That's why we created the Sustainable Communities Regional Planning Grant Program, which will help regions increase economic competitiveness by connecting housing with jobs, quality schools and transportation.

When we announced the program earlier this year, we were inundated with applications from every state and two territories — from central cities to rural areas and tribal governments. When we opened the process, we defined small regions as 500,000 or fewer residents.

However, after listening to the concerns of potential applicants, we created a new category for regions with 200,000 or fewer residents. In the end, more than half of the applications came from smaller communities.

Despite the stiff competition, I'm pleased to announce that Rockford has won $600,000 to help develop a long-term blueprint for smarter development and regional planning.

We know that sustainable communities planning works. It's not a new idea: Small and rural regions have been benefiting from smart planning for years.

One example is Albemarle County, Va., an area surrounding Charlottesville, boasting just fewer than 100,000 residents. The residents of picturesque Albemarle County wanted policies that promoted economic growth without endangering the rural character and natural beauty the area is known for.

This was accomplished by creating specific, concentrated areas where infrastructure already exists, while protecting the area's historic and scenic areas from overdevelopment. The result is a growing region where new homes, offices, schools and stores complement, rather than compete with, the area's existing character, all connected by accessible infrastructure.

Of course, no two regions are alike. What worked in Albemarle County, Va., may not work in Rockford. That's why we threw away the old Washington playbook of dictating exactly how the grant should be used. Each recipient has broad discretion to pursue a plan that makes sense in the context of local needs.

Although each region's plans are unique, they are underpinned by common values. Planning our communities smarter means parents will spend less time driving and more time with their children; more families will live in safe, stable communities near good schools and jobs; more kids will be healthy and fit; and more businesses will have access to the capital and talent they need to grow and prosper.

As Terry Mitchell, former chair of the Austin (Texas) Real Estate Council, puts it, regions that embrace sustainable communities "will have a built-in competitive edge in attracting jobs and private investment."

None of this work will be completed overnight. But by acting now, we can create good jobs in Rockford today — and lay the foundation for safe, stable communities and sustainable economic prosperity for generations to come.

Shaun Donovan is secretary of the U.S. Department of Housing and Urban Development.

Oct-Dec 2010 The local partners concentrate on responding to HUD on the technical work products of the grant, such as the workplan, logic model, indirect cost rate, terms and conditions, and budget modifications. Outreach is minimal during the holiday season.

Jan-Feb 2011 The grant management team schedule and deliver presentations on Sustainable Communities to many of the boards, councils and elected officials of the agencies being considered for membership in the Consortium. Approximately 20 presentations are made. The outreach includes an invitation to join all of the partners for a regional Sustainability Summit to be held at the end of February.

Jan 26, 2011 The grant management team attends a press event at the Rockford Housing Authority where the RHA announces plans for the modernization, de-densification and major upgrade of the Jane Addams and Brewington Oaks housing authority developments. Significant discussion with housing authority residents, housing authority board members, elected officials and the media occurs around the idea of "raising the bar" of public housing from the current "clean, safe and sanitary" housing motto to a sustainable communities' model consistent with the regional planning grant and the desire to return the neighborhoods to traditional core values.

Jan 27, 2011 The grant management team makes a formal presentation to the RHA Board during their regular January monthly board meeting. The RPSD process is presented and discussion centers on public housing authority strategic goals and how the RPSD process will serve those strategic action steps. Board consensus reaffirms the RHA desire to be a core member of the Consortium.

Feb 26, 2011 The Regional Sustainability Summit is held at the Northern Illinois University campus in Rockford. Over 125 people attend the 4-hour summit on a Saturday morning. Staff and board members of the 3 housing authorities are present at the summit. The event includes two keynote speakers, Randy Blankenhorn from CMAP in Chicago and Charlotte Kahn of the Boston Indicators Project. Public housing is highlighted in both presentations, and discussion during the break launches the regional civic engagement that will occur over the 36-month execution period of the grant. A press conference is held during the summit to highlight the $600,000 Sustainable Communities grant award from HUD.

Clockwise from bottom left:

Winnebago County Chairman Scott Christiansen addresses the media; Former Alderman Victory Bell chats with a summit attendee; Newspaper reporter Brian Leaf visits with summit attendees; Summit attendees enjoy conversation before the start of the summit; RMAP employee Chris Washington registers summit attendees; Summit attendees pose for a group photo inside the auditorium; Rockford Mayor Larry Morrissey introduces the Vital Signs project for regional sustainability.

Clockwise from bottom left:

NIU Assistant Vice President Rena Cotsones welcomes the summit attendees to the NIU Rockford campus; CMAP Executive Director Randy Blankenhorn explains the Chicago experience to develop GoTo 2040, a regional sustainability plan; Boston Indicators Project Director Charlotte Kahn expains the importance of indicators and metrics in sustainability; Boone County Chairman Bob Walberg addresses the media; Vital Signs Project Manager John Lewis gives an historical perspective of regional planning efforts; RREDD Executive Director Genevieve Borich explains the Sustainability goals, objectives, and process; RMAP Executive Director Steve Ernst closes the summit with some provacative questions.

SECTION 2: VITAL SIGNS OUTREACH TO COMMUNITY GROUPS, BOARDS, COMMISSIONS AND PARTNERS

A series of presentations were given to partner organizations that were (or were considering being) part of the Consortium in 2011. The presentations provided some insight on future civic engagement and the Vital Signs work plan. In 2012 and 2013 there were presentations given to update the Vital Signs project and to solicit input on future implementation.

Mar 22, 2011   Sustainability Presentation at a Renewable Energy event at Katie's Cup.

Apr 14, 2011   Sustainability Presentation to Next Rockford , the local GenX / GenY future leaders organization.

Apr 15, 2011   Sustainability Presentation to Boone County Housing Authority Board

Apr 21, 2011   Sustainability Presentation to Winnebago County Housing Authority Board

May 3, 2011   Sustainability Presentation to Workforce Investment Board

May 5, 2011   Sustainability Presentation to RRStar Editorial Board

May 24, 2011   Sustainability Consortium starts to turn in partner forms

Jun 1, 2011   Sustainability Presentation to Rockford Health Council Board

Jul 6, 2011   Sustainability Presentation to United Way Board

Oct 6, 2011   Sustainability Presentation to Beyond Charity Chamber Group

Jan 9, 2012   Sustainability Presentation to Operation Respect Rock River Valley concerning peace indicators

Jan 19, 2012   Sustainability Presentation to Green Drinks at Cliffbreakers

Feb 16, 2012   Sustainability Presentation to Downtown Rotary

Jun 22, 2012   Sustainability Presentation to Boone County Farmland Preservation Commission

Jan 8, 2013   Sustainability Presentation to RAEDC Business Attraction Committee

Jan 10, 2013   Sustainability Presentation to Green Drinks Environmental Coalition

Jan 30, 2013   Sustainability Presentation to Four Rivers Environmental Coalition

Feb 1, 2013   Sustainability Presentation to Natural Land Institute

Feb 6, 2013   Sustainability Presentation to WNIJ Radio

Mar 20, 2013   Sustainability Presentation to HMIS Committee

Mar 21, 2013   Sustainability Presentation to Rockford Health Council

Apr 11, 2013   Sustainability Presentation to HMIS Committee

Apr 11, 2013   Sustainability Presentation to Village of Poplar Grove Staff

Apr 15, 2013   Sustainability Presentation to Latino Coalition-La Voz Latina

Apr 18, 2013   Sustainability Presentation to Westside Business Association

May 8, 2013   Sustainability Presentation to Rockford Public Library Staff

May 13, 2013   Sustainability Presentation to Village of Poplar Grove Board

May 15, 2013   Sustainability Presentation to Miracle Mile Business Association

May 15, 2013   Sustainability Presentation to NIU/Regional Economic Development Partners

May 20, 2013   Sustainability Presentation to Rockford City Council-P&D Committee

May 21, 2013   Sustainability Presentation to Civic Design Advisory Group

May 21, 2013   Sustainability Presentation to Rockford Association of Realtors-GA Committee

May 21, 2013   Sustainability Presentation to Belvidere-Boone County Planning Commission

May 29, 2013   Sustainability Presentation to Harlem School District-Critical Conversations

Jun 4, 2013   Sustainability Presentation to Workforce Investment Board

Jun 4, 2013   Sustainability Presentation to United Way Luncheon

Jun 5, 2013   Sustainability Presentation to Rockford Health Council

Jun 7, 2013   Sustainability Presentation to EEDEN Network

Jun 13, 2013   Sustainability Presentation to Rockford Park District Quarterly Managers

Jun 20, 2013   Sustainability Presentation to Village of Machesney Park

Jun 20, 2013   Sustainability Presentation to Village of Timberlane Board

Jun 21, 2013   Sustainability Presentation to Rockford City Council Saturday Retreat

Jun 27, 2013   Sustainability Presentation to Belvidere Chamber of Commerce

Jul 16, 2013   Sustainability Presentation to Rockford East/Cherry Valley Rotary

Jul 23, 2013   Sustainability Presentation to Rockford Park District Board

Jul 30, 2013   Sustainability Presentation to RAEDC Regional Business Expo

Aug 6, 2013   Sustainability Presentation to Workforce Investment Board

Aug 6, 2013   Sustainability Presentation to National Night Out

Aug 9, 2013   Sustainability Presentation to Rockford Chamber Government Affairs Council

Aug 13, 2013   Sustainability Presentation to Neighborhood Network Outreach Meeting

Sep 12, 2013   Sustainability Presentation to Next Rockford Supporting Transform Rockford

Inaugural Steering Team Meeting
Oct 12, 2011

2nd Steering Team Meeting
Nov 8, 2011

3rd Steering Team Meeting
Feb 8, 2012

Governance Subcommittee Meeting
Apr 12, 2012

SECTION 3: VITAL SIGNS OUTREACH TO FORMAL STEERING & TOPIC TEAM COMMITTEES

Jul-Oct, 2011   Community Leader Snowball Interviews

Oct 12, 2011   Inaugural Steering Team Meeting at NIU

Nov 8, 2011   2nd Steering Team Meeting at NIU

Nov 16, 2011   RMAP Certification Review. HUD attends for the 1st time. Sustainability is considered as a prudent topic for MPOs.

Feb 8, 2012   3rd Steering Team Meeting at RAAR to discuss Regional Governance. The WEAVE product is shown publicly for the first time showcasing Social indicators. A Governance Subcommittee is established to further refine the recommended governance model for the RPSD.

Vital Signs Data Training Day #2
Jun 26, 2013

Topic Team Meeting - Social #1A
Jul 13, 2013

Vital Signs Open Houses
Oct, 2013

Apr 12, 2012	Governance Subcommittee of the Steering Team meets at the Planning & Design Center to develop consensus on the regional governance model for the RPSD.
Sep 18, 2012	Steering Committee Meeting at Regional Center for Planning & Design
Oct 10, 2012	Steering Committee meeting at RAAR
Apr 10, 2013	Vital Signs Data Training Day #1
Jun 26, 2013	Vital Signs Steering Team Meeting
Jun 26, 2013	Vital Signs Data Training Day #2
Jul 16, 2013	Topic Team Meeting #1 – Social
Jul 17, 2013	Topic Team Meeting #1 - Environmental
Jul 18, 2013	Topic Team Meeting #1 - Economic
Jul 30, 2013	Topic Team Meeting – Social #1A
Aug 20, 2013	Topic Team Meeting - Social
Aug 21, 2013	Topic Team Meeting - Environmental
Aug 22, 2013	Topic Team Meeting - Economic
Aug 23, 2013	Topic Team Meeting - Social
Sep 19, 2013	Topic Team Meeting - Economic
Sep, 30 2013	Topic Team Meeting - Environmental
Oct 1, 2013	Topic Team Meeting - Economic
Oct 1, 2013	Topic Team Meeting – Social
Oct 18, 2013	Vitals Signs Open House
Oct 23, 2013	Vital Signs Data Training Day #3

SECTION 4: VITAL SIGNS MEDIA OUTREACH

Feb 23, 2011   The grant management team and elected officials from the RMAP Policy Committee participate in a meeting with the Editorial Board of the Rockford Register Star. A portion of the

Correlation between serious crimes, housing vouchers in Rockford

The city of Rockford and the Rockford Housing Authority say the heaviest concentrations of housing voucher recipients mirror the locations of some of the city's most serious crimes reported in 2010. The map comparisons below include the beat areas patrolled by the Rockford Police Department.

Offenses, by density*: ● HIGH ● MODERATE ● LOW   • Locations and concentration of voucher recipients

* Color concentrations depict the locations of serious crimes, such as murder, simple assault, aggravated assault, robbery, burglary, weapons law violations, arson and vehicle thefts.
Sources: City of Rockford, Winnebago County Housing Authority and Rockford Police Department   ROCKFORD REGISTER STAR

discussion centers on Section 8 vouchers and how they are currently being managed in the region. This discussion carries over to a front page article the next day, as well as sets the stage for discussion at the Sustainability Summit.

Feb 24, 2011   The Rockford Register Star runs a public housing related article that references research using sustainability indicators, a major deliverable envisioned in the RPSD process. (See bottom of page 234)

Feb 10, 2013   The 1st Installment of "Poor Town" in the RRStar, titled "Life on Poverty's Borders". The article is based on early Vital Signs work on sustainability indicators and examines the issue of

concentrated poverty.

Feb 25, 2013   A follow-up article is released in the Rockford Register Star examining self-sufficiency. Vital Signs recommends a "self-sufficiency standard" higher than full-time employment at minimum wage.

Mar 17, 2013   RRStar runs 2nd Poor Town article "The Wrong Side of Town". District 11 (RCAP Area) shows as an "outlier" in the Vital Signs analysis of poverty.

Mar 24, 2013   RRStar editorial on the Wrong Side of Town article. The editorial points to the history of public housing and lack of investment in the west side of Rockford over the previous 4-5 decades.

May 19, 2013   RRStar runs 3rd Poor Town article "Life On The Edge". The article examines struggles of the elderly in the region based on the release of Volume 2 of the current conditions analysis.

Oct 13, 2013   RRStar runs 4th Poor Town article, "Paths out of Poverty"

SECTION 5: VITAL SIGNS PUBLICATIONS AND DOCUMENTATION

Feb 15, 2013   Vital Signs releases Volume 1 of 3 of the "Current Condition Reports". Volume 1 concentrates on the Social topics of sustainability (Housing, Safety, Civic Vitality, Cultural Life, Health & Wellness, and Food).

Apr 26, 2013   Vital Signs releases Volume 2 of 3 of the "Current Condition Reports". Volume 2 concentrates on the Economic topics of sustainability (Transportation, Education, Economic Development, Technology and Energy).

Jul 12, 2013   Vital Signs releases Volume 3 of 3 of the "Current Condition Reports". Volume 3 concentrates on the Environmental topics of sustainability (Water, Land, Built Infrastructure, Biodiversity and Waste).
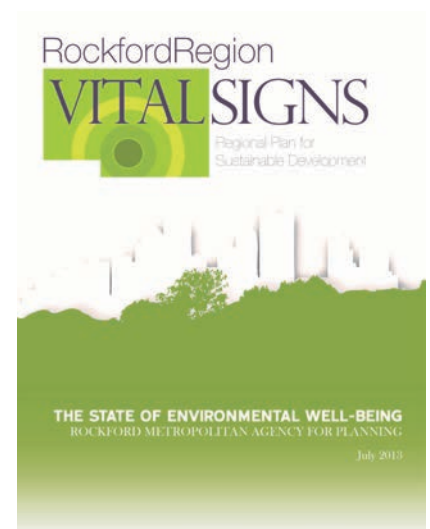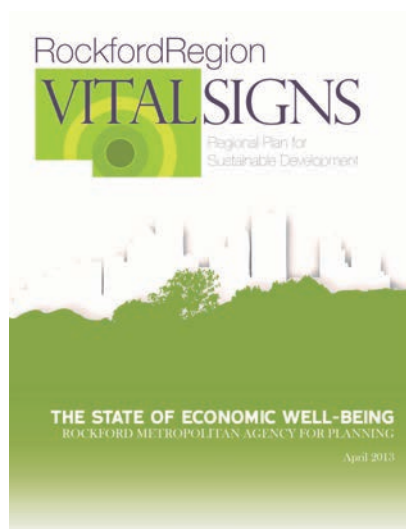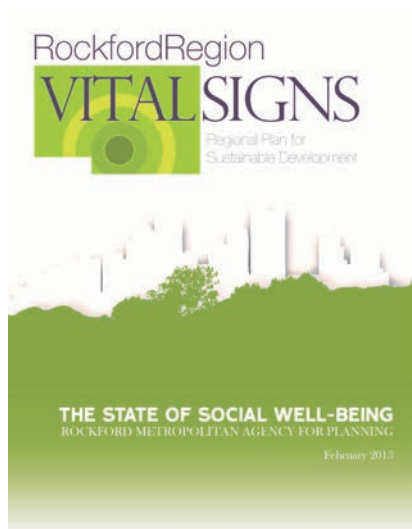
SECTION 6: VITAL SIGNS OUTREACH ON FAIR HOUSING

Nov 9, 2012   Placed Based Forum with HUD Region 5 at RMAP. 10 folks from HUD attend.

Mar 13, 2013   Fair Housing Engagement Session-Elected

Mar 14, 2013   Fair Housing Engagement Session-Boone

Mar 14, 2013   Fair Housing Engagement Session-Winnebago

A series of engagement sessions are held to solicit input on issues related to

fair housing. The sessions are moderated by James Gillylen of the J-Quad Planning Group. J-Quad is a consultant to Vital Signs and authors the Fair Housing Equity Assessment (FHEA), the Regional Analysis of Impediments to Fair Housing Choice (RAI), and a De-Concentration Plan for the Rockford Housing Authority.

Jul 10, 2013   The IL Dept. of Human Rights hosts Fair Housing Training at the Regional center for Planning & Design.

Fair Housing Engagement Session
Mar 14, 2013

SECTION 7: PARTNER EVENTS AND OUTREACH

Dec 1, 2011   RPS 205 holds a Leadership Luncheon to announce the Readiness Rocks initiative. Vital Signs becomes a partner to RPS 205 for education.

Feb 2, 2012   The Rockford Health Council hosts "Health Equity: Deepening the Dialogue". The keynote speech is delivered by Dr. Terry Mason, Chief Medical Officer at the Cook County Health and Hospital Systems. The events draws more than 150 people and highlights the 2010 Community Health Study which shows that many individuals in the community experience poor health outcomes due to their socioeconomic status. The event encourages community-wide awareness of health equity issues and the development of indicators for the social determinants of health.

Peace Roundtable
Aug 28, 2013

Jan 2, 2013   Housing Foreclosure Grant Group

Jan 14, 2013   Housing Foreclosure Grant Group

Jan 16, 2013   IL Open Technology Challenge

Mar 6, 2013   HMIS vendor MPOWR

May 1, 2013   FEMA Flood Risk Open House

Aug 10, 2013   Purpose Built Communities Meeting

Aug 28, 2013   Operation Respect Rock River Valley hosts an Executive Roundtable on Peace.

Nov 14, 2013   Transformation Rockford Engagement Summit at Coronado Theater.

Transformation Rockford Session
Nov 14, 2013

COMMUNITY MEETING 1

Introduce planning process to neighborhood residents, get initial insights, and secure their future involvement and help in getting more people to future meetings.

COMMUNITY MEETING 2

Recap first community meeting, discuss issues, assets and needs in breakout sessions and begin preliminary visioning process.

COMMUNITY MEETING 3

To establish a consensus-based vision to guide Planning for the Ellis Heights neighborhood based on the issues, needs and strategic directions identified at previous Community and Task Force meetings.

COMMUNITY MEETING 4

To establish a consensus-based vision to guide Planning for the Ellis Heights neighborhood based on the issues, needs and strategic directions identified at previous Community and Task Force meetings. This meeting was intended to reach residents of the Fairgrounds Valley homes that had been previously unengaged in the Planning process.

COMMUNITY MEETING 5

To review project proposals suggested at previous community meetings, service providers and other stakeholder groups and to identify the level of support within the Ellis Heights neighborhood. Project proposals with significant community support will be further developed and refined for inclusion in the Ellis Heights Choice Neighborhood Plan.

EDEEN

Economic development, education & entrepreneurship network formed by Mayor Morrissey - West State corridor added as "focus" area for commercial district & neighborhood "strategic doing" effort.

RESOURCE FAIR

An evening resource fair intended to connect residents to educational, service and employment opportunities.

2012

| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |

LEADERSHIP SESSION

Introduced HUD project team to the Ellis Heights/Fairgrounds neighborhood and discussed the Planning process that will be used to develop the Plan.

TASK FORCE MEETING 3

Recap the issues and project ideas identified during the prior Task Force and Community Meetings, introduce the Planning framework for physical improvements, and discuss the preliminary strategic initiatives that have emerged from the previous discussions.

WORKING GROUP MEETINGS

Smaller meetings focused on individual Plan Initiatives.

RAVEN

Rockford Area Violence Elimination Network - focus on Ellis Heights. Pilot group for re-entry housing supportive services.

TASK FORCE MEETING 1

Introduce Planning process to neighborhood residents, get initial insights, and secure their future involvement and help in getting more people to future meetings.

TASK FORCE MEETING 2

Recap first Task Force meeting, discuss issues, assets and needs of the community and begin preliminary visioning process.

TASK FORCE MEETING 4

To report on the results of Community Meeting 3, the working vision that emerged from that session and to begin to organize working groups around the six identified strategic initiatives – 1) education, 2) focus on youth, 3) income and jobs, 4) engagement/ capacity building, 5) safe, healthy neighborhood, and 6) physical improvements.

TASK FORCE MEETING 5

To review the summary results complied from the three working group meetings and to present the housing concepts and neighborhood revitalization Plan improvement projects developed to date, for feedback and refinement prior to Community Meeting 5.

Members of the Planning team on a neighborhood bus tour led by local residents.

PLANNING TIMELINE

ETSY PARTNERSHIP

Entered into LOI to launch partnership in entrepreneurship curriculum & training.

UNIVERSITY OF ILLINOIS RESIDENT MEETING

Presentations of representations of visions for the Ellis Heights Neighborhood.

NEW MIX CRAFT EVENT

To launch the Etsy pilot program and training of up to 30 people to prepare their handmade goods and selling on Etsy.com.

COMMUNITY MEETING 6

Included a series of community open houses to present the Draft Transformation Plan.

FUN SAFE SUMMER

Multi-agency, weekly summer long effort to provide safe activities for families & youth.

COMMUNITY MEETING 7

Presentation of the Final Transformation Plan to the community.

ACE HEALTH FAIR

University of Illinois students conduct a Health Fair at Fairgrounds Valley.

FAIR HOUSING ENGAGEMENT

As part of the Vital Signs Project RMAP gathered input on issues of Fair Housing and Impediments to Fair Housing Choice.

NEW MIX TREASURE HUNT

A survey designed to uncover the creative skills and assets of the neighborhood.

ELLIS HEIGHTS BLOCK PARTY

500 people attended this event to celebrate groundbreaking of the West State Street Corridor Project.

CHOICE NEIGHBORHOODS IMPLEMENTATION GRANT APPLICATION

Preparation and submittal of an Implementation Grant Application to HUD

FORECLOSURE MITIGATION PROJECT

The grant funding received under the National Foreclosure Settlement for Housing Counseling and Community Revitalization.

2013

| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |

NIRP

Northern Illinois Regional Partnership - formed to promote regional solutions for neighborhood stabilization working to address foreclosure.

FIRST RAVEN PAROLEE CALL IN

Established to address re-entry concerns & reduce recidivism.

ELLIS HEIGHTS FATHER'S DAY EVENT

The event sponsored by the RHA attracted roughly 400 participants.

INTERNATIONAL DAY OF PEACE

Planning events and workshop to build peace and bridge inequalities Includes a special focus on Ellis Heights Area.

1ST ETSY GRADUATING CLASS

Etsy 4 week curriculum enabling graduates to market and sell their products through the Etsy platform.

UNIVERSITY OF ILLINOIS SITE VISIT / RESIDENT MEETING

Architecture students from the U of Illinois' Behavior and Environment class visit Ellis Heights to meet with local residents in order to kick off a design studio focused on detailing specific elements of the Choice Neighborhoods Vision.

UNIVERSITY OF ILLINOIS MIDTERM REVIEW SESSION

Review, critique and development of specific design concepts to be incorporated into the Transformation Plan.

COMMUNITY DEVELOPMENT TRAINING

Comprehensive Community Development Training session for representatives of EDEEN and others in Rockford.

FAIRGROUNDS VALLEY NEEDS ASSESSMENT

The needs assessment will be used as a tool in developing the relocation Plan and housing Plan for Fairgrounds Valley residents.

TRANSFORM ROCKFORD

Regional initiative launches with 1,300 residents, including many Choice Neighborhoods participants; televised to thousands of others.

Task Force and Community Meetings were important to the creation of the Plan.
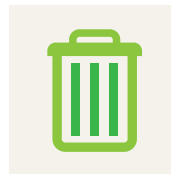
Transportation

Energy

Built
Environment

Housing

Education

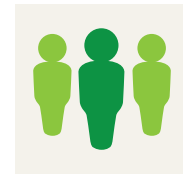Waste
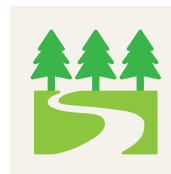
Biodiversity

Civic Vitality
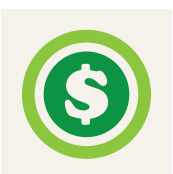
ourmap
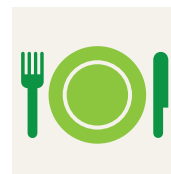
Rockford Metropolitan Agency For Planning

Health

Culture

Land

Water

Economic
Development

Technology

Food

Safety