# **Objectives:**

- 1. To improve coordination between education, workforce development and economic development entities to ensure that Kane County has a highly skilled and competitive workforce.
- 2. To continue growing Kane County's industry clusters and expanding its diverse economy in order to spur innovation, sustainability, and economic prosperity.
- 3. To create jobs and increase local food production by encouraging and expanding agriculture related businesses throughout Kane County.
- 4. To maintain and strengthen the long-term economic viability of Randall Road.
- 5. To take advantage of Kane County's existing telecommunications infrastructure, specifically its fiber optic cables, to attract new investment into Kane County and to continue strengthening the County's telecommunications infrastructure in the future.
- 6. To maintain and improve the personal health of residents and the workforce to reduce healthcare expenditures and increase workplace productivity.
- 7. To encourage mixed use land use patterns and transit opportunities that reduce commute times and locate small business opportunities and employment centers in close proximity to diverse and affordable housing.
- 8. To promote environmentally responsible and sustainable business practices and industrial operations.

# Chapter Focus

The relationship between economic prosperity and healthy communities has become unmistakable in the current economic climate. Demographic changes and economic trends point to a population becoming increasingly interested in living in areas that are more compact, walkable and that offer convenient transportation options. Depending on how our communities adjust to these changes, businesses and industries will either stay and prosper; or relocate or close. New job creating business will be more likely to locate in our communities if they are supportive to the social, housing and health needs of their workforce and customers. The places that will be most successful in the future economy will be those that can adapt and accommodate the desires of tomorrow's residents and businesses. Not only will Kane County and its municipalities need to provide healthy communities for people to live and work, but they will also need to be proactive and innovative in the types of assistance that they provide to local businesses. Successful communities will be able to find a more effective and efficient approach to leveraging existing resources such as tax credits, infrastructure improvements, loans, workforce development programs and technical assistance to create and support a thriving economic climate.

This chapter examines economic prosperity in relation to:

- The Region
- Healthy Community Design
- Community Health
- Industry Clusters
- Communications Infrastructure
- The Green Economy
- Agribusiness

# **Economic Prosperity in the Region**

The GO TO 2040 Plan developed for our region and adopted by the Chicago Metropolitan Agency for Planning (CMAP) in 2010 provides regional direction related to economic prosperity in the following areas:<sup>1</sup>

# Livable Communities (Land Use and Housing)

"The region's development over the last several decades has resulted in a pattern of land use that is not sustainable. Development in the last half of the 20th Century has overall been a story of outward expansion, consuming vast amounts of land and requiring huge investments in water, wastewater, and transportation infrastructure."

#### Human Capital (Education, Workforce Development and Economic Innovation)

"The quality of our region's labor force is crucial for sustaining economic prosperity. Increasingly, job growth relies on the availability of well-educated, skilled workers for knowledge-based industries."

# Efficient Governance (Tax Policy, Coordinated Investments)

"Now more than ever, taxpayers expect efficiency and transparency when governments invest their limited resources. To maximize the benefits that residents of our seven counties see from these public investments, government agencies across our region need to coordinate decisions and investments strategically."

# Regional Mobility (Investment in Transportation, Transit and Freight Networks)

"A modern transportation system is indispensable for our region's future prosperity. To sustain our economy and quality of life, residents must be able to travel quickly and easily around our region so they can choose from a wide variety of jobs and communities in which to live. Businesses must be able to count on the timely delivery of their goods."

Our entire region must re-evaluate where and how new development is approved and how to better use and improve our existing transportation and other infrastructure investments that support economic prosperity. While Kane County is integrally connected to the regional economy, the majority of the critical decisions that will affect the needed changes will happen at the local level.

# Economic Prosperity and Healthy Community Design

<sup>&</sup>lt;sup>1</sup> Chicago Metropolitan Agency for Planning. 2010. GO TO 2040 Plan.

Communities that are characterized by healthy community design (Figure 79) and smart growth principles (Figure 80) are highly inclined to have significant monetary benefits for both home/business owners and the government. For instance, smart growth strategies have the potential to save a substantial amount of money in infrastructure costs. In 2002 the Institute for Housing America estimated that smart growth strategies could save \$250 billion in infrastructure costs nationwide over the next 25 years.<sup>2</sup> This savings is significant when you consider that the federal government estimates that it will take two trillion dollars just to replace decaying infrastructure<sup>3</sup>. With such significant costs associated with just maintaining our existing infrastructure, it is imperative that any new infrastructure construction is done in a cost effective and sustainable manner that contributes to Kane County's economic prosperity.

#### Figure 79



- provide an appealing, safe, and comfortable environment for walking and biking
- Providing transit services that are within walking distance of homes, businesses and other facilities

# Figure 80<sup>4</sup>:

## **Ten Principles of Smart Growth**

- 1. Mix land uses
- 2. Take advantage of compact building design
- Create a range of housing opportunities and choices
  Create walkable neighborhoods
- 5. Foster distinctive, attractive communities with a strong sense of place
- 6. Preserve open space, farmland, natural beauty and critical environmental areas
- 7. Strengthen and direct development towards existing

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This will require careful evaluation of new infrastructure projects on the urban fringe, where costs are often much higher than they are for infrastructure projects in existing communities. This is evidenced by a recent study conducted by the Florida Department of Communal Affairs, which found that it cost twice as much to serve conventional suburban development as it did to serve a house closer to existing job centers.<sup>5</sup> Redirecting infrastructure towards existing communities is not only less expensive, but also helps revitalize those communities, aiding in the development of more compact, walkable and transit oriented communities. These types of communities will help to drive down the high transportation costs that are incurred by individuals by providing alternative means of transportation. The US Department of Labor has shown that annual household spending on transportation now equals annual household spending on rent/mortgage (about 18.7% of total spending).<sup>6</sup> By providing individuals with the option to complete some of their daily activities by walking, biking or taking transit, a portion of their transportation spending is freed up to be diverted into the local economy to be spent in other ways.

Communities that implement smart growth principles often realize appreciation of land values. Conversely, communities that lack smart growth features are often distinguished by high rates of vacancy, which in turn hurt surrounding property values. A September 2011 study on the impact of vacant homes and foreclosed properties on surrounding property values found that if a property is foreclosed and either vacant or tax delinquent, the value of properties within 500 feet of that home decline by 7 to 8% - the impact rises to 9.6% if the home is foreclosed, vacant and tax delinquent.<sup>7</sup>

The economic impact of smart growth on individual property value is not limited to preventing the depreciation of property value. In a 2010 report on smart growth, researchers found that in 80% of cases, housing units in smart growth developments sold for 13% higher prices per square foot than housing units in traditional sprawl development.<sup>8</sup> Homes within walkable neighborhoods have also been found to appreciate in value. As previously stated, being within walking distance of amenities is a major point of importance amongst current homebuyers. Currently, one of the

<sup>&</sup>lt;sup>5</sup> Goldberg, David. Summer 2011. "A Prescription for Fiscal Fitness? Smart Growth and the Municipal Bottom Line." On Common Ground.

<sup>&</sup>lt;sup>6</sup> Smart Growth America. http://www.smartgrowthamerica.org/economy.html

<sup>&</sup>lt;sup>7</sup> Whitaker, Stephan and Fitzpatrick IV, Thomas J. September 2011. "The Impact of Vacant, Tax-Delinquent and Foreclosed Property on Sales Prices of Neighboring Homes." Federal Reserve Bank of Cleveland.

<sup>&</sup>lt;sup>8</sup> Market Acceptance of Smart Growth. February 2010. US EPA. 231-R-10-001.

most common ways to measure the walkability of a neighborhood is through Walk Score, a free online tool that measures the straight-line distance to the nearest destination in each of 13 categories and assesses a neighborhood a score from 1-100 (the higher the score, the more walkable a particular neighborhood is). In a recent study by Joseph Cortright on the relationship between Walk Score and home prices in US cities, it was found that in a typical metropolitan area each one point increase in Walk Score was associated with \$700-\$3000 increase in home value. Generally, it was found that neighborhoods with high Walk Scores had home values that were \$10,000-\$30,000 higher than other neighborhoods.<sup>9</sup> Additionally, it has been found that properties that are located near transit stops often realize increases in property value as well. Studies completed in two separate CA counties (Santa Clara<sup>10</sup> and San Diego<sup>11</sup>) revealed that rail-transit services confer appreciable land-value benefits for residential and commercial properties that are located near rail transit stations. In some instances, it was shown that commercial land was worth more than 120% more if it was located within a 1/4 mile of a rail transit station.

Finally, neighborhoods characterized by smart growth have been found to have a significant impact on the revenue generated through local taxes. In two separate studies performed by Minicozzi in 2009 in North Carolina and Florida, it was found that mixed-use developments garnered significantly more tax revenue than any other land use, including traditional big box retail.<sup>12</sup> In fact, in Asheville it was found that one acre of moderate high-rise mixed use can generate more taxes for a county (including sales tax and property tax) than a 21 acre Super Wal-Mart, a 73 acre mall and a 60 acre big-box power center combined. That is a substantial benefit for a property that takes up very little space. While a moderate high-rise mixed-use building may be applicable to limited areas in Kane County, such as the Randall / Orchard Road Bus Rapid Transit (BRT) Corridor, the lesson learned hear is clear – mixed-use developments have the potential to significantly increase the tax revenue for local governments.

Like the rest of the economy, the retail market has taken a big hit over the last few years. In 2010, retail buildings had a national vacancy rate of 13%. According to the National Association of Realtors, "Today the most successful retail centers are those that encourage people to spend more time and visit with more frequency. Whether they spend no money or as much as possible, people beget people."<sup>13</sup> This sentiment was furthered by a 2010 presentation by S.B. Friedman on the future of the retail market in metropolitan Chicago which concluded that the retail markets with the best future potential were: 1) Supercenters and warehouse clubs offering "one stop shopping and value", 2) Retailers that offering shopping for convenience and speed and 3) Downtowns and lifestyle centers that offer a unique shopping experience.<sup>14</sup> As mixed-use compact development increasing becomes a way of life, individuals will come to expect more from their shopping experience. In the future, successful retailers will find a way to offer customers a unique shopping experience that encourages repeat and word of mouth business.

After experiencing years of decline, office space in traditional downtowns is beginning to once again attract business owners. According to Reis economist Calanog, "the nationwide office vacancy rate —which has been the highest in 17 years — is finally starting to inch down slowly, at 17.5 percent for the first quarter of 2011, down from 17.6 percent the previous quarter, and the

<sup>&</sup>lt;sup>9</sup> Cortright, Joseph. 2009. "Walking the Walk: How Walkability Increases Home Prices in U.S. Cities." CEOs for Cities. <sup>10</sup> Cervero, Robert and Duncan, Michael. June 2001. Rail Transit's Value-Added: Effects of Proximity to Light and

Commercial Rail Transit on Commercial Land Values in Santa Clara County, CA." Urban Land Institute. <sup>11</sup> Cervero, Robert and Duncan, Michael. June 2002. "Land Value Impacts of Rail Transit Services in San Diego County." Urban Land Institute.

Minicozzi, Joseph. "The Smart Math of Mixed Use Development." January 2012. Planitizen.com.

<sup>&</sup>lt;sup>13</sup> Filisko, G.M. Summer 2011. "What's on Deck for Retail Development?" On Common Ground.

<sup>&</sup>lt;sup>14</sup> S.B. Friedman & Company; APA Metro Section. October 14, 2010. "Planning for the Recovery."

first decline since the third quarter of 2008." While lower prices in traditional downtowns may be driving businesses to relocate in the short term, many office experts feel that shorter commutes, quality housing and neighborhood amenities will continue to drive this trend long into the future. John Propp, a commercial real estate expert, credited Denver's recent office renaissance to "the downtown's revitalization, its emphasis on parks, transit, bike and car-sharing programs, and its LEED (Leadership in Energy and Environmental Design) certified housing [that] have made the central city inviting to companies." The relocation of businesses into traditional downtowns follows the pattern of relocation of the nation's emerging workforce, a workforce that prefers to reside in compact, mixed-use communities.<sup>15</sup>

An abundance of reports over the years have found that smart growth communities are conducive to a more productive work force. In 2000, Robert Cervero found that compact, accessible cities with efficient transportation links were more productive than more dispersed places. Also in 2000, Nelson and Peterman found that in growth management strategies can improve economic performance by yielding taxpayer savings, efficiency gains and quality of life benefits when compared to surrounding regions.<sup>16</sup> Furthermore, Richard Florida, author of "The Rise of the Creative Class", has found that the regions that have best adapted to the "new economy" are those that have successfully attracted the "creative class." Florida believes that "mobile, demanding creative workers migrate to certain kinds of places they favor: places where they can find not just "a job" but lots of opportunities, and where they can find participatory amenitiesactive outdoor sports, not just stadiums; café-and-gallery "street-level" culture, not the symphony. They also seek places of demographic diversity, openness to newcomers, and stimulating cultural interplay. And the catch is, such regional qualities tend to be self-reinforcing. A region with many creative industries and creative-class workers will attract more of both, while the losing regionswell, they lose them."<sup>17</sup> The kind of place that Florida describes is flush in references to smart growth principles, further reinforcing the impact that these types of communities can have on the economy.

# **Economic Prosperity and Community Health**

While it may not be the first thing that comes to mind when thinking about economic prosperity, a healthy workforce is nonetheless important to the County's economy. Individuals who are obese are more likely to suffer from conditions such as coronary heart disease, type 2 diabetes and high blood pressure.<sup>18</sup> According to Shaping America's Youth, obesity costs US businesses more than \$13 billion annually in: health insurance claims, paid sick leave and disability and life insurance.<sup>1</sup> A 2007 study by Neovios found a greater trend toward sick leave among obese individuals when compared with normal weight workers, especially for spells of longer duration.<sup>20</sup>

While it is difficult to find a specific relationship between obesity and the built environment, several studies have found a connection between increased driving and obesity, including a recent study in Atlanta that found that spending an additional hour per day in a car increased an individual's

<sup>&</sup>lt;sup>15</sup> Newman, Judy. Summer 2011. "The Future of Office Development." On Common Ground.

<sup>&</sup>lt;sup>16</sup> Smart Growth America. http://www.smartgrowthamerica.org/economy.html

<sup>&</sup>lt;sup>17</sup> Florida, Richard. 2003. "The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community, and Everyday Life." Basic Books.

<sup>&</sup>lt;sup>18</sup> National Heart Lung and Blood Institute. http://www.nhlbi.nih.gov/health/health-topics/topics/obe/

 <sup>&</sup>lt;sup>19</sup> Shaping Americas Youth. 2012. "The Skyrocketing Cost of Obesity: It's Everybody's Business."
 <sup>20</sup> Neovios, M. 2009. "Obesity status and sick leave: a systematic review.." Social Medicine, Department of Public Health Sciences, Karolinska Institute. Sweden.

odds of being obese by 6%.<sup>21</sup> While it may be difficult to find out exactly what factors in the built environment are directly related to increased obesity, the opposite is not true. In a 2006 study, Sallis and Gland found that "People who have access to safe places to be active, neighborhoods that are walkable, and local markets that offer healthful food are likely to be more active and to eat more healthful food—two types of behavior that can lead to good health and may help avoid obesity."<sup>22</sup> More walkable and transit-friendly neighborhoods can help combat rising health care costs be encouraging people to abandon sedentary lifestyles, helping both individual health and overall workplace production.

The Fit Kids 2020 Plan, adopted by the County Board in 2011, included a working group and recommendations related to economic strength. See Economic Strength Strategies 1 and 2 in Figure 81.

## Figure 81<sup>23</sup>:

#### Fit Kids 2020 Plan – Economic Strength and Food Policy Strategies

The following strategies may improve the health of children in Kane County by increasing the economic strength of employers, families and local food providers.

#### Economic Strength Strategy #1 Improve the economic strength of employers by encouraging the implementation of wellness plans for employees

- Develop an awareness campaign for employers summarized in a brochure that includes best practices and success stories. Outcome will be measured by the number of brochures distributed throughout Kane County.
- Create a survey for employers to measure the quantity and quality of wellness plans. Outcome will be measured by the variety of metrics incorporated into each plan.
- Develop a model wellness plan for employers that provides step-by-step guidance to create customized wellness strategies from pre-planning to benchmarking progress. Outcome will be measured by the number of and participation in wellness programs in Kane County.
- Initiate a wellness awards program for employers to encourage participation and networking. Outcome will be measured through a database that documents progress and participation.

# Economic Strength Strategy #2 Improve the economic strength of the family through education about nutrition, health and fitness

- Educate families about community and residential produce gardens and develop gardening tool lending programs to encourage residential gardening. Outcome will be measured by the annual increase in the number of gardens.
- Employ the "Safe Routes to School Program" to increase the percentage of bikers and walkers to school and work. Outcome will be measured by the response to annual surveys.
- Increase the number of and participation in classes about healthy living offered in Kane County. Outcome will be measured by the number of classes offered and their participants.

<sup>&</sup>lt;sup>21</sup> Frank, Lawrence, D. 2004. "Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars." American Journal of Preventive Medicine.

<sup>&</sup>lt;sup>22</sup> Sallis, J.F. and Glanz, K. 2006. "The role of built environments in physical activity, eating, and obesity in childhood." San Diego State University.

<sup>&</sup>lt;sup>23</sup> Kane County. 2011. Fit for Kids 2020 Plan.

- Economic Strength Strategy #3 : Increase the economic strength of local farmers through education about the value of growing produce and participation in the local food system
- Increase the capacity and variety of produce offered at local farmers markets. Outcome will be measured through annual surveys taken at the farmers markets.
- Encourage partnerships within the community to promote participation in the local food system. Outcome will be measured by the number of partnerships created between restaurants, grocery stores, community gardens, etc.
- Build upon the efforts of the "Bounty of Kane" marketing program to further promote the local food system. Outcome will be measured by the number of participants in the local food system.
- Create a network of farmers market managers to provide education and share best practices that will strengthen the local food system. Outcome will measured by the number of participants.
- Create a farmer's focus group to identify opportunities for standardization of farmer's markets. Outcome will be measured by the increase in customers.
- Provide education to local government about zoning changes that can benefit the local food system. Outcome will be measured by the number of local governments with zoning that benefits the local food system.
- Identify strategies meant to strengthen the local food distribution chain (i.e.; internet, social media). Outcome will be measured through surveys completed by farmers, restaurants and market managers.

#### Food Policy Strategy #7

Promote food as an economic development opportunity

- Support the establishment of community and commercial kitchen space for processing and preserving locally grown products.
- Assist in developing a network of independent support labor for community and home gardens such as (small plot roto-tilling).
- Identify food policy partners for Fit for Kids branding.
- Reduce red tape for growing, processing and delivering locally grown food to local residents.
- Work with Walgreens and/or CVS to offer fresh fruits and vegetables and accept electronic LINK benefits in their stores.

# **Economic Prosperity and Industry Clusters**

"The capacity for regional innovation is often driven by industry "clusters"—broad networks of companies, suppliers, service firms, academic institutions, and organizations in related industries that, together, bring new products or services to market. Clusters significantly enhance the ability of regional economies to build prosperity because they act as incubators for innovation. Clusters possess the primary elements needed to transform ideas into prosperity—universities or research centers that churn out new knowledge; companies that transform knowledge into new services or products; suppliers that provide critical components or equipment; and marketing and distribution firms that deliver the product to customers. Regions with successful clusters enjoy higher average wages, productivity, rates of business formation, and innovation." – Center for Regional Development, Purdue University.<sup>24</sup>

The global economic climate requires that successful firms be able to rapidly innovate and commercialize products. The need for creativity has become so important that, as economist

<sup>&</sup>lt;sup>24</sup> Center for Regional Development Purdue University. 2007. "Unlocking Rural Competitiveness: The Role of Regional Clusters."

Janice Madden has pointed out: "To the extent that there is a 'new economy,' it can be described as one in which creativity has become more important than the production of goods."<sup>25</sup> With such a premium placed on innovation, it is not surprising that so many organizations, from the U.S. Economic Development Administration to the Brookings Institution to CMAP, have endorsed the support of industry clusters as a way to enhance local and regional economic competitiveness. According to Harvard Business School Professor Michael Porter, industry clusters create a competitive advantage through increased innovation that is fueled by: 1) A specialized labor pool that is tailored toward the needs of the industry cluster and a specialized infrastructure that is developed by local governments, local industries and local suppliers, 2) Nationally competitive local supplier industries that spur innovation and spin-off industries and 3) Intense rivalry among local industries that encourages increased innovation and competition.

The success of industry clusters in spurring innovation and economic prosperity within a region has been well documented. A recent study performed by Delgado and Porter found that strong industry clusters register higher wages, more establishments, and higher numbers of patents. They found that this growth was enhanced when related clusters within the region grew in strength. Furthermore, it was found that the presence of strong clusters enhanced the growth opportunities in other industries.<sup>27</sup> So, not only do industry clusters increase the performance of the firms within the targeted cluster, they also help to increase the performance of firms throughout all industries within the economy. Industry Clusters in Kane County are listed in Table 12.

Table 12

<sup>&</sup>lt;sup>25</sup> Carlino, Gerald A. "Knowledge spillovers: cities' role in the new economy." Business Review (Federal Reserve Bank of Philadelphia), December 22, 2011.

<sup>&</sup>lt;sup>26</sup> Waits, Mary Jo. 2000. "The Added Value of the Industry Cluster Approach to Economic Analysis. Strategy Development and Service Delivery," Arizona State University

Development and Service Delivery." Arizona State University. <sup>27</sup> Delgado, Mercedes. March 11, 2011. "Clusters, Convergence, and Economic Performance."

Kane County Industry Cluster Information						
	QCEW Cluster -	Industry Cluster	QCEW Cluster	Industry Cluster	QCEW Cluster -	Industry Cluster
Description	Establishments	Establishment LQ	Employment	Employment LQ	Wages	Annual Wages LQ
Total All Industries	12,881	1	193,691	1	\$7,839,352,994	1
Advanced Materials	452	2.24	9,979	1.41	\$481,270,030	1.14
Agribusiness, Food Processing & Technology	132	0.64	4,053	0.86	\$149,386,895	0.98
Apparel & Textiles	149	1.3	891	0.6	\$36,409,999	0.67
Arts, Entertainment, Recreation & Vistor Industries	301	0.79	7,565	0.98	\$205,207,601	0.89
Biomedical/Biotechnical (Life Sciences)	958	2.92	10,877	1.54	\$559,030,308	1.69
Business & Financial Services	2,200	1.11	10,482	0.62	\$586,044,750	0.49
Chemicals & Chemical Based Products	199	2.01	7,128	2.32	\$348,784,732	2.1
Defense & Security	486	1.11	2,797	0.28	\$218,070,885	0.38
Education & Knowledge Creation	239	0.84	22,965	1.18	\$918,094,713	1.23
Energy (Fossil & Renewable)	878	1.03	6,566	0.58	\$378,408,088	0.57
Forest & Wood Products	434	1.64	4,238	1.36	\$214,823,640	1.79
Glass & Ceramics	53	1.76	1,488	2.21	\$64,629,135	2.42
Information Technology & Telecommunications	823	1.32	7,565	0.84	\$441,835,312	0.69
Transportation & Logistics	397	1.38	3,224	0.58	\$172,104,208	0.77
Manufacturing Supercluster	448	2.28	12,808	1.52	\$665,221,768	1.43
Primary Metal Mfg	23	2.71	892	1.63	\$37,585,281	1.41
Fabricated Metal Product Mfg	191	2.22	4,519	2.29	\$220,206,427	2.68
Machinery Mfg	125	2.9	3,266	2.12	\$176,241,601	2.26
Computer & Electronic Product Mfg	58	2.15	1,821	1.07	\$104,546,932	0.81
Electrical Equipment, Appliance & Component Mfg	28	2.65	1,522	2.72	\$77,687,787	2.89
Transportation Equipment Mfg	23	1.07	787	0.38	\$48,953,740	0.4
Mining	17	0.99	124	0.45	\$8,404,358	0.59
Printing & Publishing	382	1.37	3,036	0.86	\$140,721,705	0.72
Source: Stats America: Innovation in America's Regions						

The key to industry clusters is the creation of a knowledge spillover as a result of a concentration of professionals from within a specific industry. It is critical to increase the collaboration and communication across firms in a particular industry to better share research, streamline implementation processes and leverage investment opportunities.<sup>28</sup> As a result, creating places for these professionals to interact is a requirement for any successful cluster-based approach to industry. The creation of smart growth communities allows for constant interaction among the people of a community. Thus, industries that are located within these communities will be able to benefit from constant interaction among professionals. It is also imperative to increase communication and collaboration amongst the firms of an industry and local research institutions and entrepreneurial programs. Those partnerships are necessary in regards to the process of testing ideas and bringing a product to commercialization.

Local government entities can play an important role in helping industry clusters blossom by facilitating communication between employers and education and workforce training programs. Since a successful industry cluster relies heavily on the availability of a specialized workforce, it is important for local education and workforce training programs to tailor their curriculum to meet the needs of employers. In addition, local governments can help industry clusters prosper by utilizing strategic funding initiatives, technical assistance and by facilitating improved communication with other funding entities. Any successful cluster-based program will also have an efficient way of tracking the success of various programs and the effectiveness of financial incentives.<sup>29</sup> Access to information will allow for constant re-evaluation of an industry and will allow for improvements and alterations to be made to a program's structure to better ensure its competitiveness.

<sup>&</sup>lt;sup>28</sup> Carlino, Gerald, A. 2001. "Knowledge Spillovers: Cities' Role in the New Economy." www.phil.frb.org

<sup>&</sup>lt;sup>29</sup> Harris, Timothy F. 2000. "Productivity and Metropolitan Density." Tufts University.

# **Economic Prosperity and Communications Infrastructure**

Improving telecommunications infrastructure can increase efficiency and lower the cost of doing business. Kane County is implementing a comprehensive communications plan that involves the construction of a fiber optic backbone for voice and data services. The network is designed to meet the growing communication needs of government offices, departments, schools, libraries, municipalities, health departments, health care providers, emergency management operations, emergency responders, and development.

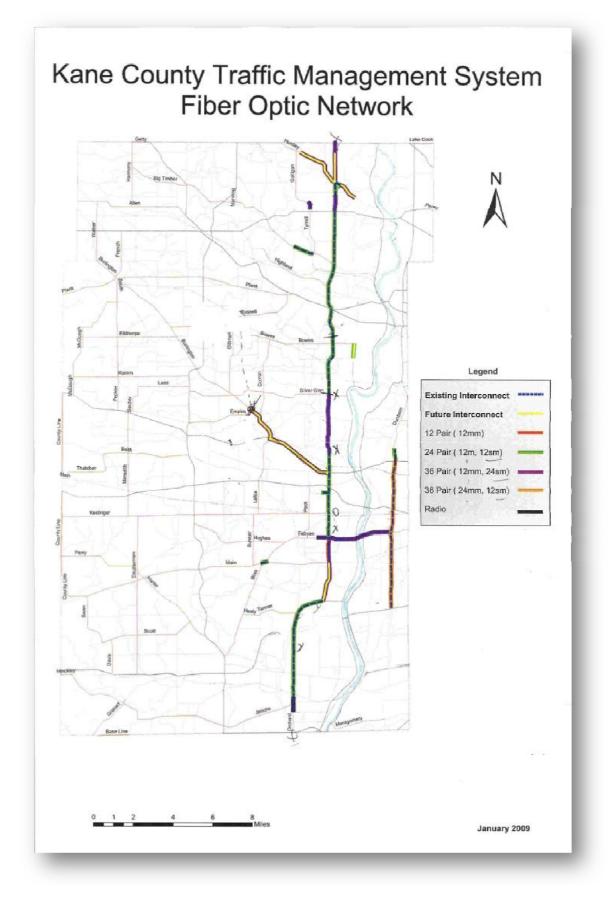
The project was envisioned as a multi-phase initiative with the first phase consisting of the construction of a fiber optic network between County facilities and the local municipalities. The second phase consists of the construction of a fiber optic backbone network that will service the Southern end of the County including Aurora, North Aurora, Batavia, and Geneva. The third phase consists of the construction of a fiber optic backbone network that will service the Northern end of the County including St. Charles, South Elgin, and Elgin.

The completed project will provide for a fiber optic backbone for voice and data communications from Aurora to Elgin. The fiber optic backbone would also provide for an information "highway" between Interstate 90 and Interstate 88. The information "highway" would be made available and accessible to constituents and provide Kane County with a tremendous advantage in technology infrastructure.

As of the end of 2011, about 90% of the system is complete including 23 miles of fiber along Orchard Road and Randall Road from Aurora to Elgin, from I-88 to I-90. Also completed are sections of fiber along Fabyan Parkway from Randall Road to Kirk Road. The final portion of the fiber project includes the IGAs, interconnects, splicing, and network equipment. There are currently existing fiber optic conduits along Randall Road, Orchard Road, and other strategic corridors as indicated in Figure 82.<sup>30</sup>

# Figure 82:

<sup>&</sup>lt;sup>30</sup> Fahnestock, Roger. Updated December 2011. "Kane County Fiber Optic Network."



Economic Prosperity and the Green Economy

Environmentally responsible and sustainable business practices and industrial operations, and the "green jobs" that result will be an integral part of successful business in the future. These are areas where innovations are occurring rapidly and where new solutions are very marketable. According to the Brookings Institute, "The region's research and innovation infrastructure is already spurring the development of new products and processes: Michigan, Ohio, and Illinois are among the top states in terms of green tech patenting, focused on new technologies in battery power, hybrid systems, and fuel cells. Great Lakes metros have the industrial and institutional infrastructure necessary to power an innovation economy."31 Specifically, the Chicago metropolitan region is in prime position to capitalize on the growing green industry. According to the Delta Redevelopment Institute, "The Chicago region also has existing assets that it can capitalize upon to create new jobs in emerging green sectors including: electricity generation from renewable sources (especially from wind), manufacturing of energy equipment, construction and maintenance of energy and fuel equipment, retrofitting existing buildings and providing business and professional services to green businesses."<sup>32</sup> Many businesses are already moving away from traditional manufacturing practices and are beginning to rely more and more (as discussed earlier) on innovation and creative design. This is the type of mentality that fits perfectly with the emerging green industry, an industry that requires rapid innovation to survive - the faster that green products become cheaper to make and easier to use in everyday life, the faster the industry will grow.

The emerging green economy has also received a considerable amount of support from local leaders. Mayors and managers from nearly 100 municipalities in the region have also made at least some commitment by signing onto the Metropolitan Mayors Caucus' Greenest Region Compact, a voluntary initiative that pledges that caucus members will make environmental considerations a priority, demonstrate that environmental practices are fiscally responsible and call on their residents and businesses to join them as environmental stewards to preserve our resources, climate, and economic viability of our region for future generations.<sup>33</sup> Political support for the green economy should come as no surprise as the Delta Redevelopment Institute has found that "opportunities for the greatest economic growth in the next decade are in emerging green industries that are building on existing capacity in the region, such as manufacturing of components for wind turbines or solar panels by metal manufacturers who are already producing similar products."

Local governments can help support the growth of green industries by examining existing public policies and identifying any barriers that may exist in regards to the implementation and development of green products and practices. In addition, local governments can encourage green construction practices through the adoption of new public policies that support energy conservation and emissions reduction. These types of policies have the potential to spur thousands of new construction jobs within the region. According to the Brookings Institute, "smart growth" zoning codes that reward energy efficiency have the ability to "create new markets for power-conserving materials and appliances, providing American designers and manufacturers with experience producing the kinds of green products world markets will increasingly want." Most importantly, local governments can take the lead and become educated on the economic implications of the green economy so that they can better match existing resources with businesses that are trying to gain entry into the green industry. Since this is an emerging field,

<sup>&</sup>lt;sup>31</sup> The Brookings Institute. 2010. "The Next Economy: Economic Recovery and Transformation in the Great Lakes Region."

<sup>&</sup>lt;sup>32</sup> The Delta Institute. 2009. "The Green Economic Development Strategies for the Chicago Region."

<sup>&</sup>lt;sup>33</sup> Mayors Caucus. <u>http://www.mayorscaucus.org/pages/Home/Reports.html</u>

many businesses and investors may be hesitant to fully embrace the possibilities that green industry represents due to a lack of knowledge. Local governments have the opportunity to emerge as a central facilitator and educator, helping the region to gain a competitive advantage in this industry.

# **Economic Prosperity and Agribusiness**

Agriculture is an integral part of Kane County's economy, landscape, natural resource base and local food supply. Agriculture continues to contribute to a stable and diversified economy, especially as the variety of agricultural crops and products including nursery and greenhouse crops, local fruits and vegetables, and livestock products increases in response to changing markets. Agribusiness services and facilities support the farm economy and need a strong agricultural base for their success. The farm economy creates jobs in cultivation and harvesting, equipment sales and service, seed research and sales, fertilizer and herbicide sales, finance and insurance, and food processing and distribution industries.

Since 1945, the number of Kane County farms has decreased. However, this decline has been offset by an increase in average farm size. In 2007 the average size of a Kane County farm was 253 acres, representing an increase of 67 acres since 2002. In 2007 the average for the State of Illinois was 348 acres. In 2007, the market value of Kane County agricultural products sold totaled \$198,108,000 per year up 71% since 2002. Top crop items include corn, soybeans, forage, wheat and nursery stock. The average market value of products sold per farm was \$261,011, considerably higher than the statewide average of \$173,421.<sup>34</sup>

According to the 2007 Census, Kane County was the largest dollar producer of nursery, greenhouse, floriculture, and sod crops of all Illinois counties. Since that time however, the economic changes have reduced the number of nursery, greenhouse, and sod farms. Kane County encourages expansion of nursery and greenhouses and other agriculturally related businesses through the use of the F-2 (agriculturally related sales) zoning district.

Local food production and agri-tourism is becoming an increasingly popular and important part of Kane County's agricultural economy and for filling local nutritional needs. "Discover the Bounty of Kane" (bountyofkane.org) is a directory of 35 Kane County farms that sell direct to consumers and local farmers markets and includes a map and contact information for each farm and farmer's market. The HARVEST FOR ALL program encourages local farmers to donate a portion of their harvest to benefit a local food pantry, as well as encourages Farm Bureau members and consumers to support hunger relief efforts.

Community gardens and community supported agriculture (CSAs) are also becoming a growing part of meeting local needs for fresh produce. In part with the help of a grant from the Robert Woods Johnson Foundation in 2010 and funding from the Making Kane County Fit for Kids Funders Consortium, the number of community gardens has increased dramatically in recent years. New locations for community gardens and CSAs include forest preserves, park districts, state and county owned lands, church properties, non-profits and privately owned lots. The Fit Kids 2020 Plan includes strategies for supporting local foods as an economic development opportunity for Kane County. See Figure 81 (Economic Strength Strategy 3 and Food Policy Strategy 7).

<sup>&</sup>lt;sup>34</sup> 2007 USDA Census of Agriculture

#### **Policies:**

- 1. Encourage and promote farming, sustainable agriculture and local food production and their related businesses in Kane County including the production, sale and research of agriculturally related goods and services.
- 2. Encourage and adopt mixed-use residential and employment activities around identified station nodes to support a pedestrian-friendly multi-modal corridor along Randall/Orchard Roads.
- 3. Continue to upgrade, increase access to, and enhance the efficiency of telecommunications infrastructure in Kane County.
- 4. Encourage and facilitate communication among local and regional education, workforce development and economic development entities to ensure that the demand for workforce skills will continue to be met both now and in the future.
- 5. Continue monitoring job opportunities and employment growth by sector in Kane County, including emerging industries.
- 6. Encourage workforce training and development entities to focus their resources on the skills needed to fill positions within the major industry clusters within Kane County.
- 7. Cooperate with local and regional economic development groups and government entities to build a common economic agenda and to pool our assets around a single, shared future-oriented economic development strategy.
- 8. Work with municipalities, hospitals and health professionals to maintain and improve the personal health of residents and the workforce to reduce healthcare expenditures and increase workplace productivity.
- 9. Support compact mixed use land use patterns and transit opportunities that reduce commute times and locate small business opportunities and employment centers in close proximity to housing.
- 10. Support the Economic Strength strategies in the Fit Kids 2020 Plan.
- 11.Support a culture of innovation that encourages the creation and implementation of new ideas.
- 12.Promote economic development through energy efficiency, energy conservation, and renewable energy opportunities.