

final report

# FLORA NEIGHBORHOOD PLAN

Boone County; City of Belvidere; & Flora, Belvidere, & Spring Townships



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Madison · Milwaukee

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## INTRODUCTION

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Boone County and the City of Belvidere have become known throughout the region for solid community values, prime agricultural land, hard-working individuals, and forward thinking governments. As growth and development pressures from the expanding Chicago Metro Market reach further into and beyond Boone County, the community is in the processes of devising proactive plans to not only deal with growth, but also to integrate sustainable land and economic development that protects the area's financial, cultural, and environmental resources.

This document outlines one of the current efforts in the larger process of defining land and economic futures for Belvidere, Boone County, and Townships of Flora, Spring, and Belvidere. The Flora Neighborhood Development Area (formerly called the "Tollway Neighborhood") was identified early in the County's Comprehensive Planning Process as an area needing additional study and detailed planning and analysis. This document summarizes these planning efforts from the impetus regional vision to the detailed land use areas. It outlines a strategy by which Boone County, Belvidere, and the three Townships can best utilize their place-based assets and local opportunities while still preserving community character, natural features, prime agricultural land, and economic vitality that are hallmarks of the area.

A Commuter Rail Feasibility Study published in November 2004, by the Northern Illinois Commuter Rail Initiative concluded that a Metra line extension to Rockford with multiple stops, including Belvidere's planned Flora Neighborhood as well as Downtown Belvidere, is a feasible and important next step in addressing the increasing residential and commercial growth along the I-90 corridor. Extending Metra to Belvidere will provide a viable alternative for the growing number of commuters from Northern Illinois and Southern Wisconsin to the Chicago-area. Recognizing the vital need to mitigate highway traffic congestion, reduce oil consumption, and improve air quality, Belvidere is proactively working to make this Metra line extension a reality.

The structure of the Flora Neighborhood Plan Project placed Vandewalle & Associates at the lead in the production, research, and planning recommendations, but in relatively constant contact with the Project Management Team for guidance, feedback, and discussion. The Project Management Team was comprised of a diverse group of individuals representing both the private and public interests in the land planning area. Specifically, the project management team members were:

- Mayor Fred Brereton, City of Belvidere
- Susan Anderson, Boone County Board Chair
- Ken Terrinoni, Boone County Administrator
- Dave Taylor, Boone County Board
- Bill Luhman, Boone County Board
- Jack Ryder, City of Belvidere Planning Commission Chair
- Richard Gamlin, City of Belvidere Alderman
- Bob Turner, Belvidere Township Supervisor
- Gail Bennett, Flora Township Supervisor
- Will Humphrey, Westminster Swanson Land Partners
- John Holmstrom, William Charles
- Tim Jagielski, William Charles
- Tim Bextel, Par Development
- Mike Drella, City of Belvidere Attorney
- Craig Lawler, City of Belvidere Director of Public Works
- Adam Tegen, City/County Director of Planning

The Project Management Team was attentive and helpful throughout the project, active in the formulation of this plan, and publicly supportive of the plan at the end of the project. Their efforts are deeply appreciated and critical to the long term success of this project.

The Flora Neighborhood Plan Project addresses the implementation of a neighborhood development strategy that includes not only a Metra rail station, but also two Tollway interchanges, a new travel corridor between north and south Belvidere, several large scale industrial and manufacturing components, mining and quarry operations, and the planning and positioning of a land area over 3000 acres in size. Key components needed to make the vision of the Flora Neighborhood Plan a success include development of transportation, energy and data infrastructure, conservation of energy and resources, and connection to place that recognizes the quality assets that have and will continue to draw people to the area.

We invite you to explore this document and learn how the vision of the Flora Neighborhood Plan will become a reality.

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## WORK ELEMENT ONE: BACKGROUND

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### 1. Review of Existing Maps and Plan Data

During the initial stages of the Tollway Neighborhood Development Plan, Vandewalle & Associates conducted a background investigation of existing plans and initiatives in the planning area. The following is a summary of the documents reviewed and insights gained.

#### ***1999 Belvidere-Boone County Comprehensive Plan***

The I-90 Tollway Corridor is identified as a critical development area in the adopted 1999 *Boone County Comprehensive Plan*. Specifically, this locale was identified as the “Tollway Corridor Area” and designated as the main focus of economic development efforts for Boone County on the *Comprehensive Plan’s* Community Character Planning Areas Map (Map 5, page 52). This same Map calls for the preservation of rural character and agricultural lands to south of the Tollway Corridor Area.

Beyond the designation of the Tollway area for strategic employment and tax base development, the *Comprehensive Plan* also makes general recommendations for land use and transportation. The *Plan’s* land use and transportation recommendations are based on the “Rural Character Alternative” considered during the development of the *Plan*. Under this selected development alternative, the adopted Land Use Plan and Transportation Plan are designed to accommodate and serve a population of 200,000 persons and their land use and transportation needs. (See the discussion of the Rural Character Alternative on pages 60-62 of the *Boone County Comprehensive Plan*.)

The Land Use Plan Map (pages 97 and 99) calls for a combination of light and heavy industrial uses in the area north of USH 20 and west of Stone Quarry Road, commercial uses in the area between the tollway and USH 20 between Tripp Road and Johnson Road, and a combination of office park and planned mixed use development south of the tollway and around a proposed new tollway interchange and passenger rail stop in the vicinity of Irene Road. Existing single-family subdivisions south of Graham Road and Cohoon Road are recognized, but this use is not planned to expand. Areas south of these roads are planned for long-term agricultural and rural character preservation. (See text describing these areas on pages 73-75.)

The Transportation Plan Map (pages 102 & 103) calls for the extension of Town Hall Road across the Kishwaukee River and its floodplain, with a westward jog over to a new interchange with the Tollway. The Map also calls for the eastward extension of Graham Road to connect with Fern Hill Road to serve the portions of the Tollway Corridor Area located south of the Tollway. A bicycle-pedestrian trail circuit extending from the Kishwaukee River floodplain along Irene Road, Graham Road, Fern Hill Road, and Johnson Road is also recommended.

#### ***Northern Illinois Commuter Rail Initiative Commuter Rail Study***

The Northern Illinois Commuter Rail Initiative (NICRI) Study evaluated the feasibility of initiating new commuter rail service between Rockford and the end of the existing Metra commuter rail line, currently at Big Timber (west of Elgin), including two stops in Belvidere, one in downtown, the other in the Tollway Neighborhood. The report examined existing railroad operating conditions, other planned infrastructure improvements along the line (including concepts described in the Rockford Rail Consolidation Study), anticipated improvements necessary to support commuter rail operations, potential station and yard locations, expected

environmental issues, potential commuter rail ridership, anticipated operating revenue and costs, potential funding sources, and recommendations for next steps for implementation.

This report provided a solid backdrop for a continued look at the interplay between a transit stop in proximity to the Tollway in the studied neighborhood. In the report, the Tollway Neighborhood was identified as a Transit-Oriented Development (TOD) Neighborhood as well as a Tollway Intercept Station. In other words, the proposed Tollway station could function as a Park and Ride for travelers coming from Wisconsin for business and recreational travel in Chicago while at the same time be developed as a rail destination, not just a trip-originating point. For Intercept Station users, common concerns include the difficulty finding parking, navigating, and dealing with traffic congestion. For Transit-Oriented Development users, concerns involve development density that would allow for multiple uses within easy walking distance ( ¼ mile from the station) and virtually all neighborhood and commercial services within ½ mile.

The NICRI Study also mentioned the construction of the new Irene Road interchange, and comfortably recommended that the Tollway Neighborhood Station facility could attract a reasonable share of both commuter and TOD markets.

### **Belvidere Park District Master Plan**

A review of the Belvidere Park District Plan was conducted by Vandewalle & Associates with the help of Dan Roddewig, Executive Director, and Mary Marquardt, President of the Belvidere Park District. At the current time, only a portion of the Neighborhood Planning Area is within the park district jurisdiction and in those limited areas, there are no existing or planned parks.

### **Boone County Conservation District Master Plan**

Vandewalle & Associates met simultaneously with the Conservation District, the Park District, and the School Districts. We received a copy of the Winnebago-Boone County Greenways Master plan and Dan indicated where Conservation areas are located around the county. None are located in the Flora Neighborhood Study area.

### **Utility Plans**

The City of Belvidere provided Vandewalle & Associates with a map of the current Urban Service Area and both groups have been involved with the future planning area and the population projections for an expanded future planning area. Currently, approximately half of the Flora Neighborhood is not part of the Belvidere FPA. Craig Lawler, the Director of Public Works, is working with Baxter-Woodman Engineers to enlarge the FPA to include the Flora Neighborhood in its entirety. The population projections for the neighborhood are available in “Work Element Three-Plan” of this document.

### **Transportation Plans**

As part of the background stage of this project, Vandewalle & Associates reviewed the City and County’s Future Transportation Plans. This project will incorporate many of the future transportation plans because they work to tie the Flora Neighborhood to the rest of Belvidere through a connection of Town Hall Road over the Kishwaukee River, additional east-west connections south of the Tollway, and an interchange at Irene Road. It is our understanding, through conversation with the City and County, that Irene Road was identified as the location for a new Tollway Interchange. Throughout this project, we will encourage that interchange a planning and expect the efforts produced in the Flora Neighborhood Plan to motivate IDOT and ISHTA to advance the timeline in making that interchange a reality.

## 2. Project Management Team Meeting #1

The following are notes from the August 16<sup>th</sup> Project Management Team Meeting. These points will direct our planning effort and greatly shape the final products of this project. The summary is followed by action items for certain members of the Project Management Team (PMT).

### Project Logistics:

Deliverables for this project include:

- A storybook that summarizes the opportunities and strategies for the development of the Tollway Neighborhood and begins to define land use and design intent.
- A final planning document in “white paper” form with implementation strategies, a development plan, and economic strategies.
- Graphics to support the ideas and concepts portrayed in the previously mentioned documents.
- The community, local, state, and federal legislators are the primary audience; however the products will also be used to procure funding and to recruit developers, businesses, and support from Metra.

The Tollway Neighborhood is the planning area and is defined by:

- The established growth boundary to the South.
  - Township Officials need to weigh in on southern boundary line.
- The county line to the West.
- Beyond the Eastern reach of Genoa Road to include the existing interchange.
  - Perhaps to Johnson Road- entry to the community?
  - Include some of Spring Township- engage them in discussions?
- North of USH 20 to include the potential future rail stop and other areas that are significantly developed.

Project stakeholders include all property owners and businesses within the planning area, with particular focus on Daimler-Chrysler, William Charles, Plote/Par, and Westminster Swanson Land Partners.

We should also meet with RATS, IDOT, The Tollway Authority, Park District, and School District as key project stakeholders.

Before the draft land use plans go public, they will be presented to the Project Management Team for the Team members to seek endorsement from their boards and organizations.

Between now and October 4th, we will have completed as many key stakeholder interviews as possible.

The Public Goals & Values Workshop is scheduled for 6pm on the 28th of September. Location is yet to be determined.

The next meeting of the PMT will be October 4th to review work to date and the results of the Public Goals & Visions Workshop.

### Planning Considerations:

- The plan should take into consideration the existing residents to the south of the planning area as they are established residents in the town.
- There is concern with an established southern “No Growth” Boundary that Cherry Valley might take a more aggressive approach to annexing land to the south.

- It is recognized that land preservation necessitates increased density in slated development areas.
- A location for the Metra Station needs to be reserved quickly to prevent inappropriate development in area.
- The plan should explore bus rapid transit as an intermediate step toward rail service.
- In addition to rail service, the team would like local bus service that connects the Tollway station with the downtown transit center.
- The plan should identify connections to regional trails and open space.

**Design Considerations:**

The architecture of new construction should be unified in style and should reflect that of the new Belvidere Oasis.

The plan should identify improvements to the eastern community gateway at Johnson Road and I-90.

**Project Implementation:**

- Metra proposes a 10-15 year timeline for service extension to Belvidere area. With community and legislator support, that timeline could likely shorten.
- Timing of development is critical to infrastructure development- currently there is no capacity south of the Tollway.

**Action Items:**

Adam to provide list of committee members, addresses, phone numbers, and emails

Adam to provide

- NICRI Feasibility Study.
- City of Belvidere FPA Map
- Info regarding Irene Road Interchange

Mayor to provide location for upcoming meetings

Brian to contact stakeholders identified and set up meetings to be held prior to Public Open House.

**Project Management Team Comprehensive Plan Survey**

As part of the kickoff to this project, each member of the Project Management Team was asked to fill out a survey regarding their opinions about the existing Comprehensive Land Use Plan for the county and city. The following is a summary document of those results.

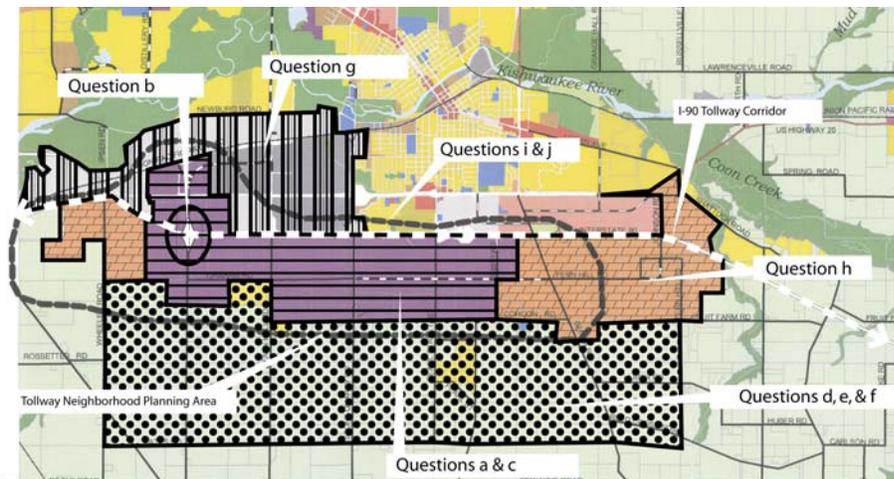
### Opinion Survey Results

1. The County grew by 33% in the years 1990 to 2000. At what pace would you like to see future population growth for the region?
  - 2\_ Much slower than the current pace of growth
  - 2\_ A little slower than the current pace of growth
  - 5\_ About the same pace that it's currently growing
  - 1\_ A little faster than the current pace of growth
  - 1\_ Much faster than the current pace of growth
  
2. The number of housing units in the County grew by over 390 units a year from 1990 to year 2000. At what pace would you like to see future housing growth for the region?
  - 2\_ Much slower than the current pace of growth
  - 2\_ A little slower than the current pace of growth
  - 5\_ About the same pace that it's currently growing
  - 1\_ A little faster than the current pace of growth
  - 1\_ Much faster than the current pace of growth
  
3. After reviewing Map 7c (Future Land Use Map for South Boon County) showing recommended future land uses and growth in the county, on a scale of 1 to 10, how would you rate your overall support for the planned future growth pattern?

Number of respondents: 9 Average Score: 7.67

No Support								Very Supportive	
1	2	3	4	5	6	7	8	9	10
0	0	0	2	0	1	0	1	3	2

4. Please respond to the following statements related to the proposed land uses shown on the map below. Circle the response that best matches your opinion: (1=Strongly Disagree, 2=disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)



The letters below match up with the letters indicated on the map above.

**a. I am in favor of future residential development to the south of the Tollway.**

Number of respondents: 10 Average Score: 3.20

( 1 -1                  2-3                  3-2                  4-1                  5-3 )

- I favor prepared advance planning to hodge-podge at the discretion of the market.
- Only in high density Tollway Station Point type development.
- South of I-90 should be reserved as much as possible for an employment corridor.
- In the mix, residential should not be limited to a line in the sand (I-90).
- Need residential to support other desired uses.
- Some residential development will be an important component of the mix of uses necessary for a quality development.

**b. I am in favor of a new Tollway Interchange at Irene Road.**

Number of respondents: 10 Average Score: 4.60

( 1 -1                  2-0                  3-0                  4-0                  5- 9 )

- It will contribute to economic development for the region.
- Access to transportation not based on automotive.
- TSP
- Needed to relieve Gena Road and 39.
- It is a logical location for transit oriented development with the Tollway (I-90), Route 20, and Route 76 intersecting.
- Supports job growth at Chrysler area; creates a link to DeKalb; creates commuter center.
- A growing city/area such as ours needs a second access point. A new interchange will help improve chances for other initiatives – i.e. commuter rail stop.
- It is one major component of the neighborhood concept.

**c. I am in favor of the Planned Mixed Use Area that will include housing, commercial, and retail components.**

Number of respondents: 9 Average Score: 4.22

( 1 -0                  2-1                  3-1                  4-2                  5-5 )

- It will meet the needs of residents and help in terms of the energy crisis.
- Only high density (TSP type)
- More commercial.
- The higher density, mixed use has been successful in other communities.
- Because of scale, the area will need a mix of uses; “all industry” or “all commercial” will not fill the area.
- Need residential to support other desired uses.
- Hope to concentrate residential in certain areas – emphasis on commercial/retail.
- Town center concept.

**d. I am in favor of allowing sewered smaller lot (less than ½ acre) single family development to occur south of the Planned Mixed Use Area.**

Number of respondents: 9 Average Score: 2.78

( 1 -2                  2-2                  3-1                  4-3                  5-1 )

- We need to preserve open space and agricultural nature of county.
- Don't know yet.
- The bigger the fewer.

- *I am in favor of severed lots and 1/2 acre is not “small.” I believe that there may be areas south of the DMUA that could develop for residential uses.*
- *Smaller lots should be on the south portion of the planned mixed use area. There should be a firm line to protect ag land.*
- *Need a better understanding of the impact of the overall neighborhood.*
- *There should be a southern growth line – severed residential will encourage further development.*
- *Upscale but smaller lots for better husbanding of ag land with population density.*

**e. I am in favor of allowing unsewered large lot (1 to 5 acre lots) single family development to occur south of the Planned Mixed Use Area.**

*Number of respondents: 10 Average Score: 1.80*

( 1-5                      2-2                      3-3                      4-0                      5-0 )

- *A few.*
- *Large lot residential is wasteful residential sprawl. Residents are needed to create demand for the interchange.*
- *Very limited, if at all.*
- *There is a high water table in this area and needs protection.*
- *Some residential is fine but preferable not in “subdivisions.”*
- *Upscale but smaller lots for better husbanding of ag land with population density.*

**f. I am in favor of setting a long-term no-development edge south of the Planned Mixed Use Area.**

*Number of respondents: 10 Average Score: 4.00*

( 1-0                      2-1                      3-3                      4-1                      5-5 )

- *Farm land preservation.*
- *Protect ag land.*
- *Need to preserve country or farm land.*
- *“Long term” is the problem. In 20 years, development up from DeKalb may be as important as down from Belvidere (ignoring Cherry Valley).*
- *The community’s interest continues to be to preserve open space and farm land.*
- *If the City/ County truly want to preserve ag land, a boundary is necessary.*
- *Upscale but smaller lots for better husbanding of ag land with population density.*

**g. I am in favor of the planned industrial development areas as shown north of the Tollway Corridor.**

*Number of respondents: 9 Average Score: 4.00*

( 1-0                      2-1                      3-1                      4-4                      5-3 )

- *Higher paying jobs = less people = more country style living.*
- *This will compliment the expansion of the Chrysler plant and also allow for diversification of manufacturing.*
- *I would also allow industrial uses south of 90.*
- *Industrial fits well with the area – only concern would be the soils permeability in the area.*
- *Rail freight component of plan.*

**h. I am in favor of the planned office development areas to the west and east of the Planned Mixed Use Area.**

*Number of respondents: 10 Average Score: 4.10*

( 1-0                      2-1                      3-2                      4-2                      5-5 )

- *We need to try to pull some of Cook County Business out here.*
- *High quality office space with good transportation to the east will help reduce the property tax burden on homeowners.*
- *I think a successful plan has to be able to accommodate a mix of uses with flexible/ overlapping boundaries. If the scale of the area set aside for office is too large, it will impede the development of the area.*
- *Planned office needs large tracts of land with access to major transportation routes.*
- *Right fit component for integrated resident and commuter population.*

**i. I am in favor of a rail stop in this planning area that would bring commuter rail service to and from Chicago and Rockford.**

*Number of respondents: 10 Average Score: 4.90*

( 1-0                      2-0                      3-0                      4-1                      5-9 )

- *Obviously for economic development.*
- *Relieve I-90.*
- *Commuter rail will spur additional commercial development and help ease the tax burden on residential development.*
- *If viable.*
- *Alternative transportation is vital for long term sustainability.*
- *This is a transportation centered plan; without rail you will lose a major component.*

**j. I am in favor of creating a neighborhood center that can include such features as retail, public gathering space, offices, parks and residential components in this planning area.**

*Number of respondents: 10 Average Score: 4.70*

( 1-0                      2-0                      3-0                      4-3                      5-7 )

- *Need places to go; things to do close to home.*
- *More than one neighborhood center may be appropriate given the scale and time frames.*
- *It will help create Belvidere’s image as a regional city and improve identity.*
- *The neighborhood center will give the planning area a sense of place while providing a central node for rail traffic.*
- *It is the center focus of the neighborhood concept.*

**5. Although the focus of this planning effort is on the Tollway Neighborhood, it is important to think about how this neighborhood area fits into the broader context of Boone County, including how it relates to the future uses planned for the City of Belvidere, and Belvidere and Flora Townships. Please offer any additional comments on the Future Land Use Map (7c)**

- *Very supportive of the proposed.*
- *Refining the concepts presented in the comprehensive plan will complement the overall long range plans for the area.*
- *It is important to continue to stress “high quality” projects and uses. If quarries are permitted, they should be cutting edge examples of how they can compliment neighborhood planning.*
- *While some residential is necessary within any area, the large residential concentrations for the county are located East, West, and North of the City. The higher concentration of uses in this area will allow the lengthening of time the ag land can be pres.*

- *No matter that Metra Rail is in the future, the focus on same from the start is a must. Tollway-Metra yes and even air makes Belvidere/Boone County the real center of commerce and quality living.*

**6. Please rank the following community components in order of importance in the Tollway Neighborhood to you: use 1 for the most important components and 14 for least important. Please use all of the numbers and allow for no repeats. As the list is not exhaustive, feel free to use the lines following this section to add any additional comments you might feel necessary.**

Community Component	Individual Responses									Average	# of Respondents
	4	10	1	6	1	2	1	1	1		
Tollway Access	4	10	1	6	1	2	1	1	1	3.00	9
Employment Centers (Office, Industry, Retail)	1	13	3	1	3	3	2	2	2	3.33	9
Train Station/Transit Hub	8	1	2	2	2	1	1	5	9	3.44	9
Parks and Open Spaces	2	3	4	9	5	7	2	7	6	5.00	9
Walkable Neighborhoods	5	9		13	4	4	1	6	5	5.88	8
Neighborhood Retail	7	5	7	11	11	6	1	8	8	7.11	9
Established Urban Boundary	12	2		7	7	5	1	12	11	7.13	8
Single Family Homes	6	4	8	12	12	13	4	4	3	7.33	9
Institutional Uses (Churches, Schools)	11	6	5	3	6	11	7	11	7	7.44	9
Multi-family Housing	14	7	6	14	13	8		3	4	7.67	9
Public Gathering Spaces	9	12		4	9	9	3	9	10	8.13	8
Farmland Preservation	3	8		8	8	10	10	14	13	9.25	8
Big Box Retail	13	14	9	10	10	12	3	10	12	10.33	9
Large Lot Residential (1-5 acres)	10	11		5	14	14	12	13	14	11.8	8

*Comments/ Additional Components*

- *I feel strongly that residential in the area should not be typical.*
- *The most important “component is the flexibility to incorporate a mix of uses and to adapt to changes in development/ employment/ residential patterns. In the time scale for transit center for example, there may be no “big box retail” anymore.*
- *Farmland preservation should be south of Tollway neighborhood.*

**7. Please tell us more about your expectations for the Tollway Neighborhood Plan. Are there issues that you think are critical to be addressed?**

- *Growth has dictated that we act on the to somewhat central development.*
- *“High quality” development with an awareness to “first impressions” from visibility on I90.*
- *Financing and infrastructure.*
- *Plan must be realistic. Strictly read, the comprehensive plan has excessive amounts of non-residential land use designation.*
- *Sufficient density for commuter rail.*
- *Commuter rail.*
- *Tollway access.*
- *Southern growth boundary.*



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## WORK ELEMENT TWO: OPPORTUNITIES

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### 1. Public Goals and Values Worksession

As a part of the scope of work for this project Vandewalle & Associates, with the assistance of the staff of the Belvidere-Boone County Planning Department, conducted a Public Goals & Values Worksession to gain valuable community insight into the Tollway Neighborhood Planning Process. The event was held on September 28<sup>th</sup>, with over 70 residents in attendance. Lively discussion and eager participants made this event a valuable part of the planning process. The following are notes and summary documents:

#### *Individual Identification of Goals & Values Survey*

This first exercise was intended to get participants' individual perspectives on the key values to be considered for the Tollway Neighborhood and/or Downtown Commuter Rail Stop Plans. They were given five minutes to write responses to the following question. The numbers following each response indicate the number of times the same response was given.

#### **What do you Value most about the City of Belvidere and the surrounding communities?**

1. *Independent viewpoints, community diversity, community unity (4)*
2. *Small town personality (17)*
3. *Beautiful countryside (5)*
4. *Planned growth to retain the beautiful countryside (9)*
5. *Farmland (7)*
6. *Open spaces (Undeveloped) (4)*
7. *Great parks (7)*
8. *Conservation district (1)*
9. *Good schools (9)*
10. *Local citizen involvement thru scenic organization (1)*
11. *Affordable lifestyle (1)*
12. *Proximity to tollway (5)*
13. *Involve the roots and history of the City of Belvidere & County of Boone (6)*
14. *Hospital Area (1)*
15. *Taxes (2)*
16. *Traffic Plan (5)*
17. *Safety (3)*
18. *Access for Rockford (2)*
19. *Involvement of community members (3)*
20. *Quality of Life (3)*
21. *Riverfront (2)*
22. *Employment Opportunities (3)*
23. *Coordinate residential and industrial businesses (2)*
24. *Airport (1)*
25. *Ag-tech Park & development is necessity for farm area & developing fuel for autos (1)*
26. *Downtown help in development (1)*
27. *Rail system will be most welcome (1)*
28. *Handicap Area – sidewalks (curb cuts) (1)*
29. *Public buildings – ease to find/use (1)*
30. *Most people are like neighbors not strangers (1)*

**Handwritten Notes**

1. *If we create a convenient alternative for commuters to get to their jobs; where are they going to live? People will live here and work toward the suburbs. These people need houses too.*
2. *People have a love affair with their cars. I don't think they will take the train to go downtown for lunch. They would use BUS service more likely. I have no suggestions for the goals. Sorry.*
3. *All residential development should be required to build an elementary school. Create opportunity for recreation & conservation space at the time plan is developed. Require greater developer contribution to schools, parks conservation in pre-annexation agreement.*
4. *Our personal biggest concern is that if and when the tollway interchange is created, we will lose our facility, Meyer's Kennel, Inc. located at 5390 Irene Road. We have been in Boone County since the 1970's and are 3rd generation in the pet care industry. We currently employ approximately 25 employees and care for 25,000+ pets per year and are continuing to grow. To the best of our knowledge we are currently the only large pet care facility in Boone County. Our stand is that we are excited in agreement for the 2 future developments for Belvidere and Boone County. We are very concerned about the future of our facility. We want to stay in Boone County. Our customer base and our reputation are here in Boone County. Irene Road has been our home and business for many years.*

**Workshop Evaluation Form**

Following is the participants' evaluation of the workshop. The first number is the rating on a scale of 1 to 10, the second is the number of respondents to that rating.

**1. On a scale of 1 to 10, how would you rate the overall usefulness of this Forum?**

1-0	2-0	3-0	4-1	5-2
6-1	7-2	8-5	9-0	10-0

**2. What were the most significant outcomes of this Workshop for you?**

- *Finding out that most people had similar values in preserving green space and agricultural property.*
- *Good mix of citizen/ elected officials.*
- *Suggestions of communities to visit where quality and progressive development have occurred*
- *Met more concerned citizens*
- *Voice opinion*
- *Common theme's – good trans./ schools/ government planned growth.*
- *Realizing that there is widespread consensus in the thinking of residents as regards development in our overall community*
- *Getting people together to discuss what's best for the city and county*
- *Made more people aware of it. We happened to hear about it from the city counsel at a public hearing.*
- *(Cookies, Cookies, Cookies) No really—would have been better to have mayor and township officials talk about reasons, pressures on this are other than rail!!*
- *Drinks – Refreshments*
- *Have it on a Saturday in the AM. Advertise sooner and more comprehensibly.*
- *Better Communication about these types of meetings This meeting was not well publicized*
- *Give/ show examples of what quality growth looks like.*
- *Better dissemination of awareness and publicity for the workshop. Reach more people to boost attendance.*
- *Probably if we would have had a representative from the Tollway and rail to give there (their) output on this*
- *Keep in mind that Boone Co.'s charm and desirability comes from its rural atmosphere. That's why people live here. I've never heard anyone complain about the wide open space. Don't get greedy when it comes to new industry and housing or Belvidere will be no different than any other Chicago Suburb.*

- *All plans are a great idea IF those who are elected to support them actually DO. West Hills is not a good example of plan implementation. Three massive subdivisions – no school!! No park!!*
- *More information should be provided in terms of what the prospective plans are for the Tollway Neighborhood to the public.*
- *One of the reasons for moving to Karr Subdivision is the fact that it is far enough away from everything to enjoy peaceful living, but close enough to amenities. WE would like to keep it that way.*
- *This type of forum is a good process perhaps neighborhoods could develop spokespeople to spread results, and get additional participation.*
- *Take into consideration the voice of the people at this meeting.*

## 2. Stakeholder Interviews

The following groups were consulted as part of the stakeholder interview process:

### Westminster-Swanson Land Partners

Will Humphrey, Charles Crook, Jim Guckenberg

Brian Ellison, of Vandewalle & Associates, met with Will Humphrey on September 23<sup>rd</sup> to discuss plans for the property that Westminster-Swanson Land Partners controlled as part of the Flora Neighborhood. Mr. Humphrey shared a plan that was predominately single family detached development with a commercial strip along the Tollway corridor. We discussed single family development not being the direction the City or County was seeking in the area south of the Tollway. We reviewed other options and Westminster-Swanson remained open and optimistic, but still focused on pursuing single family residential development. We agreed to revisit the topic as part of the Project Management Team Meetings and decided if the City and County allowed the single family plans in the land area, we would honor the request and make our best efforts to turn the area into a viable and integral part of the overall neighborhood plan. As noted later in the document, this area was included in the plan as the Ag-tech Campus and Village and is defined by its own zoning designation: Ag-Tech Village.

### Williams-Charles

John Holmstrom III, Tim Jagelski

Brian Ellison, of Vandewalle & Associates, tried on several different occasions to meet with John Holmstrom and Tim Jagelski without success. Several emails offered insight into the interest of William-Charles and their impressions of the planning effort in the Flora Neighborhood. Below is a letter from John Holmstrom to Brian Ellison dated November 9<sup>th</sup>:

“I thought I would comment on the plan that you presented yesterday. I apologize for arriving late.

I think it would be very helpful, as a part of the plan presentation, to include some estimate of the schedule or sequence of development that you would expect to see in the course of the implementation of the plan. This discussion might well include an estimate or prediction of those infrastructure improvements that will be needed first, when and where they would be made, what kind of land development would be expected or predicted to occur in 5/10/20 years, and what governmental actions are needed when.

Second, the sequence will be dictated, to a large degree, by the willingness of governmental institutions to put in place the ordinances, infrastructure, and control frameworks which they feel are necessary to implement the plan and by the market forces that actually drive what is built and when it is built. I believe that it is counterproductive to ignore the market generally and the

short (five year) term market in particular. In this regard, I think that the concept of “residential built over commercial” needs to be confirmed with solid market data before it is incorporated in the plan.

As I see it, the commuter rail facility is the key component of the plan. The other elements of the plan are intended to compliment this and to make it more likely that the commuter rail facility will be a reality. As I interpret the objectives of Belvidere, the object is not to create a major retail center or a major corporate office park or a technology park, but each of these elements of the plan would be positive components of the transit oriented commuter rail center. In the context of this objective, the idea of increased residential densities has two goals: a) to absorb demand that would otherwise take up more land in this area with single family or other less dense development; and b) to create some of the critical mass needed for the commuter rail center. This is just my impression, however, and the critical objective could be different.

That does not, however, lead inevitably to the requirement that dense residential development be limited to residential built over commercial. This is an untested product in this area--and by “this area” I mean most of the suburban area outside of urban cores in Chicago and mature first tier suburbs. It is significantly more difficult for developers to finance than “residential only” construction. If the central residential concept in the plan for this area is to require that residential units be limited, to a significant degree, to the upper floors of buildings, I think that this will slow down residential development. If slowing down residential development is the object, then the plan would be successful if the city also controls the land so that another municipality (or the county) does not allow a different course. If, however, the object is as I have stated it to be--to create critical mass--this requirement is going to be counterproductive.

My prediction could be proved wrong by a market study. In the absence of solid market data and a credible study, however, I think it is a mistake to limit residential development to this “style.” Note that I am not saying that the concept of high density residential should be abandoned, only that the concept of limiting it to the upper floors should be moderated or dramatically reduced.

I think that it would also be a good idea to include information on what the total (or minimum) residential densities per acre are planned to be in each of the mixed use categories. It is very realistic to expect that densities of 6 to 8 units per acre can be achieved with single family and duplex products--the major constraint being requirements for public streets and their rights of way.”

Mr. Holmstrom’s comments and suggestions have been incorporated in the study, as well as this document.

### ***Plote/Par Development***

Daniel Shepard, Tim Bextel

Brian Ellison, of Vandewalle & Associates, and Daniel Sheppard attempted to arrange a telephone conference to discuss the Flora Neighborhood Plan but did not have success in connecting. Tim Bextel, of Par Development, attended the Project Management Team meetings and offered his thoughts and insights. Their thoughts and ideas are reflected in the planning effort and this document.

**Belvidere School District #100**

Dr. Don Schlomann, Superintendent

Brian Ellison, of Vandewalle & Associates, met with Dr. Don Schlomann, superintendent of Belvidere School District #100. Dr Schlomann shared his perspective that there is tremendous pressure for residential development south of the Tollway. Dr. Schlomann felt that commercial and industrial growth in the County has been good, and that additional rooftops are the only way to bring more of the same to the area. On average, there are 0.7 school age children per household in the district. This is in comparison to Northern Boone County and Poplar Grove that has closer to 1 school age child per household on average. Dr. Schlomann shared with us that elementary school sites are typically 15 acres in size and support 600-800 students. Middle school sites are typically 35-40 acres in size, housing 800-1000 students, and a high school site would be 80 acres in size and would house 2000 students. He felt this information would be important should we want to plan school sites in the area south of the Tollway for the impending residential development. The feeling was that development pressure is going to be too great to not allow residential development south of the Tollway and that rather than plan away from it, to just plan for it. It was suggested that the Lincoln School site is a good example of efficiencies in detention and park space that could allow for a school and park site to be combined.

**Belvidere Park District**

Dan Rottewig, Executive Director, Mary Marquardt, Board President

Brian Ellison, of Vandewalle & Associates, met with the Park District Representatives in the same meeting with the Conservation District and the School District.

The Park District was in favor of expanding their planning area to include all of the Flora Neighborhood Planning Area, but was not enthusiastic about building additional neighborhood parks south of the I-90 Tollway if they were to be part of Single Family Residential Districts.

According to Mr. Rottewig, a typical new Neighborhood Park ranges from 15-20 acres and a Community Park ranges from 40-100 acres. The Park District has also developed joint parks with new elementary schools, with the Lincoln School being a model of efficiency in detention and parking requirements. Belvidere Park District has never planned for residential neighborhoods to be south of the Tollway, and other than greenway connections for a Regional Bike Plan has not focused planning efforts in this area.

**Boone County Conservation District**

Dan Kane, Executive Director

Brian Ellison, of Vandewalle & Associates, discussed with Dan Kane the importance of protecting the land around the Kishwaukee River for open space and natural areas. We also spoke of the Town Hall Road extension over the Kishwaukee River, and the need for careful design and construction to avoid damaging the River habitat. Dan shared the feasibility study for the Crow's Foot Conservation Area. Concern was raised over Belvidere expanding single family residential south of the Interstate due to destruction of prime agricultural lands and lack of planning for municipal infrastructure. The belief is that Belvidere needs to set tougher, higher standards for annexation and developers.

### *Daimler-Chrysler*

Curt Falk, Amy Humphries

Mark Williams of Growth Dimensions and Brian Ellison met with the two representatives of the Belvidere Daimler-Chrysler Plant. Topics of conversation included the upcoming change and re-tooling and the needs of the plant in the coming years based on the current changes. Food service was expressed as a serious concern for the plant in potentially moving from one shift to three, as workers finishing at different hours of the day would want immediate access to sustenance. Also, the current plant plans did not accommodate for an adequate amount of break areas and services.

Another concern was suppliers being able to match the increased demands of moving from one shift to three. The raise in number of employees in the plant and would require more employees to be suppliers as well. Suppliers are now required to be located within seven miles of the plant for just-in-time deliveries. That requirement would remain, but with increased plant production, there is worry that the suppliers would not be able to provide the necessary materials. . Additionally, as the area develops, traffic and congestion might make the radius of seven miles shrink considerably. Those people present agreed a Supplier Park, similar to the Ford operation in Calumet, Illinois, was a good idea because the benefits of being in a supplier cluster would appeal to companies and could make them commit to locating in Belvidere.

The Irene Road Interchange was also discussed since an expanded shift schedule would increase employee traffic and traffic of suppliers traveling to and from the plant. While Daimler-Chrysler expressed that an Irene Road Interchange would help them, they were not willing to commit publicly that the Interchange would be needed for them to operate due to fears that they would be asked to contribute to the interchange expense.

The Union Pacific “Belvidere Branch” rail line was considered in terms of both existing uses and potential expansion to include commuter rail service between Rockford and Chicago. We learned the rail between Rockford and Belvidere is in poor condition and would probably not be viable for commuter rail traffic until it was upgraded and rebuilt. However, the track between Belvidere and Chicago is in very good shape. The Union Pacific line that runs past the Daimler-Chrysler plant becomes the Elgin-Big Timber Metra line, and Union Pacific keeps the line in very good condition to supply and service Daimler-Chrysler.

The extension of commuter rail to Belvidere and the Flora Neighborhood would be a benefit to Daimler-Chrysler in a couple of different ways. Firstly, it would allow additional upgrades to the line to make train logistics flow more smoothly. Currently, there is no centralized or automatic signalized traffic control on the Belvidere Branch. Instead, Track Warrant Control (TWC) is used. TWC is a verbal authorization system defined by the General Code of Operation Rules used to authorize trains to occupy Main Tracks between named locations. TWC can be used as a stand-alone dispatching and safety system in unsignaled territories, such as the Belvidere Branch, or it can be supplemented with Automatic Block Signaling (ABS) to increase flexibility and traffic capacity. New Automatic Traffic Control (ATC) from a centralized location can give engineers in-cab instructions for seamless train flow. With the increased rail usage of a commuter train on the Belvidere Branch, Daimler-Chrysler felt that their logistics and train scheduling would be more streamlined and better managed because of the time savings of moving from TWC to an advanced ATC system. Daimler-Chrysler welcomes commuter rail for the added trains will make their track usage more streamlined.

The second reason the commuter rail extension is welcomed by Daimler-Chrysler is the ability to bring commuters to the Daimler-Chrysler plant.. A commuter rail to the Flora Neighborhood allows the plant to easily gain access to a larger labor pool to staff an expanding workplace. This same commuter area can then offer the services that Daimler-Chrysler feels are lacking, namely, food and retail services.

Finally, Daimler Chrysler is receiving energy upgrades as part of the plant re-tooling and did not feel that it would need additional power from a dedicated power park.

***Growth Dimensions***

Mark Williams, Norb Ziemer, Steve Nailor

Mark Williams was part of the Project Management Team for the Flora Neighborhood Plan and was integral to the planning and discussions. Norb Zeimer and Steve Nailor were only introduced in passing and expressed enthusiasm for the project.

***Metra***

Phillip Pagano, Executive Director of Metra, met with a group including Mayor Brereton, David Taylor, Mark Williams, Mayor Lockhart from the City of Marengo, and Brian Ellison of Vandewalle & Associates. Mr. Pagano outlined some of the general advantages and disadvantages of the Chicago Metropolitan Rail network:

Pluses	Minuses
<ol style="list-style-type: none"> <li>1. Speaker of the House (Dennis Hastert) is from Illinois and loves railroads.</li> <li>2. The Chicago Land Area always gives a unified transportation plan to the federal government and receives funds requested.</li> <li>3. Revenue streams are present in the rail system, not a lot of capital expenditures, but there are revenues.</li> <li>4. Majority of feasibility studies for expanding and improving service have been done without bias.</li> <li>5. Projects for Metra always come in on budget and often times under budget and in a faster timeframe.</li> </ol>	<ol style="list-style-type: none"> <li>1. Belvidere is outside of the six-county region.</li> <li>2. Lack of population means revenues will be in question.</li> <li>3. Lots of service needs already within six-county region.                         <ol style="list-style-type: none"> <li>a. Johnsborg Station</li> <li>b. UP West line to Geneva</li> <li>c. Star Line is \$1b project.</li> <li>d. SE Service improvement \$500m project.</li> </ol> </li> </ol>

Phillip Pagano informed us of his plan for the Star Line that will run from O’Hare to Hoffman Estates, and then south on the E&J line to River Forest, Joliet, and points further south. He suggested rather than focusing on the Union Pacific line through Belvidere, to look at linking a rail corridor down the Interstate (I-90) to the Hoffman Estates transfer station. The goal would then be to connect Belvidere to Hoffman Estates and not Elgin. He suggested Belvidere look at Bus Rapid Transit first rather than rail, and to move into rail in the future. He showed smaller diesel locomotives that could fit under the interstate bridges and suggested that the bus service could easily be switched to rail after a number of years as ridership increased. He felt that talking to Union Pacific was a waste of time and that the Star Line was the scenario that he could support after more analysis and feasibility studies are obtained. The Star Line will be implemented in the next 7 to 10 years.

### **Illinois Department of Transportation**

Although some meetings involved a representative of the Illinois Department of Transportation, we received tremendous amounts of information from the City of Belvidere, Boone County, and Rockford Area Transportation Systems (RATS) in regard to the potential Irene Road Interchange and the extension of Townhall Road. We were also assured Belvidere and Boone County would be meeting with the IDOT soon after the first of the year with our plan to discuss the Interchange and road extension.

### **Illinois State Toll Highway Authority**

As a part of the background portion of this project, Vandewalle & Associates sent a letter to ISHTA Planning Director Leanne Redden informing her of the project and inviting her and her staff to be a part of the initial planning stages. We were informed that the Tollway was not interested in meeting with us, or Belvidere, until a plan for the area was completed. Therefore, we did not push the need to meet further with ISHTA and instead concentrated on completing the project so the City and County would have the document needed to conduct a successful meeting with the Tollway Authority. It is our understanding that the City of Belvidere will be meeting with the Tollway Authority after the first of the year.

The Tollway Authority was present for our meeting with Transystems at Growth Dimensions in October (see information under “Transystems” in this section) and was interested and enthusiastic about the plans being presented. The Tollway representative, Bunny Anderson, felt the ideas and plans discussed would be of interest to the Tollway and that they would more than likely be able to support the Irene Road Interchange if the plans discussed were the intent of the City of Belvidere.

### **Transystems Engineers**

David Hadley, Robert Nastal

On October 12<sup>th</sup>, a large group of people interested in the Flora Neighborhood Plan and in particular the commuter rail initiative, met at Growth Dimensions in Belvidere to discuss the location of the transit center and the feasibility based on the report produced by Transystems for the Northern Illinois Commuter Rail Initiative. Through discussion with Mr. Hadley and Mr. Nastal of Transystems, the following conclusions were reached:

1. The original location proposed by Transystems in their report was based on ease of implementation. Property values and economic development were not part of the consideration.
2. The original location proposed by Transystems was a difficult location to implement due to the straddling of the USH 20 Corridor.
3. The location suggested by Vandewalle & Associates was also an option proposed by Transystems, but was discarded due to difficulty of crossing USH 20.
4. Vandewalle & Associates insists that the value, both in economic and property values, is considerable. The difference in moving the rail from straddling USH 20 to south of USH 20 is significant in economic terms and will help in spurring redevelopment on both sides of the Tollway.
5. Transystems insisted that there could be no at-grade crossings of the train on USH 20.
6. The most viable option, given the desire to be south of USH 20, would be to move the train line below grade at USH 20 and have the station platform be part of a larger building complex on top of it.

### *Advantage Realtors*

Lorenzo Reyes, Marcos Reyes, David Reyes

The Reyes Family came to the offices of Vandewalle & Associates early in the planning process to express their concern that the lands south of the interstate would not be readily available for single family residential development. They hold considerable land options in the area south of the interstate. The desires and opinions of the Project Management Team were shared with the Reyes and we explained that the Ag Tech Initiative was founded on work that has been on-going in the community. The Reyes felt they would have continued involvement in the public process.

### *Rockford Area Transportation Study*

Gary Macintyre, Rockford Public Works/RATS Technical Committee

In a phone interview with Gary Macintyre, a brief overview of the regional transportation planning was discussed along with details of how the Flora Neighborhood and Tollway Station fit into the bigger picture. Mr. Macintyre was receiving 10, 15, and 20 year plans from municipalities within the RATS area, and these plans focus on bus, rail, auto, and pedestrian connections.

Mr. Macintyre thought improving transit access to all stops between Belvidere and Rockford was critical to any transportation planning process. He valued unified schedules for both bus and train and multiple options for access, including park and ride, bike parking, and pedestrian waiting areas.

Mr. Macintyre explained that for any type of mass transit to be feasible, there have to be clusters of density around the transit stops. “The Neighborhood Plan needs to lead high density development [into the Rockford market.]” Another planning goal was a desire to make the greater Rockford metro market more of a employment importer than an exporter. Density in the Flora Neighborhood would help that long-range vision.

Mr. Macintyre felt that Daimler-Chrysler needed to take a vocal role in asking for the new interchange at Irene Road and the extension of Townhall Road over the Kishwaukee River, claiming that their involvement would engage both the Tollway and IDOT faster than without. He also felt that Belvidere needed to move forward with plans and get the Tollway Authority committed to the Irene Road Interchange. In order to get that commitment, Belvedere would need to commit to high density land use to drive demand for the Interchange.

## **3. Market and Feasibility Assessment**

### *Summary*

Vandewalle & Associates has conducted a limited review of existing data and reports to compile a summary of feasibility from a market and economic development perspective for the mixed land uses within the Flora Neighborhood. The concepts portrayed in the Flora Neighborhood Plan are long-term strategies to drive market rather than follow. We have looked at the market profiles and retail marketplace potentials for three different study areas- Boone County, Rockford Metropolitan Statistical Area, and the Rockford Designated Market Area. All three of these study areas contain the Flora Neighborhood, but are different sample sizes and offer different views into the regional economic profile and market potential.

Based on supply-demand analysis for retail in the Greater Rockford MSA, interviews with key stakeholders within the study area, experience within the region in long range planning, and site and development analysis within the Flora neighborhood Planning Area, we believe that it is

most likely that the Flora Neighborhood could support the following land use strategies in a final build-out scenario:

- Transit Center with vertical residential and commercial densities
- Supplier Park with a focus on manufacturing and assembly
- Distributed Energy System with quality and redundant co-generational power grid
- Technology Center that focuses on bio-ag products and systems
- Residential with a variety of styles and options, but focus on sustainable development and green design

This summary should not be used as the sole basis for real estate ventures, development, financing, or leasing by the City of Belvidere, Boone County, private developers, or prospective tenants within the Flora Neighborhood. Actual site, building, parking, utility, environmental, grading, civil engineering, architectural plans, and construction documents are not included within the scope of this work. The City and County should work closely with Vandewalle & Associates to address these and all related planning considerations.

The compilation of facts, data, and statistics is from a variety of sources, including ESRIBis, the Rockford Area Economic Development Council, and the Rockford Register-Star.

#### ***Transit Center with vertical residential and commercial densities***

As the residential aspects of Boone County have grown, commercial development in the County has lagged. With established commercial areas in neighboring McHenry and Winnebago Counties, Boone County and Belvidere have now been trying to attract commercial development in a sustainable and comprehensive manner. Bill Luhman, former executive director of Growth Dimensions shared the general sentiment of many in the Rockford Register-Star by saying if Boone County, “plays its cards right, we’ll be the next wave” of retail development.

Current executive director of Growth Dimensions, Mark Williams commented that when considering access to the Interchange and mixed use opportunities, specific retail, shopping, and entertainment become a real possibility.

With the addition of a Tollway interchange and a commuter rail stop at the Tollway Station, the area will likely face an increase in market pressure from two major categories- big box retail and low density residential development. These two categories often acquire inexpensive land in prime locations prior to the market recognizing their potential. This area may not be able to achieve goals beyond big box retail and low density residential if it does not secure a land use plan that attracts a major large-scale national developer that can hold land for market attraction and develop in size and scale to overcome short term desires to develop projects that are better served in other locations in the region.

Adjacent to a proposed Transit Center, mid to high rise residential and office towers with commercial and retail in lower levels are some goals to be pursued in this project. Surface lot parking should be minimized, and centralized structured parking should replace the majority of the off-street parking. This master planned area would focus on urban character and could provide employment for local residents living within the urban core as well as for commuters coming from the rail and bus transit lines as well as the new Tollway Interchange.

As for specific retail recommendations, we have reviewed many of the major categories in the area with a Retail Marketplace Profile. There are considerable leakages in many of the core commercial areas within the study, and certain categories have a higher potential risk than others. Any commercial offerings in this area would have to be carefully considered and

developed in concert with other efforts to improve and develop infrastructure. In contrast, Downtown Belvidere, which is also undergoing a Transit and Redevelopment Study, is more readily capable of attracting and establishing retail, commercial, and residential components through redevelopment of existing infrastructure and sites. The Flora Neighborhood will most likely need infrastructure establishment prior to major development. The detailed Retail Marketplace Profile for Boone County and the Rockford MSA are available in the addenda sections of this document.

### **Supplier Park with a focus on Manufacturing and Assembly**

Daimler-Chrysler is currently in the process of undergoing a major change over from producing a single automobile line, the Dodge Neon, to a new flexible platform system that will allow for the assembly of a variety of automobile types and styles. At the same time, Daimler-Chrysler has shared plans to progress from one working shift to three, providing for considerably more jobs and at the same time, a greater need for parts and components to supply the plant. It appears that the employment base could be able to keep up with the demands of Daimler-Chrysler, especially with the advent of commuter rail and a new interchange to allow for easy access to the plant.

At the same time, it also seems that it would be most advantageous for suppliers of the parts for assembly at a location that would be in close proximity, to have access to not only in the expanding employment base, but also to the cluster of suppliers that could build off of each others synergies.

Based on the information collected and reviewed for this project, it would seem that a Supplier Park, much like that in Chicago with the Ford Supplier Park,<sup>1</sup> would have the potential for success and interest from the development community.



**Ford Motor's 155-acre Chicago Manufacturing Campus houses nine of the companies top-tier parts suppliers in four buildings, consisting of 1.6 million square feet of manufacturing space.**

*www.naiop.org*

<sup>1</sup> See Appendix #2- "Suppliers join Ford's Chicago Campus in a Model of Just-In-Time Manufacturing."

### ***Distributed Energy System with quality and redundant co-generational power grid***

In light of the potential for a Supplier Park and the desire to attract quality employment opportunities to the Flora Neighborhood and Belvidere/Boone County as a whole, we believe that a market strategy could consider a distributed energy system that focuses on co-generation of reliable and quality power, heating and cooling. Additionally, there could be market interest in devising an alternative energy strategy that demonstrates a reduction in use of fossil fuel energy and an increase in biofuel and biomass energy resources.



Many benefits could come with having a smaller power supply location for a specific land area. Using co-generation in a smaller system offers environmental benefits and less reliance on a single resource. Many new economy industry clusters are requiring quality power for running precision equipment, performing detailed procedures, or managing large quantities of data. As evidenced by national stories of power failures in California, the East Coast, and the South due to natural disaster, mismanagement, and operator error, being able to provide quality power, in a safe and secure location with guaranteed performance, is a highly sought after feature when corporations are looking to re-locate. Industry clusters such as business services/supply chain management, biotechnology, finance and insurance, information technology/data processing, machinery manufacturing/automation, manufacturing/materials, medical devices/medical informatics, and pharmaceuticals, are just a few among the industry clusters that require quality power when looking to locate new facilities. Realistically not all of these industry clusters may look to locate in the Flora Neighborhood. However, a specific business, such as plastic injection molding manufacturing, for example, could see great value in moving to the Supplier Park, and a firm specializing in holographic data storage could be attracted to the Corporate Campus and Transit Center Areas. Further details regarding specific industry clusters and locations in the Flora Neighborhood are explained in the Implementation section of this document.



### ***Technology Center that focuses on bio-ag products and systems***

In the late 1990's, Belvedere and Boone County, together with Vandewalle & Associates, developed the idea for the Ag-Tech Initiative. The Initiative has continued to grow on the original concept of providing new markets for local farm commodities, commercialization of bio-based, industrial products and a network for aspiring entrepreneurs to gain access to public and private funding sources. The foundation has been set for the expansion of the Ag-Tech Initiative into further efforts and broader categories. Provided development and economic

trends continue in their current profile, the Ag-Tech Initiative could become part of a larger Technology Campus that could focus on not only bio-based materials, but bio-refining processes, bio-energy technology, and ag-innovation at a much higher level than is currently being practiced.

With a physical location of the Ag-Tech Park and a Technology Campus- south of the Tollway in close proximity to both Daimler-Chrysler and active agricultural lands, the City of Belvidere and Boone County could become the central hub for bio-ag research along the I-90 corridor between Chicago and Minneapolis-St. Paul, if not the whole upper Midwest. It is our belief that this Technology Campus would not focus on testing and commercialization, but instead the efforts undertaken in the AgTech Park. The Technology Campus would be ideal for existing and emerging businesses to utilize the results of extensive testing and commercialization efforts of the AgTech Initiative to readily transfer the ag technologies to existing products, processes, and research efforts.

Some users of the Technology Campus could not necessarily work in ag-technology or bio-based materials, but they could recognize the advantages to clustering with the industry. Data storage and processing, pharmaceuticals, medical devices, and informatics may all be areas that could take advantage of clustering in a technology center that has an agriculture focus. The further details and descriptions of the specific land uses and areas are available in the Conceptual Development Plan in Work Element Three of this document.

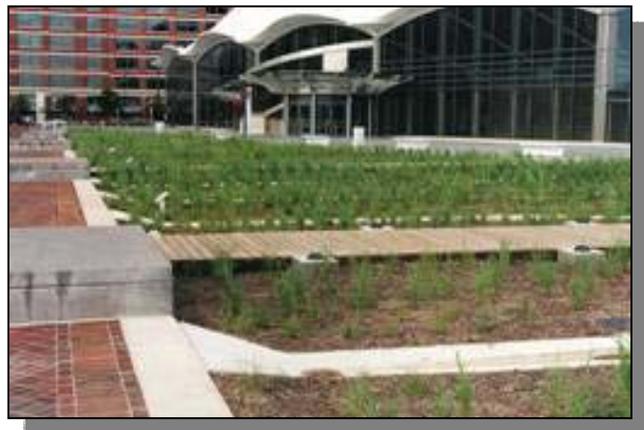
**Residential with market leading traits.**

As expressed in the Rockford Register-Star on May 22, 2005, “Boone County has become home to families escaping Chicago and its suburbs to the east and Rockford to the west.”

Since 1990, Boone County has had a 36% increase in population, with the largest growth in Caledonia County (+196%) and the smallest change in Spring Township (-3%). The demographics of the area show a predominately white, white collar workforce, strong homeownership, few instances of poverty, and a high number of high school and college graduates.

The median home value in Boone County has grown considerably (82%) from 1990 to 2000. The median year a home was built is 1972, showing much newer housing stock than neighboring Winnebago County (1965) or the State of Illinois as a whole (1962).

The new residents, from both Rockford and Chicago, appear to come for different reasons. Those from Rockford move to buy into a more expensive market for less crowded, pastoral life-style. Buyers coming out of the Rockford market tend to be professional, upper-income families with stay-at-home moms. Education is also a big factor since Rockford Schools are viewed as unsupported and lower quality than the suburban counterparts.



Chicago escapees are moving from higher taxes and less open space to an area now synonymous with large lot subdivisions and pastoral living. These new residents are still commuting to jobs in the Chicago metro area, with an average commute in the County being 45 minutes, .

Feedback from local key stakeholders, participants in the Public Goals and Values Worksession, and other local contacts illustrated the biggest concern has been the proposition of single family housing, in a form typical of the Rockford market, south of the Tollway. Comments have ranged from, “there will be one hell of a fight [if housing goes south of the Tollway]” to “Belvidere had better plan for the inevitable.”

We believe that the Flora Neighborhood can successfully develop and prosper with a limited number of single family homes south of the Tollway, but will probably have to concede some single family housing areas south of the I-90 corridor. We believe there is opportunity within the single family residential market to push for leading development styles and patterns different than those currently in the market in Belvidere and Rockford, but becoming prevalent in the Chicago and other national real estate markets.

First mover developers in the Rockford/Boone County market seem to be big box retailers, single family residential land speculators, and home builders. Despite the natural tendency to “go with the flow” of the market, it is our belief that there is an emerging, market-leading trend to provide not only quality single family homes, but a variety of housing types, especially those that, rather than rely on the formula of “big home, big lot,” focus on quality construction, attention to detail, and an emphasis on community amenities. Some housing examples that could be successful in the Flora Neighborhood would be two or three story townhomes, condominiums and lofts above retail and office, small-lot urban density single family homes, and attached home products.

Residential land requirements of a conventional single family development could absorb into smaller, denser neighborhoods and concentrate on resources, walkable neighborhoods, and advantages of proximity and density of agricultural lands and open space areas to the South. While this approach may not afford opportunity for all developers and speculators, it may attract a different market of builders and developers. There is abundant land available in areas north of the Tollway, in the West Hills Neighborhood, for example that can host the conventional subdivision developments desired by the current market conventions.



Keeping in concert with some of the overall themes of the Flora Neighborhood, namely Energy, Transportation, and Bio-agricultural Technology, the City of Belvidere and Boone County could hold the requirement of development that addresses these themes in higher favor for development practice in the Flora Neighborhood and still have market success. We recognize that the market may have hesitancy towards additional development requirements and certifications towards, but some developers would be interested in building residences that are EnergyStar or GreenBuilt Certified, for example. As the plans for development areas progress in the Flora Neighborhood, it will be important for Belvidere and Boone County to investigate various programs and their possibility for implementation.

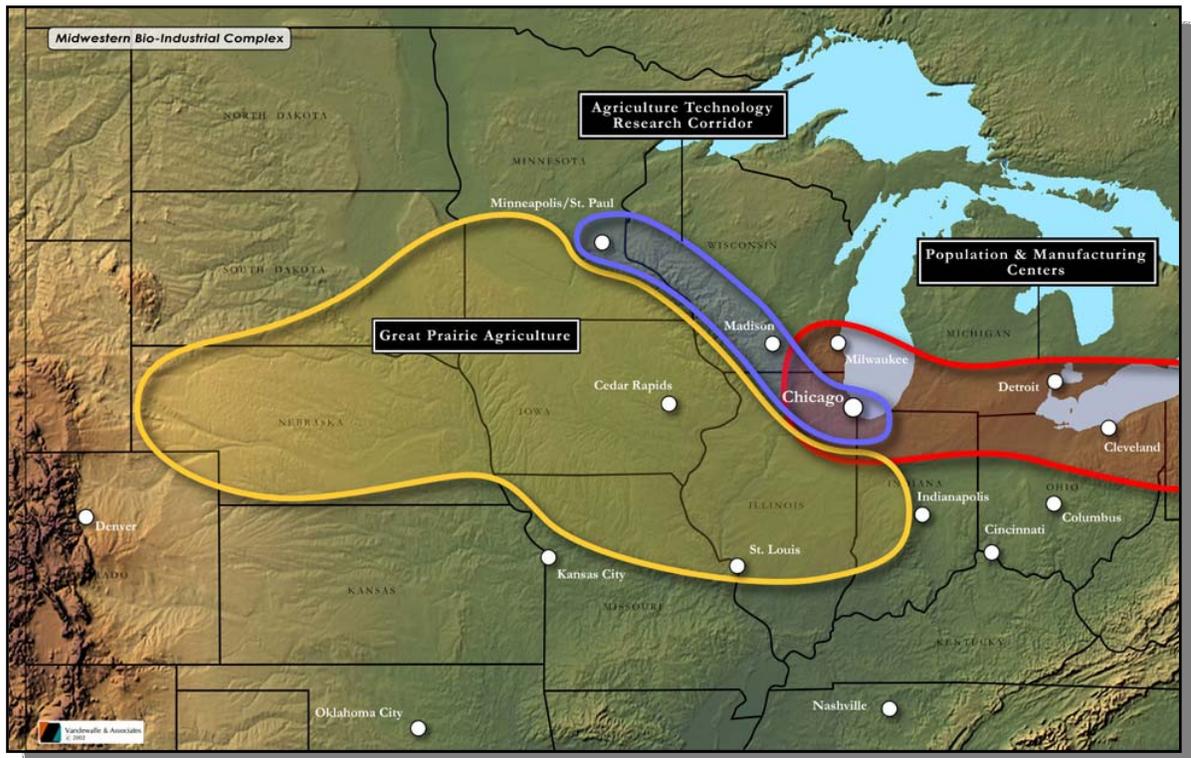
As a matter of reference, a housing profile for Boone County and the Rockford MSA is available in the Appendix Section of this document.

#### 4. Opportunities Analysis

When looking at the opportunities available to the Boone County-Belvidere area, it quickly becomes obvious that it is not possible to look solely at the local level, and a truly conclusive study must begin at a larger regional level. Summarized below, and described in the Flora Neighborhood Storybook, are the strongest opportunities that Belvidere and Boone County can and should take advantage of, and explanation of how the development of the Flora Neighborhood can help support those larger community goals.

##### Regional Opportunities

When looking at Belvidere and Boone County in a large regional context, three major defining drivers of opportunity become readily apparent- location in the Midwest Region in relation to traditional industry , location in relation to emerging technology clusters, and position in the I-90 Regional City. An understanding of the models of decision making and how they have been altered is needed as the region has moved from a traditional economic model to a “New Uses” Economy.



**Model for Economic Decision Making**

The analysis for the regional vision is rooted in the assumption that the model used in the past for economic development and growth is not suited for future development and growth. The old model must be actively discarded in favor of a new, more competitive model.

<b>In the Old Economy, People Believed That:</b>	<b>In the New Economy, People Believe That:</b>
Being a cheap place to do business was the key.	Being a place rich in ideas and talent is the key.
Attracting companies was the key.	Attracting educated people is a key.
A high-quality physical environment was a luxury that stood in the way of attracting cost-conscious businesses.	Physical and cultural amenities are key in attracting knowledge workers.
Regions won because they held a fixed competitive advantage in some resource or skill.	Regions prosper if organizations and individuals have the ability to learn and adapt.
Economic development was government-led.	Only bold partnerships among business, government, and the nonprofit sector can bring about change.

The Old Economy is characterized as being slow, fixed, and monolithic while the New Economy is characterized as being quick, adaptable, and diverse. In the New Economy, the region’s primary asset is its talented, educated, and “educable” workforce. The knowledge base and the skill set of the workforce are determining factors for the prosperity of the region.

The goal of the New Economy is to develop, attract, and retain the necessary workforce that will not only meet the needs of existing businesses but will also have the ability to create new businesses. In order to develop, attract, and retain the right workforce, the area must have a high quality of life that includes: education, culture, recreation, and a diverse choice of housing options. The creation and maintenance of a quality of life requires a comprehensive regional approach to planning and development.

The New Economy rests on the following seven pillars:

1. Knowing your region’s economic function and emerging opportunities in the global economy
2. Creating a skilled workforce
3. Investing in an infrastructure for innovation
4. Creating a great quality of life
5. Fostering an innovative business climate
6. Reinventing – and digitizing – government
7. Taking regional governance opportunities seriously

**Relation to Traditional Industry**

Belvidere-Boone County is located at the crossroads of the traditional industries that helped to define and shape the Upper Midwest. Contained within the County and extending only farther west to Rockford is the traditional Rustbelt Industry Region of steel, materials processing, manufacturing and assembly. As off-shore outsourcing and blue collar emphasis has shifted to

white collar in this region, the economic profile has changed, but the foundation built on a population weaned on hard work, attention to quality, and pride in profession has created a new class of creative professionals that can maneuver in complex international circles and can grasp technological concepts while at the same time emphasize importance in family, community, and pride in workmanship.

Contained in Boone County and heading west, is the Great Prairie Region. This area is home to some of the most productive farmland on the planet. This resource, although often overlooked in modern times, is the backbone to the success of our country. Technology and innovation has made it possible for one farmer to feed hundreds and, thanks to the hard work of the farmers and families within this Region, has made “America’s Breadbasket” into the “World’s Breadbasket.” It cannot be ignored, when looking at the regional opportunities, that this foundation has also shaped and crafted the people of the region into quietly confident and solidly valuable components in a growing economy.

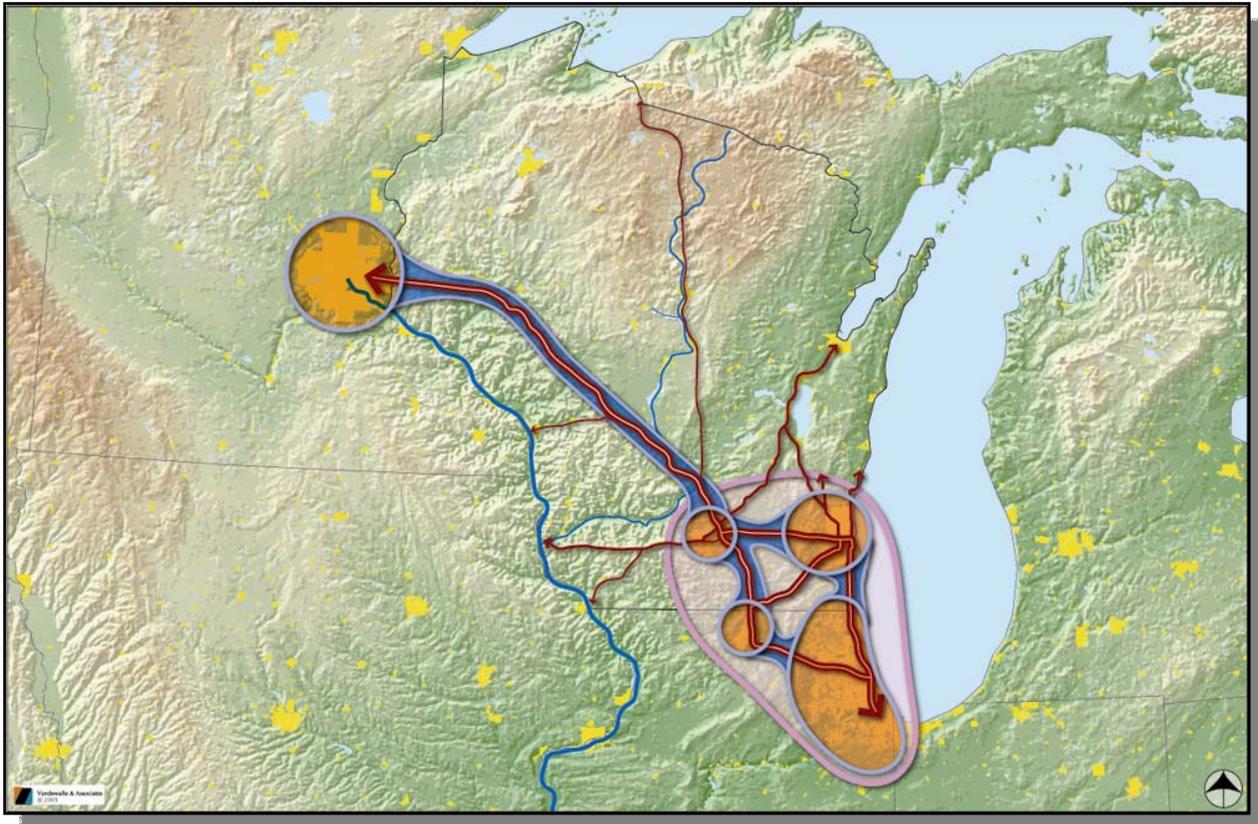
Boone County’s location has also been solidly centered between larger metropolitan areas that offer a host of innovative ideas, research, and technologies that Belvidere and Boone County have adopted throughout their history to become stronger in manufacturing, industry, and agricultural practice. The University of Illinois and the University of Wisconsin have both given influence to advanced agricultural practice in Boone County, and Chicago and Rockford have shared industrial technologies to make Boone County a strong industrial economy as well. In return, Boone County has provided staple goods- grains, milk, meat, and agricultural raw materials- and industrial goods- automobiles, building supplies, machinery and tools- to be a powerful player in the growth of the Regional Economy.

### **Relation to Emerging Technology Clusters in the New Economy**

As the economy changes from traditional to a new mindset, Boone County once again proves to be in the right place at the right time. Recently, a group of industry and government leaders in the Upper Midwest convened to help define a larger regional strategy for preserving quality of life and place while at the same time attracting investment, innovation, and ideas to the region to make it a leader in the New Economy. Belvidere and Boone County find themselves at the core of the I-Q Corridor, a region rich in ideas, innovative workers, investment capital and some of the world’s most exciting intellectual property – especially in biotechnology, the life sciences, information technology, and advanced manufacturing.

Chicago and the Twin Cities of Minneapolis & St. Paul are at a distance of only 400 miles apart and are the two dynamos of the Midwest economy. Strategically located between Chicago and the Twin Cities, alongside Interstates 90, the major travel corridor between the two metropolitan areas, is Belvidere and Boone County, a region rich in the “Q’s” of the I-Q Corridor (quality people, schools, lifestyle, and environment) and able to take advantage of the growth of the “T’s” (ideas, intellectual property, innovative spirit, and investment capital).

Between Chicago and Minneapolis, and strongly connected to Belvidere and Boone County, is the border region that includes Belvidere, Rockford, Beloit, Janesville, and Madison. Wisconsin is ranked as one of the nation’s fastest growing technology states. Wisconsin is ranked in the top 10 for biotechnology employment growth and the number of biotech companies.



The Chicago metro area, which includes Boone County, was recently ranked at the #2 location in the country for concentration of young adults with college educations and #1 in the country for young adults. Combine this with other statistics.<sup>2</sup>

- #3 in the nation for Gross Regional Product (\$411 billion)
- #2 in transportation infrastructure
- #2 in educational opportunities for its residents
- #5 in arts and cultural offerings
- #2 in the best places for recreation
- #6 in supply of top quality health care facilities and practitioners
- #8 in cost of living standards, one of the lowest for top U.S. metro areas
- #1 in high—technology employment (347,100 workers)—\$35 billion regional high-tech output and over 7,100 companies
- #1 in manufacturing—\$72.4 billion regional manufacturing output
- #1 data transmission by volume—10 terabytes/day

It becomes readily apparent that the opportunities afforded regionally for the emergence of technology sectors is second-to-none. The combined power of the region makes the “I-Q Corridor” a vibrant location for biotechnology research, technology transfer, and company growth. Belvidere’s location in the center of this Corridor makes it a strong potential winner in attracting and developing a larger local technology economy from the combined economies of Wisconsin and Illinois. It will be the investment in strategy towards realizing the opportunity that will prove to be the short-term challenges to achieve the longer term gains.

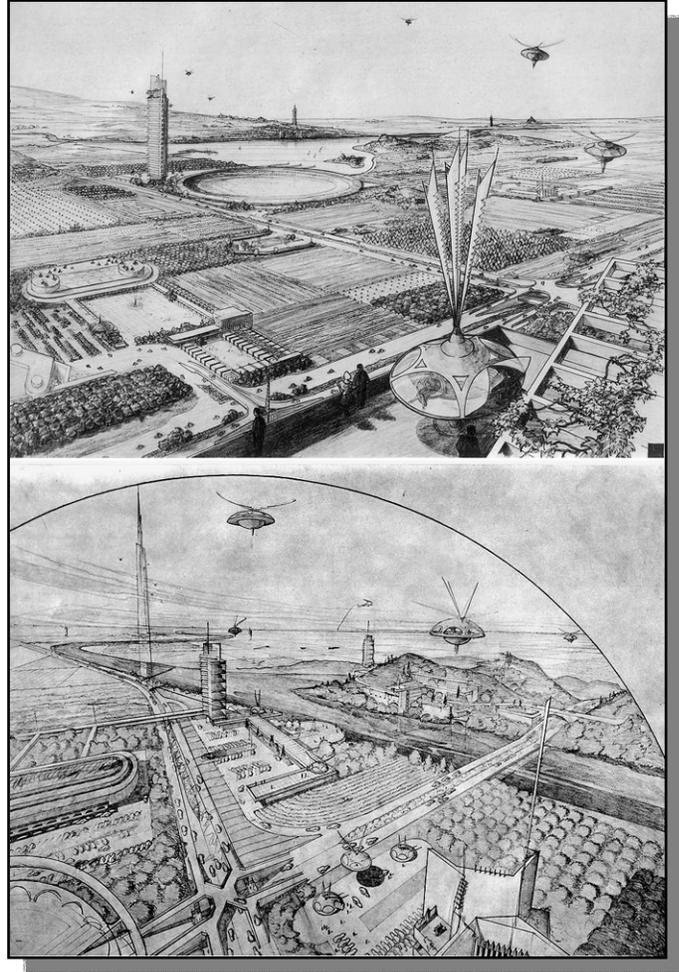
<sup>2</sup> Statistics and ranking from World Business Chicago, [www.worldbusinesschicago.com](http://www.worldbusinesschicago.com)

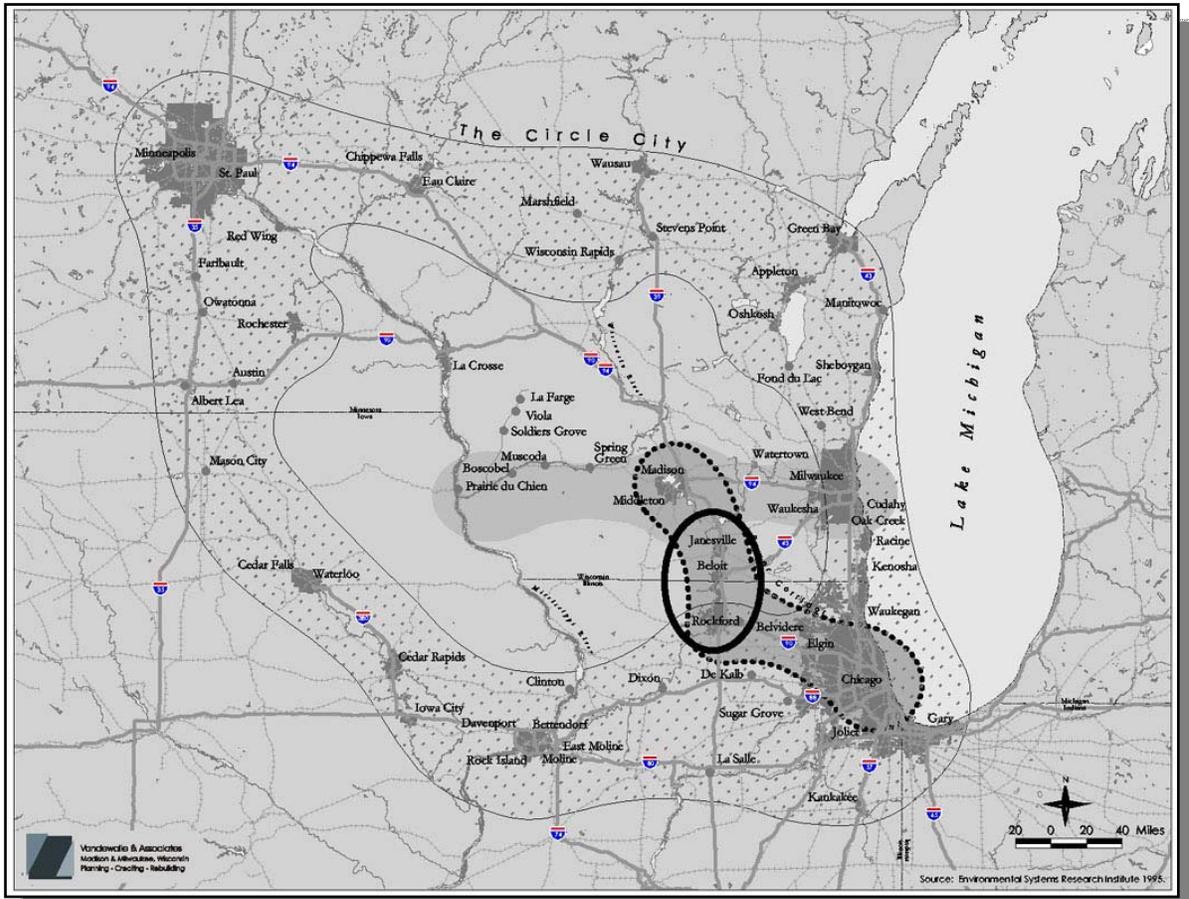
**Location in the “Linear City”**

Midwest visionary Frank Lloyd Wright and in more modern times, Phil Lewis, FASLA, envisioned the development of linear cities that would be connected by major transportation and infrastructure corridors. Rather than focusing on horizontal, sprawling densities, these “pearls on the necklace” would focus on dense urban developments that would leave the land between the corridors open for farmland and open space. Wright held the Jeffersonian ideal that every citizen should be in contact with “a vine and a fig tree,” meaning that urban residents would be connected to the people, to the food and to the land of the region.

Wright’s plan for his “Broadacre City” was never realized and as more and more farmland has been consumed by large single family lots and sprawling development, Belvidere and Boone County have recognized that the best way to preserve their valuable agricultural lands and pristine natural areas is to grasp the concept of the urban center and firmly lead it into the future.

The concept of the linear city- that large metropolitan areas should develop and concentrate along transportation spines, focusing infrastructure and resource in these areas and in contrast, utilize the areas in between the developed dense areas for agriculture, growth of raw material resources, and open space for recreation. Originally proposed back in the late 60’s the linear city concept is gaining momentum in urban planning and development circles. As it becomes more evident that the conventional development patterns devour prime agricultural land and valuable open space, burden municipalities with expensive infrastructure extensions, while providing few economic incentives, the linear city is becoming embraced as a logical, forward-thinking ideal.





Belvidere and Boone County are already situated on a major transportation corridor into the Chicago Metro area, and between the economic dynamos of Chicago and the Twin Cities. Along this corridor, developers, corporations, technology companies, and young entrepreneurs are looking for a place to establish themselves in the linear city that offers urban interface, existing successful corporation, multiple connections and travel options, quality people, access to higher education, and a high standard of living- recreational options, open space, parks, etc.

Belvidere-Boone County is poised to take advantage of the regional assets of an established diverse economic base- from agriculture to manufacturing, to services and finance- a location on the I-Q Corridor of emerging technology clusters, and a location along the linear city corridor extending from the Chicago metro area. These three larger opportunities should help to form a template for economic decision making as well as providing context for investigating opportunities at the local level.

### ***Local Opportunities***

As expressed in the regional opportunities section, Belvidere-Boone County is situated in an ideal location in the Upper Midwest to take advantage of emerging socio-economic trends and technology innovations.

## 5. Project Management Team Meeting #2

Below is a summary of the major points discussed at the Project Management team meeting on October 4<sup>th</sup>, 2005.

### Comments on Review of Draft Plan

Things liked on draft plan:

- Idea of flexible-platform neighborhood to match philosophy of Daimler-Chrysler's new flexible platform plant.
- Location of transit station between USH 20 and Tollway.
- Connection to/from both sides of the Tollway.
- Idea of distributed energy Power Park as part of the overall plan
- Regional presentation seemed appropriate and informational, though new graphics are needed.

Things disliked on draft plan:

- Rail more than likely can't go around Daimler-Chrysler.
- Transit Center not close enough to Interchange at Irene Road

Recommended additions to the preliminary conceptual land use graphic include the following:

- Need to check feasibility of proposed rail location and transit stop.
- More detail in land use types and relationships.
- Make sure Bus Rapid Transit is part of overall plan.

Recommended action steps before the next meeting include the following:

- Meet with Transystems to discuss rail alternatives and get final determination on transit center location.
- Look into funding opportunities for Power Park
- Take another look at proposed rail and Transit Center locations; make sure RATS, ISHTA, and Transystems agree with potential location and orientation.



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## WORK ELEMENT THREE: PLAN

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### 1. Land Use Map

An important purpose of the Tollway Neighborhood Plan is to provide specific land use and transportation system guidance for the area generally located south of Newburg Road, west of Genoa Road, north of Fern Hill and Cohoon Road, and east of the Boone-Winnebago County line.

#### ***Background – the 1999 Boone County Comprehensive Plan***

The I-90 Tollway Corridor is identified as a critical development area in the adopted 1999 *Boone County Comprehensive Plan*. Specifically, this locale was identified as the “Tollway Corridor Area” and designated as the main focus of economic development efforts for Boone County on the *Comprehensive Plan’s* Community Character Planning Areas Map (Map 5, page 52). This same Map calls for the preservation of rural character and agricultural lands to south of the Tollway Corridor Area.

Beyond the designation of the Tollway area for strategic employment and tax base development, the *Comprehensive Plan* also makes general recommendations for land use and transportation. The *Plan’s* land use and transportation recommendations are based on the “Rural Character Alternative” considered during the development of the *Plan*. Under this selected development alternative, the adopted Land Use Plan and Transportation Plan are designed to accommodate and serve a population of 200,000 persons, and their land use and transportation needs. (See the discussion of the Rural Character Alternative on pages 60-62 of the *Boone County Comprehensive Plan*.)

The Land Use Plan Map (pages 97 and 99) calls for a combination of light and heavy industrial uses in the area north of USH 20 and west of Stone Quarry Road, commercial uses in the area between the Tollway and USH 20 between Tripp Road and Johnson Road, and a combination of office park and planned mixed use development south of the Tollway and around a proposed new Tollway interchange and passenger rail stop in the vicinity of Irene Road. Existing single-family subdivisions south of Graham Road and Cohoon Road are recognized, but this use is not planned to expand. Areas south of these roads are planned for long-term agricultural and rural character preservation. (See text describing these areas on pages 73-75.)

The Transportation Plan Map (pages 102 & 103) calls for the extension of Town Hall Road across the Kishwaukee River and its floodplain, with a westward jog over to a new interchange with the Tollway. The Map also calls for the eastward extension of Graham Road to connect with Fern Hill Road to serve the portions of the Tollway Corridor Area located south of the Tollway. A bicycle-pedestrian trail circuit extending from the Kishwaukee River floodplain along Irene Road, Graham Road, Fern Hill Road and Johnson Road is also recommended.

## 2. Flora Neighborhood Land Use Map

### Flora Neighborhood Land Use Categories

The land use categories in this Plan are designed to directly reflect and elaborate the categories in the *Boone County Comprehensive Plan*. As such, the City, Townships and County may choose to adopt this Plan as an update to the 1999 *Comprehensive Plan*.

### Established Land Use Categories

This Plan uses ten land use categories that are fully consistent with the *Comprehensive Plan*. These include:

#### **Rural/Agriculture: (Light Green)**

Agricultural uses, farmsteads, other open lands, and single-family residential at or below one dwelling units per forty acres.

#### **Single-Family Residential: (Yellow)**

Sewered single-family residential development at densities up to five dwelling units per acre.

#### **Planned Office: (Orange)**

High-quality office, institutional and office-support land uses with very generous landscaping and limited signage.

#### **Neighborhood Business: (Pink)**

Residential, office, and neighborhood supporting institutional and commercial uses which preserve the residential character through building scale, building appearance, landscaping and signage.

#### **Planned Business: (Light Red)**

High-quality indoor commercial, office and institutional land uses, with generous landscaping and limited signage.

#### **Planned Industrial: (Light Grey)**

High-quality indoor manufacturing, assembly and storage land uses, with generous landscaping and limited signage.

#### **Heavy Industrial: (Grey)**

Carefully controlled heavy industrial, storage and disposal land uses, with moderate landscaping and signage.

#### **Extraction: (Dark Grey)**

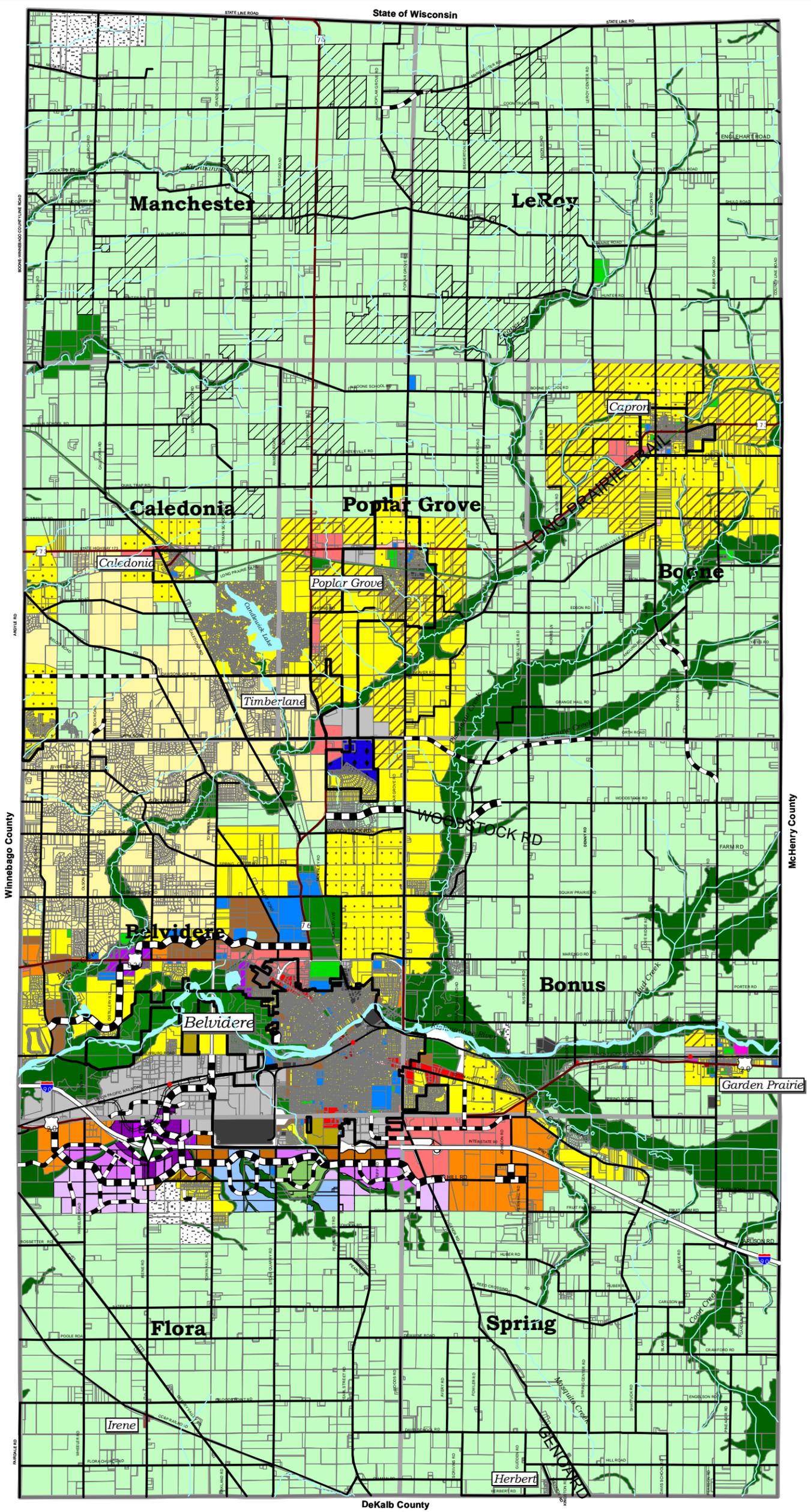
Quarries, gravel pits, clay extraction, peat extraction and related land uses.

#### **Institutional: (Blue)**

Large-scale public buildings, hospitals, and special care facilities. Small institutional uses may be permitted in other land use categories.

#### **Environmental Corridor: (Dark Green)**

Floodplains, wetlands, woodlands and other sensitive environmental features.



Boone County Comprehensive Plan  
**Map 7a: Planned Land Use**  
**Boone County**  
 (Projected Build-out 2050)  
 Updated: January 4, 2006

Sources: Boone County, City of Belvidere, State of Illinois  
 Source for Parcel Boundaries & Roads: Boone County 2004



- |                          |                                        |                      |                        |
|--------------------------|----------------------------------------|----------------------|------------------------|
| Federal Highway          | Agriculture/Rural                      | Planned Business     | Heavy Industrial       |
| Ramp                     | Exurban Residential (1 du/2 acres)     | General Business     | Special Industrial     |
| Highways                 | Single Family Residential (<5 du/acre) | Central Mixed Use    | Landfill/Extraction    |
| Roads                    | Two Family Residential (<8 du/acre)    | Technology Center    | Institutional          |
| Railroad                 | Mixed Residential (>8 du/acre)         | Ag-Tech Village      | Air Transportation     |
| Trail                    | Senior Village                         | Planned Mixed Use    | Active Recreation      |
| County Border            | Planned Neighborhood                   | Planned Mixed Use IV | Passive Recreation     |
| Township Boundaries      | Traditional Neighborhood               | Planned Mixed Use VI | Environmental Corridor |
| New Roads                | Neighborhood Office                    | Planned Mixed Use II | Surface Water          |
| 100' Right-of-Way        | Planned Office                         | Planned Mixed Use I  | Road                   |
| 120' Right-of-Way        | Corporate Center                       | Unique Use           |                        |
| Proposed Rail Connection | Neighborhood Business                  | Planned Industrial   |                        |
| Road                     |                                        |                      |                        |

# Boone County Comprehensive Plan

## Map 7c: Planned Land Use - South County

(Projected Build-out 2050)

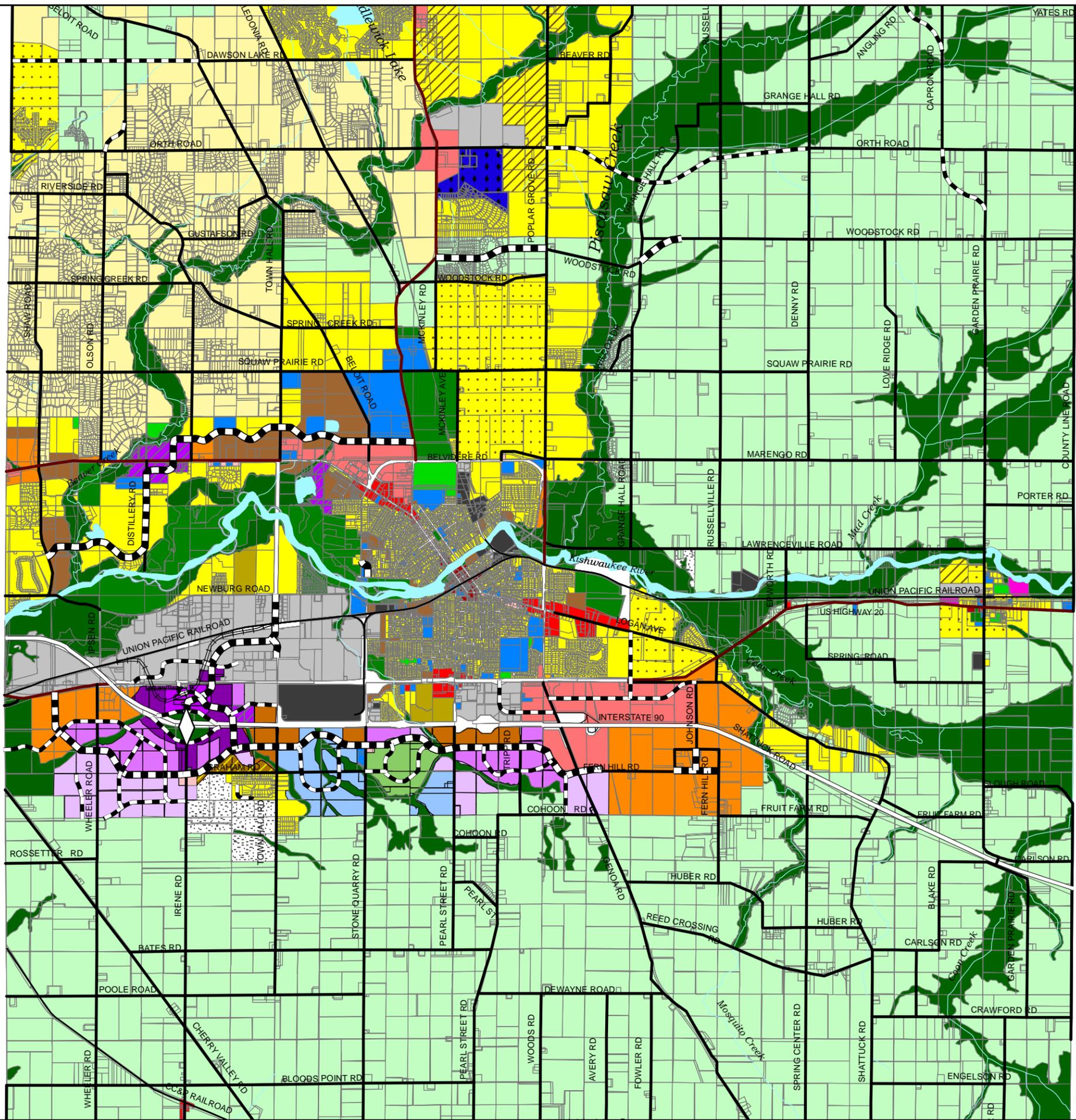
Updated: January 4, 2006

- Federal Highway
- Ramp
- Highways
- Roads
- Railroad
- Trail
- County Border
- New Roads
- 100' Right-of-Way
- 120' Right-of-Way
- Proposed Railroad Connector

- Agriculture/Rural
- Exurban Residential (1 du/2 acres)
- Single Family Residential (<5 du/acre)
- Two Family Residential (<8 du/acre)
- Mixed Residential (>8 du/acre)
- Senior Village
- Planned Neighborhood
- Traditional Neighborhood
- Neighborhood Office
- Planned Office
- Corporate Center
- Neighborhood Business
- Planned Business
- General Business
- Central Mixed Use
- Technology Center
- Ag-Tech Village
- Planned Mixed Use
- Planned Mixed Use IV
- Planned Mixed Use VI
- Planned Mixed Use II
- Planned Mixed Use I
- Unique Use
- Planned Industrial
- Heavy Industrial
- Special Industrial
- Landfill/Extraction
- Institutional
- Air Transportation
- Active Recreation
- Passive Recreation
- Environmental Corridor
- Surface Water
- Road



Sources: Boone County, City of Belvidere, State of Illinois  
 Source for Parcel Boundaries & Roads: Boone County 2004



### **Additional Land Use Categories**

A primary purpose of this Plan is to make more detailed recommendations for the land uses permitted in the Planned Mixed Use land use category described in the *Comprehensive Plan*. This category is defined in the *Comprehensive Plan* as “carefully controlled mixed institutional, commercial, office, residential, and transit uses based on high-quality detailed plans”. To accomplish this objective, an additional seven land use categories are needed. These include:

#### **Planned Mixed Use VI: (Very Dark Purple)**

Carefully controlled very high-intensity mixed use buildings at a minimum of six stories above ground level—containing one or more of office, personal and professional service, retail, entertainment, institutional and parking uses. Similar, or residential uses, may be permitted above the sixth floor.

#### **Planned Mixed Use IV: (Dark Purple)**

Carefully controlled high-intensity mixed use buildings at a minimum of four stories above ground level—containing one or more of office, personal and professional service, retail, entertainment, institutional and parking uses. Similar, or residential, uses may be permitted on a fifth and sixth floor.

#### **Planned Mixed Use II: (Purple)**

Carefully controlled moderate-intensity mixed use buildings at a minimum of two stories above ground level—containing one or more of office, personal and professional service, retail, entertainment, institutional and parking uses. Similar, or residential, uses may be permitted on a third and fourth floor.

#### **Planned Mixed Use I: (Light Purple)**

Carefully controlled mixed use buildings—containing one or more of office, personal and professional service, retail, entertainment, institutional and parking uses. Similar, or residential, uses may be permitted on a second and third floor or in a multistoried building.

#### **Ag-Tech Village: (Olive)**

The Ag-Tech Village is envisioned to be a mixed residential neighborhood focused on walkability, connection to employment, open space, and future mass transit projects, innovative building practice, and high quality development. All projects within the Ag-Tech Village Zoning district will be required to engage in the City’s Planned Unit Development process as a means of project approval.

#### **Corporate Center: (Dark Orange)**

Carefully controlled moderate- to very high-intensity office-oriented mixed use buildings at a minimum of two stories above ground level—containing one or more of office, personal and professional service, retail, entertainment, institutional and parking uses at or below ground level, with office uses above the first floor. No residential development is permitted.

#### **Technology Center: (Light Blue)**

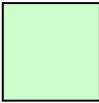
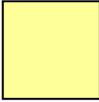
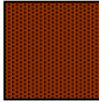
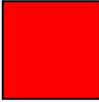
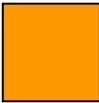
Carefully controlled low- to high-intensity research-oriented buildings—containing research and development land uses, and associated testing, office, and test production, storage and distribution and parking uses. No residential development is permitted.

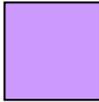
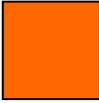
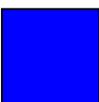
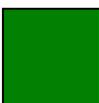
#### **Senior Neighborhood: (Brown)**

Carefully controlled mixed-use development oriented to seniors, including senior residential, personal and professional service, retail, entertainment, institutional and parking uses.



Land Use Tables

Map Key	Area Name	Intent	Appropriate Zoning District(s)	Key Permitted Land Uses	Intensity Range: FAR & ISR:	Density Range (du/ac):	Min. Lot Area & Width:	Height Range:	Front/Street Setback Range:	Parking Ratio Range:	Other Provisions and Comments:
	Agricultural / Rural	Preserve Farmland	Rural Holding (RH)	Cultivation Husbandry Farmsteads	< 0.10 & < 0.90	< 0.03	2 ac. & 250'	< 35'	35' min.	3/du	Areas in this designation are planned for long-term agricultural and open space preservation
	Infill Single-family Residential	Limited Area for Single-Family	Single-Family Residential (SR-3)	Detached Single Family, Parks, Schools	Na	< 3	15,000 sf & 100'	< 35'	25' min.	3/du	Areas in this designation are planned for existing and <u>very</u> limited infill development
	Senior Neighborhood	Senior-oriented Mixed Use	NEW (SN) Zoning District	Diverse Senior Housing, Services & Recreation in PUDs	Varies, Set by PUD	Varies, Set by PUD	Varies, Set by PUD	Varies, Set by PUD	Varies, Set by PUD	Varies, Set by PUD	Mixed Use development through PUD with sensitivity to adjacent land uses and intensities
	Neighborhood Business	Daily Goods and Services	Neighborhood Business (NB)	Office, Personal & Prof. Services, Retail, Dining	.275 FAR .60 ISR	2 <sup>nd</sup> Floor Res. Only @ < 7	10,000 sf & 60'	< 35'	25' min.	> 1 per 300 GSF	Buildings must use typical single-family residential exterior styles and materials
	Planned Business	High Quality Suburban Commercial	Planned Business (PB)	Retail, Professional Services, Offices, Entertainment	.300 FAR .75 ISR	Na				> 1 per 300 GSF	
	Planned Office	High Quality Suburban Office Park	Planned Office (PO)	Professional Services, Office, Entertainment	.300 FAR .75 ISR	Na				> 1 per 300 GSF	
	Planned Industrial	High Quality Suburban Industrial Park	Planned Industrial (PI)	Research, Production, Indoor Storage	.600 FAR .75 ISR	Na				1 per employee	
	Heavy Industrial	Uses with Substantial Off Site Impacts	Heavy Industrial (HI)	Extraction, Disposal, Transshipment	1.00 FAR .85 ISR	Na				1 per employee	

Map Key	Area Name	Intent	Appropriate Zoning District(s)	Key Permitted Land Uses	Intensity Range: FAR & ISR:	Density Range (du/ac):	Min. Lot Area & Width:	Height Range:	Front/Street Setback Range:	Parking Ratio Range:	Other Provisions and Comments:
	Planned Mixed Use 6	Very Intensive Mixed Use at Transit Center	NEW PMU IV Zoning District	Office, Services, Entertainment, Retail, UF Res.	4.00 FAR .900 ISR	Unlimited above 6 <sup>th</sup> Floor		6-10 Stories			
	Planned Mixed Use 4	Intensive Mixed Use Near Transit Center	NEW PMU III Zoning District	Office, Services, Entertainment, Retail, UF Res.	3.00 FAR .900 ISR	Unlimited above 4 <sup>th</sup> Floor		4-6 Stories			
	Planned Mixed Use 2	Mixed Use Between I-90 & Parkway	NEW PMU II Zoning District	Office Services, Entertainment, Retail, UF Res.	2.00 FAR .875 ISR	Unlimited above 2 <sup>nd</sup> Floor		2-4 Stories			
	Planned Mixed Use 1	Mixed Use South of Parkway	NEW PMU I Zoning District	Office, Services, Entertainment, Retail, UF Res.	1.0 FAR .850 ISR	Unlimited above 1 <sup>st</sup> Floor		1-3 Stories			
	Corporate Center	Corporate Offices Adj. to I-90	NEW CC Zoning District	Office, Services, Entertainment	3.00 FAR .800 ISR	Na		1-6 Stories			
	Technology Center	Office, Research & Testing	NEW TC Zoning District	Research, Office, Test Production, Limited Storage	3.00 FAR .800 ISR	Na		1-6 Stories			
	Institutional	Civic Uses	Institutional (I)	Civic, Educational, Religious	.300 FAR .75 ISR	Varies, Set by PUD		2, or per PUD			
	Park and Open Space	Recreation & Resource Protection	Resource Protection Overlay Zoning	Active & Passive Recreation, Stormwater, Trails	Na	Na		Na			

### 3. Population and Land Use Estimates

#### Boone County, IL

<b>Summary</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>
Population	41,786	47,582	53,516
Households	14,597	16,592	18,625
Families	11,260	12,637	14,003
Average Household Size	2.84	2.85	2.86
Owner Occupied HUs	11,473	13,467	15,328
Renter Occupied HUs	3,124	3,125	3,297
Median Age	34.5	35.5	36.3

<b>Trends</b>	<b>(2005 - 2010 Annual Rate)</b>	
	<b>Area</b>	<b>National</b>
Population	2.38%	1.22%
Households	2.34%	1.27%
Families	2.07%	1.00%
Owner HHs	2.62%	1.46%
Median Household Income	2.13%	3.25%

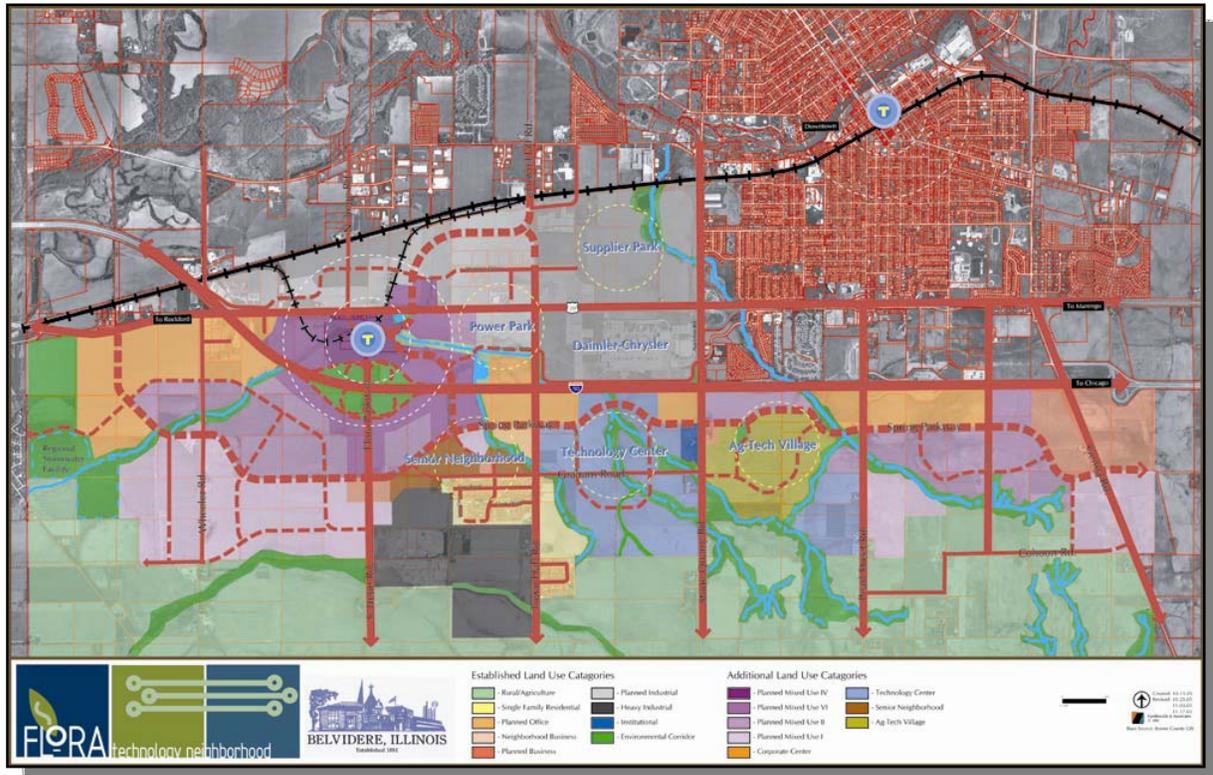
#### Rockford MSA

<b>Summary</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>
Population	320,204	338,273	357,453
Households	122,577	129,780	137,339
Families	84,926	88,496	92,144
Average Household Size	2.57	2.56	2.56
Owner Occupied HUs	87,088	96,097	103,282
Renter Occupied HUs	35,489	33,683	34,057
Median Age	35.7	36.7	37.7

<b>Trends</b>	<b>(2005 - 2010 Annual Rate)</b>	
	<b>Area</b>	<b>National</b>
Population	1.11%	1.22%
Households	1.14%	1.27%
Families	0.81%	1.00%
Owner HHs	1.45%	1.46%
Median Household Income	2.36%	3.25%

#### 4. Conceptual Development Plan

The following is the description, definition, and explanation of some of the concepts presented in the Development Plan for the Flora Neighborhood. The majority of text and energy was focused on the area most likely to become the Tollway transit Center, so that area is described in the greatest detail. The other areas, while by no means less important, were not focused as heavily on due to the distance from current development efforts and prioritization of the project areas that was defined from the beginning of the project and described in greater detail in the Implementation portion of this document.



#### Tollway Station Transit Center

The regional analysis presents a convergence of opportunities that Belvidere has responded to with a broad vision and long-term strategy for sustainable development and a concentrated effort to build even larger opportunities. The most prominent portion of Belvidere and Boone County’s vision is the Tollway Station Transit Center. Focused on vertical densities and multiple transit options, the vision is both forward looking and respectful of larger metropolitan planning ideas.

Midwest visionary architect Frank Lloyd Wright and in more modern times, the landscape architect Phil Lewis, FASLA, envisioned the development of linear cities that would be connected by major transportation and infrastructure corridors. Rather than focusing on horizontal, sprawling



densities, these “pearls on the necklace” would focus on dense urban developments that would leave the land between the corridors for farmland and open space. Wright held the Jeffersonian ideal that every citizen should be in contact with “a vine and a fig tree,” meaning that urban residents would be connected to the people, to the food and to the land of the region. By bridging the divide between the benefits of urban living and the trappings of country life, the vision of both Wright and Lewis offered the best of both worlds.

Wright’s plan for his “Broadacre City” was never realized and as more and more farmland is consumed by large single family lots and sprawling development, Belvidere and Boone County have recognized that the best way to preserve their valuable agricultural lands and pristine natural areas is to embrace the concept of the urban center and firmly lead it into the future.

Centered between USH 20 to the North and the I-90 Tollway to the South, and near a new Tollway interchange at Irene Road to connect to Townhall Road across the Kishwaukee River, the Tollway Station Transit Center will act as the catalyst for developing a dense urban core of buildings that will offer employment, retail, recreation, and homes to new residents. Easy access by rail to downtown and suburban Chicago, by car to Wisconsin and recreational areas, by bus to Downtown Belvidere, Rockford and the Chicago suburbs, and by foot and bicycle to parks, open space, and community amenities will attract new residents, visitors, and businesses.

Recognizing the importance of the Tollway Station as a regional commuter hub, the station will have a structured parking lot to allow commuters to quickly get from the Tollway, USH20, or Townhall Road to parking and onto the train platform with a minimal amount of waiting or walking.

Adjacent to the Transit Center will be a concentration of large buildings offering a range of uses, from retail on ground floors to commercial in middle floors and residential above. The vertical density of these buildings will allow for direct connections to large green space areas and open space corridors. One of the prime sites will be the Prairie Tower, which will boast a variety of uses, offer residents a full-range of services and amenities within walking distance to the transit center, and provide breathtaking views of Boone County’s agricultural land and open spaces.

Central to the concept of the urban center is working with architecture that can anticipate and adapt to greater densities over time. For example, the structured parking facility for the Tollway Station will start as a park and ride surface lot. Over time, a structured parking deck will be put into place. As the urban center grows and gathers greater density, the architecture of the structure will allow for the facility to expand further and adapt to changing needs.

Belvidere and Boone County recognize the irreplaceable value of their agricultural land as a cultural, natural, and community asset. This asset, coupled with the convergence of transportation, energy, and data infrastructure in the Flora Neighborhood, will allow the community to seize the opportunity to become visionary leaders in the Chicago Metro Area and the Midwest Region by developing a sustainable, walkable, and viable urban center.

## 5. Additional Integral Components of the Flora Neighborhood

In addition to the Tollway Transit Center, there are other key areas in the Flora Neighborhood Plan. These areas are made up of a variety of different land uses, but are to be envisioned as a part of the whole- providing amenity and opportunity while at the same time promoting energy conservation, connection to place, and agricultural land preservation.

### Supplier Park and Daimler-Chrysler

Daimler-Chrysler is one of the major land uses in the Flora Neighborhood, and instead of planning around the plant, the plan must be integral to them and their future needs. Within the Flora Neighborhood will be a Supplier Park, directly north of the Daimler-Chrysler Plant. The strategy is to encourage suppliers of parts to the automaker to develop manufacturing, assembly, and storage facilities in the Supplier Park, thus streamlining the flow of goods and services from the supplier to the assembler. By clustering suppliers in the park, collective and collaborative opportunities are created that could possibly not be afforded outside of the park. For example, food and health services can be centralized, offering greater human services to employees. Secondly, power and infrastructure needs can be streamlined to meet the exact needs of the supplier, and a guarantee in power quality and quantity can be assured. Finally, a supplier campus can allow for greater innovation in the actual process of making parts and managing the supply chain.

Innovations in manufacturing can be shared, response to platform changes can be more streamlined, and implementation of new techniques, robotics, people, and processes can be applied more effectively. Additionally, since Belvidere and Boone County are active supporters of innovative industry measures like plant asset re-utilization and waste material recycling, they will be better able to work with the various businesses if positioned in a centralized location.



### Power Park

Belvidere and Boone County recognize that continuing economic development depends in part on having an improved energy infrastructure. While expansion of the state's generation and transmission capacity is under way, the leaders of the county and city government recognize that many of the industries comprising the commercial core of the economy are becoming increasingly reliant on dependable power supplies to avoid costly down time and the corresponding loss of business.

Electronic information storage and exchange has been increasingly important in the economy, and has brought a rising awareness for not only power reliability, but power quality as well. Industries and clients that require highly reliably and quality power address the issues such as high availability (24/7) power supply with low probability of failure and assurances of near perfect power quality.



Contained within the Flora Neighborhood, strategically positioned between Daimler-Chrysler, the Tollway Station Transit Center, and the Supplier Park, the Power Park will provide reliable and quality power, as well as co-generation steam and chilled water to adjacent users.

The Flora Neighborhood is designed to be a leader in the region in energy conservation and green technologies. The Belvidere Energy Strategy Initiative (BESI) outlines the Boone County and Belvidere vision for reliable, quality, and sustainable energy use and application as a component of economic development as well as a regional model for the future.

### Technology Center

Creation of a Technology Center will provide a location for businesses with similar needs and interests to cluster. The focus of the Center will be the application of new technologies and the transfer of technological innovation to application. This new park will bolster Belvidere's ability to remain competitive in the market for the high-paying jobs of the future.

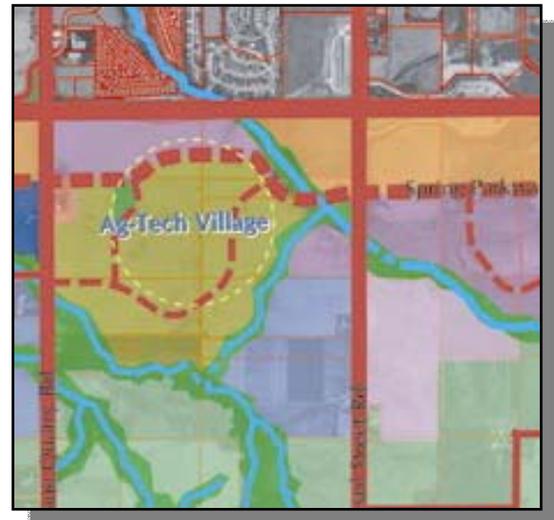
The Technology Center is located along the I-90 corridor in a highly visible and central location. The area is well connected to the region locally as well as to the Rockford and Chicago metro areas via road, air, and rail and has energy and data infrastructure to meet the needs of new economy businesses.



### Ag-tech Campus and Ag-tech Village

An Ag-Tech Campus located near the Tollway will focus on ag-based and biobased materials that can be grown nearby and used by local businesses. Agricultural resources found in Belvidere can provide renewable raw materials for a wide range of products such as lubricants, fibers, chemicals, construction materials, and fuels. This would synchronize with current industries in Belvidere as well as new industries.

New businesses in the Ag-Tech Campus can accelerate the product concepts through the early stages of testing, screening, and evaluation. Others can work to expand the markets for ag-based products, accelerate market penetration, and reduce dependence on existing resources. The campus may house facilities to research and develop, transfer technology, commercialize or market the renewable materials as well as possibly establish biobased policy. Green technologies and design will be applied to the buildings on the campus to maintain its vision and purpose. There are many streams, ponds, wetlands, and wildlife habitats as well as significant areas of wooded land throughout the county that would benefit from the environmental advantages to the use of biobased products.



The Ag-Tech Village will focus on diversity of housing types by including multi-family, single-family, townhome, and other residential units as well as a neighborhood center and a central park. Ag-Tech Village will be a model of conservation design, walkability, and efficient residential infrastructure. The Ag-Tech Campus and Village will make functional and logical connections to the environment and the community and will serve as an example for the county and region.

## 6. Conceptual Development Themes

The following four components are viewed to be critical to the long-term success of the Flora Neighborhood. These development themes center on the viability of the Transit Center for its components, the Irene Road Interchange, the Metra Extension, Town Hall Road Extension, etc. are the critical subcomponents that will bring this plan to reality.

### Infrastructure- Transportation

We believe the ability to move people and goods easily and effectively to, from, and through the Flora Neighborhood is vital. The Flora Neighborhood will center on the Tollway Station Transit Center which provides the ability to board a commuter train and arrive in downtown Chicago in less than two hours, or board a bus with dedicated travel lanes to reach the Flora Technology Center, Flora Power Park, Daimler-Chrysler, Rockford, O'Hare Airport, and Downtown Belvidere among other destinations. This access will have to be redundant- there will be several different ways to head in the general ordinal directions- and multi-modal- there will be several options to head in each of those directions. The Tollway Station Transit Center will be at the center of this effort in the Flora Neighborhood and will be appropriately sized in structure and roadways to handle the traffic flow.

The adjacent connection to the new Irene Road Interchange with I-90 will allow commuters to quickly exit the Tollway, enter a covered parking facility, and board a train or bus to complete their commute. Additional connection to the Transit Center will come from the north, as Townhall Road is extended across the Kishwaukee River and connected directly to Irene Road. Besides being another effective travel route for commuters, the Townhall Road extension will relieve congestion traffic through Downtown Belvidere, as trucks and other regional traffic use the Townhall Road crossing to travel south to the Tollway, the USH 20 corridor, and points beyond.

The development of an Interchange at Irene Road with the Tollway could be a critical component for the implementation of some of the other major factors in the Tollway Station Urban Center. A "chicken versus egg" situation has developed around both the Interchange and the extension of the Metra line to Tollway Station. It could be possible that the Interchange could drive Metra to consider the extension sooner, plus it could allow for developers to recognize the potential of such a site in the Tollway Corridor.

There are numerous minor connections within the Flora Neighborhood Plan that have been conceived based on a desire for clear and natural extension of existing land areas and connection between those areas to form a cohesive neighborhood plan. The roads mentioned in specific detail above are believed, in the estimation of Vandewalle & Associates, to be important for consideration in the implementation.

Based on the above comments, we feel that it would be in the best interest of the City of Belvidere to meet with IDOT and ISHTA for an Irene Road Interchange timeline commitment

and to share with them the ideas behind the Flora Neighborhood Plan and to engage further design and engineering for the Townhall Road extension across the Kishwaukee River.

Engagement in the alternative analysis for the commuter rail extension in order to continue discussion and progression with Metra is most likely the best course of action. Despite the Director of Metra's insistence that Union Pacific would not be interested in Metra using their tracks, it would be in the best interest of the City and County to continue to look at all options in the alternative study.



As an alternative, whether it would be in lieu of or in concert with the rail development, investigation and study into a bus transit within Boone County and bus rapid transit to downtown Chicago, the outer suburbs, and the major airports could be an important step in implementation. There are various models of bus rapid transit available and such a system could be readily implemented with additional study.

The City and County, in conjunction with the Belvidere Park District and the Boone County Conservation District, could begin the design of a bicycle and pedestrian trail system that would link the various land use areas within the Flora Neighborhood. Also, the portions of land suggested in the plan to be environmental corridors could also be inventoried and poised for implementation when development approaches or contains one of the areas.

### ***Infrastructure- Energy & Data***

Just as the ability to move people and goods will be critical for the long-term economic success of the Flora Neighborhood, so too will be managing the flow and capacity of data and energy resources. To meet the energy demands of emerging technology and business ventures, the Flora Neighborhood is designed to be a self-contained Power Island. Planned as a distributed energy network, the Flora Neighborhood will have a co-generation plant on site that will provide the urban center with clean, reliable power at a minimum 6-nines capacity (99.9999% reliability) as well as co-generating steam and chilled water for the heating and cooling needs of the urban center.

Along with meeting energy needs, the Power Island will serve as a catalyst for the attraction of businesses that can not only benefit from reliable power, but can utilize the co-generation facility to research alternative energy solutions and the application of new energy technologies.

Being able to provide reliable and redundant data infrastructure will also be a critical component of the Flora Technology Neighborhood. Both wireless and hard wire technologies will be utilized to give business and technology clients in the Flora Neighborhood multiple venues for transferring, transmitting, and storing voice and data needs. The I-90 corridor is a dark fiber corridor with large amounts of available fiber optic wire for data and voice transmission needs. As part of the implementation stage, additional fiber optics will be installed in the technology center, the urban center, the supplier park, and the planned corporate land use areas to provide direct and ample access to "big-pipe" data transmission networks.

Wireless data access will also be made available throughout the Flora Neighborhood, allowing for data and voice demands to be met in an anytime, anywhere situation.

### Conservation

Energy, Data, and Transportation Infrastructure are vital for the Flora Neighborhood as it develops and grows into a viable Urban Center. In addition to providing the infrastructure, Belvidere and Boone County will also take the opportunity to become leaders in the Midwest region in model energy conservation and alternative energy strategies. The Flora Neighborhood will be a highly visible model of application of Green Technology and sustainable design solutions.

Centered in the Power Park will be a cogeneration power system, also known as combined heat and power that will produce electricity and use the unused excess heat from the process for steam, hot water heating, space heating, cooling, and other thermal needs. This power system will provide clean, reliable, and quality power to site users.

All buildings within the Neighborhood will meet energy conservation design standards as part of the Belvidere Energy Strategy Initiative (BESI). In particular, Ag-Tech Village will be a model of conservation design, walkability, and efficient residential infrastructure.

### Connection to Place

The convergence of opportunities achieves its greatest potential by connecting to the place-based assets of the Belvidere community in a variety of ways. The Flora Neighborhood Plan will have direct connections to existing and planned regional bike and pedestrian pathways. Greenway corridors are apparent throughout the planning area, and this will form the “green Spine” to connect the various land use areas as well as give residents and users a variety of transportation options and recreational opportunities.

In addition to physical connections, uniting visual connections will be critical in the planning area. By developing the Tollway Station area at a higher density, the vertical development pattern will allow for greater walkability and give users in the buildings an enhanced opportunity to see beyond the developed corridor and south to the preserved agricultural lands, north to the Kishwaukee river corridor, west to Cherry Valley, and east to Downtown Belvidere, the Power Park, and Daimler-Chrysler.

Connections have also been made in other ways. The Tollway Station will connect to the Downtown Multi-modal Transit Center through routine bus service, the parts of the neighborhood will be connected through a variety of bus routes, and the greater Belvidere area will be connected to Rockford and Chicago greater metro areas through air, road, and rail.