

UNIVERSITY OF ILLINOIS AT SPRINGFIELD

CENTER FOR STATE POLICY AND LEADERSHIP

Institute for Legislative, Administrative, and Policy
Studies

A Knowledge-Based Approach To Regional Planning

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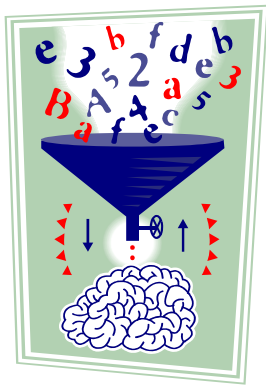
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Section 1 Introduction

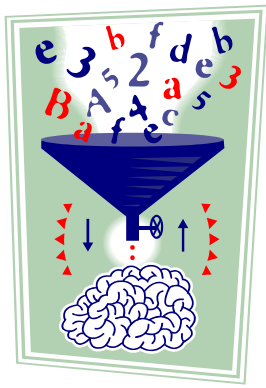
Since 1999, the Illinois Department of Commerce and Economic Opportunity (formerly The Illinois Department of Commerce and Community Affairs) and public universities including University of Illinois at Springfield have been collaborating with business, government and civic leaders throughout Illinois to *"establish a consensus on a long term economic development strategy cognizant of the competitive position of the state's regions and the needs of commerce and industry."* State and Regional Development Strategy Act, 20 ILCS 695.

During calendar year 2000, the second year of the project, the five university partners surveyed over 29,000 individuals by direct mail and spoke with 950 participants at 19 summit meetings held around the state. From the surveys and summit meetings, a common set of 15 strategic goals and 40 development objectives were articulated.

To encourage regional leadership to address regional issues, the Department of Commerce and Economic Opportunity and the University of Illinois at Springfield have partnered to provide brokering/advocacy, grant administration or offer technical assistance in support of the Central region's strategies. Projects that were funded were projects that build on the priorities identified at the regional summits and are designed to support local efforts while fostering a sense of regional partnership among participants. The outputs of the projects address Central Illinois issues and are useful to the region and other regions with similar economic development issues.

In the spring of 2003, the Department of Commerce and Economic Opportunity and the University of Illinois at Springfield partnered to complete project focused on knowledge-based planning for regional economic development. A knowledge-based approach to planning emphasizes deliberate a concentrated efforts to assemble useful information prior to and during planning programs. The purpose of this project was to describe the approach as it would be applied to regional planning economic development planning in Illinois. The project also provided a case study of the approach in this environment. The case study involves applying the approach to the Competitive Communities Initiative in Montgomery County, Illinois. While the many municipalities and villages in the county have conducted economic development planning, this CCI represents a new planning initiative has a regional focus for economic development for the entire county. The CCI is in the beginning stages the process and thus provided an excellent setting to begin the knowledge-based approach to planning.

This report is organized as followed. The next section provides a description of the knowledge-based approach to planning. Included in the description is an explanation of why knowledge-based planning should be used for economic development planning. Because data is so important to the approach, section 3 discusses the required data for the approach. A summary of the Montgomery County, Illinois case study is presented in section 4. Section 5 provides a conclusion.



Section 2 What is A Knowledge-Based Approach To Planning

Planning consists of defining the important objectives an organization needs to achieve and determining how it plans to achieve them. There are many different types and purposes of planning, including:

Strategic Visioning: Identify and describe widely held values and use them as a platform setting goals.

Strategic Planning: To set the direction of the organization to improve its prospects for long-term survival.

Operational Planning: The tactical details of how an organization is to be run over a short period of time

Project Planning: Detailed identification and sequencing of all tasks to complete a project.

No matter what the type or purpose of planning, the typical approach for assembling a plan often involves many facilitate meeting characterized by brainstorming, goal setting and selection priorities. Too often this takes place in an information vacuum. The knowledge-based approach emphasizes deliberate and concentrated efforts to assemble useful information prior to and during the planning process. The importance of useful information and a knowledge approach is described using an example of data on county population and how that data becomes information and knowledge for the counties planning. The *data* or recorded observations of real world phenomena, would be the total population of the county in 2004 and number of persons in 5-year age groups. *Information* or a level of knowledge needed to solve a problem or show patterns would be population trends over the last 10 years and projections in the next 10 years and the percent of population in each age group. *Intelligence* or the essential factors selected form information and data, is percent change in total population by age group for each community in the county. It is the combination of these that creates knowledge, or the total concept of data, information and intelligence with a feedback loop is the required data for planning.

The process begins with identifying data needs including the following steps:

Step 1: Define the problem

Step 2: Decide the geographic scope and detail

Step 3: Pinpoint and define the specific variables (data) you will need

Step 4: Establish the time period(s) for which you need the data

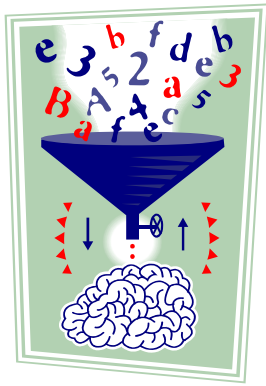
Step 5: Decided on the presentation methods (tables, charts, maps, or a combination)

Step 6: Establish and quantify parameters of the data.

Knowledge-Based Approach To Planning

The data usually collected for a planning process includes the following: population, income and employment, housing, education, health and safety. There is usually a vast amount of data in just one of these areas, let alone all of the areas. It is also important to recognize how data should be analyzed and presented to lead to knowledge. The four most important approaches are:

1. Data provides information ***about a system***. The pieces of data should be focused on describing a larger system and the condition of that system is its entirety.
 2. Data should provide information ***see relationships***. The pieces of data should show linkages between different aspects of the system.
 3. Data should provide information that ***links the past to the future***: it took years to create the status of the system, the data needs to connect and value the current state of affairs based on the past in order to understand how future goals can be attained.
 4. Problems with the data require **data refinement**: Data are not perfect and problems with the data need to be revealed in order to understand the system accurately.
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Section 3 Case Study: Montgomery County, Illinois

Montgomery is one of 102 counties in Illinois, and one of 14 counties in Central Illinois region. It is not part of Metropolitan area. In Central Illinois region, four counties surround Montgomery: Macoupin, Sangamon, Christian, and Shelby. Montgomery shares the West border with Macoupin, the North borderline with Sangamon and Christian, and the East borderline with Shelby. On the South, Montgomery shares its borderline with Madison, Bond, and Fayette, which locate in South Illinois region.

The Competitive Communities Initiative in the county is a newly created group that includes county and municipal officials and employees, local business owners and interested residents. Their goal is to create an economic development initiative that is focused on the entire county. To do this the first steps are to create an organization and embark on an economic development planning process. The study team helped them with the planning process by describing the knowledge-based approach and conducting the data analysis for the county. The data a set of observations were presented to the organization (over 30 people were present).¹ The data presented is the list described in the previous section. The observations from the data included:

1. Population losses experienced in recent decades are likely to continue.
2. Changed in the age structure of the population will be subtle buy may have important impacts on the institutions and services throughout the county.
3. An increasing number of workers are crossing county boundaries to find employment.
4. The labor force is growing even though the county population is shrinking but this is likely to change by 2010.
5. The number of full- and part-time jobs has increased steadily over the past ten years but most new jobs are in low wage industries.
6. Natural resource industries remain important even though employment levels in these industries are at an all time low.
7. An old and low value housing stock may make the area unattractive as a bedroom community.

¹ A report was also provided: Knowledge-Based Planning for Montgomery County, Illinois. (June, 2004). The report is available at <http://cspl.uis.edu/ILAPS/EconomicDevelopment/>.

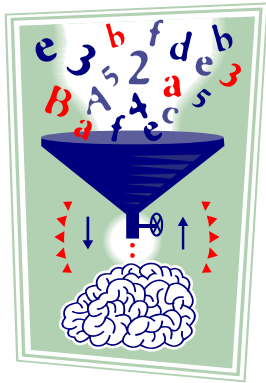
Knowledge-Based Approach To Planning

After the presenting all data the observations, he presentation also included a description of how the data could be used to inform the planning process—what does it all mean? The following is what was presented:

- Montgomery County's future is as dependent on what happens in the surrounding counties as it is on what happens at home.
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- In the next five years the county is likely to continue to experience population decline and erosion of buying power because of low incomes.
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- Strategy development should focus on population growth and increasing per capita incomes.
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- Although many jobs have been created in the County they are primarily in the service sector here wages are low and benefits limited.
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- Reversing long term structural changes in the local economy and work force will take time.

This list is not complete, it is the expectation that the group and the process yield many more implications, the following list represents some implications that will help their understanding of how data is translated into knowledge. In fact after the presentation discussion was focused on these and questions concerning next steps were raised.

The case study presented several “lesson learned” about application of a knowledge-based approach to regional economic development planning. One lesson was that the date requirements are important to help focus the many data and charts that could be presented. Data that is focused on the system, shows relationships, focuses on the past and is accurate facilitates discussion about goals and strategies to meet goals. A second observation is that participants know better what is happening in their community than the data. The participants often knew the problems with the data and tried to discredit the findings. This makes it clear that it is important to be clear about the problems with the data at the outset. Finally, while the planning process for Montgomery County is just in the beginning stages, the participants' interest in having useful information is an important indicator to their future successes.



Section 5 Conclusion

This report has described the knowledge-based approach to planning and presented a case study of the process in a regional economic development environment. A knowledge-based approach to planning emphasizes deliberate a concentrated efforts to assemble useful information prior to and during planning programs. In this approach it is important to recognize the difference between data, information, intelligence and knowledge. Knowledge is the total concept of data, information and intelligence with a feedback loop. Focusing on knowledge is required for a planning process advocated in this approach.

The report also described the data needs of this approach. Several criteria were presented to use when selecting specific data. It is also important to recognize how data should be analyzed and presented to lead to knowledge. The four most important approaches are:

- Data provides information ***about a system***. The pieces of data should be focused on describing a larger system and the condition of that system is its entirety.
- Data should provide information ***see relationships***. The pieces of data should show linkages between different aspects of the system.
- Data should provide information that ***links the past to the future***: it took years to create the status of the system, the data needs to connect and valuate the current state of affairs based on the past in order to understand how future goals can be attained.
- Problems with the data require **data refinement**: Data are not perfect and problems with the data need to be revealed in order to understand the system accurately.

The case study of regional planning in Montgomery County provided some lessons on using a knowledge approach to planning. The case validated the fact that it is important to make clear the difference between data, information and knowledge. When participants in the process saw data that focused on the past and how the current situation has been result of the past changes—some incremental some abrupt—they began to realize that making changes would require a commitment to goals over time.
