

# Local Decision Maker

GIS has proven to be invaluable as a tool for storing, managing, repackaging, integrating, and visually displaying location-based information and analyses from multiple disciplines directly to our targeted audiences.

# Plan your future

By Rick Farnsworth, Indraneel Kumar and Christine Nolan

# The Problem

Critical issues such as too much growth, too little growth, high unemployment, decaying city centers or degraded natural resource bases provide the catalyst for communities to initiate planning. Unfortunately, many planning efforts fall short of original expectations. Competing objectives among stakeholders sidetrack many planning efforts. Insufficient financial resources, especially in rural communities, cut planning efforts short. Nor do completed plans signify success if stakeholders feel divorced from the process or feel their concerns were not addressed. It should be noted that stakeholder participation and buy-in is equally important for implementing the plan.

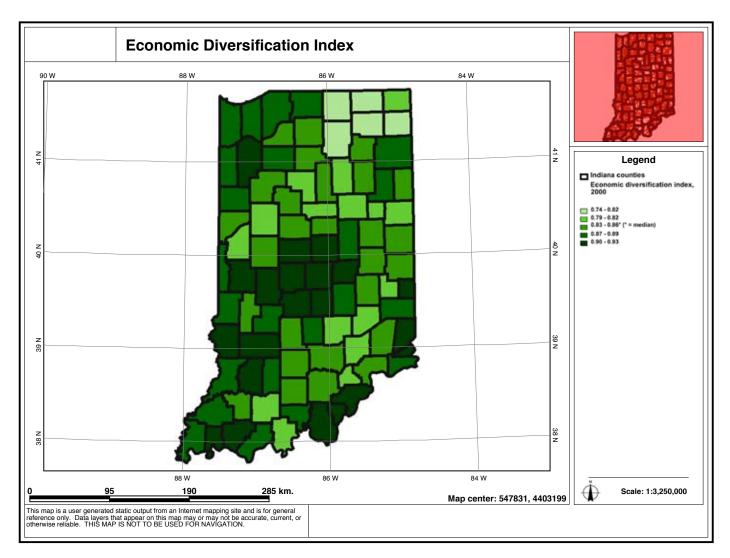
In 2006, the newly-formed Center for the Environment at Purdue University encouraged research and outreach experts to devise ways to emphasize natural resources in the planning efforts of Indiana communities. A diverse group of professionals formed a group and competed successfully for the available funds. Similar to a real planning group, it took about a year for the group to find common ground and an approach combining our different interests and expertise. The end result is Local Decision Maker (LDM), an ambitious program to assist communities in their planning efforts.

# **The Program**

Local Decision Maker's (LDM) slogan — Plan Your Future — sets the program's

tone and identifies the audience. Local Decision Maker is for planners employed in county and city planning departments, planning commission members, consultants, natural resource professionals, economic development professionals, education officials, concerned citizens, and other individuals and organizations actively shaping a community's future.

The mission of LDM is to assist Indiana communities in making informed, integrated natural resource and economic development decisions. The LDM program consists of a state-of-the-art, science-based decision support system and support staff to facilitate its use and ongoing development. Any county or community interested in updating part



# Local Decision Maker

of its existing comprehensive plan or developing a new plan and private or commercial entities participating in a planning effort can obtain assistance numerous ways. First and foremost, LDM's user-friendly decision support system is publicly available at http://purdue.edu/ldm. The team also conducts train-the-trainer workshops and training workshops for local officials and entrepreneurs and provides technical assistance via email and telephone.

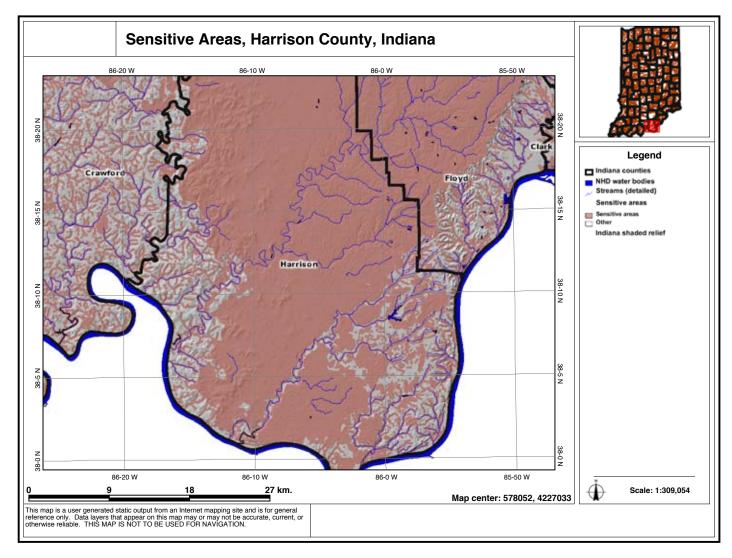
Fully embedded in LDM is the standard comprehensive planning process. A community begins with an assessment of existing conditions, followed by the development of a vision for the future, development and comparison of development strategies, and selection and implementation of the preferred strategy.

Though everything stated thus far sounds similar to other planning programs, several elements of LDM's structure make it unique and contribute to its current popularity. First, as a broad umbrella under which activities fit, the comprehensive planning process has been very useful in attracting and integrating applied research into LDM. Several theses have expanded the content in the education, health, and natural resources sections of inventory and analysis. Sensitive areas, working lands, economic diversity, and tax district layers are just a few of the new analyses conducted by researchers in support of LDM.

The second unique element is the fundamental role that Geographic

Information Systems (GIS) play in LDM. GIS has proven to be invaluable as a tool for storing, managing, repackaging, integrating, and visually displaying location-based information and analyses from multiple disciplines directly to our targeted audiences. It is quite common, for example, to see workshop participants conduct a quick appraisal of their county in relation to surrounding counties by quickly moving through the different categories of inventory and analysis. After this rapid appraisal, they use some of the more specialized GIS tools, such as ID and query, to view and understand the underlying data or create overlays of different layers to extend our basic analyses.

A third feature is the question-and-answer



format embedded in LDM and its use in transferring information and analyses to decision makers (e.g., planners, members of planning committees, consultants). Each question builds upon the prior question. building the decision maker's knowledge base and feeding new information to the point where a science-based, informed decision can be made.

The last characteristic is the team's unwritten goal that LDM users should receive decision-relevant information and results in three to four mouse clicks. More clicks suggest we have not decided exactly what we want the decision maker to know, or subconsciously we want the decision maker to recreate our path of discovery and development.

## Insights

LDM workshops for Indiana's land use extension specialists, local officials, education officials, consultants, county planners, and the pilot counties began in the fall of 2007 and continued through March 2008. The password-protected LDM program changed considerably. The inventory section grew as the team fulfilled requests for more data and analyses. The GIS component also expanded in response to user feedback. Direct connections to commercial map services, email capability, a save function, upload capabilities, and the ability to annotate maps are just a few of the features added.

In May 2008, LDM became available for public use. Workshop and presentation requests continue to increase as do requests to continually expand phase one, inventory and analysis, at the expense of the other phases of planning. Almost every time we conduct an LDM activity, one or more stakeholders will tell us the strength of LDM is its aggregation of data and analyses in a central location and how this improves the efficiency of the overall planning process. Initial concerns about possibly interfering in the private consulting market dissipated quickly as consultants regularly encourage us to focus almost exclusively on one-

stop access to critical data and analyses. Two quotes summarize this value-added element of LDM:

> "...As planning director for a rural county in Indiana, I can attest to the importance of having access to a tool such as this program to easily access important information related to our community. Without this tool our community would most likely be required to spend several thousand dollars in order to obtain similar information through the use of a consultant...."

> "...l am conducting a Brown-Bag for our local office in Indianapolis regarding the tool in a few weeks. This is really an outstanding resource for planners...."

In addition, requests have grown considerably from inventory-specific groups such as educators and natural resource professionals who want considerably more data and analyses that go beyond the requirements for comprehensive planning. People quickly recognize the savings in time and dollars when data are centrally located.

A second insight is the usefulness of LDM in establishing a consistent, statewide approach to comprehensive planning. Though every plan is unique, based on the availability of local resources and past development, the disparity in planning expertise and funding among communities that greatly influences the final plan is partially offset with LDM.

A third insight that supports continued development of LDM is planning committee membership. Comprehensive planning efforts attract well-qualified participants who devote nights and weekends in the hopes of creating a better future for their communities. They have the ability to process information and analyses and make decisions. LDM empowers them for more-informed decision making quickly and efficiently. Last and certainly not the least is the critical role of land grant institutions

in comprehensive planning. Sound, sustainable development in the future requires a much greater understanding of the interactions between the human and natural worlds and how decisions change the mix of economic, ecologic, and social consequences. Communities welcome input from research and extension specialists in their planning efforts. From our experiences, a two-way communication has significantly improved LDM's usability and acceptance.

### **Conclusions**

LDM is a work in progress. Over the next two to four years, we will work with the pilot counties and complete phases two through four while continually updating and expanding the inventory and analysis phase. Like the planning process, we will start again. Any group interested in starting their own LDM efforts should go to http://purdue.edu/ldm. The program's components are part of the site's structure and navigation. Almost any web-based GIS service will work.

# **Authors' Picks for further Reading**

Hoch, Charles, Linda C. Dalton and Frank S. So. The Practice of Local Government Planning (Municipal Management Series). International City/County Management Association. Washington, D.C. 2000.

Kelly, Eric Damian and Barbara, Becker. Community Planning: An Introduction to the Comprehensive Plan. Island Press, Washington, D.C. 2000.

American Planning Association www.planning.org

# **About the Authors**

Rick Farnsworth is the Project Coordinator for the LDM with the Purdue Department of Forestry and Natural Resources.

Indraneel Kumar specializes in GIS, Demographics and Transportation with the Purdue Center for Regional Development.

Christine Nolan is the Project Coordinator for LDM with the Purdue Center for Regional Development.