

## The WebPolis Consortium

Submitted by:

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*“Any technology tends to create a new human environment.”  
(Marshall McLuhan, 1964)*

The WebPolis Consortium provides software to assist local communities and regional agencies in making better informed decisions. Its decision support applications (apps) provide an integrated, interactive and user-friendly environment that encourages "virtual collaboration" among user communities.

### **The WebPolis Consortium concept:**

WebPolis proprietary software represents the third generation of online communication technology. The first generation, referred to as "shared ideas," have resulted from online communication, and include e-mail, discussion forums, and bulletin boards. "Shared creation" results in coordination between activities through electronic meetings, screen sharing, and application sharing. "Shared space," the third generation, provides tools for online collaboration. The WebPolis Consortium represents such a virtual environment, comprised of communities that have partnered to share resources and information online to help local leaders make more informed decisions.

The asynchronous aspect of collaborating online—having access at any time, from any place—gives flexibility to users to participate according to their own schedule. Initial studies have shown this may be one of the most important advantages of the online environment; residents and officials are able to participate when and where they want, with a level of interaction they control.

WebPolis applications and databases provide benefits in a number of ways:

1. Decision support services provide local decisionmakers with tools to better develop consensus on issues they define.
2. The Consortium structure allows communities and agencies to share information, resources, and decisionmaking processes with each other.
3. The WebPolis archive stores activities of its users and makes this information available to other member communities and agencies (on a permissions basis).
4. WebPolis services can complement the need for conferences, offering similar services without the expenses of travel, registration, and room and meals.
5. WebPolis provides online educational resources, focusing on issues of community and economic development.

Extensive review of Internet sites by staff has revealed no other decision-support web sites comparable in scope to the conceptual design of the WebPolis Consortium.

## **The WebPolis system**

Local government decision-making is done at two distinct levels. One is more conceptual and policy oriented (e.g., What are our community's economic development goals?); the other is project oriented (e.g., What are the legal requirements to establish a tax increment financing district?). Decision-making floats back and forth between these two realms. Resources developed to aid this process must be flexible enough to float back and forth with it as well.

WebPolis technology, although complex and state-of-the-art, appears simple and clear on the user's screen. No training is necessary other than the ability to use the Internet; no other software or local IT staff is necessary. Through its plentiful apps, users may "mine" information at various depths. Basic information is easily and readily accessible, and more detailed information is available for users who wish to dig deeper; the introductory level is the default condition.

WebPolis also serves an important educational function. Its educational software serves well as a tool for teaching issues of city planning and governance for the training of local officials, as well as secondary school and college-level students. WebPolis incorporates the "Rivertown Simulation," a series of online exercises that has been used over the past 23 years in urban planning and historic preservation courses at Eastern Michigan University.

## **Other considerations**

Although WebPolis, by design, is an open system, communities may not wish to make all of their archived information available to all users, and a system of permissions is part of each app. Each user community designates a "Community Manager," a local individual paid by WebPolis who is responsible for monitoring its use and giving permissions as needed (through User IDs and passwords) to community participants. User categories are defined as follows: general public at large; all registered WebPolis users; registered users in a specific member community; designated officials for a member community; designated Community Manager; WebPolis staff and directors. Additional security measures are established by WebPolis staff if requested.

## **Student-developed online applications:**

Three students in the graduate Urban and Regional Planning program at Eastern Michigan University developed apps for the WebPolis online platform. They were a Street Improvements app, a Design Guidelines app, and an Incubator Facilities app. The apps were designed by the students based on information collected from other sources. They were then adapted for the WebPolis online environment by one of their faculty mentors, Norman Tyler, and coded by the project programmer, Mike Ludlum of Useful Solutions, LLC.

Graduate planning student Jason Krol researched the planning and design of street improvement programs for downtowns. Community leaders have many options for streetscape design based on items to be selected and locations within a designated district. The research began by gaining information on street improvement items, their design and costs. Illustrations were selected to indicate the range of possible items. Then, Google

Maps was used to present a map of the users' communities. The map could indicate the locations of selected items through the use of icons placed at desired locations. The number of each selected item, combined with its cost per item, output the final price of the project.

In his project review, Jason commented on the challenges he encountered with this project: "Due the vast amount of examples, as well as climate conditions and aesthetic preferences, it was difficult to offer examples and pricing options for the project elements: trees, benches, trash receptacles, bike racks and planters. Most companies that provide products for streetscapes have websites exhibiting their products. However, they do not include prices, as they want to send a sales representative to generate business. Also, the larger the quantity purchased, the cheaper the price per unit. Prices listed are for the lowest purchased quantity group (usually less than six). A potential way to alleviate these constraints would be to partner up with suppliers and have them participate in the creation of the streetscape section of Webpolis. As for the formatting for WebPolis, I was unable to locate any before and after pictures of a Michigan community. The only before and after Michigan streetscape improvements I was able to locate are for New Baltimore and they are renderings, not pictures. It might be beneficial to travel to smaller towns to take pictures, including as many Michigan examples as possible, to make the website more relevant and identifiable to potential users."

Planning student Albra Buelow developed the app for Design Guidelines. The goal was to have a template for guidelines that could be reviewed, adapted, and utilized by a community with a minimum of research by the users and opportunities for revisions if necessary. The final app presents design guidelines developed recently for the City of Ann Arbor, which were based on guidelines from a number of larger cities, most notably Seattle. Guidelines are divided into three categories: Context and Site, Buildings, and Building Elements. A community user group can review each guideline in turn and if they wish to include it in their document, they simply click a box on that guideline. For each category, boxes are included where a community can add their own guidelines to the template. Upon completion, the web presents a download in either Microsoft Word or .pdf form of a completed document that includes all the guidelines that were selected or written. This format, presented in PowerPoint, was then converted to an online application.

Upon completion of the project, Albra commented her involvement: " I came across many challenges doing this project. I came across was an extremely large amount of information and various forms design guidelines come in. It became very hard to narrow it down. The other thing that was hard in developing these was that what works in one city might not work in another city, so how do you figure out what clauses to place in as options. I think there is something there with what I have developed but I think it is the very start of a stepping-stone to a long development. There are so many parts to all the guidelines I read. They definitely took a lot of time to develop, with a lot of people involved."

Planning graduate student Benjamin Hooper conducted extensive research on the process of forming an incubator facility in a community as a tool of local economic development. The development process involved a series of steps. Throughout the semester he created a step-by-step process for the first step, a project's feasibility analysis. The analysis

included data collection, review of other facilities, background information, and a process for local review by an incubator facility committee. These steps were outlined in detail, but were not programmed as a web page application by the end of the semester.