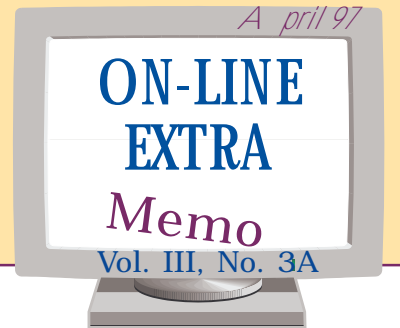


CREATING COMMUNITIES OF PLACE

Office of State Planning

DEPARTMENT OF THE TREASURY
Governor
Christine Todd Whitman
Treasurer
Brian W. Clymer



PLANNING VIRTUAL COMMUNITIES: Designing Your Own Planning Web Site

OSPnet *The New Jersey Office of State Planning (OSP) has established an Internet Web site (<http://www.state.nj.us/osp/>) to improve two-way communication with the public and other agencies. Local planners and other public officials who are designing and establishing their own Web sites can apply the experience gained and the lessons learned by the OSP.*

Designing Your Own Web Site

The *OSPlanning Memo, Planning Virtual Communities: Using the Web to Make Planning Real*, describes how planners can use the World Wide Web to improve community participation in local planning processes. This supplementary on-line article provides more detailed advice for practicing planners who want to establish a presence on the Web as easily

as possible.

You need not be an expert at the leading edge of technology to develop and maintain content for a Web site. You should, however, seek out and study examples of what is good and what is to be avoided, and creatively adapt these examples to your circumstances. Using software programs and books with examples on CD-ROM available for Windows and Macintosh computers, you can set up a site without seeing any programming code at all. Some computer systems are now being packaged as "turnkey" Web sites — just add the content. As the developer of a planning Web site, the OSP offers its experience.

What Needs to Be Accomplished?

Not surprisingly, the principles that make for good plans also lead to good Web sites. It's just a different environment.

The OSP initially defined these primary objectives for its Web site:

- ◆ Use the Internet to improve the State Plan cross-acceptance process.
- ◆ Provide useful and understandable information to people of all backgrounds and interests.
- ◆ Provide another way to distribute information and publications.
- ◆ Save printing, storage, handling and mailing costs.
- ◆ Provide 24-hour public access.
- ◆ Provide better cross-referencing among documents.
- ◆ Provide opportunities to provide feedback to staff and commissioners.
- ◆ Don't spend too much time or money on it.

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First, define what you want to accomplish. Only then can you begin to determine the best ways to accomplish it.

What Is Your Message?

Your objectives define the priorities you should follow for adding material ("content") to the Web site. You may need only to convert existing information materials for use on the Web, or you may need to develop entirely new content. In any case, *you should complete this stage of the design process with a work plan listing the contents of your site and how, when and by whom they will be developed.*

We first posted on the Web our staff directory, meeting announcements and publications catalog. Later, we placed larger projects on-line — the State Plan, our governing statutes, rules and regulations, and new proposals for changing the Plan and our administrative rules. The opening ("home") page describes who we are and what is available at the site.

Establish internal controls to manage the message. On the Internet, as with any other medium, the message may be taken incorrectly or interpreted out of context. Content should be brought to the attention of the highest officials in the organization, at least at the outset. At the OSP, most new Web content is information already approved for publication in other forms, or it is written by or in

consultation with the public affairs manager and the executive director. The "webmaster" should be a manager authorized to upload approved content to the Web.

As you consider converting content that already exists in print, you should consider the opportunities the Internet affords for presenting more colorful, multimedia content.

The Internet supports many more ways of conveying information than conventional printed reports. Among them are:

- ◆ color text
- ◆ hyperlinks to other content at your site
- ◆ hyperlinks to content at other sites
- ◆ tables
- ◆ charts
- ◆ maps
- ◆ graphics
- ◆ animations
- ◆ sounds
- ◆ videos and voice-overs
- ◆ interactive maps and databases
- ◆ three-dimensional renderings and walk-throughs
- ◆ e-mail
- ◆ fill-in forms
- ◆ on-line chats.

Who Is the Messenger?

If you have not yet met real constraints, you will when you con-

sider how to get this content onto the Internet, as a series of computer files. *This stage results in specifications for the technology platform to be used.*

The Internet is simply a network connecting computer networks. The price of admission is to have a computer network that is part of or can be connected to an Internet hub. This network can be as small as a single computer running network software, or as large as a huge, enterprise-wide computer system. At this point simplicity ends.

Planning agencies can avoid complexity by being part of a network that has other people paid to worry about these connections, or by subscribing to an *Internet service provider* (ISP), who assigns you an address and a limited amount of space on which you can place your Web site. ISPs are now competitively priced, and are found in most telephone directory advertising. They also take the form of on-line services like CompuServe, America Online and Prodigy, which host access to the Internet.

The amount of content you can post varies among providers. It is usually 1 to 5 megabytes (MBs), but additional space is readily provided, for a fee. A municipal planning agency, for example, may be able simply to add content to a site maintained by another municipal agency. The OSP now has slightly more than 10 MBs of files on the state's Internet server.

Hosting your own Web site using a desktop computer and a telecommunications connection to an Internet hub allows you to provide advanced features such as interactive databases and maps. You can also establish your own “domain name” (generally, the part of the address between the http:// and the first slash), by paying a registration fee. But as a Web site host, you will also be responsible for providing your own security to prevent users from tampering with your files. For that reason alone, you may be best served by using someone else’s network, unless you have an experienced Internet network administrator on your staff.

Using the Medium

Presenting information on the Web is very different from newsletters, magazines, video, slide shows and CD-ROM. You can enable users to select the information they want to receive from a site. You can present content in multiple forms, frames and color schemes. *You don’t even have to develop all your own content* — you can simply add links to other sites of interest. You can get feedback from each page. Each feature adds its own design opportunities and constraints (Mok 1996). *At this stage, you develop the content of the Web site.*

Layout

Web *sites* host a collection of individual Web *pages*. Most Web pages are written in the *HTML* (hypertext markup language) format, which takes advantage of the high speed at which text is transmitted over the Internet. Guidebooks and other training materials are useful (e.g., Lemay 1995 and Microsoft 1996), and there are many software programs that simplify the process of composing Web pages (e.g., Mendelson 1997).

But because standards evolve far more slowly than technologies, instructions on advanced formatting and layout are interpreted differently by each browser (viewing software). Therefore, your visitor may not see your Web site in the same way you designed it. You have a few options:

- ◆ *Test your pages using several different browsers.* By collecting both the current and previous versions of each browser you can find, you can test pages and design around some significant incompatibilities among browsers to establish a much more functional and attractive site. While ideal, this approach is very time-consuming, as you must repeatedly test the site to make sure that changes you make to improve its looks for one browser do not destroy the format in another. Also, while most browsers can be used for free during an

evaluation period, they must be registered — for a fee — if you want to continue using them. After you establish a successful style, new pages and new versions of browsers will tend to reduce incompatibilities. However, you should still test new approaches with two or three major browsers.

- ◆ *Design your page for a specific browser.* This testing can be avoided entirely if you select one or two browsers for your design standards. It is not uncommon today to see the phrase, “This page was designed to be viewed using (browser name).” This approach is simple and clean, but annoying to users who have a different browser. If you must use this approach, at least include a link to a site where users can immediately download the browser. (This goes for “plug-ins,” too.)
- ◆ *Use a browser-independent format.* Where design counts, documents can be translated into a format that preserves all the fonts and other design features of the original. These files can be viewed in major browsers using a plug-in utility, or can be downloaded by the user for viewing in a separate viewer program. New Jersey state agencies typically use Adobe Acrobat or Corel’s Envoy for this purpose. Similarly, in Microsoft’s Office 97

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suite, Microsoft Word and Excel files can be viewed in their native format using Internet Explorer.

The OSP has used Adobe Acrobat to place on-line detailed maps that the user can “zoom into.” The maps include graphics, links to other sites from various locations, and embedded features (See <http://www.state.nj.us/osp/ospmaps.htm>.) We have also placed detailed flow charts and other complex graphics in Acrobat format to prevent loss of information when they are rendered as graphic elements in browsers. (See <http://www.state.nj.us/osp/luiehome.htm>.)

Design Limitations for the Web

While there are many unique and innovative ways to design a Web site, there are far fewer ways for a Web site to be *effective* on a 15-inch computer screen. To get the user's attention and *keep it*, consider our variation of the famous “KISS” principle — Keep it Informative, Simple and Speedy.

Keep It Informative

Provide content with specifics. Otherwise:

- ◆ Identify a person to contact, with his or her mailing and e-mail address, phone and fax numbers.
- ◆ Provide a link to a site that will provide specifics.

- ◆ Or, identify when more detail will be developed and posted at the site.

Keep It Simple

Don't hide your on-line information. The user must be able to navigate easily within your site. You should have at least one link to your home page on every page. Many sites use a banner at the top that expands or highlights the visitor's location relative to the site's home page. For a complex site, these banners considerably slow down the page's loading time. A link to the home page and to the next-highest level or two is a reasonable compromise. We also use a separate, graphical Web site map to allow users to get a sense of the scope of the site. (See <http://www.state.nj.us/osp/ospnet00.htm>.)

Communicate with all segments of the population. While some technical reports on our site require an advanced degree to comprehend, we write to an 8th-grade level whenever possible. For example, we put in a page defining what “planning” is, with links to the American Planning Association site and other Web sites. (See <http://www.state.nj.us/osp/whatispl.htm>.)

Keep It Speedy

People expect a page to load in five to 10 seconds. This speed is affected by the speed of the

telecommunications connection, the computer, and the Internet. (It is slower in busy periods.) Today's typical user with a two- or three-year-old computer and a 14.4 BPS modem will get very impatient with a site that takes a minute to load each page. Even 75K (kilobytes) of text and graphics per page will create such a delay. Keep the Web site speedy by:

- ◆ *Keeping files small.* Text files, often 5K in size or less, will load almost instantly over any typical connection. Use small text and graphics files, and include lots of links to other small files to keep your site quick and agile.
- ◆ *Using simple graphics.* GIF (CompuServe's Graphics Interchange Format) files are optimized for transmitting graphics on the Web. Using this format, small logos with a limited but attractive range of colors can be as small as 2K or 3K in size. Ruler lines, typically built into HTML editors and Web browsers, can be enhanced using GIF files. Small GIF graphics can also be tiled by browsers to create attractive, subtle backgrounds that enhance the text. Adobe Photoshop and other graphics software can create GIF89a format graphics that include transparent backgrounds. GIF89a also allows “interlacing,” in which

an image is gradually created as the text loads, increasing in detail as the text appears on the page. Use JPEG format to preserve the quality of larger or full-color graphics.

- ◆ *Limit special effects.* Movement can bring a Web page to life — or destroy it. Users find constantly blinking or moving text, as in marquees, quite annoying. However, you can set a marquee to scroll into position as the page loads, and to stay parked there. Sounds can be added to Web pages, but they can also be problems if they constantly repeat, or if they are so long and involve such large files that they take more than 10 seconds to load. Some animations require repeated contact with the server, which tends to monopolize and stall slower connections. Video clips, sound narratives, background music and three-dimensional “worlds” require high bandwidth connections not typically available to the home user, and should be avoided entirely.

Alternatively, make videos and other intensive special-effects files available for experiencing off-line. By clicking on a small graphic, users can download the file and save it to their computers. Then, they can open it with the appropriate

viewer programs. Such content may best be distributed off the Internet, using CD-ROM or floppy disks.

...And, Most
Importantly, Keep It
Up!

The OSP would like to help make your site known to the planning world. Please call Bob Kull at (609) 292-3096 or send e-mail questions, comments, announcements and URLs to kull_r@tre.state.nj.us.

Current and relevant content will keep people in contact through your Web site. The frequency of updates may vary. The OSP’s Web site is usually updated every three weeks, with minor updates (e.g., meeting announcements) as needed. If you maintain a “chat” capability on your Web site for visitor comments, you will always be current as long as there is traffic on the site. (You may need to be sure that postings do not automatically scroll off so soon that it appears that no one has visited.) The OSP also maintains a “What’s New” page to allow users to locate the most recently updated information. (See <http://www.state.nj.us/osp/whatsnew.htm>).

References

Lemay, Laura. 1995. *Teach Yourself More Web Publishing with*

HTML in a Week. Indianapolis: Sams.net Publishing, 1995.

Mendelson, Edward. 1997. Grand Designs: Personal Web Page Editors. *PC Magazine* 16,5: 100-138.

Microsoft Corporation. 1996. *Mastering Internet Development with Microsoft ActiveX Technologies*. CD-ROM.

Mok, Clement. 1996. *Designing Business: Multiple Media, Multiple Disciplines*. Indianapolis: Adobe Press/Macmillan Computer Publishing U.S.A.

Bob Kull is the Assistant Director for Research for the New Jersey Office of State Planning and the Webmaster for the OSP Web site. (See <http://www.state.nj.us/osp/kull.htm>.)

OSPlanning Memo is a monthly publication which highlights strategies, techniques and data of interest to the planning community in New Jersey. I welcome your comments on these memos and your suggestions for future topics.

Herb Simmens, Director,
Office of State Planning,
609-292-3155 or E-mail at
simmens_h@tre.state.nj.us

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OFFICE OF STATE PLANNING

New Jersey Department of the Treasury
33 West State Street, CN 204
Trenton, New Jersey 08625

OFFICE OF STATE PLANNING STAFF

Toll Free Meeting Information: 1-800-522-0129
Office of State Planning Phone: (609) 292-7156
Office of State Planning Fax: (609) 292-3292
Internet Address: <http://www.state.nj.us/osp/>

Herbert Simmens, Director

State Agency Coordination

Charles Newcomb, *Assistant Director* (609) 633-6912

Wendy McVicker, *Secretarial Support* (609) 633-6927

Local Planning Assistance

David Maski, *Unit Manager & Northeast Area Planning Manager - Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset and Union Counties* (609) 292-3732

David Hojsak, *Delaware River Area Planning Manager - Burlington, Camden, Gloucester, Hunterdon, Mercer, Sussex and Warren Counties* (609) 292-5248

Bill Purdie, *Coastal Area Planning Manager - Atlantic, Cape May, Cumberland, Monmouth, Ocean and Salem Counties* (609) 292-3730

Research

Robert Kull, *Assistant Director* (609) 929-3096

James Reilly, *Senior Research Planner* (609) 292-3589

William Bauer, *Research Planner* (609) 292-3228

Nichole Purcell, *Research Planner* (609) 633-9647

Steven Karp, *GIS & Cartography* (609) 292-3160

Sheila Bodga, *Secretarial Support* (609) 292-3744

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Tom Dallessio, *Public Affairs Manager* (609) 292-3502

Mary Kleber, *Executive Secretary to the Director* (609) 292-7155

Kathleen Kelly, *Assistant to the Director* (609) 633-9648

Carlos Rodrigues, *Manager, Special Projects* (609) 292-3097

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Carol Schulz, *Chief of Office Services* (609) 633-6927

Diane Chepega, *Graphic Coordinator* (609) 292-3170

Denise Johnson, *MIS, Tech* (609) 292-3158

Carol Cavallo, *Administrative Analyst* (609) 633-6942

Sandy Giambrone, *Secretarial Support* (609) 292-3156